Keeyask Generation Project

Environmental Impact Statement

Supporting Volume

Aquatic Environment

KEEYASK Hydropower Limited Partnership

June 2012

APPENDIX 2H
SUPPLEMENTAL WATER QUALITY TABLES, MAPS AND FIGURES: EXISTING ENVIRONMENT

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Burntwood River	SPL1	Mean	57	69	<20	<10	0.007	0.013	0.4	0.37	0.39	0.020	0.010	0.040	0.030	27	23	4	1	8	8	13	13
	SPL1	Median	57	70	<20	<10	0.006	0.011	0.4	0.39	0.41	0.019	0.011	0.039	0.029	27	22	4	1	8	8	13	13
	SPL1	Minimum	53	65	<20	<10	<0.002	<0.005	0.2	0.20	0.21	<0.005	0.005	0.029	0.018	15	9	1	0	5	5	12	12
	SPL1	Maximum	60	73	<20	<10	0.020	0.026	0.5	0.49	0.53	0.039	0.015	0.054	0.044	38	30	9	3	11	11	15	14
	SPL1	SD[1]	2	2	-	-	0.006	0.006	0.1	0.08	0.09	0.011	0.003	0.008	0.008	7	6	3	1	2	1	1	1
	SPL1	SE[2]	1	1	-	-	0.001	0.002	0.0	0.02	0.02	0.003	0.001	0.002	0.002	2	1	1	0	0	0	0	0
	SPL1	n[3]	12	12	12	12	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	8	8
NR u/s Kelsey GS	SPL9	Mean	104	127	<0.6	<0.4	0.005	0.006	0.4	0.43	0.44	0.010	0.014	0.034	0.020	41	29	1	1	8	8	-	-
	SPL9	Median	106	130	<0.6	<0.4	<0.003	<0.005	0.4	0.41	0.42	0.006	0.014	0.034	0.020	40	27	1	0	9	8	-	-
	SPL9	Minimum	97	119	<0.6	<0.4	<0.003	<0.005	0.4	0.39	0.40	<0.005	0.010	0.028	0.014	34	23	0	0	6	6	-	-
	SPL9	Maximum	107	131	<0.6	<0.4	0.013	0.011	0.5	0.50	0.51	0.024	0.017	0.041	0.027	50	40	3	1	9	8	-	-
	SPL9	SD	5	6	-	-	0.006	0.004	0.0	0.05	0.05	0.010	0.003	0.006	0.005	8	8	1	1	1	1	-	-
	SPL9	SE	2	3	-	-	0.003	0.002	0.0	0.02	0.02	0.005	0.001	0.003	0.003	4	4	1	0	1	1	-	-
	SPL9	n	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-
NR d/n Kelsey GS	SPL2	Mean	104	127	<0.6	<0.4	0.022	0.028	0.5	0.44	0.49	0.050	0.016	0.038	0.022	41	30	6	3	8	8	-	-
	SPL2	Median	106	130	<0.6	<0.4	0.010	0.014	0.4	0.40	0.43	0.026	0.015	0.037	0.023	41	29	4	2	8	8	-	-
	SPL2	Minimum	97	119	<0.6	<0.4	<0.002	<0.005	0.3	0.28	0.31	<0.005	0.006	0.021	0.005	23	15	1	0	6	6	-	-
	SPL2	Maximum	107	130	<0.6	<0.4	0.180	0.195	0.6	0.60	0.80	0.375	0.027	0.060	0.036	84	55	31	26	10	10	-	-
	SPL2	SD	5	5	-	-	0.043	0.046	0.1	0.10	0.13	0.089	0.006	0.009	0.007	14	11	7	6	1	1	-	-
	SPL2	SE	2	3	-	-	0.011	0.012	0.0	0.03	0.03	0.022	0.002	0.002	0.002	4	3	2	2	0	0	-	-
	SPL2	n	4	4	4	4	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	-	-
Split Lake	SPL3	Mean	-	-	-	-	0.013	0.019	0.4	0.42	0.45	0.032	0.011	0.040	0.029	27	26	8	2	9	8	-	-
	SPL3	Median	-	-	-	-	0.007	0.015	0.4	0.39	0.45	0.028	0.011	0.039	0.029	26	25	5	2	8	8	-	-
	SPL3	Minimum	-	-	-	-	<0.002	<0.005	0.3	0.30	0.31	0.007	0.005	0.026	0.018	15	14	1	0	7	7	-	-
	SPL3	Maximum	-	-	-	-	0.040	0.051	0.6	0.57	0.60	0.071	0.016	0.053	0.039	45	38	24	5	11	11	-	-
	SPL3	SD	-	-	-	-	0.012	0.015	0.1	0.09	0.09	0.019	0.004	0.008	0.007	9	7	7	1	1	1	-	-
	SPL3	SE	-	-	-	-	0.004	0.004	0.0	0.03	0.03	0.005	0.001	0.002	0.002	2	2	2	0	0	0	-	-
	SPL3	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Split Lake	SPL4	Mean	-	-	-	-	0.015	0.028	0.5	0.48	0.52	0.043	0.014	0.038	0.024	35	32	8	3	8	8	-	-
	SPL4	Median	-	-	-	-	0.012	0.027	0.5	0.42	0.48	0.042	0.013	0.036	0.023	38	28	6	2	8	8	-	-
	SPL4	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.29	0.32	<0.005	0.006	0.022	0.016	19	15	1	0	5	5	-	-
	SPL4	Maximum	-	-	-	-	0.060	0.081	1.0	0.98	1.01	0.101	0.027	0.062	0.035	47	75	20	7	10	10	-	-
	SPL4	SD	-	-	-	-	0.015	0.023	0.2	0.18	0.18	0.027	0.006	0.011	0.006	9	15	7	2	1	1	-	-
	SPL4	SE	-	-	-	-	0.004	0.007	0.1	0.05	0.05	0.008	0.002	0.003	0.002	3	4	2	1	0	0	-	-
	SPL4	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-

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Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Split Lake	SPL6	Mean	-	-	-	-	0.006	0.012	0.5	0.48	0.50	0.017	0.014	0.037	0.023	39	33	3	1	9	9	-	-
	SPL6	Median	-	-	-	-	0.004	0.007	0.5	0.49	0.50	0.013	0.011	0.034	0.021	33	29	3	1	9	8	-	-
	SPL6	Minimum	-	-	-	-	<0.002	<0.005	0.4	0.39	0.40	<0.005	0.006	0.021	0.007	21	16	0	0	7	8	-	-
	SPL6	Maximum	-	-	-	-	0.020	0.039	0.7	0.68	0.71	0.046	0.025	0.063	0.042	78	54	9	3	10	10	-	-
	SPL6	SD	-	-	-	-	0.006	0.012	0.1	0.09	0.10	0.013	0.007	0.014	0.012	19	13	3	1	1	1	-	-
	SPL6	SE	-	-	-	-	0.002	0.003	0.0	0.03	0.03	0.004	0.002	0.004	0.004	5	4	1	0	0	0	-	-
	SPL6	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Split Lake	SPL7	Mean	89	109	<20	<10	0.008	0.020	0.5	0.45	0.48	0.028	0.012	0.038	0.026	32	29	6	2	9	8	19	19
	SPL7	Median	90	110	<20	<10	0.007	0.015	0.4	0.40	0.44	0.022	0.013	0.035	0.024	33	28	5	1	8	8	20	20
	SPL7	Minimum	71	86	<20	<10	<0.003	<0.005	0.3	0.29	0.30	<0.005	0.006	0.025	0.019	17	18	0	0	6	6	16	16
	SPL7	Maximum	99	121	<20	<10	0.022	0.059	0.8	0.79	0.83	0.069	0.024	0.057	0.038	42	51	18	5	11	10	21	22
	SPL7	SD	8	10	-	-	0.005	0.018	0.1	0.13	0.13	0.020	0.004	0.008	0.006	8	9	5	1	1	1	2	2
	SPL7	SE	2	3	-	-	0.001	0.004	0.0	0.03	0.03	0.005	0.001	0.002	0.001	2	2	1	0	0	0	1	1
	SPL7	n	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	8	8
Split Lake	SPL8	Mean	89	109	<0.6	<0.4	0.007	0.018	0.5	0.50	0.52	0.025	0.012	0.039	0.027	30	32	5	1	8	8	-	-
	SPL8	Median	89	109	<0.6	<0.4	0.006	0.013	0.5	0.44	0.48	0.022	0.012	0.037	0.028	32	26	4	1	8	8	-	-
	SPL8	Minimum	85	104	<0.6	<0.4	<0.002	<0.005	0.3	0.30	0.30	<0.005	0.005	0.025	0.018	15	17	1	0	6	6	-	-
	SPL8	Maximum	94	114	<0.6	<0.4	0.020	0.052	1.4	1.40	1.41	0.062	0.021	0.056	0.039	42	100	18	5	10	10	-	-
	SPL8	SD	5	6	-	-	0.005	0.017	0.2	0.25	0.25	0.018	0.004	0.009	0.006	7	20	4	1	1	1	-	-
	SPL8	SE	2	3	-	-	0.001	0.004	0.1	0.06	0.06	0.005	0.001	0.002	0.002	2	5	1	0	0	0	-	-
	SPL8	n	4	4	4	4	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	-	-
Clark Lake	CL1	Mean	96	118	<0.6	<0.4	0.008	0.019	0.5	0.44	0.47	0.027	0.012	0.040	0.028	30	27	5	1	9	8	-	-
	CL1	Median	97	119	<0.6	<0.4	0.007	0.017	0.4	0.40	0.44	0.027	0.012	0.040	0.027	31	27	5	1	8	8	-	-
	CL1	Minimum	91	111	<0.6	<0.4	<0.003	<0.005	0.3	0.29	0.33	<0.005	0.007	0.026	0.019	20	17	0	0	6	6	-	-
	CL1	Maximum	100	122	<0.6	<0.4	0.020	0.054	0.6	0.60	0.62	0.074	0.022	0.057	0.035	39	42	14	4	12	11	-	-
	CL1	SD	4	5	-	-	0.006	0.016	0.1	0.08	0.08	0.019	0.004	0.008	0.005	6	8	4	1	1	1	-	-
	CL1	SE	2	2	-	-	0.001	0.004	0.0	0.02	0.02	0.005	0.001	0.002	0.001	2	2	1	0	0	0	-	-
	CL1	n	4	4	4	4	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	-	-
Nelson River	NR1	Mean	-	-	-	-	0.008	0.019	0.4	0.44	0.46	0.027	0.012	0.039	0.027	31	28	5	2	8	8	-	-
	NR1	Median	-	-	-	-	0.009	0.009	0.5	0.44	0.47	0.018	0.011	0.036	0.026	31	26	4	1	8	9	-	-
	NR1	Minimum	-	-	-	-	<0.003	<0.005	0.1	0.10	0.10	<0.005	0.006	0.024	0.016	14	6	1	0	7	6	-	-
	NR1	Maximum	-	-	-	-	0.020	0.068	0.6	0.59	0.67	0.088	0.024	0.058	0.038	41	55	19	7	10	10	-	-
	NR1	SD	-	-	-	-	0.005	0.020	0.1	0.11	0.12	0.023	0.005	0.009	0.007	7	11	5	2	1	1	-	-
	NR1	SE	-	-	-	-	0.001	0.005	0.0	0.03	0.03	0.006	0.001	0.002	0.002	2	3	1	0	0	0	-	-
	NR1	n	-	-	-	-	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	-	-

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Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Gull Lake	GL1	Mean	-	-	-	-	0.010	0.021	0.5	0.48	0.51	0.031	0.012	0.039	0.028	28	31	6	2	9	8	-	-
	GL1	Median	-	-	-	-	0.007	0.023	0.5	0.48	0.52	0.034	0.010	0.038	0.028	28	30	5	2	9	9	-	-
	GL1	Minimum	-	-	-	-	<0.002	<0.005	0.3	0.30	0.30	<0.005	0.005	0.027	0.018	15	16	1	0	7	6	-	-
	GL1	Maximum	-	-	-	-	0.040	0.051	0.7	0.68	0.75	0.071	0.028	0.061	0.036	46	52	20	5	10	9	-	-
	GL1	SD	-	-	-	-	0.011	0.018	0.1	0.11	0.12	0.021	0.007	0.010	0.006	9	11	5	1	1	1	-	-
	GL1	SE	-	-	-	-	0.003	0.005	0.0	0.03	0.03	0.006	0.002	0.003	0.002	3	3	1	0	0	0	-	-
	GL1	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Gull Lake	GL2	Mean	-	-	-	-	0.008	0.023	0.5	0.47	0.50	0.031	0.011	0.039	0.028	28	30	6	2	8	8	-	-
	GL2	Median	-	-	-	-	0.008	0.024	0.5	0.49	0.50	0.032	0.011	0.038	0.028	29	30	4	2	8	8	-	-
	GL2	Minimum	-	-	-	-	<0.002	<0.005	0.3	0.30	0.30	<0.005	0.005	0.022	0.016	16	17	1	0	6	6	-	-
	GL2	Maximum	-	-	-	-	0.020	0.064	0.6	0.60	0.66	0.084	0.021	0.057	0.036	37	44	19	6	10	10	-	-
	GL2	SD	-	-	-	-	0.005	0.020	0.1	0.09	0.10	0.023	0.005	0.010	0.006	7	9	5	2	1	1	-	-
	GL2	SE	-	-	-	-	0.001	0.006	0.0	0.03	0.03	0.007	0.001	0.003	0.002	2	3	2	0	0	0	-	-
	GL2	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Nelson River	NR2	Mean	91	111	<20	<10	0.007	0.020	0.5	0.47	0.50	0.027	0.012	0.038	0.026	31	32	5	2	8	8	20	20
	NR2	Median	93	113	<20	<10	0.007	0.011	0.5	0.49	0.50	0.020	0.010	0.037	0.027	31	27	4	1	8	8	20	20
	NR2	Minimum	74	90	<20	<10	<0.002	<0.005	0.4	0.39	0.40	<0.005	0.006	0.018	0.010	17	19	1	0	6	5	17	17
	NR2	Maximum	100	122	<20	<10	0.020	0.067	0.6	0.59	0.67	0.087	0.029	0.057	0.033	51	82	24	11	9	9	22	22
	NR2	SD	8	9	-	-	0.006	0.019	0.1	0.06	0.08	0.023	0.006	0.010	0.006	9	15	6	3	1	1	2	2
	NR2	SE	2	2	-	-	0.001	0.005	0.0	0.02	0.02	0.006	0.001	0.003	0.002	2	4	1	1	0	0	1	1
	NR2	n	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	8	8
Nelson River n. nearshore	Camp1	Mean	87	105	<20	<10	0.008	0.022	0.5	0.44	0.47	0.030	0.011	0.045	0.034	25	24	6	1	9	8	20	20
	Camp1	Median	90	109	<20	<10	0.006	0.020	0.5	0.44	0.47	0.025	0.011	0.043	0.031	26	25	5	1	9	8	20	20
	Camp1	Minimum	76	92	<20	<10	0.004	0.005	0.4	0.39	0.41	0.011	0.010	0.038	0.028	18	16	2	1	8	8	17	18
	Camp1	Maximum	90	109	<20	<10	0.016	0.044	0.5	0.50	0.54	0.060	0.013	0.056	0.046	32	28	12	3	9	9	21	21
	Camp1	SD	7	9	-	-	0.005	0.017	0.1	0.06	0.07	0.021	0.001	0.008	0.008	6	5	4	1	1	1	2	1
	Camp1	SE	4	4	-	-	0.003	0.008	0.0	0.03	0.04	0.011	0.001	0.004	0.004	3	3	2	1	0	0	1	1
	Camp1	n	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Nelson River s. nearshore	Camp2	Mean	85	103	<20	<10	0.006	0.027	0.5	0.44	0.48	0.033	0.013	0.043	0.030	31	26	5	2	9	8	20	20
	Camp2	Median	89	108	<20	<10	0.005	0.028	0.5	0.45	0.48	0.035	0.013	0.040	0.028	30	27	6	2	9	8	20	20
	Camp2	Minimum	69	85	<20	<10	0.003	0.006	0.4	0.39	0.41	0.009	0.010	0.034	0.019	21	17	2	1	8	8	17	17
	Camp2	Maximum	91	111	<20	<10	0.009	0.046	0.5	0.50	0.55	0.052	0.015	0.057	0.045	44	34	8	3	9	9	21	21
	Camp2	SD	10	12	-	-	0.003	0.016	0.1	0.06	0.07	0.018	0.002	0.010	0.011	10	8	3	1	1	1	2	2
	Camp2	SE	5	6	-	-	0.001	0.008	0.0	0.03	0.03	0.009	0.001	0.005	0.005	5	4	1	0	0	0	1	1
	Camp2	n	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

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			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Stephens Lake	STL1	Mean	92	111	<20	<10	0.009	0.020	0.5	0.47	0.50	0.029	0.011	0.037	0.026	31	32	6	2	9	8	20	20
	STL1	Median	93	112	<20	<10	0.007	0.014	0.5	0.49	0.52	0.030	0.010	0.036	0.025	31	30	6	2	9	8	20	20
	STL1	Minimum	75	92	<20	<10	<0.003	<0.005	0.3	0.33	0.34	<0.005	0.007	0.024	0.013	17	21	1	0	6	5	17	17
	STL1	Maximum	100	122	<20	<10	0.030	0.061	0.6	0.60	0.66	0.064	0.022	0.057	0.041	46	61	13	6	11	11	22	22
	STL1	SD	7	8	-	-	0.008	0.019	0.1	0.09	0.10	0.019	0.004	0.009	0.007	8	11	4	2	1	1	2	2
	STL1	SE	2	2	-	-	0.002	0.005	0.0	0.02	0.02	0.005	0.001	0.002	0.002	2	3	1	0	0	0	1	1
	STL1	n	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	8	8
Stephens Lake	STL2	Mean	-	-	-	-	0.009	0.017	0.5	0.48	0.51	0.026	0.013	0.034	0.022	36	35	5	2	8	8	-	-
	STL2	Median	-	-	-	-	0.007	0.006	0.5	0.49	0.51	0.023	0.010	0.038	0.022	32	30	5	1	8	8	-	-
	STL2	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.31	<0.005	0.006	0.022	0.003	23	20	1	0	6	6	-	-
	STL2	Maximum	-	-	-	-	0.022	0.057	0.7	0.68	0.70	0.062	0.035	0.050	0.033	92	63	17	6	10	10	-	-
	STL2	SD	-	-	-	-	0.007	0.019	0.1	0.10	0.11	0.020	0.007	0.009	0.008	16	12	5	2	1	1	-	-
	STL2	SE	-	-	-	-	0.002	0.005	0.0	0.03	0.03	0.005	0.002	0.002	0.002	4	3	1	0	0	0	-	-
	STL2	n	-	-	-	-	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	-	-
Stephens Lake	GT1	Mean	89	108	<20	<10	0.006	0.015	0.4	0.43	0.45	0.021	0.011	0.036	0.024	32	30	4	1	9	8	20	20
	GT1	Median	90	110	<20	<10	0.006	<0.005	0.4	0.40	0.41	0.014	0.010	0.037	0.026	32	29	3	1	9	8	21	21
	GT1	Minimum	73	89	<20	<10	<0.003	<0.005	0.3	0.30	0.30	<0.005	0.006	0.022	0.014	21	18	1	0	6	6	17	17
	GT1	Maximum	98	120	<20	<10	0.011	0.048	0.5	0.50	0.55	0.054	0.022	0.051	0.038	46	55	19	5	10	10	22	22
	GT1	SD	8	10	-	-	0.004	0.018	0.1	0.06	0.08	0.020	0.005	0.010	0.007	8	10	5	2	1	1	2	2
	GT1	SE	2	3	-	-	0.001	0.005	0.0	0.02	0.02	0.006	0.001	0.003	0.002	2	3	1	0	0	0	1	1
	GT1	n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	8	8
Long Spruce reservoir	NR3	Mean	-	-	-	-	0.005	0.016	0.4	0.41	0.43	0.021	0.012	0.033	0.022	35	30	4	1	9	9	-	-
	NR3	Median	-	-	-	-	0.005	0.007	0.4	0.40	0.43	0.014	0.011	0.034	0.021	33	29	3	1	9	9	-	-
	NR3	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.29	0.30	<0.005	0.006	0.019	0.012	20	18	1	0	8	7	-	-
	NR3	Maximum	-	-	-	-	0.015	0.047	0.5	0.50	0.54	0.051	0.022	0.048	0.032	48	52	19	6	10	10	-	-
	NR3	SD	-	-	-	-	0.004	0.018	0.1	0.08	0.09	0.019	0.005	0.009	0.006	10	9	5	2	1	1	-	-
	NR3	SE	-	-	-	-	0.001	0.005	0.0	0.02	0.03	0.005	0.002	0.003	0.002	3	3	1	0	0	0	-	-
	NR3	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Limestone reservoir	NR4	Mean	89	108	<20	<10	0.006	0.019	0.5	0.47	0.50	0.025	0.011	0.032	0.020	35	37	5	2	8	8	20	20
	NR4	Median	91	111	<20	<10	0.006	0.010	0.4	0.43	0.46	0.018	0.009	0.033	0.022	37	31	4	1	9	8	21	21
	NR4	Minimum	72	88	<20	<10	<0.003	<0.005	0.3	0.30	0.31	<0.005	0.006	0.016	0.010	21	23	1	0	7	7	17	17
	NR4	Maximum	99	120	<20	<10	0.016	0.048	1.0	1.00	1.01	0.064	0.022	0.047	0.030	49	70	17	6	9	10	23	22
	NR4	SD	8	10	-	-	0.005	0.017	0.2	0.18	0.17	0.020	0.005	0.009	0.006	10	15	5	2	1	1	2	2
	NR4	SE	2	3	-	-	0.001	0.005	0.1	0.05	0.05	0.006	0.002	0.003	0.002	3	4	1	0	0	0	1	1
	NR4	n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	8	8

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Nelson River	NR5	Mean	91	105	<20	<10	0.004	0.015	0.4	0.37	0.39	0.019	0.011	0.030	0.019	36	29	4	1	9	9	20	20
	NR5	Median	93	104	<20	<10	0.004	0.015	0.4	0.40	0.41	0.019	0.010	0.028	0.017	34	28	4	2	9	9	21	21
	NR5	Minimum	75	91	<20	<10	<0.002	<0.005	0.1	0.10	0.12	<0.005	0.007	0.020	0.012	26	11	1	0	8	8	17	17
	NR5	Maximum	99	121	<20	<10	0.007	0.036	0.5	0.50	0.54	0.043	0.020	0.044	0.028	50	42	8	3	11	12	22	22
	NR5	SD	7	11	-	-	0.002	0.011	0.1	0.12	0.12	0.012	0.004	0.007	0.005	8	9	2	1	1	1	2	2
	NR5	SE	2	3	-	-	0.001	0.003	0.0	0.04	0.04	0.004	0.001	0.002	0.002	2	3	1	0	0	0	1	1
	NR5	n	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	7	7
Nelson River	NR6	Mean	91	111	<20	<10	0.004	0.021	0.4	0.40	0.43	0.025	0.013	0.032	0.019	40	31	5	2	9	9	21	21
	NR6	Median	94	114	<20	<10	0.004	0.013	0.4	0.40	0.42	0.016	0.010	0.030	0.021	34	31	4	1	9	9	21	21
	NR6	Minimum	77	94	<20	<10	<0.002	<0.005	0.3	0.29	0.30	<0.005	0.006	0.019	0.001	20	19	0	0	7	7	18	18
	NR6	Maximum	100	122	<20	<10	0.010	0.064	0.5	0.50	0.55	0.070	0.029	0.047	0.025	97	43	26	6	11	10	23	23
	NR6	SD	7	8	-	-	0.003	0.020	0.1	0.07	0.07	0.023	0.007	0.008	0.007	20	7	7	2	1	1	2	2
	NR6	SE	2	2	-	-	0.001	0.006	0.0	0.02	0.02	0.007	0.002	0.002	0.002	6	2	2	0	0	0	1	1
	NR6	n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	8	8
Nelson River	NR7	Mean	-	-	-	-	0.005	0.016	0.4	0.44	0.46	0.021	0.011	0.037	0.026	29	29	5	1	9	9	-	-
	NR7	Median	-	-	-	-	0.005	0.007	0.4	0.40	0.42	0.011	0.010	0.035	0.026	28	27	3	1	9	9	-	-
	NR7	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.29	0.30	<0.005	0.005	0.023	0.015	19	17	1	0	7	7	-	-
	NR7	Maximum	-	-	-	-	0.009	0.048	0.6	0.59	0.65	0.055	0.021	0.054	0.038	41	41	20	5	10	10	-	-
	NR7	SD	-	-	-	-	0.003	0.019	0.1	0.09	0.10	0.021	0.005	0.010	0.007	8	7	5	1	1	1	-	-
	NR7	SE	-	-	-	-	0.001	0.005	0.0	0.03	0.03	0.006	0.002	0.003	0.002	2	2	2	0	0	0	-	-
	NR7	n	-	-	-	-	12	12	11	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Nelson River	NR8	Mean	-	-	-	-	0.005	0.014	0.4	0.42	0.44	0.018	0.010	0.033	0.023	30	31	4	1	9	9	-	-
	NR8	Median	-	-	-	-	0.004	<0.005	0.4	0.40	0.40	0.009	0.009	0.032	0.024	30	30	2	1	9	9	-	-
	NR8	Minimum	-	-	-	-	<0.003	<0.005	0.4	0.39	0.40	<0.005	0.005	0.025	0.017	16	22	1	0	8	7	-	-
	NR8	Maximum	-	-	-	-	0.010	0.049	0.6	0.59	0.65	0.055	0.023	0.048	0.030	48	40	17	5	10	10	-	-
	NR8	SD	-	-	-	-	0.003	0.018	0.1	0.06	0.07	0.020	0.005	0.007	0.004	9	6	5	1	1	1	-	-
	NR8	SE	-	-	-	-	0.001	0.005	0.0	0.02	0.02	0.006	0.002	0.002	0.001	3	2	1	0	0	0	-	-
	NR8	n	-	-	-	-	12	12	11	11	11	12	12	12	12	12	11	12	12	12	12	-	-
Stephens Lake - north	STL3	Mean	-	-	-	-	<0.003	<0.005	0.4	0.35	0.35	0.006	0.011	0.016	0.006	60	51	2	1	8	8	-	-
	STL3	Median	-	-	-	-	<0.003	<0.005	0.4	0.35	0.35	0.005	0.007	0.015	0.008	46	54	2	1	8	8	-	-
	STL3	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.30	<0.005	0.005	0.013	-0.002	38	30	0	0	6	6	-	-
	STL3	Maximum	-	-	-	-	0.004	0.006	0.4	0.40	0.41	0.010	0.024	0.022	0.008	109	64	4	2	9	9	-	-
	STL3	SD	-	-	-	-	-	-	0.1	0.06	0.06	0.004	0.009	0.004	0.005	33	14	2	1	1	1	-	-
	STL3	SE	-	-	-	-	-	-	0.0	0.03	0.03	0.002	0.004	0.002	0.003	17	7	1	0	1	1	-	-
	STL3	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Assean Lake	AL1	Mean	-	-	-	-	0.006	0.008	0.4	0.42	0.43	0.014	0.009	0.023	0.013	39	48	5	2	10	10	-	-
	AL1	Median	-	-	-	-	0.006	0.005	0.4	0.40	0.41	0.011	0.008	0.022	0.014	36	41	3	1	11	10	-	-
	AL1	Minimum	-	-	-	-	<0.002	<0.005	0.3	0.29	0.30	<0.005	<0.001	0.011	0.002	2	24	1	0	8	9	-	-
	AL1	Maximum	-	-	-	-	0.020	0.039	0.6	0.60	0.60	0.045	0.022	0.038	0.030	91	102	17	7	11	11	-	-
	AL1	SD	-	-	-	-	0.005	0.010	0.1	0.08	0.08	0.012	0.006	0.007	0.006	21	22	5	2	1	1	-	-
	AL1	SE	-	-	-	-	0.001	0.003	0.0	0.02	0.02	0.003	0.002	0.002	0.002	6	6	1	1	0	0	-	-
	AL1	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Assean Lake	AL2	Mean	-	-	-	-	0.007	0.010	0.5	0.44	0.46	0.017	0.008	0.020	0.012	41	54	9	2	11	11	-	-
	AL2	Median	-	-	-	-	0.008	0.007	0.4	0.39	0.41	0.013	0.008	0.019	0.011	43	49	4	1	11	10	-	-
	AL2	Minimum	-	-	-	-	<0.002	<0.005	0.4	0.39	0.40	<0.005	<0.001	0.013	0.006	3	30	1	0	9	9	-	-
	AL2	Maximum	-	-	-	-	0.010	0.045	0.6	0.60	0.61	0.053	0.016	0.030	0.019	73	88	49	7	14	15	-	-
	AL2	SD	-	-	-	-	0.003	0.012	0.1	0.07	0.07	0.013	0.004	0.004	0.004	17	17	14	2	2	2	-	-
	AL2	SE	-	-	-	-	0.001	0.003	0.0	0.02	0.02	0.004	0.001	0.001	0.001	5	5	4	1	0	1	-	-
	AL2	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Limestone River	LR1	Mean	-	-	-	-	0.004	0.011	0.4	0.41	0.43	0.015	0.007	0.014	0.007	49	74	6	2	14	14	-	-
	LR1	Median	-	-	-	-	0.004	0.006	0.4	0.40	0.41	0.009	0.006	0.013	0.007	53	69	3	1	15	15	-	-
	LR1	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.30	<0.005	0.003	0.008	0.003	29	47	1	0	9	9	-	-
	LR1	Maximum	-	-	-	-	0.008	0.045	0.5	0.50	0.54	0.048	0.010	0.021	0.015	67	111	21	9	19	19	-	-
	LR1	SD	-	-	-	-	0.002	0.015	0.1	0.06	0.07	0.016	0.002	0.004	0.004	15	24	7	2	3	3	-	-
	LR1	SE	-	-	-	-	0.001	0.004	0.0	0.02	0.02	0.005	0.001	0.001	0.001	4	7	2	1	1	1	-	-
	LR1	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
Angling River	AR1	Mean	-	-	-	-	0.005	0.012	0.5	0.48	0.49	0.016	0.006	0.012	0.006	48	94	7	3	15	15	-	-
	AR1	Median	-	-	-	-	0.005	0.007	0.5	0.50	0.50	0.011	0.006	0.012	0.007	48	93	6	2	16	16	-	-
	AR1	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.31	<0.005	<0.001	0.007	0.003	4	64	1	0	13	13	-	-
	AR1	Maximum	-	-	-	-	0.010	0.052	0.6	0.59	0.61	0.058	0.009	0.015	0.014	73	159	18	9	17	17	-	-
	AR1	SD	-	-	-	-	0.003	0.014	0.1	0.09	0.09	0.016	0.002	0.002	0.003	19	27	5	3	1	1	-	-
	AR1	SE	-	-	-	-	0.001	0.004	0.0	0.03	0.03	0.005	0.001	0.001	0.001	6	8	2	1	0	0	-	-
	AR1	n	-	-	-	-	12	12	11	11	11	12	12	12	12	12	11	12	12	12	12	-	-
Weir River	WR1	Mean	-	-	-	-	0.005	0.011	0.4	0.44	0.45	0.016	0.006	0.014	0.008	45	77	7	3	15	15	-	-
	WR1	Median	-	-	-	-	0.006	0.007	0.4	0.40	0.41	0.013	0.005	0.014	0.007	39	73	6	2	15	16	-	-
	WR1	Minimum	-	-	-	-	<0.003	<0.005	0.4	0.39	0.40	<0.005	0.003	0.008	0.002	17	49	1	0	9	9	-	-
	WR1	Maximum	-	-	-	-	0.009	0.043	0.6	0.59	0.61	0.048	0.014	0.020	0.015	88	122	17	5	18	18	-	-
	WR1	SD	-	-	-	-	0.002	0.012	0.1	0.08	0.08	0.012	0.003	0.004	0.004	23	25	5	2	3	3	-	-
	WR1	SE	-	-	-	-	0.001	0.003	0.0	0.02	0.02	0.004	0.001	0.001	0.001	6	7	1	0	1	1	-	-
	WR1	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-

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Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Aiken River	AK1	Mean	77	94	<20	<10	0.011	0.009	0.8	0.74	0.76	0.020	0.012	0.026	0.014	53	77	4	2	17	17	18	19
	AK1	Median	70	86	<20	<10	0.011	0.010	0.7	0.69	0.71	0.019	0.011	0.022	0.011	55	72	4	1	17	17	17	18
	AK1	Minimum	55	67	<20	<10	0.006	<0.005	0.6	0.59	0.61	0.011	0.009	0.012	0.003	25	43	2	1	14	14	12	12
	AK1	Maximum	115	141	<20	<10	0.018	0.014	1.0	0.98	1.01	0.030	0.022	0.052	0.039	75	131	6	4	20	20	26	27
	AK1	SD	19	24	-	-	0.004	0.004	0.1	0.12	0.12	0.006	0.004	0.013	0.011	17	31	1	1	2	2	5	5
	AK1	SE	7	8	-	-	0.002	0.002	0.0	0.04	0.04	0.002	0.002	0.005	0.004	6	11	0	0	1	1	2	2
	AK1	n	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Split Lake	SPL5	Mean	-	-	-	-	0.011	0.009	0.6	0.62	0.64	0.020	0.010	0.030	0.021	34	50	5	2	13	13	-	-
	SPL5	Median	-	-	-	-	0.006	0.007	0.6	0.60	0.62	0.017	0.009	0.026	0.018	31	51	3	1	13	13	-	-
	SPL5	Minimum	-	-	-	-	<0.002	<0.005	0.5	0.49	0.51	0.007	0.007	0.019	0.008	19	32	2	0	11	10	-	-
	SPL5	Maximum	-	-	-	-	0.040	0.027	0.8	0.79	0.81	0.047	0.015	0.043	0.035	65	69	15	4	18	18	-	-
	SPL5	SD	-	-	-	-	0.012	0.007	0.1	0.11	0.11	0.013	0.002	0.009	0.009	13	13	4	1	2	2	-	-
	SPL5	SE	-	-	-	-	0.004	0.002	0.0	0.03	0.03	0.004	0.001	0.003	0.003	4	4	1	0	1	1	-	-
	SPL5	n	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-
York Landing	YL1	Mean	93	111	<20	<10	0.006	0.008	0.6	0.55	0.56	0.013	0.013	0.033	0.020	39	41	3	1	10	10	20	20
	YL1	Median	95	110	<20	<10	0.003	<0.005	0.5	0.50	0.51	0.010	0.010	0.032	0.017	35	33	1	1	10	10	22	22
	YL1	Minimum	74	90	<20	<10	<0.003	<0.005	0.3	0.30	0.30	<0.005	0.007	0.021	0.004	20	21	1	0	7	7	5	5
	YL1	Maximum	106	130	<20	<10	0.016	0.033	1.1	1.08	1.10	0.040	0.028	0.047	0.033	88	76	9	3	11	12	24	24
	YL1	SD	11	14	-	-	0.005	0.011	0.2	0.20	0.20	0.012	0.007	0.010	0.009	18	16	3	1	1	1	6	6
	YL1	SE	3	4	-	-	0.001	0.003	0.1	0.06	0.06	0.004	0.002	0.003	0.003	5	5	1	0	0	0	2	2
	YL1	n	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	8	8
Two Goose Creek	TRIB1	Mean	-	-	-	-	0.008	<0.005	0.4	0.40	0.42	0.012	0.009	0.013	0.004	70	74	3	2	16	16	-	-
	TRIB1	Median	-	-	-	-	0.007	<0.005	0.4	0.39	0.41	0.011	0.009	0.013	0.005	65	71	3	2	16	17	-	-
	TRIB1	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.30	<0.005	0.006	0.010	0.001	58	60	1	1	13	13	-	-
	TRIB1	Maximum	-	-	-	-	0.024	0.008	0.5	0.49	0.50	0.027	0.011	0.018	0.007	90	90	5	3	19	20	-	-
	TRIB1	SD	-	-	-	-	0.007	-	0.1	0.06	0.06	0.007	0.002	0.003	0.002	11	13	1	1	2	2	-	-
	TRIB1	SE	-	-	-	-	0.002	-	0.0	0.02	0.02	0.003	0.001	0.001	0.001	4	4	1	0	1	1	-	-
	TRIB1	n	-	-	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	-	-
Portage Creek	TRIB2	Mean	-	-	-	-	0.045	0.012	0.6	0.53	0.59	0.056	0.010	0.020	0.010	51	67	16	5	18	17	-	-
	TRIB2	Median	-	-	-	-	0.006	0.010	0.6	0.59	0.61	0.019	0.010	0.019	0.009	56	68	4	2	16	15	-	-
	TRIB2	Minimum	-	-	-	-	<0.003	<0.005	0.4	0.29	0.41	0.007	0.005	0.014	0.005	26	43	1	1	14	14	-	-
	TRIB2	Maximum	-	-	-	-	0.312	0.025	0.7	0.69	0.70	0.318	0.014	0.031	0.023	74	82	88	23	24	22	-	-
	TRIB2	SD	-	-	-	-	0.108	0.009	0.1	0.13	0.09	0.106	0.003	0.005	0.006	18	12	30	7	4	3	-	-
	TRIB2	SE	-	-	-	-	0.038	0.003	0.0	0.05	0.03	0.038	0.001	0.002	0.002	6	4	11	3	1	1	-	-
	TRIB2	n	-	-	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	-	-

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
Rabbit Creek	TRIB3	Mean	-	-	-	-	0.005	<0.005	0.6	0.63	0.64	0.009	0.008	0.016	0.008	55	104	3	1	23	23	-	-
	TRIB3	Median	-	-	-	-	0.006	<0.005	0.6	0.60	0.60	0.009	0.009	0.013	0.005	67	111	3	2	24	23	-	-
	TRIB3	Minimum	-	-	-	-	<0.003	<0.005	0.6	0.59	0.60	<0.005	0.004	0.009	0.003	21	42	1	1	12	12	-	-
	TRIB3	Maximum	-	-	-	-	0.009	0.011	0.8	0.80	0.81	0.015	0.011	0.032	0.021	75	148	4	2	29	29	-	-
	TRIB3	SD	-	-	-	-	0.002	-	0.1	0.07	0.08	0.004	0.002	0.007	0.007	21	34	1	1	5	6	-	-
	TRIB3	SE	-	-	-	-	0.001	-	0.0	0.03	0.03	0.001	0.001	0.003	0.002	7	12	0	0	2	2	-	-
	TRIB3	n	-	-	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	-	-
Beaver Creek	BC1	Mean	-	-	-	-	0.005	0.017	0.5	0.47	0.49	0.022	0.004	0.008	0.004	50	161	23	6	23	23	-	-
	BC1	Median	-	-	-	-	0.005	0.012	0.5	0.49	0.51	0.018	0.005	0.009	0.003	50	124	14	6	23	22	-	-
	BC1	Minimum	-	-	-	-	0.004	0.009	0.4	0.39	0.41	0.013	<0.001	0.004	0.001	13	114	6	5	21	22	-	-
	BC1	Maximum	-	-	-	-	0.007	0.034	0.5	0.50	0.53	0.038	0.007	0.010	0.007	86	281	57	8	27	24	-	-
	BC1	SD	-	-	-	-	0.002	0.012	0.1	0.05	0.06	0.011	0.003	0.003	0.002	34	81	24	2	3	1	-	-
	BC1	SE	-	-	-	-	0.001	0.006	0.0	0.03	0.03	0.006	0.001	0.001	0.001	17	40	12	1	1	1	-	-
	BC1	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-
Swift Creek	SCK1	Mean	-	-	-	-	<0.003	0.014	0.4	0.40	0.41	0.016	0.004	0.008	0.004	48	163	5	2	16	17	-	-
	SCK1	Median	-	-	-	-	<0.003	<0.005	0.4	0.40	0.40	0.007	0.004	0.007	0.004	38	148	3	1	18	18	-	-
	SCK1	Minimum	-	-	-	-	<0.003	<0.005	0.3	0.30	0.35	<0.005	<0.001	0.003	0.000	17	59	2	1	12	13	-	-
	SCK1	Maximum	-	-	-	-	0.003	0.045	0.5	0.50	0.51	0.048	0.006	0.015	0.009	100	297	11	3	18	19	-	-
	SCK1	SD	-	-	-	-	-	0.021	0.1	0.08	0.07	0.021	0.003	0.005	0.004	36	103	4	1	3	3	-	-
	SCK1	SE	-	-	-	-	-	0.010	0.0	0.04	0.03	0.011	0.001	0.003	0.002	18	52	2	1	1	1	-	-
	SCK1	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-
Goose Creek	GC1	Mean	-	-	-	-	<0.003	<0.005	0.5	0.45	0.45	<0.005	0.003	0.005	0.002	53	258	5	2	19	19	-	-
	GC1	Median	-	-	-	-	<0.003	<0.005	0.5	0.45	0.45	<0.005	0.003	0.006	0.002	54	182	3	2	19	19	-	-
	GC1	Minimum	-	-	-	-	<0.003	<0.005	0.4	0.40	0.40	<0.005	<0.001	0.002	0.001	25	111	2	1	18	18	-	-
	GC1	Maximum	-	-	-	-	0.003	<0.005	0.5	0.50	0.50	0.006	0.006	0.008	0.004	80	556	11	3	20	20	-	-
	GC1	SD	-	-	-	-	-	-	0.1	0.06	0.06	-	0.002	0.003	0.001	28	201	4	1	1	1	-	-
	GC1	SE	-	-	-	-	-	-	0.0	0.03	0.03	-	0.001	0.001	0.001	14	101	2	0	0	0	-	-
	GC1	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-
Tiny Creek	TC1	Mean	-	-	-	-	0.003	0.018	0.5	0.52	0.54	0.021	0.004	0.010	0.006	33	161	24	5	21	21	-	-
	TC1	Median	-	-	-	-	0.004	0.019	0.5	0.50	0.52	0.022	0.004	0.011	0.006	35	118	19	5	21	21	-	-
	TC1	Minimum	-	-	-	-	<0.003	0.009	0.4	0.40	0.43	0.012	<0.001	0.004	0.004	13	72	7	3	19	20	-	-
	TC1	Maximum	-	-	-	-	0.004	0.027	0.7	0.70	0.71	0.030	0.006	0.013	0.011	50	337	53	7	22	22	-	-
	TC1	SD	-	-	-	-	0.001	0.010	0.2	0.15	0.14	0.009	0.002	0.004	0.003	20	123	21	1	1	1	-	-
	TC1	SE	-	-	-	-	0.001	0.005	0.1	0.07	0.07	0.005	0.001	0.002	0.002	10	62	11	1	1	0	-	-
	TC1	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Alkalinity				Nitrogen						Phosphorus				N:P Molar Ratios			Carbon			
			Total alkalinity ($CaCO_3$)	Bicarbonate alkalinity (HCO_3)	Carbonate alkalinity (CO_3)	Hydroxide alkalinity (OH)	Dissolved ammonia	Dissolved nitrate/ nitrite	TKN	Organic nitrogen[4]	TN [5]	DIN [6]	TDP	TP	TPP [7]	TDP fraction % of TP	TN:TP	DIN:DP	DIN:TP	TOC	DOC	DIC	TIC
#15 Creek	15C1	Mean	-	-	-	-	0.004	0.010	0.5	0.50	0.51	0.014	0.003	0.007	0.004	35	232	29	6	21	21	-	-
	15C1	Median	-	-	-	-	0.005	0.008	0.5	0.50	0.51	0.012	0.002	0.006	0.003	25	224	28	7	22	21	-	-
	15C1	Minimum	-	-	-	-	0.003	<0.005	0.4	0.40	0.41	0.008	<0.001	0.003	0.003	17	105	6	2	20	20	-	-
	15C1	Maximum	-	-	-	-	0.005	0.021	0.6	0.60	0.60	0.026	0.008	0.011	0.006	73	374	53	9	22	22	-	-
	15C1	SD	-	-	-	-	0.001	0.008	0.1	0.08	0.08	0.008	0.004	0.004	0.002	26	127	26	3	1	1	-	-
	15C1	SE	-	-	-	-	0.000	0.004	0.0	0.04	0.04	0.004	0.002	0.002	0.001	13	63	13	2	0	0	-	-
	15C1	n	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Burntwood River	SPL1	Mean	27	26	122	121	91	19	36.83	66	0.39	48	8.02	8.12	59.7	-	4	<1	14.3	12.24
	SPL1	Median	26	25	123	121	92	17	38.50	54	0.40	50	8.09	8.10	58.8	-	4	<1	13.8	12.40
	SPL1	Minimum	19	18	119	111	46	8	20.00	34	0.25	25	7.72	7.69	54.8	-	<1	<1	8.1	9.09
	SPL1	Maximum	47	44	124	136	120	30	53.00	155	0.50	70	8.25	8.55	65.6	-	5	2	19.8	16.85
	SPL1	SD	7	7	2	6	17	7	10.28	32	0.10	15	0.17	0.27	3.7	-	1	-	3.8	2.23
	SPL1	SE	2	2	1	2	5	2	2.97	9	0.05	4	0.04	0.08	1.1	-	0	-	1.0	0.56
	SPL1	n	16	16	4	16	12	16	12	13	4	12	16	13	12	-	16	12	16	16
NR u/s Kelsey GS	SPL9	Mean	22	21	312	313	195	14	18.00	37	-	18	8.24	8.16	124.5	-	6	<1	13.8	11.43
	SPL9	Median	21	21	317	319	195	14	17.00	38	-	15	8.26	8.24	125.0	-	6	<1	13.7	12.31
	SPL9	Minimum	18	17	293	284	170	9	12.00	25	-	15	8.17	7.85	120.0	-	4	<1	8.7	8.01
	SPL9	Maximum	27	26	319	328	220	19	26.00	47	-	25	8.29	8.31	128.0	-	8	1	18.9	13.10
	SPL9	SD	4	3	12	21	21	5	6.68	9	-	5	0.05	0.21	3.7	-	2	-	4.2	2.32
	SPL9	SE	2	2	6	10	10	2	3.34	5	-	3	0.03	0.11	1.8	-	1	-	2.1	1.16
	SPL9	n	4	4	4	4	4	4	4	4	-	4	4	4	4	-	4	4	4	4
NR d/n Kelsey GS	SPL2	Mean	24	21	310	302	198	13	22.97	39	0.55	20	8.14	8.26	123.2	-	6	2	15.1	11.00
	SPL2	Median	21	20	315	308	197	11	23.50	39	0.60	15	8.17	8.34	121.2	-	6	<1	14.5	10.86
	SPL2	Minimum	16	12	292	259	177	4	13.00	21	0.47	15	7.90	7.86	119.3	-	<1	<1	8.7	8.42
	SPL2	Maximum	48	44	317	325	220	27	37.00	56	0.60	37	8.28	8.49	131.0	-	13	10	20.3	13.68
	SPL2	SD	9	8	12	20	20	6	8.00	11	0.07	11	0.13	0.20	5.3	-	3	3	3.5	1.47
	SPL2	SE	2	2	6	5	10	1	2.31	3	0.03	5	0.03	0.06	2.6	-	1	1	0.9	0.37
	SPL2	n	16	16	4	16	4	16	12	13	5	4	16	13	4	-	16	12	16	16
Split Lake	SPL3	Mean	24	22	-	154	-	17	37.00	58	0.44	-	8.05	8.15	-	-	4	1	14.5	11.76
	SPL3	Median	23	22	-	134	-	15	37.50	62	0.44	-	8.09	8.22	-	-	4	<1	14.1	11.60
	SPL3	Minimum	17	16	-	113	-	10	26.00	28	0.18	-	7.82	7.58	-	-	2	<1	7.9	8.79
	SPL3	Maximum	32	30	-	263	-	26	52.00	83	0.70	-	8.22	8.54	-	-	8	3	19.7	16.23
	SPL3	SD	5	5	-	45	-	6	8.26	18	0.15	-	0.12	0.32	-	-	2	1	3.7	2.12
	SPL3	SE	1	1	-	13	-	2	2.92	6	0.05	-	0.03	0.11	-	-	1	0	1.1	0.61
	SPL3	n	12	12	-	12	-	12	8	9	10	-	12	9	-	-	12	8	12	12
Split Lake	SPL4	Mean	21	19	-	291	-	12	25.00	37	0.64	-	8.14	8.36	-	-	6	2	15.0	11.28
	SPL4	Median	21	20	-	299	-	11	24.50	35	0.60	-	8.17	8.46	-	-	6	<1	14.4	11.13
	SPL4	Minimum	12	12	-	249	-	6	14.00	20	0.48	-	7.94	7.87	-	-	2	<1	8.7	8.79
	SPL4	Maximum	32	29	-	317	-	25	35.00	55	1.00	-	8.28	8.52	-	-	11	7	19.8	15.08
	SPL4	SD	6	5	-	22	-	5	7.03	12	0.17	-	0.11	0.21	-	-	3	2	3.6	1.70
	SPL4	SE	2	1	-	6	-	2	2.49	4	0.07	-	0.03	0.07	-	-	1	1	1.0	0.49
	SPL4	n	12	12	-	12	-	12	8	9	7	-	12	9	-	-	12	8	12	12

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Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Split Lake	SPL6	Mean	22	21	-	285	-	12	26.50	39	0.57	-	8.15	8.40	-	-	7	3	14.4	11.84
	SPL6	Median	21	20	-	297	-	11	26.00	36	0.55	-	8.10	8.44	-	-	6	<1	14.4	12.00
	SPL6	Minimum	17	16	-	231	-	3	14.00	17	0.23	-	7.95	7.91	-	-	2	<1	6.9	8.90
	SPL6	Maximum	26	26	-	316	-	18	36.00	62	1.00	-	8.37	8.66	-	-	15	9	20.2	15.94
	SPL6	SD	3	3	-	28	-	4	7.89	15	0.29	-	0.14	0.23	-	-	5	4	4.1	2.18
	SPL6	SE	1	1	-	8	-	1	2.79	5	0.09	-	0.04	0.08	-	-	1	1	1.2	0.66
	SPL6	n	12	12	-	12	-	12	8	9	11	-	12	9	-	-	12	8	12	11
Split Lake	SPL7	Mean	23	22	274	250	167	14	27.50	45	0.51	35	8.13	8.32	104.3	-	6	1	14.0	11.88
	SPL7	Median	24	23	275	254	170	14	27.50	46	0.55	30	8.19	8.40	104.5	-	6	<1	13.9	11.86
	SPL7	Minimum	13	13	262	194	130	8	16.00	25	0.18	5	7.86	7.62	75.8	-	<1	<1	7.7	8.69
	SPL7	Maximum	32	31	285	283	200	20	39.00	64	0.90	120	8.28	8.58	148.0	-	14	4	19.2	15.96
	SPL7	SD	5	5	10	26	20	4	7.94	11	0.24	26	0.13	0.25	16.7	-	3	1	3.5	1.82
	SPL7	SE	1	1	5	7	5	1	2.29	3	0.08	7	0.03	0.07	4.2	-	1	0	0.9	0.49
	SPL7	n	16	16	4	15	16	16	12	13	9	16	16	13	16	-	16	12	15	14
Split Lake	SPL8	Mean	21	20	252	245	163	15	29.42	46	0.62	21	8.11	8.22	103.3	-	6	<1	13.8	11.42
	SPL8	Median	22	21	254	253	165	15	27.50	43	0.55	23	8.11	8.27	103.2	-	5	<1	14.1	10.80
	SPL8	Minimum	8	7	229	201	140	9	18.00	26	0.38	15	7.87	7.85	93.9	-	1	<1	7.2	8.58
	SPL8	Maximum	27	25	271	277	180	24	51.00	73	0.90	25	8.29	8.52	113.0	-	11	2	19.1	15.93
	SPL8	SD	5	4	20	24	17	4	8.94	12	0.20	5	0.13	0.22	9.6	-	3	-	3.9	1.97
	SPL8	SE	1	1	10	6	9	1	2.58	3	0.08	2	0.03	0.06	4.8	-	1	-	1.0	0.51
	SPL8	n	16	16	4	15	4	15	12	13	7	4	16	13	4	-	16	12	15	15
Clark Lake	CL1	Mean	23	22	280	258	178	15	28.42	43	0.62	19	8.14	8.24	114.0	-	6	2	13.9	11.51
	CL1	Median	24	22	283	259	175	14	27.00	42	0.63	20	8.18	8.39	113.0	-	5	<1	14.1	11.16
	CL1	Minimum	16	15	266	208	150	9	16.00	30	0.25	15	7.88	7.62	105.0	-	3	<1	7.7	8.70
	CL1	Maximum	32	29	290	298	210	28	45.00	59	0.90	20	8.33	8.65	125.0	-	12	9	18.9	15.19
	CL1	SD	4	4	11	25	25	5	8.50	10	0.23	3	0.13	0.30	8.9	-	2	2	3.6	1.83
	CL1	SE	1	1	6	7	13	1	2.45	3	0.09	1	0.03	0.08	4.4	-	1	1	0.9	0.47
	CL1	n	16	16	4	15	4	16	12	12	6	4	16	13	4	-	16	12	15	15
Nelson River	NR1	Mean	26	24	-	252	-	16	28.00	46	-	-	8.13	8.18	-	-	5	2	14.0	11.60
	NR1	Median	24	21	-	256	-	15	26.50	46	-	-	8.10	8.21	-	-	5	1	14.2	12.01
	NR1	Minimum	14	13	-	208	-	10	10.00	28	-	-	7.96	7.26	-	-	3	<1	7.7	8.63
	NR1	Maximum	83	80	-	299	-	23	45.00	66	-	-	8.38	8.67	-	-	10	6	18.9	15.16
	NR1	SD	16	15	-	27	-	4	9.40	11	-	-	0.13	0.36	-	-	2	2	3.7	1.78
	NR1	SE	4	4	-	7	-	1	2.71	3	-	-	0.03	0.10	-	-	1	1	0.9	0.46
	NR1	n	16	16	-	15	-	15	12	13	-	-	16	13	-	-	16	12	15	15

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Gull Lake	GL1	Mean	22	21	-	251	-	15	30.63	46	0.51	-	8.07	8.33	-	-	6	2	14.3	11.53
	GL1	Median	21	20	-	256	-	16	31.00	46	0.50	-	8.03	8.45	-	-	5	<1	14.5	10.94
	GL1	Minimum	12	11	-	204	-	8	18.00	28	0.15	-	7.91	7.88	-	-	3	<1	8.9	9.73
	GL1	Maximum	32	31	-	276	-	25	44.00	64	0.80	-	8.29	8.66	-	-	10	7	18.7	15.32
	GL1	SD	6	5	-	23	-	6	8.09	12	0.20	-	0.13	0.26	-	-	2	2	3.5	1.70
	GL1	SE	2	2	-	7	-	2	2.86	4	0.07	-	0.04	0.09	-	-	1	1	1.1	0.51
	GL1	n	12	12	-	11	-	11	8	9	8	-	12	9	-	-	12	8	11	11
Gull Lake	GL2	Mean	22	21	-	258	-	15	30.63	45	0.49	-	8.10	8.33	-	-	6	1	14.2	11.20
	GL2	Median	21	20	-	264	-	16	31.50	43	0.50	-	8.05	8.40	-	-	6	<1	14.0	11.09
	GL2	Minimum	12	11	-	209	-	10	18.00	27	0.20	-	7.96	7.61	-	-	4	<1	8.8	9.26
	GL2	Maximum	31	31	-	281	-	24	45.00	61	0.80	-	8.30	8.64	-	-	10	5	18.7	14.84
	GL2	SD	6	5	-	20	-	5	8.45	12	0.18	-	0.12	0.30	-	-	2	2	3.5	1.71
	GL2	SE	2	2	-	6	-	1	2.99	4	0.06	-	0.04	0.10	-	-	1	1	1.1	0.52
	GL2	n	12	12	-	10	-	11	8	9	8	-	12	9	-	-	12	8	11	11
Nelson River	NR2	Mean	21	20	271	257	168	16	27.97	45	0.25	26	8.11	8.28	110.8	-	6	1	13.9	11.65
	NR2	Median	21	20	270	263	163	15	27.33	45	0.25	23	8.13	8.30	110.5	-	6	<1	14.1	11.75
	NR2	Minimum	14	13	254	205	140	10	18.00	27	0.15	15	7.85	7.85	94.3	-	2	<1	7.2	8.53
	NR2	Maximum	28	27	289	290	210	28	43.33	58	0.35	60	8.26	8.54	130.0	-	12	8	18.7	15.32
	NR2	SD	4	4	16	22	23	5	7.44	10	0.14	11	0.12	0.22	11.2	-	2	2	3.7	1.81
	NR2	SE	1	1	8	6	6	1	2.15	3	0.10	3	0.03	0.06	2.8	-	1	1	1.0	0.47
	NR2	n	16	16	4	15	16	16	12	13	2	16	16	13	16	-	16	12	15	15
Nelson River n. nearshore	Camp1	Mean	23	22	-	244	153	18	34.50	50	0.48	43	8.18	8.41	106.6	-	5	3	15.1	13.46
	Camp1	Median	23	22	-	253	155	17	36.00	51	0.48	40	8.21	8.40	109.5	-	4	2	17.1	12.85
	Camp1	Minimum	21	19	-	216	130	11	25.00	35	0.48	40	8.04	8.37	96.2	-	3	<1	7.2	12.22
	Camp1	Maximum	27	25	-	255	170	25	41.00	62	0.48	50	8.25	8.47	111.0	-	7	8	19.0	15.94
	Camp1	SD	2	3	-	19	17	6	6.76	11	-	5	0.09	0.05	6.9	-	2	3	5.4	1.71
	Camp1	SE	1	1	-	9	9	3	3.38	6	-	3	0.05	0.02	3.5	-	1	2	2.7	0.85
	Camp1	n	4	4	-	4	4	4	4	4	1	4	4	4	4	-	4	4	4	4
Nelson River s. nearshore	Camp2	Mean	23	21	-	245	153	15	32.75	49	-	41	8.23	8.49	103.5	-	5	4	15.5	13.79
	Camp2	Median	22	21	-	254	155	16	32.00	47	-	43	8.26	8.49	104.5	-	4	3	17.3	13.05
	Camp2	Minimum	19	18	-	215	140	10	24.00	34	-	30	8.14	8.38	95.8	-	2	<1	7.9	12.42
	Camp2	Maximum	27	24	-	257	160	18	43.00	67	-	50	8.27	8.62	109.0	-	10	8	19.4	16.62
	Camp2	SD	3	3	-	20	10	4	7.85	14	-	10	0.06	0.10	5.7	-	3	4	5.3	1.93
	Camp2	SE	2	2	-	10	5	2	3.92	7	-	5	0.03	0.05	2.8	-	2	2	2.6	0.97
	Camp2	n	4	4	-	4	4	4	4	4	-	4	4	4	4	-	4	4	4	4

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Stephens Lake	STL1	Mean	22	21	274	260	178	15	28.06	46	0.54	26	8.16	8.29	107.8	-	6	2	14.3	11.60
	STL1	Median	22	20	279	261	170	15	27.67	42	0.53	23	8.17	8.38	107.0	-	6	<1	15.1	11.71
	STL1	Minimum	14	12	256	207	130	9	17.00	25	0.30	15	7.95	7.69	88.7	-	2	<1	6.9	8.71
	STL1	Maximum	32	32	282	292	300	23	41.00	95	0.90	60	8.31	8.51	123.0	-	12	7	19.9	16.05
	STL1	SD	5	5	12	23	38	4	7.75	17	0.16	12	0.12	0.24	9.4	-	3	2	4.3	1.97
	STL1	SE	1	1	6	6	10	1	2.24	5	0.05	3	0.03	0.07	2.3	-	1	1	1.1	0.49
	STL1	n	16	16	4	16	16	16	12	13	9	16	16	13	16	-	16	12	16	16
Stephens Lake	STL2	Mean	21	20	-	255	-	11	23.67	38	0.57	-	8.12	8.28	-	-	5	2	14.0	11.63
	STL2	Median	19	18	-	254	-	10	25.50	39	0.60	-	8.14	8.29	-	-	6	<1	14.9	11.86
	STL2	Minimum	14	13	-	204	-	3	12.00	20	0.30	-	7.88	7.88	-	-	2	<1	7.4	8.61
	STL2	Maximum	35	34	-	296	-	20	35.00	57	0.90	-	8.29	8.52	-	-	10	6	19.8	15.52
	STL2	SD	6	5	-	25	-	4	7.24	12	0.19	-	0.12	0.20	-	-	2	2	4.3	1.92
	STL2	SE	1	1	-	6	-	1	2.09	3	0.06	-	0.03	0.06	-	-	1	1	1.1	0.48
	STL2	n	16	16	-	16	-	15	12	13	9	-	16	13	-	-	16	12	16	16
Stephens Lake	GT1	Mean	24	23	271	252	158	10	22.42	35	0.52	28	8.17	8.25	105.7	-	6	2	13.7	11.77
	GT1	Median	24	21	274	255	160	10	23.00	32	0.49	28	8.22	8.45	106.5	-	5	<1	14.4	12.11
	GT1	Minimum	18	17	251	204	130	4	12.00	17	0.30	15	7.97	7.24	90.5	-	2	<1	6.8	8.51
	GT1	Maximum	31	31	284	296	190	14	33.00	53	0.78	50	8.28	8.52	123.0	-	16	6	19.2	15.08
	GT1	SD	4	4	14	28	16	3	7.06	13	0.20	11	0.11	0.41	9.3	-	4	2	4.4	1.96
	GT1	SE	1	1	7	9	5	1	2.04	4	0.10	3	0.03	0.14	2.7	-	1	1	1.3	0.57
	GT1	n	12	12	4	11	12	12	12	9	4	12	12	9	12	-	12	12	12	12
Long Spruce reservoir	NR3	Mean	26	25	-	252	-	10	21.08	37	-	-	8.14	8.27	-	0.8	6	2	13.6	11.76
	NR3	Median	25	25	-	252	-	9	21.00	34	-	-	8.12	8.34	-	0.9	6	<1	14.2	12.18
	NR3	Minimum	21	20	-	201	-	5	11.00	17	-	-	7.94	7.73	-	0.5	<1	<1	8.0	8.24
	NR3	Maximum	33	31	-	292	-	19	31.00	71	-	-	8.30	8.59	-	1.1	8	8	19.6	14.95
	NR3	SD	4	4	-	30	-	4	6.79	17	-	-	0.12	0.29	-	0.3	3	3	4.5	2.18
	NR3	SE	1	1	-	9	-	1	1.96	6	-	-	0.03	0.10	-	0.1	1	1	1.3	0.63
	NR3	n	12	12	-	12	-	12	12	9	-	-	12	9	-	4	12	12	12	12
Limestone reservoir	NR4	Mean	23	22	270	252	157	9	20.41	36	-	26	8.13	8.21	101.1	-	5	2	13.3	11.48
	NR4	Median	22	20	275	253	153	9	21.00	34	-	23	8.18	8.28	102.0	-	6	<1	13.6	11.54
	NR4	Minimum	15	15	247	204	130	4	11.00	13	-	17	7.95	7.77	78.4	-	<1	<1	5.0	8.18
	NR4	Maximum	33	32	283	295	180	17	31.00	74	-	50	8.29	8.47	120.0	-	8	10	19.7	14.98
	NR4	SD	5	4	16	31	17	4	6.66	18	-	10	0.12	0.23	11.3	-	2	3	4.8	2.27
	NR4	SE	1	1	8	9	5	1	1.92	6	-	3	0.03	0.08	3.3	-	1	1	1.4	0.65
	NR4	n	12	12	4	12	12	12	12	9	-	12	12	9	12	-	12	12	12	12

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Nelson River	NR5	Mean	35	31	271	248	159	8	19.10	30	-	28	8.24	8.39	102.3	0.8	4	2	13.7	12.31
	NR5	Median	27	26	277	243	160	7	19.50	28	-	25	8.20	8.35	100.0	0.9	4	1	13.5	12.24
	NR5	Minimum	21	20	246	208	130	<2	12.00	16	-	20	7.87	7.72	80.4	0.4	1	<1	6.1	7.61
	NR5	Maximum	107	85	286	293	200	14	27.00	49	-	50	8.69	8.88	117.0	1.1	7	7	23.1	16.18
	NR5	SD	24	18	17	26	21	4	4.46	10	-	9	0.21	0.33	10.7	0.3	2	2	5.1	2.45
	NR5	SE	7	5	9	8	7	1	1.41	4	-	3	0.06	0.11	3.2	0.1	1	1	1.5	0.74
	NR5	n	11	11	4	10	10	11	10	8	-	11	11	9	11	4	11	11	11	11
Nelson River	NR6	Mean	26	25	271	251	162	9	18.11	33	-	23	8.15	8.39	102.1	0.9	5	2	13.0	11.26
	NR6	Median	26	25	275	250	155	8	18.50	33	-	23	8.17	8.43	104.0	0.9	4	1	12.7	11.56
	NR6	Minimum	16	16	248	200	130	5	8.30	15	-	15	7.95	7.91	82.1	0.5	2	<1	7.7	8.18
	NR6	Maximum	35	35	287	291	200	17	29.00	55	-	30	8.31	8.72	114.0	1.2	9	9	18.5	13.45
	NR6	SD	6	6	16	31	20	4	7.19	12	-	6	0.11	0.23	10.5	0.3	2	3	4.3	1.69
	NR6	SE	2	2	8	10	6	1	2.08	4	-	2	0.03	0.08	3.0	0.1	1	1	1.2	0.49
	NR6	n	12	12	4	10	12	12	12	9	-	12	12	9	12	4	12	12	12	12
Nelson River	NR7	Mean	24	23	-	254	-	13	23.58	40	-	-	8.20	8.45	-	0.8	6	2	13.2	12.09
	NR7	Median	22	22	-	254	-	12	24.00	41	-	-	8.17	8.51	-	0.8	7	<1	13.3	12.90
	NR7	Minimum	18	16	-	203	-	9	14.00	26	-	-	8.01	7.84	-	0.4	1	<1	5.7	8.71
	NR7	Maximum	32	31	-	296	-	27	32.00	65	-	-	8.45	8.81	-	1.2	10	8	19.3	15.40
	NR7	SD	5	5	-	32	-	5	6.37	12	-	-	0.15	0.27	-	0.3	3	3	4.8	2.25
	NR7	SE	1	1	-	10	-	1	1.84	4	-	-	0.04	0.09	-	0.2	1	1	1.4	0.65
	NR7	n	12	12	-	11	-	12	12	9	-	-	12	9	-	4	12	12	12	12
Nelson River	NR8	Mean	25	24	-	252	-	14	23.00	44	-	-	8.25	8.54	-	0.8	6	2	13.1	12.46
	NR8	Median	26	25	-	255	-	13	23.00	43	-	-	8.22	8.57	-	0.8	6	<1	13.3	13.02
	NR8	Minimum	18	16	-	202	-	5	15.00	27	-	-	7.99	8.04	-	0.4	2	<1	6.1	9.06
	NR8	Maximum	29	29	-	294	-	30	32.00	65	-	-	8.55	8.91	-	1.1	10	10	20.1	16.23
	NR8	SD	3	4	-	30	-	7	6.30	11	-	-	0.17	0.25	-	0.3	2	3	4.9	2.33
	NR8	SE	1	1	-	9	-	2	1.82	4	-	-	0.05	0.08	-	0.1	1	1	1.4	0.70
	NR8	n	11	11	-	11	-	12	12	9	-	-	12	9	-	4	12	12	12	11
Stephens Lake - north	STL3	Mean	26	26	-	281	-	7	9.90	20	-	-	8.19	8.19	-	-	2	<1	10.3	12.30
	STL3	Median	24	23	-	280	-	4	6.40	15	-	-	8.26	8.14	-	-	2	<1	9.5	13.08
	STL3	Minimum	23	23	-	269	-	3	3.80	10	-	-	7.91	7.94	-	-	1	<1	6.0	8.54
	STL3	Maximum	35	34	-	294	-	15	23.00	42	-	-	8.31	8.54	-	-	3	<1	16.2	14.50
	STL3	SD	6	6	-	12	-	6	8.82	15	-	-	0.19	0.25	-	-	1	-	5.1	2.63
	STL3	SE	3	3	-	6	-	3	4.41	7	-	-	0.09	0.13	-	-	0	-	2.5	1.32
	STL3	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Assean Lake	AL1	Mean	28	27	-	209	-	9	13.41	21	0.93	-	8.19	8.44	-	-	3	2	14.4	11.76
	AL1	Median	28	27	-	210	-	7	11.50	21	0.90	-	8.17	8.56	-	-	3	1	15.6	11.19
	AL1	Minimum	21	21	-	159	-	5	3.10	11	0.45	-	8.02	7.90	-	-	<1	<1	5.8	9.02
	AL1	Maximum	33	32	-	257	-	20	29.00	36	1.60	-	8.40	8.76	-	-	6	4	17.7	16.49
	AL1	SD	4	3	-	31	-	5	8.26	9	0.33	-	0.14	0.31	-	-	1	1	3.7	2.09
	AL1	SE	1	1	-	10	-	1	2.92	3	0.10	-	0.04	0.11	-	-	0	0	1.2	0.66
	AL1	n	12	12	-	10	-	11	8	8	10	-	12	8	-	-	12	8	10	10
Assean Lake	AL2	Mean	29	28	-	184	-	4	6.08	10	1.55	-	8.07	8.30	-	-	3	2	14.7	11.51
	AL2	Median	30	29	-	190	-	4	5.90	8	1.60	-	8.07	8.39	-	-	3	<1	15.6	11.17
	AL2	Minimum	21	21	-	117	-	2	2.00	3	0.65	-	7.76	7.62	-	-	2	<1	6.4	8.94
	AL2	Maximum	36	34	-	247	-	7	11.00	18	2.20	-	8.30	8.70	-	-	4	7	18.5	15.53
	AL2	SD	4	4	-	38	-	2	2.73	5	0.48	-	0.16	0.35	-	-	1	2	3.5	1.93
	AL2	SE	1	1	-	12	-	0	0.97	2	0.16	-	0.05	0.12	-	-	0	1	1.1	0.61
	AL2	n	12	12	-	10	-	11	8	8	9	-	12	8	-	-	12	8	10	10
Limestone River	LR1	Mean	39	37	-	272	-	3	3.04	5	-	-	8.22	8.43	-	3.3	2	<1	12.8	12.82
	LR1	Median	39	37	-	279	-	<2	2.70	3	-	-	8.23	8.44	-	3.5	2	<1	15.6	13.68
	LR1	Minimum	26	26	-	186	-	<2	1.10	0	-	-	7.92	7.81	-	2.3	<1	<1	3.6	8.94
	LR1	Maximum	56	55	-	380	-	7	6.10	13	-	-	8.48	8.73	-	4.0	8	1	19.1	19.01
	LR1	SD	8	8	-	59	-	2	1.55	5	-	-	0.15	0.28	-	0.8	2	-	6.1	3.15
	LR1	SE	2	2	-	18	-	1	0.45	2	-	-	0.04	0.09	-	0.4	1	-	1.8	0.95
	LR1	n	12	12	-	11	-	12	12	9	-	-	12	9	-	4	12	12	11	11
Angling River	AR1	Mean	39	37	-	157	-	2	2.27	3	-	-	8.05	8.28	-	2.3	2	<1	12.5	12.22
	AR1	Median	38	37	-	159	-	<2	2.05	3	-	-	8.08	8.36	-	2.3	2	<1	14.9	12.00
	AR1	Minimum	27	27	-	102	-	<2	1.40	0	-	-	7.80	7.75	-	1.7	<1	<1	1.9	9.10
	AR1	Maximum	51	50	-	199	-	6	5.00	9	-	-	8.36	8.62	-	2.7	4	2	22.9	16.84
	AR1	SD	7	7	-	35	-	2	1.01	3	-	-	0.16	0.30	-	0.4	1	-	6.5	2.49
	AR1	SE	2	2	-	12	-	0	0.29	1	-	-	0.05	0.10	-	0.2	0	-	1.9	0.72
	AR1	n	11	11	-	9	-	12	12	9	-	-	12	9	-	4	12	12	12	12
Weir River	WR1	Mean	39	38	-	228	-	4	3.08	6	-		8.15	8.40	-	2.5	2	<1	11.6	12.79
	WR1	Median	39	38	-	220	-	4	3.15	4	-		8.16	8.42	-	2.8	2	<1	14.2	12.16
	WR1	Minimum	27	26	-	142	-	<1	0.70	0	-		7.82	7.62	-	1.7	<1	<1	1.6	8.81
	WR1	Maximum	53	52	-	333	-	8	5.70	14	-		8.58	8.82	-	2.9	6	2	17.1	19.25
	WR1	SD	9	9	-	60	-	2	1.48	5	-		0.21	0.34	-	0.6	2	-	5.9	3.09
	WR1	SE	3	3	-	19	-	1	0.43	2	-		0.06	0.11	-	0.3	0	-	1.7	0.89
	WR1	n	12	12	-	10	-	12	12	9	-		12	9	-	4	12	12	12	12

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Aiken River	AK1	Mean	27	27	-	160	118	7	6.25	10	1.20	66	7.79	8.22	83.1	-	5	3	14.5	11.23
	AK1	Median	29	28	-	146	120	4	3.00	8	0.99	65	7.83	8.21	77.8	-	4	1	16.2	11.45
	AK1	Minimum	20	20	-	111	94	<2	1.10	2	0.75	40	7.45	7.98	62.0	-	<1	<1	4.4	8.50
	AK1	Maximum	34	33	-	240	150	18	17.00	20	2.08	100	8.15	8.49	118.0	-	10	10	21.8	16.72
	AK1	SD	5	5	-	45	18	6	6.29	9	0.60	17	0.28	0.19	19.0	-	3	3	6.9	2.77
	AK1	SE	2	2	-	16	6	2	2.23	4	0.30	6	0.10	0.08	6.7	-	1	1	2.4	0.98
	AK1	n	8	8	-	8	8	8	8	5	4	8	8	5	8	-	8	8	8	8
Split Lake	SPL5	Mean	26	25	-	205	-	8	13.74	18	0.91	-	7.97	8.23	-	-	6	1	13.9	11.37
	SPL5	Median	26	25	-	202	-	8	13.50	16	0.90	-	7.92	8.24	-	-	6	<1	14.6	10.90
	SPL5	Minimum	16	16	-	122	-	3	8.00	5	0.49	-	7.63	7.30	-	-	3	<1	4.3	8.23
	SPL5	Maximum	35	33	-	278	-	15	20.00	32	1.60	-	8.44	8.79	-	-	13	5	21.1	17.13
	SPL5	SD	6	5	-	54	-	3	4.11	8	0.38	-	0.25	0.40	-	-	3	2	5.1	2.55
	SPL5	SE	2	2	-	16	-	1	1.45	3	0.13	-	0.07	0.13	-	-	1	1	1.5	0.74
	SPL5	n	12	12	-	12	-	12	8	9	9	-	12	9	-	-	12	8	12	12
York Landing	YL1	Mean	22	22	281	270	169	8	17.16	28	0.69	31	8.13	8.38	107.4	-	5	2	13.2	12.40
	YL1	Median	22	21	302	274	170	8	19.00	25	0.65	35	8.04	8.44	104.0	-	6	<1	13.4	12.54
	YL1	Minimum	9	8	237	209	140	4	6.80	15	0.35	15	7.89	8.01	91.8	-	2	<1	6.7	9.33
	YL1	Maximum	35	35	305	316	220	15	26.00	54	0.98	50	8.39	8.78	124.0	-	9	20	20.3	15.98
	YL1	SD	7	7	38	42	23	3	6.91	12	0.28	10	0.19	0.27	11.7	-	3	6	4.6	1.90
	YL1	SE	2	2	22	13	7	1	2.08	4	0.12	3	0.06	0.10	3.5	-	1	2	1.4	0.57
	YL1	n	11	11	3	11	11	11	11	8	5	11	11	8	11	-	11	11	11	11
Two Goose Creek	TRIB1	Mean	47	46	-	141	-	<1	1.53	3	-	-	7.71	7.70	-	-	1	<1	11.3	12.99
	TRIB1	Median	47	46	-	141	-	<1	1.40	1	-	-	7.70	7.89	-	-	1	<1	12.6	12.64
	TRIB1	Minimum	34	32	-	102	-	<1	1.00	0	-	-	7.40	6.74	-	-	<1	<1	3.3	8.78
	TRIB1	Maximum	63	62	-	181	-	2	2.20	14	-	-	8.12	8.32	-	-	4	2	18.0	17.46
	TRIB1	SD	10	10	-	27	-	-	0.39	5	-	-	0.22	0.55	-	-	1	-	5.3	2.73
	TRIB1	SE	3	3	-	9	-	-	0.14	2	-	-	0.08	0.19	-	-	0	-	1.9	0.96
	TRIB1	n	8	8	-	8	-	8	8	8	-	-	8	8	-	-	8	8	8	8
Portage Creek	TRIB2	Mean	40	35	-	125	-	2	2.90	10	-	-	7.67	7.65	-	-	2	1	12.3	12.21
	TRIB2	Median	39	36	-	102	-	<1	2.70	4	-	-	7.62	7.69	-	-	1	1	13.1	12.72
	TRIB2	Minimum	28	26	-	80	-	<1	1.60	1	-	-	7.47	7.17	-	-	1	1	4.6	7.72
	TRIB2	Maximum	61	43	-	204	-	6	5.40	54	-	-	8.17	8.27	-	-	5	4	17.6	14.56
	TRIB2	SD	10	6	-	46	-	2	1.29	18	-	-	0.22	0.42	-	-	1	1	4.8	2.36
	TRIB2	SE	4	2	-	16	-	1	0.46	6	-	-	0.08	0.15	-	-	0	0	1.7	0.83
	TRIB2	n	8	8	-	8	-	8	8	8	-	-	8	8	-	-	8	8	8	8

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
Rabbit Creek	TRIB3	Mean	42	41	-	168	-	2	3.78	7	-	-	7.61	7.63	-	-	2	<1	12.1	11.86
	TRIB3	Median	41	41	-	159	-	<1	2.35	3	-	-	7.52	7.42	-	-	2	<1	12.8	11.19
	TRIB3	Minimum	24	23	-	123	-	<1	0.50	0	-	-	7.09	6.98	-	-	<1	<1	5.4	7.09
	TRIB3	Maximum	57	56	-	268	-	6	13.00	40	-	-	8.49	8.64	-	-	4	<1	17.7	17.58
	TRIB3	SD	10	10	-	46	-	2	4.11	13	-	-	0.46	0.58	-	-	1	-	4.4	4.26
	TRIB3	SE	4	4	-	18	-	1	1.45	5	-	-	0.16	0.21	-	-	0	-	1.6	1.51
	TRIB3	n	8	8	-	7	-	8	8	8	-	-	8	8	-	-	8	8	8	8
Beaver Creek	BC1	Mean	58	55	-	149	-	2	1.73	9	-	-	7.85	7.51	-	-	<1	<1	6.6	14.02
	BC1	Median	58	56	-	135	-	2	1.50	8	-	-	7.84	7.61	-	-	<1	<1	7.3	14.73
	BC1	Minimum	52	50	-	85	-	<2	1.30	0	-	-	7.72	6.53	-	-	<1	<1	0.8	9.87
	BC1	Maximum	63	60	-	243	-	4	2.60	20	-	-	8.01	8.30	-	-	<1	<1	11.0	16.75
	BC1	SD	6	5	-	68	-	2	0.59	10	-	-	0.12	0.74	-	-	-	-	4.3	2.94
	BC1	SE	3	2	-	34	-	1	0.30	5	-	-	0.06	0.37	-	-	-	-	2.1	1.47
	BC1	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4
Swift Creek	SCK1	Mean	48	46	-	177	-	<2	0.64	1	-	-	7.95	7.79	-	-	<1	<1	7.7	13.70
	SCK1	Median	49	45	-	165	-	<2	0.76	1	-	-	7.89	7.81	-	-	<1	<1	8.6	14.38
	SCK1	Minimum	42	41	-	108	-	<2	0.20	0	-	-	7.85	7.18	-	-	<1	<1	0.7	9.43
	SCK1	Maximum	53	52	-	270	-	<2	0.85	2	-	-	8.18	8.37	-	-	<1	<1	12.9	16.60
	SCK1	SD	5	6	-	69	-	-	0.30	1	-	-	0.15	0.50	-	-	-	-	5.1	3.03
	SCK1	SE	2	3	-	34	-	-	0.15	0	-	-	0.08	0.25	-	-	-	-	2.5	1.52
	SCK1	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4
Goose Creek	GC1	Mean	50	50	-	146	-	<2	0.86	2	-	-	7.98	7.98	-	-	<1	<1	8.4	13.70
	GC1	Median	50	50	-	146	-	<2	0.75	2	-	-	7.96	8.03	-	-	<1	<1	9.2	14.22
	GC1	Minimum	42	42	-	93	-	<2	0.55	0	-	-	7.85	7.31	-	-	<1	<1	0.9	9.47
	GC1	Maximum	59	58	-	199	-	2	1.40	3	-	-	8.15	8.53	-	-	<1	<1	14.5	16.90
	GC1	SD	8	8	-	44	-	-	0.37	1	-	-	0.13	0.50	-	-	-	-	5.6	3.10
	GC1	SE	4	4	-	22	-	-	0.19	1	-	-	0.06	0.25	-	-	-	-	2.8	1.55
	GC1	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4
Tiny Creek	TC1	Mean	48	46	-	133	-	4	2.93	8	-	-	7.88	7.77	-	-	<1	<1	6.9	13.67
	TC1	Median	49	47	-	124	-	4	3.05	8	-	-	7.86	7.75	-	-	<1	<1	7.6	14.39
	TC1	Minimum	35	34	-	95	-	<1	0.70	1	-	-	7.81	7.30	-	-	<1	<1	0.5	8.87
	TC1	Maximum	59	55	-	189	-	7	4.90	16	-	-	8.00	8.26	-	-	<1	1	12.0	17.02
	TC1	SD	11	9	-	43	-	3	2.19	6	-	-	0.08	0.40	-	-	-	-	4.8	3.49
	TC1	SE	6	5	-	21	-	2	1.09	3	-	-	0.04	0.20	-	-	-	-	2.4	1.75
	TC1	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4

Table 2H-1: Summary statistics for routine *in situ* and laboratory parameters measured in the study area: open water seasons, 2001–2004. Units in mg/L unless otherwise indicated

Waterbody	Site ID		Organic Carbon: N ratios		Lab Cond. (µmhos/cm)	*In situ* spec. cond. (µS/cm)	TDS	TSS	Lab turb. (NTU)	*In situ* turb (NTU)	Secchi disk depth (m)	True Color (TCU)	Lab pH	*In situ* pH	Hardness as $CaCO_3$	Dissolved Reactive Silica	Chlor *a* (µg/L)	Pheophytin (µg/L)	*In situ* temp. (°C)	DO
			TOC:ON	TOC:TN																
#15 Creek	15C1	Mean	51	49	-	104	-	<2	0.77	2	-	-	7.73	7.62	-	-	<1	<1	7.9	13.97
	15C1	Median	52	50	-	92	-	<2	0.78	2	-	-	7.69	7.61	-	-	<1	<1	8.8	14.56
	15C1	Minimum	41	41	-	64	-	<2	0.52	0	-	-	7.61	6.96	-	-	<1	<1	0.4	9.91
	15C1	Maximum	59	57	-	168	-	2	1.00	5	-	-	7.93	8.28	-	-	1	1	13.4	16.85
	15C1	SD	7	7	-	45	-	-	0.20	2	-	-	0.15	0.54	-	-	-	-	5.4	2.91
	15C1	SE	4	3	-	23	-	-	0.10	1	-	-	0.07	0.27	-	-	-	-	2.7	1.46
	15C1	n	4	4	-	4	-	4	4	4	-	-	4	4	-	-	4	4	4	4

TKN = total Kjeldahl nitrogen, TN = total nitrogen, DIN = dissolved inorganic nitrogen, TDP = total dissolved phosphorus, TP = total phosphorus, TPP = total particulate phosphorus, TOC = total organic carbon, DOC = dissolved organic carbon, DIC = dissolved inorganic carbon, TIC = total inorganic carbon, TDS = total dissolved solids, TSS = total suspended solids, DO = dissolved oxygen.

1. SD=standard deviation.
2. SE=standard error.
3. N=sample size.
4. Calculated as TKN - ammonia.
5. Calculated as TKN + nitrate/nitrite.
6. Calculated as ammonia + nitrate/nitrite.
7. Calculated as TP - DP.

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Chloride	Fluoride	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium [1]	Cadmium [2]	Calcium	Cesium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Magnesium
Burntwood River	SPL1	Mean	5	0.1	9	1.85	<0.001	<0.0005	0.0257	<0.001	<0.0001	<0.03	<0.0002	<0.00002	16.0	0.0002	0.003	0.0007	0.003	1.43	0.0007	<0.01	0.0283	4.83
	SPL1	Median	5	0.1	11	1.81	<0.001	<0.0005	0.0267	<0.001	<0.0001	<0.03	<0.0002	<0.00002	15.8	0.0002	0.003	0.0007	0.004	1.34	0.0008	<0.01	0.0267	4.78
	SPL1	Minimum	5	<0.1	5	1.28	<0.001	<0.0005	0.0205	<0.001	<0.0001	<0.03	<0.0002	<0.00002	14.5	0.0001	0.002	0.0004	0.001	0.93	<0.0005	<0.01	0.0170	4.51
	SPL1	Maximum	5	0.3	11	2.74	<0.001	0.0006	0.0320	<0.001	<0.0001	0.04	<0.0002	0.00003	17.7	0.0003	0.004	0.0013	0.004	2.03	0.0013	<0.01	0.0402	5.25
	SPL1	SD[3]	0.2	0.09	2.7	0.45	-	-	0.0038	-	-	0.01	-	-	1.1	0.00010	0.0008	0.0003	0.001	0.35	0.0003	-	0.0069	0.30
	SPL1	SE[4]	0.1	0.03	0.8	0.13	-	-	0.0011	-	-	0.00	-	-	0.3	0.00005	0.0002	0.0001	0.000	0.10	0.0001	-	0.0020	0.09
	SPL1	n[5]	12	8	12	12	12	12	12	12	4	12	4	8	12	4	12	12	12	12	12	4	12	12
NR u/s Kelsey GS	SPL9	Mean	20	-	20	1.18	<0.001	0.0015	0.0431	<0.001	<0.0001	0.03	-	<0.00002	30.2	<0.0001	0.002	0.0004	0.004	0.74	0.0006	<0.01	0.0187	11.95
	SPL9	Median	20	-	20	1.14	<0.001	0.0015	0.0425	<0.001	<0.0001	0.03	-	<0.00002	30.2	<0.0001	0.003	0.0004	0.003	0.69	0.0006	<0.01	0.0184	12.00
	SPL9	Minimum	17	-	19	0.85	<0.001	0.0012	0.0393	<0.001	<0.0001	<0.03	-	<0.00002	29.4	<0.0001	0.001	<0.0002	0.003	0.53	<0.0005	<0.01	0.0129	11.40
	SPL9	Maximum	23	-	22	1.58	<0.001	0.0017	0.0481	<0.001	<0.0001	0.04	-	<0.00002	31.0	0.0001	0.003	0.0005	0.005	1.04	0.0010	0.02	0.0250	12.40
	SPL9	SD	2.5	-	1.5	0.34	-	0.0002	0.0037	-	-	0.01	-	-	0.8	-	0.0010	0.0002	0.001	0.25	0.0004	-	0.0067	0.44
	SPL9	SE	1.3	-	0.8	0.17	-	0.0001	0.0018	-	-	0.01	-	-	0.4	-	0.0005	0.0001	0.001	0.12	0.0002	-	0.0033	0.22
	SPL9	n	4	0	4	4	4	4	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	4
NR d/n Kelsey GS	SPL2	Mean	20	-	20	1.20	<0.001	0.0015	0.0424	<0.001	<0.0001	0.04	-	0.00002	29.8	<0.0001	0.002	0.0005	0.003	0.77	<0.0005	<0.01	0.0196	11.85
	SPL2	Median	20	-	20	1.20	<0.001	0.0014	0.0413	<0.001	<0.0001	0.05	-	<0.00002	29.3	<0.0001	0.002	0.0006	0.003	0.75	<0.0005	<0.01	0.0198	11.72
	SPL2	Minimum	17	-	18	0.81	<0.001	0.0012	0.0380	<0.001	<0.0001	<0.03	-	<0.00002	29.0	<0.0001	<0.002	0.0003	0.002	0.48	<0.0005	<0.01	0.0123	11.27
	SPL2	Maximum	23	-	22	1.59	<0.001	0.0020	0.0489	<0.001	<0.0001	0.05	-	0.00004	31.6	0.0001	0.003	0.0008	0.004	1.11	0.0009	0.02	0.0266	12.70
	SPL2	SD	2.5	-	1.7	0.40	-	0.0003	0.0047	-	-	0.02	-	0.00001	1.2	0.00004	0.0008	0.0002	0.001	0.29	0.0003	-	0.0075	0.61
	SPL2	SE	1.3	-	0.9	0.20	-	0.0002	0.0023	-	-	0.01	-	0.00001	0.6	0.00002	0.0004	0.0001	0.000	0.15	0.0002	-	0.0037	0.30
	SPL2	n	4	0	4	4	4	4	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	4
Aiken River	AK1	Mean	<10	<0.1	13	0.31	<0.001	<0.0005	0.0109	<0.001	-	<0.03	<0.0002	<0.00002	23.4	-	<0.002	0.0003	0.002	0.33	<0.0005	-	0.0214	5.97
	AK1	Median	<10	<0.1	13	0.14	<0.001	<0.0005	0.0086	<0.001	-	<0.03	<0.0002	<0.00002	22.5	-	<0.002	<0.0002	0.001	0.25	<0.0005	-	0.0216	5.28
	AK1	Minimum	<10	<0.1	12	0.07	<0.001	<0.0005	0.0071	<0.001	-	<0.03	<0.0002	<0.00002	17.9	-	<0.002	<0.0002	<0.001	0.11	<0.0005	-	0.0054	4.21
	AK1	Maximum	<10	0.2	14	0.95	<0.001	0.0007	0.0190	<0.001	-	<0.03	<0.0002	0.00003	32.8	-	<0.002	0.0006	0.007	0.75	0.00100	-	0.0349	8.75
	AK1	SD	-	-	0.7	0.33	-	-	0.0044	-	-	-	-	0.00001	4.9	-	-	0.0002	0.002	0.24	-	-	0.0111	1.63
	AK1	SE	-	-	0.3	0.12	-	-	0.0016	-	-	-	-	0.00000	1.7	-	-	0.0001	0.001	0.08	-	-	0.0039	0.58
	AK1	n	8	8	8	8	8	8	8	8	0	8	4	4	8	0	8	8	8	8	8	0	8	8
York Landing	YL1	Mean	17	<0.1	15	0.97	<0.001	0.0011	0.0347	<0.001	<0.0002	<0.03	<0.0002	<0.00002	26.7	<0.0001	<0.002	0.0004	0.003	0.58	0.0007	0.01	0.0154	9.90
	YL1	Median	17	<0.1	16	1.15	<0.001	0.0011	0.0357	<0.001	<0.0002	<0.03	<0.0002	<0.00002	25.7	<0.0001	<0.002	0.0004	0.002	0.59	<0.0005	0.01	0.0163	9.39
	YL1	Minimum	13	<0.1	11	0.45	<0.001	0.0008	0.0261	<0.001	<0.0002	<0.03	<0.0002	<0.00002	22.6	<0.0001	<0.002	<0.0002	0.002	0.25	<0.0005	<0.01	0.0080	8.58
	YL1	Maximum	20	0.1	20	1.35	<0.001	0.0016	0.0412	<0.001	0.0003	0.12	<0.0002	<0.00002	30.3	0.0001	0.0020	0.0008	0.009	0.91	0.0021	0.02	0.0223	11.80
	YL1	SD	2.4	0.03	3.0	0.33	-	0.0002	0.0058	-	-	0.03	-	-	2.9	0.00003	-	0.0002	0.002	0.20	0.0007	0.01	0.0045	1.16
	YL1	SE	0.7	0.01	0.9	0.10	-	0.0001	0.0017	-	-	0.01	-	-	0.9	0.00002	-	0.0001	0.001	0.06	0.0002	0.00	0.0014	0.35
	YL1	n	11	8	11	11	11	11	11	11	3	11	4	7	11	3	11	11	11	11	11	3	11	11

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Chloride	Fluoride	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium [1]	Cadmium [2]	Calcium	Cesium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Magnesium
Split Lake	SPL7	Mean	17	0.1	18	1.34	<0.001	0.0012	0.0379	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.3	<0.0001	<0.002	0.0005	0.010	0.97	0.0007	0.01	0.0204	10.27
	SPL7	Median	17	<0.1	16	1.34	<0.001	0.0011	0.0369	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.4	<0.0001	0.002	0.0004	0.003	0.94	0.0007	0.01	0.0189	10.40
	SPL7	Minimum	12	<0.1	10	0.58	<0.001	0.0008	0.0294	<0.001	<0.0001	<0.03	<0.0002	<0.00002	21.9	<0.0001	<0.002	0.0002	<0.001	0.33	<0.0005	<0.01	0.0124	8.31
	SPL7	Maximum	24	0.2	34	2.15	0.001	0.0020	0.0543	<0.001	<0.0001	0.04	<0.0002	0.00003	36.2	0.0001	0.004	0.0011	0.131	1.64	0.0013	0.02	0.0320	14.10
	SPL7	SD	3.5	0.07	7.6	0.43	-	0.0003	0.0058	-	-	0.01	-	-	3.7	0.00003	0.0009	0.0002	0.029	0.33	0.0002	0.01	0.0058	1.64
	SPL7	SE	0.8	0.02	1.7	0.10	-	0.0001	0.0013	-	-	0.00	-	-	0.8	0.00001	0.0002	0.0001	0.007	0.08	0.0001	0.00	0.0013	0.38
	SPL7	n	19	15	19	19	19	19	19	19	5	19	10	9	19	5	19	19	19	19	19	5	19	19
Split Lake	SPL8	Mean	15	-	14	1.46	<0.001	0.0011	0.0367	<0.001	<0.0001	<0.03	-	<0.00002	25.2	<0.0001	<0.002	0.0004	0.002	0.94	0.0010	0.01	0.0210	9.88
	SPL8	Median	16	-	14	1.50	<0.001	0.0011	0.0361	<0.001	<0.0001	<0.03	-	<0.00002	25.1	<0.0001	0.002	0.0005	0.003	0.95	0.0011	0.01	0.0208	9.90
	SPL8	Minimum	13	-	12	1.26	<0.001	0.0009	0.0332	<0.001	<0.0001	<0.03	-	<0.00002	23.4	<0.0001	<0.002	0.0002	<0.001	0.85	<0.0005	0.01	0.0188	8.63
	SPL8	Maximum	17	-	16	1.59	<0.001	0.0012	0.0416	<0.001	<0.0001	0.0400	-	0.00002	27.2	0.0001	0.002	0.0005	0.004	1.02	0.0016	0.02	0.0238	11.10
	SPL8	SD	1.7	-	1.6	0.14	-	0.0002	0.0040	-	-	0.01	-	-	2.0	0.00003	0.0008	0.0002	0.001	0.08	0.0007	0.01	0.0021	1.20
	SPL8	SE	0.9	-	0.8	0.07	-	0.0001	0.0020	-	-	0.01	-	-	1.0	0.00001	0.0004	0.0001	0.001	0.04	0.0003	0.00	0.0010	0.60
	SPL8	n	4	0	4	4	4	4	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	4
Clark Lake	CL1	Mean	18	-	17	1.52	<0.001	0.0012	0.0406	<0.001	<0.0001	<0.03	-	0.00004	27.5	<0.0001	0.005	0.0005	0.003	0.92	0.0005	0.01	0.0201	11.00
	CL1	Median	18	-	17	1.41	<0.001	0.0012	0.0387	<0.001	<0.0001	<0.03	-	0.00002	27.3	0.0001	0.003	0.0005	0.003	0.87	<0.0005	0.02	0.0192	10.90
	CL1	Minimum	16	-	15	1.27	<0.001	0.0011	0.0383	<0.001	<0.0001	<0.03	-	<0.00002	25.6	<0.0001	0.002	0.0002	<0.001	0.78	<0.0005	<0.01	0.0171	9.89
	CL1	Maximum	19	-	18	2.00	<0.001	0.0014	0.0469	<0.001	<0.0001	0.04	-	0.00011	29.9	0.0001	0.012	0.0009	0.007	1.15	0.0008	0.02	0.0250	12.30
	CL1	SD	1.3	-	1.3	0.33	-	0.0002	0.0042	-	-	0.01	-	0.00005	1.9	0.00003	0.0049	0.0003	0.003	0.17	0.0003	0.01	0.0035	1.14
	CL1	SE	0.6	-	0.6	0.16	-	0.0001	0.0021	-	-	0.01	-	0.00002	0.9	0.00001	0.0024	0.0001	0.001	0.08	0.0001	0.00	0.0018	0.57
	CL1	n	4	0	4	4	4	4	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	4
Nelson River	NR2	Mean	17	0.1	18	1.50	<0.001	0.0013	0.0389	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.4	0.0001	<0.002	0.0006	0.004	1.12	0.0007	<0.01	0.0231	10.28
	NR2	Median	17	0.1	16	1.40	<0.001	0.0012	0.0398	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.1	0.0001	<0.002	0.0005	0.003	1.02	0.0006	<0.01	0.0212	10.12
	NR2	Minimum	12	<0.1	11	0.95	<0.001	0.0008	0.0288	<0.001	<0.0001	<0.03	<0.0002	<0.00002	23.0	<0.0001	<0.002	0.0003	<0.001	0.75	<0.0005	<0.01	0.0160	8.58
	NR2	Maximum	23	0.2	33	2.53	0.001	0.0025	0.0456	<0.001	<0.0001	0.05	<0.0002	0.00005	32.4	0.0001	0.003	0.0013	0.019	1.66	0.0014	0.012	0.0314	12.57
	NR2	SD	3.0	0.04	7.0	0.40	-	0.0005	0.0049	-	-	0.01	-	-	2.6	0.00004	-	0.0002	0.004	0.25	0.0003	-	0.0049	1.18
	NR2	SE	0.8	0.01	1.7	0.10	-	0.0001	0.0012	-	-	0.00	-	-	0.7	0.00002	-	0.0001	0.001	0.06	0.0001	-	0.0012	0.29
	NR2	n	16	12	16	16	16	16	16	16	4	16	8	8	16	4	16	16	16	16	16	4	16	16
Nelson River n. nearshore	Camp1	Mean	15	0.1	13	1.94	<0.001	0.0012	0.0387	<0.001	-	<0.03	-	<0.00002	26.5	-	0.003	0.0009	0.003	1.39	0.0007	-	0.0278	9.74
	Camp1	Median	15	0.2	13	1.99	<0.001	0.0012	0.0387	<0.001	-	<0.03	-	<0.00002	27.3	-	0.003	0.0009	0.003	1.50	0.0007	-	0.0282	9.79
	Camp1	Minimum	13	<0.1	11	1.39	<0.001	0.0011	0.0349	<0.001	-	<0.03	-	<0.00002	23.4	-	<0.002	0.0005	0.003	0.96	0.0005	-	0.0207	9.17
	Camp1	Maximum	16	0.2	14	2.41	0.0010	0.0013	0.0426	<0.001	-	<0.03	-	<0.00002	28.0	-	0.003	0.0012	0.003	1.60	0.0008	-	0.0340	10.20
	Camp1	SD	1.3	0.08	1.3	0.43	-	0.0001	0.0039	-	-	-	-	-	2.1	-	0.0010	0.0003	0.000	0.29	0.0001	-	0.0056	0.43
	Camp1	SE	0.6	0.04	0.6	0.22	-	0.0000	0.0020	-	-	-	-	-	1.1	-	0.0005	0.0002	0.000	0.15	0.0001	-	0.0028	0.22
	Camp1	n	4	4	4	4	4	4	4	4	0	4	0	4	4	0	4	4	4	4	4	0	4	4

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Chloride	Fluoride	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium [1]	Cadmium [2]	Calcium	Cesium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Magnesium
Nelson River s. nearshore	Camp2	Mean	15	0.1	13	1.45	<0.001	0.0011	0.0343	<0.001	-	<0.03	-	<0.00002	25.8	-	0.003	0.0008	0.003	1.06	0.0007	-	0.0237	9.52
	Camp2	Median	16	0.1	13	1.60	<0.001	0.0012	0.0342	<0.001	-	<0.03	-	<0.00002	26.3	-	0.003	0.0008	0.003	1.18	0.0008	-	0.0253	9.37
	Camp2	Minimum	13	<0.1	11	0.23	<0.001	0.0009	0.0251	<0.001	-	<0.03	-	<0.00002	23.3	-	<0.002	0.0002	0.002	0.20	<0.0005	-	0.0132	9.13
	Camp2	Maximum	16	0.2	14	2.36	<0.001	0.0013	0.0438	<0.001	-	<0.03	-	<0.00002	27.2	-	0.004	0.0013	0.003	1.68	0.0009	-	0.0309	10.20
	Camp2	SD	1.4	0.06	1.3	0.92	-	0.0002	0.0077	-	-	-	-	-	1.8	-	0.0013	0.0005	0.001	0.63	0.0003	-	0.0075	0.48
	Camp2	SE	0.7	0.03	0.6	0.46	-	0.0001	0.0038	-	-	-	-	-	0.9	-	0.0006	0.0003	0.000	0.31	0.0001	-	0.0037	0.24
	Camp2	n	4	4	4	4	4	4	4	4	0	4	0	4	4	0	4	4	4	4	4	0	4	4
Stephens Lake	STL1	Mean	18	0.1	19	1.37	<0.001	0.0012	0.0388	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.6	<0.0001	0.002	0.0005	0.003	0.94	0.0006	0.0100	0.0197	10.54
	STL1	Median	17	0.1	16	1.28	<0.001	0.0012	0.0395	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.9	0.00010	0.002	0.0005	0.003	0.96	0.0006	<0.01	0.0191	10.40
	STL1	Minimum	12	<0.1	11	0.63	<0.001	<0.0005	0.0281	<0.001	<0.0001	<0.03	<0.0002	<0.00002	23.6	<0.0001	<0.002	0.0003	0.002	0.45	<0.0005	<0.01	0.0122	8.63
	STL1	Maximum	23	0.2	36	2.43	0.001	0.0024	0.0456	<0.001	<0.0001	0.04	0.0003	0.00002	31.4	0.0002	0.006	0.0012	0.011	1.59	0.0016	0.03	0.0278	12.60
	STL1	SD	3.3	0.06	7.1	0.44	-	0.0004	0.0055	-	-	0.01	0.0001	-	2.4	0.00005	0.0013	0.0002	0.002	0.30	0.0004	0.01	0.0044	1.03
	STL1	SE	0.8	0.02	1.6	0.10	-	0.0001	0.0013	-	-	0.00	0.0000	-	0.6	0.00002	0.0003	0.0001	0.000	0.07	0.0001	0.01	0.0010	0.24
	STL1	n	19	15	19	19	19	19	19	19	5	19	10	9	19	5	19	19	19	19	19	5	19	19
Stephens Lake	GT1	Mean	15	0.1	14	1.24	<0.001	0.0011	0.0354	<0.001	<0.0001	<0.03	<0.0002	<0.00002	26.5	<0.0001	<0.002	0.0005	0.003	0.84	0.0007	<0.01	0.0162	9.67
	GT1	Median	16	<0.1	14	1.21	<0.001	0.0012	0.0381	<0.001	<0.0001	<0.03	<0.0002	<0.00002	26.7	0.0001	<0.002	0.0005	0.003	0.84	0.0006	<0.01	0.0173	9.66
	GT1	Minimum	12	<0.1	11	0.60	<0.001	0.0006	0.0260	<0.001	<0.0001	<0.03	<0.0002	<0.00002	22.8	<0.0001	<0.002	0.0003	0.001	0.36	<0.0005	<0.01	0.0077	7.91
	GT1	Maximum	19	0.2	17	2.05	0.001	0.0013	0.0411	<0.001	0.0001	0.05	<0.0002	0.00002	30.1	0.0001	0.003	0.0010	0.004	1.31	0.0018	0.010	0.0210	11.80
	GT1	SD	2.1	0.07	2.0	0.39	-	0.0002	0.0055	-	-	0.01	-	-	2.2	0.00003	0.0007	0.0002	0.001	0.26	0.0005	-	0.0038	1.08
	GT1	SE	0.6	0.02	0.6	0.11	-	0.0001	0.0016	-	-	0.00	-	-	0.6	0.00001	0.0002	0.0001	0.000	0.08	0.0001	-	0.0011	0.31
	GT1	n	12	8	12	12	12	12	12	12	4	12	4	8	12	4	12	12	12	12	12	4	12	12
Nelson River	NR4	Mean	15	<0.1	15	1.16	<0.001	0.0011	0.0347	<0.001	<0.0001	<0.03	<0.0002	<0.00002	25.9	<0.0001	<0.002	0.0005	0.005	0.76	0.0006	<0.01	0.0157	9.61
	NR4	Median	15	0.1	15	1.19	<0.001	0.0012	0.0363	<0.001	<0.0001	<0.03	<0.0002	<0.00002	26.4	<0.0001	<0.002	0.0005	0.004	0.75	0.0006	<0.01	0.0152	9.40
	NR4	Minimum	12	<0.1	11	0.63	<0.001	0.0006	0.0247	<0.001	<0.0001	<0.03	<0.0002	<0.00002	21.8	<0.0001	<0.002	0.0002	<0.001	0.37	<0.0005	<0.01	0.0086	7.53
	NR4	Maximum	19	0.2	21	1.88	<0.001	0.0013	0.0446	<0.001	<0.0002	0.03	<0.0002	0.00005	29.1	0.0001	0.002	0.0009	0.027	1.20	0.0024	0.020	0.0213	11.43
	NR4	SD	1.9	0.05	2.7	0.34	-	0.0002	0.0055	-	-	0.01	-	-	2.3	-	0.0005	0.0002	0.006	0.24	0.0006	-	0.0041	1.16
	NR4	SE	0.5	0.02	0.7	0.09	-	0.0001	0.0015	-	-	0.00	-	-	0.6	-	0.0001	0.0001	0.002	0.06	0.0001	-	0.0011	0.31
	NR4	n	14	9	14	14	14	14	14	14	6	14	4	10	14	6	14	14	14	14	14	6	14	14
Nelson River	NR5	Mean	15	<0.1	12	0.99	<0.001	0.0010	0.0324	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.0	0.00010	<0.002	0.0004	0.002	0.63	<0.0005	0.011	0.0136	9.48
	NR5	Median	16	0.1	13	0.96	<0.001	0.0011	0.0323	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.3	<0.0001	<0.002	0.0004	0.002	0.59	<0.0005	0.010	0.0136	9.47
	NR5	Minimum	12	<0.1	5	0.44	<0.001	<0.0005	0.0269	<0.001	<0.0001	<0.03	<0.0002	<0.00002	23.9	<0.0001	<0.002	0.0002	<0.001	0.25	<0.0005	<0.01	0.0070	7.50
	NR5	Maximum	17	0.2	18	1.52	<0.001	0.0013	0.0394	<0.001	<0.0001	0.12	<0.0002	0.00003	28.9	0.0002	0.002	0.0009	0.004	0.99	0.0006	0.020	0.0200	11.00
	NR5	SD	1.5	0.05	3.3	0.29	-	0.0003	0.0042	-	-	0.03	-	-	1.7	0.00007	0.0005	0.0002	0.001	0.21	-	0.006	0.0037	1.03
	NR5	SE	0.5	0.02	1.0	0.09	-	0.0001	0.0013	-	-	0.01	-	-	0.5	0.00004	0.0002	0.0001	0.000	0.06	-	0.003	0.0011	0.31
	NR5	n	11	7	11	11	11	11	11	11	4	11	3	8	11	4	11	11	11	11	11	4	11	11

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Chloride	Fluoride	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium [1]	Cadmium [2]	Calcium	Cesium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Magnesium
Nelson River	NR6	Mean	16	<0.1	14	1.08	<0.001	0.0010	0.0337	<0.001	<0.0001	<0.03	<0.0002	0.00002	27.0	<0.0001	<0.002	0.0004	0.002	0.71	<0.0005	<0.01	0.0150	9.52
	NR6	Median	16	0.1	13	1.02	<0.001	0.0011	0.0352	<0.001	<0.0001	<0.03	<0.0002	<0.00002	27.2	<0.0001	<0.002	0.0004	0.002	0.69	<0.0005	0.010	0.0156	9.56
	NR6	Minimum	12	<0.1	9	0.55	<0.001	<0.0005	0.0255	<0.001	<0.0001	<0.03	<0.0002	<0.00002	22.3	<0.0001	<0.002	0.0002	<0.001	0.31	<0.0005	<0.01	0.0079	7.61
	NR6	Maximum	18	0.2	19	1.81	0.001	0.0012	0.0422	<0.001	0.0002	0.04	<0.0002	0.00006	32.2	0.0001	0.002	0.0010	0.004	1.10	0.0006	0.010	0.0185	11.00
	NR6	SD	2.0	0.05	2.9	0.38	-	0.0003	0.0052	-	-	0.01	-	0.00002	2.6	0.00003	0.0004	0.0002	0.001	0.23	-	0.003	0.0033	0.95
	NR6	SE	0.6	0.02	0.8	0.11	-	0.0001	0.0015	-	-	0.00	-	0.00001	0.8	0.00001	0.0001	0.0001	0.000	0.07	-	0.001	0.0010	0.27
	NR6	n	12	8	12	12	12	12	12	12	4	12	4	8	12	4	12	12	12	12	12	4	12	12

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Mercury [6]	Mercury [7]	Molybdenum	Nickel	Potassium	Rubidiuim	Selenium [8]	Selenium [9]	Silver [10]	Silver [11]	Sodium	Strontium	Tellurium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
Burntwood River	SPL1	Mean	-	<0.00005	0.0006	0.003	1.6	0.0047	-	<0.001	-	0.0002	3.27	0.0408	<0.001	<0.0001	0.0027	0.0609	<0.0002	0.0002	0.0032	0.0100	0.0021
	SPL1	Median	-	<0.00005	0.0002	0.003	1.6	0.0046	-	<0.001	-	<0.0001	3.30	0.0413	<0.001	<0.0001	0.0007	0.0591	<0.0002	0.0002	0.0030	0.0100	0.0018
	SPL1	Minimum	-	<0.00005	<0.0002	<0.002	1.4	0.0038	-	<0.001	-	<0.0001	2.76	0.0379	<0.001	<0.0001	<0.0005	0.0434	<0.0002	0.0002	0.0020	0.0100	0.0015
	SPL1	Maximum	-	<0.00005	0.0029	0.006	1.8	0.0060	-	0.002	-	0.0011	3.86	0.0430	0.001	<0.0001	0.0228	0.0822	<0.0002	0.0002	0.0050	0.0100	0.0034
	SPL1	SD	-	-	0.0011	0.001	0.1	0.0009	-	0.0004	-	0.0003	0.30	0.0018	-	-	0.0064	0.0160	-	0.0000	0.0008	0.0000	0.0009
	SPL1	SE	-	-	0.0003	0.0004	0.0	0.0005	-	0.0001	-	0.00009	0.09	0.0005	-	-	0.0019	0.0080	-	0.0000	0.0002	0.0000	0.0004
	SPL1	n	0	12	12	12	12	4	0	12	0	12	12	12	4	12	12	4	4	12	12	12	4
NR u/s Kelsey GS	SPL9	Mean	-	<0.00005	0.0006	0.002	2.8	0.0035	-	<0.001	-	<0.0001	16.18	0.1180	<0.001	<0.0001	0.0045	0.0401	<0.0002	0.0007	0.0025	0.0275	0.0011
	SPL9	Median	-	<0.00005	0.0007	0.002	2.8	0.0033	-	<0.001	-	<0.0001	16.40	0.1195	<0.001	<0.0001	0.0020	0.0410	<0.0002	0.0007	0.0025	0.0100	0.0011
	SPL9	Minimum	-	<0.00005	0.0004	<0.002	2.7	0.0029	-	<0.001	-	<0.0001	15.20	0.1100	<0.001	<0.0001	<0.0005	0.0244	<0.0002	0.0006	0.0020	0.0100	0.0006
	SPL9	Maximum	-	<0.00005	0.0007	0.003	3.1	0.0046	-	0.001	-	<0.0001	16.70	0.1230	<0.001	0.0001	0.0140	0.0541	<0.0002	0.0007	0.0030	0.0800	0.0017
	SPL9	SD	-	-	0.0002	0.001	0.2	0.0008	-	-	-	-	0.68	0.0056	-	-	0.0064	0.0150	-	0.0001	0.0006	0.0350	0.0006
	SPL9	SE	-	-	0.0001	0.0006	0.1	0.0004	-	-	-	-	0.34	0.0028	-	-	0.0032	0.0075	-	0.0000	0.0003	0.0175	0.0003
	SPL9	n	0	4	4	4	4	4	0	4	0	4	4	4	4	4	4	4	4	4	4	4	4
NR d/n Kelsey GS	SPL2	Mean	-	<0.00005	0.0013	<0.002	2.8	0.0036	-	<0.001	-	<0.0001	15.84	0.1152	<0.001	0.0001	<0.0005	0.0419	<0.0002	0.0006	0.0024	0.0108	0.0014
	SPL2	Median	-	<0.00005	0.0007	<0.002	2.8	0.0034	-	<0.001	-	<0.0001	15.62	0.1178	<0.001	<0.0001	<0.0005	0.0427	<0.0002	0.0006	0.0027	0.0100	0.0013
	SPL2	Minimum	-	<0.00005	0.0005	<0.002	2.5	0.0029	-	<0.001	-	<0.0001	15.20	0.1043	<0.001	<0.0001	<0.0005	0.0255	<0.0002	0.0006	0.0010	0.0100	0.0008
	SPL2	Maximum	-	<0.00005	0.0035	0.003	3.1	0.0047	-	<0.001	-	0.0001	16.93	0.1207	<0.001	0.0004	0.0006	0.0566	<0.0002	0.0007	0.0033	0.0133	0.0020
	SPL2	SD	-	-	0.0014	0.001	0.3	0.0009	-	-	-	0.00004	0.82	0.0073	-	0.0002	0.0002	0.0164	-	0.0000	0.0010	0.0017	0.0005
	SPL2	SE	-	-	0.0007	0.0005	0.1	0.0004	-	-	-	0.00002	0.41	0.0037	-	0.0001	0.0001	0.0082	-	0.0000	0.0005	0.0008	0.0003
	SPL2	n	0	4	4	4	4	4	0	4	0	4	4	4	4	4	4	4	4	4	4	4	4
Aiken River	AK1	Mean	-	<0.00005	<0.0002	<0.002	0.6	-	-	<0.001	-	<0.0001	2.09	0.0382	-	<0.0001	0.0021	-	-	0.0001	0.00075	0.01	-
	AK1	Median	-	<0.00005	<0.0002	<0.002	0.6	-	-	<0.001	-	<0.0001	1.57	0.0353	-	<0.0001	0.0006	-	-	0.0001	0.00050	0.01	-
	AK1	Minimum	-	<0.00005	<0.0002	<0.002	0.2	-	-	<0.001	-	<0.0001	1.30	0.0239	-	<0.0001	<0.0005	-	-	<0.0001	0.00050	0.01	-
	AK1	Maximum	-	<0.00005	0.0002	<0.002	1.2	-	-	<0.001	-	0.0003	4.03	0.0576	-	<0.0001	0.0130	-	-	0.0004	0.00200	0.01	-
	AK1	SD	-	-	-	-	0.4	-	-	-	-	0.00009	0.99	0.0116	-	-	0.0044	-	-	0.0001	0.00053	0.00	-
	AK1	SE	-	-	-	-	0.1	-	-	-	-	0.00003	0.35	0.0041	-	-	0.0016	-	-	0.0000	0.00019	0.00	-
	AK1	n	0	8	8	8	8	0	0	8	0	8	8	8	0	8	8	0	0	8	8	8	0
York Landing	YL1	Mean	-	<0.00005	0.0006	<0.002	2.4	0.0022	-	<0.001	-	<0.0001	12.74	0.0911	<0.001	<0.0001	0.0020	0.0149	0.0005	0.0005	0.0018	0.0100	0.0007
	YL1	Median	-	<0.00005	0.0006	<0.002	2.3	0.0020	-	<0.001	-	<0.0001	12.90	0.0949	<0.001	<0.0001	0.0007	0.0139	<0.0002	0.0006	0.0020	0.0100	0.0006
	YL1	Minimum	-	<0.00005	0.0004	<0.002	2.0	0.0019	-	<0.001	-	<0.0001	10.20	0.0637	<0.001	<0.0001	<0.0005	0.0112	<0.0002	0.0004	0.0005	0.0100	0.0005
	YL1	Maximum	-	0.00007	0.0009	0.004	2.8	0.0026	-	0.0010	-	0.0002	15.80	0.1150	<0.001	0.0001	0.0108	0.0197	0.0014	0.0006	0.0030	0.0100	0.0009
	YL1	SD	-	-	0.0001	-	0.2	0.0004	-	-	-	-	1.94	0.0157	-	-	0.0033	0.0043	0.0008	0.0001	0.0008	0.0000	0.0002
	YL1	SE	-	-	0.0000	-	0.1	0.0002	-	-	-	-	0.58	0.0047	-	-	0.0010	0.0025	0.0004	0.0000	0.0002	0.0000	0.0001
	YL1	n	0	11	11	11	11	3	0	11	0	11	11	11	3	11	11	3	3	11	11	11	3

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Mercury [6]	Mercury [7]	Molybdenum	Nickel	Potassium	Rubidiuim	Selenium [8]	Selenium [9]	Silver [10]	Silver [11]	Sodium	Strontium	Tellurium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
Split Lake	SPL7	Mean	<0.0003	<0.00005	0.0006	0.002	2.6	0.0035	<0.002	<0.001	<0.0005	<0.0001	13.48	0.0933	<0.001	<0.0001	0.0008	0.0399	<0.0002	0.0006	0.0027	0.0126	0.0013
	SPL7	Median	<0.0003	<0.00005	0.0006	0.002	2.5	0.0033	<0.002	<0.001	<0.0005	<0.0001	13.00	0.0909	<0.001	<0.0001	0.0006	0.0368	<0.0002	0.0005	0.0020	0.0100	0.0012
	SPL7	Minimum	<0.0003	<0.00005	0.0004	<0.002	2.2	0.0030	<0.002	<0.001	<0.0005	<0.0001	9.31	0.0616	<0.001	<0.0001	<0.0005	0.0366	<0.0002	0.0004	0.0020	0.0100	0.0010
	SPL7	Maximum	<0.0003	<0.00005	0.0014	0.004	3.7	0.0041	<0.002	0.002	0.0005	0.0002	20.70	0.1320	<0.001	0.0002	0.0027	0.0460	<0.0003	0.0011	0.0040	0.0400	0.0015
	SPL7	SD	-	-	0.0002	0.0008	0.4	0.0005	-	0.0004	-	0.00005	3.23	0.0184	-	-	0.0007	0.0044	-	0.0002	0.0009	0.0081	0.0002
	SPL7	SE	-	-	0.0001	0.0002	0.1	0.0002	-	0.0001	-	0.00001	0.74	0.0042	-	-	0.0002	0.0020	-	0.0000	0.0002	0.0018	0.0001
	SPL7	n	5	14	19	19	19	5	5	14	5	14	19	19	5	19	19	5	5	19	19	19	5
Split Lake	SPL8	Mean	-	<0.00005	0.0006	0.004	2.5	0.0039	-	0.001	-	<0.0001	12.18	0.0850	<0.001	<0.0001	<0.0005	0.0470	<0.0002	0.0005	0.0023	0.0200	0.0014
	SPL8	Median	-	<0.00005	0.0006	0.003	2.5	0.0039	-	<0.001	-	<0.0001	12.30	0.0837	<0.001	<0.0001	<0.0005	0.0476	<0.0002	0.0005	0.0020	0.0150	0.0015
	SPL8	Minimum	-	<0.00005	0.0005	0.003	2.1	0.0036	-	<0.001	-	<0.0001	10.20	0.0803	<0.001	<0.0001	<0.0005	0.0434	<0.0002	0.0004	0.0020	0.0100	0.0012
	SPL8	Maximum	-	<0.00005	0.0006	0.008	2.8	0.0041	-	0.002	-	<0.0001	13.90	0.0921	<0.001	0.0002	<0.0005	0.0495	<0.0002	0.0005	0.0030	0.0400	0.0016
	SPL8	SD	-	-	0.0001	0.003	0.3	0.0002	-	0.0007	-	-	1.85	0.0052	-	-	-	0.0029	-	0.0001	0.0005	0.0141	0.0002
	SPL8	SE	-	-	0.0000	0.001	0.2	0.0001	-	0.0004	-	-	0.93	0.0026	-	-	-	0.0015	-	0.0000	0.0003	0.0071	0.0001
	SPL8	n	0	4	4	4	4	4	0	4	0	4	4	4	4	4	4	4	4	4	4	4	4
Clark Lake	CL1	Mean	-	<0.00005	0.0021	0.008	2.7	0.0039	-	<0.001	-	<0.0001	14.18	0.0977	<0.001	0.0001	<0.0005	0.0483	0.0002	0.0005	0.0023	0.0200	0.0020
	CL1	Median	-	<0.00005	0.0007	0.004	2.7	0.0039	-	<0.001	-	<0.0001	14.00	0.0966	<0.001	0.0001	<0.0005	0.0457	<0.0002	0.0006	0.0020	0.0100	0.0013
	CL1	Minimum	-	<0.00005	0.0005	<0.002	2.4	0.0034	-	<0.001	-	<0.0001	12.80	0.0935	<0.001	<0.0001	<0.0005	0.0441	<0.0002	0.0004	0.0020	0.0100	0.0011
	CL1	Maximum	-	<0.00005	0.0063	0.022	3.2	0.0046	-	<0.001	-	<0.0001	15.90	0.1040	<0.001	0.0003	0.0005	0.0578	0.0006	0.0006	0.0030	0.0500	0.0043
	CL1	SD	-	-	0.0028	0.010	0.4	0.0005	-	-	-	-	1.56	0.0051	-	0.0001	-	0.0064	0.0003	0.0001	0.0005	0.0200	0.0015
	CL1	SE	-	-	0.0014	0.005	0.2	0.0002	-	-	-	-	0.78	0.0025	-	0.0001	-	0.0032	0.0001	0.0000	0.0003	0.0100	0.0008
	CL1	n	0	4	4	4	4	4	0	4	0	4	4	4	4	4	4	4	4	4	4	4	4
Nelson River	NR2	Mean	<0.0003	<0.00005	0.0006	0.003	2.7	0.0040	<0.002	<0.001	<0.0005	0.00014	13.43	0.0924	<0.001	<0.0001	0.0008	0.0513	<0.0002	0.0005	0.0029	0.0144	0.0017
	NR2	Median	<0.0003	<0.00005	0.0007	0.003	2.7	0.0040	<0.002	<0.001	<0.0005	<0.0001	12.60	0.0917	<0.001	<0.0001	<0.0005	0.0539	<0.0002	0.0005	0.0030	0.0100	0.0017
	NR2	Minimum	<0.0003	<0.00005	0.0004	<0.002	2.3	0.0035	<0.002	<0.001	<0.0005	<0.0001	10.53	0.0696	<0.001	<0.0001	<0.0005	0.0425	<0.0002	0.0004	0.0020	0.0100	0.0015
	NR2	Maximum	<0.0003	<0.00005	0.0008	0.004	3.1	0.0044	0.002	<0.001	0.0005	0.0007	18.10	0.1120	<0.001	0.0001	0.0045	0.0549	0.0003	0.0007	0.0040	0.0700	0.0020
	NR2	SD	-	-	0.0001	0.0009	0.2	0.0004	0.0006	-	-	0.0002	2.44	0.0131	-	0.00002	0.0011	0.0059	0.0001	0.0001	0.0008	0.0150	0.0003
	NR2	SE	-	-	0.0000	0.0002	0.1	0.0002	0.0003	-	-	0.00005	0.61	0.0033	-	0.000004	0.0003	0.0030	0.00004	0.0000	0.0002	0.0038	0.0001
	NR2	n	4	12	16	16	16	4	4	12	4	12	16	16	4	16	16	4	4	16	16	16	4
Nelson River n. nearshore	Camp1	Mean	-	<0.00005	0.0007	0.003	2.8	-	-	0.001	-	0.0003	11.20	0.0808	-	<0.0001	0.0013	-	-	0.0005	0.0038	0.0100	-
	Camp1	Median	-	<0.00005	0.0006	0.003	2.8	-	-	<0.001	-	0.0004	11.30	0.0838	-	<0.0001	0.0012	-	-	0.0005	0.0040	0.0100	-
	Camp1	Minimum	-	<0.00005	0.0005	0.002	2.6	-	-	<0.001	-	<0.0001	10.20	0.0685	-	<0.0001	0.0009	-	-	0.0005	0.0030	0.0100	-
	Camp1	Maximum	-	0.00008	0.0013	0.003	2.9	-	-	0.004	-	0.0005	12.00	0.0871	-	0.0001	0.0019	-	-	0.0006	0.0040	0.0100	-
	Camp1	SD	-	-	0.0004	0.001	0.2	-	-	0.002	-	0.0002	0.75	0.0083	-	-	0.0004	-	-	0.0001	0.0005	0.0000	-
	Camp1	SE	-	-	0.0002	0.0003	0.1	-	-	0.001	-	0.0001	0.37	0.0042	-	-	0.0002	-	-	0.0000	0.0003	0.0000	-
	Camp1	n	0	4	4	4	4	0	0	4	0	4	4	4	0	4	4	0	0	4	4	4	0

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Mercury [6]	Mercury [7]	Molybdenum	Nickel	Potassium	Rubidiuim	Selenium [8]	Selenium [9]	Silver [10]	Silver [11]	Sodium	Strontium	Tellurium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
Nelson River s. nearshore	Camp2	Mean	-	<0.00005	0.0005	0.002	2.6	-	-	0.001	-	0.0002	11.18	0.0766	-	0.0001	0.0011	-	-	0.0005	0.0033	0.0100	-
	Camp2	Median	-	<0.00005	0.0005	0.003	2.5	-	-	<0.001	-	0.0002	11.10	0.0755	-	<0.0001	0.0010	-	-	0.0005	0.0035	0.0100	-
	Camp2	Minimum	-	<0.00005	0.0004	<0.002	2.2	-	-	<0.001	-	<0.0001	10.40	0.0687	-	<0.0001	<0.0005	-	-	0.0004	0.0020	0.0100	-
	Camp2	Maximum	-	0.00008	0.0005	0.003	3.0	-	-	0.003	-	0.0003	12.10	0.0866	-	0.0003	0.0023	-	-	0.0006	0.0040	0.0100	-
	Camp2	SD	-	-	0.0001	0.001	0.3	-	-	0.001	-	0.0001	0.77	0.0078	-	0.0001	0.0009	-	-	0.0001	0.0010	0.0000	-
	Camp2	SE	-	-	0.0000	0.000	0.2	-	-	0.001	-	0.00006	0.39	0.0039	-	0.0001	0.0004	-	-	0.0000	0.0005	0.0000	-
	Camp2	n	0	4	4	4	4	0	0	4	0	4	4	4	0	4	4	0	0	4	4	4	0
Stephens Lake	STL1	Mean	<0.0003	<0.00005	0.0006	0.004	2.6	0.0036	<0.002	<0.001	<0.0005	<0.0001	13.91	0.0946	<0.001	<0.0001	0.0009	0.0427	<0.0002	0.0006	0.0026	0.0112	0.0016
	STL1	Median	<0.0003	<0.00005	0.0006	0.003	2.6	0.0035	<0.002	<0.001	<0.0005	<0.0001	14.33	0.0959	<0.001	<0.0001	<0.0005	0.0405	<0.0002	0.0006	0.0022	0.0100	0.0018
	STL1	Minimum	<0.0003	<0.00005	0.0005	<0.002	2.2	0.0031	<0.002	<0.001	<0.0005	<0.0001	10.60	0.0690	<0.001	<0.0001	<0.0005	0.0326	<0.0002	0.0004	0.0010	0.0100	0.0012
	STL1	Maximum	<0.0003	0.00008	0.0010	0.030	2.9	0.0047	0.003	0.005	0.0010	0.0002	17.60	0.1170	<0.001	0.0002	0.0041	0.0590	<0.0002	0.0007	0.0040	0.0200	0.0018
	STL1	SD	-	-	0.0001	0.006	0.2	0.0006	-	0.001	-	-	2.20	0.0127	-	-	0.0011	0.0098	-	0.0001	0.0008	0.0032	0.0003
	STL1	SE	-	-	0.0000	0.001	0.0	0.0003	-	0.000	-	-	0.51	0.0029	-	-	0.0003	0.0044	-	0.0000	0.0002	0.0008	0.0001
	STL1	n	5	14	19	19	19	5	5	14	5	14	19	19	5	19	19	5	5	18	18	18	5
Stephens Lake	GT1	Mean	-	<0.00005	0.0006	0.002	2.5	0.0034	-	<0.001	-	<0.0001	12.30	0.0878	<0.001	0.0001	0.0012	0.0357	0.0004	0.0005	0.0027	0.0108	0.0016
	GT1	Median	-	<0.00005	0.0005	0.002	2.6	0.0037	-	<0.001	-	<0.0001	11.95	0.0879	<0.001	<0.0001	<0.0005	0.0370	0.0003	0.0005	0.0030	0.0100	0.0015
	GT1	Minimum	-	<0.00005	0.0004	<0.002	2.1	0.0022	-	<0.001	-	<0.0001	10.10	0.0657	<0.001	<0.0001	<0.0005	0.0173	<0.0002	0.0004	0.0020	0.0100	0.0013
	GT1	Maximum	-	0.00014	0.0009	0.003	2.8	0.0041	-	<0.001	-	0.0005	15.30	0.1110	<0.001	0.0006	0.0054	0.0514	0.0008	0.0006	0.0030	0.0200	0.0020
	GT1	SD	-	-	0.0001	0.0008	0.2	0.0009	-	-	-	0.0001	1.69	0.0132	-	0.0002	0.0016	0.0142	0.0003	0.0001	0.0005	0.0029	0.0003
	GT1	SE	-	-	0.0000	0.0002	0.1	0.0004	-	-	-	0.00004	0.49	0.0038	-	0.00005	0.0005	0.0071	0.0002	0.0000	0.0001	0.0008	0.0001
	GT1	n	0	12	12	12	12	4	0	12	0	12	12	12	4	12	12	4	4	12	12	12	4
Nelson River	NR4	Mean	-	<0.00005	0.0006	0.002	2.4	0.0032	-	0.0010	-	<0.0001	12.08	0.0869	<0.001	<0.0001	0.0028	0.0404	0.0001	0.0005	0.0023	0.0115	0.0010
	NR4	Median	-	<0.00005	0.0005	0.002	2.5	0.0032	-	<0.001	-	<0.0001	11.52	0.0863	<0.001	<0.0001	0.0022	0.0373	<0.0002	0.0005	0.0022	0.0100	0.0010
	NR4	Minimum	-	<0.00005	0.0004	<0.002	2.0	0.0022	-	<0.001	-	<0.0001	9.61	0.0619	<0.001	<0.0001	<0.0005	0.0209	<0.0002	0.0004	0.0010	0.0100	0.0006
	NR4	Maximum	-	0.00006	0.0020	0.0030	2.8	0.0038	-	0.008	-	<0.0001	14.63	0.1013	<0.001	0.0002	0.0084	0.0697	0.0002	0.0006	0.0030	0.0300	0.0015
	NR4	SD	-	-	0.0004	0.0007	0.2	0.0006	-	0.002	-	0.00005	1.66	0.0121	-	0.00004	0.0027	0.0173	0.0001	0.0001	0.0007	0.0053	0.0003
	NR4	SE	-	-	0.0001	0.0002	0.1	0.0002	-	0.0005	-	0.00001	0.44	0.0032	-	0.00001	0.0007	0.0070	0.0000	0.0000	0.0002	0.0014	0.0001
	NR4	n	0	13	14	14	14	6	0	14	0	14	14	14	6	14	14	6	6	14	14	14	6
Nelson River	NR5	Mean	-	0.000069	0.0005	<0.002	2.3	0.0031	-	<0.001	-	0.0001	11.68	0.0858	<0.001	<0.0001	<0.0005	0.0315	0.0011	0.0005	0.0020	0.0164	0.0013
	NR5	Median	-	<0.00005	0.0005	<0.002	2.4	0.0034	-	<0.001	-	<0.0001	11.20	0.0807	<0.001	<0.0001	<0.0005	0.0339	<0.0002	0.0005	0.0020	0.0100	0.0014
	NR5	Minimum	-	<0.00005	0.0004	<0.002	1.7	0.0017	-	<0.001	-	<0.0001	9.39	0.0749	<0.001	<0.0001	<0.0005	0.0123	<0.0002	0.0004	0.0010	0.0100	0.0006
	NR5	Maximum	-	0.00032	0.0006	0.004	2.7	0.0040	-	0.002	-	0.0006	14.30	0.1090	0.001	0.0001	0.0018	0.0461	0.0039	0.0006	0.0030	0.0500	0.0017
	NR5	SD	-	0.00010	0.0001	-	0.3	0.0010	-	0.0005	-	0.0002	1.45	0.0113	-	-	-	0.0151	0.0019	0.0001	0.0004	0.0129	0.0005
	NR5	SE	-	0.00003	0.0000	-	0.1	0.0005	-	0.0001	-	0.00005	0.44	0.0034	-	-	-	0.0076	0.0010	0.0000	0.0001	0.0039	0.0003
	NR5	n	0	11	11	11	11	4	0	11	0	11	11	11	4	11	11.00000	4	4	11	11	11	4

Table 2H-2: Summary statistics for total metals and dissolved chloride, fluoride, and sulphate measured across the study area: 2001–2006. All units are mg/L

Waterbody	Site ID		Mercury [6]	Mercury [7]	Molybdenum	Nickel	Potassium	Rubidiuim	Selenium [8]	Selenium [9]	Silver [10]	Silver [11]	Sodium	Strontium	Tellurium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
Nelson River	NR6	Mean	-	<0.00005	0.0006	<0.002	2.4	0.0031	-	<0.001	-	0.00011	12.03	0.0874	<0.001	<0.0001	<0.0005	0.0333	0.0004	0.0005	0.0023	0.0150	0.0010
	NR6	Median	-	<0.00005	0.0006	<0.002	2.5	0.0032	-	<0.001	-	<0.0001	12.05	0.0875	<0.001	<0.0001	<0.0005	0.0325	<0.0002	0.0005	0.0020	0.0100	0.0012
	NR6	Minimum	-	<0.00005	0.0004	<0.002	1.9	0.0020	-	<0.001	-	<0.0001	9.44	0.0684	<0.001	<0.0001	<0.0005	0.0169	<0.0002	0.0004	0.0010	0.0100	0.0002
	NR6	Maximum	-	0.00018	0.0008	0.003	2.8	0.0041	-	0.001	-	0.0003	14.00	0.1030	<0.001	0.0001	0.0013	0.0514	0.0014	0.0006	0.0030	0.0400	0.0016
	NR6	SD	-	-	0.0001	-	0.3	0.0009	-	-	-	0.0001	1.39	0.0112	-	-	-	0.0154	0.0007	0.0001	0.0007	0.0100	0.0006
	NR6	SE	-	-	0.0000	-	0.1	0.0004	-	-	-	0.00003	0.40	0.0032	-	-	-	0.0077	0.0003	0.0000	0.0002	0.0029	0.0003
	NR6	n	0	12	12	12	12	4	0	12	0	12	12	12	4	12	12	4	4	12	12	12	4

1. Measured at an analytical detection limit of 0.0002 mg/L.
2. Measured at an analytical detection limit of 0.00002 mg/L.
3. SD=standard deviation.
4. SE=standard error.
5. N=sample size.
6. Measured at an analytical detection limit of 0.0003 mg/L
7. Measured at an analytical detection limit of 0.00005 mg/L.
8. Measured at an analytical detection limit of 0.002 mg/L.
9. Measured at an analytical detection limit of 0.001 mg/L.
10. Measured at an analytical detection limit of 0.0005 mg/L.
11. Measured at an analytical detection limit of 0.0001 mg/L.

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Site ID		Antimony		Arsenic		Barium		Boron		Cadmium		Chloride	Chromium		Copper		Fluoride	Iron		Lead		Manganese	
			Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.006		0.010		1		5		0.005			0.05				1.5			0.01			
	Drinking water AO												250			1			0.3				0.05	
Aiken River	AK-1	# Samples	8	0	8	0	8	0	8	0	8	0	8	8	0	8	0	8	8	0	8	0	8	0
		# Detected	0	-	3	-	8	-	0	-	2	-	0	0	-	5	-	3	8	-	2	-	8	-
		% Detected	0	-	38	-	100	-	0	-	25	-	0	0	-	63	-	38	100	-	25	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	50	-	-	-	0	-
Burntwood River at Split Lake	SPL-1	# Samples	12	0	12	0	12	0	12	0	12	0	12	12	0	12	0	8	12	0	12	0	12	0
		# Detected	0	-	4	-	12	-	1	-	1	-	0	12	-	12	-	5	12	-	10	-	12	-
		% Detected	0	-	33	-	100	-	8	-	8	-	0	100	-	100	-	63	100	-	83	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	12	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River upstream of Kelsey GS	SPL-9	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	0	4	0	4	0	4	0
		# Detected	0	-	4	-	4	-	3	-	0	-	4	4	-	4	-	-	4	-	2	-	4	-
		% Detected	0	-	100	-	100	-	75	-	0	-	100	100	-	100	-	-	100	-	50	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River at Split Lake	SPL-2	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	0	4	0	4	0	4	0
		# Detected	0	-	4	-	4	-	3	-	2	-	4	3	-	4	-	-	4	-	1	-	4	-
		% Detected	0	-	100	-	100	-	75	-	50	-	100	75	-	100	-	-	100	-	25	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Site ID		Antimony		Arsenic		Barium		Boron		Cadmium		Chloride	Chromium		Copper		Fluoride	Iron		Lead		Manganese	
			Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.006		0.010		1		5		0.005			0.05				1.5			0.01			
	Drinking water AO												250			1			0.3				0.05	
Split Lake near	SPL-5	# Samples	1	0	1	0	1	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	0
York Landing		# Detected	0	-	1	-	1	-	0	-	0	-	1	0	-	0	-	1	1	-	0	-	1	-
		% Detected	0	-	100	-	100	-	0	-	0	-	100	0	-	0	-	100	100	-	0	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	1	-	-	-	1	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	100	-
Split Lake near	YL-1	# Samples	11	0	11	0	11	0	11	0	11	0	11	11	0	11	0	8	11	0	11	0	11	0
York Landing		# Detected	0	-	11	-	11	-	3	-	0	-	11	2	-	11	-	3	11	-	4	-	11	-
		% Detected	0	-	100	-	100	-	27	-	0	-	100	18	-	100	-	38	100	-	36	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	10	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	91	-	-	-	0	-
Split Lake upstream of	SPL-7	# Samples	19	12	19	12	19	12	19	12	19	12	19	19	12	19	12	15	19	12	19	12	19	12
Split Lake community		# Detected	2	1	19	12	19	12	6	12	3	0	19	12	2	18	12	7	19	11	17	2	19	12
		% Detected	11	8	100	100	100	100	32	100	16	0	100	63	17	95	100	47	100	92	89	17	100	100
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	19	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Split Lake outlet	SPL-8	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	0	4	0	4	0	4	0
		# Detected	0	-	4	-	4	-	2	-	1	-	0	3	-	3	-	-	4	-	3	-	4	-
		% Detected	0	-	100	-	100	-	50	-	25	-	0	75	-	75	-	-	100	-	75	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Site ID		Antimony		Arsenic		Barium		Boron		Cadmium		Chloride	Chromium		Copper		Fluoride	Iron		Lead		Manganese	
			Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.006		0.010		1		5		0.005			0.05				1.5			0.01			
	Drinking water AO												250			1			0.3				0.05	
Clark Lake Outlet	CL-1	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	0	4	0	4	0	4	0
		# Detected	0	-	4	-	4	-	2	-	2	-	4	4	-	3	-	-	4	-	2	-	4	-
		% Detected	0	-	100	-	100	-	50	-	50	-	100	100	-	75	-	-	100	-	50	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River	NR-2	# Samples	17	0	17	0	17	0	17	0	17	0	17	17	0	17	0	13	17	0	17	0	17	0
		# Detected	2	-	17	-	17	-	4	-	2	-	17	9	-	16	-	9	17	-	14	-	17	-
		% Detected	12	-	100	-	100	-	24	-	12	-	100	53	-	94	-	69	100	-	82	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	17	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River	Camp-1	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	4	4	0	4	0	4	0
		# Detected	1	-	4	-	4	-	0	-	0	-	4	3	-	4	-	3	4	-	4	-	4	-
		% Detected	25	-	100	-	100	-	0	-	0	-	100	75	-	100	-	75	100	-	100	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River	Camp-2	# Samples	4	0	4	0	4	0	4	0	4	0	4	4	0	4	0	4	4	0	4	0	4	0
		# Detected	0	-	4	-	4	-	0	-	0	-	4	3	-	4	-	3	4	-	3	-	4	-
		% Detected	0	-	100	-	100	-	0	-	0	-	100	75	-	100	-	75	100	-	75	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	4	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Site ID		Antimony		Arsenic		Barium		Boron		Cadmium		Chloride	Chromium		Copper		Fluoride	Iron		Lead		Manganese	
			Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.006		0.010		1		5		0.005			0.05				1.5			0.01			
	Drinking water AO												250			1			0.3				0.05	
Stephens Lake	STL-1	# Samples	20	13	20	13	20	13	20	13	20	13	20	20	13	20	13	16	20	13	20	13	20	13
		# Detected	3	1	19	13	20	13	7	13	4	0	20	12	0	20	13	11	20	11	15	6	20	13
		% Detected	15	8	95	100	100	100	35	100	20	0	100	60	0	100	100	69	100	85	75	46	100	100
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	20	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Stephens Lake near Gillam	GT-1	# Samples	13	0	13	0	13	0	13	0	13	0	13	13	0	13	0	9	13	0	13	0	13	0
		# Detected	1	-	13	-	13	-	2	-	1	-	13	6	-	13	-	5	13	-	9	-	13	-
		% Detected	8	-	100	-	100	-	15	-	8	-	100	46	-	100	-	56	100	-	69	-	100	-
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	13	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River at Long Spruce GS (reservoir)	NR-4	# Samples	15	9	15	9	15	9	15	9	15	9	15	15	9	15	9	10	15	9	15	9	15	9
		# Detected	0	0	15	9	15	9	2	9	2	0	15	8	0	14	9	6	15	6	9	2	15	9
		% Detected	0	0	100	100	100	100	13	100	13	0	100	53	0	93	100	60	100	67	60	22	100	100
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	15	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-
Nelson River	NR-5	# Samples	11	7	11	7	11	7	11	7	11	7	11	11	7	11	7	7	11	7	11	7	11	7
		# Detected	0	0	10	7	11	7	1	7	1	0	11	5	0	10	7	4	11	5	2	2	11	7
		% Detected	0	0	91	100	100	100	9	100	9	0	100	45	0	91	100	57	100	71	18	29	100	100
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	10	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	91	-	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Site ID		Antimony		Arsenic		Barium		Boron		Cadmium		Chloride	Chromium		Copper		Fluoride	Iron		Lead		Manganese	
			Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.006		0.010		1		5		0.005			0.05				1.5			0.01			
	Drinking water AO												250			1			0.3				0.05	
Nelson River	NR-6	# Samples	12	8	12	8	12	8	12	8	12	8	12	12	8	12	8	8	12	8	12	8	12	8
		# Detected	1	0	11	8	12	8	1	8	3	2	12	5	1	11	8	5	12	5	2	0	12	8
		% Detected	8	0	92	100	100	100	8	100	25	25	100	42	13	92	100	63	100	63	17	0	100	100
		# Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		% Above MAC	0	-	0	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	-	-
		# Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	12	-	-	-	0	-
		% Above AO	-	-	-	-	-	-	-	-	-	-	0	-	-	0	-	-	100	-	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOGs) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Location ID		Mercury		Selenium		Sodium		Sulphate	Uranium		Zinc	
			Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.001		0.01					0.02			
	Drinking AO						200		500			500	
Aiken River	AK-1	# Samples	8	0	8	0	8	0	8	8	0	8	0
		# Detected	0	-	0	-	8	-	8	4	-	0	-
		% Detected	0	-	0	-	100	-	100	50	-	0	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Burntwood River at Split Lake	SPL-1	# Samples	12	0	12	0	12	0	12	12	0	12	0
		# Detected	0	-	1	-	12	-	9	12	-	2	-
		% Detected	0	-	8	-	100	-	75	100	-	17	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River upstream of Kelsey GS	SPL-9	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	0	-	1	-	4	-	4	4	-	1	-
		% Detected	0	-	25	-	100	-	100	100	-	25	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River at Split Lake	SPL-2	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	0	-	0	-	4	-	4	4	-	1	-
		% Detected	0	-	0	-	100	-	100	100	-	25	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOGs) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Location ID		Mercury		Selenium		Sodium		Sulphate	Uranium		Zinc	
			Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.001		0.01					0.02			
	Drinking AO						200		500			500	
Split Lake near York Landing	SPL-5	# Samples	1	0	1	0	1	0	1	1	0	1	0
		# Detected	0	-	0	-	1	-	1	0	-	0	-
		% Detected	0	-	0	-	100	-	100	0	-	0	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Split Lake near York Landing	YL-1	# Samples	11	0	11	0	11	0	11	11	0	11	0
		# Detected	2	-	1	-	11	-	11	11	-	1	-
		% Detected	18	-	9	-	100	-	100	100	-	9	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Split Lake upstream of Split Lake community	SPL-7	# Samples	19	12	19	12	19	12	19	19	12	19	12
		# Detected	0	0	1	0	19	12	19	19	12	4	1
		% Detected	0	0	5	0	100	100	100	100	100	21	8
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Split Lake outlet	SPL-8	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	0	-	2	-	4	-	4	4	-	4	-
		% Detected	0	-	50	-	100	-	100	100	-	100	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOGs) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Location ID		Mercury		Selenium		Sodium		Sulphate	Uranium		Zinc	
			Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.001		0.01					0.02			
	Drinking AO						200		500			500	
Clark Lake Outlet	CL-1	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	0	-	0	-	4	-	4	4	-	3	-
		% Detected	0	-	0	-	100	-	100	100	-	75	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River	NR-2	# Samples	17	0	17	0	17	0	17	17	0	17	0
		# Detected	0	-	3	-	17	-	17	17	-	2	-
		% Detected	0	-	18	-	100	-	100	100	-	12	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River	Camp-1	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	1	-	1	-	4	-	4	4	-	0	-
		% Detected	25	-	25	-	100	-	100	100	-	0	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River	Camp-2	# Samples	4	0	4	0	4	0	4	4	0	4	0
		# Detected	1	-	1	-	4	-	4	4	-	0	-
		% Detected	25	-	25	-	100	-	100	100	-	0	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOGs) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Location ID		Mercury		Selenium		Sodium		Sulphate	Uranium		Zinc	
			Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.001		0.01					0.02			
	Drinking AO						200		500			500	
Stephens Lake	STL-1	# Samples	20	13	20	13	20	13	20	20	12	20	13
		# Detected	3	0	3	0	20	13	20	20	12	5	4
		% Detected	15	0	15	0	100	100	100	100	100	25	31
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Stephens Lake near Gillam	GT-1	# Samples	13	0	13	0	13	0	13	13	0	13	0
		# Detected	1	-	0	-	13	-	13	13	-	1	-
		% Detected	8	-	0	-	100	-	100	100	-	8	-
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River at Long Spruce GS (reservoir)	NR-4	# Samples	15	9	15	9	15	9	15	15	9	15	9
		# Detected	3	0	1	0	15	9	15	15	9	5	1
		% Detected	20	0	7	0	100	100	100	100	100	33	11
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-
Nelson River	NR-5	# Samples	11	7	11	7	11	7	11	11	7	11	7
		# Detected	3	0	1	0	11	7	10	11	7	4	0
		% Detected	27	0	9	0	100	100	91	100	100	36	0
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-

Table 2H-3: Detection frequencies and frequencies of exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOGs) and Canadian Council of Ministers of the Environment (CCME) guidelines for drinking water for metals (Total and Dissolved [Diss]) measured in the study area: open water season 2001–2004. Guidelines include maximum acceptable concentrations (MAC) and aesthetic objectives (AO). All units are mg/L

Sample Location	Location ID		Mercury		Selenium		Sodium		Sulphate	Uranium		Zinc	
			Total	Diss	Total	Diss	Total	Diss	Diss	Total	Diss	Total	Diss
MWQSOGs	Drinking water MAC		0.001		0.01					0.02			
	Drinking AO						200		500			500	
Nelson River	NR-6	# Samples	12	8	12	8	12	8	12	12	8	12	8
		# Detected	1	0	1	0	12	8	12	12	8	4	0
		% Detected	8	0	8	0	100	100	100	100	100	33	0
		# Above MAC	0	-	0	-	-	-	-	0	-	-	-
		% Above MAC	0	-	0	-	-	-	-	0	-	-	-
		# Above AO	-	-	-	-	0	-	0	-	-	0	-
		% Above AO	-	-	-	-	0	-	0	-	-	0	-

Table 2H-4: Summary of microbiological data collected in the study area

Sample Location	Sample ID	Years	Fecal Coliform (CFU/100 mL)			*Cryptosporidium* (oocysts/10 L)						*Giardia* (cysts/L) [1]					
						Viable oocysts		Nonviable oocysts		Amorphous		Viable cysts		Nonviable cysts		Amorphous	
			Range	n [1]	% Detection	Range	% Detection	Range	% Detection	Range	% Detection	Range	% Detection	Range	% Detection	Range	% Detection
Open water Season																	
Split Lake	SPL1	2002–2003	7–33	8	100	0-1	12.5	0–1	25	0	0	0	0	0–3	50	0	0
Split Lake	SPL7	2001–2003	<1–<10	12	33	0	0	0–1	8	0	0	0–1	8	0–2	17	0–1	8
York Landing	YL1	2002–2004	<1–10	12	8	0	0	0	0	0	0	0	0	0–1	8	0	0
Aiken River	AK1	2002–2004	<1–40	8	50	0-1	29	0–1	14	0–1	13	0	0	0–1	29	0–2	14
Stephens Lake	GT1	2002–2003	<1–<10	8	25	0	0	0	0	0	0	0	0	0–1	13	0	0
Nelson River	NR2	2001–2003	<1–<10	12	8	0	0	0	0	0	0	0	0	0–2	8	0	0
Camp	Camp1	2003	1–12	4	75	0	0	0	0	0	0	0	0	0	0	0	0
Camp	Camp2	2003	1–<10	4	50	0	0	0	0	0	0	0	0	0	0	0	0
Stephens Lake	STL1	2001–2003	<1–10	12	33	0	0	0	0	0	0	0	0	0–3	25	0–1	8
Nelson River	NR4	2002–2003	<1–14	8	38	0	0	0	0	0	0	0	0	0–1	13	0	0
Nelson River	NR5	2002–2003	1–20	7	71	0	0	0–1	14	0	0	0	0	0–2	29	0	0
Nelson River	NR6	2002–2003	<1–10	8	63	0	0	0	0	0	0	0	0	0–3	25	0	0
Ice-Cover Season																	
Split Lake	SPL5	2004	<1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Split Lake	SPL7	2001, 2004	2–32	2	100	0	0	0	0	0	0	0	0	0	0	0	0
Nelson River	NR2	2003	<10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Stephens Lake	STL1	2001, 2003–2004	10–15	3	100	0	0	0	0	0	0	0–2	67	0	0	0	0
Stephens Lake	GT1	2003	40	1	100	0	0	0	0	0	0	0	0	0	0	0	0
Nelson River	NR4	2003–2004	6–<10	2	50	0	0	0	0	0	0	0	0	0	0	0	0

1. n=sample size.

Table 2H-5: Dissolved oxygen (DO) measurements collected at core water quality sampling sites: winter 2001–2006

Sample Location	Location ID	Sample Date	Sampling Depth (m)	Temperature (°C)	DO (mg/L)
Ice-Cover Season 2001					
Split Lake	SPL1	20-Mar-01	Near Surface	0.1	15.82
Split Lake	SPL3	20-Mar-01	Near Surface	0.1	16.38
Split Lake	SPL4	20-Mar-01	Near Surface	0.2	14.41
Split Lake	SPL5	19-Mar-01	Near Surface	0.3	8.20
Split Lake	SPL6	19-Mar-01	Near Surface	0.2	14.81
Split Lake	SPL7	19-Mar-01	Near Surface	0.3	14.72
Split Lake	SPL8	19-Mar-01	Near Surface	0.5	14.54
Assean Lake	AL1	25-Mar-01	Near Surface	1.0	15.30
Assean Lake	AL2	25-Mar-01	Near Surface	0.4	10.45
Nelson River	NR1	24-Mar-01	Near Surface	0.7	16.24
Stephens Lake	STL1	24-Mar-01	Near Surface	0.2	14.42
Ice-Cover Season 2002					
Split Lake	SPL1	18-Mar-02	Near Surface	0.1	13.50
Split Lake	SPL3	18-Mar-02	Near Surface	0.1	14.14
Split Lake	SPL4	20-Mar-02	Near Surface	0.1	12.50
Split Lake	SPL5	20-Mar-02	Near Surface	0.3	13.84
Split Lake	SPL6	20-Mar-02	Near Surface	0.2	12.80
Split Lake	SPL7	20-Mar-02	Near Surface	0.1	14.00
Split Lake	SPL8	20-Mar-02	Near Surface	0.3	13.81
Assean Lake	AL1	18-Mar-02	Near Surface	2.0	11.65
Assean Lake	AL2	18-Mar-02	Near Surface	4.4	8.76
Gull Lake	GL2	19-Mar-02	Near Surface	0.2	11.10
Stephens Lake	STL1	19-Mar-02	Near Surface	0.2	12.33
Stephens Lake	STL2	19-Mar-02	Near Surface	0.1	13.13
Ice-Cover Season 2003					
Nelson River	NR1	2-Apr-03	Near Surface	0.2	14.21
Gull Lake	GL1	2-Apr-03	Near Surface	0.2	15.97
Gull Lake	GL2	2-Apr-03	Near Surface	0.2	15.97
Nelson River	NR2	2-Apr-03	Near Surface	0.1	15.13
Stephens Lake	STL1	2-Apr-03	Near Surface	0.2	16.11
Stephens Lake	STL2	2-Apr-03	Near Surface	0.2	14.24
Stephens Lake	GT1	3-Apr-03	Near Surface	0.4	17.16
Nelson River	NR3	2-Apr-03	Near Surface	0.1	13.12
Nelson River	NR4	2-Apr-03	Near Surface	0.2	12.24
Limestone River	LR1	2-Apr-03	Near Surface	0.2	10.59
Angling River	AR1	3-Apr-03	Near Surface	0.3	7.36
Weir River	WR1	4-Mar-03	Near Surface	0.1	3.44
Ice-Cover Season 2004					
Split Lake	SPL1	16-Mar-04	Near Surface	0.1	15.43
Split Lake	SPL5	16-Mar-04	Near Surface	0.1	6.96
Split Lake	SPL7	16-Mar-04	Near Surface	0.8	15.99

Table 2H-5: Dissolved oxygen (DO) measurements collected at core water quality sampling sites: winter 2001–2006

Sample Location	Location ID	Sample Date	Sampling Depth (m)	Temperature (°C)	DO (mg/L)
Gull Lake	GL2	15-Mar-04	Near Surface	0.2	14.31
Nelson River	NR2	15-Mar-04	Near Surface	0.2	13.32
Stephens Lake	STL1	15-Mar-04	Near Surface	0.2	13.51
Nelson River	NR3	15-Mar-04	Near Surface	0.1	13.23
Nelson River	NR4	15-Mar-04	Near Surface	0.1	13.53
Ice-Cover Season 2006					
Long Spruce GS reservoir	NR3	22-Mar-06	0.1	0.7	13.32
	NR3	22-Mar-06	7.0	0.4	13.61
	NR3	22-Mar-06	14.0	0.4	13.26
	NR3	22-Mar-06	21.0	0.2	12.32
	NR3	22-Mar-06	27.3	0.1	12.06
Limestone GS reservoir	NR4	22-Mar-06	0.1	0.1	12.92
	NR4	22-Mar-06	8.0	0.0	13.53
	NR4	22-Mar-06	16.0	0.1	12.81
	NR4	22-Mar-06	24.0	0.0	11.43
	NR4	22-Mar-06	29.0	0.0	11.71
Limestone River	LR1	19-Mar-06	Near Surface	1.2	9.09
Beaver Creek	BC1	19-Mar-06	Near Surface	1.0	12.54
Swift Creek[1]	SC1	19-Mar-06	Near Surface	-	-
Tiny Creek	TC1	19-Mar-06	Near Surface	1.6	14.58
Goose Creek[1]	GC1	19-Mar-06	Near Surface	-	-
Creek 15[1]	15C	19-Mar-06	Near Surface	-	-
Angling River	AR1	19-Mar-06	Near Surface	1.0	12.21
Weir River[2]	WR1	19-Mar-06	Near Surface	-	-

1. Creek mouth dry - no water sample obtained.
2. Site inaccessible.

Table 2H-6: Statistical summary of laboratory water quality data collected at the north and south access road stream crossing sites

Sample Location	Site ID	Sample Date	Nitrogen			Phosphorus		Organic Carbon (OC)		Water Clarity		Chlor *a*	Pheo.	pH
			Dissolved Ammonia	Dissolved Nitrate/ nitrite	TKN[1]	Diss	Total	Total	Diss	Total Suspended Solids	Turbidity			
			(mg/L N)	(mg/L N)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(NTU)	(ug/L)	(ug/L)	
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	2003 open water mean	0.008	0.008	0.7	0.007	0.018	16	16	2	1.4	7	1	6.98
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	2004 open water mean	<0.003	0.008	0.5	0.007	0.010	17	17	<2	1.3	<1	<1	7.54
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	May 2005	0.005	0.007	0.4	0.006	0.012	15	15	2	3	<1	<1	7.24
1 km upstream of Stream Crossing 1: Unnamed Tributary North Access Road	SC1	March 2005	-	-	-	-	-	-	-	44	23	-	-	-
1 km east (downstream of) Stream Crossing 2: Looking Back Creek	SC2	2003 open water mean	0.008	<0.005	0.6	0.013	0.030	17	17	7	8.8	5	<1	7.73
1 km east (downstream of) Stream Crossing 2: Looking Back Creek	SC2	2004 open water mean	0.004	<0.005	0.6	0.010	0.031	18	18	22	18.1	2	<1	7.84
Stream Crossing 2: Looking Back Creek	SC2	May 2005	0.015	0.006	0.4	0.012	0.020	22	22	7	7	2	<1	7.50
East of Stream Crossing 3: Gull Rapids Creek	SC3	2003 open water mean	0.007	<0.005	0.8	0.007	0.015	23	23	2	1.3	2	<1	6.87
East of Stream Crossing 3: Gull Rapids Creek	SC3	2004 open water mean	<0.003	<0.005	0.6	0.006	0.009	19	19	<2	0.5	<1	<1	6.93
Stream Crossing 3: Gull Rapids Creek	SC3	May 2005	0.014	0.010	0.6	0.008	0.016	19	19	<2	1	3	<1	6.74
Stream Crossing 4	SC4	May 2005	0.006	0.015	0.5	0.009	0.019	20	20	5	2	<1	<1	6.97
Stream Crossing 5	SC5	May 2005	0.010	<0.005	0.9	0.007	0.021	19	19	12	4	2	<1	7.06

1. TNK = total Kjeldahl nitrogen.
Chlor = Chlorophyll, Pheo = Pheophytin

Table 2H-7: Statistical summary of *in situ* water quality data collected at the north and south access road stream crossing sites

Sample Location	Site ID	Sampling Period	Time	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductance (µS/cm)	pH
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	2003 open water mean	Mean	13.6	6.80	99	7.05
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	2004 open water mean	Mean	6.5	11.52	196	7.54
Stream Crossing 1: Unnamed Tributary North Access Road	SC1	May 2005	-	4.6	9.25	-	7.71
1 km upstream of Stream Crossing 1: Unnamed Tributary North Access Road	SC1	March 2005	-	1.1	1.72	-	-
1 km east (downstream of) Stream Crossing 2: Looking Back Creek	SC2	2003 open water mean	Mean	14.8	9.63	199	7.95
1 km east (downstream of) Stream Crossing 2: Looking Back Creek	SC2	2004 open water mean	Mean	11.3	9.47	204	7.75
Stream Crossing 2: Looking Back Creek	SC2	May 2005	-	5.8	12.62	70	-
East of Stream Crossing 3: Gull Rapids Creek	SC3	2003 open water mean	Mean	12.3	7.08	123	7.23
East of Stream Crossing 3: Gull Rapids Creek	SC3	2004 open water mean	Mean	9.0	7.34	97	6.89
Stream Crossing 3: Gull Rapids Creek	SC3	May 2005	-	4.1	7.06	53	7.96
Stream Crossing 4	SC4	May 2005	-	7.4	6.60	78	7.88
Stream Crossing 5	SC5	May 2005	-	8.4	7.68	70	7.98

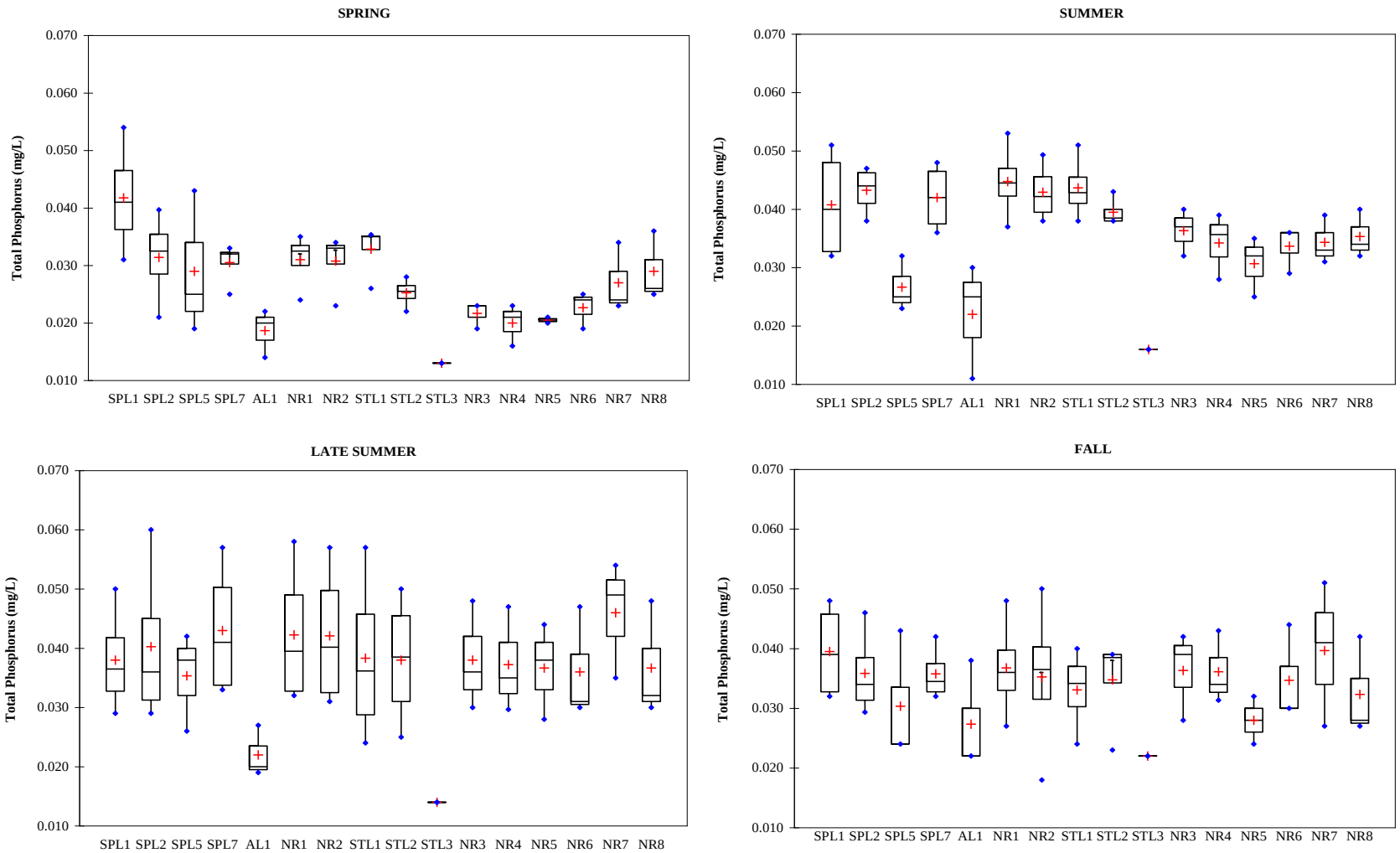

Figure 2H-1: Total phosphorus box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

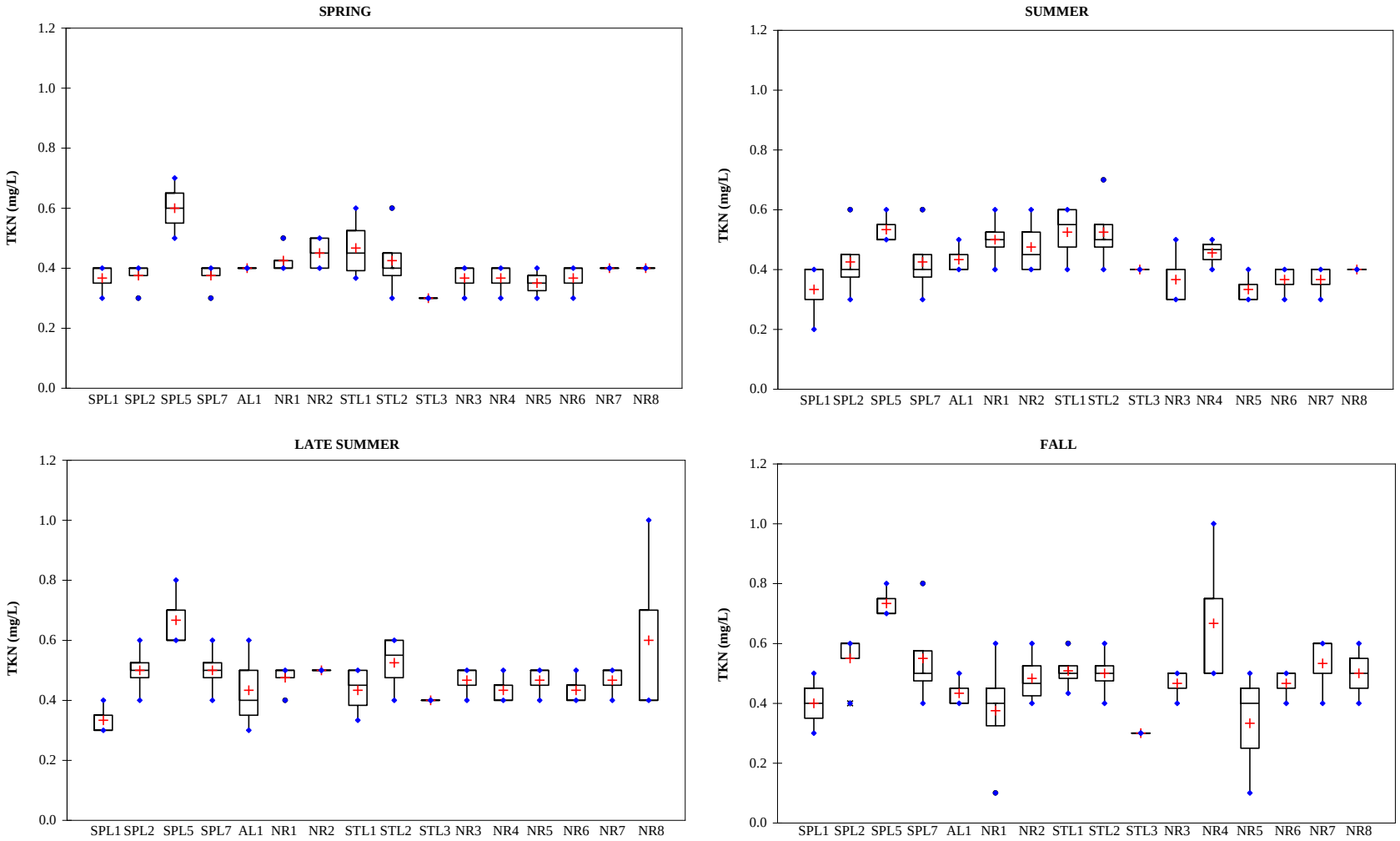

Figure 2H-2: Total Kjeldahl nitrogen (TKN) box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

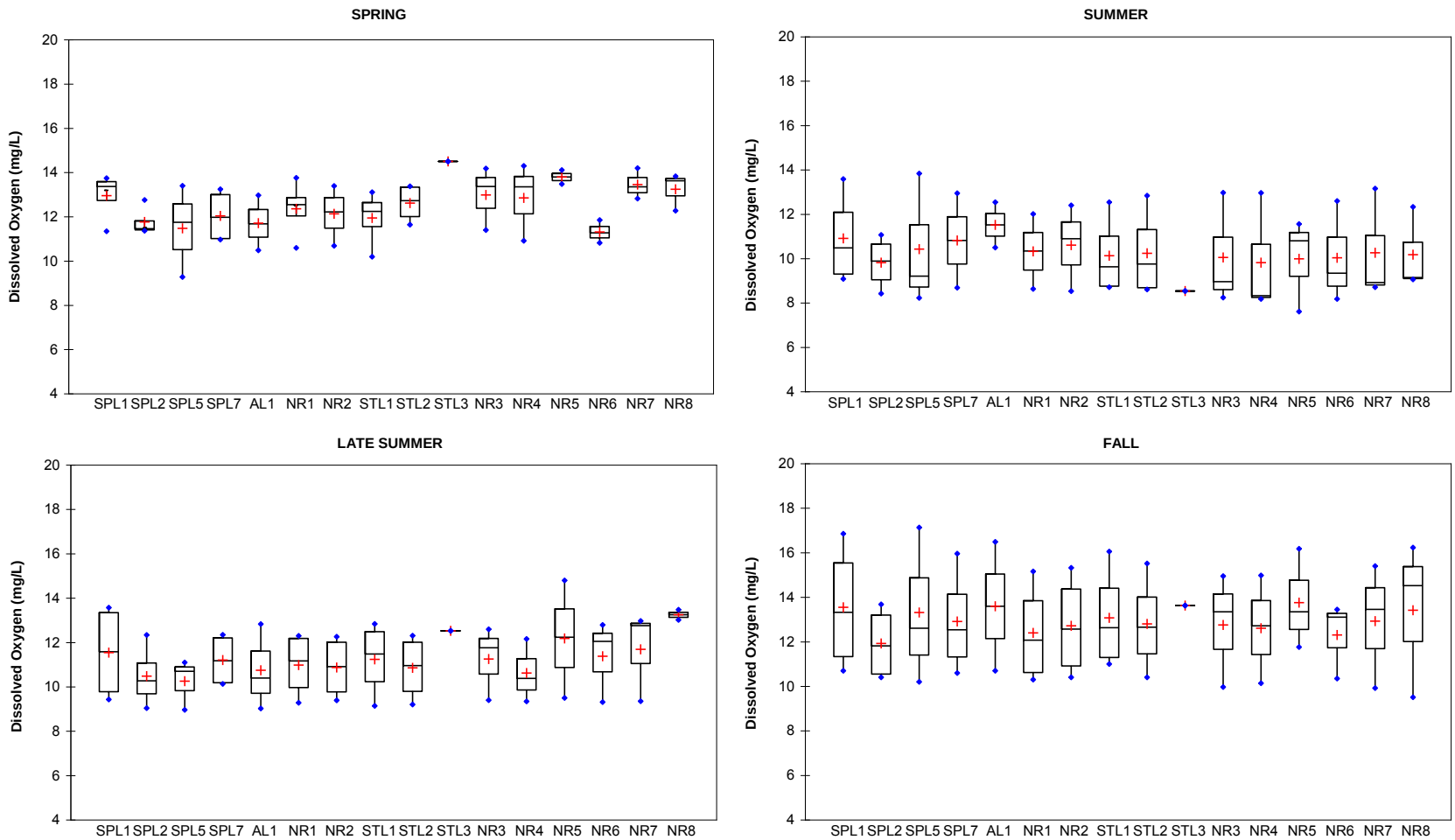

Figure 2H-3: Dissolved oxygen box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

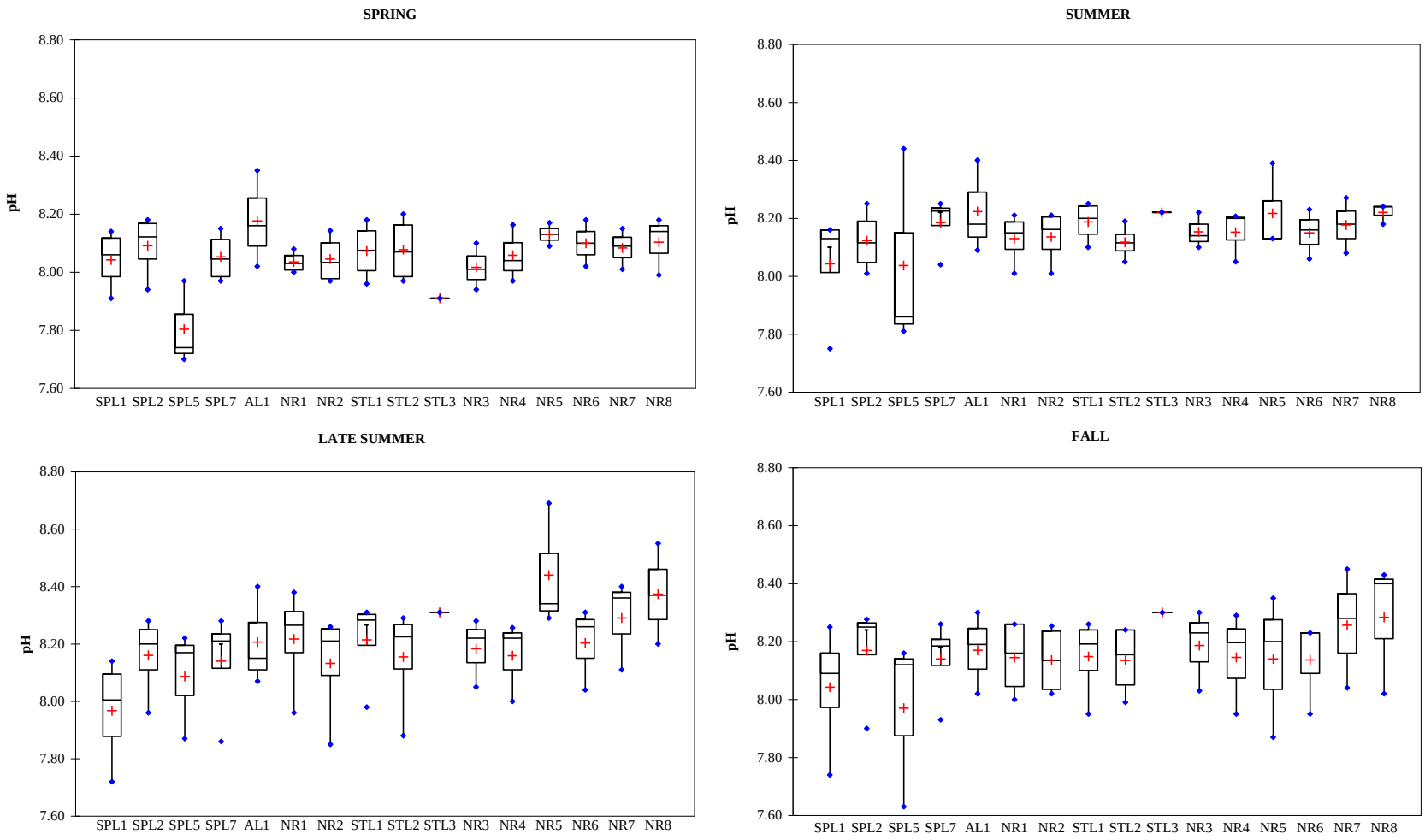

Figure 2H-4: pH (laboratory) box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

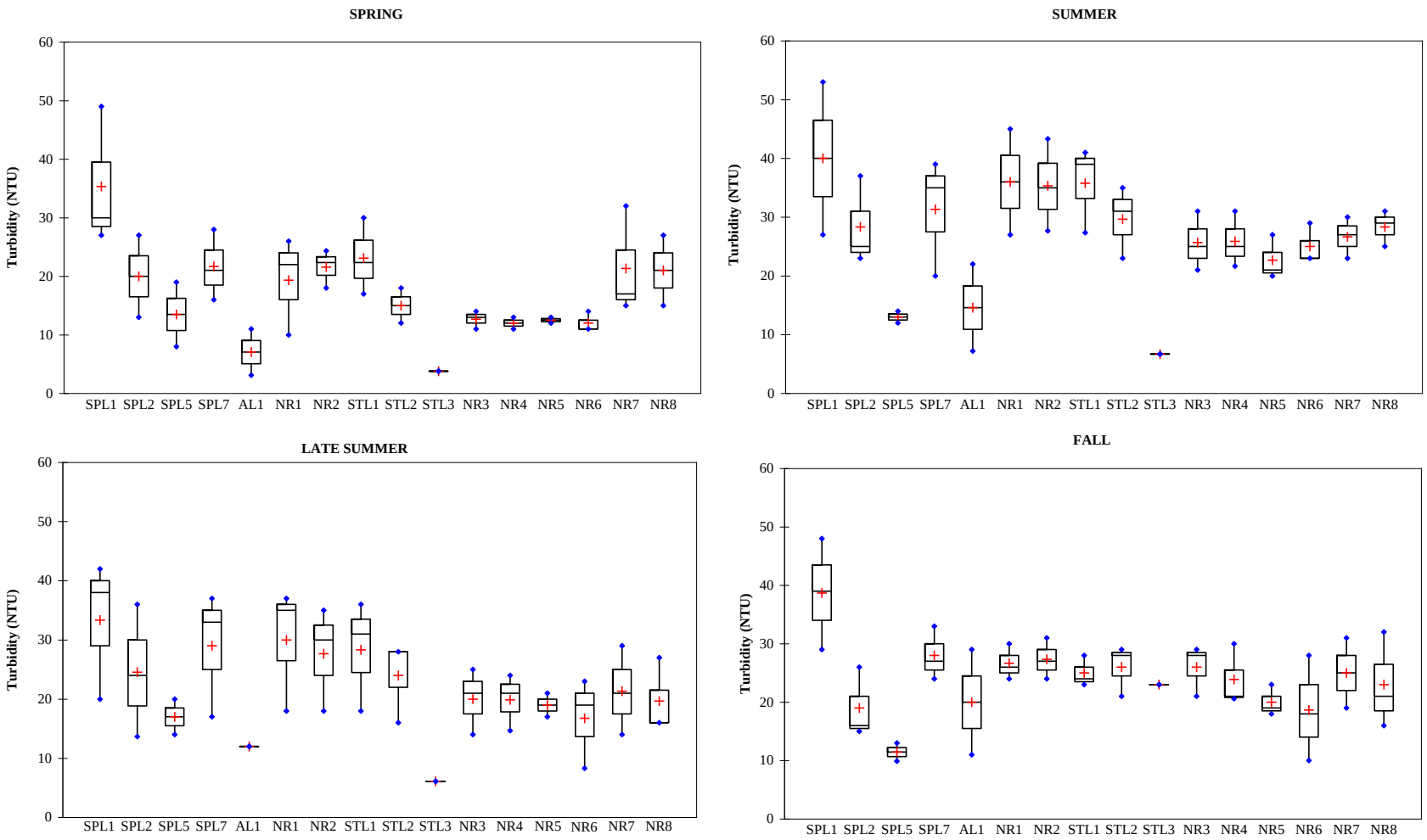

Figure 2H-5: Turbidity (laboratory) box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

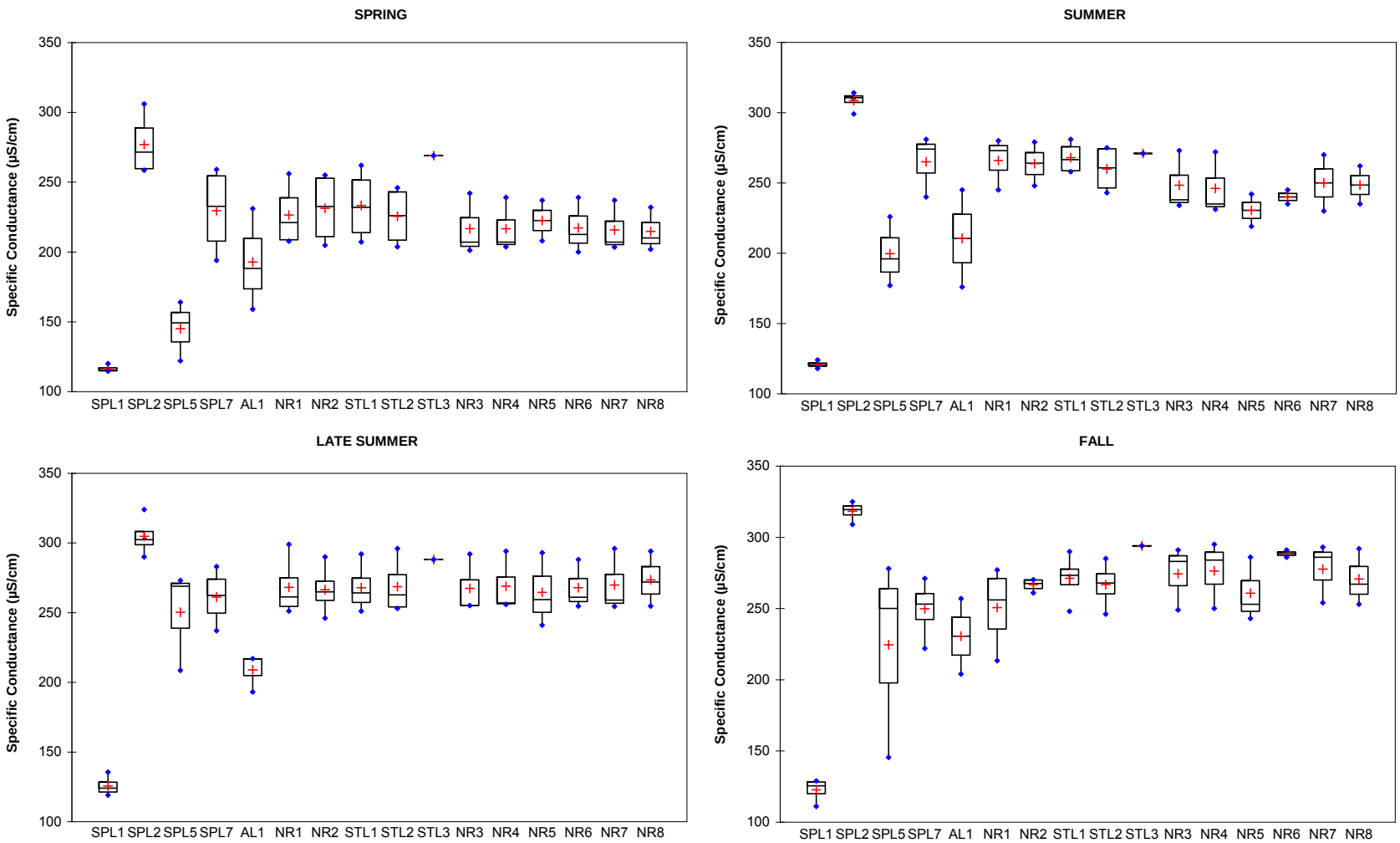

Figure 2H-6: Specific conductance (*in situ*) box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

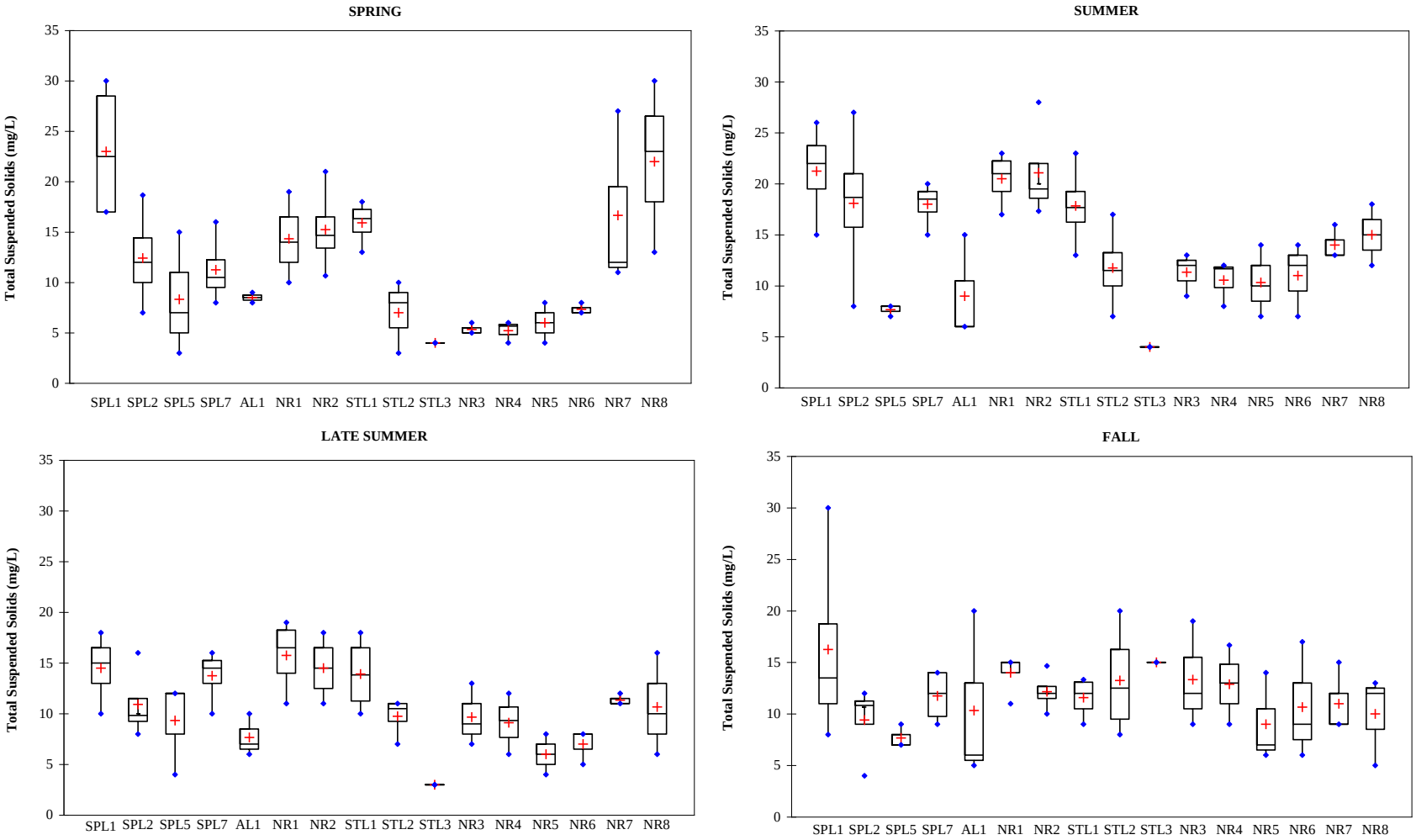

Figure 2H-7: Total suspended solids box plots for data collected from Split Lake to Gillam Island in the open water seasons 2001–2004. Data represent surface measurements

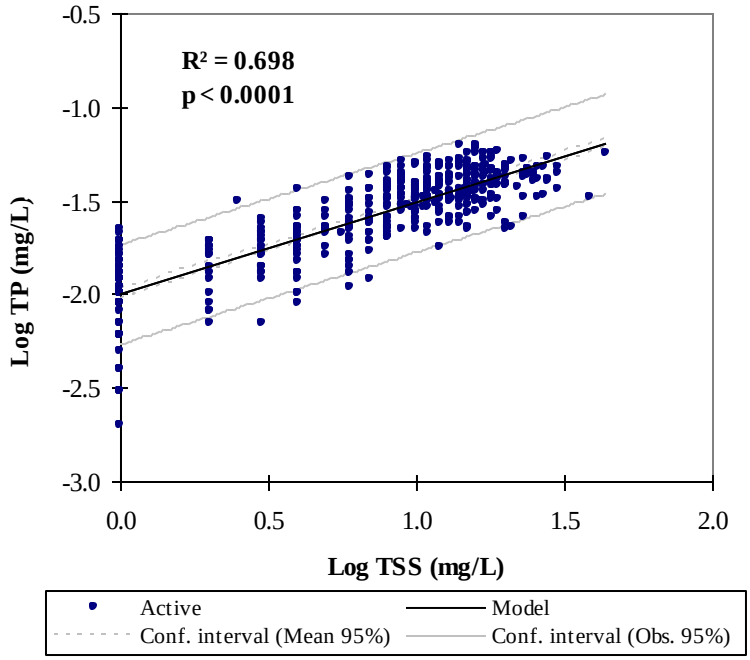

Figure 2H-8: Linear regression between total phosphorus (TP) and total suspended solids (TSS) measured across the study area: open water seasons 1999–2004. Regressions should be interpreted with caution; data did not meet the assumptions of normality

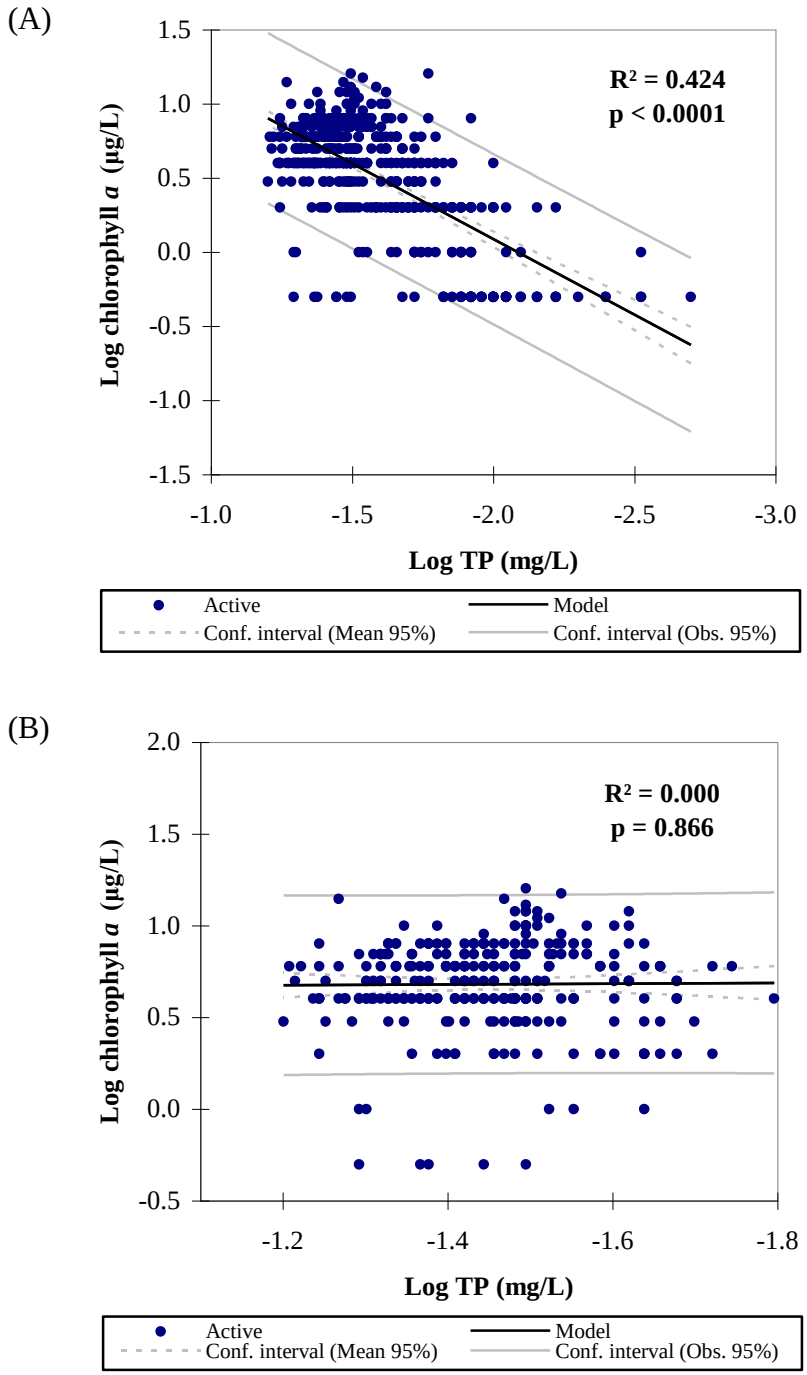

Figure 2H-9: Linear regression between total phosphorus (TP) and chlorophyll *a* measured (A) across the study area and (B) at mainstem sites only: open water seasons 1999–2004. Regressions should be interpreted with caution; data did not meet the assumptions of normality

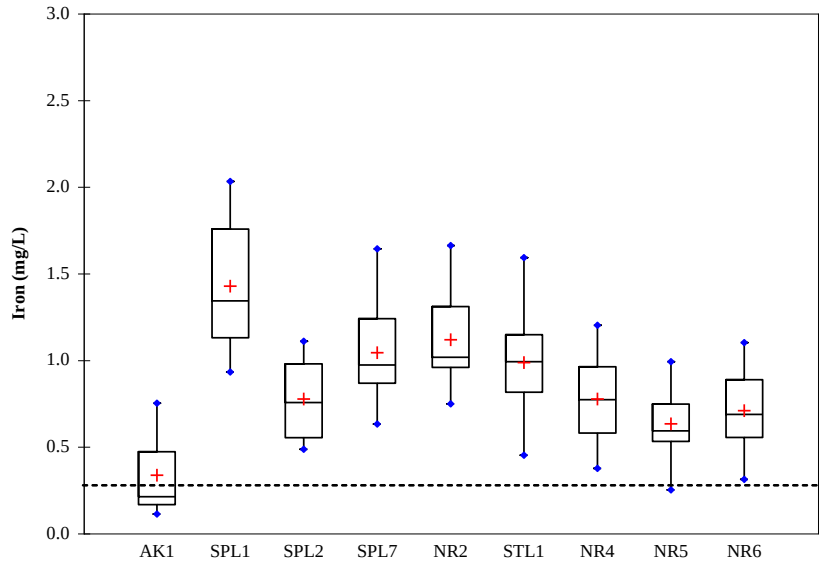

Figure 2H-10: Total iron box plots for data collected in the study area in the open water seasons 2001–2004. Data represent surface measurements. Dashed line indicates the Manitoba and Canadian Council of Ministers of the Environment water quality guideline for the protection of aquatic life and the aesthetic drinking water quality guideline

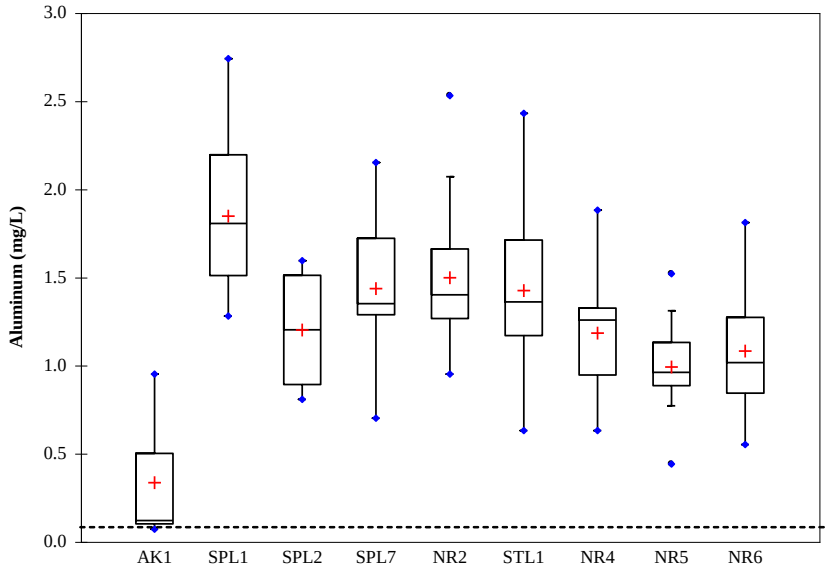

Figure 2H-11: Total aluminum box plots for data collected from the study area in the open water seasons 2001–2004. Data represent surface measurements. Dashed line indicates the Manitoba and Canadian Council of Ministers of the Environment water quality guideline for the protection of aquatic life

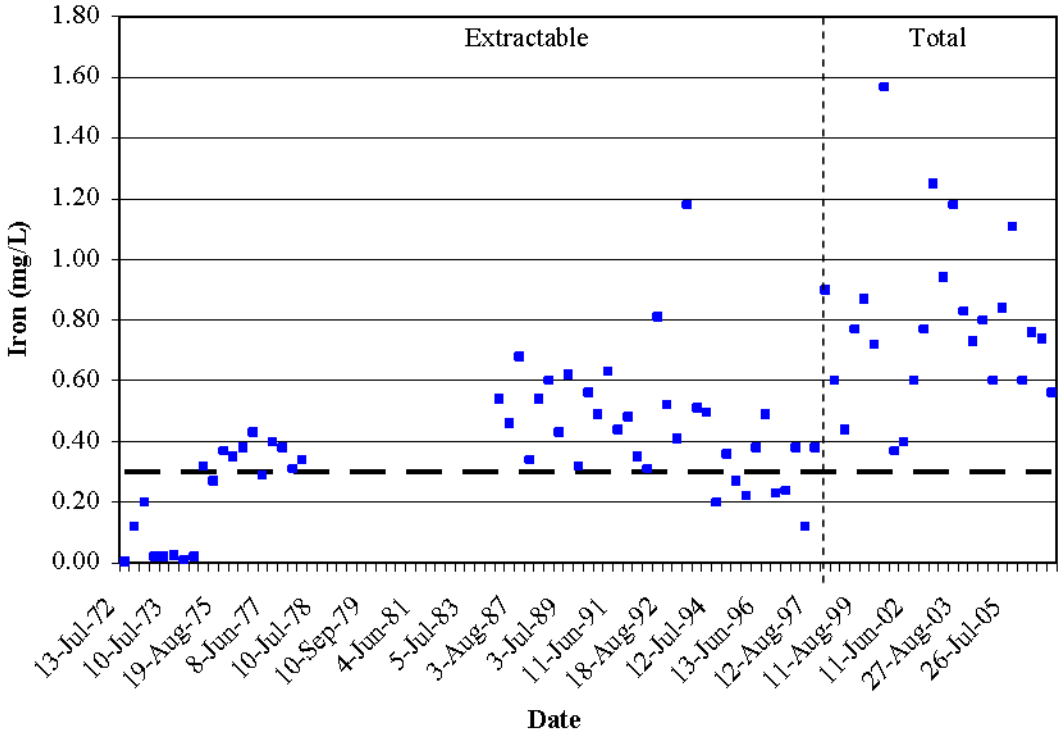

Figure 2H-12: Concentrations of iron measured in Split Lake from 1975–2006. Data provided by Manitoba Water Stewardship (2006). Horizontal dashed line indicates the Manitoba and Canadian Council of Ministers of the Environment water quality guideline for the protection of aquatic life and the aesthetic drinking water quality objective. The vertical line indicates the transition for measurements of iron as extractable (prior to 1998) and total (1998 onwards) forms

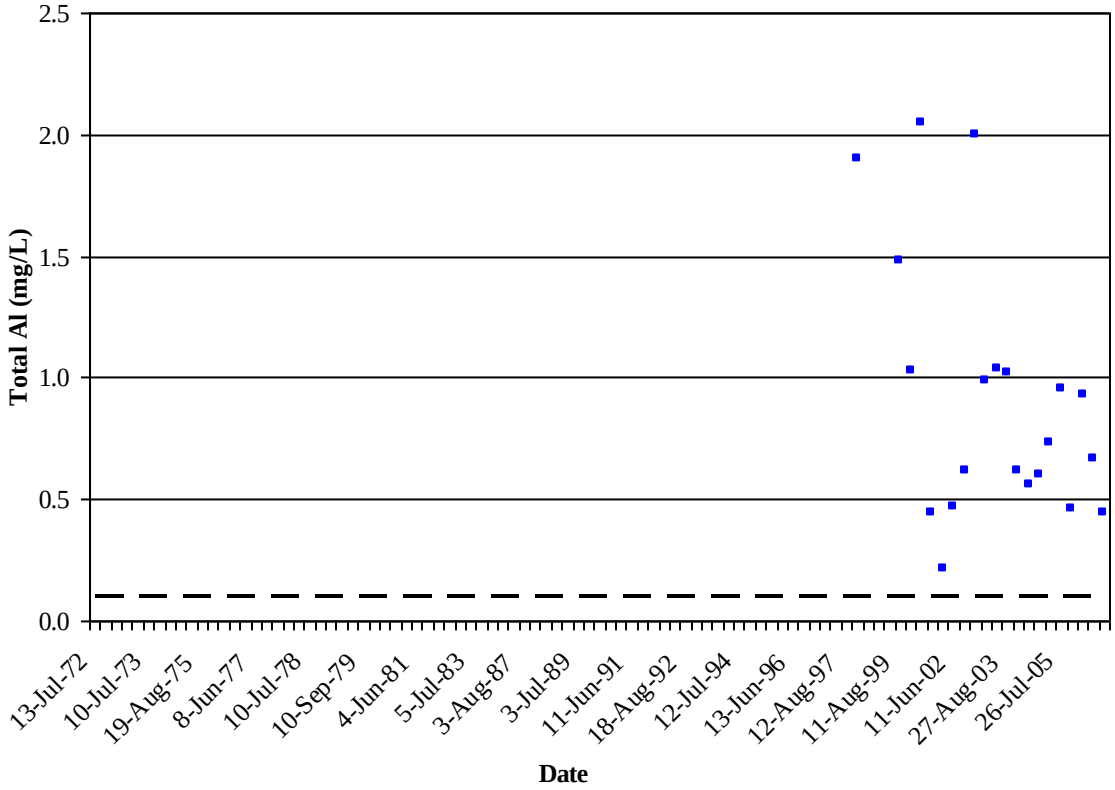

Figure 2H-13: Concentrations of aluminum measured in Split Lake from 1975–2006. Data provided by Manitoba Water Stewardship (2006). The dashed line indicates the Manitoba and Canadian Council of Ministers of the Environment water quality guideline for the protection of aquatic life

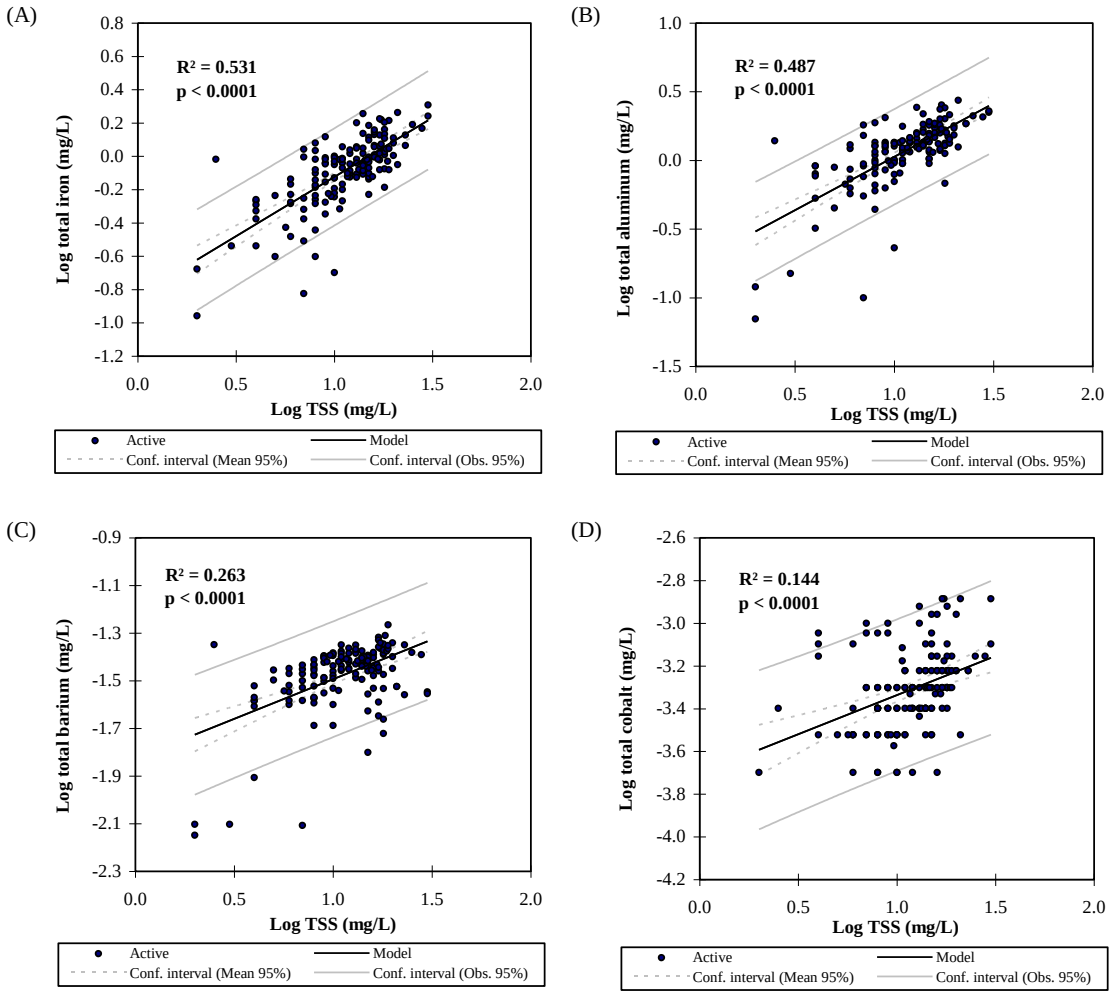

Figure 2H-14: Linear regression between total suspended solids (TSS) and (A) iron, (B) aluminum, (C) barium, (D) cobalt, (E) manganese, (F) potassium, (G) vanadium, (H) chromium, and (I) titanium measured across the study area: open water seasons 1999–2004

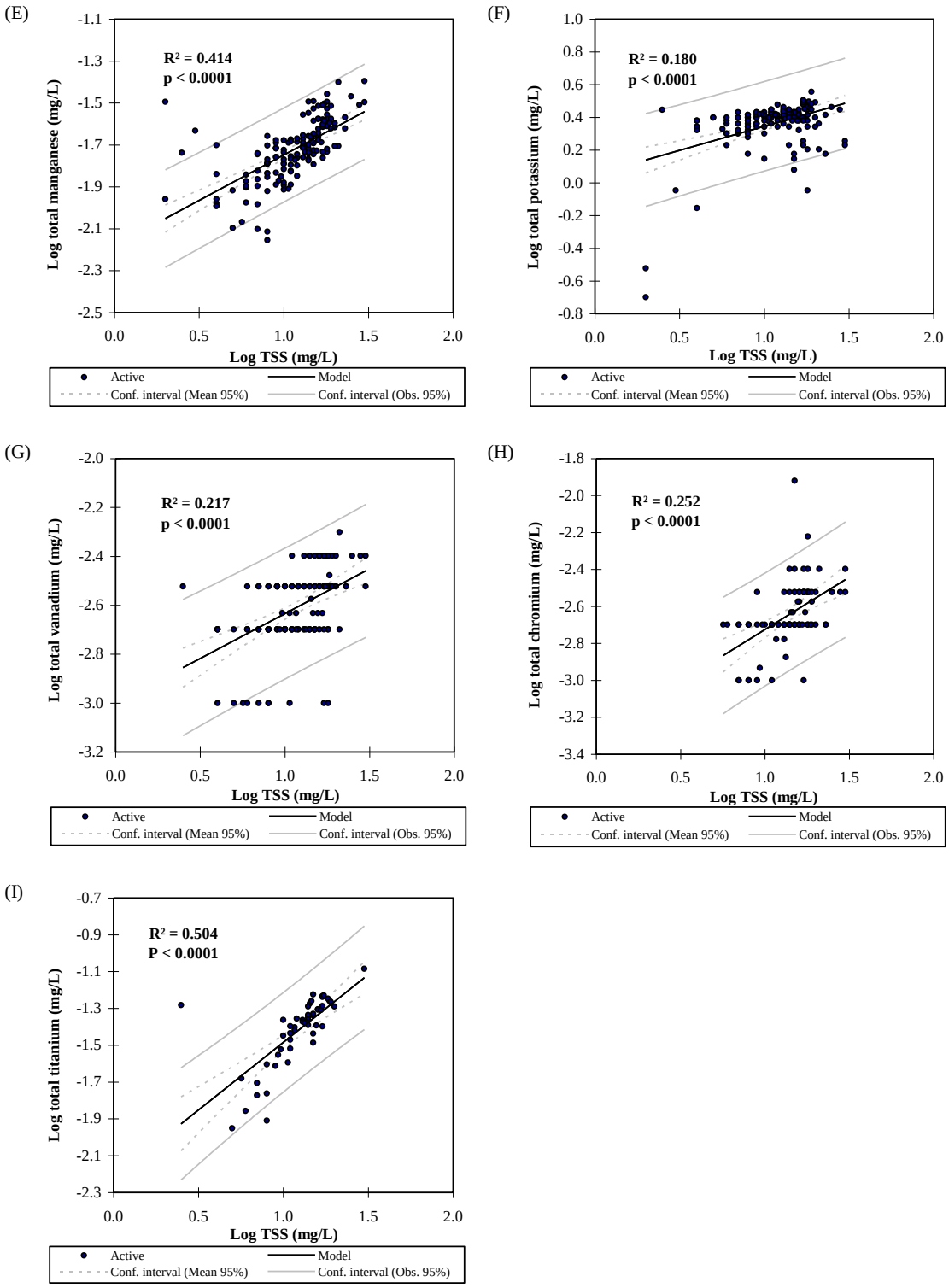

Figure 2H-14: Linear regression between total suspended solids (TSS) and (A) iron, (B) aluminum, (C) barium, (D) cobalt, (E) manganese, (F) potassium, (G) vanadium, (H) chromium, and (I) titanium measured across the study area: open water seasons 1999–2004

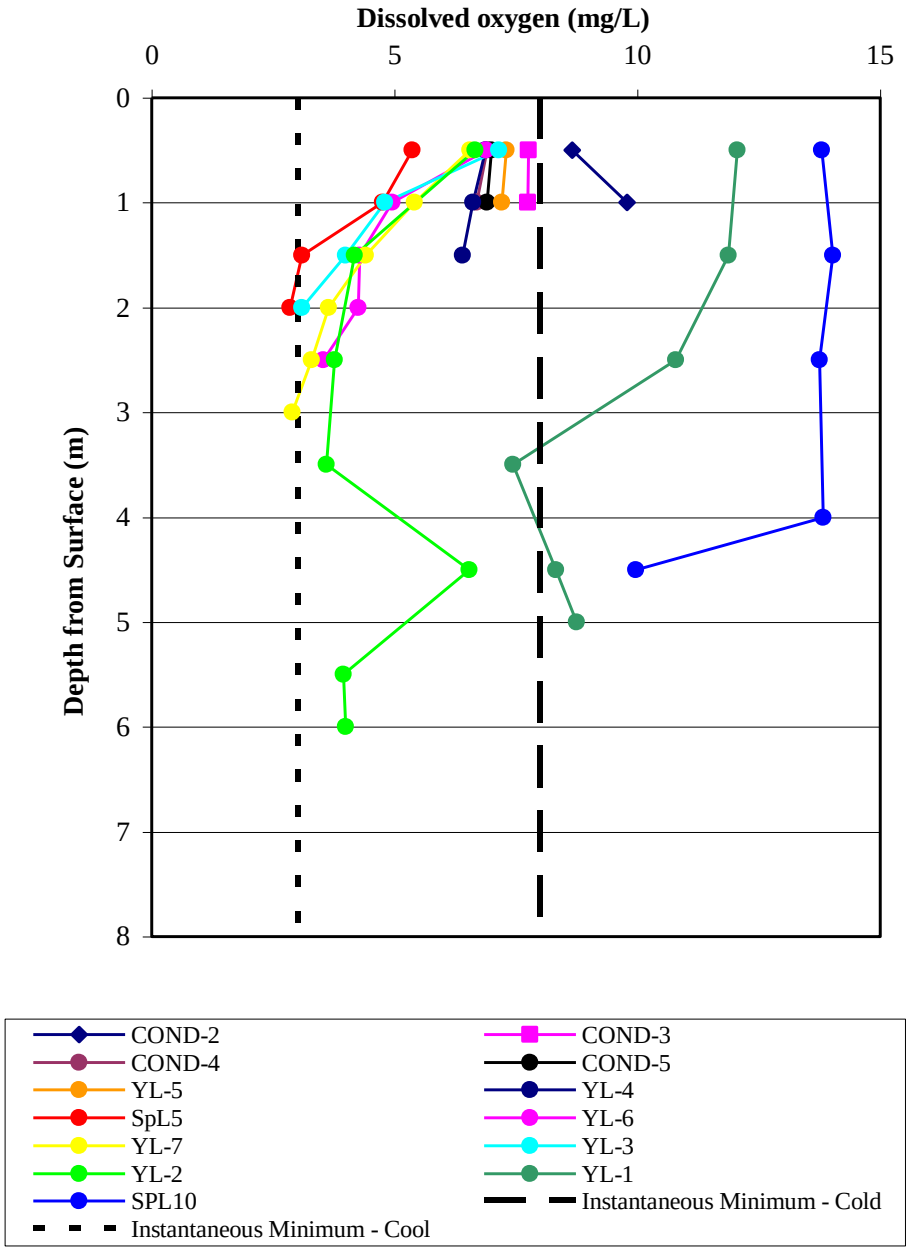

Figure 2H-15: Dissolved oxygen depth profiles measured in the York Landing area April 2007. Dashed lines represent the Manitoba instantaneous minimum DO objectives for the protection of cool-water and cold-water aquatic life

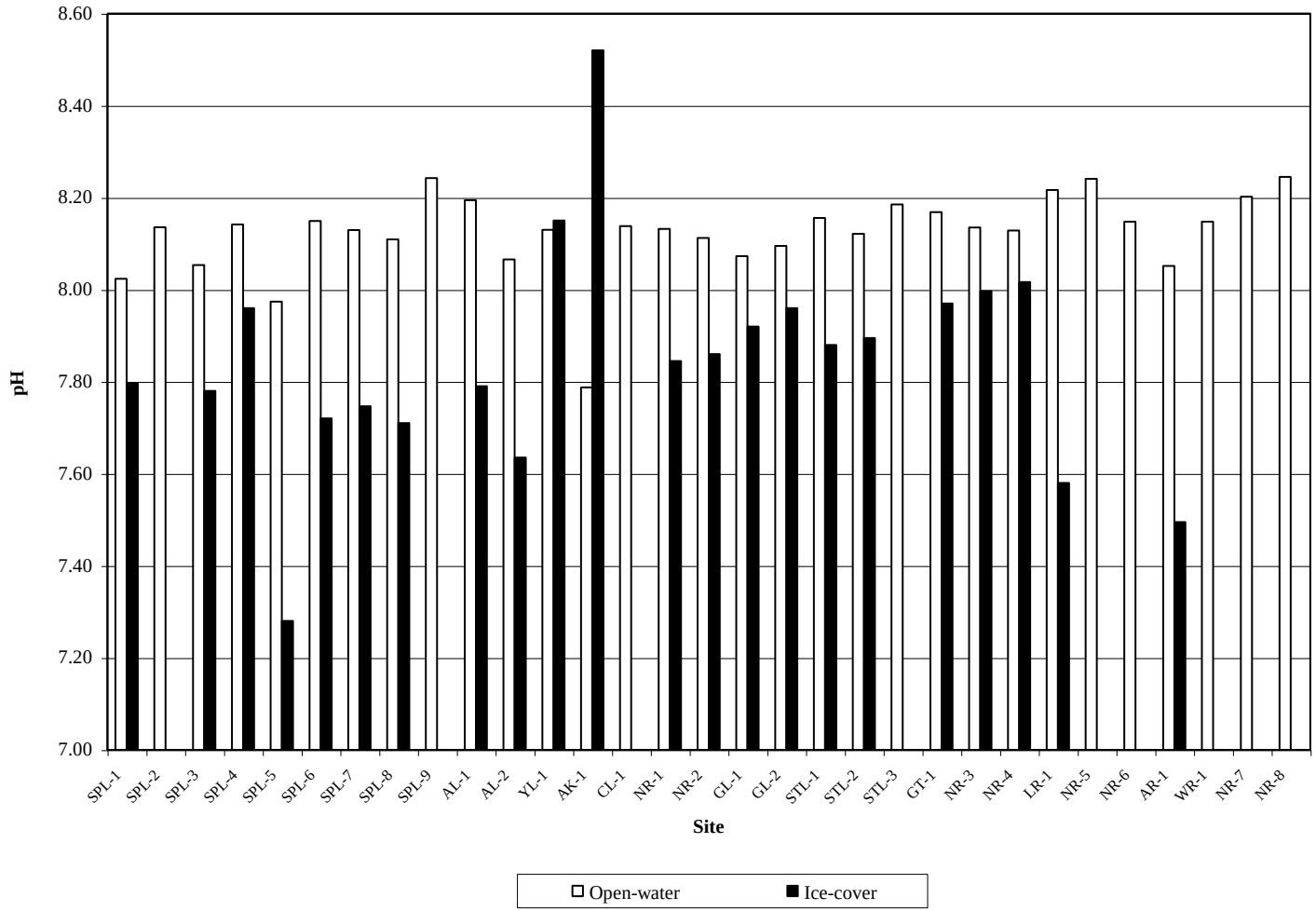

Figure 2H-16: Comparison of mean pH (laboratory) values measured in the open water and ice-cover seasons in the study area 2001–2007

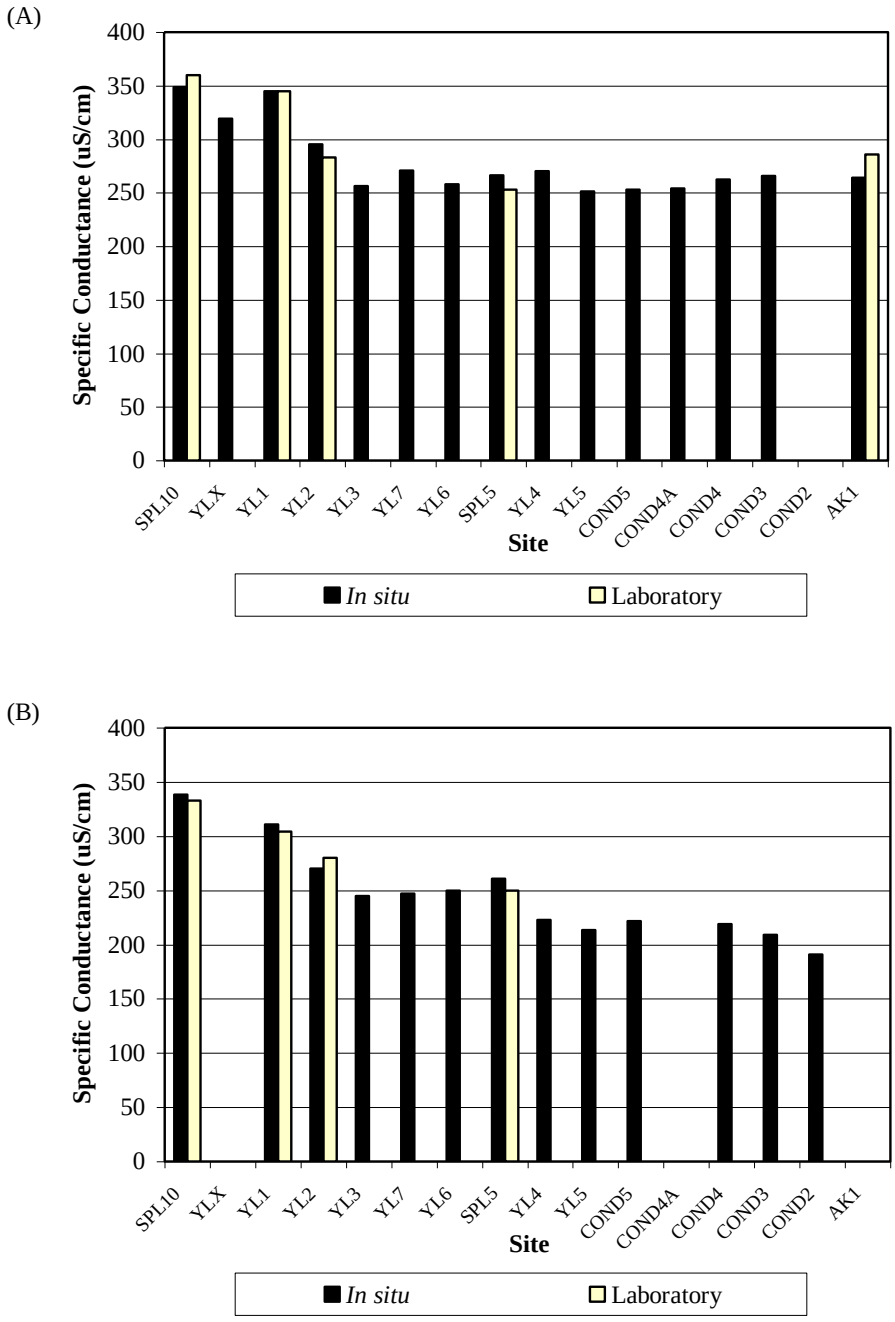

Figure 2H-17: Specific conductance measured in the York Landing area: (A) February 2007; and (B) April 2007. Values illustrated represent mean (depth-averaged) *in situ* and laboratory measurements. Samples of surface water were collected for laboratory analysis at sites SPL10, YL1, YL2, SPL5, and AK1 in February and SPL10, YL1, YL2, and SPL5 in April

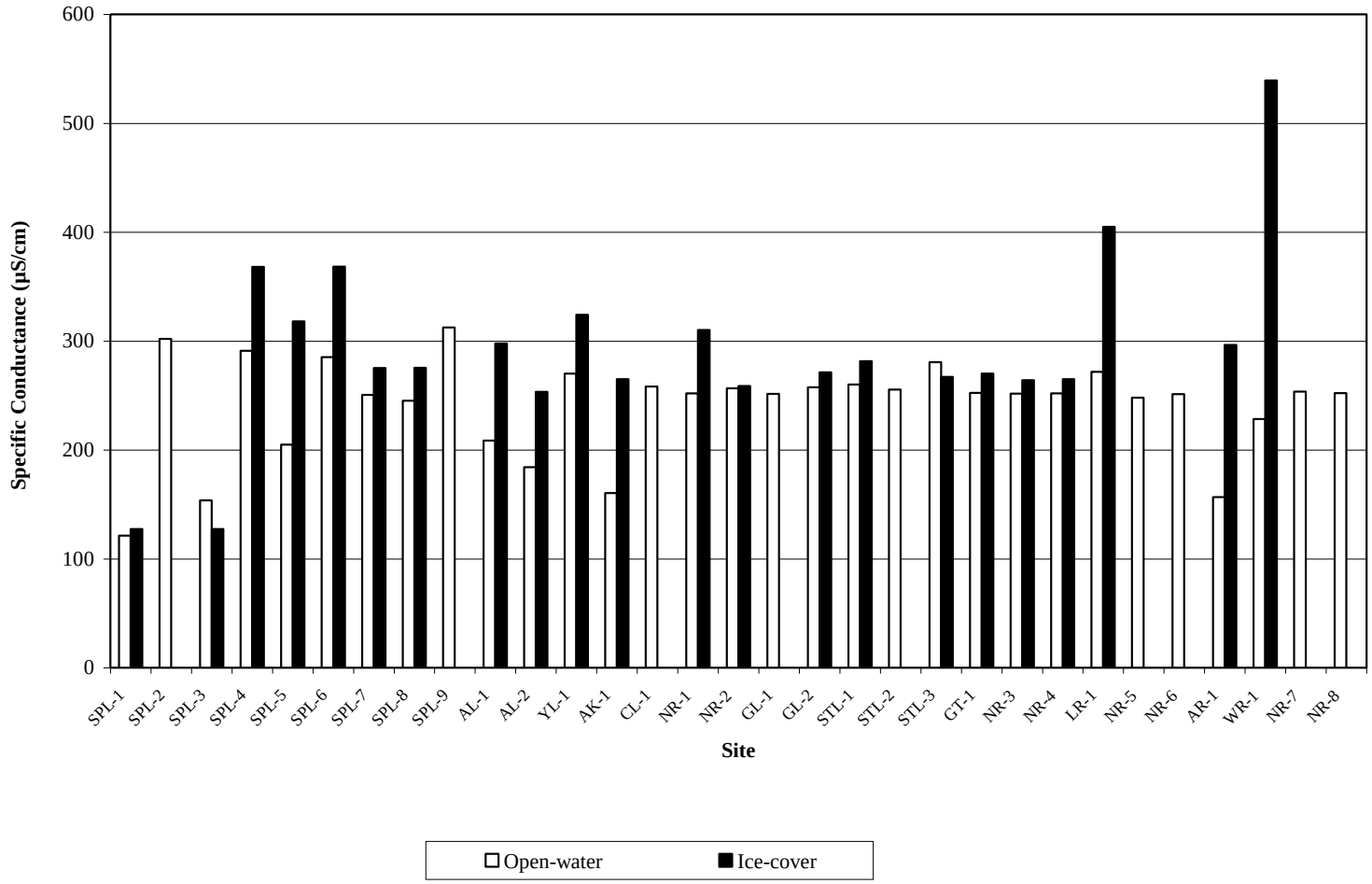

Figure 2H-18: Comparison of mean specific conductance (*in situ*) values measured in the open water and ice-cover seasons in the study area 2001–2007

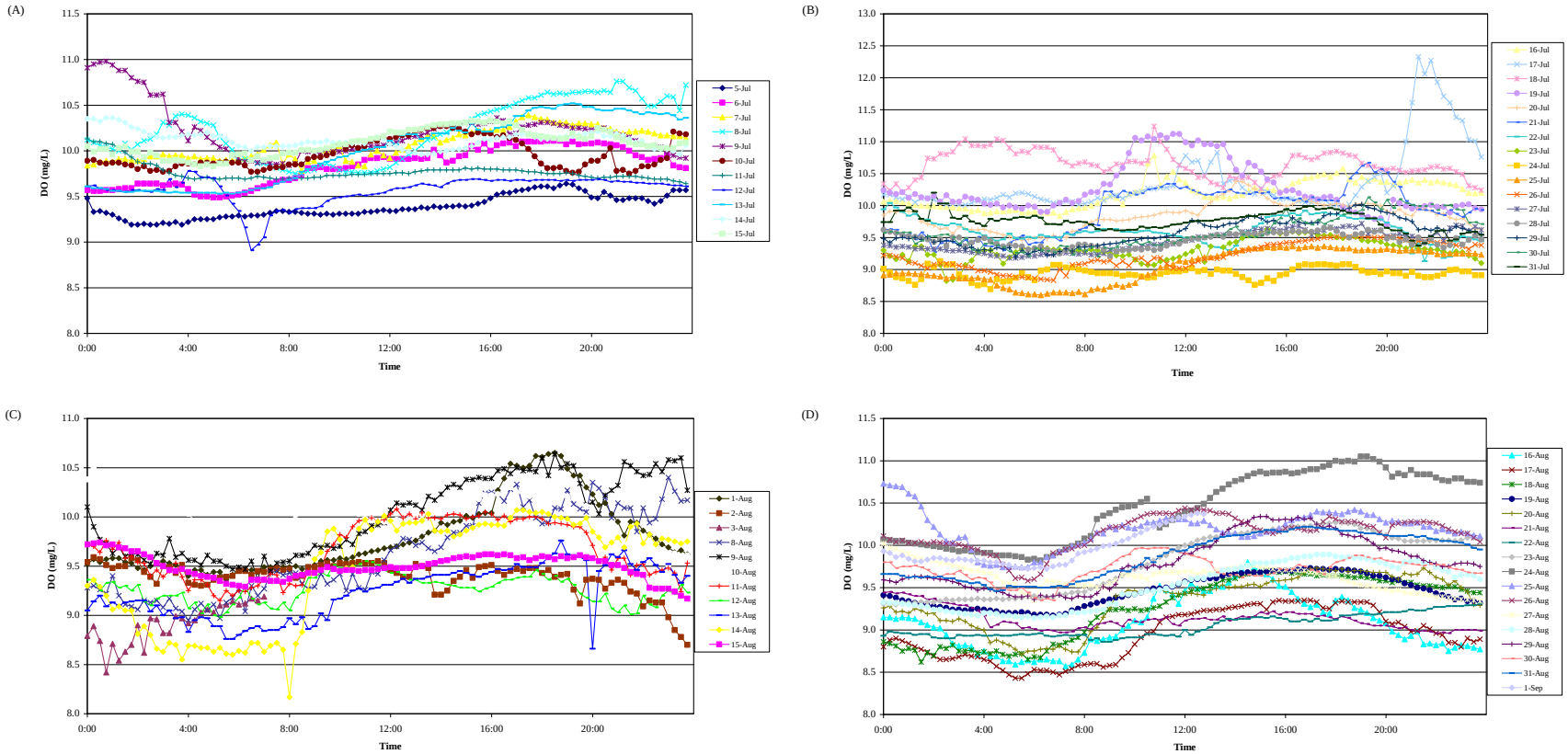

Figure 2H-19: Dissolved oxygen (DO) data collected from near the water surface in John Garson Bay illustrating diurnal changes: (A) 5–15 July; (B) 16–31 July; (C) 1–15 August; and (D) 16 August to 1 September 2008

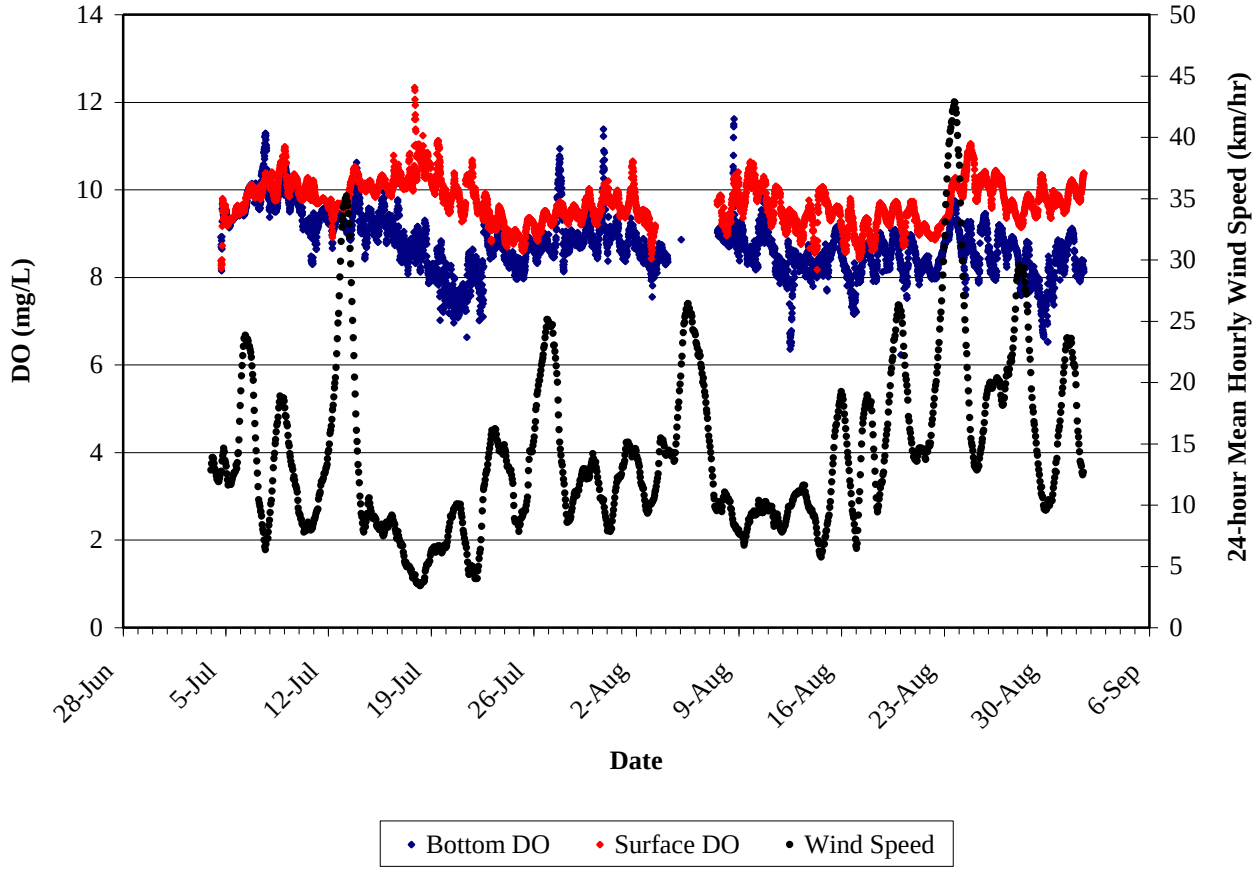

Figure 2H-20: Dissolved oxygen (DO) measured from loggers installed at John Garson Bay along the Nelson River and 24-hour average hourly wind speed measured at Gillam: summer 2008

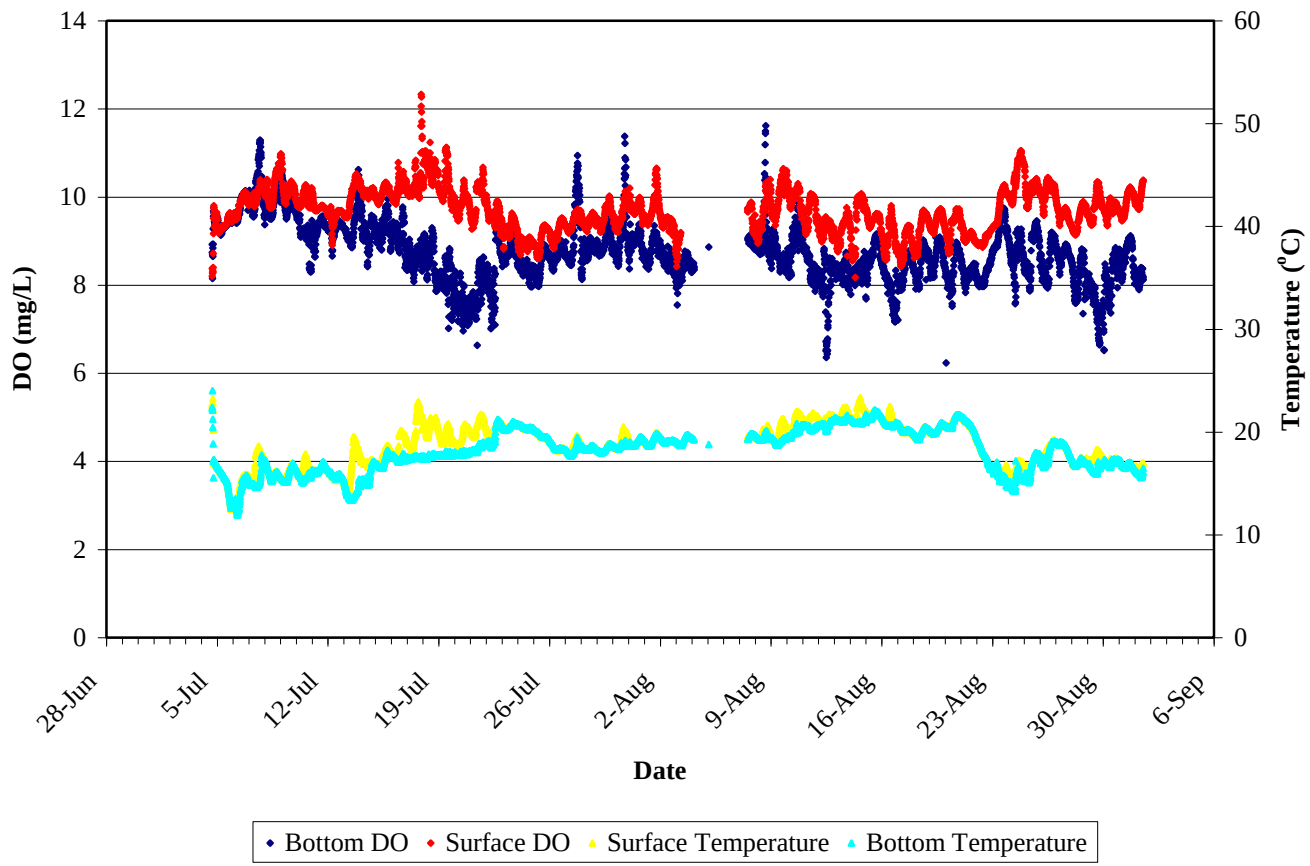

Figure 2H-21: Dissolved oxygen (DO) and temperature measured from loggers installed at John Garson Bay along the Nelson River: summer 2008

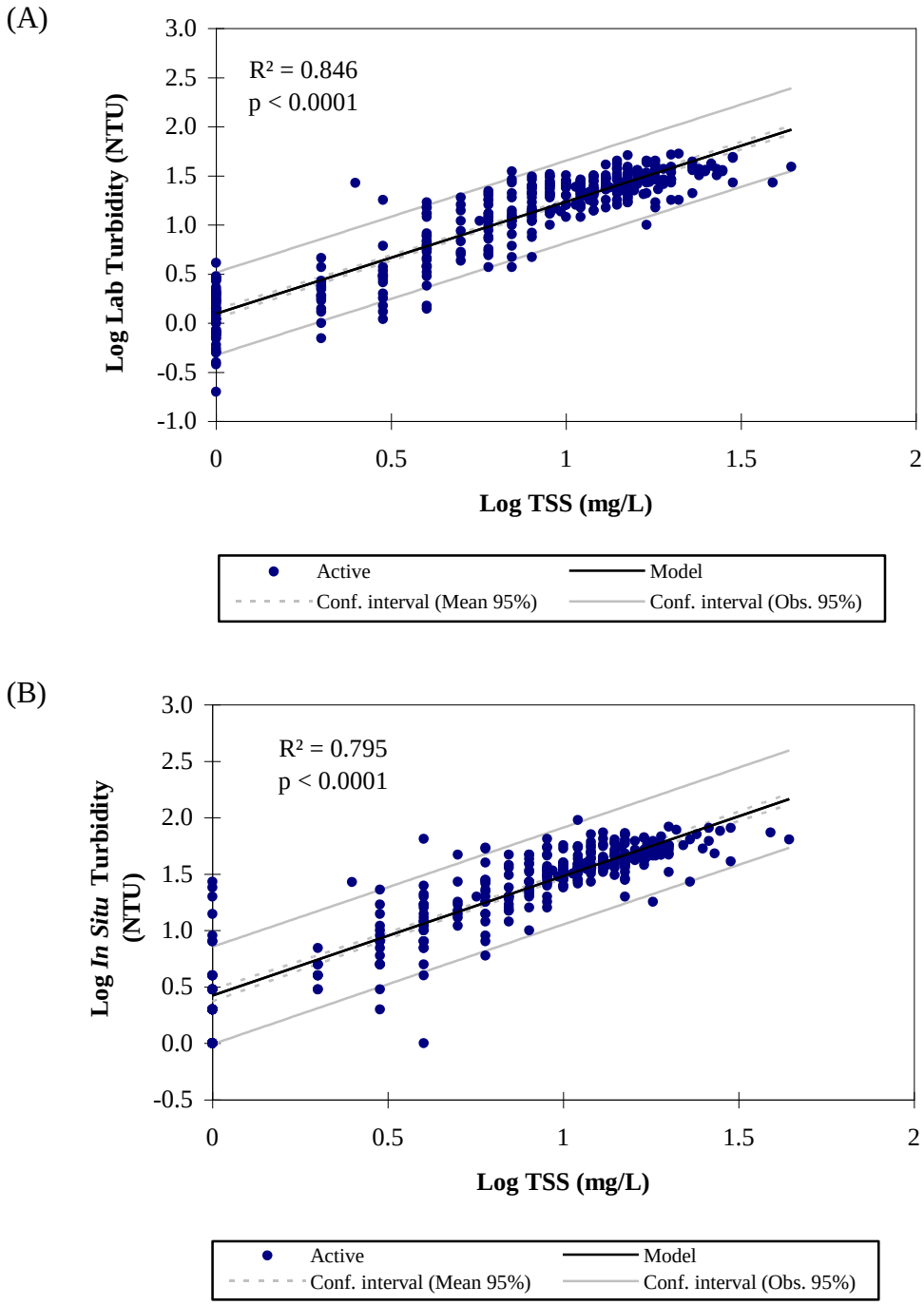

Figure 2H-22: Linear regression between lab turbidity and total suspended solids (TSS) (A) and *in situ* turbidity and TSS (B) measured across the study area: open water seasons 1999–2004

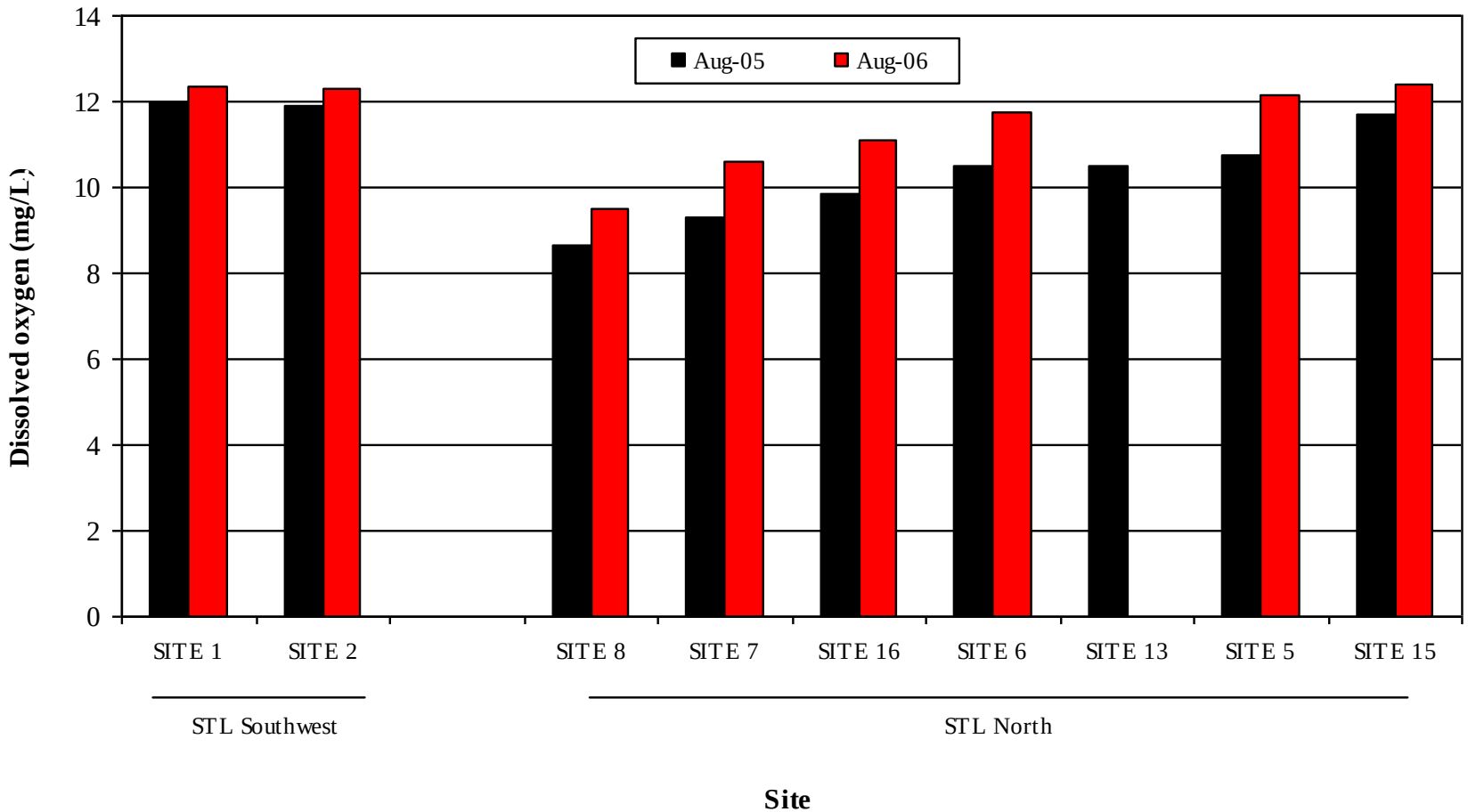

Figure 2H23: Dissolved oxygen concentrations measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

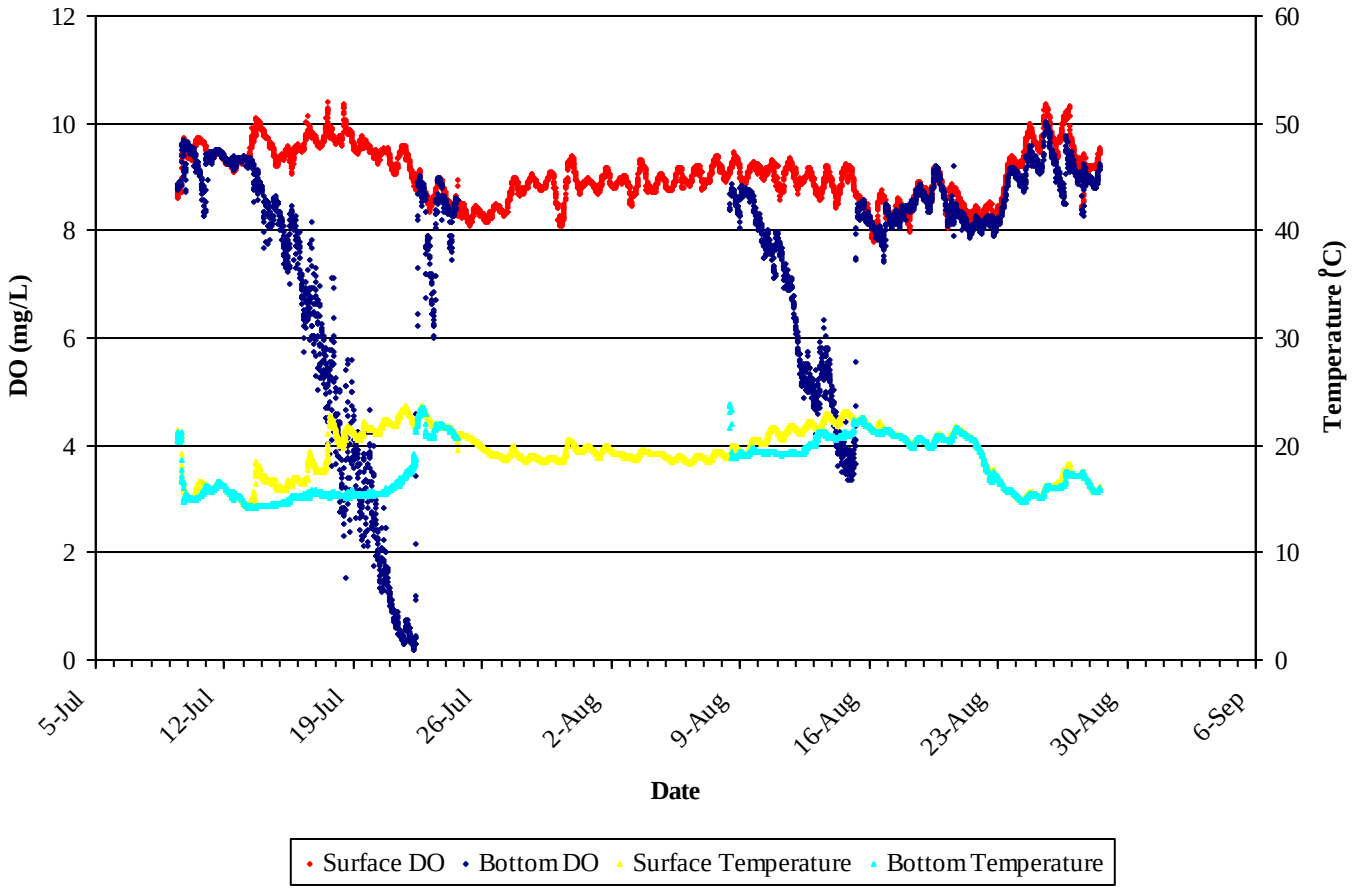

Figure 2H-24: Dissolved oxygen (DO) and temperature measured from loggers installed at Ross Wright Bay in Stephens Lake: summer 2008

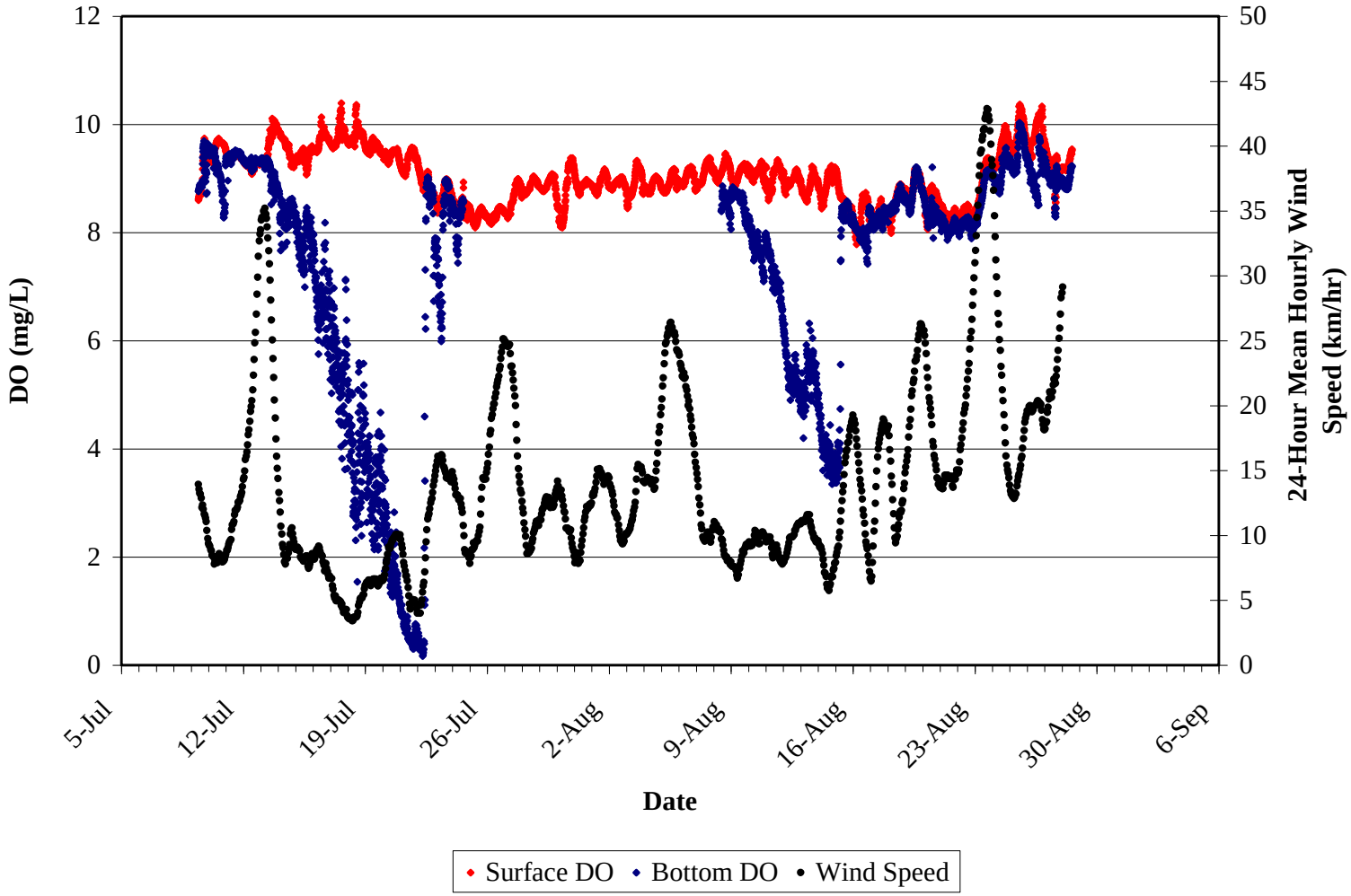

Figure 2H-25: Dissolved oxygen (DO) measured from loggers installed at Ross Wright Bay in Stephens Lake and 24-hour average hourly wind speed measured at Gillam: summer 2008

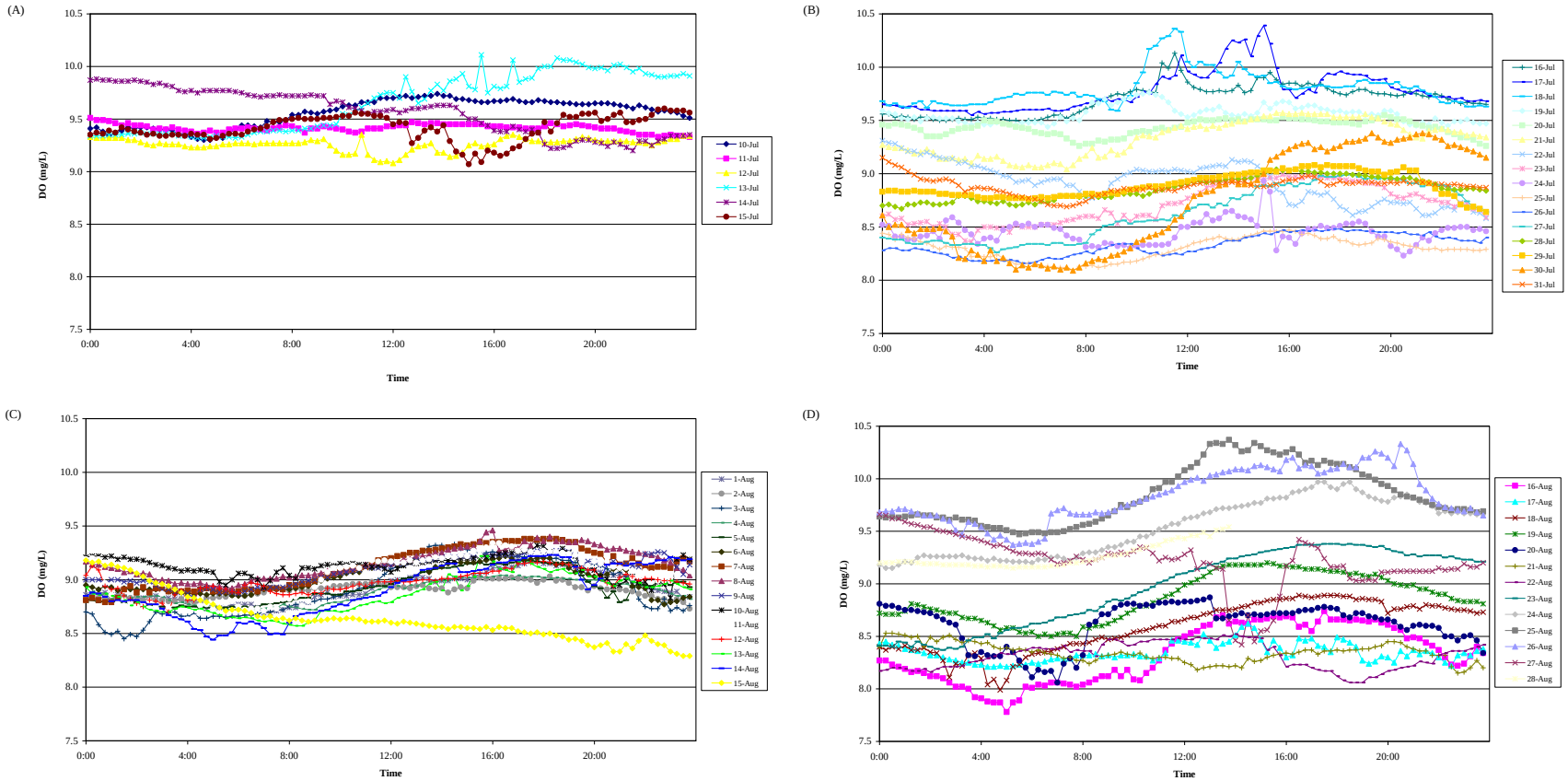

Figure 2H-26: Dissolved oxygen data collected from near the water surface in Ross Wright Bay in Stephens Lake illustrating diurnal changes: (A) 10–15 July; (B) 16–31 July; (C) 1–15 August; and (D) 16–28 August 2008

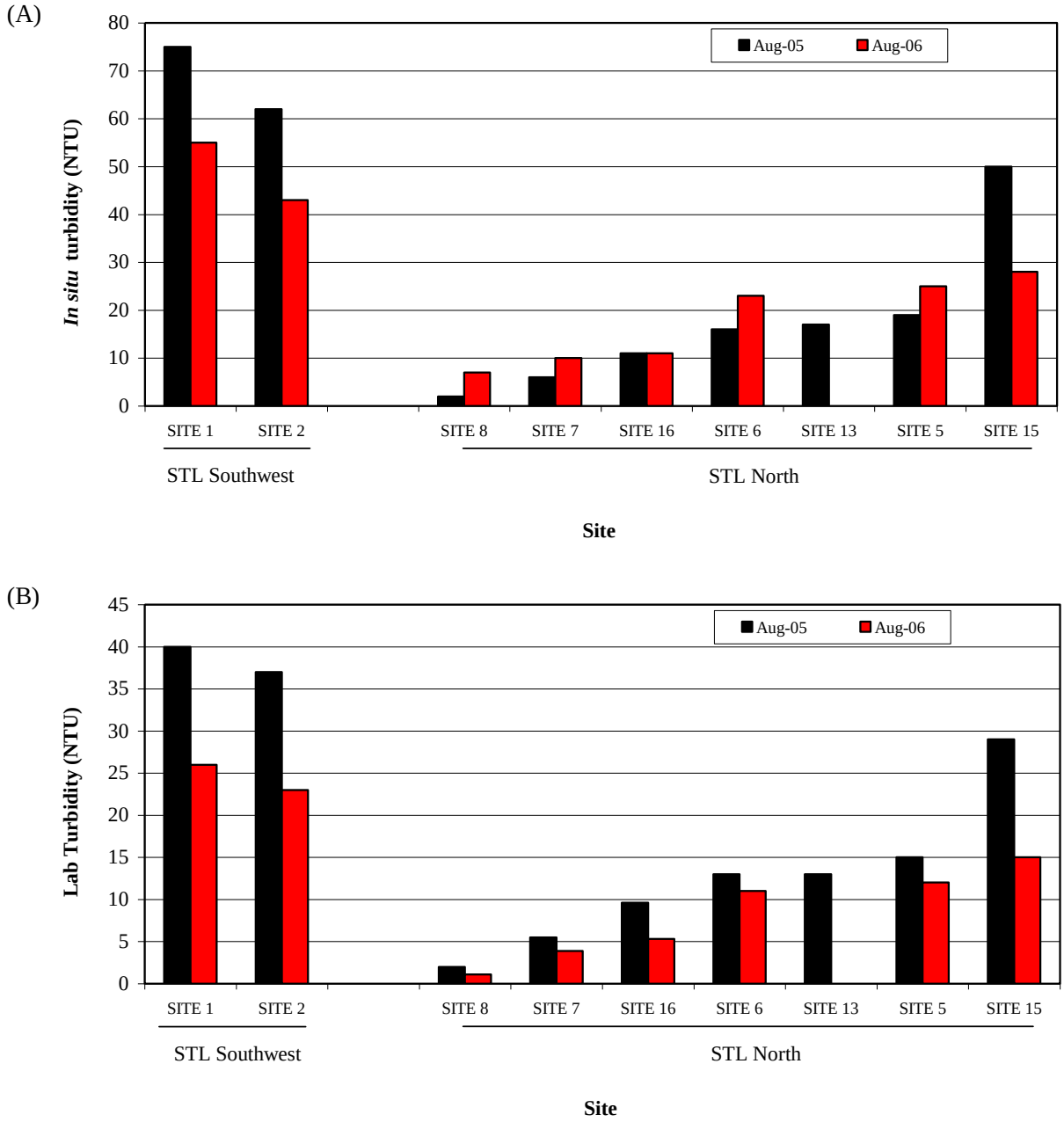

Figure 2H-27: Turbidity ((A) *in situ* and (B) laboratory)) measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

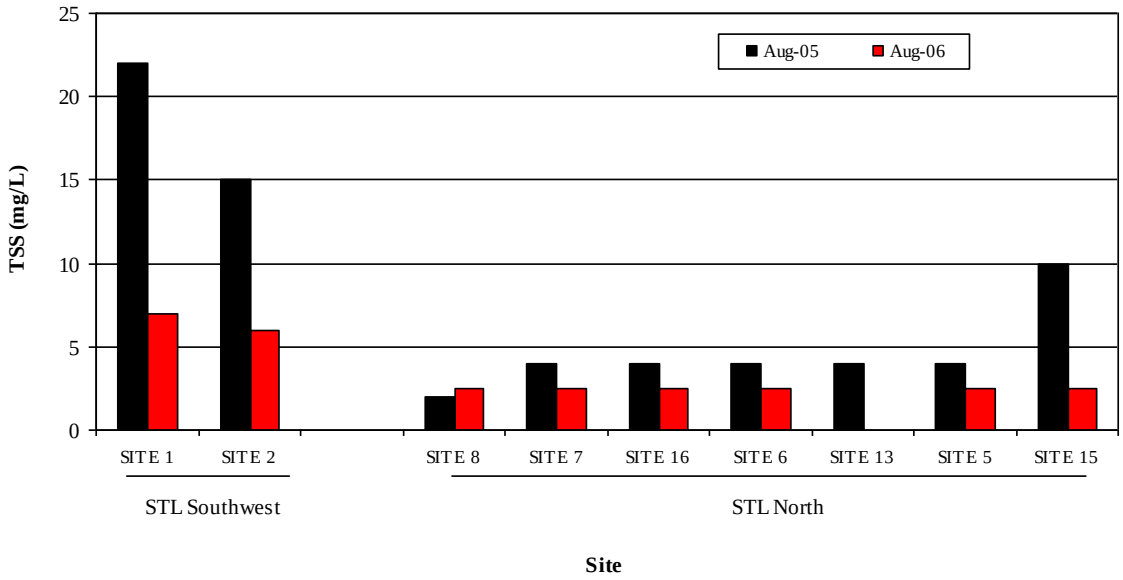

Figure 2H-28: Total suspended solids (TSS) measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

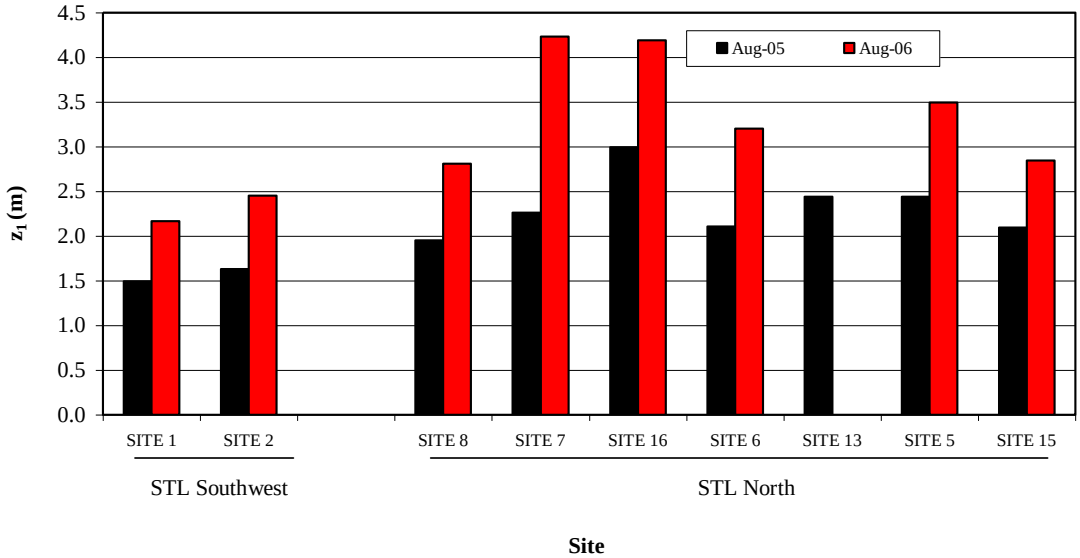

Figure 2H-29: Euphotic zone depth (z_1) measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

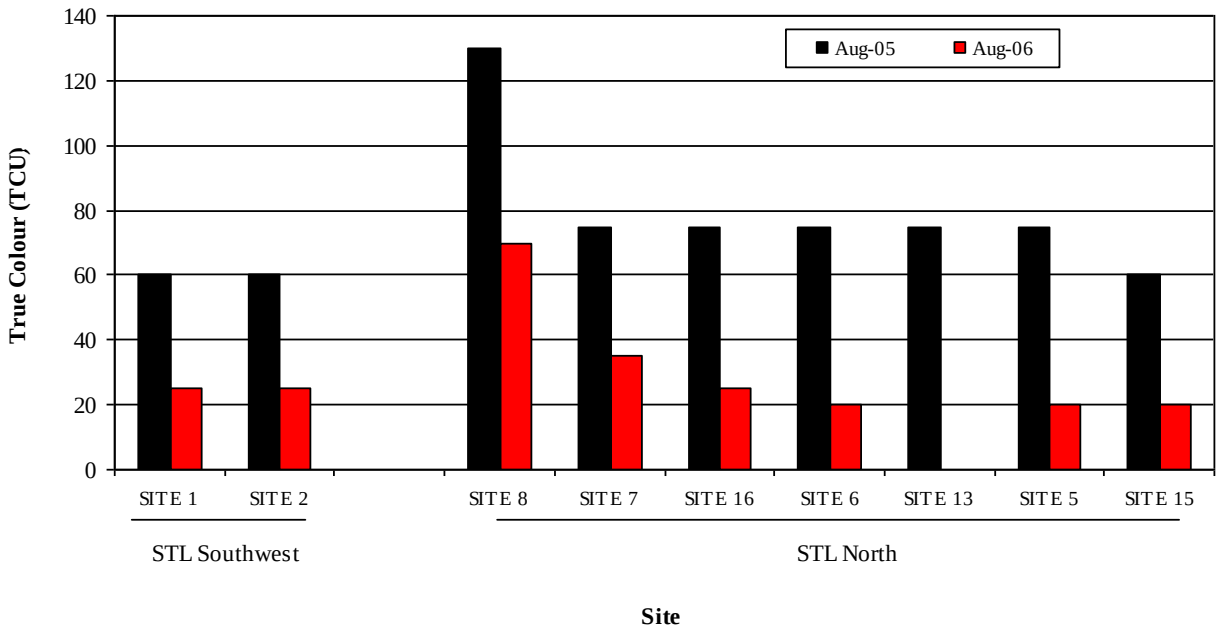

Figure 2H-30: True colour measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

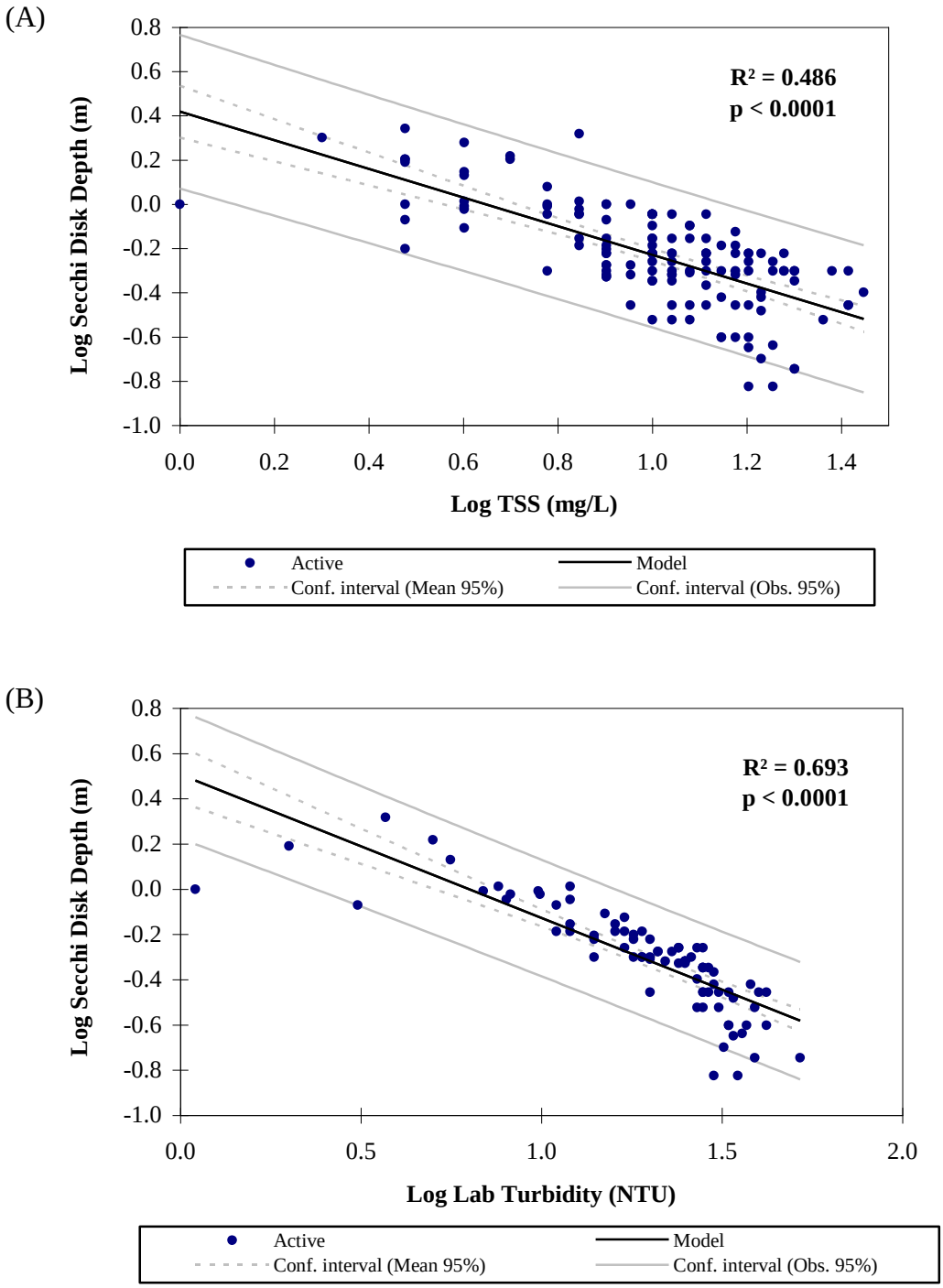

Figure 2H-31: Linear regression between (A) laboratory turbidity and Secchi disk depth and (B) total suspended solids (TSS) and Secchi disk depth measured across the study area: open water seasons 1999–2004

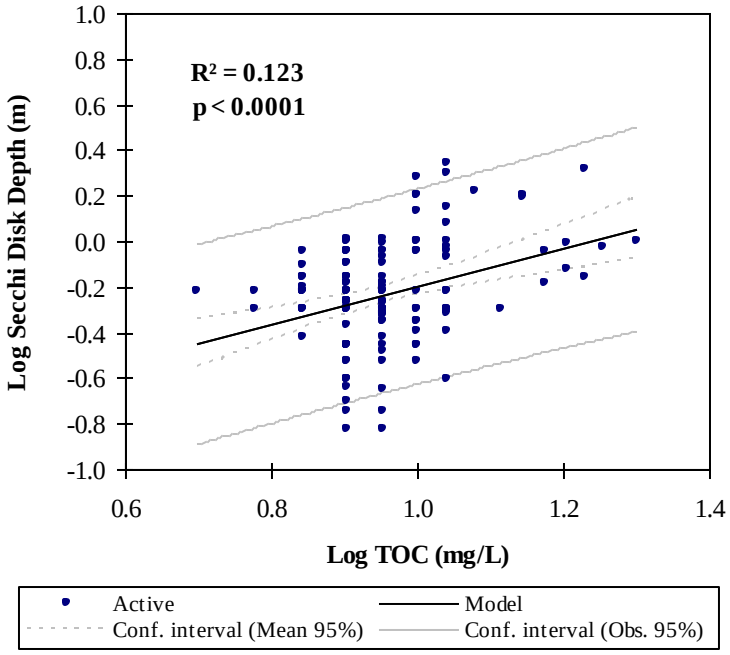

Figure 2H-32: Linear regression between total organic carbon (TOC) and Secchi disk depth measured across the study area: open water seasons 1999–2004

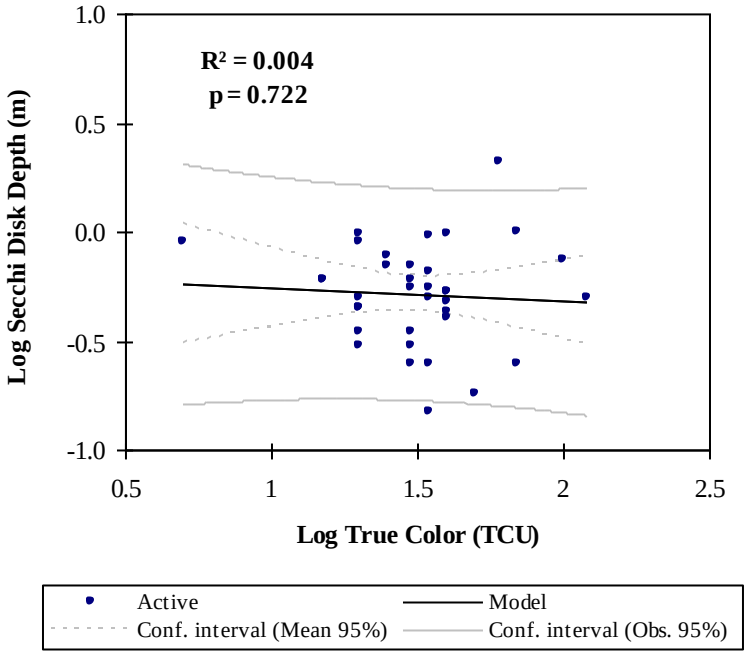

Figure 2H-33: Linear regression between true colour and Secchi disk depth measured across the study area: open water seasons 1999–2004

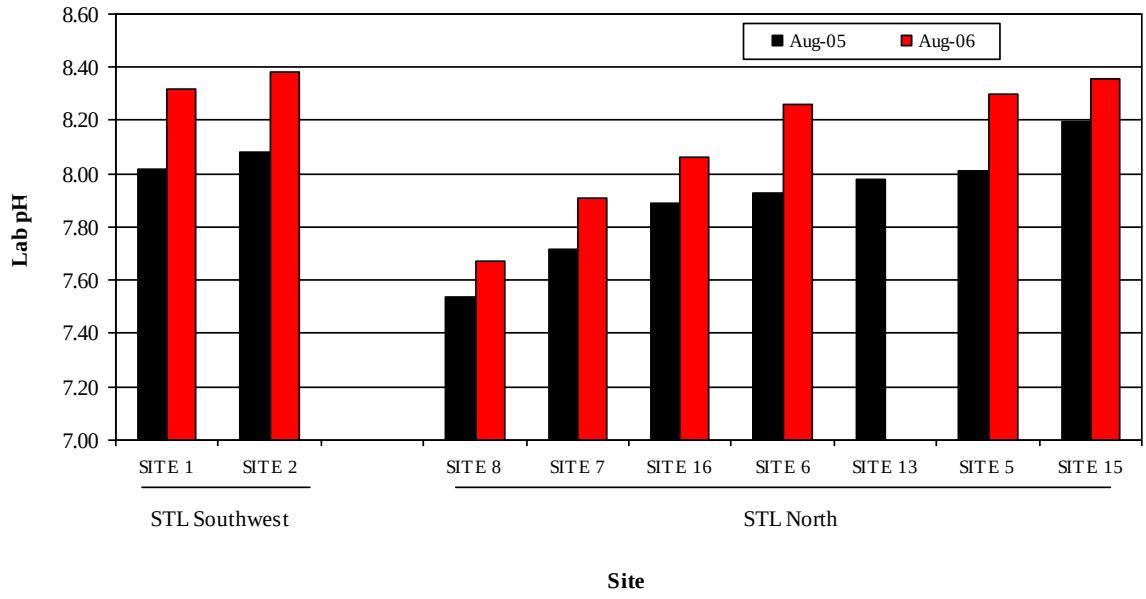

Figure 2H-34: pH measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

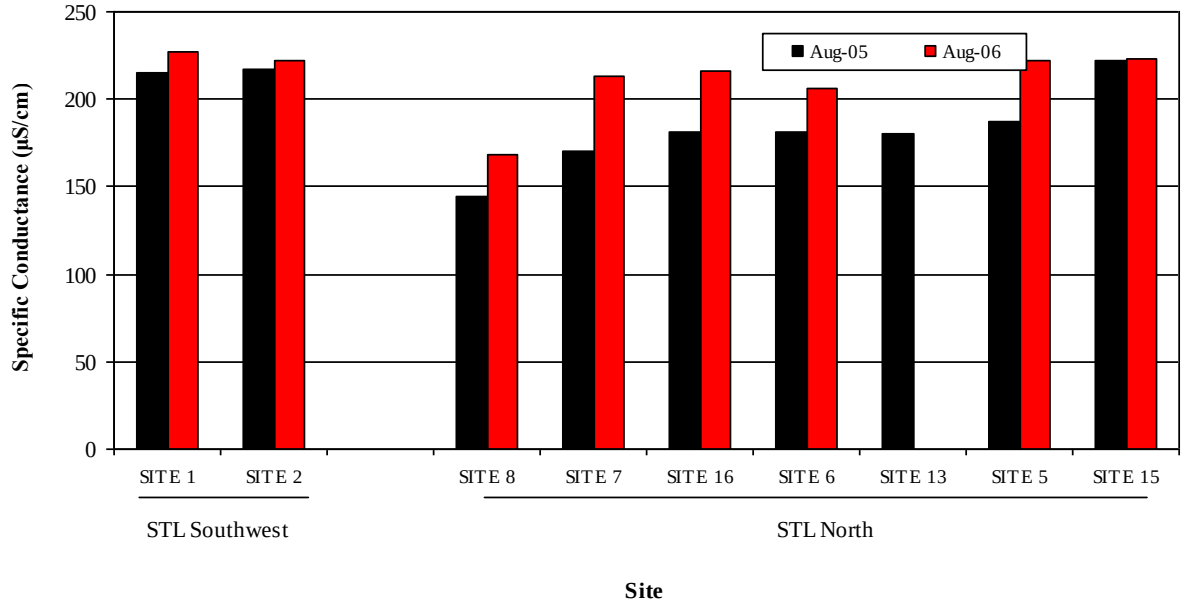

Figure 2H-35: Specific conductance measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

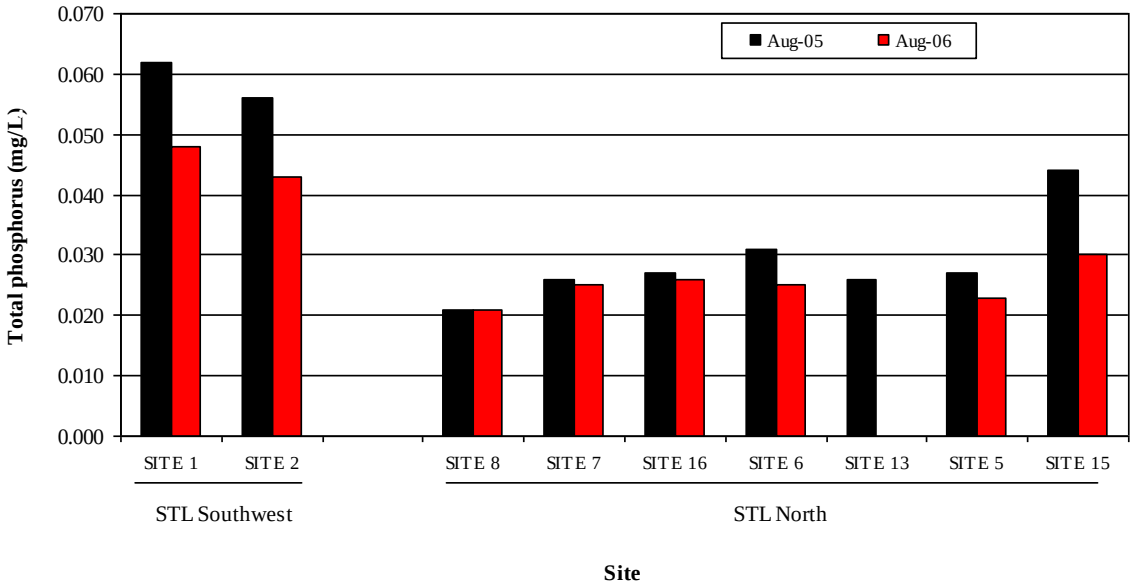

Figure 2H-36: Total phosphorus measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

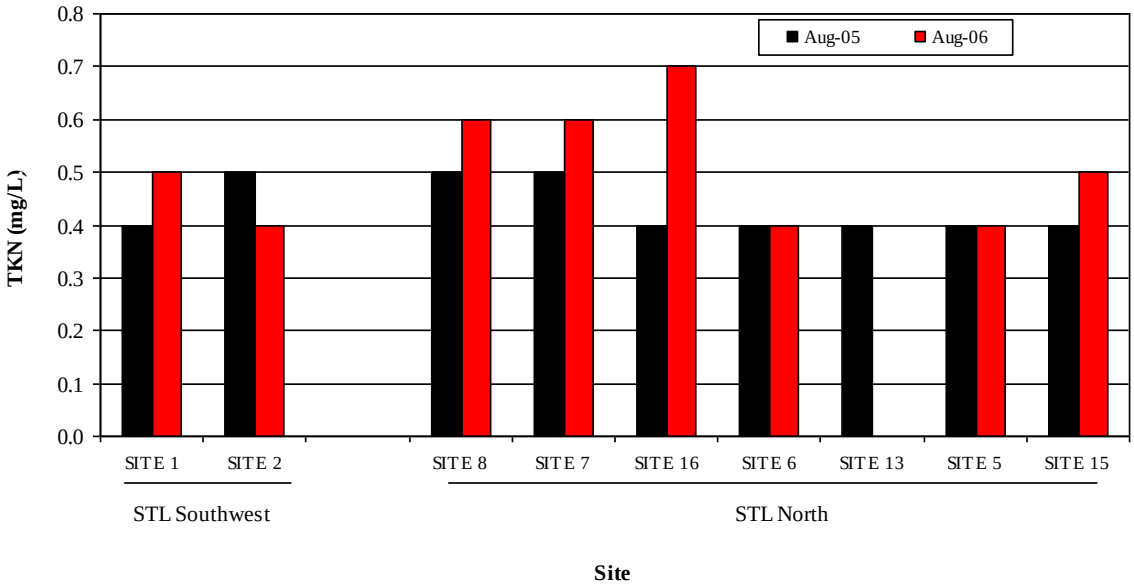

Figure 2H-37: Total Kjeldahl nitrogen (TKN) measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

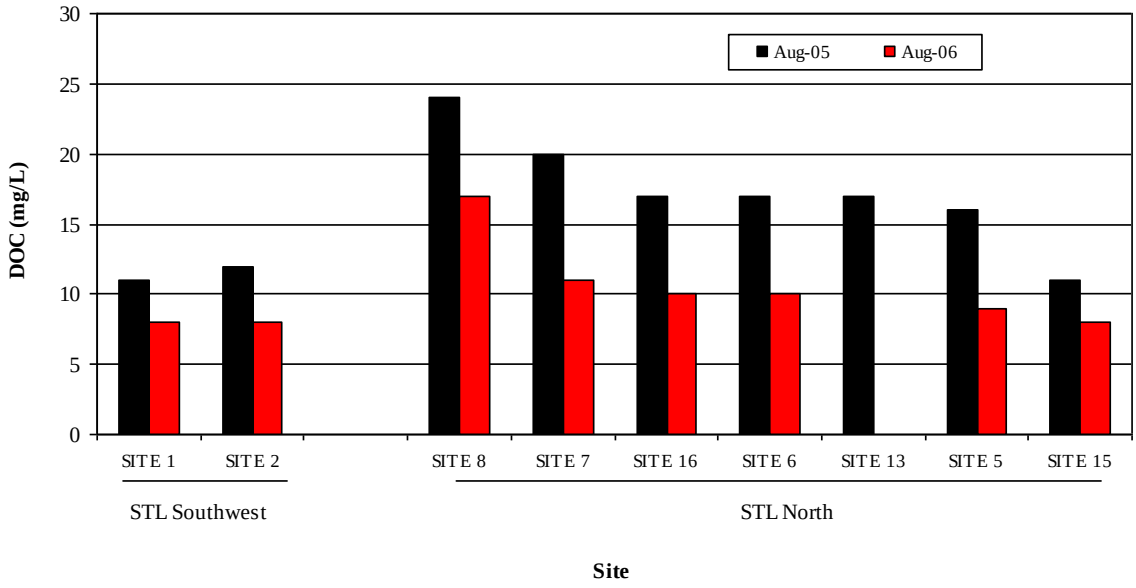

Figure 2H-38: Dissolved organic carbon (DOC) measured at sites located in the southwestern area of Stephens Lake (STL Southwest) and in the vicinity of O'Neil Bay (STL North). Sites in the north arm illustrated here represent a gradient from the nearshore area of O'Neil Bay out into the offshore area of the lake

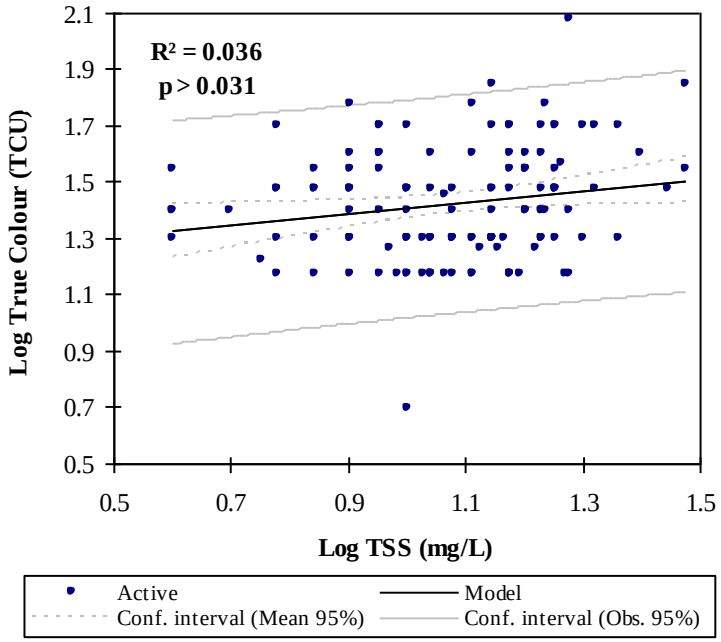

Figure 2H-39: Linear regression between total suspended solids (TSS) and true colour measured at sites located along the mainstem of the Nelson River: 2001–2004

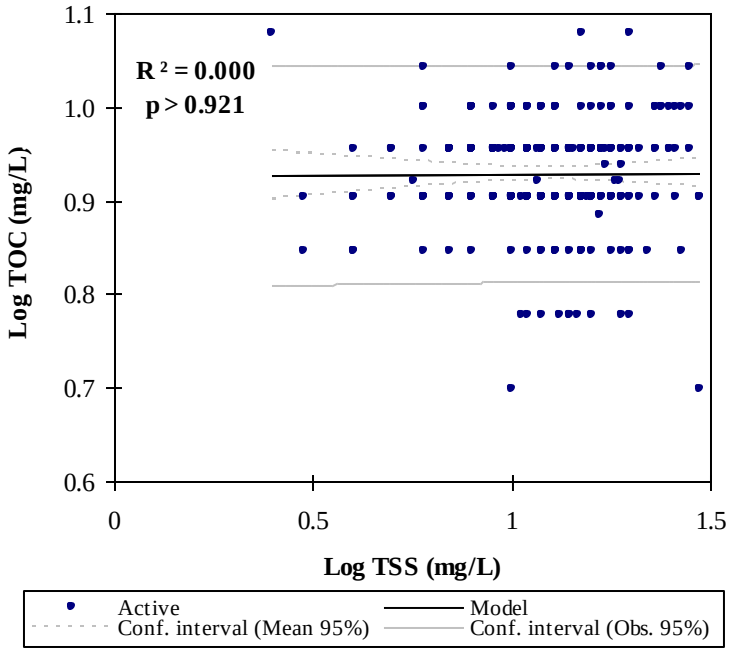

Figure 2H-40: Linear regression between total suspended solids (TSS) and total organic carbon (TOC) measured at sites located along the mainstem of the Nelson River: 2001–2004

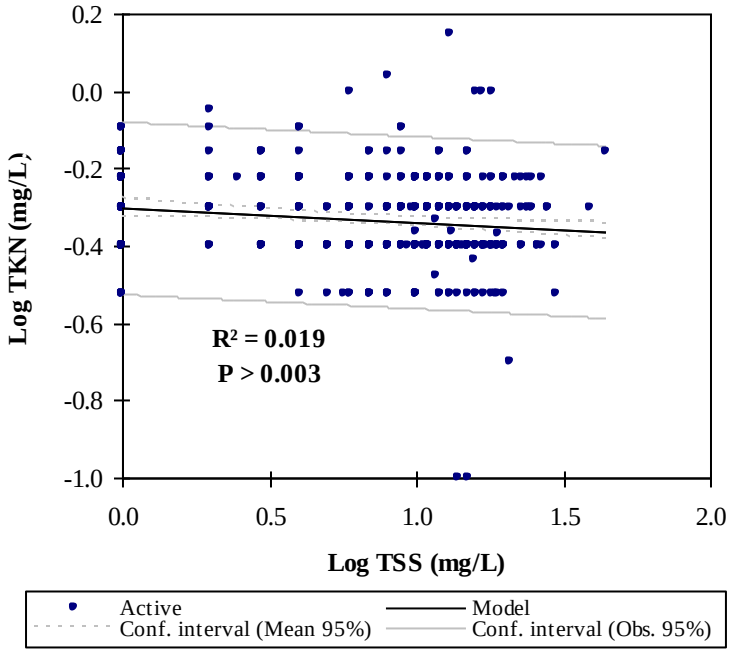

Figure 2H-41: Linear regression between total suspended solids (TSS) and total Kjeldahl nitrogen (TKN) measured across the study area: 2001–2004

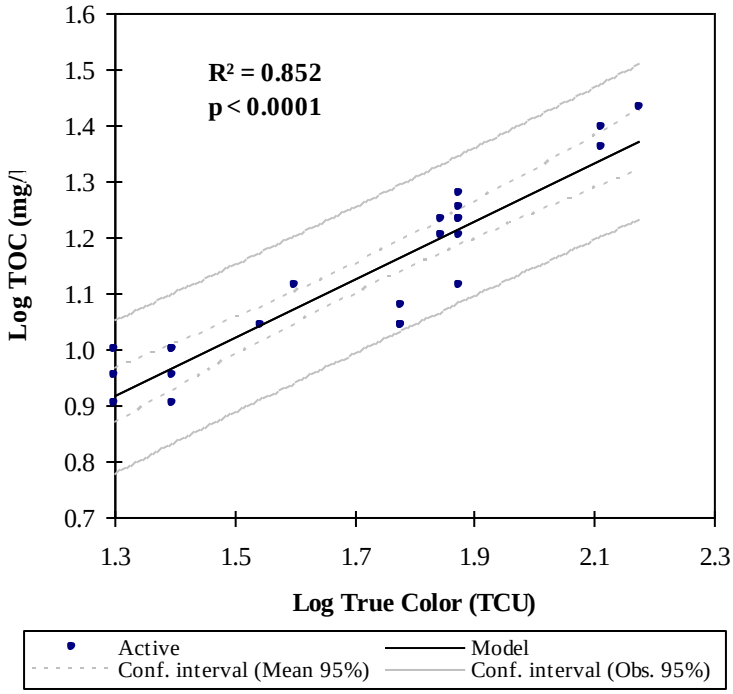

Figure 2H-42: Linear regression between total organic carbon (TOC) and true colour for data collected in the north arm of Stephens Lake: August 2005 and 2006