

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 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 ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	7.4	8.1	7.0	NS	NS	9.3	10.0	9.4	9.5	10.4
Dissolved Oxygen	mg/L	11.8	11.6	11.8	NS	NS	11.1	10.7	10.9	10.9	11.0
Oxygen Saturation ²	%	98	98	97	NS	NS	97	95	95	96	99
pH	units	8.48	8.49	8.52	NS	NS	8.59	8.60	8.52	8.43	8.32
Total Solids	mg/L	780	816	720	NS	NS	520	516	548	556	592
Total Suspended Solids	mg/L	188	226	104	NS	NS	24	17	31	27	11
Turbidity	n.t.u.	98	67	63	NS	NS	20	15	20	22	18
Total Organic Carbon	mg/L	11	11	10	NS	NS	10	10	10	11	10
Chlorophyll a	ug/L	16	12	2	NS	NS	23	23	26	21	23
Ammonia Nitrogen	mg/L N	0.038	0.018	0.046	NS	NS	0.185	0.217	0.188	0.424	0.511
Nitrate Nitrogen	mg/L N	0.323	0.325	0.337	NS	NS	0.043	0.051	0.153	0.232	0.378
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	2.4
Soluble Phosphorus	mg/L P	0.16	0.14	0.16	NS	NS	0.19	0.17	0.16	0.21	0.24
Total Phosphorus	mg/L P	0.40	0.40	0.30	NS	NS	0.30	<0.30	<0.30	0.30	0.30
Escherichia Coliform ³	colonies/100 mL	75	93	230	NS	NS	150	430	210	430	430
Fecal Coliform ³	colonies/100 mL	150	230	230	NS	NS	150	430	210	430	930

Weather Conditions during monitoring: Winds SSW at 20 km/hr with 86% cloud cover. Average air temperature during survey at 0.6 C

- Notes:
- 1) LIMS Reference No: 24319
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 724.6 ft
 - 5) There is no sample at the West Perimeter Bridge and the South Floodway Control Gates due to construction.

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