

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 6, 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	23.7	23.5	23.2	22.5	23.0	22.9	23.1	22.6	22.2	22.3	21.7
Dissolved Oxygen	mg/L	8.7	8.6	8.5	8.2	7.6	7.5	7.4	7.2	7.4	7.5	8.4
Oxygen Saturation	%	102	101	99	95	89	88	86	83	85	86	96
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	<3
pH	units	8.47	8.40	8.56	8.48	8.07	8.06	8.08	8.09	8.21	8.22	8.00
Total Solids	mg/L	1100	1040	1030	1020	854	868	790	914	948	814	900
Total Suspended Solids	mg/L	233	243	238	185	166	186	116	185	157	109	177
Turbidity	n.t.u.	134	129	123	117	124	124	79	146	124	86	121
Total Organic Carbon	mg/L	33	30	37	32	36	27	29	32	34	31	32
Chlorophyll a	ug/L	33	30	64	45	9	3	4	3	3	3	5
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.048	0.057	0.028	0.047	0.080
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.006	0.012	0.418	0.416	0.410	0.432	0.299	0.317	0.434
Total Nitrogen	mg/L N	1.0	1.1	1.5	1.5	2.2	1.6	1.6	1.7	1.8	1.4	2.1
Soluble Phosphorus	mg/L P	0.06	0.07	0.07	0.07	0.13	0.13	0.14	0.11	0.13	0.13	0.15
Total Phosphorus	mg/L P	0.31	0.32	0.33	0.31	0.31	0.31	0.28	0.31	0.30	0.26	0.34
Escherichia Coliform ²	MPN/100 mL	43	93	74	240	9	43	23	93	430	240	740
Fecal Coliform ²	MPN/100 mL	43	93	74	240	9	43	23	93	430	240	740

Weather Conditions during monitoring Winds N at 13 km/hr with 40% cloud cover and 0.2 mm of precipitation. Average air temperature during survey at 16.3°C

- Notes:
- 1) LIMS Reference No: **46705**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **733.8** ft.
 - 4) No result because the initial DO and/or temperature were outside the BOD test limits.

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Date Compiled: 11-Jan-19

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