

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 7, 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	9.5	9.4	9.6	9.2	9.5	9.5	9.5	9.2	9.2	9.1	9.5
Dissolved Oxygen	mg/L	10.4	10.3	10.3	10.3	10.0	10.0	10.0	10.1	10.0	10.1	10.2
Oxygen Saturation ²	%	91	90	90	90	88	87	87	87	87	87	89
Biochemical Oxygen Demand	mg/L	3	3	3	3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.06	8.02	8.02	8.04	8.00	7.97	7.99	7.97	7.93	7.86	7.52
Total Solids	mg/L	1100	1060	1000	1040	774	732	742	784	864	868	914
Total Suspended Solids	mg/L	543	463	472	471	278	273	263	300	360	380	420
Turbidity	n.t.u.	295	296	275	261	203	186	200	216	237	245	275
Total Organic Carbon	mg/L	26	25	27	29	21	21	20	20	20	23	22
Chlorophyll a	ug/L	18	14	4	11	4	4	4	4	4	7	4
Ammonia Nitrogen	mg/L N	0.072	0.060	0.068	0.068	0.117	0.102	0.146	0.084	0.115	0.140	0.157
Nitrate Nitrogen	mg/L N	0.692	0.710	0.700	0.745	2.440	2.420	2.330	2.230	2.120	1.930	1.920
Total Kjeldahl Nitrogen	mg/L N	1.7	1.6	1.9	6.2	1.8	0.5	0.9	1.1	0.9	0.9	<0.5
Total Nitrogen ²	mg/L N	2.4	2.3	2.6	6.9	4.2	2.9	3.2	3.3	3.0	2.8	2.2
Soluble Phosphorus	mg/L P	0.11	0.10	0.10	0.11	0.19	0.18	0.19	0.19	0.19	0.17	0.37
Total Phosphorus	mg/L P	0.60	0.60	0.70	0.50	0.50	0.50	0.50	0.50	0.60	0.60	0.60
Escherichia Coliform ³	MPN/100 mL	9	23	9	23	23	9	9	15	15	43	23
Fecal Coliform ³	MPN/100 mL	15	23	9	23	23	9	9	15	93	43	23

Weather Conditions during monitoring Winds E/NE at 12 km/hr with 100% cloud cover and 3.4 mm of precipitation. Average air temperature during survey at 12°C

- Notes: 1) LIMS Reference No: **39125**
 2) Calculated values
 3) Analysed by contract laboratory
 4) Red River Floodway at South Floodway Control Gates

780.0 ft.

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