

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : April 28, 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 ⁴ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	11.0	9.9	10.0	9.7	11.0	10.4	10.5	9.9	9.9	9.4	9.7
Dissolved Oxygen	mg/L	10.3	10.2	10.2	10.0	10.3	10.4	10.2	10.0	10.0	9.9	10.4
Oxygen Saturation ²	%	93	90	91	88	92	94	92	89	89	86	92
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	3
pH	units	8.32	8.32	8.25	8.23	8.44	8.39	8.38	8.22	8.08	8.09	7.89
Total Solids	mg/L	1190	1170	1180	1200	704	678	668	700	870	772	878
Total Suspended Solids	mg/L	576	540	558	560	172	150	144	160	310	212	310
Turbidity	n.t.u.	277	235	310	263	118	101	96	123	172	160	163
Total Organic Carbon	mg/L	25	30	26	17	17	15	18	17	20	16	28
Chlorophyll a	ug/L	15	18	18	10	9	12	7	4	12	12	11
Ammonia Nitrogen	mg/L N	0.045	<0.003	0.064	0.057	0.024	0.033	0.120	0.131	0.090	0.115	0.205
Nitrate Nitrogen	mg/L N	1.450	1.540	1.630	1.910	0.679	0.914	0.898	0.995	1.380	1.460	1.370
Total Kjeldahl Nitrogen	mg/L N	2.4	2.2	1.4	3.0	2.2	1.9	1.6	1.8	2.1	1.7	2.3
Total Nitrogen ²	mg/L N	3.9	3.7	3.0	4.9	2.9	2.8	2.5	2.8	3.5	3.2	3.7
Soluble Phosphorus	mg/L P	0.09	0.09	0.07	0.14	0.06	0.05	0.07	0.07	0.07	0.08	0.09
Total Phosphorus	mg/L P	0.70	0.70	0.40	0.50	0.70	0.40	0.40	0.40	0.70	0.50	0.60
Escherichia Coliform ³	MPN/100 mL	15	9	15	23	4	23	<3	23	23	14	240
Fecal Coliform ³	MPN/100 mL	15	9	15	23	4	23	4	23	23	30	240

Weather Conditions during monitoring Winds N at 32 km/hr with 25% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 8.4°C

- Notes: 1) LIMS Reference No: **45955**
 2) Calculated values
 3) Analysed by contract laboratory
 4) Red River Floodway at South Floodway Control Gates **735.3** ft.

Report Compiled By: H.Demchenko

Compliance Reporting Technician

Approved in LIMS By: C.Diduck

Analytical Services Branch Head

Date Compiled: 11-Jan-19

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