

January 23, 2008

Loree Randall  
Washington State Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600

RE: Condit Hydroelectric Project (Corps ID No. 200400523)  
Elevation of Tributary Samples

Dear Loree:

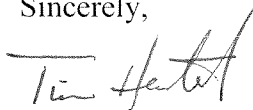
On April 13, 2006, the U.S. Army Corps of Engineers requested that PacifiCorp prepare a sediment sampling and analysis plan for the investigation of sediments within Northwestern Lake that will be released downstream following the removal of Condit dam. PacifiCorp completed the identified sediment sampling in Northwestern Lake and prepared the *Sediment Sampling and Analysis Report* (March 2007).

Following its review of the March 2007 report, the Regional Sediment Evaluation Team (RSET) requested that PacifiCorp conduct further sampling at Northwestern Lake and in the local area to confirm mercury concentrations found in the initial sampling, establish the bioavailability of mercury detected within the reservoir sediments, and determine background mercury levels in the local area. PacifiCorp completed this work and prepared the *Supplemental Evaluation of Mercury in Sediments Report* (November 2007).

As part of its review of this latest report, the RSET requested that PacifiCorp provide additional information about the location of the Northwestern Lake tributary samples and the possible influence of the White Salmon River on those sediment samples. Enclosed is the additional information request that has been collected by Kleinfelder, Inc.

If you have any questions or concerns regarding this additional information, please feel free to contact me at 503-813-6170.

Sincerely,



Tim Hemstreet, P.E.  
Senior Project Manager

AP/anp

Cc: Laura Inouye, Department of Ecology  
Kathryn Harris, U.S. Army Corps of Engineers  
Marci Cook, U.S. Army Corps of Engineers  
File

January 22, 2008

Project No. 53866 / 5

PacifiCorp,  
Hydro Resources  
825 N.E. Multnomah, 1500 LCT  
Portland, Oregon 97232

Attn: Tim Hemstreet, P.E.  
Senior Engineer

Subject: Elevation of Tributary Samples  
Northwestern Lake Sediment Characterization

Dear Tim:

Please find attached a table presenting the approximate elevations of the sediment samples collected at the confluences of three tributaries for the White Salmon River, in Northwestern Lake. The approximate elevations indicate that the samples were collected within the reservoir, under water that is part of Northwestern Lake, since the sample elevations lie below the measured reservoir elevation for the day of sample collection.

Each sample was collected in water depths of 1-foot or less. I have also included three photographs which display the sample locations for Spring Creek, Mill Creek, and Little Buck Creek (refer, Figures 1, 2, and 3, respectively). As demonstrated by the attached photographs (and supported by the figures included in the Supplemental Evaluation of Mercury In Sediments Report, Northwestern Lake, November 2007), the samples were collected at the head of each embayment. As indicated in the photographs, a noticeable water flow, or current, is apparent from each of the creeks. This current would limit the deposition of suspended fine particles carried by the White Salmon River. The sieve analyses of the samples collected at the confluences of Spring and Little Buck Creeks indicate that these sediments consist of coarser material than sediment samples collected at nearby locations in the reservoir. Given that

coarser materials will be deposited closer to the source of those materials than fine sediments, this comparison suggests that the sediments present at the confluence of the creeks with Northwestern Lake are from the creeks and not from the White Salmon River. The sieve analysis for the Mill Creek sample suggests a similar grain size assortment as a nearby reservoir sediment sample. However, there are no other indications that different depositional processes would be expected at Mill Creek compared to Spring and Little Buck Creeks.

Accordingly, it is Kleinfelder's opinion that the mercury reported in the samples collected at these three points is representative of the bedload for each creek and not the White Salmon River. It remains our opinion that the mercury present in the sediments is from natural sources in the uplands drained by the White Salmon River and its tributaries.

Should you have questions concerning this letter, please do not hesitate to contact us.

Sincerely,

KLEINFELDER WEST, INC.



David Earl King, LG

Senior Professional Geologist

DAVID EARL KING

Attached 1 Table and 3 Figures

**TRIBUTARY SAMPLES  
ANALYTICAL DATA FOR MERCURY BACKGROUND EVALUATION  
NORTHWESTERN LAKE, WASHINGTON**

Location	Spring Creek	Little Buck Creek	Mill Creek	Average of 7 Northwestern Lake Samples
<b>Sample #</b>	BC-071807	LBC-071807	MC-071807	
<b>Maximum Condit Pool Elevation (feet)</b>	295	295	295	295
<b>Pool Elevation on 18-Jul-07 (feet)</b>	293.23	293.23	293.23	293.23
<b>Minimum Pool Elevation (feet)</b>	285	285	285	285
<b>Approximate Elevation of Sample (feet)</b>	292	292	292	292
<b>Depth Below Water Surface (feet)</b>	0.5	0.5	1	64
<b>Depth Below Sediment Surface (feet)</b>	0.5	0.5	0.5	1
<b>Date</b>	18-Jul-07	18-Jul-07	18-Jul-07	18-Jul-07
Mercury (mg/Kg)	0.051	0.067	<b>0.443</b>	<b>0.598</b>
Mercury (mg/Kg) in samples< 200 sieve	<b>0.73</b>	<b>0.85</b>	<b>1.2</b>	
<i>NWRSEF Mercury SL1</i>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>
<i>NWRSEF Mercury SL2</i>	<b>0.75</b>	<b>0.75</b>	<b>0.75</b>	<b>0.75</b>
Total Solids (percent)	19.1	51.4	33	50.4
percent passing 3/4-inch sieve	100	100	100	100
percent passing 1/2-inch sieve	100	100	100	100
percent passing 3/8-inch sieve	100	100	100	100
percent passing 1/4-inch sieve	100	100	100	100
percent passing #4 sieve	99	99	100	100
percent passing #8 sieve	98	99	99	100
percent passing #10 sieve	97	99	99	100
percent passing #16 sieve	94	98	98	100
percent passing #30 sieve	89	95	97	99
percent passing #40 sieve	87	91	97	99
percent passing #50 sieve	82	82	97	99
percent passing #100 sieve	60	65	94	98
percent passing #120 sieve	59	61	93	
percent passing #200 sieve	45.7	53	89.2	94.3
percent passing #230 sieve	43.9	49.7	89.4	
percent passing 2 micron				6.6

mg/Kg = milligrams per kilogram

Northwestern Lake		Location
B-2-20	B-4-15	Sample #
295	295	<b>Maximum Condit Pool Elevation (feet)</b>
		<b>Pool Elevation on Sample Date</b>
285	285	<b>Minimum Pool Elevation (feet)</b>
		<b>Approximate Elevation of Sample (feet)</b>
20	15	<b>Depth Below Water Surface (feet)</b>
0	3	<b>Depth Below Sediment Surface (feet)</b>
15-Dec-06	14-Dec-06	<b>Date</b>
<b>0.79</b>	<b>0.449</b>	Mercury (mg/Kg)
		Mercury (mg/Kg) in samples< 200 sieve
<b>0.28</b>	<b>0.28</b>	<i>NWRSEF Mercury SL1</i>
<b>0.75</b>	<b>0.75</b>	<i>NWRSEF Mercury SL2</i>
63.5	70.0	Total Solids (percent)
100	100	percent passing 3/4-inch sieve
100	100	percent passing 1/2-inch sieve
100	100	percent passing 3/8-inch sieve
100	100	percent passing 1/4-inch sieve
100	100	percent passing #4 sieve
100		percent passing #8 sieve
100	99.9	percent passing #10 sieve
100	99.6	percent passing #18 sieve
100	98.5	percent passing #35 sieve
		percent passing #40 sieve
100	93.3	percent passing #60 sieve
		percent passing #100 sieve
100	70.6	percent passing #120 sieve
		percent passing #200 sieve
100	55.1	percent passing #230 sieve
		percent passing 2 micron



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PROJECT NO.  
53886

DRAWN BY:  
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CHECKED BY:  
DEK

**SPRING CREEK SAMPLING SITE**  
NORTHWESTERN LAKE, WASHINGTON

DATE: 01/08

FIGURE:

1



KLEINFELDER

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DRAWN BY:  
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CHECKED BY:  
DEK

**MILL CREEK SAMPLING SITE**  
NORTHWESTERN LAKE, WASHINGTON

DATE: 01/08

FIGURE:

2



KLEINFELDER

PROJECT NO.  
53886

DRAWN BY:  
TLK

CHECKED BY:  
DEK

**LITTLE BUCK CREEK SAMPLING SITE**  
NORTHWESTERN LAKE, WASHINGTON

DATE: 01/08

FIGURE:

**3**