

**City of Winnipeg  
Water and Waste Department**

**2016 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : August 4, 2016		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>3</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	24.3	23.9	22.9	23.1	23.2	23.5	23.7	23.5	23.4	23.4	23.3
Dissolved Oxygen	mg/L	7.9	7.8	7.7	7.2	6.7	6.6	6.3	6.4	6.4	6.4	7.7
Oxygen Saturation	%	93	92	90	85	79	78	75	75	76	75	90
Biochemical Oxygen Demand	mg/L	<3	<3	<3	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	<3
pH	units	8.55	8.35	8.34	8.30	7.85	7.76	7.78	7.65	7.82	7.79	7.80
Total Solids	mg/L	964	930	990	978	832	938	862	976	988	844	952
Total Suspended Solids	mg/L	189	178	197	182	267	350	296	391	326	160	274
Turbidity	n.t.u.	92	106	106	113	174	205	228	223	171	109	182
Total Organic Carbon	mg/L	19	19	19	19	18	18	18	19	20	17	18
Chlorophyll a	ug/L	31	37	42	31	4	2	7	4	9	9	11
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.042	0.055	0.038	0.042	0.009
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.345	0.343	0.347	0.391	0.320	0.359	0.326
Total Nitrogen	mg/L N	1.6	1.6	1.5	1.6	1.6	1.9	1.8	1.9	2.2	1.8	1.9
Soluble Phosphorus	mg/L P	0.13	0.13	0.14	0.14	0.24	0.25	0.24	0.24	0.22	0.23	0.18
Total Phosphorus	mg/L P	0.35	0.39	0.36	0.36	0.46	0.47	0.48	0.53	0.50	0.39	0.45
Escherichia Coliform <sup>2</sup>	MPN/100 mL	43	30	93	240	2400	930	93	93	93	2400	2400
Fecal Coliform <sup>2</sup>	MPN/100 mL	43	30	93	430	2400	930	240	93	240	4300	7500

Weather Conditions during monitoring Winds NW at 57 km/hr with 95% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 18.1°C

- Notes:
- 1) LIMS Reference No: **47038**
  - 2) Analysed by contract laboratory
  - 3) Red River Floodway at South Floodway Control Gates **734.7** ft.
  - 4) No result because the initial DO and/or temperature were outside the BOD test limits.

Report Compiled By: H.Demchenko  
Compliance Reporting Technician

Approved in Sample Manager By: C.Diduck  
Analytical Services Branch Head

Date Compiled: 11-Jan-19

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