

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 28, 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	15.9	15.6	15.3	15.7	14.8	14.8	14.8	14.9	14.8	15.1
Dissolved Oxygen	mg/L	8.5	8.6	8.4	8.4	8.0	7.8	7.8	8.0	8.1	8.6
Oxygen Saturation ²	%	86	87	84	85	79	77	77	80	80	86
pH	units	8.17	8.18	8.17	8.16	7.98	7.98	7.97	8.03	8.00	8.02
Total Solids	mg/L	912	824	816	804	624	688	688	708	716	736
Total Suspended Solids	mg/L	408	380	366	372	216	234	210	268	264	282
Turbidity	n.t.u.	85	69	108	51	125	53	131	126	132	122
Total Organic Carbon	mg/L	11	12	11	12	12	12	11	12	11	11
Chlorophyll a	ug/L	16	18	16	18	9	5	9	7	4	7
Ammonia Nitrogen	mg/L N	0.045	0.041	0.051	0.045	0.109	0.109	0.099	0.087	0.104	0.123
Nitrate Nitrogen	mg/L N	0.150	0.153	0.160	0.149	0.927	0.700	0.447	0.334	0.281	0.278
Total Kjeldahl Nitrogen	mg/L N	<2.0	3.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	3.2	<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	0.11	0.18	0.17	0.16	0.15	0.15	0.19
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	7	4	17	7	110	79	2300	220	140	17
Fecal Coliform ³	colonies/100 mL	17	11	49	33	220	79	2300	220	140	33

Weather Conditions during monitoring: Winds N at 22.5 km/hr with 45 % cloud cover. Average air temperature during survey at 11.3°C

- Notes:
- 1) LIMS Reference No: 23101
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 742.5 ft

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Date Approved: 06/09/2009

File No: 040-14-09-03-00