

**City of Winnipeg  
Water and Waste Department**

**2013 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : October 30, 2013		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL <sup>4</sup>	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	2.5	2.6	2.5	2.2	4.4	4.6	4.9	4.2	3.4	3.7	3.7
Dissolved Oxygen	mg/L	12.6	12.7	12.9	12.8	11.7	11.6	11.5	11.6	11.9	11.8	12.9
Oxygen Saturation <sup>2</sup>	%	92	93	94	93	90	90	90	89	89	89	97
pH	units	8.83	8.67	8.70	8.77	8.40	8.44	8.41	8.39	8.51	8.45	8.39
Total Solids	mg/L	1020	1040	1010	998	1140	1150	1090	1070	1060	1010	1220
Total Suspended Solids	mg/L	166	164	148	152	363	393	410	357	331	285	520
Turbidity	n.t.u.	83	90	85	62	240	103	204	278	115	178	180
Total Organic Carbon	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorophyll a	ug/L	42	37	39	35	4	7	5	7	14	11	14
Ammonia Nitrogen	mg/L N	0.077	<0.003	<0.003	<0.003	0.040	0.019	0.085	0.109	0.099	0.155	0.240
Nitrate Nitrogen	mg/L N	0.061	0.073	0.067	0.072	0.865	0.805	0.780	0.721	0.501	0.529	0.559
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen <sup>2</sup>	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.10	0.09	0.09	0.09	0.21	0.21	0.22	0.22	0.34	0.22	0.38
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	<0.30	0.50	0.40	0.30	0.40	0.60	0.30	0.50
Escherichia Coliform <sup>3</sup>	MPN/100 mL	23	9	23	23	43	230	43	43	43	230	430
Fecal Coliform <sup>3</sup>	MPN/100 mL	23	9	23	23	43	230	43	93	43	230	430

Weather Conditions during monitoring: Winds NW at 5 km/hr with 60% cloud cover and no precipitation. Average air temperature during survey at 1.5°C

Notes: 1) LIMS Reference No: 37510  
 2) Calculated values  
 3) Analyzed by contract laboratory.  
 4) Red River elevation at South Floodway Control Gates 730.5  
 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.  
 6) TOC not analysed for any locations due to sample holding time exceedence.  
 File No: 040-14-09-03-00

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