0007

cc: Pete Hess for follow-up OK


# State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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April 19, 2002

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: James D. Smith, Senior Reclamation Specialist JDS

RE: 2001 Third Quarter Water Monitoring, Energy West Mining Company, Trail Mountain Mine, C/015/009-WQ01-3

**1. Were data submitted for all of the MRP required sites?** YES [X] NO [ ]
*Identify sites not monitored and reason why, if known*:

The mine was sealed in June 2001 and the reports indicate no discharge at UPDES UT23728–002 after May 2001.

**2. On what date does the MRP require a five-year resampling of baseline water data.**
*See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP does not have such a requirement.*

**Resampling Due Date**

Renewal submittal due 10/21/04, renewal due 02/21/05. Baseline analyses were performed in 1996 and will be repeated every 5 years, i.e., next baseline analyses will be in 2001.

**3. Were all required parameters reported for each site?** YES [ ] NO [X]
*Comments, including identity of monitoring site:*

SW-2: TSS and oil and grease were not on the September lab report but are in the database;

SW-3: Se was on the September lab report but is not in the database;

**4. Were irregularities found in the data?** YES [X] NO [ ]

*Comments, including identity of monitoring site:*

SW-2: Na (number of samples, n = 15), SO4 (n = 111), and lab specific conductivity (not a required parameter; n = 82) were outside the two standard deviation range;

SW-3: total hardness (n = 49) and SO4 (n = 101) were outside the two standard deviation range; and field specific conductivity (n = 120), lab specific conductivity (n = 70), TDS (n = 102), total anions (n = 75), total cations (n = 75), Ca (n = 18), Mg (n = 18), and Cl (n = 102) were outside the two standard deviation range and exceeded the maximum value recorded in the APPX database;

18-3-1 (T-19): bicarbonate (n = 44), total alkalinity (not a required parameter, n = 43), lab conductivity (not a required parameter, n = 43), Mg (n = 17), and K (n = 16) exceeded the maximum value recorded in the APPX database;

T-8 (TM-21 or 17-21-1): lab conductivity (n = 36) was outside the two standard deviation range; and field pH (n = 32) was outside the two standard deviation range and below the minimum value recorded in the APPX database;

T-14 (17-25-1): field temperature (n = 18) was outside the two standard deviation range (high); bicarbonate (n = 15), total alkalinity (not a required parameter, holding time had expired, n = 15), Ca (n = 6), total iron (n = 7), Mg (n = 6), Na (n =6), and nitrate (n = 1) and were outside the two standard deviation range and exceeded the maximum value recorded in the APPX database; and Mo (n = 0) was detected above the MRL;

T-10 (17-26-4): field pH (n = 20) was below the minimum value recorded in the APPX database; K (n = 5) was outside the two standard deviation range and exceeded the maximum value recorded in the APPX database; and nitrate (n = 1) exceeded the maximum value recorded in the APPX database;

T-6 (18-2-1): lab specific conductivity (n = 35) and SO4 (n = 38) were outside the two standard deviation range; TDS (n = 38) was outside the two standard deviation range and exceeded the maximum value recorded in the APPX database; field pH (n = 32) and nitrate (n = 2) were outside the two standard deviation range and below the minimum value recorded in the APPX database; total anions (n = 38) and Mg (n = 8) exceeded the maximum value recorded in the APPX database but were within the two standard deviation range; and Mo (n = 0) was detected above the MRL.

**5. Were DMR forms submitted for all required sites?**

1st month, YES [X] NO [ ]
2nd month, YES [X] NO [ ]
3rd month, YES [X] NO [ ]

*Identify sites and months not monitored:*

There was no discharge from either UPDES point during the third quarter.
The mine was sealed in June 2001 and there has been no reported discharge at UPDES UT23728–002 since May 2001.

**6. Were all required DMR parameters reported?** YES [X] NO [ ]

*Comments, including identity of monitoring site:*

There was no discharge from either UPDES point during the third quarter.

**7. Were irregularities found in the DMR data?** YES [ ] NO [X]

*Comments, including identity of monitoring site:*

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

Low pH values may indicate a need to check the accuracy of the pH meter, the calibration standards, or the calibration procedure.

The numerous values in this set of samples that are outside the two standard deviation limit, and often are new maximums or minimums, possibly indicates poor sample collection and handling techniques, poor lab technique, or both. (Detection of Mo in two of these samples may be due to increased sensitivity of analysis methods.) The operator needs to collect and handle samples and monitor lab work with greater diligence.

The operator needs to check for consistency between the lab reports and the database.