

**City of Winnipeg
Water and Waste Department**

2016 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 12, 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 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	13.3	13.4	13.0	13.9	11.0	14.2	14.0	13.8	14.7
Dissolved Oxygen	mg/L	9.2	9.5	9.6	9.7	9.3	9.0	9.2	9.0	9.1	9.0	9.5
Oxygen Saturation ²	%	88	91	92	93	89	88	90	88	88	87	93
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.42	8.37	8.16	8.25	8.00	8.62	8.32	8.16	8.20	8.18	8.00
Total Solids	mg/L	734	746	744	776	688	738	646	662	720	682	724
Total Suspended Solids	mg/L	205	197	192	234	119	121	105	98	178	114	192
Turbidity	n.t.u.	131	128	141	170	98	86	86	84	118	88	129
Total Organic Carbon	mg/L	23	20	22	23	23	23	22	22	23	20	22
Chlorophyll a	ug/L	9	9	44	9	11	13	7	12	9	9	9
Ammonia Nitrogen	mg/L N	0.009	0.006	<0.003	<0.003	<0.003	<0.003	0.066	0.059	0.039	0.064	0.136
Nitrate Nitrogen	mg/L N	0.367	0.379	0.389	0.388	0.570	0.559	0.475	0.547	0.428	0.431	0.488
Total Kjeldahl Nitrogen	mg/L N	1.8	1.4	1.7	1.1	nr ⁵	1.2	1.2	1.1	1.5	0.9	1.4
Total Nitrogen ²	mg/L N	2.2	1.8	2.1	1.5	0.6	1.8	1.7	1.6	1.9	1.3	1.9
Soluble Phosphorus	mg/L P	0.07	0.07	0.07	0.06	0.05	0.04	0.04	0.06	0.06	0.06	0.05
Total Phosphorus	mg/L P	0.50	0.40	0.40	0.50	0.30	0.30	0.30	0.30	0.40	0.30	0.40
Escherichia Coliform ³	MPN/100 mL	93	23	23	43	4	740	4	9	43	43	93
Fecal Coliform ³	MPN/100 mL	93	23	43	43	4	740	4	23	43	43	93

Weather Conditions during monitoring Winds NE at 57 km/hr with 100% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 5.8°C

- Notes:
- 1) LIMS Reference No: **46104**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **223.6** ft.
 - 5) No result due to technician error.

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