

**City of Winnipeg  
Water and Waste Department**

**2016 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : May 25, 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>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	19.7	19.9	20.3	20.0	19.6	19.1	19.5	19.5	19.5	19.0	18.5
Dissolved Oxygen	mg/L	9.9	10.0	9.7	9.6	9.7	9.6	9.6	9.8	9.8	9.9	9.8
Oxygen Saturation <sup>2</sup>	%	108	109	107	106	105	104	104	108	107	106	104
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.40	8.37	8.43	8.42	8.49	8.39	8.36	8.51	8.45	8.43	8.24
Total Solids	mg/L	668	636	782	636	660	662	644	636	630	608	618
Total Suspended Solids	mg/L	118	108	118	100	48	58	32	37	39	42	56
Turbidity	n.t.u.	70	66	61	63	43	42	33	33	40	34	41
Total Organic Carbon	mg/L	22	22	24	20	22	28	22	23	21	22	22
Chlorophyll a	ug/L	26	28	28	2	5	4	2	44	14	26	2
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.058	<0.003	0.006	<0.003	0.040	0.025	0.003	0.108	0.122
Nitrate Nitrogen	mg/L N	0.191	0.185	0.209	0.215	<0.003	<0.003	0.003	0.011	0.124	0.134	0.212
Total Kjeldahl Nitrogen	mg/L N	2.2	1.9	1.5	1.9	1.7	1.1	2.4	2.2	2.3	2.6	1.5
Total Nitrogen <sup>2</sup>	mg/L N	2.4	2.1	1.7	2.1	1.7	1.1	2.4	2.2	2.4	2.7	1.7
Soluble Phosphorus	mg/L P	0.05	0.05	0.07	0.05	0.03	0.02	0.03	0.03	0.04	0.05	0.07
Total Phosphorus	mg/L P	0.30	0.30	0.30	0.30	0.30	0.20	0.30	0.20	0.40	0.30	0.30
Escherichia Coliform <sup>3</sup>	MPN/100 mL	43	23	23	74	>3	4	9	23	93	240	930
Fecal Coliform <sup>3</sup>	MPN/100 mL	43	23	23	430	>3	4	23	43	240	300	930

Weather Conditions during monitoring Winds NE at 35 km/hr with 90% cloud cover and 26.6 mm of precipitation. Average air temperature during survey at 19.5°C

- Notes:
- 1) LIMS Reference No: **46275**
  - 2) Calculated values
  - 3) Analysed by contract laboratory
  - 4) Red River Floodway at South Floodway Control Gates **733.9** ft.

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