



PAMZ | Parkland Airshed
Management Zone

Parkland AirShed Management Zone

Air Quality Monitoring Program 2010 Annual Summary

Prepared by
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AIR QUALITY MONITORING

**Parkland AirShed Management Zone
Air Quality Monitoring Program
2010 Annual Summary**

Table of Contents

	Page
1. SO₂ Frequency & Exceedence Summary Tables	
1.1 Caroline	2
1.2 Crossfield – Carstairs	3
1.3 Delburne	4
1.4 Gadsby Lake	5
1.5 Jackson Creek	6
1.6 James River – Kyler	7
1.7 Louis Lake	8
1.8 Mirror	9
1.9 Nevis	10
1.10 Red Deer – Edgar Industrial Park 2	11
1.11 Red Deer Riverside	12
1.12 Trochu	13
2. TRS & H₂S Frequency & Exceedence Summary Tables	
2.1 Caroline	15
1.2 Crossfield – Carstairs	16
1.3 Delburne	17
1.4 Gadsby Lake	18
1.5 Jackson Creek	19
1.6 James River – Kyler	20
1.7 Louis Lake	21
1.8 Mirror	22
1.9 Nevis	23
1.10 Red Deer – Edgar Industrial Park 2	24
1.11 Red Deer Riverside	25
1.12 Trochu	26
3. NO₂ Frequency & Exceedence Summary Tables	
3.1 Caroline	28
1.2 Crossfield – Carstairs	29
1.3 Delburne	30
1.4 Gadsby Lake	31
1.5 Jackson Creek	32
1.6 James River – Kyler	33
1.7 Louis Lake	34
1.8 Mirror	35
1.9 Nevis	36
1.10 Red Deer – Edgar Industrial Park 2	37

1.11	Red Deer Riverside	38
1.12	Trochu	39
4.	PM_{2.5} Frequency & Exceedence Summary Tables	
4.1	Caroline	41
1.2	Crossfield – Carstairs	42
1.3	Delburne	43
1.4	Gadsby Lake	44
1.5	Jackson Creek	45
1.6	James River – Kyler	46
1.7	Louis Lake	47
1.8	Mirror	48
1.9	Nevis	49
1.10	Red Deer – Edgar Industrial Park 2	50
1.11	Red Deer Riverside	51
1.12	Trochu	52
5.	Wind Data Summary Tables & Wind Roses	
5.1	Caroline	54
1.2	Crossfield – Carstairs	56
1.3	Delburne	58
1.4	Gadsby Lake	60
1.5	Jackson Creek	62
1.6	James River – Kyler	64
1.7	Louis Lake	66
1.8	Mirror	68
1.9	Nevis	70
1.10	Red Deer – Edgar Industrial Park 2	72
1.11	Red Deer Riverside	74
1.12	Trochu	76
6.	Passive Monitoring Program	
6.1	SO ₂ Results	79
6.2	SO ₂ Isopleth Map	80
6.3	NO ₂ Results	81
6.4	NO ₂ Isopleth Map	82
6.5	O ₃ Results	83
6.6	O ₃ Isopleth Map	84

1.

SO₂ Frequency & Exceedence Summary Tables

1.1 Parkland Airshed Management Zone – Caroline SO₂ Sulphur Dioxide (ppb)

Caroline															SO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range								
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340			
January	706	1.1	4.7	Jan 26	14.1	Jan 29 20:00	99.9	0	0	100	0	0	0	0	0			
February	636	0.9	2.6	Feb 22	9.4	Feb 24 12:00	99.9	0	0	100	0	0	0	0	0			
March	707	0.6	3.2	Mar 26	12.0	Mar 02 11:00	99.9	0	0	100	0	0	0	0	0			
April	687	0.4	1.1	Apr 09	6.2	Apr 09 01:00	100.0	0	0	100	0	0	0	0	0			
May	708	0.3	0.7	May 26	4.7	May 08 09:00	100.0	0	0	100	0	0	0	0	0			
June	687	0.5	2.2	Jun 13	9.2	Jun 28 20:00	100.0	0	0	100	0	0	0	0	0			
July	708	0.4	0.8	Jul 18	3.1	Jul 09 12:00	99.9	0	0	100	0	0	0	0	0			
August	706	0.3	0.8	Aug 20	3.0	Aug 21 05:00	99.7	0	0	100	0	0	0	0	0			
September	681	0.5	1.2	Sep 10	5.9	Sep 10 01:00	99.7	0	0	100	0	0	0	0	0			
October	706	0.9	7.2	Oct 26	78.9	Oct 26 05:00	99.6	0	0	99.58	0.28	0.14	0	0	0			
November	686	0.6	2.0	Nov 19	6.4	Nov 21 15:00	100.0	0	0	100	0	0	0	0	0			
December	709	0.8	2.5	Dec 23	10.1	Dec 23 13:00	100.0	0	0	100	0	0	0	0	0			
Annual	8327	0.6	7.2	Oct 26	78.9	Oct 26 05:00	99.9	0	0	99.96	0.02	0	0	0	0			

1.2 Parkland Airshed Management Zone – Crossfield-Carstairs SO₂ Sulphur Dioxide (ppb)

Crossfield - Carstairs											SO ₂ (ppb)					2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January																
February																
March																
April																
May																
June																
July																
August																
September																
October	370	0.6	1.3	Oct 17	6.8	Oct 15 20:00	99.3	0	0	100	0	0	0	0	0	0
November	685	0.7	1.5	Nov 21	8.6	Nov 21 18:00	100.0	0	0	100	0	0	0	0	0	0
December	708	1.1	3.3	Dec 03	21.7	Dec 03 18:00	99.9	0	0	99.86	0.14	0	0	0	0	0
Annual	1763	0.9	3.3	Dec 03	21.7	Dec 03 18:00	99.7	0	0	99.94	0.06	0	0	0	0	0

1.3 Parkland Airshed Management Zone – Delburne SO₂ Sulphur Dioxide (ppb)

Delburne														SO ₂ (ppb)		2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January																
February	560	4.3	12.2	Feb 20	51.6	Feb 20 12:00	100.0	0	0	99.29	0.71	0	0	0	0	
March	30	3.5	3.7	Mar 01	4.4	Mar 01 03:00	100.0	0	0	100	0	0	0	0	0	
April																
May																
June																
July																
August																
September	489	2.6	21.5	Sep 25	112.3	Sep 25 13:00	100.0	0	0	96.11	2.86	0.82	0.2	0	0	
October	102	2.2	7.3	Oct 02	72.6	Oct 02 10:00	100.0	0	0	98.04	0.98	0.98	0	0	0	
November																
December																
Annual	1181	3.4	21.5	Sep 25	112.3	Sep 25 13:00	100.0	0	0	97.88	1.61	0	0	0	0	

1.4 Parkland Airshed Management Zone – Gadsby Lake SO₂ Sulphur Dioxide (ppb)

Gadsby Lake											SO ₂ (ppb)					2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January	400	1.8	4.1	Jan 22	11.5	Jan 22 08:00	100.0	0	0	100	0	0	0	0	0	
February	634	1.8	9.2	Feb 28	32.6	Feb 28 15:00	99.1	0	0	98.9	1.1	0	0	0	0	
March	692	1.1	4.3	Mar 03	12.0	Mar 03 16:00	99.9	0	0	100	0	0	0	0	0	
April																
May																
June																
July																
August																
September																
October																
November																
December																
Annual	1726	1.5	9.2	Feb 28	32.6	Feb 28 15:00	99.7	0	0	99.57	0.43	0	0	0	0	

1.5 Parkland Airshed Management Zone – Jackson Creek SO₂ Sulphur Dioxide (ppb)

Jackson Creek											SO ₂ (ppb)					2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January	537	2.5	5.6	Jan 29	13.9	Jan 29 18:00	100.0	0	0	100	0	0	0	0	0	
February	33	2.8	3.0	Feb 01	4.3	Feb 01 18:00	100.0	0	0	100	0	0	0	0	0	
March	0															
April	0															
May	0															
June	0															
July	0															
August	0															
September	0															
October	0															
November	0															
December	0															
Annual	570	2.5	5.6	Jan 29	13.9	Jan 29 18:00	100.0	0	0	100.00	0.00	0	0	0	0	

1.6 Parkland Airshed Management Zone – James River - Kyler SO₂ Sulphur Dioxide (ppb)

James River - Kyler											SO ₂ (ppb)					2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January																
February																
March																
April																
May																
June	494	0.7	2.0	Jun 13	14.1	Jun 13 11:00	99.8	0	0	100	0	0	0	0	0	
July	122	0.8	1.0	Jul 04	2.9	Jul 01 20:00	100.0	0	0	100	0	0	0	0	0	
August																
September																
October																
November	606	0.6	2.4	Nov 17	6.7	Nov 17 13:00	100.0	0	0	100	0	0	0	0	0	
December	146	0.2	0.4	Dec 02	2.0	Dec 02 18:00	100.0	0	0	100	0	0	0	0	0	
Annual	1368	0.6	2.4	Nov 17	14.1	Jun 13 11:00	100.0	0	0	100.00	0.00	0	0	0	0	

1.7 Parkland Airshed Management Zone – Louis Lake SO₂ Sulphur Dioxide (ppb)

Louis Lake															SO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range								
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340			
January																		
February																		
March																		
April																		
May																		
June																		
July	564	0.2	0.6	Jul 25	3.0	Jul 21 11:00	100.0	0	0	100	0	0	0	0	0			
August	192	0.2	0.6	Aug 01	2.4	Aug 01 12:00	100.0	0	0	100	0	0	0	0	0			
September																		
October																		
November																		
December																		
Annual	756	0.2	0.6	Aug 01	3.0	Jul 21 11:00	100.0	0	0	100.00	0.00	0	0	0	0			

1.8 Parkland Airshed Management Zone – Mirror SO₂ Sulphur Dioxide (ppb)

Mirror															SO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range								
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340			
January																		
February																		
March																		
April																		
May	564	0.6	1.7	May 26	5.0	May 25 10:00	100.0	0	0	100	0	0	0	0	0			
June	145	0.5	0.7	Jun 02	2.5	Jun 02 10:00	100.0	0	0	100	0	0	0	0	0			
July																		
August																		
September																		
October																		
November																		
December	519	1.1	2.2	Dec 26	10.5	Dec 17 02:00	100.0	0	0	100	0	0	0	0	0			
Annual	1228	0.8	2.2	Dec 26	10.5	Dec 17 02:00	100.0	0	0	100.00	0.00	0	0	0	0			

1.9 Parkland Airshed Management Zone – Nevis SO₂ Sulphur Dioxide (ppb)

Nevis SO ₂ (ppb) 2010															
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340
January															
February															
March	628	3.1	3.6	Mar 21	7.9	Mar 31 10:00	99.7	0	0	100	0	0	0	0	0
April	145	3.0	3.5	Apr 05	9.7	Apr 01 10:00	100.0	0	0	100	0	0	0	0	0
May															
June															
July															
August	445	0.5	1.4	Aug 13	8.5	Aug 21 09:00	99.2	0	0	100	0	0	0	0	0
September	148	0.6	1.1	Sep 01	5.2	Sep 01 14:00	100.0	0	0	100	0	0	0	0	0
October															
November															
December															
Annual	1366	2.0	3.6	Mar 21	9.7	Apr 01 10:00	99.7	0	0	100.00	0.00	0	0	0	0

1.10 Parkland Airshed Management Zone – Red Deer - Edgar Industrial Park 2 SO₂ Sulphur Dioxide (ppb)

Red Deer Edgar Industrial Park 2											SO ₂ (ppb)					2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340	
January																
February																
March																
April	496	0.5	0.9	Apr 22	2.7	Apr 24 12:00	100.0	0	0	100	0	0	0	0	0	
May	76	0.6	1.0	May 03	1.6	May 03 20:00	100.0	0	0	100	0	0	0	0	0	
June																
July																
August																
September																
October	559	0.6	1.3	Oct 27	3.7	Oct 27 05:00	100.0	0	0	100	0	0	0	0	0	
November	30	0.5	0.6	Nov 01	1.6	Nov 01 13:00	100.0	0	0	100	0	0	0	0	0	
December																
Annual	1161	0.6	1.3	Oct 27	3.7	Oct 27 05:00	100.0	0	0	100.00	0.00	0	0	0	0	

1.11 Parkland Airshed Management Zone – Red Deer Riverside SO₂ Sulphur Dioxide (ppb)

Red Deer Riverside															SO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range								
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340			
January	709	0.9	3.4	Jan 04	6.9	Jan 04 12:00	100.0	0	0	100	0	0	0	0	0			
February	639	0.8	3.6	Feb 03	9.4	Feb 02 15:00	100.0	0	0	100	0	0	0	0	0			
March	709	0.4	1.2	Mar 15	6.3	Mar 06 17:00	100.0	0	0	100	0	0	0	0	0			
April	685	0.4	0.7	Apr 14	3.0	Apr 01 01:00	99.9	0	0	100	0	0	0	0	0			
May	708	0.3	1.1	May 14	11.5	May 14 10:00	100.0	0	0	100	0	0	0	0	0			
June	686	0.3	0.8	Jun 18	1.9	Jun 17 21:00	100.0	0	0	100	0	0	0	0	0			
July	709	0.3	0.8	Jul 20	2.8	Jul 20 10:00	100.0	0	0	100	0	0	0	0	0			
August	709	0.4	1.0	Aug 10	5.3	Aug 10 11:00	99.9	0	0	100	0	0	0	0	0			
September	678	0.3	0.7	Sep 07	4.1	Sep 05 11:00	100.0	0	0	100	0	0	0	0	0			
October	708	0.4	0.9	Oct 27	2.4	Oct 07 18:00	100.0	0	0	100	0	0	0	0	0			
November	686	0.5	1.3	Nov 19	3.2	Nov 19 19:00	100.0	0	0	100	0	0	0	0	0			
December	704	0.7	1.9	Dec 08	5.6	Dec 07 15:00	100.0	0	0	100	0	0	0	0	0			
Annual	8330	0.5	3.6	Feb 03	11.5	May 14 10:00	100.0	0	0	100.00	0.00	0	0	0	0			

1.12 Parkland Airshed Management Zone – Trochu SO₂ Sulphur Dioxide (ppb)

Trochu															SO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range								
								24-Hr	1-Hr	0 - 20	20 - 60	60 - 110	110 - 170	170 - 340	>340			
January																		
February																		
March																		
April	353	0.5	1.1	Apr 18	2.8	Apr 18 13:00	98.9	0	0	100	0	0	0	0	0			
May	708	0.4	1.0	May 20	2.4	May 13 09:00	100.0	0	0	100	0	0	0	0	0			
June	674	0.3	0.8	Jun 18	5.2	Jun 29 13:00	98.5	0	0	100	0	0	0	0	0			
July	701	0.3	0.9	Jul 20	3.3	Jul 20 12:00	99.7	0	0	100	0	0	0	0	0			
August	694	0.3	1.0	Aug 06	4.3	Aug 26 21:00	99.2	0	0	100	0	0	0	0	0			
September	687	0.4	0.8	Sep 28	2.6	Sep 21 09:00	99.9	0	0	100	0	0	0	0	0			
October	261	0.5	1.2	Oct 04	2.7	Oct 05 00:00	100.0	0	0	100	0	0	0	0	0			
November																		
December																		
Annual	4078	0.4	1.2	Oct 04	5.2	Jun 29 13:00	99.5	0	0	100.00	0.00	0	0	0	0			

2.

TRS & H₂S Frequency & Exceedence Summary Tables

2.1 Parkland Airshed Management Zone – Caroline TRS Total Reduced Sulphide (ppb)

Caroline TRS (ppb) 2010															
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January	709	0.4	0.8	Jan 04	1.3	Jan 04 19:00	100.0	0	0	98.45	1.55	0	0	0	0
February	635	0.3	0.7	Feb 06	1.1	Feb 05 20:00	99.9	0	0	99.37	0.63	0	0	0	0
March	709	0.3	0.6	Mar 02	1.7	Mar 30 09:00	100.0	0	0	99.29	0.71	0	0	0	0
April	683	0.3	0.7	Apr 09	2.4	Apr 09 01:00	100.0	0	0	98.39	1.61	0	0	0	0
May	686	0.2	0.4	May 20	4.0	May 11 00:00	97.6	0	0	99.13	0.58	0.29	0	0	0
June	686	0.5	0.7	Jun 03	1.6	Jun 12 11:00	100.0	0	0	98.69	1.31	0	0	0	0
July	704	0.4	0.8	Jul 30	2.2	Jul 09 10:00	100.0	0	0	98.58	1.42	0	0	0	0
August	704	0.6	0.8	Aug 30	1.6	Aug 30 11:00	99.6	0	0	98.3	1.7	0	0	0	0
September	681	0.5	0.8	Sep 01	1.7	Sep 04 23:00	99.9	0	0	98.83	1.17	0	0	0	0
October	701	0.6	1.3	Oct 25	5.7	Oct 26 16:00	99.1	0	0	87.45	11.98	0.43	0.14	0	0
November	683	0.4	1.0	Nov 28	7.7	Nov 28 17:00	99.6	0	0	97.66	2.05	0.15	0	0.15	0
December	707	0.4	0.7	Dec 02	1.4	Dec 19 21:00	99.7	0	0	98.73	1.27	0	0	0	0
Annual	8288	0.4	1.3	Oct 25	7.7	Nov 28 17:00	99.6	0	0	97.7	2.2	0.1	0.0	0.0	0.0

2.2 Parkland Airshed Management Zone – Crossfield - Carstairs TRS Total Reduced Sulphide (ppb)

Crossfield - Carstairs		TRS (ppb)										2010			
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February															
March															
April															
May															
June															
July															
August															
September															
October	400	0.5	1.1	Oct 29	3.3	Oct 29 19:00	100.0	0	0	94	4.5	1.5	0	0	0
November	658	0.3	0.7	Nov 29	2.6	Nov 29 18:00	96.8	0	0	97.57	2.28	0.15	0	0	0
December	707	0.5	1.1	Dec 06	2.6	Dec 02 13:00	100.0	0	0	92.08	7.64	0.28	0	0	0
Annual	1765	0.4	1.1	Dec 06	3.3	Oct 29 19:00	98.9	0	0	94.65	4.84	0.51	0.00	0.00	0

2.3 Parkland Airshed Management Zone – Delburne TRS Total Reduced Sulphide (ppb)

Delburne TRS (ppb) 2010															
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February	559	0.1	0.5	Feb 05	0.9	Feb 04 19:00	100.0	0	0	100	0	0	0	0	0
March	33	0.2	0.1	Mar 01	0.8	Mar 02 10:00	100.0	0	0	100	0	0	0	0	0
April															
May															
June															
July															
August															
September	482	0.5	1.0	Sep 25	3.5	Sep 25 13:00	100.0	0	0	96.27	3.32	0.41	0	0	0
October	102	0.7	0.9	Oct 04	2.2	Oct 02 10:00	100.0	0	0	93.14	6.86	0	0	0	0
November															
December															
Annual	1176	0.3	1.0	Sep 25	3.5	Sep 25 13:00	100.0	0	0	97.87	1.96	0.17	0	0	0

2.4 Parkland Airshed Management Zone – Gadsby Lake TRS Total Reduced Sulphide (ppb)

Gadsby Lake															TRS (ppb)															2010														
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range																																		
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10																													
January	377	0.2	0.5	Jan 28	1.0	Jan 28 16:00	99.3	0	0	100	0	0	0	0	0																													
February	632	0.6	1.2	Feb 09	1.7	Feb 09 18:00	99.9	0	0	92.09	7.91	0	0	0	0																													
March	691	0.3	1.0	Mar 28	1.7	Mar 28 18:00	98.9	0	0	95.08	4.92	0	0	0	0																													
April																																												
May																																												
June																																												
July																																												
August																																												
September																																												
October																																												
November																																												
December																																												
Annual	1700	0.4	1.2	Feb 09	1.7	Mar 28 18:00	99.3	0	0	94.86	5.14	0	0	0	0																													

2.5 Parkland Airshed Management Zone – Jackson Creek TRS Total Reduced Sulphide (ppb)

Jackson Creek															2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January	533	0.2	0.5	Jan 11	1.1	Jan 26 18:00	100.0	0	0	99.81	0.19	0	0	0	0
February	36	0.1	0.1	Feb 01	0.6	Feb 01 18:00	100.0	0	0	100	0	0	0	0	0
March															
April															
May															
June															
July															
August															
September															
October															
November															
December															
Annual	569	0.2	0.5	Jan 11	1.1	Jan 26 18:00	100.0	0	0	99.82	0.18	0.00	0	0	0

2.7 Parkland Airshed Management Zone – Louis Lake TRS Total Reduced Sulphide (ppb)

Louis Lake															2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Number of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February															
March															
April															
May															
June															
July	564	0.4	0.7	Jul 11	1.1	Jul 11 22:00	100.0	0	0	99.82	0.18	0	0	0	0
August	196	0.5	0.6	Aug 05	0.8	Aug 05 02:00	100.0	0	0	100	0	0	0	0	0
September															
October															
November															
December															
Annual	760	0.4	0.7	Jul 11	1.1	Jul 11 22:00	100.0	0	0	99.87	0.13	0.00	0	0	0

2.8 Parkland Airshed Management Zone – Mirror TRS Total Reduced Sulphide (ppb)

Mirror															2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Number of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February															
March															
April															
May	557	0.5	1.1	May 17	4.0	May 17 03:00	100.0	0	0	93.36	5.03	1.62	0	0	0
June	148	0.5	1.0	Jun 03	3.7	Jun 03 06:00	100.0	0	0	89.19	9.46	1.35	0	0	0
July															
August															
September															
October															
November															
December	510	0.9	1.6	Dec 14	7.7	Dec 26 21:00	100.0	0	0	64.31	31.18	3.73	0.59	0.2	0
Annual	1215	0.7	1.6	Dec 14	7.7	Dec 26 21:00	100.0	0	0	80.66	16.54	2.47	0	0	0

2.9 Parkland Airshed Management Zone – Nevis TRS Total Reduced Sulphide (ppb)

Nevis TRS (ppb) 2010															
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February															
March	619	0.2	0.6	Mar 29	2.6	Mar 24 00:00	99.4	0	0	98.71	1.13	0.16	0	0	0
April	145	0.3	0.4	Apr 03	1.0	Apr 05 03:00	100.0	0	0	100	0	0	0	0	0
May															
June															
July															
August	441	0.6	1.0	Aug 20	3.2	Aug 20 08:00	98.9	0	0	91.16	8.39	0.45	0	0	0
September	149	0.7	0.8	Sep 01	1.5	Sep 07 05:00	100.0	0	0	90.6	9.4	0	0	0	0
October															
November															
December															
Annual	1354	0.4	1.0	Aug 20	3.2	Aug 20 08:00	99.6	0	0	95.49	4.28	0	0	0	0

2.11 Parkland Airshed Management Zone – Red Deer Riverside H₂S Hydrogen Sulphide (ppb)

Red Deer Riverside															H ₂ S (ppb)	2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range						
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10	
January	706	0.6	1.7	Jan 20	4.6	Jan 20 05:00	100.0	0	0	84.56	13.88	2	0	0	0	
February	593	0.4	1.1	Feb 02	2.9	Feb 02 11:00	93.0	0	0	93.42	6.24	0	0	0	0	
March	709	0.2	0.5	Mar 12	2.4	Mar 12 07:00	100.0	0	0	98.87	1.13	0	0	0	0	
April	685	0.2	0.6	Apr 28	2.6	Apr 24 07:00	99.9	0	0	98.69	1.17	0	0	0	0	
May	709	0.2	0.8	May 29	3.8	May 18 07:00	100.0	0	0	95.35	4.51	0	0	0	0	
June	685	0.3	0.7	Jun 22	3.4	Jun 23 06:00	100.0	0	0	96.20	3.36	0	0	0	0	
July	709	0.3	0.6	Jul 27	2.8	Jul 01 03:00	100.0	0	0	95.20	4.51	0	0	0	0	
August	707	0.3	0.6	Aug 19	2.8	Aug 16 06:00	99.9	0	0	95.47	4.38	0.14	0	0	0	
September	680	0.2	0.5	Sep 29	4.3	Sep 04 05:00	100.0	0	0	96.91	2.94	0.15	0	0	0	
October	709	0.3	0.7	Oct 21	3.8	Oct 21 21:00	100.0	0	0	96.90	2.96	0.14	0	0	0	
November	685	0.3	0.7	Nov 10	2.2	Nov 07 10:00	100.0	0	0	97.08	2.92	0.00	0	0	0	
December	710	0.4	0.8	Dec 22	3.7	Dec 22 11:00	100.0	0	0	94.08	5.77	0	0	0	0	
Annual	8287	0.3	1.7	Jan 20	4.6	Jan 20 05:00	99.4	0	0	95.31	4.40	0	0	0	0	

2.12 Parkland Airshed Management Zone – Trochu TRS Total Reduced Sulphide (ppb)

Trochu															2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range					
								24-Hr	1-Hr	0 - 1	1 - 2.5	2.5 - 5	5 - 7.5	7.5 - 10	>10
January															
February															
March															
April	216	0.5	0.6	Apr 22	0.8	Apr 24 21:00	64.8	0	0	100	0	0	0	0	0
May	709	0.4	0.6	May 04	1.4	May 04 08:00	100.0	0	0	99.44	0.56	0	0	0	0
June	682	0.4	0.7	Jun 23	3.2	Jun 30 03:00	99.6	0	0	95.89	3.96	0.15	0	0	0
July	709	0.5	0.8	Jul 12	3.3	Jul 29 05:00	100.0	0	0	94.36	5.36	0.28	0	0	0
August	672	0.4	0.7	Aug 19	3.5	Aug 16 06:00	95.3	0	0	95.39	4.46	0.15	0	0	0
September	688	0.4	0.9	Sep 27	2.2	Sep 28 21:00	100.0	0	0	95.93	4.07	0	0	0	0
October	285	0.4	1.0	Oct 04	2.5	Oct 04 06:00	100.0	0	0	95.79	3.86	0.35	0	0	0
November															
December															
Annual	3961	0.4	1.0	Oct 04	3.5	Aug 16 06:00	94.2	0	0	96.35	3.52	0.13	0.00	0	0

3.

NO₂ Frequency & Exceedence Summary Tables

3.1 Parkland Airshed Management Zone – Caroline NO₂ Nitrogen Dioxide (ppb)

Caroline														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January	707	6.5	24.2	Jan 30	40.6	Jan 30 02:00	100.0	0	0	97.45	3	0	0	0			
February	637	7.7	18.6	Feb 06	42.1	Feb 05 20:00	100.0	0	0	96.86	3	0	0	0			
March	707	3.5	8.8	Mar 26	20.7	Mar 01 18:00	100.0	0	0	100.00	0.00	0	0	0			
April	684	1.8	3.4	Apr 21	12.4	Apr 21 04:00	100.0	0	0	100.00	0	0	0	0			
May	704	1.6	3.2	May 27	8.3	May 08 04:00	100.0	0	0	100.00	0	0	0	0			
June	677	0.9	2.7	Jun 28	8.4	Jun 28 05:00	100.0	0	0	100.00	0	0	0	0			
July	705	0.9	1.7	Jul 01	6.2	Jul 28 00:00	99.9	0	0	100.00	0	0	0	0			
August	703	1.0	3.0	Aug 19	8.8	Aug 19 19:00	99.6	0	0	100.00	0	0	0	0			
September	677	1.5	2.7	Sep 22	9.7	Sep 19 02:00	99.9	0	0	100.00	0	0	0	0			
October	699	2.2	5.4	Oct 20	12.9	Oct 28 23:00	99.3	0	0	100.00	0	0	0	0			
November	684	3.0	10.9	Nov 19	33.4	Nov 19 23:00	100.0	0	0	99.27	0.73	0	0	0			
December	707	5.6	21.4	Dec 23	33.3	Dec 23 02:00	100.0	0	0	98.30	2	0	0	0			
Annual	8291	3.0	24.2	Jan 30	42.1	Feb 05 20:00	99.9	0	0	99.34	0.66	0	0	0			

3.2 Parkland Airshed Management Zone – Crossfield - Carstairs NO₂ Nitrogen Dioxide (ppb)

Crossfield - Carstairs														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February																	
March																	
April																	
May																	
June																	
July																	
August																	
September																	
October	379	3.3	6.3	Oct 20	24.8	Oct 17 20:00	100.0	0	0	100.00	0	0	0	0			
November	679	6.7	17.8	Nov 29	41.1	Nov 29 21:00	99.7	0	0	97.64	2.36	0	0	0			
December	703	10.0	19.6	Dec 22	40.2	Dec 07 22:00	99.7	0	0	91.47	8.53	0	0	0			
Annual	1761	7.3	19.6	Dec 22	41.1	Nov 29 21:00	99.8	0	0	95.67	4.33	0	0	0			

3.3 Parkland Airshed Management Zone – Delburne NO₂ Nitrogen Dioxide (ppb)

Delburne														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February	559	6.6	14.4	Feb 11	26.7	Feb 11 19:00	100.0	0	0	99.82	0.18	0.00	0.00	0.00			
March	30	6.5	6.9	Mar 01	12.9	Mar 01 08:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
April																	
May																	
June																	
July																	
August																	
September	484	2.7	5.2	Sep 30	11.7	Sep 30 02:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
October	102	5.0	6.3	Oct 04	18.7	Oct 04 23:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
November																	
December																	
Annual	1175	4.8	14.4	Feb 11	26.7	Feb 11 19:00	100.0	0	0	99.91	0.09	0.00	0.00	0.00			

3.4 Parkland Airshed Management Zone – Gadsby Lake NO₂ Nitrogen Dioxide (ppb)

Gadsby Lake														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January	398	8.5	22.8	Jan 29	33.7	Jan 20 04:00	100.0	0	0	94.47	5.53	0	0	0			
February	638	7.6	15.9	Feb 02	31.0	Feb 28 22:00	100.0	0	0	98.12	1.88	0	0	0			
March	697	4.1	12.2	Mar 03	26.1	Mar 04 06:00	100.0	0	0	99.86	0.14	0	0	0			
April																	
May																	
June																	
July																	
August																	
September																	
October																	
November																	
December																	
Annual	1733	6.4	22.8	Jan 29	33.7	Jan 20 04:00	100.0	0	0	97.93	2.07	0	0	0			

3.5 Parkland Airshed Management Zone – Jackson Creek NO₂ Nitrogen Dioxide (ppb)

Jackson Creek														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January	535	4.7	21.5	Jan 30	37.3	Jan 29 18:00	100.0	0	0	96.64	3.36	0.00	0.00	0.00			
February	33	5.8	4.6	Feb 01	15.7	Feb 02 00:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
March																	
April																	
May																	
June																	
July																	
August																	
September																	
October																	
November																	
December																	
Annual	568	4.7	21.5	Jan 30	37.3	Jan 29 18:00	100.0	0	0	96.80	3.20	0.00	0.00	0.00			

3.6 Parkland Airshed Management Zone – James River - Kyler NO₂ Nitrogen Dioxide (ppb)

James River - Kyler														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February																	
March																	
April																	
May																	
June	490	1.7	2.3	Jun 22	8.4	Jun 14 11:00	99.8	0	0	100.00	0.00	0.00	0.00	0.00			
July	122	1.8	2.3	Jul 01	8.8	Jul 03 02:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
August																	
September																	
October																	
November	604	4.4	12.9	Nov 19	35.4	Nov 19 21:00	100.0	0	0	98.68	1.32	0.00	0.00	0.00			
December	146	6.7	8.7	Dec 02	25.8	Dec 06 18:00	100.0	0	0	99.32	0.68	0.00	0.00	0.00			
Annual	1362	3.5	12.9	Nov 19	35.4	Nov 19 21:00	100.0	0	0	99.34	0.66	0.00	0.00	0.00			

3.7 Parkland Airshed Management Zone – Louis Lake NO₂ Nitrogen Dioxide (ppb)

Louis Lake														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February																	
March																	
April																	
May																	
June																	
July	560	1.4	2.6	Jul 28	10.5	Jul 24 02:00	99.8	0	0	100.00	0.00	0.00	0.00	0.00			
August	192	1.7	2.2	Aug 06	11.2	Aug 09 02:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
September																	
October																	
November																	
December																	
Annual	752	1.5	2.6	Jul 28	11.2	Aug 09 02:00	99.9	0	0	100.00	0.00	0.00	0.00	0.00			

3.8 Parkland Airshed Management Zone – Mirror NO₂ Nitrogen Dioxide (ppb)

Mirror														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February																	
March																	
April																	
May	562	4.6	7.8	May 19	24.4	May 30 08:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
June	145	4.3	5.0	Jun 03	17.2	Jun 03 17:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00			
July																	
August																	
September																	
October																	
November																	
December	516	10.8	19.3	Dec 14	63.3	Dec 14 18:00	100.0	0	0	95.54	4.26	0.19	0.00	0.00			
Annual	1223	7.2	19.3	Dec 14	63.3	Dec 14 18:00	100.0	0	0	98.12	1.80	0.08	0.00	0.00			

3.9 Parkland Airshed Management Zone – Nevis NO₂ Nitrogen Dioxide (ppb)

Nevis NO ₂ (ppb) 2010														
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range				
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210
January														
February														
March	625	4.4	6.3	Mar 16	21.4	Mar 09 07:00	99.6	0	0	100.00	0.00	0.00	0.00	0.00
April	145	4.8	6.9	Apr 05	27.0	Apr 06 23:00	100.0	0	0	99.31	0.69	0.00	0.00	0.00
May														
June														
July														
August	443	4.2	6.5	Aug 19	17.9	Aug 25 19:00	99.2	0	0	100.00	0.00	0.00	0.00	0.00
September	148	4.5	5.0	Sep 01	14.0	Sep 01 02:00	100.0	0	0	100.00	0.00	0.00	0.00	0.00
October														
November														
December														
Annual	1361	4.4	6.9	Apr 05	27.0	Apr 06 23:00	99.7	0	0	99.93	0.07	0.00	0.00	0.00

3.10 Parkland Airshed Management Zone – Red Deer - Edgar Industrial Park 2 NO₂ Nitrogen Dioxide (ppb)

Red Deer Edgar Industrial Park 2														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January																	
February																	
March																	
April	494	7.8	13.6	Apr 18	36.6	Apr 23 23:00	100.0	0	0	96.36	3.64	0.00	0.00	0.00			
May	76	6.9	8.8	May 03	26.8	May 01 04:00	100.0	0	0	97.37	2.63	0.00	0.00	0.00			
June																	
July																	
August																	
September																	
October	561	13.6	20.7	Oct 19	43.2	Oct 13 19:00	100.0	0	0	88.41	11.59	0.00	0.00	0.00			
November	30	16.3	15.0	Nov 01	30.5	Nov 01 21:00	100.0	0	0	86.67	13.33	0.00	0.00	0.00			
December																	
Annual	1161	10.7	20.7	Oct 19	43.2	Oct 13 19:00	100.0	0	0	92.29	7.71	0.00	0.00	0.00			

3.11 Parkland Airshed Management Zone – Red Deer Riverside NO₂ Nitrogen Dioxide (ppb)

Red Deer Riverside														NO ₂ (ppb)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAQO		Percentage of Readings in Concentration Range							
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210			
January	708	22.7	43.9	Jan 08	51.1	Jan 29 13:00	100.0	0	0	56.64	43.08	0.28	0	0			
February	636	20.8	39.8	Feb 10	47.9	Feb 24 11:00	100.0	0	0	62.74	37.26	0	0	0			
March	701	14.2	24.9	Mar 03	42.1	Mar 13 23:00	100.0	0	0	83.74	16.26	0.00	0	0			
April	681	7.8	17.2	Apr 06	45.7	Apr 07 00:00	99.9	0	0	95.30	4.70	0	0	0			
May	705	6.0	11.8	May 06	28.1	May 11 03:00	100.0	0	0	99.57	0.43	0	0	0			
June	684	5.8	10.9	Jun 17	22.7	Jun 17 08:00	100.0	0	0	100.00	0.00	0	0	0			
July	708	5.1	9.1	Jul 16	22.2	Jul 19 08:00	100.0	0	0	100.00	0.00	0	0	0			
August	707	5.2	11.0	Aug 19	19.8	Aug 20 10:00	99.9	0	0	100.00	0.00	0	0	0			
September	668	7.0	11.3	Sep 24	25.3	Sep 30 08:00	100.0	0	0	99.85	0.15	0	0	0			
October	706	12.3	20.0	Oct 14	34.6	Oct 14 08:00	100.0	0	0	94.62	5.38	0	0	0			
November	684	19.8	38.1	Nov 27	50.3	Nov 26 10:00	100.0	0	0	68.71	31.14	0	0	0			
December	707	21.4	34.0	Dec 07	50.1	Dec 07 11:00	100.0	0	0	59.83	40.03	0.14	0	0			
Annual	8295	12.3	43.9	Jan 08	51.1	Jan 29 13:00	100.0	0	0	85.08	14.87	0.05	0	0			

3.12 Parkland Airshed Management Zone – Trochu NO₂ Nitrogen Dioxide (ppb)

Trochu															NO ₂ (ppb)					2010				
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	AAAQO		Percentage of Readings in Concentration Range														
								24-Hr	1-Hr	0 - 25	25 - 50	50 - 110	110 - 210	>210										
January																								
February																								
March																								
April	347	2.9	4.8	Apr 24	15.7	Apr 18 06:00	100.0	0	0	100	0	0	0	0										
May	703	2.9	5.8	May 26	16.8	May 18 03:00	100.0	0	0	100	0	0	0	0										
June	680	3.0	5.0	Jun 23	17.4	Jun 23 03:00	99.3	0	0	100	0	0	0	0										
July	704	2.2	4.1	Jul 09	10.9	Jul 27 03:00	100.0	0	0	100	0	0	0	0										
August	690	2.3	3.8	Aug 26	9.7	Aug 26 07:00	99.1	0	0	100	0	0	0	0										
September	684	2.2	4.6	Sep 03	11.4	Sep 30 01:00	100.0	0	0	100.00	0.00	0	0	0										
October	261	3.5	5.8	Oct 07	13.8	Oct 02 22:00	100.0	0	0	100	0	0	0	0										
November																								
December																								
Annual	4069	2.6	5.8	Oct 07	17.4	Jun 23 03:00	99.8	0	0	100.00	0.00	0	0	0										

4.

PM_{2.5} Frequency & Exceedence Summary Tables

4.1 Parkland Airshed Management Zone – Caroline PM_{2.5} Particulate Matter 2.5 (µg/m³)

Caroline															PM _{2.5} (µg/m ³)	2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range								
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30	
January	595	3.3	11.2	Jan 01	55.0	Jan 26 00:00	80.0	0	0	56.97	19.66	17.31	4.03	1.85	0.17	
February	660	5.7	16.5	Feb 03	36.9	Feb 03 09:00	98.2	0	0	37.12	24.55	21.21	10.15	6.21	0.76	
March	744	4.4	20.1	Mar 26	56.7	Mar 25 22:00	100.0	0	0	52.55	24.87	9.68	7.12	4.57	1.21	
April	717	2.6	7.3	Apr 16	32.6	Apr 24 22:00	99.6	0	0	51.46	36.4	10.6	1.39	0	0.14	
May	725	2.7	7.5	May 16	71.8	May 16 23:00	97.6	0	0	50.21	39.31	9.52	0.69	0.14	0.14	
June	717	4.4	11.6	Jun 19	143.6	Jun 30 06:00	99.6	0	1	35.01	37.38	21.48	5.02	0.7	0.42	
July	525	5.3	10.4	Jul 31	97.2	Jul 01 17:00	71.0	0	1	20.38	43.62	29.71	5.52	0.57	0.19	
August	740	15.1	154.9	Aug 20	200.2	Aug 20 02:00	99.7	3	28	25.68	28.65	20.14	8.51	6.76	10.27	
September	715	1.7	4.1	Sep 07	9.5	Sep 07 11:00	100.0	0	0	65.03	29.65	5.31	0	0	0	
October	732	2.5	8.5	Oct 23	22.0	Oct 04 08:00	98.4	0	0	56.15	29.23	13.11	1.09	0.41	0	
November	693	2.1	12.3	Nov 25	85.4	Nov 25 19:00	96.7	0	1	66.67	23.67	7.79	0.72	0.87	0.29	
December	742	4.4	15.1	Dec 09	35.6	Dec 03 23:00	100.0	0	0	46.63	22.51	21.16	6.06	3.37	0.27	
Annual	8305	4.5	154.9	Aug 20	200.2	Aug 20 02:00	95.0	3	31	47.47	29.82	15.24	4.11	2.15	1.22	

4.2 Parkland Airshed Management Zone – Crossfield - Carstairs PM_{2.5} Particulate Matter 2.5 (µg/m³)

Crossfield - Carstairs													PM _{2.5} (µg/m ³)				2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range										
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30			
January																		
February																		
March																		
April																		
May																		
June																		
July																		
August																		
September																		
October	292	12.5	21.3	Oct 23	61.7	Oct 23 16:00	98.3	0	0	4.45	11.99	26.03	35.27	21.23	1.03			
November	720	8.3	15.1	Nov 19	32.8	Nov 19 14:00	100.0	0	0	3.75	30	44.17	17.22	4.44	0.42			
December	740	12.9	31.2	Dec 09	41.8	Dec 09 01:00	99.7	1	0	1.08	17.7	29.32	28.51	20.14	3.24			
Annual	1752	11.0	31.2	Dec 09	61.7	Oct 23 16:00	99.4	1	0	2.8	21.9	35.0	24.7	13.9	1.7			

4.3 Parkland Airshed Management Zone – Delburne PM_{2.5} Particulate Matter 2.5 (µg/m³)

Delburne															PM _{2.5} (µg/m ³)	2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range								
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30	
January																
February	583	9.6	25.5	Feb 28	46.5	Mar 01 00:00	100.0	0	0	22.64	22.3	19.73	14.58	18.18	2.57	
March	48	20.5	35.3	Mar 01	54.2	Mar 01 06:00	100.0	1	0	18.75	6.25	14.58	14.58	12.5	33.33	
April																
May																
June																
July																
August																
September	491	1.5	4.3	Sep 11	39.7	Sep 11 11:00	100.0	0	0	74.54	20.57	4.07	0	0.61	0.2	
October	126	5.2	9.3	Oct 04	15.3	Oct 04 12:00	100.0	0	0	22.22	40.48	29.37	7.94	0	0	
November																
December																
Annual	1248	6.4	35.3	Mar 01	54.2	Mar 01 06:00	100.0	1	0	42.87	22.84	14.34	8.17	9.21	2.56	

4.4 Parkland Airshed Management Zone – Gadsby Lake PM_{2.5} Particulate Matter 2.5 (µg/m³)

Gadsby Lake														PM _{2.5} (µg/m ³)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range									
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30		
January	420	9.2	25.4	Jan 29	32.0	Jan 30 07:00	99.8	0	0	23.33	23.81	22.62	9.29	19.52	1.43		
February	672	13.2	31.0	Feb 02	57.7	Feb 02 21:00	100.0	2	0	7.74	20.24	21.88	20.09	23.51	6.55		
March	723	8.0	37.5	Mar 01	57.8	Mar 01 09:00	97.2	1	0	21.44	31.67	22.96	12.17	8.99	2.77		
April	10	1.2	-	-	3.2	Apr 01 06:00	100.0	0	0	70	30	0	0	0	0		
May																	
June																	
July																	
August																	
September																	
October																	
November																	
December																	
Annual	1825	10.1	37.5	Mar 01	57.8	Mar 01 09:00	99.2	3	0	16.96	25.78	21.63	14.3	17.3	4.04		

4.5 Parkland Airshed Management Zone – Jackson Creek PM_{2.5} Particulate Matter 2.5 (µg/m³)

Jackson Creek															PM _{2.5} (µg/m ³)	2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range								
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30	
January	587	3.4	21.8	Jan 30	103.6	Jan 22 04:00	100.0	0	2	64.74	16.70	8.86	5.11	3.92	0.68	
February	58	8.6	9.1	Feb 02	39.3	Feb 03 10:00	100.0	0	0	37.93	15.52	12.07	15.52	10.34	8.62	
March																
April																
May																
June																
July																
August																
September																
October																
November																
December																
Annual	645	3.9	21.8	Jan 30	103.6	Jan 22 04:00	100.0	0	2	61.97	16.74	9.23	6.10	4.54	1.41	

4.6 Parkland Airshed Management Zone – James River - Kyler PM_{2.5} Particulate Matter 2.5 (µg/m³)

James River - Kyler														PM _{2.5} (µg/m ³)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range									
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30		
January																	
February																	
March																	
April																	
May																	
June	467	3.4	9.1	Jun 19	58.2	Jun 14 12:00	99.8	0	0	50.75	27.84	16.27	3.85	1.07	0.21		
July	129	2.0	3.7	Jul 01	29.9	Jul 04 03:00	100.0	0	0	72.09	15.5	9.3	1.55	1.55	0		
August																	
September																	
October																	
November	612	2.9	17.0	Nov 11	134.6	Nov 11 10:00	100.0	0	1	77.12	12.25	5.23	0.82	1.96	2.61		
December	180	3.9	8.0	Dec 04	84.9	Dec 08 11:00	100.0	0	1	64.44	16.11	7.22	6.11	5	1.11		
Annual	1388	3.1	17.0	Nov 11	134.6	Nov 11 10:00	99.9	0	2	66.19	18.24	9.59	2.60	2.02	1.37		

4.7 Parkland Airshed Management Zone – Louis Lake PM_{2.5} Particulate Matter 2.5 (µg/m³)

Louis Lake														PM _{2.5} (µg/m ³)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range									
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30		
January																	
February																	
March																	
April																	
May																	
June																	
July	604	4.8	11.6	Jul 31	31.2	Jul 29 11:00	99.5	0	0	38.58	30.63	19.7	6.95	3.97	0.17		
August	225	10.0	17.0	Aug 05	37.2	Aug 05 10:00	100.0	0	0	12.44	26.22	24.44	19.11	16	1.78		
September																	
October																	
November																	
December																	
Annual	829	6.2	17.0	Aug 05	37.2	Aug 05 10:00	99.8	0	0	31.16	29.68	21.06	10.10	7.39	0.62		

4.8 Parkland Airshed Management Zone – Mirror PM_{2.5} Particulate Matter 2.5 (µg/m³)

Mirror															PM _{2.5} (µg/m ³)		2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range										
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30			
January																		
February																		
March																		
April																		
May	586	4.0	12.5	May 20	96.8	May 27 10:00	100.0	0	1	43.52	33.62	17.41	3.24	1.88	0.34			
June	175	2.8	4.7	Jun 01	11.5	Jun 02 11:00	100.0	0	0	53.14	32	14.29	0.57	0	0			
July																		
August																		
September																		
October																		
November																		
December	539	4.1	9.5	Dec 26	43.1	Dec 20 21:00	100.0	0	0	44.34	29.87	18.55	3.9	2.78	0.56			
Annual	1300	3.9	12.5	May 20	96.8	May 27 10:00	100.0	0	1	45.15	31.85	17.46	3.15	2.00	0.38			

4.9 Parkland Airshed Management Zone – Nevis PM_{2.5} Particulate Matter 2.5 (µg/m³)

Nevis PM _{2.5} (µg/m ³) 2010															
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range							
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30
January															
February															
March	667	5.4	17.3	Mar 04	40.1	Mar 13 17:00	98.4	0	0	42.28	24.59	16.49	9.9	5.85	0.9
April	157	2.8	6.8	Apr 06	16.6	Apr 06 08:00	100.0	0	0	63.06	15.29	17.83	3.82	0	0
May															
June															
July															
August	461	16.8	113.5	Aug 20	199.9	Aug 19 19:00	99.2	3	21	31.02	31.24	13.88	4.12	4.12	15.62
September	177	3.2	5.0	Sep 03	17.2	Sep 03 11:00	100.0	0	0	49.15	32.77	15.25	2.26	0.56	0
October															
November															
December															
Annual	1462	8.4	113.5	Aug 20	199.9	Aug 19 19:00	99.4	3	21	42.31	27.01	15.58	6.37	3.53	5.19

4.10 Parkland Airshed Management Zone – Red Deer - Edgar Industrial Park 2 PM_{2.5} Particulate Matter 2.5 (µg/m³)

Red Deer Edgar Industrial Park 2							PM _{2.5} (µg/m ³)							2010	
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range							
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30
January															
February															
March															
April	513	6.6	11.0	Apr 14	32.1	Apr 17 11:00	97.2	0	0	17.54	31.58	34.5	11.7	4.29	0.39
May	95	1.9	2.8	May 03	13.4	May 04 13:00	91.3	0	0	65.26	21.05	11.58	2.11	0	0
June															
July															
August															
September															
October	608	5.9	12.4	Oct 27	80.8	Oct 19 20:00	100.0	0	1	30.76	29.61	25.66	9.38	3.62	0.99
November	60	1.4	1.9	Nov 02	10.4	Nov 02 15:00	100.0	0	0	80	11.67	8.33	0	0	0
December															
Annual	1276	5.6	12.4	Oct 27	80.8	Oct 19 20:00	97.1	0	1	29.89	29.10	27.52	9.38	3.47	0.63

4.11 Parkland Airshed Management Zone – Red Deer Riverside PM_{2.5} Particulate Matter 2.5 (µg/m³)

Red Deer Riverside															PM _{2.5} (µg/m ³)	2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range								
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30	
January	740	24.9	46.4	Jan 30	77.9	Jan 30 10:00	100.0	8	0	0.68	1.49	3.65	14.59	53.78	25.81	
February	669	21.2	44.4	Feb 02	65.5	Feb 02 17:00	100.0	7	0	0.45	2.39	22.42	17.34	34.23	23.17	
March	739	14.4	41.6	Mar 01	56.9	Mar 01 06:00	99.6	1	0	0.27	11.64	35.05	22.87	23.82	6.36	
April	718	9.6	14.0	Apr 17	35.9	Apr 09 15:00	100.0	0	0	0.42	13.51	55.15	27.44	3.34	0.14	
May	744	11.1	18.8	May 20	29.5	May 20 07:00	100.0	0	0	0	10.08	43.41	38.44	8.06	0	
June	717	12.6	22.0	Jun 19	30.6	Jun 20 01:00	99.9	0	0	0	2.09	38.21	45.61	13.95	0.14	
July	744	12.1	16.8	Jul 31	25.8	Jul 30 22:00	100.0	0	0	0	0.94	37.77	54.03	7.26	0	
August	739	28.6	200.7	Aug 20	450.8	Aug 19 22:00	99.6	3	31	0	3.25	23.55	36.13	22.87	14.21	
September	619	9.2	15.8	Sep 01	24.9	Sep 25 00:00	86.0	0	0	10.99	12.76	38.45	33.93	3.88	0	
October	743	15.4	26.2	Oct 27	44.0	Oct 07 22:00	99.9	0	0	0.27	0.27	24.9	41.72	30.01	2.83	
November	717	14.6	23.3	Nov 10	34.6	Nov 11 01:00	100.0	0	0	0.14	2.51	27.62	40.45	28.45	0.84	
December	740	22.0	42.3	Dec 08	51.5	Dec 08 15:00	99.6	2	0	0.14	0	4.19	26.22	54.46	15	
Annual	8629	16.4	200.7	Aug 20	450.8	Aug 19 22:00	98.7	21	31	0.99	5.01	29.49	33.43	23.64	7.43	

4.12 Parkland Airshed Management Zone – Trochu PM_{2.5} Particulate Matter 2.5 (µg/m³)

Trochu PM _{2.5} (µg/m ³)															2010
Month	# of Readings	Average	24-hr Maximum	Date	1-hr Maximum	Date	Operational Time (%)	Percentage of Readings in Concentration Range							
								AAAQO 24-Hr	AAAQG 1-Hr	0 - 2	2 - 6	6 - 11	11 - 17	17 - 30	> 30
January															
February															
March															
April	376	5.4	10.1	Apr 16	22.4	Apr 17 09:00	100.0	0	0	18.88	40.16	35.11	3.99	1.86	0
May	744	5.3	10.1	May 15	34.9	May 15 06:00	100.0	0	0	20.03	43.55	29.57	5.11	1.61	0.13
June	675	6.4	14.2	Jun 20	29.3	Jun 20 03:00	93.8	0	0	9.93	40.74	37.48	10.22	1.63	0
July	741	5.3	11.5	Jul 28	41.3	Jul 28 18:00	99.6	0	0	22.54	40.49	28.61	6.88	1.21	0.27
August	728	15.0	120.9	Aug 20	200.4	Aug 19 21:00	98.1	3	19	15.38	28.98	27.61	9.75	7.14	11.13
September	714	3.0	6.1	Sep 10	13.4	Sep 10 05:00	99.9	0	0	42.44	43.7	12.46	1.4	0	0
October	244	7.2	13.7	Oct 04	30.5	Oct 08 19:00	81.1	0	0	16.8	31.56	29.92	13.93	7.38	0.41
November															
December															
Annual	4222	6.9	120.9	Aug 20	200.4	Aug 19 21:00	96.1	3	19	21.67	39.19	27.71	6.81	2.59	2.04

5.

Wind Data Summary Tables & Wind Roses

5.1 Parkland Airshed Management Zone – Caroline Wind Speed and Wind Direction Frequency Table

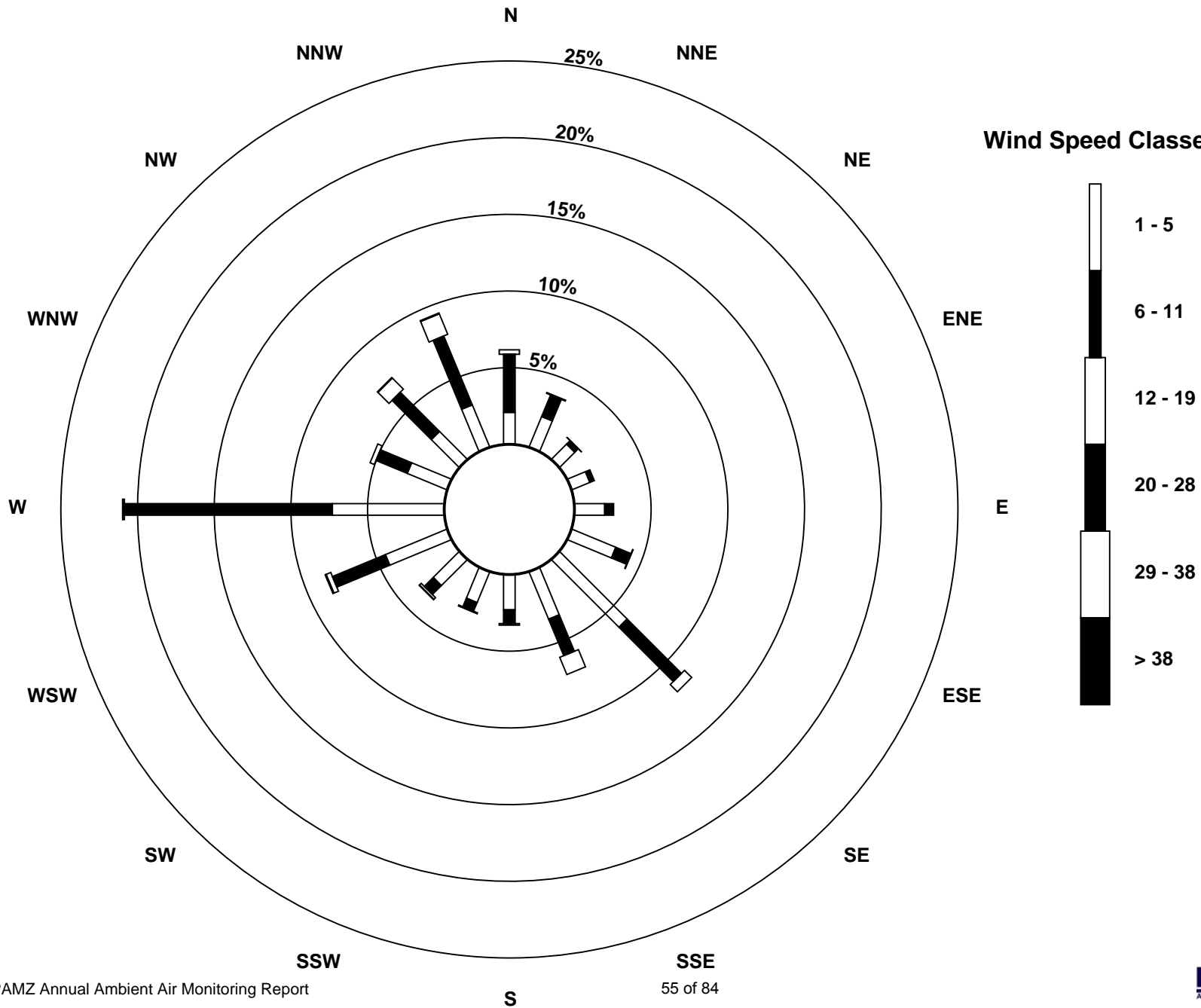
Caroline								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	531	2.09	3.78	0.29	0	0	0	6.16
NNE	322	2.16	1.52	0.06	0	0	0	3.74
NE	150	1.40	0.33	0.01	0	0	0	1.74
ENE	137	1.28	0.31	0.00	0	0	0	1.59
E	220	1.97	0.58	0.00	0	0	0	2.55
ESE	363	3.11	1.07	0.03	0	0	0	4.21
SE	1026	6.23	5.01	0.66	0	0	0	11.91
SSE	615	3.34	2.58	1.22	0.00	0	0	7.14
S	284	2.30	0.89	0.10	0.00	0	0	3.30
SSW	245	2.17	0.60	0.07	0.00	0	0	2.84
SW	294	2.40	0.82	0.15	0.03	0	0	3.41
WSW	731	4.35	3.74	0.33	0.07	0	0	8.49
W	1807	7.30	13.56	0.10	0	0	0	20.98
WNW	458	2.81	2.21	0.30	0	0	0	5.32
NW	626	2.58	3.62	1.02	0.05	0	0	7.27
NNW	806	2.98	4.86	1.45	0.06	0	0	9.36
Totals	8615	48.49	45.49	5.80	0.22	0	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Caroline - 2010

Wind Speed Classes (km/h)

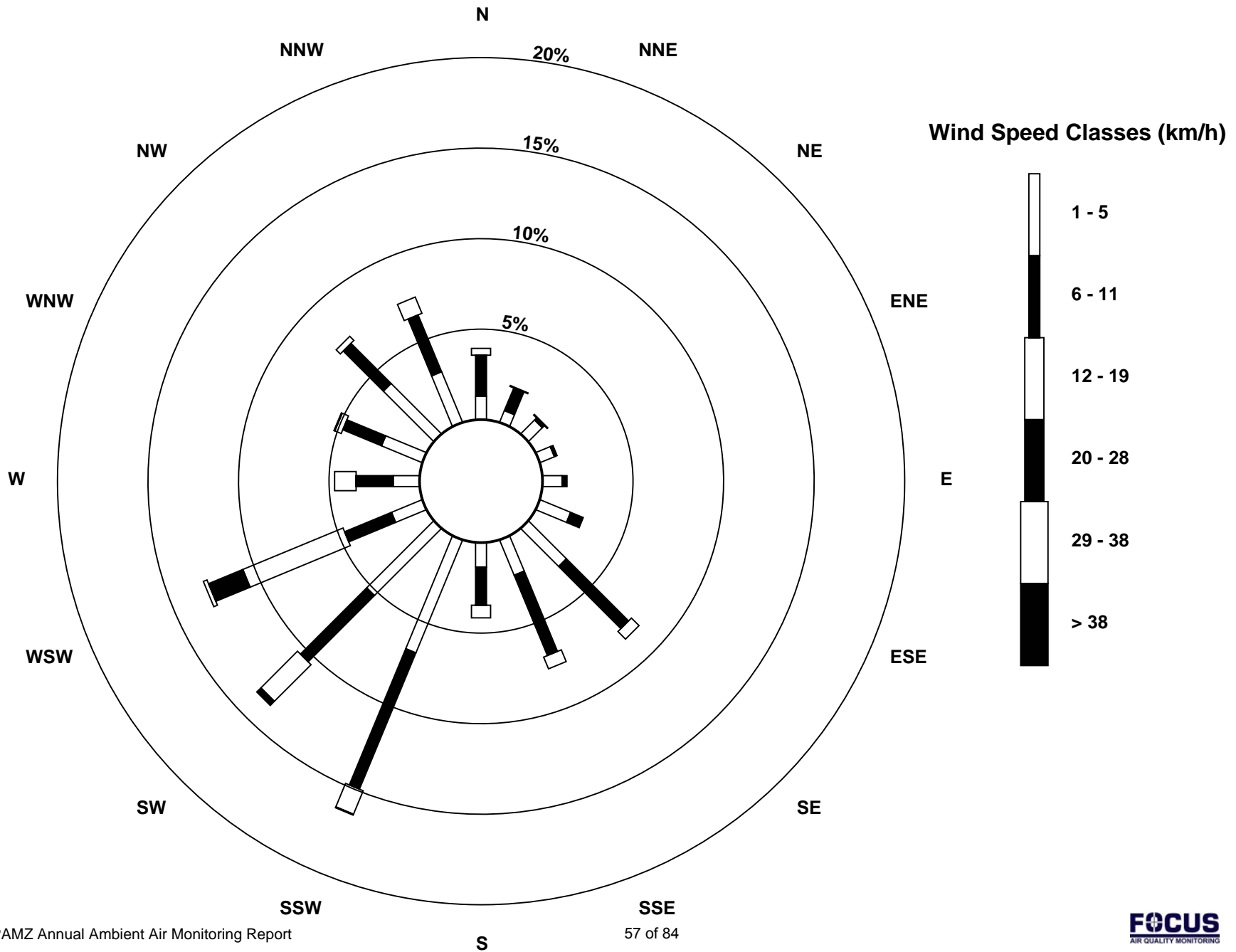


5.2 Parkland Airshed Management Zone – Crossfield - Carstairs Wind Speed and Wind Direction Frequency Table

Crossfield - Carstairs								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	73	1.30	2.27	0.38	0	0	0	3.94
NNE	39	0.70	1.35	0.05	0	0	0	2.10
NE	24	1.08	0.16	0.05	0	0	0	1.30
ENE	19	0.86	0.16	0.00	0	0	0	1.03
E	25	1.08	0.27	0	0	0	0	1.35
ESE	48	1.83	0.76	0	0	0	0	2.59
SE	156	2.97	4.86	0.59	0	0	0	8.42
SSE	141	2.10	4.80	0.70	0.00	0.00	0	7.61
S	77	1.35	2.10	0.70	0.00	0	0	4.16
SSW	303	6.75	8.15	1.40	0	0	0	16.35
SW	252	5.23	5.18	2.86	0.32	0	0	13.60
WSW	239	1.83	2.81	5.99	2.05	0	0	12.90
W	87	1.46	2.05	1.19	0.00	0	0	4.70
WNW	96	2.43	2.32	0.38	0.05	0	0	5.18
NW	137	3.94	3.13	0.32	0.00	0	0	7.39
NNW	137	3.02	3.40	0.97	0	0	0	7.39
Totals	1853	37.94	43.77	15.60	2.48	0.22	0	100.00

Wind Rose

Wind Speed (WS) (km/h)
Crossfield - Carstairs - 2010



5.3 Parkland Airshed Management Zone – Delburne Wind Speed and Wind Direction Frequency Table

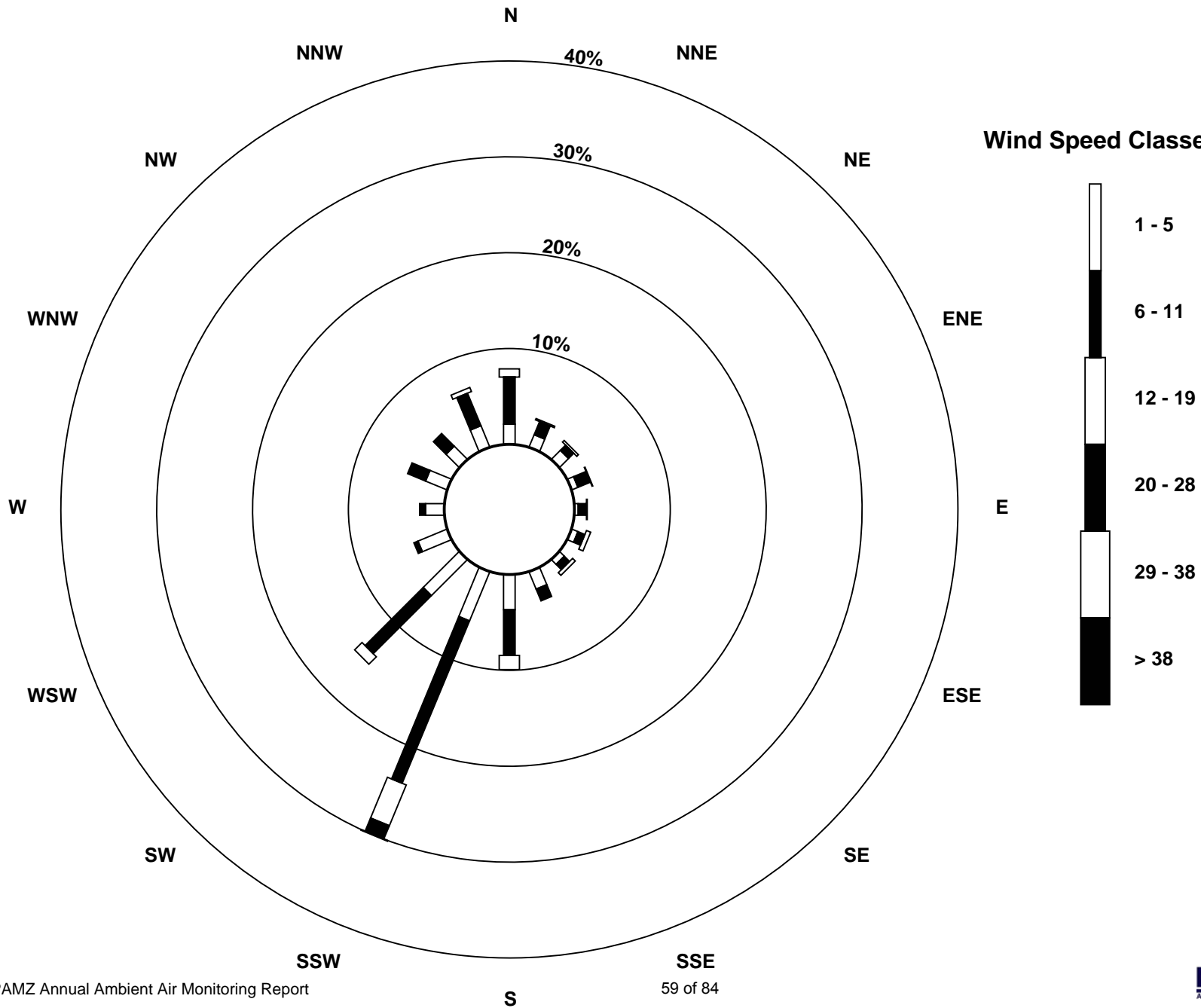
Delburne								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	101	2.11	4.92	0.86	0	0	0	7.88
NNE	39	1.41	1.48	0.16	0	0	0	3.04
NE	30	1.33	0.78	0.23	0	0	0	2.34
ENE	28	0.7	1.41	0.08	0	0	0	2.19
E	17	0.39	0.86	0.08	0	0	0	1.33
ESE	25	0.7	0.78	0.47	0	0	0	1.95
SE	24	0.7	0.78	0.39	0	0	0	1.87
SSE	42	1.95	1.33	0	0	0	0	3.28
S	127	3.67	4.76	1.48	0	0	0	9.91
SSW	385	5.54	18.35	4.61	1.48	0.08	0	30.05
SW	192	5.31	8.59	1.09	0	0	0	14.99
WSW	48	3.28	0.47	0	0	0	0	3.75
W	33	1.95	0.62	0	0	0	0	2.58
WNW	57	2.42	2.03	0	0	0	0	4.45
NW	49	1.95	1.87	0	0	0	0	3.83
NNW	84	2.42	3.67	0.47	0	0	0	6.56
Totals	1281	35.83	52.69	9.91	1.48	0.08	0	100

Wind Rose

Wind Speed (WS) (km/h)

Delburne - 2010

Wind Speed Classes (km/h)



5.4 Parkland Airshed Management Zone – Gadsby Lake Wind Speed and Wind Direction Frequency Table

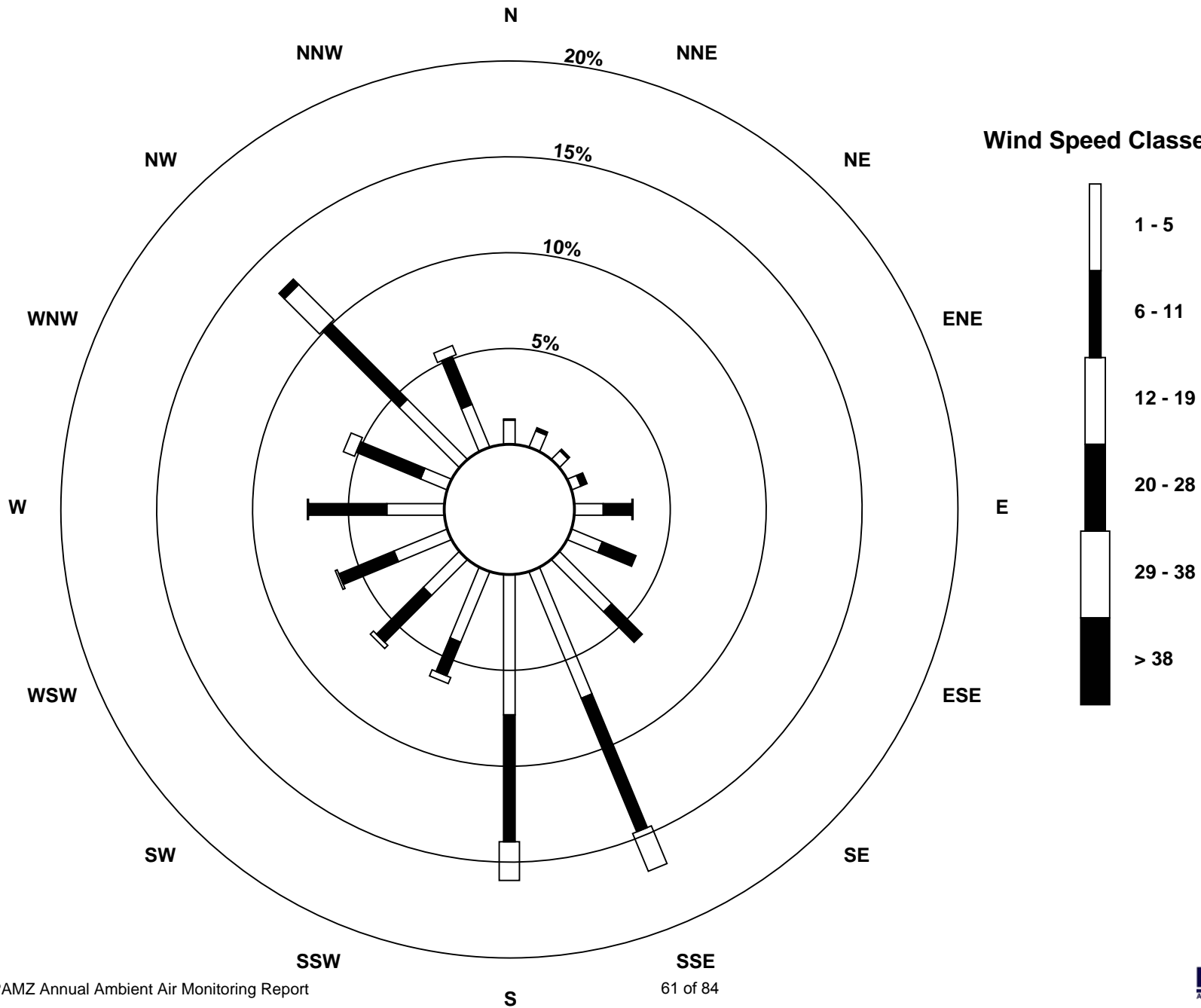
Gadsby Lake								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	23	1.27	0.06	0.00	0	0	0	1.32
NNE	19	0.92	0.17	0.00	0	0	0	1.09
NE	13	0.63	0.12	0.00	0	0	0	0.75
ENE	15	0.52	0.35	0.00	0	0	0	0.86
E	53	1.50	1.50	0.06	0	0	0	3.05
ESE	63	1.73	1.90	0.00	0	0	0	3.63
SE	106	3.86	2.25	0.00	0	0	0	6.11
SSE	292	7.14	7.55	2.13	0	0	0	16.82
S	277	7.32	6.62	2.02	0	0	0	15.96
SSW	108	3.97	1.90	0.35	0	0	0	6.22
SW	110	2.65	3.46	0.23	0	0	0	6.34
WSW	108	3.00	3.11	0.12	0	0	0	6.22
W	124	3.00	4.09	0.06	0	0	0	7.14
WNW	100	1.50	3.63	0.63	0.00	0	0	5.76
NW	227	4.44	5.65	2.59	0.40	0	0	13.08
NNW	98	2.42	2.71	0.52	0	0	0	5.65
Totals	1736	45.85	45.05	8.70	0.40	0	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Gadsby Lake - 2010

Wind Speed Classes (km/h)



5.5 Parkland Airshed Management Zone – Jackson Creek Wind Speed and Wind Direction Frequency Table

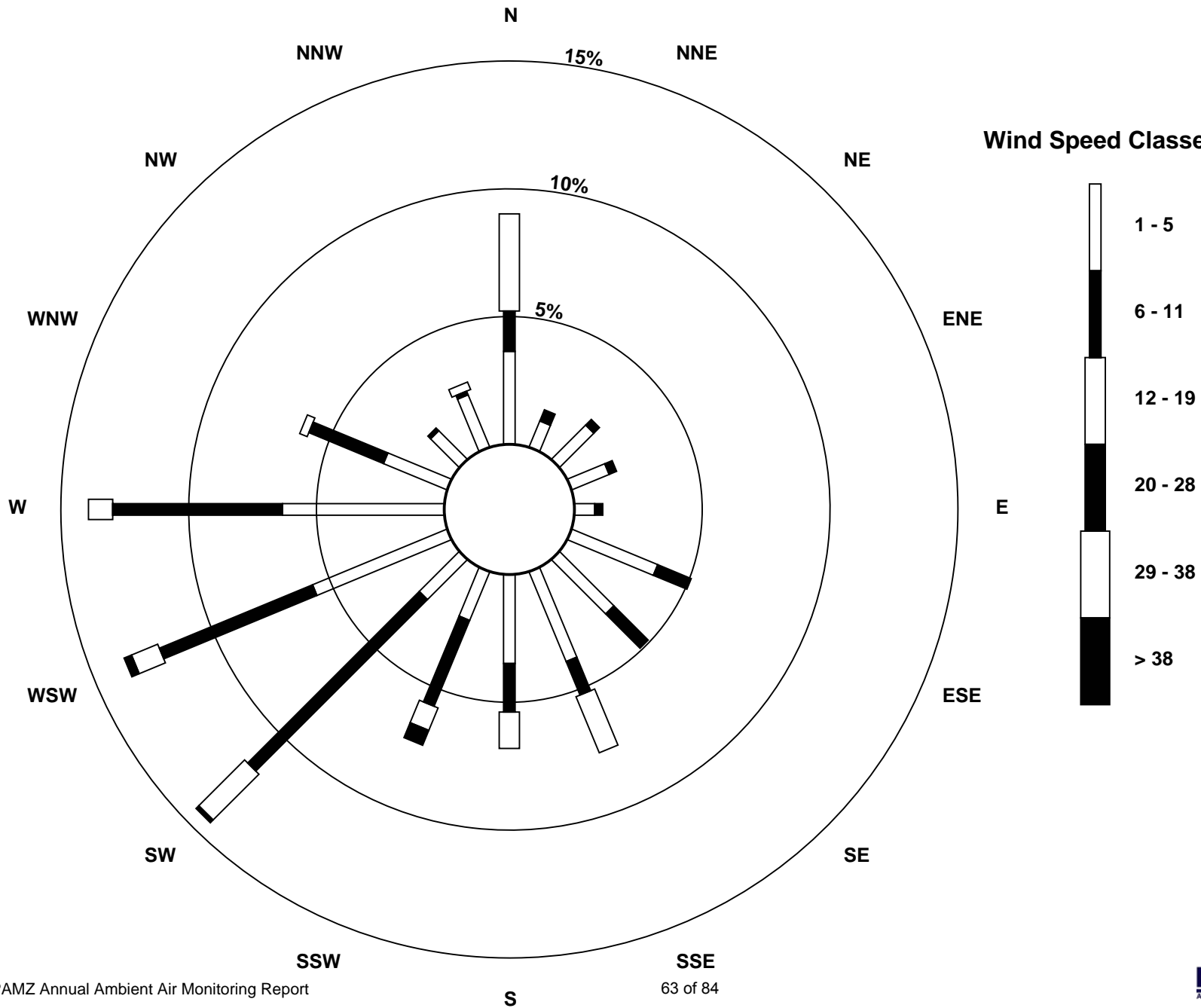
Jackson Creek								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	57	3.64	1.58	3.80	0	0	0	9.02
NNE	10	1.11	0.47	0.00	0	0	0	1.58
NE	14	1.90	0	0	0	0	0	2.22
ENE	12	1.58	0	0	0	0	0	1.90
E	7	0.79	0.32	0	0	0	0	1.11
ESE	32	3.64	1.42	0	0	0	0	5.06
SE	31	3.01	1.90	0.00	0	0	0	4.91
SSE	48	3.80	1.42	2.37	0	0	0	7.59
S	43	3.48	1.90	1.42	0	0	0	6.80
SSW	46	2.06	3.64	0.95	0.63	0	0	7.28
SW	91	2.22	9.49	2.53	0.16	0	0	14.40
WSW	86	5.70	6.49	1.11	0.32	0	0	13.61
W	88	6.33	6.65	0.95	0	0	0	13.92
WNW	39	2.69	3.16	0	0	0	0	6.17
NW	11	1.58	0.16	0.00	0	0	0	1.74
NNW	17	2.22	0.16	0.32	0.00	0	0	2.69
Totals	632	45.73	39.40	13.77	1.11	0	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Jackson Creek - 2010

Wind Speed Classes (km/h)



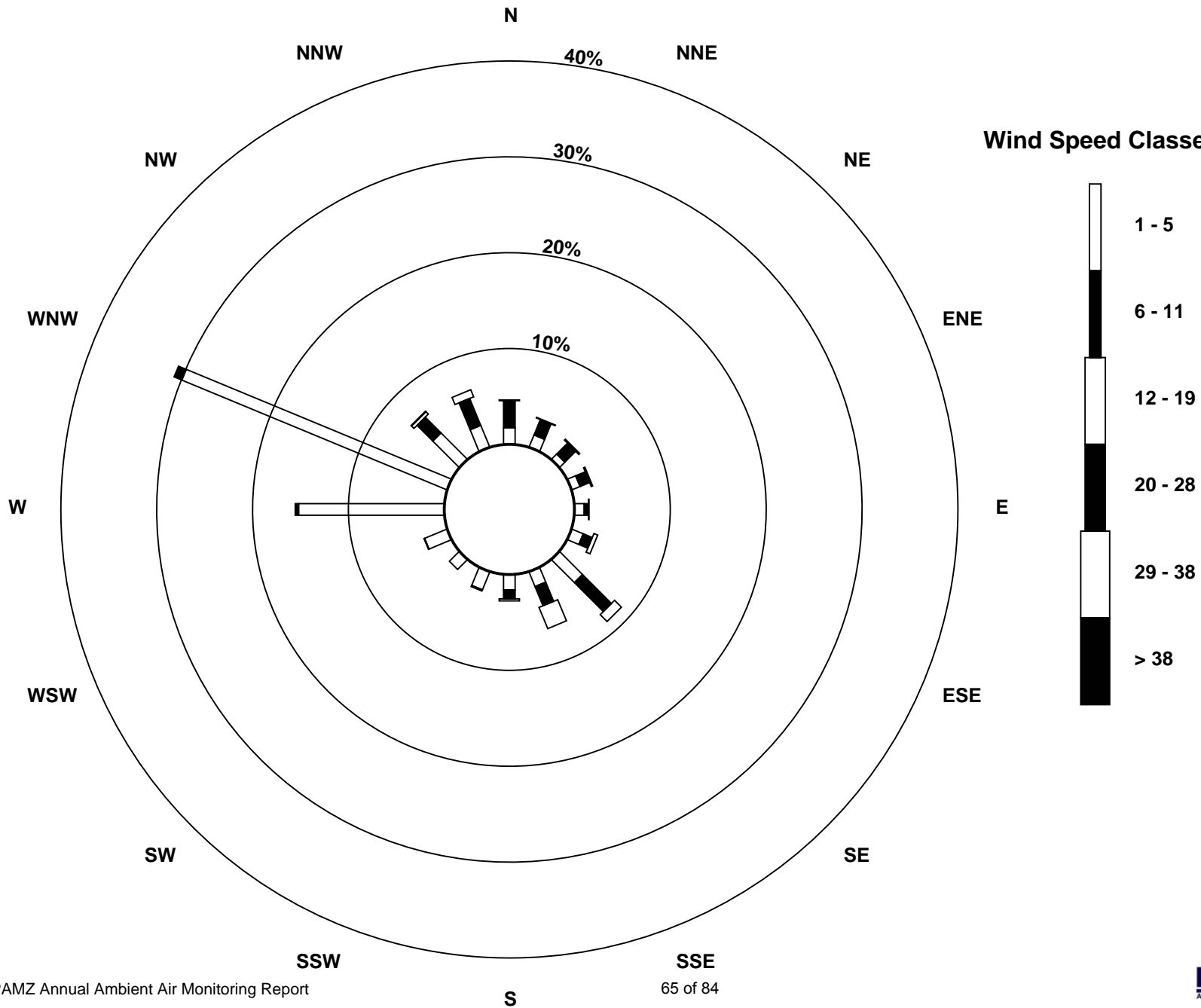
5.6 Parkland Airshed Management Zone – James River - Kyler Wind Speed and Wind Direction Frequency Table

James River - Kyler								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	64	1.74	2.82	0.07	0.00	0.00	0.00	4.63
NNE	44	1.37	1.74	0.07	0.00	0	0	3.18
NE	35	0.80	1.59	0.14	0.00	0	0	2.53
ENE	30	0.94	1.09	0.14	0	0	0	2.17
E	21	1.01	0.43	0	0	0	0	1.52
ESE	38	1.30	1.01	0	0	0	0	2.75
SE	120	3.40	4.27	1.01	0	0	0	8.68
SSE	86	1.66	2.17	2.39	0.00	0	0	6.22
S	38	1.59	0.94	0.22	0.00	0.00	0.00	2.75
SSW	30	2.03	0.14	0.00	0.00	0.00	0	2.17
SW	20	1.45	0.00	0.00	0.00	0.00	0	1.45
WSW	36	2.53	0.07	0.00	0.00	0.00	0	2.60
W	215	15.20	0.36	0.00	0.00	0.00	0	15.56
WNW	426	29.96	0.87	0.00	0	0	0	30.82
NW	92	3.91	2.32	0.36	0.07	0	0	6.66
NNW	87	2.46	3.04	0.80	0.00	0	0	6.30
Totals	1382	71.35	22.87	5.72	0.07	0.00	0.00	100.00

Wind Rose

Wind Speed (WS) (km/h)
James River - Kyler - 2010

Wind Speed Classes (km/h)



5.7 Parkland Airshed Management Zone – Louis Lake Wind Speed and Wind Direction Frequency Table

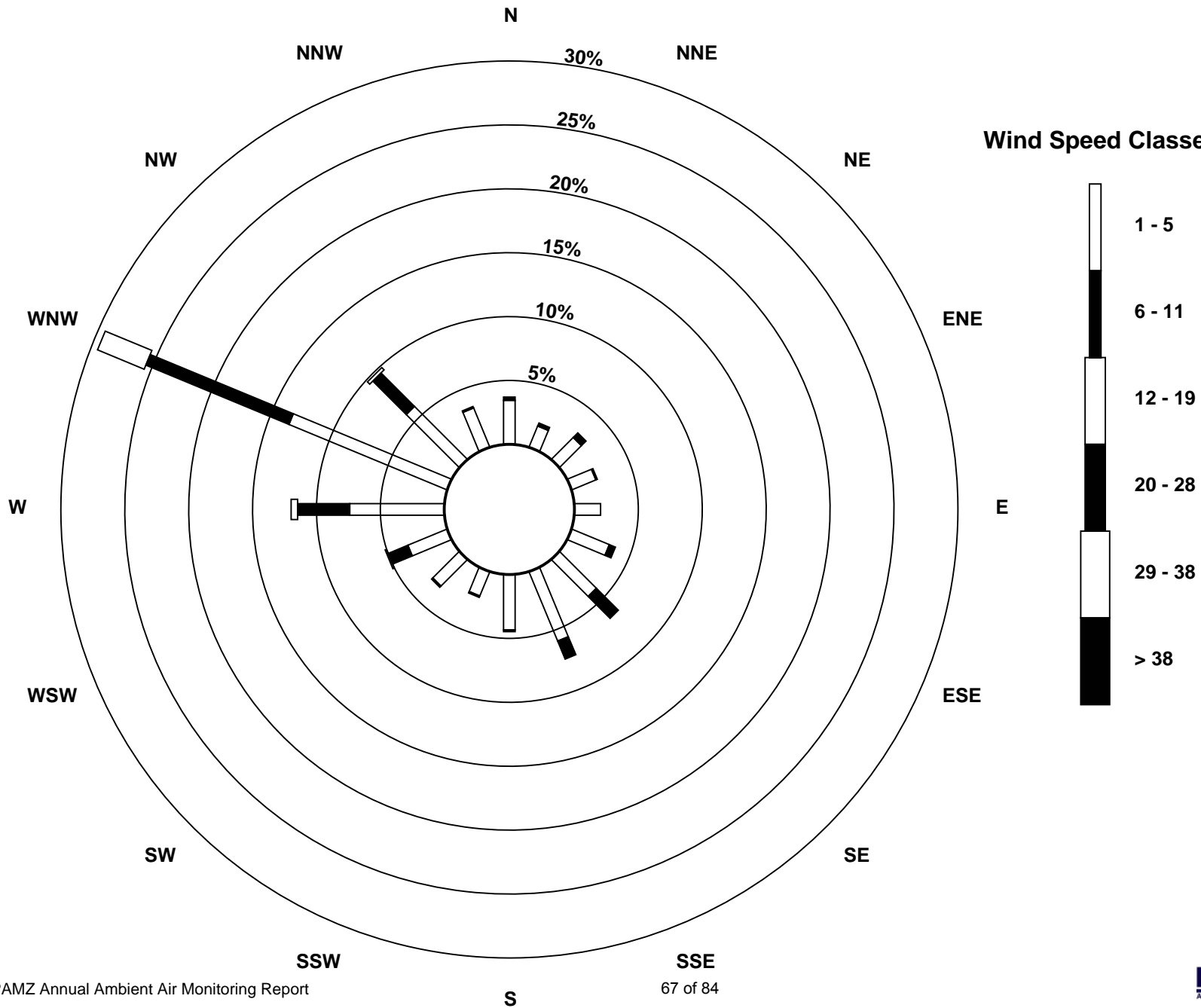
Louis Lake								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	29	3.44	0.26	0	0	0	0	3.7
NNE	16	1.79	0.26	0	0	0	0	2.04
NE	23	2.42	0.51	0	0	0	0	2.93
ENE	17	2.04	0.13	0	0	0	0	2.17
E	16	2.04	0	0	0	0	0	2.04
ESE	29	3.19	0.51	0	0	0	0	3.7
SE	51	4.08	2.42	0	0	0	0	6.51
SSE	58	5.87	1.53	0	0	0	0	7.4
S	35	4.34	0.13	0	0	0	0	4.46
SSW	17	2.04	0.13	0	0	0	0	2.17
SW	24	2.93	0.13	0	0	0	0	3.06
WSW	40	3.32	1.66	0.13	0	0	0	5.1
W	94	7.4	4.08	0.51	0	0	0	11.99
WNW	231	13.39	12.12	3.95	0	0	0	29.46
NW	77	5.87	3.7	0.26	0	0	0	9.82
NNW	27	3.32	0.13	0	0	0	0	3.44
Totals	784	67.47	27.68	4.85	0	0	0	100

Wind Rose

Wind Speed (WS) (km/h)

Louis Lake - 2010

Wind Speed Classes (km/h)



5.8 Parkland Airshed Management Zone – Mirror Wind Speed and Wind Direction Frequency Table

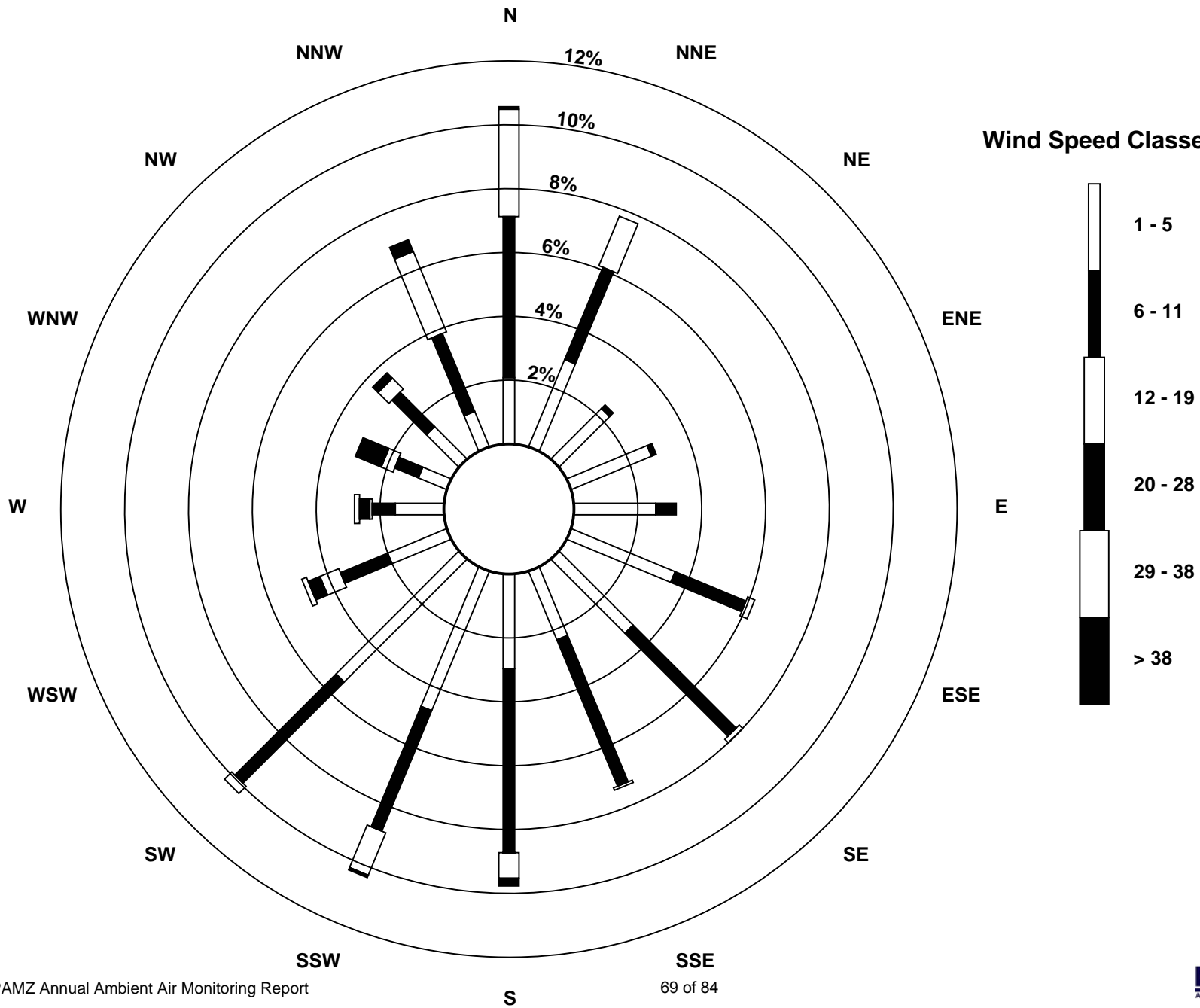
Mirror								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	132	2.08	5.04	3.36	0	0	0	10.57
NNE	97	2.96	3.12	2	0	0	0	7.77
NE	30	2.24	0.16	0	0	0	0	2.40
ENE	36	2.72	0.16	0	0	0	0	2.88
E	40	2.56	0.64	0.00	0	0	0	3.20
ESE	77	3.52	2.40	0.24	0	0	0	6.16
SE	100	3.28	4.56	0.16	0	0	0	8.01
SSE	92	2.32	4.96	0.08	0	0	0	7.37
S	122	2.96	5.76	0.80	0	0	0	9.77
SSW	129	4.72	4.08	1.44	0	0	0	10.33
SW	128	5.44	4.48	0	0	0	0	10.25
WSW	60	2.00	1.60	1	0	0	0	4.80
W	35	1.52	0.72	0.08	0.32	0	0	2.80
WNW	38	0.96	0.80	0.40	0.88	0.00	0	3.04
NW	46	1.44	1.52	0.48	0.24	0	0	3.68
NNW	87	1.20	2.64	2.72	0.40	0	0	6.97
Totals	1249	41.95	42.67	12.41	2.64	0.32	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Mirror - 2010

Wind Speed Classes (km/h)



5.9 Parkland Airshed Management Zone – Nevis Wind Speed and Wind Direction Frequency Table

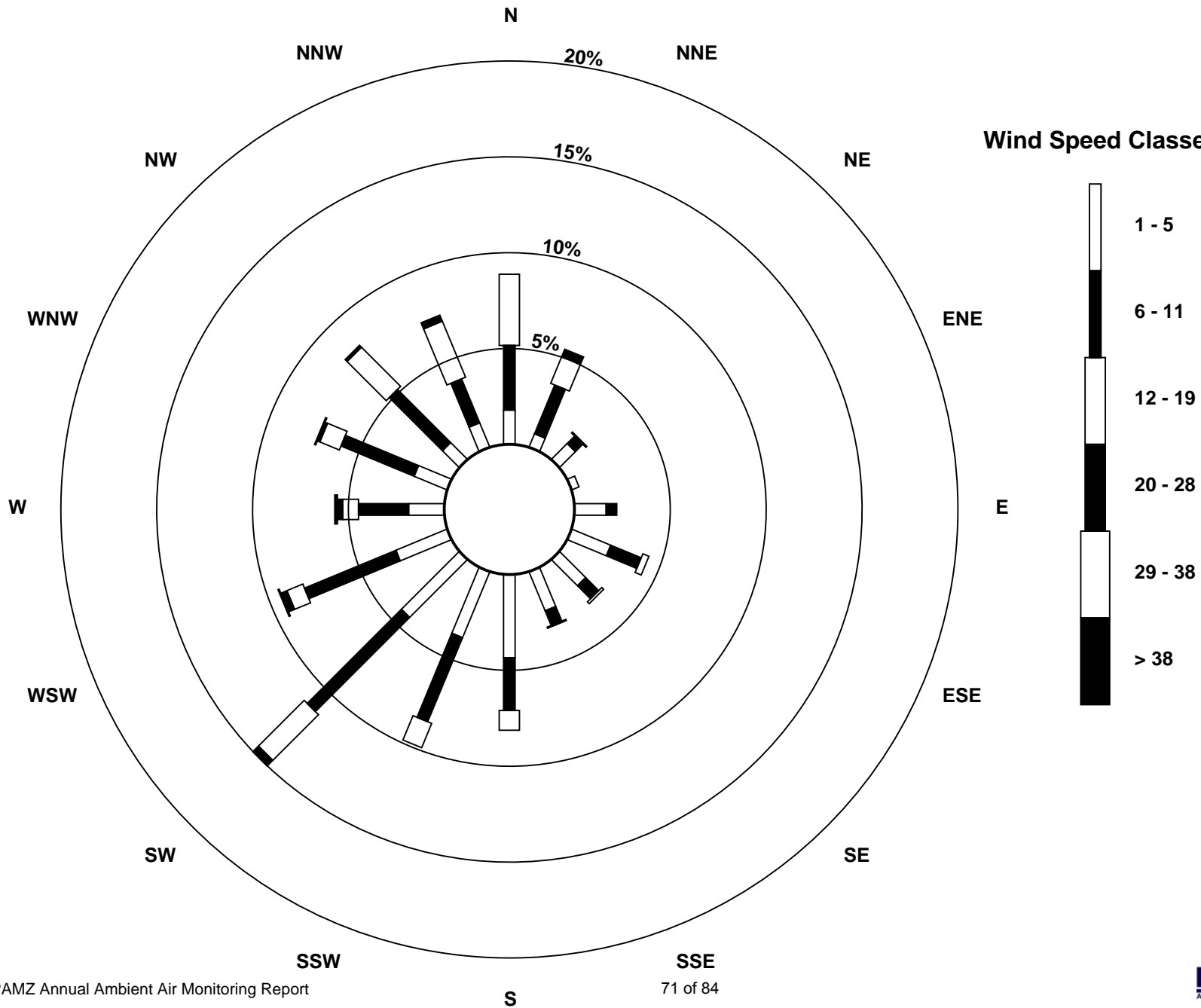
Nevis								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	129	1.79	3.37	4	0	0	0	8.88
NNE	79	0.76	2.75	2	0	0	0	5.44
NE	26	1.17	0.55	0	0	0	0	1.79
ENE	6	0.41	0.00	0	0	0	0	0.41
E	32	1.65	0.55	0.00	0	0	0	2.20
ESE	62	2.20	1.72	0	0	0	0	4.27
SE	44	1.93	0.96	0.14	0	0	0	3.03
SSE	45	2.20	0.83	0.07	0	0	0	3.10
S	118	4.34	2.75	1	0	0	0	8.12
SSW	143	3.72	4.75	1	0	0	0	9.84
SW	218	4.27	7	3	0	0	0	15.00
WSW	136	2.89	5.16	1	0	0	0	9.36
W	83	1.86	2.62	1	0	0	0	5.71
WNW	106	1.86	4.13	1.10	0	0	0	7.30
NW	119	1.24	3.92	2.89	0	0	0	8.19
NNW	107	1.38	2.48	3.17	0	0	0	7.36
Totals	1453	33.65	43.50	20.51	2	0	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Nevis - 2010

Wind Speed Classes (km/h)



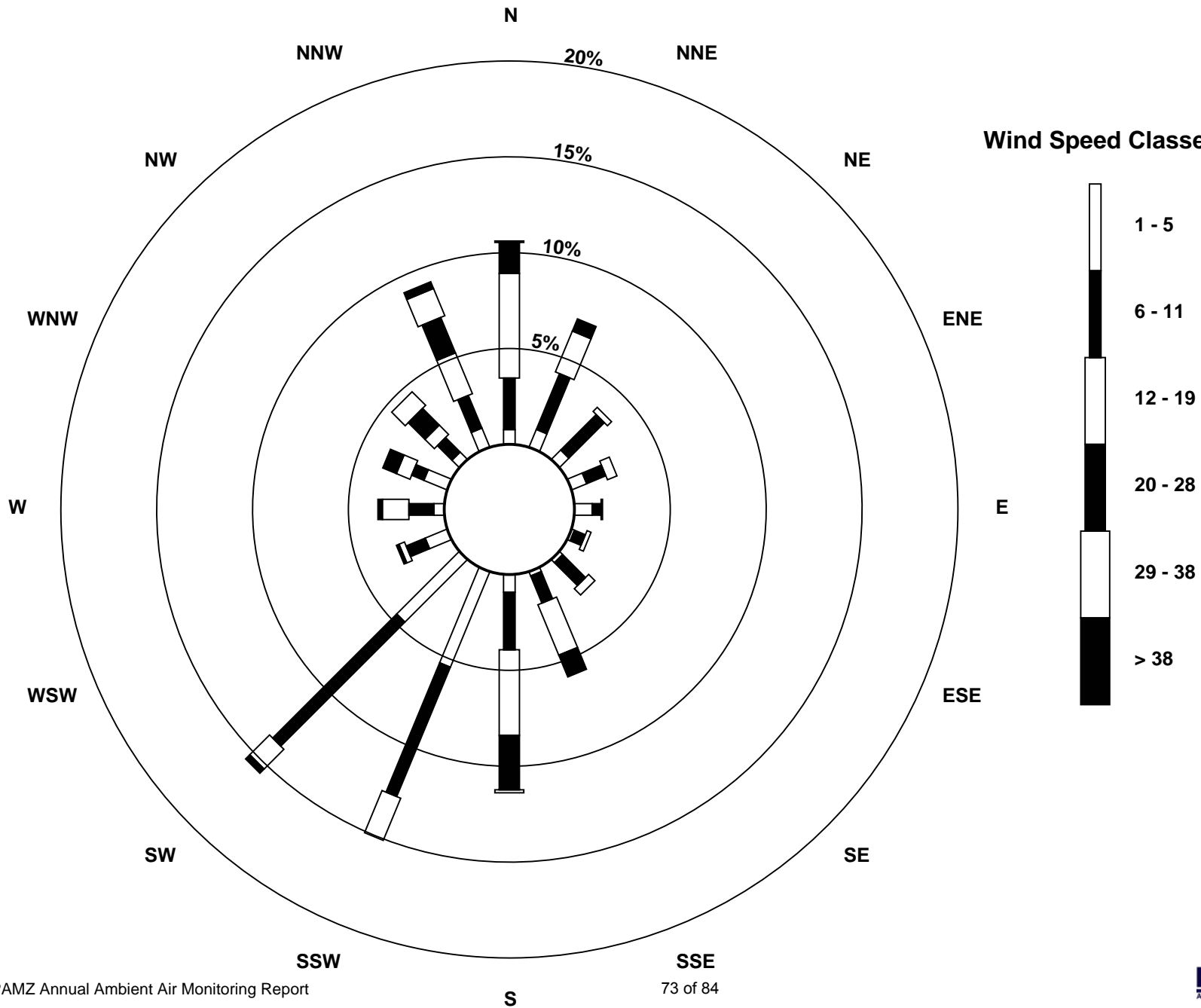
5.10 Parkland Airshed Management Zone – Red Deer - Edgar Industrial Park 2 Wind Speed and Wind Direction Frequency Table

Red Deer Edgar Industrial Park 2								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	138	0.77	2.69	5.46	2	0	0	10.62
NNE	93	1.00	3.15	2	1	0	0	7.15
NE	47	0.69	2.62	0.31	0	0	0	3.62
ENE	32	0.85	1.08	0.54	0	0	0	2.46
E	19	0.92	0.46	0.08	0	0	0	1.46
ESE	13	0.15	0.62	0	0	0	0	1.00
SE	31	0.23	1.69	0	0	0	0	2.38
SSE	76	0.23	1.54	3	1	0	0	5.85
S	148	0.92	3.00	4	3	0	0	11.38
SSW	196	5.38	7.31	2.38	0	0	0	15.08
SW	202	4.62	9.15	1.46	0.31	0	0	15.54
WSW	36	1.23	1.08	0.31	0.15	0	0	2.77
W	45	0.54	1.31	1.38	0.23	0	0	3.46
WNW	46	1.31	0.69	0.77	0.77	0	0	3.54
NW	59	0.54	1.08	0.69	1.23	1	0	4.54
NNW	119	1.08	1.85	2.31	2	2	0	9.15
Totals	1300	20.46	39.31	26.00	11.08	3	0	100.00

Wind Rose

Wind Speed (WS) (km/h)
Red Deer - Edgar Industrial Park 2 - 2010

Wind Speed Classes (km/h)



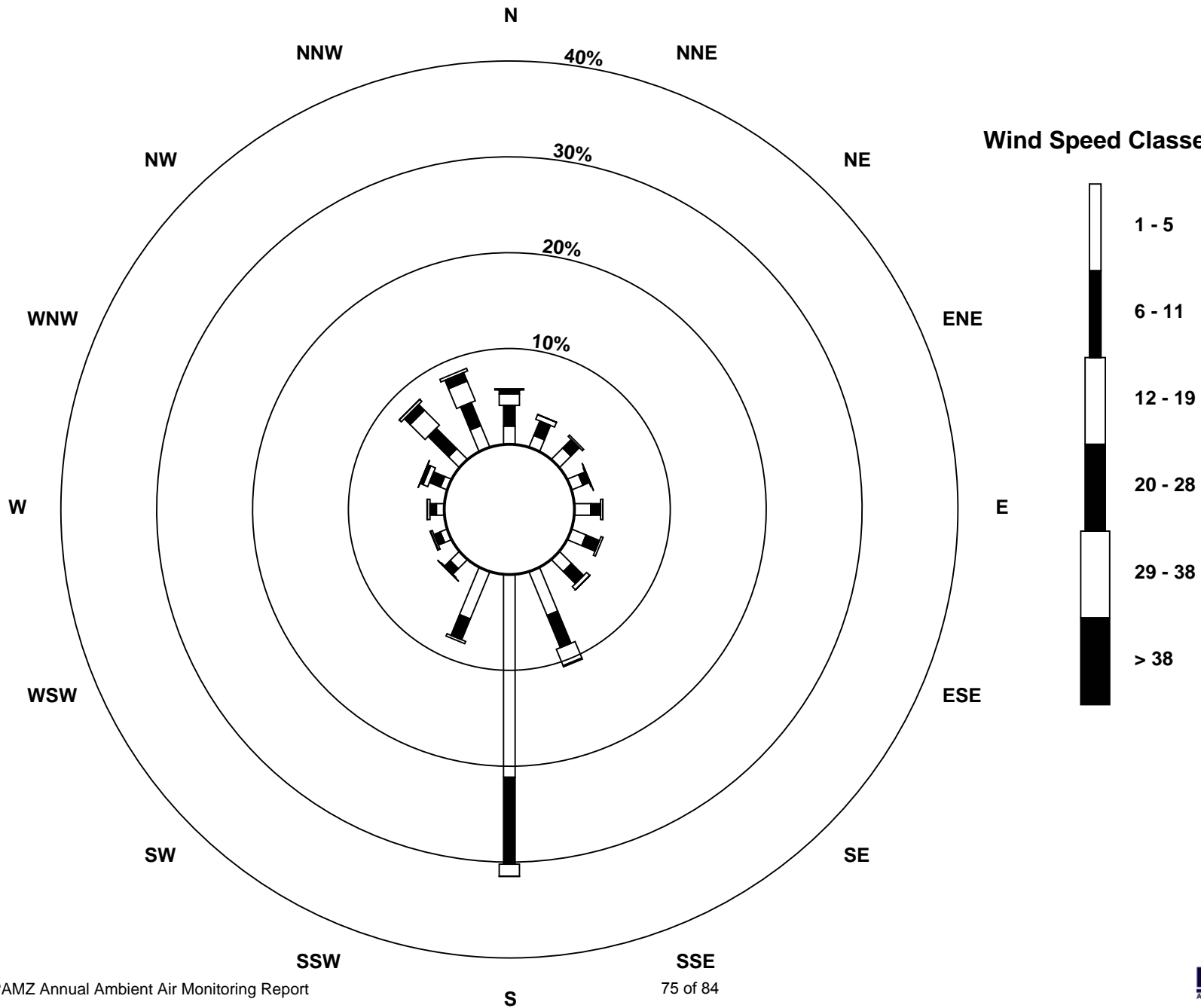
5.11 Parkland Airshed Management Zone – Red Deer Riverside Wind Speed and Wind Direction Frequency Table

Red Deer Riverside								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	477	1.91	2.17	1.19	0.41	0.12	0	5.80
NNE	289	1.33	1.63	0.52	0.04	0.00	0	3.52
NE	257	1.68	1.25	0.19	0	0.00	0	3.13
ENE	171	1.27	0.71	0.10	0	0	0	2.08
E	244	1.69	1.03	0.23	0	0	0	2.97
ESE	276	1.63	1.50	0.23	0	0	0	3.36
SE	330	1.78	1.78	0.45	0	0	0	4.01
SSE	867	4.93	3.64	1.85	0.13	0	0	10.55
S	2590	21.15	9.06	1.27	0.02	0	0	31.50
SSW	652	5.33	2.35	0.26	0.00	0	0	7.93
SW	185	1.35	0.80	0.06	0.02	0	0	2.25
WSW	143	0.77	0.71	0.19	0.07	0	0	1.74
W	148	0.83	0.66	0.28	0.04	0	0	1.80
WNW	237	0.75	1.24	0.54	0.34	0	0	2.88
NW	654	1.58	3.02	2.20	0.84	0.30	0.01	7.96
NNW	701	2.43	2.62	2.23	0.96	0.29	0.00	8.53
Totals	8221	50.40	34.14	11.79	2.91	0.74	0.02	100.00

Wind Rose

Wind Speed (WS) (km/h)
Red Deer Riverside - 2010

Wind Speed Classes (km/h)



5.12 Parkland Airshed Management Zone – Trochu Wind Speed and Wind Direction Frequency Table

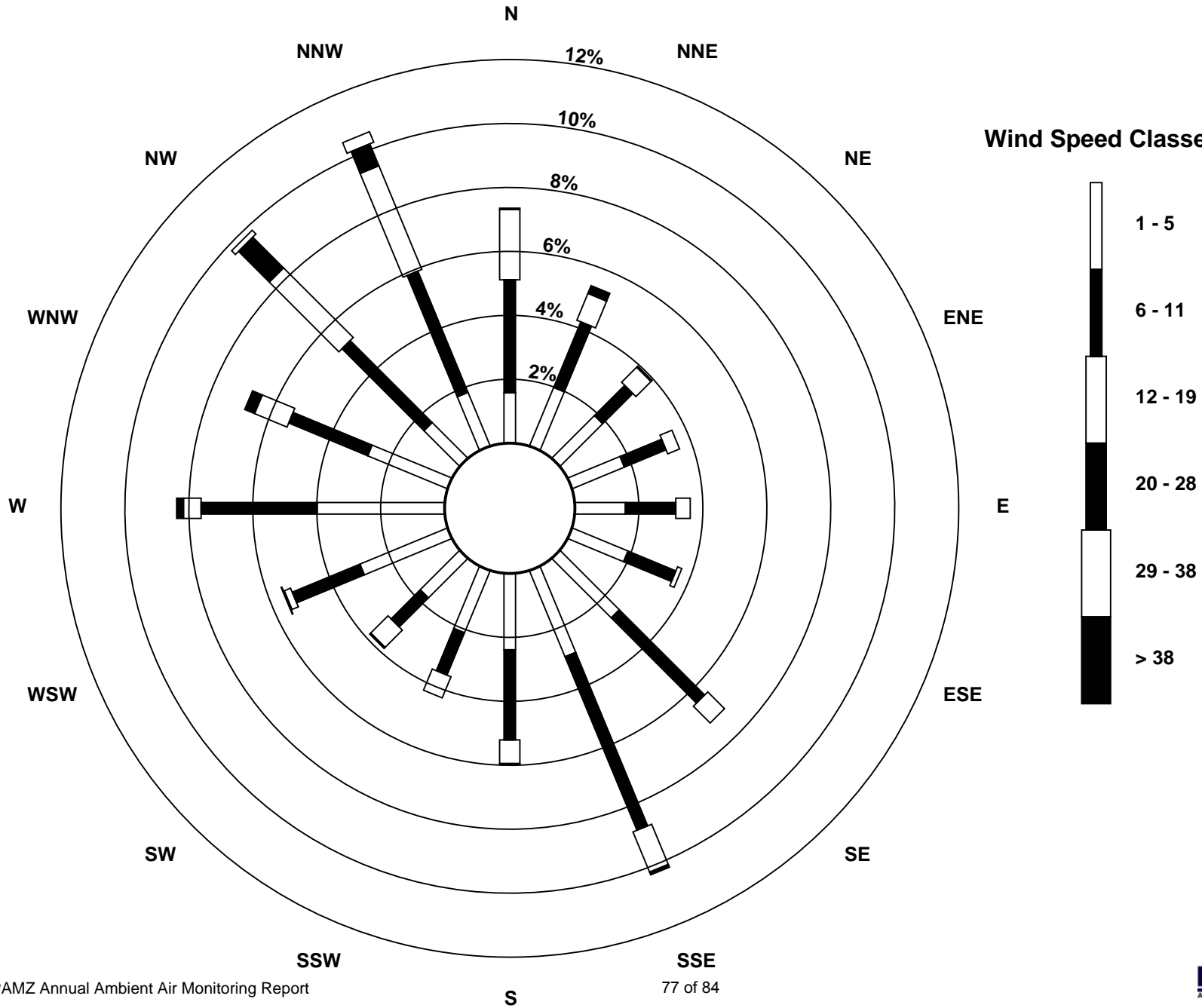
Trochu								2010
Direction	# of Readings	% of wind speed (km/hr)						Totals
		1 - 5	6 - 11	12 - 19	20 - 28	29 - 38	> 38	
N	308	1.58	3.53	2.20	0	0	0	7.35
NNE	225	1.98	2.22	0.91	0	0	0	5.37
NE	165	1.89	1.34	0.67	0	0	0	3.94
ENE	150	1.77	1.41	0.41	0	0	0	3.58
E	151	1.58	1.58	0.45	0	0	0	3.61
ESE	153	1.89	1.62	0.14	0	0	0	3.65
SE	299	2.63	3.77	0.74	0	0	0	7.14
SSE	429	2.91	5.87	1.36	0	0	0	10.24
S	250	2.39	2.82	0.74	0	0	0	5.97
SSW	178	2.10	1.43	0.72	0	0	0	4.25
SW	161	1.74	1.29	0.76	0	0	0	3.84
WSW	231	2.96	2.29	0.21	0	0	0	5.52
W	351	3.99	3.63	0.55	0	0	0	8.38
WNW	285	2.70	2.67	1.10	0.33	0	0	6.81
NW	411	1.58	3.63	3.08	1.36	0	0	9.81
NNW	441	1.81	4.11	3.51	1	0	0	10.53
Totals	4188	35.48	43.22	17.55	3.20	1	0	100.00

Wind Rose

Wind Speed (WS) (km/h)

Trochu - 2010

Wind Speed Classes (km/h)



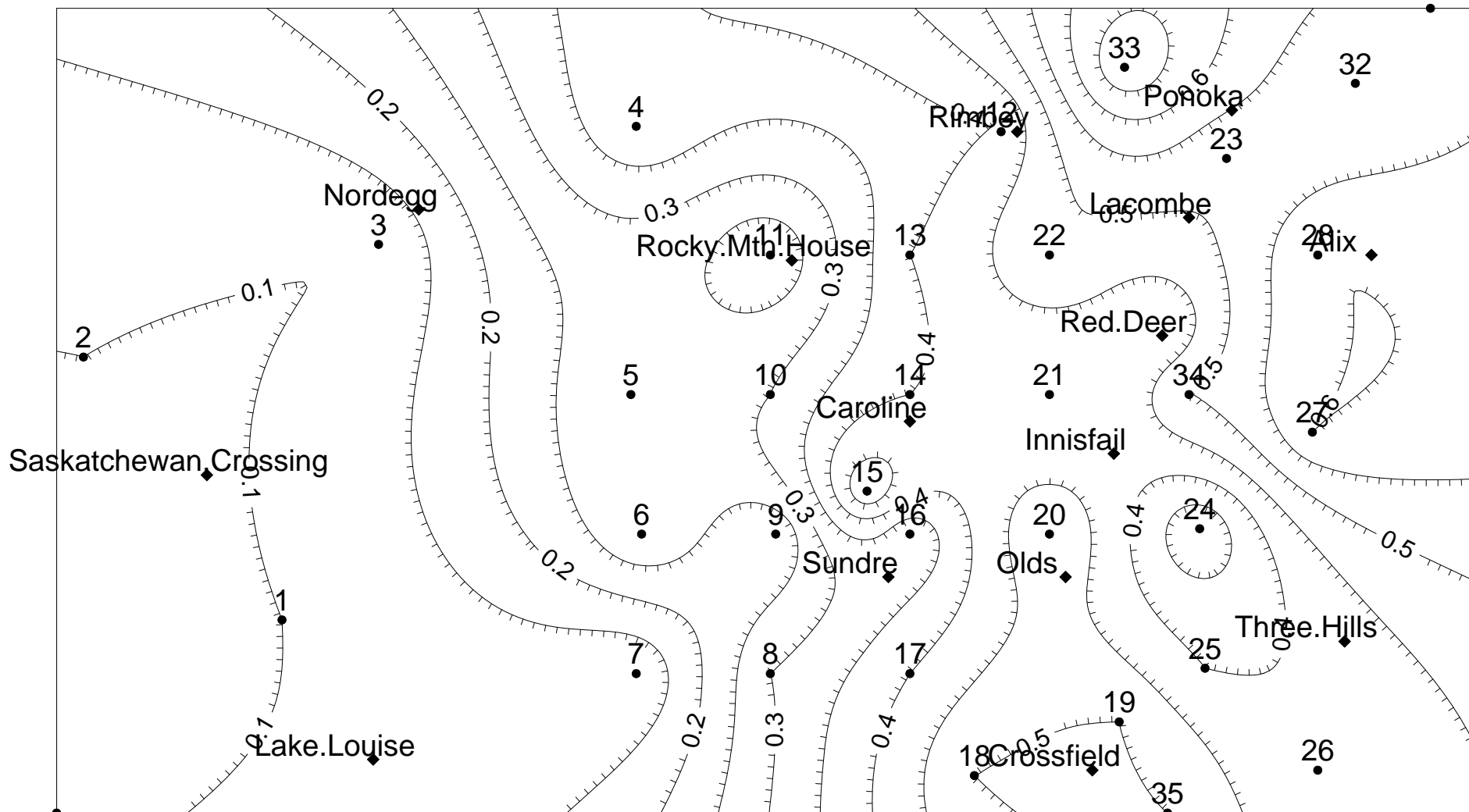
6.

Passive Monitoring Program

PAMZ Annual Air Quality Monitoring Summary - 2010 SO₂ Passive Monitoring Network

Station	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Station Average
1 Bow Summit	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1
2 Parker Ridge	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.1
3 Bighorn	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.1	0.1
4 Sunchild	0.5	0.7	0.3	0.5	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.6	0.4
5 Baseline Mountain	0.4	0.3	0.2	0.1	0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.1	0.3
6 Limestone Mountain	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.3	1.6	0.4	0.1	0.3
7 Panther River	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.1	0.1
8 Fallen Timber	0.4	0.3	0.2	0.0	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3
9 Bearberry	0.4	0.4	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
10 Ricinus	0.4	0.3	0.3	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.4	0.5	0.3
11 Twin Lakes	0.4	0.5	0.3	0.2	NA	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.2
12 Rimbey	0.9	0.8	0.4	0.1	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.7	0.4
13 Leslieville	0.7	0.6	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.8	0.4
14 Raven River	0.6	0.7	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.6	0.4
15 Caroline	0.8	0.7	0.5	0.3	0.4	0.3	0.4	0.4	0.5	0.7	0.6	0.7	0.5
16 Sundre	0.5	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.3
17 South Elkton	0.6	0.6	0.3	0.5	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4
18 Bottrel	0.8	0.9	0.3	0.3	0.3	0.2	0.2	0.3	0.4	0.5	0.6	0.8	0.5
19 Crossfield-Carstairs	0.9	0.7	0.5	0.3	0.3	0.7	0.3	0.4	0.4	0.4	0.6	1.0	0.5
20 Netook-Olds	0.8	0.6	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.7	1.0	0.5
21 Markerville	0.6	0.6	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.5	0.4
22 Sylvan Lake	0.9	0.8	0.4	0.3	0.2	0.3	0.4	0.2	0.3	0.5	0.5	0.9	0.5
23 Morningside	1.1	0.6	0.4	0.2	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.8	0.5
24 Mayton	0.8	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.3
25 Sunnyslope	0.7	0.4	0.2	0.0	0.2	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.4
26 Grainger	0.9	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.5	0.6	0.4
27 Elnora	1.3	0.8	0.3	0.7	0.4	0.3	0.4	0.4	0.3	0.4	0.7	0.9	0.6
28 Alix	1.5	1.0	0.6	0.2	0.3	0.4	0.3	0.4	0.4	0.5	0.6	1.3	0.6
32 Samson	1.2	0.8	0.5	0.3	0.3	0.6	0.5	0.4	0.3	0.3	0.4	0.9	0.5
33 Ferrybank	1.6	1.2	0.6	0.2	0.2	0.5	0.3	0.4	0.5	0.6	0.7	1.3	0.7
34 Pakkwaw	1.0	0.7	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.6	0.8	0.5
35 Kersey	1.0	0.5	0.3	0.2	0.3	0.3	0.5	0.3	0.3	0.4	0.7	0.9	0.5
65 Red Deer	0.7	0.5	0.3	0.1	0.3	0.7	0.3	0.3	0.3	0.4	0.5	0.6	0.4
Monthly Average	0.7	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.4
Monthly Maximum	1.6	1.2	0.6	0.7	0.4	0.7	0.5	0.4	0.5	1.6	0.7	1.3	
Monthly Minimum	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	

* All Values Expressed in PPB

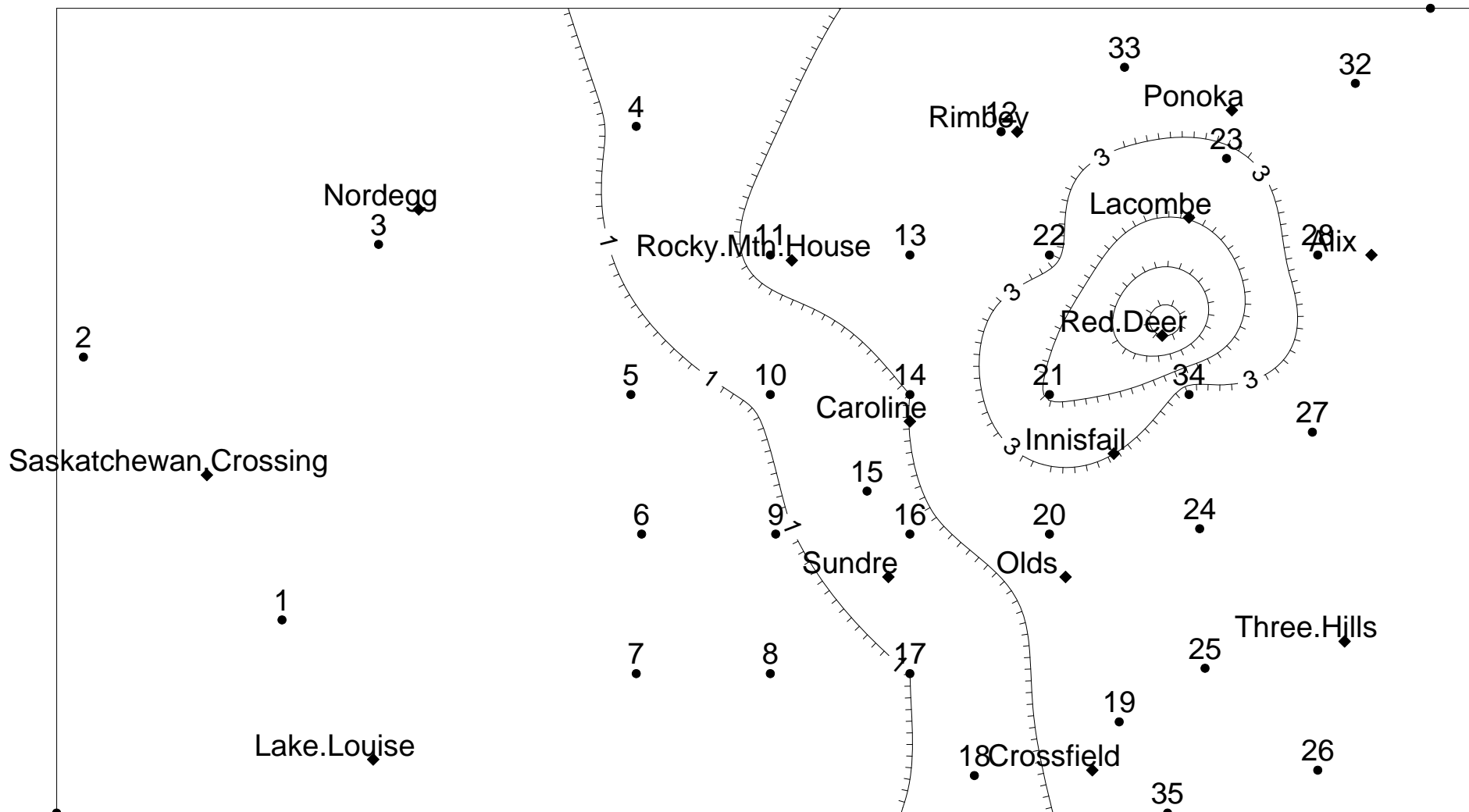


PAMZ Passive SO₂ Monitoring Network - 2010 Station Averages (ppb)

PAMZ Annual Air Quality Monitoring Summary - 2010 NO₂ Passive Monitoring Network

Station	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Station Average
1 Bow Summit	0.6	0.6	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.5	0.3
2 Parker Ridge	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.1
3 Bighorn	0.8	0.4	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.8	0.3	0.3	0.3
4 Sunchild	2.4	1.9	0.5	0.3	0.3	0.4	0.3	0.5	1.1	0.6	0.8	4.1	1.1
5 Baseline Mountain	1.5	0.4	0.3	0.5	0.4	0.4	0.4	0.5	0.6	0.5	0.7	1.0	0.6
6 Limestone Mountain	0.9	0.2	0.0	0.0	0.1	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.2
7 Panther River	1.2	0.3	0.0	0.1	0.1	0.2	0.2	0.5	0.6	0.2	0.3	0.5	0.3
8 Fallen Timber	1.5	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.7	0.9	0.5
9 Bearberry	2.5	1.4	0.4	0.4	0.4	0.5	0.4	0.4	0.8	0.9	1.1	1.7	0.9
10 Ricinus	2.8	2.2	1.0	0.5	0.5	0.3	0.5	0.3	0.5	0.8	1.3	2.9	1.1
11 Twin Lakes	5.4	4.1	1.7	0.7	0.6	0.6	0.7	0.7	1.4	2.2	2.3	7.3	2.3
12 Rimbey	6.5	4.7	2.5	1.8	0.9	1.0	1.1	0.9	1.3	2.6	3.2	7.6	2.8
13 Leslieville	4.8	3.9	2.5	0.9	1.0	1.0	0.9	0.8	1.3	2.3	2.5	8.2	2.5
14 Raven River	3.9	3.5	2.1	0.6	0.6	0.6	0.7	0.7	0.9	1.5	2.0	7.1	2.0
15 Caroline	3.7	3.2	1.4	0.6	0.6	0.6	0.6	0.7	1.1	2.3	1.6	3.2	1.6
16 Sundre	4.7	3.9	1.1	0.8	0.7	0.9	0.6	0.5	0.7	1.3	1.9	4.3	1.8
17 South Elkton	2.6	1.4	0.6	0.5	0.4	1.1	0.5	0.4	0.6	1.0	1.1	1.7	1.0
18 Bottrel	3.3	2.1	0.9	0.5	0.6	0.5	0.5	0.5	1.0	1.3	1.7	2.3	1.3
19 Crossfield-Carstairs	5.5	4.8	2.4	1.3	1.3	1.5	1.3	1.4	1.8	2.2	4.0	7.8	2.9
20 Netook-Olds	5.0	3.6	1.5	0.9	0.8	1.0	0.9	0.8	1.1	2.2	3.2	6.2	2.3
21 Markerville	9.8	6.3	3.5	1.0	2.6	1.7	2.0	1.6	3.0	3.9	4.1	9.2	4.1
22 Sylvan Lake	4.8	4.7	2.0	1.2	1.1	1.5	1.3	1.1	1.8	2.5	2.7	7.8	2.7
23 Morningside	7.5	4.7	2.1	1.1	1.0	0.8	1.2	1.1	2.0	3.2	4.3	8.1	3.1
24 Mayton	4.3	3.3	1.5	0.9	1.0	0.5	0.8	0.7	0.8	2.0	3.0	5.7	2.0
25 Sunnyslope	5.3	3.7	1.8	1.1	1.0	1.1	1.0	0.8	1.2	2.0	2.9	8.5	2.5
26 Grainger	5.0	3.3	1.6	NA	1.2	1.3	1.3	1.1	1.7	2.7	3.7	8.6	2.9
27 Elnora	5.3	2.7	1.5	1.1	0.9	1.1	1.2	1.1	1.2	2.5	3.5	7.3	2.5
28 Alix	4.2	3.3	1.8	1.0	1.1	1.4	1.3	1.3	1.5	2.3	3.1	6.2	2.4
32 Samson	5.8	4.2	1.5	1.1	1.5	1.4	1.3	1.0	1.1	2.2	3.3	6.8	2.6
33 Ferrybank	4.8	3.6	1.4	0.8	0.9	1.1	1.1	1.1	1.4	2.6	3.4	5.8	2.3
34 Pakkwaw	4.2	4.2	2.3	1.1	1.0	1.2	1.1	1.0	1.6	2.3	3.2	7.4	2.5
35 Kersey	5.4	3.7	2.5	0.9	1.2	1.0	1.1	0.9	1.5	1.9	3.3	7.7	2.6
65 Red Deer	17.1	9.0	6.1	2.4	2.2	2.2	2.1	2.0	3.5	6.9	9.1	16.6	6.6
Monthly Average	4.3	3.0	1.5	0.8	0.8	0.8	0.8	0.8	1.2	1.8	2.4	5.3	1.96
Monthly Maximum	17.1	9.0	6.1	2.4	2.6	2.2	2.1	2.0	3.5	6.9	9.1	16.6	
Monthly Minimum	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.0	

* All Values Expressed in PPB

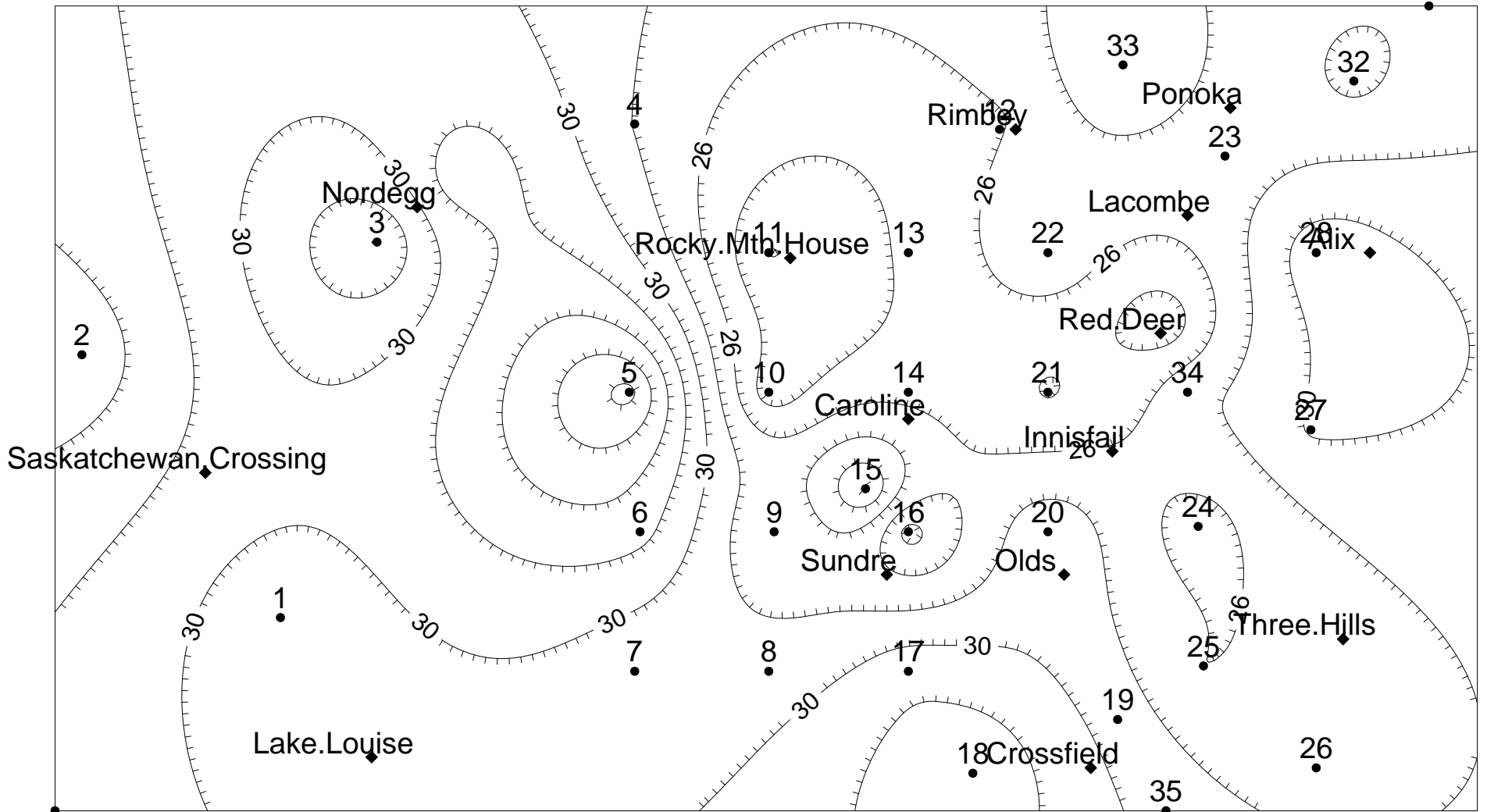


PAMZ Passive NO₂ Monitoring Network - 2010 Station Averages (ppb)

PAMZ Annual Air Quality Monitoring Summary - 2010
O₃ Passive Monitoring Network

Station	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Station Average
1 Bow Summit	32.9	32.6	38.7	32.2	33.4	28.7	24.0	21.4	18.7	23.0	22.2	35.2	28.6
2 Parker Ridge	47.4	44.1	47.6	32.8	38.3	32.6	25.6	23.6	24.1	34.0	31.5	43.1	35.4
3 Bighorn	31.3	31.6	34.9	29.4	28.6	23.9	24.5	17.5	14.2	18.4	23.3	32.3	25.8
4 Sunchild	27.6	31.5	37.7	33.5	35.7	27.7	27.8	22.7	18.1	22.6	24.3	25.7	27.9
5 Baseline Mountain	38.8	39.8	48.1	47.3	47.1	37.1	31.8	32.0	23.9	39.8	38.7	40.1	38.7
6 Limestone Mountain	37.9	38.8	40.4	36.6	33.3	30.7	30.7	25.2	22.7	30.8	26.1	39.3	32.7
7 Panther River	33.5	35.0	37.2	31.8	28.3	24.4	26.7	20.1	16.6	21.8	25.5	41.0	28.5
8 Fallen Timber	34.5	35.1	33.2	36.6	32.2	26.9	29.6	18.4	19.2	24.2	24.7	32.7	28.9
9 Bearberry	28.3	32.9	39.4	25.8	27.5	25.7	23.3	18.5	14.4	19.6	21.3	33.5	25.9
10 Ricinus	23.1	25.2	30.9	28.9	27.8	24.6	21.7	19.0	14.2	16.8	18.0	24.4	22.9
11 Twin Lakes	20.0	29.0	33.6	29.3	27.9	23.8	21.3	16.5	15.4	14.9	12.4	18.5	21.9
12 Rimbeey	24.0	34.7	35.0	31.8	31.8	32.9	23.5	19.8	16.9	16.7	19.0	23.2	25.8
13 Leslieville	24.9	35.0	35.8	29.9	30.1	25.8	21.5	18.0	15.5	15.6	16.3	24.1	24.4
14 Raven River	23.4	35.0	31.8	30.3	26.8	29.5	24.5	20.9	20.5	16.5	20.0	27.2	25.5
15 Caroline	31.9	35.2	38.3	37.0	33.6	35.9	34.8	30.0	26.0	24.4	26.5	34.8	32.4
16 Sundre	22.3	26.4	32.3	27.8	38.4	24.7	20.6	16.4	14.8	15.2	15.8	22.4	23.1
17 South Elkton	34.6	36.7	34.5	37.9	29.7	30.4	31.5	23.3	22.8	25.3	27.6	42.1	31.4
18 Bottrel	35.1	35.9	38.9	40.5	34.2	35.6	35.0	29.7	25.9	26.9	28.3	38.4	33.7
19 Crossfield-Carstairs	28.1	36.8	39.9	36.3	34.8	30.6	25.8	22.8	21.0	21.0	22.2	29.3	29.1
20 Netook-Olds	26.3	40.7	33.7	32.7	36.0	35.7	27.4	23.3	22.1	24.2	22.2	32.4	29.7
21 Markerville	21.9	35.2	37.1	26.0	33.5	30.1	22.2	17.0	15.3	12.7	13.4	20.6	23.8
22 Sylvan Lake	26.5	33.2	37.7	33.7	32.7	32.7	27.9	23.6	19.0	21.8	19.4	26.6	27.9
23 Morningside	26.4	34.1	35.1	32.3	33.7	33.9	24.3	20.3	19.2	19.1	18.9	25.1	26.9
24 Mayton	26.5	37.9	34.4	28.9	29.6	34.6	22.7	17.7	17.0	13.6	15.2	21.6	25.0
25 Sunnyslope	26.8	38.5	35.8	31.4	29.6	30.3	22.9	16.7	17.8	17.0	20.6	24.4	26.0
26 Grainger	29.4	42.6	40.1	30.8	30.4	28.1	23.2	18.1	19.7	18.9	18.9	27.4	27.3
27 Elnora	32.0	45.2	40.6	32.5	34.5	30.7	31.5	22.3	22.5	19.5	21.4	29.3	30.2
28 Alix	31.0	43.8	38.3	35.3	36.2	37.6	29.3	22.2	25.1	21.1	22.6	33.6	31.3
32 Samson	25.8	39.4	40.4	30.0	34.0	30.1	22.1	15.9	16.7	15.2	16.4	19.9	25.5
33 Ferrybank	32.4	38.0	40.5	33.2	32.8	30.7	25.6	23.7	23.0	26.8	21.5	29.1	29.8
34 Pakkwaw	29.1	37.4	35.2	32.9	36.3	31.5	25.6	19.7	18.3	18.2	20.3	26.3	27.6
35 Kersey	28.9	37.1	33.8	32.1	35.7	31.5	27.1	23.1	21.3	21.7	24.9	31.4	29.1
44 Harlech	36.7	38.9	40.7	36.2	34.5	34.1	32.4	27.2	25.9	26.5	28.5	38.0	33.3
65 Red Deer	15.7	24.6	27.1	27.9	35.0	29.5	29.0	21.8	17.8	14.6	12.2	14.8	22.5
Monthly Average	29.3	35.8	37.0	32.7	33.1	30.4	26.4	21.4	19.6	21.1	21.8	29.6	28.2
Monthly Maximum	47.4	45.2	48.1	47.3	47.1	37.6	35.0	32.0	26.0	39.8	38.7	43.1	
Monthly Minimum	15.7	24.6	27.1	25.8	26.8	23.8	20.6	15.9	14.2	12.7	12.2	14.8	

* All Values Expressed in PPB



PAMZ Passive O3 Monitoring Network - 2010 Station Averages (ppb)