

**City of Winnipeg  
Water and Waste Department**

**2015 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : July 24, 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 <sup>4</sup> (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	24.7	24.4	24.2	23.9	25.1	24.9	25.2	24.0	24.0	23.8	24.0
Dissolved Oxygen	mg/L	8.2	8.2	8.2	7.8	7.0	6.9	7.0	6.9	7.0	6.4	8.4
Oxygen Saturation <sup>2</sup>	%	99	98	97	92	85	84	84	82	83	75	99
Biochemical Oxygen Demand	mg/L	<3	nr <sup>5</sup>	<3	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>	nr <sup>5</sup>
pH	units	8.58	8.60	8.60	8.57	8.22	8.20	8.21	8.13	8.26	8.12	8.02
Total Solids	mg/L	1090	1150	1120	1090	876	920	826	884	884	846	1260
Total Suspended Solids	mg/L	194	229	238	210	219	220	186	228	192	93	482
Turbidity	n.t.u.	148	140	143	116	124	125	107	136	118	69	290
Total Organic Carbon	mg/L	24	23	19	14	17	19	20	17	18	18	27
Chlorophyll a	ug/L	68	57	50	44	4	4	4	4	13	13	11
Ammonia Nitrogen	mg/L N	0.007	<0.003	0.006	0.009	0.005	<0.003	0.048	0.061	0.045	0.095	0.126
Nitrate Nitrogen	mg/L N	0.093	0.148	0.190	0.183	0.347	0.336	0.346	0.353	0.314	0.328	0.408
Total Kjeldahl Nitrogen	mg/L N	0.7	0.5	<0.5	<0.5	<0.5	1.0	<0.5	0.5	0.7	<0.5	0.7
Total Nitrogen <sup>2</sup>	mg/L N	0.8	0.6	0.4	0.4	0.6	1.3	0.6	0.9	1.0	0.6	1.1
Soluble Phosphorus	mg/L P	0.10	0.10	0.10	0.10	0.14	0.15	0.15	0.16	0.14	0.14	0.19
Total Phosphorus	mg/L P	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.30	0.70
Escherichia Coliform <sup>3</sup>	MPN/100 mL	430	92	23	4600	36	92	150	930	1500	46000	4600
Fecal Coliform <sup>3</sup>	MPN/100 mL	430	92	36	7500	36	92	210	930	4600	46000	11000

Weather Conditions during monitoring Winds NW at 15 km/hr with 90% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 22.1°C

- Notes:
- 1) LIMS Reference No: **43330**
  - 2) Calculated values
  - 3) Analysed by contract laboratory
  - 4) Red River Floodway at South Floodway Control Gates **734.9** ft.
  - 5) No result because the initial DO was below the BOD test limit.

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