

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 1, 2010		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	18.8	18.6	18.4	NS	NS	19.2	19.3	19.3	19.2	19.2
Dissolved Oxygen	mg/L	8.6	8.4	8.4	NS	NS	7.6	7.6	7.8	7.9	8.8
Oxygen Saturation ²	%	93	90	90	NS	NS	83	83	85	86	96
pH	units	8.31	8.35	8.26	NS	NS	7.89	8.01	8.20	8.08	7.89
Total Solids	mg/L	940	892	924	NS	NS	624	576	752	692	732
Total Suspended Solids	mg/L	150	150	172	NS	NS	172	95	156	125	136
Turbidity	n.t.u.	71.0	72.5	81.2	NS	NS	122	65.0	91.1	76.5	80.6
Total Organic Carbon	mg/L	22	21	21	NS	NS	17	17	18	18	16
Chlorophyll a	ug/L	16	19	18	NS	NS	9	12	11	16	12
Ammonia Nitrogen	mg/L N	0.006	0.038	<0.003	NS	NS	<0.003	0.022	0.004	0.052	0.075
Nitrate Nitrogen	mg/L N	0.375	0.368	0.378	NS	NS	1.100	0.555	0.404	0.372	0.450
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	2.1	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.24	0.22	0.22	NS	NS	0.41	0.28	0.21	0.20	0.19
Total Phosphorus	mg/L P	0.50	<0.30	0.40	NS	NS	0.70	<0.30	0.50	0.40	0.50
Escherichia Coliform ³	colonies/100 mL	430	930	9300	NS	NS	750	230	1500	2300	4300
Fecal Coliform ³	colonies/100 mL	930	930	9300	NS	NS	750	230	1500	2300	4300

Weather Conditions during monitoring: Winds S at 13 km/hr with 90% cloud cover and 1 mm of precipitation. Average air temperature during survey at 16°C

- Notes:
- 1) LIMS Reference No: 27214
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 736.6 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

Report Compiled By: J. Jones
Compliance Reporting Technician

Approved in LIMS By: S. Fletcher
Supervisor of Analytical Services

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