

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: July 2, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	23.9	23.9	23.9	23.9	23.8	23.8	23.8	23.7	23.8
Dissolved Oxygen	mg/L	7.18	7.2	7.32	7.5	7.11	7.1	7.05	7.2	6.85
Conductivity	mS/cm	1103	1100	1102	1106	1105	1105	1105	1106	1106
pH	units	8.67	8.68	8.64	8.67	8.68	8.68	8.7	8.69	8.7
Biochemical Oxygen Demand	mg/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbonaceous BOD	mg/L	*	*	*	*	*	*	*	*	*
Total Suspended Solids	mg/L	321	303	272	275	307	245	246	222	281
Ammonia Nitrogen	mg/L N	0.021	0.018	0.016	0.016	0.016	0.015	0.011	< 0.01	0.01
Nitrate Nitrogen	mg/L N	0.247	0.204	0.21	0.268	0.268	0.27	0.227	0.29	0.276
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.247	0.204	0.21	0.268	0.268	0.27	0.227	0.29	0.276
Total Kjeldahl Nitrogen	mg/L N	0.89	0.85	0.95	0.88	0.95	0.89	1.05	1.03	1.01
Total Nitrogen <sup>1</sup>	mg/L N	1.13	1.06	1.16	1.15	1.22	1.16	1.28	1.32	1.29
Total Phosphorus	mg/L P	0.151	0.155	0.153	0.146	0.188	0.156	0.172	0.155	0.147
Escherichia Coliform	MPN/100 mL	35	32	25	47	45	41	79	62	50
Fecal Coliform	MPN/100 mL	*	629	*	*	7920	*	*	6290	*
		10:45 AM	10:45 AM	10:45 AM	11:30 AM	11:30 AM	11:30 AM	1:00 PM	1:00 PM	1:00 PM

- Notes:
- 1) Calculated values
  - 2) \* - Fecal coliform testing performed only at Sample B locations to compare with historical data. Not a requirement of Environment Act Licence No. 3042
  - 3) Analysed by contract laboratory

Client File No: 3205.00

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: July 3, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	23.5	23.6	23.5	23.5	23.5	23.4	23.6	23.6	23.6
Dissolved Oxygen	mg/L	7.23	7.25	7.35	6.62	6.6	6.76	6.73	6.8	6.82
Conductivity	mS/cm	1107	1106	1107	1109	1109	1108	1110	1110	1119
pH	units	8.66	8.64	8.64	8.68	8.68	8.73	8.7	8.72	8.7
Biochemical Oxygen Demand	mg/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbonaceous BOD	mg/L	*	*	*	*	*	*	*	*	*
Total Suspended Solids	mg/L	255	339	217	274	266	276	211	207	263
Ammonia Nitrogen	mg/L N	0.018	0.015	0.018	0.027	0.016	0.015	0.018	0.021	0.02
Nitrate Nitrogen	mg/L N	0.255	0.295	0.3	0.269	0.269	0.268	0.244	0.247	0.253
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	0.014	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.255	0.295	0.314	0.269	0.269	0.268	0.244	0.247	0.253
Total Kjeldahl Nitrogen	mg/L N	1.01	0.98	1.01	1.1	1.09	1.09	1.26	1.14	1.18
Total Nitrogen <sup>1</sup>	mg/L N	1.27	1.28	1.32	1.37	1.36	1.36	1.5	1.39	1.43
Total Phosphorus	mg/L P	0.153	0.149	0.151	0.148	0.158	0.154	0.165	0.168	0.168
Escherichia Coliform	MPN/100 mL	30	31	32	35	44	26	63	37	61
Fecal Coliform	MPN/100 mL	*	2210	*	*	2350	*	*	1250	*
		9:15 AM	9:15 AM	9:15 AM	10:00 AM	10:00 AM	10:00 AM	11:45 AM	11:45 AM	11:45 AM

- Notes:
- 1) Calculated values
  - 2) \* - Fecal coliform testing performed only at Sample B locations to compare with historical data. Not a requirement of Environment Act Licence No. 3042
  - 3) Analysed by contract laboratory

Client File No: 3205.00

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: July 4, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	23.5	23.5	23.6	23.5	23.5	23.4	23.7	23.7	23.7
Dissolved Oxygen	mg/L	7.21	7.1	7.14	7.42	7.43	7.4	7.12	7.12	6.5
Conductivity	mS/cm	1097	1097	1095	1104	1102	1103	1107	1108	1113
pH	units	8.72	8.68	8.72	8.74	8.7	8.74	8.73	8.74	8.72
Biochemical Oxygen Demand	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR
Carbonaceous BOD	mg/L	*	*	*	*	*	*	*	*	*
Total Suspended Solids	mg/L	198	225	215	224	229	215	214	197	217
Ammonia Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.011	0.01	< 0.01
Nitrate Nitrogen	mg/L N	0.284	0.263	0.193	0.266	0.264	0.276	0.255	0.256	0.258
Nitrite Nitrogen	mg/L N	0.016	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.3	0.263	0.193	0.266	0.264	0.276	0.255	0.256	0.258
Total Kjeldahl Nitrogen	mg/L N	1.05	1.12	1.07	1.17	1.07	1.04	1.24	1.13	0.97
Total Nitrogen <sup>1</sup>	mg/L N	1.35	1.38	1.26	1.44	1.33	1.32	1.5	1.39	1.23
Total Phosphorus	mg/L P	0.153	0.164	0.158	0.197	0.174	0.154	0.244	0.211	0.154
Escherichia Coliform	MPN/100 mL	38	40	25	41	29	37	75	42	38
Fecal Coliform	MPN/100 mL	*	473	*	*	145	*	*	205	*
		9:00 AM	9:00 AM	9:00 AM	10:00 AM	10:00 AM	10:00 AM	11:30 AM	11:30 AM	11:30 AM

- Notes:
- 1) Calculated values
  - 2) \* - Fecal coliform testing performed only at Sample B locations to compare with historical data. Not a requirement of Environment Act Licence No. 3042
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