

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 21, 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	24.9	25.2	24.5	23.5	24.5	24.3	24.6	23.7	23.3	23.3	22.9
Dissolved Oxygen	mg/L	8.2	8.3	8.2	7.9	7.6	7.1	7.6	6.9	7.2	7.0	8.1
Oxygen Saturation	%	100	102	99	93	93	86	93	83	86	83	95
Biochemical Oxygen Demand	mg/L	3	<3	<3	4	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.25	8.47	8.28	8.31	8.02	7.71	7.98	7.98	7.82	7.74	7.81
Total Solids	mg/L	1040	1080	1040	1010	882	838	850	894	942	794	946
Total Suspended Solids	mg/L	223	243	202	177	310	320	301	342	305	181	329
Turbidity	n.t.u.	119	126	114	109	183	177	198	198	170	104	169
Total Organic Carbon	mg/L	25	18	23	34	24	24	23	25	27	22	23
Chlorophyll a ⁵	ug/L	na	na	na	na	na	na	na	na	na	na	na
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.020	0.023	<0.003	<0.003	0.029	0.039	0.170	0.048	0.062
Nitrate Nitrogen	mg/L N	0.070	0.070	0.122	0.140	0.519	0.478	0.474	0.479	0.433	0.483	0.436
Total Nitrogen	mg/L N	1.3	1.2	1.1	1.4	1.7	1.8	1.7	1.7	1.8	1.6	1.8
Soluble Phosphorus	mg/L P	0.14	0.20	0.17	0.16	0.18	0.19	0.19	0.19	0.31	nr ⁶	0.20
Total Phosphorus	mg/L P	0.32	0.28	0.32	0.30	0.40	0.38	0.35	0.39	0.36	0.29	0.39
Escherichia Coliform ²	MPN/100 mL	26	240	240	9300	43	200	43	930	430	2400	15000
Fecal Coliform ²	MPN/100 mL	920	240	240	9300	43	200	93	930	930	2400	46000

Weather Conditions during monitoring Winds NE at 20 km/hr with <1% cloud cover and 19.5 mm of precipitation. Average air temperature during survey at 24.7°C

- Notes:
- 1) LIMS Reference No: **46867**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **747.8** ft.
 - 4) No result because the initial DO was below the BOD test limit.
 - 5) Not analysed due to technician error.
 - 6) No result due to sample contamination.

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