

**City of Winnipeg  
Water and Waste Department**

**2011 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : November 3, 2011		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	ST.ADOLPHE PIERRE DELORME BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	4.2	NS	4.2	5.3	5.6	6.1	6.5	4.8	4.8	5.1
Dissolved Oxygen	mg/L	14.2	NS	14.1	14.1	14.3	14.1	14.3	14.1	14.3	14.7
Oxygen Saturation <sup>2</sup>	%	109	NS	108	111	114	113	116	110	111	115
pH	units	8.57	NS	8.59	8.57	8.83	8.76	8.73	8.55	8.64	8.47
Total Solids	mg/L	920	NS	932	944	624	560	628	764	784	764
Total Suspended Solids	mg/L	140	NS	145	135	40	32	31	81	71	90
Turbidity	n.t.u.	72	NS	72	75	25	20	19	41	39	46
Total Organic Carbon	mg/L	14	NS	18	15	13	14	17	13	14	14
Chlorophyll a	ug/L	28	NS	35	36	22	41	55	37	43	23
Ammonia Nitrogen	mg/L N	0.004	NS	0.031	0.004	0.022	0.179	0.154	0.068	0.310	0.337
Nitrate Nitrogen	mg/L N	0.468	NS	0.475	0.466	0.094	<0.003	0.013	0.210	0.217	0.263
Total Kjeldahl Nitrogen	mg/L N	<2.0	NS	<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	NS	<2.0	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.16	NS	0.16	0.15	0.10	0.10	0.11	0.13	0.16	0.17
Total Phosphorus	mg/L P	0.60	NS	0.60	0.40	0.40	0.40	0.40	0.40	0.40	0.50
Escherichia Coliform <sup>3</sup>	colonies/100 mL	23	NS	43	43	<3	430	930	2300	430	150
Fecal Coliform <sup>3</sup>	colonies/100 mL	23	NS	43	93	<3	430	930	2300	430	150

Weather Conditions during monitoring: Winds S at 21 km/hr with 53 % cloud cover. Average air temperature during survey at 4.3 C

- Notes:**
- 1) LIMS Reference No: 31186
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 730.5ft.
  - 5) There are no samples at the West Perimeter Bridge due to construction.
  - 6) Effective November 3, 2011 the Ste. Adolphe at Pierre Delorme Bridge will be used as an alternate location for the South Floodway Control gates due to construction.

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

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Date Approved: 16-Nov-11