

**City of Winnipeg  
Water and Waste Department**

**2009 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : August 20, 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	19.1	18.8	19.9	18.7	20.0	20.2	20.4	20.3	19.7	19.4
Dissolved Oxygen	mg/L	9.1	9.3	8.3	9.5	7.9	7.7	7.4	7.7	7.6	8.5
Oxygen Saturation <sup>2</sup>	%	99	101	92	103	88	86	83	86	84	93
pH	units	8.88	8.84	8.81	8.87	8.38	8.34	8.28	8.41	8.30	8.32
Total Solids	mg/L	864	728	828	736	540	564	524	608	624	676
Total Suspended Solids	mg/L	158	172	128	162	53	43	38	47	44	95
Turbidity	n.t.u.	103	123	80	105	42	39	32	34	31	40
Total Organic Carbon	mg/L	10	10	10	11	11	11	12	12	11	11
Chlorophyll a	ug/L	166	145	135	148	10	10	11	37	30	41
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.052	0.005	0.094	0.098	0.082	0.130	0.125
Nitrate Nitrogen	mg/L N	0.166	0.286	0.221	0.251	0.388	0.423	0.446	0.427	0.492	0.732
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
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
Soluble Phosphorus	mg/L P	0.12	0.11	0.12	0.13	0.22	0.24	0.26	0.22	0.25	0.48
Total Phosphorus	mg/L P	0.50	0.40	0.40	0.50	0.30	0.30	0.30	0.40	0.40	0.40
Escherichia Coliform <sup>3</sup>	colonies/100 mL	330	79	1700	79	79	130	170	280	220	33
Fecal Coliform <sup>3</sup>	colonies/100 mL	330	130	3500	130	130	330	170	790	220	49

Weather Conditions during monitoring: Winds NE at 18 km/hr with 73 % cloud cover and 0 mm of precipitation. Average air temperature during survey at 18.6 C

- Notes:
- 1) LIMS Reference No: 23878
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 734.4 ft

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