File INA/015/007
water monitoring

0008

CalMat Co

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

CalMat
CALIFORNIA PORTLAND
CEMENT DIVISION

June 25, 1986

RECEIVED
JUN 27 1986
DIVISION OF
OIL, GAS & MINING

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

Dear Mr. Braxton:

Enclosed please find the results of the May, 1986 stream monitoring work for Ivie Creek at the Hidden Valley Project. Samples and field measurements were taken on May 21. 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
CalMat Co

JWR/kew

CERTIFICATE OF ANALYSIS

STANDARD LABORATORIES, INC.

P.O. Box 1140, Huntington, Utah 84528 801-653-2314

Lab. No. 8095

Date Rec'd 5-21-86

Date Sampled 5-21-86

Time Sampled

Client: JBR/UINTEX
1841 EAST FORT UNION BLVD
SALT LAKE CITY, UT 84121

Sample ID: JBR: HIDDEN VALLEY
SITE #2 EAST SITE

Acidity	<1.0	mg/l $CaCO_3$
Alkalinity, Total		mg/l $CaCO_3$
Alkalinity, Bicarbonate	215	mg/l ~~$CaCO_3$~~ HCO_3
Alkalinity, Carbonate	<1.0	mg/l $CaCO_3$
Chloride	44	mg/l
Coliform, Fecal		MPN/100 ml
Coliform, Total		MPN/100 ml
Conductivity		umhos/cm
Fluoride	0.20	mg/l
Hardness, Total	461	mg/l $CaCO_3$
Nitrogen, Ammonia		mg/l
Nitrogen, Nitrate	0.06	mg/l
Nitrogen, Nitrite		mg/l
Oil & Grease	<0.5	mg/l
pH		Units
Phosphorus, Ortho		mg/l
Phosphorus, Total		mg/l
Solids, Total Dissolved	740	mg/l
Solids, Total Suspended	627.0	mg/l
Sulfate	355	mg/l
Sulfide		mg/l
Turbidity	250	NTU
Total Cations	12.28	meq/l
Total Anions	12.16	meq/l

Aluminum		mg/l
Arsenic	<0.001	mg/l
Barium	<0.1	mg/l
Beryllium		mg/l
Boron	0.24	mg/l
Cadmium	<0.005	mg/l
Calcium	84	mg/l
Chromium	<0.05	mg/l
Copper	<0.02	mg/l
Iron	<0.05	mg/l
Lead	<0.05	mg/l
Magnesium		mg/l
Manganese	0.02	mg/l
Mercury	<0.2	ug/l
Nickel	<0.04	mg/l
Potassium	6	mg/l
Selenium	<0.005	mg/l
Silica	8.2	mg/l
Sodium	67	mg/l
Vanadium		mg/l
Zinc	<0.005	mg/l
Iron (Diss.)	<0.05	mg/l
Manganese (Diss.)	<0.01	mg/l
Silver	<0.01	mg/l

Analyst: David A. Janney

Respectfully submitted David A. Janney

Certified Environmental Laboratory

CERTIFICATE OF ANALYSIS

STANDARD LABORATORIES, INC.
P.O. Box 1140, Huntington, Utah 84528 801-653-2314

Lab. No. 8094
Date Rec'd 5-21-86
Date Sampled 5-21-86
Time Sampled

Client: JBR/UINTEX
1841 EAST FORT UNION BLVD
SALT LAKE CITY, UT 84121

Sample ID: JBR: HIDDEN VALLEY
SITE #1 WEST SITE

Acidity	<1.0	mg/l $CaCO_3$
Alkalinity, Total		mg/l $CaCO_3$
Alkalinity, Bicarbonate	214	mg/l ~~$CaCO_3$~~ HCO_3
Alkalinity, Carbonate	<1.0	mg/l $CaCO_3$
Chloride	45	mg/l
Coliform, Fecal		MPN/100 ml
Coliform, Total		MPN/100 ml
Conductivity		umhos/cm
Fluoride	0.19	mg/l
Hardness, Total	456	mg/l $CaCO_3$
Nitrogen, Ammonia		mg/l
Nitrogen, Nitrate	0.04	mg/l
Nitrogen, Nitrite		mg/l
Oil & Grease	<0.5	mg/l
pH		Units
Phosphorus, Ortho		mg/l
Phosphorus, Total		mg/l
Solids, Total Dissolved	732	mg/l
Solids, Total Suspended	682.0	mg/l
Sulfate	350	mg/l
Sulfide		mg/l
Turbidity	260	NTU
Total Cations	12.10	meq/l
Total Anions	12.06	meq/l

Aluminum		mg/l
Arsenic	<0.001	mg/l
Barium	<0.1	mg/l
Beryllium		mg/l
Boron	0.26	mg/l
Cadmium	<0.005	mg/l
Calcium	84	mg/l
Chromium	<0.05	mg/l
Copper	<0.02	mg/l
Iron	1.37	mg/l
Lead	<0.05	mg/l
Magnesium		mg/l
Manganese	0.20	mg/l
Mercury	<0.2	ug/l
Nickel	<0.04	mg/l
Potassium	6	mg/l
Selenium	<0.005	mg/l
Silica	8.4	mg/l
Sodium	65	mg/l
Vanadium		mg/l
Zinc	<0.005	mg/l
Iron (Diss.)	0.08	mg/l
Manganese (Diss.)	<0.01	mg/l
Silver	<0.01	mg/l

Analyst: David L Janusz

Respectfully submitted David L Janusz

Certified Environmental Laboratory

DATA SUMMARY
HIDDEN VALLEY SURFACE WATER MONITORING
MAY, 1986

#	Location	Date	Time	Q (cfs)	pH	Temp air-water (° C)	Cond. micro-mhos*
1	Ivie west	5-21-86	1330	15.0	8.2	23-14	1100
2	Ivie east	5-21-86	1445	15.2	8.2	23-15	1175

*Temperature-corrected

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Surface Water Monitoring Record

Client HIDDEN VALLEY

Site #1 West site Ivie Creek (upstream)

Crew KK Date/Time 5-21-86 1330

Measuring Conditions fair very high downstream wind is disturbing flow

Air Temp 23°c Water Temp 14°c pH 8.2 EC 1100 µmhos

Flow Meas. Method Marsh McBirney Sample? yes

Dist.		Depth	Velocity	Ad. Vel.	cfs
11'		WE			
11.4	(.7)	.4	.68		.190
12.0	(.6)	.4	1.45		.348
12.6	(.55)	.55	2.08		.629
13.1	(.55)	.55	2.22		.672
13.7	(.65)	.6	2.38		.928
14.4	(.7)	.6	2.47		1.037
15.1	(.75)	.6	2.40		1.080
15.9	(.9)	.6	2.44		1.318
16.9	(.8)	.55	2.46		1.082
17.5	(.6)	.5	2.60		.780
18.1	(.65)	.45	2.51		.734
18.8	(.75)	.4	2.22		.666
19.6	(.8)	.35	2.30		.644
20.4	(.65)	.3	2.00		.390
20.9	(.6)	.3	2.40		.432
21.6	(.75)	.4	2.40		.720
22.4	(.8)	.4	2.33		.745
23.2	(.8)	.45	2.03		.731
24	(.9)	.5	1.70		.765
25	(.9)	.7	1.76		1.109

25.4 wb

Total = 15.0 cfs

Surface Water Monitoring Record

Client HIDDEN VALLEY

Site #2 Ivie Creek East Site (downstream)

Crew KK Date/Time 5-21-86 1445

Measuring Conditions okay

Air Temp 23°C Water Temp 15 °C pH 8.2 EC 1175 µ

Flow Meas. Method Marsh McBirney Sample? yes

Dist.	Depth	Velocity	Ad. Vel.	cfs
13.6	WE			
13.2 (.65)	.2	1.02		.133
12.7 (.5)	.3	1.18		.177
12.2 (.5)	.4	1.43		.286
11.7 (.5)	.4	1.50		.300
11.2 (.5)	.45	1.94		.436
10.7 (.5)	.45	2.14		.482
10.2 (.5)	.45	2.35		.529
9.7 (.5)	.55	2.29		.630
9.2 (.5)	.6	2.13		.639
8.7 (.5)	.7	2.38		.833
8.2 (.5)	.75	2.82		1.056
7.7 (.5)	.8	2.90		1.160
7.2 (.5)	.7	2.50		.875
6.7 (.5)	.65	2.51		.816
6.2 (.5)	.65	2.70		.878
5.7 (.5)	.65	2.66		.864
5.2 (.5)	.7	2.23		.780
4.7 (.5)	.9	2.12		.954
4.2 (.5)	1.1	2.43		1.336
3.7 (.5)	1.1	1.80		.990
3.2 (.65)	1.0	1.62		1.053
2.8 WE			Total	15.2 cfs

(December 1985)

COAL MINING AND RECLAMATION OPERATIONS FOR 1985
(Authority UMC 784)

(Must be submitted to the Division by March 31, 1986)

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84180-1203
(801) 538-5340

Operator: California Portland Cement Company
Mine Name: Hidden Valley
Mailing Address: P.O. Box 947, Colton, CA 92324
Company Representative: John W. Rains
Permit No.: INA/015/007
~~Date of Permanent Program Permit~~ Mine Land Reclamation Contract: 4/4/80
Quantity of Coal Mined (tonnage) 1985: Ø

Attach Most Recent Certificate of Insurance. N/A

Attach Updated Mine Sequence Map. N/A

All monitoring activities during the report period must be submitted with this report: (including, but not limited to)

A. **Water Monitoring Data** Sample taken middle of May 1986 - See attached

B. **Precipitation Data** N/A

C. **Subsidence Monitoring** N/A

D. **Vegetation Data (test plots) or Revegetation Success Monitoring (includes interim and final)** N/A

E. **Permit Stipulation Status**

Mine Land Reclamation Contract April 4, 1986.
Issued uner the interim program

0488R