

**City of Winnipeg  
Water and Waste Department**

**2017 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : May 18, 2017		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	12.9	13.2	13.0	13.1	14.7	14.8	14.2	13.9	13.7	13.4	13.6
Dissolved Oxygen	mg/L	9.8	9.9	9.8	10.2	9.5	9.5	9.6	9.6	9.5	9.6	9.7
Oxygen Saturation	%	93	94	93	97	94	94	93	93	92	92	93
Biochemical Oxygen Demand	mg/L	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>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>	nr <sup>4</sup>
pH	units	8.25	8.15	8.16	8.17	8.32	8.32	8.30	8.31	8.31	8.24	8.20
Total Solids	mg/L	962	954	992	1040	832	732	760	866	902	862	970
Total Suspended Solids	mg/L	226	242	238	303	148	119	104	174	180	148	249
Turbidity	n.t.u.	74	62	28	39	88	59	66	105	70	29	65
Total Organic Carbon	mg/L	12	11	12	13	12	9	12	12	12	12	12
Chlorophyll a	ug/L	11	11	11	9	9	9	8	9	7	7	9
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.025	<0.003	<0.003	0.017	0.063	0.048	0.094	0.105
Nitrate Nitrogen	mg/L N	0.115	0.104	0.120	0.126	0.247	0.250	0.248	0.263	0.192	0.163	0.228
Total Nitrogen	mg/L N	1.0	0.9	1.0	1.0	1.0	0.8	1.1	1.2	1.1	1.2	1.3
Soluble Phosphorus	mg/L P	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.11
Total Phosphorus	mg/L P	0.43	0.42	0.44	0.37	0.29	0.26	0.25	0.31	0.35	0.35	0.39
Escherichia Coliform <sup>2</sup>	MPN/100 mL	9	31	9	64	10	9	166	42	29	14	4
Fecal Coliform <sup>2</sup>	MPN/100 mL	15	31	10	68	13	3	143	57	31	23	10

Weather Conditions during monitoring Winds North at 13 km/hr with 1% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 7°C

- Notes:
- 1) LIMS Reference No: **49541**
  - 2) Analysed by contract laboratory
  - 3) Red River Floodway at South Floodway Control Gates **737.4** ft.
  - 4) No result because the initial temperature was outside the BOD test limit.

Report Compiled By: H.Demchenko  
Compliance Reporting Technician

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

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