

**City of Winnipeg
Water and Waste Department**

2015 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 18, 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	22.3	22.2	22.0	21.5	23.1	22.7	23.5	22.9	22.4	22.5	22.4
Dissolved Oxygen	mg/L	8.5	8.8	8.6	8.2	7.6	7.6	7.7	7.4	7.6	7.7	8.4
Oxygen Saturation ²	%	98	100	98	92	89	88	90	85	87	88	97
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	nr ⁵	<3
pH	units	8.71	8.74	8.72	8.67	8.41	8.40	8.40	8.21	8.32	8.20	8.29
Total Solids	mg/L	816	810	826	762	740	712	664	646	724	726	692
Total Suspended Solids	mg/L	49	60	70	40	96	67	46	37	33	22	26
Turbidity	n.t.u.	29	39	39	24	84	57	36	42	27	24	12
Total Organic Carbon	mg/L	15	15	15	14	15	16	15	16	14	14	14
Chlorophyll a	ug/L	15	18	19	5	4	2	2	6	2	3	21
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.067	0.052	<0.003	0.055	<0.003
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.004	<0.003	0.334	0.349	0.371	0.391	0.240	0.287	0.333
Total Kjeldahl Nitrogen	mg/L N	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Nitrogen ²	mg/L N	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.5	0.5	0.6
Soluble Phosphorus	mg/L P	0.11	0.11	0.12	0.11	0.15	0.17	0.17	0.18	0.15	0.33	0.28
Total Phosphorus	mg/L P	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Escherichia Coliform ³	MPN/100 mL	7	36	23	36	4	15	23	74	92	230	92
Fecal Coliform ³	MPN/100 mL	7	36	23	92	4	15	23	74	230	380	230

Weather Conditions during monitoring Winds E at 11 km/hr with 30% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 14.1°C

- Notes:
- 1) LIMS Reference No: **43561**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **733.7** ft.
 - 5) No result because the initial DO and/or temperature were outside the BOD test limits.

Report Compiled By: H.Demchenko

Compliance Reporting Technician

Approved in LIMS By: C.Diduck

Analytical Services Branch Head

Date Compiled: 11-Jan-19

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