

**City of Winnipeg  
Water and Waste Department**

**2013 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : August 7, 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	20.7	20.6	20.5	20.3	21.8	21.1	20.9	21.3	20.7	20.7	20.6
Dissolved Oxygen	mg/L	8.0	8.0	8.1	8.1	7.8	7.9	7.9	7.7	8.0	8.0	8.5
Oxygen Saturation <sup>2</sup>	%	90	90	91	90	89	89	89	88	90	89	95
pH	units	8.34	8.36	8.36	8.35	8.28	8.32	8.32	8.25	8.31	8.24	8.02
Total Solids	mg/L	916	914	998	964	786	744	738	746	852	764	890
Total Suspended Solids	mg/L	213	193	218	234	105	92	57	31	136	52	163
Turbidity	n.t.u.	112	103	111	125	83	71	46	32	80	34	105
Total Organic Carbon	mg/L	16	14	13	12	10	21	10	16	12	14	11
Chlorophyll a	ug/L	<1	7	7	4	2	4	4	<1	4	4	5
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.009	<0.003	0.039	0.094	0.009	0.081	0.077
Nitrate Nitrogen	mg/L N	0.307	0.311	0.313	0.324	0.502	0.524	0.555	0.584	0.421	0.473	0.500
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	0.22	0.23	0.23	0.23	0.22	0.24	0.24	0.25	0.24	0.24	0.25
Total Phosphorus	mg/L P	0.50	0.40	0.40	0.50	0.40	0.40	0.40	0.40	0.40	0.40	0.50
Escherichia Coliform <sup>3</sup>	MPN/100 mL	9	9	43	150	<3	<3	9	43	230	430	93
Fecal Coliform <sup>3</sup>	MPN/100 mL	23	9	43	150	4	<3	23	43	430	2300	230

Weather Conditions during monitoring: Winds WNW-NW at 18 km/hr with 100% cloud cover and trace amounts of precipitation. Average air temperature during survey at 13.2°C

- Notes:
- 1) LIMS Reference No: 36725
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates 741.2 ft
  - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.

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