

WATER MONITORING MEMORANDUM

Utah Coal Regulatory Program

March 31, 2006

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor *pgl*

FROM: Steve Fluke, Reclamation Hydrogeologist *MF*

RE: 2005 Third Quarter Water Monitoring, West Ridge Resources, West Ridge Mine, C007/0041-WQ05-3, Task ID #2866

1. Was data submitted for all required monitoring sites? YES [X] NO []

The West Ridge Mine is currently operational. Water monitoring data is evaluated from the data that is submitted quarterly by the mine to the Division EDI database. Water monitoring protocols, and surface, groundwater and monitoring wells, and UPDES sample parameters are outlined in the mine's MRP on Tables 7-1, 7-2, 7-3, and 7-4, respectively.

Surface *Operational sampling is required quarterly for eight stream monitoring sites (ST-3, ST-8, ST-9, ST-10, ST-11, ST-12, ST-13, and ST-15). Sites ST-11, ST-12 and ST-15 have been added and site ST-4 has been replaced by ST-13 this quarter for the SITLA lease area. There are four stream monitoring sites (ST-5, ST-6, ST-6A, and ST-7) that are equipped with automatic samplers that are required to be checked following precipitation events.*

All surface monitoring sites were sampled and data submitted for the 2005 third quarter monitoring.

Groundwater and Wells *Operational sampling is required quarterly for ten spring monitoring sites (SP-12, SP-13, SP-15, WR-1, WR-2, SP-16, SP-8, S-80, SP-101, and SP-102) and one groundwater monitoring well site (DH 86-2). Sites SP-101 and SP-102 have been added this quarter for the SITLA lease area.*

All groundwater and well monitoring sites were sampled and data submitted for the 2005 third quarter monitoring.

UPDES *Operational sampling is required monthly for two active UPDES sites (D001 and D002).*

All UPDES sites were sampled and data submitted for the 2005 third quarter monitoring.

2. Were all required parameters reported for each site? YES [] NO [X]

Surface All required parameters were reported.

Groundwater and Wells All required parameters were reported with the following exception:

SP-15 – No laboratory sample was collected due to low flow (approx. 0.1 gpm).

UPDES All required parameters were reported.

3. Were any irregularities found in the data? YES [X] NO []

Surface No irregularities were found in the data with the following exceptions:

ST-5 -. Total dissolved solids (TDS), sulfate, and dissolved potassium were reported above two standard deviations. This is not uncommon for this site that uses an automatic sampler to collect surface water following a storm event.

Groundwater and Wells No irregularities were found in the data with the following exceptions:

SP-15 – TDS, total hardness, dissolved calcium, magnesium, sodium, and sulfate were reported above two standard deviations likely due to low flow.

WR-2 –Dissolved sodium was reported above two standard deviations. This site has no prior history of elevated constituent concentrations. Continue monitoring for trends.

UPDES No irregularities were found in the data with the following exceptions:

D002 – The calculated TDS for the mine water discharge exceeds the maximum limit of 2,000 lbs/day for July, August, and September.

4. On what date does the MRP require a five-year resampling of baseline water data?

Five-year baseline resampling is to occur at the time of the mid-term review. The next baseline resampling should be conducted by October 1, 2006.

5. Based on your review, what further actions, if any, do you recommend?

Surface Continue discussions with the Permittee and mine hydrologist regarding whether the automatic sampling method for some of the stream sites can be improved upon.

Groundwater and Wells None.

UPDES Follow up on the ongoing discussions between Jeff Studenka of the Utah DWQ and the mine to possibly amend the UPDES permit to account for TDS concentrations that exceed the daily maximum load. Determine if and/or why there is a discrepancy between the data input to the EDI database and the DMR data submitted to DWQ. Correct this problem as necessary.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES [] NO [X]

7. Follow-up from last quarter, if necessary. Did the Mine Operator submit or provide an explanation for missing and/or irregular data?

I discussed the discrepancy between the data input to the EDI database and the DMR with Gary Gray. He committed to making sure the two are in agreement. In addition, the mine is pursuing a new UPDES permit and the possibility of joining the salinity offset program.