

**City of Winnipeg
Water and Waste Department**

2011 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : November 3, 2011		Red River Sampling Locations							
Parameter	Unit	ST.ADOLPHE PIERRE DELORME BRIDGE	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	COCKBURN AT BRIDGE DRIVE INN	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	5.6	5.9	6.1	6.9	6.5	4.8	4.8	5.1
Dissolved Oxygen	mg/L	14.3	14.0	14.1	14.5	14.3	14.1	14.3	14.7
Oxygen Saturation ²	%	114	112	113	119	116	110	111	115
pH	units	8.83	8.80	8.76	8.73	8.73	8.55	8.64	8.47
Total Solids	mg/L	624	580	560	552	628	764	784	764
Total Suspended Solids	mg/L	40	31	32	31	31	81	71	90
Turbidity	n.t.u.	24.9	18.4	20.3	17.9	18.7	41.1	39.1	46.3
Total Organic Carbon	mg/L	13	13	14	14	17	13	14	14
Chlorophyll a	ug/L	22	30	41	3	55	37	43	23
Ammonia Nitrogen	mg/L N	0.022	<0.003	0.179	0.127	0.154	0.068	0.310	0.337
Nitrate Nitrogen	mg/L N	0.094	<0.003	<0.003	<0.003	0.013	0.210	0.217	0.263
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.10	0.09	0.10	0.11	0.11	0.13	0.16	0.17
Total Phosphorus	mg/L P	0.40	0.30	0.40	0.30	0.40	0.40	0.40	0.50
Escherichia Coliform ³	colonies/100 mL	<3	9	430	1200	930	2300	430	150
Fecal Coliform ³	colonies/100 mL	<3	9	430	1200	930	2300	430	150

Weather Conditions during monitoring: Winds S at 21 km/hr with 53 % cloud cover. Average air temperature during survey at 4.3 C

- Notes:
- 1) LIMS Reference No: 31186
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 730.5ft.
 - 5) Black line inserted to show the location of the South End Plant.
 - 6) Effective November 3, 2011 the Ste. Adolphe at Pierre Delorme Bridge will be used as an alternate location for the South Floodway Control gates due to construction.

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Report Compiled By: H.Demchenko
Compliance Reporting Technician

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

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