

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 18, 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 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	24.2	24.4	24.0	23.6	24.7	24.8	24.0	24.2	24.0	23.9	23.3
Dissolved Oxygen	mg/L	9.8	9.8	9.7	9.0	8.8	8.9	8.9	8.8	8.5	8.5	9.8
Oxygen Saturation	%	117	118	115	107	106	107	107	106	102	101	115
Biochemical Oxygen Demand	mg/L	<3	3	<3	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	<3
pH	units	8.35	8.43	8.38	8.26	7.91	7.92	7.97	7.78	7.99	7.72	7.75
Total Solids	mg/L	858	860	834	804	856	726	786	814	736	640	790
Total Suspended Solids	mg/L	154	150	146	136	206	96	96	214	110	27	152
Turbidity	n.t.u.	97	104	88	86	131	88	91	122	84	35	118
Total Organic Carbon	mg/L	26	31	25	23	26	22	21	28	24	19	27
Chlorophyll a	ug/L	52	49	46	33	13	9	7	7	11	12	12
Ammonia Nitrogen	mg/L N	0.018	<0.003	<0.003	<0.003	<0.003	<0.003	0.060	0.061	0.013	0.124	0.023
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.012	0.425	0.400	0.425	0.467	0.360	0.383	0.449
Total Nitrogen	mg/L N	1.2	1.3	1.1	1.1	2.2	1.8	1.8	2.5	2.3	1.9	2.6
Soluble Phosphorus	mg/L P	0.08	0.08	0.08	0.09	0.21	0.24	0.21	0.21	0.18	0.16	0.17
Total Phosphorus	mg/L P	0.38	0.31	0.32	0.27	0.41	0.34	0.34	0.39	0.35	0.28	0.38
Escherichia Coliform ²	MPN/100 mL	1500	240	93	2400	150	240	93	210	4300	4300	430
Fecal Coliform ²	MPN/100 mL	1500	240	240	2400	430	1500	150	930	4300	9300	9300

Weather Conditions during monitoring Winds NW at 22 km/hr with 100% cloud cover and 5.5 mm of precipitation. Average air temperature during survey at 20.2°C

- Notes:
- 1) LIMS Reference No: **47143**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **783.1** ft.
 - 4) No result because the initial DO was below the BOD test limit.

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