

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : April 14, 2016		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE (R1)	WEST PERIMETER BRIDGE (R2)	ASSINIBOINE PARK FOOT BRIDGE (R3)	MAIN STREET BRIDGE (R4)	SOUTH FLOODWAY CONTROL ⁴ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	7.9	7.2	7.0	5.7	7.0	6.7	6.7	5.4	5.2	5.3	5.3
Dissolved Oxygen	mg/L	11.0	10.9	11.1	11.3	11.7	11.5	11.4	11.7	11.7	11.7	11.9
Oxygen Saturation ²	%	93	91	92	91	97	95	94	93	93	92	94
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	3	3	3	3	<3	<3	4
pH	units	8.33	8.37	8.33	8.18	8.52	8.63	8.54	8.16	7.45	7.42	7.64
Total Solids	mg/L	954	936	932	886	560	470	530	472	686	668	716
Total Suspended Solids	mg/L	247	204	244	216	83	94	97	97	160	155	171
Turbidity	n.t.u.	135	133	128	130	78	72	69	74	112	94	128
Total Organic Carbon	mg/L	25	18	19	19	18	17	16	18	18	19	19
Chlorophyll a	ug/L	9	7	9	9	25	9	25	12	19	16	16
Ammonia Nitrogen	mg/L N	1.310	1.330	0.093	0.130	0.007	0.004	0.174	0.090	0.003	0.177	0.428
Nitrate Nitrogen	mg/L N	1.100	1.110	1.230	1.190	<0.003	0.035	0.050	0.047	0.506	0.482	0.519
Total Kjeldahl Nitrogen	mg/L N	1.8	2.0	1.6	1.7	2.9	5.2	6.4	1.7	3.6	3.7	8.5
Total Nitrogen ²	mg/L N	2.9	3.1	2.8	2.9	2.9	5.2	6.5	1.7	4.1	4.2	9.0
Soluble Phosphorus	mg/L P	0.14	0.15	0.15	0.13	0.06	0.11	0.04	0.03	0.04	0.08	0.10
Total Phosphorus	mg/L P	0.60	0.50	0.50	0.40	0.20	0.30	0.20	0.30	0.50	0.40	0.40
Escherichia Coliform ³	MPN/100 mL	23	43	430	15	<3	23	9	93	23	150	200
Fecal Coliform ³	MPN/100 mL	23	43	430	43	<3	23	9	93	23	150	200

Weather Conditions during monitoring Winds SW at 8 km/hr with 70% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 13.6°C

- Notes:
- 1) LIMS Reference No: **45829**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **732.4** ft.

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Date Compiled: 11-Jan-19

File No: 040-14-09-03-00