

**City of Winnipeg
Water and Waste Department**

2015 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 10, 2015		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	23.6	23.9	22.8	22.6	23.4	23.7	23.8	23.0	22.7	22.5	22.4
Dissolved Oxygen	mg/L	8.1	8.2	8.2	7.9	6.8	6.8	6.9	6.9	7.3	7.3	8.5
Oxygen Saturation ²	%	95	97	95	91	80	80	82	81	84	84	97
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	<3
pH	units	8.39	8.48	8.49	8.44	8.18	8.18	8.21	8.19	8.26	8.21	8.08
Total Solids	mg/L	1080	1070	1060	1070	1010	860	894	880	996	934	1230
Total Suspended Solids	mg/L	214	198	166	192	380	234	212	127	208	166	526
Turbidity	n.t.u.	108	96	114	115	235	140	116	92	117	94	286
Total Organic Carbon	mg/L	21	19	23	18	28	22	20	20	25	19	27
Chlorophyll a	ug/L	24	22	24	20	4	4	4	4	7	7	9
Ammonia Nitrogen	mg/L N	0.012	0.004	0.004	<0.003	0.014	<0.003	0.035	0.045	0.037	0.063	0.081
Nitrate Nitrogen	mg/L N	0.323	0.266	0.292	0.322	0.741	0.734	0.728	0.871	0.779	0.850	0.955
Total Kjeldahl Nitrogen	mg/L N	0.8	0.8	1.3	1.6	1.1	2.0	0.6	0.8	1.1	1.0	1.9
Total Nitrogen ²	mg/L N	1.1	1.1	1.6	1.9	1.8	2.7	1.3	1.7	1.9	1.9	2.9
Soluble Phosphorus	mg/L P	0.12	0.11	0.12	0.11	0.19	0.19	0.19	0.19	0.17	0.18	0.26
Total Phosphorus	mg/L P	0.60	0.90	0.60	0.60	0.80	0.60	1.10	0.60	0.60	0.60	1.30
Escherichia Coliform ³	MPN/100 mL	36	15	23	92	92	380	74	92	110	92	930
Fecal Coliform ³	MPN/100 mL	36	36	23	92	92	380	74	92	200	92	930

Weather Conditions during monitoring Winds N at 39 km/hr with <1% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 24.1°C

- Notes:
- 1) LIMS Reference No: **43175**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **735.5** ft.
 - 5) No result because the initial DO was below the BOD test limit.

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