

**City of Winnipeg  
Water and Waste Department**

**2015 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 16, 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	17.9	17.5	17.2	17.0	19.2	18.1	18.7	17.5	17.6	17.3	17.6
Dissolved Oxygen	mg/L	9.8	9.9	9.4	8.8	8.4	8.1	8.2	7.8	8.1	8.1	8.8
Oxygen Saturation <sup>2</sup>	%	104	104	98	91	91	86	87	81	84	84	92
Biochemical Oxygen Demand	mg/L	5	4	4	4	<3	<3	<3	<3	<3	<3	<3
pH	units	8.85	8.91	8.86	8.83	8.41	8.25	8.27	8.10	8.43	8.06	7.95
Total Solids	mg/L	896	894	922	868	650	626	612	562	650	638	602
Total Suspended Solids	mg/L	59	76	78	53	81	86	81	73	38	52	43
Turbidity	n.t.u.	37	49	47	32	38	68	56	66	48	43	37
Total Organic Carbon	mg/L	17	16	16	16	18	18	18	17	17	17	16
Chlorophyll a	ug/L	52	63	44	59	11	7	14	9	26	23	33
Ammonia Nitrogen	mg/L N	<0.003	0.072	<0.003	<0.003	<0.003	<0.003	0.075	0.073	<0.003	0.054	0.057
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.005	<0.003	0.131	0.137	0.174	0.099	0.150	0.183
Total Kjeldahl Nitrogen	mg/L N	1.1	1.6	1.2	0.9	0.8	0.5	1.0	0.8	0.9	0.9	0.7
Total Nitrogen <sup>2</sup>	mg/L N	1.1	1.6	1.2	0.9	0.8	0.6	1.1	1.0	1.0	1.1	0.9
Soluble Phosphorus	mg/L P	0.08	0.07	0.06	0.06	0.08	0.19	0.21	0.22	0.15	0.18	0.21
Total Phosphorus	mg/L P	<0.2	0.20	0.20	<0.2	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Escherichia Coliform <sup>3</sup>	MPN/100 mL	930	240	930	240	23	43	74	93	240	93	1500
Fecal Coliform <sup>3</sup>	MPN/100 mL	930	240	930	240	23	43	74	93	240	240	1500

Weather Conditions during monitoring Winds NW at 23 km/hr with 90% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 16.4°C

Notes: 1) LIMS Reference No: **43825**  
 2) Calculated values  
 3) Analysed by contract laboratory  
 4) Red River Floodway at South Floodway Control Gates **734.1** ft.

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