

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 26, 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	18.3	18.0	17.3	NS	NS	18.3	18.2	17.6	17.2	17.4
Dissolved Oxygen	mg/L	9.1	9.1	8.7	NS	NS	8.4	8.2	8.1	8.2	8.7
Oxygen Saturation ²	%	97	97	91	NS	NS	90	88	85	86	91
pH	units	8.50	8.48	8.49	NS	NS	8.17	8.12	8.21	8.19	8.14
Total Solids	mg/L	892	912	848	NS	NS	816	840	808	812	776
Total Suspended Solids	mg/L	204	218	157	NS	NS	140	152	108	136	130
Turbidity	n.t.u.	96	85	66	NS	NS	76	75	55	74	83
Total Organic Carbon	mg/L	12	11	12	NS	NS	13	13	12	12	12
Chlorophyll a	ug/L	68	58	23	NS	NS	14	7	18	21	21
Ammonia Nitrogen	mg/L N	0.004	<0.003	<0.003	NS	NS	0.035	0.032	0.031	0.060	0.082
Nitrate Nitrogen	mg/L N	0.023	0.005	0.030	NS	NS	1.800	1.770	1.500	1.500	1.590
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	2.8	2.8	2.5	2.5	2.6
Soluble Phosphorus	mg/L P	0.12	0.07	0.09	NS	NS	0.14	0.13	0.14	0.15	0.14
Total Phosphorus	mg/L P	0.40	<0.30	0.40	NS	NS	0.40	0.40	<0.30	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	43	43	93	NS	NS	75	43	43	230	230
Fecal Coliform ³	colonies/100 mL	43	43	150	NS	NS	150	93	43	430	640

Weather Conditions during monitoring: Winds W at 20 km/hr with 65% cloud cover. Average air temperature during survey at 18°C.

- Notes:
- 1) LIMS Reference No: 26227
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 736.0 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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