

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 22, 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	21.5	21.5	20.9	21.0	21.3	20.9	21.5	21.3	21.5	20.8	19.8
Dissolved Oxygen	mg/L	8.8	8.9	8.5	8.3	6.7	6.1	6.7	6.8	6.7	7.3	7.4
Oxygen Saturation	%	100	100	96	93	76	69	75	78	76	82	84
Biochemical Oxygen Demand	mg/L	4	4	3	3	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.73	8.47	8.71	8.65	7.84	8.71	7.67	7.57	7.77	7.78	7.84
Total Solids	mg/L	876	854	814	790	740	696	718	798	806	830	862
Total Suspended Solids	mg/L	183	131	179	139	255	236	329	365	384	423	385
Turbidity	n.t.u.	99	78	101	80	201	196	226	219	262	231	281
Total Organic Carbon	mg/L	37	35	35	31	29	24	29	28	36	32	35
Chlorophyll a	ug/L	46	70	56	46	5	<1	4	2	9	11	1
Ammonia Nitrogen	mg/L N	0.008	<0.003	<0.003	<0.003	0.061	0.008	0.058	0.019	0.197	0.058	0.084
Nitrate Nitrogen	mg/L N	<0.003	0.004	0.038	0.010	0.789	0.843	0.850	0.969	0.814	0.843	0.941
Total Nitrogen	mg/L N	1.4	1.4	1.4	1.3	1.8	1.8	2.0	2.1	2.4	2.2	2.7
Soluble Phosphorus	mg/L P	0.02	0.02	0.03	0.04	0.18	0.18	0.19	0.19	0.17	0.17	0.17
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.60	0.60	0.60	0.70	0.70	0.70	0.70
Escherichia Coliform ²	MPN/100 mL	430	93	43	280	43	93	43	300	300	93	430
Fecal Coliform ²	MPN/100 mL	430	93	43	280	43	93	43	300	300	93	930

Weather Conditions during monitoring Winds N at 10 km/hr with 95% cloud cover and 0.9 mm of precipitation. Average air temperature during survey at 16.3°C

- Notes:
- 1) LIMS Reference No: **46600**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **379.7** ft.
 - 4) No result because the initial DO was below the BOD test limit.

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