

Table 3

Manitoba Ambient Air Quality Data - 2000 Annual Pollutant Summary –
Continuous Monitoring

POLLUTANT Conc. Units	STATION NUMBER & LOCATION	ANNUAL MEAN	MAXIMUM DATA VALUES		# OF SAMPLES ABOVE M.D.L.		# OF SAMPLES ABOVE M.A.L.		# OF SAMPLES ABOVE M.T.L.	
			1-HR	24-HR	1-HR	24-HR	1-HR	24-HR	1-HR	24-HR
CARBON MONOXIDE (CO) ppm	9118 WINNIPEG, SCOTIA & JEFFERSON	0.48	4.1	2.4 ^Δ	0	0 ^Δ	0	0 ^Δ	--	0 ^Δ
	9119 WINNIPEG, 65 ELLEN STREET	0.57	4.4	2.4 ^Δ	0	0 ^Δ	0	0 ^Δ	--	0 ^Δ
NITROGEN DIOXIDE (NO ₂) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	0.69	7.1	3.0	--	--	0	0	0	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	1.24	5.8	3.7	--	--	0	0	0	--
	9119 WINNIPEG, 65 ELLEN STREET	1.66	7.1	4.6	--	--	0	0	0	--
NITRIC OXIDE (NO) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	0.38	14.2	4.9	--	--	--	--	--	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	0.62	27.0	6.9	--	--	--	--	--	--
	9119 WINNIPEG, 65 ELLEN STREET	1.10	25.7	7.5	--	--	--	--	--	--
NITROGEN OXIDES (NO _X) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	0.96	18.3	7.6	--	--	--	--	--	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	1.69	32.1	10.5	--	--	--	--	--	--
	9119 WINNIPEG, 65 ELLEN STREET	2.55	31.7	10.3	--	--	--	--	--	--
SULPHUR DIOXIDE (SO ₂) ppm	7251 [*] FLIN FLON, 143 MAIN STREET	0.02	1.45	0.29	230	573	104	244	--	0
	7271 [*] FLIN FLON, AQUA CENTRE	0.00	0.12	0.02	0	0	0	0	--	0
	7281 [*] FLIN FLON, HBM&S STAFFHOUSE	0.01	0.97	0.23	164	364	66	156	--	0
	7291 [*] CREIGHTON, SASK. CITY HALL	0.00	0.63	0.11	21	44	6	0	--	0
	7301 [*] FLIN FLON, HAPNOT COLLEGIATE	0.00	0.68	0.12	25	23	7	3	--	0
	7351 [*] THOMPSON, WATER TREATMENT PLANT	0.00	1.02	0.12	46	45	14	18	--	0
OXIDANTS OZONE (O ₃) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	2.58	6.2	4.6	141	~	0	~	0	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	2.05	6.1	4.5	48	~	0	~	0	--
	9119 WINNIPEG, 65 ELLEN STREET	1.35	5.2	3.6	2	~	0	~	0	--
AMMONIA (NH ₃) ppm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	0.01	3.1	0.4	--	--	1	--	--	--

Δ averaged over 8 hours * denotes company supplied data -- no guideline or objective
 ~ numerous exceedences of the 24 hour MDL and MAL which are currently under review

Table 4a

Manitoba Ambient Air Quality Data - 2000 Annual Pollutant Summary –
Particulate Matter Monitoring (PM₁₀)

POLLUTANT	STATION NUMBER & LOCATION	ANNUAL ARITH/ GEO MEAN	MAXIMUM DATA VALUES 24/1-HR	# OF SAMPLES ABOVE M.D.L.		# OF SAMPLES ABOVE M.A.L.		# OF SAMPLES ABOVE M.T.L.		
				1-HR	24-HR	1-HR	24-HR	1-HR	24-HR	
INHALABLE PARTICULATE (PM ₁₀)	7251 ⁴	FLIN FLON, 143 MAIN STREET	24.2 / -	123.7 / 440.7	--	--	--	27 ⁶	--	--
	7284 ¹	FLIN FLON, RUTH BETTS	12.4 / 10.3	36.0 / -	--	--	--	0 ⁶	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	12.2 / 10.0	42.1 / -	--	--	--	0 ⁶	--	--
	9119 ⁶	WINNIPEG, 65 ELLEN STREET	18.7 / -	62 / 233	--	--	--	7 ⁶	--	--
	9119 ⁶	WINNIPEG, 65 ELLEN STREET	20.2 / 16.6	44.7 / -	--	--	--	0 ⁶	--	--
5131 ⁴	BRANDON, ASSIN. COMMUN. COLLEGE	19.8 / -	143.0 / 498.0	--	--	--	23 ⁶	--	--	
LEAD (Pb)	7284 ¹	FLIN FLON, RUTH BETTS	0.410 / 0.153	1.859 / -	--	--	--	0	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	0.222 / 0.087	0.639 / -	--	--	--	0	--	--
SULPHATES (SO ₄ ²⁻)	7284 ¹	FLIN FLON, RUTH BETTS	2.389 / 1.669	5.574 / -	--	--	--	--	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	1.568 / 1.147	3.446 / -	--	--	--	--	--	--
ARSENIC (As)	7284 ¹	FLIN FLON, RUTH BETTS	0.044 / 0.024	0.166 / -	--	--	--	0 ⁶	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	0.033 / 0.007	0.167 / -	--	--	--	0 ⁶	--	--
CADMIUM (Cd)	7284 ¹	FLIN FLON, RUTH BETTS	0.046 / 0.015	0.276 / -	--	--	--	0 ⁶	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	0.034 / 0.013	0.109 / -	--	--	--	0 ⁶	--	--
COPPER (Cu)	7284 ¹	FLIN FLON, RUTH BETTS	0.174 / 0.129	0.528 / -	--	--	--	0 ⁶	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	0.149 / 0.072	0.637 / -	--	--	--	0 ⁶	--	--
ZINC (Zn)	7284 ¹	FLIN FLON, RUTH BETTS	0.627 / 0.191	2.810 / -	--	--	--	0 ⁶	--	--
	7285 ¹	FLIN FLON, SEWAGE PLANT	0.301 / 0.055	1.580 / -	--	--	--	0 ⁶	--	--

Notes:

All Concentration units for the above Table 4a are in ug/m3.

1 - 24 Hour sample collected every six days according to NAPS schedule objective

4 - real-time continuous monitoring

6 - Ontario 24-hour guideline

-- no guideline or

Table 4b

Manitoba Ambient Air Quality Data - 2000 Annual Pollutant Summary –
Particulate Matter Monitoring (PM_{2.5})

POLLUTANT	STATION NUMBER & LOCATION		ANNUAL ARITH/GEO MEAN	MAXIMUM DATA VALUES 24/1-HR	# OF SAMPLES ABOVE M.D.L.		# OF SAMPLES ABOVE M.A.L.		# OF SAMPLES ABOVE M.T.L.	
					1-HR	24-HR	1-HR	24-HR	1-HR	24-HR
INHALABLE PARTICULATE (PM _{2.5})	9118 ^d	WINNIPEG, SCOTIA & JEFFERSON	5.7 / -	18.2 / 46.3	--	--	--	--	--	--
	9119 ^d	WINNIPEG, 65 ELLEN STREET	4.2 / -	9.1 / 32.6	--	--	--	--	--	--
	9119 ^f	WINNIPEG, 65 ELLEN STREET	6.2 / 5.2	18.3 / -	--	--	--	--	--	--

Notes:

All Concentration units for the above Table 4b are in ug/m3.

1 - 24 Hour sample collected every six days according to NAPS schedule

4 - real-time continuous monitoring

-- no guideline or objective

Table 4c

Manitoba Ambient Air Quality Data - 2000 Annual Pollutant Summary –
Particulate Matter Monitoring (TSP)

POLLUTANT	STATION NUMBER & LOCATION	ANNUAL ARITH/ GEO MEAN	MAXIMUM DATA VALUES 24-HR	# OF SAMPLES ABOVE M.D.L.		# OF SAMPLES ABOVE M.A.L.		# OF SAMPLES ABOVE M.T.L.		
				1-HR	24-HR	1-HR	24-HR	1-HR	24-HR	
TOTAL SUSPENDED PARTICULATE (TSP)	7251 ²	FLIN FLON, 143 MAIN STREET	49 / 36	184	--	--	--	10	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	34 / 26	216	--	--	--	2	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	28 / 22	100	--	--	--	0	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	26 / 21	123	--	--	--	1	--	--
	9118 ^{1*} 9119 ^{1*3}	WINNIPEG, 299 SCOTIA STREET WINNIPEG, 65 ELLEN STREET	28 / 23 48 / 37	73 181	--	--	--	0 9	--	--
LEAD (Pb)	7251 ²	FLIN FLON, 143 MAIN STREET	0.36 / 0.10	5.05	--	--	--	1	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	0.16 / 0.07	0.89	--	--	--	0	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	0.48 / 0.18	1.73	--	--	--	0	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	0.18 / 0.08	1.33	--	--	--	0	--	--
SULPHATES (SO4=)	7251 ²	FLIN FLON, 143 MAIN STREET	3.29 / 2.03	17.65	--	--	--	--	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	1.76 / 1.37	3.76	--	--	--	--	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	2.87 / 2.32	6.41	--	--	--	--	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	1.89 / 1.56	4.07	--	--	--	--	--	--
NITRATES (NO3-)	7251 ²	FLIN FLON, 143 MAIN STREET	0.19 / 0.12	2.05	--	--	--	--	--	--
ARSENIC (As)	7251 ²	FLIN FLON, 143 MAIN STREET	0.043 / 0.014	0.566	--	--	--	4 ⁶	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	0.045 / 0.012	0.316	--	--	--	1 ⁶	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	0.059 / 0.032	0.189	--	--	--	0 ⁶	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	0.033 / 0.010	0.182	--	--	--	0 ⁶	--	--
CADMIUM (Cd)	7251 ²	FLIN FLON, 143 MAIN STREET	0.050 / 0.011	1.039	--	--	--	0 ⁶	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	0.020 / 0.007	0.159	--	--	--	0 ⁶	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	0.055 / 0.021	0.274	--	--	--	0 ⁶	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	0.026 / 0.010	0.167	--	--	--	0 ⁶	--	--
COPPER (Cu)	7251 ²	FLIN FLON, 143 MAIN STREET	0.723 / 0.428	5.563	--	--	--	0 ⁶	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	0.381 / 0.328	0.823	--	--	--	0 ⁶	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	1.050 / 0.884	2.323	--	--	--	0 ⁶	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	0.565 / 0.471	2.047	--	--	--	0 ⁶	--	--
ZINC (Zn)	7251 ²	FLIN FLON, 143 MAIN STREET	1.857 / 0.914	13.180	--	--	--	0 ⁶	--	--
	7283 ^{1*}	CREIGHTON, SCHOOL	0.428 / 0.154	1.602	--	--	--	0 ⁶	--	--
	7284 ^{1*}	FLIN FLON, RUTH BETTS	1.281 / 0.731	3.492	--	--	--	0 ⁶	--	--
	7285 ^{1*}	FLIN FLON, SEWAGE PLANT	0.589 / 0.316	2.428	--	--	--	0 ⁶	--	--

Notes:

All Concentration units for the above Table 4c are in ug/m3.

-- no guideline or objective

*- company supplied data

1 - 24 Hour sample collected every six days according to NAPS schedule

2 - 24 Hour sample collected every three days, synchronized with the NAPS schedule

3 - 3 additional samples collected every NAPS cycle

6 - Ontario 24-hour Guideline