

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : April 14, 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	12.0	11.2	9.2	11.3	NS	10.1	10.0	9.7	10.2	10.1
Dissolved Oxygen	mg/L	12.4	12.2	13.3	12.7	NS	10.1	10.1	10.3	10.2	10.3
Oxygen Saturation ²	%	115	111	116	116	NS	90	90	91	91	92
pH	units	8.81	8.74	8.83	8.80	NS	8.08	8.04	8.06	8.03	7.97
Total Solids	mg/L	712	708	616	676	NS	504	508	504	524	480
Total Suspended Solids	mg/L	150	142	55	128	NS	82	118	108	120	116
Turbidity	n.t.u.	77	76	34	75	NS	77	75	74	77	78
Total Organic Carbon	mg/L	13	13	14	13	NS	12	12	12	12	12
Chlorophyll a	ug/L	117	103	5	7	NS	11	19	21	14	11
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	NS	0.020	0.016	0.031	0.053	0.063
Nitrate Nitrogen	mg/L N	0.207	0.199	0.154	0.234	NS	1.170	1.200	1.190	1.180	1.180
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	NS	2.2	2.2	2.2	2.2	2.2
Soluble Phosphorus	mg/L P	0.17	0.16	0.16	0.17	NS	0.19	0.19	0.19	0.20	0.20
Total Phosphorus	mg/L P	0.50	0.50	0.40	0.50	NS	0.40	0.40	0.40	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	4	2	14	<2	NS	8	17	8	13	23
Fecal Coliform ³	colonies/100 mL	4	2	14	<2	NS	8	49	11	46	23

Weather Conditions during monitoring: Winds SSW at 40 km/hr with 8% cloud cover. Average air temperature during survey at 17.5°C.

- Notes:
- 1) LIMS Reference No: 25887
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 744.8 ft
 - 5) There is no sample at the South Floodway Control Gates due to construction.

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Approved in LIMS By: S. Fletcher
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