

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

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October 14, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Dana Dean, P.E., Senior Reclamation Hydrologist

RE: 2001 First Quarter Water Monitoring, Plateau Mining Corporation, Willow Creek Mine, C/007/0038-WQ01-3, Task ID #1160

- 1. Was data submitted for all of the MRP required sites?** YES  NO   
*Identify sites not monitored and reason why, if known:*

The Permittee did not submit required samples for sites B26, B263, B353, or B25. They reported "No Access" at sites B131, B331, B331A, B51, B121, BN251, BN301, and BW361.

- 2. On what date does the MRP require a five-year resampling of baseline water data.**  
See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP does not have such a requirement.

### Resampling due date

The MRP no longer has a commitment to resample for baseline parameters; the mine is inactive.

- 3. Were all required parameters reported for each site?** YES  NO   
*Comments, including identity of monitoring site:*

**4. Were irregularities found in the data?**

YES  NO

*Comments, including identity of monitoring site:*

Several parameters fell outside of two standard deviations from the mean. They were:

SITE	PARAMETER	VALUE	MEAN	DEVIATIONS FROM MEAN
B3N	Total cations	4.5 meq/l	9.53 meq/l	2.06
B3N	Dissolved Magnesium	18 mg/l	45.52 mg/l	2.22
B3N	Total hardness	152 mg/l	308.58 mg/l	2.45
B5	Total Suspended Solids	1120 mg/l	206.61 mg/l	2.36
B5	Bicarbonate	429 mg/l	230.39 mg/l	3.50
B5	Chloride	33 mg/l	17.17 mg/l	2.05
B5	Total alkalinity	352 mg/l	206.07 mg/l	3.16
B5	Lab sp. Conductivity	722 µmhos/cm	507.48 µmhos/cm	2.23
B5	Total iron	23.4 mg/l	3.07 mg/l	3.69
B6	Bicarbonate	418 mg/l	237.44 mg/l	3.21
B6	Chloride	33 mg/l	17.49 mg/l	2.03
B6	Total alkalinity	343 mg/l	214.28 mg/l	2.70
B6	Lab sp. Conductivity	763 µmhos/cm	513.65 µmhos/cm	2.57
B6	Total iron	18 mg/l	3.39 mg/l	2.66
B151	Dissolved calcium	30 mg/l	51.76 mg/l	2.21
B151	Dissolved magnesium	17 mg/l	41.05 mg/l	2.51
B151	Total hardness	145 mg/l	298.44 mg/l	2.70
BW221	Total iron	15.3 mg/l	1.75 mg/l	3.23

The cation-anion balance was greater than 5% at four sites. They were B151 (12.9%), B3N (14.3%), B5 (20.8%), and B6 (19.0%).

**5. Were DMR forms submitted for all required sites?**

1<sup>st</sup> month, YES  NO   
 2<sup>nd</sup> month, YES  NO   
 3<sup>rd</sup> month, YES  NO

No DMR's were available for the quarter.

**6. Were all required DMR parameters reported?** YES  NO   
*Comments, including identity of monitoring site:*

No DMR's were available for the quarter.

**7. Were irregularities found in the DMR data?** YES  NO   
*Comments, including identity of monitoring site:*

No DMR's were available for the quarter.

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

No further actions are necessary at this time. The missing samples were most likely submitted and/or reviewed during complete inspections at the time, however they did not get into the database or the Division's files. Due to the lapse of time, and personnel and other changes at the mine, the Permittee is unable to locate the missing data now. If the Permittee locates the data, they will submit it to the database.