

**City of Winnipeg  
Water and Waste Department**

**2016 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 29, 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 <sup>3</sup> (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	14.0	14.8	14.0	13.5	15.5	15.4	15.6	14.9	14.2	14.3	14.2
Dissolved Oxygen	mg/L	10.0	10.2	9.9	9.6	9.6	9.2	9.3	9.3	9.2	9.3	10.3
Oxygen Saturation	%	97	102	96	94	98	93	94	94	89	90	101
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.39	8.29	8.43	8.32	8.15	8.12	8.13	8.12	8.14	8.12	8.17
Total Solids	mg/L	888	880	858	828	864	812	812	840	810	734	818
Total Suspended Solids	mg/L	198	200	160	126	194	172	140	156	138	70	150
Turbidity	n.t.u.	111	96	108	77	53	102	90	91	92	56	96
Total Organic Carbon	mg/L	12	11	13	13	16	17	15	17	16	14	17
Chlorophyll a	ug/L	32	40	30	26	18	11	7	7	11	11	14
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.061	0.071	0.068	0.235	0.146
Nitrate Nitrogen	mg/L N	0.337	0.320	0.271	0.249	0.386	0.380	0.388	0.394	0.370	0.426	0.401
Total Nitrogen	mg/L N	1.5	1.3	1.4	1.4	1.7	1.8	1.7	1.8	1.6	1.9	2.0
Soluble Phosphorus	mg/L P	0.10	0.09	0.09	0.10	0.13	0.14	0.14	0.13	0.13	0.15	0.15
Total Phosphorus	mg/L P	0.31	0.19	0.13	0.20	0.18	0.14	0.16	0.28	0.13	0.20	0.15
Escherichia Coliform <sup>2</sup>	MPN/100 mL	93	2400	300	240	240	430	93	43	43	150	430
Fecal Coliform <sup>2</sup>	MPN/100 mL	240	2400	300	240	240	430	240	43	43	150	930

Weather Conditions during monitoring Winds N at 9 km/hr with 70% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 16.2°C

Notes: 1) LIMS Reference No: **47540**  
 2) Analysed by contract laboratory  
 3) Red River Floodway at South Floodway Control Gates **738.1** ft.

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Date Compiled: 16-Jan-19

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