

**City of Winnipeg
Water and Waste Department**

2015 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 3, 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	23.0	22.6	22.4	22.6	22.8	22.5	22.6	21.9	22.2	22.1	22.0
Dissolved Oxygen	mg/L	7.6	7.3	7.5	7.2	7.0	7.2	7.0	6.7	7.0	6.6	7.5
Oxygen Saturation ²	%	89	85	87	83	81	83	81	76	80	75	87
Biochemical Oxygen Demand	mg/L	3	3	3	nr ⁵	<3	<3	<3	nr ⁵	nr ⁵	nr ⁵	<3
pH	units	8.74	8.75	8.73	8.74	8.20	8.21	8.16	8.01	8.40	8.23	8.16
Total Solids	mg/L	810	884	734	830	512	550	442	468	600	576	564
Total Suspended Solids	mg/L	59	76	76	49	99	107	66	76	65	49	33
Turbidity	n.t.u.	39	45	63	34	79	80	61	61	49	39	31
Total Organic Carbon	mg/L	25	14	15	17	19	18	16	16	16	16	15
Chlorophyll a	ug/L	37	33	33	24	11	9	9	7	14	16	18
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.014	0.017	0.070	0.105	0.025	0.255	0.031
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.254	0.262	0.272	0.311	0.226	0.305	0.356
Total Kjeldahl Nitrogen	mg/L N	1.1	1.4	0.6	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	1.5	<0.5
Total Nitrogen ²	mg/L N	1.1	1.4	0.6	0.3	1.1	0.5	0.5	0.6	0.5	1.8	0.6
Soluble Phosphorus	mg/L P	0.09	0.09	0.09	0.10	0.16	0.16	0.17	0.18	0.15	0.19	0.23
Total Phosphorus	mg/L P	0.60	0.40	0.30	0.50	0.40	0.40	0.30	<0.2	0.50	0.40	0.40
Escherichia Coliform ³	MPN/100 mL	93	93	9	74	43	23	43	43	93	93	93
Fecal Coliform ³	MPN/100 mL	93	93	9	150	43	23	43	43	150	240	93

Weather Conditions during monitoring Winds S at 46 km/hr with 100% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 26.5°C

- Notes:
- 1) LIMS Reference No: **43728**
 - 2) Calculated values
 - 3) Analysed by contract laboratory
 - 4) Red River Floodway at South Floodway Control Gates **734.0** ft.
 - 5) No result because the initial DO was below the BOD test limit.

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Date Compiled: 11-Jan-19

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