

**City of Winnipeg  
Water and Waste Department**

**2013 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : June 26, 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 <sup>4</sup>	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	23.6	23.7	23.9	23.3	24.5	24.5	24.8	24.0	23.0	23.0	22.4
Dissolved Oxygen	mg/L	8.1	8.1	7.8	7.9	8.0	8.0	8.0	8.0	8.1	8.3	8.2
Oxygen Saturation <sup>2</sup>	%	96	97	93	94	97	97	97	96	96	97	95
pH	units	8.24	8.23	8.25	8.21	8.14	8.17	8.15	8.03	8.12	8.03	7.59
Total Solids	mg/L	1040	1010	1020	998	854	840	762	806	898	844	794
Total Suspended Solids	mg/L	216	198	184	216	188	112	84	100	160	138	95
Turbidity	n.t.u.	111	111	105	112	113	72	58	102	86	82	56
Total Organic Carbon	mg/L	12	13	13	14	13	12	13	13	15	12	12
Chlorophyll a	ug/L	<1	2	2	8	<1	5	<1	<1	4	4	1
Ammonia Nitrogen	mg/L N	0.053	0.043	0.252	0.013	0.017	<0.003	0.065	0.049	0.029	0.103	0.238
Nitrate Nitrogen	mg/L N	0.380	0.394	0.399	0.393	0.361	0.364	0.405	0.380	0.408	0.418	0.448
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 <sup>2</sup>	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	0.14	0.15	0.14	0.14	0.17	0.17	0.18	0.17	0.16	0.17	0.25
Total Phosphorus	mg/L P	0.40	0.40	0.30	0.30	0.30	0.30	<0.30	0.30	0.30	<0.30	<0.30
Escherichia Coliform <sup>3</sup>	MPN/100 mL	150	150	230	430	43	43	430	210	4300	4300	930
Fecal Coliform <sup>3</sup>	MPN/100 mL	150	150	230	930	43	43	430	930	4300	4300	930

Weather Conditions during monitoring: Winds W at 20 km/hr with 40 % cloud cover and 24.5 mm of precipitation. Average air temperature during survey at 24 C

- Notes:
- 1) LIMS Reference No: 36334
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates 737.4

Report Compiled By: H.Demchenko  
Compliance Reporting Technician

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

Date Approved: 6-Aug-13

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