

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 8, 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	19.8	19.4	19.2	18.8	19.1	19.1	19.4	18.9	18.5	18.2	18.1
Dissolved Oxygen	mg/L	9.8	10.0	9.3	9.1	7.6	8.2	7.4	7.3	7.8	7.8	7.3
Oxygen Saturation	%	108	109	101	97	82	89	81	78	83	82	77
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	nr ⁴	nr ⁴	<3	<3	nr ⁴
pH	units	8.66	8.66	8.65	8.63	8.03	8.07	8.00	8.03	8.19	7.99	7.57
Total Solids	mg/L	748	968	790	766	1030	1090	1030	1040	996	1020	730
Total Suspended Solids	mg/L	120	119	144	134	272	316	230	158	262	248	61
Turbidity	n.t.u.	84	73	75	77	184	200	148	167	162	153	54
Total Organic Carbon	mg/L	32	30	29	31	35	31	34	32	33	38	25
Chlorophyll a	ug/L	62	51	70	71	4	7	7	7	16	21	9
Ammonia Nitrogen	mg/L N	<0.003	0.052	<0.003	0.140	<0.003	2.120	0.102	0.094	0.115	0.120	0.089
Nitrate Nitrogen	mg/L N	0.060	0.036	0.059	0.101	2.000	2.350	2.130	2.280	1.890	1.990	2.900
Total Nitrogen	mg/L N	3.0	2.8	2.5	3.2	7.1	7.8	7.3	7.6	7.1	8.3	8.5
Soluble Phosphorus	mg/L P	0.04	0.04	0.03	0.06	0.12	0.12	0.13	0.14	0.17	0.12	0.15
Total Phosphorus	mg/L P	0.40	0.30	0.50	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.40
Escherichia Coliform ²	MPN/100 mL	43	140	43	93	23	23	93	74	23	93	240
Fecal Coliform ²	MPN/100 mL	43	140	43	240	23	23	93	74	43	240	240

Weather Conditions during monitoring Winds S at 35 km/hr with 75% cloud cover and 1.6 mm of precipitation. Average air temperature during survey at 16.5°C

- Notes:
- 1) LIMS Reference No: **46439**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **736.4** ft.
 - 4) No result because the initial DO was below the BOD test limit.

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