

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 24, 2014		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	11.7	10.7	10.5	10.1	11.3	10.9	11.2	10.2	10.1	10.0	10.1
Dissolved Oxygen	mg/L	10.3	10.3	10.4	10.4	10.9	10.7	10.5	10.6	10.4	10.4	10.8
Oxygen Saturation ²	%	95	93	93	92	99	97	97	95	93	93	97
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.47	8.47	8.50	8.50	8.64	8.62	8.62	8.58	8.50	8.42	8.18
Total Solids	mg/L	1060	994	1290	1030	894	748	688	696	964	1320	850
Total Suspended Solids	mg/L	162	136	154	149	73	76	66	45	95	79	97
Turbidity	n.t.u.	94	68	87	78	46	50	44	40	60	56	61
Total Organic Carbon	mg/L	25	29	33	29	22	22	20	21	25	22	25
Chlorophyll a	ug/L	23	23	28	26	20	18	19	19	21	23	21
Ammonia Nitrogen	mg/L N	0.032	0.044	0.005	<0.003	0.009	<0.003	0.085	0.143	0.048	0.170	0.198
Nitrate Nitrogen	mg/L N	0.326	0.357	0.350	0.339	0.189	0.175	0.173	0.204	0.293	0.300	0.330
Total Kjeldahl Nitrogen	mg/L N	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Nitrogen ²	mg/L N	0.6	0.6	0.6	0.9	0.4	0.4	0.4	0.5	0.5	0.6	0.6
Soluble Phosphorus	mg/L P	0.12	0.12	0.12	0.12	0.10	0.09	0.10	0.12	0.12	0.15	0.24
Total Phosphorus	mg/L P	0.60	0.80	0.60	0.50	0.50	0.40	0.40	0.40	0.50	0.50	0.50
Escherichia Coliform ³	MPN/100 mL	15	23	9	23	23	23	93	75	23	93	38
Fecal Coliform ³	MPN/100 mL	15	23	9	43	23	23	93	75	93	93	38

Weather Conditions during monitoring Winds SW at 20 km/hr with 25% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 17°C

Notes: 1) LIMS Reference No: **40823**
 2) Calculated values
 3) Analysed by contract laboratory
 4) Red River Floodway at South Floodway Control Gates **732.0** ft.

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