

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 2, 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	19.4	19.2	18.9	18.7	20.1	19.8	19.9	19.0	19.2	19.1	19.2
Dissolved Oxygen	mg/L	8.6	8.4	8.4	8.3	7.2	6.9	7.2	7.4	7.3	7.4	7.7
Oxygen Saturation ²	%	93	90	90	89	79	76	78	81	80	80	84
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr ⁵	<3	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵
pH	units	8.21	8.19	8.20	8.16	7.81	7.78	7.81	7.80	7.90	7.89	7.64
Total Solids	mg/L	1020	1020	984	968	634	644	618	990	722	732	742
Total Suspended Solids	mg/L	294	256	254	250	76	80	94	95	136	140	147
Turbidity	n.t.u.	163	161	163	156	71	85	85	94	112	114	122
Total Organic Carbon	mg/L	19	20	24	20	19	18	18	18	18	18	19
Chlorophyll a	ug/L	7	4	4	<1	4	4	2	2	2	4	4
Ammonia Nitrogen	mg/L N	0.008	0.036	<0.003	0.016	0.066	0.043	0.042	0.023	0.030	0.043	0.050
Nitrate Nitrogen	mg/L N	0.439	0.441	0.425	0.422	1.420	1.380	1.400	1.470	1.230	1.240	1.300
Total Kjeldahl Nitrogen	mg/L N	2.0	2.3	2.6	2.3	2.5	2.1	2.5	2.6	1.4	2.4	2.6
Total Nitrogen ²	mg/L N	2.4	2.7	3.0	2.7	3.9	3.5	3.9	4.1	2.6	3.6	3.9
Soluble Phosphorus	mg/L P	0.15	0.15	0.16	0.16	0.23	0.25	0.25	0.25	0.23	0.23	0.25
Total Phosphorus	mg/L P	0.50	0.30	0.60	0.50	0.40	0.60	0.50	0.50	0.70	1.00	0.60
Escherichia Coliform ³	MPN/100 mL	230	230	430	150	43	930	750	230	75	150	930
Fecal Coliform ³	MPN/100 mL	230	230	430	150	43	4300	750	230	75	210	2300

Weather Conditions during monitoring Winds NW at 20 km/hr with 75% cloud cover and 0.2 mm of precipitation. Average air temperature during survey at 19°C

- Notes:
- 1) LIMS Reference No: **39647**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **750.4** ft.
 - 5) No result because the initial DO was below the BOD test limit.
 - 6) Pierre Delorme Bridge was used as an alternate location for the South Floodway Control due to construction.

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