

OGMCOAL - Castle Gate and Willow Creek 2nd Quarter 2011 Water Reports

From: April Abate
To: dware@foundationcoal.com
Date: 2/1/2012 8:24 AM
Subject: Castle Gate and Willow Creek 2nd Quarter 2011 Water Reports
CC: OGMCOAL@utah.gov
Attachments: 12222011.pdf; 12222011.pdf; April Abate.vcf

Hi Dennis,

Sorry I am so late getting these to you (I'm sure you've been eagerly awaiting their arrival :)

Hope all is well.

Regards,
April

April A. Abate
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114-5801
T: 801.538.5214
M: 801.232.1339
Starting Tuesday, September 6, 2011, our agency hours will be
8am-5pm, Monday-Friday.

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**WATER QUALITY
MEMORANDUM**
Utah Coal Regulatory Program

December 22, 2011

TO: Internal File
THRU: Steve Christensen, Permit Supervisor *GC*
FROM: April A. Abate, Environmental Scientist III *all by 85*
RE: 2011 Second Quarter Water Monitoring, Castle Gate Holding Company, Castle Gate Mine, C/007/0004-WQ11-02, Task ID #3828

The Castle Gate Mine is inactive, mostly reclaimed, and is awaiting appropriate conditions to apply for Phase II Bond Release.

Pertinent water monitoring requirement information is in the MRP in Sections 7.5-1 and 7.5-3, and table 7-16.

1. Was data submitted for all of the MRP required sites? YES NO

Springs –
The Permittee is not required to monitor any springs at the Castle Gate Mine.

Streams –
The Permittee is required to sample four intermittent/ephemeral streams (B-11, B-12, B-28, B-45) for flow, and the laboratory parameters outlined in Table 7-16 each quarter.

The Permittee monitored the intermittent/ephemeral streams on June 28, 2011. None of the locations had any measurable flow.

Wells–
The Permittee is not required to monitor any wells at the Castle Gate Mine.

UPDES–
There are no active UPDES sites at the Castle Gate Mine.

2. Were all required parameters reported for each site? YES NO

Not applicable

3. Were any irregularities found in the data?

YES

NO

Not applicable

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

The MRP does not require a five-year re-sampling of baseline water data.

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

None at this time.

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WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

December 22, 2011

TO: Internal File

THRU: Steve Christensen, Permit Supervisor *SCC*

FROM: April A. Abate, Environmental Scientist III *AAAS*

RE: 2011 Second Quarter Water Monitoring, Plateau Mining Corporation (PMC), Willow Creek Mine, C/007/0038, WQ11-02, Task ID #3851

The Willow Creek Mine is in reclamation. The mines have been closed and sealed. The disturbed areas around the portals have been regraded and seeded. The most recent surface operations took place in Willow Creek Canyon, about a mile from the junction between U.S. Highway 6 and State Highway 191. The reclaimed area in Crandall Canyon is part of the Willow Creek permit area received Phase I Bond Release approval from the Division. The MRP requires that all surface water sampling be conducted up through Phase II Bond Release.

There are no ground water sites monitored during the reclamation phase.

1. Were data submitted for all of the MRP required sites? YES NO

Under the reclamation plan, surface water monitoring is required for sites listed on Table 4.7-2 and shown on Map 15.

Springs- There are no springs monitored during the reclamation phase.

Streams- There are six surface water-monitoring sites:
B3N (Willow Creek above power plant),
B-5 (Price River below processing plant above Willow Creek),
B-6 (Price River above coal processing plant),
B25 (Crandall Canyon Creek),
B26 (lower reach of Crandall Canyon)
B151 (Willow Creek – 3 miles above Willow Creek Mine)

The reclamation sampling water quality list is presented in Section 13, p. 28. Sampling is conducted quarterly. PMC tries to monitor the sites within a two week period from March 15th, June 10th, September 5th and November 30th to attempt to collect data that coincides with first thaw, spring high flow, end of summer low-flow and last sample before

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freeze-up.

All required stream sampling locations were monitored for the quarter on June 27 and 28, 2011. No flow was measured from Crandall Canyon Creek samples B-25 and B-26.

Wells- There are no operational monitoring wells.

UPDES- The mine has been reclaimed and as a result, there are no currently active Utah Pollutant Discharge Elimination System (UPDES) monitoring locations at the site.

2. **Were all required parameters reported for each site?** YES NO
3. **Were any irregularities found in the data?** YES NO

Flows remain exceedingly high (approximately 5,700 gallons per minute upstream of the former portal area) in Willow Creek. Sample B151 had a drop in total suspended solids and total iron levels from 1st to 2nd quarter. Downstream of the former portal area near the processing plant flow levels were reported from B5 at 241,000 gpm and exactly the same rate of 241,454 from B6.

In general, reliability checks for total dissolved solids (TDS) relative to measured conductivity show a TDS result remaining between 55 – 75% of the conductivity value. Reliability checks for TDS values for all stream locations where a sample was collected are presented below:

ID	TDS (mg/L)	Conductivity uS/cm	Acceptable range = between 55% - 75%
B151	481	769	0.625488
B3N	519	831	0.624549
B5	274	411	0.666667
B6	272	412	0.660194

TDS standards for this reach of the Price River Watershed are set at 1,700 mg/L based on the Utah Administrative Code Rule R317-2. Stream samples during this quarter remain well below this standard ranging between 272-519 mg/L.

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

Baseline data were collected at the beginning of mining operations for a two-year period; however, routine 5-year sampling is not specified in MRP. The Division recommends baseline water quality parameter sampling at each five-year renewal period.

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

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Task ID #3851
December 22, 2011

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The Permittee may wish to consider removing Crandall Canyon B-25 and B-26 samples from 1st quarter sampling requirements due to accessibilities issues during the winter months. Reporting of these data during 1st quarter would no longer be required. A minor amendment change to the water monitoring plan in the MRP would accomplish this.

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