

Peace Airshed Zone Association Ambient Air Monitoring Network Summary

Ambient Air Quality Monitoring Program

Monthly Report

June 2021

July 31, 2021

Alberta Environment and Parks 11th Floor, Oxbridge Place 9820-106 Street Edmonton Alberta T5K 2J6

Subject: Peace Airshed Zone Association (PAZA) June 2021 Ambient Air Quality Monitoring Report

Please find enclosed the PAZA Ambient Air Quality Monitoring Network Report for the month of June 2021.

The representative of the Person Responsible for this monitoring program is:

Mandeep Dhaliwal, B.Sc., P.Chem. Program Manager Box 21135 Grande Prairie, Alberta T8V 6W7 Email: Mandeep@paza.ca Phone: 403-608-9697

This report was prepared by Matrix Solutions Inc. and reviewed by Mandeep Dhaliwal.

PAZA has retained the services of WSP Canada Inc. to conduct continuous ambient monitoring and Matrix Solutions Inc. to provide data validation and reporting.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the facility Operating Approvals listed in Table A

The monthly summary report includes the operational summaries and hourly continuous monitoring and monthly passive results

Continuous Monitoring:

Seven (7) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, Donnelly and Wembley-Portable. Detailed Summaries are included in the report

Calibration and Data Submission:

Monthly report, hourly data and calibration reports for June 2021 were submitted to the ETS data system.

Company	Facility	LSD	EPEA Approval No.	
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	262479-00-00	
Alberta Power (2000) Ltd. (an ATCO company)	Sturgeon	SW-06-069-21-W5	10283-02-02	
ATCO Power Canada	Poplar Hill	11-19-073-08-W6	67774-01-01	
ATCO Power Canada	Valleyview	SW-06-069-21-W5	147709-01-01	
	Pouce Coupe	03-03-081-13-W6	247673-00-00	
AltaGas Ltd.	Ante Creek	02-26-068-25-W5	266694-00-00	
	Gordondale	02-26-068-25-W5	287474-00-00	
Apache Canada Ltd.	House Mountain	01-08-070-10-W5	10137-02-02	
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	252529-00-00	
	Bonanza	11-25-081-11-W6	0000029-01-00	
	Progress/Gordondale	01-01-077-10-W6	00010036-02-00	
Canadian Natural	Gold Creek	13-26-067-05-W6	00010446-02-00	
Resources Limited	Teepee Creek	SE-2-074-04-W6	00001635-02-00	
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00	
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	152645-01-00	
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00	
0/ 1	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00	
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00	
Devon Canada	North Normanville	03-36-079-23-W5	00047455-01-00	
	West Culp	05-34-078-25-W6	00136284-00-00	
	Cecil	08-15-084-08-W6	00010032-02-00	
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00	
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	1464-02-03	
Exshaw Oil Corporation	Spirit River	03-10-077-07-W6	344521-00-00	
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	00238762-00-00	
Inception Exploration Ltd.	Gold Creek	03-26-069-05-W6	00335317-00-02	
	Eaglesham	01-25-076-01-W6	00241532-00-00	
	Kakut	14-12-075-03-W6	00248469-00-00	
Long Run Exploration	Donnelly	06-01-077-21-W5	00000087-02-00	
	Puskwaskau	03-26-074-01-W6	00017524-01-00	
Longview Oil Corp.	Sunset House	06-22-070-20-W5	138884-01-00	
	Tangent	13-29-080-23-W5	00001746-02-00	
Penn West Petroleum Ltd.	Pouce Coupe	16-07-078-11-W6	00000614-01-00	
D	Rycroft	08-25-077-06-W6	11351-02-00	
Petrus Resources	Spirit River	08-34-077-06-W6	11096-02-00	
	Fourth Creek	16-11-082-09-W6	00000263-01-00	
NorthRiver Midstream Inc.	Gordondale	11-26-079-09-W6	00011495-01-01	
	Pouce Coupe/Bonanza	03-23-080-13-W6	00070203-01-01	
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00	
Strathcona Resources Ltd.	Jayar Sour Gas Processing Plant	06-08-062-03 W6	3612040	
KANATA Energy Group Ltd.	Valhalla	13-21-076-09-W6	00017620-02-02	
Veresen Energy	Hythe Brainard	11-18-074-12-W6	00010910-02-00	
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	00000113-02-00	

Table A. PAZA members with Facility Operating Approvals

Concentrations in excess of the Clean Air (Maximum Levels) Regulation:

There were 12 readings above the AAAQO (including 1hr O_3 and 24hr $PM_{2.5}$) and 6 readings above the AAAQG (1hr $PM_{2.5}$), results are summarized below:

	,				1			
Reference	Pollutant	Station	Date	From	То	Hour avg	WS	WD
Number	Follutalit	Station	Date	MST	MST	ppb	km/h	degrees
380664	O₃	Beaverlodge	June 30, 2021	16:00	17:00	82.4	22.8	65.5
380664	O₃	Beaverlodge	June 30, 2021	18:00	19:00	76.6	16.6	37
380523	O₃	Henry Pirker	June 28, 2021	10:00	11:00	76.5	1.8	219.7
380523	O₃	Henry Pirker	June 28, 2021	11:00	12:00	78.1	3.1	168.9
380523	O₃	Henry Pirker	June 28, 2021	13:00	14:00	87.2	3.6	82.9
380646	O₃	Henry Pirker	June 30, 2021	13:00	14:00	79.1	2.7	26.5
380647	O₃	Wembley	June 30, 2021	13:00	14:00	82.1	1.3	120.6
380647	O₃	Wembley	June 30, 2021	14:00	15:00	105.8	1.3	358.2
380647	O₃	Wembley	June 30, 2021	15:00	16:00	95.9	3.4	135.6
380647	O₃	Wembley	June 30, 2021	16:00	17:00	83.4	3.8	119.2

There were ten, 1hr ozone readings above 76ppb (AAAQO) as follows:

There were two, 24hr PM_{2.5} readings above 29 μ g/m³ (AAAQO) as follows:

Reference Number	Pollutant	Station	Date	Day avg µg/m³	WS km/h	WD degrees
380668	PM _{2.5}	Henry Pirker	June 30, 2021	29.6	4.5	138.1
380631	PM _{2.5}	Smoky Heights	June 30, 2021	35.3	19.3	141.8

There were six, 1hr PM_{2.5} readings above 80 μ g/m³ (AAAQG) as follows:

			10,					
Reference	Pollutant	Station	Date	From	То	Hour avg	WS	WD
Number	Pollutant	Station	Date	MST	MST	ppb	km/h	degrees
380177	PM _{2.5}	Evergreen	21-Jun	03:00	04:00	110.6	0.5	222.5
380432	PM _{2.5}	Evergreen	25-Jun	20:00	21:00	85.6	3.8	317.6
380444	PM _{2.5}	Evergreen	26-Jun	12:00	13:00	163.3	4.2	306.1
380434	PM _{2.5}	Henry Pirker	26-Jun	03:00	04:00	119.1	3.9	251.6
379915	PM _{2.5}	Smoky Heights	12-Jun	22:00	23:00	81.1	10.9	258.3
380631	PM _{2.5}	Smoky Heights	30-Jun	06:00	07:00	85.3	4.1	221.6

Operational times less than 90 percent:

There were no operational times less than 90% in June 2021

Air Incidents

None were reported to PAZA

Deviations from Authorized Monitoring Methods

None to report.

Passive Monitoring

- 45 Stations throughout the PAZA zone
 - o Passive sample analyses were performed by Bureau Veritas Laboratories
- There were 13 duplicate sites sampled in the month of June

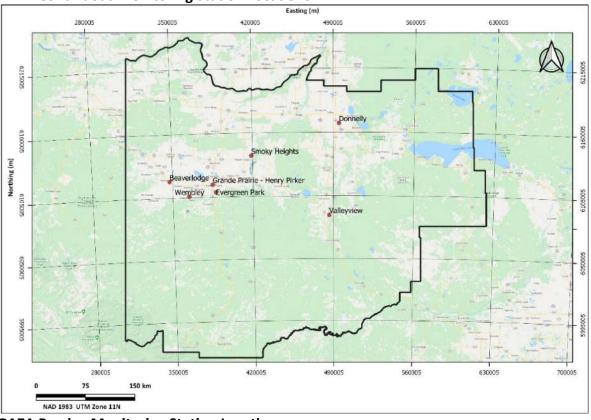
- SO₂ duplicates at Steeprock Creek, Spirit River, McLennan, Deer Mountain, Fox Creek
 4, Jayar Plant; RPD ranging from 3% to 89% (2 fails)
- There was one duplicate at Bay Tree for O₃ duplicates; RPD at 7%
- NO₂ duplicates at Forth Creek, Pinto Creek, Clouston Creek, Peavine, Bone Yard; RPD ranging from 0% to 20% (0 fails)
- H₂S duplicates Jayar1 Plant, Fox Creek 2 stations; RPD ranging from 0% to 57% (1 fails)
- There were no additional field notes
- Milner Sites collected and reported separately.
- There were no exceedances of the AAAQOs for all monitored parameters at any of the passive monitoring stations during this month.

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements.

Mandeep Dhaliwal, B.Sc., P.Chem. Program Manager

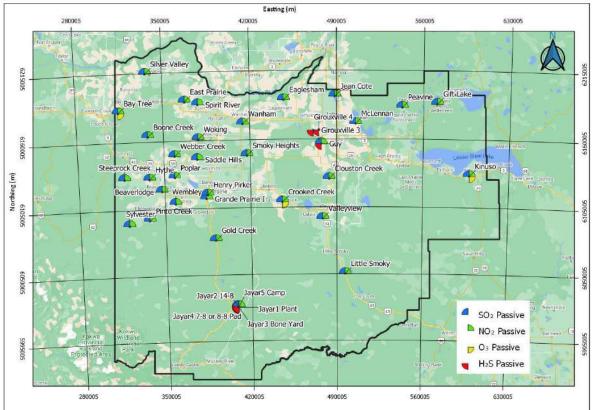
TABLE OF CONTENTS

1	JUNE N	10NTHLY STATION SUMMARIES
	1.1	Beaverlodge Air Monitoring Station
	1.2	Evergreen Park Air Monitoring Station2
	1.3	Grande Prairie - Henry Pirker Air Monitoring Station3
	1.4	Smoky Heights Air Monitoring Station3
	1.5	Valleyview Air Monitoring Station
	1.6	Donnelly Air Monitoring Station 4
	1.7	Wembley Air Monitoring Station
2	BEAVE	RLODGE CHARTS
3	EVERG	REEN PARK CHARTS
4	GRAND	PE PRAIRIE - HENRY PIRKER CHARTS
5	SMOKY	' HEIGHTS CHARTS
6	VALLEY	VIEW CHARTS
7	DONNE	ELLY CHARTS
8	WEMB	LEY (PORTABLE) CHARTS
9	CONCE	NTRATION SUMMARIES AND ROSES FOR PAZA
	9.1	Air Quality Health Index (AQHI) Plots
	9.2	Wind Roses
	9.3	Sulphur Dioxide (SO ₂) Plots
	9.4	Nitrogen Dioxide (NO ₂) Plots
	9.5	Ozone (O₃) Plots
	9.6	Fine Particulate Matter (PM _{2.5}) Plots
	9.7	Hydrogen Sulphide (H ₂ S) Plots
	9.8	Total Reduced Sulphur (TRS) Plots
	9.9	Total Hydrocarbon (THC) Plots
	9.10	Carbon Monoxide (CO) Plots
	9.11	Meteorology Summary
10	PASSIV	E MONITORING DATA
11	END OI	- REPORT



PAZA Continuous Monitoring Station Locations





1 June Monthly Station Summaries

The following summaries are for the equipment and data results from the continuous ambient monitoring network

1.1 Beaverlodge Air Monitoring Station

	June				1-hour			24-hour			Exceedance				Calibration
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
NO (ppb)	0.4	0.0	94.7%	99.9%	21.3	-	Jun-30 08:00	1.9	-	Jun-30	-	-	-	-	Jun 09, 2021
NO ₂ (ppb)	2.3	0.2	94.7%	99.9%	17.6	159	Jun-30 08:00	7.6	-	Jun-30	0	-	-	-	Jun 09, 2021
NO _x (ppb)	2.7	0.3	94.7%	99.9%	39.1	-	Jun-30 08:00	9.5	-	Jun-30	-	-	-	-	Jun 09, 2021
O₃ (ppb)	30.3	3.6	92.6%	97.6%	82.0	76	Jun-30 17:00	42.4	-	Jun-04	2	-	-	-	Jun 09, 2021
PM _{2.5} (μg/m³)	4.3	0.0	96.0%	96.7%	35.5	80	Jun-30 02:00	19.4	29	Jun-30	0	-	0	-	Jun 08, 2021
SO₂ (ppb)	0.3	0.0	94.9%	99.6%	24.1	172	Jun-29 13:00	2.1	48	Jun-29	0	-	0	0	Jun 08, 2021
	Average	Minimum	Valid	Operational	Maximum										
Гетр (°С)	17.5	4.6	100.0%	100.0%	40.3		Note: Valid h	ours must b	e greater tha	n 75%]				
RH (%)	52.2	17.4	100.0%	100.0%	100.0		Operat	ional hours	must be great	ter than 90%					
NS (km/hr)	12.5	0.3	100.0%	100.0%	54.5										
ND (deg)	273	0.2	100.0%	100.0%	359.1		Average Wind Direc	tion	273	W	1				

Opdate Sum	nary.		
Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _X	Thermo	42i	June 23 span failed, manual span conducted on same day with 1hr of maintenance
O3	Thermo	49iQ	Install of new TECO 49iQ, between removal and install calibration (16hrs removed)
PM _{2.5}	Sharp	5030	PM2.5 calibration on June 8 to 9th resulted in 24hrs of maintenance
SO2	Thermo	43i-TLE	June 10 and 23 span failed, manual span conducted on same day with 1hr of maintenance
Met Equip	MetOne	50.5	No Operational issues noted during the month

1.2 Evergreen Park Air Monitoring Station

PAZA - June 2021 Evergreen Park Station Report

	June					1-ho	ur		24-hour			Exceedance			Calibration
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
PM _{2.5} (µg/m³)	7.3	0.0	97.8%	98.2%	163.3	80	Jun-26 13:00	26.4	29	Jun-16	3	-	0	-	Jun-21-2021
SO₂ (ppb)	0.3	0.0	95.3%	100.0%	13.2	172	Jun-20 11:00	1.4	48	Jun-20	0	-	0	0	Jun-21-2021
TRS (ppb)	0.5	0.0	87.5%	92.4%	1.8	-	Jun-28 05:00	0.9	-	Jun-17	-	-	-	-	Jun-21-2021
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	18.0	0.3	100.0%	100.0%	42.0		Note: Valid	hours must b	e greater thai	n 75%]				
RH (%)	52.9	14.9	100.0%	100.0%	94.0		Opera	tional hours	must be great	ter than 90%					
WS (km/hr)	4.3	0.0	100.0%	100.0%	18.1						-				
WD (deg)	268	0.1	100.0%	100.0%	359.4		Average Wind Dire	ction	268	W					
1											,				

Update Summ	nary:		
Parameter	Make	Model	Equipment summary
PM _{2.5}	Thermo	TEOM AB	Three PM2.5 >AAAQG, June 21, 25, 26 (ref# 380444, 380432, 380177); 13hrs of excessive negative drift
SO ₂	TECO	43i	No Operational issues noted during the month
TRS	TECO	43C	TRS second calibration flagged as maintenance (10hrs), following span on June 29 data removed till July 1 (45hrs)
Met Equip	Gil/RMYoung	MetPak/RMY86004	No Operational issues noted during the month

1.3 Grande Prairie - Henry Pirker Air Monitoring Station

	June					1-ho	bur	8-	hour / 24-ho	bur		Excee	dance		Calibration
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
NO (ppb)	0.8	0.0	95.1%	100.0%	15.3	-	Jun-28 11:00	5.3	-	Jun-28	-	-	-	-	Jun 07, 2021
NO ₂ (ppb)	4.4	0.2	95.1%	100.0%	25.0	159	Jun-28 09:00	10.2	-	Jun-30	0	-	-	-	Jun 07, 2021
NO _x (ppb)	5.2	0.1	95.1%	100.0%	39.3	-	Jun-28 09:00	13.9	-	Jun-28	-	-	-	-	Jun 07, 2021
O₃ (ppb)	29.4	0.7	95.3%	100.0%	88.1	76	Jun-28 14:00	37.1	-	Jun-05	4	-	-	-	Jun 07, 2021
PM _{2.5} (μg/m³)	6.9	0.0	99.9%	100.0%	119.1	80	Jun-26 02:00	29.6	29	Jun-30	1	-	1	-	Jun 01, 2021
SO ₂ (ppb)	0.4	0.0	95.3%	100.0%	7.3	172	Jun-18 11:00	2.1	48	Jun-30	0	-	0	0	Jun 07, 2021
H ₂ S (ppb)	0.2	0.0	95.1%	100.0%	1.5	10	Jun-30 07:00	0.6	3	Jun-30	0	-	0	-	Jun 03, 2021
CH ₄ (ppm)	2.0	1.8	95.3%	100.0%	3.1	-	Jun-30 05:00	2.2	-	Jun-30	-	-	-	-	Jun 01, 2021
THC (ppm)	2.0	1.8	95.3%	100.0%	3.6	-	Jun-30 05:00	2.6	-	Jun-30	-	-	-	-	Jun 01, 2021
NMHC (ppm)	0.0	0.0	95.3%	100.0%	0.5	-	Jun-30 04:00	0.3	-	Jun-30	-	-	-	-	Jun 01, 2021
CO (ppm)	0.1	0.0	94.9%	99.6%	0.8	13	Jun-28 07:00	0.2	5	Jun-30	0	0	-	-	Jun 03, 2021
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	19.1	0.9	100.0%	100.0%	42.5		Note: Valid h	ours must b	e greater tha	n 75%]				
RH (%)	49.6	13.3	100.0%	100.0%	89.4		Operat	ional hours	must be great	ter than 90%					
SR (W/m²)	230.8	0.0	100.0%	100.0%	828.1										
WS (km/hr)	8.1	0.4	100.0%	100.0%	34.9										
WD (deg)	265	7.7	100.0%	100.0%	359.9		Average Wind Direc	tion	265	W					
	4				1										
Update Sum	mary:														
Parameter		Make		Model	Equipment	summary									

PAZA - June 2021 Henry Pirker Station Report

Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _X	Thermo	42i	No Operational issues noted during the month
O ₃	TECO	491	No Operational issues noted during the month; four readings above AAAQO (O ₃ , 3x Jun 28 & 1x Jun 30, ref# 380523, 380646)
PM _{2.5}	Sharp	5030	One reading above AAAQO (PM2.5, x1 Jun 30, ref# 380668) & one reading above AAAQG (PM2.5, x1 Jun 26, ref# 380434)
SO ₂	TEI	43I-TLE	No Operational issues noted during the month
H₂S	TEI	450i	No Operational issues noted during the month
THC/CH ₄ /NMHC	TEI	55i	No Operational issues noted during the month
0	TEI	48I-TLE	No Operational issues noted during the month; Three hours removed due to negative spike June 28
Met Equip	MetOne	50.5	No Operational issues noted during the month

1.4 Smoky Heights Air Monitoring Station

		· ·		A	- ·
PAZA - June	2021	Smoky	Heights	Station	Report

June				1-hour			24-hour				Excee	dance	Calibration		
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
PM _{2.5} (μg/m³)	8.2	0.0	99.4%	100.0%	85.3	80	Jun-30 07:00	35.3	29	Jun-30	2	-	1	-	Jun 22, 2021
SO₂ (ppb)	0.3	0.0	95.3%	100.0%	4.6	172	Jun-18 19:00	0.6	48	Jun-06	0	-	0	0	Jun 25, 2021
TRS (ppb)	0.2	0.0	94.5%	100.0%	0.8	-	Jun-28 04:00	0.3	-	Jun-02	-	-	-	-	Jun 22, 2021
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	17.8	2.9	100.0%	100.0%	41.7]	Note: Valid I	nours must b	e greater tha	n 75%]				
WS (km/hr)	13.2	0.6	100.0%	100.0%	58.7		Opera	tional hours	must be grea	ter than 90%					
WD (deg)	257	0.2	100.0%	100.0%	359.5		Average Wind Dire	tion	257	WNW					
		L		•••••••		4					.1				

Update Summary:												
Parameter	Make	Model	Equipment summary									
PM _{2.5}	Sharp	5030	One reading above AAAQO (Jun 30, ref#380631) & 2 readings above AAAQG (Jun 12 & Jun 30, ref# 379915, 380631)									
SO2	TECO	43i	No Operational issues noted during the month									
TRS	TEI	43I APSAA	No Operational issues noted during the month									
Met Equip	MetOne	50.5	No Operational issues noted during the month									

1.5 Valleyview Air Monitoring Station

	June					1-ho	ur	24-hour				Excee		Calibration	
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
SO ₂ (ppb)	0.1	0.0	95.3%	100.0%	0.9	172	Jun-16 14:00	0.2	48	Jun-29	0	-	0	0	Jun 02, 2021
H ₂ S (ppb)	0.1	0.0	90.6%	95.1%	1.4	10	Jun-29 04:00	0.3	3	Jun-29	0	-	0	-	Jun 02, 2021
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	18.0	1.0	100.0%	100.0%	44.7		Note: Valid h	ours must k	be greater that	n 75%]				
RH (%)	61.2	12.8	100.0%	100.0%	100.2		Operational hours must be greater than 90%								
WS (km/hr)	4.4	0.1	100.0%	100.0%	19.9						-				
WD (deg)	280	0.0	100.0%	100.0%	359.3		Average Wind Direc	tion	280	NW					
Update Sum	many:														
Parameter	inary.	Make	9	Mod	əl	Equipment	summary								
SO2		TEI				No Operational issues noted during the month									
H₂S		TEI		450i-AP	HAA	Replaced sample pump, data removed from last month till June 2 calibration						n (34hr:	s remov	ed in J	une)
Met Equip		RMYou	MYoung RMY860			No Operational issues noted during the month									

PAZA - June 2021 Valleyview Station Report

1.6 Donnelly Air Monitoring Station

	June				1-hour				24-hour			Excee	dance		Calibration	
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date	
SO ₂ (ppb)	0.1	0.0	95.1%	99.9%	1.3	172	Jun-10 19:00	0.3	48	Jun-02	0	-	0	0	Jun 01, 2021	
H₂S (ppb)	0.2	0.0	95.1%	99.9%	1.5	10	Jun-27 08:00	0.4	3	Jun-27	0	-	0	-	Jun 01, 2021	
	Average	Minimum	Valid	Operational	Maximum											
Temp (°C)	17.9	2.2	99.6%	99.9%	39.9		Note: Valid h	hours must be greater than 75%								
WS (km/hr)	12.1	0.3	99.6%	99.9%	46.5		Operat	ational hours must be greater than 90%								
WD (deg)	258	1.2	99.6%	99.9%	358.2		Average Wind Direc	tion	258	WSW						
Update Sum	mary:															
Parameter		Make	Э	Mod	əl	Equipment	summary									
50 ₂		Teco)	43i		No Operational issues noted during the month; one hour data missing June 17										
H2S		Therm	าด	450	:	No Operational issues noted during the month; one hour data missing June 17										
Met Equip		RMYou					No Operational issues noted during the month; one hour data missing June 17									

1.7 Wembley Air Monitoring Station

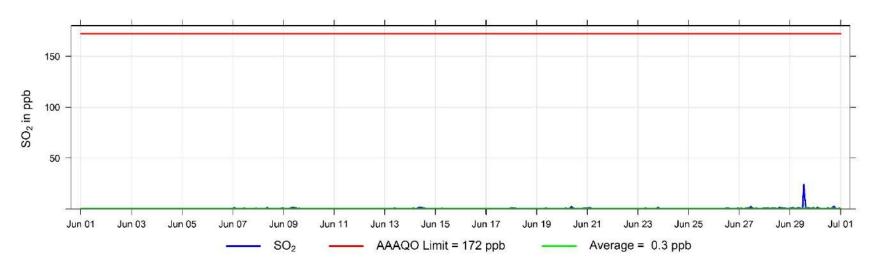
PAZA - June 2021 Wembley Station Report

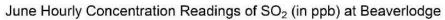
	June			1-hour			ur	24-hour				Excee		Calibration	
Parameter	Average	Minimum	Valid	Operational	Max	Objective	Max Day and Time	Max	Objective	Max Day	1hr	8hr	24hr	30d	Date
NO (ppb)	0.7	0.0	95.1%	100.0%	35.5	-	Jun-24 20:00	2.4	-	Jun-02	-	-	-	-	Jun 24, 2021
NO₂ (ppb)	2.6	0.1	95.1%	100.0%	20.0	159	Jun-08 01:00	6.5	-	Jun-30	0	-	-	-	Jun 24, 2021
NO _x (ppb)	3.4	0.1	95.1%	100.0%	43.0	-	Jun-24 20:00	7.8	-	Jun-30	-	-	-	-	Jun 24, 2021
O₃ (ppb)	29.6	1.2	95.3%	100.0%	106.3	76	Jun-30 15:00	40.6	-	Jun-03	4	-	-	-	Jun 24, 2021
PM _{2.5} (μg/m³)	3.3	0.0	99.6%	100.0%	35.0	80	Jun-30 14:00	20.5	29	Jun-30	0	-	0	-	Jun 23, 2021
SO ₂ (ppb)	0.2	0.0	95.3%	100.0%	4.7	172	Jun-14 20:00	0.9	48	Jun-30	0	-	0	0	Jun 24, 2021
TRS (ppb)	0.4	0.1	95.1%	100.0%	2.0	-	Jun-12 06:00	0.7	-	Jun-30	-	-	-	-	Jun 23, 2021
CH4 (ppm)	1.9	1.8	95.3%	100.0%	2.3	-	Jun-18 05:00	2.1	-	Jun-30	-	-	-	-	Jun 23, 2021
THC (ppm)	2.0	1.8	95.3%	100.0%	2.4	-	Jun-29 23:00	2.1	-	Jun-30	-	-	-	-	Jun 23, 2021
NMHC (ppm)	0.0	0.0	95.3%	100.0%	0.3	-	Jun-29 23:00	0.0	-	Jun-29	-	-	-	-	Jun 23, 2021
	Average	Minimum	Valid	Operational	Maximum										
Temp (°C)	17.8	0.6	100.0%	100.0%	42.4		Note: Valid hours must be greater than 75%								
WS (km/hr)	8.7	0.2	100.0%	100.0%	33.9	Operational hours must be greater than 90%									
WD (deg)	290	0.2	100.0%	100.0%	359.9		Average Wind Direc	tion	290	WNW					

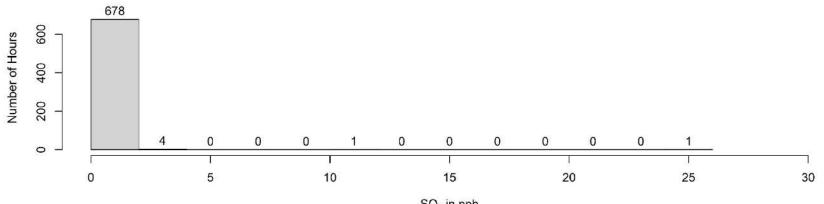
Update Sumn	nary:		
Parameter	Make	Model	Equipment summary
NO/NO ₂ /NO _X	TEI	42i	No Operational issues noted
0 ₃	TEI	491	No Operational issues noted; four readings above the AAAQO for ozone (ref# 380647)
PM _{2.5}	Thermo	TEOM AB	No Operational issues noted
SOz	TEI	431	No Operational issues noted
TRS	TEI	431	No Operational issues noted
THC/CH4/NMHC	TEI	55I-A3PHAA	No Operational issues noted
Met Equip	MetOne	50.5	No Operational issues noted

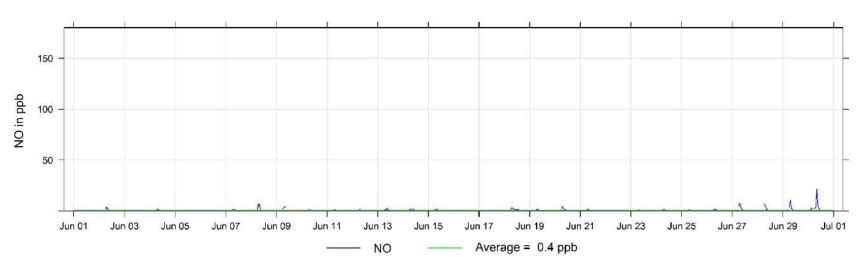
2 Beaverlodge Charts

The following pages include the charts and histograms for Beaverlodge Station



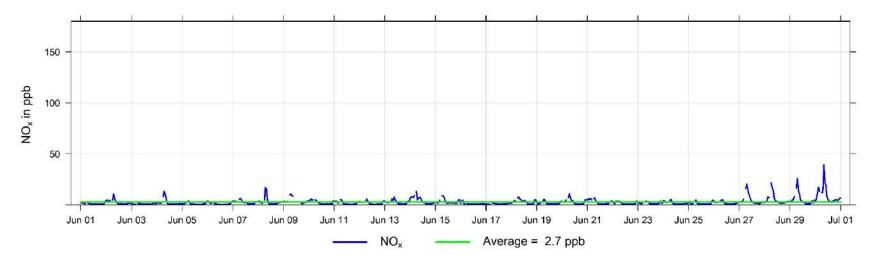


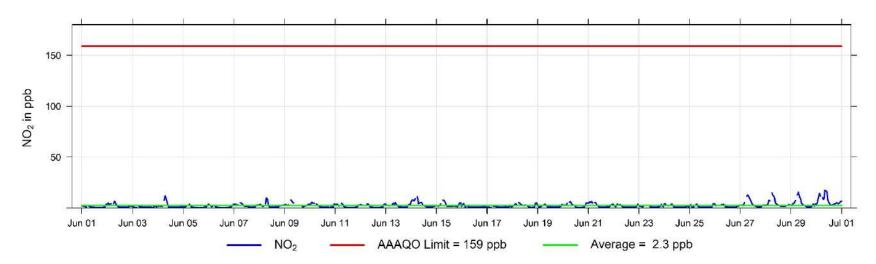




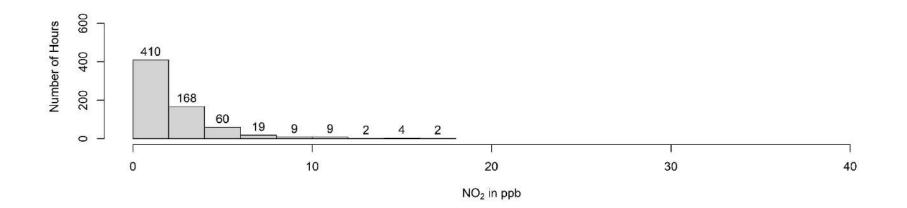
June Hourly Concentration Readings of NO (in ppb) at Beaverlodge

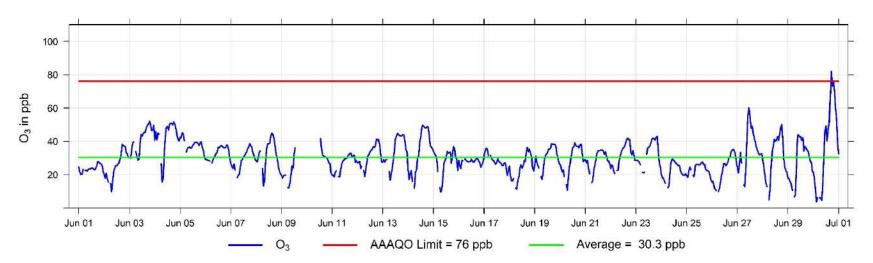
June Hourly Concentration Readings of NO_x (in ppb) at Beaverlodge



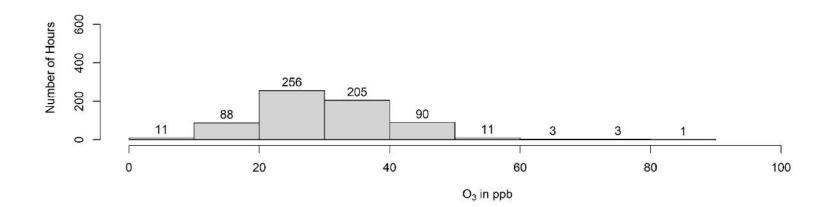


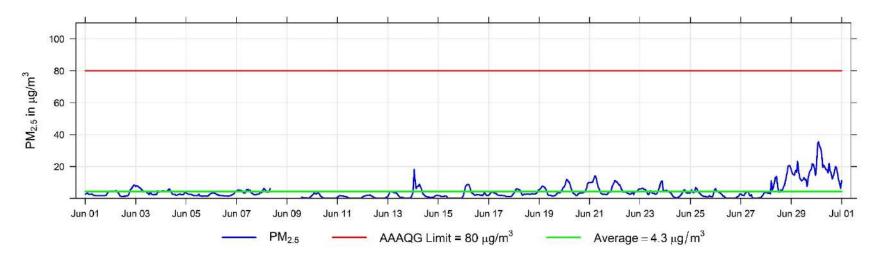
June Hourly Concentration Readings of NO2 (in ppb) at Beaverlodge



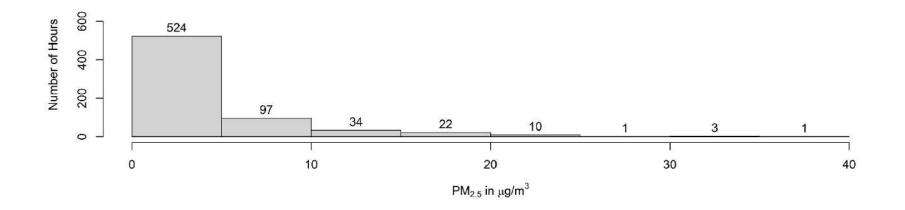


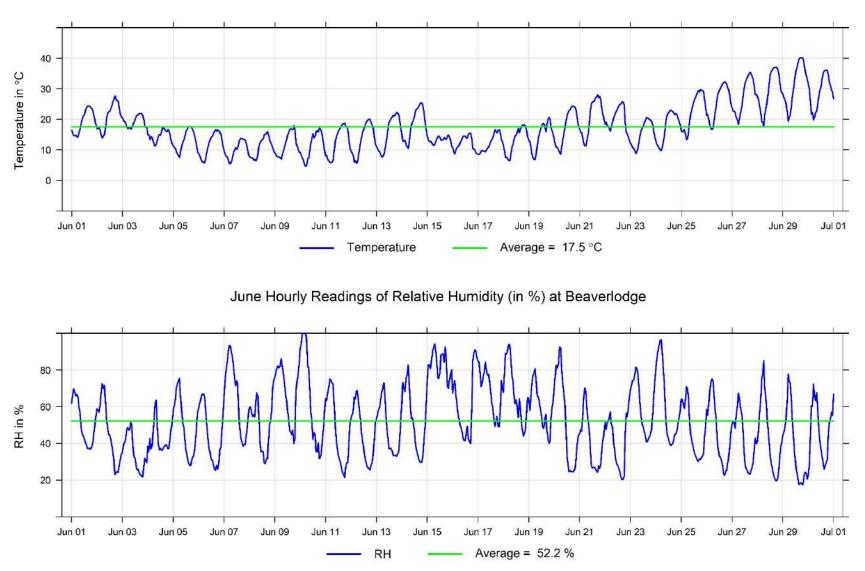
June Hourly Concentration Readings of O₃ (in ppb) at Beaverlodge



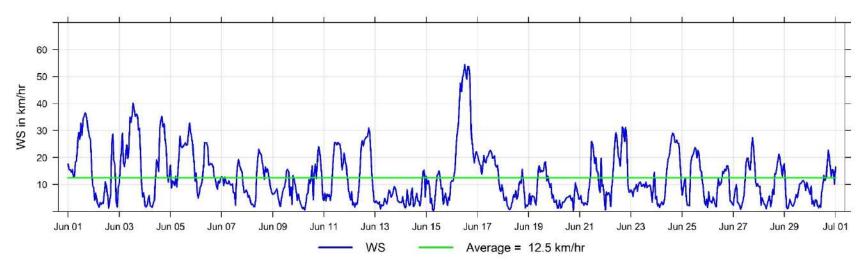


June Hourly Concentration Readings of $\text{PM}_{2.5}$ in $\mu\text{g/m}^3$ at Beaverlodge



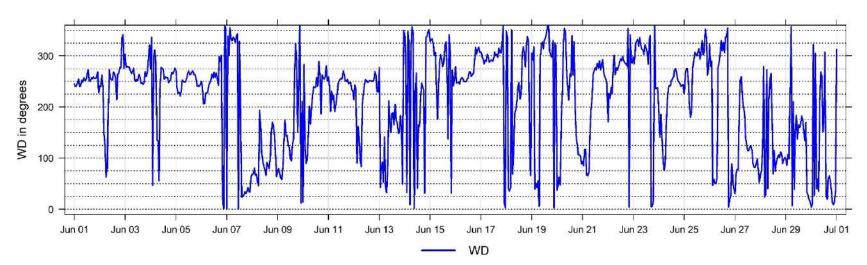


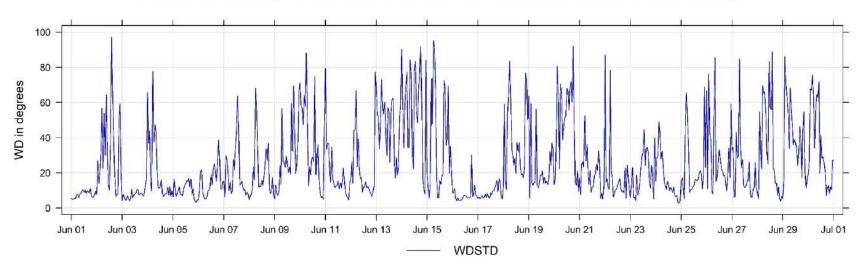
June Hourly Temperature Readings (in °C) at Beaverlodge



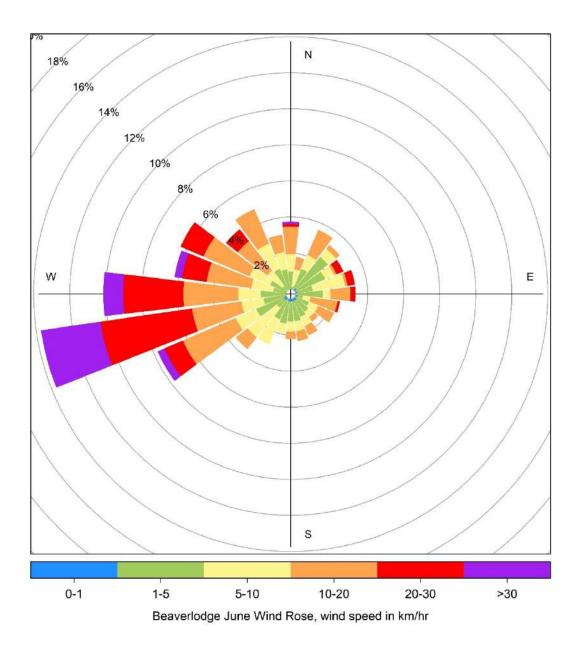
June Hourly Readings of Wind Speed (in km/hr) at Beaverlodge

June Hourly Readings of Wind Direction (in degrees) at Beaverlodge



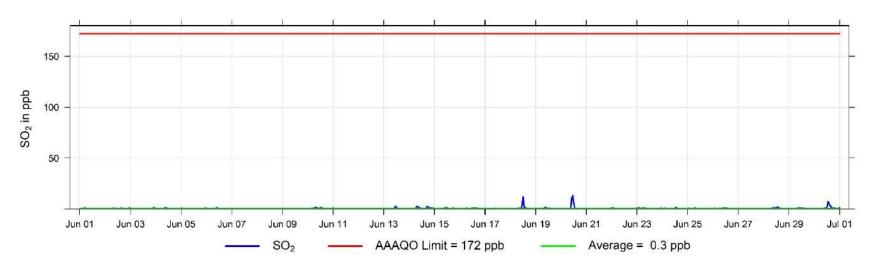


June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Beaverlodge

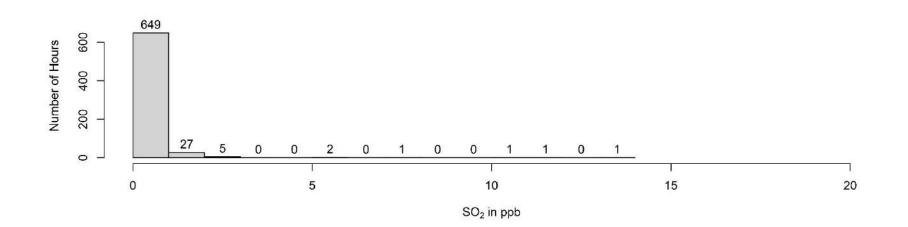


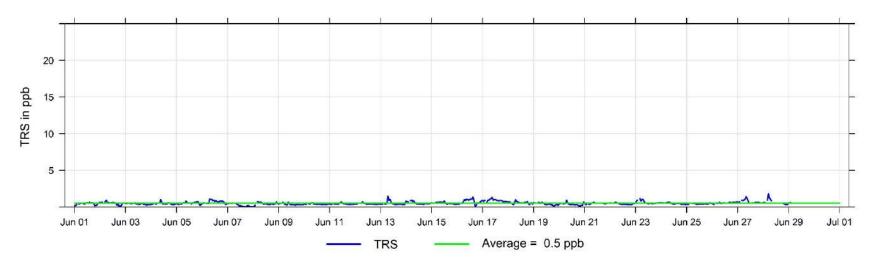
3 Evergreen Park Charts

The following pages include the charts and histograms for Evergreen Park Station

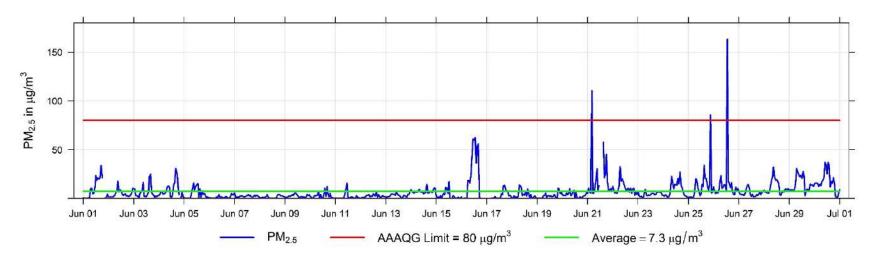


June Hourly Concentration Readings of SO₂ (in ppb) at Evergreen Park

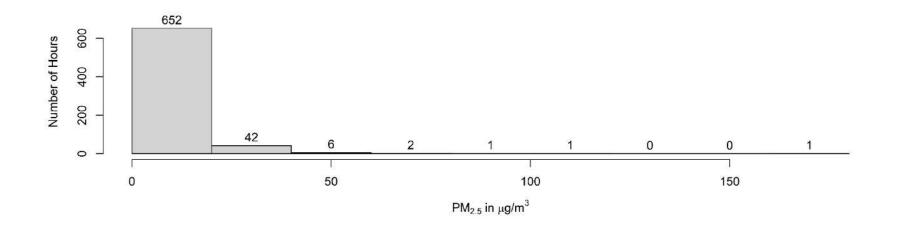


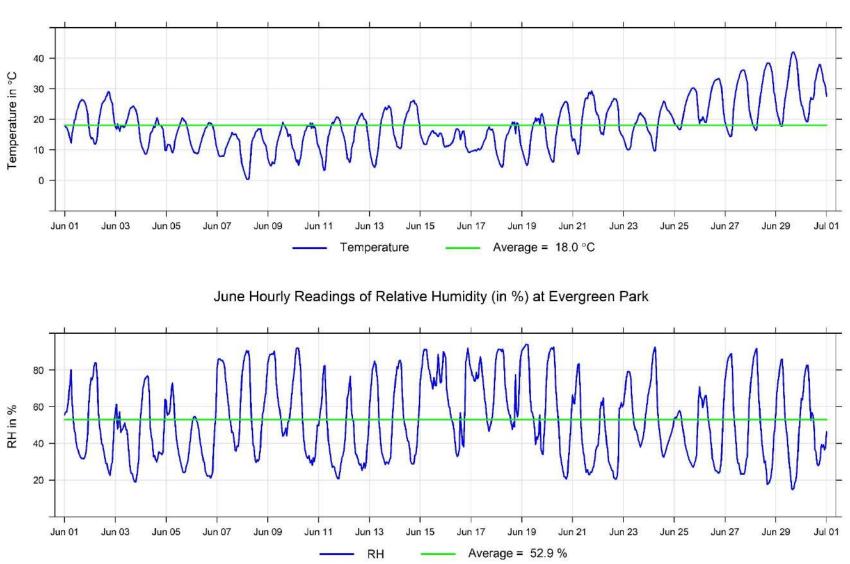


June Hourly Concentration Readings of TRS (in ppb) at Evergreen Park

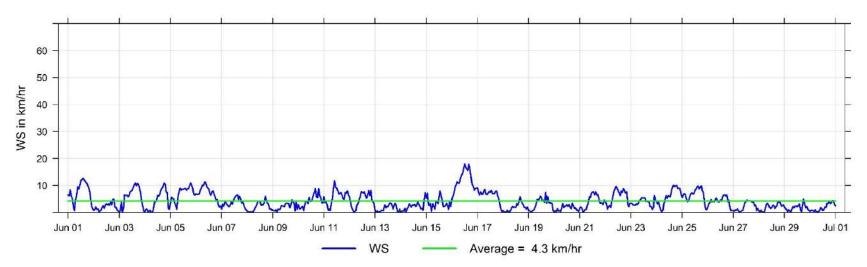


June Hourly Concentration Readings of $\text{PM}_{2.5}$ in $\mu\text{g/m}^3$ at Evergreen Park



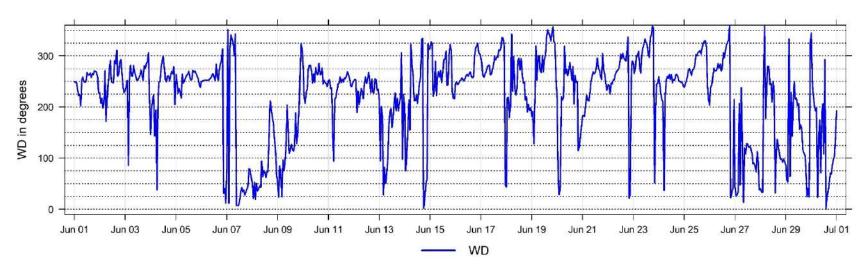


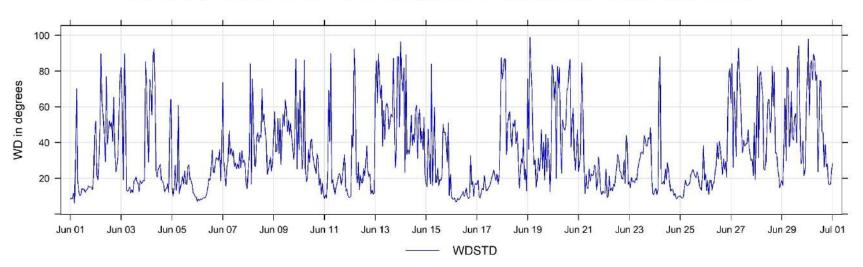
June Hourly Temperature Readings (in °C) at Evergreen Park



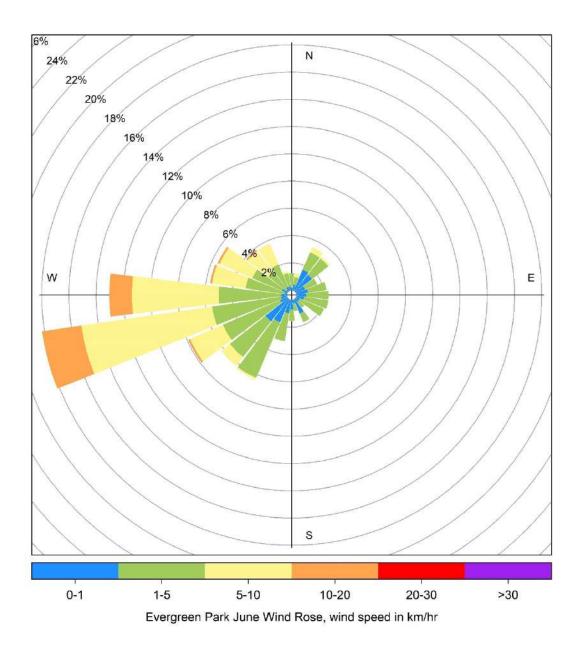
June Hourly Readings of Wind Speed (in km/hr) at Evergreen Park

June Hourly Readings of Wind Direction (in degrees) at Evergreen Park



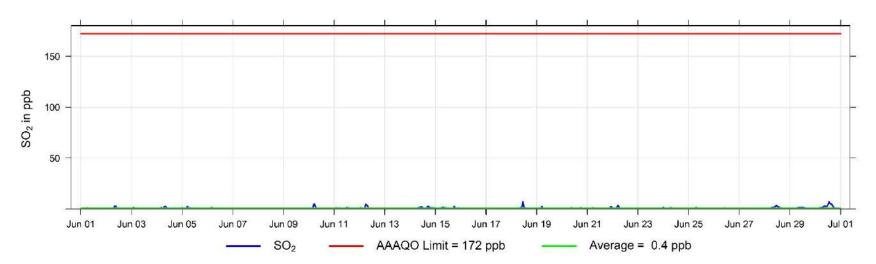


June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Evergreen Park

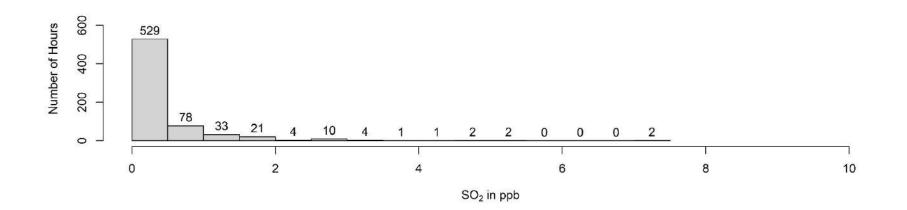


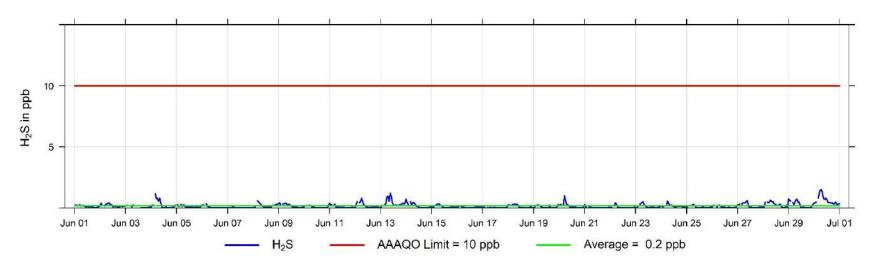
4 Grande Prairie - Henry Pirker Charts

The following pages include the charts and histograms for Henry Pirker Station in Grande Prairie

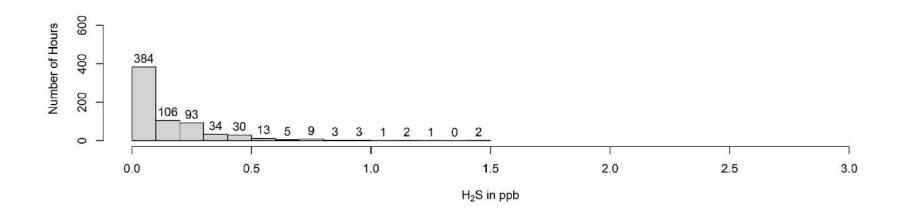


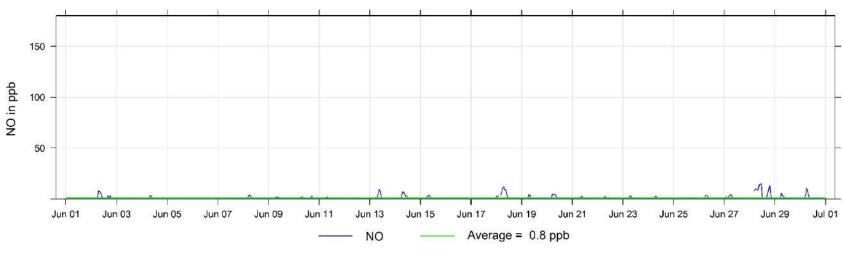
June Hourly Concentration Readings of SO₂ (in ppb) at Henry Pirker





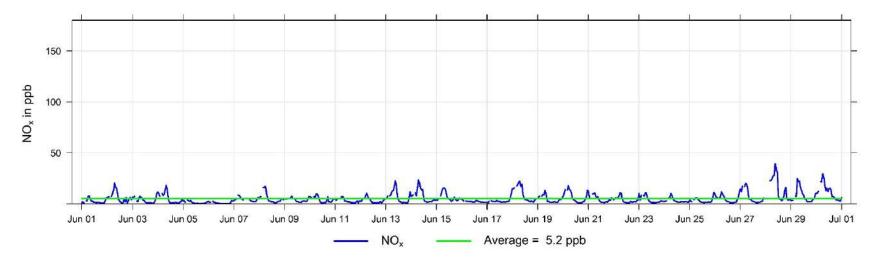
June Hourly Concentration Readings of H₂S (in ppb) at Henry Pirker

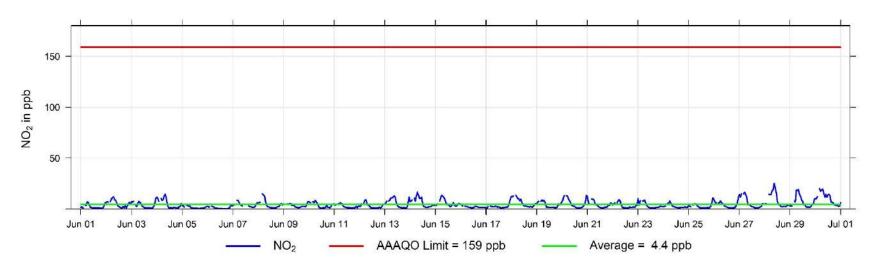




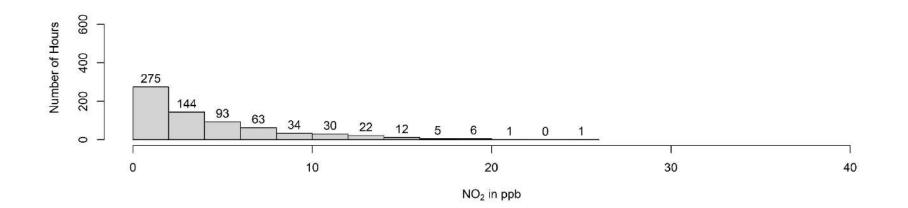
June Hourly Concentration Readings of NO (in ppb) at Henry Pirker

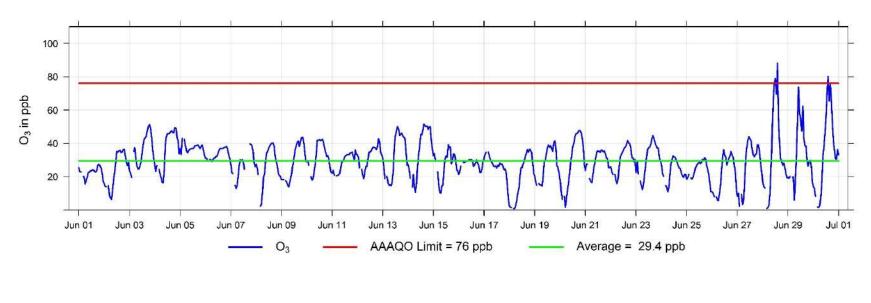
June Hourly Concentration Readings of NO_x (in ppb) at Henry Pirker



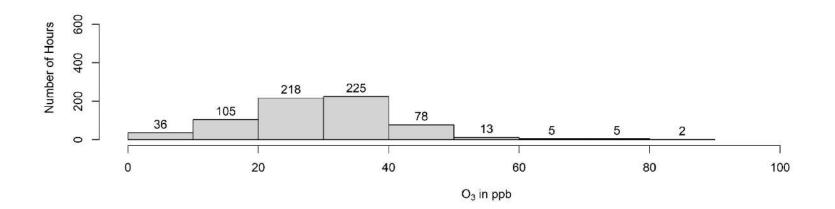


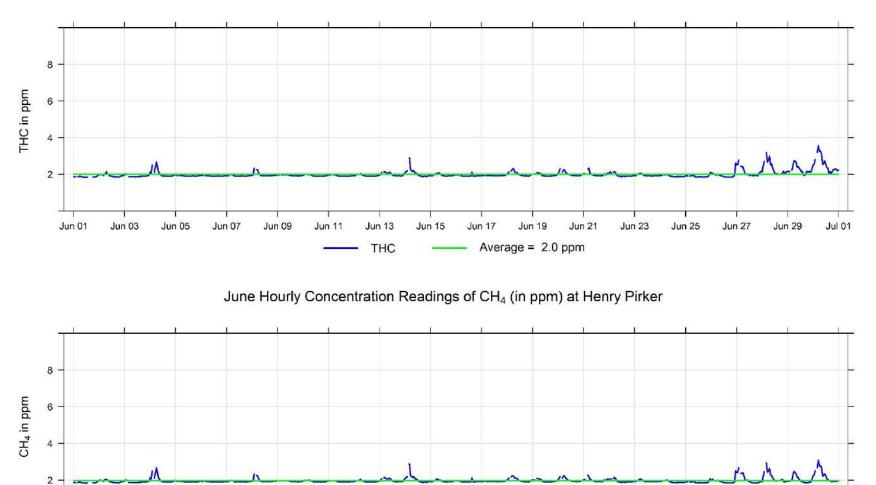
June Hourly Concentration Readings of NO2 (in ppb) at Henry Pirker





June Hourly Concentration Readings of O₃ (in ppb) at Henry Pirker





June Hourly Concentration Readings of THC (in ppm) at Henry Pirker

Jun 01

Jun 03

Jun 05

Jun 07

Jun 09

Jun 11

Jun 13

 CH_4

Jun 15

Jun 17

Jun 19

Average = 2.0 ppm

Jun 21

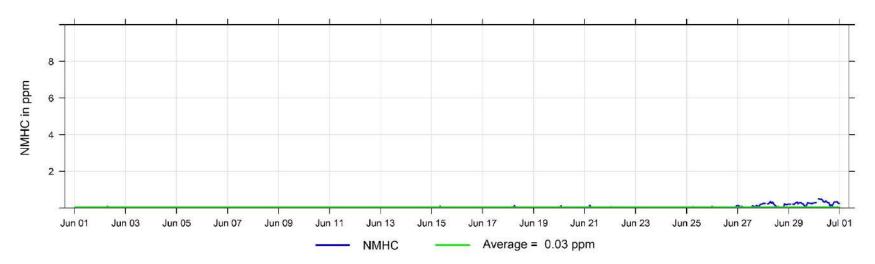
Jun 23

Jun 25

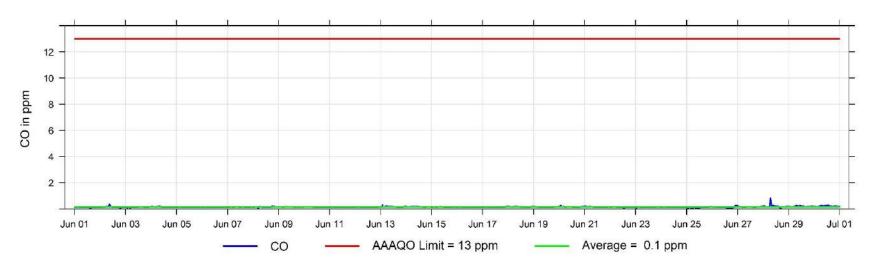
Jun 27

Jun 29

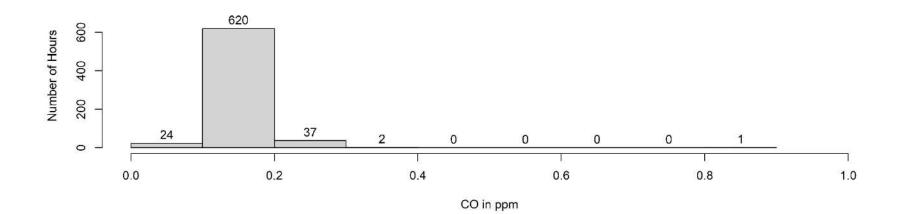
Jul 01

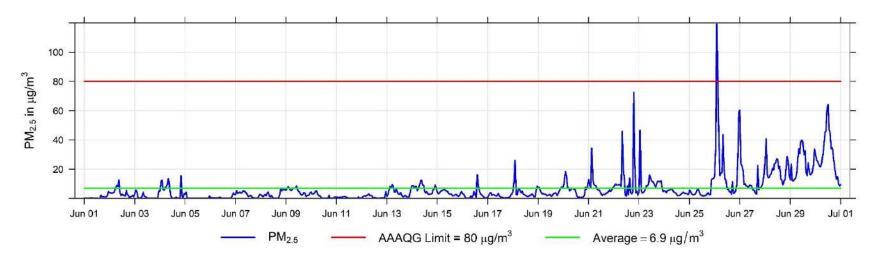


June Hourly Concentration Readings of NMHC (in ppm) at Henry Pirker

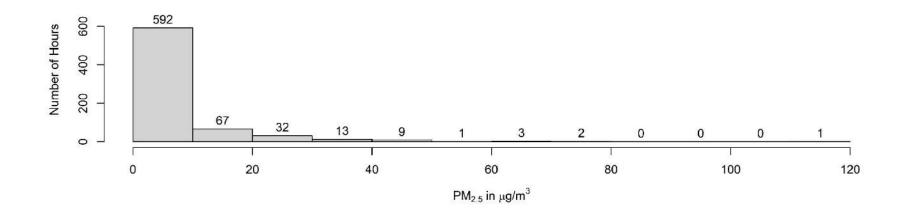


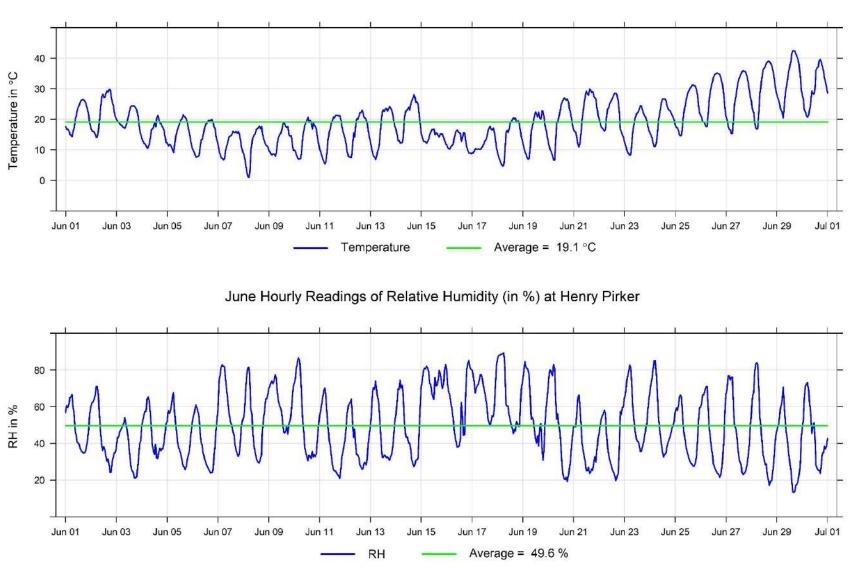
June Hourly Concentration Readings of CO (in ppm) at Henry Pirker



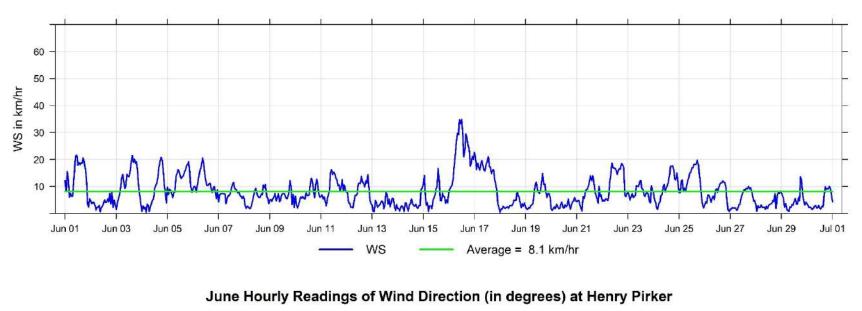


June Hourly Concentration Readings of $\text{PM}_{2.5}$ in $\mu\text{g/m}^3$ at Henry Pirker



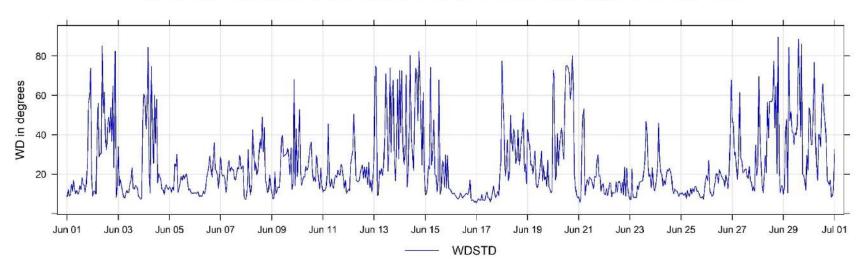


June Hourly Temperature Readings (in °C) at Henry Pirker

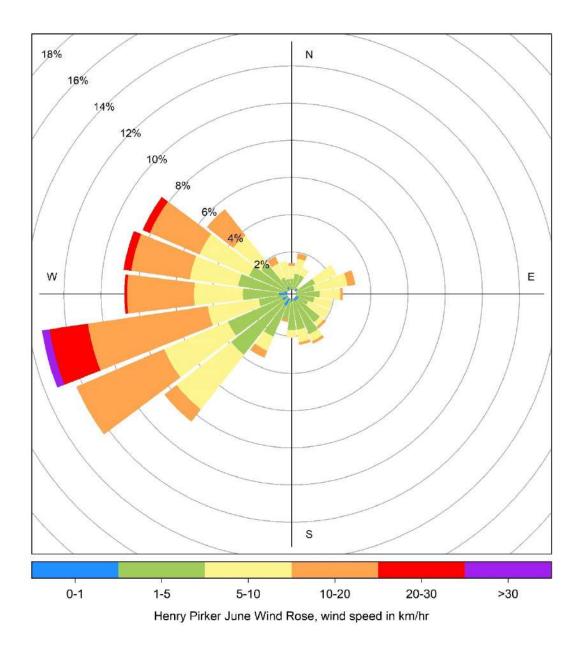


June Hourly Readings of Wind Speed (in km/hr) at Henry Pirker

300 WD in degrees 200 100 0 Jun 07 Jun 01 Jun 03 Jun 05 Jun 09 Jun 11 Jun 13 Jun 15 Jun 17 Jun 19 Jun 21 Jun 23 Jun 25 Jun 27 Jun 29 Jul 01 WD

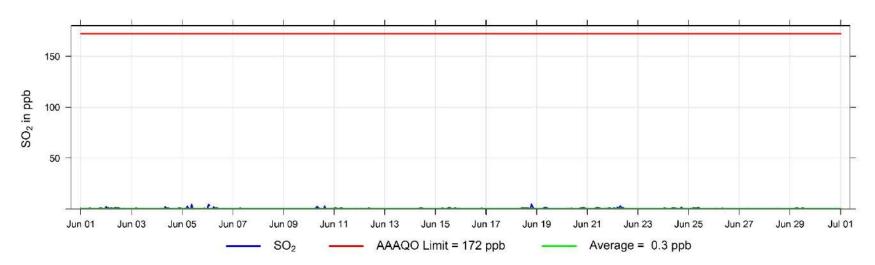


June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Henry Pirker

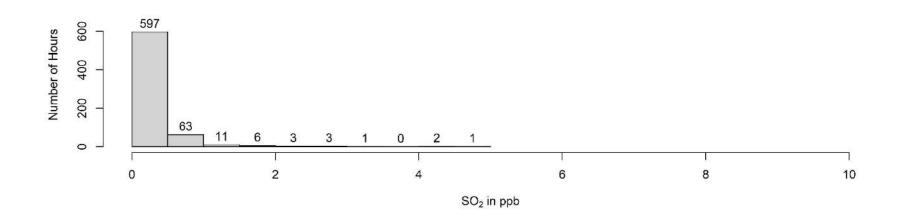


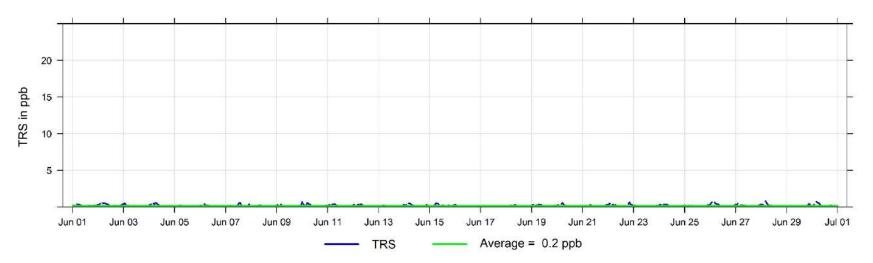
5 Smoky Heights Charts

The following pages include the charts and histograms for Smoky Heights Station

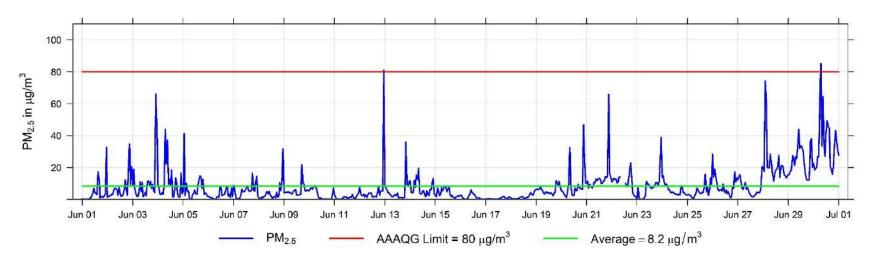


June Hourly Concentration Readings of SO2 (in ppb) at Smoky Heights

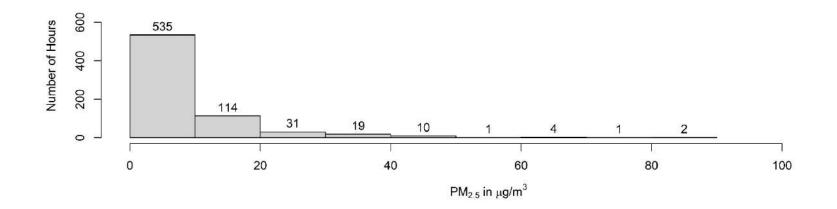


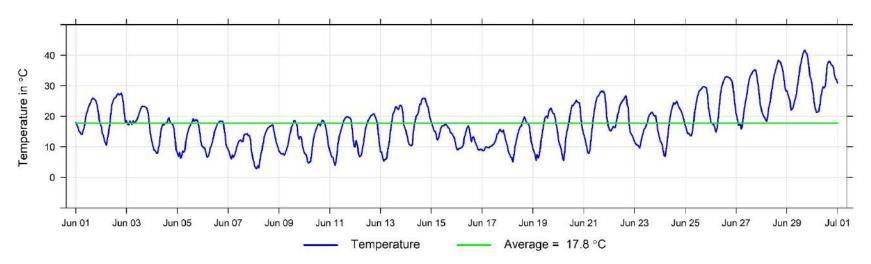


June Hourly Concentration Readings of TRS (in ppb) at Smoky Heights



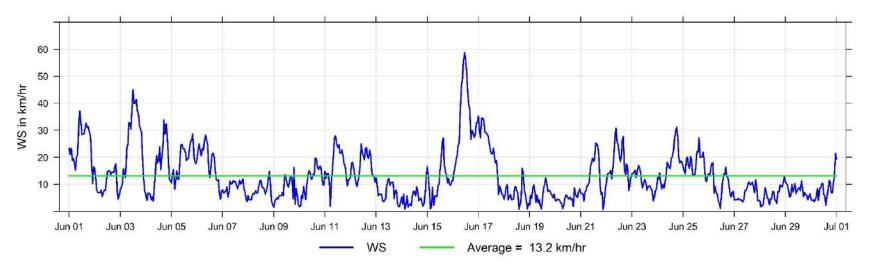
June Hourly Concentration Readings of $PM_{2.5}$ in $\mu g/m^3$ at Smoky Heights

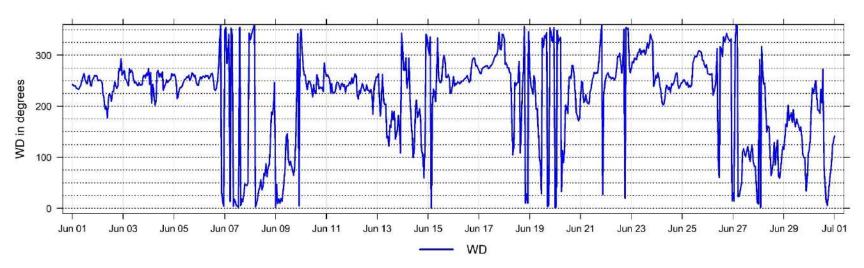




June Hourly Temperature Readings (in °C) at Smoky Heights

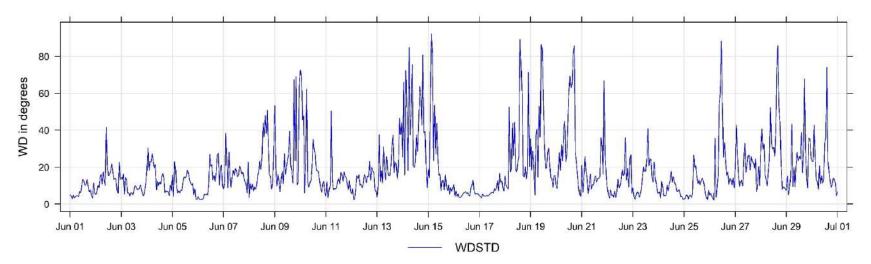
June Hourly Readings of Wind Speed (in km/hr) at Smoky Heights

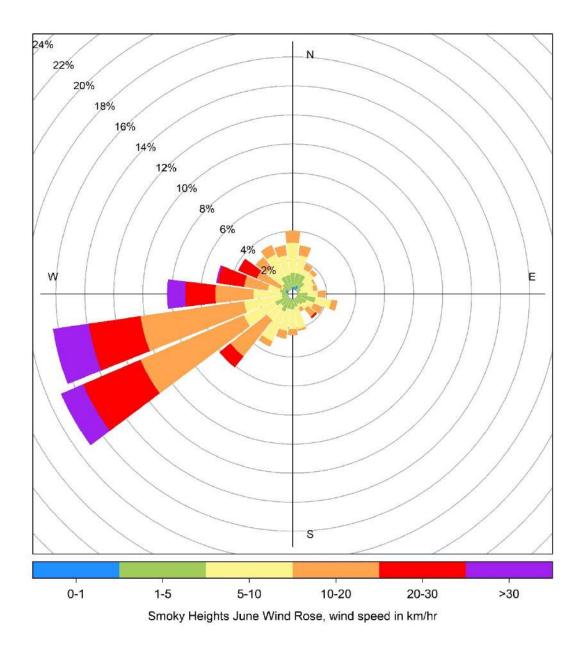




June Hourly Readings of Wind Direction (in degrees) at Smoky Heights

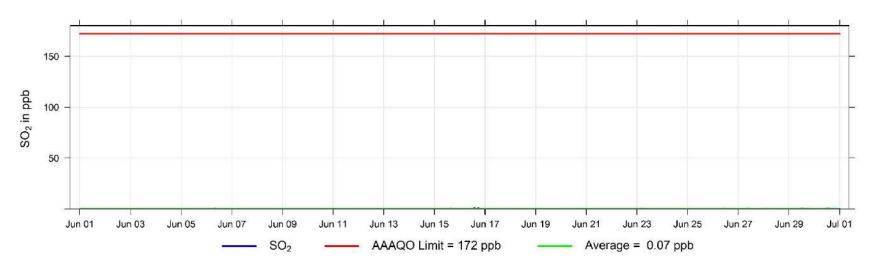
June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Smoky Heights

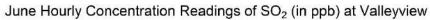


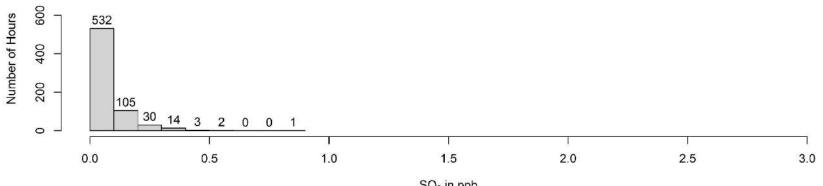


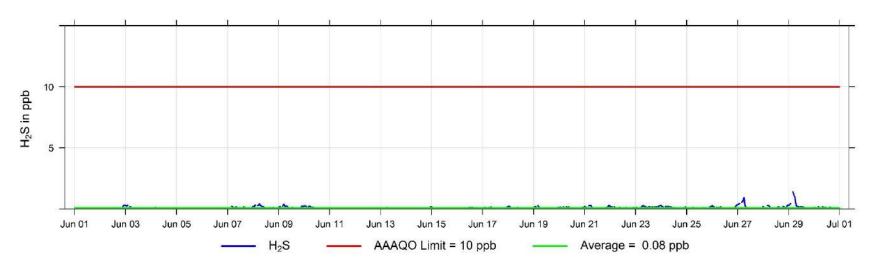
6 Valleyview Charts

The following pages include the charts and histograms for Valleyview Station

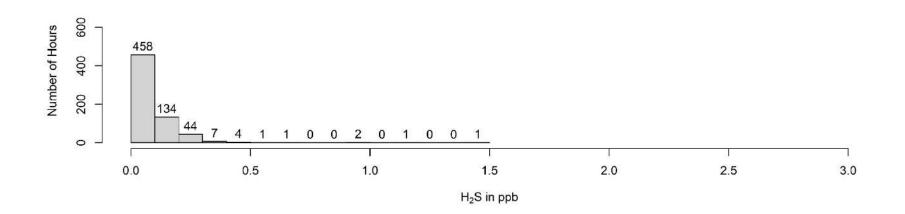


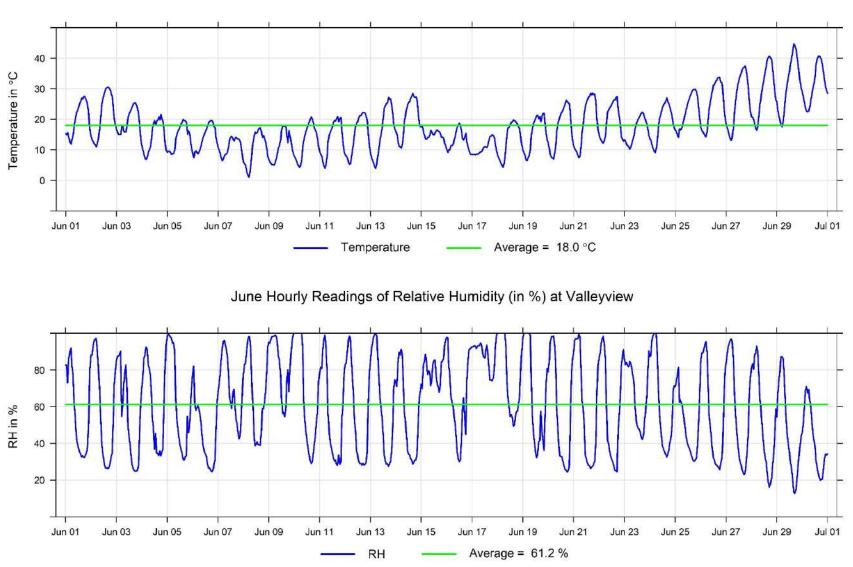




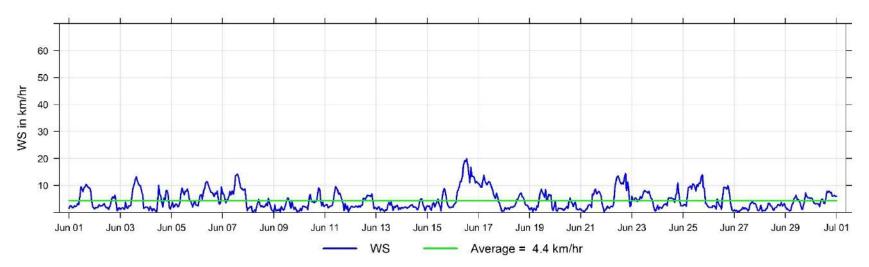


June Hourly Concentration Readings of H₂S (in ppb) at Valleyview



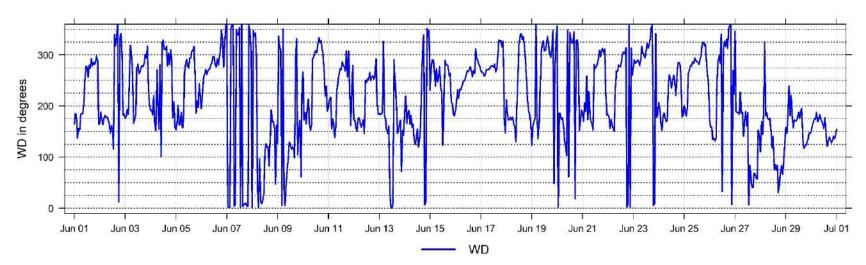


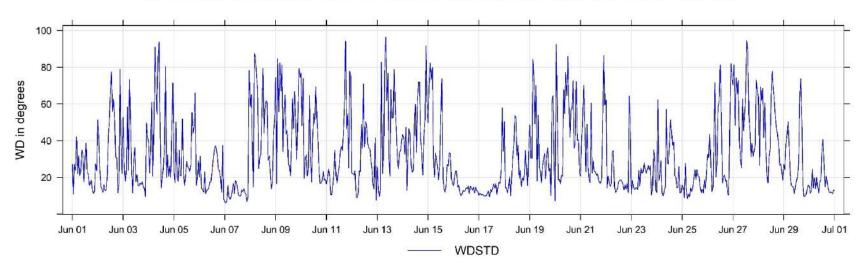
June Hourly Temperature Readings (in °C) at Valleyview



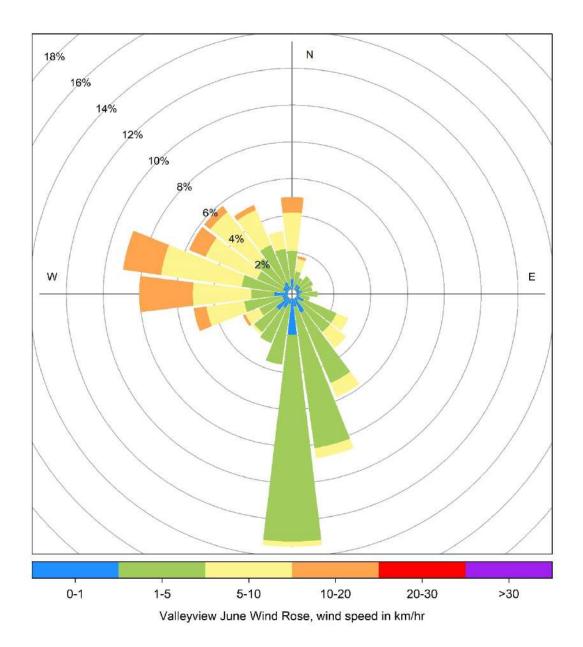
June Hourly Readings of Wind Speed (in km/hr) at Valleyview

June Hourly Readings of Wind Direction (in degrees) at Valleyview



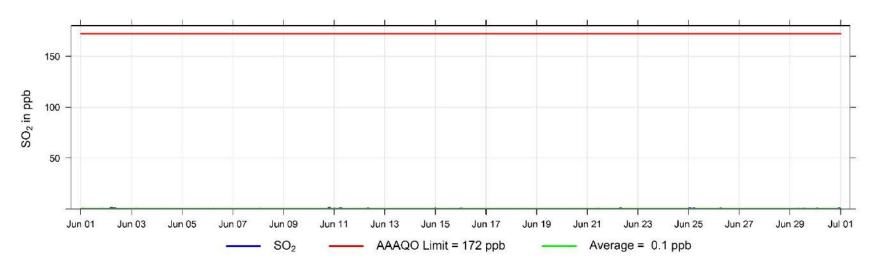


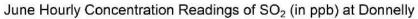
June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Valleyview

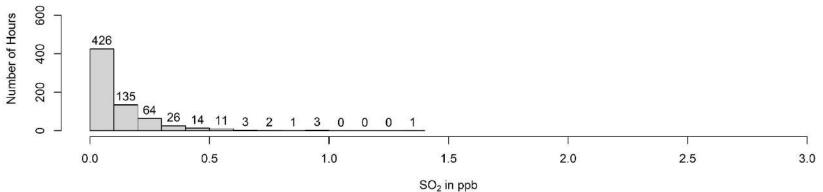


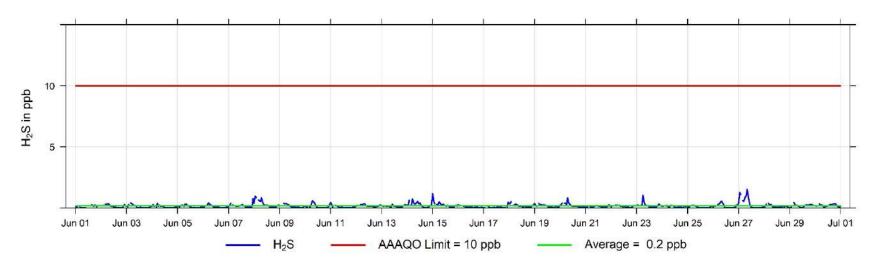
7 Donnelly Charts

The following pages include the charts and histograms for Donnelly Station

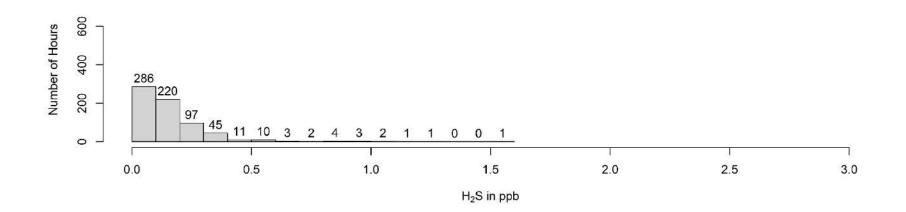


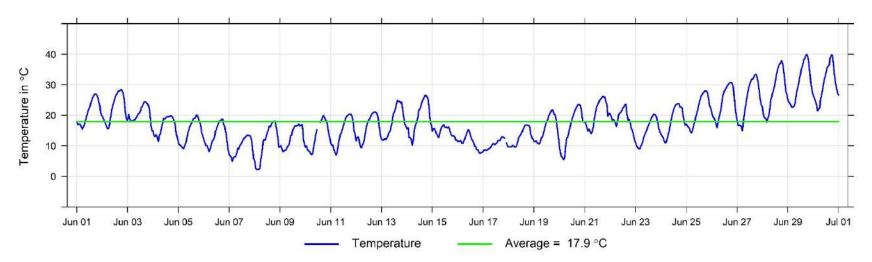






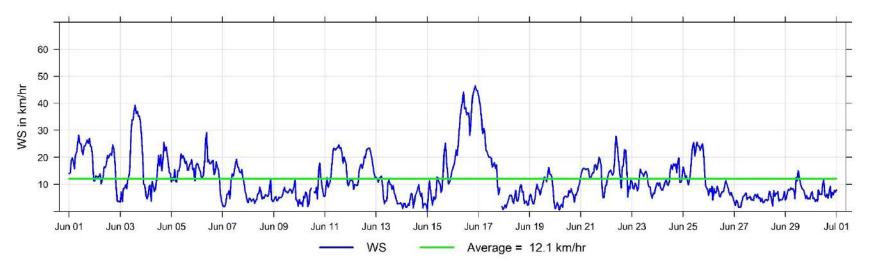
June Hourly Concentration Readings of H₂S (in ppb) at Donnelly

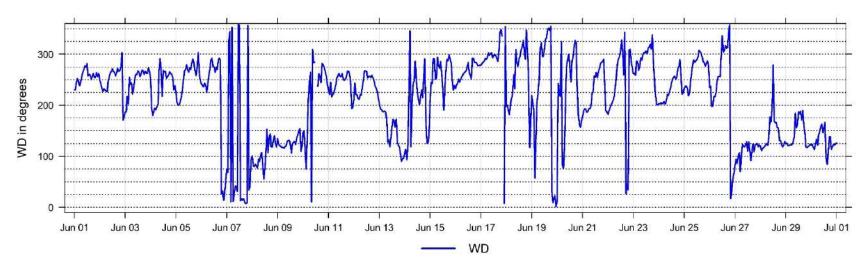




June Hourly Temperature Readings (in °C) at Donnelly

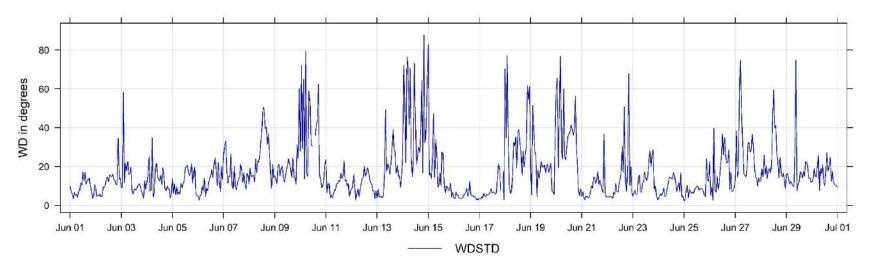
June Hourly Readings of Wind Speed (in km/hr) at Donnelly

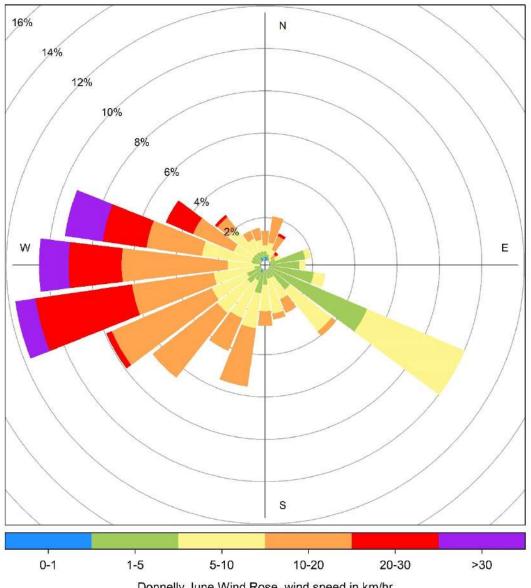




June Hourly Readings of Wind Direction (in degrees) at Donnelly

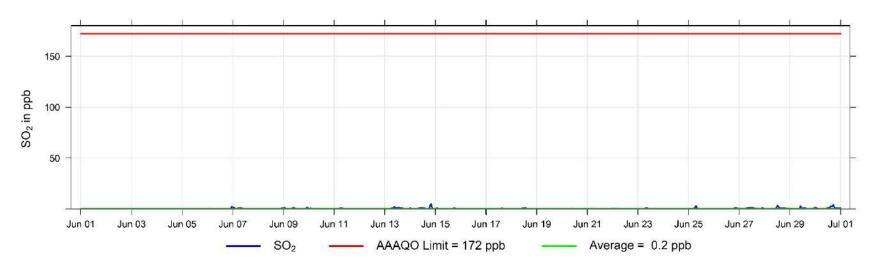
June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Donnelly



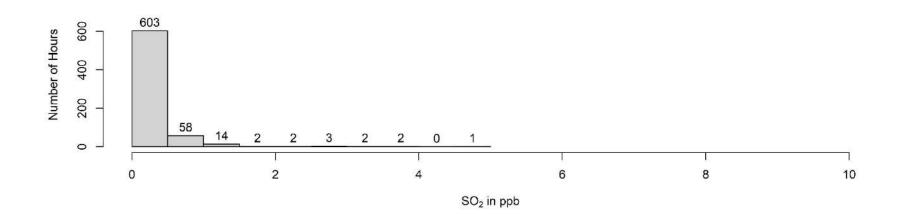


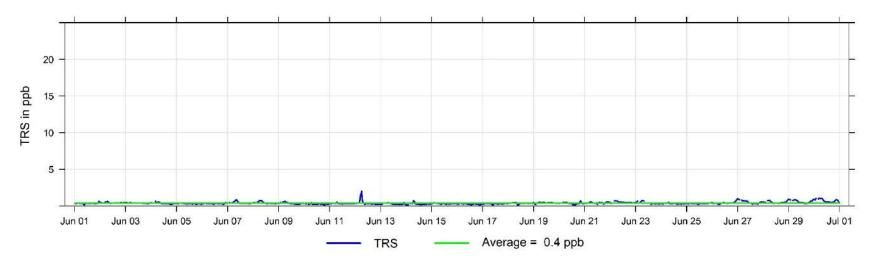
8 Wembley (Portable) Charts

The following pages include the charts and histograms for Wembley Portable Station

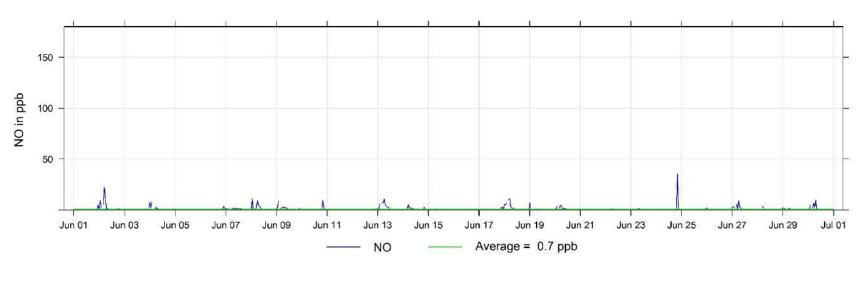


June Hourly Concentration Readings of SO2 (in ppb) at Wembley



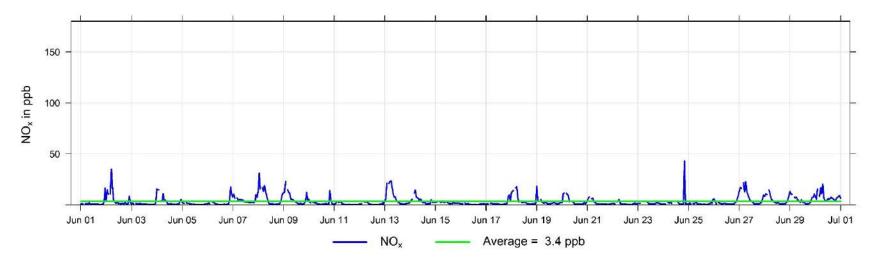


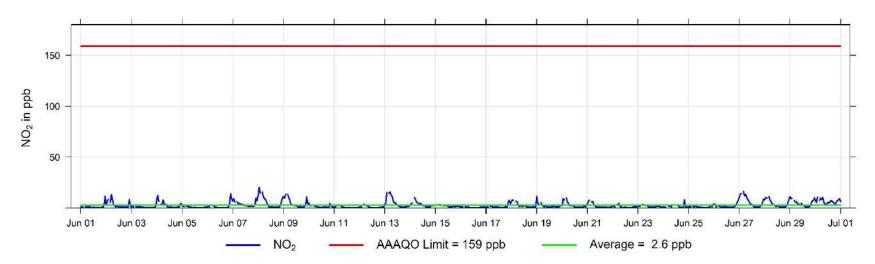
June Hourly Concentration Readings of TRS (in ppb) at Wembley



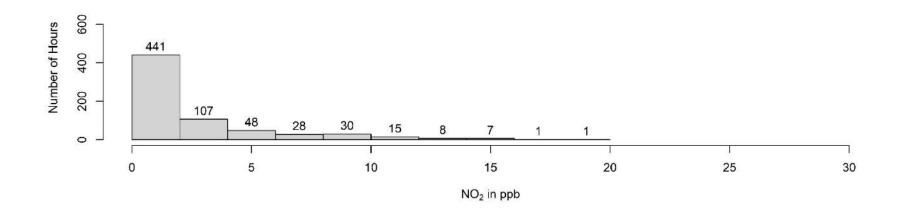
June Hourly Concentration Readings of NO (in ppb) at Wembley

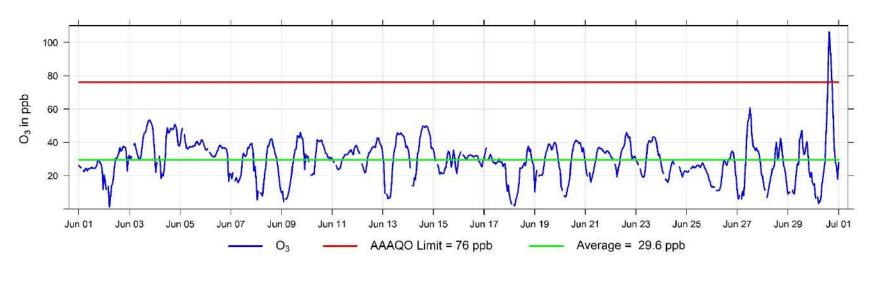
June Hourly Concentration Readings of NO_x (in ppb) at Wembley



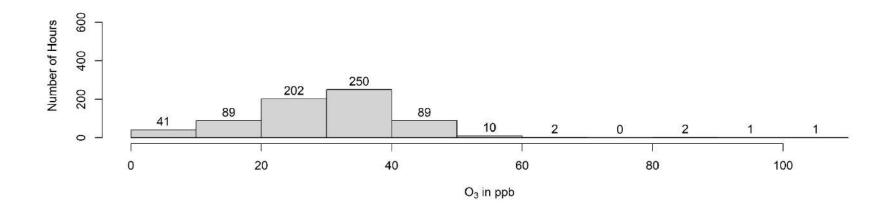


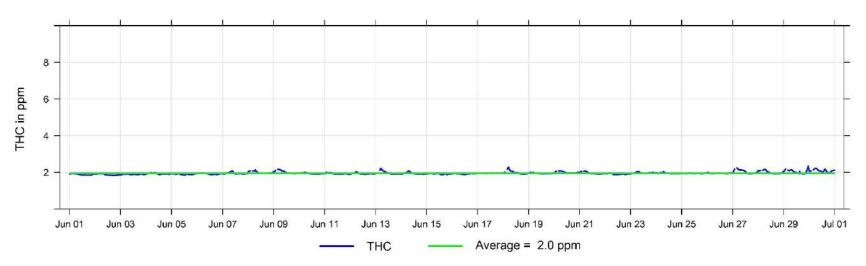
June Hourly Concentration Readings of NO2 (in ppb) at Wembley





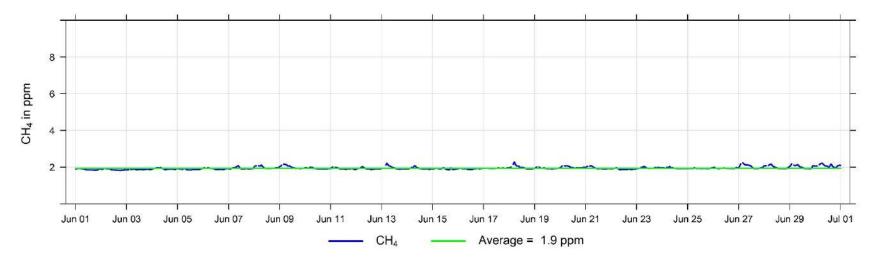
June Hourly Concentration Readings of O₃ (in ppb) at Wembley

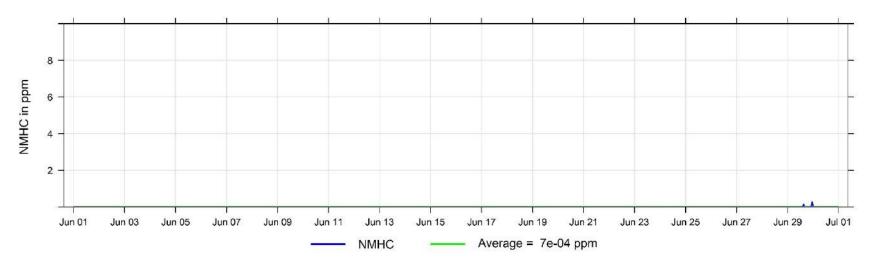




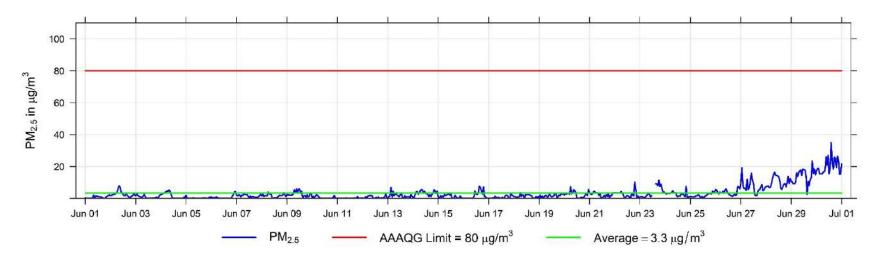
June Hourly Concentration Readings of THC (in ppm) at Wembley

June Hourly Concentration Readings of CH₄ (in ppm) at Wembley

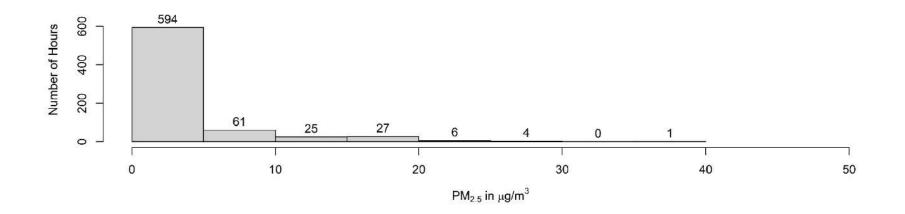


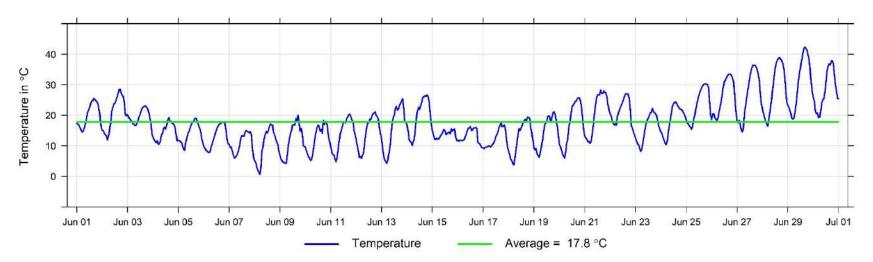


June Hourly Concentration Readings of NMHC (in ppm) at Wembley



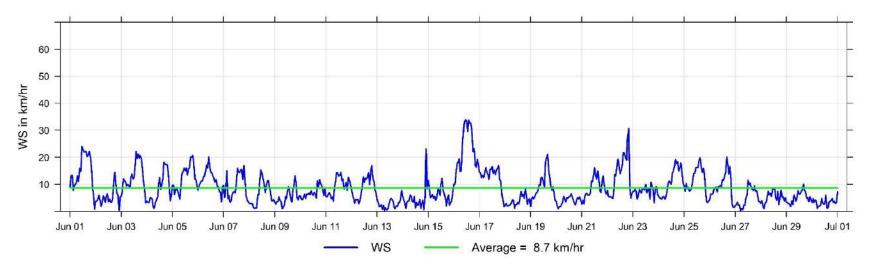
June Hourly Concentration Readings of $\text{PM}_{2.5}$ in $\mu\text{g/m}^3$ at Wembley

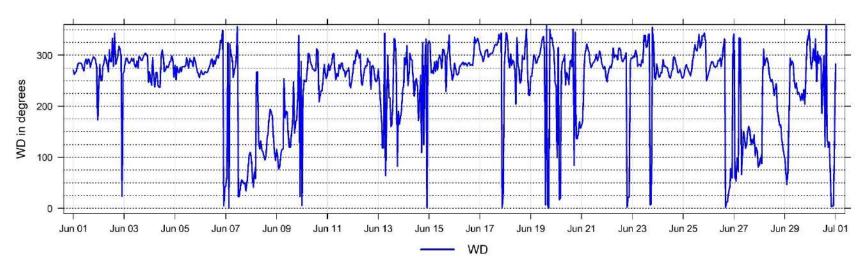




June Hourly Temperature Readings (in °C) at Wembley

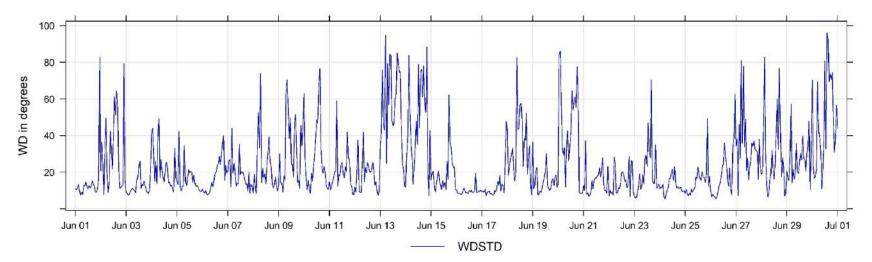
June Hourly Readings of Wind Speed (in km/hr) at Wembley

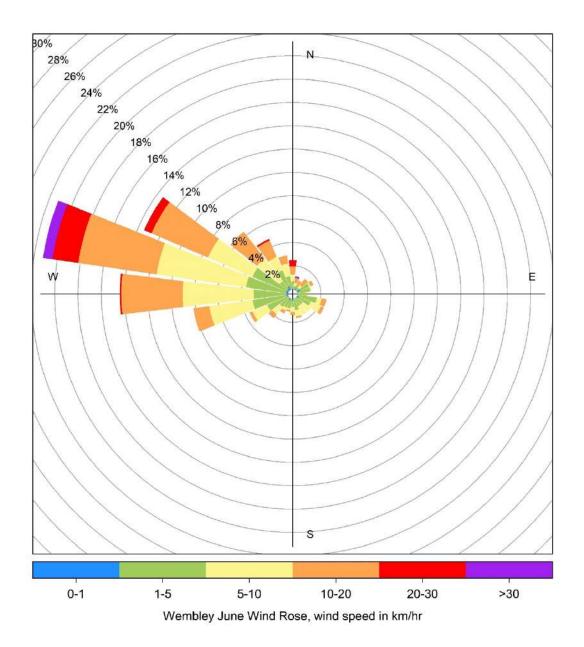


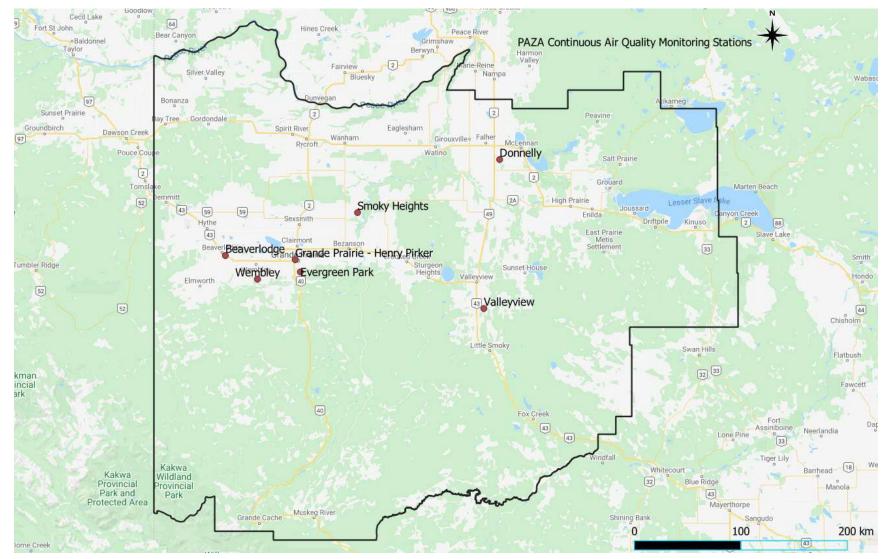


June Hourly Readings of Wind Direction (in degrees) at Wembley

June Hourly Readings of Wind Direction Standared Deviation (in degrees) at Wembley

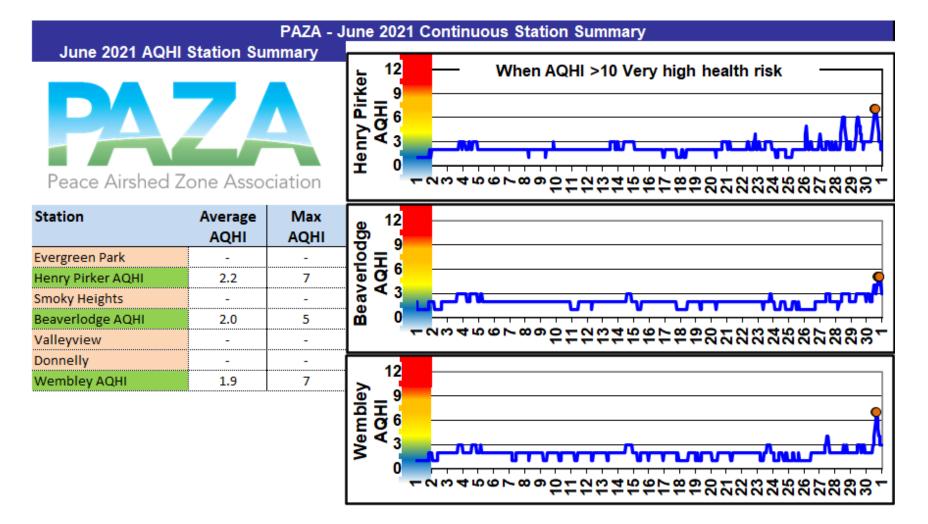






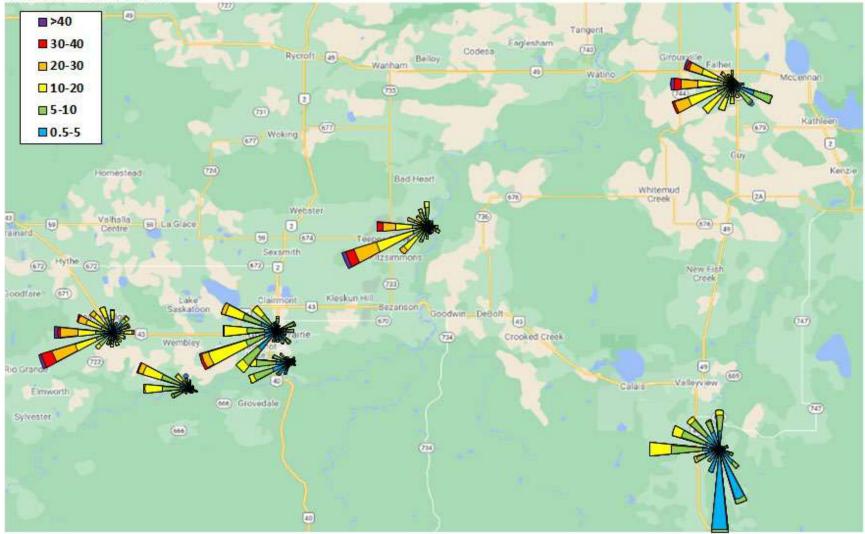
9 Concentration Summaries and Roses for PAZA

9.1 Air Quality Health Index (AQHI) Plots



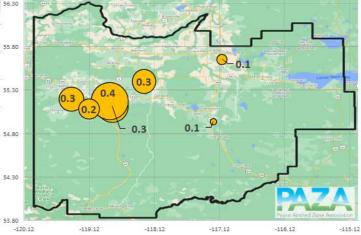
9.2 Wind Roses

Wind Roses in km/hr



9.3 Sulphur Dioxide (SO₂) Plots

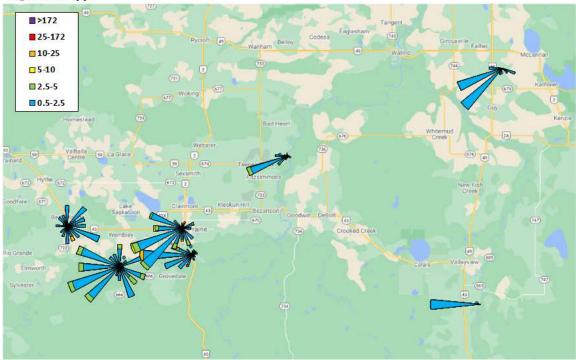
June 2021 SO ₂ Station Summary			
Station	Avg (ppb)	Max (ppb)	
Evergreen Park SO ₂	0.3	13.2	
Henry Pirker SO ₂	0.4	7.3	55.80
Smoky Heights SO ₂	0.3	4.6	
Beaverlodge SO₂	0.3	24.1	9 900
Valleyview SO₂	0.1	0.9	55.30
Donnelly SO ₂	0.1	1.3	
Wembley SO ₂	0.2	4.7	88)



Sulphur Dioixde in ppb Wembley SO₂

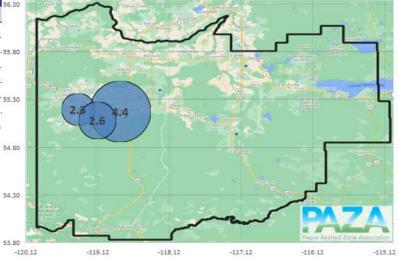
25 AAAQO = 172 ppb 15 10 5 0 - m & & & E m & & & & & & & & & & & & & &	53.80 -120.12 -119.12 -118.12	-117.12 -116.12 -115.12
Evergreen Park SO2 25 AAAQO = 172 ppb 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 10 5 10 5 10 5 10 5 10 5 11 5 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 <	Henry Pirker SO2 25 AAAQO = 172 ppb 20 15 15 10 5 0 6 5 0 4 7 9 7 9 8 5 9 5 10 5 <th>Smoky Heights 50₂ 25 26 27 27 27 27 27 27 27 27 27 27</th>	Smoky Heights 50 ₂ 25 26 27 27 27 27 27 27 27 27 27 27
Beaverlodge SO ₂ 25 AAAQO = 172 ppb	Valleyview SO2 25 AAAQO = 172 ppb 20 172 ppb 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 0	$\begin{array}{c} \hline Donnelly SO_2 \\ \hline AAAQO = 172 ppb \\ \hline 20 \\ 15 \\ 10 \\ \hline 5 \\ 0 \\ \hline \hline$

SO₂ Roses in ppb



9.4 Nitrogen Dioxide (NO₂) Plots

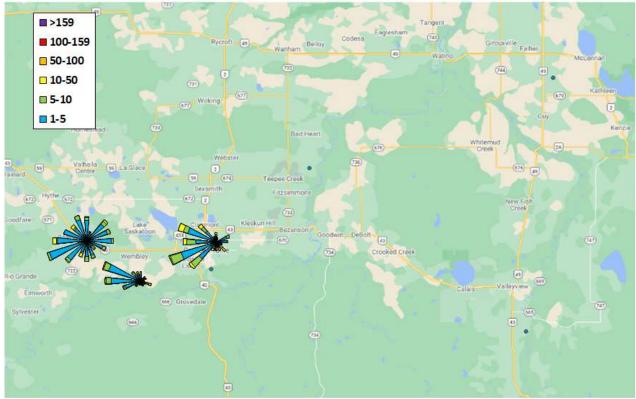
Station	Avg (ppb)	Max (ppb)
Evergreen Park NO ₂	-	
Henry Pirker NO2	4.4	25.0
Smoky Heights NO ₂		-
Beaverlodge NO ₂	2.3	17.6
Valleyview NO ₂	-	-
Donnelly NO ₂	-	-
Wembley NO ₂	2.6	20.0



Nitrogen Dioixde in ppb

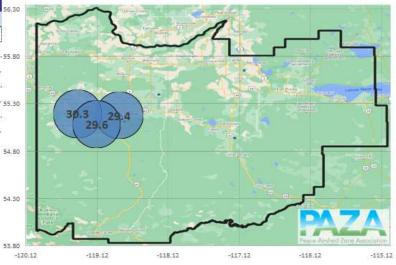
Henry Pirker NO ₂	Beaverlodge NO ₂ AAAQO = 159 ppb	Wembley NO ₂ AAAQO = 159 ppb
30	30	

NO₂ Roses in ppb



9.5 Ozone (O₃) Plots

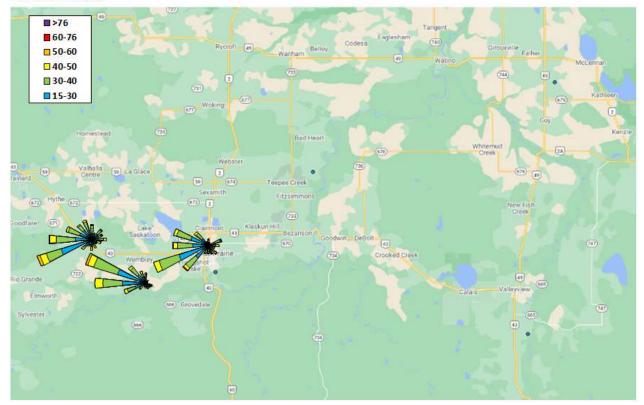
Station	Avg (ppb)	Max (ppb)
Evergreen Park O₃	-	-
Henry Pirker O₃	29.4	88.1
Smoky Heights O₃		-
Beaverlodge O₃	30.3	82.0
Valleyview O₃	-	-
Donnelly O₃	-	-
Wembley O₃	29.6	106.3



Ozone in ppb

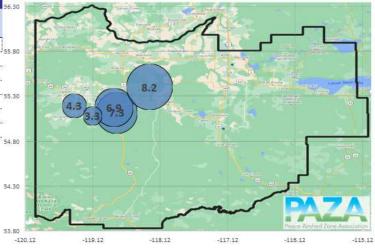
Henry Pirker O ₃	Beaverlodge O ₃	Wembley O ₃
100 80 AAAAQO = 76 ppb 40 20 0 0 0 0 0 0 0 0 0 0 0 0 0	100 80 60 40 20 0 	100 80 40 20 40 20 40 20 40 20 40 40 20 40 40 40 40 40 40 40 40 40 4

O3 Roses in ppb

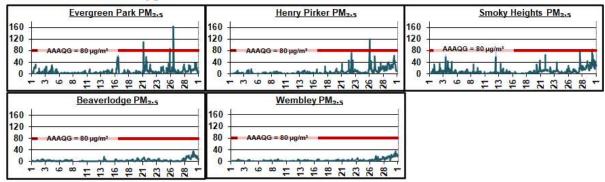


9.6 Fine Particulate Matter (PM_{2.5}) Plots

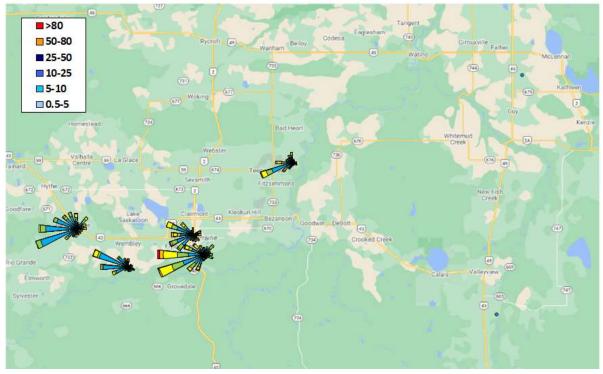
Station	Avg µg/m³	Max µg/m³	
Evergreen Park PM2.5	7.3	163.3	
Henry Pirker PM2.5	6.9	119.1	
Smoky Heights PM2.5	8.2	85.3	9990). 200
Beaverlodge PM2.5	4.3	35.5	
Valleyview PM2.5	-	-	55
Donnelly PM2.5	-	-	
Wembley PM2.5	3.3	35.0	



Fine Particulate Matter in µg/m³

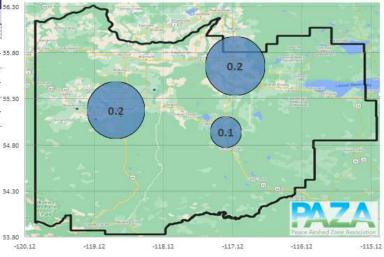


PM2.5 Roses in µg/m3



9.7 Hydrogen Sulphide (H₂S) Plots

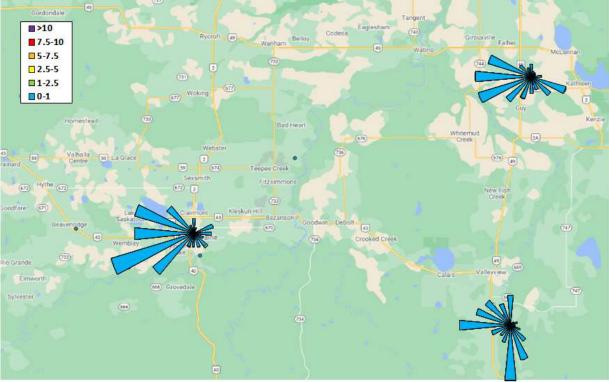
Station	Avg (ppb)	Max (ppb)
Evergreen Park H₂S	-	-
Henry Pirker H ₂ S	0.2	1.5
Smoky Heights H ₂ S		
Beaverlodge H₂S	-	-
Valleyview H₂S	0.1	1.4
Donnelly H₂S	0.2	1.5
Wembley H₂S	-	-



Hydrogen Sulphide in ppb

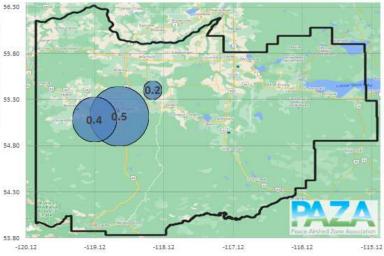
10 - AAAQO = 10 ppb	10 AAAQO = 10 ppb	10 - AAAQO = 10 ppb
8	8	8
8		8 - 11 - 11 - 11 - 11 - 11 - 11 - 11 -

H₂S Roses in ppb



9.8 Total Reduced Sulphur (TRS) Plots

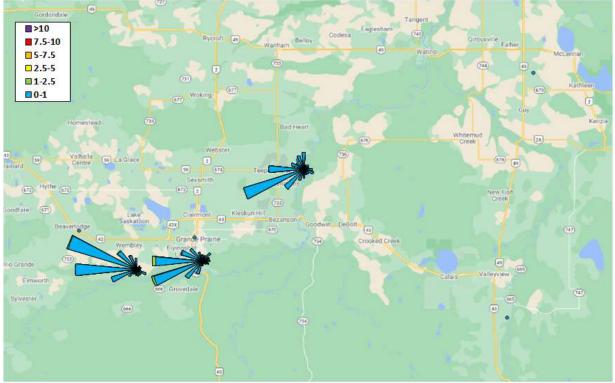
Station	Avg (ppb)	Max (ppb)
Evergreen Park TRS	0.5	1.8
Henry Pirker TRS	-	-
Smoky Heights TRS	0.2	0.8
Beaverlodge TRS	-	-
Valleyview TRS	1.5	-
Donnelly TRS	-	-
Wembley TRS	0.4	2.0



Total	Reduced	Sulphur in pp	h
TULA	Neuuceu	Sulphur in pp	L L

10	10Smoky Heights TRS	10 Wembley TRS
8	8	8
4	4	4
28 28 29 29 29 29 29 29 29 29 29 29 29 29 29	28 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 3 6 6 6 11 11 11 11 11 11 11 11 11 11 11

TRS Roses in ppb



9.9 Total Hydrocarbon (THC) Plots

June 2021 THO	8						
Station		lrocarbons	Methane		Non-Methane HCs		
	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)	Avg (ppm)	Max (ppm)	
Evergreen Park THC	-	-		-			
Henry Pirker THC	2.0	3.6	3.1	3.1	0.5	0.5	
Smoky Heights THC	-	-	-	-	-	-	
Beaverlodge THC	-	-	-	-	-	-	
Valleyview THC	-	-	-	-	-	-	
Donnelly THC	-	-	-	-	-	-	
Wembley THC	2.0	2.4	2.3	2.3	0.3	0.3	

Total Hydrocarbons in ppm

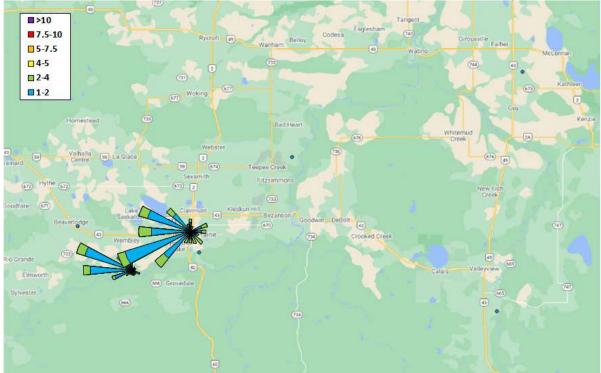
6 Henry Pirker THC	6 Wembley THC
	4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Henry Pirker CH4	6 Wembley CH4
2 8 8 3 7 2 2 2 4 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Henry Pirker NMHC	6
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Total Hydrocarbons (THC)

Methane (CH₄)

Non-Methane Hydrocarbons (NMHC)

THC Roses in ppm

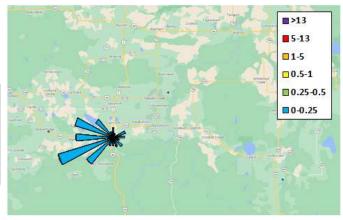


9.10 Carbon Monoxide (CO) Plots

June 2021 CO Station Summary						
Station	Avg (ppm)	Max (ppm)				
Henry Pirker CO	0.14	0.82				

Carbon Monoxide in ppm

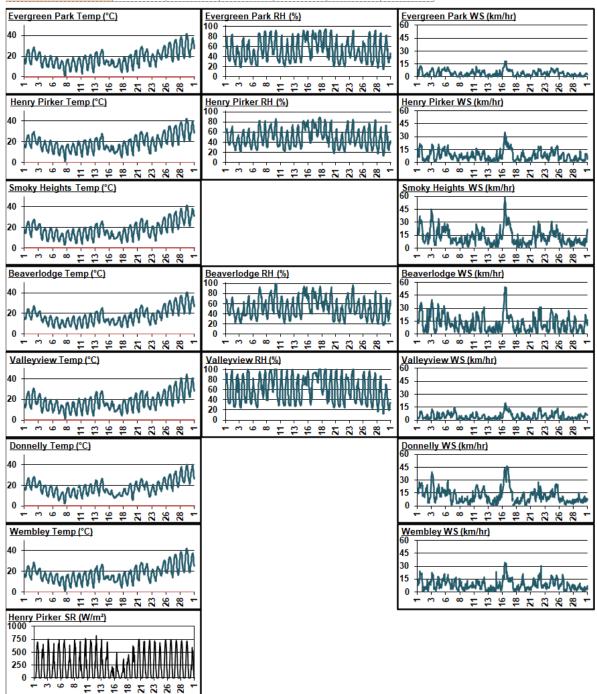
				L	lenry	Pirk	ker C	0			
-	AAA	= 06	13 pp	n -				ini ku			
-	0000000										
-											
											1
1		i = i	1.000		here	12121	100		9733		
-	~	-		-				4-		-	-h-



9.11 Meteorology Summary

June 2021 Meterological Summary							
Station	Temp (°C)	RH (%)	SR (W/m²)	WS (km/hr)	WD (deg)	WD	
Evergreen Park	18.0	52.9	-	4.3	267.9	W	Tem
Henry Pirker	19.1	49.6	230.8	8.1	265	W	R
Smoky Heights	17.8	-	-	13.2	257	WSW	SR (W
Beaverlodge	17.5	52.2	-	12.5	273	W	WS (kr
Valleyview	18.0	61.2	-	4.4	280	W	WD
Donnelly	17.9	-	-	12.1	258	WSW	
Wembley	17.8	-	-	8.7	290	WNW	<

Temp (°C) Outside Temperature RH (%) Relative Humidity SR (W/m²) Solar Radiation /S (km/hr) Wind Speed WD (deg) Wind Direction WD Wind Direction



10 **Passive Monitoring Data**

Station Station SO2 03 NO2 H2S Number Name ppb ppb LSD ppb ppb Duplicates Bay Tree 31.5 2a 2b Bay Tree 29.5 3a Forth Creek 0.7 3b Forth Creek 0.6 7a Steeprock Creek 0.1 7b Steeprock Creek 0.2 9a Spirit River 0.3 9b Spirit River 0.3 25a 0.2 Pinto Creek 25b Pinto Creek 0.2 36a Guv 0.7 36b Guy 0.8 1.2 39a Clouston Creek 39b **Clouston Creek** 1.3 40a McLennan 0.2 40b McLennan 0.6 44a Peavine 0.3 44b Peavine 0.3 Deer Mountain 48a 0.2 48b Deer Mountain 0.1 0.1 FC4a Fox Creek 4 0.4 FC4b Fox Creek 4 0.2 0.1 J3a Plant 0.3 J3b Plant 0.2 Bone Yard 0.5 0.1 J3a J3b Bone Yard 0.5 0.1 Bay Tree 0.2 31.5 0.5 13-16-078-13 W6M 2 Forth Creek 0.2 0.6 04-13-082-07 W6M 3 Boone Creek 0.2 0.4 01-23-076-11 W6M E Steeprock Creek 0.2 0.2 09-35-072-13 W6M q Spirit River 2.2 08-12-079-07 W6M Webber Creek 11 0.3 2.1 09-36-074-09 W6M 12 Hythe 0.3 1.5 14-36-072-11 W6M 08-06-069-12 W6M 14 Sylvester 0.1 0.3 15-36-071-10 W6M 16 Beaverlodge 0.4 0.8 13-06-073-08 W6M 17 Poplar 0.5 1.9 Saddle Hills 04-25-074-07 W6M 18 0.4 0.5 19 Wanham 0.3 0.7 16-22-077-03 W6M Shaftesbury 04-03-082-23 W5M 20 0.2 1.2 21 Eaglesham 0.2 2.8 16-21-079-25 W5M 23 Bear Lake 0.4 1.7 15-31-072-06 W6M 24 Wembley 0.4 1.8 12-31-070-08 W6M Pinto Creek 25 0.1 0.2 04-24-069-11 W6M 26 Flyingshot 0.6 0.9 15-36-070-07 W6M 27 Grande Prairie I 0.6 1.7 08-15-071-06 W6M 29 Smoky Heights 0.3 1.2 04-06-075-02 W6M 32 Gold Creek 0.3 1.0 06-33-067-05 W6M 34 15.35.074.25 W5M Puskwaskau 0 1 03 12-35-079-21 W5M 35 Jean Cote 0.31.3 03-04-076-22 W5M 36 Guy Crooked Creek 0.2 5.9 0.7 37 30.4 16-01-071-26 W5M 0.7 0.2 39 12-01-073-22 W5M Clouston Creek 0.3 1.2 40 3.5 03-29-077-19 W5M McLennan 0.4 42 0.2 0.3 05-32-070-19 W5M Sunset House 44 Peavine 0.2 0.3 03-05-079-15 W5M 46 Little Smoky 0.2 0.7 12-01-065-21 W5M 47 Kinuso 0.3 35.1 0.4 12-10-073-10 W5M 48 Deer Mountain 0.2 0.1 15-22-068-09 W5M 49 Henry Pirker 0.4 1.3 17-26-071-06 W6M -50 East Prairie 0.2 0.1 11-13-079-08 W6M 57 0.0 Jayar1 Plant 03 0.6 06-08-062-03 W6M 07-08-062-03 W6M 58 Jayar2 14-8 0.3 1.3 0.1 14-08-062-03 W6M 59 Jayar3 Bone Yard 0.6 0.5 0.1 Jayar4 7-8 or 8-8 Pad 0.1 10-08-062-03 W6M 60 0.5 0.7 11-08-062-03 W6M 61 Javar5 Camp 0.3 3.4 0.1 14-02-077-23 W5M Girouxville 3 G3 0.3 G4 Girouxville 4 0.3 04-08-077-22 W5M 0.3 FC1 Fox Creek 1 0.1 FC2 Fox Creek 2 0.4 0.1

Peace Airshed Zone Association - PAZA Passive Stations for June 2021

FC3

FC4

Fox Creek 3

Fox Creek 4

1.0

0.3

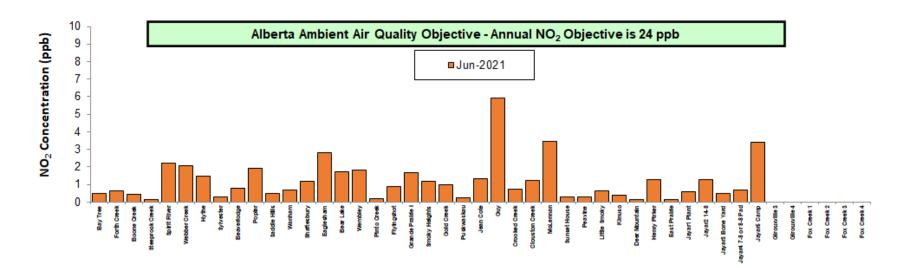
-

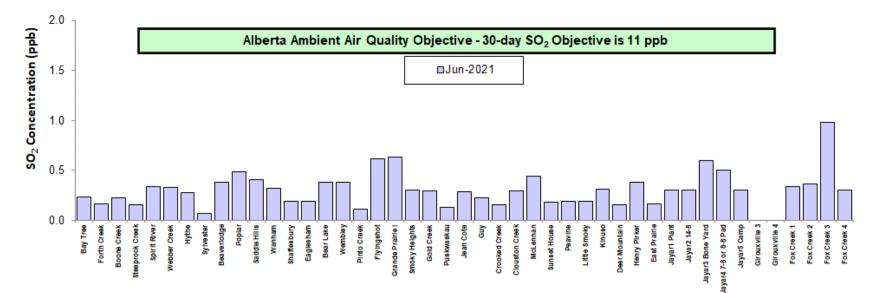
0.1

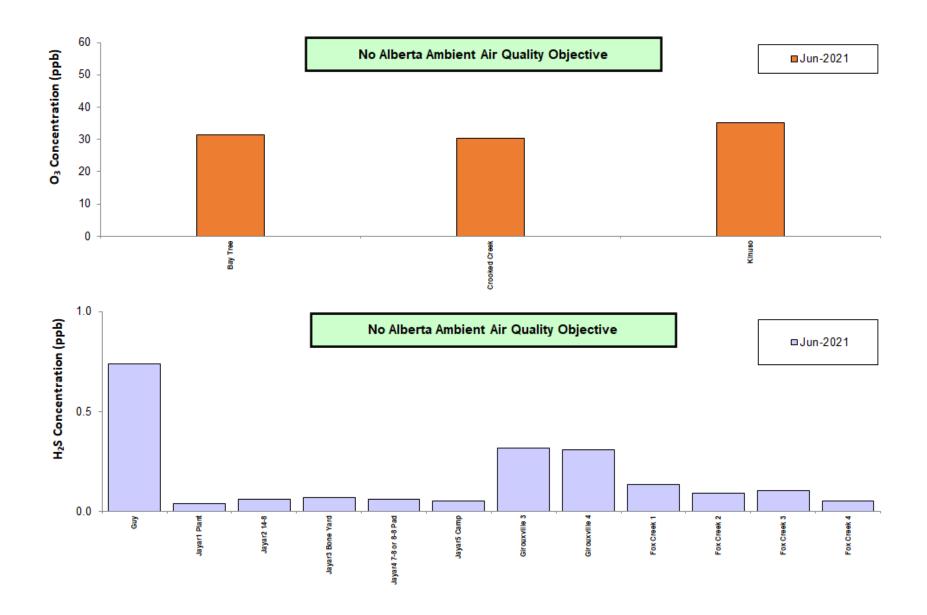
0.1

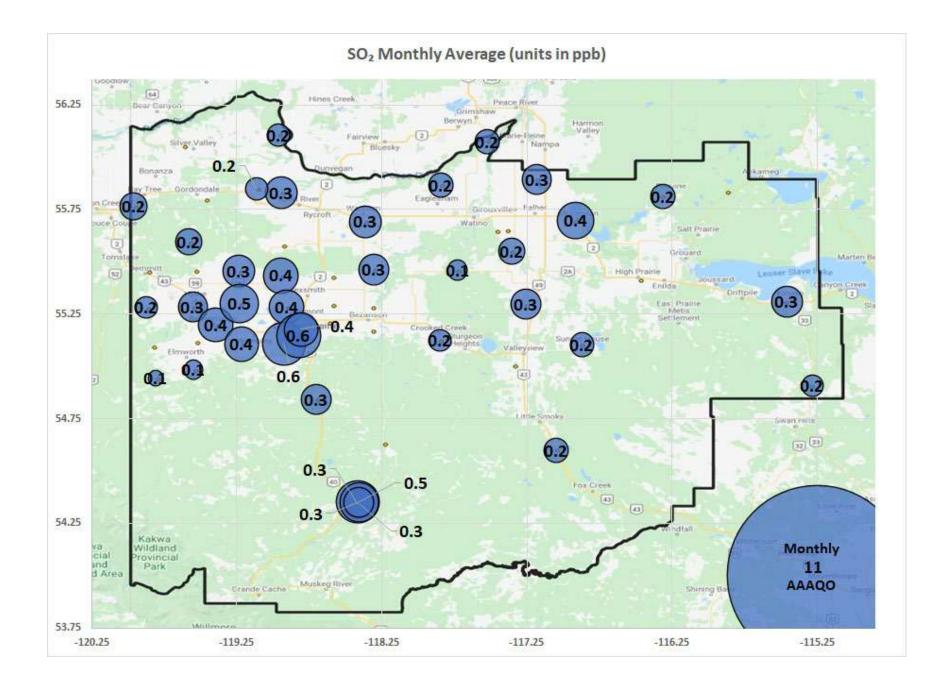
Passive Summary for June 2021

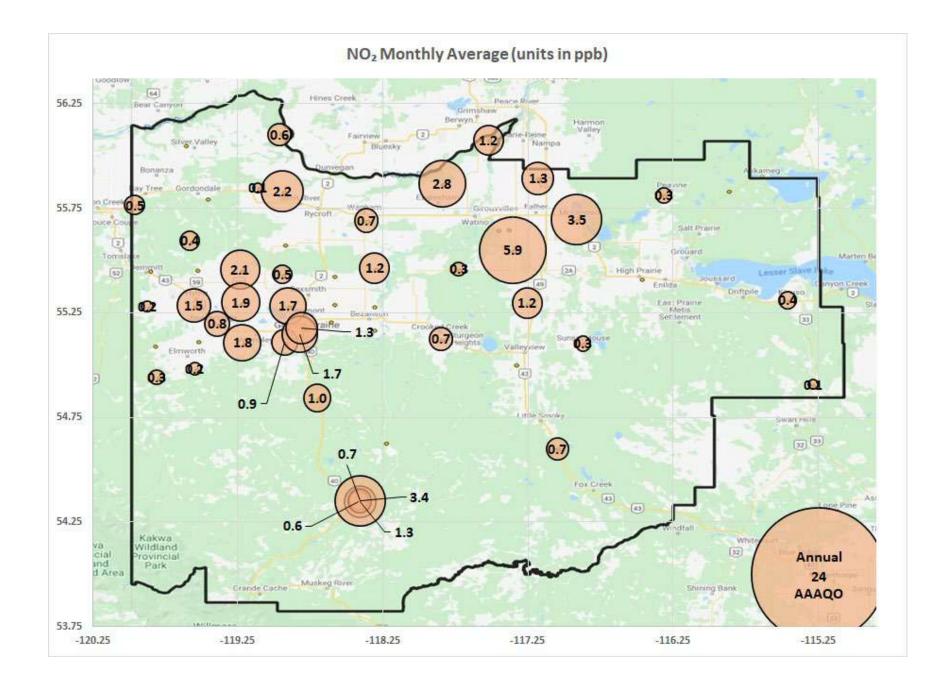
Stats	Sulphur Dioxide	Ozone	Nitrogen Dioxide	Hydrogen Sulphide				
Stats	SO ₂	O ₃	NO ₂	H ₂ S				
	ppb	ppb	ppb	ppb				
-								
	Passive Summary for June 2021 (PAZA)							
Mean	0.3	32.4	1.2	0.2				
Standard Deviation	0.1	2.5	1.2	0.2				
Minimum	0.1	30.4	0.1	0.0				
	Sylvester (#14)	Crooked Creek (#37)	East Prairie (#50)	Jayar1 Plant (#57)				
Maximum	0.6	35.1	5.9	0.7				
	Grande Prairie I (#27)	Kinuso (#47)	Guy (#36)	Guy (#36)				
	Continuous and Passive Monitoring Comparision							
PAZA Beaverlodge Station	0.3	30.3	17.6	-				
Beaverlodge Passive (#16)	0.4	-	0.8	-				
				•				
PAZA Henry Pirker Station	0.4	29.4	25.0	0.2				
Henry Pirker passive (#49)	0.4	-	1.3	-				

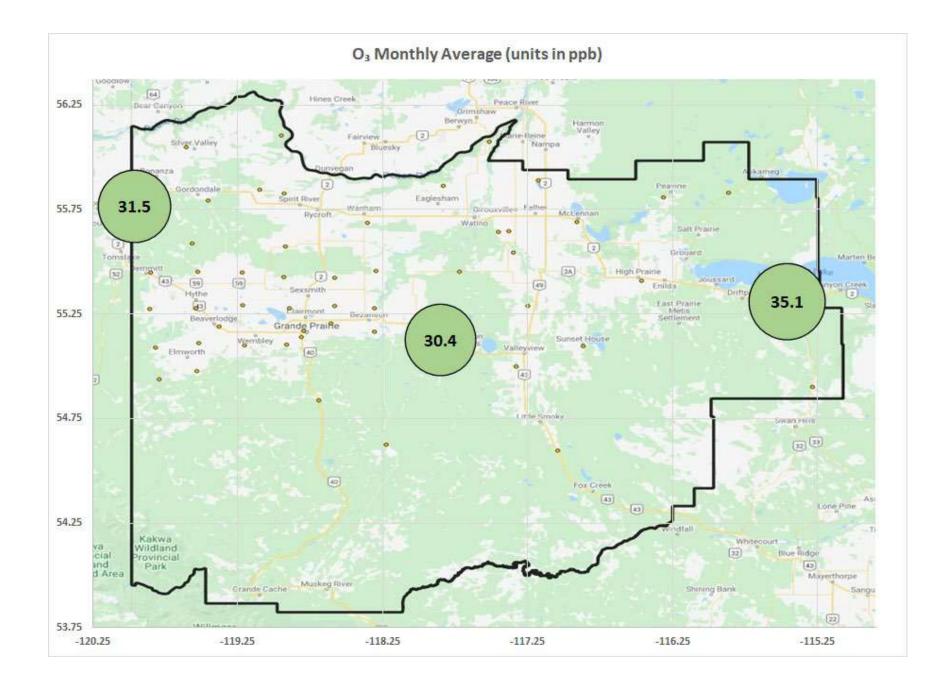


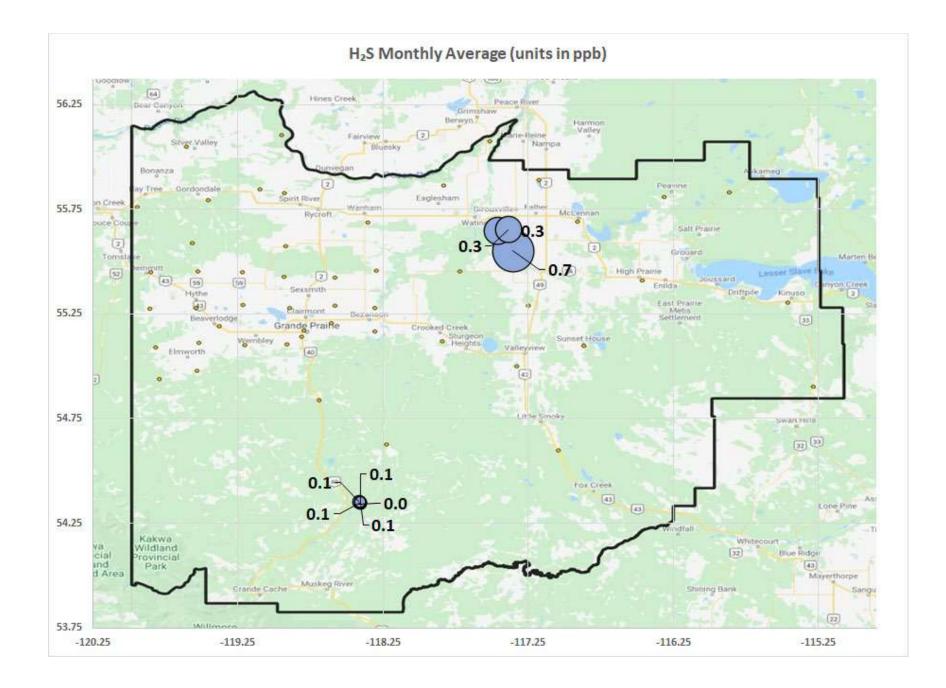












11 End of Report

End of Report



Peace Airshed Zone Association Ambient Air Monitoring Report

June 2021