TABLE 1
SAMPLE POINT LOCATIONS WITH COORDINATES
NORTHWESTERN LAKE, WASHINGTON

Sample Point Description	Sample Name	latitude	longitude	northing	Easting	feet below sediment surface	comments
Northwestern Lake	NW1-071707	45.76830	121.53825	160362.593	1375455.849	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW2-071707	45.76818	121.53799	160317.964	1375521.621	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW3-071707	45.76842	121.53788	160405.106	1375550.843	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW4-071807	45.76847	121.53829	160424.714	1375446.457	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW5-071807	45.76866	121.53852	160494.766	1375388.677	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW6-071807	45.76865	121.53779	160488.668	1375574.913	1	vicinity of B-1 (N45.76825 / W121.53781)
Northwestern Lake	NW7-071807	45.76833	121.53788	160372.289	1375550.411	1	vicinity of B-1 (N45.76825 / W121.53781)
Buck Creek	no sample						cobble to gravel sediment, no fines available
Little Buck Creek	LBC-071807	45.77117	121.53925	161412.436	1375214.453	0.5	at confluence with Northwestern Lake
Mill Creek	MC-071807	45.77547	121.53169	163687.211	1326134.593	0.5	at confluence with Northwestern Lake
Spring Creek	BC-071807	45.77028	121.53951	161088.791	1375143.831	0.5	at confluence with Northwestern Lake
Salt Creek	SP1-071707	46.1256	121.58598	290806.368	1365069.744	0.5	southwest of Mount Adams, lahar material
Trout Lake	SP2-071707	46.00735	121.55015	247566.488	1373579.702	1	in marshy area
Gilmer Creek	SP3-071707	45.85725	121.50428	192684.111	1384537.475	0.5	at confluence with White Salmon River
Rattlesnake Creek	SP4-071707	45.79726	121.48.551	170749.64	1389046.291	0.5	
White Salmon River	SP5-071707	45.72936	121.52377	146115.618	1378966.628	0.5	at boat dock, near confluence with Columbia River
Little White Salmon River	LWS-071907	45.71852	121.64498	142588.662	1347956.739	0.5	below fish hatchery, near Columbia River
Wind River	WR-071907	45.71708	121.79044	142637.214	1310796.723	0.5	near boat ramp, near Columbia River
In-Lieu Fishing Access Site	ILFAS-052108	45.72931	121.52324			1	off boat dock, near confluence with Columbia River, almost exact location of previous sample identified as White Salmon River

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TABLE 2
ANALYTICAL DATA FOR MERCURY DISTRIBUTION ANALYSIS
NORTHWESTERN LAKE, WASHINGTON

Location	B-1	NW-1	NW-2	NW-3	NW-4	NW-5	NW-6	NW-7	In-Lieu Fishing Access Site		
Sample #	B1-72	NW1-071807	NW2-071807	NW3-071807	NW4-071807	NW5-071807	NW6-071807	NW7-071807	ILFAS-052108	average	average
Depth Below Water Surface (feet)	72	72	71	72	25	70	70	69	15	7 Supplemental Samples	7 Supplemental Samples and B-1 Samples
Depth Below Sediment Surface (feet)	1	1	1	1	1	1	1	1	1		
Sample Collection Date	18-Dec-06	18-Jul-07	18-Jul-07	18-Jul-07	18-Jul-07	18-Jul-07	18-Jul-07	18-Jul-07	21-May-08		
Total Solids (percent)	48.0	43.7	49.5	52.6	52	55.1	48.4	51.6	67.6	50.4	50.1
Total Volatile Solids (percent)	4.01	5.74	5.85	5.18	4.33	3.67	5.47	4.71		4.99	4.87
Total Organic Carbons (percent)	1.05	1.55	1.56	1.64	1.10	0.86	1.56	1.35	1.20	1.37	1.33
Ammonia (mg/Kg)	2.88	26.9	21.3	18.7	18.4	11.0	19.7	16.1		18.9	16.9
Sulfide (mg/Kg)	<0.5	<0.5	2.2	50.2	10.1	7.3	44.5	2.4		19.5	19.5
Mercury (mg/Kg)	**2.03**	**0.881**	**0.774**	**0.647**	**0.832**	**0.856**	0.105	0.094	**1.20**	**0.60**	**0.78**
NWRSEF Mercury SL1	***0.28***	***0.28***	***0.28***	***0.28***	***0.28***	***0.28***	*0.28*	*0.28*	***0.28***	***0.28***	***0.28***
NWRSEF Mercury SL2	***0.75***	***0.75***	***0.75***	*0.75*	***0.75***	***0.75***	*0.75*	*0.75*	***0.75***	*0.75*	***0.75***
percent passing 3/4-inch sieve	100	100	100	100	100	100	100	100	100	100.00	100.0
percent passing 1/2-inch sieve	100	100	100	100	100	100	100	100	100	100.00	100.0
percent passing 3/8-inch sieve	100	100	100	100	100	100	100	100	100	100.00	100.0
percent passing 1/4-inch sieve	100	100	100	100	100	100	100	99	100	99.86	99.9
percent passing #4 sieve	100	100	100	100	100	100	100	99	100	99.86	99.9
percent passing #8 sieve	100	100	100	100	100	100	100	99	-	99.86	99.9
percent passing #10 sieve	100	100	99	100	100	100	100	99	100	99.71	99.8
percent passing #16 sieve	100	100	99	100	100	100	100	99	-	99.71	99.8
percent passing #30 sieve	100	99	99	100	100	99	99	99	-	99.29	99.4
percent passing #40 sieve	100	99	99	99	99	99	99	99	100	99.00	99.1
percent passing #50 sieve	100	99	98	99	99	99	99	99	-	98.86	99.0
percent passing #100 sieve	100	98	98	99	98	99	98	98	100	98.29	98.5
percent passing #120 sieve	100										
percent passing #200 sieve	100	95	94	96	92	97	93	93	98.7	94.29	95.0
percent passing #230 sieve	100										
percent passing 2 micron	9	9	11	5	6	6	4	5	9	6.57	6.9

mg/Kg = milligrams per kilogram
NWRSEF Mercury SL1 = Northwest Regional Sediment Evaluation Framework Lower Screening Level
NWRSEF Mercury SL2 = Northwest Regional Sediment Evaluation Framework Upper Screening Level

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TABLE 3
ANALYTICAL DATA FOR MERCURY BACKGROUND EVALUATION
NORTHWESTERN LAKE, WASHINGTON

Location	Little Buck Creek	Mill Creek	Spring Creek	Salt Creek	Trout Lake	Gilmer Creek	Rattlesnake Creek	White Salmon River	Little White Salmon River	Wind River	In-Lieu Fishing Access Site	average
Sample #	LBC-071807	MC-071807	BC-071807	SP1-071707	SP2-071707	SP3-071707	SP4-071707	SP5-071707	LWS-071907	WR-071907	ILFAS-052108	
Depth Below Water Surface (feet)	0.5	1	0.5	0.5	1	1	0	2	0	0	15	2.0
Depth Below Sediment Surface (feet)	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Date	18-Jul-07	18-Jul-07	18-Jul-07	17-Jul-07	17-Jul-07	17-Jul-07	17-Jul-07	17-Jul-07	17-Jul-07	17-Jul-07	21-May-08	14-Aug-07
Mercury (mg/Kg)	0.067	**0.443**	0.051	0.031	0.007	0.021	0.016	**0.72**	0.014	0.054	**1.20**	0.239
Mercury (mg/Kg) in samples< 200 sieve	**0.85**	**1.2**	**0.73**	**0.29**	0.11	0.08	0.10					**0.48**
NWRSEF Mercury SL1	***0.28***	***0.28***	***0.28***	***0.28***	*0.28*	*0.28*	*0.28*	***0.28***	*0.28*	*0.28*	***0.28***	***0.28***
NWRSEF Mercury SL2	***0.75***	***0.75***	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	***0.75***	*0.75*
Total Solids (percent)	51.4	33	19.1	73.2	27.1	58	75.3	56.3	63.9	49.3	52.4	50.8
percent passing 3/4-inch sieve	100	100	100	100	100	100	100	100	100	100	100	100
percent passing 1/2-inch sieve	100	100	100	100	100	100	71	100	100	100	100	97
percent passing 3/8-inch sieve	100	100	100	100	100	100	61	100	100	100	100	96
percent passing 1/4-inch sieve	100	100	100	100	100	100	55	100	98	100	100	96
percent passing #4 sieve	99	100	99	100	100	100	49	100	94	100	100	95
percent passing #8 sieve	99	99	98	100	98	100	42	99	86	100	100	93
percent passing #10 sieve	99	99	97	100	97	100	40	99	84	100	100	92
percent passing #16 sieve	98	98	94	98	93	98	37	98	81	99	100	90
percent passing #30 sieve	95	97	89	95	88	94	27	98	78	98	100	87
percent passing #40 sieve	91	97	87	94	85	78	18	98	75	98	100	84
percent passing #50 sieve	82	97	82	90	82	61	12	97	71	97	100	79
percent passing #100 sieve	65	94	60	65	74	40	6	97	52	91	100	68
percent passing #120 sieve	61	93	59	56	65	35	5					53
percent passing #200 sieve	53	89.2	45.7	20.4	59.2	23.3	3	95	30	68	98.7	53
percent passing #230 sieve	49.7	89.4	43.9	14.7	52.7	20.7	2.5					39
percent passing 2 micron								5	2	7	9	6

mg/Kg = milligrams per kilogram
NWRSEF Mercury SL1 = Northwest Regional Sediment Evaluation Framework Lower Screening Level
NWRSEF Mercury SL2 = Northwest Regional Sediment Evaluation Framework Upper Screening Level

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TABLE 4
SOIL CLASSIFICATION OF SEDIMENT SAMPLES
NORTHWESTERN LAKE, WASHINGTON

Sample Location	Percent retained				USCS	ASTM
	gravel	sand	silt	clay		
B1-72	0%	0%	91%	9%	ML	silt with some clay
NW-1	0%	5%	86%	9%	ML	silt with some clay
NW-2	0%	6%	83%	11%	ML	silt with some clay and trace sand
NW-3	0%	4%	91%	5%	ML	silt with trace clay and trace sand
NW-4	0%	8%	86%	6%	ML	silt with trace clay and trace sand
NW-5	0%	3%	91%	6%	ML	silt with trace clay and trace sand
NW-6	0%	7%	89%	4%	ML	silt with trace clay and trace sand
NW-7	0%	7%	88%	5%	ML	silt with trace clay and trace sand
LBC	1%	47%	52%	-	SM	sandy silt with trace gravel
MC	0%	11%	89%	-	MH	silt with some sand
BC	0%	54%	46%	-	SM	silty sand
SP-1	0%	80%	20%	-	SM	silty sand
SP-2	0%	41%	59%	-	SM	sandy silt
SP-3	0%	77%	23%	-	SM	silty sand
SP-4	45%	52%	3%	-	SP	gravelly sand with trace silt
SP-5	0%	5%	95%	-	ML	silt with trace sand
LWS	2%	70%	28%	-	SM	silty sand with trace gravel
WR	0%	32%	68%	-	SM	sandy silt
ILFAS	0%	1%	83%	16%	ML	Silt with clay and trace organics

USCS = Unified Soil Classification System designation
ASTM = classification according to American Society for Testing and Materials D 2488

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TABLE 5
COMPARISON OF BIOACCUMULATION ANALYTICAL RESULTS TO OREGON GUIDELINES
NORTHWESTERN LAKE, WASHINGTON

sample	sample	laboratory	sample location	ng/g	mg/Kg	Human ATL		Avian ATL				Mammals		Freshwater
type	number	identification	and / or identifier			general	tribal	Individual		Population		Individual	Population	CTL
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
worms	1138G-01	07BR1309-01	pre-exposure sample	4.390	0.00439	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1138G-02	07BR1309-02	pre-exposure sample	4.160	0.00416	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1138G-03	07BR1309-03	pre-exposure sample	4.240	0.00424	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1138G-04	07BR1309-04	pre-exposure sample	4.340	0.00434	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1138G-05	07BR1309-05	pre-exposure sample	3.970	0.00397	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	NAS 1729G	0828032-03	pre-exposure sample	1.330	0.00133	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1172G-01	07BR1309-11	control sample	13.400	0.01340	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1172G-02	07BR1309-12	control sample	13.500	0.01350	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1172G-03	07BR1309-13	control sample	13.300	0.01330	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1172G-04	07BR1309-14	control sample	13.100	0.01310	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1172G-05	07BR1309-15	control sample	12.300	0.01230	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	NAS 1817G	0828032-01	control sample	10.600	0.01060	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1173G-01	07BR1309-16	Northwestern Lake	340.000	**0.34000**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	**0.20**	**0.088**
worms	1173G-02	07BR1309-17	Northwestern Lake	346.000	**0.34600**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	**0.20**	**0.088**
worms	1173G-03	07BR1309-18	Northwestern Lake	354.000	**0.35400**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	**0.20**	**0.088**
worms	1173G-04	07BR1309-19	Northwestern Lake	340.000	**0.34000**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	**0.20**	**0.088**
worms	1173G-05	07BR1309-20	Northwestern Lake	357.000	**0.35700**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	**0.20**	**0.088**
worms	1174G-01	07BR1309-21	Little White Salmon River	4.980	0.00498	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1174G-02	07BR1309-22	Little White Salmon River	4.740	0.00474	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1174G-03	07BR1309-23	Little White Salmon River	4.460	0.00446	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1174G-04	07BR1309-24	Little White Salmon River	4.910	0.00491	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	1174G-05	07BR1309-25	Little White Salmon River	4.980	0.00498	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
worms	NAS 1818G	0828032-02	In-Lieu Fishing Access Site	186.000	**0.18600**	0.40	**0.049**	**0.074**	**0.18**	**0.15**	0.89	**0.12**	0.20	**0.088**
blank	HB-07-0606-Hg	07BR0799-04	homogenizing blank	0.070	0.00007	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
blank	HB-Hg-07-1022	07BR1309-41	homogenizing blank	0.650	0.00065	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
blank	HB-Hg-07-0992	07BR1309-42	homogenizing blank	0.650	0.00065	0.40	0.049	0.074	0.18	0.15	0.89	0.12	0.20	0.088
blank	HB-B081104-Hg	0828032-04	homogenizing blank											

ng/g = nanograms per gram
mg/Kg = milligrams per kilogram
ATL = acceptable tissue level
CTL = critical tissue level

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