From: Nickel, Brian
To: June.Bergquist@deq.idaho.gov
Subject: RE: Sandpoint hardness value
Date: Thursday, February 07, 2013 1:04:20 PM
Attachments: 481452116211100 PEND OREILLE LAKE NEAR HOPE ID.xlsx

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June:

I wasn't able to find a whole lot of useful hardness data, but the data collected by the City (there were four results; 56.1 mg/L was the lowest) seemed consistent with what little data I was able to find. I will explain.

For example, the prior fact sheet states that "EPA searched the STORET data base and found a Lake Pend Oreille site with 19 hardness values collected between 1984-1987. The 5th percentile hardness from this data set is 67 mg/L...." See Page C-11.
http://yosemite.epa.gov/R10/WATER.NSF/95537302e2c56cea8825688200708c9a/2978a2d617a53f36882568790059bd3c/$FILE/ATTKNCO8/ID0020842%20FS.pdf

I found a USGS site in the northern part of Lake Pend Oreille; the data are old (from the '70s) but I wouldn't expect the hardness to have changed much over time. The hardness values range from 60 - 94 mg/L. See attached.

I decided to use the minimum value measured by the permittee, in part because it was the most conservatve value, but also because it was from the data set that was most recent and the closest to the discharge.

It appears, based on the permittee's data, the prior fact sheet, and the USGS data that I found, that the water is softer at Newport than in Lake Pend Oreille.

Thanks,

Brian Nickel, E.I.T.
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http://epa.gov/r10earth/waterpermits.htm
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From: June.Bergquist@deq.idaho.gov [June.Bergquist@deq.idaho.gov]
Sent: Thursday, February 07, 2013 11:37 AM
To: Nickel, Brian
Cc: June.Bergquist@deq.idaho.gov
Subject: Sandpoint hardness value

Hi Brian,
I was just going over the metals stuff and noticed the hardness reported by the facility was 56.1 mg/L. The method used might be different but the USGS reports at Newport, WA that hardness ranges from 19-23 mg/L which is more what I would expect. Do I have this wrong? I am doing the significance tests for the metals with human health criteria right now and this question came up.
Thanks.
June