

**City of Winnipeg  
Water and Waste Department**

**2009 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : June 9, 2009		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	ASSINIBOINE PARK FOOT BRIDGE	HEADINGLY BRIDGE	MAIN STREET BRIDGE	WEST PERIMETER BRIDGE	SOUTH FLOODWAY CONTROL <sup>4</sup>	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	14.0	14.1	13.4	14.0	15.0	14.8	14.8	14.6	14.9	15.5
Dissolved Oxygen	mg/L	9.1	8.9	8.8	9.0	7.8	7.9	7.7	7.8	8.0	8.5
Oxygen Saturation <sup>2</sup>	%	89	87	85	88	78	78	76	77	80	86
pH	units	8.41	8.36	8.33	8.37	8.05	8.07	7.99	8.07	8.05	8.02
Total Solids	mg/L	668	612	704	656	596	604	592	648	644	632
Total Suspended Solids	mg/L	165	139	191	150	123	127	123	141	136	141
Turbidity	n.t.u.	76	68	92	76	78	80	76	84	84	87
Total Organic Carbon	mg/L	14	13	13	13	15	15	15	15	16	16
Chlorophyll a	ug/L	33	30	30	26	7	7	7	16	12	11
Ammonia Nitrogen	mg/L N	0.009	0.007	0.032	0.008	0.019	0.040	0.048	0.050	0.099	0.087
Nitrate Nitrogen	mg/L N	0.107	0.092	0.127	0.099	0.333	0.348	0.387	0.352	0.371	0.369
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	2.1	2.1	2.5	2.2	2.6	<2.0	<2.0
Total Nitrogen <sup>2</sup>	mg/L N	<2.0	<2.0	<2.0	2.2	2.4	2.8	2.6	2.9	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.13	0.13	0.14	0.13	0.12	0.13	0.14	0.16	0.15	0.39
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Escherichia Coliform <sup>3</sup>	colonies/100 mL	33	4	49	8	8	79	490	330	490	1100
Fecal Coliform <sup>3</sup>	colonies/100 mL	49	4	130	8	8	79	790	790	3300	3300

Weather Conditions during monitoring: Winds NW at 17 km/hr with 96 % cloud cover. Average air temperature during survey at 10.8 C

- Notes:
- 1) LIMS Reference No: 23213
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 737.8 ft

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