

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 30, 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	23.0	22.9	23.0	22.7	23.4	23.5	23.9	23.5	22.8	22.7	22.6
Dissolved Oxygen	mg/L	7.5	7.1	7.2	7.1	6.8	6.9	6.7	6.6	6.9	7.2	7.4
Oxygen Saturation ²	%	88	83	84	82	79	81	79	77	80	84	85
Biochemical Oxygen Demand	mg/L	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁶	nr ⁶	nr ⁵	nr ⁵	nr ⁵	<3
pH	units	8.19	8.14	8.14	8.15	8.13	8.15	8.11	8.10	8.12	8.11	8.05
Total Solids	mg/L	934	924	980	924	748	802	726	770	860	864	900
Total Suspended Solids	mg/L	206	186	200	198	254	316	224	290	250	258	276
Turbidity	n.t.u.	136	144	142	148	208	227	190	212	182	183	205
Total Organic Carbon	mg/L	22	27	28	22	25	22	21	20	21	24	23
Chlorophyll a	ug/L	11	7	7	<1	4	4	<1	<1	4	4	7
Ammonia Nitrogen	mg/L N	0.033	0.021	<0.003	<0.003	0.132	<0.003	0.009	<0.003	0.030	0.016	0.020
Nitrate Nitrogen	mg/L N	0.159	0.180	0.159	0.159	0.354	0.315	0.353	0.385	0.305	0.295	0.361
Total Kjeldahl Nitrogen	mg/L N	1.5	1.1	1.3	1.8	1.2	2.0	1.5	0.8	1.4	1.4	1.7
Total Nitrogen ²	mg/L N	1.7	1.3	1.5	2.0	1.6	2.3	1.9	1.2	1.7	1.7	2.1
Soluble Phosphorus	mg/L P	0.16	0.16	0.16	0.16	0.16	0.14	0.15	0.17	0.18	0.17	0.26
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Escherichia Coliform ³	MPN/100 mL	93	93	75	93	23	43	43	43	93	75	43
Fecal Coliform ³	MPN/100 mL	93	93	75	93	230	230	210	43	230	75	43

Weather Conditions during monitoring Winds NW at 14 km/hr with 25% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 25°C

- Notes:
- 1) LIMS Reference No: **39977**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **739.4** ft.
 - 5) No result because the initial DO and/or temperature were outside the BOD test limits.

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