

**City of Winnipeg  
Water and Waste Department**

**2009 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : July 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	21.9	22.4	22.6	22.7	22.5	22.1	21.9	21.9	21.8	21.9
Dissolved Oxygen	mg/L	7.9	8.1	7.4	8.1	6.3	6.5	6.3	6.3	6.3	7.0
Oxygen Saturation <sup>2</sup>	%	91	94	86	95	73	75	73	73	72	81
pH	units	8.64	8.67	8.67	8.66	7.89	7.89	7.87	7.88	7.75	7.88
Total Solids	mg/L	844	856	748	828	516	492	536	520	516	532
Total Suspended Solids	mg/L	212	196	66	170	56	63	56	66	63	68
Turbidity	n.t.u.	133	105	47	101	43	47	44	51	47	54
Total Organic Carbon	mg/L	10	10	10	9	12	13	12	12	12	12
Chlorophyll a	ug/L	44	57	45	50	13	13	13	13	12	15
Ammonia Nitrogen	mg/L N	0.022	0.020	0.020	0.020	0.036	0.050	0.047	0.049	0.164	0.073
Nitrate Nitrogen	mg/L N	0.049	0.018	0.016	0.020	0.615	0.641	0.675	0.656	0.688	0.762
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	0.09	0.09	0.08	0.09	0.20	0.20	0.20	0.20	0.22	0.21
Total Phosphorus	mg/L P	0.40	0.40	<0.30	<0.30	0.30	0.40	0.30	0.30	0.40	0.30
Escherichia Coliform <sup>3</sup>	colonies/100 mL	1700	49	790	33	17	195	170	2400	2400	33
Fecal Coliform <sup>3</sup>	colonies/100 mL	1700	49	1300	130	79	294	330	3500	2400	33

Weather Conditions during monitoring: Winds W at 31 km/hr with 58 % cloud cover and 35 mm of precipitation. Average air temperature during survey at 17 C

- Notes:
- 1) LIMS Reference No: 23498
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 741 ft

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