

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

April 14, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: James D. Smith, Environmental Scientist

RE: 2004 Third Quarter Water Monitoring, Andalex Resources, Inc., Centennial Project, C/007/0019, Task ID # 2124

The monitoring plan is described in Section R645-301-711.300 of the MRP. Monitoring sites are shown on Figure IV-11. Reports for many monitoring sites are typically no-flow.

1. Were data submitted for all required sites?

Springs YES [X] NO []

There was no flow at two of the four monitored springs.

Streams YES [X] NO []

No-flow was reported at all ten sites.

Well YES [X] NO []

One well is monitored.

UPDES YES [X] NO []

There was no discharge for all four sites.

2. Were all required parameters reported for each site?

Springs YES [X] NO []

Streams YES NO

Well YES NO

UPDES YES NO

3. Were irregularities found in the data?

Springs YES NO

B351: Ca (n = 11), Cl (n = 11), and cation-anion balance (n = 6) were outside two standard deviations.

S18-1: Cl (n = 10), Na (n = 8), and field conductivity (n = 10) were outside two standard deviations.

Streams YES NO

Wells YES NO

Well #1: K (n = 15) and total hardness (n = 31) were outside two standard deviations.

UPDES YES NO

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

The Permittee has committed to sampling baseline water parameters one year prior to the renewal date. The next renewal submittal is due 09/04/2006 for renewal on 04/04/2007, so baseline sampling and analysis are to be done in 2006.

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

Since September 1998, the water depth in Well #1 has dropped but now appears stable at 72 to 76 feet. This condition will continue to be monitored.

6. **Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?** Yes No

7. **Follow-up from last quarter (2nd quarter 2004), if necessary.**

In the second and now in the third quarter 2004, Cl concentration in B351 was 16 mg/l, approximately three times the values seen in the previous two years. This needs to be watched for a trend; however, this higher concentration is not in itself a concern at this time.

8. **Did the Mine Operator submit all missing or irregular data?**

NA