

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

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December 8, 2009

TO: Internal File

THRU: James D. Smith, Permit Supervisor *JS 12/14/09*

FROM: April A. Abate, Environmental Scientist II *AA*  
Kevin Lundmark, Environmental Scientist II *KL*

SUBJECT: 2007 Second Quarter Water Monitoring, Andalex Resources, Centennial Mine, C/007/0019, WQ07-2, Task ID #3172

The Centennial Mine is currently in temporary cessation. No mining or coal processing activities currently take place there, nor is the site in active reclamation. The Permittee (Andalex Resources) is required to continue with the requirements for water monitoring up until bond release in accordance with R645.731.214.

This report is being prepared retroactively and all water monitoring requirements are listed herein are under the previously-approved plan. The new water monitoring plan has been in effect since March 26, 2009. Sections 711.300 pages 7-2 through 7-10 and Appendix L of the MRP pertain to water monitoring. Water sampling locations are shown on Figure IV-11.

**1. Were data submitted for all of the MRP required sites?**

**Springs** YES  NO

Six of the spring sample sites were monitored during this quarter. Only two sites yielded flow, B-351 (undeveloped spring below stock pond) and S18-1.

**Streams** YES  NO

Four out of the 12 stream sample sites reported flow: Intermediate Reach of Buck/Deep Canyon (B263) and the Left Fork of Deadman Wash (18-3), Summit Creek (SC-1) and Antone Creek (AC-1). All the remaining points reported no flow conditions.

**Wells** YES  NO

Well #1 was reported as dry to pump elevation.

**UPDES** YES  NO

All UPDES locations were monitored monthly in accordance with the permit. The only location that discharged was the Aberdeen Mine Discharge outfall (D004).

**Pond** YES  NO

The stock watering pond, 31-1 sampling location was reported as not flowing during the Second quarter of 2007.

**2. Were all required parameters reported for each site?**

**Springs** YES  NO

Flow was not reported for spring B-351 (undeveloped spring below stock pond).

**Streams** YES  NO

**Well** YES  NO

Not applicable this quarter.

**UPDES** YES  NO

**Pond** YES  NO

Not applicable this quarter.

**3. Were any irregularities found in the data?**

**Springs** YES  NO

**Streams** YES  NO

The flow rate at sample location 18-3 was reported as 1,032 gallons per minute on May 1, 2007. The sampler reported that this was mine discharge water.

The reported TSS for location B263 (158 mg/L) was greater than the average value at this location (50 mg/L). The dissolved sodium concentration at this location also appeared slightly elevated.

**Wells**

YES  NO

Not applicable this quarter.

**UPDES**

YES  NO

Location D004 had TDS of 1,491 to 1,523 mg/L during second quarter 2007, which exceed the discharge limitation of 500 mg/L average 30-day TDS. The UPDES permit provides an alternate limitation of 1 ton (2,000 pounds) per day TDS loading as a sum from all outfalls if the 30-day average of 500 mg/L cannot be met. TDS loading calculated from flow and TDS measurements during second quarter 2007 were 6.9 to 7.9 tons per day at location D004. The measured TDS at location 004 are below the Site Specific Standard for TDS for the Price River and tributaries from the confluence of Coal Creek to Carbon Canal Diversion (1,700 mg/L, UAC R317-2-14). As this report was prepared retroactively and discharge from the mine ceased when mining operations ceased, additional action does not appear warranted for the elevated TDS.

**4. Did the Permittee make a timely submittal of all data, including initially missing data, and satisfactorily explain irregular data?**

YES  NO

Permittee indicated that the elevated flow data for spring sample S18-1 were due to mine water discharge.

**5. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements?**

YES  NO

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

None

**7. Follow-up from last quarter, if necessary.**

None, report was prepared retroactively.