

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 3, 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 ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	22.4	21.4	20.7	21.2	20.5	20.8	20.5	20.4	20.0	20.0
Dissolved Oxygen	mg/L	9.3	9.5	7.7	10.6	8.0	7.9	7.8	8.0	7.6	8.7
Oxygen Saturation ²	%	108	108	87	120	90	89	87	89	84	96
pH	units	8.79	8.83	8.71	8.87	8.30	8.22	8.22	8.35	8.23	8.24
Total Solids	mg/L	760	756	748	772	496	472	460	540	520	484
Total Suspended Solids	mg/L	170	172	152	160	80	71	62	73	65	65
Turbidity	n.t.u.	101	98	93	105	69	52	50	56	51	54
Total Organic Carbon	mg/L	11	10	10	10	10	10	13	10	13	10
Chlorophyll a	ug/L	108	106	89	128	8	7	8	33	33	48
Ammonia Nitrogen	mg/L N	0.044	<0.003	<0.003	0.004	0.004	0.141	0.060	0.051	0.110	0.130
Nitrate Nitrogen	mg/L N	0.008	0.008	0.015	0.010	0.368	0.359	0.405	0.378	0.600	0.717
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 ²	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	0.06	0.06	0.07	0.05	0.15	0.16	0.15	0.13	0.16	0.18
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	<0.30	<0.30	<0.30	<0.30	<0.30	0.30
Escherichia Coliform ³	colonies/100 mL	26	11	3500	22	17	1700	490	490	330	110
Fecal Coliform ³	colonies/100 mL	70	11	3500	26	17	1700	490	490	330	330

Weather Conditions during monitoring: Winds S at 8 km/hr with 0% cloud cover. Average air temperature during survey at 22.7 C

- Notes:
- 1) LIMS Reference No: 24011
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 734.0 ft

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