

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

December 20, 2018

TO: Internal File

THRU: Steve Christensen, Permit Supervisor

FROM: Keenan Storrar, Hydrologist

RE: Second Quarter 2018 Water Monitoring, UtahAmerican Energy Inc., Horse Canyon Complex, C/007/0013, Task ID #5756



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. The list of parameters for baseline, operational and post-mining water monitoring are the same.

1. Were data submitted for all required sites?

Springs YES NO

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. Springs L-11-G and L-7-G reported flow while all others were dry this quarter.

Streams YES NO

Surface water (stream) sites are monitored quarterly. Sites L-1-S, L-2-S, L-3-S, and L-19-S are identified for surface water monitoring for the Lila Canyon Mine.

Stream monitoring sites were monitored according to the schedule. Lila Canyon had a little less than 1 CFS this quarter.

Wells YES NO

The wells IPA-1 and IPA-2 were monitored for depth this quarter.

UPDES YES NO

Discharges from the Lila Canyon Mine are authorized under UPDES Permit No. UT0026018. The Lila Canyon Mine UPDES permit identifies two discharges: 001 is discharge from the sediment pond and 002 is discharge from the underground mine. These discharges are being monitored as sites L-4-S and L-5-G, respectively. The UPDES permit specifies monitoring frequency and required parameters. The underground mine and sediment pond are constructed but not discharging.

L-5-G discharged a couple months this quarter. L-4-S, the sediment pond, did not discharge.

2. Were all required parameters reported for each site?

Springs	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Streams	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Wells	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
UPDES	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

3. Were irregularities found in the data?

The following sites reported parameters more than two standard deviations above the mean:

Springs	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Streams	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Wells	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
UPDES	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

L-5-G has been turned back on in APPX as water monitoring point UPDES 002.

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

Re-sampling for baseline parameters is due preceding permit renewal. Analysis of baseline water samples is conducted according to the operational monitoring plan, therefore no additional parameters are required for baseline monitoring.

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

No further action required at this time.

6. Follow-up from last quarter, if necessary.

None