

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: June 28, 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	23.2	23.3	23.1	23.8	23.8	23.6	23.6	23.5	23.4
Dissolved Oxygen	mg/L	6.6	6.6	6.59	7	6.7	6.79	6.55	6.6	6.6
Conductivity	mS/cm	1000	1099	1099	1082	1085	1087	1102	1104	1103
pH	units	8.52	8.52	8.52	8.51	8.53	8.46	8.54	8.49	8.54
Biochemical Oxygen Demand	mg/L	< 2.0	< 6.0	< 6.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbonaceous BOD	mg/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Suspended Solids	mg/L	189	181	170	186	186	161	177	169	164
Ammonia Nitrogen	mg/L N	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate Nitrogen	mg/L N	0.437	0.436	0.433	0.38	0.407	0.402	0.381	0.384	0.387
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.437	0.436	0.433	0.38	0.407	0.402	0.381	0.384	0.387
Total Kjeldahl Nitrogen	mg/L N	1.11	1.01	0.96	1.03	1.04	1.08	1.03	0.99	1.04
Total Nitrogen <sup>1</sup>	mg/L N	1.55	1.45	1.39	1.41	1.45	1.48	1.41	1.37	1.43
Total Phosphorus	mg/L P	0.177	0.159	0.156	0.165	0.16	0.165	0.161	0.163	0.173
Escherichia Coliform	MPN/100 mL	31	75	31	134	31	52	279	173	144
Fecal Coliform	MPN/100 mL	*	1570	*	*	1790	*	*	2380	*
		11:30 AM	11:30 AM	11:30 AM	12:20 PM	12:20 PM	12:20 PM	1:20 PM	1:20 PM	1:20 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: June 29, 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	23.7	23.6	23.6	23.3	23.4	23.4	23.4	23.4	23.4
Dissolved Oxygen	mg/L	7.34	7.35	7.5	7.34	7.35	7.2	7.28	7.4	7.02
Conductivity	mS/cm	1083	1077	1079	1096	1093	1096	1102	1105	1103
pH	units	8.52	8.54	8.5	8.56	8.57	8.55	8.68	8.68	8.68
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	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Suspended Solids	mg/L	221	201	180	202	206	322	179	173	167
Ammonia Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	0.015	< 0.01	< 0.01	< 0.01	< 0.01	0.043
Nitrate Nitrogen	mg/L N	0.395	0.396	0.393	0.494	0.493	0.498	0.504	0.507	0.502
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.395	0.396	0.393	0.494	0.493	0.498	0.504	0.507	0.502
Total Kjeldahl Nitrogen	mg/L N	1.01	1.12	1.18	1	1.01	1.01	1.06	0.98	0.99
Total Nitrogen <sup>1</sup>	mg/L N	1.4	1.52	1.57	1.49	1.5	1.51	1.56	1.49	1.5
Total Phosphorus	mg/L P	0.15	0.151	0.152	0.162	0.157	0.159	0.158	0.156	0.159
Escherichia Coliform	MPN/100 mL	64	46	73	119	55	71	248	108	115
Fecal Coliform	MPN/100 mL	*	> 2420	*	*	> 2420	*	*	> 2420	*
		9:15 AM	9:15 AM	9:15 AM	10:30 AM	10:30 AM	10:30 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
  - 3) Analysed by contract laboratory

Client File No: 3205.00

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: June 30, 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	23.8	23.9	23.8	23.8	23.7	23.6	23.7	23.6	23.6
Dissolved Oxygen	mg/L	7.5	7.23	7.85	7.42	7.56	7.03	7.28	7.4	7.02
Conductivity	mS/cm	1102	1102	1099	1104	1101	1102	1102	1105	1103
pH	units	8.63	8.63	8.65	8.65	8.66	8.65	8.68	8.68	8.68
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	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Suspended Solids	mg/L	216	241	210	226	203	217	243	193	210
Ammonia Nitrogen	mg/L N	< 0.01	0.013	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate Nitrogen	mg/L N	0.323	0.321	0.321	0.332	0.332	0.334	0.337	0.338	0.337
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	, 0.01	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.323	0.321	0.321	0.332	0.332	0.334	0.337	0.338	0.337
Total Kjeldahl Nitrogen	mg/L N	0.9	0.9	0.89	0.89	1.12	0.95	0.93	0.91	0.86
Total Nitrogen <sup>1</sup>	mg/L N	1.22	1.22	1.21	1.22	1.45	1.29	1.27	1.25	1.2
Total Phosphorus	mg/L P	0.151	0.152	0.152	0.155	0.153	0.155	0.155	0.158	0.148
Escherichia Coliform	MPN/100 mL	72	109	62	93	91	63	111	112	115
Fecal Coliform	MPN/100 mL	*	579	*	*	291	*	*	214	*
		9:45 AM	9:45 AM	9:45 AM	10:30 AM	10:30 AM	10:30 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
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