

**MERRILL MINING, LLC**  
3340 Peachtree Road NE, Suite 2200  
Atlanta, Georgia 30326  
404-495-9577 Fax: 404-495-9578

**HUGH NOWELL  
CORPORATE COUNSEL**

**October 28, 2005**

Mr. Doug Liden  
Ground Water Office WTR-0  
US Environmental Protection Agency Region IX  
Water Management Division (WTR-9)  
75 Hawthorne Street  
San Francisco, California 94105-3901

**RE: MONITORING REPORT FOR UIC PERMIT NUMBER AZ396000001  
THIRD QUARTER 2005 REPORT**

Dear Mr. Liden,

This report is submitted in accordance with the reporting requirements of Parts II.G.2.(a) through (j) of the referenced permit. It pertains to monitoring activities conducted at the Florence In-Situ Mine Site from July 1 through September 30, 2005. Copies of records required by Part II.G.1 are maintained at the Mine Site along with other information that is summarized below.

Florence Copper is subject to the requirements of Underground Injection Control (UIC) Permit No. AZ396000001 issued by the United States Environmental Protection Agency (USEPA) on May 1, 1997, and Aquifer Protection Permit (APP) No. 101704 issued by the Arizona Department of Environmental Quality (ADEQ) on June 9, 1997, and last amended on July 16, 2004.

As you are aware, Florence Copper discontinued hydraulic control on September 1, 2004, in order to conduct groundwater quality tests in accordance with Part II.H.2 of the APP and Part II.I.2 of the UIC Permit. A report of the results has been provided to ADEQ and USEPA for review. The pumping wells remain off during the evaluation process. As a result, no extraction flows are reported under Section (b) below, and the water level measurements that are reported in Section (b) reflect natural conditions, not hydraulic control.

**(a) A map showing the current status of the mine.**

Figure 1 shows the current monitoring area including the Point of Compliance (POC) wells and the wellfield. Figure 2 shows the approximate layout of the wellfield and denotes the four well pairs. There are four injection/recovery wells and nine pumping wells. Five observation wells were installed to demonstrate net inward hydraulic gradient for the 90 days required by the permit. Solution injection began on October 31, 1997, and ceased on February 8, 1998.

**(b) A table and graph showing daily cumulative injection flows and extraction flows in each active mine block over the reporting period.**

Hydraulic control was discontinued on September 1, 2004, for purposes of collecting groundwater samples following a 90-day period of no hydraulic control, and remains discontinued for evaluation of results. Accordingly there are no injection or extraction flows to report.

**(c) A table and graph comparing average daily head in the four observation wells.**

Although hydraulic control was not maintained during this reporting period, water level measurements were continued by manual measurements in the four observation wells and their nearest inward neighbors. Figure 1 of Attachment 1 and the supporting data show the groundwater elevations in the four well pairs.

**(d) A table showing POC monitoring wells analytical results and alert levels.**

The attached report *Florence Project Quarterly Compliance Monitoring Report - Third Quarter 2005* by Brown and Caldwell and sealed by Ms. Tekla King, Registered Professional Geologist (Attachment 2), contains the POC monitoring records and results. Brown and Caldwell, along with Project personnel, conducted compliance sampling on July 13, August 4, August 11, August 17, and August 19, 2005.

Quarterly and biennial parameters were conducted for 29 of the 31 POC monitoring wells. POC monitoring wells M32-UBF and M33-UBF were dry and could not be sampled. Of the 1,067 constituents analyzed, only one had a reported concentration exceeding the approved Alert Levels (ALs). Gross alpha activity in well O19-GL was reported at  $15.7 \pm 2.1$  picocuries per liter (pCi/L), which is nominally above the AL of 15 pCi/L established in the APP. The permit does not contain an Aquifer Quality Limit (AQL) for gross alpha activity, but it does include an AQL of 15 pCi/L for adjusted gross alpha. Adjusted gross alpha was calculated by subtracting total uranium from gross alpha. The adjusted gross alpha for well O19-GL was reported to be  $8.7 \pm 2.18$  pCi/L, well below the AQL of 15 pCi/L.

Because the exceedance was not verified during the Third Quarter reporting period, Merrill Mining provided advance notice of a possible exceedance to ADEQ in a letter dated October 28, 2005, in accordance with Part II, Section F.4 of APP No. 101704. Notification to USEPA pursuant to Part II, Section H. 2 of the UIC Permit AZ396000001 is only required after commercial operations have begun. However, a copy of the ADEQ notice was provided to the USEPA.

**(e) Results of the monthly analyses of organic in the injectate**

Organic analyses are not required because no solution was injected during the reporting period.

**(f) Results of monitoring required by 40 CFR 146.33 (b)(1)**

No solution was injected.

**(g) Results of the mechanical integrity tests**

No mechanical integrity test was required.

**(h) Results of the annular conductivity monitoring**

Although injection ceased in early 1998, annular conductivity measurements have continued to the present time. A graph showing measurement results for this reporting period is presented in Attachment 1, Figure 2. No unusual conditions were noted.

**(i) Well and core hole plugging and abandonment.**

None of the existing wells and core holes were abandoned during the report period.

**(j) A summary of closure operations during the reporting period.**

There were no closure operations during the reporting period.

Mr. Doug Liden  
October 28, 2005  
Page 4

Florence Copper, Inc., believes that you will find this report complete and in compliance with all permit conditions. Please contact me at (404) 495-9577 should you have any questions regarding this report.

Sincerely,



Hugh Nowell  
Corporate Counsel

BAS:ld  
Attachments

cc: Florence Copper File



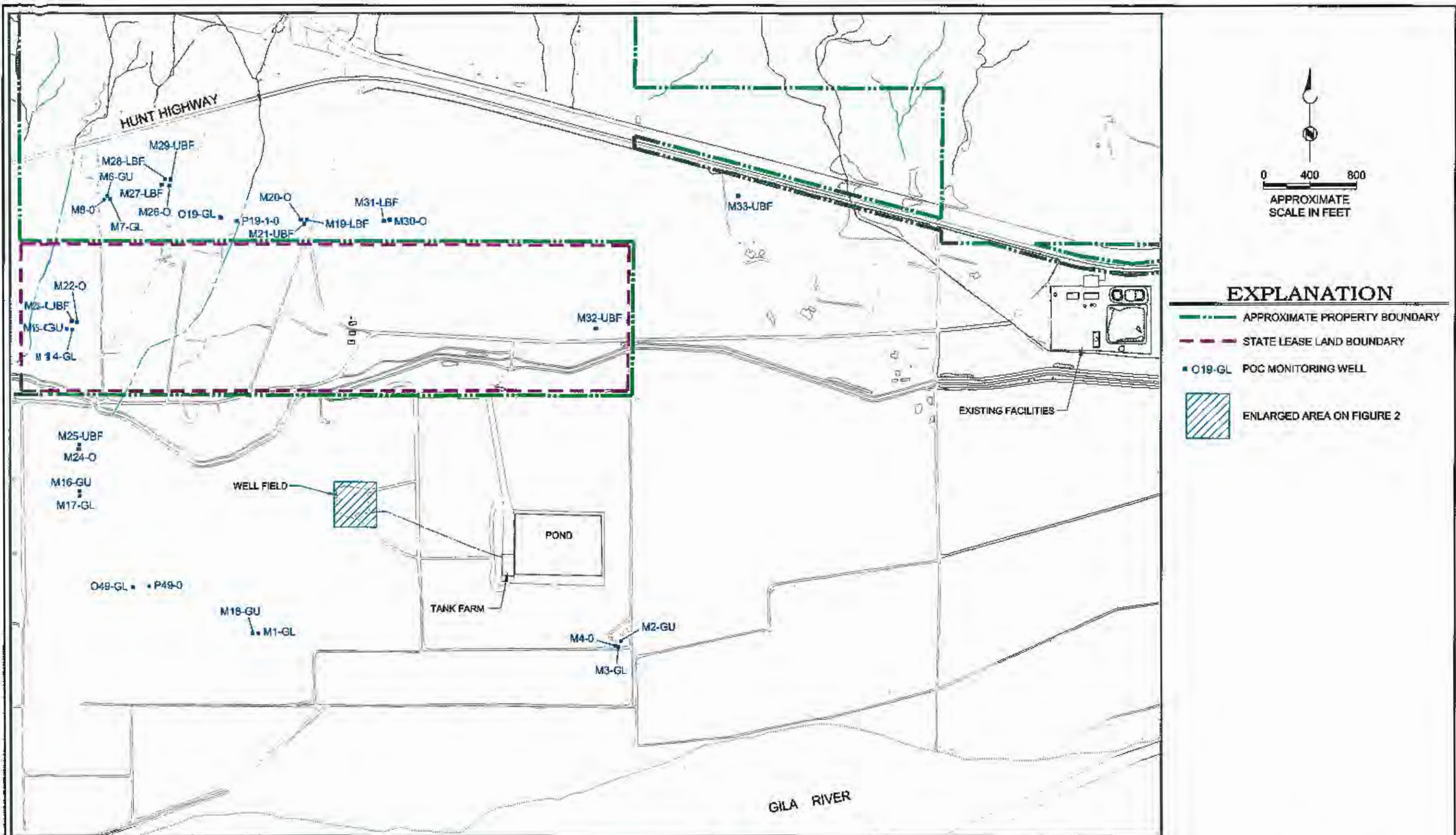
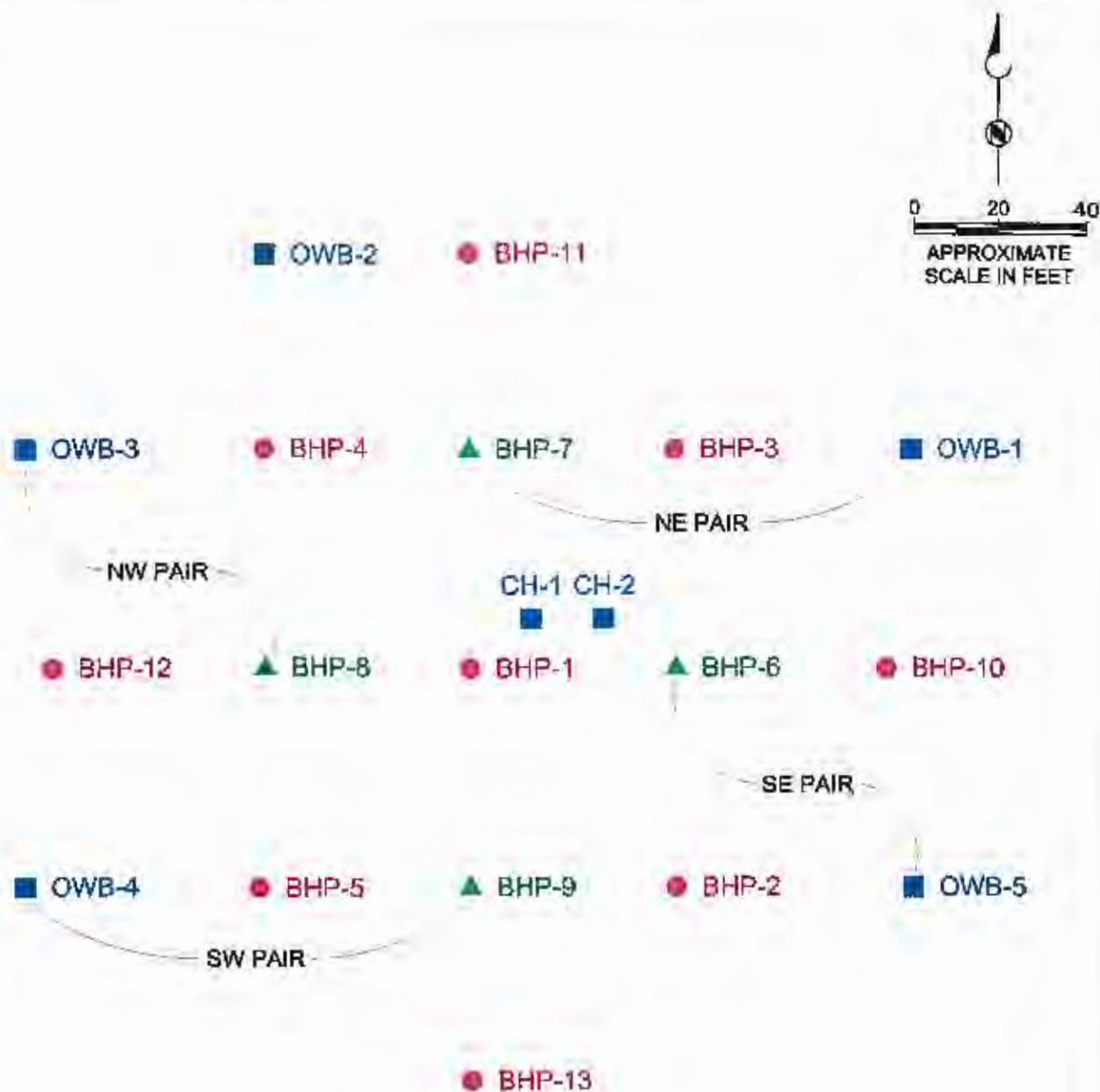


Figure 1  
**MONITORING AREA**  
 MERRILL MINING, L.L.C.  
 FLORENCE, ARIZONA

**BROWN AND  
 CALDWELL**



### EXPLANATION

- BHP-10 PUMPING WELL (CURRENTLY INACTIVE)
- OWB-2 OBSERVATION WELL
- ▲ BHP-8 INJECTION / RECOVERY WELL (RECOVERY MODE SINCE 1998)

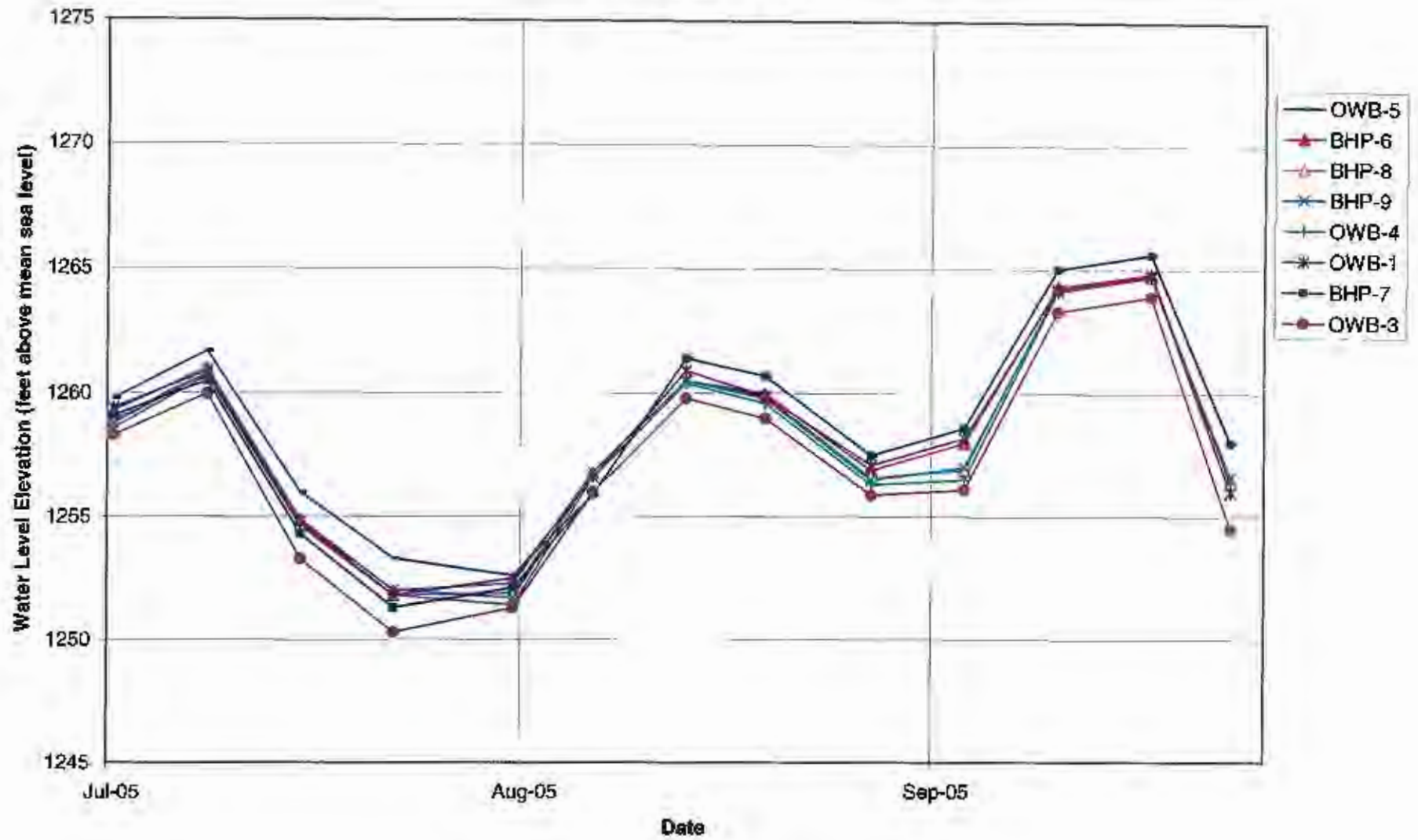
BROWN AND  
CALDWELL

Figure 2  
**WELLFIELD LAYOUT**  
MERRILL MINING, L.L.C.  
FLORENCE, ARIZONA

**ATTACHMENT 1**  
**MINE OPERATIONS MONITORING**



**Figure 1 - Well Field Water Elevations  
Third Quarter 2005**

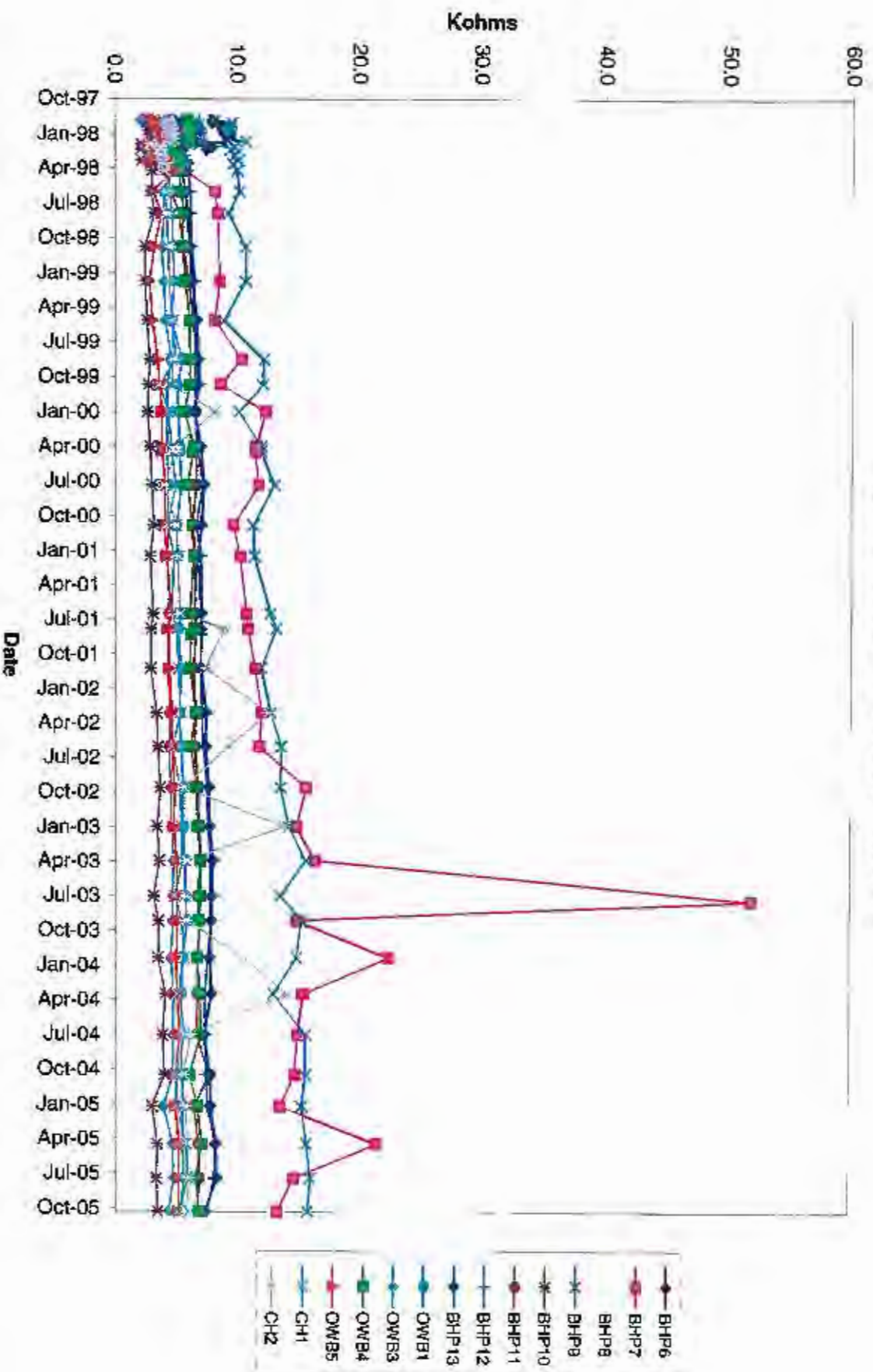




**Well Field Water Elevations  
Third Quarter 2005**

<b>Date</b>	<b>BHP-6</b>	<b>BHP-7</b>	<b>BHP-8</b>	<b>BHP-9</b>	<b>OWB-1</b>	<b>OWB-3</b>	<b>OWB-4</b>	<b>OWB-5</b>
7/6/05	1259.3	1259.1	1258.9	1258.8	1259.4	1258.3	1258.6	1259.8
7/13/05	1261.0	1260.5	1260.9	1260.8	1260.9	1260.0	1260.7	1261.7
7/20/05	1254.9	1254.3	1254.7	1254.8	1254.8	1253.3	1254.6	1256.0
7/27/05	1252.0	1251.3	1251.8	1252.0	1251.8	1250.3	1251.8	1253.3
8/5/05	1252.3	1252.1	1251.9	1251.7	1252.5	1251.3	1251.4	1252.6
8/11/05	1256.8	1255.9	1256.8	1256.8	1256.6	1256.0	1256.6	1255.9
8/18/05	1260.5	1261.4	1260.5	1260.5	1260.9	1259.8	1260.4	1261.4
8/24/05	1260.0	1260.7	1259.9	1259.8	1259.9	1259.0	1259.6	1260.7
9/1/05	1256.9	1257.5	1256.6	1256.5	1257.1	1255.9	1256.3	1257.5
9/8/05	1258.0	1258.6	1256.9	1257.0	1258.2	1256.1	1256.5	1258.6
9/15/05	1264.3	1265.0	1264.2	1264.1	1264.2	1263.3	1264.1	1265.0
9/22/05	1264.8	1265.6	1264.7	1264.7	1264.8	1263.9	1264.7	1265.6
9/28/05	1256.4	1258.0	1256.4	1256.6	1256.0	1254.5	1256.4	1258.0
Water Level Elevations (feet AMSL)								

Figure 2 - Annular Resistivity in Kohms



**ATTACHMENT 2**

**POC QUARTERLY COMPLIANCE MONITORING REPORT**

**FLORENCE COPPER PROJECT  
QUARTERLY COMPLIANCE MONITORING REPORT  
THIRD QUARTER 2005**

***Primary Sampling Activities***

Quarterly and biennial compliance monitoring was conducted for the Florence Copper project on July 13, August 4, August 11, August 17, and August 19, 2005 (Third Quarter 2005). Groundwater sampling and analysis was conducted in accordance with the requirements of Aquifer Protection Permit (APP) Permit Number 101704, Part III.E.3.d (Compliance Monitoring). Quarterly parameters, as listed in Part IV Table III.B of the APP, were analyzed from the designated Point of Compliance (POC) wells. The quarterly parameters are magnesium, sulfate, fluoride, and total dissolved solids (TDS). During this quarter, biennial parameters were also analyzed. The biennial parameters, as listed in Part IV, Table III.C, are shown in Table 1 of this report. Radium 226 and radium 228 were only analyzed if gross alpha exceeded 5.0 picocuries per liter (pCi/L). Total uranium was only analyzed if gross alpha exceeded 15.0 pCi/L.

During the Third Quarter 2005 sampling event, 29 POC wells were sampled and a total of 1,067 constituents were analyzed. Two POC wells, M32-UBF and M33-UBF, were dry and could not be sampled. Of the 1,067 constituents analyzed, only one had a reported concentration exceeding the approved Alert Levels (ALs). Gross alpha in well O19-GL was reported at  $15.7 \pm 2.1$  picocuries per liter (pCi/L), which is nominally above the AL of 15 pCi/L established in the APP. The permit does not contain an Aquifer Quality Limit (AQL) for gross alpha activity, but it does include an AQL of 15 pCi/L for adjusted gross alpha, calculated by subtracting total uranium from gross alpha. The adjusted gross alpha for well O19-GL was reported to be  $8.7 \pm 2.18$  pCi/L, well below the AQL of 15 pCi/L.

Analyses of the samples were conducted by Aerotech Environmental Laboratories (Aerotech). Radiochemical analyses were provided by Radiation Safety Engineering. Analytical results for the POC wells for the indicator parameters are provided in Table 2 and field parameters measured during sampling are indicated in Table 3. Common ions are presented in Table 4, formation-related radiochemicals are presented in Table 5, process-related organics are presented in Table 6, and trace inorganics (metals) are presented in Table 7.

All of the results were similar to past results for Level II parameters. No trends or unusual changes were observed, except the single exceedance for gross alpha.

***AL Exceedances and Verification Sampling***

Part II.F.4 of the APP (Contingencies for AL and AQL Exceedances) requires verification sampling for an AL exceedance. Verification sampling for O19-GL will be conducted during the Fourth Quarter 2005 and the results submitted in the next quarterly report.



### ***Contingency Sampling Plan to be Implemented During Fourth Quarter 2005***

Contingency sampling plans are only required in the event of verified exceedances occurring during the operational life of the mine. Since commercial operations have not begun, no contingency sampling plan is required during the Fourth Quarter of 2005.

If the verification sample confirms the gross alpha exceedance, Merrill Mining will collect another sample for a more detailed analysis of potential alpha emitters. Merrill Mining will then submit a demonstration to the Arizona Department of Environmental Quality (ADEQ) in accordance with Part II, Section F.4.d of APP No. 101704 which will show that the exceedance resulted "from errors in sampling, analysis, statistical evaluation, or natural circumstances." Based on the fact that the gross alpha value is anomalous, and commercial operations have not yet begun, Merrill Mining is confident that such a demonstration, if necessary, can be developed.

### ***Results of Contingency Sampling Plan Implemented from Second Quarter 2005***

There were no AL exceedances during the Second Quarter 2005. Therefore, no contingency sampling plan was implemented.

### ***Issues***

The recovery wells in the test wellfield remain turned off while Merrill Mining awaits permission from ADEQ and the United States Environmental Protection Agency (USEPA) to close the test wellfield permanently.



Florence Copper Project  
Quarterly Compliance Monitoring Report  
Third Quarter 2005

**TABLE 1. SUMMARY OF BIENNIAL GROUNDWATER MONITORING PARAMETERS**

ANALYSIS	METHOD	PRESERVATIVE
<b>Quarterly Parameters</b>		
Fluoride	EPA 300.0	None
Magnesium	EPA 200.7	HNO <sub>3</sub>
Sulfate	EPA 300.0	None
Total dissolved solids	SM 2540C	None
<b>Common Ions</b>		
pH	EPA 150.1	None
Bicarbonate alkalinity	SM 2320B	None
Carbonate alkalinity	SM 2320B	None
Calcium	EPA 200.7	HNO <sub>3</sub>
Chloride	EPA 300.0	None
Nitrate as N	EPA 300.0	None
Potassium	EPA 200.7	HNO <sub>3</sub>
Sodium	EPA 200.7	HNO <sub>3</sub>
Cation/anion balance	Calculation	
<b>Formation-Related Radiochemicals</b>		
Gross alpha	EPA 600/00-02	None
Radium 226 (if gross alpha >5.0)	EPA 903.1	None
Radium 228 (if gross alpha >5.0)	EPA 904	None
Total Uranium (if Q. Alpha >15.0)	EPA 00-07	None
<b>Process-Related Organics</b>		
Extractable fuel hydrocarbons (diesel range organics)	8015AZR1	None
Benzene	EPA 8260B	HCl
Ethylbenzene	EPA 8260B	HCl
Toluene	EPA 8260B	HCl
Total xylene	EPA 8260B	HCl
<b>Trace Inorganics (Metals)</b>		
Aluminum	EPA 200.7	HNO <sub>3</sub>
Antimony	EPA 200.8	HNO <sub>3</sub>
Arsenic	EPA 200.8	HNO <sub>3</sub>
Barium	EPA 200.8	HNO <sub>3</sub>
Beryllium	EPA 200.7	HNO <sub>3</sub>
Cadmium	EPA 200.7	HNO <sub>3</sub>
Chromium total	EPA 200.8	HNO <sub>3</sub>
Cobalt	EPA 200.8	HNO <sub>3</sub>
Copper	EPA 200.7	HNO <sub>3</sub>
Iron	EPA 200.7	HNO <sub>3</sub>
Lead	EPA 200.8	HNO <sub>3</sub>
Manganese	EPA 200.7	HNO <sub>3</sub>
Mercury	EPA 245.1	HNO <sub>3</sub>
Nickel	EPA 200.7	HNO <sub>3</sub>
Selenium	EPA 200.8	HNO <sub>3</sub>
Thallium	EPA 200.8	HNO <sub>3</sub>
Zinc	EPA 200.7	HNO <sub>3</sub>

TABLE 2. SUMMARY OF ANALYTICAL RESULTS, QUARTERLY PARAMETERS

Well ID	Sample Date	Magnesium		Sulfate		Fluoride		Total Dissolved Solids	
		Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level
M1-GL	Jul 13 2005	21.0	31	96	109	0.81	1.3	650	1028
M2-GU	Jul 13 2005	24.0	39	130	275	0.92	1.4	770	1496
M3-GL	Jul 13 2005	20.0	36	120	187	0.77	1.3	560	1157
M4-O	Jul 13 2005	4.6	15	35	405	2.5	5.1	420	1072
M6-GU	Aug 04 2005	2.8	5.1	49	86	0.78	1.3	360	620
M7-GL	Aug 04 2005	<0.25	1	34	82	0.98	1.7	270	464
M8-O	Aug 04 2005	<0.25	1	71	122	2.0	3.6	350	609
M14-GL	Aug 04 2005	2.3	23	56	144	0.72	1.4	400	874
M15-GU	Aug 04 2005	30.0	44	74	126	0.68	1.2	780	1359
M16-GU	Jul 13 2005	31.0	52	170	248	0.69	1.1	950	1635
M17-GL	Jul 13 2005	5.6	9.3	110	209	0.86	1.6	450	831
M17-GL (Dup)	Jul 13 2005	5.6	9.3	110	209	0.82	1.6	450	831
M18-GU	Jul 13 2005	17.0	36	150	288	1.2	1.6	670	1323
M19-LBF	Aug 17 2005	12.0	21	50	89	0.6	1	460	794
M20-O	Aug 11 2005	8.9	14	64	112	0.36	1.7	450	809
M21-UBF	Aug 17 2005	32.0	87	230	487	0.79	1.1	1000	2867
M22-O	Aug 04 2005	6.3	8.6	50	86	0.84	1.3	390	1094
M23-UBF	Aug 04 2005	39.0	69	250	411	0.85	1.3	1300	2392
M23-UBF (Dup)	Aug 04 2005	40.0	69	240	411	0.86	1.3	1300	2392
M24-O	Jul 13 2005	11.0	19	720	1364	1.1	2.5	1300	2363
M25-UBF	Jul 13 2005	37.0	76	240	387	0.77	1.6	1200	2683
M26-O	Aug 17 2005	<0.25	1	57	105	1.6	3.4	310	556
M27-LBF	Aug 17 2005	32.0	51	110	179	0.59	1	1000	1745
M27-LBF (Dup)	Aug 17 2005	32.0	51	120	179	0.54	1	1100	1745
M28-LBF	Aug 17 2005	1.6	2.6	45	81	0.91	1.6	350	610
M29-UBF	Aug 17 2005	41.0	84	270	465	0.73	1.1	1300	2751
M30-O	Aug 04 2005	11.0	18	56	102	0.87	1.6	470	824
M31-LBF	Aug 04 2005	19.0	46	170	330	0.92	1.3	700	1665
O19-GL	Aug 17 2005	10.0	17	53	99	0.74	1.4	460	770
O49-GL	Aug 11 2005	10.0	18	70	159	0.71	1	500	849
P19-L-O	Aug 17 2005	6.3	12	60	107	1.5	2.8	440	767
P49-O	Aug 19 2005	3.4	6.2	100	181	1.1	2	440	801
Arizona Aquifer Water Quality Standard		-		-		4		-	
All results in milligrams per liter (mg/l) <= less than the laboratory practical quantitation limit									

TABLE 3. SUMMARY OF QUARTERLY FIELD PARAMETERS

Well ID	Sample Date	Temperature (°C)	Temperature (°F)	pH	Conductivity (µmhos/cm)
M1-GL	Jul 13 2005	22.4	72.3	7.44	1068
M2-GU	Jul 13 2005	20.0	68.0	7.37	1192
M3-GL	Jul 13 2005	22.7	72.9	7.49	1045
M4-O	Jul 13 2005	23.8	74.8	7.36	650
M6-GU	Aug 04 2005	25.3	77.5	8.48	687
M7-GL	Aug 04 2005	24.8	76.6	9.37	496
M8-O	Aug 04 2005	29.5	85.1	8.79	673
M14-GL	Aug 04 2005	27.5	81.5	8.48	805
M15-GU	Aug 04 2005	25.4	77.7	7.47	1306
M16-GU	Jul 13 2005	24.3	75.7	7.44	1566
M17-GL	Jul 13 2005	28.6	83.5	8.27	843
M18-GU	Jul 13 2005	20.2	68.4	7.48	1004
M19-LBF	Aug 17 2005	23.7	74.7	7.65	780
M20-O	Aug 11 2005	25.2	77.4	7.41	766
M21-UBF	Aug 17 2005	23.0	73.4	7.19	1622
M22-O	Aug 04 2005	28.9	84.0	8.00	785
M23-UBF	Aug 04 2005	22.6	72.7	7.14	2067
M24-O	Jul 13 2005	30.9	87.6	7.84	1973
M25-UBF	Jul 13 2005	21.6	70.9	7.16	1838
M26-O	Aug 17 2005	29.0	84.2	8.53	585
M27-LBF	Aug 17 2005	23.4	74.1	7.53	1570
M28-LBF	Aug 17 2005	26.5	79.7	8.35	671
M29-UBF	Aug 15 2005	22.4	72.3	7.10	1989
M30-O	Aug 04 2005	24.5	76.1	7.45	789
M31-LBF	Aug 04 2005	22.8	73.0	7.34	1098
O19-GL	Aug 17 2005	23.9	75.0	7.72	754
O49-GL	Aug 11 2005	26.9	80.4	7.62	932
P19-I-O	Aug 17 2005	24.9	76.8	7.61	741
P49-O	Aug 19 2005	29.0	84.2	7.63	805



**TABLE 4. SUMMARY OF COMMON INORGANIC ANALYTICAL RESULTS,  
BIENNIAL PARAMETERS**

Well ID	Sample Date	Bicarbonate Alkalinity	Carbonate Alkalinity	Calcium	Chloride	Nitrate as N	Potassium	Sodium	pH	Ion Balance
M1-GL	Jul 13 2005	140	<2	87	210	4.1	7	130	7.97	0
M2-GU	Jul 13 2005	200	<2	98	200	6.4	6.6	170	7.94	10.1
M3-GL	Jul 13 2005	150	<2	83	180	3.2	7.4	130	8.01	6.92
M4-O	Jul 13 2005	89	<2	20	97	0.71	5.2	120	7.85	10.2
M6-GU	Aug 04 2005	48	<2	16	140	0.78	5.3	130	8.31	8
M7-GL	Aug 04 2005	61	32	3	69	<0.2	2	110	9.35	2.19
M8-O	Aug 04 2005	140	15	3	44	1.1	<2	200	8.79	22.2
M14-GL	Aug 04 2005	64	<2	18	150	1.1	5	160	8.45	11.4
M15-GU	Aug 04 2005	120	<2	110	280	4.4	11	180	7.94	16.5
M16-GU	Jul 13 2005	140	<2	130	310	9	9.8	190	7.91	8.65
M17-GL	Jul 13 2005	90	<2	29	96	0.6	7	140	8.23	6.32
M17-GL (Dup)	Jul 13 2005	90	<2	28	97	0.61	7.1	140	8.28	6.04
M18-GU	Jul 13 2005	180	<2	78	150	4.2	6.2	160	7.99	8.64
M19-LBF	Aug 17 2005	130	<2	53	140	0.92	6.3	97	8.07	5.57
M20-O	Aug 11 2005	110	<2	44	130	0.57	8.6	110	7.97	7.62
M21-UBF	Aug 17 2005	240	<2	140	240	9.4	9.9	180	7.89	6.04
M22-O	Aug 04 2005	91	<2	35	130	0.91	6.6	130	8.11	12.8
M23-UBF	Aug 04 2005	180	<2	180	400	11	13	210	7.82	4.81
M23-UBF (Du)	Aug 04 2005	180	<2	190	390	11	13	210	7.85	7.41
M24-O	Jul 13 2005	76	<2	130	59	0.75	8.6	330	8.01	10
M25-UBF	Jul 13 2005	220	<2	160	340	12	9.7	190	7.82	2.93
M26-O	Aug 17 2005	130	6.9	3	37	1.3	<2	130	8.51	10.6
M27-LBF	Aug 17 2005	99	<2	130	320	8.7	10	160	7.93	11
M27-LBF (Du)	Aug 17 2005	97	<2	140	350	8.8	10	160	7.96	8.73
M28-LBF	Aug 17 2005	82	<2	14	120	0.68	4.7	130	8.33	6.2
M29-UBF	Aug 17 2005	230	<2	180	340	13	12	210	7.85	10.1
M30-O	Aug 04 2005	120	<2	50	130	0.77	7.9	110	7.96	10.2
M31-LBF	Aug 04 2005	220	<2	84	120	3.3	7.8	160	7.98	9.7
O19-GL	Aug 17 2005	120	<2	47	130	0.7	6.8	100	8.07	6.25
O49-GL	Aug 11 2005	120	<2	53	140	1.8	7.3	130	8.08	11.2
P19-1-O	Aug 17 2005	110	<2	32	97	0.63	6.4	120	8.06	12.1
P49-O	Aug 19 2005	100	<2	29	85	0.66	5.6	130	8.01	9.76
AWQS		-	-	-	-	10	-	-	-	-

All results in milligrams per liter (mg/L), except pH in pH units, and Ion Balance, a calculation

<= less than detection limit

AWQS = Arizona Aquifer Water Quality Standard

TABLE S. SUMMARY OF RADIOCHEMICAL ANALYTICAL RESULTS, BIENNIAL PARAMETERS

Well ID	Sample Date	Gross Alpha	Uranium	Adj Gross Alpha	Radium 226	Radium 228	Total Radium
M1-GL	Jul 13 2005	4.4 ± 1.0	-	-	-	-	-
M2-GU	Jul 13 2005	5.1 ± 1.1	-	-	0.3 ± 0.1	<0.4	0.3 ± 0.1
M3-GL	Jul 13 2005	5.1 ± 1.1	-	-	<0.4	<0.4	<0.4
M4-O	Jul 13 2005	2.2 ± 0.7	-	-	-	-	-
M6-GU	Aug 04 2005	1.1 ± 0.5	-	-	-	-	-
M7-GL	Aug 04 2005	1.5 ± 0.6	-	-	-	-	-
M8-O	Aug 04 2005	11.4 ± 1.6	-	-	<0.3	<0.4	<0.4
M14-GL	Aug 04 2005	1.9 ± 0.6	-	-	-	-	-
M15-GU (Dup)	Aug 04 2005	3.4 ± 0.8	-	-	-	-	-
M16-GU	Jul 13 2005	4.5 ± 1.0	-	-	-	-	-
M17-GL	Jul 13 2005	3.1 ± 1.0	-	-	-	-	-
M17-GL (Dup)	Jul 13 2005	1.2 ± 0.5	-	-	-	-	-
M18-GU	Jul 13 2005	3.9 ± 0.9	-	-	-	-	-
M19-LBF	Aug 17 2005	4.7 ± 1.0	-	-	-	-	-
M20-O	Aug 11 2005	3.9 ± 0.9	-	-	-	-	-
M21-UBF	Aug 17 2005	7.4 ± 1.3	-	-	<0.2	<0.4	<0.4
M22-O	Aug 04 2005	3.6 ± 0.9	-	-	-	-	-
M23-UBF	Aug 04 2005	6.3 ± 1.2	-	-	<0.3	<0.3	<0.3
M23-UBF (Dup)	Aug 04 2005	5.9 ± 1.1	-	-	<0.3	<0.4	<0.4
M24-O	Jul 13 2005	3.6 ± 0.9	-	-	-	-	-
M25-UBF	Jul 13 2005	8.1 ± 1.4	-	-	<0.2	<0.4	<0.4
M26-O	Aug 17 2005	9.0 ± 1.4	-	-	<0.2	<0.4	<0.4
M27-LBF	Aug 17 2005	5.6 ± 1.1	-	-	<0.4	<0.4	<0.4
M27-LBF (Dup)	Aug 17 2005	6.2 ± 1.2	-	-	<0.3	<0.4	<0.4
M28-LBF	Aug 17 2005	3.1 ± 0.8	-	-	-	-	-
M29-UBF	Aug 17 2005	8.3 ± 1.4	-	-	<0.4	<0.4	<0.4
M30-O	Aug 04 2005	8.2 ± 1.4	-	-	<0.3	<0.3	<0.3
M31-LBF	Aug 04 2005	5.4 ± 1.1	-	-	<0.3	<0.3	<0.3
O19-GL	Aug 17 2005	15.7 ± 2.1	7.0 ± 0.6	8.7 ± 2.18	1.4 ± 0.2	1.3 ± 0.4	2.7 ± 0.4
O49-GL	Aug 11 2005	4.6 ± 1.0	-	-	-	-	-
P19-I-O	Aug 17 2005	4.9 ± 1.0	-	-	-	-	-
P49-O	Aug 19 2005	1.6 ± 0.5	-	-	-	-	-
Alert Level		15	-	-	-	-	4
Arizona Aquifer Water Quality Standard		-	-	15	-	-	5

All results in pico-curies per liter +/- a standard deviation of two (pCi/L +/- 2σ)  
 Radium 226 and Radium 228 are analyzed when Gross Alpha exceeds 5.0  
 Uranium is analyzed when Gross Alpha exceeds 15.0

Adj Gross Alpha = Gross Alpha - Uranium  
 Total Radium = Radium 226 + Radium 228  
 < = less than detection limit  
 Bold indicates result exceeds AWQS.

**TABLE 6. SUMMARY OF ORGANIC ANALYTICAL  
RESULTS, BIENNIAL PARAMETERS**

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Total Xylene	Total Petroleum Hydrocarbons-Diesel
M1-GL	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M2-GU	Jul 13 2005	<0.0005	<0.0005	0.0007	<0.001	<0.25
M3-GL	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M4-O	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M6-GU	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M7-GL	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M8-O	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M14-GL	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M15-GU	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M16-GU	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M17-GL	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M17-GL (Dup)	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M18-GU	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M19-LBF	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M20-O	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M21-UBF	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M22-O	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M23-UBF	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M23-UBF (Du	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M24-O	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M25-UBF	Jul 13 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M26-O	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M27-LBF	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M27-LBF (Dup)	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M28-LBF	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M29-UBF	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M30-O	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
M31-LBF	Aug 04 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
O19-GL	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
O49-GL	Aug 11 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
P19-T-O	Aug 17 2005	<0.0005	<0.0005	<0.0005	<0.001	<0.25
P49-O	Aug 19 2005	<0.0005	<0.0005	0.0007	<0.001	<0.25
Alert Level		0.0025	0.35	0.5	5	R
AWQS		0.005	0.7	1	10	-

All results are in milligrams per liter (mg/L).

<= less than detection limit

AWQS = Arizona Aquifer Water Quality Standard

R = Reserved



TABLE 7. SUMMARY OF TRACE METAL ANALYTICAL RESULTS, BIENNIAL PARAMETERS

Well ID	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Thallium	Zinc
M1-GL	Jul 13 2005	<0.2	<0.003	0.0022	0.025	<0.001	<0.001	<0.001	<0.001	0.0021	<0.05	<0.001	<0.005	<0.0002	0.0042	<0.002	<0.001	<0.05
M2-GU	Jul 13 2005	<0.2	<0.003	0.0032	0.045	<0.001	<0.001	<0.001	<0.001	0.0021	<0.05	<0.001	<0.005	<0.0002	0.0033	<0.002	<0.001	<0.05
M3-GL	Jul 13 2005	<0.2	<0.003	0.0022	0.024	<0.001	<0.001	0.0011	<0.001	0.0019	<0.05	<0.001	<0.005	<0.0002	0.0061	<0.002	<0.001	<0.05
M4-O	Jul 13 2005	<0.2	<0.003	<0.001	0.0078	<0.001	<0.001	0.0013	<0.001	0.003	<0.05	<0.001	0.0052	<0.0002	0.001	<0.002	<0.001	<0.05
M6-GU	Aug 04 2005	<0.2	<0.003	0.0012	0.0047	<0.001	<0.001	0.009	<0.001	0.0029	<0.05	<0.001	<0.0025	<0.0002	<0.001	<0.002	<0.001	<0.05
M7-GL	Aug 04 2005	<0.2	<0.003	0.0037	0.0072	<0.001	<0.001	<0.001	<0.001	0.0027	<0.05	<0.001	0.0035	<0.0002	<0.001	<0.002	<0.001	<0.05
M8-O	Aug 04 2005	<0.2	<0.003	<0.001	0.0012	<0.001	<0.001	0.014	<0.001	0.0038	<0.05	<0.001	0.0039	<0.0002	<0.001	0.0039	<0.001	<0.05
M14-GL	Aug 04 2005	<0.2	<0.003	<0.001	0.018	<0.001	<0.001	0.0038	0.0015	0.0036	<0.05	<0.001	0.0048	<0.0002	<0.001	<0.002	<0.001	<0.05
M15-GU	Aug 04 2005	<0.2	<0.003	0.002	0.0052	<0.001	<0.001	0.0022	<0.001	0.0032	<0.05	<0.001	<0.0025	<0.0002	0.0049	<0.002	<0.001	<0.05
M16-GU	Jul 13 2005	<0.2	<0.003	0.0019	0.0067	<0.001	<0.001	<0.001	<0.001	0.0023	<0.05	<0.001	0.025	<0.0002	0.0039	<0.002	<0.001	<0.05
M17-GL	Jul 13 2005	<0.2	<0.003	0.0011	0.0086	<0.001	<0.001	0.0031	<0.001	0.0017	<0.05	<0.001	<0.005	<0.0002	<0.001	0.0029	<0.001	<0.05
M17-GL (Dup)	Jul 13 2005	<0.2	<0.003	<0.001	0.0086	<0.001	<0.001	0.0031	0.002	0.0019	<0.05	<0.001	0.0067	<0.0002	0.0011	0.0028	<0.001	<0.05
M18-GU	Jul 13 2005	<0.2	<0.003	0.0027	0.037	<0.001	<0.001	<0.001	<0.001	0.0021	<0.05	<0.001	<0.005	<0.0002	0.0029	<0.002	<0.001	<0.05
M19-LBF	Aug 17 2005	<0.2	<0.003	<0.001	0.035	<0.001	<0.001	0.002	<0.001	0.0014	<0.05	<0.001	0.014	<0.0002	0.0021	<0.002	<0.001	<0.05
M20-O	Aug 11 2005	<0.2	<0.003	<0.001	0.011	<0.001	<0.001	<0.001	<0.001	0.0025	0.88	<0.001	0.2	<0.0002	0.0015	0.0038	<0.001	<0.05
M21-UBF	Aug 17 2005	<0.2	<0.003	0.0023	0.07	<0.001	<0.001	0.0017	<0.001	0.003	<0.05	<0.001	<0.0025	<0.0002	0.0058	<0.002	<0.001	<0.05
M22-O	Aug 04 2005	<0.2	<0.003	<0.001	0.0039	<0.001	<0.001	0.0014	<0.001	0.0029	0.087	<0.001	0.011	<0.0002	0.0015	<0.002	0.0011	<0.05
M23-UBF	Aug 04 2005	<0.2	<0.003	0.0024	0.099	<0.001	<0.001	0.0016	0.0012	0.005	<0.05	<0.001	<0.0025	<0.0002	0.0078	<0.002	<0.001	<0.05
M23-UBF (Dup)	Aug 04 2005	<0.2	<0.003	0.0025	0.099	<0.001	<0.001	0.0015	<0.001	0.005	<0.05	<0.001	<0.0025	<0.0002	0.0084	<0.002	<0.001	<0.05
M24-O	Jul 13 2005	<0.2	<0.003	0.0011	0.0073	<0.001	<0.001	0.0053	0.0028	0.0048	<0.05	<0.001	0.0068	<0.0002	0.013	0.011	<0.001	<0.05
M25-UBF	Jul 13 2005	<0.2	<0.003	0.0027	0.086	<0.001	<0.001	0.0012	0.0021	0.0035	<0.05	<0.001	<0.005	<0.0002	0.0061	<0.002	<0.001	<0.05
M26-O	Aug 17 2005	<0.2	<0.003	0.0014	0.0014	<0.001	<0.001	0.007	<0.001	0.002	<0.05	<0.001	<0.0025	<0.0002	<0.001	0.003	<0.001	<0.05
M27-LBF	Aug 17 2005	<0.2	<0.003	0.002	0.031	<0.001	<0.001	0.0018	<0.001	0.0023	<0.05	<0.001	<0.0025	<0.0002	0.005	<0.002	<0.001	<0.05
M27-LBF (Dup)	Aug 17 2005	<0.2	<0.003	0.0019	0.032	<0.001	<0.001	0.0018	<0.001	0.0021	<0.05	<0.001	<0.0025	<0.0002	0.005	<0.002	<0.001	<0.05
M28-LBF	Aug 17 2005	<0.2	<0.003	<0.001	0.0054	<0.001	<0.001	0.0024	<0.001	0.0019	0.13	<0.001	0.0096	<0.0002	<0.001	<0.002	<0.001	<0.05
M29-UBF	Aug 17 2005	<0.2	<0.003	0.002	0.088	<0.001	<0.001	0.0017	<0.001	0.0033	<0.05	<0.001	<0.0025	<0.0002	0.0069	<0.002	<0.001	<0.05
M30-O	Aug 04 2005	<0.2	<0.003	<0.001	0.015	<0.001	<0.001	0.0013	<0.001	0.0025	0.6	<0.001	0.019	<0.0002	0.0023	<0.002	<0.001	<0.05
M31-LBF	Aug 04 2005	<0.2	<0.003	0.0022	0.044	<0.001	<0.001	<0.001	<0.001	0.0034	<0.05	<0.001	0.016	<0.0002	0.0037	<0.002	<0.001	<0.05
O19-GL	Aug 17 2005	<0.2	<0.003	<0.001	0.036	<0.001	<0.001	0.002	<0.001	0.0018	<0.05	<0.001	0.0034	<0.0002	0.0027	<0.002	<0.001	<0.05
O49-GL	Aug 11 2005	<0.2	<0.003	0.0013	0.0049	<0.001	<0.001	0.0019	<0.001	0.0035	<0.05	<0.001	<0.0025	<0.0002	0.0014	<0.002	0.0015	<0.05
P19-I-O	Aug 17 2005	<0.2	<0.003	<0.001	0.0076	<0.001	<0.001	0.0013	<0.001	0.0025	<0.05	<0.001	<0.0025	<0.0002	0.0014	<0.002	<0.001	<0.05
P49-O	Aug 19 2005	<0.2	<0.003	<0.001	0.0027	<0.001	<0.001	0.0032	<0.001	0.01	<0.05	<0.001	0.0028	<0.0002	0.0013	<0.002	<0.001	<0.05
Lower Action Level		0.71	0.005	0.026	1	0.0032	0.005	0.061	0.005	0.51	2.2	0.026	0.22	0.0011	0.08	0.027	0.002	2.5
Arizona Aquifer Water Quality Standard		-	0.006	0.05	2	0.004	0.005	0.1	-	-	-	0.05	-	0.002	0.1	0.05	0.002	-

All results in milligrams per liter (mg/L)

 $\leq$  = less than detection limit

AOL = Accept quality limit

Lowest Action Level = Lowest alert level or AQL; a higher value may apply to individual results wells.

R = Reserved