

**City of Winnipeg  
Water and Waste Department**

**2011 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : November 9, 2011		Red River Sampling Locations							
Parameter	Unit	ST.ADOLPHE PIERRE DELORME BRIDGE	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	COCKBURN AT BRIDGE DRIVE INN	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	3.4	3.3	3.7	3.7	4.0	3.0	3.6	3.7
Dissolved Oxygen	mg/L	14.9	14.8	14.6	14.6	14.4	14.6	14.6	13.9
Oxygen Saturation <sup>2</sup>	%	112	111	110	110	110	108	110	105
pH	units	8.54	8.54	8.50	8.51	8.48	8.43	8.40	8.32
Total Solids	mg/L	708	644	632	676	640	788	776	800
Total Suspended Solids	mg/L	106	44	28	82	29	80	68	71
Turbidity	n.t.u.	47.4	23.6	20.0	9.6	20.4	40.2	40.6	42.6
Total Organic Carbon	mg/L	15	15	14	14	14	15	15	16
Chlorophyll a	ug/L	33	46	2	27	72	26	22	22
Ammonia Nitrogen	mg/L N	0.014	0.020	0.125	0.200	0.209	0.071	0.308	0.373
Nitrate Nitrogen	mg/L N	0.108	0.071	0.060	0.055	0.095	0.292	0.314	0.355
Total Kjeldahl Nitrogen	mg/L N	<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
Soluble Phosphorus	mg/L P	0.07	0.08	0.12	0.11	0.11	0.13	0.16	0.18
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.30	0.30
Escherichia Coliform <sup>3</sup>	colonies/100 mL	9	23	43	43	9	43	75	43
Fecal Coliform <sup>3</sup>	colonies/100 mL	23	23	93	43	23	43	150	230

Weather Conditions during monitoring: Winds NW at 26 km/hr with 100 % cloud cover. Average air temperature during survey at -2 C

- Notes:
- 1) LIMS Reference No: 31216
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 730.3ft.

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