

Table 3

Manitoba Ambient Air Quality Data - 1996 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	0.38	5.4	2.7	0	0*	0	0*	--	0*
	9119 WINNIPEG, 65 ELLEN STREET	0.62	8	2.7	0	0*	0	0*	--	0*
NITROGEN DIOXIDE (NO <sub>2</sub> ) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	-	-	-	--	--	0	0	0	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	1.3	9	6.2	--	--	0	0	0	--
	9119 WINNIPEG, 65 ELLEN STREET	1.82	8	4.9	--	--	0	0	0	--
NITRIC OXIDE (NO) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	-	-	-	--	--	--	--	--	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	0.65	34.8	11.4	--	--	--	--	--	--
	9119 WINNIPEG, 65 ELLEN STREET	1.27	35.8	8.6	--	--	--	--	--	--
NITROGEN OXIDES (NO <sub>x</sub> ) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	-	-	-	--	--	--	--	--	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	1.87	42.3	15	--	--	--	--	--	--
	9119 WINNIPEG, 65 ELLEN STREET	3.08	42.1	13	--	--	--	--	--	--
SULPHUR DIOXIDE (SO <sub>2</sub> ) ppm	7251 FLIN FLON, 143 MAIN STREET	0.02	1.42	0.37	287	850	113	461	--	15
	7271 FLIN FLON, AQUA CENTRE	0	0.7	0.12	31	46	11	13	--	0
	7281 FLIN FLON, HBM&S STAFFHOUSE	0.01	0.93	0.33	211	615	81	214	--	2
	7291 CREIGHTON, SASK. CITY HALL	0	0.71	0.12	30	24	6	2	--	0
	7301 FLIN FLON, HAPNOT COLLEGIATE	0	0.53	0.06	28	0	8	0	--	0
	7351 THOMPSON, WATER TREATMENT PLANT	0	1	0.09	11	23	4	0	--	0
OXIDANTS OZONE (O <sub>3</sub> ) pphm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	3.02	7.8	5.7	377	8238	0	6104	0	--
	9118 WINNIPEG, SCOTIA & JEFFERSON	1.7	5.4	4.1	6	5279	0	888	0	--
	9119 WINNIPEG, 65 ELLEN STREET	1.55	5.8	4.2	28	4184	0	889	0	--
AMMONIA (NH <sub>3</sub> ) ppm	5131 BRANDON, ASSIN. COMMUN. COLLEGE	0.03	4.9	1	--	--	8	--	--	--
SOILING INDEX (COH) COH Units	9118 WINNIPEG, SCOTIA & JEFFERSON	0	2.1	0.2	--	0	--	0	--	--
	9119 WINNIPEG, 65 ELLEN STREET	0.1	0.8	0.2	--	0	--	0	--	--

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 - 1996 Annual Pollutant Summary –  
Particulate Matter Monitoring (PM<sub>10</sub>)

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 <sub>10</sub> )	7251 <sup>1</sup>	FLIN FLON, 143 MAIN STREET	30 / 23	122 / -	--	--	--	--	--	--
	7284 <sup>1</sup>	FLIN FLON, RUTH BETTS	11 / 10	31 / -	--	--	--	--	--	--
	7285 <sup>1</sup>	FLIN FLON, SEWAGE PLANT	9 / 7	43 / -	--	--	--	--	--	--
	9118 <sup>4</sup>	WINNIPEG, SCOTIA & JEFFERSON	17.4 / -	68.8 / 185.3	--	--	--	--	--	--
	9119 <sup>4</sup>	WINNIPEG, 65 ELLEN STREET	22.0 / -	91.3 / 355.8	--	--	--	--	--	--
	9119 <sup>1</sup>	WINNIPEG, 65 ELLEN STREET	16.8 / 14.4	46.5 / -	--	--	--	--	--	--
LEAD (Pb)	7251 <sup>1</sup>	FLIN FLON, 143 MAIN STREET	0.45 / 0.12	5.46 / -	--	--	--	1	--	--
	7284 <sup>1</sup>	FLIN FLON, RUTH BETTS	0.20 / 0.07	1.91 / -	--	--	--	0	--	--
	7285 <sup>1</sup>	FLIN FLON, SEWAGE PLANT	0.10 / 0.05	0.66 / -	--	--	--	0	--	--
SULFATES (SO <sub>4</sub> <sup>2-</sup> )	7251 <sup>1</sup>	FLIN FLON, 143 MAIN STREET	2.90 / 1.93	17.81 / -	--	--	--	--	--	--
	7284 <sup>1</sup>	FLIN FLON, RUTH BETTS	1.64 / 1.26	4.15 / -	--	--	--	--	--	--
	7285 <sup>1</sup>	FLIN FLON, SEWAGE PLANT	1.36 / 1.14	3.74 / -	--	--	--	--	--	--
NITRATES (NO <sub>3</sub> <sup>-</sup> )	7251 <sup>1</sup>	FLIN FLON, 143 MAIN STREET	0.10 / 0.06	0.54 / -	--	--	--	--	--	--
	7284 <sup>1</sup>	FLIN FLON, RUTH BETTS								
	7285 <sup>1</sup>	FLIN FLON, SEWAGE PLANT								
ARSENIC (As)	7251 <sup>1</sup>	FLIN FLON, 143 MAIN STREET	0.048 / 0.014	0.497 / -	--	--	--	1	--	--
	7284 <sup>1</sup>	FLIN FLON, RUTH BETTS	0.011 / 0.007	0.116 / -	--	--	--	--	--	--
	7285 <sup>1</sup>	FLIN FLON, SEWAGE PLANT	0.006 / 0.003	0.070 / -	--	--	--	--	--	--

## Notes:

All Concentration units for the above Table 4a are in ug/m<sup>3</sup>.<sup>a</sup> - ARITHMETIC MEAN<sup>g</sup> - GEOMETRIC MEAN

-- no guideline or objective

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

4 - real-time continuous monitoring

Table 4b

Manitoba Ambient Air Quality Data - 1996 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 <sup>2</sup> FLIN FLON, 143 MAIN STREET	52 / 36	267 / -	--	--	--	9	--	0
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	24 / 19	80 / -	--	--	--	0	--	0
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	16 / 13	65 / -	--	--	--	0	--	0
	9118 <sup>1</sup> WINNIPEG, 299 SCOTIA STREET	29 / 25	83 / -	--	--	--	0	--	0
	9119 <sup>3</sup> WINNIPEG, 65 ELLEN STREET	49 / 39	158 / -	--	--	--	10	--	0
	9201 <sup>1</sup> BRANDON, 1104 PRINCESS AVENUE	43 / 34	138 / -	--	--	--	1	--	0
LEAD (Pb)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	0.54 / 0.13	6.29 / -	--	--	--	2	--	--
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	0.15 / 0.06	1.85 / -	--	--	--	0	--	--
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	0.08 / 0.04	0.77 / -	--	--	--	0	--	--
	9118 <sup>1</sup> WINNIPEG, 299 SCOTIA STREET	0.03 / 0.03	0.04 / -	--	--	--	0	--	--
	9119 <sup>1</sup> WINNIPEG, 65 ELLEN STREET	0.04 / 0.03	0.13 / -	--	--	--	0	--	--
	9201 <sup>1</sup> BRANDON, 1104 PRINCESS AVENUE	0.03 / 0.03	0.04 / -	--	--	--	0	--	--
SULFATES (SO4=)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	3.90 / 2.39	24.75 / -	--	--	--	--	--	--
	9118 <sup>1</sup> WINNIPEG, 299 SCOTIA STREET	1.55 / 1.25	5.30 / -	--	--	--	--	--	--
	9119 <sup>1</sup> WINNIPEG, 65 ELLEN STREET	1.32 / 1.13	3.77 / -	--	--	--	--	--	--
	9201 <sup>1</sup> BRANDON, 1104 PRINCESS AVENUE	1.73 / 1.42	4.68 / -	--	--	--	--	--	--
NITRATES (NO3-)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	1.86 / 1.59	4.95 / -	--	--	--	--	--	--
	9118 <sup>1</sup> WINNIPEG, 299 SCOTIA STREET	1.52 / 1.27	6.17 / -	--	--	--	--	--	--
	9119 <sup>1</sup> WINNIPEG, 65 ELLEN STREET	0.13 / 0.07	2.02 / -	--	--	--	--	--	--
	9201 <sup>1</sup> BRANDON, 1104 PRINCESS AVENUE	0.77 / 0.49	3.65 / -	--	--	--	--	--	--
ARSENIC (As)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	1.09 / 0.69	5.10 / -	--	--	--	--	--	--
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	0.94 / 0.63	5.39 / -	--	--	--	--	--	--
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	0.051 / 0.016	0.318 / -	--	--	--	--	--	--
CADMIUM (Cd)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	0.011 / 0.005	0.109 / -	--	--	--	--	--	--
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	0.010 / 0.005	0.131 / -	--	--	--	--	--	--
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	0.044 / 0.011	0.454 / -	--	--	--	--	--	--
COPPER (Cu)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	0.012 / 0.005	0.133 / -	--	--	--	--	--	--
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	0.009 / 0.004	0.104 / -	--	--	--	--	--	--
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	1.015 / 0.465	7.721 / -	--	--	--	--	--	--
ZINC (Zn)	7251 <sup>2</sup> FLIN FLON, 143 MAIN STREET	0.472 / 0.357	2.144 / -	--	--	--	--	--	--
	7284 <sup>1</sup> FLIN FLON, RUTH BETTS	0.353 / 0.262	2.401 / -	--	--	--	--	--	--
	7285 <sup>1</sup> FLIN FLON, SEWAGE PLANT	2.20 / 0.88	14.07 / -	--	--	--	--	--	--

## Notes:

All Concentration units for the above Table 4a are in ug/m<sup>3</sup>.      <sup>a</sup> - ARITHMETIC MEAN      <sup>g</sup> - GEOMETRIC MEAN      -- no guideline or objective  
 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      4 - real-time continuous monitoring