

OGMCOAL - Sampling at Crandall

From: Kevin Lundmark
 To: Dana Marrelli; Dave Shaver
 Date: 4/1/2010 1:13 PM
 Subject: Sampling at Crandall
 CC: Daron Haddock; Jim Smith; Karla Knoop; OGMCOAL; Steve Christensen

Dave, Dana:

The metals results and field parameters for the February 23, 2010 sampling at Crandall were provided on March 1, 2010; however, we have not yet received the sulfate, alkalinity, TDS and TSS results. Please email the February 23, 2010 results for sulfate, alkalinity, TDS and TSS at your earliest convenience.

I have previously requested that a whole-water sample be collected of the mine discharge water. This request has been made on multiple calls, and was sent in emails on February 9, February 16 and March 2, 2010. I have provided the list of parameters below which should be included. Note that some of the parameters are included with the monthly monitoring being performed. Please complete this sampling as soon as possible. Let me know if you or your analytical laboratory have any questions about the requested analyses.

Water monitoring parameters should include:

1. calcium (dissolved)
2. potassium (dissolved)
3. sodium (dissolved)
4. magnesium (dissolved)
5. silica
6. chloride
7. hot acidity (Standard Methods 2310a)
8. aluminum (total & dissolved)
9. iron (total & dissolved)
10. manganese (total & dissolved)
11. sulfate
12. alkalinity (total, carbonate and bicarbonate)
13. TDS
14. suspended solids
15. ferrous iron (field)
16. pH (field)
17. dissolved oxygen (field)
18. conductivity (field)
19. temperature (field)
20. flow (field)

Thanks,
Kevin

>>> "Karla Knoop" <kknoop@jbreenv.com> 3/1/2010 9:45 AM >>>
Kevin,

I've added the field parameters to the table:

2/23/2010

Parameter	002-Pretreatment	002
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Iron	total, mg/L	3.3	3.3
	dissolved, mg/L	1.30	0.12
	ferrous, mg/L	0.77	<0.10
Aluminum	total, mg/L	<0.10	<0.10
	dissolved, mg/L	<0.10	<0.10
Manganese	total, mg/L	0.13	0.13
	dissolved, mg/L	0.13	0.13
pH	std. units	7.76	7.94
Temperature	deg. C	10.1	11.2
Conductivity	µmhos/cm2	1030	1040
Dissolved Oxygen	mg/L	5.3	8.7

I'm also attaching the lab report, in case you are interested in the details. The remaining parameters are being analyzed by another lab – those results are not yet available. Please let me know if you have any additional questions.

Regards,
Karla

Karla Knoop, hydrologist
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From: Kevin Lundmark [mailto:kevinlundmark@utah.gov]
Sent: Monday, March 01, 2010 9:25 AM
To: Dave Shaver; Karla Knoop
Cc: Steve Christensen
Subject: Re: FW: Genwal -- metals results from last week's sampling

Dave,
Thanks for forwarding these along.

Karla,
Can you please provide the field parameters (including pH, DO and temperature) when you have a chance?

Thanks,
Kevin

Kevin Lundmark
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>>> "Shaver, Dave" <dshaver@coalsource.com> 3/1/2010 8:57 AM >>>

From: Karla Knoop [mailto:kknoop@jbrenv.com]
Sent: Monday, March 01, 2010 8:25 AM
To: Shaver, Dave
Cc: Marrelli, Dana
Subject: Genwal -- metals results from last week's sampling

Dave,

Here are the metal results from last week's samples at Crandall. They aren't much different that last month's. Iron is still exceeding the limit, so I will have to notify DWQ about that today. Let me know if you have any questions.

2/23/2010

Parameter		002-Pretreatment	002
Iron	total, mg/L	3.3	3.3
	dissolved, mg/L	1.30	0.12
	ferrous, mg/L	0.77	<0.10
Aluminum	total, mg/L	<0.10	<0.10
	dissolved, mg/L	<0.10	<0.10
Manganese	total, mg/L	0.13	0.13
	dissolved, mg/L	0.13	0.13

Karla

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