

**City of Winnipeg  
Water and Waste Department**

**2014 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : June 4, 2014		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE (R1)	WEST PERIMETER BRIDGE (R2)	ASSINIBOINE PARK FOOT BRIDGE (R3)	MAIN STREET BRIDGE (R4)	SOUTH FLOODWAY CONTROL <sup>4</sup> (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	22.5	21.0	21.2	20.8	21.9	22.1	22.2	21.4	20.8	20.7	20.7
Dissolved Oxygen	mg/L	7.8	7.8	7.7	7.8	7.0	7.0	7.1	6.9	7.3	7.3	8.0
Oxygen Saturation <sup>2</sup>	%	90	88	87	87	80	80	81	78	81	82	89
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	<3
pH	units	8.05	8.09	8.04	8.08	8.03	8.07	8.00	7.94	7.99	7.94	7.65
Total Solids	mg/L	918	904	806	848	684	792	710	758	778	768	810
Total Suspended Solids	mg/L	192	168	164	186	75	59	81	77	134	106	160
Turbidity	n.t.u.	111	125	113	112	57	50	61	57	91	75	98
Total Organic Carbon	mg/L	18	20	18	30	19	19	22	19	21	19	20
Chlorophyll a	ug/L	9	8	7	8	6	7	8	7	6	6	7
Ammonia Nitrogen	mg/L N	0.017	0.023	0.019	0.023	0.016	0.063	0.052	0.037	0.052	0.065	0.092
Nitrate Nitrogen	mg/L N	0.121	0.122	0.120	0.107	0.351	0.357	0.365	0.374	0.252	0.246	0.282
Total Kjeldahl Nitrogen	mg/L N	2.4	2.1	1.8	1.9	2.0	1.8	1.8	1.9	2.2	1.8	2.1
Total Nitrogen <sup>2</sup>	mg/L N	2.5	2.2	1.9	2.0	2.4	2.2	2.2	2.3	2.5	2.0	2.4
Soluble Phosphorus	mg/L P	0.07	0.08	0.06	0.06	0.09	0.10	0.09	0.10	0.08	0.09	0.20
Total Phosphorus	mg/L P	0.50	0.40	0.30	0.40	0.30	0.30	0.30	0.30	0.40	0.30	0.30
Escherichia Coliform <sup>3</sup>	MPN/100 mL	15	9	43	230	15	23	23	23	43	93	93
Fecal Coliform <sup>3</sup>	MPN/100 mL	43	23	230	230	15	23	75	23	43	93	93

Weather Conditions during monitoring Winds WSW at 33 km/hr with 10% cloud cover and 4.4 mm of precipitation. Average air temperature during survey at 20.2°C

- Notes:
- 1) LIMS Reference No: **39398**
  - 2) Calculated values
  - 3) Analysed by contract laboratory
  - 4) Red River Floodway at South Floodway Control Gates **740.8** ft.
  - 5) No result because the initial DO was below the BOD test limit.

Report Compiled By: H.Demchenko  
Compliance Reporting Technician

Approved in LIMS By: C.Diduck  
Analytical Services Branch Head

Date Compiled: 10-Jan-19

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