

**City of Winnipeg
Water and Waste Department**

2015 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 1, 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	13.8	13.9	13.7	13.6	15.6	15.1	15.8	15.6	15.1	15.0	15.3
Dissolved Oxygen	mg/L	8.9	9.0	8.8	8.6	8.5	8.4	8.3	8.0	8.4	8.3	8.7
Oxygen Saturation ²	%	86	87	85	83	85	83	84	81	83	82	87
Biochemical Oxygen Demand	mg/L	3	3	3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.72	8.73	8.64	8.53	8.79	8.80	8.75	8.45	8.43	8.30	8.45
Total Solids	mg/L	890	978	898	890	760	758	730	762	784	796	848
Total Suspended Solids	mg/L	91	85	108	79	59	35	32	33	36	29	41
Turbidity	n.t.u.	58	64	63	53	41	28	25	27	26	23	27
Total Organic Carbon	mg/L	14	14	13	12	13	13	15	15	16	13	15
Chlorophyll a	ug/L	58	33	55	44	11	12	14	17	32	31	37
Ammonia Nitrogen	mg/L N	0.172	<0.003	0.011	<0.003	<0.003	0.190	0.369	0.257	0.003	0.045	0.415
Nitrate Nitrogen	mg/L N	0.016	<0.003	0.003	0.006	0.006	0.252	0.033	0.060	0.003	0.027	0.154
Total Kjeldahl Nitrogen	mg/L N	1.1	1.0	1.2	0.7	1.3	1.5	0.5	1.2	<0.5	0.8	1.9
Total Nitrogen ²	mg/L N	1.1	1.0	1.2	0.7	1.3	1.8	0.5	1.3	0.3	0.8	2.1
Soluble Phosphorus	mg/L P	0.16	0.11	0.12	0.11	0.11	0.20	0.14	0.13	0.10	0.12	0.19
Total Phosphorus	mg/L P	0.20	0.30	0.30	<0.2	0.40	0.40	<0.2	0.40	<0.2	<0.2	0.40
Escherichia Coliform ³	MPN/100 mL	140	93	150	150	240	430	620	4300	1400	430	430
Fecal Coliform ³	MPN/100 mL	140	93	150	150	240	430	620	4300	1400	430	430

Weather Conditions during monitoring Winds S at 44 km/hr with 65% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 15.5°C

Notes: 1) LIMS Reference No: **43993**
 2) Calculated values
 3) Analysed by contract laboratory
 4) Red River Floodway at South Floodway Control Gates **734.2** ft.

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