

**City of Winnipeg  
Water and Waste Department**

**2013 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : August 21, 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	24.3	24.5	24.4	23.7	24.2	24.3	24.3	23.6	23.2	23.3	22.8
Dissolved Oxygen	mg/L	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	7.9	8.1	8.3
Oxygen Saturation <sup>2</sup>	%	95	95	96	93	93	95	97	95	93	96	97
pH	units	8.41	8.39	8.38	8.38	8.39	8.42	8.41	8.33	8.34	8.34	8.01
Total Solids	mg/L	894	906	880	910	778	708	708	694	764	764	772
Total Suspended Solids	mg/L	133	145	128	142	55	6	24	21	49	34	30
Turbidity	n.t.u.	80	79	78	21	52	34	25	20	36	27	28
Total Organic Carbon	mg/L	18	18	17	17	33	14	15	36	17	15	17
Chlorophyll a	ug/L	16	15	16	16	1	7	<1	7	12	<1	13
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.111	0.066	0.041	0.068	0.186
Nitrate Nitrogen	mg/L N	0.259	0.270	0.286	0.290	0.419	0.487	0.462	0.516	0.413	0.387	0.379
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<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	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.19	0.19	0.19	0.19	0.20	0.37	0.23	0.25	0.22	0.22	0.21
Total Phosphorus	mg/L P	0.80	0.60	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.50
Escherichia Coliform <sup>3</sup>	MPN/100 mL	9	4	43	7500	<3	36	27	9300	15000	24000	24000
Fecal Coliform <sup>3</sup>	MPN/100 mL	9	4	43	7500	<3	36	120	9300	15000	24000	24000

Weather Conditions during monitoring: Winds WNW at 24 km/hr with no cloud cover and 0 mm of precipitation. Average air temperature during survey at 23.2°C

- Notes:
- 1) LIMS Reference No: 36859
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates 740.0 ft
  - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.

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