

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 13, 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	24.2	24.1	24.0	23.8	24.7	24.5	24.5	23.8	23.6	23.3	23.0
Dissolved Oxygen	mg/L	7.5	7.1	7.2	7.3	7.1	7.1	7.1	6.9	7.2	7.1	7.8
Oxygen Saturation ²	%	89	85	86	86	85	85	85	81	84	83	91
Biochemical Oxygen Demand	mg/L	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵
pH	units	8.16	8.18	8.18	8.24	8.21	8.26	8.24	8.17	8.22	8.17	8.14
Total Solids	mg/L	1090	1070	1090	1120	1110	818	748	778	974	938	944
Total Suspended Solids	mg/L	322	286	284	306	146	119	72	120	234	204	208
Turbidity	n.t.u.	169	159	162	161	96	91	66	86	134	133	140
Total Organic Carbon	mg/L	22	24	24	22	18	20	16	18	22	22	28
Chlorophyll a	ug/L	7	7	7	4	4	5	4	4	4	7	7
Ammonia Nitrogen	mg/L N	0.061	0.098	0.070	0.033	0.028	0.021	0.075	0.112	0.051	0.077	0.102
Nitrate Nitrogen	mg/L N	0.180	0.175	0.200	0.180	0.340	0.335	0.336	0.384	0.249	0.262	0.323
Total Kjeldahl Nitrogen	mg/L N	1.4	1.2	1.4	1.6	1.0	1.0	1.0	1.1	1.5	1.1	1.4
Total Nitrogen ²	mg/L N	1.6	1.4	1.6	1.8	1.3	1.3	1.3	1.5	1.7	1.4	1.7
Soluble Phosphorus	mg/L P	0.19	0.21	0.21	0.19	0.16	0.15	0.17	0.17	0.17	0.18	0.29
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.30	0.20	0.20	0.30	0.40	0.40	0.40
Escherichia Coliform ³	MPN/100 mL	7	23	21	43	3	9	9	230	43	23	930
Fecal Coliform ³	MPN/100 mL	7	23	21	43	4	9	9	230	43	43	2300

Weather Conditions during monitoring Winds SE at 50 km/hr with <1% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 22°C

- Notes:
- 1) LIMS Reference No: **40096**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **735.3** ft.
 - 5) No result because the initial DO was below the BOD test limit.

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