

**City of Winnipeg
Water and Waste Department**

2017 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ :		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 ³ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	7.4	7.3	6.7	6.9	10.0	9.3	9.7	8.5	8.4	8.5	8.8
Dissolved Oxygen	mg/L	11.5	11.8	11.6	11.3	10.8	10.6	10.5	10.5	10.5	10.6	11.7
Oxygen Saturation	%	96	98	95	93	96	92	93	90	90	90	100
Biochemical Oxygen Demand	mg/L	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.37	8.41	8.34	8.32	8.14	8.12	8.08	8.02	8.06	8.06	8.06
Total Solids	mg/L	680	700	722	730	1170	1180	1100	1110	972	876	842
Total Suspended Solids	mg/L	53	52	73	63	244	260	183	175	106	47	43
Turbidity	n.t.u.	37	34	48	48	159	180	147	148	87	52	41
Total Organic Carbon	mg/L	8	8	8	8	11	11	11	14	11	11	11
Chlorophyll a	ug/L	53	63	63	55	7	5	8	8	16	16	16
Ammonia Nitrogen	mg/L N	0.006	<0.003	<0.003	<0.003	0.008	0.008	0.106	0.208	<0.003	0.347	0.335
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.009	0.050	0.581	0.531	0.601	0.510	0.395	0.411	0.439
Total Nitrogen	mg/L N	0.5	0.7	0.6	0.7	1.5	1.7	1.7	1.9	1.5	1.8	1.9
Soluble Phosphorus	mg/L P	0.08	0.09	0.10	0.12	0.16	0.18	0.32	0.18	0.16	0.17	0.22
Total Phosphorus	mg/L P	0.17	0.17	0.18	0.15	0.32	0.30	0.29	0.30	0.23	0.23	0.24
Escherichia Coliform ²	MPN/100 mL	150	110	120	230	60	100	80	110	170	320	110
Fecal Coliform ²	MPN/100 mL	120	100	170	200	40	60	110	60	220	150	110

Weather Conditions during monitoring Winds SE at 11 km/hr with 80% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 14°C

- Notes:
- 1) LIMS Reference No: **51051**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **733.8** 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

Date Compiled: 16-Jan-19

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