

**City of Winnipeg  
Water and Waste Department**

**2014 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 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 <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	16.3	16.1	16.3	15.9	16.7	16.9	16.7	16.3	15.9	15.9	15.9
Dissolved Oxygen	mg/L	9.2	9.1	9.1	9.1	9.0	8.9	9.0	8.9	9.0	9.0	9.4
Oxygen Saturation <sup>2</sup>	%	93	92	93	92	93	92	92	90	91	91	95
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.44	8.44	8.42	8.47	8.43	8.41	8.44	8.39	8.42	8.35	8.24
Total Solids	mg/L	1270	914	928	906	838	676	960	616	1210	994	882
Total Suspended Solids	mg/L	158	144	153	154	101	77	60	45	131	105	133
Turbidity	n.t.u.	91	94	98	83	86	57	54	51	85	68	86
Total Organic Carbon	mg/L	31	31	31	31	24	22	20	20	28	26	27
Chlorophyll a	ug/L	21	25	32	11	21	18	18	11	25	14	18
Ammonia Nitrogen	mg/L N	<0.003	0.453	<0.003	<0.003	0.020	0.008	0.083	0.051	0.008	0.044	0.071
Nitrate Nitrogen	mg/L N	0.138	0.158	0.149	0.148	0.327	0.291	0.291	0.337	0.201	0.219	0.281
Total Kjeldahl Nitrogen	mg/L N	1.0	1.1	1.1	0.8	0.7	0.7	0.8	0.7	0.6	0.7	0.7
Total Nitrogen <sup>2</sup>	mg/L N	1.1	1.3	1.2	0.9	1.0	1.0	1.1	1.0	0.8	0.9	1.0
Soluble Phosphorus	mg/L P	0.16	0.20	0.15	0.15	0.19	0.18	0.19	0.20	0.17	0.18	0.30
Total Phosphorus	mg/L P	0.40	0.70	0.50	0.90	0.50	0.50	0.40	0.20	0.50	0.40	0.40
Escherichia Coliform <sup>3</sup>	MPN/100 mL	230	93	93	75	75	75	43	93	93	43	230
Fecal Coliform <sup>3</sup>	MPN/100 mL	230	93	93	75	75	75	43	93	230	43	230

Weather Conditions during monitoring Winds SSW at 20 km/hr with 90% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 17°C

Notes: 1) LIMS Reference No: **40544**  
 2) Calculated values  
 3) Analysed by contract laboratory  
 4) Red River Floodway at South Floodway Control Gates **734.7** ft.

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