

**City of Winnipeg  
Water and Waste Department**

**2017 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : June 29, 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	20.0	19.8	19.0	18.8	20.9	21.0	20.2	19.9	19.8	19.7	19.5
Dissolved Oxygen	mg/L	9.0	9.0	8.9	8.6	7.9	8.0	8.2	8.0	8.2	8.3	8.9
Oxygen Saturation	%	98	99	95	92	89	90	90	88	89	91	96
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>	<3
pH	units	8.46	8.50	8.44	8.47	8.13	8.43	8.19	8.16	8.30	8.31	8.21
Total Solids	mg/L	808	834	800	848	824	694	708	692	748	640	692
Total Suspended Solids	mg/L	120	135	128	110	265	164	116	134	160	63	79
Turbidity	n.t.u.	72	84	70	71	175	106	83	89	103	45	58
Total Organic Carbon	mg/L	12	12	12	12	12	12	12	11	12	12	11
Chlorophyll a	ug/L	31	31	32	27	8	8	8	8	15	17	23
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.018	0.085	0.081	0.067	0.179
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	1.030	0.804	0.580	0.514	0.332	0.299	0.320
Total Nitrogen	mg/L N	0.7	0.7	0.7	0.9	1.8	1.7	1.5	1.3	1.0	1.1	1.4
Soluble Phosphorus	mg/L P	0.02	<0.01	<0.01	<0.01	0.15	0.11	0.11	0.20	0.10	0.10	0.14
Total Phosphorus	mg/L P	0.28	0.24	0.25	0.27	0.35	0.28	0.25	0.30	0.25	0.21	0.24
Escherichia Coliform <sup>2</sup>	MPN/100 mL	104	326	26	155	30	34	68	84	38	47	34
Fecal Coliform <sup>2</sup>	MPN/100 mL	105	261	35	155	32	43	68	72	84	81	39

Weather Conditions during monitoring Winds SW at 7 km/hr with 70% cloud cover and 0.5 mm of precipitation. Average air temperature during survey at 24°C

- Notes:
- 1) LIMS Reference No: **49989**
  - 2) Analysed by contract laboratory
  - 3) Red River Floodway at South Floodway Control Gates **735.6** ft.
  - 4) No result because the initial DO was below 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