Appendix A

Metals, TOC and Grain Size Data

2004 Data

MMS Beaufort Sea cANIMDA Project: Summer 2004 Sampling

Table 1. Station Data for Trace Metal Sediment Samples.

Sample Identification	Station Identification	Station Grouping	Collection Date	Comments
04-N01-01-MET-S	N01	Northstar	8/8/2004	
04-N02-01-MET-S	N02	Northstar	8/7/2004	
04-N03-01-MET-S	N03	Northstar	8/7/2004	
04-N04-01-MET-S	N04	Northstar	8/9/2004	
04-N05-01-MET-S	N05	Northstar	8/7/2004	
04-N06-01-MET-S	N06	Northstar	8/7/2004	Field Triplicate
04-N06-02-MET-S	N06	Northstar	8/7/2004	Field Triplicate
04-N06-03-MET-S	N06	Northstar	8/7/2004	Field Triplicate
04-N07-01-MET-S	N07	Northstar	8/6/2004	
04-N08-01-MET-S	N08	Northstar	8/6/2004	
04-N09-01-MET-S	N09	Northstar	8/6/2004	
04-N10-01-MET-S	N10	Northstar	8/6/2004	
04-N11-01-MET-S	N11	Northstar	8/6/2004	
04-N12-01-MET-S	N12	Northstar	8/6/2004	
04-N13-01-MET-S	N13	Northstar	8/9/2004	
04-N14-01-MET-S	N14	Northstar	8/9/2004	
04-N15-01-MET-S	N15	Northstar	8/9/2004	
04-N16-01-MET-S	N16	Northstar	8/7/2004	
04-N17-01-MET-S	N17	Northstar	8/6/2004	
04-N18-01-MET-S	N18	Northstar	8/6/2004	
04-N19-01-MET-S	N19	Northstar	8/6/2004	
04-N20-01-MET-S	N20	Northstar	8/6/2004	
04-N21-01-MET-S	N21	Northstar	8/9/2004	
04-N23-01-MET-S	N23	Northstar	8/6/2004	
04-L01-01-MET-S	L01	Liberty	8/2/2004	
04-L01A-01-MET-S	L01A	Liberty	8/11/2004	
04-L04-01-MET-S	L04	Liberty	8/2/2004	
04-L06-01-MET-S	L06	Liberty	8/2/2004	Field Triplicate
04-L06-02-MET-S	L06	Liberty	8/2/2004	Field Triplicate
04-L06-03-MET-S	L06	Liberty	8/2/2004	Field Triplicate
04-L07-01-MET-S	L07	Liberty	8/2/2004	
04-L08-01-MET-S	L08	Liberty	8/2/2004	
04-L09-01-MET-S	L09	Liberty	8/2/2004	
04-L17-01-MET-S	L17	Liberty	8/3/2004	
04-L18-01-MET-S	L18	Liberty	8/3/2004	
04-3A-01-MET-S	3A	BSMP	7/30/2004	
04-3B-01-MET-S	3B	BSMP	7/30/2004	Near Pole Island
04-4A1-01-MET-S	4A	BSMP	8/3/2004	
04-4B-01-MET-S	4B	BSMP	8/3/2004	Boulder Patch
04-4C-01-MET-S	4C	BSMP	8/3/2004	
04-5A-01-MET-S	5A	BSMP	8/9/2004	
04-5B-01-MET-S	5B	BSMP	8/9/2004	
04-5D-01-MET-S	5D	BSMP	8/8/2004	Lee of STP/West Dock
04-5E-01-MET-S	5E	BSMP	8/9/2004	
04-5F-01-MET-S	5F	BSMP	8/9/2004	Gwydyr Bay
04-5H-01-MET-S	5H	BSMP	8/2/2004	
04-5(0)-01-MET-S	5(0)	BSMP	8/3/2004	
04-5(1)-01-MET-S	5(1)	BSMP	8/5/2004	
04-5(5)-01-MET-S	5(5)	BSMP	8/3/2004	
04-5(5A)-01-MET-S	5(5A)	BSMP	8/8/2004	
04-5(10)-01-MET-S	5(10)	BSMP	8/8/2004	

MMS Beaufort Sea cANIMDA Project: Summer 2004 Sampling

Table 2. Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Samples (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
04-N01-01-MET-S	0.07	1.84	6.4	254	0.51	0.04	5.7	24.6	6.4	1.18	0.010	174	14.3	5.1	0.35		35.1	93.9	0.07	
04-N02-01-MET-S	0.05	3.72	9.5	421	1.04	0.17	8.9	62.8	15.4	2.20	0.038	292	25.4	9.1	0.34		85	68.3	0.38	
04-N03-01-MET-S #1	0.12	6.30	17.3	584	1.59	0.22	12.9	94.0	32.2	3.68	0.070	522	38.5	16.1	0.82		151	115	0.44	Lab Duplicate
04-N03-01-MET-S #2	0.12	6.33	17.6	571	1.65	0.22	13.4	93.3	32.1	3.72	0.069	523	36.9	16.3	0.81		151	114	0.48	Lab Duplicate
04-N04-01-MET-S	0.09	4.17	11.0	493	1.16	0.19	8.8	64.4	20.6	2.45	0.058	321	28.2	10.3	0.57		98.5	80.9	1.15	
04-N05-01-MET-S	0.07	3.78	9.7	483	1.03	0.15	8.0	61.2	17.3	2.21	0.042	331	26.0	8.6	0.45		84.2	70.9	0.33	
04-N06-01-MET-S	0.07	4.59	11.5	527	1.18	0.19	9.2	71.8	21.9	2.63	0.051	338	30.2	11.0	0.52		107	86.4	0.47	Field Triplicate
04-N06-02-MET-S	0.09	5.58	15.1	609	1.51	0.23	11.2	85.1	28.9	3.32	0.061	451	35.9	13.9	0.66		136	103	0.31	Field Triplicate
04-N06-03-MET-S	0.10	5.09	13.2	556	1.38	0.23	11.2	82.8	25.5	2.92	0.042	423	31.0	12.4	0.44		122	95.3	0.39	Field Triplicate
04-N07-01-MET-S	0.06	2.70	8.1	312	0.75	0.16	7.1	51.5	11.6	1.66	0.028	231	19.9	4.0	0.34		57.3	54.2	0.12	
04-N08-01-MET-S	0.09	5.30	15.3	559	1.38	0.21	11.7	84.4	26.7	3.04	0.056	444	33.6	10.4	0.67		126	96.9	0.41	
04-N09-01-MET-S	0.05	2.89	5.5	314	0.75	0.15	6.1	47.3	11.6	1.56	0.023	232	20.0	4.5	0.33		61.2	51.3	0.14	
04-N10-01-MET-S	0.12	5.50	15.7	562	1.45	0.22	11.5	86.0	30.8	3.22	0.065	503	34.5	12.3	0.6		130	105	0.48	
04-N11-01-MET-S	0.10	1.98	7.3	309	0.62	0.09	6.4	47.7	7.5	1.46	0.012	185	15.0	3.8	0.36		49.7	37.1	0.05	
04-N12-01-MET-S	0.10	4.75	15.1	506	1.25	0.17	11.5	79.7	22.6	3.20	0.051	449	34.3	10.9	0.55		115	95.6	1.72	
04-N13-01-MET-S	0.12	4.83	10.0	474	1.26	0.26	12.5	81.0	25.6	2.92	0.065	534	36.8	9.0	0.48		121	103	0.88	
04-N14-01-MET-S	0.10	4.23	8.7	404	1.12	0.23	11.4	75.4	20.6	2.51	0.049	425	32.8	9.2	0.44		105	89	0.57	
04-N15-01-MET-S	0.18	1.64	7.1	406	0.49	0.07	3.8	20.2	4.4	0.94	0.004	100	11.3	6.5	0.21		34.0	21.8	0.04	
04-N16-01-MET-S	0.09	4.81	11.5	528	1.11	0.17	9.6	79.0	21.8	2.74	0.050	347	31.0	9.6	0.47		120	85.6	0.29	
04-N17-01-MET-S	0.13	6.25	16.2	654	1.47	0.21	6.0	97.1	28.7	3.57	0.063	460	37.1	13.3	0.61		154	110	0.55	
04-N18-01-MET-S	0.10	3.41	10.8	406	0.82	0.11	7.8	61.6	14.8	1.96	0.037	278	20.4	6.0	0.45		78.2	63.5	0.92	
04-N19-01-MET-S	0.09	3.75	8.2	375	0.77	0.17	7.8	61.3	14.5	2.03	0.043	304	22.9	6.4	0.39		89.2	69.7	0.98	
04-N20-01-MET-S	0.15	4.88	9.7	526	1.07	0.15	10.5	73.3	25.3	2.87	0.055	432	32.3	10.0	0.47		110	84.1	1.41	
04-N21-01-MET-S	0.06	3.26	6.2	379	0.63	0.16	7.3	66.5	12.7	1.92	0.030	276	23.2	5.3	0.44		75.8	69.5	0.29	
04-N23-01-MET-S	0.14	5.66	12.9	651	0.99	0.31	11.8	87.8	30.9	3.02	0.068	319	35.5	15.7	0.66		142	111	0.63	
04-L01-01-MET-S #1	0.06	2.16	6.8	218	0.50	0.10	5.2	31.2	7.7	1.33	0.022	179	12.8	4.3	0.25		56.3	42.6	0.26	Lab Duplicate
04-L01-01-MET-S #2	0.05	2.17	6.6	223	0.54	0.10	5.5	33.4	7.4	1.33	0.023	179	12.4	4.3	0.24		54.3	40.1	0.24	Lab Duplicate
04-L01A-01-MET-S	0.08	4.65	11.1	493	1.06	0.20	9.2	74.4	21.1	2.67	0.054	366	26.5	10.2	0.46		113	87.0	0.47	
04-L04-01-MET-S	0.08	3.69	10.5	371	0.96	0.18	9.3	63.6	16.5	2.29	0.048	340	25.3	8.3	0.43		86.8	76.8	0.69	
04-L06-01-MET-S	0.09	4.86	11.3	489	1.18	0.23	10.9	85.5	22.9	2.83	0.066	467	32.4	9.6	0.55		119	93.4	1.03	Field Triplicate
04-L06-02-MET-S	0.12	6.36	16.6	683	1.47	0.23	12.7	102	33.4	3.64	0.082	542	39.6	13.9	0.68		153	121	2.13	Field Triplicate
04-L06-03-MET-S	0.13	6.26	16.9	629	1.51	0.24	12.8	98.3	33.3	3.58	0.086	552	38.7	13.0	0.69		156	122	1.63	Field Triplicate
04-L07-01-MET-S	0.14	5.75	18.6	580	1.66	0.36	11.3	88.3	38.4	3.39	0.097	428	32.3	18.1	0.71		149	136	2.36	
04-L08-01-MET-S	0.12	4.33	12.0	612	0.64	0.21	8.7	74.3	22.6	2.61	0.061	335	27.7	13.7	0.34		104	84.7	1.09	
04-L09-01-MET-S	0.07	4.51	13.7	456	1.11	0.19	8.8	72.4	23.0	2.79	0.064	410	27.7	15.1	0.63		109	90.8	0.97	
04-L17-01-MET-S	0.05	3.34	8.5	321	0.58	0.05	6.5	50.3	14.5	1.93	0.034	260	19.4	9.8	0.25		74.9	59.2	0.65	
04-L18-01-MET-S	0.04	3.16	7.4	319	0.57	0.14	7.0	48.7	14.4	1.90	0.037	263	21.7	8.4	0.19		70.3	64.2	0.47	
04-3A-01-MET-S	0.05	4.65	12.2	503	0.69	0.18	7.9	73.4	21.6	2.63	0.056	348	27.1	12.8	0.35		108	84.7	0.87	
04-3B-01-MET-S	0.04	4.37	11.1	441	0.87	0.17	7.2	69.0	19.0	2.45	0.061	315	26.6	11.8	0.34		100	74.5	0.81	
04-4A1-01-MET-S	0.05	4.46	10.4	447	0.83	0.23	8.5	72.9	21.4	2.58	0.056	384	29.3	11.7	0.33		103	83.0	0.77	
04-4B-01-MET-S	0.08	2.07	5.7	191	0.59	0.19	4.1	30.4	9.4	1.34	0.023	227	16.7	5.4	0.27		45.7	42.6	0.30	
04-4C-01-MET-S	0.06	1.80	5.3	163	0.49	0.04	3.9	29.9	6.6	1.37	0.011	203	11.8	5.2	0.14		40.9	28.3	0.22	
04-5A-01-MET-S	0.10	4.01	11.8	441	1.06	0.19	8.8	63.9	21.4	2.47	0.055	320	26.1	11.6	0.34		95.7	73.7	0.76	
04-5B-01-MET-S	0.08	1.28	8.2	154	0.45	0.05	4.2	15.8	4.9	0.95	0.003	126	9.8	4.2	0.14		25.2	15.1	0.08	
04-5D-01-MET-S	0.10	3.25	6.9	301	0.74	0.23	7.6	58.6	16.2	1.89	0.036	284	21.7	7.3	0.34		63.4	68.4	0.54	
04-5E-01-MET-S	0.10	2.20	7.9	182	3.59	0.03	5.7	27.3	7.7	1.37	0.015	201	10.6	6.5	0.32		42.4	33.7	0.05	
04-5F-01-MET-S	0.10	3.61	8.4	329	0.94	0.21	9.7	56.5	17.4	2.25	0.045	405	25.5	8.5	0.41		69.4	72.2	0.61	

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Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Samples (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
04-5H-01-MET-S	0.07	2.65	7.5	245	0.71	0.19	6.3	43.0	11.3	1.71	0.025	213	16.7	6.9	0.31		54.3	53.6	0.30	
04-5(0)-01-MET-S	0.13	3.89	10.3	353	1.00	0.19	9.0	64.5	22.6	2.42	0.052	381	27.9	10.5	0.45		88.3	82.0	0.91	
04-5(1)-01-MET-S	0.08	1.46	8.1	142	0.46	0.03	4.3	14.7	4.9	1.04	0.006	148	7.5	5.3	0.25		25.5	25.0	0.04	
04-5(5)-01-MET-S #1	0.10	5.81	14.1	684	1.55	0.12	11.9	79.3	24.0	3.08	0.056	465	33.6	14.4	0.45		120	88.9	0.72	Lab Duplicate
04-5(5)-01-MET-S #2	0.10	5.87	14.5	652	1.49	0.11	12.1	82.9	24.2	3.14	0.052	472	34.1	14.7	0.47		124	89.4	0.77	Lab Duplicate
04-5(5A)-01-MET-S	0.10	3.42	8.5	342	0.82	0.11	8.3	52.4	16.2	2.02	0.041	279	28.1	8.8	0.31		72.0	65.2	0.43	
04-5(10)-01-MET-S	0.07	2.83	7.4	260	0.52	0.16	6.8	45.8	13.3	1.73	0.029	267	22.4	6.9	0.21		63.2	56.2	0.16	

Table 3. Grain Size Distribution in Sediment Samples.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	Comments
04-N01-01-GRS-S	0.1	92.2	3.6	4.0	99.9	
04-N02-01-GRS-S	0.0	54.1	33.3	12.6	100.0	
04-N03-01-GRS-S	0.0	75.6	12.6	11.8	100.0	
04-N04-01-GRS-S	22.5	29.5	35.2	12.8	100.0	
04-N05-01-GRS-S	0.0	21.1	64.9	13.9	99.9	
04-N06-01-GRS-S	0.0	32.4	46.8	20.9	100.1	Field Triplicate
04-N06-02-GRS-S	0.0	92.5	3.8	3.8	100.1	Field Triplicate
04-N06-03-GRS-S	0.0	17.2	54.7	28.1	100.0	Field Triplicate
04-N07-01-GRS-S	0.6	83.9	10.8	4.8	100.1	
04-N08-01-GRS-S	0.0	21.1	48.8	30.1	100.0	
04-N09-01-GRS-S #1	0.0	85.5	9.5	5.0	100.0	Lab Duplicate
04-N09-01-GRS-S #2	0.0	86.4	9.2	4.4	100.0	Lab Duplicate
04-N10-01-GRS-S	0.0	11.3	56.5	32.1	99.9	
04-N11-01-GRS-S	5.7	91.6	1.8	0.9	100.0	
04-N13-01-GRS-S	0.0	13.0	69.2	17.8	100.0	
04-N14-01-GRS-S	0.0	41.4	44.9	13.6	99.9	
04-N15-01-GRS-S	61.0	38.6	0.4	0.0	100.0	
04-N16-01-GRS-S	0.0	24.9	52.6	22.5	100.0	
04-N17-01-GRS-S	0.0	11.6	63.8	24.6	100.0	
04-N18-01-GRS-S	3.5	62.9	20.0	13.6	100.0	
04-N19-01-GRS-S	0.0	75.6	12.0	12.4	100.0	
04-N20-01-GRS-S	0.0	45.4	29.1	25.6	100.1	
04-N21-01-GRS-S	0.0	68.6	22.6	8.8	100.0	
04-N23-01-GRS-S	45.7	8.1	29.9	16.2	99.9	
04-L01-01-GRS-S	0.0	93.2	3.9	2.8	99.9	
04-L04-01-GRS-S	3.0	50.9	29.7	16.4	100.0	Lab Duplicate
04-L04-01-GRS-S	0.2	47.6	33.4	18.7	99.9	Lab Duplicate
04-L06-01-GRS-S	0.0	34.9	29.0	36.1	100.0	Field Triplicate
04-L06-02-GRS-S	0.0	8.6	68.7	22.7	100.0	Field Triplicate
04-L06-03-GRS-S	0.0	8.8	46.5	44.6	99.9	Field Triplicate
04-L07-01-GRS-S #1	0.0	10.9	74.7	14.4	100.0	Lab Duplicate
04-L07-01-GRS-S #2	0.0	7.4	55.3	37.3	100.0	Lab Duplicate
04-L08-01-GRS-S	0.0	42.7	37.9	19.4	100.0	
04-L09-01-GRS-S	0.0	34.1	54.9	11.0	100.0	
04-L17-01-GRS-S	0.0	53.3	33.4	13.3	100.0	
04-L18-01-GRS-S	0.2	50.6	31.1	18.1	100.0	
04-3A-01-GRS-S	0.0	39.6	42.4	18.0	100.0	
04-4A1-01-GRS-S	1.5	16.7	31.3	50.5	100.0	
04-4B-01-GRS-S	0.0	90.0	7.8	2.3	100.1	
04-4C-01-GRS-S	0.0	98.4	1.6	0.0	100.0	
04-5A-01-GRS-S	6.7	37.5	35.7	20.1	100.0	
04-5B-01-GRS-S	0.0	28.9	53.9	17.2	100.0	
04-5D-01-GRS-S	0.0	0.0	99.8	0.1	99.9	
04-5E-01-GRS-S	0.5	86.5	6.0	6.9	99.9	
04-5F-01-GRS-S	0.0	15.9	81.2	2.9	100.0	
04-5H-01-GRS-S	1.5	77.9	13.3	7.3	100.0	
04-5(0)-01-GRS-S	0.0	61.9	26.1	12.0	100.0	
04-5(1)-01-GRS-S	2.1	97.8	0.1	0.0	100.0	
04-5(5)-01-GRS-S	6.7	36.5	31.1	25.6	99.9	Lab Duplicate
04-5(5)-01-GRS-S	3.9	36.5	25.0	29.3	94.7	Lab Duplicate
04-5(5A)-01-GRS-S	2.6	67.2	20.2	10.1	100.1	

* Sample collection dates are the same as the Metal & Carbon samples.

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Table 4. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Samples (dry weight). Field Triplicates and Lab Duplicates were averaged prior to statistical analysis.

Station Grouping	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Northstar Stations N01-N23	Mean	0.10	4.13	10.7	462	1.03	0.17	9.0	67.6	19.4	2.42	0.044	344	27.5	9.0	0.48		97.4	80.5	0.56
	Std. Dev.	0.03	1.36	3.6	112	0.33	0.06	2.6	20.2	8.3	0.77	0.019	119	8.1	3.6	0.14		35.5	24.6	0.45
	n	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22		22	22	22
	Maximum	0.18	6.32	17.5	654	1.62	0.31	13.2	97.1	32.2	3.70	0.070	534	37.7	16.2	0.82		154	115	1.72
	Minimum	0.05	1.64	5.5	254	0.49	0.04	3.8	20.2	4.4	0.94	0.004	100	11.3	3.8	0.21		34.0	21.8	0.04
Liberty Stations L01-L18	Mean	0.08	4.16	11.5	441	0.94	0.18	8.7	66.6	20.9	2.47	0.055	345	25.6	11.1	0.43		101	83.6	0.95
	Std. Dev.	0.03	1.20	3.8	141	0.40	0.09	2.2	20.1	9.2	0.68	0.023	102	7.1	4.1	0.19		32.0	28.3	0.66
	n	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		9	9	9
	Maximum	0.14	5.83	18.6	612	1.66	0.36	12.1	95.3	38.4	3.39	0.097	520	36.9	18.1	0.71		149	136	2.36
	Minimum	0.04	2.17	6.7	221	0.52	0.05	5.4	32.3	7.6	1.33	0.023	179	12.6	4.3	0.19		55.3	41.4	0.25
BSMP Stations 3A-5(10)	Mean	0.08	3.24	9.0	323	0.96	0.14	7.1	50.0	14.9	1.96	0.036	286	21.4	8.6	0.31		69.9	59.2	0.47
	Std. Dev.	0.02	1.28	2.5	148	0.75	0.07	2.3	21.2	6.7	0.63	0.020	97	8.1	3.2	0.09		30.2	23.7	0.31
	n	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		16	16	16
	Maximum	0.13	5.84	14.3	668	3.59	0.23	12.0	81.1	24.1	3.11	0.061	469	33.9	14.6	0.46		122	89.2	0.91
	Minimum	0.04	1.28	5.3	142	0.45	0.03	3.9	14.7	4.9	0.95	0.003	126	7.5	4.2	0.14		25.2	15.1	0.04
Cumulative	Mean	0.09	3.83	10.3	410	0.99	0.17	8.3	61.4	18.2	2.27	0.043	324	25.0	9.3	0.41		88.7	73.8	0.60
	Std. Dev.	0.03	1.35	3.4	143	0.51	0.07	2.5	21.7	8.2	0.73	0.021	110	8.2	3.6	0.15		35.2	26.7	0.48
	n	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47		47	47	47
	Maximum	0.18	6.32	18.6	668	3.59	0.36	13.2	97.1	38.4	3.70	0.097	534	37.7	18.1	0.82		154	136	2.36
	Minimum	0.04	1.28	5.3	142	0.45	0.03	3.8	14.7	4.4	0.94	0.003	100	7.5	3.8	0.14		25.2	15.1	0.04

Table 5. Statistics for Grain Size in Sediment Samples. Field Triplicates and Lab Duplicates were averaged prior to statistical analysis.

Station Grouping	Statistic	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
Northstar Stations N01-N23	Mean	6.6	47.8	31.3	14.3
	Std. Dev.	16.5	28.9	22.0	9.0
	n	21	21	21	21
	Maximum	61	92.2	69.2	32.1
	Minimum	0.0	8.1	0.4	0.0
Liberty Stations L01-L18	Mean	0.2	43.7	38.2	17.8
	Std. Dev.	0.6	25.6	18.5	9.5
	n	8	8	8	8
	Maximum	1.6	93.2	65	34.5
	Minimum	0.0	9.2	3.9	2.8
BSMP Stations 3A-5(10)	Mean	1.4	53.9	32.0	12.5
	Std. Dev.	2.1	33.1	29.6	13.9
	n	14	14	14	14
	Maximum	6.7	98.4	99.8	50.5
	Minimum	0.0	0.0	0.1	0.0
Cumulative	Mean	3.7	49.0	32.8	14.4
	Std. Dev.	11.8	29.3	23.8	10.8
	n	43	43	43	43
	Maximum	61.0	98.4	99.8	50.5
	Minimum	0.0	0.0	0.1	0.0

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Table 6. Quality Assurance and Quality Control Data for Sediment Metal Analyses.

Results for the Marine Sediment Certified Reference Materials (CRM) MESS-3 certified by the National Research Council of Canada (NRC) and Standard Reference Material (SRM) Trace Elements in Water #1643d certified by the National Institute of Standards and Technology (NIST).

Reference Material	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-3	0.18	8.57	21.3	999	2.26	0.24	14.3	106	33.6	4.28	0.091	314	45.6	20.8	1.09		238	151	2.0
This Study	0.16	8.51	22.1	1007	2.23	0.25	14.0	108	33.7	4.29	0.095	321	44.9	20.8	1.07		235	152	2.0
	0.18	8.65	20.7	1049	2.20	0.25	14.1	108	34.9	4.35	0.096	326	47.1	21.1	0.94		243	159	2.0
	0.16	8.66	21.3	1047	2.25	0.24	13.9	108	33.4	4.33	0.094	319	44.4	21.6	0.97		245	153	
CRM MESS-3	0.18	8.59	21.2	-	2.30	0.24	14.4	105	33.9	4.34	0.091	324	46.9	21.1	1.02	0.90	243	159	2*
NRC Certified Values	± 0.02	± 0.23	± 1.1	-	± 0.12	± 0.01	± 2.0	± 4	± 1.6	± 0.11	± 0.009	± 12	± 2.2	± 0.7	± 0.09	± 0.06	± 10	± 8	-
	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	
SRM #1643d	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
This Study	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SRM #1643d	1.270	127.6	56.02	506.5	12.53	6.47	25.00	18.53	20.5	91.2	-	37.66	58.1	18.15	54.1	7.28	35.1	72.48	-
NIST Certified Values	± 0.057	± 3.5	± 0.73	± 8.9	± 0.28	± 0.37	± 0.59	± 0.20	± 3.8	± 3.9	-	± 0.83	± 2.7	± 0.64	± 1.1	± 0.25	± 1.4	± 0.65	-

* Reference Value, not Certified; Total Carbon (Inorganic plus Organic).

Method Detection Limits (MDLs).

	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Method Detection Limit	0.007	0.01	0.1	1	0.1	0.002	0.3	3.4	1.7	0.01	0.001	2.4	0.5	0.002	0.04	0.04	10	0.5	0.03

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Table 6. Quality Assurance and Quality Control Data for Sediment Metal Analyses.

Percent Spike Recovery.

	Ag	Al	As	Ba**	Be	Cd	Co	Cr	Cu	Fe	Hg**	Mn	Ni	Pb	Sb**	Tl	V**	Zn	TOC
Mean	92.5	98.9	99.0	114.7	101.0	95.3	90.4	100.2	98.9	98.1	84.2	95.0	93.6	94.3	124.4		114.9	95.5	-
Standard Deviation	2.1	2.5	2.9	9.4	2.0	4.2	8.0	1.5	2.3	1.7	4.8	1.4	2.9	3.0	23.9		3.0	3.0	-
(n =)	4	4	4	4	4	4	4	4	4	4	12	4	4	4	4		4	4	-

**Final concentrations are corrected for percent spike recovery.

Estimate of Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates.

Lab Duplicate	Ag	Al	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg	Mn	Ni	Pb	Sb	Tl	V	Zn	TOC
04-N03-01-MET-S	0.0	0.3	1.2	1.6	2.6	0.0	2.7	0.5	0.2	0.8	1.0	0.1	3.0	0.9	0.9		0.0	0.6	6.1
04-L01-01-MET-S	12.9	0.3	2.1	1.6	5.4	0.0	4.0	4.8	2.8	0.0	3.1	0.0	2.2	0.0	2.9		2.6	4.3	5.7
04-5(5)-01-MET-S	0.0	0.7	2.0	3.4	2.8	6.1	1.2	3.1	0.6	1.4	5.2	1.1	1.0	1.5	3.1		2.3	0.4	4.7

Percent RSD = (standard deviation / mean) X 100

2005 Data

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Table 1. Station Data for Surficial Sediment Samples.

Sample Identification	Station Identification	Station Grouping	Collection Date	Comments
05-N04-01-MET-S	N04	Northstar	8/4/2005	
05-N05-01-MET-S	N05	Northstar	8/4/2005	
05-N06-01-MET-S	N06	Northstar	8/4/2005	
05-N08-01-MET-S	N08	Northstar	8/4/2005	
05-N11-01-MET-S	N11	Northstar	8/4/2005	
05-N14-01-MET-S	N14	Northstar	8/4/2005	
05-N18-01-MET-S	N18	Northstar	8/4/2005	
05-L07-01-MET-S	L07	Liberty	7/30/2005	
05-L08-01-MET-S	L08	Liberty	7/30/2005	
05-L17B-01-MET-S	L17B	Liberty	8/2/2005	
05-BP01-01-MET-S	BP01	Liberty	8/1/2005	Boulder Patch
05-E01-01-MET-S	E01	Liberty	8/1/2005	East of Endicott Island
05-1A-01-MET-S	1A	BSMP	8/7/2005	
05-1B-01-MET-S	1B	BSMP	8/7/2005	
05-1C-01-MET-S	1C	BSMP	8/7/2005	
05-1D-01-MET-S	1D	BSMP	8/7/2005	
05-1E-01-MET-S	1E	BSMP	8/7/2005	Barter Island
05-2A-01-MET-S	2A	BSMP	8/8/2005	Camden Bay
05-2B-01-MET-S	2B	BSMP	8/8/2005	
05-2C-01-MET-S	2C	BSMP	8/7/2005	
05-2D-01-MET-S	2D	BSMP	8/8/2005	
05-2E-01-MET-S	2E	BSMP	8/6/2005	
05-2F-01-MET-S	2F	BSMP	8/6/2005	
05-2G-01-MET-S	2G	BSMP	8/8/2005	
05-2H-01-MET-S	2H	BSMP	8/8/2005	
05-3A-01-MET-S	3A	BSMP	7/30/2005	
05-3B-01-MET-S	3B	BSMP	7/30/2005	
05-4A-01-MET-S	4A	BSMP	7/30/2005	
05-4B-01-MET-S	4B	BSMP	7/30/2005	
05-5(1)-01-MET-S	5(1)	BSMP	8/9/2005	
05-5(5)-01-MET-S	5(5)	BSMP	8/9/2005	

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Table 2. Station Data for Sediment Cores

Sample Identification	Station Identification	Station Grouping	Collection Date	Sectioning Interval	Comments
05-N26-01-MET-S	N26	Northstar	8/10/2006	2 cm to a depth of 24 cm	Sediment Core (Grain Size and Organics)
05-N26-02-MET-S	N26	Northstar	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 17 cm	Sediment Core (Metals and Age Dating)
05-PB1A-01-MET-S	PB1A	Prudhoe Bay	8/10/2006	2 cm to a depth of 32 cm	Sediment Core (Grain Size and Organics)
05-PB1A-02-MET-S	PB1A	Prudhoe Bay	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 42 cm	Sediment Core (Metals and Age Dating)
05-L17B-01-MET-S	L17B	Liberty	8/2/2005	2 cm to a depth of 22 cm	Sediment Core (Grain Size and Organics)
05-L17B-02-MET-S	L17B	Liberty	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 30 cm	Sediment Core (Metals and Age Dating)
05-BP01-01-MET-S	BP01	Liberty	8/1/2005	2 cm to a depth of 12 cm	Sediment Core (Grain Size and Organics)
05-BP01-02-MET-S	BP01	Liberty	"	0.5 cm to a depth of 10 cm	Sediment Core (Metals and Age Dating)
05-E01-01-MET-S	E01	Liberty	8/1/2005	2 cm to a depth of 18 cm	Sediment Core (Grain Size and Organics)
05-E01-02-MET-S	E01	Liberty	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 21 cm	Sediment Core (Metals and Age Dating)
05-1C-01-MET-S	1C	BSMP	8/7/2005	2 cm to a depth of 54 cm	Sediment Core (Grain Size and Organics)
05-1C-02-MET-S	1C	BSMP	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 54 cm	Sediment Core (Metals and Age Dating)
05-2A-01-MET-S	2A	BSMP	8/8/2005	2 cm to a depth of 38 cm	Sediment Core (Grain Size and Organics)
05-2A-02-MET-S	2A	BSMP	"	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 52 cm	Sediment Core (Metals and Age Dating)

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Table 3. Trace Metal and Total Organic Carbon (TOC) Concentrations in Surficial Sediment Samples (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
05-N04-01-MET-S	0.09	1.91	7.6	299	0.47	0.09	5.6	46.5	8.3	1.34	0.016	198	17.5	5.4	0.32	0.17	45.9	38.4	0.11	
05-N05-01-MET-S	0.12	4.89	11.0	558	0.87	0.23	9.0	79.4	22.8	2.55	0.050	307	38.0	12.7	0.52	0.36	111	87.8	0.76	
05-N06-01-MET-S	0.17	2.80	8.3	749	0.61	0.14	6.1	51.6	14.3	1.65	0.027	226	25.2	8.9	0.39	0.23	69.0	52.3	0.20	
05-N08-01-MET-S #1	0.07	3.57	9.2	429	0.68	0.17	6.9	55.6	12.9	1.82	0.032	295	26.1	8.2	0.34	0.20	73.1	58.1	0.54	Lab Duplicate
05-N08-01-MET-S #2	0.06	3.50	9.5	413	0.66	0.18	6.8	58.0	12.8	1.84	0.032	300	26.4	7.9	0.37	0.23	73.0	57.5	0.48	Lab Duplicate
05-N11-01-MET-S	0.12	3.09	11.6	425	0.94	0.13	7.1	43.8	14.7	1.83	0.029	254	26.7	9.3	0.30	0.25	68.5	54.4	0.44	
05-N14-01-MET-S #1	0.44	3.05	24.9	411	0.84	0.77	12.5	57.8	46.2	2.78	0.113	433	45.8	16.2	0.61	0.33	84.2	101	6.42	Lab Duplicate
05-N14-01-MET-S #2	0.39	2.81	21.5	379	0.75	0.73	12.8	57.0	45.3	2.77	-	406	40.5	16.8	0.68	0.32	79.1	98.0	6.29	Lab Duplicate
05-N18-01-MET-S	0.09	3.33	12.8	455	0.59	0.28	8.3	62.2	17.1	2.07	0.039	315	29.4	10.0	0.40	0.30	87.2	69.8	0.83	
05-L07-01-MET-S #1	0.22	6.30	20.3	701	1.13	0.38	11.6	96.2	40.6	3.43	0.097	400	43.6	20.1	0.63	0.53	147	126	1.60	Lab Duplicate
05-L07-01-MET-S #2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.59	Lab Duplicate
05-L08-01-MET-S	0.13	2.47	7.2	397	0.52	0.12	6.1	45.8	10.3	1.40	0.026	170	18.4	7.2	0.29	0.22	53.3	46.8	0.28	
05-L17B-01-MET-S	0.12	5.96	14.1	673	0.94	0.13	11.0	84.3	23.6	3.03	0.047	493	35.5	14.8	0.62	0.38	129	95.2	0.52	
05-BP01-01-MET-S	0.05	2.17	4.7	259	0.35	0.11	5.0	37.3	8.8	1.25	0.028	174	15.2	5.2	0.21	0.22	46.0	39.7	0.60	
05-E01-01-MET-S	0.13	4.89	10.1	499	0.77	0.35	10.2	75.2	24.8	2.60	0.059	416	38.0	11.5	0.39	0.44	104	103	0.84	
05-1A-01-MET-S	0.07	3.44	8.6	393	1.08	0.14	7.2	51.1	17.0	1.97	0.045	270	26.5	8.7	0.28	0.30	62.8	55.8	0.92	
05-1B-01-MET-S	0.04	2.60	6.4	261	1.14	0.09	5.5	31.0	7.3	1.43	0.016	173	15.6	7.1	0.18	0.20	40.3	37.0	0.18	
05-1C-01-MET-S	0.08	5.00	11.6	538	1.31	0.11	9.5	68.6	18.5	2.50	0.035	401	27.9	11.4	0.69	0.39	97.8	75.9	0.50	
05-1D-01-MET-S	0.03	3.87	11.4	372	1.81	0.05	8.5	44.5	13.3	2.49	0.017	332	23.4	9.7	0.50	0.27	73.2	58.2	-	
05-1E-01-MET-S #1	0.09	4.56	10.4	435	1.51	0.13	9.5	60.4	23.8	2.56	0.036	433	28.5	14.5	0.55	0.35	91.5	69.0	1.72	Lab Duplicate
05-1E-01-MET-S #2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.77	Lab Duplicate
05-2A-01-MET-S	0.08	3.56	10.7	398	0.96	0.17	7.2	57.1	13.6	1.90	0.043	192	21.6	9.8	0.26	0.24	75.7	67.5	0.91	
05-2B-01-MET-S	0.06	2.22	4.9	198	0.73	0.05	3.6	23.7	4.8	1.08	0.009	149	10.9	6.0	0.18	0.27	36.6	27.6	0.12	
05-2C-01-MET-S	0.10	5.52	11.5	620	1.31	0.11	10.2	72.0	21.1	2.77	0.047	447	30.6	12.9	0.62	0.52	113	84.7	0.50	
05-2D-01-MET-S	0.05	2.17	5.4	204	0.72	0.06	3.8	17.2	3.9	0.87	0.008	147	6.9	6.3	0.20	0.23	30.7	22.1	0.18	
05-2E-01-MET-S #1	0.04	1.93	6.7	237	0.51	0.19	4.5	42.5	8.4	1.40	0.018	208	15.5	5.7	0.31	0.15	38.5	45.6	0.57	Lab Duplicate
05-2E-01-MET-S #2	0.04	1.84	6.3	217	0.52	0.19	4.4	40.7	8.2	1.33	0.020	196	15.5	5.4	0.29	0.14	38.0	41.8	0.62	Lab Duplicate
05-2F-01-MET-S	0.03	3.03	6.8	365	0.56	0.24	7.1	53.3	13.7	1.73	0.031	227	28.1	7.3	0.42	0.22	64.7	63.0	0.61	
05-2G-01-MET-S	0.08	3.66	7.6	432	1.07	0.43	9.5	65.1	24.7	2.29	0.063	378	31.4	12.2	0.64	0.30	77.6	97.1	1.49	
05-2H-01-MET-S	0.07	3.74	9.2	383	0.88	0.10	5.8	43.5	11.8	1.76	0.025	214	19.5	10.4	0.27	0.20	72.7	49.4	0.40	
05-3A-01-MET-S	0.09	4.83	13.6	549	0.89	0.20	9.0	75.2	21.3	2.53	0.052	416	30.0	12.5	0.37	0.25	104	84.0	0.91	
05-3B-01-MET-S	0.09	4.55	11.5	520	0.87	0.17	7.3	67.0	20.5	2.41	0.050	333	29.1	11.8	0.38	0.20	96.8	77.7	0.80	
05-4A-01-MET-S	0.10	3.43	8.3	481	0.64	0.19	8.7	56.1	17.3	1.76	0.019	313	28.0	10.6	0.38	0.28	72.7	64.7	0.65	
05-4B-01-MET-S	0.06	1.98	5.4	268	0.90	0.19	4.2	33.4	9.3	1.27	0.020	192	14.9	6.3	0.25	0.14	42.1	44.2	0.49	
05-5(1)-01-MET-S	0.07	1.98	10.2	317	0.37	0.04	8.4	20.9	5.3	1.34	0.011	165	14.7	6.9	0.18	0.17	34.4	28.7	0.05	
05-5(5)-01-MET-S	0.08	3.75	8.6	433	0.61	0.19	8.4	61.2	17.3	2.07	0.037	297	28.3	10.1	0.38	0.25	84.3	71.7	0.87	

Table 4. Trace Metal Concentrationtions in Sediment Cores (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	Comments
05-N26-02-MET-S (0-0.5 cm)	0.06	4.45	9.2	481	0.90	0.12	10.1	74.4	17.7	2.52	0.037	316	41.0	13.5	0.50	0.43	93.6	76.0	
05-N26-02-MET-S (1-1.5 cm) #1	0.08	4.29	8.8	498	0.88	0.10	9.6	56.6	16.9	2.46	0.034	264	26.5	12.9	0.60	0.34	89.7	71.9	Lab Duplicate
05-N26-02-MET-S (1-1.5 cm) #2	0.08	4.22	9.0	495	0.90	0.10	9.4	59.3	16.8	2.40	0.031	262	26.1	12.3	0.62	0.32	91.3	70.0	Lab Duplicate
05-N26-02-MET-S (3-3.5 cm)	0.08	3.85	7.5	438	0.83	0.05	7.6	55.5	15.5	2.31	0.031	273	27.0	11.9	0.51	0.40	85.7	64.5	
05-N26-02-MET-S (5-5.5 cm)	0.08	4.02	6.8	452	1.01	0.10	8.9	58.4	15.6	2.32	0.020	243	23.4	10.8	0.49	0.42	88.3	69.5	
05-N26-02-MET-S (7-7.5 cm)	0.05	4.19	7.6	472	0.87	0.12	9.1	59.6	17.4	2.35	0.023	253	28.3	11.0	0.59	0.34	87.9	69.9	
05-N26-02-MET-S (9.5-10 cm) #1	0.06	4.22	7.0	522	0.86	0.19	10.5	73.0	18.4	2.43	0.028	265	28.7	11.7	0.51	0.36	88.9	79.4	Lab Duplicate
05-N26-02-MET-S (9.5-10 cm) #2	-	-	-	-	-	-	-	-	-	-	0.035	-	-	-	-	-	-	-	Lab Duplicate
05-N26-02-MET-S (16-17 cm)	0.08	3.53	8.5	462	0.72	0.28	9.6	70.6	20.1	2.72	0.028	584	31.2	12.4	0.35	0.27	71.5	75.4	
05-PB1A-02-MET-S (0-0.5 cm)	0.13	5.10	12.2	564	0.88	0.29	10.9	84.9	29.0	3.07	0.067	309	38.9	13.8	0.59	0.46	113	110	
05-PB1A-02-MET-S (1-1.5 cm)	0.09	4.82	7.1	546	0.88	0.25	9.5	79.3	22.9	2.41	0.046	241	36.1	11.2	0.68	0.42	97.6	97.5	
05-PB1A-02-MET-S (3-3.5 cm)	0.23	1.15	5.7	270	0.47	0.36	8.6	57.3	28.4	1.65	0.053	162	36.8	7.7	0.58	0.44	78.6	99.3	
05-PB1A-02-MET-S (5-5.5 cm)	0.10	4.97	6.3	526	0.88	0.33	8.7	79.2	23.6	2.38	0.042	239	33.0	11.3	0.61	0.37	108	103	
05-PB1A-02-MET-S (7-7.5 cm)	-	-	-	-	-	-	-	-	-	-	0.030	-	-	-	-	-	-	-	
05-PB1A-02-MET-S (9.5-10 cm)	0.14	5.00	6.9	546	0.88	0.39	11.3	84.3	27.0	2.52	0.054	236	40.9	12.8	0.65	0.36	112	115	
05-PB1A-02-MET-S (19-20 cm)	0.10	4.61	7.3	520	0.82	0.38	9.4	82.4	26.4	2.42	0.054	257	39.1	12.2	0.54	0.31	102	110	
05-L17B-02-MET-S (0-0.5 cm)	0.08	5.54	11.4	610	1.11	0.15	12.1	82.8	27.1	3.03	0.045	385	34.1	14.5	0.52	0.40	126	95.0	
05-L17B-02-MET-S (1-1.5 cm)	0.18	5.49	11.6	617	1.24	0.15	10.5	75.9	23.8	3.09	0.039	375	30.6	13.3	0.44	0.31	122	91.9	
05-L17B-02-MET-S (3-3.5 cm)	0.11	5.16	18.7	635	1.27	0.15	9.1	72.5	21.6	3.01	0.039	351	30.5	14.5	0.49	0.46	112	88.3	
05-L17B-02-MET-S (5-5.5 cm)	0.10	5.50	12.5	671	1.26	0.17	9.9	75.6	23.1	2.96	0.038	363	31.6	14.2	0.66	0.45	115	95.4	
05-L17B-02-MET-S (7-7.5 cm)	0.15	5.40	11.5	738	1.32	0.14	9.7	74.8	22.7	2.98	0.040	357	35.6	15.2	0.65	0.39	109	94.5	
05-L17B-02-MET-S (9.5-10 cm)	0.07	5.53	12.0	616	1.05	0.13	12.7	82.5	23.4	3.03	0.033	353	36.0	13.7	0.60	0.50	131	94.1	
05-L17B-02-MET-S (19-20 cm) #1	0.08	5.24	12.9	608	1.21	0.14	11.7	81.1	22.2	2.90	0.037	339	34.1	13.1	0.66	0.46	118	89.6	Lab Duplicate
05-L17B-02-MET-S (19-20 cm) #2	0.07	5.03	12.4	599	1.12	0.15	12.1	81.0	23.3	2.88	-	339	34.8	13.0	0.58	0.45	120	-	Lab Duplicate
05-BP01-02-MET-S (0-0.5 cm)	0.04	3.12	5.9	390	0.46	0.17	6.1	53.4	13.0	1.86	0.030	227	22.3	7.0	0.31	0.54	60.8	54.7	
05-BP01-02-MET-S (1-1.5 cm) #1	0.04	2.96	7.4	368	0.74	0.16	5.0	46.0	11.2	1.72	0.027	186	22.0	8.2	0.41	0.36	56.5	54.9	Lab Duplicate
05-BP01-02-MET-S (1-1.5 cm) #2	0.04	3.00	7.3	386	0.78	0.14	5.0	47.6	11.6	1.75	-	188	22.2	7.8	0.44	0.38	58.6	55.2	Lab Duplicate
05-BP01-02-MET-S (3-3.5 cm)	0.05	2.99	7.4	411	0.94	0.11	4.4	39.5	10.4	1.66	0.023	178	16.2	8.6	0.33	0.41	51.4	48.9	
05-BP01-02-MET-S (5-5.5 cm)	0.09	2.73	4.8	360	0.78	0.16	4.2	37.3	11.0	1.35	0.027	156	15.2	7.9	0.25	0.30	48.1	48.2	
05-BP01-02-MET-S (7-7.5 cm)	0.14	2.61	3.8	332	0.68	0.28	4.5	41.8	13.3	1.42	0.030	180	19.1	7.2	0.55	0.30	56.1	59.3	
05-BP01-02-MET-S (9.5-10 cm)	0.07	2.24	4.8	375	0.55	0.61	5.0	52.3	16.9	1.29	0.048	213	25.6	6.3	0.30	0.36	57.3	80.8	
05-E01-02-MET-S (0-0.5 cm)	0.08	4.28	6.8	515	0.63	0.36	9.8	79.9	22.9	2.51	0.051	370	36.9	9.0	0.54	0.43	88.7	95.5	
05-E01-02-MET-S (1-1.5 cm)	0.08	4.15	5.9	465	0.64	0.34	9.5	71.6	21.7	2.40	0.044	333	34.0	11.4	0.50	0.42	84.7	92.2	
05-E01-02-MET-S (3-3.5 cm)	0.06	4.02	5.1	410	0.62	0.30	8.9	60.1	19.0	2.34	0.037	300	30.3	9.4	0.54	0.43	95.2	87.8	
05-E01-02-MET-S (5-5.5 cm)	0.06	4.24	5.8	439	0.66	0.29	8.5	68.1	20.3	2.41	0.045	313	32.4	9.2	0.56	0.46	102	92.9	
05-E01-02-MET-S (7-7.5 cm)	0.06	3.96	4.4	404	0.59	0.27	7.7	65.0	17.7	2.25	0.045	303	28.3	7.8	0.59	0.38	93.8	88.6	
05-E01-02-MET-S (9.5-10 cm)	0.07	3.78	6.7	415	0.60	0.27	7.8	66.2	19.3	2.22	0.040	305	33.1	8.4	0.59	0.38	84.6	84.0	
05-E01-02-MET-S (19-20 cm)	0.09	3.86	6.4	517	0.57	0.33	9.0	68.6	20.4	2.42	0.040	316	33.2	8.3	0.56	0.31	88.4	87.9	

Table 4. Trace Metal Concentrationtions in Sediment Cores (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	Comments
05-1C-02-MET-S (0-0.5 cm)	0.07	6.14	10.5	874	1.15	0.09	10.7	80.2	22.3	2.92	0.043	338	34.2	13.3	0.62	0.45	120	88.5	
05-1C-02-MET-S (1-1.5 cm)	0.10	5.86	13.1	675	1.29	0.11	9.6	75.3	21.9	3.04	0.040	299	28.6	14.0	0.64	0.39	123	89.7	
05-1C-02-MET-S (3-3.5 cm)	0.12	6.01	11.6	756	1.10	0.09	10.1	80.2	22.3	3.06	0.040	309	28.1	14.2	0.82	0.42	124	91.5	
05-1C-02-MET-S (5-5.5 cm)	0.15	6.06	9.6	763	1.23	0.11	10.7	79.0	23.1	3.06	0.047	324	29.6	14.2	0.69	0.33	122	92.3	
05-1C-02-MET-S (7-7.5 cm)	0.20	6.16	10.0	695	1.39	0.13	10.5	77.1	22.8	3.07	0.045	312	28.7	14.2	0.66	0.47	120	94.0	
05-1C-02-MET-S (9.5-10 cm)	0.06	6.16	10.8	923	1.17	0.16	11.3	85.1	22.5	2.95	0.048	293	36.0	14.2	0.68	0.45	130	93.3	
05-1C-02-MET-S (19-20 cm) #1	0.07	6.07	12.8	975	1.70	0.11	10.7	80.4	22.8	2.92	0.047	307	33.1	14.0	0.73	0.49	130	89.4	Lab Duplicate
05-1C-02-MET-S (19-20 cm) #2	-	-	-	-	-	-	-	-	-	-	0.045	-	-	-	-	-	-	-	Lab Duplicate
05-2A-02-MET-S (0-0.5 cm) #1	0.07	3.73	8.7	648	0.69	0.25	8.2	64.4	19.0	2.13	0.046	212	27.6	10.6	0.63	0.38	85.1	79.1	Lab Duplicate
05-2A-02-MET-S (0-0.5 cm) #2	0.07	3.73	8.7	646	0.74	0.27	7.9	67.6	18.6	2.10	-	215	27.6	10.7	0.61	0.40	84.9	77.1	Lab Duplicate
05-2A-02-MET-S (1-1.5 cm)	0.10	4.17	8.9	513	0.94	0.27	7.8	64.7	19.5	2.22	0.037	236	25.2	11.0	0.75	0.38	86.1	80.1	
05-2A-02-MET-S (3-3.5 cm)	0.17	5.10	9.9	597	1.16	0.34	8.8	76.5	29.4	2.79	0.052	306	30.4	13.0	0.95	0.44	99.2	91.5	
05-2A-02-MET-S (5-5.5 cm)	0.13	3.84	6.0	455	0.97	0.30	6.6	65.8	17.1	2.18	0.041	222	21.1	9.2	0.65	0.43	77.6	76.0	
05-2A-02-MET-S (7-7.5 cm)	0.09	4.41	7.5	538	0.96	0.27	7.7	67.9	18.4	2.29	0.040	244	24.5	9.7	0.79	0.40	87.9	80.0	
05-2A-02-MET-S (9.5-10 cm)	0.12	4.79	9.0	772	0.89	0.38	9.8	79.3	23.8	2.38	0.047	189	34.6	12.0	0.93	0.45	105	93.0	
05-2A-02-MET-S (19-20 cm)	0.14	6.05	9.5	890	1.10	0.36	10.1	84.4	28.6	2.81	0.055	215	37.2	13.8	1.02	0.59	127	105	

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Table 5. Grain Size Distribution in Surficial Sediment Samples.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	Comments
05-N04-01-MET-S	30.7	59.0	7.1	3.2	100.0	
05-N05-01-MET-S	0.0	36.4	39.6	24.0	100.0	
05-N06-01-MET-S	1.8	65.3	21.6	11.3	100.0	
05-N08-01-MET-S #1	0.0	56.3	38.4	5.3	100.0	Lab Triplicate
05-N08-01-MET-S #2	0.0	55.2	35.3	9.4	99.9	Lab Triplicate
05-N08-01-MET-S #3	0.0	54.3	36.6	9.1	100.0	Lab Triplicate
05-N11-01-MET-S	-	-	-	-	-	
05-N14-01-MET-S	0.0	56.1	33.4	10.4	99.9	
05-N18-01-MET-S	0.2	59.2	26.9	13.8	100.1	
05-L07-01-MET-S	0.0	16.2	45.1	38.8	100.1	
05-L08-01-MET-S	0.7	78.6	14.3	6.5	100.1	
05-L17B-01-MET-S	5.2	26.7	37.9	30.3	100.1	
05-BP01-01-MET-S	0.0	72.5	19.2	8.3	100.0	
05-E01-01-MET-S	0.0	8.4	71.7	19.9	100.0	
05-1A-01-MET-S	0.0	62.3	29.5	8.2	100.0	
05-1B-01-MET-S	0.0	86.1	8.5	5.4	100.0	
05-1D-01-MET-S	0.0	88.3	8.5	3.2	100.0	
05-1E-01-MET-S	0.0	29.0	64.6	6.4	100.0	
05-2A-01-MET-S	0.0	70.1	25.4	4.5	100.0	
05-2B-01-MET-S	0.0	96.0	1.6	2.4	100.0	
05-2C-01-MET-S	0.3	31.3	43.6	24.8	100.0	
05-2D-01-MET-S	0.5	96.4	1.2	1.9	100.0	
05-2E-01-MET-S	0.0	94.1	3.9	2.0	100.0	
05-2F-01-MET-S	0.0	80.0	16.9	3.1	100.0	
05-2G-01-MET-S	0.0	16.4	69.3	14.3	100.0	
05-2H-01-MET-S	1.2	64.7	23.4	10.6	99.9	
05-3A-01-MET-S	0.0	25.1	54.1	20.8	100.0	
05-3B-01-MET-S #1	0.0	31.5	47.3	21.1	99.9	Lab Triplicate
05-3B-01-MET-S #2	0.0	32.6	46.7	20.7	100.0	Lab Triplicate
05-3B-01-MET-S #3	0.2	30.7	48.3	20.7	99.9	Lab Triplicate
05-3B-01-MET-S	0.1	31.7	47.5	20.7	100.0	
05-4A-01-MET-S	52.2	24.6	13.1	10.1	100.0	
05-4B-01-MET-S	0.0	86.1	9.0	4.8	99.9	
05-5(1)-01-MET-S	2.0	94.7	1.6	1.7	100.0	
05-5(5)-01-MET-S	0.9	58.0	26.1	15.0	100.0	

* Sample collection dates are the same as the Metal samples.

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Table 6. Grain Size Distribution and Total Organic Carbon (TOC) Concentrations in Sediment Cores.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	TOC (%)	Comments
05-N26-01-MET-S (0-2 cm)	4.2	56.8	20.3	18.6	99.9	0.56	
05-N26-01-MET-S (2-4 cm)	1.0	64.3	19.4	15.3	100.0	0.51	
05-N26-01-MET-S (4-6 cm)	1.0	59.8	18.3	20.9	100.0	0.34	
05-N26-01-MET-S (6-8 cm)	0.0	41.8	27.1	31.1	100.0	0.43	
05-N26-01-MET-S (8-10 cm)	2.9	39.7	26.7	30.7	100.0	0.46	
05-PB1A-01-MET-S (0-2 cm)	0.0	64.0	28.5	7.5	100.0	0.97	
05-PB1A-01-MET-S (2-4 cm) #1	0.0	8.7	68.0	23.3	100.0	1.93	Lab Duplicate
05-PB1A-01-MET-S (2-4 cm) #2	-	-	-	-	-	1.95	Lab Duplicate
05-PB1A-01-MET-S (4-6 cm)	0.0	5.4	71.1	23.5	100.0	1.38	
05-PB1A-01-MET-S (8-10 cm)	0.0	6.6	80.0	13.4	100.0	1.24	
05-1C-01-MET-S (0-2 cm)	0.3	32.1	35.9	31.7	100.0	0.50	
05-1C-01-MET-S (2-4 cm) #1	0.2	29.2	37.7	32.9	100.0	0.43	Lab Duplicate
05-1C-01-MET-S (2-4 cm) #2	-	-	-	-	-	0.48	Lab Duplicate
05-1C-01-MET-S (4-6 cm)	8.2	29.0	32.2	30.6	100.0	0.49	
05-1C-01-MET-S (6-8 cm)	0.1	31.8	31.0	37.1	100.0	0.54	
05-1C-01-MET-S (8-10 cm)	0.1	29.2	36.2	34.5	100.0	0.51	
05-1C-01-MET-S (10-12 cm)	0.6	31.5	35.2	32.7	100.0	0.48	
05-1C-01-MET-S (12-14 cm) #1	0.1	30.2	36.0	33.7	100.0	0.63	Lab Duplicate
05-1C-01-MET-S (12-14 cm) #2	-	-	-	-	-	0.64	Lab Duplicate
05-1C-01-MET-S (14-16 cm)	0.2	30.3	35.5	34.0	100.0	0.45	
05-1C-01-MET-S (28-30 cm)	0.3	29.2	36.1	34.4	100.0	0.44	
05-2A-01-MET-S (0-2 cm)	0.0	9.3	64.1	26.6	100.0	0.93	
05-2A-01-MET-S (2-4 cm)	0.0	61.4	30.0	8.6	100.0	0.84	
05-2A-01-MET-S (4-6 cm) #1	0.0	41.5	47.6	10.9	100.0	0.88	Lab Duplicate
05-2A-01-MET-S (4-6 cm) #2	0.0	40.6	47.3	12.1	100.0	0.84	Lab Duplicate
05-2A-01-MET-S (6-8 cm)	0.0	36.6	55.7	7.7	100.0	0.60	
05-2A-01-MET-S (8-10 cm)	0.0	33.3	58.5	8.2	100.0	0.76	
05-2A-01-MET-S (18-20 cm)	0.0	9.9	64.7	25.4	100.0	1.50	
05-2A-01-MET-S (28-30 cm)	0.0	8.3	75.9	15.8	100.0	1.77	
05-BP01-01-MET-S (0-2 cm)	0.0	67.0	23.3	9.7	100.0	-	33.0
05-BP01-01-MET-S (2-4 cm)	0.0	69.1	22.0	8.9	100.0	-	30.9
05-BP01-01-MET-S (4-6 cm)	0.0	63.6	25.7	10.7	100.0	-	36.4
05-BP01-01-MET-S (6-8 cm)	4.9	60.2	22.8	12.1	100.0	-	34.9
05-BP01-01-MET-S (8-10 cm)	0.1	48.3	35.3	16.3	100.0	-	51.6
05-BP01-01-MET-S (10-12 cm)	0.2	29.5	64.6	5.7	100.0	-	70.3

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Table 7. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Surficial Sediment Samples (dry weight). Lab Duplicates were averaged prior to statstical analysis.

Station Grouping	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Northstar Stations N04-N18	Mean	0.18	3.19	12.8	469	0.72	0.29	8.2	56.5	21.5	2.06	0.044	297	30.6	10.6	0.43	0.27	76.4	67.9	1.71
	Std. Dev.	0.13	0.90	6.2	145	0.17	0.25	2.5	11.7	13.2	0.53	0.032	81.0	9.5	3.7	0.12	0.07	19.8	22.9	2.39
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Maximum	0.44	4.89	24.9	749	0.94	0.77	12.5	79.4	46.2	2.78	0.113	433	45.8	16.2	0.61	0.36	111	101	6.42
	Minimum	0.07	1.91	7.6	299	0.47	0.09	5.6	43.8	8.3	1.34	0.016	198	17.5	5.4	0.3	0.17	45.9	38.4	0.11
Liberty Stations L07-E01	Mean	0.13	4.36	11.3	506	0.74	0.22	8.8	67.8	21.6	2.34	0.051	331	30.1	11.8	0.43	0.36	95.9	82.1	0.77
	Std. Dev.	0.06	1.93	6.1	186	0.31	0.13	3.0	25.2	12.9	0.98	0.029	149	12.6	6.0	0.19	0.14	44.9	37.3	0.50
	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Maximum	0.22	6.3	20.3	701	1.13	0.38	11.6	96.2	40.6	3.43	0.097	493	43.6	20.1	0.63	0.53	147	126	1.60
	Minimum	0.05	2.17	4.7	259	0.35	0.11	5.0	37.3	8.8	1.25	0.026	170	15.2	5.2	0.21	0.22	46.0	39.7	0.28
BSMP Stations 1A-5(5)	Mean	0.07	3.46	8.9	389	0.94	0.15	7.3	49.6	14.4	1.90	0.031	278	22.7	9.5	0.37	0.26	68.9	59.1	0.66
	Std. Dev.	0.02	1.11	2.5	122	0.36	0.09	2.1	17.8	6.6	0.57	0.016	103	7.5	2.7	0.16	0.09	25.7	21.2	0.45
	n	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18
	Maximum	0.10	5.52	13.6	620	1.81	0.43	10.2	75.2	24.7	2.77	0.063	447	31.4	14.5	0.69	0.52	113	97.1	1.75
	Minimum	0.03	1.89	4.9	198	0.37	0.04	3.6	17.2	3.9	0.87	0.008	147	6.9	5.6	0.18	0.14	30.7	22.1	0.05
Cumulative	Mean	0.10	3.55	10.2	426	0.86	0.19	7.7	54.1	17.1	2.01	0.037	291	25.7	10.1	0.39	0.28	74.9	64.8	0.93
	Std. Dev.	0.08	1.24	4.4	142	0.33	0.15	2.4	18.6	9.8	0.63	0.023	105	9.4	3.5	0.16	0.10	29.0	25.2	1.24
	n	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
	Maximum	0.44	6.30	24.9	749	1.81	0.77	12.5	96.2	46.2	3.43	0.113	493	45.8	20.1	0.69	0.53	147	126	6.42
	Minimum	0.03	1.89	4.7	198	0.35	0.04	3.6	17.2	3.9	0.87	0.008	147	6.9	5.2	0.18	0.14	30.7	22.1	0.05

Table 8. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Cores (dry weight). Lab Duplicates were averaged prior to statstical analysis.

Sediment Core	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
N26	Mean	0.07	4.07	7.9	475	0.87	0.14	9.3	64.2	17.4	2.44	0.029	314	29.4	12.0	0.51	0.36	86.6	72.2	0.46
	Std. Dev.	0.01	0.30	0.9	28.2	0.09	0.08	0.9	8.1	1.6	0.14	0.006	121	5.6	0.9	0.08	0.06	7.1	5.0	0.08
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5
	Maximum	0.08	4.45	9.2	522	1.01	0.28	10.5	74.4	20.1	2.72	0.037	584	41.0	13.5	0.61	0.43	93.6	79.4	0.56
	Minimum	0.05	3.53	6.8	438	0.72	0.05	7.6	55.5	15.5	2.31	0.020	243	23.4	10.8	0.35	0.27	71.5	64.5	0.34
PB1A	Mean	0.13	4.28	7.6	495	0.80	0.33	9.7	77.9	26.2	2.41	0.049	241	37.5	11.5	0.61	0.39	102	106	1.38
	Std. Dev.	0.05	1.54	2.3	112	0.16	0.05	1.1	10.4	2.5	0.45	0.012	47.2	2.8	2.1	0.05	0.06	12.8	6.9	0.41
	n	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	6	6	6	4
	Maximum	0.23	5.10	12.2	564	0.88	0.39	11.3	84.9	29.0	3.07	0.067	309	40.9	13.8	0.68	0.46	113	115	1.94
	Minimum	0.09	1.15	5.7	270	0.47	0.25	8.6	57.3	22.9	1.65	0.030	162	33.0	7.7	0.54	0.31	78.6	97.5	0.97
L17B	Mean	0.11	5.39	12.9	642	1.20	0.15	10.8	77.9	23.5	3.00	0.039	360	33.3	14.1	0.57	0.42	119	105	-
	Std. Dev.	0.04	0.17	2.6	48.2	0.10	0.01	1.4	4.1	1.7	0.06	0.004	15.5	2.3	0.8	0.09	0.06	7.8	32.4	-
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	-
	Maximum	0.18	5.54	18.7	738	1.32	0.17	12.7	82.8	27.1	3.09	0.045	385	36.0	15.2	0.66	0.50	131	179	-
	Minimum	0.07	5.135	11.4	604	1.05	0.13	9.1	72.5	21.6	2.89	0.033	339	30.5	13.1	0.44	0.31	109	88.3	-
BP01	Mean	0.07	2.78	5.7	374	0.70	0.25	4.9	45.2	12.7	1.55	0.031	190	20.1	7.5	0.36	0.38	55.2	57.8	-
	Std. Dev.	0.04	0.32	1.5	26.8	0.17	0.19	0.7	6.7	2.4	0.23	0.009	25.7	4.0	0.8	0.11	0.09	4.6	12.0	-
	n	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-
	Maximum	0.14	3.12	7.4	411	0.94	0.61	6.1	53.4	16.9	1.86	0.048	227	25.6	8.6	0.55	0.54	60.8	80.8	-
	Minimum	0.04	2.24	3.8	332	0.46	0.11	4.2	37.3	10.4	1.29	0.023	156	15.2	6.3	0.25	0.30	48.1	48.2	-
E01	Mean	0.07	4.04	5.9	452	0.62	0.31	8.7	68.5	20.2	2.36	0.043	320	32.6	9.1	0.55	0.40	91.1	89.8	-
	Std. Dev.	0.01	0.19	0.9	48.3	0.03	0.04	0.8	6.2	1.7	0.10	0.005	24.7	2.7	1.2	0.03	0.05	6.3	3.9	-
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	-
	Maximum	0.09	4.28	6.8	517	0.66	0.36	9.8	79.9	22.9	2.51	0.051	370	36.9	11.4	0.59	0.46	102	95.5	-
	Minimum	0.06	3.78	4.4	404	0.57	0.27	7.7	60.1	17.7	2.22	0.037	300	28.3	7.8	0.50	0.31	84.6	84.0	-

Table 8. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Cores (dry weight). Lab Duplicates were averaged prior to statistical analysis.

Sediment Core	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
1C	Mean	0.11	6.07	11.2	809	1.29	0.11	10.5	79.6	22.5	3.00	0.044	312	31.2	14.0	0.69	0.43	124	91.2	0.50
	Std. Dev.	0.05	0.11	1.4	116	0.20	0.02	0.5	3.1	0.4	0.07	0.003	15.2	3.2	0.3	0.07	0.05	4.3	2.1	0.06
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	9
	Maximum	0.20	6.16	13.1	975	1.70	0.16	11.3	85.1	23.1	3.07	0.048	338	36.0	14.2	0.82	0.49	130	94.0	0.64
	Minimum	0.06	5.86	9.6	675	1.10	0.09	9.6	75.3	21.9	2.92	0.040	293	28.1	13.3	0.62	0.33	120	88.5	0.44
2A	Mean	0.12	4.58	8.5	630	0.96	0.31	8.4	72.1	22.2	2.40	0.045	232	28.7	11.3	0.82	0.44	95.4	86.2	1.04
	Std. Dev.	0.03	0.81	1.3	154	0.14	0.05	1.2	7.9	5.1	0.29	0.007	37.0	5.8	1.7	0.15	0.07	16.7	10.6	0.43
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Maximum	0.17	6.05	9.9	890	1.16	0.38	10.1	84.4	29.4	2.81	0.055	306	37.2	13.8	1.02	0.59	127	105	1.77
	Minimum	0.07	3.73	6.0	455	0.72	0.26	6.6	64.7	17.1	2.12	0.037	189	21.1	9.2	0.62	0.38	77.6	76.0	0.60

Table 9. Statistics for Grain Size in Surficial Sediment Samples. Lab Triplicates were averaged prior to statistical analysis.

Station Grouping	Statistic	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
Northstar Stations N04-N18	Mean	5.5	55.2	27.6	11.8
	Std. Dev.	12.4	9.9	12.0	7.0
	n	6	6	6	6
	Maximum	30.7	65.3	39.6	24.0
	Minimum	0.0	36.4	7.1	3.2
Liberty Stations L07-E01	Mean	1.2	40.5	37.6	20.8
	Std. Dev.	2.3	32.7	22.9	13.9
	n	5	5	5	5
	Maximum	5.2	78.6	71.7	38.8
	Minimum	0.0	8.4	14.3	6.5
BSMP Stations 1A-5(5)	Mean	3.0	61.4	26.1	9.5
	Std. Dev.	11.9	29.3	22.2	7.6
	n	19	19	19	19
	Maximum	52.2	96.4	69.3	24.8
	Minimum	0.0	16.4	1.2	1.7
Cumulative	Mean	3.2	56.7	28.3	11.8
	Std. Dev.	10.8	27.5	20.5	9.4
	n	30	30	30	30
	Maximum	52.2	96.4	71.7	38.8
	Minimum	0.0	8.4	1.2	1.7

Table 10. Statistics for Grain Size in Sediment Cores. Lab Duplicates were averaged prior to statistical analysis.

Sediment Core	Statistic	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
N26	Mean	1.8	52.5	22.4	23.3
	Std. Dev.	1.7	11.1	4.2	7.2
	n	5	5	5	5
	Maximum	4.2	64.3	27.1	31.1
	Minimum	0.0	39.7	18.3	15.3
PB1A	Mean	0.0	21.2	61.9	16.9
	Std. Dev.	0.0	28.6	22.8	7.9
	n	4	4	4	4
	Maximum	0	64	80	23.5
	Minimum	0.0	5.4	28.5	7.5
L17B	Mean	-	-	-	-
	Std. Dev.	-	-	-	-
	n	-	-	-	-
	Maximum	-	-	-	-
	Minimum	-	-	-	-
BP01	Mean	0.9	56.3	32.3	10.6
	Std. Dev.	2.0	15.0	16.6	3.5
	n	6.0	6.0	6.0	6.0
	Maximum	4.9	69.1	64.6	16.3
	Minimum	0.0	29.5	22.0	5.7
E01	Mean	-	-	-	-
	Std. Dev.	-	-	-	-
	n	-	-	-	-
	Maximum	-	-	-	-
	Minimum	-	-	-	-
1C	Mean	1.1	30.3	35.1	33.5
	Std. Dev.	2.7	1.2	2.1	1.9
	n	9	9	9	9
	Maximum	8.2	32.1	37.7	37.1
	Minimum	0.1	29	31	30.6
2A	Mean	0.0	28.6	56.6	14.8
	Std. Dev.	0.0	20.2	14.7	8.1
	n	7	7	7	7
	Maximum	0.0	61.4	75.9	26.6
	Minimum	0.0	8.3	30	7.7

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Table 11. Quality Assurance and Quality Control Data for Sediment Metal and Carbon Analyses.

Results for the Marine Sediment Certified Reference Material (CRM) MESS-3 certified by the National Research Council of Canada (NRC).

Reference Material	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-3	0.19	8.56	20.5	1041	2.29	0.24	12.8	108	34.4	4.03	0.092	327	47.1	21.3	1.08	0.95	243	159	2.09
This Study	0.19	8.82	20.6	1036	2.37	0.23	12.9	107	35.3	4.05	0.098	322	47.4	21.7	1.09	0.88	242	157	2.12
	0.17	9.11	20.2	1080	2.29	0.23	15.1	108	34.8	4.19	0.095	323	46.1	21.7	0.98	0.96	248	153	2.11
	0.17	9.07	18.2	1048	2.39	0.23	13.7	107	35.4	4.15	0.090	326	45.2	21.5	1.08	0.95	242	154	2.09
	0.20	8.48	21.6	1022	2.30	0.24	12.6	107	32.5	4.26	0.090	321	45.3	20.8	1.07	0.94	240	157	2.09
	0.19	8.46	21.0	1027	2.33	0.24	12.9	105	33.9	4.33	0.093	329	47.9	21.9	1.05	0.89	244	157	2.07
	0.19	8.44	21.1	969	2.22	0.25	13.1	104	34.0	4.34	0.098	324	47.2	21.1	1.06	0.95	241	159	2.09
	0.19	8.60	21.0	1031	2.38	0.24	12.7	108	34.4	4.34	0.098	327	45.1	21.7	1.05	0.91	240	155	2.07
CRM MESS-3	0.18	8.59	21.2	-	2.30	0.24	14.4	105	33.9	4.34	0.091	324	46.9	21.1	1.02	0.90	243	159	2**
NRC Certified Values	± 0.02	± 0.23	± 1.1	-	± 0.12	± 0.01	± 2.0	± 4	± 1.6	± 0.11	± 0.009	± 12	± 2.2	± 0.7	± 0.09	± 06	± 10	± 8	-

* Reference Value, not Certified.

** Reference Value for Total Carbon (Inorganic plus Organic).

Method Detection Limits (MDLs).

	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Method Detection Limit	0.007	0.01	0.08	22	0.003	0.003	0.04	1.0	1.7	0.01	0.001	2	0.08	0.03	0.05	0.03	10	0.5	0.04

Percent Spike Recovery.

	Ag	Al	As	Ba***	Be	Cd	Co	Cr	Cu	Fe	Hg***	Mn	Ni	Pb	Sb	Tl***	V***	Zn	TOC
Mean	94.4	99.8	100.8	134.7	95.5	95.9	96.9	99.3	98.5	98.1	88.0	99.3	99.8	94.5	101.2	62.3	113.2	97.6	
Standard Deviation	3.3	3.8	6.7	5.1	4.7	4.0	5.2	3.5	2.2	2.7	6.7	2.6	4.5	2.5	5.6	7.9	4.1	2.5	
(n =)	8	8	8	8	8	8	8	8	8	8	23	8	8	8	8	8	8	8	

***Final concentrations are corrected for percent spike recovery.

Table 11. Quality Assurance and Quality Control Data for Sediment Metal and Carbon Analyses.

Estimate of Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates.

	Ag	Al	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg	Mn	Ni	Pb	Sb	Tl	V	Zn	TOC
05-N08-01-MET-S	10.9	1.4	2.3	2.8	2.1	4.0	1.0	3.0	0.6	0.8	0.0	3.9	0.8	2.6	7.7	9.9	0.1	1.2	8.3
05-N14-01-MET-S	8.5	5.8	10.4	5.7	8.0	3.8	1.7	1.0	1.4	0.3	-	4.6	8.7	2.6	7.7	2.2	4.4	2.1	1.4
05-N26-01-MET-S (1-1.5 cm)	0.0	1.2	1.6	0.4	1.6	0.0	1.5	3.3	0.4	1.7	6.5	0.5	1.1	3.4	2.3	4.3	1.3	1.9	-
05-N26-01-MET-S (9.5-10 cm)	-	-	-	-	-	-	-	-	-	-	15.7	-	-	-	-	-	-	-	-
05-PB1A-01-MET-S (2-4 cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7
05-L07-01-MET-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
05-L17B-01-MET-S (19-20 cm)	9.4	2.9	2.8	1.1	5.5	4.9	2.4	0.1	3.4	0.5	-	0.0	1.4	0.5	9.1	1.6	1.2	-	-
05-BP01-01-MET-S (1-1.5 cm)	0.0	0.9	1.0	3.4	3.7	9.4	0.0	2.4	2.5	1.2	-	0.8	0.6	3.5	5.0	3.8	2.6	0.4	-
05-1C-01-MET-S (2-4 cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.9
05-1C-01-MET-S (12-14 cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1
05-1C-01-MET-S (19-20 cm)	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	-
05-1E-01-MET-S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0
05-2A-01-MET-S (0-0.5 cm)	0.0	0.0	0.0	0.2	4.9	5.4	2.6	3.4	1.5	1.0	-	0.1	0.0	0.7	2.3	3.6	0.2	1.8	-
05-2A-01-MET-S (4-6 cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2
05-2E-01-MET-S	0.0	3.4	4.4	6.2	1.4	0.0	1.6	3.1	1.7	3.6	7.4	6.1	0.0	3.8	7.8	4.9	0.9	4.2	5.9

Percent RSD = (standard deviation / mean) X 100.

2006 Data

MMS Beaufort Sea cANIMDA Project: Summer 2006 Sampling

Table 1. Station Data for Surficial Sediment Samples.

Sample Identification	Station Identification	Station Grouping	Collection Date	Comments
06-N03-01-MET-S	N03	Northstar	8/5/2006	Field Replicate
06-N03-02-MET-S	N03	Northstar	8/5/2006	Field Replicate
06-N06-01-MET-S	N06	Northstar	8/5/2006	
06-N11-01-MET-S	N11	Northstar	8/5/2006	
06-N14-01-MET-S	N14	Northstar	8/4/2006	
06-N17-01-MET-S	N17	Northstar	7/31/2006	
06-N27-01-MET-S	N27	Northstar	8/5/2006	
06-N28-01-MET-S	N28	Northstar	8/5/2006	
06-WDK-01-MET-S		West Dock	8/6/2006	
06-M01-01-MET-S	M01	McCovey	7/31/2006	Well Area
06-L03-01-MET-S	L03	Liberty	7/28/2006	
06-L08-01-MET-S	L08	Liberty	7/28/2006	
06-L19-01-MET-S	L19	Liberty	7/27/2006	
06-L20-01-MET-S	L20	Liberty	7/27/2006	
06-L21-01-MET-S	L21	Liberty	7/27/2006	
06-L22-01-MET-S	L22	Liberty	7/30/2006	
06-BP01-01-MET-S	BP01	Liberty	7/28/2006	Boulder Patch
06-E01-01-MET-S	E01	Liberty	7/27/2006	
06-E02-01-MET-S	E02	Liberty	7/29/2006	
06-SDI-01-MET-S	SDI	Liberty	7/27/2006	
06-4A-01-MET-S	4A	BSMP	7/28/2006	
06-5A-01-MET-S	5A	BSMP	8/6/2006	
06-5(1)-01-MET-S	5(1)	BSMP	7/27/2006	
06-5(5)-01-MET-S	5(5)	BSMP	7/31/2006	
06-6A-01-MET-S	6A	BSMP	8/3/2006	
06-6B-01-MET-S	6B	BSMP	8/1/2006	
06-6D-01-MET-S	6D	BSMP	8/3/2006	
06-6F-01-MET-S	6F	BSMP	8/2/2006	
06-6G-01-MET-S	6G	BSMP	8/3/2006	
06-6H-01-MET-S	6H	BSMP	8/1/2006	
06-7A-01-MET-S	7A	BSMP	8/2/2006	
06-7C-01-MET-S	7C	BSMP	8/2/2006	
06-7E-01-MET-S	7E	BSMP	8/2/2006	
06-7G-01-MET-S	7G	BSMP	8/2/2006	

MMS Beaufort Sea cANIMDA Project: Summer 2006 Sampling

Table 2. Station Data for Sediment Cores

Sample Identification	Station Identification	Station Grouping	Collection Date	Sectioning Interval	Comments
06-N05-01-MET-S	N05	Northstar	7/31/2006	2 cm to a depth of 14 cm	Sediment Core (Grain Size and Organics)
06-N05-02-MET-S	N05	Northstar	7/31/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 14 cm	Sediment Core (Metals and Age Dating)
06-N17-01-MET-S	N17	Northstar	7/31/2006	2 cm to a depth of 44 cm	Sediment Core (Grain Size and Organics)
06-N17-02-MET-S	N17	Northstar	7/31/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm, and then 2 cm to a depth of 46 cm	Sediment Core (Metals and Age Dating)
06-L22-01-MET-S	L22	Liberty	7/30/2006	2 cm to a depth of 28 cm	Sediment Core (Grain Size and Organics)
06-L22-02-MET-S	L22	Liberty	7/30/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm, and then 2 cm to a depth of 36 cm	Sediment Core (Metals and Age Dating)
06-6B-01-MET-S	6B	BSMP	8/1/2006	2 cm to a depth of 44 cm	Sediment Core (Grain Size and Organics)
06-6B-02-MET-S	6B	BSMP	8/1/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm, and then 2 cm to a depth of 42 cm	Sediment Core (Metals and Age Dating)
06-7A-01-MET-S	7A	BSMP	8/2/2006	2 cm to a depth of 18 cm	Sediment Core (Grain Size and Organics)
06-7A-02-MET-S	7A	BSMP	8/2/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 19 cm	Sediment Core (Metals and Age Dating)
06-7C-01-MET-S	7C	BSMP	8/2/2006	2 cm to a depth of 36 cm	Sediment Core (Grain Size and Organics)
06-7C-02-MET-S	7C	BSMP	8/2/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 42 cm	Sediment Core (Metals and Age Dating)
06-7E-01-MET-S	7E	BSMP	8/2/2006	2 cm to a depth of 32 cm	Sediment Core (Grain Size and Organics)
06-7E-02-MET-S	7E	BSMP	8/2/2006	0.5 cm to a depth of 10 cm, then 1 cm to a depth of 20 cm and 2 cm to a depth of 32 cm	Sediment Core (Metals and Age Dating)

MMS Beaufort Sea cANIMDA Project: Summer 2006 Sampling

Table 3. Trace Metal and Total Organic Carbon (TOC) Concentrations in Surficial Sediment Samples (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
06-N03-01-MET-S	0.13	4.99	15.0	517	1.69	0.27	10.8	95.4	31.9	3.65	0.040	414	38.5	16.7	0.65	0.64	155	113	1.38	
06-N03-02-MET-S	0.18	5.79	13.6	587	1.65	0.30	10.6	89.0	27.6	3.37	0.055	360	36.6	15.3	0.67	0.59	143	105	1.21	
06-N06-01-MET-S #1	0.16	4.76	12.3	646	1.38	0.25	10.1	80.4	24.7	2.93	0.052	349	34.3	14.0	0.64	0.48	123	90.9	0.93	Lab Duplicate
06-N06-01-MET-S #2	0.18	4.75	11.6	610	1.32	0.26	9.6	78.4	24.6	2.92	0.055	348	33.4	13.3	0.62	0.48	123	91.8	0.97	Lab Duplicate
06-N11-01-MET-S	0.15	3.74	9.6	411	1.07	0.23	7.2	64.9	10.3	2.26	0.049	293	24.6	9.3	0.50	0.37	87.2	68.4	0.76	
06-N14-01-MET-S	0.10	1.78	5.5	256	0.82	0.09	4.7	33.4	7.5	1.27	0.013	152	13.8	4.3	0.29	0.22	40.3	37.8	0.23	
06-N17-01-MET-S	0.14	4.86	12.2	501	1.34	0.21	9.3	82.3	24.7	2.96	0.056	330	31.6	12.6	0.56	0.49	127	91.0	1.11	
06-N27-01-MET-S	0.19	5.39	12.4	546	1.52	0.25	10.0	86.8	26.5	3.14	0.058	340	34.1	14.2	0.69	0.55	136	99.0	1.23	
06-N28-01-MET-S	0.13	4.11	9.6	443	1.14	0.23	8.1	67.6	20.4	2.38	0.041	320	26.0	9.9	0.50	0.41	98.9	75.6	1.13	
06-WDK-01-MET-S	0.14	4.23	12.7	465	1.47	0.30	11.8	84.2	30.0	3.19	0.072	518	39.4	14.7	0.72	0.05	117	108	2.76	
06-M01-01-MET-S	0.08	1.85	5.4	215	0.90	0.09	4.2	29.9	6.9	1.11	0.011	156	11.9	4.5	0.26	0.21	36.5	30.1	0.62	
06-L03-01-MET-S	0.16	4.01	10.5	451	1.19	0.28	7.9	71.0	20.4	2.44	0.040	281	27.0	14.2	0.54	0.40	91.7	76.5	1.15	
06-L08-01-MET-S	0.14	3.66	10.7	575	1.08	0.22	8.0	68.0	18.5	2.46	0.032	252	27.2	10.9	0.51	0.37	82.0	70.3	0.79	
06-L19-01-MET-S	0.11	2.54	6.2	268	0.75	0.21	6.1	52.0	10.8	1.73	0.025	214	19.9	6.0	0.38	0.25	55.9	56.1	0.43	
06-L20-01-MET-S	0.10	2.50	7.1	278	0.77	0.16	7.2	49.6	10.0	1.65	0.018	251	18.6	7.2	0.39	0.27	57.2	52.8	0.41	
06-L21-01-MET-S	0.07	2.04	5.8	229	0.94	0.04	7.1	26.9	5.6	1.12	0.004	416	13.5	5.5	0.32	0.32	34.9	34.3	0.02	
06-L22-01-MET-S	0.15	3.18	12.2	317	1.55	0.17	10.4	80.6	21.6	2.76	0.036	341	29.7	12.2	0.60	0.51	131	80.5	0.81	
06-BP01-01-MET-S	0.15	3.60	8.9	407	0.99	0.22	7.5	61.6	15.1	2.12	0.035	273	24.1	8.7	0.44	0.35	84.1	62.4	0.80	
06-E01-01-MET-S	0.10	2.41	7.6	256	0.75	0.13	5.8	47.9	11.1	1.78	0.022	226	18.1	6.0	0.40	0.25	57.3	52.9	0.28	
06-E02-01-MET-S	0.17	3.90	13.0	528	1.16	0.39	10.9	72.6	25.5	2.67	0.049	287	35.7	13.0	0.67	0.42	102	92.1	2.75	
06-SDI-01-MET-S	0.15	3.84	7.7	471	1.00	0.29	8.3	69.7	19.0	2.33	0.039	320	28.5	9.2	0.50	0.36	86.6	79.6	1.04	
06-4A-01-MET-S	0.13	3.59	7.6	389	0.98	0.24	8.2	56.4	15.7	2.18	0.028	320	24.1	8.9	0.46	0.37	88.5	64.0	0.65	
06-5A-01-MET-S	0.11	3.06	7.0	307	0.73	0.46	5.4	51.2	13.1	1.54	0.026	187	17.9	6.4	0.35	0.27	63.9	50.4	0.70	
06-5(1)-01-MET-S	0.11	2.69	9.1	332	0.82	0.14	5.5	40.9	12.7	1.71	0.023	223	16.0	8.3	0.37	0.35	61.8	49.8	0.46	
06-5(5)-01-MET-S	0.11	2.76	7.8	310	0.77	0.16	6.9	48.0	11.4	1.65	0.028	224	20.0	6.9	0.37	0.25	61.0	51.5	0.75	
06-6A-01-MET-S	0.10	5.32	11.7	511	1.37	0.28	12.3	90.2	27.3	3.11	0.056	458	35.8	12.7	0.61	0.46	124	96.3	1.47	
06-6B-01-MET-S	0.17	5.29	10.8	534	1.42	0.18	11.0	83.9	22.9	3.20	0.046	516	35.1	11.6	0.55	0.44	117	83.3	0.81	
06-6D-01-MET-S	0.16	4.92	14.6	531	1.26	0.15	11.1	75.7	22.1	3.18	0.041	398	33.2	12.4	0.54	0.41	110	81.4	0.74	
06-6F-01-MET-S	0.11	2.84	6.9	333	0.84	0.10	6.5	47.8	9.3	1.73	0.020	275	18.3	5.7	0.32	0.25	60.9	46.9	0.68	
06-6G-01-MET-S	0.11	3.56	22.8	394	1.14	0.17	10.7	69.6	20.5	2.98	0.056	553	31.6	14.7	0.66	0.35	94.9	83.2	2.13	
06-6H-01-MET-S	0.13	2.73	9.6	863	0.73	0.11	8.9	86.2	9.2	2.34	0.013	369	23.6	7.8	0.46	0.20	60.5	53.3	0.08	
06-7A-01-MET-S	0.16	4.50	10.6	732	1.10	0.16	13.8	84.9	15.5	2.82	0.040	633	36.6	11.5	0.53	0.31	92.0	79.2	0.76	
06-7C-01-MET-S	0.18	6.29	16.6	637	1.58	0.19	13.2	99.6	28.0	3.70	0.059	443	41.9	16.0	0.58	0.50	148	105	1.09	
06-7E-01-MET-S	0.21	5.59	13.4	678	1.49	0.33	13.0	93.7	30.4	3.32	0.066	496	42.0	15.2	0.63	0.48	124	103	2.17	
06-7G-01-MET-S #1	0.13	3.72	17.8	683	0.95	0.14	13.2	68.3	14.0	2.53	0.036	389	32.5	11.6	0.50	0.27	78.8	69.0	0.80	Lab Duplicate
06-7G-01-MET-S #2	0.13	3.74	17.8	647	0.97	0.15	12.4	66.9	14.0	2.54	0.037	391	31.8	10.7	0.51	0.28	79.2	68.2	0.81	Lab Duplicate

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Table 4. Trace Metal Concentrationtions in Sediment Cores (dry weight).

Sample Identification	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
06-N17-02-MET-S (0-0.5 cm)	0.12	4.25	10.2	467	1.18	0.20	9.9	79.4	20.6	2.79	0.051	296	31.6	12.1	0.57	0.46	98.1	89.0	1.06	
06-N17-02-MET-S (2-2.5 cm)	0.14	4.70	10.1	500	1.28	0.27	9.3	75.9	20.2	2.70	0.055	278	31.0	11.3	0.56	0.49	94.9	84.9	0.96	
06-N17-02-MET-S (4-4.5 cm) #1	0.14	5.11	12.3	496	1.39	0.31	9.8	87.7	28.0	3.08	0.071	326	33.2	13.5	0.60	0.51	110	101	1.60	Lab Duplicate
06-N17-02-MET-S (4-4.5 cm) #2	0.14	5.27	11.9	516	1.41	0.32	10.7	85.4	28.6	3.18	0.075	327	34.9	14.2	0.60	0.52	117	103	1.55	Lab Duplicate
06-N17-02-MET-S (6-6.5 cm)	0.12	4.17	10.8	454	1.18	0.23	8.9	68.0	20.7	2.67	0.050	289	28.2	10.4	0.49	0.41	85.3	78.2	1.16	
06-N17-02-MET-S (8-8.5 cm)	0.11	4.08	11.1	460	1.21	0.20	9.3	76.1	21.8	2.67	0.059	283	30.3	11.4	0.52	0.43	92.7	83.0	0.89	
06-N17-02-MET-S (28-30 cm)	0.12	2.40	14.8	340	0.79	0.28	9.0	45.7	16.6	1.70	0.061	200	21.3	6.9	0.44	0.28	52.4	51.4	1.88	
06-L22-02-MET-S (0-0.5 cm)	0.10	4.64	13.5	524	1.44	0.13	10.5	72.8	21.0	2.99	0.043	357	29.5	13.0	0.51	0.50	105	83.7	0.59	
06-L22-02-MET-S (2-2.5 cm)	0.13	4.91	11.6	596	1.42	0.15	10.5	69.5	19.0	2.63	0.034	313	28.7	12.0	0.47	0.45	105	75.6	0.57	
06-L22-02-MET-S (4-4.5 cm)	0.11	5.29	11.6	572	1.50	0.19	10.3	72.2	21.2	2.84	0.052	340	29.8	13.0	0.54	0.51	110	83.6	0.68	
06-L22-02-MET-S (6-6.5 cm)	0.12	5.64	12.3	601	1.64	0.20	11.3	76.7	22.3	3.11	0.037	353	31.8	13.9	0.61	0.58	122	88.7	1.31	
06-L22-02-MET-S (8-8.5 cm)	0.10	5.63	12.6	655	1.41	0.17	11.0	78.4	22.0	2.99	0.044	332	32.1	14.1	0.52	0.49	119	87.0	0.69	
06-L22-02-MET-S (26-28 cm)	0.10	5.20	12.8	541	1.37	0.16	12.5	70.4	20.3	2.76	0.045	317	31.1	13.4	0.52	0.48	106	81.5	0.65	
06-7A-02-MET-S (0-0.5 cm)	0.09	4.37	10.8	773	1.05	0.16	13.0	93.1	13.8	2.76	0.075	500	34.7	10.6	0.50	0.27	74.1	77.0	0.52	
06-7A-02-MET-S (2-2.5 cm)	0.11	4.91	10.4	561	1.26	0.22	12.5	95.1	18.0	2.95	0.044	361	36.9	11.3	0.57	0.34	85.7	84.1	1.27	
06-7A-02-MET-S (4-4.5 cm)	0.11	5.22	9.6	860	1.28	0.20	12.8	101	19.9	3.06	0.048	359	38.6	12.4	0.56	0.33	92.9	88.4	0.88	
06-7A-02-MET-S (6-6.5 cm)	0.11	5.32	9.7	824	1.35	0.19	14.0	98.8	19.9	3.05	0.046	413	41.8	12.5	0.57	0.34	92.9	88.4	1.02	
06-7A-02-MET-S (8-8.5 cm)	0.12	5.42	9.5	760	1.35	0.19	14.2	98.5	19.8	3.20	0.054	459	42.2	11.5	0.57	0.36	96.4	89.3	0.90	
06-7A-02-MET-S (12-13 cm)	0.11	5.22	8.6	693	1.28	0.20	13.1	96.9	18.9	3.03	0.046	413	38.6	10.2	0.54	0.33	89.2	88.6	0.88	
06-7A-02-MET-S (16-17 cm)	0.12	5.14	9.8	829	1.27	0.27	13.2	93.1	19.0	2.92	0.048	355	39.2	12.1	0.56	0.32	85.7	87.8	0.99	
06-7C-02-MET-S (0-0.5 cm)	0.14	6.38	16.2	661	1.66	0.21	12.3	107	29.0	3.75	0.064	446	40.3	15.3	0.61	0.52	142	104	1.19	
06-7C-02-MET-S (2-2.5 cm)	0.13	6.30	14.4	644	1.55	0.21	12.8	101	27.1	3.62	0.061	412	40.8	15.8	0.57	0.50	139	103	1.14	
06-7C-02-MET-S (4-4.5 cm)	0.14	6.64	15.1	630	1.69	0.21	12.4	108	30.7	3.87	0.078	430	40.2	15.8	0.61	0.53	149	112	1.29	
06-7C-02-MET-S (6-6.5 cm)	0.12	5.52	12.8	552	1.42	0.18	11.0	93.9	24.4	3.26	0.057	389	36.4	13.5	0.51	0.45	126	98.3	1.15	
06-7C-02-MET-S (8-8.5 cm)	0.12	6.14	13.2	637	1.55	0.17	12.7	95.1	25.3	3.51	0.063	415	41.5	14.8	0.52	0.47	135	102	1.08	
06-7C-02-MET-S (18-19 cm)	0.15	6.57	15.7	637	1.75	0.16	12.8	102	28.9	3.76	0.063	431	41.8	16.0	0.63	0.54	140	112	1.18	
06-7C-02-MET-S (28-30 cm)	0.12	5.34	13.6	640	1.34	0.22	12.2	88.0	22.5	2.99	0.044	378	40.7	13.8	0.51	0.44	111	93.7	0.94	
06-7E-02-MET-S (0-0.5 cm)	0.19	5.81	16.9	681	1.51	0.40	12.7	95.3	41.9	3.61	0.095	535	42.0	17.3	0.67	0.47	128	115	3.86	
06-7E-02-MET-S (2-2.5 cm)	0.18	5.05	17.3	697	1.45	0.38	13.3	82.8	31.6	3.17	0.101	362	44.1	18.1	0.80	0.45	106	95.0	3.88	
06-7E-02-MET-S (4-4.5 cm)	0.13	4.77	23.8	859	1.28	0.26	15.4	85.8	25.0	2.98	0.090	333	39.9	16.5	0.57	0.37	97.3	87.9	1.77	
06-7E-02-MET-S (6-6.5 cm)	0.15	5.50	15.9	736	1.46	0.29	14.5	81.2	28.5	3.27	0.084	380	41.2	14.8	0.65	0.44	113	97.5	2.30	
06-7E-02-MET-S (8-8.5 cm)	0.13	4.63	12.1	679	1.28	0.24	11.6	83.2	18.7	2.77	0.038	302	34.2	10.9	0.57	0.39	89.3	82.6	0.98	
06-7E-02-MET-S (12-13 cm)	0.12	5.47	9.3	707	1.32	0.19	13.5	86.6	24.2	3.19	0.061	324	39.7	13.0	0.58	0.37	106	92.2	1.14	
06-7E-02-MET-S (16-17 cm)	0.13	5.58	11.1	684	1.45	0.18	13.2	80.8	23.7	3.19	0.066	347	40.8	13.2	0.60	0.40	103	90.4	1.14	
06-7E-02-MET-S (28-30 cm) #1	0.14	6.47	11.8	780	1.56	0.24	14.2	104	29.4	3.76	0.068	451	47.0	15.5	0.63	0.44	124	107	1.71	Lab Duplicate
06-7E-02-MET-S (28-30 cm) #2	0.15	6.51	12.1	749	1.65	0.26	14.0	107	30.2	3.79	0.071	446	45.8	15.2	0.66	0.47	123	108	1.69	Lab Duplicate

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Table 5. Grain Size Distribution in Surficial Sediment Samples.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	Comments
06-N03-01-MET-S #1	0.2	3.7	56.5	39.6	100.0	Lab Duplicate
06-N03-01-MET-S #2	0.3	5.3	57.3	37.1	100.0	Lab Duplicate
06-N06-01-MET-S	0.3	19.9	61.2	18.7	100.1	
06-N11-01-MET-S	0.0	26.0	55.3	18.8	100.1	
06-N14-01-MET-S	1.5	87.9	7.3	3.2	99.9	
06-N17-01-MET-S	0.0	17.5	52.6	30.0	100.1	
06-N27-01-MET-S #1	5.2	14.6	50.7	29.5	100.0	Lab Duplicate
06-N27-01-MET-S #2	5.2	16.3	47.6	30.9	100.0	Lab Duplicate
06-N28-01-MET-S	49.4	5.4	36.1	9.0	99.9	
06-WDK-01-MET-S	1.5	17.1	50.6	30.8	100.0	
06-M01-01-MET-S	0.0	93.7	3.0	3.3	100.0	
06-L03-01-MET-S	0.0	37.8	39.9	22.3	100.0	
06-L08-01-MET-S	0.0	50.1	35.2	14.7	100.0	
06-L19-01-MET-S	0.0	78.1	17.0	5.0	100.1	
06-L20-01-MET-S	0.1	85.0	9.6	5.3	100.0	
06-L21-01-MET-S	0.1	98.7	0.0	1.2	100.0	
06-L22-01-MET-S	10.4	30.5	29.0	30.2	100.1	
06-BP01-01-MET-S	0.0	51.5	33.7	14.8	100.0	
06-E01-01-MET-S	0.0	82.3	12.0	5.8	100.1	
06-E02-01-MET-S	0.0	39.3	47.1	13.5	99.9	
06-SDI-01-MET-S	0.2	39.9	46.8	13.1	100.0	
06-4A-01-MET-S	5.7	40.6	21.5	32.2	100.0	
06-5A-01-MET-S	22.1	36.3	26.2	15.4	100.0	
06-5(1)-01-MET-S	1.7	72.2	15.0	11.0	99.9	
06-5(5)-01-MET-S	2.8	78.0	12.6	6.6	100.0	
06-6A-01-MET-S	0.0	7.3	69.4	23.3	100.0	
06-6B-01-MET-S	0.0	48.5	29.4	22.1	100.0	
06-6D-01-MET-S	0.0	49.4	29.2	21.4	100.0	
06-6F-01-MET-S	0.0	87.9	5.7	6.4	100.0	
06-6G-01-MET-S	0.0	51.0	35.9	13.1	100.0	
06-6H-01-MET-S	0.0	95.4	2.6	2.0	100.0	
06-7A-01-MET-S	0.0	38.5	51.7	9.7	99.9	
06-7C-01-MET-S	0.0	10.1	48.2	41.6	99.9	
06-7E-01-MET-S	0.0	5.4	73.8	20.7	99.9	
06-7G-01-MET-S	0.0	60.7	32.5	6.7	99.9	

* Sample collection dates are the same as the Metal samples.

Table 6. Grain Size Distribution and Total Organic Carbon (TOC) Concentrations in Sediment Cores.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	Comments
06-7A-01-MET-S (0-2 cm)	0.0	61.6	32.2	6.2	100.0	
06-7A-01-MET-S (2-4 cm)	0.0	45.1	46.2	8.7	100.0	
06-7A-01-MET-S (4-6 cm)	0.0	31.8	57.0	11.2	100.0	
06-7A-01-MET-S (6-8 cm)	0.0	35.7	50.4	13.9	100.0	
06-7A-01-MET-S (8-10 cm)	0.0	23.1	62.9	14.0	100.0	
06-7A-01-MET-S (12-14 cm)	0.0	11.9	78.1	10.0	100.0	
06-7A-01-MET-S (16-18 cm)	0.0	16.5	71.6	11.9	100.0	
06-7C-01-MET-S (0-2 cm)	0.0	22.4	48.3	29.3	100.0	
06-7C-01-MET-S (2-4 cm)	0.0	12.5	50.8	36.7	100.0	
06-7C-01-MET-S (4-6 cm)	0.0	12.2	50.9	36.9	100.0	
06-7C-01-MET-S (6-8 cm)	0.0	14.4	52.9	32.7	100.0	
06-7C-01-MET-S (8-10 cm)	0.0	7.6	56.5	35.9	100.0	
06-7C-01-MET-S (18-20 cm)	0.0	4.7	62.4	32.9	100.0	
06-7C-01-MET-S (28-30 cm)	0.0	9.3	56.6	34.1	100.0	
06-7E-01-MET-S (0-2 cm)	0.0	23.0	61.2	15.8	100.0	Sand fraction ~1/3 peat
06-7E-01-MET-S (2-4 cm)	0.0	33.0	50.8	16.2	100.0	Sand fraction ~1/3 peat
06-7E-01-MET-S (4-6 cm)	0.0	47.5	44.8	7.7	100.0	Sand fraction ~1/3 peat
06-7E-01-MET-S (6-8 cm)	0.0	42.2	51.3	6.5	100.0	Sand fraction ~1/4 peat
06-7E-01-MET-S (8-10 cm)	0.0	26.1	53.8	20.1	100.0	Sand fraction ~1/4 peat
06-7E-01-MET-S (12-14 cm)	0.0	53.3	37.6	9.1	100.0	Sand fraction ~1/5 peat
06-7E-01-MET-S (16-18 cm)	0.0	33.4	47.8	18.8	100.0	Sand fraction ~1/10 peat
06-7E-01-MET-S (28-30 cm)	0.0	15.9	63.0	21.1	100.0	Sand fraction ~1/5 peat
06-L22-01-MET-S (0-2 cm)	8.2	43.7	22.4	25.7	100.0	
06-L22-01-MET-S (2-4 cm)	10.0	30.2	25.7	34.1	100.0	
06-L22-01-MET-S (4-6 cm)	3.3	31.3	30.0	35.4	100.0	
06-L22-01-MET-S (6-8 cm)	3.6	31.8	28.1	36.5	100.0	
06-L22-01-MET-S (8-10 cm)	0.1	30.5	28.7	40.7	100.0	
06-L22-01-MET-S (26-28 cm)	2.1	34.1	27.5	36.3	100.0	

* Sample collection dates are the same as the Metal samples.

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Table 6. Grain Size Distribution and Total Organic Carbon (TOC) Concentrations in Sediment Cores.

Sample Identification*	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Total (%)	Comments
06-N17-01-MET-S (0-2 cm)	0.0	15.3	50.5	34.2	100.0	
06-N17-01-MET-S (2-4 cm)	0.0	10.6	55.5	33.9	100.0	
06-N17-01-MET-S (4-6 cm)	0.0	34.0	48.2	17.8	100.0	
06-N17-01-MET-S (6-8 cm)	0.1	26.8	52.4	20.7	100.0	
06-N17-01-MET-S (8-10 cm)	0.0	23.9	54.4	21.7	100.0	
06-N17-01-MET-S (28-30 cm)	1.0	70.8	20.4	7.8	100.0	gr wood; sa mostly peat

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Table 7. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Surficial Sediment Samples (dry weight). Lab Duplicates were averaged prior to statstical analysis.

Station Grouping	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Northstar Stations N03-N28	Mean	0.15	4.43	11.2	486	1.32	0.23	8.8	74.9	21.7	2.74	0.046	320	29.9	12.0	0.56	0.47	113.8	85.1	1.00
	Std. Dev.	0.03	1.25	2.9	117	0.30	0.06	2.1	19.7	8.6	0.75	0.015	76.3	8.1	4.0	0.13	0.13	37.1	24.0	0.36
	n	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Maximum	0.19	5.79	15.0	628	1.69	0.30	10.8	95.4	31.9	3.65	0.058	414	38.5	16.7	0.69	0.64	155	113	1.38
	Minimum	0.10	1.78	5.5	256	0.82	0.09	4.7	33.4	7.5	1.27	0.013	152	13.8	4.3	0.29	0.22	40.3	37.8	0.23
Liberty Stations L03-SDI	Mean	0.13	3.17	9.0	378	1.02	0.21	7.9	60.0	15.8	2.11	0.030	286	24.2	9.3	0.48	0.35	78.3	65.8	0.85
	Std. Dev.	0.03	0.73	2.5	124	0.25	0.10	1.6	15.9	6.3	0.52	0.013	60.0	6.7	3.2	0.11	0.08	27.7	17.2	0.75
	n	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Maximum	0.17	4.01	13.0	575	1.55	0.39	10.9	80.6	25.5	2.76	0.049	416	35.7	14.2	0.67	0.51	131	92.1	2.75
	Minimum	0.07	2.04	5.8	229	0.75	0.04	5.8	26.9	5.6	1.12	0.004	214	13.5	5.5	0.32	0.25	34.9	34.3	0.02
BSMP Stations 4A-7G	Mean	0.14	4.06	11.9	515	1.09	0.20	10.0	71.1	18.0	2.57	0.038	392	29.2	10.7	0.50	0.35	91.8	72.6	0.95
	Std. Dev.	0.03	1.23	4.7	179	0.30	0.10	3.0	19.4	7.1	0.72	0.016	135	9.0	3.4	0.11	0.10	29.0	20.5	0.59
	n	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	Maximum	0.21	6.29	22.8	863	1.58	0.46	13.8	99.6	30.4	3.70	0.066	633	42.0	16.0	0.66	0.50	148	105	2.17
	Minimum	0.10	2.69	6.9	307	0.73	0.10	5.4	40.9	9.2	1.54	0.013	187	16.0	5.7	0.32	0.20	60.5	46.9	0.08
Cumulative*	Mean	0.14	3.82	10.7	458	1.13	0.21	9.0	67.9	18.2	2.45	0.038	341	27.7	10.5	0.50	0.37	92.1	73.3	0.98
	Std. Dev.	0.03	1.20	3.8	158	0.30	0.09	2.6	19.7	7.7	0.73	0.017	116	8.7	3.6	0.13	0.13	33.4	22.7	0.65
	n	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
	Maximum	0.21	6.29	22.8	863	1.69	0.46	13.8	99.6	31.9	3.70	0.072	633	42.0	16.7	0.72	0.64	155	113	2.76
	Minimum	0.07	1.78	5.4	215	0.73	0.04	4.2	26.9	5.6	1.11	0.004	152	11.9	4.3	0.26	0.05	34.9	30.1	0.02

* Includes Stations WDK and M01.

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Table 8. Statistics for Trace Metal Concentrations and Total Organic Carbon (TOC) Content in Sediment Cores (dry weight). Lab Duplicates were averaged prior to statstical analysis.

Sediment Core	Statistic	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
N17	Mean	0.13	4.13	11.5	455	1.17	0.25	9.4	71.9	21.4	2.61	0.058	279	29.4	11.0	0.53	0.43	89.5	81.4	1.25
	Std. Dev.	0.01	0.94	1.8	60.0	0.21	0.05	0.5	14.2	3.8	0.48	0.008	42.2	4.4	2.3	0.06	0.08	20.4	16.8	0.39
	n	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Maximum	0.14	5.19	14.8	506	1.40	0.32	10.3	86.6	28.3	3.13	0.073	327	34.1	13.9	0.60	0.52	114	102	1.88
	Minimum	0.11	2.40	10.1	340	0.79	0.20	8.9	45.7	16.6	1.70	0.050	200	21.3	6.9	0.44	0.28	52.4	51.4	0.89
L22	Mean	0.11	5.22	12.4	582	1.46	0.17	11.0	73.3	21.0	2.89	0.043	335	30.5	13.2	0.53	0.50	111	83.4	0.75
	Std. Dev.	0.01	0.40	0.7	47	0.10	0.03	0.8	3.5	1.2	0.18	0.006	18.2	1.4	0.8	0.05	0.04	7.5	4.6	0.28
	n	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Maximum	0.13	5.64	13.5	655	1.64	0.20	12.5	78.4	22.3	3.11	0.052	357	32.1	14.1	0.61	0.58	122	88.7	1.31
	Minimum	0.10	4.64	11.6	524	1.37	0.13	10.3	69.5	19.0	2.63	0.034	313	28.7	12.0	0.47	0.45	105	75.6	0.57
7A	Mean	0.11	5.09	9.8	757	1.26	0.20	13.3	96.6	18.5	3.00	0.052	409	38.9	11.5	0.55	0.33	88.1	86.2	0.92
	Std. Dev.	0.01	0.35	0.7	103	0.10	0.03	0.6	3.0	2.2	0.14	0.011	55.6	2.6	0.9	0.03	0.03	7.3	4.4	0.22
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Maximum	0.12	5.42	10.8	860	1.35	0.27	14.2	101	19.9	3.20	0.075	500	42.2	12.5	0.57	0.36	96.4	89.3	1.27
	Minimum	0.09	4.37	8.6	561	1.05	0.16	12.5	93.1	13.8	2.76	0.044	355	34.7	10.2	0.50	0.27	74.1	77.0	0.52
7C	Mean	0.13	6.13	14.4	629	1.57	0.19	12.3	99.3	26.8	3.54	0.061	414	40.2	15.0	0.57	0.49	135	104	1.14
	Std. Dev.	0.01	0.51	1.3	35.2	0.15	0.02	0.6	7.3	2.9	0.31	0.010	24.1	1.8	1.0	0.05	0.04	12.5	6.7	0.11
	n	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Maximum	0.15	6.64	16.2	661	1.75	0.22	12.8	108	30.7	3.87	0.078	446	41.8	16.0	0.63	0.54	149	112	1.29
	Minimum	0.12	5.34	12.8	552	1.34	0.16	11.0	88.0	22.5	2.99	0.044	378	36.4	13.5	0.51	0.44	111	93.7	0.94
7E	Mean	0.15	5.41	14.8	726	1.42	0.27	13.5	87.7	27.9	3.24	0.076	379	41.0	14.9	0.64	0.42	108	96.0	2.10
	Std. Dev.	0.03	0.60	4.7	61.5	0.12	0.08	1.2	8.6	6.9	0.32	0.021	77.0	3.6	2.4	0.08	0.04	12.9	10.6	1.18
	n	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Maximum	0.19	6.49	23.8	859	1.61	0.40	15.4	106	41.9	3.78	0.101	535	46.4	18.1	0.80	0.47	128	115	3.88
	Minimum	0.12	4.63	9.3	679	1.28	0.18	11.6	80.8	18.7	2.77	0.038	302	34.2	10.9	0.57	0.37	89.3	82.6	0.98

Table 9. Statistics for Grain Size in Surficial Sediment Samples. Lab Duplicates were averaged prior to statistical analysis.

Station Grouping	Statistic	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
Northstar Stations	Mean	8.1	25.2	45.5	21.2
	Std. Dev.	18.3	28.7	18.6	12.5
	n	7	7	7	7
	Maximum	49.4	87.9	61.2	38.4
	Minimum	0.0	4.5	7.3	3.2
Liberty Stations	Mean	1.1	59.3	27.0	12.6
	Std. Dev.	3.3	24.3	16.4	8.8
	n	10	10	10	10
	Maximum	10.4	98.7	47.1	30.2
	Minimum	0.0	30.5	0.0	1.2
BSMP Stations	Mean	2.3	48.7	32.4	16.6
	Std. Dev.	5.9	28.7	21.8	11.1
	n	14	14	14	14
	Maximum	22.1	95.4	73.8	41.6
	Minimum	0.0	5.4	2.6	2.0
Cumulative*	Mean	3.1	47.3	33.2	16.4
	Std. Dev.	9.4	30.0	20.4	11.1
	n	33	33	33	33
	Maximum	49.4	98.7	73.8	41.6
	Minimum	0.0	4.5	0.0	1.2

* Includes Stations WDK and M01.

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Table 10. Statistics for Grain Size in Sediment Cores. Lab Duplicates were averaged prior to statistical analysis.

Sediment Core	Statistic	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
N17	Mean	0.2	30.2	46.9	22.7
	Std. Dev.	0.4	21.5	13.2	10.1
	n	6	6	6	6
	Maximum	1	70.8	55.5	34.2
	Minimum	0.0	10.6	20.4	7.8
L22	Mean	4.6	33.6	27.1	34.8
	Std. Dev.	3.4	5.1	2.7	5.0
	n	6	6	6	6
	Maximum	10	43.7	30	40.7
	Minimum	0.1	30.2	22.4	25.7
7A	Mean	0.0	32.2	56.9	10.8
	Std. Dev.	0.0	17.2	15.6	2.8
	n	7	7	7	7
	Maximum	0.0	61.6	78.1	14.0
	Minimum	0.0	11.9	32.2	6.2
7C	Mean	0.0	11.9	54.1	34.1
	Std. Dev.	0.0	5.7	4.8	2.7
	n	7	7	7	7
	Maximum	0	22.4	62.4	36.9
	Minimum	0.0	4.7	48.3	29.3
7E	Mean	0.0	34.3	51.3	14.4
	Std. Dev.	0.0	12.7	8.3	5.8
	n	8	8	8	8
	Maximum	0	53.3	63.0	21.1
	Minimum	0.0	15.9	37.6	6.5

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Table 11. Quality Assurance and Quality Control Data for Sediment Metal and Carbon Analyses.

Results for the Marine Sediment Certified Reference Material (CRM) MESS-3 certified by the National Research Council of Canada (NRC) and the Standard Reference Material (SRM) Trace Elements in Water #1643d certified by the National Institute of Standards and Technology (NIST).

Reference Material	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-3	0.18	8.51	20.7	1005	2.20	0.24	12.5	109	33.2	4.28	0.088	322	45.8	21.8	1.01	0.85	240	153	2.02
This Study	0.19	8.61	21.2	999	2.31	0.25	12.6	109	34.2	4.38	0.088	322	45.9	21.3	1.04	0.86	246	157	2.00
	0.16	8.68	20.6	1043	2.24	0.23	12.9	108	33.2	4.31	0.099	324	46.6	21.7	0.97	0.85	233	154	-
	0.18	8.40	20.5	1004	2.25	0.25	12.6	106	33.5	4.33	0.091	319	45.8	21.6	1.05	0.86	236	153	-
CRM MESS-3	0.18	8.59	21.2	-	2.30	0.24	14.4	105	33.9	4.34	0.091	324	46.9	21.1	1.02	0.90	243	159	2**
NRC Certified Values	± 0.02	± 0.23	± 1.1	-	± 0.12	± 0.01	± 2.0	± 4	± 1.6	± 0.11	± 0.009	± 12	± 2.2	± 0.7	± 0.09	± 06	± 10	± 8	-
	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	
SRM #1643d	-	-	-	507.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
This Study	-	-	-	509.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SRM #1643d	1.27	127.6	56.02	506.5	12.53	6.47	25.00	18.53	20.5	91.2	-	37.66	58.1	18.15	54.1	7.28	35.1	72.48	-
NIST Certified Values	± 0.057	± 3.5	± 0.73	± 8.9	± 0.28	± 0.37	± 0.59	± 0.20	± 3.8	± 3.9	-	± 0.83	± 2.7	± 0.64	± 1.1	± 0.25	± 1.4	± 0.65	-

* Reference Value, not Certified. ** Reference Value for Total Carbon (Inorganic plus Organic).

Method Detection Limits (MDLs).

	Ag (µg/g)	Al (%)	As (µg/g)	Ba (µg/g)	Be (µg/g)	Cd (µg/g)	Co (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	Sb (µg/g)	Tl (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Method Detection Limit	0.007	0.01	0.08	22	0.003	0.003	0.04	1.0	1.7	0.01	0.001	2	0.08	0.03	0.05	0.03	10	0.5	0.04

Percent Spike Recovery.

	Ag	Al	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg***	Mn	Ni	Pb	Sb	Tl	V***	Zn	TOC
Mean	99.0	99.0	100.3	100.2	99.0	101.1	98.0	99.0	100.2	98.8	89.2	96.1	97.8	102.3	100.1	100.9	116.8	96.2	-
Standard Deviation	1.3	5.9	4.6	5.8	5.8	7.2	3.4	6.4	2.3	2.9	7.2	3.0	2.9	6.0	6.5	4.3	12.2	4.7	-
(n =)	4	4	4	4	4	4	4	4	4	4	14	4	4	4	4	4	4	4	-

***Final concentrations are corrected for percent spike recovery.

Table 11. Quality Assurance and Quality Control Data for Sediment Metal and Carbon Analyses.

Estimate of Trace Metal and TOC Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates.

	Ag	Al	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg	Mn	Ni	Pb	Sb	Tl	V	Zn	TOC
06-N06-01-MET-S	8.3	0.1	4.1	4.1	3.1	2.8	3.6	1.8	0.3	0.2	4.0	0.2	1.9	3.6	2.2	0.0	0.0	0.8	3.0
06-7G-01-MET-S	0.0	0.4	0.0	3.8	1.5	4.9	4.4	1.5	0.0	0.3	1.9	0.4	1.5	5.7	1.4	2.6	0.4	0.8	0.9
06-N17-02-MET-S (4-4.5 cm)	0.0	2.2	2.3	2.8	1.0	2.2	6.2	2.4	1.5	2.3	3.9	0.2	3.5	3.6	0.0	1.4	4.4	1.4	2.2
06-7E-02-MET-S (28-30 cm)	4.9	0.4	1.8	2.9	4.0	5.7	1.0	2.0	1.9	0.6	3.1	0.8	1.8	1.4	3.3	4.7	0.6	0.7	0.8

Percent RSD = (standard deviation / mean) X 100.

Estimate of Grain Size Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates.

	Gravel	Sand	Silt	Clay
06-N03-01-MET-S	28.3	25.1	1.0	4.6
06-N27-01-MET-S	0.0	7.8	4.5	3.3

Percent RSD = (standard deviation / mean) X 100.