

CalMat Co

P.O. BOX 947, COLTON, CALIFORNIA 92324/(714) 825-4260



July 11, 1988

Mr. Lowell P. Braxton
Administrator
Utah Division of Oil, Gas and Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RECEIVED
JUL 18 1988

DIVISION OF
OIL, GAS & MINING

Re: Ivie Creek, Hidden Valley Project
1988 Stream Monitoring Work

Dear Mr. Braxton:

Enclosed are the results of the May 1988 stream monitoring work for Ivie Creek at the Hidden Valley Project. Samples and field measurements were taken on May 23, 1988.

Both the field results, including work sheets, and the laboratory results are included here. Site #1 is the upstream monitoring site and is located on the west side of the property. Site #2, the downstream monitoring site, is located just to the east of the property line.

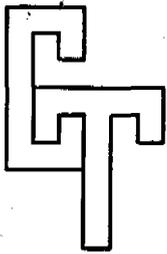
Please contact me if you have any questions regarding this matter.

Sincerely,

John W Rains

John W. Rains
Chief Mining Engineer
California Portland Cement Division

JWR/kew
Enclosures



CHEMTECH

CHEMICAL AND BACTERIOLOGICAL ANALYSES

6100 S. STRATLER
MURRAY, UTAH 84107
(801) 262-7299

DATE: 6-13-88

TO: JBR/Calmat
1952 E. Fort Union Blvd.
Suite 209
Salt Lake City, UT 84121

SAMPLE ID: Lab #U030166 - Ivie Upper #1, 5-25-88
Lab #U030167 - Ivie Lower #2, 5-25-88

CERTIFICATE OF ANALYSIS

<u>PARAMETER</u>	<u>Upper</u> <u>U030166</u>	<u>Lower</u> <u>U030167</u>
TDS, mg/l	3,310	3,200
TSS, mg/l	16	12
Settleable Solids, ml/l	<.1	<.1
Hardness as CaCO ₃ , mg/l	1,560	1,580
Acidity as CaCO ₃ , mg/l	0	0
Bicarbonate as HCO ₃ , mg/l	306	299
Carbonate as CO ₃ , mg/l	0	0
Calcium as Ca, mg/l	173	172
Chloride as Cl, mg/l	215	214
Iron as Fe (Diss), mg/l	<.01	<.01
Magnesium as Mg, mg/l	247	248
Manganese as Mn (Tot), mg/l	0.020	0.020
Potassium as K, mg/l	10.1	10.4
Sodium as Na, mg/l	560	550
Sulfate as SO ₄ , mg/l	1,960	1,960
Oil & Grease, mg/l	<.5	<.5
Cation, meq/l	53.6	53.2
Anion, meq/l	51.9	51.8

Rex Henderson

HIDDEN VALLEY MINE
WATER MONITORING SUMMARY
MAY 23, 1988

Location	Flow (cfs)	Temperature degress C	pH	Conductivity (micromhos)	Dissolved Oxygen (mg/l)
#1 Ivie Ck (upper)	1.7	21.4	8.0	3300	7.4
#2 Ivie Ck (lower)	1.9	18.9	7.9	3500	7.2