

**City of Winnipeg
Water and Waste Department**

2015 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 28, 2015		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 ⁴ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	18.4	18.4	18.4	18.3	17.1	17.1	17.1	16.8	17.3	17.2	17.3
Dissolved Oxygen	mg/L	8.3	8.4	8.4	8.4	7.4	7.4	7.4	7.1	7.6	7.6	8.3
Oxygen Saturation ²	%	89	90	89	89	76	77	77	73	79	78	86
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	nr ⁵	nr ⁵	nr ⁵
pH	units	8.41	8.40	8.35	8.33	7.98	7.99	7.99	7.87	7.99	7.90	7.89
Total Solids	mg/L	978	982	982	980	1050	1030	1000	1020	1040	988	1080
Total Suspended Solids	mg/L	117	150	150	143	360	338	372	412	342	294	228
Turbidity	n.t.u.	87	90	82	153	198	246	481	256	197	190	223
Total Organic Carbon	mg/L	21	22	21	18	26	22	24	22	24	24	18
Chlorophyll a	ug/L	12	15	12	16	6	7	5	9	7	7	5
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.011	0.011	0.058	0.038	0.051	0.037	0.088
Nitrate Nitrogen	mg/L N	0.331	0.365	0.391	0.391	6.560	6.720	6.640	6.960	1.610	1.610	1.650
Total Kjeldahl Nitrogen	mg/L N	<0.5	<0.5	0.6	1.1	0.9	0.6	0.6	0.7	0.8	0.7	0.7
Total Nitrogen ²	mg/L N	0.6	0.6	1.0	1.5	7.5	7.3	7.2	7.7	2.4	2.3	2.4
Soluble Phosphorus	mg/L P	0.07	0.06	0.06	0.07	0.13	0.13	0.14	0.14	0.12	0.12	0.12
Total Phosphorus	mg/L P	0.30	0.40	0.40	0.30	0.60	0.70	0.60	0.60	0.50	0.90	0.60
Escherichia Coliform ³	MPN/100 mL	9	23	43	4300	4	15	230	23	20	93	230
Fecal Coliform ³	MPN/100 mL	9	23	43	4300	9	15	230	23	120	93	230
Weather Conditions during monitoring		Winds NNE at 52 km/hr with 50% cloud cover and 12.5 mm of precipitation. Average air temperature during survey at 18.2°C										
Notes: 1) LIMS Reference No: 42710 2) Calculated values 3) Analysed by contract laboratory 4) Red River Floodway at South Floodway Control Gates 739.8 ft. 5) No result because the initial DO was below the BOD test limit.						Report Compiled By: <u>H.Demchenko</u> Compliance Reporting Technician Approved in LIMS By: <u>C.Diduck</u> Analytical Services Branch Head Date Compiled: <u>11-Jan-19</u>						
File No: 040-14-09-03-00												