

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 18, 2014		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	19.1	18.9	18.9	18.3	19.4	19.6	19.7	18.9	18.4	18.1	18.0
Dissolved Oxygen	mg/L	8.5	8.3	8.5	8.4	7.7	7.7	7.8	7.7	8.0	8.0	8.4
Oxygen Saturation ²	%	91	89	91	89	84	84	85	82	85	84	89
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr ⁵	nr ⁵	nr ⁵	nr ⁵	<3	<3	<3
pH	units	8.19	8.14	8.14	8.11	8.02	8.22	7.99	8.00	8.02	8.00	7.72
Total Solids	mg/L	964	932	1090	950	966	832	838	804	954	824	876
Total Suspended Solids	mg/L	219	181	173	166	195	138	152	128	159	119	180
Turbidity	n.t.u.	120	111	106	100	127	105	100	87	99	87	112
Total Organic Carbon	mg/L	21	19	19	19	21	20	20	19	19	20	20
Chlorophyll a	ug/L	5	5	7	2	5	4	5	5	<1	5	2
Ammonia Nitrogen	mg/L N	0.018	0.014	0.021	0.022	0.036	0.027	0.053	0.053	0.054	0.079	0.087
Nitrate Nitrogen	mg/L N	0.173	0.257	0.050	0.272	0.820	1.370	0.504	0.475	0.188	0.554	0.868
Total Kjeldahl Nitrogen	mg/L N	2.1	2.2	1.8	2.5	2.0	1.9	2.0	2.3	2.0	2.1	2.1
Total Nitrogen ²	mg/L N	2.3	2.5	1.9	2.8	2.8	3.3	2.5	2.8	2.2	2.7	3.0
Soluble Phosphorus	mg/L P	0.14	0.14	0.14	0.15	0.15	0.14	0.16	0.15	0.15	0.16	0.18
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.40	0.50	0.40	0.40	0.40	0.50	0.50
Escherichia Coliform ³	MPN/100 mL	23	38	23	380	23	150	43	93	93	93	930
Fecal Coliform ³	MPN/100 mL	23	38	23	750	23	150	43	93	150	93	930

Weather Conditions during monitoring Winds E at 30 km/hr with 5% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 22°C

- Notes:
- 1) LIMS Reference No: **39535**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **742.9** ft.
 - 5) No result because the initial DO was below the BOD test limit.

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