

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 25, 2009		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	23.5	23.0	22.5	23.4	23.4	22.9	22.4	22.3	22.3	22.0
Dissolved Oxygen	mg/L	8.1	8.4	7.5	8.4	7.0	6.8	6.6	6.9	6.8	8.4
Oxygen Saturation ²	%	96	99	87	100	83	80	77	80	79	97
pH	units	8.51	8.53	8.44	8.57	8.13	8.07	8.02	8.13	8.07	7.94
Total Solids	mg/L	808	840	816	792	788	796	860	904	920	1050
Total Suspended Solids	mg/L	144	136	164	148	218	244	324	222	360	312
Turbidity	n.t.u.	58	60	77	58	110	129	156	184	198	376
Total Organic Carbon	mg/L	12	16	13	14	14	15	16	13	11	14
Chlorophyll a	ug/L	42	41	37	47	15	11	12	14	14	18
Ammonia Nitrogen	mg/L N	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.04	0.05	0.07
Nitrate Nitrogen	mg/L N	0.02	0.01	0.03	0.03	0.42	0.49	0.62	0.61	0.72	0.93
Total Kjeldahl Nitrogen	mg/L N	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Nitrogen ²	mg/L N	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Soluble Phosphorus	mg/L P	0.11	0.11	0.12	0.11	0.12	0.13	0.14	0.14	0.14	0.20
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	<0.30	<0.30	0.30	0.40	0.40	0.40	0.70
Escherichia Coliform ³	colonies/100 mL	13	21	248	34	33	350	170	280	140	1300
Fecal Coliform ³	colonies/100 mL	23	26	248	46	33	540	350	1700	790	1300

Weather Conditions during monitoring: Winds NW at 18 km/hr with 0 % cloud cover. Average air temperature during survey at 21 C

- Notes:
- 1) LIMS Reference No: 23342
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 735.4 ft

Report Compiled By: H.Demchenko
Compliance Reporting Technician

Approved for Distribution By: S.Fletcher
Supervisor of Analytical Services

Date Approved: 08/04/2009

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