

0022

RECEIVED FEB 10 1986

# COAL SYSTEMS, Inc.

CONSULTANTS/ENGINEERS

L. G. MANWARING, P.E.  
President

P.O. BOX 17117  
SALT LAKE CITY, UTAH 84117

February 7, 1986

Area Code 801  
261-4500

RECEIVED  
MAR 10 1986

DIVISION OF  
OIL, GAS & MINING

Mr. John R. Danio, Mining Engineer  
WESTERN STATES MINERALS CORPORATION  
4975 Van Gordon Street  
Wheatridge, CO 80033

Re: J. B. King Mine Reclamation

Dear Mr. Danio:

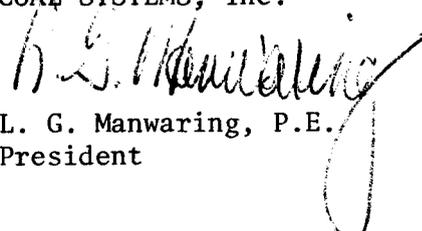
Attached please find the data you requested for preparation of your report on the J. B. King Mine.

Included are the Post-Reclamation Monitoring Reports to the DOGM for the months of November, December 1985 and January 1986, and the Annual Precipitation Data for the area.

Should you have any questions, please call.

Sincerely,

COAL SYSTEMS, Inc.

  
L. G. Manwaring, P.E.  
President

LGM/bm

Attachments: Post-Monitoring Reports (3), Precipitation Data



ANNUAL PRECIPITATION - J. B. KING MINE AREA

Measurements from Ferron, Utah station, approximately 22 miles north of mine site. Can be considered comparable to J. B. King environment.

1984 - 7.61" (Total for year)

1985 - January	0.40"
February	0.19
March	0.84
April	1.15
May	1.06
June	0.43
July	2.21
August	0.01
September	0.91
October	0.95
November	1.54
December	0.51

1985 Total - 10.20"

Data from Utah State Climatologist, Logan, Utah  
Phone - 801-750-2190

Note: 30 year Average Annual Precipitation - 8.16"/year

# COAL SYSTEMS, Inc.

CONSULTANTS/ENGINEERS

L. G. MANWARING, P.E.  
President

P.O. BOX 17117  
SALT LAKE CITY, UTAH 84117

Area Code 801  
261-4500

January 20, 1986

Mr. John J. Whitehead  
Reclamation Hydrologist and Permit Supervisor  
DIVISION OF OIL, GAS & MINING  
3 Triad Center, #350  
Salt Lake City, Ut. 84180-1203

Re: J. B. King Mine  
Permit No. INA-015-002  
Post Reclamation Monitoring

Dear Mr. Whitehead:

In accordance with the schedule outlined in the approved permit, the monthly monitoring inspection for January was conducted on January 17, 1986. L. G. Manwaring of Coal Systems, Inc. performed all the monitoring activities. This letter is intended to inform you of this inspection, and relay the conclusion and observations made.

An inspection was made of the many hydrologic structures found on the site. This included an inspection of the sediment pond, the borrow pit ditch and feeder ditches. Also, all the sediment control structures were inspected. All these structures were found to be in good condition and functional. A small amount of water was observed flowing in the borrow pit for about 150 ft. The snow has all melted now, but no signs of erosion due to snow melt runoff were seen.

Cattle are now grazing in the area. This may be a problem in the future. They have started to eat some of the straw bales serving as sediment control structures. Fencing the area has been discussed with Western States Minerals and it is recommended that it be done in the near future.

Subsidence caused tension cracks were inspected and found to be stable. Remedial actions are working well. Only one small hole of about 5 in. in diameter was observed and will be filled and re-groomed during the next visit.

All embankments and backfilled slopes were inspected and found to be sound.



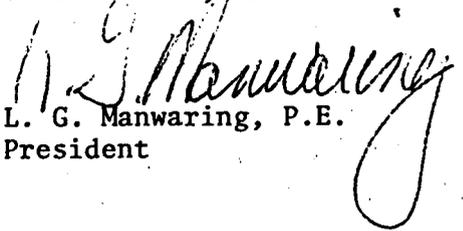
Mr. J. J. Whitehead  
January 20, 1986  
Page 2

In general, the site looked good and is in compliance with the overall goals. No disturbance to the hydrologic balance within the reclaimed site and associated off-site areas was observed. The reclamation plan is working well and should cause no adverse impacts on wildlife in the area. A number of pictures were taken during this visit.

Should you have any questions, or desire further detail in some area, please give us a call.

Sincerely,

COAL SYSTEMS, Inc.

  
L. G. Manwaring, P.E.  
President

LGM/bm

cc: Mr. J. F. Carmody, Western States Minerals Corporation

# COAL SYSTEMS, Inc.

CONSULTANTS/ENGINEERS

L. G. MANWARING, P.E.  
President

P.O. BOX 17117  
SALT LAKE CITY, UTAH 84117

Area Code 801  
261-4500

December 31, 1985

Mr. John Whitehead  
Reclamation Hydrologist & Permit Supervisor  
DIVISION OF OIL, GAS & MINING  
3 Triad Center, #350  
Salt Lake City, Ut. 84180-1203

Re: Post Reclamation Monitoring  
J. B. King Mine  
Permit No. INA-015-002

Dear Mr. Whitehead:

In accordance with the schedule outlined in the approved permit, the monthly monitoring inspection for December was conducted on December 27, 1985. L. G. Manwaring of Coal Systems, Inc. performed all the monitoring activities. This letter is intended to inform you of this inspection, and relay the conclusions and observations made.

All appropriate signs and markers were found to be in place and in good condition.

An inspection was made of the many hydrologic structures found on the site. This included an inspection of the sediment pond and borrow pit ditch and feeder ditches. Also, all the sediment control structures were inspected. All these structures were found to be in condition and functional. Some snowfall remained in a few areas, but the majority has melted. No real evidence of this snow melt can be seen in the borrow pit ditch or the sediment control structures. All structures are still in a 'new' condition.

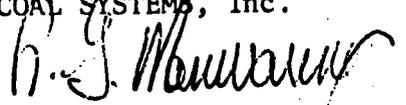
All embankments and backfilled slopes were inspected and found to be sound.

In general, the site looked good and is in compliance with the overall goals. No disturbance to the hydrologic balance within the reclaimed site and associated off-site areas was observed. The reclamation plan is working well and should cause no adverse impacts on wildlife in the area.

Should you have any questions, or desire further detail in some area, please give us a call.

Sincerely,

COAL SYSTEMS, Inc.

  
L. G. Manwaring, P.E.  
President

LGM/bm

cc: J. F. Carmody, J. Danio, Western States Minerals Corp.  
Wheatridge, CO



# COAL SYSTEMS, Inc.

CONSULTANTS/ENGINEERS

L. G. MANWARING, P.E.  
President

P.O. BOX 17117  
SALT LAKE CITY, UTAH 84117

Area Code 801  
261-4500

November 29, 1985

Mr. John J. Whitehead  
Reclamation Hydrologist & Permit Supervisor  
DIVISION OF OIL, GAS & MINING  
3 Triad Center, #350  
Salt Lake City, Ut. 84180-1203

Re: Post Reclamation Monitoring  
J. B. King Mine  
Permit No. INA-015-002

Dear Mr. Whitehead:

As you are aware, the J. B. King Mine site reclamation activities have been completed. In accordance with the schedule outlined in the approved permit, the first monthly monitoring inspection was conducted on November 14, 1985. Brian Howell and Ivan Lott of Coal Systems, Inc. performed all the monitoring activities. This letter is intended to inform you of this inspection, and relay the conclusions and observations made.

All appropriate signs and markers were found to be in place and in good condition.

An inspection was made of the many hydrologic structures found on the site. This included an inspection of the sediment pond and borrow pit ditch and feeder ditches. Also, all the sediment control structures were inspected. All these structures were found to be in good condition and functional. Little or no rainfall has apparently fallen since their construction; therefore, these structures are still in a 'brand new' condition. However, about 2-3 inches of snow covered the site at the time of the inspection. The effect of the runoff from this snow melt will be closely monitored during the next visit.

All embankments and backfilled slopes were inspected and found to be sound and showed no signs of instability.

Although it had only been one month since the revegetation planting, some new grass sprouts were observed.

In general, the site looked good and it was found to be in compliance with the overall goals. No disturbance to the hydrologic bal-



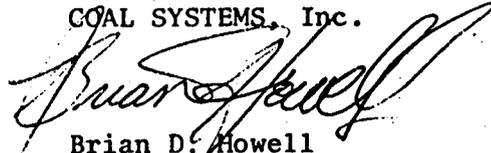
Mr. J. J. Whitehead  
November 29, 1985  
Page 2

ance within the reclaimed site and associated off-site areas was observed. The reclamation plan is working well and should not cause any adverse impacts on the wildlife in the area.

Should you have any questions, or desire further detail in some area, please give us a call.

Sincerely,

COAL SYSTEMS, Inc.



Brian D. Howell  
Mining Engineer

BDH/bm

cc: J. F. Carmody, J. Danio, Western States Minerals Corp., Wheat Ridge, CO.