

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 15, 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	20.9	21.0	20.9	20.4	21.8	21.8	22.1	21.3	20.8	20.6	20.5
Dissolved Oxygen	mg/L	7.5	6.9	6.8	6.9	6.7	7.3	7.0	6.8	6.8	7.0	7.4
Oxygen Saturation ²	%	84	78	76	76	76	83	80	77	76	78	82
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	7.85	7.79	7.79	7.77	7.88	7.93	7.92	7.83	7.79	7.72	7.47
Total Solids	mg/L	726	720	952	730	782	768	720	1100	740	714	730
Total Suspended Solids	mg/L	148	166	152	146	93	114	94	79	120	120	129
Turbidity	n.t.u.	128	130	124	126	97	88	80	77	105	96	103
Total Organic Carbon	mg/L	22	21	21	22	22	24	20	20	23	23	21
Chlorophyll a	ug/L	7	9	7	7	4	4	4	4	4	4	5
Ammonia Nitrogen	mg/L N	0.037	0.055	0.044	0.048	0.015	0.015	0.030	0.017	0.030	0.039	0.050
Nitrate Nitrogen	mg/L N	0.129	0.135	0.142	0.147	0.502	0.534	0.533	0.556	0.364	0.364	0.375
Total Kjeldahl Nitrogen	mg/L N	0.7	0.8	0.7	1.1	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.5
Total Nitrogen ²	mg/L N	0.8	0.9	0.8	1.2	0.8	0.8	0.8	0.8	1.2	0.6	0.9
Soluble Phosphorus	mg/L P	0.14	0.15	0.14	0.15	0.22	0.24	0.23	0.24	0.19	0.20	0.34
Total Phosphorus	mg/L P	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40	0.30	0.40	0.40
Escherichia Coliform ³	MPN/100 mL	23	75	230	120	23	27	93	23	150	43	93
Fecal Coliform ³	MPN/100 mL	23	75	230	210	23	35	93	23	210	230	93

Weather Conditions during monitoring Winds NNE at 10 km/hr with 25% cloud cover and 0.2 mm of precipitation. Average air temperature during survey at 20°C

- Notes:
- 1) LIMS Reference No: **39793**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **741.7** ft.
 - 5) No result because the initial temperature was outside 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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Date Compiled: 10-Jan-19

File No: 040-14-09-03-00