

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: July 5, 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	23.3	23.3	23.3	23.3	23.2	23.1	23.2	23.2	23.1
Dissolved Oxygen	mg/L	7.1	7.07	7.06	7.5	7.6	7.5	7.34	7.15	7.2
Conductivity	mS/cm	1085	1085	1077	1088	1089	1089	1087	1087	1088
pH	units	8.72	8.7	8.72	8.74	8.75	8.77	8.76	8.75	8.74
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	237	246	223	233	291	233	204	250	247
Ammonia Nitrogen	mg/L N	0.023	0.019	0.012	0.013	0.02	0.052	0.014	0.016	0.017
Nitrate Nitrogen	mg/L N	0.25	0.249	0.248	0.229	0.233	0.241	0.226	0.225	0.224
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	0.25	0.249	0.248	0.229	0.233	0.241	0.226	0.225	0.224
Total Kjeldahl Nitrogen	mg/L N	1.43	1.31	1.24	1.4	1.42	1.44	1.3	1.39	2.12
Total Nitrogen ¹	mg/L N	1.68	1.56	1.49	1.63	1.65	1.68	1.53	1.62	2.34
Total Phosphorus	mg/L P	0.274	0.284	0.264	0.285	0.294	0.263	0.275	0.278	0.301
Escherichia Coliform	MPN/100 mL	73	98	97	1180	175	122	591	397	512
Fecal Coliform	MPN/100 mL	*	384	*	*	425	*	*	489	*
		12:00 PM	12:00 PM	12:00 PM	1:00 PM	1:00 PM	1:00 PM	1:45 PM	1:45 PM	1:45 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 6, 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	21.7	21.8	21.8	21.6	21.4	21.4	21.4	21.4	21.4
Dissolved Oxygen	mg/L	7.49	7.5	7.43	7.47	7.5	7.54	7.47	7.44	7.48
Conductivity	mS/cm	1077	1074	1073	1082	1087	1083	1084	1086	1086
pH	units	8.74	8.74	8.76	8.77	8.77	8.78	8.56	8.75	8.76
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	215	305	224	213	195	195	235	252	210
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	0.309	0.312	0.31	0.301	0.303	0.301	0.345	0.323	0.294
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	0.309	0.312	0.31	0.301	0.303	0.301	0.345	0.323	0.294
Total Kjeldahl Nitrogen	mg/L N	1.13	1.03	1.3	1.15	1.15	1.18	1.3	1.23	1.19
Total Nitrogen ¹	mg/L N	1.44	1.34	1.61	1.45	1.45	1.48	1.64	1.55	1.48
Total Phosphorus	mg/L P	0.266	0.196	0.286	0.267	0.267	0.275	0.272	0.261	0.273
Escherichia Coliform	MPN/100 mL	96	105	121	345	129	135	192	214	161
Fecal Coliform	MPN/100 mL	*	1460	*	*	3130	*	*	7700	*
		9:15 AM	9:15 AM	9:15 AM	10:00 AM	10:00 AM	10:00 AM	11:00 AM	11:00 AM	11:00 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 7, 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	21.3	21.2	21.3	21.1	21.1	21	21.1	20.8	21
Dissolved Oxygen	mg/L	7.42	7.48	7.44	7.67	7.43	7.42	7.4	7.35	7.38
Conductivity	mS/cm	1081	1079	1076	1081	1080	1079	1079	1083	1082
pH	units	8.78	8.77	8.76	8.78	8.77	8.79	8.78	8.77	8.75
Biochemical Oxygen Demand	mg/L	2	< 2.0	2	2	< 2.0	2	< 2.0	< 2.0	2
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	252	260	271	282	402	243	277	282	280
Ammonia Nitrogen	mg/L N	0.02	0.017	0.01	0.019	0.026	0.021	0.021	0.019	0.021
Nitrate Nitrogen	mg/L N	0.297	0.299	0.3	0.38	0.387	0.378	0.365	0.369	0.364
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	0.297	0.299	0.3	0.38	0.387	0.378	0.365	0.369	0.364
Total Kjeldahl Nitrogen	mg/L N	1.03	1.03	0.94	1.05	1.02	1.02	1.08	1.01	1
Total Nitrogen ¹	mg/L N	1.33	1.33	1.24	1.43	1.41	1.4	1.45	1.38	1.36
Total Phosphorus	mg/L P	0.137	0.14	0.142	0.157	0.158	0.157	0.152	0.154	0.152
Escherichia Coliform	MPN/100 mL	46	36	40	42	46	36	108	114	102
Fecal Coliform	MPN/100 mL	*	1730	*	*	1200	*	*	1300	*
		9:00 AM	9:00 AM	9:00 AM	9:30 AM	9:30 AM	9:30 AM	11:00 AM	11:00 AM	11:00 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