

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

June 29, 2017

TO: Internal File

THRU: Steve Christensen, Permit Supervisor 

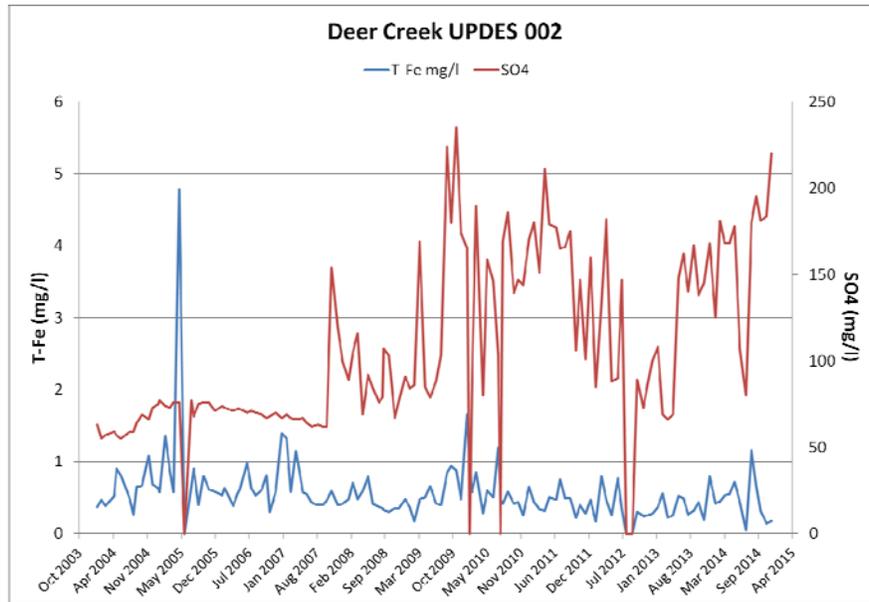
FROM: Keenan Storrar, Hydrologist 

RE: Fourth Quarter 2016 Water Monitoring, PacifiCorp, Deer Creek Mine.
C/015/0018, Task ID #5380

The Deer Creek Mine monitoring plan is described in Appendix A-1 of Volume 9 of the MRP. The Deer Creek Mine closed in January of 2015 and is transitioning towards reclamation. The Permittee will pipe mine-water gravity discharge from Rilda Right portals to the Raw Water Holding Pond of the Huntington Power Plant. The Permittee is also in the process of acquiring a UPDES on Huntington Creek near the pond.

1. **Were data submitted for all of the MRP required sites?** YES NO
2. **Were all required parameters reported for each site?** YES NO
- Springs** YES NO
- Streams** YES NO
- Wells** YES NO
- UPDES** YES NO
3. **Were any irregularities found in the data?**
Listed parameters are more than two standard deviations above the mean.
- Springs** YES NO
MF 213, MF 10: Cond, Bcrb, T-Alk
Sheba Spring: T-Alk, Bcrb
UJV 101: SO4
- Streams** YES NO
ICD: Cond, D-Ca, D0Mg, Bcrb, SO4, T0Hardns, TDS, T-Cats
ICF: Flow
- Wells** YES NO
DCWR1 dropped significantly
- UPDES** YES NO

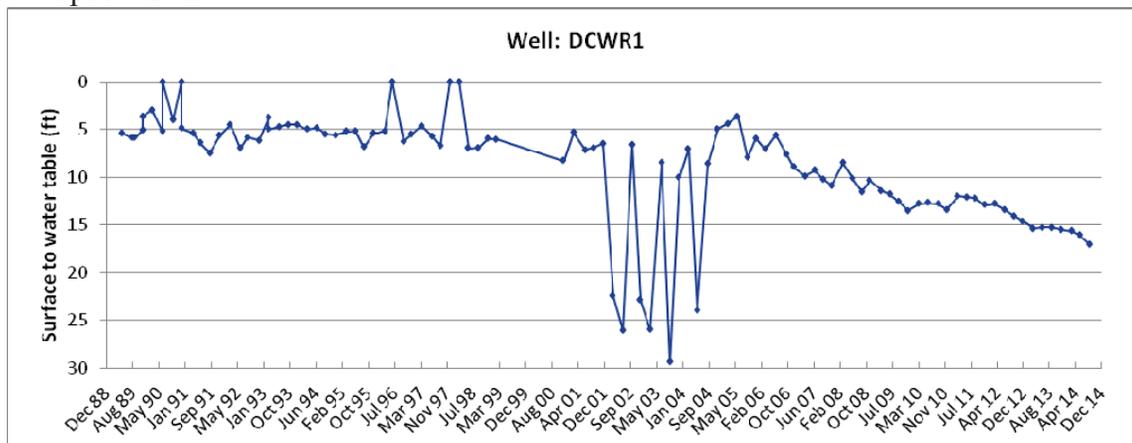
Mine water discharge at the Deer Creek portals UPDES outfall has ceased. Mine pools are developing in the Southern Deer Creek workings and the Mill Fork area workings. These will eventually gravity discharge at the Deer Creek and Rilda Right portals, respectively. Since there is no discharge from the Deer Creek mine portals the graph below is not applicable. Once gravity drainage reaches the Deer Creek and Rilda Right portals this graph should be reinitiated.



Wells

YES NO

The Deer Creek Waste Rock well has been dropping since 2006 (following a small rise in 2004-2005). These changes are probably from factors other than disposal of waste rock at this site: a similar drop in water level is seen at WCWR1 at the Cottonwood/Wilberg Mine Waste Rock Disposal Site.



This well is no longer a Pacificorp water monitored site. It is now monitored by BRC as the

Deer Creek Waste Rock site.

4. **On what date does the MRP require a five-year resampling of baseline water data.**
Baseline analyses were performed in 2001, 2006, 2011, and 2016, repeating every 5 years. The next baseline analyses will be conducted in 2021.
5. **Based on your review, what further actions, if any, do you recommend?**
There is no indication of trends or extremes in any of the parameter values. No further action recommended at this time.
6. **Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?** YES NO
7. **Follow-up from last quarter, if necessary.**
None.
8. **Did the Mine Operator submit all the missing and/or irregular data (datum)?**
NA.