

**City of Winnipeg
Water and Waste Department**

2013 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 2, 2013		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL ⁴	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	13.8	14.0	13.7	13.5	14.7	14.7	14.9	14.9	14.5	14.1	14.4
Dissolved Oxygen	mg/L	10.1	10.1	10.0	9.7	9.9	10.1	10.6	9.7	9.7	9.6	9.8
Oxygen Saturation ²	%	98	98	97	93	98	100	105	96	95	93	96
pH	units	8.57	8.57	8.53	8.55	8.55	8.62	8.60	8.56	8.58	8.45	8.26
Total Solids	mg/L	870	918	854	850	966	968	908	918	868	856	846
Total Suspended Solids	mg/L	80	81	68	63	47	38	34	33	37	22	25
Turbidity	n.t.u.	38	40	39	36	41	38	32	33	24	22	20
Total Organic Carbon	mg/L	11	14	13	15	NA	15	8	10	12	14	17
Chlorophyll a	ug/L	31	23	26	28	18	22	23	23	28	29	30
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.273	0.155	<0.003	0.199	0.199
Nitrate Nitrogen	mg/L N	0.174	0.194	<0.003	<0.003	0.318	0.242	0.323	0.278	0.100	0.170	0.243
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.11	0.11	0.12	0.13	0.20	0.19	0.22	0.21	0.15	0.19	0.35
Total Phosphorus	mg/L P	0.40	0.40	0.30	0.30	0.30	0.40	0.40	0.40	<0.3	0.30	<0.3
Escherichia Coliform ³	MPN/100 mL	93	430	430	120	430	430	230	290	2300	430	230
Fecal Coliform ³	MPN/100 mL	93	430	430	750	430	430	230	2300	2300	430	230

Weather Conditions during monitoring: Winds WSW at 13 km/hr with 100% cloud cover and no precipitation. Average air temperature during survey at 13°C

- Notes:
- 1) LIMS Reference No: 37245
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 734.3
 - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.
 - 6) South Floodway Control not analysed for TOC due to technician error.

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

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Date Approved: 15-Nov-13