

# Quivira Mining Company

P.O. Box 218, Grants, New Mexico, USA 87020

October 5, 1999

Certified Mail  
Return Receipt Requested (P 268 361 038)

Ms. Katherine Yuhas  
Groundwater Section  
New Mexico Environment Department  
P.O. Box 26110  
Santa Fe, NM 87502

Re: **Discharge Plan - 71**  
**3<sup>rd</sup> Quarter 1999 Report**

*Docket # 40-8905*

Dear Ms. Yuhas,

Please find attached the 3<sup>rd</sup> quarter monitoring reports as required by discharge plan, DP-71.

If you have any questions or need additional information, please call me at 287-8851, extension 205.

Regards,



Peter Luthiger  
Supervisor, Radiation Safety  
and Environmental Affairs

xc: T. Fletcher  
P. Goranson  
J. Suermier (NRC-MD)  
NRC-TX  
file

*ML05*

*PDN ADDCR 0400 8905*

Hydrological Monitoring Report Form  
 Ambrosia Lake, New Mexico  
 Section 4 Monitor Wells (DP-71)  
 Page 1

Monitoring Well	Date	Depth To Water (feet)	Total Depth (feet)	Specific Conduct.	Temp. (C)	pH	Var. H2O	Cl mg/l	NO3(N) mg/l	SO4 mg/l	TDS mg/l
MW-1	20-Jul-99		39.20				Dry				
MW-2	20-Jul-99		38.68				Dry				
MW-3	20-Jul-99		37.90				Dry				
MW-4	20-Jul-99		35.75				Dry				
MW-5	20-Jul-99		38.71				Dry				
MW-6	20-Jul-99		38.60				Dry				
MW-7	20-Jul-99		38.70				Dry				
MW-8	20-Jul-99		38.73				Dry				
MW-9	20-Jul-99		38.73				Dry				
MW-10	20-Jul-99		39.21				Dry				
MW-11	20-Jul-99		36.15				Dry				
MW-12	20-Jul-99		18.35				Dry				
MW-13	20-Jul-99		29.50				Dry				
MW-14	20-Jul-99		47.53				Dry				
MW-15	20-Jul-99		39.80				Dry				
MW-16	20-Jul-99	37.75	38.22				Insuff H2O				
MW-17	20-Jul-99		43.53				Dry				
MW-18	20-Jul-99	53.69	54.85				Insuff H2O				
MW-19	20-Jul-99	45.33	48.40	3000	15.8	6.7	-0.55	140.0	5.9	1650	3520
MW-20	20-Jul-99		51.20				Dry				
MW-21	20-Jul-99		52.21				Dry				
MW-22	20-Jul-99	28.60	36.90	3875	13.8	7.5	0.15	71.0	53.0	3180	5190
MW-23	20-Jul-99	41.70	41.90				Insuff H2O				
MW-24	20-Jul-99	49.50	50.25				0.10				
MW-25	20-Jul-99		29.71				Dry				
MW-26	20-Jul-99	35.28	35.43				Insuff H2O				
MW-27	20-Jul-99	26.67	28.10	3300	11.3	7.0	0.44	170.0	0.2	2450	4170
MW-28	20-Jul-99		32.65				Dry				
MW-29	20-Jul-99	28.15	29.43	3050	13.8	7.1	-0.58	210.0	12.7	2170	3630
MW-30	20-Jul-99	42.29	42.40				Insuff H2O				
MW-31	20-Jul-99	44.40	50.75	2925	13.2	7.1	0.18	74.0	4.9	2240	3910

Note --> A negative variance indicates a decrease in the depth to water level from the previous reading.  
 A positive variance indicates an increase in the depth to water level from the previous reading.

Quivira Mining Company  
Discharge Plan DP-71

Evaporation Pond Analytical Results

Pond	U	Se	Mo	Pb	As	NO <sub>3</sub>	SO <sub>4</sub>	TDS	Cl
11	13.7	1.41	4.0	<0.005	1.0	3.0	31300	52800	7950
12	4.3	0.57	2.0	0.002	.24	0.8	10400	19100	3030
13	99.7	5.3	27	0.09	11	15	135000	239000	36700
14	130	1.76	28	0.13	13	20	151000	255000	33500
15	76.2	1.48	8	< 0.02	7	10	113000	183000	22100
16	34.5	5.3	35	0.05	3.2	131	74700	129000	19900
17	79	9.4	33	< 0.03	1.7	560	144000	265000	43300
18	26.6	2.9	2	< 0.02	1.6	8	538000	101000	15100
19	14	3	3.3	< 0.01	0.6	6	48800	83400	12600
20	17.9	1.87	5.2	< 0.01	1.3	6	35900	64800	11300
21	18.5	1.74	2.1	< 0.01	1.0	6	38400	66500	9980

Notes: Sample collection date August 9, 1999  
All values are milligrams per liter.