

**WATER QUALITY
MEMORANDUM
Utah Coal Regulatory Program**

January 12, 2010

TO: Internal File

THRU: James D. Smith, Permit Supervisor *JDS 01/12/10*

FROM: Kevin Lundmark, Environmental Scientist II *KWL*

RE: 2008, 4th Quarter Water Monitoring, UtahAmerican Energy Inc., Horse Canyon Complex, C/007/0013, WQ08-4, Task ID #3128

This report was prepared from monitoring data queried from the UDOGM database. The data that support this report were collected by mine personnel and sent to a laboratory that analyzed the samples. Data was submitted to the database by UtahAmerican Energy Inc., (UEI). The data were downloaded into file O:\007013.HOR\Water Quality\Spreadsheets\HC122009.xls for this review.

Geneva Mine

Mining at the Geneva Mine ceased October 15, 1985 and the mine is undergoing final reclamation. The Permit for the Geneva Mine (Horse Canyon Mine, MRP-A) was reissued on May 18, 2007. UEI has received Phase 1 and Phase II bond release on most of the acreage of the Geneva Mine Permit; however, UEI has not received Phase III bond release to date. Surface monitoring is required for the Geneva Mine under the Reclamation Plan (MRP-A). The Division previously found that all but one monitoring site were not necessary because they no longer provide pertinent resource information for mining effects or influence. Surface water monitoring site B-1, located on Horse Canyon Creek downstream of the mine, will be monitored until final bond release.

Lila Canyon Mine

UEI received permit approval for the Lila Canyon Mine on May 18, 2007 with special conditions attached. The Conditions were clarified on August 3, 2007. Operational water monitoring is described in Section 731.200 and monitoring sites are listed in Table 7-3 of the Lila Canyon MRP. Table 7-4 and Table 7-5 list the monitoring parameters for surface water and groundwater, respectively, and Plate 7-4 shows the water monitoring sites.

1. Were data submitted for all required sites?

Springs **YES [X] NO []**

No springs are monitored at the Geneva Mine. Operational monitoring for Lila Canyon includes quarterly monitoring at springs L-7-G, L-8-G, L-9-G, L-11-G, L-12-G, L-16-G and L-17-G.

All springs were monitored according to the schedule and the data were submitted. Low flows (<1 GPM) were reported for springs L-7-G, L-8-G, and L-9-G. No flow was reported for the other springs.

Streams **YES [X] NO []**

Surface water (stream) sites will be monitored quarterly. Surface water site B-1 is the only surface water monitoring site monitored at the Geneva Mine. Sites L-1-S, L-2-S, L-3-S, L-13-S, L-14-S, L-18-S, and L-19-S are identified for surface water monitoring for the Lila Canyon Mine.

All required stream sites were monitored for the quarter. No flow was reported for all stream sites.

Wells **YES [X] NO []**

There are no active wells at the Geneva Mine. Three piezometers are monitored for water level only for the Lila Canyon Mine permit: IPA-1, IPA-2 and IPA-3.

The required groundwater wells were monitored for the quarter.

UPDES **YES [X] NO []**

There is not an active UPDES permit for the Geneva Mine. Discharges from the Lila Canyon Mine are authorized under UPDES General Permit No. UTG040000 as application number UTG040024. The Lila Canyon Mine UPDES permit identifies two discharges: 001 is discharge from the sediment pond and 002 is discharge from the underground mine. The UPDES permit specifies monitoring frequency and required parameters. Neither the sediment pond nor the underground mine have been constructed, although these discharges are being monitored as sites L-4-S and L-5-S.

The required monitoring data were reported for the quarter.

2. Were all required parameters reported for each site?

Springs YES [] NO [X]

Oil and grease data (Yes/No) were not reported for spring sites where flow was present.

Streams YES [X] NO []

Wells YES [X] NO []

UPDES YES [X] NO []

3. Were irregularities found in the data?

Springs YES [X] NO []

The water temperature reported for spring L-9-G (Pine Spring) on October 8, 2008 was reported as 52.6 degrees C instead of degrees F. This temperature has been corrected in the database to 11.4 degrees C.

Streams YES [] NO []

Not applicable this quarter.

Wells YES [] NO [X]

UPDES YES [] NO []

Not applicable this quarter.

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

Re-sampling is due preceding permit renewal in May 2011.

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

None

Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? [] Yes [X] No

- 6. Follow-up from last quarter, if necessary.
Did the Mine Operator submit all the missing and/or irregular data (datum)?**

None

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