

**City of Winnipeg  
Water and Waste Department**

**2013 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 18, 2013		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL <sup>4</sup>	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	18.1	18.4	17.9	17.3	18.2	18.7	NS	18.5	17.8	18.3	18.1
Dissolved Oxygen	mg/L	9.3	9.4	9.4	9.1	9.7	10.4	NS	9.0	9.0	9.0	9.2
Oxygen Saturation <sup>2</sup>	%	99	101	100	95	103	112	NS	96	95	96	98
pH	units	8.70	8.67	8.66	8.63	8.70	8.77	NS	8.55	8.56	7.59	8.29
Total Solids	mg/L	858	874	868	916	794	724	NS	772	808	810	798
Total Suspended Solids	mg/L	104	82	88	84	52	35	NS	32	40	35	33
Turbidity	n.t.u.	53	47	48	49	39	31	NS	27	28	25	21
Total Organic Carbon	mg/L	17	16	18	17	15	17	NS	17	17	15	20
Chlorophyll a	ug/L	<1	26	2	<1	<1	<1	NS	<1	<1	2	2
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.032	<0.003	<0.003	NS	0.199	0.036	0.115	0.050
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.142	<0.003	NS	0.047	0.009	0.059	0.102
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0
Total Nitrogen <sup>2</sup>	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.10	0.11	0.12	0.10	0.18	0.15	NS	0.20	0.14	0.16	0.25
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	NS	<0.30	<0.30	<0.30	<0.30
Escherichia Coliform <sup>3</sup>	MPN/100 mL	150	23	93	43	230	230	NS	43	75	43	43
Fecal Coliform <sup>3</sup>	MPN/100 mL	150	43	93	43	230	230	NS	43	150	230	43

Weather Conditions during monitoring: Winds SE at 21 km/hr with 100 % cloud cover and 0.4 mm of precipitation. Average air temperature during survey at 20.4 C

- Notes:
- 1) LIMS Reference No: 37104
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates 733.9 ft.
  - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.

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