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Incoming  
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# 3366  
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**From:** Ingrid Wieser  
**To:** OGMCOAL  
**Date:** 9/21/2009 11:31 AM  
**Subject:** Fwd: FW: Crandall Canyon -- NOV abatement  
**Place:** OGMCOAL

Incoming for Task # 3366 Thanks!

>>> "Shaver, Dave" <dshaver@coalsource.com> 9/21/2009 11:22 AM >>>  
This email is being forwarded to you to keep you apprised of efforts to  
comply with citation 10044 regarding the macroinvertebrate study in  
Crandall Creek. Thanks

Dave

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From: Karla Knoop [mailto:kknnoop@jbrenv.com]  
Sent: Monday, September 21, 2009 9:57 AM  
To: Shaver, Dave  
Subject: Crandall Canyon -- NOV abatement

Dave,

Here is an update on what JBR has done to help with the Crandall Canyon  
NOV #10044 abatement:

\* On September 3, Karla Knoop (JBR) met Ingrid Wieser (DOGM) and Pam  
Jewkes (USFS) at Crandall Canyon to look at the stream and select sites  
for macroinvertebrate sampling. DWR was also invited to participate in  
this field meeting, but no representatives attended. Three general  
stream reaches were selected for sampling: (1) an upstream reach in the  
vicinity of the memorial; (2) a downstream reach within the iron-stained  
substrate just downstream of the sediment pond; and (3) another  
downstream reach in Crandall Creek near the stream's mouth outside of  
the area with visible iron staining. During the field meeting, it was  
also agreed that the USFS's sampling methodology would be used.

\* To follow up on the methodology discussions, Pam Jewkes  
subsequently emailed some example data sheets, and Dave Kikkert (JBR  
biologist) later discussed details on methods with her by telephone.

\* On September 16th, Karla Knoop and Dave Kikkert met at Crandall Canyon to observe sample locations and finalize sampling methodology. Dave Kikkert then set up the sampling reaches and collected subsamples at all three locations on Crandall Creek, completing the sampling late on September 16th.

\* Samples were submitted to the Utah State University BugLab for detailed taxonomic identification. A rush-fee was paid so that analysis could be obtained as soon as possible, but the lab will likely take a minimum of two weeks to complete the identification.

\* Once results are reported by the BugLab, JBR will begin preparing a complete report. The report will include: (1) raw data; (2) methods description; (3) site descriptions; (4) data interpretation including information on diversity and tolerance; (5) comparisons between sites; (6) comparisons with data obtained during previous macroinvertebrate sampling in Crandall Creek; (7) a discussion on macroinvertebrate populations in light of iron in discharge water; and (8) possible recommendations for future sampling (i.e. site locations, methodology, etc.).

Let me know if you'd like any more detail on this. I will let you know once we receive the analysis from the lab, and will give you a timetable for the report at that time.

Karla

Karla Knoop, Hydrologist

jbr Environmental Consultants, Inc.

phone (435) 637-9645

fax (435) 637-8679

[kknoop@jbrenv.com](mailto:kknoop@jbrenv.com) <<mailto:kknoop@jbrenv.com>>