Table 6. Concentrations of metals, trace elements, carbon, nitrogen, and phosphorus measured on suspended sediment, Columbia River Estuary, 2004–05

[Detections are shown in bold type and shaded; mg/L, milligrams per liter; µg/g, micrograms per gram; --, no data]

Sampling information			Suspended sediment	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Selenium	Silver	Strontium	Thallium	Titanium	Total organic carbon	Total carbon	Total nitrogen	Uranium	Vanadium	Zinc
Location	Date	Time	mg/L	%	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	%	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	%	µg/g	µg/g	µg/g	µg/g	%	%	%	%	µg/g	µg/g	µg/g
Warrendale	6/1/2004	1230	22	7.7	1.1	6.0	480	1	0.8	57	16	44	4.2	110	22	1,100	0.12	2	36	0.130	0.6	<0.5	300	<50	0.49	2.2	2.4	0.28	<50	110	220
Warrendale	10/20/2004	1300	3	6.1	1.4	11	580	2	1.7	69	17	85	4.2	130	23	1,900	--	3	46	0.170	1	3	260	<100	0.47	3.8	4.6	0.56	<100	110	250
Warrendale	1/20/2005	1130	15	8.6	0.3	3.1	520	1	0.2	21	10	100	2.6	20	20	530	0.08	2	17	0.130	0.1	<0.5	460	<50	0.31	1.2	1.2	0.23	<50	53	83
Warrendale	4/20/2005	1300	7	4.9	0.9	7.5	440	1	1.3	49	14	33	3.3	20	22	1,400	0.12	3	30	0.180	2	<1	300	<50	0.35	4.8	5.3	0.75	<50	85	400
Willamette	5/25/2004	1200	4	7.0	1.7	5.4	430	1	0.4	110	27	120	5.9	100	21	3,200	0.17	5	58	0.290	0.9	<1	220	<100	0.64	6.4	6.8	0.84	<100	160	240
Willamette	10/19/2004	1320	5	7.5	1.0	9.5	430	1	0.3	77	24	60	5.7	49	22	3,100	0.17	2	44	0.210	0.5	2	240	<100	0.65	4.5	5.4	0.61	<100	150	160
Willamette	1/18/2005	1330	5	8.6	0.9	10	420	2	0.2	120	26	60	6.2	25	27	2,600	--	7	62	0.220	0.6	<1	200	<100	0.70	5.0	5.1	0.66	<100	170	170
Willamette	4/14/2005	1330	11	8.4	0.6	9.0	440	2	0.2	84	24	51	6.3	20	26	1,900	0.10	3	42	0.190	0.8	<0.5	230	<50	0.66	4.2	4.5	0.57	<50	170	150
Columbia City	8/24/2004	1220	5	6.5	1.5	9.7	610	2	1.4	72	19	55	4.5	32	25	1,900	0.13	2	47	0.210	0.8	3	260	<100	0.52	3.9	4.7	0.60	<100	120	240
Beaver	6/3/2004	1300	8	7.1	1.3	7.8	540	2	1.4	71	18	41	4.8	80	26	1,400	0.19	3	45	0.160	1	<0.5	260	<50	0.50	3.2	3.6	0.43	<50	130	280
Beaver	9/13/2004	1250	27	8.2	0.4	4.3	450	1	0.2	21	9	79	2.8	19	21	720	0.07	1	15	0.110	0.2	<0.5	350	<50	0.31	1.0	1.2	0.16	<50	63	80
Beaver	10/18/2004	1340	19	8.1	0.4	3.6	390	1	0.3	25	11	52	3.0	18	20	820	0.07	2	17	0.110	0.2	<0.5	380	<50	0.36	1.3	1.4	0.15	<50	68	88
Beaver	11/22/2004	1300	4	7.2	1.3	12	530	2	0.7	80	19	59	4.3	31	24	1,800	0.22	5	48	0.180	0.5	<1	300	<100	0.47	4.0	4.0	0.54	<100	110	200
Beaver	12/15/2004	1330	21	8.4	0.8	8.4	490	2	0.5	55	20	48	4.6	24	26	1,200	0.07	2	32	0.110	0.3	<0.5	330	<50	0.53	2.4	2.4	0.26	<50	110	150
Beaver	1/19/2005	1400	78	8.6	0.4	4.6	400	1	0.1	24	13	66	3.3	17	24	750	0.04	2	18	0.100	0.2	<0.5	350	<50	0.38	0.9	0.8	0.13	<50	64	71
Beaver	3/16/2005	1350	8	5.6	0.6	6.4	390	1	0.6	200	13	34	3.0	20	17	1,200	0.21	25	73	0.200	1	<0.5	300	<50	0.37	5.6	6.2	1.1	<50	77	170
Beaver	4/21/2005	1410	11	6.0	0.6	6.3	380	1	0.5	53	13	45	3.4	19	21	1,200	0.05	4	30	0.200	1	<0.5	310	<50	0.34	4.0	4.7	0.63	<50	84	140
Point Adams	8/18/2004	1000	12	4.4	0.6	6.5	240	1	0.4	59	9	32	2.8	44	19	790	0.06	3	36	0.096	0.6	0.8	240	<50	0.31	1.9	2.4	0.28	<50	66	110
Point Adams	4/18/2005	1200	22	1.1	64	2.6	55	0.2	0.1	13	3	8	0.9	4	8	410	0.04	1	7	0.060	0.4	<0.5	220	<50	0.07	1.5	1.9	0.28	<50	20	92