

**City of Winnipeg  
Water and Waste Department**

**2017 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : July 27, 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	24.7	24.7	24.1	24.2	25.1	25.6	25.2	23.9	23.8	23.0	22.8
Dissolved Oxygen	mg/L	8.5	8.8	8.0	7.4	7.8	8.0	8.2	8.1	8.1	8.0	8.5
Oxygen Saturation	%	103	105	93	89	95	98	99	96	95	93	98
Biochemical Oxygen Demand	mg/L	4	4	3	nr <sup>4</sup>	<3	<3	<3	<3	nr <sup>4</sup>	nr <sup>4</sup>	3
pH	units	8.34	8.35	8.27	8.25	8.18	8.24	8.20	8.10	8.10	7.96	7.96
Total Solids	mg/L	1020	972	954	870	936	974	922	918	894	904	892
Total Suspended Solids	mg/L	198	202	187	99	61	38	47	30	36	30	32
Turbidity	n.t.u.	123	49	51	37	11	33	38	28	29	22	23
Total Organic Carbon	mg/L	10	11	10	10	11	11	11	11	11	12	11
Chlorophyll a	ug/L	52	55	37	29	9	9	11	12	23	27	31
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.195	0.137	0.041	0.399	0.312
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.481	0.503	0.543	0.573	0.408	0.434	0.593
Total Nitrogen	mg/L N	0.6	0.7	0.7	0.6	1.2	1.4	1.6	1.7	1.1	1.7	2.0
Soluble Phosphorus	mg/L P	0.06	<0.01	0.02	<0.01	0.15	0.12	0.14	0.14	0.09	0.13	0.14
Total Phosphorus	mg/L P	0.22	0.23	0.21	0.15	0.19	0.17	0.19	0.20	0.17	0.21	0.23
Escherichia Coliform <sup>2</sup>	MPN/100 mL	9	6	19	129	2	15	24	48	219	344	1120
Fecal Coliform <sup>2</sup>	MPN/100 mL	10	12	16	75	9	15	20	62	291	214	1050

Weather Conditions during monitoring Winds South at 4 km/hr with 20% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 23°C

- Notes:
- 1) LIMS Reference No: **50279**
  - 2) Analysed by contract laboratory
  - 3) Red River Floodway at South Floodway Control Gates **734.2** ft.
  - 4) No result because the initial DO was below the BOD test limit.

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