

**City of Winnipeg
Water and Waste Department**

2017 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 5, 2017		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	11.3	11.3	10.7	11.3	13.4	13.2	13.4	12.9	12.6	12.3	12.9
Dissolved Oxygen	mg/L	10.8	10.9	10.8	10.4	9.6	9.4	9.5	9.2	9.4	9.2	10.6
Oxygen Saturation	%	99	100	98	96	92	90	91	87	88	86	101
Biochemical Oxygen Demand	mg/L	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.39	8.41	8.40	8.37	7.90	7.89	7.83	7.75	7.93	7.82	7.82
Total Solids	mg/L	772	770	776	744	704	704	656	630	630	598	592
Total Suspended Solids	mg/L	95	93	99	51	140	185	110	108	114	89	62
Turbidity	n.t.u.	65	69	70	44	132	157	122	130	120	91	73
Total Organic Carbon	mg/L	13	13	12	12	14	14	14	14	13	12	12
Chlorophyll a	ug/L	53	57	43	41	8	8	8	7	11	11	12
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	0.013	0.070	0.164	0.069	0.330	0.333
Nitrate Nitrogen	mg/L N	0.124	0.137	0.154	0.196	0.309	0.278	0.295	0.298	0.319	0.360	0.479
Total Nitrogen	mg/L N	0.6	0.6	0.7	0.8	1.3	1.0	1.3	1.2	1.0	1.3	1.3
Soluble Phosphorus	mg/L P	0.09	0.10	0.11	0.10	0.17	0.19	0.25	0.20	0.15	0.19	0.17
Total Phosphorus	mg/L P	0.23	0.21	0.22	0.18	0.27	0.25	0.25	0.27	0.22	0.26	0.34
Escherichia Coliform ²	MPN/100 mL	190	280	410	260	120	180	60	70	340	250	310
Fecal Coliform ²	MPN/100 mL	230	350	460	270	90	140	90	50	290	290	310

Weather Conditions during monitoring Winds N/NW at 7 km/hr with 40% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 11°C

- Notes:
- 1) LIMS Reference No: **50924**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **735.6** ft.
 - 4) No result because the initial temperature was outside the BOD test limit.

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Date Compiled: 16-Jan-19

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