

**City of Winnipeg
Water and Waste Department**

2008 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 2, 2008		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	13.3	12.9	12.3	12.9	13.6	13.6	13.9	13.7	13.9	14.2
Dissolved Oxygen	mg/L	11.5	11.5	10.7	11.7	9.8	9.5	9.2	9.5	9.3	10.3
Oxygen Saturation ²	%	110	109	100	111	95	92	89	92	90	101
pH	units	8.65	8.60	8.57	8.62	8.14	8.01	7.94	8.17	7.90	7.91
Total Solids	mg/L	616	604	580	608	460	436	404	468	464	448
Total Suspended Solids	mg/L	82	73	56	81	46	53	43	45	59	59
Turbidity	n.t.u.	48	39	37	47	64	62	50	51	31	46
Total Organic Carbon	mg/L	8	11	13	10	12	12	12	11	12	12
Chlorophyll a	ug/L	44	49	40	39	9	9	9	19	12	9
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	0.197	0.151	0.054	0.635	0.376
Nitrate Nitrogen	mg/L N	0.011	0.012	0.034	0.019	0.366	0.463	0.423	0.300	0.455	0.579
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.6
Soluble Phosphorus	mg/L P	0.08	0.08	0.09	0.08	0.26	0.31	0.33	0.25	0.36	0.37
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	0.30	0.40	0.40	0.40	0.30	0.40	0.60
Escherichia Coliform ³	colonies/100 mL	90	500	170	50	70	80	50	300	130	90
Fecal Coliform ³	colonies/100 mL	500	800	170	80	70	130	50	300	130	90

Weather Conditions during monitoring: Winds NE at 18 km/hr with 30% cloud cover. Average air temperature during survey at 11°C

- Notes: 1) LIMS Reference No: 21291
 2) Calculated values
 3) Analyzed by contract laboratory.
 4) Red River elevation at South Floodway Control Gates: 734.1 ft

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