0011

Outgoing c/007/0041

From: Priscilla Burton
To: Karla Knoop; OGMCOAL
CC: Haddock, Daron; Smith, Jim; Steve Christensen
Date: 2/12/2009 4:28 PM
Subject: 0070041 WestRidge Incoming\NOV10033 sludge analysis methods
Place: OGMCOAL
Attachments: 6010b.pdf; 6020.pdf

Karla,
I will have more time to review these methods next week. In addition to analyzing for volatile and semi-volatile hydrocarbons and metals, did I understand you to say that you will be running SAR, Se and B analysis through the USU lab?
Priscilla

>>> "Karla Knoop" <kknoop@jbrenv.com> Thursday, February 12, 2009 3:38 PM >>>
Priscilla,

After our phone conversation, I contacted the lab manager at AWAL regarding your methods questions. His response is in blue, below.

Methods 6010C and 6020A are the new methods for ICP and ICP/MS respectively. The methods: 6010B and 6020 are the current methods that we are using. We are working on updating to 6010C and 6020A and are certified to perform them. We are fine tuning those methods before we start reporting them. When we move to the new methods we will be the first Utah NELAC certified laboratory to be both certified to perform and report them. I should note that the new methods are only minor changes over the older ones and will not result in differing results. Here is a description of the methods we used:

. ********** . Method 6010B is from USEPA SW-846 (and is still on-line). It is "Inductively Coupled Plasma-Atomic Emission Spectrometry"

. Method 6020 is from USEPA SW-846 (and is still on-line). It is "Inductively Coupled Plasma-Mass Spectrometry"

I, l Like you, I was not able to find 6010B or 6020 in the online SW-846, but I did find the 6010C and 6020A there; you probably did too. I was able to pull up descriptions for 6010B and 6020 from another EPA source. Those descriptions are attached, and a link to them is: http://www.epa.gov/region8/water/biosolids/biosolidsdown/methods/.

File in:
C/007/041/2009 Outgoing
Refer to:
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Date 02/12/09 for additional information

I also asked him about the boron reporting level, which you had a concern with. His remarks are pasted below, again in blue.

Boron in solid material is difficult to analyze. Additionally, your sample has two problems that make it more difficult.

. The percent moisture of your sample is 66% resulting in a multiplier of 3 times our normal reporting limit. This is to allow us to report the result in mg/kg-dry.

. Your sample contains high concentrations of other elements making low concentration of elements like boron more difficult.

Generally, our reporting limit for boron is fine with those regulatory bodies that we have worked with in the past. If you must see below 150 mg/kg-dry we may be able to go lower by using 6020 instead of 6010B but that is speculation at this point. It would be helpful if your sample did not contain so much moisture but I am guessing that you have no control over that.

He is right, we don't have control over the original sample moisture, due to its proximity to the water being discharged. I hope this information helps better explain the analyses that we originally had done.

Regards,
Karla

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