



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
September 2017**

October 31, 2017

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

RE: Peace Airshed Zone Association (PAZA) – September 2017 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of September 2017.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the following facility Operating Approvals:

Company	Facility	LSD	EPEA Approval Number
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
AltaGas Ltd.	Pouce Coupe	03-03-081-13-W6	247673-00-00
	Ante Creek	02-26-068-25-W5	266694-00-00
	Gordondale	16-31-78-11-W6M	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
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	00000029-01-00
	Progress/Gordondale	01-01-077-10-W6	00010036-02-00
	Gold Creek	13-26-067-05-W6	00010446-02-00

Company	Facility	LSD	EPEA Approval Number
	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
Devon Canada	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00
	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
Long Run Exploration	Eaglesham	01-25-076-01-W6	00241532-00-00
	Kakut	14-12-075-03-W6	00248469-00-00
	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
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	00001746-02-00

Company	Facility	LSD	EPEA Approval Number
	Pouce Coupe	16-07-078-11-W6	00000614-01-00
Petrus Resources	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	00000263-01-00
	Gordondale	11-26-079-09-W6	00011495-01-01
	Pouce Coupe/Bonanza	3-23-080-13-W6	00070203-01-01
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00
TAQA North Ltd.	Valhalla	13-21-076-09-W6	00017620-01-00
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

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the “Monthly Continuous Data Summary” and “Continuous Network Equipment Summary” pages of the report.

Continuous Monitoring: Six (6) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, and Rycroft-Portable.

During the month of September, the following events were noted:

Henry Pirker Station:

- ◆ The measured ambient air quality was within the AAAQO for the Henry Pirker station, with the exception of three 1-hour and one 24-hour PM_{2.5} exceedances recorded on September 7, attributed to wildfire smoke in the region. AEP reference number: 329410.
- ◆ All analyzers and meteorological sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of September.

Evergreen Park Station:

- ◆ The measured ambient air quality was within the AAAQO for the Evergreen Park station, with the exception of one 24-hour PM_{2.5} exceedance recorded on September 7, attributed to wildfire smoke in the region. AEP reference number: 331268.
- ◆ All analyzers and meteorological sensors at the Evergreen Park station had an operational uptime greater than 90% for the month of September.

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station, with the exception of one 24-hour PM_{2.5} exceedance recorded on September 7, attributed to wildfire smoke in the region. AEP reference number: 329411.
- ◆ All analyzers and meteorological sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of September.

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station, with the exception of two 1-hour and one 24-hour PM_{2.5} exceedances recorded on September 7, attributed to wildfire smoke in the region. AEP reference number: 329409.
- ◆ All analyzers and meteorological sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of September.

Valleyview Station:

- ◆ The measured ambient air quality was within the AAAQO for the Valleyview station.
- ◆ All analyzers and meteorological sensors at the Valleyview station had an operational uptime greater than 90% for the month of September, with the exception of the relative humidity sensor which was not operational this month due to instrument malfunctioning.

Donnelly Station:

- ◆ The measured ambient air quality was within the AAAQO for the Donnelly station.
- ◆ All analyzers and meteorological sensors at the Donnelly station had an operational uptime greater than 90% for the month of September.

Rycroft-Portable Station:

- ◆ The measured ambient air quality was within the AAAQO for the Rycroft-Portable station.
- ◆ All analyzers and meteorological sensors at the Rycroft-Portable station had an operational uptime greater than 90% for the month of September.

◆ **Passive Monitoring - 27 Stations throughout the PAZA zone:**

There were six duplicate sites sampled in the month of September: Wembley and Gold Creek (SO₂), Bay Tree (O₃), Sylvester and Pinto Creek (NO₂), and Girouxville 4 (H₂S). The passive sample analyses were performed by MAXXAM Analytics Inc.

A summary of the passive data collected are reported as follows:

- Monthly average concentrations for SO₂ passives ranged from BDL ppb to 0.6 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.3 ppb to 5.9 ppb, with a mean of 1.2 ppb.
- Monthly average concentrations for O₃ passives ranged from 20.8 ppb to 28.2 ppb, with a mean of 24.3 ppb.
- Monthly average concentrations for H₂S passives ranged from 0.1 ppb to 0.2 ppb, with a mean of 0.1 ppb.

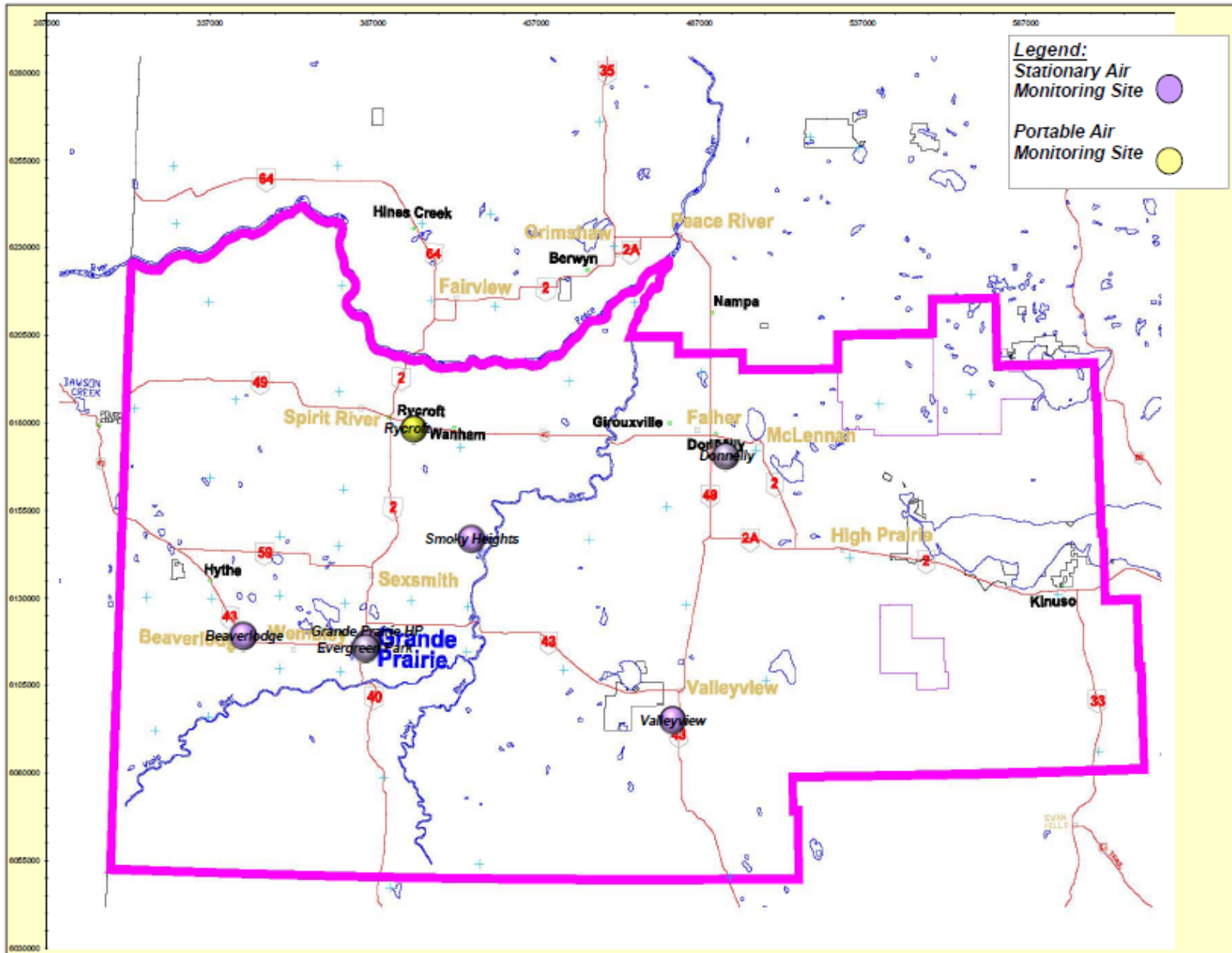
If you have any questions or concerns, please contact Patrick Andersen at 403.505.1041 or the PAZA office at 780.833.4343.

On Behalf of the
Peace Airshed Zone Association



Patrick Andersen, B.Sc.
Program Manager

Location of PAZA Continuous Monitoring Stations



Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues:

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
NOx/NO/NO ₂	TEI	42i	No operational issues observed.
O ₃	TEI	49i	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55I	No operational issues observed.
TRS	TEI	45C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	The daily spans failed to run following the monthly calibration. One hour of data is flagged as maintenance while this was resolved, resulting in an uptime of 99.9%
TRS	TEI	43C	The daily spans failed to run following the monthly calibration. One hour of data is flagged as maintenance while this was resolved, resulting in an uptime of 99.9%
PM _{2.5}	Sharp	5030	Routine maintenance and analyzer malfunctioning resulted in an uptime of 97.5%.
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PAZA – Smoky Heights Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43i	Maintenance while the analyzer was removed for repairs resulted in an uptime of 96.3%.
PM _{2.5}	Sharp	5030	Analyzer malfunctioning resulted in an uptime of 98.9%.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
ET	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS / WD	Met One	50.5H	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	The relative humidity sensor was not operational for the month of September due to instrument malfunctioning.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Donnelly Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	Thermo	450i	No operational issues observed.
ET	Gill	RM Young 5103	No operational issues observed.
WS / WD	Gill	RM Young 5103	The wind instrument was swapped out for calibrations, resulting in an uptime of 99.9%.

PAZA – Portable-Rycroft

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
NOx/NO/NO ₂	TEI	42i	No operational issues observed.
O ₃	TEI	49i	No operational issues observed.
TRS	TEI	43i	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55i	Analyzer malfunctioning and routine maintenance while the span cylinder was replaced resulted in an uptime of 97.4%.
PM _{2.5}	Sharp	5030	Routine analyzer maintenance resulted in an uptime of 99.6%.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA Monthly Continuous Data Summary

Sep-2017 Peace Airshed Zone Association							Maximum Recorded Values				Operational Time (%)	Calibration Date
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr		24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	Conc	Day		
SO ₂ (ppb)	172	48	Henry Pirker	0.2	0	0	2.9	Sep-04 12:00	0.4	Sep-13	100.0%	Sep-30
SO ₂ (ppb)	172	48	Evergreen Park	0.2	0	0	8.1	Sep-04 12:00	0.5	Sep-04	99.9%	Sep-08
SO ₂ (ppb)	172	48	Smoky Heights	0.3	0	0	3.5	Sep-27 02:00	0.6	Sep-26	100.0%	Sep-27
SO ₂ (ppb)	172	48	Beaverlodge	0.2	0	0	2.8	Sep-17 13:00	0.8	Sep-07	100.0%	Sep-18
SO ₂ (ppb)	172	48	Valleyview	0.6	0	0	12.4	Sep-11 23:00	2.8	Sep-30	100.0%	Sep-19
SO ₂ (ppb)	172	48	Donnelly	0.2	0	0	0.8	Sep-29 12:00	0.4	Sep-07	100.0%	Sep-26
SO ₂ (ppb)	172	48	Rycroft-Portable	0.3	0	0	5.2	Sep-01 09:00	0.6	Sep-06	100.0%	Sep-25
NO (ppb)			Henry Pirker	3.7	-	-	94.9	Sep-29 08:00	21.2	Sep-28	100.0%	Sep-29
NO ₂ (ppb)	159	106	Henry Pirker	6.8	0	0	25.4	Sep-05 23:00	12.9	Sep-07	100.0%	Sep-29
NO _x (ppb)			Henry Pirker	10.6	-	-	114.5	Sep-29 08:00	30.9	Sep-28	100.0%	Sep-29
NO (ppb)			Beaverlodge	0.4	-	-	16.6	Sep-28 08:00	1.9	Sep-28	100.0%	Sep-18
NO ₂ (ppb)	159	106	Beaverlodge	3.0	0	0	13.1	Sep-11 07:00	6.7	Sep-07	100.0%	Sep-18
NO _x (ppb)			Beaverlodge	3.5	-	-	25.2	Sep-28 08:00	7.3	Sep-07	100.0%	Sep-18
NO (ppb)			Rycroft-Portable	0.4	-	-	4.5	Sep-30 20:00	0.6	Sep-17	100.0%	Sep-25
NO ₂ (ppb)	159	106	Rycroft-Portable	2.1	0	0	13.7	Sep-28 22:00	4.3	Sep-07	100.0%	Sep-25
NO _x (ppb)			Rycroft-Portable	2.4	-	-	14.3	Sep-28 22:00	4.7	Sep-07	100.0%	Sep-25
O ₃ (ppb)	82		Henry Pirker	20.1	0	-	71.8	Sep-06 16:00	35.5	Sep-30	100.0%	Sep-29
O ₃ (ppb) - 8-hr			Henry Pirker		0				57.4	Sep-06		-
O ₃ (ppb)	82		Beaverlodge	22.6	0	-	52.5	Sep-06 16:00	34.1	Sep-30	100.0%	Sep-18
O ₃ (ppb) - 8-hr			Beaverlodge		0				48.4	Sep-05		-
O ₃ (ppb)	82		Rycroft-Portable	22.1	0	-	62.1	Sep-06 17:00	35.4	Sep-06	100.0%	Sep-25
O ₃ (ppb) - 8-hr			Rycroft-Portable		0				54.4	Sep-06		-
CO (ppm)	13		Henry Pirker	0.20	0	-	1.0	Sep-27 22:00	0.4	Sep-07	100.0%	Sep-21
CO (ppm) - 8-hr	5		Henry Pirker		0				1.5	Sep-29		-

PAZA Monthly Continuous Data Summary – continued

Sep-2017 Peace Airshed Zone Association							Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
THC (ppm)			Henry Pirker	1.9	-	-	4.2	Sep-08 03:00	2.2	Sep-07	100.0%	Sep-21
CH ₄ (ppm)			Henry Pirker	1.9	-	-	4.2	Sep-08 03:00	2.2	Sep-07	100.0%	Sep-21
NMHC (ppm)			Henry Pirker	0.0	-	-	0.1	Sep-07 08:00	0.0	Sep-07	100.0%	Sep-21
THC (ppm)			Rycroft-Portable	1.9	-	-	2.1	Sep-14 07:00	2.0	Sep-14	97.4%	Sep-11
CH ₄ (ppm)			Rycroft-Portable	1.9	-	-	2.1	Sep-14 07:00	2.0	Sep-14	97.4%	Sep-11
NMHC (ppm)			Rycroft-Portable	0.0	-	-	0.0	Sep-25 17:00	0.0	Sep-25	97.4%	Sep-11
TRS (ppb)			Henry Pirker	0.2	-	-	1.5	Sep-07 01:00	0.4	Sep-07	100.0%	Sep-21
TRS (ppb)			Evergreen Park	0.2	-	-	1.9	Sep-15 09:00	0.4	Sep-15	99.9%	Sep-08
TRS (ppb)			Smoky Heights	0.1	-	-	1.9	Sep-04 05:00	0.4	Sep-29	96.3%	Sep-28
TRS (ppb)			Rycroft-Portable	0.2	-	-	0.9	Sep-02 19:00	0.3	Sep-23	100.0%	Sep-11
H ₂ S (ppb)	10	3	Valleyview	0.1	0	0	0.8	Sep-07 21:00	0.3	Sep-26	100.0%	Sep-19
H ₂ S (ppb)	10	3	Donnelly	0.1	0	0	2.5	Sep-12 22:00	0.3	Sep-08	100.0%	Sep-26
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	7.8	3	1	92.5	Sep-07 23:00	46.0	Sep-07	100.0%	Jun-05
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	5.3	0	1	64.3	Sep-08 00:00	32.1	Sep-07	97.5%	Aug-25
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	5.3	0	1	74.6	Sep-07 23:00	30.2	Sep-07	98.9%	Jul-26
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	6.4	2	1	93.7	Sep-07 16:00	48.7	Sep-07	100.0%	Jun-15
PM _{2.5} (µg/m ³)	80	30	Rycroft-Portable	3.7	0	0	70.2	Sep-07 22:00	28.1	Sep-07	99.6%	Jun-19
RH (%)			Henry Pirker	66.9	-	-	90.5	Sep-09 03:00	85.2	Sep-19	100.0%	-
RH (%)			Evergreen Park	73.7	-	-	99.6	Sep-07 08:00	95.6	Sep-19	100.0%	-
RH (%)			Beaverlodge	69.5	-	-	99.0	Sep-22 08:00	92.2	Sep-19	100.0%	-
RH (%)			Valleyview	-	-	-	-	-	-	-	0.0%	-
SR (W/m ²)			Henry Pirker	120.6	-	-	618.7	Sep-01 13:00	198.6	Sep-04	100.0%	-
Temp (°C)			Henry Pirker	11.9	-	-	29.5	Sep-06 16:00	18.0	Sep-06	100.0%	-
Temp (°C)			Evergreen Park	11.0	-	-	29.2	Sep-06 17:00	16.6	Sep-06	100.0%	-
Temp (°C)			Smoky Heights	11.1	-	-	28.5	Sep-06 17:00	17.0	Sep-07	100.0%	-
Temp (°C)			Beaverlodge	11.6	-	-	29.0	Sep-06 15:00	19.1	Sep-06	100.0%	-
Temp (°C)			Valleyview	11.5	-	-	30.6	Sep-06 17:00	17.5	Sep-07	100.0%	-
Temp (°C)			Donnelly	11.8	-	-	30.1	Sep-06 16:00	18.8	Sep-07	100.0%	-
Temp (°C)			Rycroft-Portable	12.2	-	-	31.1	Sep-06 15:00	18.7	Sep-07	100.0%	-

PAZA Monthly Continuous Data Summary – continued

Sep-2017		Peace Airshed Zone Association					Maximum Recorded Values						
							1-hr		24-hr / 8-hr				
WSPD s (km/hr)			Henry Pirker	7.4	-	-	34.0	Sep-11 17:00	17.5	Sep-30	100.0%	-	
WSPD s (km/hr)			Evergreen Park	9.2	-	-	48.0	Sep-10 12:00	28.5	Sep-10	100.0%	-	
WSPD s (km/hr)			Smoky Heights	11.1	-	-	50.0	Sep-11 16:00	25.0	Sep-30	99.9%	-	
WSPD s (km/hr)			Beaverlodge	9.4	-	-	45.0	Sep-11 15:00	23.1	Sep-10	100.0%	-	
WSPD s (km/hr)			Valleyview	3.4	-	-	22.0	Sep-20 15:00	13.1	Sep-20	100.0%	-	
WSPD s (km/hr)			Donnelly	9.7	-	-	38.0	Sep-11 17:00	23.8	Sep-10	99.9%	-	
WSPD s (km/hr)			Rycroft-Portable	8.4	-	-	33.0	Sep-11 17:00	21.9	Sep-20	100.0%	-	
WSPD v (km/hr)			Henry Pirker	3.6	-	-	33.0	Sep-11 17:00	17.2	Sep-30	100.0%	-	
WSPD v (km/hr)			Evergreen Park	5.4	-	-	48.0	Sep-10 12:00	27.3	Sep-10	100.0%	-	
WSPD v (km/hr)			Smoky Heights	6.7	-	-	49.0	Sep-11 16:00	24.7	Sep-30	99.9%	-	
WSPD v (km/hr)			Beaverlodge	3.6	-	-	44.0	Sep-11 15:00	21.2	Sep-10	100.0%	-	
WSPD v (km/hr)			Valleyview	1.2	-	-	22.0	Sep-20 15:00	12.3	Sep-20	100.0%	-	
WSPD v (km/hr)			Donnelly	4.2	-	-	38.0	Sep-11 17:00	22.7	Sep-10	99.9%	-	
WSPD v (km/hr)			Rycroft-Portable	3.9	-	-	33.0	Sep-11 17:00	20.5	Sep-20	100.0%	-	
WDIR			Henry Pirker	WSW	-	-	-	-	-	-	100.0%	-	
WDIR			Evergreen Park	WSW	-	-	-	-	-	-	100.0%	-	
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	99.9%	-	
WDIR			Beaverlodge	W	-	-	-	-	-	-	100.0%	-	
WDIR			Valleyview	W	-	-	-	-	-	-	100.0%	-	
WDIR			Donnelly	SSW	-	-	-	-	-	-	99.9%	-	
WDIR			Rycroft-Portable	SW	-	-	-	-	-	-	100.0%	-	

PAZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

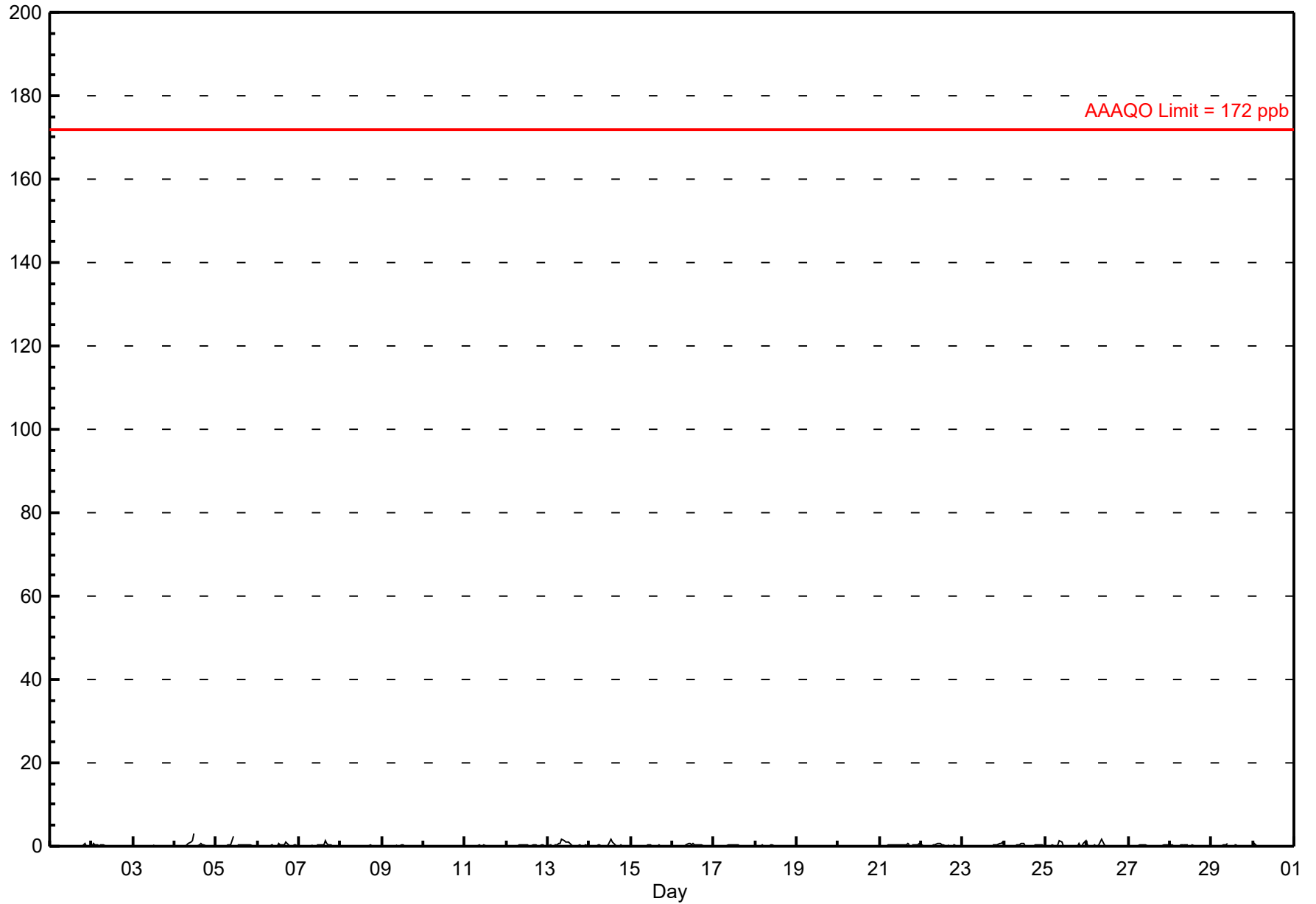
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Henry Pirker - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 2.9 ppb on Sep 4 12:00	Maximum Daily Average: 0.4 ppb on Sep 13		Hours of Data:	687
Minimum Value: 0 ppb on Sep 1 11:00	Minimum Daily Average: 0.0 ppb on Sep 20		Hours of Missing Data:	33
Maximum Diurnal Average: 0.4 ppb at hour 10	Minimum Diurnal Average: 0.1 ppb at hour 4		Hours of Calibration:	33
Monthly Average: 0.17 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.4		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0.1	0.5
2-Sep	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.6
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.2
4-Sep	0	0	0	0	0	0	0	0	1	1	1	3	A	0	0	1	0	0	0	0	0	0	0	0	0.4	2.9
5-Sep	0	0	0	0	0	0	0	0	0	1	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	1	1	0	0	0	0	0	0	0.2	1.1
7-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0.2	1.4
8-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
9-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Sep	0	0	0	A	0	0	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.6
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0.3	1.7
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
16-Sep	A	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.2
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	1	0.3	0.6
22-Sep	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.8
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	0.2	1.1
24-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.8
25-Sep	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	1	0	0	1	1	0.3	1.4
26-Sep	0	0	0	0	0	0	0	0	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	1.9
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
29-Sep	0	0	0	0	0	0	0	0	0	1	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
30-Sep	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.7
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Diurnal Average	
	0.3	0.7	0.3	0.2	0.4	0.3	0.6	0.6	1.9	1.5	2.3	2.9	1.7	0.9	0.8	1.4	1.1	0.7	0.4	0.7	0.5	0.7	0.5	1.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



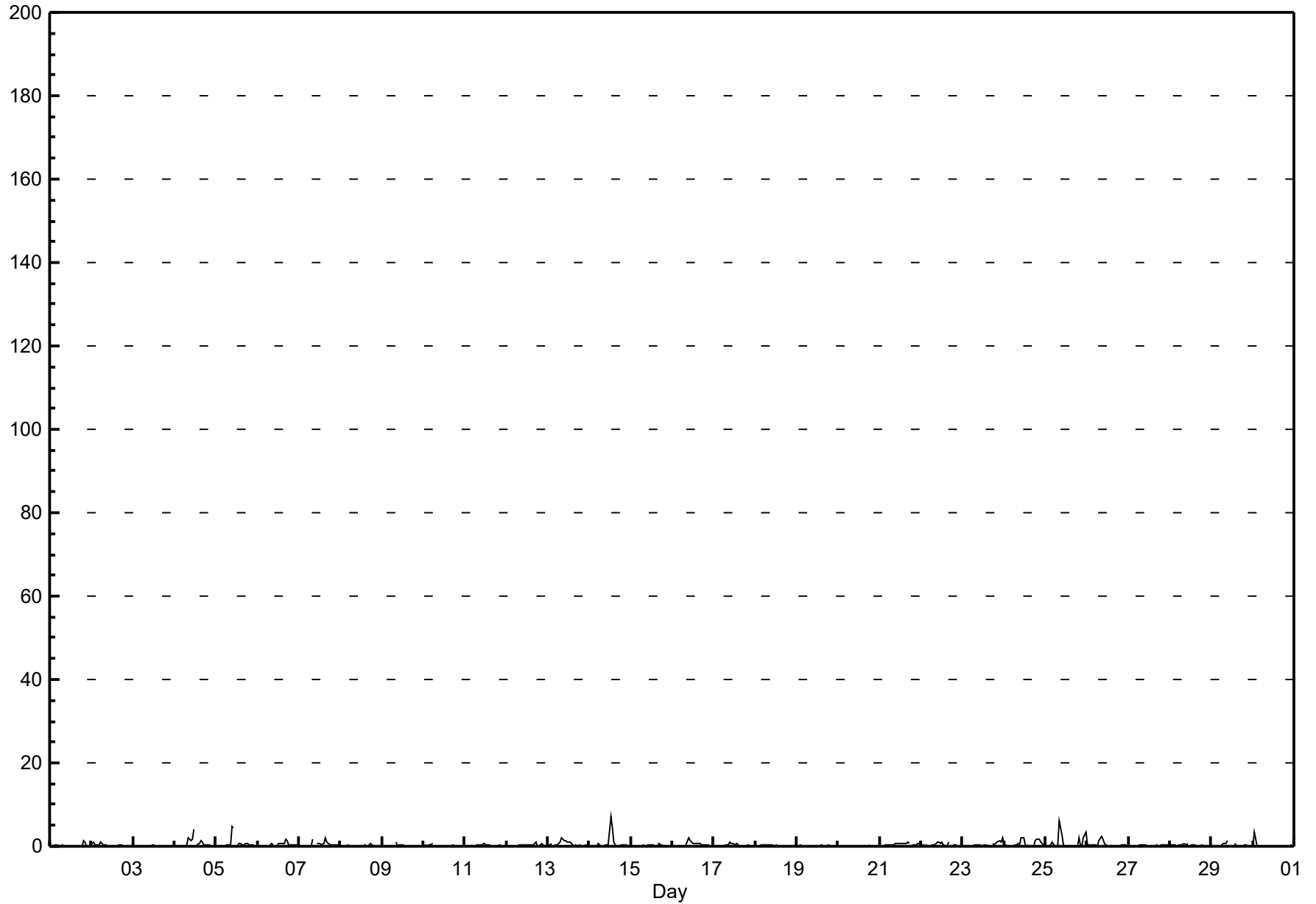
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - September 2017

Maximum Value: 7.1 ppb on Sep 14 13:00		Maximum Daily Average: 0.9 ppb on Sep 25		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 3 02:00		Minimum Daily Average: 0.1 ppb on Sep 20		Hours of Data: 687																						
Maximum Diurnal Average: 0.8 ppb at hour 10		Minimum Diurnal Average: 0.2 ppb at hour 3		Hours of Missing Data: 33																						
Monthly Average: 0.36 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.7 P ₉₉ = 3.2		Hours of Calibration: 33																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0	0	0		
2-Sep	1	1	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0		
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0		
4-Sep	0	0	0	0	0	0	0	2	1	2	4	A	0	1	1	1	1	0	0	0	0	0	0	0		
5-Sep	0	0	0	0	0	0	0	0	0	5	4	A	0	1	1	0	0	1	1	0	0	0	0	0		
6-Sep	0	0	0	0	0	0	0	1	0	A	0	1	1	1	1	2	1	0	0	0	0	0	0	0		
7-Sep	0	0	0	0	0	0	0	0	2	A	1	1	1	0	1	2	1	1	0	0	0	0	0	0		
8-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
9-Sep	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10-Sep	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11-Sep	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0		
13-Sep	0	0	1	A	0	0	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0		
14-Sep	0	0	A	0	0	1	0	0	0	0	0	7	4	1	0	0	0	0	0	0	0	0	0	0		
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
16-Sep	A	0	0	0	0	0	0	0	0	2	1	1	1	1	1	1	1	0	0	0	0	0	0	A		
17-Sep	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0		
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0		
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0		
21-Sep	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	A	0	0	0	1	1		
22-Sep	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1	A	0	0	0	0	0	0		
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	1	1	1	2		
24-Sep	0	0	0	0	0	0	0	0	1	0	2	2	0	0	0	A	0	0	1	2	2	1	1	0		
25-Sep	0	0	0	0	1	0	0	0	6	3	0	0	0	0	A	0	0	0	0	2	0	0	2	3		
26-Sep	0	0	0	0	0	0	0	1	2	2	1	0	0	A	0	0	0	0	0	0	0	0	0	0		
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0		
28-Sep	0	0	0	0	0	0	0	0	1	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0		
29-Sep	0	0	0	0	0	0	0	1	1	1	C	C	C	1	0	0	0	0	0	0	0	0	0	0		
30-Sep	0	3	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.8	0.8	0.6	0.5	0.6	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	Diurnal Average	
		0.8	3.5	0.7	0.4	0.9	1.0	0.7	1.3	6.2	4.7	4.5	4.2	7.1	4.4	1.1	2.1	1.5	1.5	1.3	2.2	1.8	1.3	1.9	3.3	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

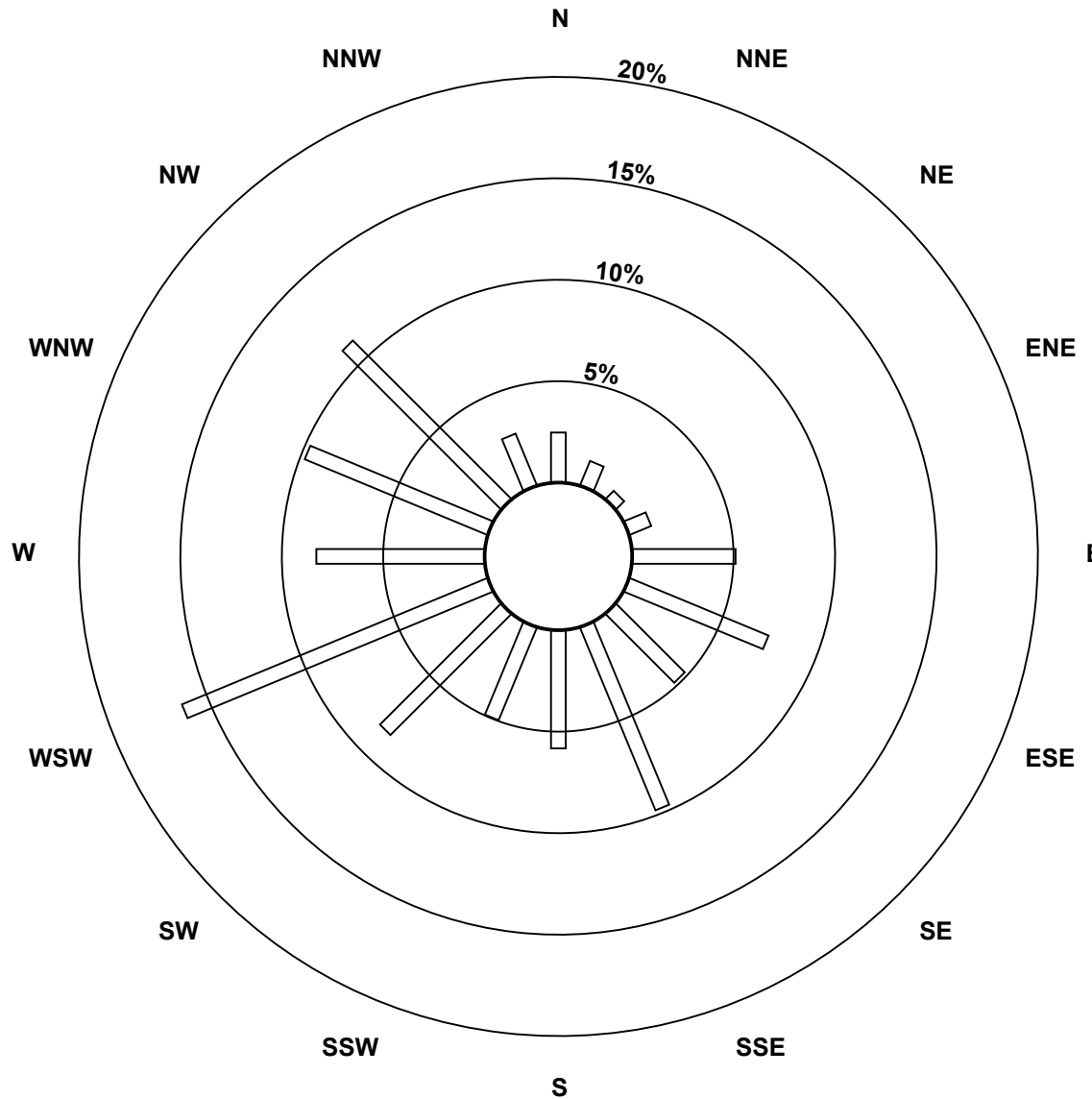
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - September 2017

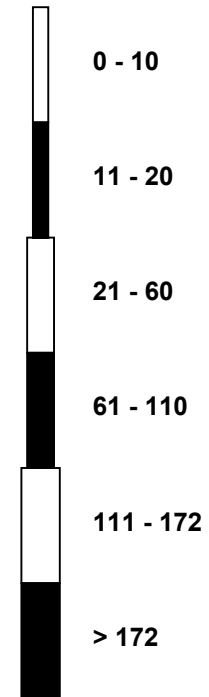


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - September 2017

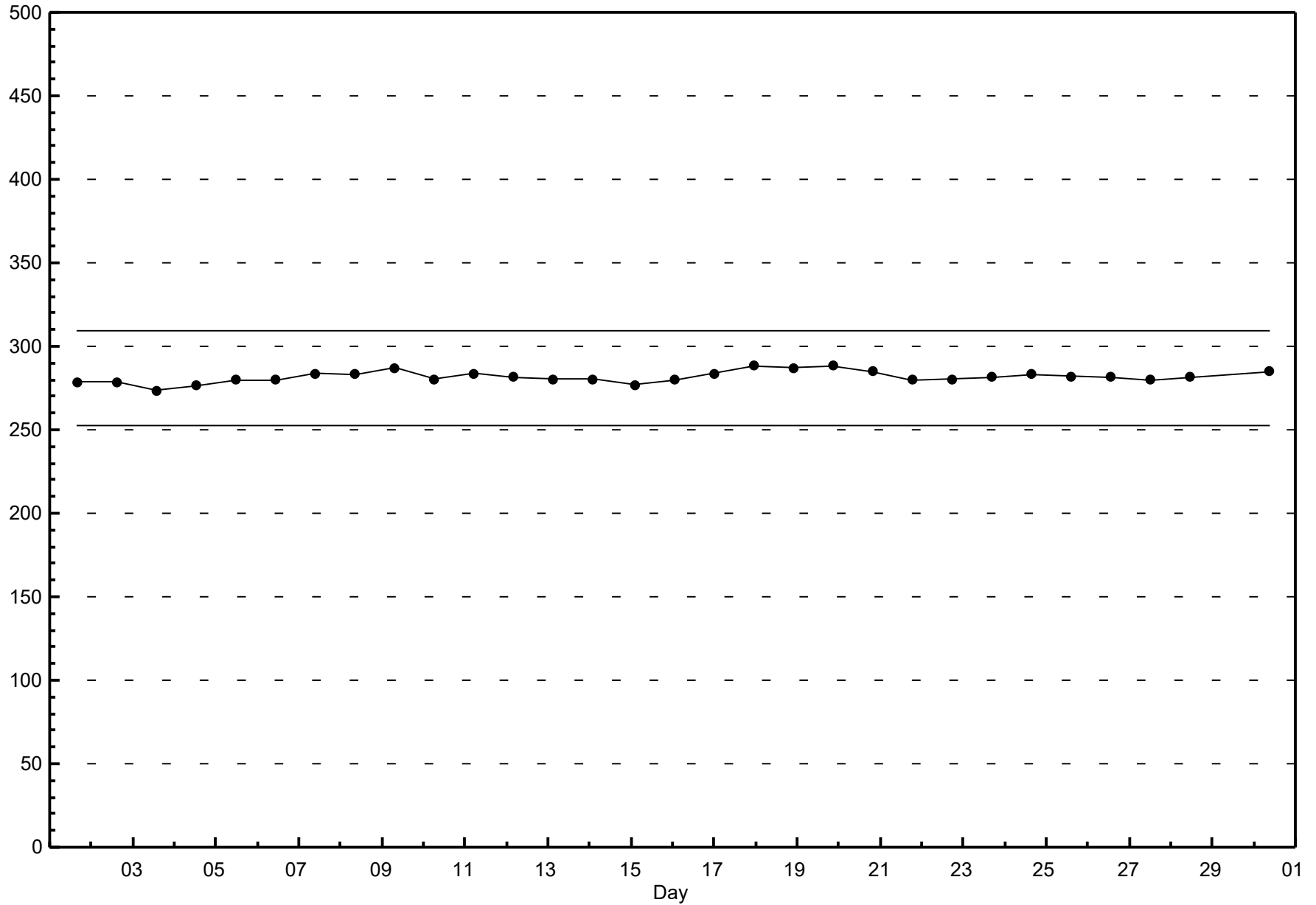


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - September 2017



Hourly Averages

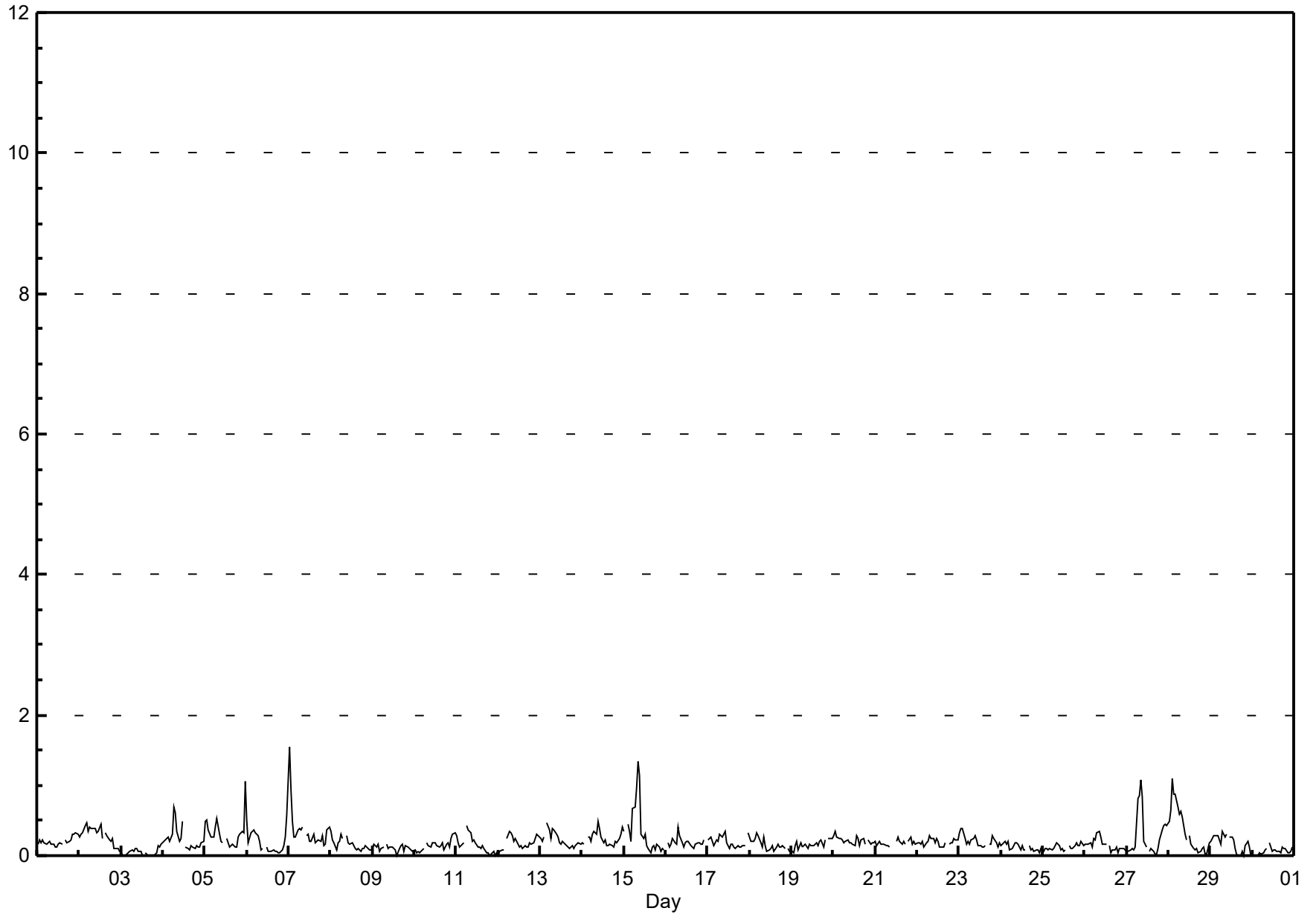
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2017

Maximum Value: 1.5 ppb on Sep 7 01:00		Maximum Daily Average: 0.4 ppb on Sep 7		Hours in Service: 720																																															
Minimum Value: 0 ppb on Sep 3 13:00		Minimum Daily Average: 0.0 ppb on Sep 3		Hours of Data: 686																																															
Maximum Diurnal Average: 0.3 ppb at hour 8		Minimum Diurnal Average: 0.1 ppb at hour 16		Hours of Missing Data: 34																																															
Monthly Average: 0.20 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 1.0		Hours of Calibration: 34																																															
				Percent Operational Time: 100.0																																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																											
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3																									
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.5																									
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.2																									
4-Sep	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7																									
5-Sep	0	1	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.1																									
6-Sep	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.6																									
7-Sep	2	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.5																									
8-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
9-Sep	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																									
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																									
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																									
15-Sep	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3																									
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4																									
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3																									
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3																									
21-Sep	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3																									
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3																									
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4																									
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2																									
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2																									
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
27-Sep	0	0	0	0	0	0	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1																									
28-Sep	0	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1																									
29-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																									
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
																								Diurnal Average		Diurnal Maximum																									
																								0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
																								1.5	0.9	1.1	0.9	0.9	0.7	0.8	1.0	1.3	1.1	0.4	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.4	1.1		

C - Calibration

A - Automated Daily Zero Span

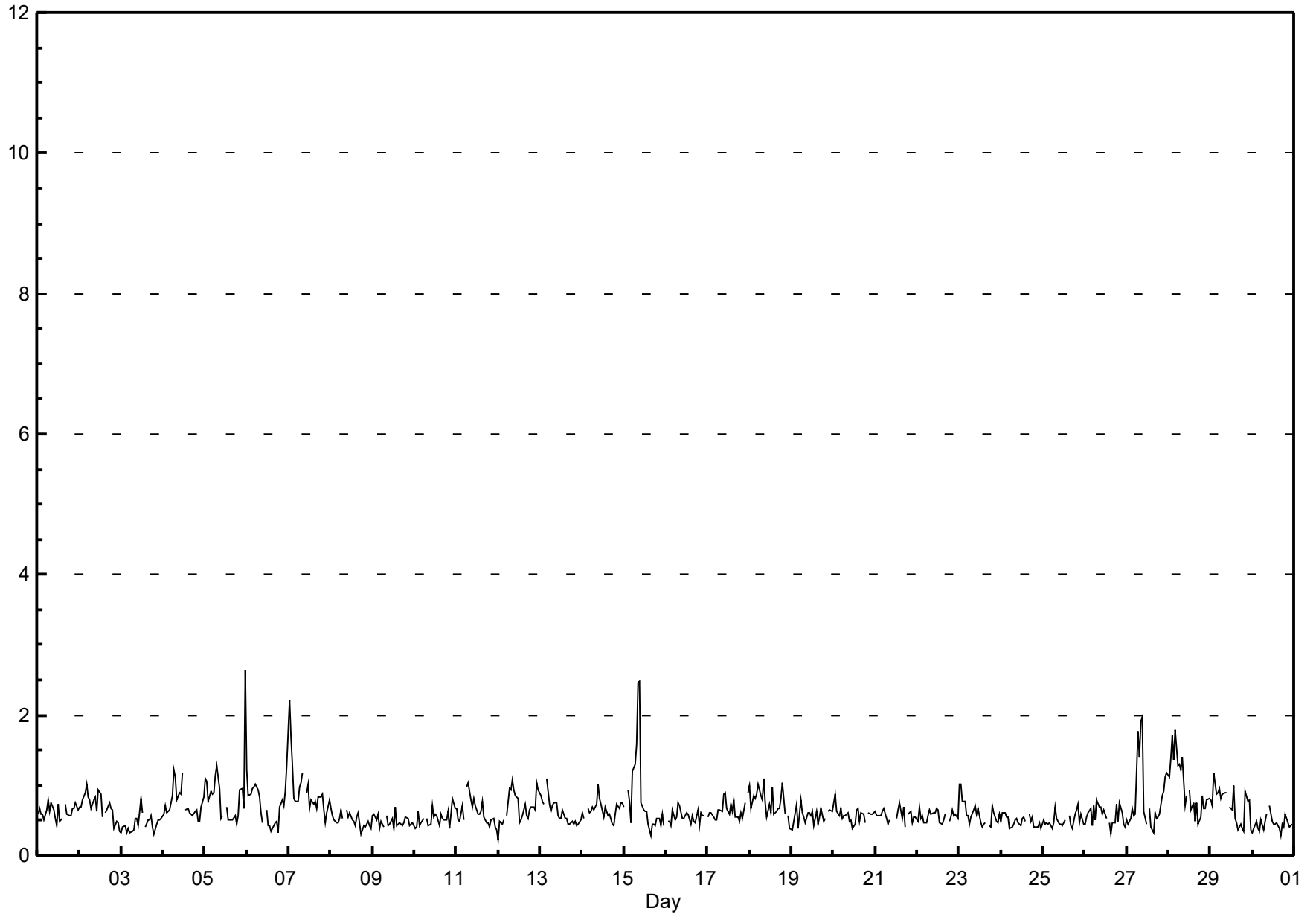


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2017

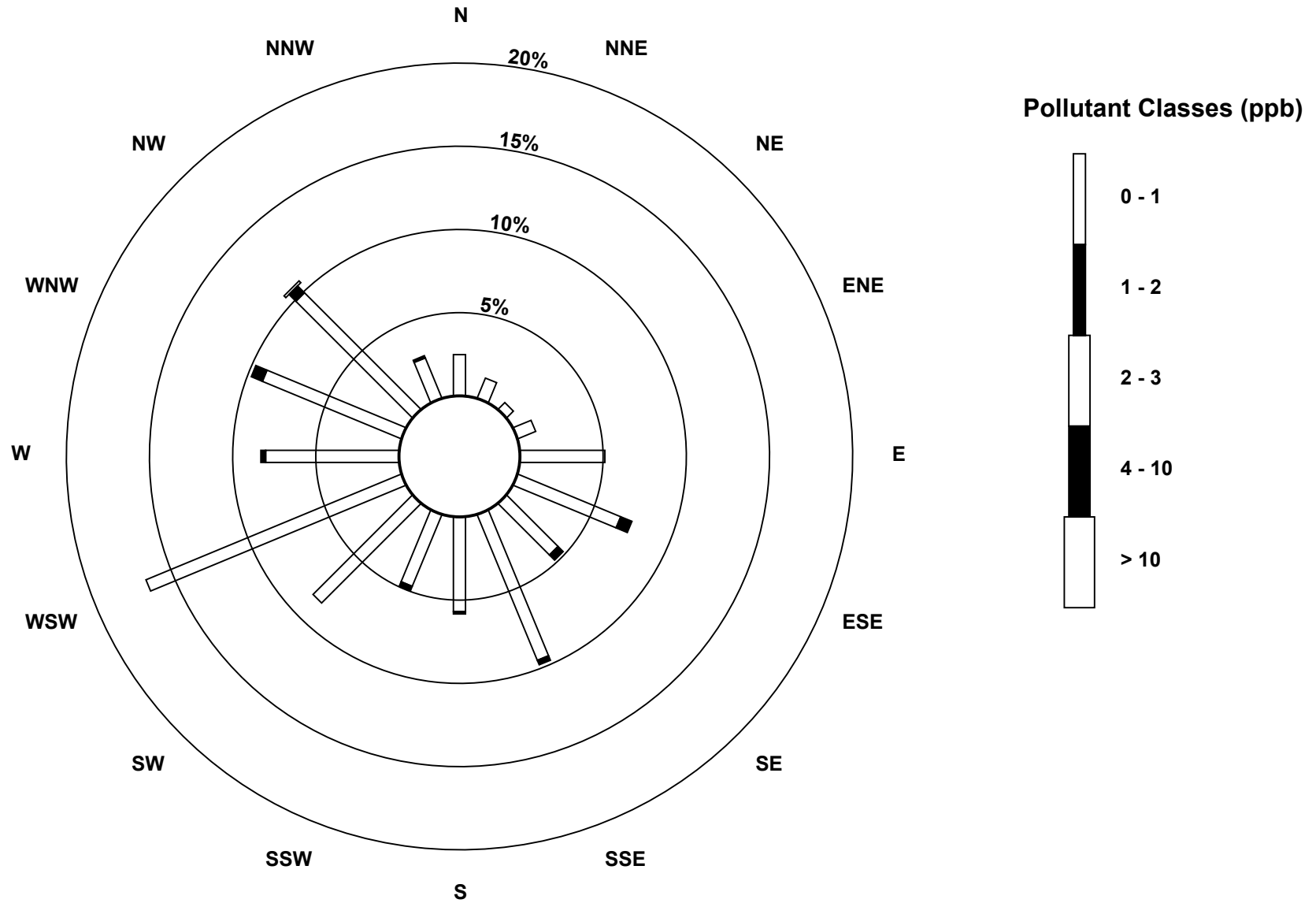
Maximum Value: 2.6 ppb on Sep 6 00:00		Maximum Daily Average: 1.0 ppb on Sep 28		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 12 01:00		Minimum Daily Average: 0.5 ppb on Sep 30		Hours of Data: 686																						
Maximum Diurnal Average: 0.8 ppb at hour 9		Minimum Diurnal Average: 0.5 ppb at hour 18		Hours of Missing Data: 34																						
Monthly Average: 0.65 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.9 P ₉₉ = 1.8		Hours of Calibration: 34																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	A	1	1	1	1	1	1	1	1	0.6	0.8
2-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0.7	1.0
3-Sep	0	0	0	0	0	0	0	0	1	1	0	1	1	A	0	1	1	1	0	0	0	0	1	1	0.5	0.8
4-Sep	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1	1	0.7	1.2
5-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	3	0.9	2.6
6-Sep	1	1	1	1	1	1	1	1	1	0	A	1	0	0	0	0	0	0	0	1	1	1	1	1	0.7	1.3
7-Sep	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.9	2.2
8-Sep	1	1	1	0	0	1	1	1	A	A	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0.5	0.7
9-Sep	1	1	0	1	0	0	0	A	1	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0.5	0.7
10-Sep	0	0	1	0	0	1	A	1	0	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	0.5	0.8
11-Sep	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0.6	1.0
12-Sep	0	0	0	1	A	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.1
13-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.6	1.1
14-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0.7	1.0
15-Sep	1	A	1	1	0	1	1	2	2	2	1	1	1	1	0	0	0	0	0	1	1	0	1	0	0.8	2.5
16-Sep	A	0	0	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	0	1	1	1	A	0.6	0.7
17-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	0.6	0.9
18-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.1
19-Sep	0	0	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	A	1	1	0.6	0.8
20-Sep	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	0	A	1	1	1	1	0.6	0.9
21-Sep	1	1	1	1	1	1	1	0	1	C	C	C	1	1	1	1	1	0	A	1	1	0	1	1	0.6	0.8
22-Sep	0	1	1	1	0	0	1	1	1	1	1	1	0	0	1	1	1	A	0	1	1	1	1	1	0.6	0.7
23-Sep	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	A	0	0	1	1	0	0	1	0.6	1.0
24-Sep	0	1	1	1	1	0	0	0	1	1	0	0	1	1	0	A	1	0	1	0	0	0	0	0	0.5	0.6
25-Sep	1	0	0	0	0	0	0	1	1	0	0	0	0	1	A	1	0	0	1	1	1	0	1	0	0.5	0.7
26-Sep	0	1	1	1	0	1	1	1	1	1	1	1	1	A	0	0	0	0	1	0	1	1	0	0	0.6	0.8
27-Sep	1	0	1	1	1	1	2	1	2	2	1	0	A	1	0	0	1	1	1	1	1	1	1	1	0.8	2.0
28-Sep	1	1	2	1	2	1	1	1	1	1	1	1	A	1	1	0	1	0	1	1	1	1	1	1	1.0	1.8
29-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0	0	0	1	1	1	0	0.7	1.2
30-Sep	0	0	0	0	0	1	0	0	1	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	0.7
		0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.7	Diurnal Average
		2.2	1.7	1.7	1.4	1.8	1.3	1.8	1.6	2.5	2.5	0.9	1.2	0.9	1.0	0.8	0.8	0.7	0.8	0.8	1.0	0.9	1.0	1.1	2.6	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

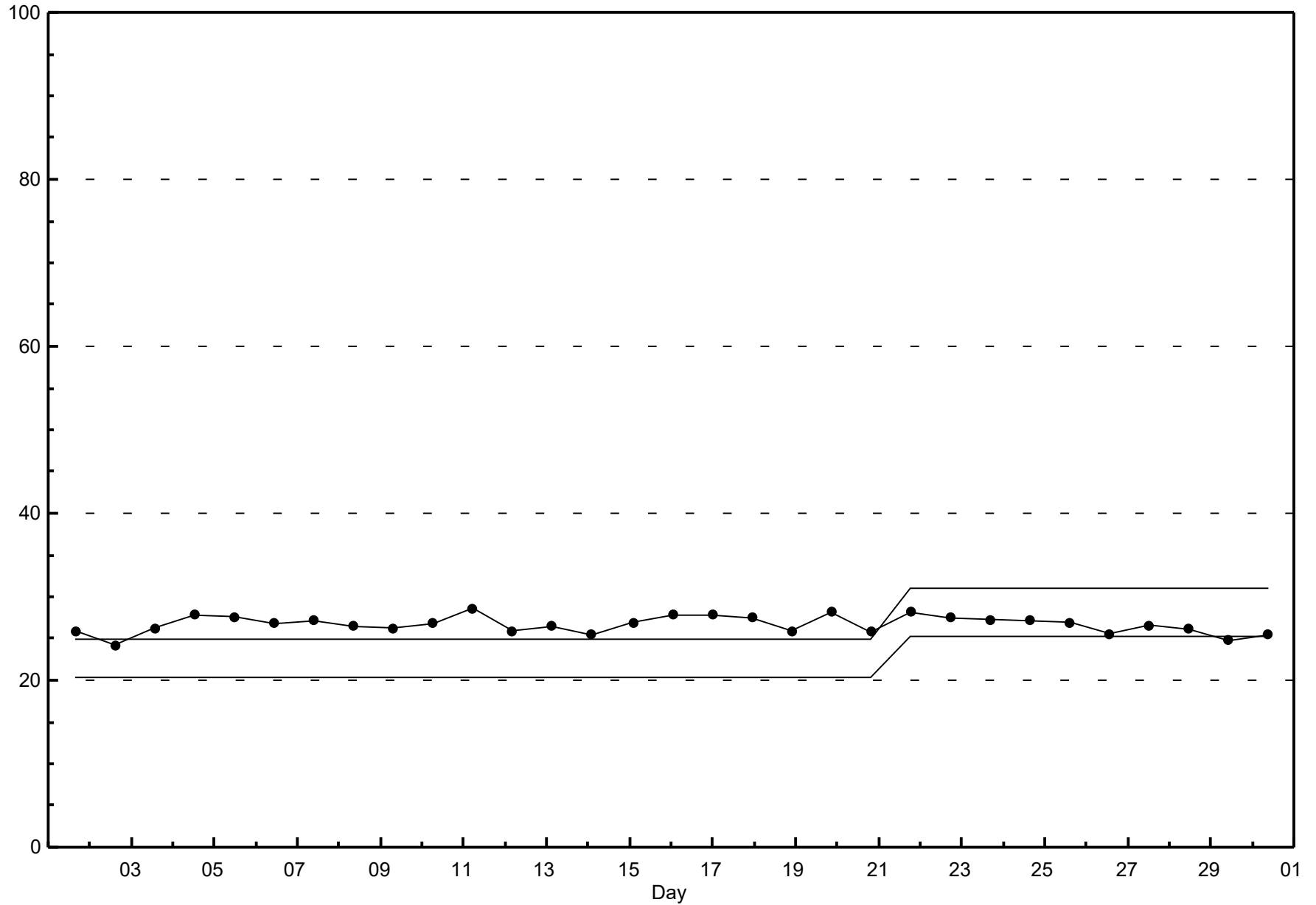


Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2017





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

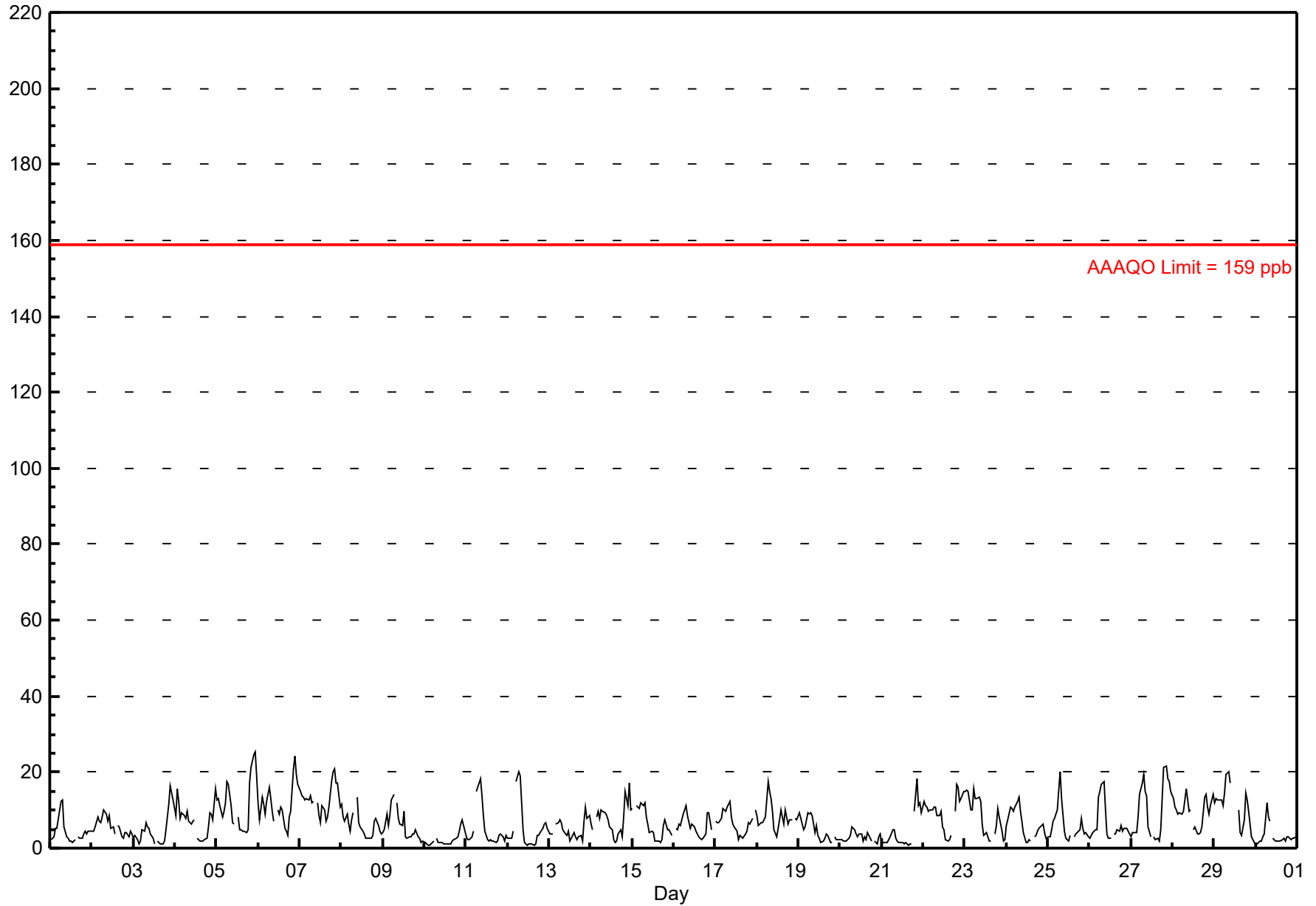
Henry Pirker - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 25.4 ppb on Sep 5 23:00	Maximum Daily Average: 12.9 ppb on Sep 7		Hours of Data:	686
Minimum Value: 1 ppb on Sep 10 04:00	Minimum Daily Average: 2.3 ppb on Sep 10		Hours of Missing Data:	34
Maximum Diurnal Average: 12.0 ppb at hour 8	Minimum Diurnal Average: 3.0 ppb at hour 16		Hours of Calibration:	34
Monthly Average: 6.81 ppb	Percentiles: P ₁ = 1.0 P ₁₀ = 1.9 Q ₁ = 2.9 Median = 5.3 Q ₃ = 9.8 P ₉₀ = 13.5 P ₉₉ = 21.0		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	2	2	3	5	5	10	12	13	6	3	3	2	2	2	2	A	3	3	2	4	4	4	4	4	4.4	12.6
2-Sep	4	5	6	8	7	7	8	10	9	7	9	5	6	4	A	6	5	3	3	4	4	3	5	4	5.7	9.9
3-Sep	3	3	2	1	2	5	4	7	6	5	4	2	1	A	2	1	1	1	2	5	12	16	15	13	4.9	16.4
4-Sep	8	16	12	8	9	9	8	10	7	6	7	7	A	3	2	2	2	2	3	6	9	9	7	16	7.3	15.7
5-Sep	13	13	11	8	10	12	18	17	11	7	6	A	8	5	5	4	5	4	5	17	21	25	25	19	11.7	25.4
6-Sep	12	8	13	11	9	12	16	13	10	7	A	10	9	11	10	5	4	3	8	10	21	24	19	17	11.4	24.1
7-Sep	15	14	13	13	13	13	14	12	12	A	12	9	7	11	10	7	8	11	18	20	21	17	17	11	12.9	21.0
8-Sep	11	8	7	9	6	4	8	9	A	A	13	7	5	4	4	3	3	3	3	7	8	6	4	4	6.0	13.3
9-Sep	4	5	9	6	9	13	14	A	12	8	6	6	10	3	2	3	3	4	4	5	3	2	2	2	5.8	14.2
10-Sep	1	1	1	1	1	2	A	3	2	1	1	1	1	1	1	1	2	2	3	3	4	6	8	4	2.3	7.5
11-Sep	3	2	2	3	5	A	15	16	18	14	9	4	2	2	2	2	2	2	2	3	4	3	2	3	5.2	18.2
12-Sep	2	2	3	5	A	17	20	19	12	5	2	1	1	1	1	1	1	3	3	4	5	7	7	5	5.6	20.3
13-Sep	4	4	4	A	6	7	7	7	5	4	3	4	2	3	4	3	2	3	3	2	7	11	8	8	4.8	10.8
14-Sep	6	5	A	8	10	8	10	10	9	9	7	5	5	2	2	2	4	5	3	8	15	11	17	10	7.5	17.2
15-Sep	10	A	11	11	10	12	11	12	8	6	4	4	4	2	2	2	2	2	6	8	5	5	4	4	6.3	12.0
16-Sep	A	5	5	6	6	9	10	11	9	5	6	6	6	5	3	3	2	3	4	10	9	7	5	A	6.1	11.3
17-Sep	7	7	7	8	10	10	10	11	12	8	6	6	4	2	3	3	3	4	4	7	6	8	A	10	6.8	12.2
18-Sep	9	6	7	7	7	8	17	15	13	10	5	3	5	8	10	6	10	8	6	7	7	A	8	7	8.3	17.4
19-Sep	9	8	6	5	5	9	9	9	9	4	6	3	2	1	2	2	4	3	1	2	A	3	2	2	4.7	9.5
20-Sep	2	2	2	2	2	2	3	6	5	4	3	4	4	2	3	2	4	3	2	A	2	1	3	4	2.9	5.5
21-Sep	1	1	1	1	2	3	5	5	3	2	1	2	1	1	2	1	1	1	A	10	18	11	12	9	4.1	18.1
22-Sep	12	11	11	10	10	10	11	11	9	8	10	6	5	2	2	2	3	A	10	17	16	12	13	15	9.4	16.6
23-Sep	15	15	15	10	10	16	13	13	13	12	6	3	4	3	2	2	A	4	6	10	8	4	2	2	8.3	15.6
24-Sep	6	8	11	10	10	11	12	14	10	7	4	1	2	2	2	A	3	3	4	5	6	6	4	2	6.3	13.5
25-Sep	3	3	5	7	8	10	15	20	13	4	3	2	2	3	A	3	4	4	5	8	5	4	4	3	6.0	20.0
26-Sep	3	3	4	5	5	14	15	17	18	10	4	3	3	A	4	4	5	4	6	4	5	5	4	4	6.4	17.5
27-Sep	3	4	4	4	8	14	17	19	15	14	5	3	A	3	2	3	2	5	13	21	21	18	18	15	10.1	21.5
28-Sep	13	11	10	9	9	9	10	13	16	10	10	A	5	6	4	4	4	6	13	14	11	9	11	14	9.6	15.7
29-Sep	12	13	13	13	13	11	15	19	20	17	C	C	C	C	10	4	4	8	15	13	10	3	2	1	10.7	20.2
30-Sep	1	1	2	2	3	4	12	8	7	A	3	2	2	2	2	2	2	2	3	3	2	3	2	3	3.2	12.0

6.8	6.5	6.9	6.8	7.3	9.3	11.8	12.0	10.3	7.5	5.4	4.1	3.9	3.4	3.5	3.0	3.3	3.7	5.5	8.1	9.4	8.4	8.1	7.4	Diurnal Average
15.0	15.6	15.1	12.8	13.2	17.5	20.3	20.0	20.2	17.1	11.8	10.0	9.6	11.2	10.1	7.1	10.1	11.0	17.8	21.3	21.5	24.6	25.4	18.9	Diurnal Maximum

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb



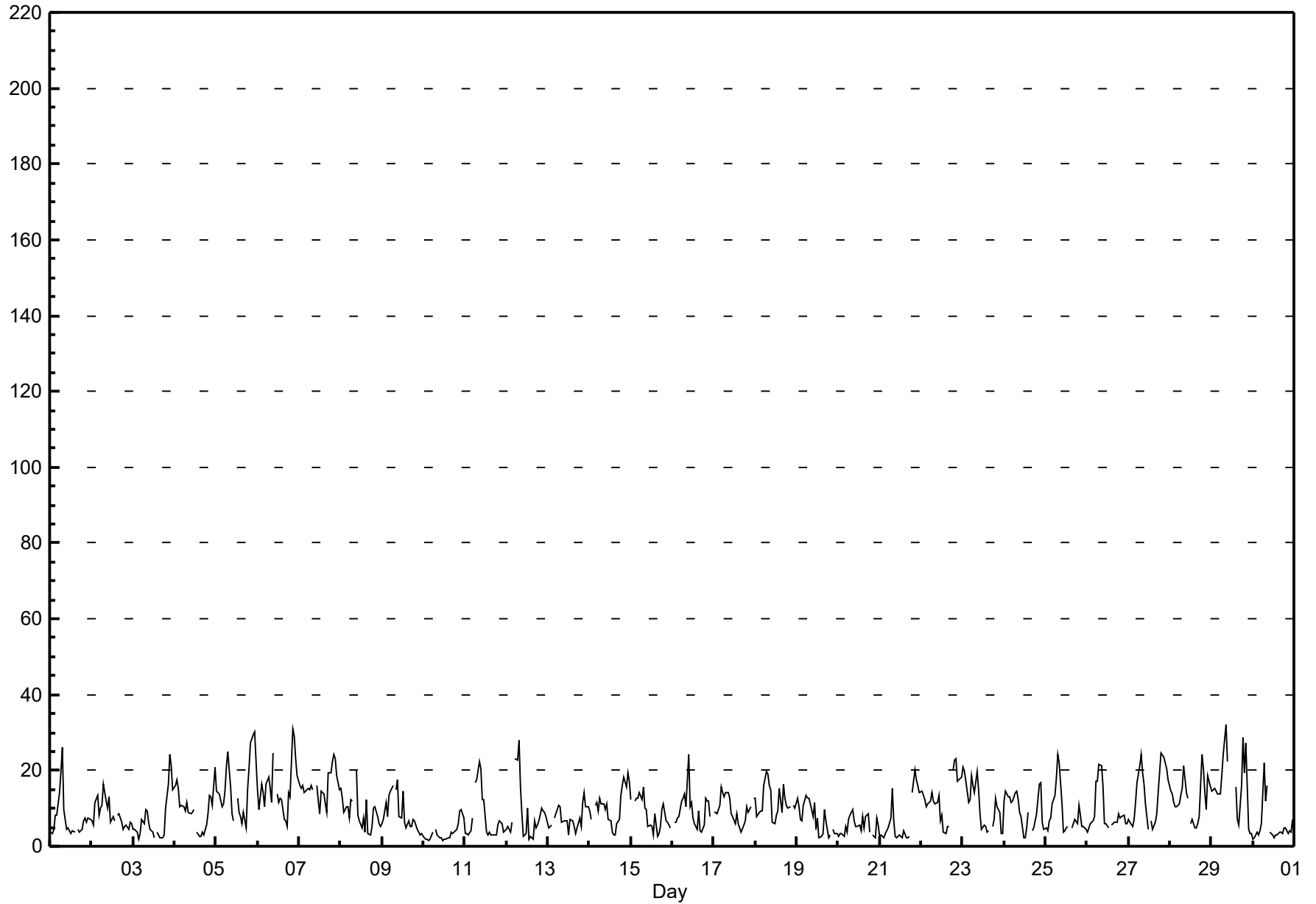
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Henry Pirker - September 2017

Maximum Value: 31.9 ppb on Sep 29 09:00		Maximum Daily Average: 15.8 ppb on Sep 7		Hours in Service: 720																																												
Minimum Value: 1 ppb on Sep 10 04:00		Minimum Daily Average: 3.6 ppb on Sep 10		Hours of Data: 686																																												
Maximum Diurnal Average: 16.0 ppb at hour 8		Minimum Diurnal Average: 5.4 ppb at hour 16		Hours of Missing Data: 34																																												
Monthly Average: 9.67 ppb		Percentiles: P ₁ = 1.8 P ₁₀ = 3.2 Q ₁ = 4.8 Median = 8.2 Q ₃ = 13.4 P ₉₀ = 17.8 P ₉₉ = 27.8		Hours of Calibration: 34																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	4	4	4	8	8	14	20	26	10	4	5	4	3	4	4	A	4	4	5	7	7	6	8	7	7.4	26.0																						
2-Sep	7	6	12	13	8	10	11	16	12	10	13	6	8	7	A	8	9	7	4	5	6	4	6	6	8.4	16.5																						
3-Sep	4	5	4	2	3	7	6	10	9	6	5	4	2	A	4	2	2	2	3	10	16	24	21	15	7.3	24.1																						
4-Sep	16	18	15	10	11	10	9	11	9	8	9	10	A	4	2	3	4	3	5	8	13	13	11	21	9.8	21.0																						
5-Sep	15	14	14	11	11	14	21	25	16	9	7	A	13	9	8	6	9	5	15	20	27	30	30	22	15.2	30.3																						
6-Sep	15	10	16	14	10	16	18	15	11	25	A	14	12	13	12	7	7	5	14	13	31	29	23	19	15.2	30.8																						
7-Sep	16	15	16	14	15	15	15	16	15	A	16	12	8	14	14	11	9	20	19	22	24	23	19	15	15.8	24.1																						
8-Sep	15	13	9	10	10	7	12	12	A	20	8	7	5	7	4	12	3	3	5	10	11	8	6	5	8.8	20.0																						
9-Sep	6	7	12	8	14	14	16	A	15	18	8	8	15	6	5	7	5	7	7	4	4	3	3	3	8.5	17.5																						
10-Sep	2	2	2	1	2	4	A	5	3	2	2	2	2	2	2	2	4	3	4	4	6	9	10	7	3.6	9.7																						
11-Sep	3	3	3	4	8	A	17	18	22	20	12	12	4	3	4	3	3	3	3	6	7	6	4	4	7.5	22.3																						
12-Sep	4	5	4	6	A	23	23	28	16	9	3	3	10	2	2	2	7	5	6	7	10	9	9	8	8.7	28.1																						
13-Sep	5	5	5	A	7	10	11	10	6	7	7	7	3	7	7	5	3	5	8	5	12	14	11	10	7.4	14.1																						
14-Sep	9	7	A	11	12	9	13	11	11	10	11	7	7	4	3	3	6	7	13	16	18	16	20	17	10.5	19.5																						
15-Sep	12	A	12	13	13	14	12	16	10	10	5	6	5	3	9	3	3	5	10	11	7	6	5	5	8.5	15.5																						
16-Sep	A	6	6	8	8	12	13	14	11	24	10	12	7	6	5	9	4	4	6	13	12	12	8	A	9.5	24.3																						
17-Sep	9	9	9	11	16	14	13	14	14	13	8	8	6	8	6	5	4	5	7	10	9	10	A	13	9.6	15.7																						
18-Sep	13	8	9	9	9	16	20	19	16	15	6	6	8	9	15	9	16	13	11	10	10	A	11	10	11.7	19.8																						
19-Sep	13	11	7	7	11	14	13	13	11	8	12	4	7	2	3	3	10	7	2	3	A	5	3	3	7.4	13.6																						
20-Sep	3	3	3	3	5	4	7	8	10	7	5	5	6	4	8	5	8	9	4	A	3	2	7	6	5.4	9.6																						
21-Sep	3	3	2	3	4	5	7	15	7	3	2	3	3	2	4	2	2	2	A	14	20	18	16	14	6.8	20.3																						
22-Sep	15	13	12	10	11	12	14	12	11	12	14	7	8	4	3	5	5	A	20	23	23	17	18	18	12.5	23.0																						
23-Sep	21	20	17	11	12	18	16	14	20	15	9	5	6	5	4	4	A	5	7	13	10	9	3	4	10.8	20.8																						
24-Sep	12	14	13	13	12	12	14	15	12	9	8	2	2	5	9	A	4	5	7	8	17	17	6	5	9.6	16.7																						
25-Sep	5	4	7	8	11	13	18	24	22	11	4	4	5	5	A	5	6	7	6	11	8	5	5	4	8.7	24.2																						
26-Sep	4	5	6	7	8	17	17	21	21	16	6	6	5	A	6	6	6	6	9	7	8	8	6	6	9.0	21.5																						
27-Sep	7	6	5	7	12	17	21	24	20	17	11	5	A	7	4	6	9	14	19	25	23	22	20	18	13.9	24.6																						
28-Sep	15	14	12	10	10	11	13	15	21	14	13	A	6	7	5	5	6	8	24	21	14	10	19	16	12.5	24.4																						
29-Sep	14	15	15	14	14	14	19	24	32	22	C	C	C	C	16	7	6	16	29	19	27	4	3	3	15.7	31.9																						
30-Sep	2	2	4	3	4	6	22	12	16	A	4	3	2	3	3	4	4	3	5	5	3	4	4	7	5.4	22.1																						
																								9.2	8.5	8.8	8.6	9.6	12.2	14.9	16.0	14.1	12.2	7.9	6.3	6.2	5.6	6.0	5.4	5.8	6.4	9.5	11.5	13.3	11.9	10.8	10.0	Diurnal Average
																								20.8	19.6	17.3	14.2	15.7	23.2	22.8	28.1	31.9	24.8	16.1	13.6	14.7	14.4	15.7	12.2	16.4	19.5	28.7	24.6	30.8	29.5	30.3	22.4	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

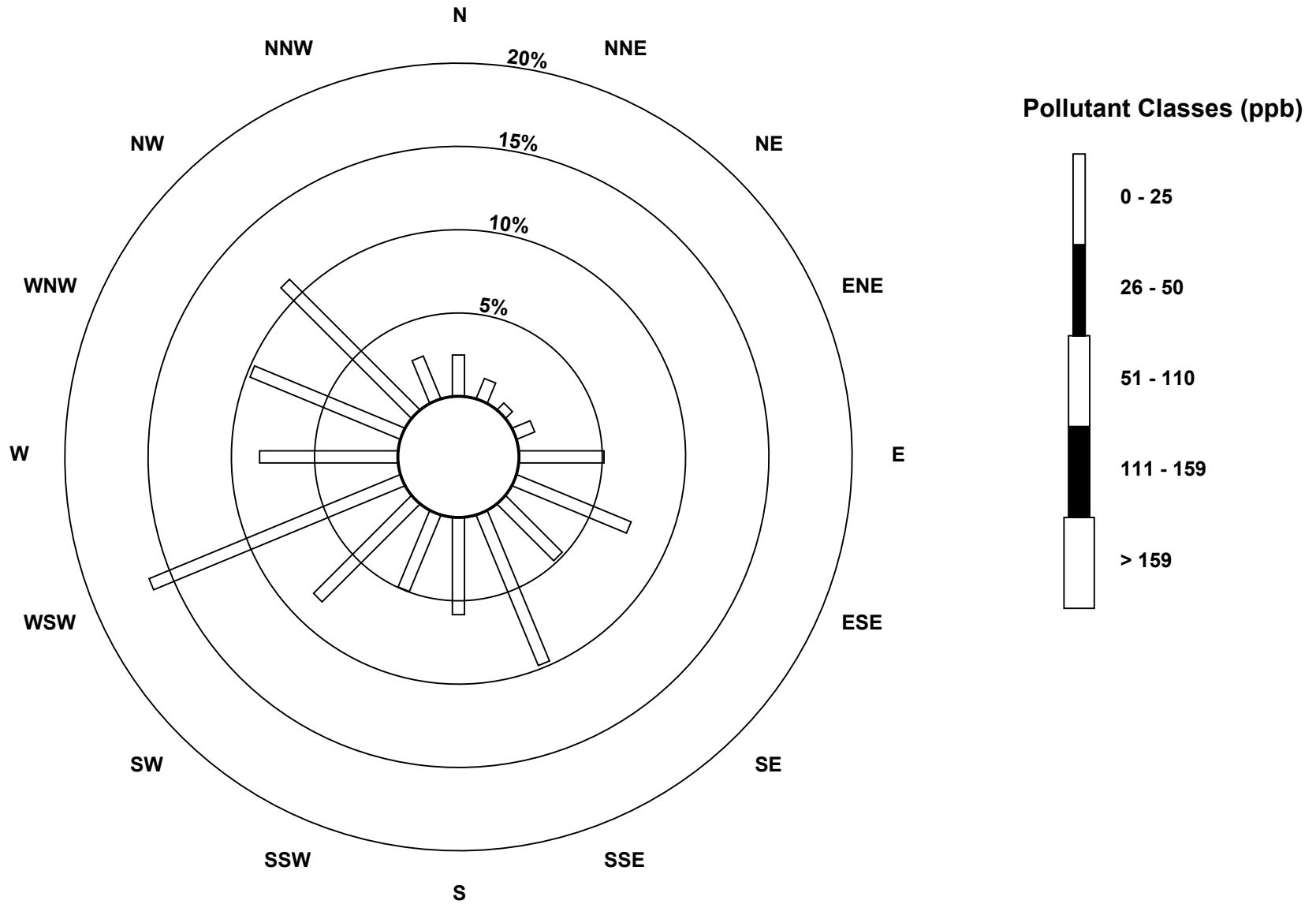
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - September 2017



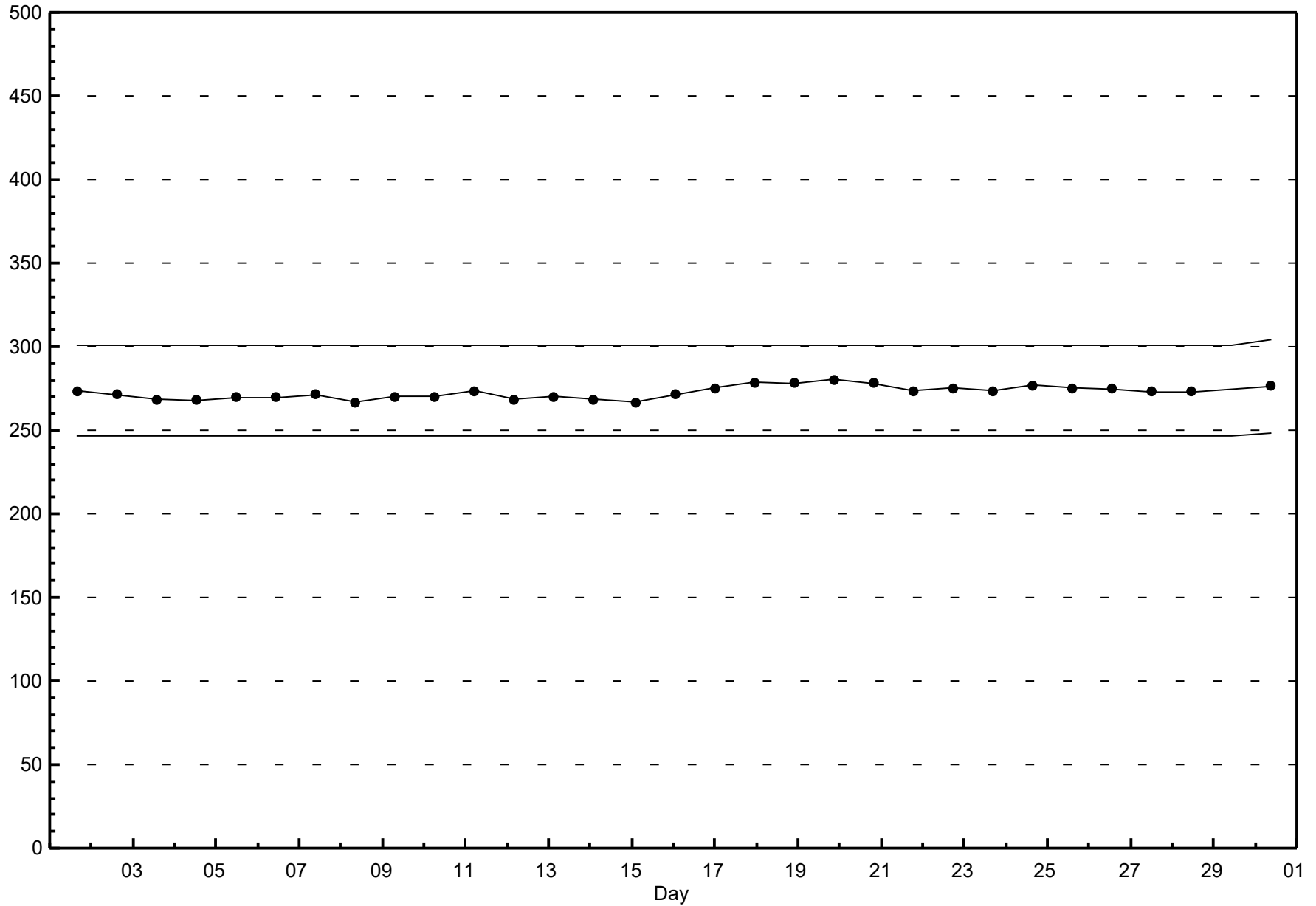
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - September 2017



Span Responses

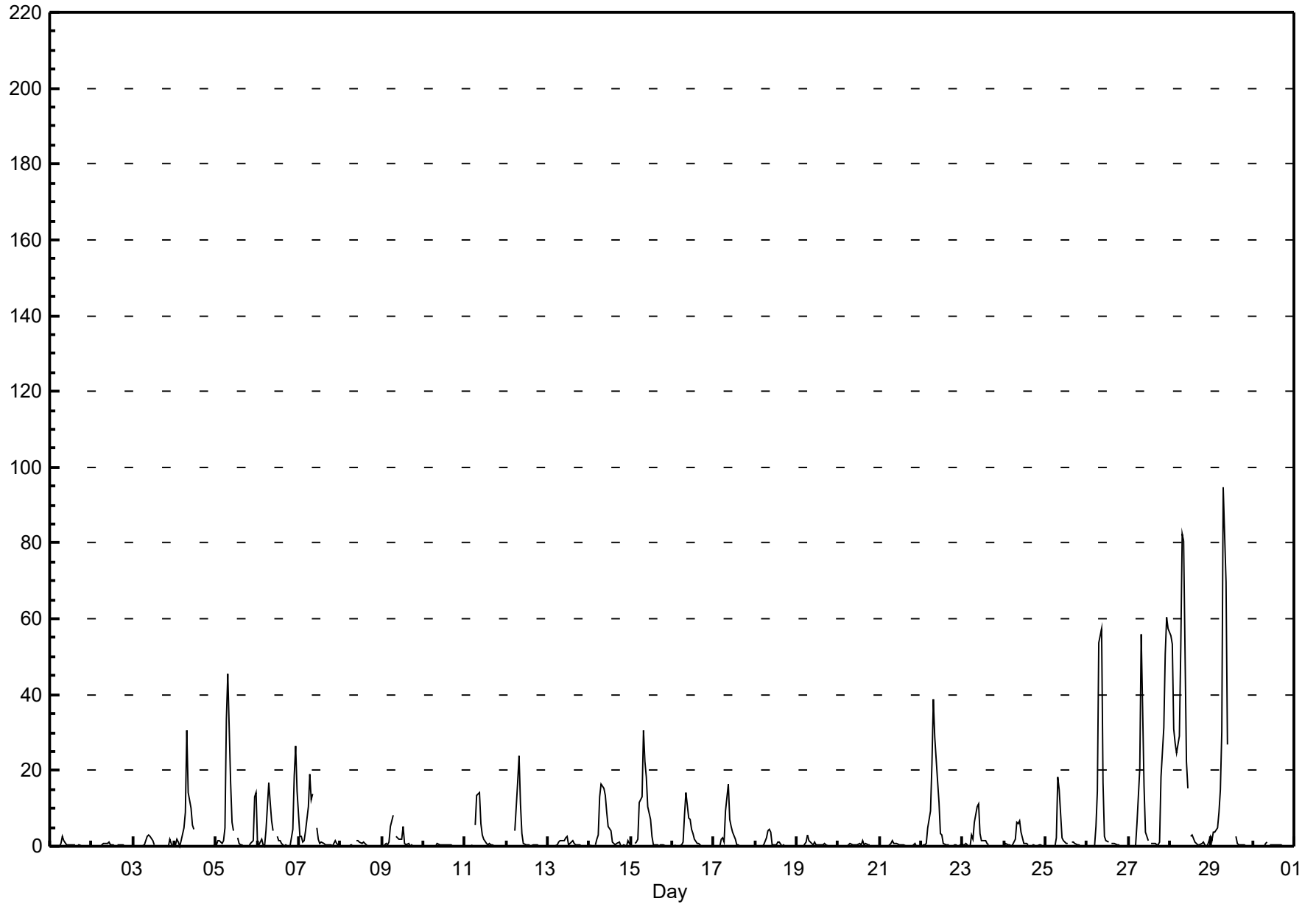
Nitrogen Dioxide (NO₂)
Henry Pirker - September 2017



Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - September 2017

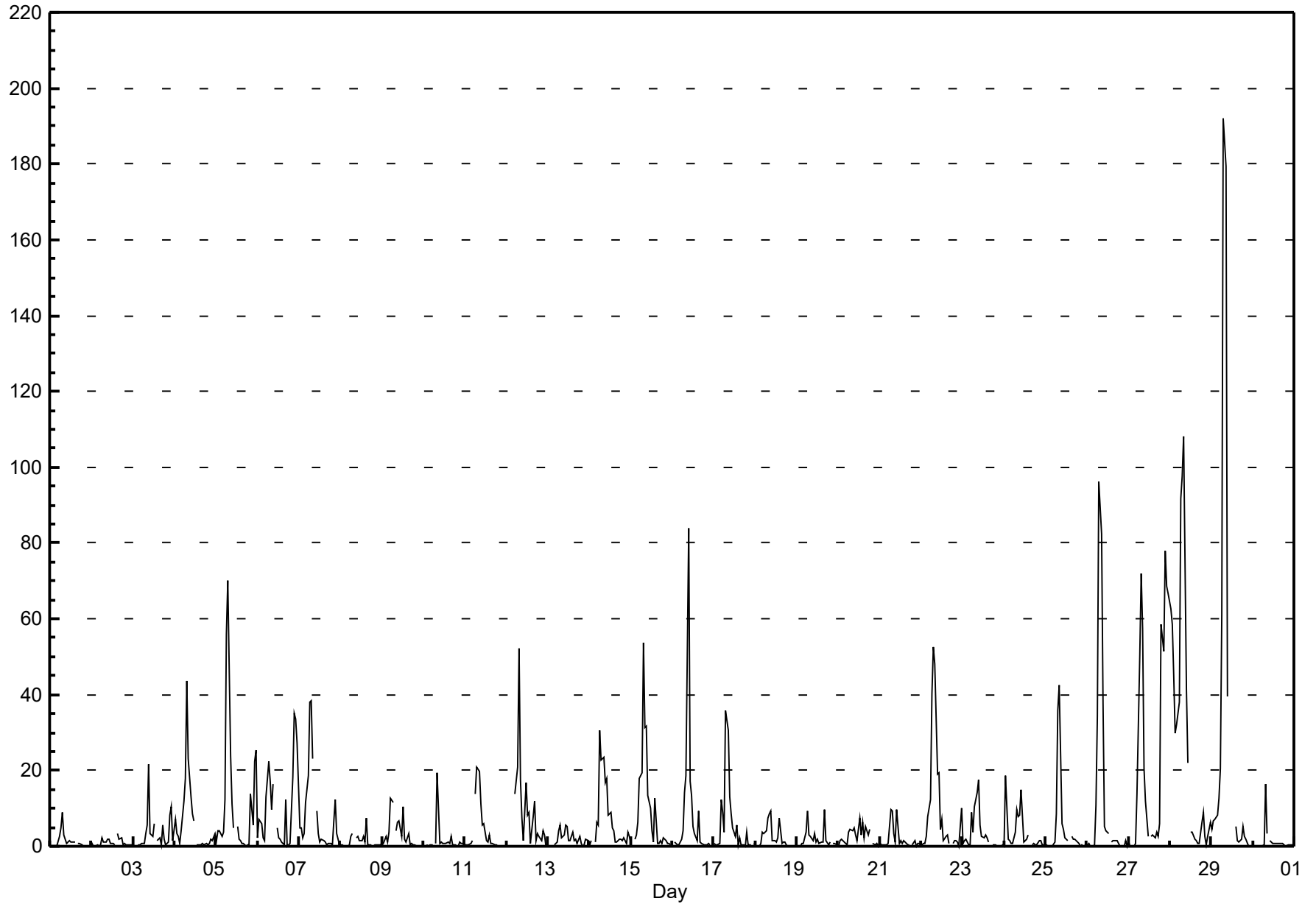
Maximum Value: 94.9 ppb on Sep 29 08:00		Maximum Daily Average: 21.2 ppb on Sep 28		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 1 02:00		Minimum Daily Average: 0.2 ppb on Sep 10		Hours of Data: 686																							
Maximum Diurnal Average: 19.8 ppb at hour 8		Minimum Diurnal Average: 0.2 ppb at hour 19		Hours of Missing Data: 34																							
Monthly Average: 3.69 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.4 Q ₃ = 1.6 P ₉₀ = 10.6 P ₉₉ = 57.1		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	1	3	1	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0.3	2.6	
2-Sep	0	0	0	0	0	0	0	1	1	1	1	0	0	A	A	0	1	1	0	0	0	0	0	0	0.3	1.3	
3-Sep	0	0	0	0	0	0	0	2	3	3	3	1	0	A	A	0	0	0	0	0	0	2	1	0	0.7	3.0	
4-Sep	0	2	1	0	1	5	9	30	14	10	6	4	A	A	0	0	0	0	0	0	0	0	0	1	3.7	30.4	
5-Sep	0	2	2	1	2	5	34	46	17	7	4	A	A	2	1	0	0	0	0	0	1	2	13	14	6.6	45.5	
6-Sep	1	0	2	0	0	4	17	12	7	4	A	A	2	1	1	1	0	0	0	0	5	19	26	15	5.1	26.3	
7-Sep	2	2	1	1	4	11	19	12	14	A	A	5	2	1	1	1	0	0	0	0	1	1	1	0	3.5	19.0	
8-Sep	0	0	0	0	0	0	0	1	A	A	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.5	
9-Sep	0	0	1	0	1	5	8	A	A	3	2	2	2	5	1	0	1	0	0	0	0	0	0	0	1.4	8.1	
10-Sep	0	0	0	0	0	0	A	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
11-Sep	0	0	0	0	0	A	A	6	14	14	6	3	2	1	1	1	0	0	0	0	0	0	0	0	2.0	14.1	
12-Sep	0	0	0	0	A	A	4	17	24	11	3	1	1	0	0	0	0	0	0	0	0	0	0	0	2.7	23.7	
13-Sep	0	0	0	A	A	0	0	1	2	1	2	2	3	1	1	1	1	0	0	0	0	0	0	0	0.7	2.6	
14-Sep	0	0	A	A	0	2	3	13	16	15	13	9	5	4	1	1	0	1	1	0	0	0	1	1	3.9	16.3	
15-Sep	0	A	A	1	1	2	12	13	31	22	18	11	7	2	0	1	0	0	0	0	0	0	0	0	5.4	30.7	
16-Sep	A	0	0	0	0	1	1	8	14	8	7	4	3	2	1	1	0	0	0	0	0	0	0	A	2.3	14.3	
17-Sep	0	0	0	0	2	2	1	9	17	7	5	4	2	0	0	0	0	0	0	0	0	0	0	A	2.2	16.5	
18-Sep	0	0	0	0	0	0	2	4	5	4	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.9	4.6	
19-Sep	0	0	0	0	0	1	3	2	1	0	1	0	0	0	0	0	1	0	0	0	0	A	A	0	0.5	2.8	
20-Sep	0	0	0	0	0	0	0	1	1	1	0	1	1	0	2	0	1	0	0	A	A	0	0	0	0.4	1.6	
21-Sep	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	A	A	0	1	0	0	0.3	1.4	
22-Sep	0	0	0	1	5	9	22	39	29	17	11	4	3	1	0	0	0	A	A	0	0	0	0	1	6.2	38.6	
23-Sep	0	0	1	0	0	3	2	6	11	11	3	2	1	1	1	0	A	A	0	0	0	0	0	0	1.9	11.1	
24-Sep	0	1	0	0	0	0	2	7	6	7	4	1	1	1	1	A	A	0	0	0	0	0	0	0	1.3	6.7	
25-Sep	0	0	0	0	0	0	2	18	15	2	1	1	1	1	A	A	1	1	1	0	0	0	0	0	2.0	18.2	
26-Sep	0	0	0	0	0	5	15	54	58	17	3	1	1	A	A	1	1	1	1	0	0	0	0	0	6.8	57.6	
27-Sep	0	0	0	0	0	6	20	56	36	16	4	1	A	A	1	1	1	0	1	1	18	31	51	60	15.7	60.3	
28-Sep	56	54	31	27	25	29	53	82	81	22	15	A	A	3	3	1	1	0	0	1	1	0	0	3	21.2	82.4	
29-Sep	1	4	4	5	9	15	30	95	70	27	C	C	C	C	3	1	0	0	1	0	0	0	0	0	13.2	94.9	
30-Sep	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
		2.2	2.3	1.5	1.3	1.9	4.2	10.0	19.8	16.1	7.5	3.7	1.9	1.4	0.8	0.7	0.4	0.4	0.3	0.2	0.7	1.4	2.6	3.6	3.2	Diurnal Average	
		55.7	53.5	30.9	27.1	24.7	29.0	52.6	94.9	80.7	27.0	15.3	6.9	5.2	2.8	2.8	1.1	0.9	1.1	1.0	18.2	31.2	50.8	60.3	57.2	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - September 2017

Maximum Value: 191.9 ppb on Sep 29 08:00		Maximum Daily Average: 29.0 ppb on Sep 28		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 1 23:00		Minimum Daily Average: 1.0 ppb on Sep 2		Hours of Data: 686																							
Maximum Diurnal Average: 34.4 ppb at hour 8		Minimum Diurnal Average: 1.2 ppb at hour 18		Hours of Missing Data: 34																							
Monthly Average: 7.22 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.4 Median = 1.5 Q ₃ = 5.6 P ₉₀ = 18.7 P ₉₉ = 81.1		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	2	5	9	3	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	1.2	9.0	
2-Sep	1	0	0	0	0	0	2	1	1	2	2	1	1	0	A	3	2	2	1	1	0	0	0	0	1.0	3.4	
3-Sep	0	0	0	0	0	1	1	3	5	21	3	3	6	A	1	2	0	6	2	0	1	8	10	2	3.4	21.5	
4-Sep	7	3	3	1	4	12	18	44	23	13	8	7	A	0	0	0	1	0	1	0	1	2	2	4	6.7	43.7	
5-Sep	2	4	4	3	4	12	56	70	24	11	5	A	5	2	1	1	1	0	0	0	14	6	22	25	11.8	70.3	
6-Sep	2	7	6	2	1	13	22	17	10	16	A	5	2	2	1	0	12	0	1	1	18	35	34	27	10.3	35.1	
7-Sep	5	5	2	3	12	19	38	38	23	A	9	4	1	2	2	1	1	1	1	0	7	12	3	0	8.2	38.2	
8-Sep	0	0	0	0	0	0	2	3	A	2	3	2	1	3	1	8	0	0	0	0	0	0	0	0	1.3	7.6	
9-Sep	1	1	2	1	4	13	11	A	4	6	7	3	10	2	1	3	0	1	1	0	0	0	0	0	3.1	12.7	
10-Sep	0	0	0	0	0	0	A	1	19	1	1	1	1	1	1	1	3	1	0	0	0	1	1	1	1.5	19.4	
11-Sep	0	0	0	1	1	A	14	21	20	11	6	6	1	1	3	1	1	1	0	0	0	0	0	0	3.9	20.7	
12-Sep	0	0	0	0	A	14	21	52	17	7	1	17	8	9	1	8	12	2	3	3	2	4	3	0	8.0	52.1	
13-Sep	0	0	0	A	0	1	4	6	2	3	6	5	1	1	4	1	2	1	2	1	0	0	2	1	2.0	5.7	
14-Sep	1	1	A	1	6	6	31	23	23	17	18	8	9	5	4	1	1	2	2	2	2	1	4	3	7.4	30.5	
15-Sep	1	A	2	3	6	18	19	54	31	32	13	10	4	1	13	1	1	1	1	2	1	1	1	0	9.4	53.8	
16-Sep	A	1	1	0	0	2	4	14	19	84	17	13	5	3	1	9	1	1	1	0	0	1	0	A	8.1	83.9	
17-Sep	1	0	0	1	12	9	4	36	31	13	8	5	3	5	0	2	1	0	0	4	0	0	A	1	6.0	35.7	
18-Sep	0	0	0	1	4	3	4	7	8	9	2	2	1	2	7	1	1	1	0	0	0	A	0	0	2.4	9.2	
19-Sep	0	0	0	1	1	4	9	3	3	1	3	1	2	1	1	1	10	1	0	1	A	1	1	0	2.0	9.6	
20-Sep	0	2	2	1	1	0	4	4	4	5	3	1	7	3	7	2	5	3	5	A	1	0	1	0	2.6	7.4	
21-Sep	1	0	0	0	0	1	10	9	3	1	10	1	1	1	1	1	0	0	A	0	2	0	1	1	2.0	9.8	
22-Sep	1	1	1	2	8	12	40	53	48	19	19	4	7	2	2	3	1	A	1	1	1	1	0	10	10.4	52.6	
23-Sep	1	2	2	0	0	9	4	10	14	17	6	3	2	3	2	1	A	0	0	0	0	0	0	0	3.4	17.5	
24-Sep	0	19	2	1	1	1	4	10	8	8	15	1	1	2	3	A	0	1	0	1	2	2	0	0	3.5	18.7	
25-Sep	0	0	0	0	0	1	9	36	42	6	4	2	2	2	A	3	2	2	1	1	0	0	0	0	4.9	42.5	
26-Sep	0	1	0	0	0	11	34	96	82	38	5	4	3	A	1	1	1	1	1	0	0	0	2	0	12.3	96.1	
27-Sep	1	0	0	0	1	14	50	72	57	20	12	3	A	3	3	2	4	3	6	58	51	78	69	67	24.9	78.0	
28-Sep	63	59	45	30	32	38	92	108	41	22	A	4	4	2	2	1	1	6	9	3	1	3	6	6	29.0	108.2	
29-Sep	5	7	7	8	13	21	61	192	179	39	C	C	C	C	5	2	1	2	5	3	2	0	0	0	27.6	191.9	
30-Sep	0	0	0	0	0	0	16	3	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1.2	16.4	
		3.2	3.9	2.8	2.2	3.9	8.2	19.8	34.4	28.2	16.0	7.5	4.2	3.5	2.2	2.6	2.2	2.3	1.2	1.4	3.1	3.8	5.4	5.4	5.2	Diurnal Average	
		62.8	58.5	45.2	29.8	32.2	38.1	91.6	191.9	179.3	83.9	22.1	17.0	10.3	8.8	12.9	9.4	12.3	5.5	6.5	58.4	51.4	78.0	68.5	66.7	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

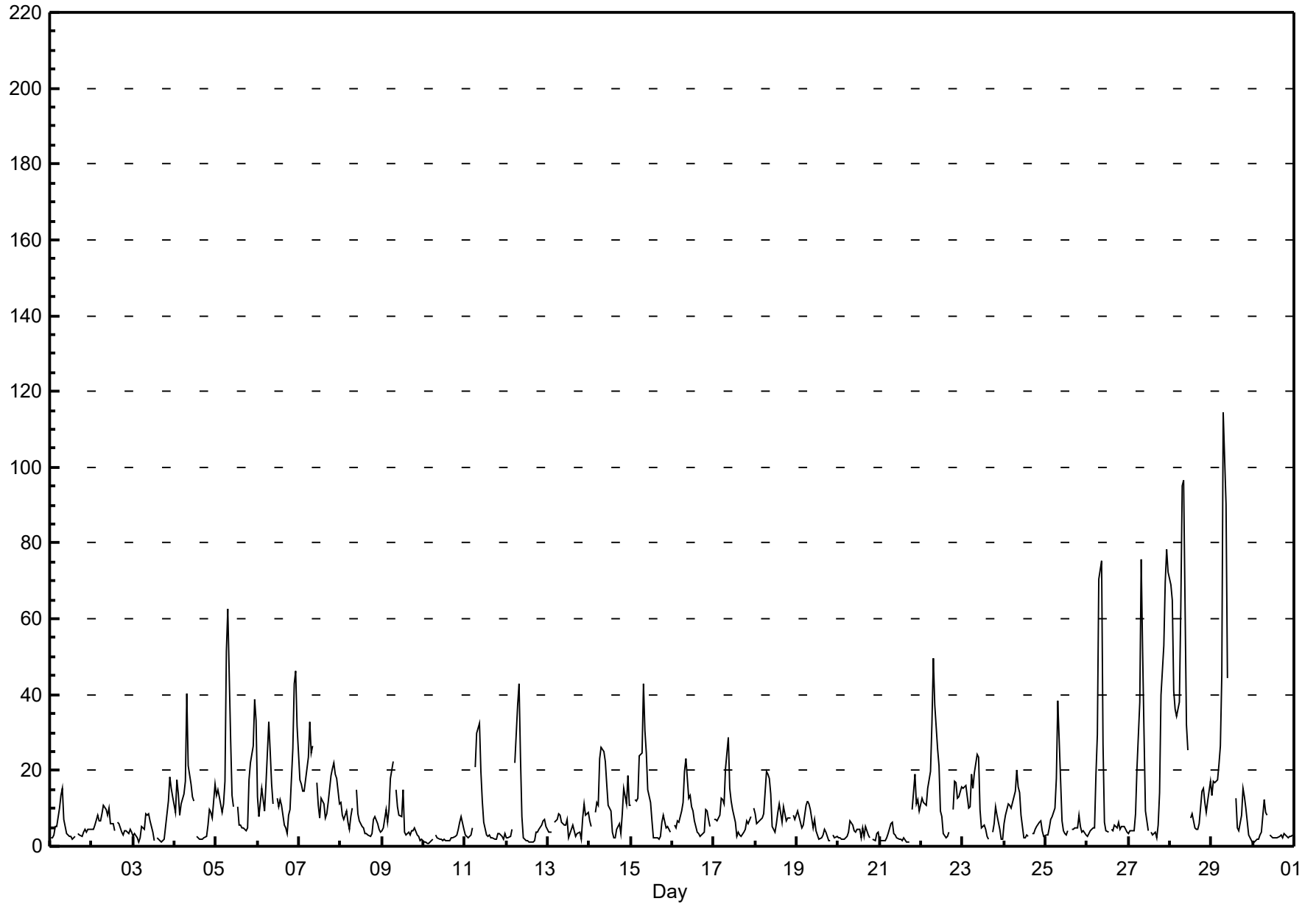


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - September 2017

Maximum Value: 114.5 ppb on Sep 29 08:00		Maximum Daily Average: 30.9 ppb on Sep 28		Hours in Service: 720																						
Minimum Value: 1 ppb on Sep 10 04:00		Minimum Daily Average: 2.5 ppb on Sep 10		Hours of Data: 686																						
Maximum Diurnal Average: 31.9 ppb at hour 8		Minimum Diurnal Average: 3.4 ppb at hour 16		Hours of Missing Data: 34																						
Monthly Average: 10.59 ppb		Percentiles: P ₁ = 1.2 P ₁₀ = 2.1 Q ₁ = 3.3 Median = 6.2 Q ₃ = 12.1 P ₉₀ = 23.1 P ₉₉ = 75.2		Hours of Calibration: 34																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	2	2	3	5	5	10	13	15	7	3	3	2	3	2	3	A	3	3	3	4	4	4	4	4	4.7	15.4
2-Sep	4	4	6	8	7	7	9	11	10	8	10	6	6	4	A	6	6	4	3	4	4	3	5	4	6.0	10.7
3-Sep	3	3	2	1	2	5	5	9	8	8	7	4	2	A	2	1	1	1	2	5	12	18	15	13	5.7	18.3
4-Sep	9	18	14	8	11	14	17	40	21	17	13	12	A	3	2	2	2	3	6	10	9	7	17	11.1	40.2	
5-Sep	13	15	13	9	11	17	51	63	28	13	10	A	11	6	5	5	5	4	5	17	22	27	39	33	18.4	62.6
6-Sep	13	8	15	12	9	17	33	25	16	11	A	13	11	12	11	5	5	4	8	10	26	43	46	32	16.7	46.1
7-Sep	18	17	14	14	18	24	33	25	26	A	17	11	7	13	11	7	9	11	19	20	22	19	18	11	16.7	32.9
8-Sep	12	8	7	9	6	4	8	10	A	15	8	7	5	5	3	3	3	3	3	7	8	6	4	4	6.5	14.9
9-Sep	4	5	10	6	10	18	23	A	15	10	8	8	15	4	3	4	3	4	4	5	3	2	2	2	7.2	22.5
10-Sep	1	1	1	1	1	2	A	3	2	2	2	2	2	2	2	2	2	3	3	4	6	8	4	4	2.5	7.6
11-Sep	3	2	2	3	5	A	21	30	32	20	12	6	3	3	3	2	2	2	2	3	4	3	2	3	7.3	32.4
12-Sep	2	2	3	4	A	22	37	43	24	8	2	1	2	1	1	1	2	4	4	4	5	7	7	5	8.3	43.1
13-Sep	4	4	4	A	6	7	9	8	6	6	6	7	2	3	6	4	3	3	4	2	7	11	8	9	5.6	11.1
14-Sep	7	5	A	9	12	11	23	26	25	22	17	11	9	4	2	2	4	6	3	8	15	11	19	11	11.4	26.1
15-Sep	11	A	12	12	13	24	25	43	31	25	15	12	7	2	2	2	3	6	8	5	5	4	4	4	11.8	42.9
16-Sep	A	6	5	7	6	9	11	20	23	13	13	10	9	7	4	3	3	3	4	10	9	7	5	A	8.5	23.1
17-Sep	7	7	7	8	13	12	11	20	29	15	12	10	6	3	4	3	3	4	4	7	6	8	A	10	9.0	28.9
18-Sep	9	6	7	7	8	9	20	19	18	14	5	4	6	9	11	6	11	9	7	7	7	A	8	7	9.2	19.8
19-Sep	9	8	6	5	6	11	12	11	10	5	7	4	3	2	2	3	4	4	1	2	A	3	2	2	5.3	11.8
20-Sep	2	2	2	2	2	3	4	7	5	4	4	4	5	2	5	3	5	3	2	A	2	1	3	4	3.3	6.5
21-Sep	1	1	1	2	2	3	6	6	4	3	2	2	2	2	2	1	1	1	A	10	19	11	12	9	4.5	19.0
22-Sep	13	11	11	11	15	20	33	50	37	26	21	9	8	3	2	3	4	A	10	17	17	13	13	16	15.8	49.7
23-Sep	15	16	16	10	10	19	15	20	24	24	10	5	6	5	3	2	A	4	6	10	8	4	2	2	10.2	24.2
24-Sep	6	8	11	11	10	11	14	20	16	14	8	2	2	3	3	A	3	3	4	5	6	7	4	2	7.7	20.2
25-Sep	3	3	5	7	8	10	18	38	28	7	4	3	3	4	A	4	5	5	5	8	5	4	4	3	8.0	38.4
26-Sep	3	3	4	5	5	19	30	70	75	27	6	4	4	A	5	4	6	5	6	4	5	5	4	4	13.3	75.4
27-Sep	3	4	4	4	9	20	38	76	52	30	9	4	A	4	3	4	2	6	14	40	53	70	78	72	26.0	78.2
28-Sep	69	65	41	36	34	38	63	95	97	32	25	A	8	9	5	5	6	15	15	11	9	12	17	17	30.9	96.6
29-Sep	13	17	17	18	22	27	45	115	90	44	C	C	C	C	13	5	4	8	15	13	10	3	2	1	24.1	114.5
30-Sep	1	1	2	2	3	4	12	9	8	A	3	2	2	2	2	3	3	2	3	3	2	3	2	3	3.4	12.2
		9.0	8.8	8.5	8.2	9.2	13.7	22.0	31.9	26.5	15.2	9.3	6.1	5.4	4.3	4.2	3.4	3.8	4.1	5.8	8.9	10.8	11.1	11.8	10.7	Diurnal Average
		69.0	64.7	41.0	36.4	34.2	38.2	62.6	114.5	96.6	44.3	25.4	12.6	15.0	12.7	12.8	7.5	10.6	11.5	18.6	39.8	53.0	69.6	78.2	72.3	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

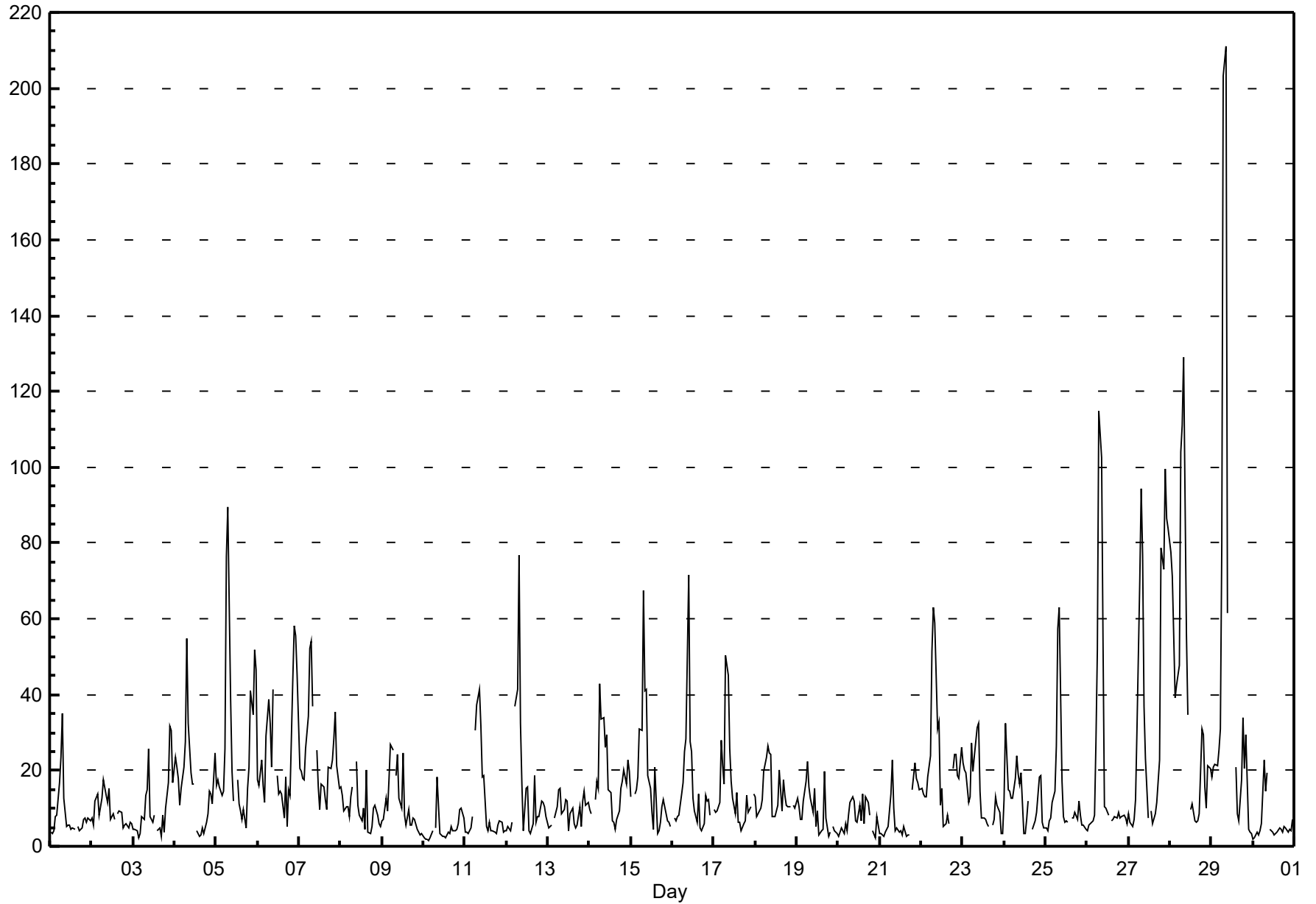


Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

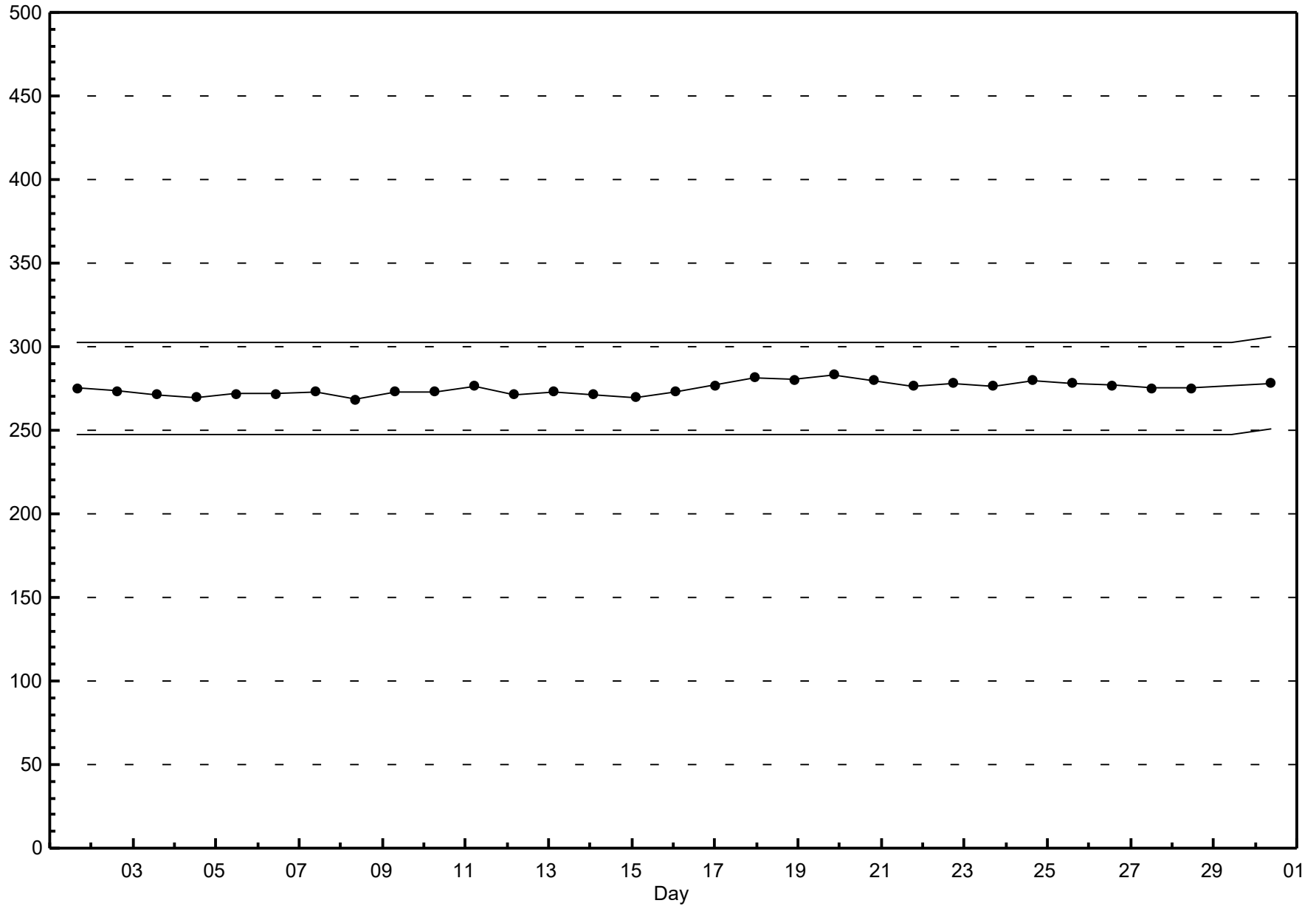
Henry Pirker - September 2017

Maximum Value: 211.0 ppb on Sep 29 09:00		Maximum Daily Average: 42.2 ppb on Sep 29		Hours in Service: 720																																													
Minimum Value: 1 ppb on Sep 10 04:00		Minimum Daily Average: 4.7 ppb on Sep 10		Hours of Data: 686																																													
Maximum Diurnal Average: 48.5 ppb at hour 8		Minimum Diurnal Average: 7.1 ppb at hour 16		Hours of Missing Data: 34																																													
Monthly Average: 16.47 ppb		Percentiles: P ₁ = 2.3 P ₁₀ = 3.9 Q ₁ = 5.8 Median = 10.3 Q ₃ = 18.6 P ₉₀ = 32.9 P ₉₉ = 101.7		Hours of Calibration: 34																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	4	4	4	8	8	17	23	35	13	5	6	6	4	5	5	A	5	4	5	7	7	6	8	7	8.5	35.2																							
2-Sep	7	6	12	14	8	11	13	18	13	12	15	7	9	7	A	9	10	9	5	5	6	5	6	6	9.2	17.6																							
3-Sep	5	5	4	2	3	8	7	13	15	26	8	6	8	A	4	5	3	8	4	10	17	32	30	17	10.4	31.8																							
4-Sep	23	21	18	11	15	21	27	55	32	19	17	17	A	4	3	3	5	3	6	8	15	14	11	25	16.2	54.8																							
5-Sep	16	18	16	13	15	26	76	90	39	20	12	A	18	11	9	7	10	5	15	21	41	35	52	47	26.5	89.6																							
6-Sep	18	16	23	16	11	29	39	33	21	41	A	19	14	15	14	8	18	5	15	13	44	58	56	46	24.8	58.4																							
7-Sep	20	20	18	18	26	34	52	54	37	A	25	16	10	16	16	12	10	21	20	23	28	35	21	15	23.8	54.1																							
8-Sep	16	13	9	10	11	8	13	16	A	22	11	8	7	10	5	20	4	3	5	10	11	8	6	5	10.1	22.5																							
9-Sep	7	7	13	9	17	27	26	A	19	24	13	10	25	8	6	10	6	6	7	7	4	4	3	4	11.3	26.7																							
10-Sep	2	2	2	1	2	4	A	5	18	3	3	3	3	2	4	3	5	4	4	4	6	10	10	8	4.7	18.2																							
11-Sep	4	4	3	5	8	A	31	37	42	32	18	19	5	4	6	4	4	4	3	6	7	6	4	4	11.2	41.5																							
12-Sep	4	5	4	6	A	37	42	77	32	16	4	15	16	4	3	6	19	6	8	8	12	12	11	8	15.4	76.8																							
13-Sep	5	5	5	A	8	11	15	15	8	10	12	12	4	8	10	6	5	6	10	5	12	15	11	12	9.1	15.2																							
14-Sep	10	8	A	12	17	15	43	34	34	26	29	15	14	7	6	4	7	9	15	17	20	16	23	20	17.6	42.9																							
15-Sep	13	A	14	15	18	31	31	67	41	41	19	15	9	4	21	3	4	6	10	12	8	7	6	5	17.5	67.5																							
16-Sep	A	7	7	8	8	14	17	25	28	72	28	25	13	9	6	14	5	4	6	13	12	12	8	A	15.5	71.7																							
17-Sep	10	9	9	11	28	21	16	50	45	26	17	13	9	14	6	6	4	6	7	13	9	11	A	14	15.5	50.2																							
18-Sep	13	8	9	10	12	20	23	26	25	24	8	8	9	11	20	9	18	13	11	10	10	A	11	10	13.9	26.4																							
19-Sep	13	11	7	7	12	17	22	16	13	9	15	5	9	3	4	5	20	7	2	4	A	5	4	3	9.3	22.2																							
20-Sep	3	4	5	3	6	4	8	12	13	12	7	6	11	7	14	6	13	11	8	A	4	2	8	5	7.5	13.6																							
21-Sep	3	3	3	4	5	5	14	23	10	4	5	4	4	3	5	3	3	3	A	15	22	18	17	15	8.2	22.7																							
22-Sep	15	14	13	13	18	24	52	63	59	31	33	11	15	5	6	8	6	A	21	24	24	18	18	26	22.5	63.1																							
23-Sep	22	20	19	12	13	27	20	24	31	32	15	7	8	7	6	5	A	6	7	13	11	9	3	3	13.9	32.5																							
24-Sep	12	33	15	15	13	13	18	24	19	16	19	3	3	7	12	A	4	5	7	9	18	19	7	5	12.8	32.5																							
25-Sep	5	4	7	8	11	15	27	57	63	17	8	6	7	7	A	8	7	9	7	12	8	5	6	5	13.4	62.9																							
26-Sep	4	6	6	7	8	27	52	115	102	54	10	10	8	A	7	7	8	7	9	7	8	8	8	6	21.1	114.8																							
27-Sep	8	6	5	7	12	31	70	94	77	37	23	7	A	9	6	9	12	17	23	79	73	100	87	84	38.1	99.7																							
28-Sep	77	71	55	39	43	48	104	111	129	56	35	A	10	11	7	6	7	9	31	29	16	10	21	20	41.1	129.0																							
29-Sep	18	21	22	21	25	31	80	203	211	62	C	C	C	C	21	9	7	17	34	21	29	4	4	3	42.2	211.0																							
30-Sep	2	2	4	3	4	6	23	15	19	A	4	4	3	4	4	5	5	4	5	5	4	5	4	7	6.0	22.9																							
																								12.4	12.1	11.4	10.7	13.3	20.0	33.9	48.5	41.7	26.8	14.9	10.2	9.4	7.5	8.4	7.1	7.9	7.6	10.8	14.2	16.8	16.9	15.9	15.0	Diurnal Average	
																								77.4	71.2	55.5	39.2	42.6	47.8	104.2	203.1	211.0	71.7	34.8	25.0	24.8	16.4	21.1	20.0	19.6	20.7	34.1	78.7	73.2	99.7	86.7	84.1	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									



Span Responses

Oxides of Nitrogen (NO_x)
Henry Pirker - September 2017



Hourly Averages

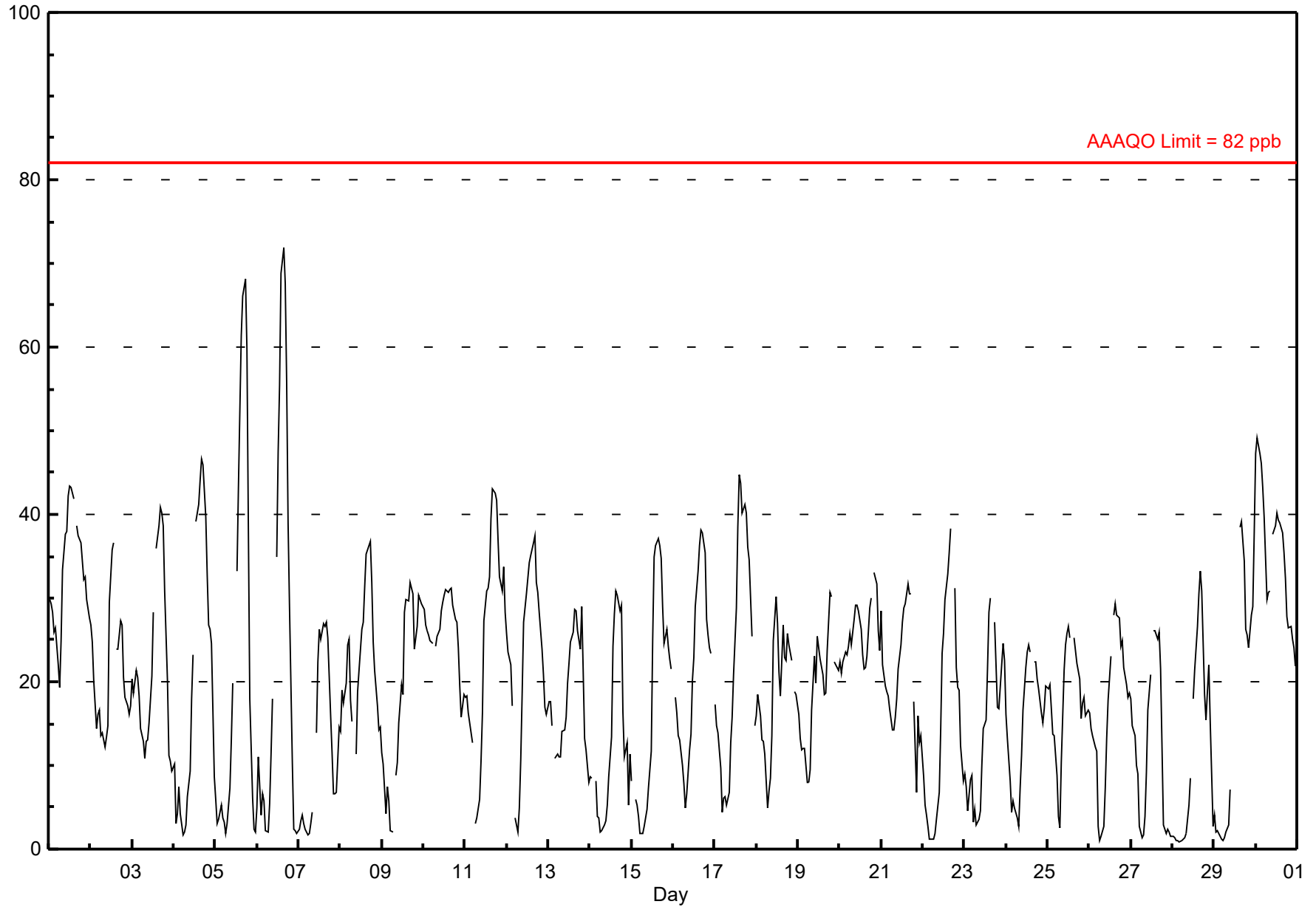
Ozone (O₃) - ppb

Henry Pirker - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 71.8 ppb on Sep 6 16:00	Maximum Daily Average: 35.5 ppb on Sep 30		Hours of Data:	686
Minimum Value: 1 ppb on Sep 28 05:00	Minimum Daily Average: 11.7 ppb on Sep 27		Hours of Missing Data:	34
Maximum Diurnal Average: 34.6 ppb at hour 17	Minimum Diurnal Average: 7.2 ppb at hour 7		Hours of Calibration:	34
Monthly Average: 20.07 ppb	Percentiles: P ₁ = 1.2 P ₁₀ = 3.1 Q ₁ = 10.3 Median = 19.8 Q ₃ = 28.2 P ₉₀ = 36.2 P ₉₉ = 59.0		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Sep	30	29	28	26	27	22	19	25	33	38	38	42	43	43	42	A	39	37	37	34	32	33	30	28	32.8	43.5		
2-Sep	27	25	20	14	16	17	14	14	12	13	15	30	36	37	A	24	24	27	27	21	18	17	16	17	20.8	36.6		
3-Sep	20	19	21	20	18	14	13	11	13	13	15	21	28	A	36	39	41	40	39	31	20	11	10	9	21.9	40.8		
4-Sep	10	3	4	8	4	2	2	3	6	9	18	23	A	39	41	44	47	46	40	33	27	26	25	9	20.4	46.6		
5-Sep	6	3	4	5	4	3	2	3	7	13	20	A	33	43	52	61	66	68	60	38	18	6	2	2	22.7	68.2		
6-Sep	5	11	4	7	6	2	2	5	11	18	A	35	48	55	69	72	68	56	39	29	10	2	2	2	24.3	71.8		
7-Sep	2	3	4	3	2	2	2	3	4	A	14	22	26	25	27	27	27	25	16	11	7	7	7	15	12.2	27.1		
8-Sep	14	19	17	20	24	25	18	15	A	11	19	21	26	27	31	35	36	37	32	25	21	17	14	15	22.6	36.7		
9-Sep	12	10	4	8	6	2	2	A	9	10	15	20	19	28	30	30	32	31	30	24	27	30	30	29	19.0	31.9		
10-Sep	29	27	26	26	25	25	A	24	25	26	28	30	30	31	31	31	31	29	28	27	24	19	16	18	26.4	31.2		
11-Sep	18	18	16	14	13	A	3	4	6	10	16	27	31	31	33	40	43	42	42	37	33	31	34	28	24.8	43.1		
12-Sep	26	24	22	17	A	4	2	5	11	19	27	31	32	34	35	37	37	32	31	28	24	21	17	16	23.1	37.4		
13-Sep	18	18	15	A	11	11	11	11	14	14	16	20	22	25	26	29	28	26	24	29	21	13	12	8	18.3	29.0		
14-Sep	9	8	A	8	4	4	2	2	3	3	5	9	13	24	28	31	30	29	29	16	11	13	5	11	13.0	30.9		
15-Sep	8	A	6	5	4	2	2	3	4	5	7	12	25	35	36	37	36	35	29	25	26	24	23	22	17.8	37.1		
16-Sep	A	18	16	13	13	10	8	5	7	12	14	20	23	29	33	36	38	38	35	27	26	24	23	A	21.3	38.1		
17-Sep	17	15	14	10	4	6	6	5	7	13	16	21	29	38	45	44	40	41	40	36	34	25	A	15	22.7	44.7		
18-Sep	16	18	16	13	13	11	5	7	8	13	25	30	27	21	18	27	23	23	26	24	23	A	19	18	18.5	30.1		
19-Sep	16	13	12	12	12	8	8	10	17	23	20	25	24	23	21	19	19	24	31	30	A	22	22	21	18.7	30.6		
20-Sep	22	21	22	24	23	24	26	24	27	29	29	28	26	23	22	22	23	29	30	A	33	32	26	24	25.7	33.1		
21-Sep	29	22	20	19	18	17	14	14	16	18	21	24	27	29	29	32	31	30	A	18	7	16	13	14	20.7	31.6		
22-Sep	9	5	4	3	1	1	1	2	4	7	14	23	26	30	33	35	38	A	31	22	19	19	12	8	15.1	38.2		
23-Sep	9	7	5	8	9	3	5	3	4	5	10	14	15	21	28	30	A	27	22	17	17	22	25	23	14.3	30.1		
24-Sep	16	13	8	4	6	5	4	3	7	11	17	22	24	24	24	A	22	22	20	19	16	15	17	20	14.8	24.4		
25-Sep	19	20	17	14	14	9	4	3	10	21	24	26	27	25	A	25	24	22	20	16	17	18	16	17	17.7	26.5		
26-Sep	16	14	14	12	12	3	1	2	3	7	13	18	23	A	28	29	28	28	24	25	22	20	18	19	16.4	29.3		
27-Sep	18	15	13	10	9	3	1	2	4	9	17	21	A	26	26	25	26	22	12	3	2	2	2	2	11.7	26.2		
28-Sep	2	1	1	1	1	1	1	1	1	2	5	8	A	18	18	21	27	31	33	31	19	15	19	22	15	3	12.1	33.2
29-Sep	4	2	2	2	1	1	1	2	3	7	A	18	C	C	C	38	39	34	26	26	24	28	29	38	16.3	39.1		
30-Sep	47	49	47	46	43	40	30	31	31	A	38	39	40	39	39	38	35	32	28	26	27	25	24	22	35.5	49.1		
16.3 15.6 13.9 12.8 11.8 9.5 7.2 8.3 10.6 13.7 18.5 24.0 27.5 30.7 32.9 34.5 34.6 33.2 29.8 24.6 20.8 19.4 17.3 16.2																								Diurnal Average				
47.3 49.1 47.2 46.0 43.3 39.7 29.9 30.7 33.4 37.6 38.0 42.1 47.5 55.5 68.8 71.8 67.6 68.2 59.6 38.4 34.5 32.6 33.7 37.8																								Diurnal Maximum				

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na



Hourly Maximums

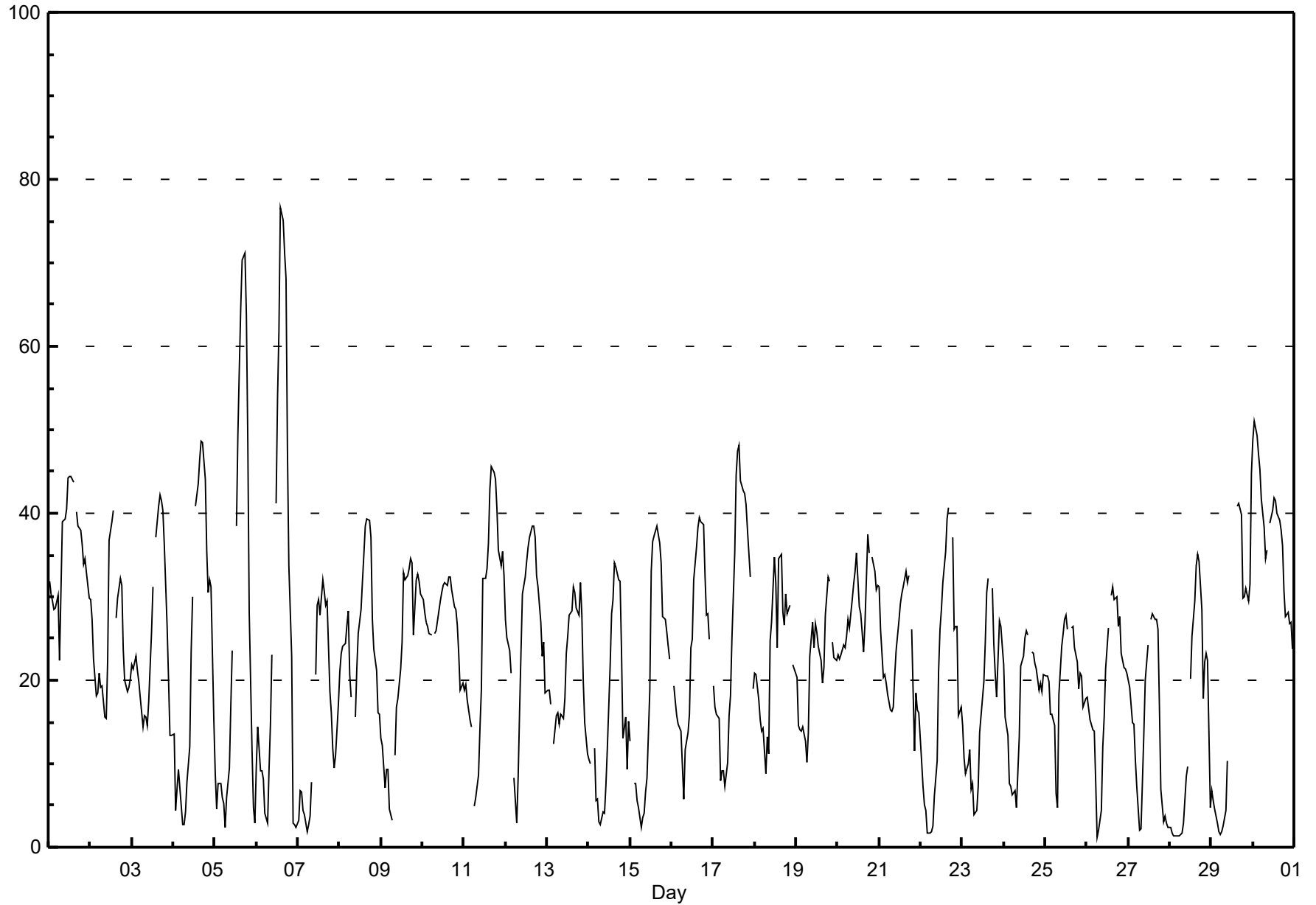
Ozone (O₃) - ppb

Henry Pirker - September 2017

Maximum Value: 76.6 ppb on Sep 6 15:00		Maximum Daily Average: 37.9 ppb on Sep 30		Hours in Service: 720																																												
Minimum Value: 1 ppb on Sep 26 07:00		Minimum Daily Average: 14.3 ppb on Sep 27		Hours of Data: 686																																												
Maximum Diurnal Average: 37.2 ppb at hour 16		Minimum Diurnal Average: 9.3 ppb at hour 7		Hours of Missing Data: 34																																												
Monthly Average: 22.98 ppb		Percentiles: P ₁ = 1.7 P ₁₀ = 5.5 Q ₁ = 13.9 Median = 23.2 Q ₃ = 31.2 P ₉₀ = 38.8 P ₉₉ = 63.2		Hours of Calibration: 34																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	32	30	29	28	29	30	22	31	39	39	41	44	44	44	A	40	39	38	36	34	35	33	30	35.3	44.4																							
2-Sep	30	27	23	18	18	21	19	19	16	15	22	37	39	40	A	27	30	32	31	24	20	19	19	20	24.7	40.4																						
3-Sep	22	21	23	21	20	18	14	16	16	15	18	26	31	A	37	41	42	41	40	36	26	20	13	13	24.9	42.2																						
4-Sep	14	4	7	9	7	3	3	4	8	12	24	30	A	41	43	46	49	49	44	35	30	32	31	15	23.5	48.6																						
5-Sep	9	5	8	8	6	5	2	6	10	17	24	A	38	50	57	65	70	71	64	49	28	12	5	3	26.5	71.2																						
6-Sep	10	14	9	9	8	4	3	9	15	23	A	41	54	62	77	75	71	68	48	34	23	3	3	2	28.9	76.6																						
7-Sep	3	7	7	4	4	2	3	4	8	A	21	29	30	28	32	31	29	30	19	16	12	10	11	17	15.4	32.0																						
8-Sep	21	23	24	24	27	28	21	18	A	16	21	26	28	32	35	39	39	37	27	24	21	16	16	16	26.2	39.3																						
9-Sep	13	12	7	9	9	5	3	A	11	17	18	21	25	33	32	33	33	35	34	25	32	33	32	30	21.8	34.6																						
10-Sep	30	28	27	26	26	25	A	26	26	28	29	30	31	32	31	32	32	31	29	28	27	23	19	20	27.7	32.3																						
11-Sep	19	19	18	15	14	A	5	6	9	14	19	32	32	33	36	43	46	45	44	41	36	34	35	33	27.3	45.6																						
12-Sep	27	25	23	21	A	8	3	9	16	23	30	32	34	36	37	39	39	37	33	31	27	23	25	18	25.9	38.5																						
13-Sep	19	19	17	A	12	16	16	15	16	15	18	23	25	28	28	31	30	29	28	32	28	20	15	11	21.3	31.7																						
14-Sep	10	10	A	12	6	6	3	3	4	4	7	12	22	28	30	34	34	32	32	24	13	16	9	15	15.8	34.0																						
15-Sep	13	A	8	8	6	5	2	3	4	7	8	19	33	37	37	38	37	36	34	28	27	26	24	23	20.1	38.4																						
16-Sep	A	19	18	16	15	14	10	6	12	14	16	24	25	32	36	38	39	39	39	33	28	28	25	A	23.8	39.4																						
17-Sep	19	17	16	15	8	9	9	7	10	16	18	25	35	45	47	48	44	43	42	41	38	32	A	19	26.3	48.1																						
18-Sep	21	21	18	15	14	14	9	13	11	25	27	35	32	24	35	35	28	27	30	28	29	A	22	21	23.2	35.1																						
19-Sep	20	15	14	14	14	13	10	14	23	27	24	27	26	24	22	20	22	28	32	32	A	25	23	22	21.3	32.3																						
20-Sep	23	22	23	24	24	25	27	26	30	32	33	35	29	28	26	23	27	37	35	A	35	33	31	31	28.7	37.4																						
21-Sep	31	26	20	21	20	18	17	16	17	20	24	27	29	30	31	33	32	33	A	26	11	19	16	16	23.2	33.0																						
22-Sep	10	7	5	4	2	2	2	2	6	10	21	26	28	32	35	39	41	A	37	26	26	26	16	17	18.4	40.6																						
23-Sep	15	11	9	10	12	7	8	4	4	7	14	16	20	25	31	32	A	31	24	21	18	27	26	24	17.1	32.2																						
24-Sep	22	16	13	8	7	6	7	5	9	13	22	23	25	26	25	A	23	23	22	21	19	20	19	21	17.2	26.0																						
25-Sep	21	20	20	16	16	15	6	5	18	24	26	27	28	26	A	26	26	24	22	19	21	21	17	18	20.1	27.8																						
26-Sep	18	17	15	14	14	8	1	2	4	12	16	21	26	A	30	31	30	30	26	28	23	21	21	21	18.7	31.2																						
27-Sep	20	19	15	15	11	7	2	2	8	14	20	24	A	27	28	27	27	26	17	7	3	4	3	2	14.3	27.9																						
28-Sep	2	2	1	1	1	1	2	2	3	9	10	A	20	25	30	34	35	34	28	18	22	23	22	5	14.4	35.1																						
29-Sep	7	6	5	3	2	1	2	2	4	10	A	20	C	C	C	41	41	40	30	30	31	30	32	45	19.0	44.7																						
30-Sep	49	51	49	47	45	42	38	35	36	A	39	40	42	42	40	39	38	36	31	28	28	27	27	24	37.9	51.0																						
																								18.9	17.7	16.2	15.1	13.6	12.4	9.3	10.7	13.5	17.1	21.7	27.6	30.8	33.6	36.1	37.2	37.1	36.7	33.5	28.4	24.8	22.7	20.3	19.1	Diurnal Average
																								48.8	51.0	49.3	47.2	45.3	41.6	38.4	34.5	39.0	39.4	40.6	44.3	53.7	61.8	76.6	75.0	71.2	71.2	63.7	48.6	38.0	34.5	35.4	44.7	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

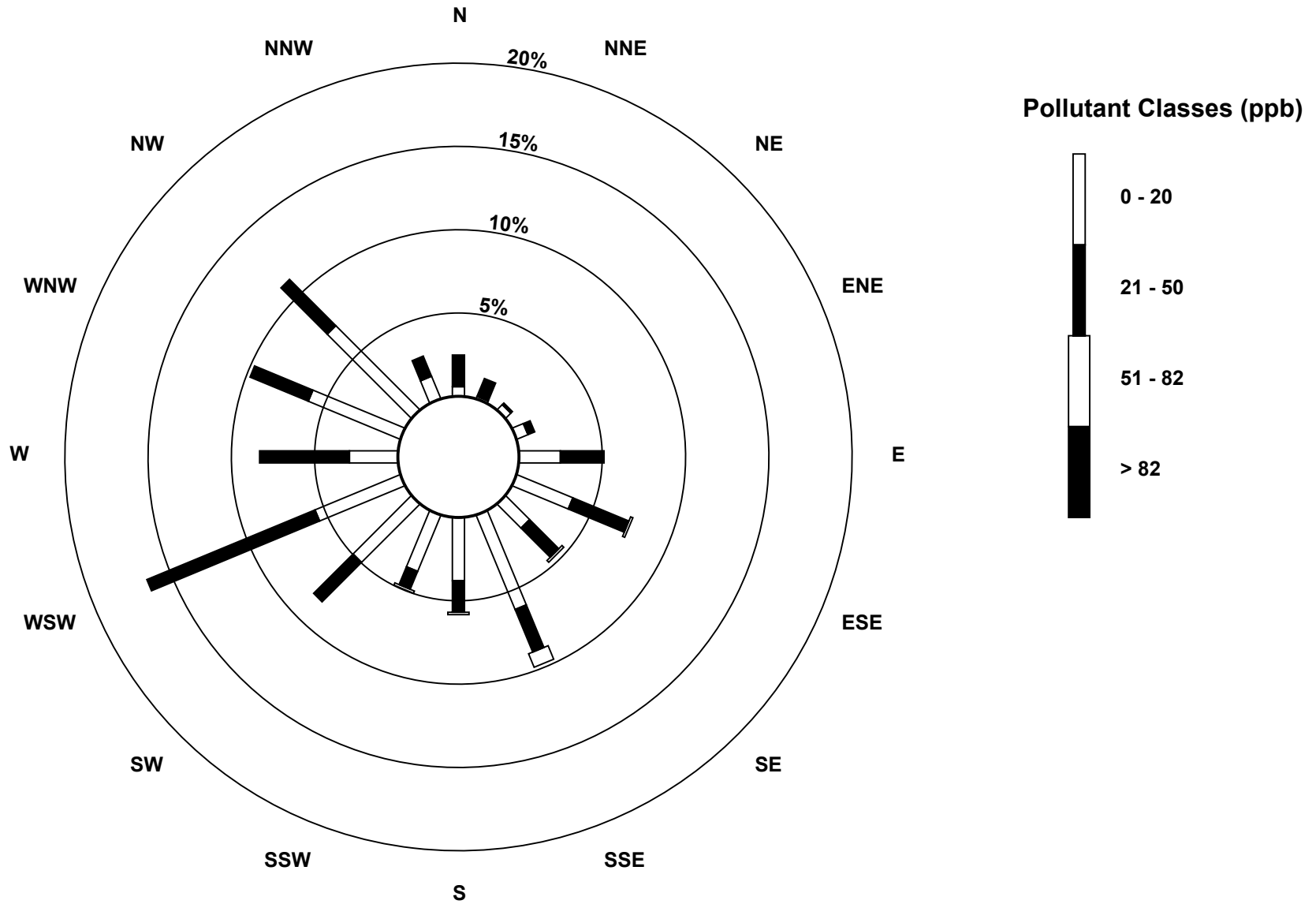
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - September 2017



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - September 2017



Eight Hour Running Averages

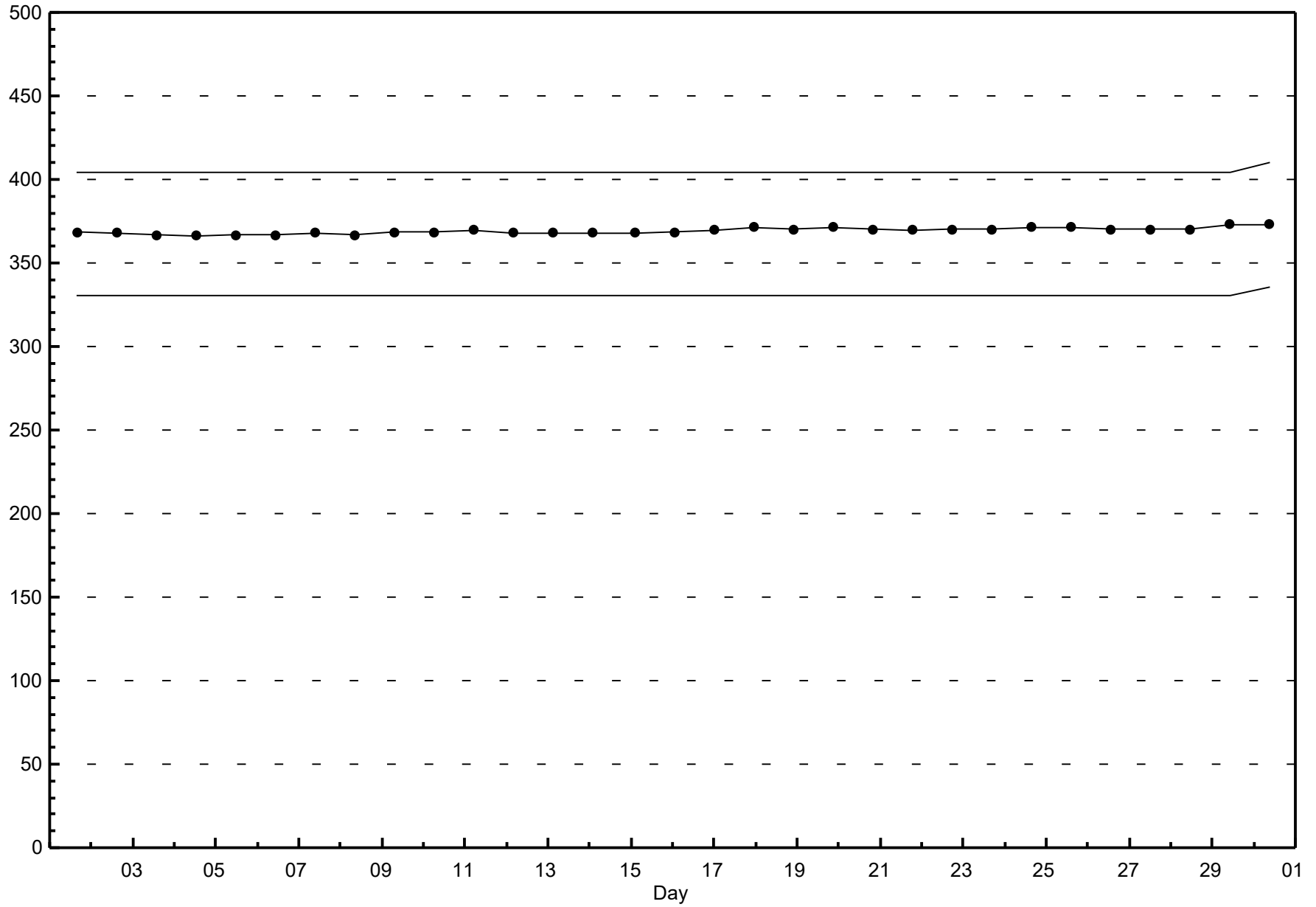
Ozone (O₃) - ppb

Henry Pirker - September 2017

Maximum Value: 57.4 ppb on Sep 6 18:00																				Hours in Service:	720					
Minimum Value: 1.2 ppb on Sep 28 08:00																				Hours of Data:	713					
Percentiles: P ₁ = 1.7 P ₁₀ = 6.3 Q ₁ = 12.3 Median = 20.0 Q ₃ = 26.5 P ₉₀ = 33.1 P ₉₉ = 50.2																				Hours of Missing Data:	7					
																				Hours of Calibration:	7					
																				Percent Operational Time:	100.0					
Day	Hourly Period Ending At (MST)																								Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	33	32	31	30	29	28	26	26	26	27	28	30	33	35	38	40	41	41	40	39	38	36	35	34	40.7	
2-Sep	32	31	29	26	24	22	20	18	16	15	14	16	19	21	22	24	25	27	29	28	25	23	22	21	32.2	
3-Sep	20	19	19	19	19	18	18	17	16	16	15	15	16	16	20	24	28	31	35	36	35	32	29	25	36.2	
4-Sep	21	17	12	10	8	6	5	4	4	5	6	8	9	14	20	26	32	37	40	41	40	38	36	31	41.3	
5-Sep	26	21	16	13	10	7	4	4	4	5	7	7	12	17	25	33	41	49	55	53	51	46	40	33	54.9	
6-Sep	25	18	11	7	5	5	5	5	6	7	7	11	17	25	35	44	52	57	55	54	50	43	35	26	57.4	
7-Sep	18	11	7	4	3	3	3	3	3	3	4	7	10	14	17	21	24	24	24	23	21	18	16	14	24.4	
8-Sep	13	12	12	13	15	18	19	19	20	19	19	19	19	20	22	25	26	29	31	31	31	29	27	25	31.2	
9-Sep	22	18	15	13	11	9	7	6	6	6	7	9	11	15	19	20	23	25	27	28	29	29	29	29	29.2	
10-Sep	29	28	28	28	28	27	27	26	25	25	26	26	27	28	28	29	30	30	30	30	29	28	26	24	30.2	
11-Sep	22	21	20	18	17	16	14	12	11	9	9	11	14	16	20	24	29	33	36	37	38	37	38	36	37.6	
12-Sep	34	32	29	27	26	22	18	14	12	11	12	14	16	20	24	28	31	33	34	33	32	31	28	26	34.1	
13-Sep	23	21	20	18	16	15	14	13	13	12	13	14	15	17	18	21	22	24	25	26	26	25	23	20	26.1	
14-Sep	18	16	14	11	9	8	6	5	4	4	4	4	5	8	11	15	18	21	24	25	25	23	21	18	25.1	
15-Sep	15	13	10	9	8	6	5	4	4	4	4	5	7	12	16	20	24	28	31	32	32	31	29	27	32.4	
16-Sep	26	24	22	20	18	16	14	12	11	10	10	11	12	15	18	22	26	29	32	33	33	32	31	30	32.9	
17-Sep	27	24	21	18	15	13	10	10	8	8	8	10	13	17	22	26	31	34	37	39	40	38	37	33	39.9	
18-Sep	30	26	23	20	17	15	13	12	12	11	12	14	16	17	19	21	23	24	24	24	23	23	23	22	29.7	
19-Sep	21	20	18	16	15	14	12	11	11	13	14	15	17	19	20	21	22	22	23	24	24	24	24	24	24.1	
20-Sep	25	24	23	22	22	23	23	23	24	25	26	26	27	27	26	26	25	25	25	25	26	27	28	28	28.1	
21-Sep	29	28	26	25	24	22	20	19	17	17	17	18	19	21	22	25	26	28	29	28	25	23	21	18	28.9	
22-Sep	15	11	11	9	8	6	5	3	3	3	4	7	10	13	17	21	26	29	31	31	30	28	25	21	30.9	
23-Sep	17	16	13	11	10	8	7	6	5	5	6	7	7	10	13	16	18	21	23	23	23	23	23	22	23.3	
24-Sep	21	19	18	16	15	12	10	7	6	6	7	9	11	14	16	18	20	22	23	22	21	20	19	19	22.6	
25-Sep	19	18	18	17	17	16	14	12	11	11	12	14	15	18	19	23	25	25	24	23	21	20	20	19	24.7	
26-Sep	18	17	16	16	15	13	11	9	7	7	7	7	9	10	13	17	21	24	25	26	26	25	24	23	26.5	
27-Sep	22	20	19	17	15	13	11	9	7	6	7	8	8	11	15	18	21	23	23	20	18	15	12	9	23.2	
28-Sep	6	3	2	2	1	1	1	1	1	2	3	5	5	8	12	16	21	24	26	24	24	25	23	20	25.6	
29-Sep	16	12	10	9	6	4	2	2	2	2	2	5	5	N	N	N	N	N	N	N	N	31	31	31	31	31.3
30-Sep	32	33	36	39	41	42	43	42	40	38	37	36	35	35	37	38	38	38	38	36	35	33	31	29	27	42.5
	34.1	33.4	36.0	38.5	41.0	42.4	42.5	41.6	39.6	38.2	36.9	35.8	35.4	35.3	38.1	44.0	52.0	57.4	55.1	54.4	50.9	46.3	40.0	36.2		
Diurnal Maximums																										
N - Not Valid																										

Span Responses

Ozone (O₃)
Henry Pirker - September 2017



Hourly Averages

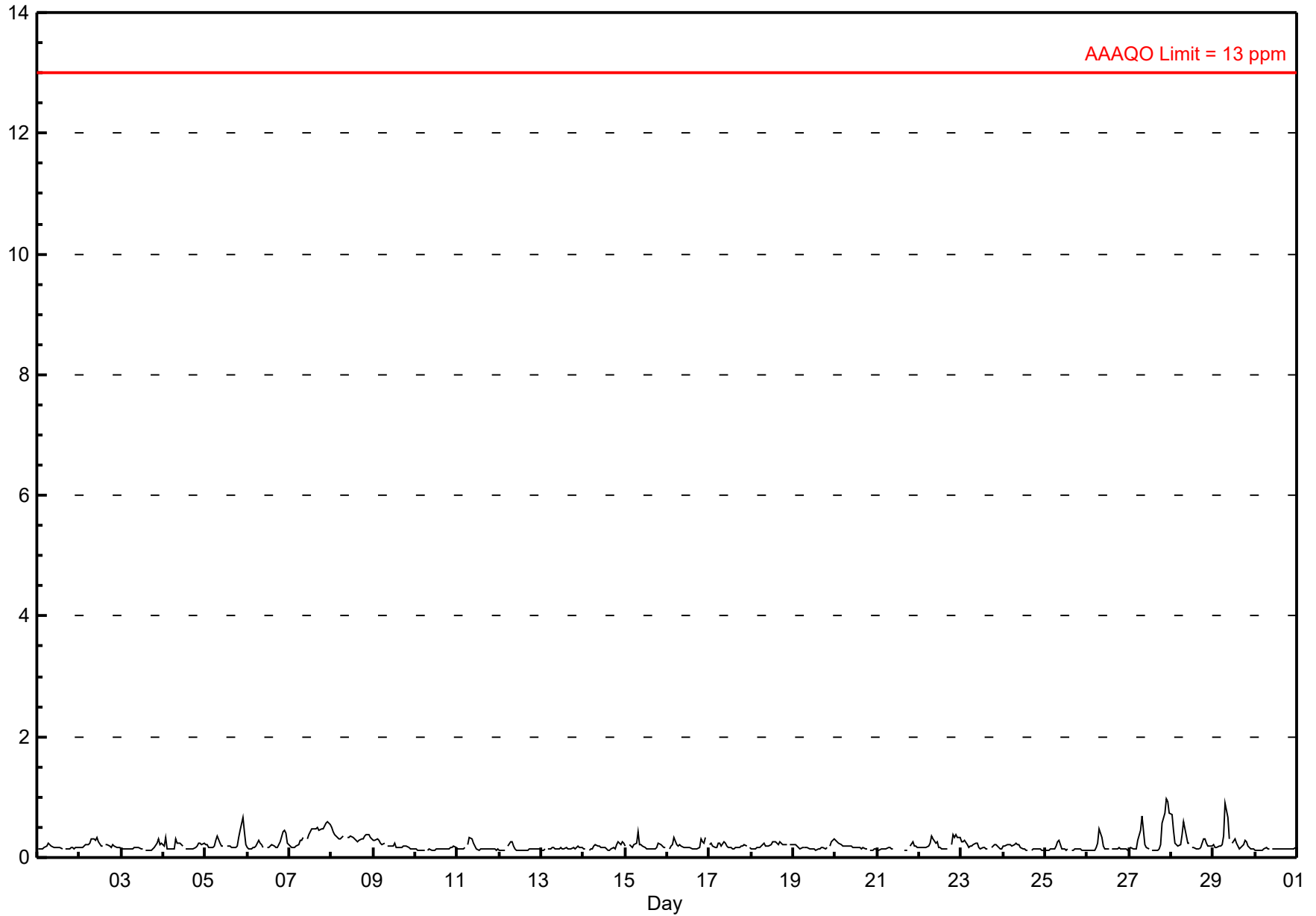
Carbon Monoxide (CO) - ppm

Henry Pirker - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 0.98 ppm on Sep 27 22:00	Maximum Daily Average: 0.38 ppm on Sep 7		Hours of Data:	684
Minimum Value: 0.1 ppm on Sep 21 16:00	Minimum Daily Average: 0.14 ppm on Sep 10		Hours of Missing Data:	36
Maximum Diurnal Average: 0.30 ppm at hour 8	Minimum Diurnal Average: 0.16 ppm at hour 16		Hours of Calibration:	36
Monthly Average: 0.204 ppm	Percentiles: P ₁ = 0.12 P ₁₀ = 0.13 Q ₁ = 0.14 Median = 0.17 Q ₃ = 0.22 P ₉₀ = 0.32 P ₉₉ = 0.68		Percent Operational Time:	100.0

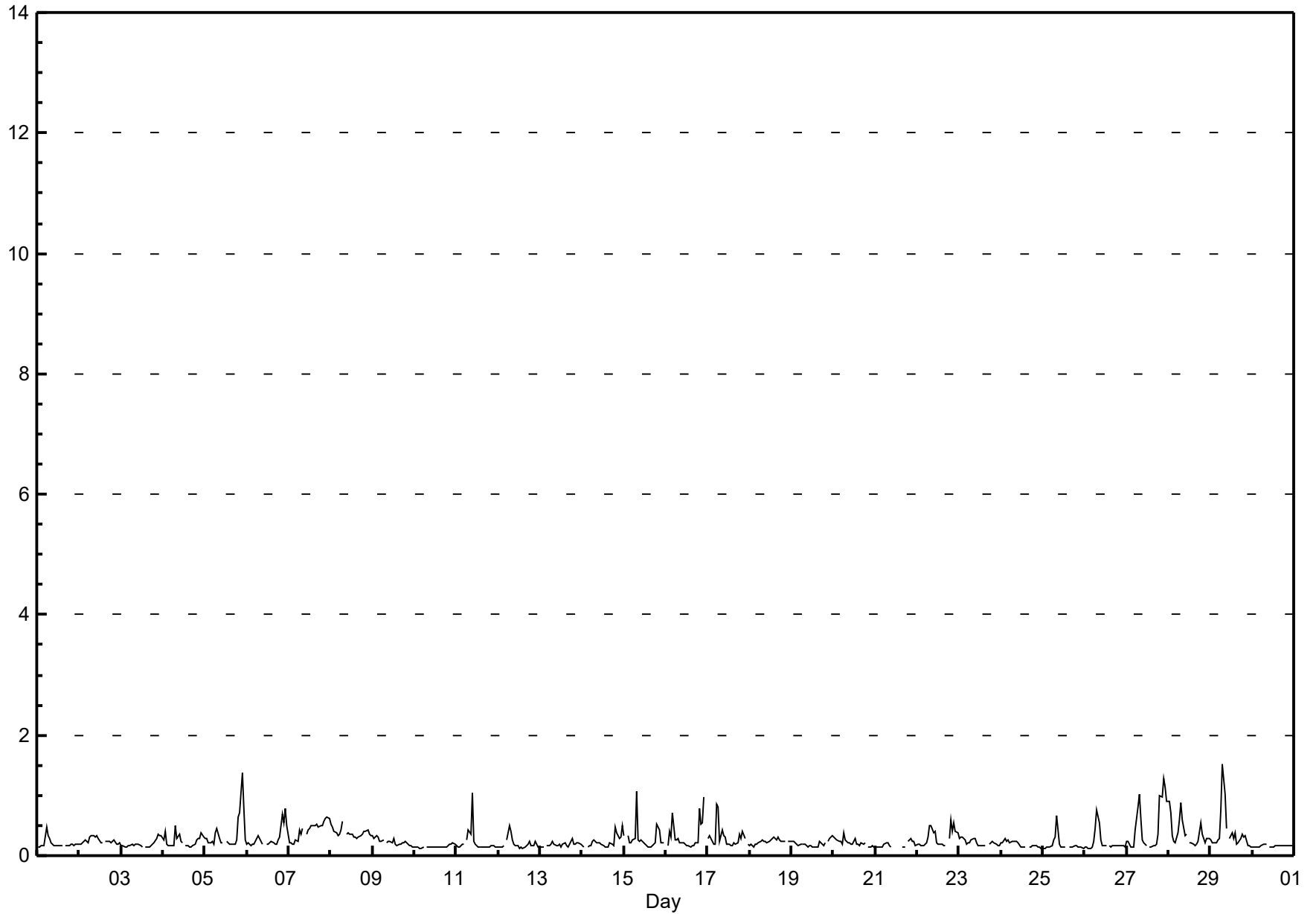
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.23																						
2-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.32																					
3-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.16	0.31																							
4-Sep	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.32																							
5-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.4	0.2	0.25	0.67																						
6-Sep	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.2	0.22	0.44																							
7-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	A	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.38	0.60																							
8-Sep	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	A	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.34	0.49																							
9-Sep	0.3	0.3	0.3	0.3	0.2	0.2	0.2	A	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.20	0.30																							
10-Sep	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.14	0.19																							
11-Sep	0.1	0.1	0.1	0.1	0.2	A	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	0.32																							
12-Sep	0.1	0.1	0.1	0.1	A	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.15	0.26																							
13-Sep	0.1	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.15	0.18																							
14-Sep	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.17	0.26																						
15-Sep	0.2	A	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.19	0.43																							
16-Sep	A	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.3	A	0.20	0.33																							
17-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.19	0.26																							
18-Sep	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.20	0.26																							
19-Sep	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.17	0.30																							
20-Sep	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.18	0.30																							
21-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	C	C	C	C	C	0.1	0.1	0.1	A	0.2	0.3	0.2	0.2	0.2	0.15	0.25																							
22-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	A	0.2	0.4	0.3	0.4	0.3	0.3	0.23	0.38																							
23-Sep	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.19	0.28																							
24-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	0.24																							
25-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.28																							
26-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.3	0.2	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.17	0.47																							
27-Sep	0.1	0.2	0.1	0.1	0.1	0.3	0.4	0.7	0.5	0.2	0.2	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.6	0.7	1.0	0.9	0.7	0.34	0.98																							
28-Sep	0.7	0.5	0.2	0.2	0.2	0.2	0.4	0.6	0.5	0.2	0.2	A	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.28	0.72																							
29-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.9	0.7	0.3	A	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.26	0.91																							
30-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.14	0.16																							
																								0.20	0.19	0.18	0.17	0.17	0.19	0.23	0.30	0.25	0.20	0.19	0.18	0.18	0.17	0.17	0.16	0.17	0.17	0.19	0.23	0.25	0.26	0.24	0.22	Diurnal Average	
																								0.72	0.46	0.38	0.32	0.33	0.32	0.44	0.91	0.68	0.34	0.34	0.39	0.43	0.47	0.48	0.48	0.49	0.45	0.48	0.57	0.74	0.98	0.93	0.74	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na



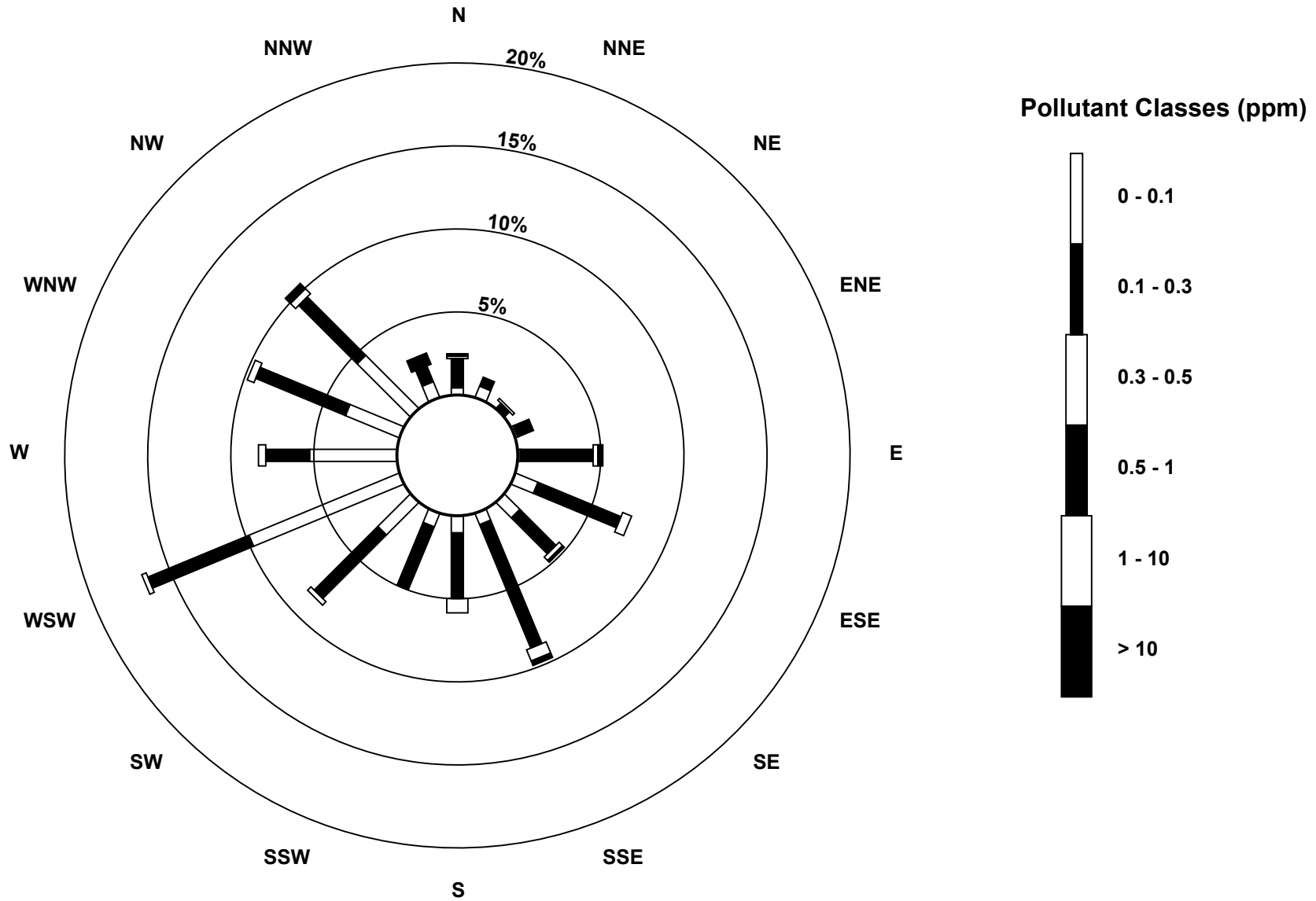
Hourly Maximums

Carbon Monoxide (CO) - ppm
Henry Pirker - September 2017



Pollutant Rose

Carbon Monoxide (CO) - ppm
Henry Pirker - September 2017



Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2017

Number of Exceedences (AAAQO): 8-hr: 0	Hours in Service: 720
Maximum Value: 0.67 ppm on Sep 28 03:00	Hours of Data: 711
Minimum Value: 0.12 ppm on Sep 26 05:00	Hours of Missing Data: 9
	Hours of Calibration: 9
	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.13 P ₁₀ = 0.14 Q ₁ = 0.15 Median = 0.18 Q ₃ = 0.22 P ₉₀ = 0.31 P ₉₉ = 0.49	

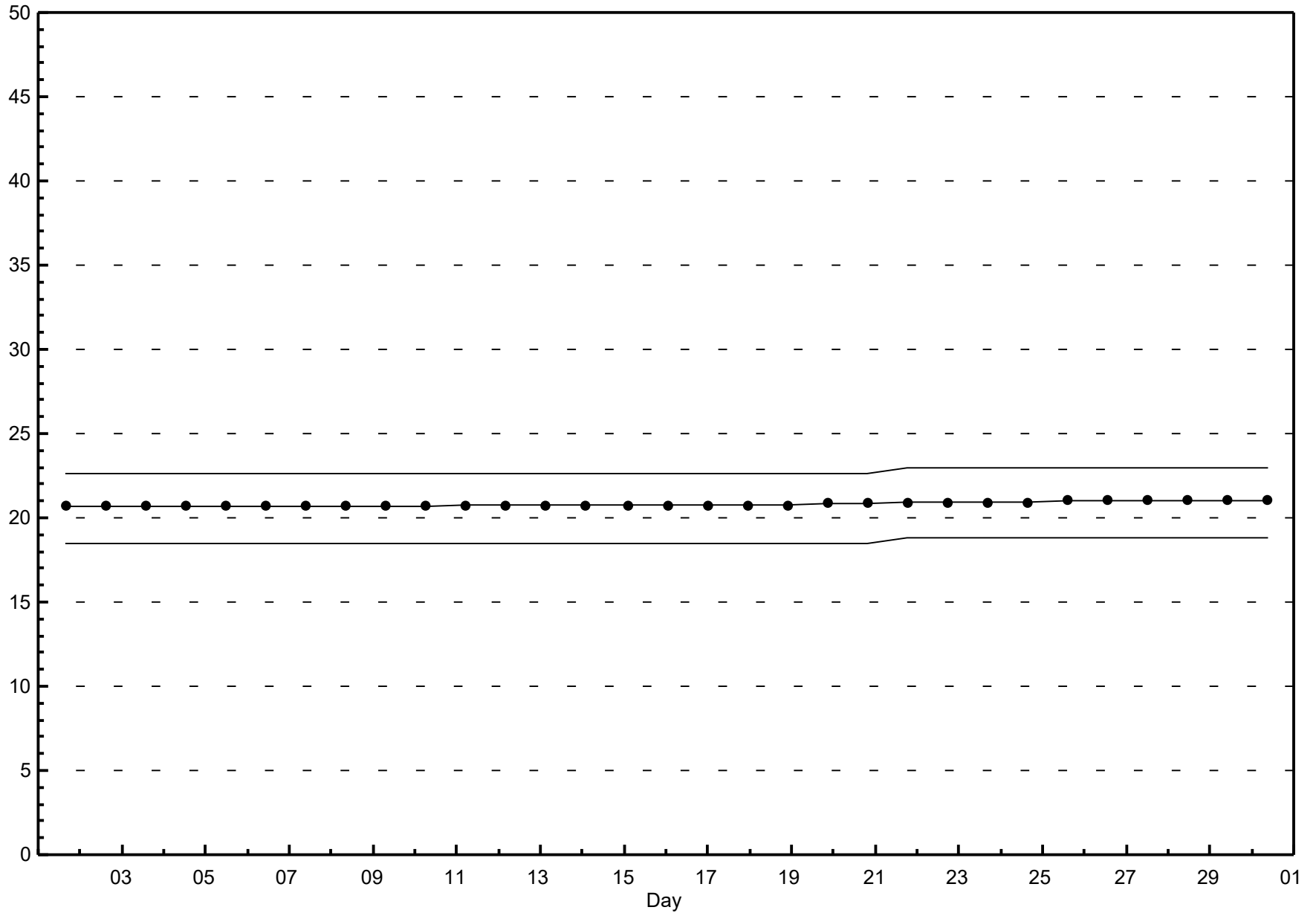
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
2-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
3-Sep	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.19
4-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.23
5-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.33
6-Sep	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.33
7-Sep	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.52
8-Sep	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.52
9-Sep	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
10-Sep	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.16
11-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.23
12-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18
13-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.15
14-Sep	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.20
15-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.24
16-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
17-Sep	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
18-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
19-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.22
20-Sep	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.25
21-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.17
22-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.30
23-Sep	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31
24-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.21
25-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18
26-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.24
27-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.56
28-Sep	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.67
29-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.43
30-Sep	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18

0.63	0.67	0.67	0.63	0.56	0.46	0.40	0.38	0.36	0.37	0.40	0.41	0.43	0.43	0.41	0.41	0.44	0.44	0.46	0.47	0.48	0.49	0.51	0.56	
Diurnal Maximums																								

N - Not Valid
 Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm

Span Responses

Carbon Monoxide (CO)
Henry Pirker - September 2017

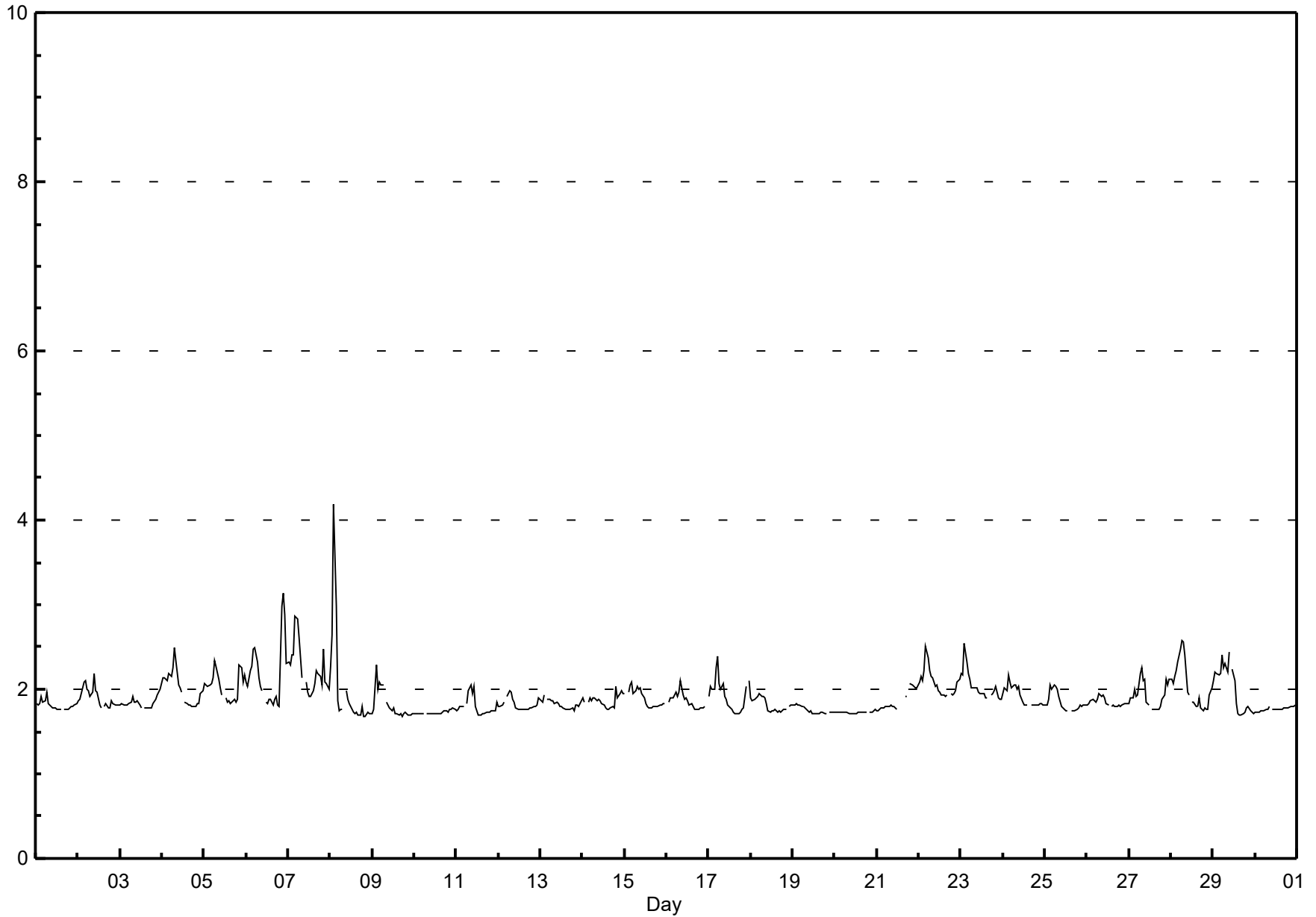


Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2017

Maximum Value: 4.19 ppm on Sep 8 03:00 Maximum Daily Average: 2.24 ppm on Sep 7 Minimum Value: 1.7 ppm on Sep 8 20:00 Minimum Daily Average: 1.72 ppm on Sep 10 Maximum Diurnal Average: 2.05 ppm at hour 3 Minimum Diurnal Average: 1.78 ppm at hour 16 Monthly Average: 1.904 ppm Percentiles: P ₁ = 1.70 P ₁₀ = 1.72 Q ₁ = 1.77 Median = 1.83 Q ₃ = 1.98 P ₉₀ = 2.15 P ₉₉ = 2.81																								Hours in Service:	720																								
																								Hours of Data:	685																								
																								Hours of Missing Data:	35																								
																								Hours of Calibration:	35																								
																								Percent Operational Time:	100.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	1.8	1.8	1.8	1.9	1.8	1.9	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.81	1.97																						
2-Sep	1.9	1.9	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.2	2.0	2.0	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.90	2.18																						
3-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.84	2.00																							
4-Sep	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.5	2.3	2.1	2.0	2.0	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.01	2.50																							
5-Sep	2.1	2.1	2.0	2.0	2.1	2.1	2.3	2.3	2.1	2.0	1.9	A	1.9	1.8	1.9	1.8	1.9	1.9	1.8	1.9	2.3	2.3	2.1	2.2	2.03	2.34																							
6-Sep	2.1	2.0	2.2	2.3	2.5	2.5	2.3	2.1	2.0	2.0	A	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.8	3.0	3.1	2.9	2.3	2.17	3.14																							
7-Sep	2.3	2.3	2.4	2.4	2.9	2.8	2.6	2.4	2.1	A	2.1	2.0	1.9	1.9	2.0	2.1	2.2	2.2	2.2	2.1	2.5	2.1	2.1	2.0	2.24	2.87																							
8-Sep	2.3	2.6	4.2	3.0	1.9	1.7	1.8	1.8	A	2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.98	4.19																							
9-Sep	1.7	1.8	2.3	2.0	2.1	2.1	2.0	A	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.81	2.29																							
10-Sep	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.72	1.78																							
11-Sep	1.8	1.8	1.8	1.8	1.8	A	1.8	2.0	2.0	2.0	2.0	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.80	2.04																							
12-Sep	1.8	1.8	1.8	1.9	A	1.9	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.82	1.98																							
13-Sep	1.9	1.8	1.9	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.82	1.94																							
14-Sep	1.9	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	2.0	2.0	1.86	2.03																							
15-Sep	1.9	A	2.0	2.1	2.1	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.89	2.08																							
16-Sep	A	1.8	1.9	1.9	1.9	2.0	1.9	2.0	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.86	2.10																							
17-Sep	1.9	2.0	2.0	2.0	2.2	2.4	2.1	2.0	2.1	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	2.0	A	2.1	1.92	2.39																							
18-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.7	1.8	1.7	1.7	1.8	1.8	A	1.8	1.8	1.82	1.95																							
19-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.75	1.83																							
20-Sep	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.8	1.73	1.77																							
21-Sep	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	C	1.9	1.9	A	2.1	2.0	2.0	2.0	2.0	1.86	2.07																								
22-Sep	2.1	2.1	2.1	2.2	2.5	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.1	2.1	2.07	2.50																							
23-Sep	2.2	2.2	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.03	2.53																							
24-Sep	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.92	2.18																							
25-Sep	1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.7	1.7	A	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	2.05																							
26-Sep	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	1.95																							
27-Sep	1.8	1.9	1.9	2.0	1.9	1.9	2.2	2.3	2.1	2.1	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.1	2.1	1.94	2.26																							
28-Sep	2.1	2.1	2.2	2.2	2.3	2.5	2.6	2.6	2.4	2.0	1.9	A	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.03	2.58																							
29-Sep	2.1	2.2	2.2	2.2	2.2	2.4	2.3	2.3	2.2	2.4	A	2.2	2.1	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.7	2.00	2.44																							
30-Sep	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.77	1.81																							
																								1.92	1.94	2.05	2.03	2.03	2.03	2.03	2.01	1.98	1.93	1.87	1.84	1.81	1.79	1.79	1.78	1.80	1.79	1.79	1.82	1.90	1.90	1.90	1.91	Diurnal Average	
																								2.32	2.65	4.19	2.98	2.87	2.82	2.61	2.55	2.41	2.44	2.09	2.24	2.09	1.95	1.99	2.06	2.22	2.19	2.15	2.07	2.99	3.14	2.88	2.30	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									



Hourly Maximums

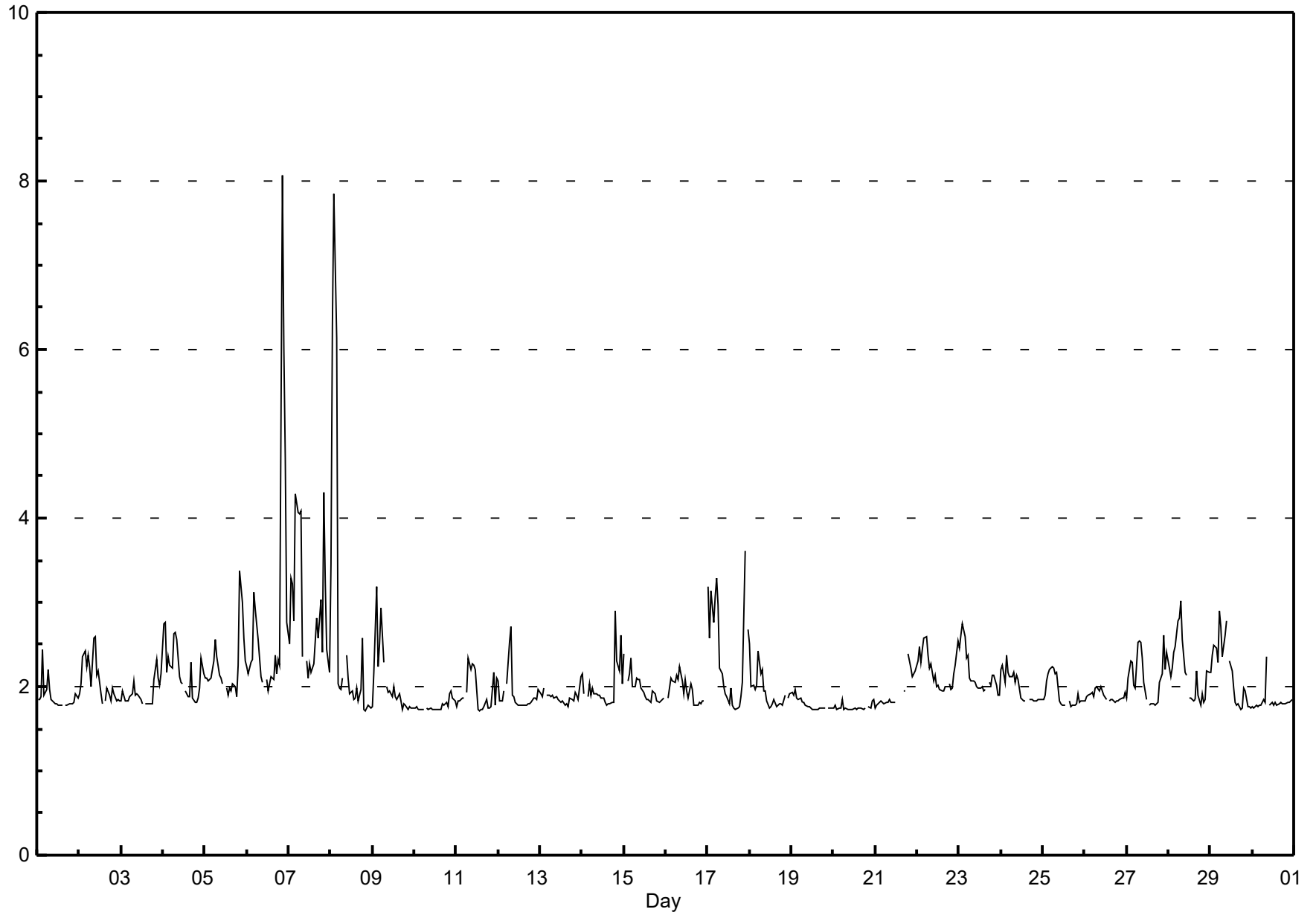
Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2017

Maximum Value: 8.07 ppm on Sep 6 21:00		Maximum Daily Average: 2.93 ppm on Sep 7		Hours in Service: 720																																												
Minimum Value: 1.7 ppm on Sep 11 14:00		Minimum Daily Average: 1.76 ppm on Sep 20		Hours of Data: 685																																												
Maximum Diurnal Average: 2.37 ppm at hour 3		Minimum Diurnal Average: 1.85 ppm at hour 15		Hours of Missing Data: 35																																												
Monthly Average: 2.079 ppm		Percentiles: P ₁ = 1.72 P ₁₀ = 1.76 Q ₁ = 1.81 Median = 1.92 Q ₃ = 2.16 P ₉₀ = 2.52 P ₉₉ = 4.15		Hours of Calibration: 35																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	1.8	1.9	1.9	2.4	1.9	2.0	2.2	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.88	2.43																						
2-Sep	1.9	2.0	2.3	2.4	2.2	2.4	2.2	2.0	2.6	2.6	2.1	2.2	1.9	1.8	A	1.8	2.0	1.9	1.8	2.0	1.9	1.8	1.8	1.8	2.07	2.60																						
3-Sep	1.8	2.0	1.8	1.8	1.8	1.9	1.9	2.1	1.9	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	2.1	2.3	2.1	2.0	2.2	1.92	2.33																						
4-Sep	2.8	2.8	2.2	2.3	2.3	2.2	2.6	2.6	2.6	2.1	2.1	2.0	A	2.0	1.9	1.9	2.3	1.9	1.8	1.8	1.9	2.0	2.3	2.2	2.19	2.77																						
5-Sep	2.1	2.1	2.1	2.1	2.2	2.3	2.6	2.4	2.1	2.1	2.0	A	2.0	1.9	2.0	1.9	2.0	2.0	1.9	2.3	3.4	3.0	2.6	2.3	2.23	3.37																						
6-Sep	2.2	2.1	2.3	2.3	3.1	2.9	2.6	2.3	2.1	2.1	A	2.1	1.9	2.0	2.1	2.1	2.4	2.2	2.3	2.3	8.1	6.0	4.7	2.8	2.83	8.07																						
7-Sep	2.5	3.3	3.2	2.8	4.3	4.1	4.0	4.1	2.4	A	2.3	2.1	2.3	2.2	2.3	2.5	2.8	2.6	3.0	2.4	4.3	3.2	2.4	2.2	2.93	4.30																						
8-Sep	3.5	6.3	7.9	6.1	2.0	2.0	2.0	2.1	A	2.4	2.1	1.9	2.0	1.8	1.9	2.0	1.8	2.0	2.6	1.7	1.7	1.8	1.8	1.7	2.65	7.85																						
9-Sep	1.8	2.2	3.2	2.2	2.5	2.9	2.3	A	2.0	1.9	2.0	1.9	2.0	1.9	1.8	1.9	1.8	1.7	1.8	1.8	1.7	1.8	1.8	1.7	2.03	3.19																						
10-Sep	1.8	1.8	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	2.0	1.9	1.8	1.77	1.95																						
11-Sep	1.8	1.8	1.8	1.9	1.9	A	1.9	2.3	2.2	2.3	2.3	2.2	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.8	2.2	1.8	2.1	1.92	2.34																						
12-Sep	2.1	1.8	1.8	1.9	A	2.0	2.5	2.7	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	2.0	1.92	2.71																						
13-Sep	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.8	2.1	1.87	2.11																						
14-Sep	2.2	1.9	A	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	2.9	2.3	2.2	2.6	2.00	2.89																						
15-Sep	2.4	A	2.1	2.2	2.3	2.0	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.8	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.98	2.38																						
16-Sep	A	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	1.9	2.1	1.9	1.9	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.96	2.23																						
17-Sep	3.2	2.6	3.1	2.8	3.1	3.3	3.0	2.2	2.1	2.0	1.9	1.9	1.8	2.0	1.8	1.7	1.7	1.7	1.8	1.9	2.1	3.6	A	2.7	2.34	3.61																						
18-Sep	2.5	2.0	2.0	2.0	2.0	2.4	2.2	2.2	1.9	1.9	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	1.95	2.50																						
19-Sep	1.9	1.9	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.8	1.8	1.79	1.97																						
20-Sep	1.8	1.8	1.7	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.8	1.8	1.8	1.76	1.85																						
21-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	C	1.9	1.9	A	2.4	2.2	2.1	2.2	2.2	1.93	2.40																							
22-Sep	2.3	2.5	2.3	2.4	2.6	2.6	2.4	2.2	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.2	2.2	2.5	2.20	2.60																						
23-Sep	2.5	2.6	2.7	2.6	2.3	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.0	2.1	2.1	2.0	1.9	1.9	2.15	2.75																						
24-Sep	2.2	2.3	2.1	2.4	2.2	2.1	2.1	2.2	2.1	2.1	2.1	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.99	2.37																						
25-Sep	1.8	1.9	2.1	2.2	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.93	2.23																						
26-Sep	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.89	2.01																						
27-Sep	1.9	2.1	2.3	2.3	2.0	2.0	2.5	2.5	2.5	2.3	2.0	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	2.1	2.1	2.6	2.2	2.4	2.11	2.61																						
28-Sep	2.2	2.1	2.2	2.4	2.5	2.8	2.8	3.0	2.6	2.2	2.1	A	1.9	1.9	1.8	1.9	2.2	1.9	1.8	1.9	1.8	1.8	2.2	2.2	2.18	3.01																						
29-Sep	2.2	2.4	2.5	2.5	2.3	2.9	2.7	2.3	2.6	2.8	A	2.3	2.2	2.0	1.8	1.8	1.8	1.7	1.8	2.0	1.9	1.8	1.8	1.7	2.16	2.91																						
30-Sep	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	2.4	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.82	2.36																						
																								2.15	2.25	2.37	2.31	2.23	2.28	2.28	2.22	2.12	2.05	1.96	1.92	1.88	1.86	1.85	1.87	1.91	1.87	1.91	1.96	2.27	2.21	2.08	2.04	Diurnal Average
																								3.46	6.29	7.85	6.14	4.28	4.07	4.04	4.08	2.60	2.79	2.31	2.30	2.26	2.17	2.27	2.54	2.82	2.58	3.04	2.89	8.07	6.02	4.72	2.77	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

Hourly Maximums

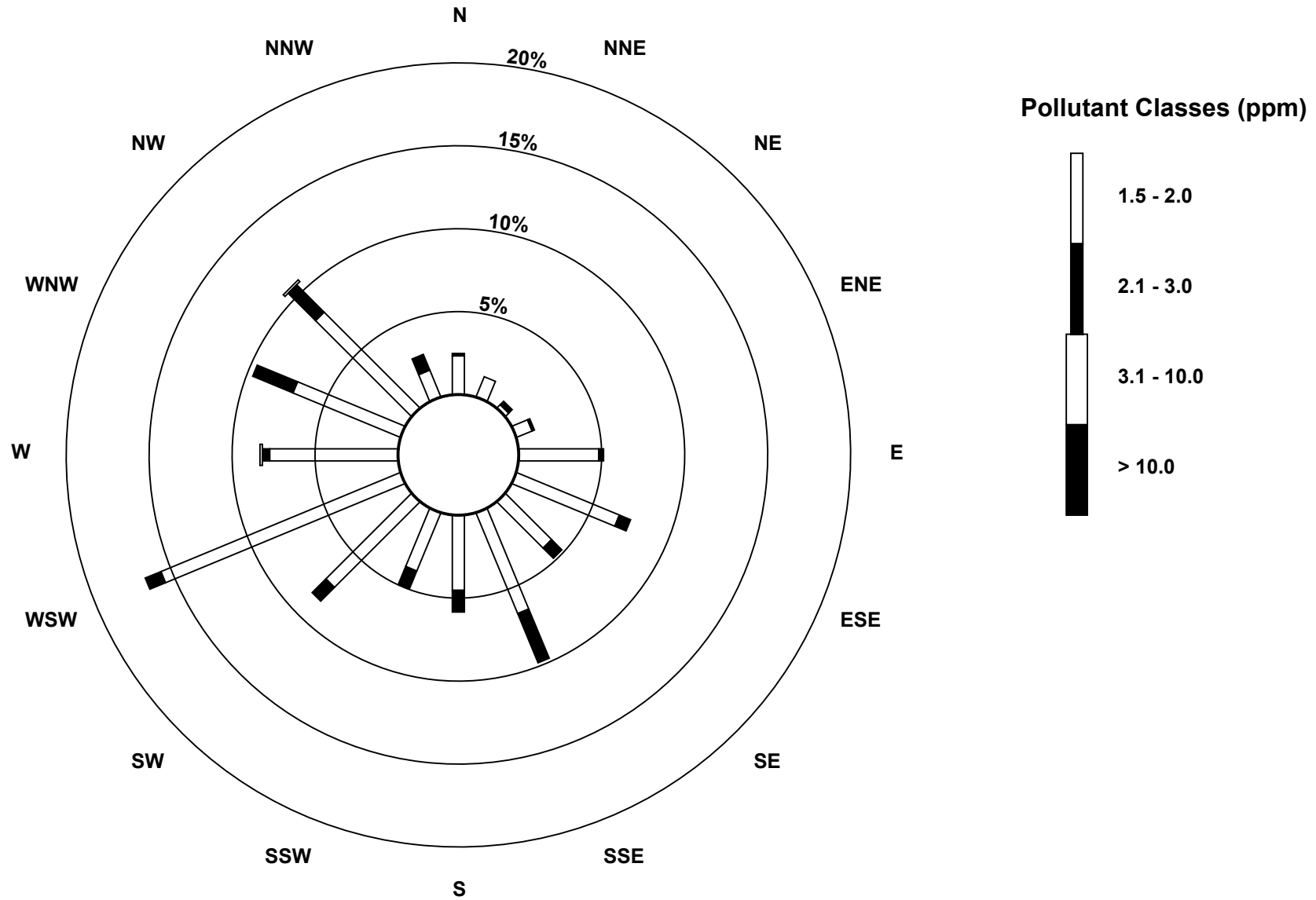
Total Hydrocarbons (THC) - ppm
Henry Pirker - September 2017



Pollutant Rose

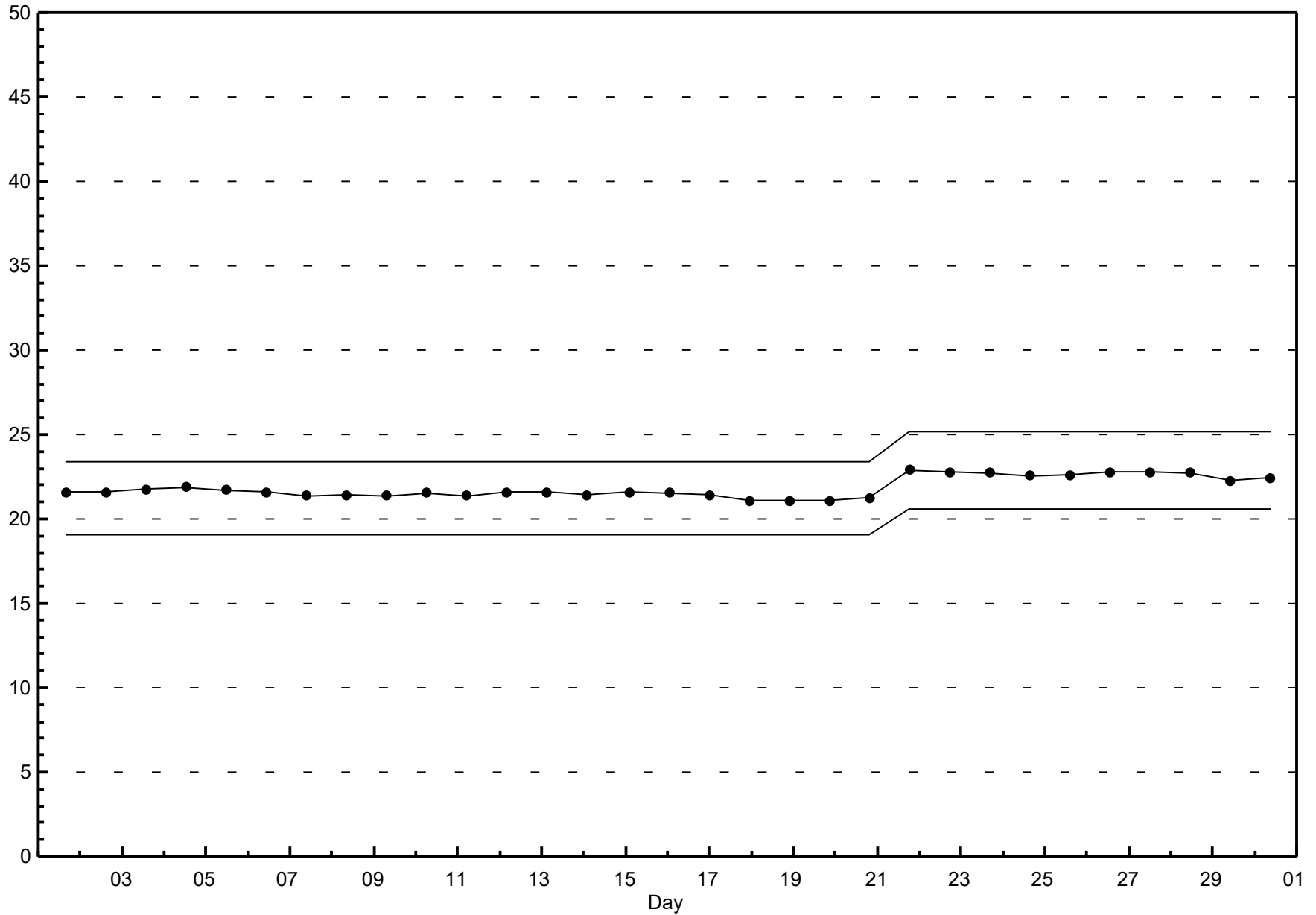
Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2017



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - September 2017

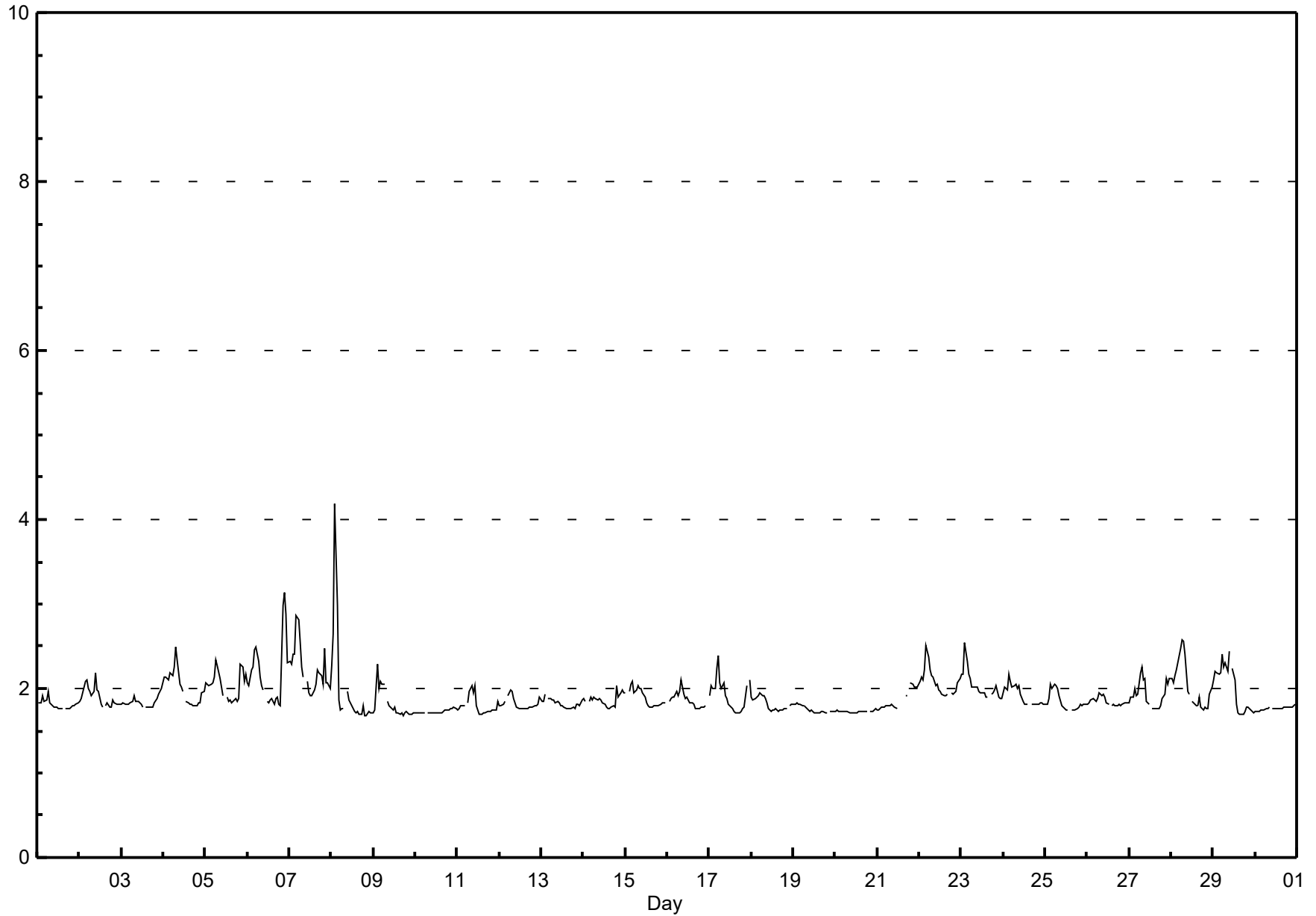


Hourly Averages

Methane (CH₄) - ppm

Henry Pirker - September 2017

Maximum Value: 4.19 ppm on Sep 8 03:00 Maximum Daily Average: 2.22 ppm on Sep 7 Minimum Value: 1.7 ppm on Sep 8 20:00 Minimum Daily Average: 1.72 ppm on Sep 10 Maximum Diurnal Average: 2.05 ppm at hour 3 Minimum Diurnal Average: 1.78 ppm at hour 16 Monthly Average: 1.903 ppm Percentiles: P ₁ = 1.70 P ₁₀ = 1.72 Q ₁ = 1.77 Median = 1.83 Q ₃ = 1.97 P ₉₀ = 2.14 P ₉₉ = 2.80																								Hours in Service: 720 Hours of Data: 685 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1.8	1.8	1.8	1.9	1.8	1.9	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.81	1.97
2-Sep	1.9	1.9	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.2	2.0	2.0	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.90	2.18
3-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.84	2.00	
4-Sep	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.5	2.3	2.1	2.0	2.0	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.01	2.50	
5-Sep	2.1	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.1	2.0	1.9	A	1.9	1.8	1.9	1.8	1.9	1.9	1.8	1.9	2.3	2.3	2.1	2.2	2.03	2.34	
6-Sep	2.1	2.0	2.2	2.3	2.5	2.5	2.3	2.1	2.0	2.0	A	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.8	3.0	3.1	2.9	2.3	2.17	3.14	
7-Sep	2.3	2.3	2.4	2.4	2.9	2.8	2.5	2.3	2.1	A	2.1	2.0	1.9	1.9	2.0	2.1	2.2	2.2	2.2	2.1	2.5	2.1	2.1	2.0	2.22	2.87	
8-Sep	2.3	2.6	4.2	3.0	1.9	1.7	1.8	1.8	A	2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.98	4.19	
9-Sep	1.7	1.8	2.3	2.0	2.1	2.1	2.0	A	1.8	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.81	2.28	
10-Sep	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.72	1.78	
11-Sep	1.8	1.8	1.8	1.8	1.8	A	1.8	2.0	2.0	2.0	2.0	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.80	2.04	
12-Sep	1.8	1.8	1.8	1.9	A	1.9	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.82	1.98	
13-Sep	1.9	1.8	1.9	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.82	1.93	
14-Sep	1.9	1.8	A	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	2.0	1.9	1.86	2.03	
15-Sep	1.9	A	2.0	2.1	2.1	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.89	2.08	
16-Sep	A	1.8	1.9	1.9	1.9	2.0	1.9	2.0	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.86	2.10	
17-Sep	1.9	2.0	2.0	2.0	2.2	2.4	2.1	2.0	2.1	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	2.0	A	2.1	1.92	2.39	
18-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.7	1.8	1.7	1.8	1.8	1.8	A	1.8	1.8	1.82	1.95	
19-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.75	1.83	
20-Sep	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.8	1.73	1.77	
21-Sep	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	C	1.9	1.9	A	2.1	2.0	2.0	2.0	2.0	1.86	2.07		
22-Sep	2.1	2.1	2.1	2.2	2.5	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.1	2.1	2.07	2.50	
23-Sep	2.2	2.2	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.03	2.53	
24-Sep	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.92	2.17	
25-Sep	1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.7	1.7	A	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	2.05	
26-Sep	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	1.95	
27-Sep	1.8	1.9	1.9	2.0	1.9	1.9	2.2	2.3	2.1	2.1	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.1	2.1	1.93	2.26	
28-Sep	2.1	2.1	2.2	2.2	2.3	2.5	2.6	2.6	2.4	2.0	1.9	A	1.8	1.8	1.8	1.8	1.9	1.8	1.7	1.8	1.8	1.9	2.0	2.03	2.58		
29-Sep	2.1	2.2	2.2	2.2	2.2	2.4	2.2	2.3	2.2	2.4	A	2.2	2.1	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.7	2.00	2.44	
30-Sep	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.76	1.81	
1.92 1.94 2.05 2.03 2.03 2.03 2.03 2.01 1.97 1.93 1.87 1.84 1.81 1.79 1.79 1.78 1.80 1.79 1.79 1.82 1.90 1.90 1.89 1.90																								Diurnal Average			
2.31 2.65 4.19 2.98 2.87 2.82 2.58 2.55 2.41 2.44 2.09 2.23 2.09 1.95 1.98 2.06 2.22 2.19 2.15 2.07 2.99 3.14 2.87 2.30																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											



Hourly Maximums

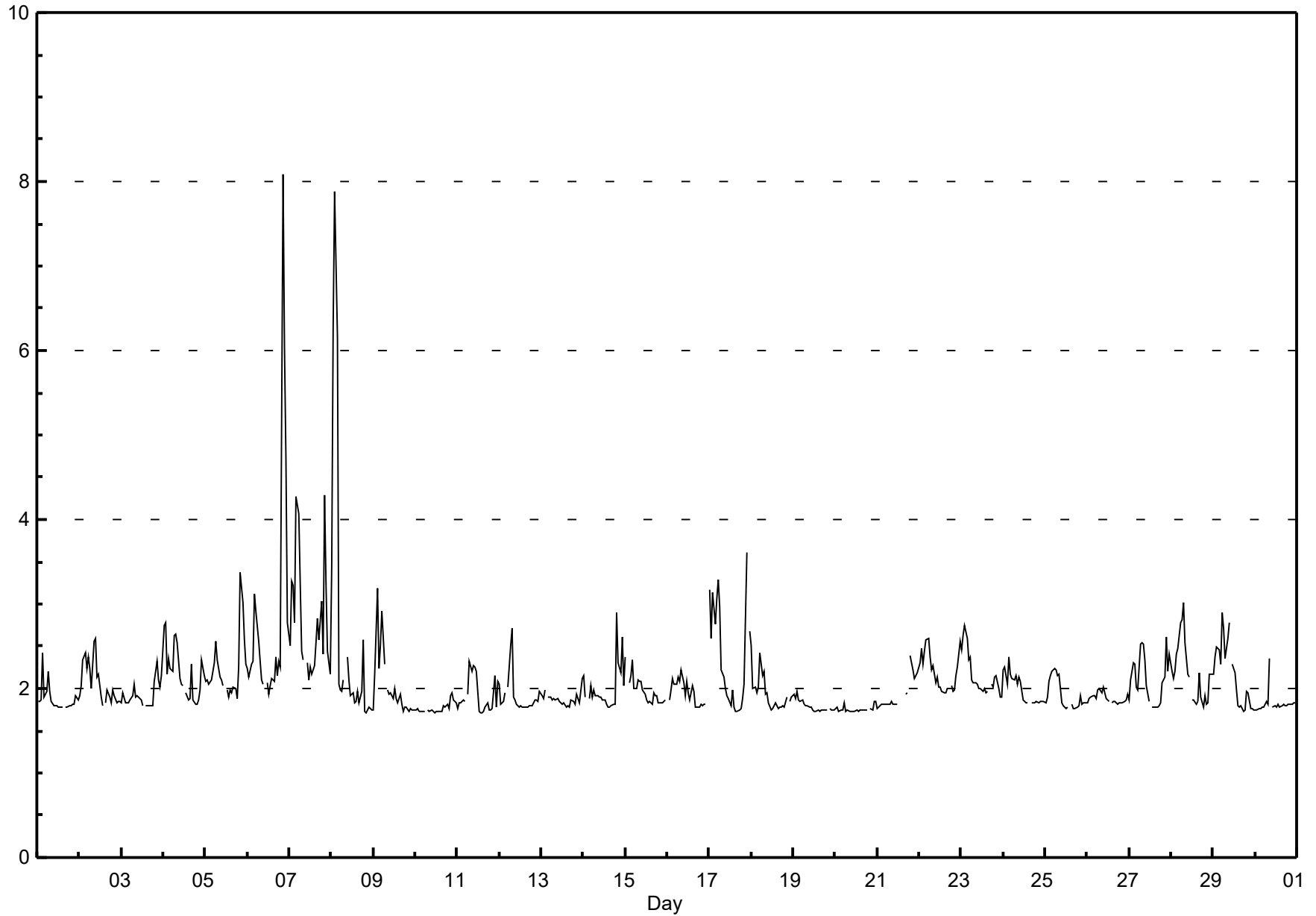
Methane (CH₄) - ppm

Henry Pirker - September 2017

Maximum Value: 8.09 ppm on Sep 6 21:00		Maximum Daily Average: 2.83 ppm on Sep 6		Hours in Service: 720																																												
Minimum Value: 1.7 ppm on Sep 11 14:00		Minimum Daily Average: 1.76 ppm on Sep 20		Hours of Data: 685																																												
Maximum Diurnal Average: 2.37 ppm at hour 3		Minimum Diurnal Average: 1.85 ppm at hour 15		Hours of Missing Data: 35																																												
Monthly Average: 2.074 ppm		Percentiles: P ₁ = 1.72 P ₁₀ = 1.76 Q ₁ = 1.81 Median = 1.91 Q ₃ = 2.16 P ₉₀ = 2.52 P ₉₉ = 4.15		Hours of Calibration: 35																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	1.8	1.9	1.9	2.4	1.9	2.0	2.2	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.88	2.43																						
2-Sep	1.9	2.0	2.3	2.4	2.2	2.4	2.2	2.0	2.6	2.6	2.1	2.2	1.9	1.8	A	1.8	2.0	1.9	1.8	2.0	1.9	1.8	1.8	1.8	2.07	2.59																						
3-Sep	1.8	1.9	1.8	1.8	1.8	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	2.1	2.3	2.1	2.0	2.2	1.92	2.33																						
4-Sep	2.7	2.8	2.2	2.4	2.2	2.2	2.6	2.6	2.5	2.1	2.1	2.0	A	1.9	1.9	1.9	2.3	1.9	1.8	1.8	1.9	2.0	2.3	2.2	2.19	2.77																						
5-Sep	2.1	2.1	2.1	2.1	2.2	2.3	2.6	2.3	2.1	2.1	2.0	A	2.0	1.9	2.0	1.9	2.0	2.0	1.9	2.3	3.4	3.0	2.6	2.3	2.23	3.37																						
6-Sep	2.2	2.1	2.3	2.3	3.1	2.9	2.6	2.3	2.1	2.0	A	2.1	1.9	2.0	2.1	2.1	2.4	2.2	2.3	2.3	8.1	6.0	4.7	2.8	2.83	8.09																						
7-Sep	2.5	3.3	3.2	2.8	4.3	4.1	3.2	2.4	2.3	A	2.3	2.1	2.3	2.2	2.3	2.5	2.8	2.6	3.0	2.4	4.3	3.2	2.4	2.2	2.81	4.30																						
8-Sep	3.5	6.3	7.9	6.1	2.0	2.0	2.0	2.1	A	2.4	2.1	1.9	2.0	1.8	1.8	2.0	1.8	2.0	2.6	1.7	1.7	1.8	1.8	1.7	2.65	7.87																						
9-Sep	1.8	2.2	3.2	2.2	2.5	2.9	2.3	A	2.0	1.9	1.9	1.9	2.0	1.9	1.8	1.9	1.8	1.7	1.8	1.8	1.7	1.8	1.7	1.7	2.02	3.19																						
10-Sep	1.7	1.8	1.7	1.7	1.7	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.77	1.94																						
11-Sep	1.8	1.8	1.8	1.9	1.9	A	1.9	2.3	2.2	2.3	2.3	2.2	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.8	2.2	1.8	2.1	1.92	2.33																						
12-Sep	2.1	1.8	1.8	1.9	A	2.0	2.5	2.7	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.92	2.71																						
13-Sep	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.8	2.1	1.87	2.12																						
14-Sep	2.2	1.9	A	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	2.9	2.3	2.2	2.6	2.0	2.00	2.89																						
15-Sep	2.4	A	2.1	2.2	2.3	2.0	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.8	1.9	1.8	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.98	2.38																						
16-Sep	A	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	1.9	2.1	1.9	1.9	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.95	2.23																						
17-Sep	3.2	2.6	3.1	2.8	3.1	3.3	3.0	2.2	2.1	2.0	1.9	1.9	1.8	2.0	1.8	1.7	1.7	1.7	1.8	1.9	2.1	3.6	A	2.7	2.34	3.61																						
18-Sep	2.5	2.0	2.0	2.0	2.0	2.4	2.2	2.2	1.9	2.0	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	1.95	2.51																						
19-Sep	1.9	1.9	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.8	1.8	1.79	1.96																						
20-Sep	1.8	1.8	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	A	1.8	1.8	1.8	1.9	1.76	1.85																						
21-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	C	1.9	1.9	A	2.4	2.2	2.1	2.1	2.2	1.93	2.39																							
22-Sep	2.3	2.5	2.3	2.4	2.6	2.6	2.4	2.2	2.3	2.1	2.1	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	2.0	2.0	2.1	2.3	2.6	2.20	2.59																						
23-Sep	2.5	2.6	2.7	2.6	2.3	2.4	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	2.1	2.1	2.0	1.9	1.9	2.15	2.74																						
24-Sep	2.2	2.3	2.1	2.4	2.2	2.1	2.1	2.2	2.1	2.1	2.1	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.99	2.37																						
25-Sep	1.8	1.9	2.1	2.2	2.2	2.2	2.2	2.1	2.2	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.92	2.23																						
26-Sep	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.89	2.01																						
27-Sep	1.9	2.1	2.3	2.3	2.0	2.0	2.5	2.5	2.5	2.3	2.0	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	2.1	2.1	2.6	2.2	2.4	2.11	2.60																						
28-Sep	2.2	2.1	2.2	2.4	2.5	2.8	2.8	3.0	2.5	2.2	2.1	A	1.9	1.9	1.8	1.9	2.2	1.9	1.8	1.9	1.8	1.8	2.2	2.2	2.17	3.01																						
29-Sep	2.2	2.4	2.5	2.5	2.3	2.9	2.7	2.4	2.6	2.8	A	2.3	2.2	2.0	1.8	1.8	1.8	1.7	1.7	2.0	1.9	1.8	1.8	1.7	2.16	2.90																						
30-Sep	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	2.4	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.82	2.35																						
																								2.14	2.25	2.37	2.30	2.23	2.28	2.25	2.16	2.12	2.05	1.95	1.92	1.88	1.86	1.85	1.87	1.91	1.87	1.91	1.96	2.27	2.21	2.08	2.04	Diurnal Average
																								3.46	6.29	7.87	6.15	4.27	4.06	3.23	3.01	2.60	2.79	2.30	2.29	2.26	2.16	2.26	2.54	2.82	2.58	3.03	2.89	8.09	6.03	4.72	2.77	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

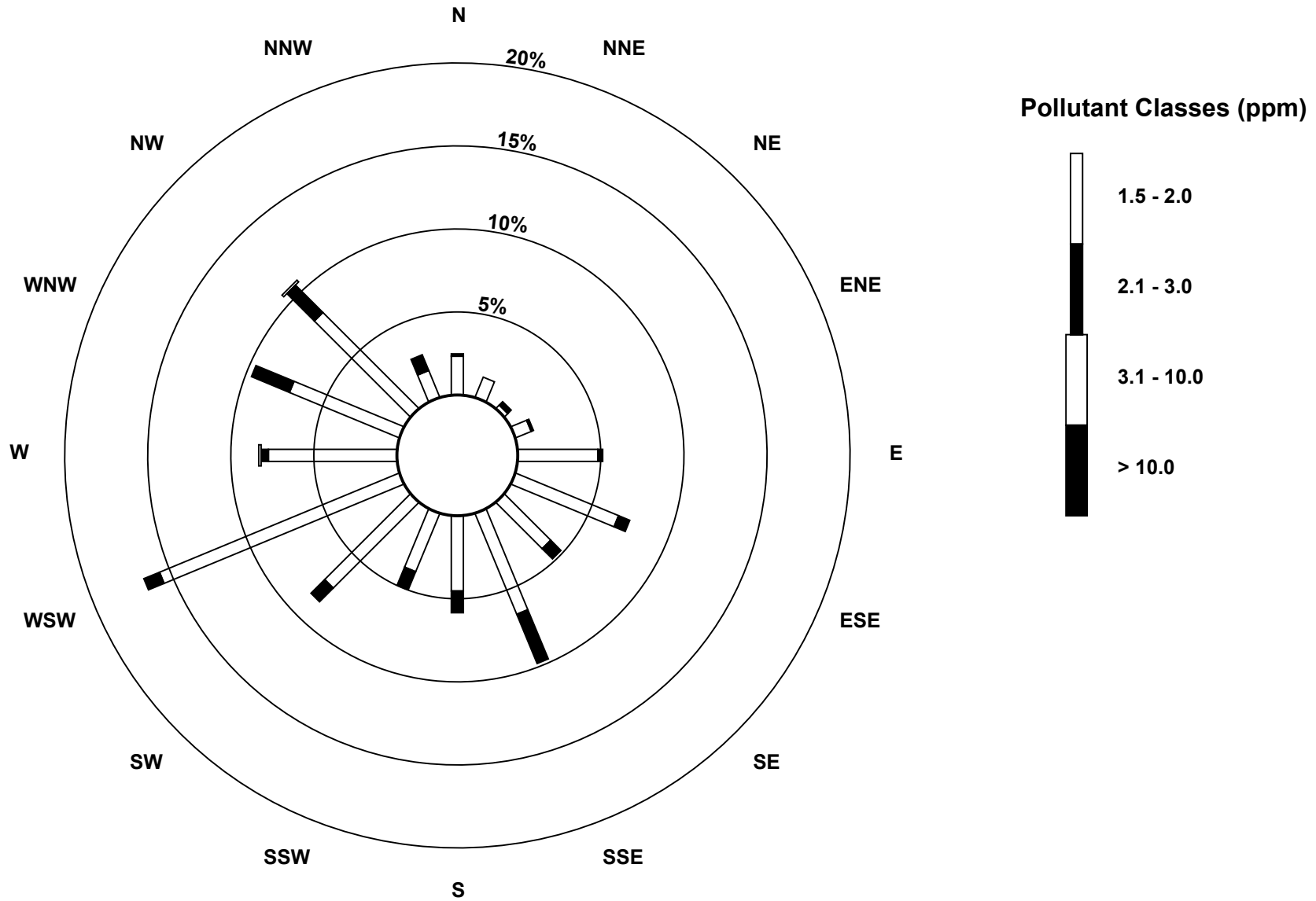
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - September 2017



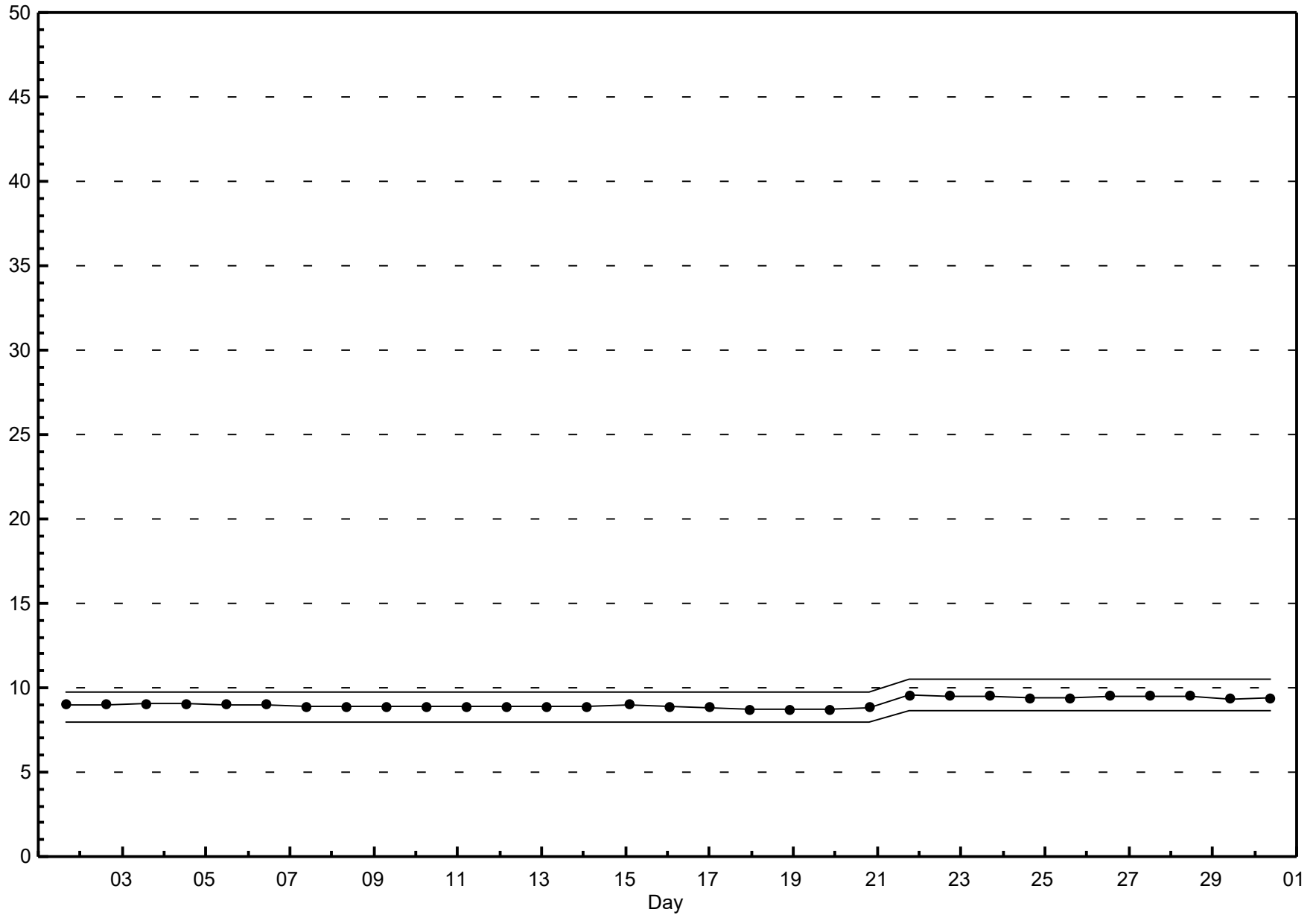
Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - September 2017



Span Responses

Methane (CH₄)
Henry Pirker - September 2017

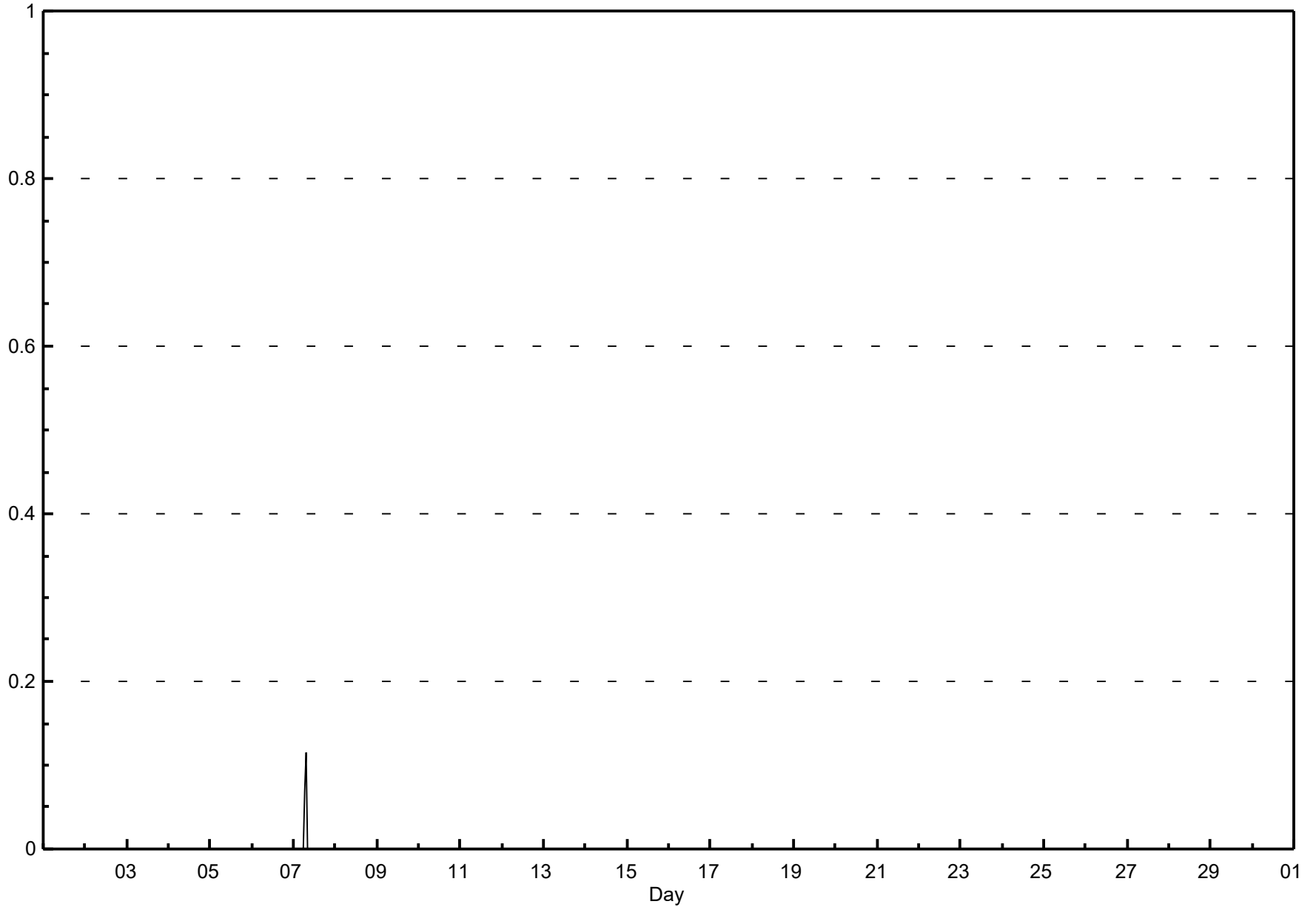


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - September 2017

Maximum Value: 0.12 ppm on Sep 7 08:00 Maximum Daily Average: 0.01 ppm on Sep 7 Minimum Value: 0.0 ppm on Sep 1 01:00 Minimum Daily Average: 0.00 ppm on Sep 8 Maximum Diurnal Average: 0.00 ppm at hour 8 Minimum Diurnal Average: 0.00 ppm at hour 12 Monthly Average: 0.000 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service: 720 Hours of Data: 685 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
6-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.12
8-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
9-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
11-Sep	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
12-Sep	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
13-Sep	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-Sep	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-Sep	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-Sep	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
18-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
21-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span			

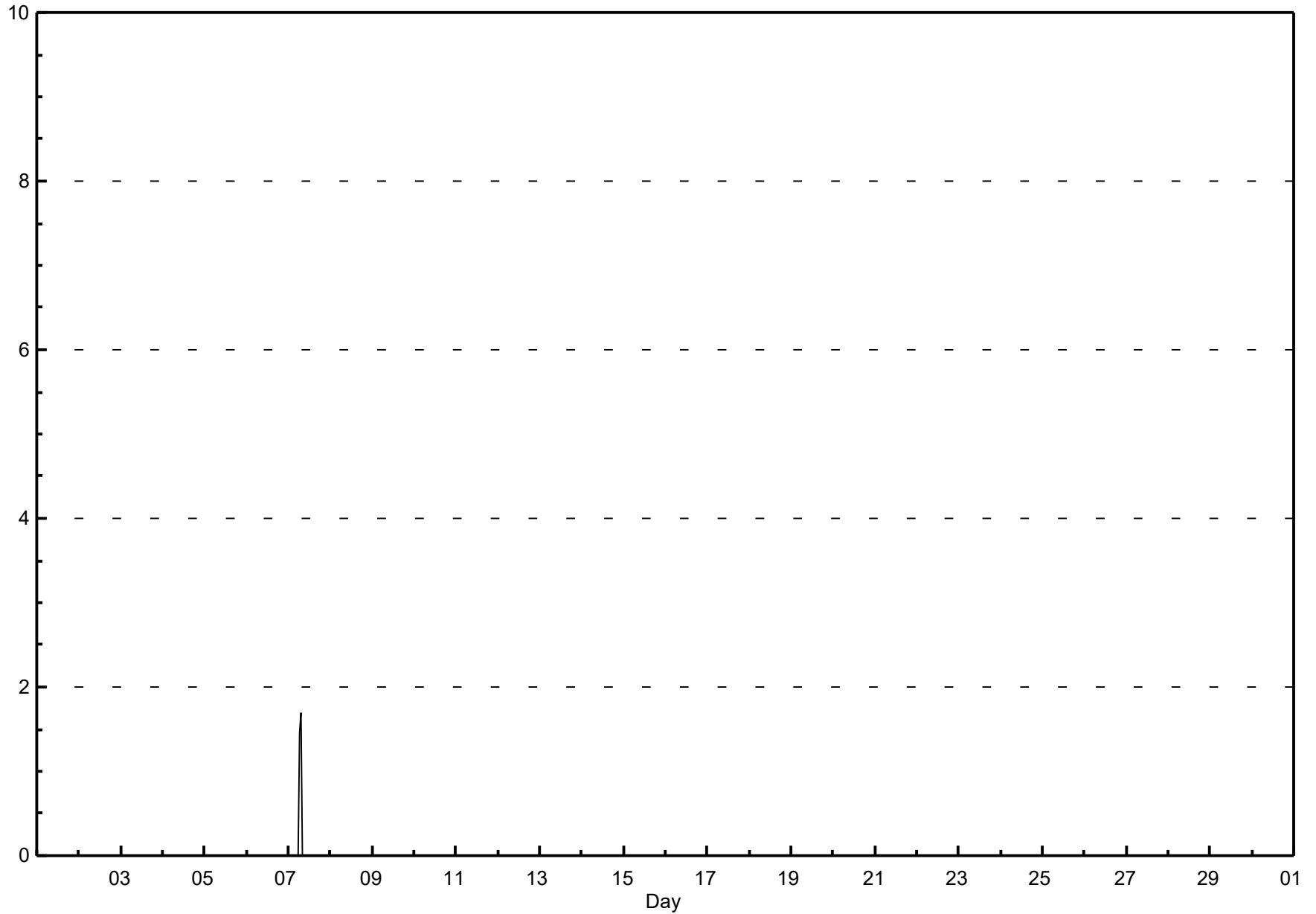


Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - September 2017

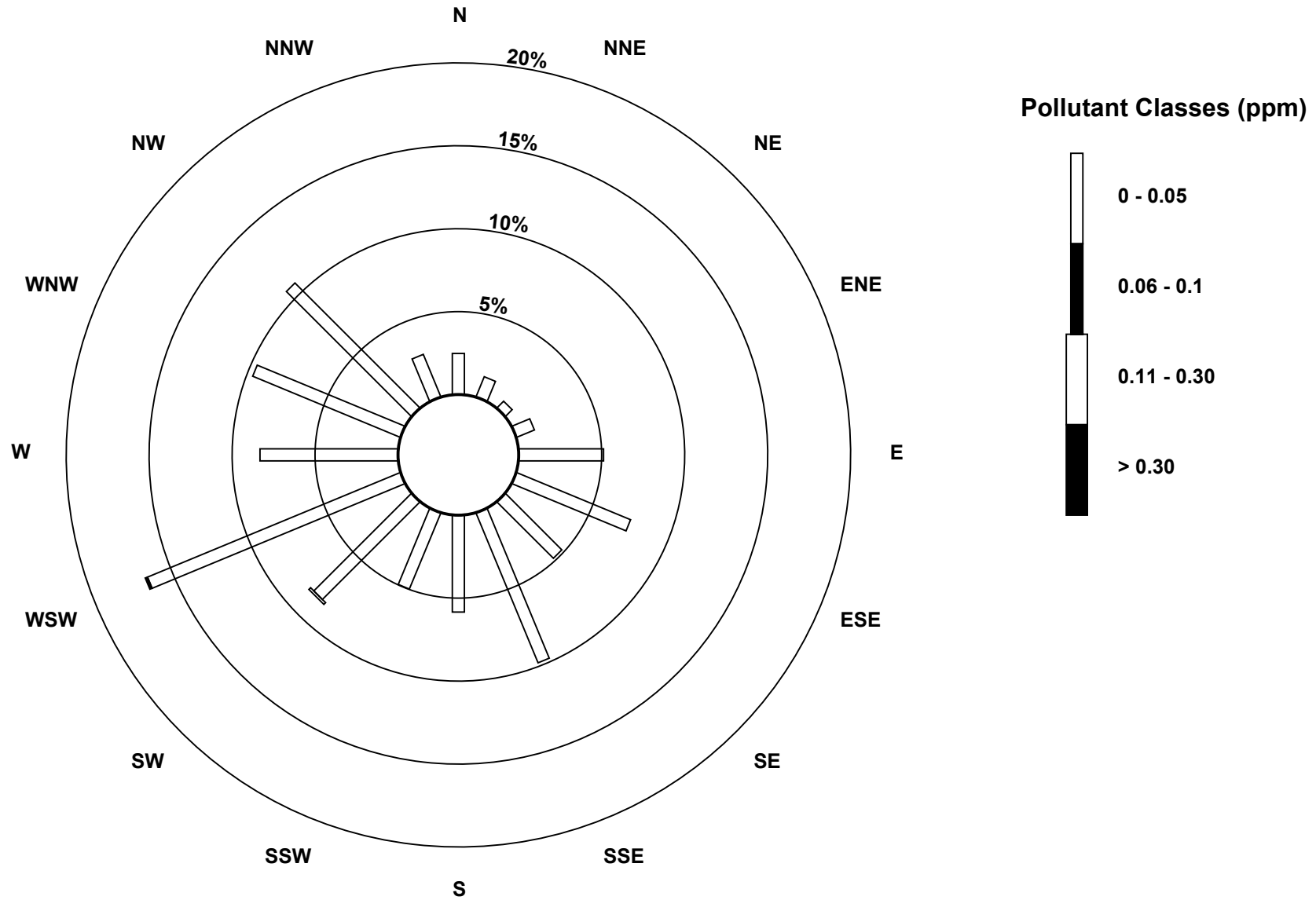
Maximum Value: 1.69 ppm on Sep 7 08:00 Maximum Daily Average: 0.14 ppm on Sep 7 Minimum Value: 0.0 ppm on Sep 23 14:00 Minimum Daily Average: 0.00 ppm on Sep 12 Maximum Diurnal Average: 0.06 ppm at hour 8 Minimum Diurnal Average: 0.00 ppm at hour 18 Monthly Average: 0.005 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	720		
																								Hours of Data:	685		
																								Hours of Missing Data:	35		
																								Hours of Calibration:	35		
																								Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
6-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-Sep	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.7	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	1.69
8-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
9-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
11-Sep	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
12-Sep	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
13-Sep	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-Sep	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-Sep	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-Sep	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
18-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
21-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	1.46	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span			

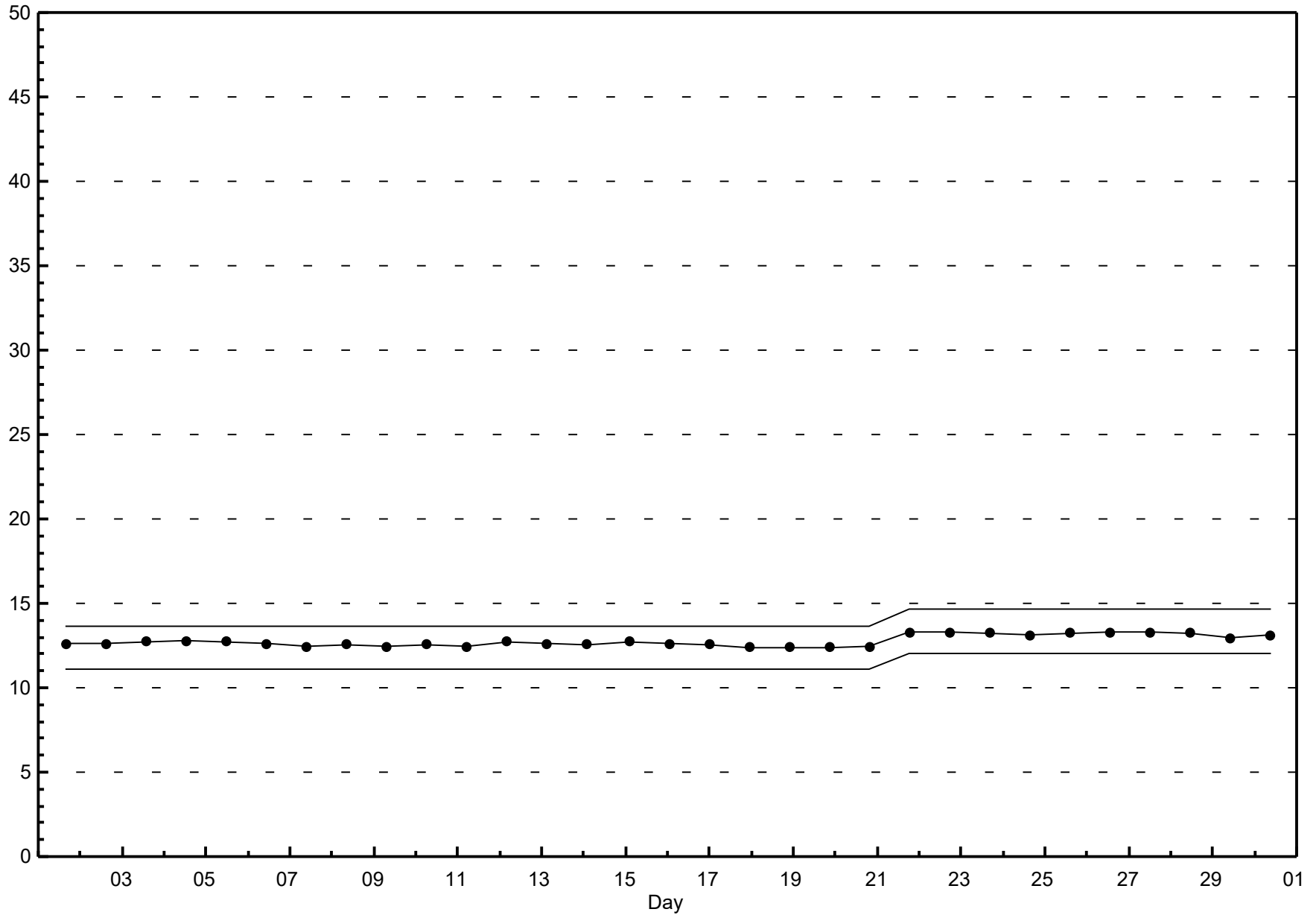


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - September 2017





Hourly Averages

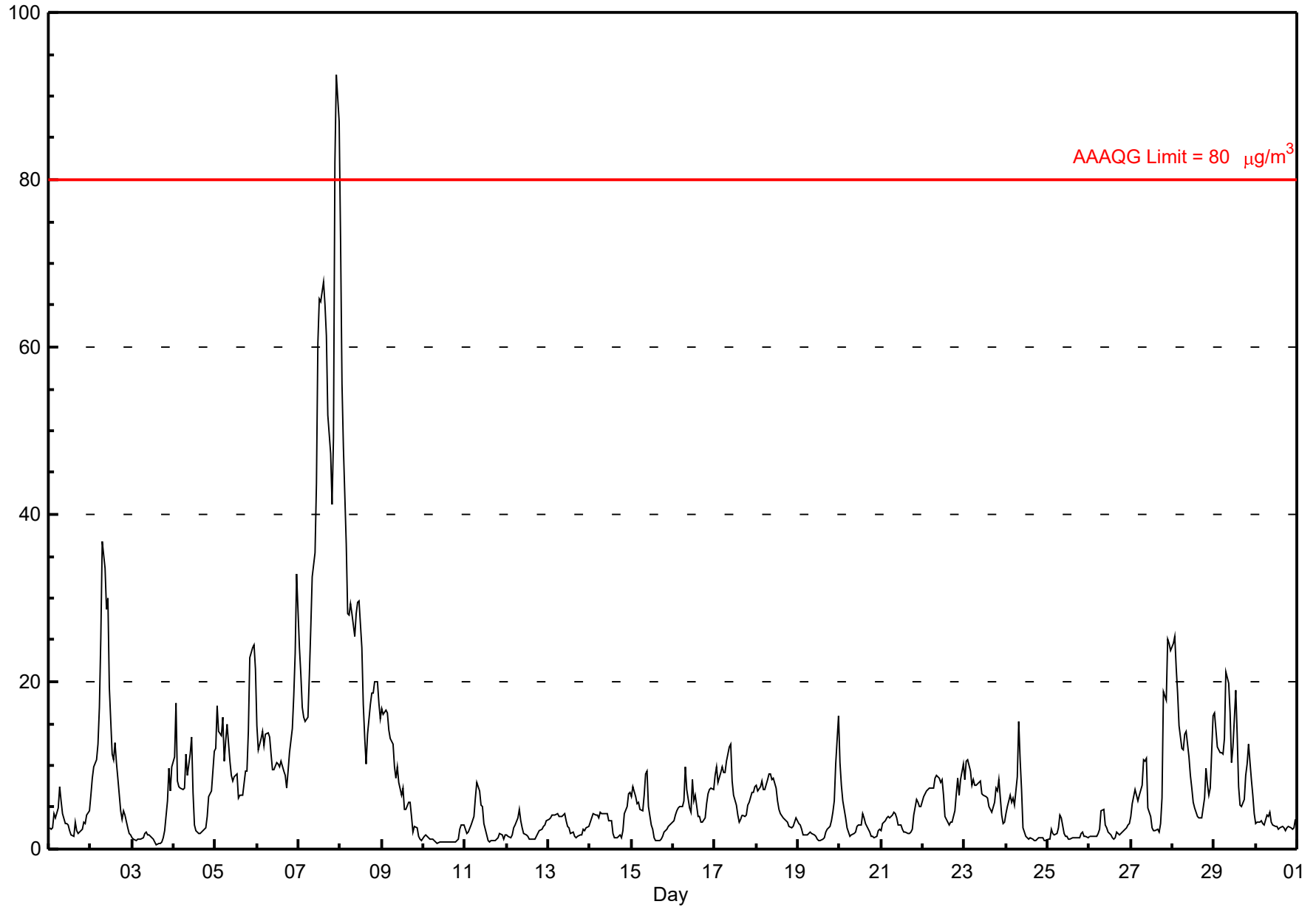
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Henry Pirker - September 2017

Number of Exceedences: 1-hr: 3 24-hr: 1	Hours in Service: 720
Maximum Value: 92.5 µg/m ³ on Sep 7 23:00	Maximum Daily Average: 46.0 µg/m ³ on Sep 7
Minimum Value: 1 µg/m ³ on Sep 3 15:00	Hours of Data: 720
Maximum Diurnal Average: 10.5 µg/m ³ at hour 24	Hours of Missing Data: 0
Monthly Average: 7.76 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.2 µg/m ³ on Sep 10	Percent Operational Time: 100.0
Minimum Diurnal Average: 5.1 µg/m ³ at hour 18	
Percentiles: P ₁ = 0.8 P ₁₀ = 1.3 Q ₁ = 2.2 Median = 4.2 Q ₃ = 8.8 P ₉₀ = 16.1 P ₉₉ = 65.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	3	2	3	4	4	5	7	6	4	3	3	2	2	1	3	2	2	2	2	2	3	3	4	5	3.3	7.5																						
2-Sep	7	8	10	11	13	17	25	37	33	29	30	19	11	11	13	10	8	5	3	5	4	3	2	2	13.1	36.9																						
3-Sep	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	2	6	10	7	10	2.4	9.8																						
4-Sep	11	18	8	8	7	7	7	11	9	11	13	7	3	2	2	2	2	2	3	4	6	7	7	12	7.0	17.5																						
5-Sep	12	17	14	14	16	11	13	15	11	9	8	9	9	6	6	7	6	9	9	14	23	24	24	21	12.8	24.3																						
6-Sep	15	12	13	14	12	14	14	13	11	10	9	10	10	10	11	9	9	7	9	12	14	18	23	33	13.1	32.9																						
7-Sep	24	21	17	16	15	16	21	26	32	35	44	60	66	65	68	65	61	52	47	41	49	82	93	87	46.0	92.5																						
8-Sep	73	56	48	36	28	28	29	28	25	28	30	24	17	13	10	14	17	19	19	20	20	17	16	16	26.9	72.7																						
9-Sep	17	16	17	16	14	13	13	10	8	10	8	7	7	5	5	6	6	4	2	3	2	2	1	1	8.0	16.8																						
10-Sep	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	1.2	2.9																						
11-Sep	2	2	2	3	3	4	6	8	7	5	5	3	2	1	1	1	1	1	1	1	2	2	1	2	2.8	8.0																						
12-Sep	2	1	1	2	2	3	4	5	3	3	2	2	2	1	1	1	1	2	2	2	2	3	3	3	2.2	4.8																						
13-Sep	3	4	4	4	4	4	4	4	4	4	3	3	3	2	2	1	1	1	2	2	2	2	3	3	2.9	4.2																						
14-Sep	3	4	4	4	4	4	4	4	4	4	4	3	3	2	1	1	1	2	1	2	4	5	7	7	3.6	6.7																						
15-Sep	6	8	6	5	6	5	5	6	9	9	5	3	2	1	1	1	1	1	1	2	2	3	3	3	4.0	9.3																						
16-Sep	3	4	5	5	5	5	6	10	7	5	4	8	6	7	4	4	3	3	4	5	7	7	7	7	5.5	9.8																						
17-Sep	9	10	8	9	10	9	9	10	12	13	8	7	5	4	3	4	4	4	4	5	6	7	7	7	7.2	12.6																						
18-Sep	8	7	7	8	7	7	8	9	9	8	8	7	6	5	4	4	4	3	3	3	2	3	3	4	5.8	9.0																						
19-Sep	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	3	3	4	6	10	16	3.1	16.0																						
20-Sep	10	8	6	4	3	2	2	2	2	2	3	3	3	4	4	3	3	2	2	1	1	2	2	2	3.1	10.3																						
21-Sep	2	3	3	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	2	4	6	6	5	5	3.4	6.0																						
22-Sep	6	7	7	7	7	7	7	8	9	8	8	8	6	4	3	3	3	3	5	7	8	6	8	10	6.6	10.1																						
23-Sep	8	10	11	9	8	8	8	8	8	8	7	6	6	6	5	5	4	6	7	7	8	4	3	3	6.8	10.7																						
24-Sep	4	5	6	6	6	5	9	15	11	7	3	2	1	1	1	1	1	1	1	1	1	1	1	1	3.9	15.3																						
25-Sep	1	1	2	2	2	2	3	4	4	2	2	2	1	1	1	1	1	1	1	2	2	2	1	1	1.8	4.1																						
26-Sep	2	1	1	1	2	2	2	5	5	3	3	2	2	1	1	1	2	2	2	2	2	3	3	3	2.2	4.8																						
27-Sep	4	5	7	7	6	6	8	11	11	11	5	4	3	2	2	2	2	3	6	19	18	25	25	24	8.9	25.1																						
28-Sep	25	25	22	19	15	12	12	14	14	11	9	7	6	5	4	4	4	6	10	8	7	7	7	16	11.0	25.3																						
29-Sep	16	14	12	11	11	11	13	21	20	16	10	12	19	14	7	5	5	6	9	10	13	8	6	4	11.5	21.1																						
30-Sep	3	3	3	3	3	3	4	4	4	3	3	3	3	2	3	3	3	2	2	3	2	2	3	4	3.0	4.4																						
																								9.5	9.3	8.5	7.9	7.4	7.3	8.3	10.1	9.5	8.9	8.1	7.8	7.2	6.2	5.8	5.4	5.3	5.1	5.4	6.5	7.7	9.1	9.7	10.5	Diurnal Average
																								72.7	55.7	47.9	36.4	28.2	28.0	29.4	36.9	33.5	35.4	43.8	60.4	65.7	65.4	67.8	65.0	61.4	51.8	47.3	41.1	49.2	82.1	92.5	86.9	Diurnal Maximum

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

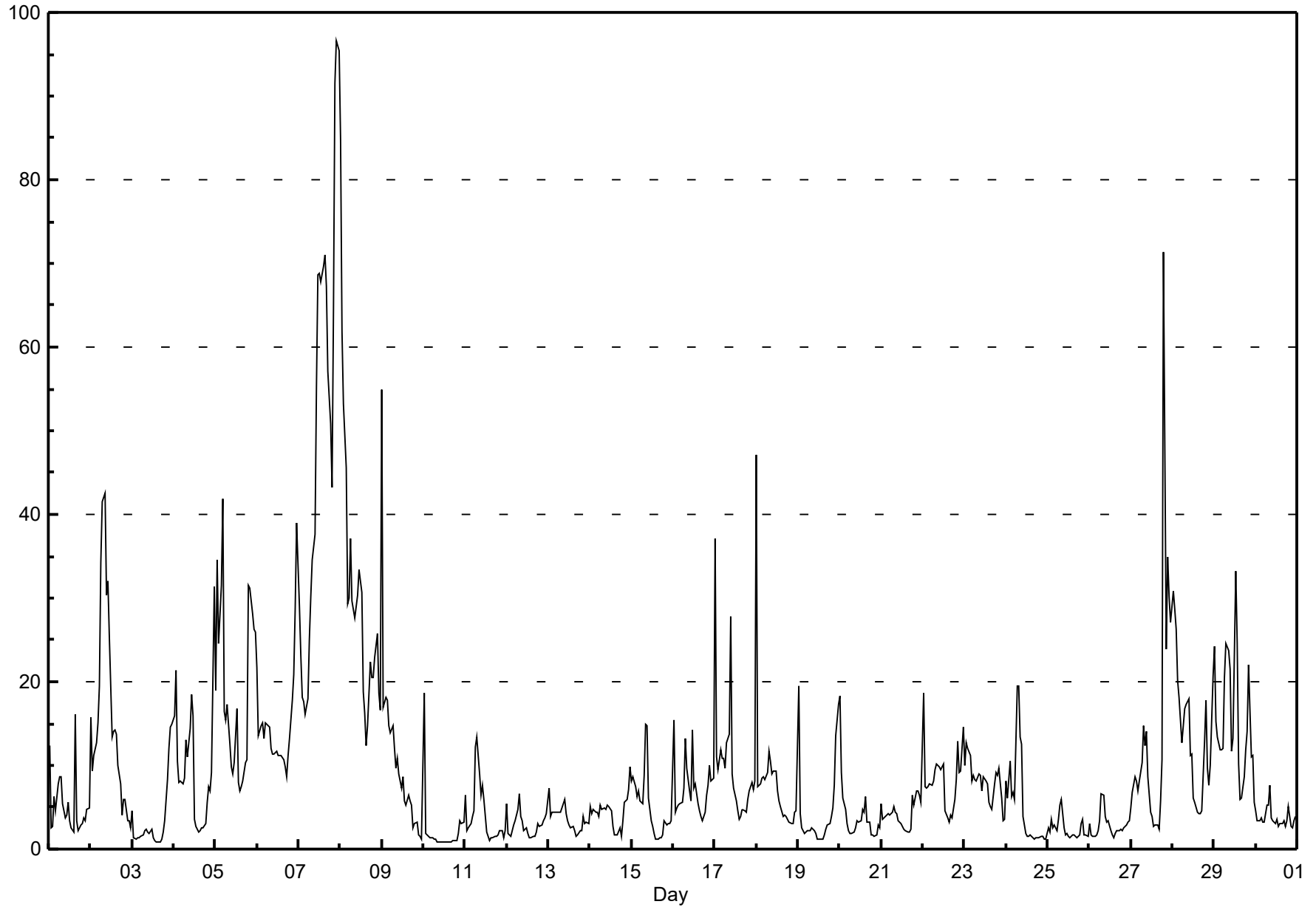


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

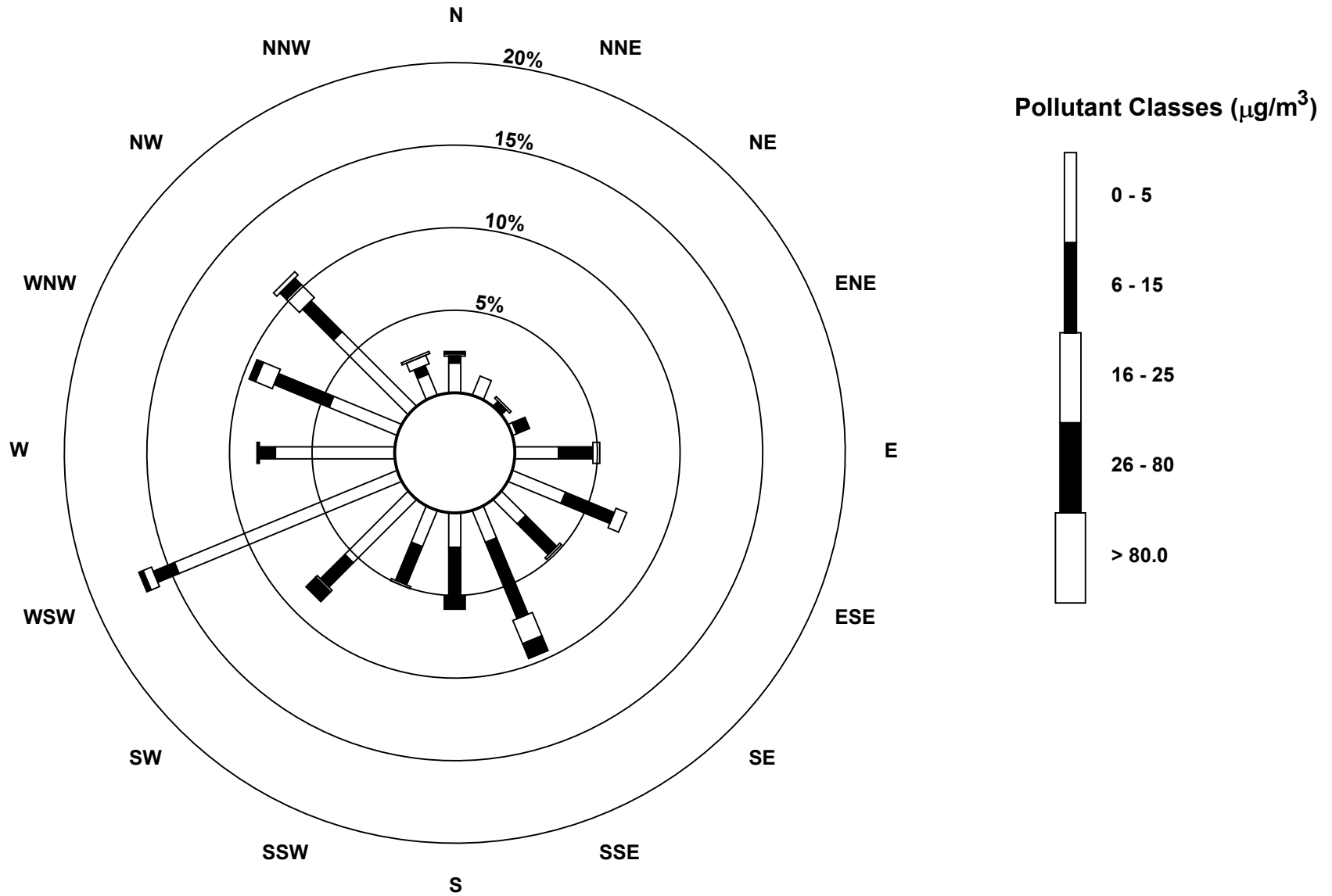
Henry Pirker - September 2017

Maximum Value: 96.6 µg/m³ on Sep 7 23:00																	Maximum Daily Average: 50.7 µg/m³ on Sep 7																	Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0	
Minimum Value: 1 µg/m³ on Sep 10 09:00																	Minimum Daily Average: 2.1 µg/m³ on Sep 10																		
Maximum Diurnal Average: 18.6 µg/m³ at hour 1																	Minimum Diurnal Average: 6.0 µg/m³ at hour 17																		
Monthly Average: 9.82 µg/m³																	Percentiles: P₁ = 0.9 P₁₀ = 1.6 Q₁ = 2.8 Median = 5.4 Q₃ = 11.4 P₉₀ = 21.7 P₉₉ = 68.8																		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24											
1-Sep	12	3	3	6	5	8	9	9	5	4	4	6	3	3	2	16	3	2	3	3	4	3	5	5	5.2	16.1									
2-Sep	16	9	11	13	15	20	34	41	43	30	32	25	13	14	14	14	10	8	4	6	6	3	3	2	16.2	42.6									
3-Sep	5	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	2	3	8	12	15	15	3.5	14.9									
4-Sep	16	21	11	8	8	8	8	13	11	14	18	16	4	3	2	2	2	2	3	6	7	7	9	31	9.7	31.4									
5-Sep	19	35	25	31	42	16	15	17	12	10	9	10	17	8	7	7	8	10	11	32	31	28	26	26	18.9	41.9									
6-Sep	22	14	15	15	13	15	15	15	12	11	11	12	11	11	11	11	10	9	11	13	18	21	29	39	15.1	39.0									
7-Sep	29	23	18	18	16	18	25	30	35	38	55	69	69	68	70	71	67	57	51	43	65	92	97	95	50.7	96.6									
8-Sep	85	62	53	46	29	30	37	30	28	29	30	33	31	19	16	12	15	22	21	21	23	26	19	17	30.5	84.8									
9-Sep	55	17	18	18	15	14	15	12	10	11	9	7	9	6	5	7	6	5	3	3	3	2	2	1	10.4	54.9									
10-Sep	19	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	2.1	18.6									
11-Sep	6	2	2	3	4	5	12	13	9	7	8	6	2	2	1	1	1	2	2	2	2	2	1	2	4.1	13.5									
12-Sep	5	2	2	2	3	3	5	7	4	3	2	3	2	1	1	2	2	2	3	3	3	3	4	4	2.9	6.6									
13-Sep	7	4	4	4	4	4	4	4	5	6	4	3	3	2	3	2	2	2	2	2	4	3	3	3	3.6	7.4									
14-Sep	5	4	5	4	4	4	5	5	5	5	5	5	5	3	2	2	2	2	2	3	6	6	7	10	4.4	9.8									
15-Sep	8	9	7	6	7	6	5	9	15	15	6	3	3	2	1	1	1	1	2	3	3	3	3	3	5.2	14.9									
16-Sep	15	4	5	5	5	6	7	13	10	7	6	14	7	8	5	5	4	3	4	6	8	10	8	8	7.3	15.4									
17-Sep	37	11	10	12	11	11	10	13	14	28	9	7	6	5	4	4	5	5	4	6	7	8	7	8	10.0	37.2									
18-Sep	47	7	8	8	9	8	9	12	11	9	9	7	6	5	4	4	4	4	3	3	3	4	5	5	8.3	47.1									
19-Sep	19	4	3	2	2	2	2	2	2	2	2	1	1	1	1	2	2	3	3	4	5	8	14	17	4.4	19.4									
20-Sep	18	9	6	5	3	2	2	2	2	3	3	3	3	5	4	6	3	3	2	2	2	2	3	3	4.0	18.3									
21-Sep	5	3	4	4	4	4	4	5	4	4	3	3	3	2	2	2	2	2	7	5	7	7	6	6	4.2	7.0									
22-Sep	19	7	7	7	8	8	8	9	10	10	10	10	10	10	5	4	3	4	4	6	8	13	9	9	15	8.5	18.7								
23-Sep	10	13	12	11	8	9	8	8	9	9	7	9	8	8	6	5	5	8	9	9	10	6	3	3	8.0	12.7									
24-Sep	8	6	11	6	7	6	20	20	13	12	4	2	2	2	2	1	1	1	1	1	2	2	1	1	5.5	19.5									
25-Sep	3	2	4	3	3	2	4	5	6	3	2	2	2	1	2	2	2	1	2	3	4	2	2	2	2.5	6.0									
26-Sep	3	2	2	2	2	2	3	7	7	4	3	3	2	2	1	2	2	2	2	2	3	3	3	3	2.8	6.6									
27-Sep	5	7	9	8	7	8	10	15	12	14	9	4	4	3	3	3	2	6	11	71	24	35	30	27	13.6	71.4									
28-Sep	31	29	26	20	18	13	15	17	17	18	11	11	6	6	4	4	4	5	13	18	10	8	10	21	13.9	30.9									
29-Sep	24	15	13	12	12	12	21	25	24	22	12	13	33	25	10	6	6	9	12	14	22	11	11	6	15.3	33.2									
30-Sep	5	3	3	4	3	3	5	5	8	4	3	3	4	3	3	3	3	3	3	5	3	3	3	4	3.7	7.6									
18.6 11.0 9.9 9.6 9.0 8.3 10.7 12.2 11.5 11.1 9.7 9.9 9.0 7.4 6.5 6.7 6.0 6.2 6.7 10.1 10.1 11.0 11.4 12.9																	Diurnal Average																		
84.8 61.8 53.3 45.6 41.9 30.0 37.2 41.5 42.6 37.6 55.2 68.7 68.7 67.8 69.7 71.0 67.3 57.0 50.8 71.4 64.6 91.6 96.6 95.4																	Diurnal Maximum																		



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Henry Pirker - September 2017

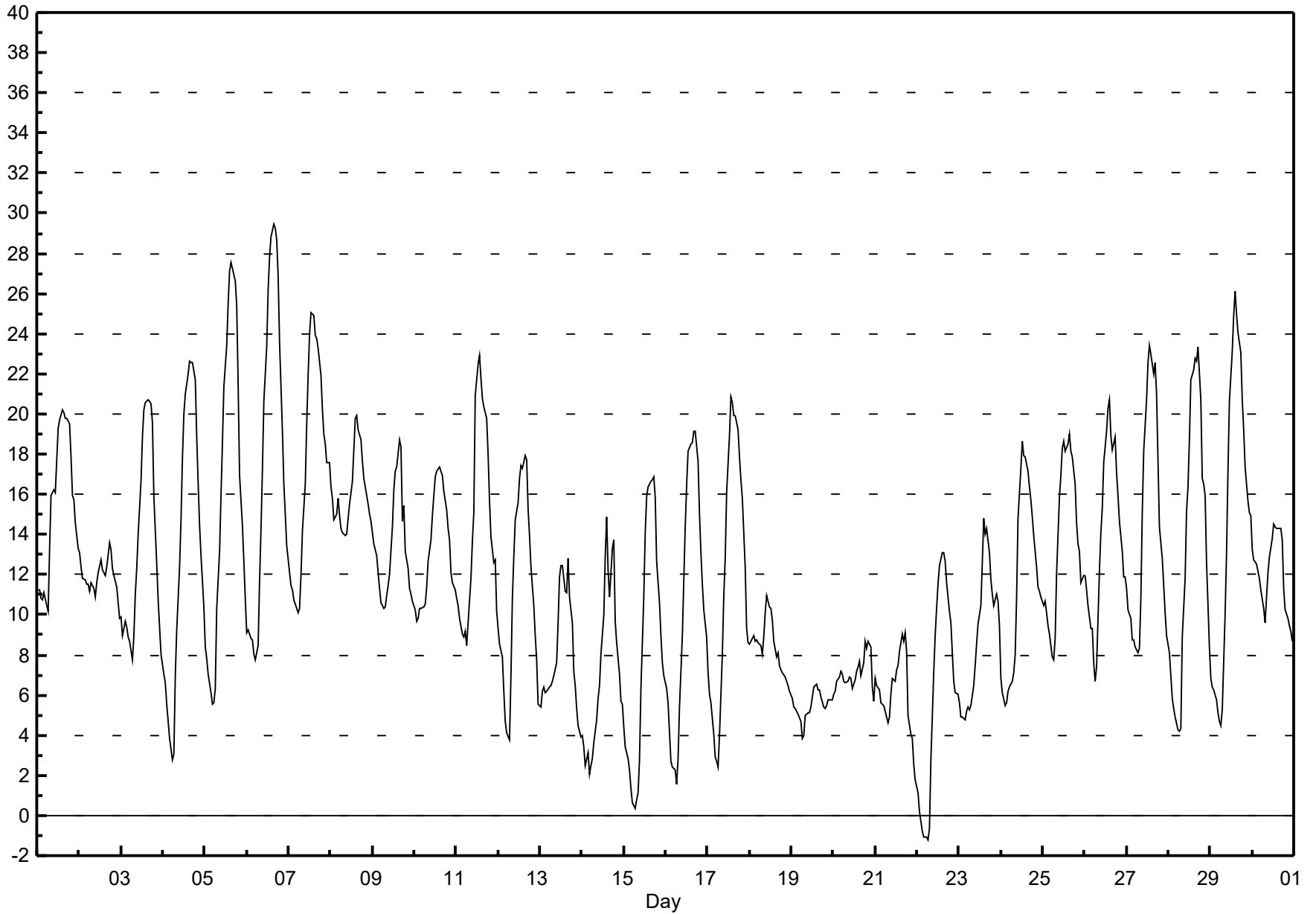


Hourly Averages

External Temperature (ET) - °C

Henry Pirker - September 2017

Maximum Value: 29.5 °C on Sep 6 16:00		Maximum Daily Average: 18.0 °C on Sep 6		Hours in Service: 720																							
Minimum Value: -1 °C on Sep 22 07:00		Minimum Daily Average: 5.4 °C on Sep 19		Hours of Data: 720																							
Maximum Diurnal Average: 17.7 °C at hour 15		Minimum Diurnal Average: 6.5 °C at hour 7		Hours of Missing Data: 0																							
Monthly Average: 11.87 °C		Percentiles: P ₁ = 0.3 P ₁₀ = 5.1 Q ₁ = 7.1 Median = 11.2 Q ₃ = 15.9 P ₉₀ = 20.0 P ₉₉ = 27.1		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	11	11	11	11	11	10	10	13	16	16	16	18	19	20	20	20	20	20	18	16	16	15	13	15.4	20.2		
2-Sep	13	12	12	12	12	12	11	12	11	11	12	12	13	12	12	12	12	14	13	12	12	11	11	10	11.9	13.6	
3-Sep	10	9	10	9	9	9	8	9	11	12	14	17	19	20	21	21	21	20	20	16	13	11	9	8	13.5	20.7	
4-Sep	7	7	6	5	4	3	3	7	9	12	15	18	20	21	22	23	23	23	22	19	17	14	13	10	13.3	22.6	
5-Sep	8	8	7	6	6	6	6	10	13	16	19	21	23	25	27	28	27	27	25	22	17	14	13	11	16.1	27.5	
6-Sep	9	9	9	9	8	8	8	12	14	17	21	23	26	28	29	29	29	29	27	24	19	17	15	13	18.0	29.5	
7-Sep	12	11	11	11	11	10	10	12	14	16	19	22	24	25	25	24	24	23	22	20	19	18	18	18	17.5	25.0	
8-Sep	16	16	15	15	16	15	14	14	14	14	15	16	17	18	20	20	19	19	18	17	16	15	15	15	16.2	19.9	
9-Sep	14	13	13	12	11	11	10	10	11	11	12	14	16	17	17	19	18	15	15	13	12	11	11	11	13.3	18.7	
10-Sep	10	10	10	10	10	10	11	11	13	14	15	16	17	17	17	17	17	16	15	14	14	12	12	11	13.3	17.4	
11-Sep	11	10	10	9	9	9	8	10	12	14	15	21	22	23	22	21	20	20	18	16	14	13	13	10	14.5	22.9	
12-Sep	9	9	8	6	5	4	4	7	11	13	15	16	17	17	17	18	18	15	14	12	10	9	8	6	11.1	18.0	
13-Sep	5	6	6	6	6	6	6	7	7	8	10	12	12	12	11	11	13	11	10	7	6	5	4	4	8.1	12.8	
14-Sep	4	3	3	3	2	3	3	4	5	6	6	8	10	13	15	12	11	13	14	10	9	7	6	6	7.2	14.9	
15-Sep	4	3	3	2	1	1	0	1	1	3	6	11	14	16	16	17	17	17	16	13	11	9	8	7	8.2	16.9	
16-Sep	6	6	4	3	2	2	2	3	5	9	12	14	16	18	19	19	19	19	18	15	13	12	10	9	10.6	19.2	
17-Sep	7	6	6	4	3	3	2	4	8	11	13	16	19	21	21	20	20	19	18	17	16	12	9	9	11.8	20.8	
18-Sep	9	9	9	9	9	9	8	8	9	10	11	10	10	10	9	8	8	7	7	7	7	7	6	6	8.4	11.0	
19-Sep	6	5	5	5	5	5	4	4	5	5	5	5	6	6	7	6	6	6	5	5	5	6	6	6	5.4	6.6	
20-Sep	6	6	7	7	7	7	7	7	7	7	7	7	6	7	7	7	8	7	8	9	8	9	8	6	6	7.1	8.7
21-Sep	7	6	6	6	6	5	5	5	5	6	7	7	7	7	8	9	9	9	8	5	4	4	3	2	6.1	9.1	
22-Sep	1	0	0	-1	-1	-1	-1	-1	3	7	9	10	12	12	13	13	13	12	10	10	8	7	6	6	6.1	13.1	
23-Sep	6	5	5	5	5	5	5	5	6	7	9	10	10	13	15	14	14	13	12	11	10	11	11	9	9.0	14.8	
24-Sep	7	6	6	6	6	6	7	7	8	11	15	17	19	18	18	17	16	16	15	14	12	11	11	11	11.6	18.7	
25-Sep	10	11	10	9	9	8	8	9	12	16	17	18	19	18	19	19	18	18	17	15	13	13	12	12	13.7	19.0	
26-Sep	12	11	10	9	9	8	7	7	12	14	15	18	19	20	21	19	18	19	17	16	15	13	12	12	13.9	20.7	
27-Sep	11	10	10	9	9	8	8	8	11	15	18	21	23	23	23	22	23	23	21	18	14	13	11	10	9	14.5	23.4
28-Sep	8	7	6	5	5	4	4	4	9	12	15	16	19	22	22	23	23	23	21	17	17	16	13	8	13.3	23.3	
29-Sep	7	6	6	6	5	5	4	5	10	13	17	21	23	25	26	25	24	23	21	19	17	16	15	15	14.8	26.1	
30-Sep	13	13	13	12	12	11	10	10	11	12	13	14	15	14	14	14	14	14	11	10	10	9	9	9	12.0	14.5	
		8.7	8.2	7.8	7.3	7.0	6.7	6.5	7.5	9.4	11.3	13.0	14.9	16.4	17.4	17.7	17.5	17.4	16.9	15.8	13.8	12.5	11.3	10.3	9.3	Diurnal Average	
		16.4	15.8	14.7	15.0	15.8	14.9	14.3	14.1	15.9	17.2	20.6	23.3	26.2	27.8	28.8	29.5	29.2	28.7	26.9	23.6	19.1	18.5	17.6	17.6	Diurnal Maximum	



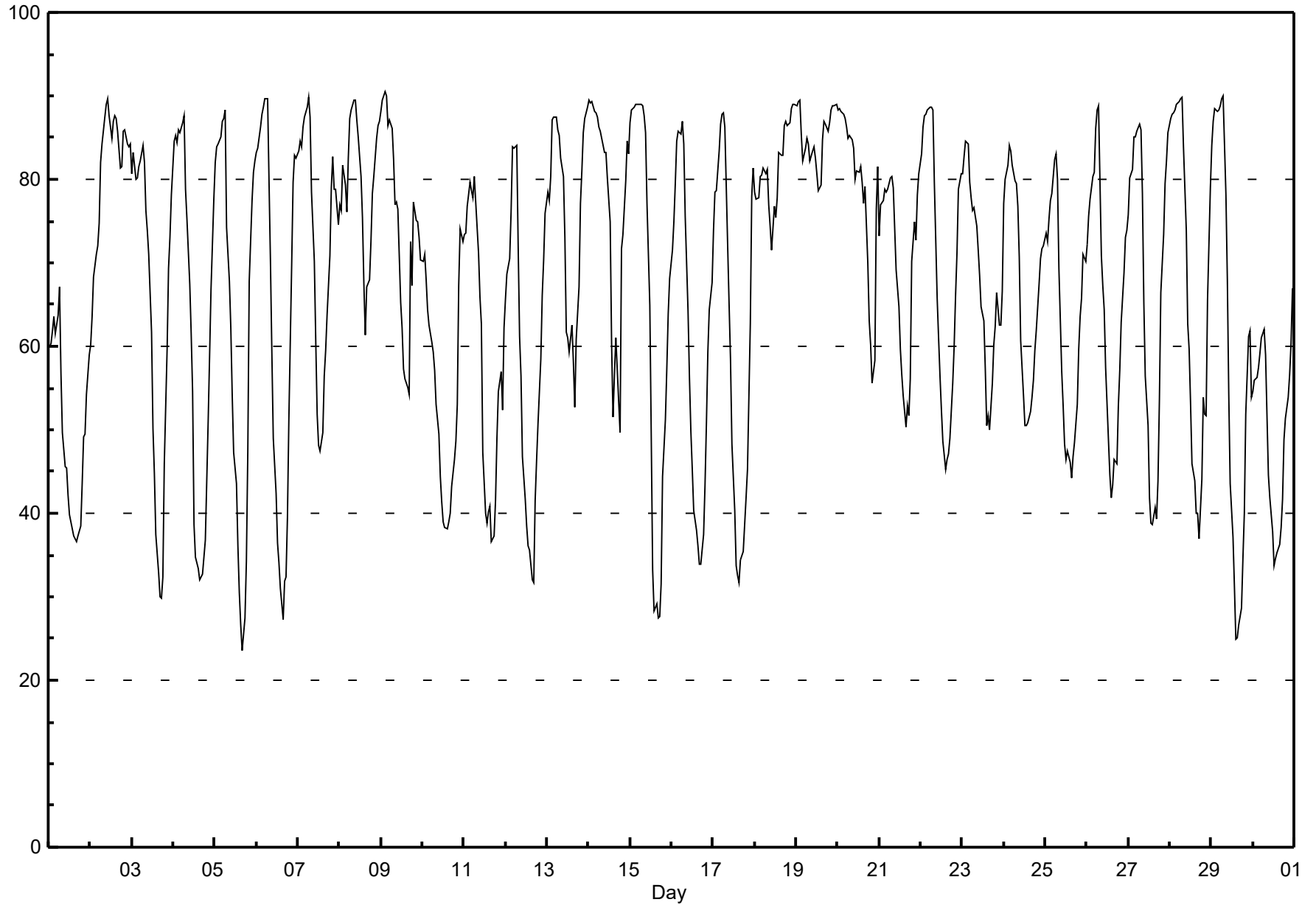
Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - September 2017

Maximum Value: 90.5 % on Sep 9 03:00		Maximum Daily Average: 85.2 % on Sep 19		Hours in Service: 720																							
Minimum Value: 24 % on Sep 5 17:00		Minimum Daily Average: 49.9 % on Sep 1		Hours of Data: 720																							
Maximum Diurnal Average: 83.2 % at hour 7		Minimum Diurnal Average: 47.2 % at hour 16		Hours of Missing Data: 0																							
Monthly Average: 66.88 %		Percentiles: P ₁ = 27.5 P ₁₀ = 38.9 Q ₁ = 52.2 Median = 71.1 Q ₃ = 83.0 P ₉₀ = 87.5 P ₉₉ = 89.6		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	60	60	62	64	62	64	67	57	50	46	45	42	40	39	37	37	37	37	39	44	49	49	54	59	49.9	67.1	
2-Sep	60	64	68	71	72	75	82	84	88	89	90	88	85	87	88	87	86	81	81	86	86	84	84	84	81.2	89.6	
3-Sep	81	83	80	80	82	82	84	82	76	74	71	62	50	45	37	33	30	30	32	46	60	69	73	78	63.3	84.0	
4-Sep	85	85	84	86	86	87	88	79	75	68	62	55	39	35	33	32	32	33	37	44	51	59	67	78	61.5	87.7	
5-Sep	82	84	84	85	87	87	88	74	68	62	54	47	43	36	31	27	24	28	34	47	68	78	81	82	61.7	88.3	
6-Sep	83	84	86	88	89	90	90	80	70	59	49	42	36	34	31	27	32	32	39	51	70	80	83	83	62.8	89.7	
7-Sep	83	85	84	86	88	89	90	87	78	70	61	52	48	48	50	57	60	64	71	79	83	79	79	75	72.6	89.8	
8-Sep	77	76	82	79	76	83	87	88	89	90	87	85	80	75	67	61	67	68	73	78	80	85	86	87	79.5	89.6	
9-Sep	88	90	90	90	87	87	86	82	77	77	77	65	62	57	56	55	54	73	67	77	75	75	73	70	74.6	90.5	
10-Sep	70	71	68	64	63	61	59	57	53	49	44	41	39	38	38	39	40	43	46	49	53	67	74	73	54.2	74.0	
11-Sep	73	74	77	80	79	78	80	77	71	66	63	47	40	39	40	41	37	37	42	49	55	57	52	62	59.0	80.4	
12-Sep	66	69	70	76	84	84	84	72	61	56	47	42	39	36	36	32	32	42	46	51	59	66	70	76	58.1	84.1	
13-Sep	78	77	80	87	87	87	86	85	83	80	73	62	61	59	63	58	53	61	67	77	81	86	87	89	75.3	88.6	
14-Sep	89	89	89	88	88	87	86	86	84	83	83	80	75	60	52	57	61	53	50	72	73	80	85	83	76.4	89.4	
15-Sep	87	88	89	89	89	89	89	89	88	86	77	65	49	33	28	29	27	28	32	44	51	57	64	68	64.0	89.0	
16-Sep	72	75	80	85	86	85	87	84	76	64	56	50	45	40	38	36	34	34	37	43	51	59	64	68	60.4	87.0	
17-Sep	74	78	79	83	87	88	88	86	72	65	58	48	40	34	33	32	34	35	39	42	45	63	78	81	61.0	88.0	
18-Sep	79	78	78	80	81	81	81	81	77	74	71	77	75	78	83	83	83	86	87	86	87	88	89	89	81.4	89.0	
19-Sep	89	89	89	85	82	84	85	84	82	83	84	83	81	79	79	85	87	87	86	87	88	89	89	89	85.2	89.4	
20-Sep	88	88	88	88	87	86	85	85	85	84	80	81	81	81	80	77	79	70	63	60	56	58	76	82	78.7	88.4	
21-Sep	73	77	77	79	78	79	80	80	79	74	69	65	60	57	54	50	53	52	56	70	75	73	78	81	69.5	80.6	
22-Sep	83	86	88	88	88	89	89	88	80	66	61	56	52	49	45	46	47	49	56	60	66	71	79	81	69.3	88.7	
23-Sep	81	83	85	84	80	78	76	77	74	71	68	65	63	57	50	52	50	56	60	62	66	62	63	67	67.9	84.6	
24-Sep	77	80	82	84	83	82	80	79	77	71	61	54	50	50	51	52	54	56	59	62	67	71	72	72	67.8	84.1	
25-Sep	74	72	75	77	78	82	83	80	69	57	53	48	46	47	46	44	47	49	53	60	64	66	71	70	63.0	83.0	
26-Sep	72	76	78	80	81	86	88	89	71	67	64	58	49	45	42	43	46	46	53	57	63	69	73	74	65.4	88.9	
27-Sep	76	80	81	85	85	86	87	86	78	65	56	50	42	39	39	41	39	44	54	66	73	79	82	86	66.7	86.6	
28-Sep	87	88	88	88	89	89	90	90	84	74	63	60	53	46	44	40	40	37	44	54	52	52	66	79	66.5	89.9	
29-Sep	84	87	88	88	88	89	90	90	78	68	54	44	37	31	25	25	27	29	35	40	52	61	62	54	59.4	90.0	
30-Sep	55	56	56	58	59	61	62	59	52	45	42	38	34	35	35	36	38	42	49	51	54	57	60	67	50.0	67.0	
		77.5	79.1	80.2	81.6	81.6	82.5	83.2	80.7	74.8	69.5	64.1	58.4	53.2	49.6	47.7	47.2	47.6	49.3	52.9	59.8	65.1	69.6	73.8	76.1	Diurnal Average	
		89.4	89.5	90.5	90.0	88.9	89.7	89.8	90.0	89.5	89.6	89.6	87.6	85.0	87.0	87.7	87.3	86.9	86.5	87.0	86.8	88.3	88.8	89.0	89.0	Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - September 2017

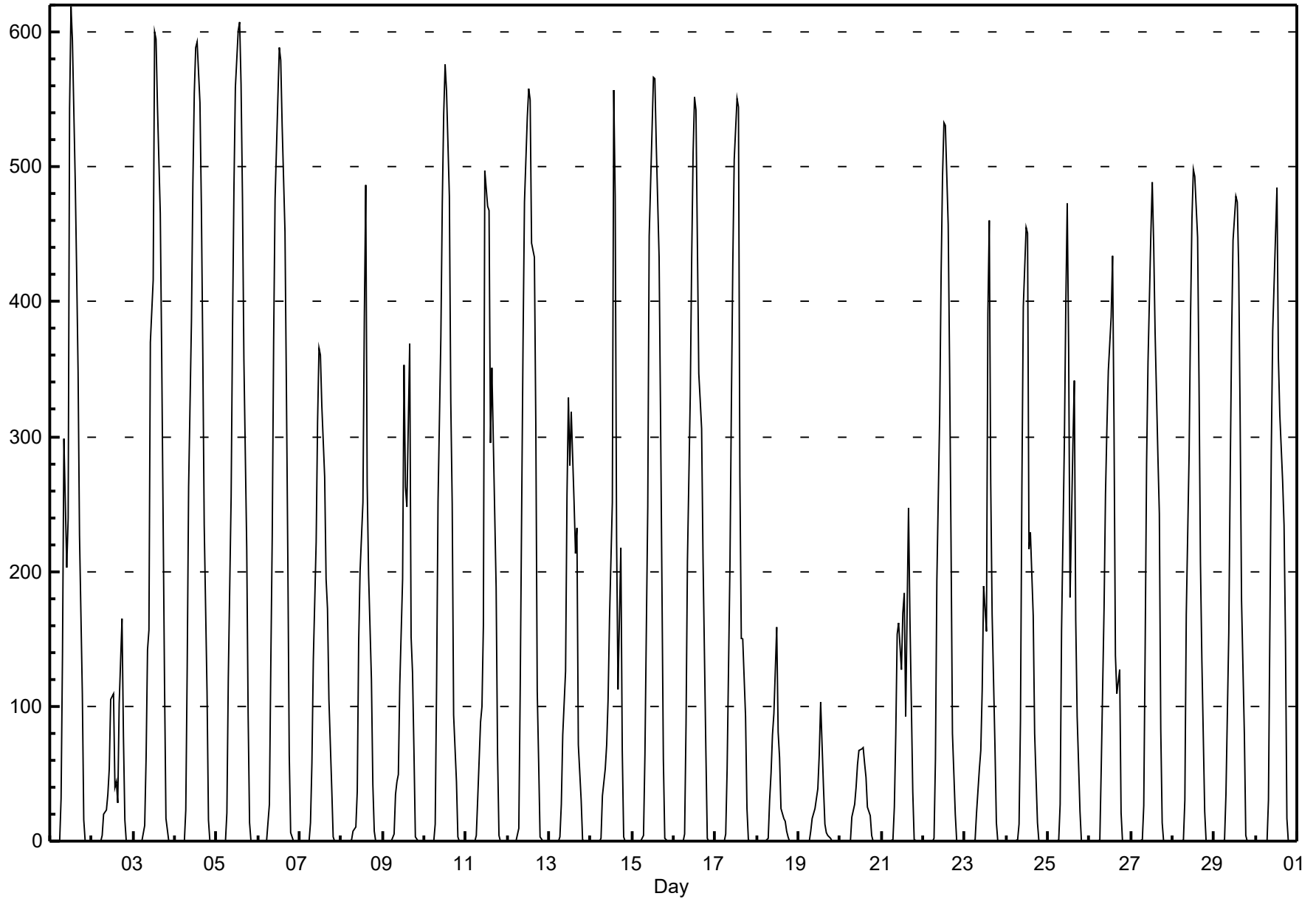


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - September 2017

Maximum Value: 618.7 W/m² on Sep 1 13:00		Maximum Daily Average: 198.6 W/m² on Sep 4		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Minimum Value: 0 W/m² on Sep 1 01:00 Maximum Diurnal Average: 403.3 W/m² at hour 13 Monthly Average: 120.63 W/m²		Minimum Daily Average: 14.6 W/m² on Sep 19 Minimum Diurnal Average: 0.0 W/m² at hour 1 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 12.7 Q ₃ = 207.9 P ₉₀ = 442.7 P ₉₉ = 592.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	32	138	298	203	239	544	619	593	489	421	348	227	110	16	0	0	0	0	178.2	618.7
2-Sep	0	0	0	0	0	0	4	20	23	35	53	106	109	40	44	29	102	165	78	16	0	0	0	0	34.3	165.2
3-Sep	0	0	0	0	0	0	12	62	141	156	370	416	600	594	545	466	361	240	116	17	0	0	0	0	170.6	599.6
4-Sep	0	0	0	0	0	0	23	130	263	385	488	555	589	593	548	471	363	235	110	16	0	0	0	0	198.6	592.5
5-Sep	0	0	0	0	0	0	21	121	256	382	485	560	602	608	561	477	357	218	94	14	0	0	0	0	198.1	607.7
6-Sep	0	0	0	0	0	0	27	131	226	371	477	551	589	579	530	452	335	210	64	6	0	0	0	0	189.6	588.6
7-Sep	0	0	0	0	0	0	14	57	134	222	311	366	361	323	270	195	172	105	39	3	0	0	0	0	107.1	366.2
8-Sep	0	0	0	0	0	0	1	8	10	37	148	200	252	389	486	264	197	120	42	7	0	0	0	0	90.1	486.1
9-Sep	0	0	0	0	0	0	5	34	45	50	115	194	353	263	248	369	151	125	67	3	0	0	0	0	84.2	368.6
10-Sep	0	0	0	0	0	0	13	118	252	374	473	540	575	556	479	326	250	94	44	4	0	0	0	0	170.7	575.4
11-Sep	0	0	0	0	0	0	4	32	88	100	160	498	471	468	295	351	297	188	65	4	0	0	0	0	125.8	497.5
12-Sep	0	0	0	0	0	0	10	115	244	371	474	536	558	550	444	433	309	112	59	4	0	0	0	0	175.7	558.2
13-Sep	0	0	0	0	0	0	4	27	79	126	256	329	278	319	251	213	232	71	31	1	0	0	0	0	92.4	328.8
14-Sep	0	0	0	0	0	0	3	34	53	72	105	165	251	556	478	223	112	217	67	3	0	0	0	0	97.5	556.4
15-Sep	0	0	0	0	0	0	4	64	158	247	449	527	567	565	516	433	317	191	61	2	0	0	0	0	170.8	566.6
16-Sep	0	0	0	0	0	0	5	86	208	331	433	511	552	542	346	327	306	209	67	2	0	0	0	0	163.6	552.1
17-Sep	0	0	0	0	0	0	6	53	205	324	428	506	550	545	270	150	151	92	25	1	0	0	0	0	137.7	550.1
18-Sep	0	0	0	0	0	0	2	30	50	79	94	159	81	62	24	17	14	7	3	0	0	0	0	0	25.9	158.6
19-Sep	0	0	0	0	0	0	0	8	17	24	32	39	64	103	40	13	6	4	2	0	0	0	0	0	14.6	103.0
20-Sep	0	0	0	0	0	0	0	18	28	40	57	68	68	69	58	47	25	19	4	0	0	0	0	0	20.9	69.4
21-Sep	0	0	0	0	0	0	1	25	78	153	162	128	170	184	92	247	165	102	37	1	0	0	0	0	64.4	247.2
22-Sep	0	0	0	0	0	0	2	61	193	316	420	493	532	531	457	351	221	80	20	0	0	0	0	0	153.3	532.3
23-Sep	0	0	0	0	0	0	1	21	53	67	112	189	156	391	461	266	168	70	13	0	0	0	0	0	82.1	460.6
24-Sep	0	0	0	0	0	0	1	13	89	263	396	456	451	217	229	167	80	46	14	0	0	0	0	0	100.9	455.5
25-Sep	0	0	0	0	0	0	1	28	156	298	399	473	365	181	294	342	164	92	22	0	0	0	0	0	117.2	472.6
26-Sep	0	0	0	0	0	0	1	54	173	258	307	348	389	434	309	138	109	127	21	0	0	0	0	0	111.2	434.4
27-Sep	0	0	0	0	0	0	1	26	145	281	356	449	488	442	377	284	243	84	14	0	0	0	0	0	132.9	488.4
28-Sep	0	0	0	0	0	0	1	30	168	286	388	462	499	493	447	339	207	134	22	0	0	0	0	0	144.8	498.5
29-Sep	0	0	0	0	0	0	1	35	154	272	374	446	478	474	425	315	179	79	4	0	0	0	0	0	134.8	478.1
30-Sep	0	0	0	0	0	0	0	31	160	290	379	450	484	359	317	266	234	150	17	0	0	0	0	0	130.7	484.3
		0.0	0.0	0.0	0.0	0.0	0.0	6.6	53.7	138.3	213.8	298.0	375.4	403.3	400.7	344.4	279.7	205.9	127.0	44.4	4.0	0.0	0.0	0.0	0.0	Diurnal Average
		0.0	0.1	0.1	0.0	0.0	0.2	31.7	138.4	298.3	385.4	487.9	559.5	618.7	607.7	561.0	477.2	362.9	240.0	116.1	16.6	0.2	0.0	0.0	0.1	Diurnal Maximum





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	9	7	4	5	4	2	4	8	12	21	22	29	27	28	27	30	31	26	23	14	10	12	7	6	15.0	31.4
Dir	239	242	237	205	264	160	172	226	248	247	246	252	251	251	254	259	252	254	245	238	255	247	237	248.5	258.6	
2 Spd	2	1	1	2	1	1	1	2	5	4	3	4	1	7	6	5	6	8	7	5	6	7	5	4	2.7	8.3
Dir	239	251	144	143	189	162	251	216	169	165	153	168	243	308	310	293	196	208	226	206	224	239	267	272	225.6	207.8
3 Spd	6	4	9	10	7	6	3	4	3	2	2	5	7	8	13	13	13	12	10	4	1	1	2	2	5.5	13.5
Dir	255	245	258	265	271	282	304	260	253	245	176	289	296	289	308	306	308	320	333	320	354	299	321	321	292.5	308.3
4 Spd	1	1	4	2	2	2	0	2	4	3	4	6	9	9	8	6	5	5	7	6	4	2	1	3	2.6	8.9
Dir	196	225	315	305	318	295	210	144	153	113	128	120	130	140	129	138	139	107	90	95	85	66	45	292	120.7	140.4
5 Spd	2	2	3	2	3	2	1	1	3	3	2	3	2	3	3	3	4	4	3	3	1	1	2	3	1.1	3.9
Dir	311	291	304	302	288	297	242	269	229	229	213	176	181	178	195	160	168	173	153	91	104	342	299	301	222.4	172.6
6 Spd	4	3	3	3	0	2	1	3	5	6	4	3	2	2	3	4	5	5	6	4	0	2	2	3	1.1	6.2
Dir	314	300	310	309	327	174	219	224	230	238	215	196	170	166	148	120	136	147	118	103	37	319	300	292	199.8	238.3
7 Spd	3	2	2	1	1	2	2	3	4	3	3	4	4	2	4	5	5	3	3	3	2	4	4	5	1.6	5.3
Dir	320	315	305	333	288	147	246	235	228	229	242	236	231	177	187	164	156	171	181	176	241	331	319	320	231.5	163.5
8 Spd	3	3	2	4	7	5	4	1	3	5	7	7	6	7	8	7	8	8	6	5	5	5	4	2	2.7	8.4
Dir	304	321	280	285	304	304	310	3	163	166	157	161	153	162	161	172	157	164	151	129	106	102	104	99	160.4	163.7
9 Spd	2	3	2	4	2	2	3	2	3	7	2	1	4	6	5	4	6	10	7	9	10	8	11	10	4.3	11.1
Dir	46	116	212	243	261	296	289	206	202	281	279	152	176	217	219	194	231	233	225	231	228	266	240	238	233.9	240.2
10 Spd	8	8	13	16	18	20	21	17	22	23	28	30	29	30	29	27	24	14	8	7	5	1	4	5	16.0	29.9
Dir	227	222	227	241	237	253	248	255	250	257	250	253	250	248	255	256	261	246	226	228	219	214	93	97	247.4	248.2
11 Spd	6	7	8	5	6	6	4	4	2	3	4	14	26	22	23	31	33	32	26	17	10	12	14	4	9.5	33.4
Dir	101	103	113	106	110	125	131	149	157	180	154	246	243	241	253	265	264	269	259	254	253	268	251	224	246.9	264.3
12 Spd	7	6	6	3	2	2	1	5	4	5	10	10	6	8	8	8	8	10	9	6	5	4	5	7	4.6	10.5
Dir	230	234	259	314	255	315	291	296	320	315	315	322	305	303	286	300	315	13	16	12	31	8	323	315	315.4	315.4
13 Spd	4	4	5	5	6	6	7	7	9	10	4	2	4	4	2	6	4	5	5	2	4	2	1	1	2.8	9.8
Dir	331	315	306	312	303	322	318	300	304	317	330	33	300	7	60	259	22	133	93	182	207	252	303	257	313.8	317.4
14 Spd	3	3	3	5	3	4	4	3	4	4	6	6	6	8	6	14	11	8	3	1	4	4	3	4	3.4	13.5
Dir	219	251	228	249	226	238	226	233	279	287	245	251	222	212	244	306	284	267	293	297	147	146	117	101	249.2	306.5
15 Spd	3	3	2	2	1	2	0	3	4	5	5	7	10	11	13	12	10	9	7	7	9	8	7	7	5.7	12.7
Dir	139	94	98	101	146	153	102	123	122	110	113	120	139	156	151	144	156	151	122	98	102	101	100	95	127.4	151.1
16 Spd	7	6	2	2	2	3	3	3	3	4	3	3	4	5	5	5	7	8	8	6	8	8	7	6	4.4	8.4
Dir	86	85	89	89	102	101	110	145	164	222	177	149	154	144	152	145	109	110	111	105	106	110	103	103	117.0	109.9
17 Spd	2	2	1	1	1	2	3	2	2	5	7	6	7	7	8	6	9	9	9	3	4	2	3	1	3.3	9.4
Dir	81	91	75	328	38	115	123	309	63	108	118	123	123	131	125	101	86	91	97	104	86	292	297	284	103.9	90.5
18 Spd	2	5	4	6	6	1	2	3	3	7	12	16	11	11	7	6	4	5	4	4	3	2	3	4	4.3	15.8
Dir	242	240	267	315	311	286	180	194	275	284	285	291	266	262	246	295	276	314	256	252	187	213	178	182	268.8	291.4
19 Spd	2	3	2	9	7	4	8	9	10	11	13	14	19	25	21	18	9	11	16	14	10	11	10	8	10.0	24.9
Dir	204	189	248	257	275	227	244	256	268	287	276	271	288	289	295	292	318	318	303	312	313	315	316	318	289.1	289.2
20 Spd	8	7	11	13	13	13	14	12	13	16	17	14	12	16	16	16	12	17	16	19	19	19	3	2	12.9	19.3
Dir	339	325	350	358	15	20	10	7	5	358	1	14	355	337	337	334	353	333	347	354	349	352	66	347	353.8	353.6
21 Spd	9	9	8	9	10	10	9	11	13	11	11	13	11	11	7	9	6	4	2	3	4	4	3	2	6.8	13.3
Dir	335	316	320	313	314	313	315	313	308	313	304	310	325	321	322	300	295	301	281	181	176	188	224	212	309.0	309.9
22 Spd	2	2	4	4	2	2	3	3	2	1	3	4	3	5	5	6	6	5	3	4	4	2	1	1	2.6	5.9
Dir	208	153	151	149	175	211	157	147	196	322	122	126	135	124	112	114	178	170	135	98	88	99	147	156	140.5	178.1



Peace Airshed Zone Association

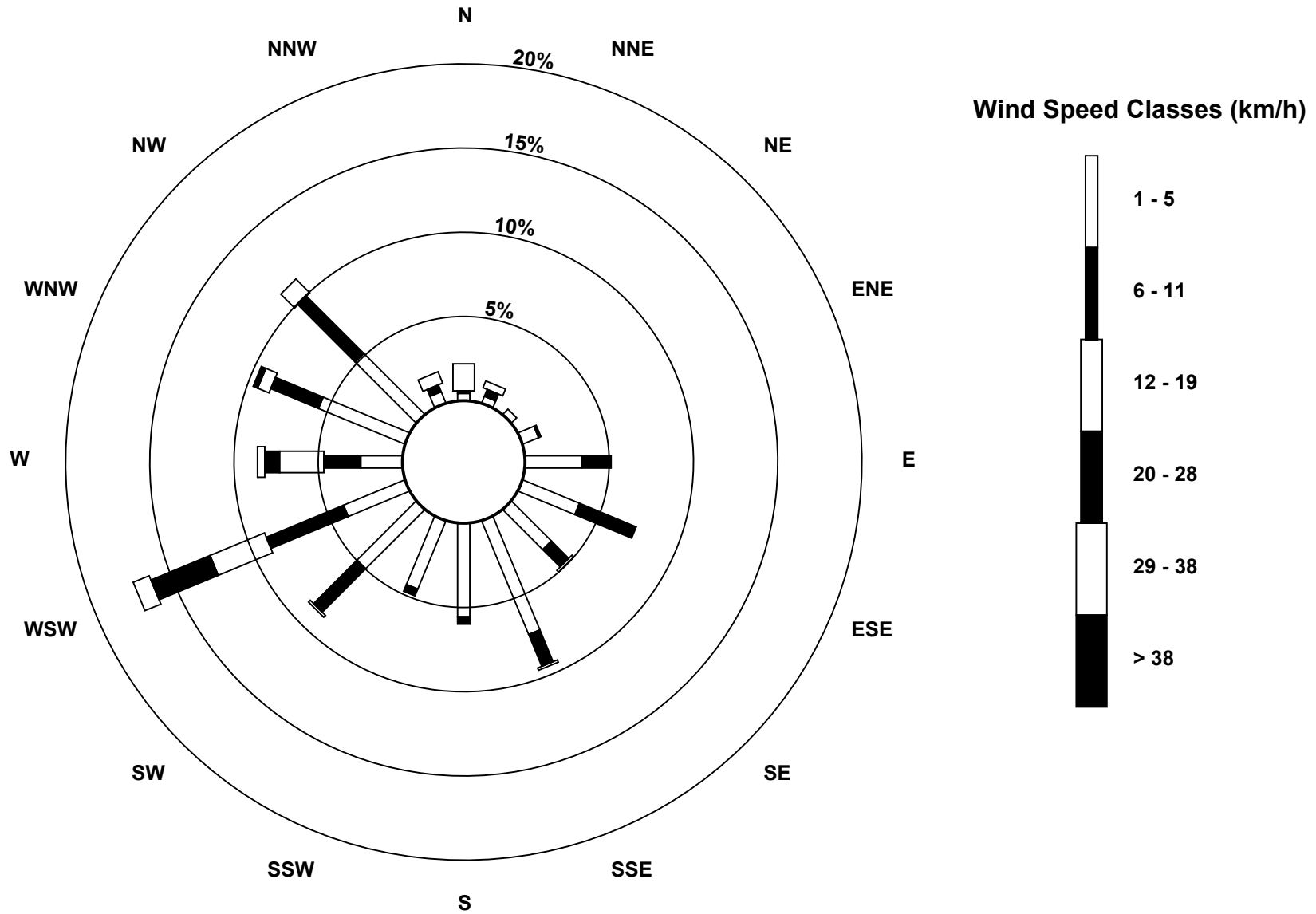
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	2	2	3	2	3	2	2	1	1	2	4	5	5	5	4	6	3	6	7	6	5	8	9	6	3.2	9.1
Dir	133	148	152	186	234	233	232	207	235	217	226	209	209	187	171	170	159	157	148	138	169	235	253	253	194.8	252.6
24 Spd	1	2	1	3	3	3	4	4	5	6	8	12	15	16	18	19	18	14	8	8	6	7	8	7	6.7	18.8
Dir	254	149	5	149	159	147	144	149	150	162	223	255	250	260	244	250	248	249	240	237	226	229	231	230	234.4	250.4
25 Spd	5	5	3	4	4	5	5	3	2	11	19	18	18	16	20	22	20	17	11	6	8	9	5	7	9.2	22.3
Dir	224	214	198	204	183	154	159	193	234	249	252	259	256	251	247	257	263	266	258	230	237	239	225	227	245.2	256.8
26 Spd	4	4	4	4	6	2	2	1	2	3	5	5	13	14	12	19	16	10	9	13	9	7	5	6	6.9	18.8
Dir	285	305	273	268	247	269	273	252	299	213	214	210	250	246	252	266	262	244	250	259	250	246	286	253	255.1	265.8
27 Spd	3	2	3	4	3	1	3	2	4	4	5	7	12	12	14	11	8	6	1	0	1	0	0	0	2.8	13.9
Dir	306	187	178	176	182	145	132	137	161	195	211	233	277	260	250	282	320	314	315	84	147	352	347	349	251.7	250.1
28 Spd	0	2	2	1	2	0	1	0	1	2	2	5	3	1	6	6	6	6	4	4	6	6	1	3	1.6	6.4
Dir	317	289	309	311	282	114	261	344	175	163	153	123	149	216	115	125	122	122	81	64	74	79	60	296	110.1	122.2
29 Spd	3	2	2	1	1	1	2	1	2	2	1	2	3	2	1	3	4	5	5	3	11	10	11	24	1.8	24.0
Dir	290	287	241	283	286	192	149	93	151	153	240	253	255	226	141	118	97	79	80	103	301	300	294	253	268.3	253.2
30 Spd	21	18	13	11	8	10	10	10	13	21	23	25	26	22	22	22	21	24	19	17	17	14	15	11	17.2	25.5
Dir	253	261	257	259	250	269	260	264	271	262	254	257	262	257	251	253	254	263	262	260	270	267	274	272	260.3	262.3
Spd	2.1	1.8	2.1	2.5	2.4	1.5	1.7	2.2	2.9	4.0	4.7	5.6	6.8	7.1	6.6	7.1	5.8	4.6	2.7	1.9	1.8	2.5	2.5	2.8	Diurnal Average	
Dir	264.4	255.3	262.2	267.0	270.2	264.5	254.9	253.0	251.8	259.4	251.7	252.9	252.9	251.8	249.8	259.3	257.8	254.2	253.3	247.2	244.9	273.1	265.7	258.5	Diurnal Maximum	
Spd	21.1	18.0	13.4	15.7	18.2	20.4	20.5	17.2	21.5	23.4	27.6	29.8	29.1	29.9	28.7	31.0	33.4	32.2	26.3	19.3	18.6	18.9	15.4	24.0	Diurnal Maximum	
Dir	252.8	261.0	257.2	241.1	237.3	252.9	248.2	254.6	250.0	256.6	250.3	252.8	250.5	248.2	255.5	264.8	264.3	268.7	259.1	353.6	348.9	352.3	273.9	253.2	Diurnal Maximum	
Maximum Speed Value: 33 km/h on Sep 11 17:00		Minimum Speed Value: 0 km/h on Sep 28 01:00										Hours in Service: 720														
Maximum Daily Speed Average: 17.2 km/h on Sep 30		Minimum Daily Speed Average: 1.1 km/h on Sep 5										Hours of Data: 720														
Maximum Diurnal Speed Average: 7.1 km/h at hour 16		Minimum Diurnal Speed Average: 1.5 km/h at hour 6										Hours of Missing Data: 0														
Monthly Average Velocity: 3.57 km/h 256.25 deg		Speed Percentiles: P ₁ = 0.4 P ₁₀ = 1.6 Q ₁ = 2.8 Median = 4.9 Q ₃ = 8.6 P ₉₀ = 15.9 P ₉₉ = 29.8										Percent Operational Time: 100.0														
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	12	4	15	1	0	0	32																			
NorthEast	12	0	0	0	0	0	12																			
East	34	33	0	0	0	0	67																			
SouthEast	70	36	2	0	0	0	108																			
South	64	11	0	0	0	0	75																			
SouthWest	64	54	9	5	0	0	132																			
West	53	34	42	29	10	0	168																			
NorthWest	58	49	18	1	0	0	126																			
Total	367	221	86	36	10	0	720																			

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - September 2017

Maximum Speed: 34 km/h on Sep 11 17:00		Maximum Daily Speed Average: 17.5 km/h on Sep 30		Hours in Service: 720																						
Minimum Speed: 1 km/h on Sep 28 00:00		Minimum Daily Speed Average: 2.8 km/h on Sep 5		Hours of Data: 720																						
Maximum Diurnal Speed Average: 12.1 km/h at hour 16		Minimum Diurnal Speed Average: 4.6 km/h at hour 2		Hours of Missing Data: 0																						
Monthly Average Speed: 7.39 km/h		Percentiles: P ₁ = 1.1 P ₁₀ = 2.2 Q ₁ = 3.2 Median = 5.3 Q ₃ = 9.0 P ₉₀ = 16.3 P ₉₉ = 30.2		Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	9	7	4	5	5	4	5	8	13	21	22	29	28	29	27	30	32	26	23	15	10	12	8	6	15.8	32.0
2-Sep	3	3	2	3	3	2	3	3	5	4	3	4	3	7	6	5	6	9	7	5	6	7	5	5	4.5	8.5
3-Sep	6	5	9	10	7	6	4	4	4	3	3	6	8	9	14	14	14	12	10	4	2	2	3	2	6.6	13.8
4-Sep	2	3	4	2	3	2	1	2	5	3	4	6	9	9	8	7	6	6	7	6	4	3	2	3	4.4	9.5
5-Sep	2	2	3	2	3	2	2	2	3	3	3	3	4	4	4	4	4	4	3	3	1	1	2	3	2.8	4.0
6-Sep	4	4	3	3	1	2	2	3	5	6	5	4	3	3	4	5	5	6	6	4	1	2	2	3	3.6	6.4
7-Sep	3	3	4	2	2	3	3	3	4	4	4	4	4	2	4	6	5	4	3	3	3	4	4	5	3.6	5.5
8-Sep	4	3	2	4	7	6	5	4	4	5	7	7	6	8	8	7	8	9	6	6	5	5	4	3	5.5	8.6
9-Sep	2	4	3	4	3	3	3	2	3	8	4	2	5	6	6	5	7	10	7	9	11	9	11	10	5.7	11.3
10-Sep	8	9	13	16	18	21	21	17	22	24	28	30	30	30	29	27	24	15	9	7	6	3	4	5	17.3	30.3
11-Sep	7	7	8	6	6	6	4	4	3	4	4	15	26	23	24	31	34	33	27	17	11	13	14	5	13.7	33.9
12-Sep	7	6	7	4	2	2	2	5	4	6	11	10	8	9	9	8	8	10	9	6	5	4	5	7	6.5	10.8
13-Sep	4	4	6	5	6	6	7	7	9	10	5	3	5	8	4	7	6	6	6	6	5	2	3	2	5.5	10.1
14-Sep	4	3	3	5	3	4	4	4	5	4	6	7	6	8	8	14	11	8	3	2	4	4	3	5	5.3	13.8
15-Sep	3	3	3	3	2	2	1	3	5	6	6	7	11	11	13	12	11	10	7	7	9	8	7	7	6.5	13.0
16-Sep	7	6	2	2	2	3	3	3	4	4	3	4	4	5	5	6	7	9	8	7	8	8	7	6	5.2	8.6
17-Sep	2	2	2	2	1	2	4	2	2	6	7	7	7	8	8	7	9	10	9	5	4	4	4	2	4.9	9.5
18-Sep	3	5	5	6	7	4	3	4	4	7	12	16	11	11	8	6	5	5	5	4	4	3	3	4	6.1	15.9
19-Sep	2	3	3	9	8	5	8	9	10	11	13	14	19	25	21	18	10	11	16	14	10	11	10	8	11.2	25.1
20-Sep	8	7	11	13	13	14	14	13	13	16	17	15	13	16	17	16	13	18	16	20	19	19	4	5	13.8	19.6
21-Sep	10	9	8	9	10	10	9	11	13	11	11	13	12	11	7	9	7	5	2	3	4	4	3	2	8.0	13.5
22-Sep	2	2	4	4	2	2	3	3	3	2	3	5	5	6	6	7	7	5	4	4	4	2	1	1	3.6	6.6
23-Sep	2	2	3	3	3	2	2	2	1	2	4	5	5	6	5	7	4	7	7	6	5	8	9	6	4.5	9.2
24-Sep	2	2	2	3	3	4	4	4	5	6	9	12	16	17	18	19	18	14	8	8	6	7	8	7	8.3	19.0
25-Sep	6	5	3	4	4	5	5	3	4	12	19	18	19	16	20	23	20	17	11	6	8	9	5	7	10.4	22.7
26-Sep	5	4	5	4	6	3	2	2	2	3	5	6	13	14	13	19	16	10	9	13	9	7	6	6	7.6	19.0
27-Sep	4	3	4	4	3	2	3	2	4	4	5	7	13	12	14	12	9	6	2	1	1	1	1	1	4.9	14.4
28-Sep	2	2	2	1	2	1	1	1	1	3	3	5	4	3	6	7	7	6	4	4	6	6	2	3	3.5	7.0
29-Sep	3	2	3	2	1	1	2	1	2	3	2	2	3	3	3	5	5	5	5	3	12	11	11	24	4.7	24.3
30-Sep	21	18	14	12	9	10	10	10	13	21	23	25	26	22	22	22	21	25	19	17	18	14	16	12	17.5	26.1
																								Diurnal Average		
																								Diurnal Maximum		

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Henry Pirker - September 2017

Maximum Value: 99.5 deg on Sep 15 07:00																		Hours in Service: 720							
Minimum Value: 5.7 deg on Sep 25 06:00																		Hours of Data: 720							
Percentiles: P ₁ = 6.2 P ₁₀ = 8.6 Q ₁ = 11.4 Median = 19.0 Q ₃ = 33.3 P ₉₀ = 61.0 P ₉₉ = 89.3																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	10	15	16	33	30	90	42	12	10	9	12	10	10	12	11	11	11	9	10	9	11	8	18	15	90.2
2-Sep	88	79	64	37	80	80	67	27	17	14	19	16	65	9	29	13	29	13	15	15	15	12	14	44	88.1
3-Sep	19	20	10	7	18	21	30	57	26	47	40	45	30	29	16	11	11	11	9	18	82	71	26	44	82.4
4-Sep	90	76	14	34	29	21	89	33	23	34	27	28	21	19	26	26	26	29	15	9	14	20	52	17	90.3
5-Sep	19	24	19	21	21	30	36	42	17	32	65	45	64	52	49	36	20	13	28	12	88	25	30	17	88.2
6-Sep	23	30	17	26	98	21	59	32	12	13	25	40	76	63	40	30	30	18	14	6	82	52	56	12	98.1
7-Sep	19	41	58	88	73	69	50	20	17	16	27	24	19	39	24	14	13	14	26	17	45	14	13	8	87.9
8-Sep	26	14	69	14	9	18	35	88	15	11	14	17	15	17	17	22	12	10	13	18	12	8	13	43	87.9
9-Sep	27	22	33	19	27	56	16	47	26	33	67	89	48	20	29	42	28	12	11	12	12	26	11	11	88.9
10-Sep	11	8	10	9	9	7	8	10	11	10	10	11	10	10	12	10	10	17	15	12	27	78	39	17	78.3
11-Sep	10	11	11	19	11	13	29	29	32	27	21	28	11	13	15	10	10	8	10	9	22	20	10	27	32.5
12-Sep	15	10	13	41	26	63	81	15	30	20	15	18	36	31	31	30	36	15	15	13	15	23	25	19	80.7
13-Sep	33	14	31	12	7	12	8	11	10	12	36	61	52	76	55	48	49	32	39	77	19	34	84	83	84.1
14-Sep	19	37	44	15	30	50	26	28	25	21	23	18	15	20	31	13	10	13	25	70	17	11	16	23	69.5
15-Sep	23	35	54	61	45	25	99	25	15	21	28	20	19	19	14	17	16	18	19	7	7	6	7	8	99.5
16-Sep	9	8	51	14	15	9	14	10	27	25	44	42	42	31	35	29	21	15	9	6	6	7	8	11	51.2
17-Sep	62	35	75	55	58	41	21	61	38	18	20	22	23	27	20	18	14	9	12	50	43	68	24	81	81.1
18-Sep	63	25	45	19	36	87	64	50	34	17	11	8	16	9	31	20	28	20	42	26	50	49	24	16	86.7
19-Sep	36	38	53	8	14	29	15	11	10	14	10	9	7	6	7	6	18	15	8	17	10	7	6	9	52.8
20-Sep	8	12	7	8	11	12	11	9	10	10	9	14	12	8	10	8	14	15	14	11	11	9	62	88	87.8
21-Sep	15	6	8	6	6	7	7	7	7	8	10	9	14	14	20	16	28	25	26	23	9	22	19	28	28.1
22-Sep	35	46	8	9	27	27	23	9	43	82	46	45	59	37	46	37	30	16	24	7	12	37	39	71	82.4
23-Sep	42	17	21	34	14	21	27	66	53	28	15	21	19	27	38	23	43	10	11	11	26	16	12	13	66.5
24-Sep	80	23	60	14	9	9	10	13	10	19	26	18	13	14	12	9	7	7	12	12	9	10	8	10	80.4
25-Sep	8	16	20	15	30	6	16	23	78	18	10	12	14	12	10	11	8	8	13	12	23	10	12	10	78.3
26-Sep	33	22	17	24	11	23	31	36	33	47	23	33	14	15	18	9	10	15	15	8	7	11	36	13	47.4
27-Sep	22	55	20	14	34	65	22	32	15	22	23	23	19	18	16	19	21	15	56	71	67	89	90	65	90.4
28-Sep	92	16	48	66	24	87	67	90	66	46	66	31	57	70	27	23	20	14	13	8	8	10	64	27	92.2
29-Sep	27	42	39	69	63	64	42	62	33	23	52	39	24	52	88	53	33	12	8	38	28	6	10	9	88.2
30-Sep	7	7	9	9	12	10	10	10	9	11	11	11	12	11	11	9	11	7	7	7	6	8	10	8	12.1
	92.2	78.8	74.7	87.9	98.1	90.2	99.5	89.7	78.3	82.4	66.6	88.9	75.6	76.4	88.2	53.1	48.8	31.7	56.2	77.2	88.2	89.1	90.4	87.8	

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

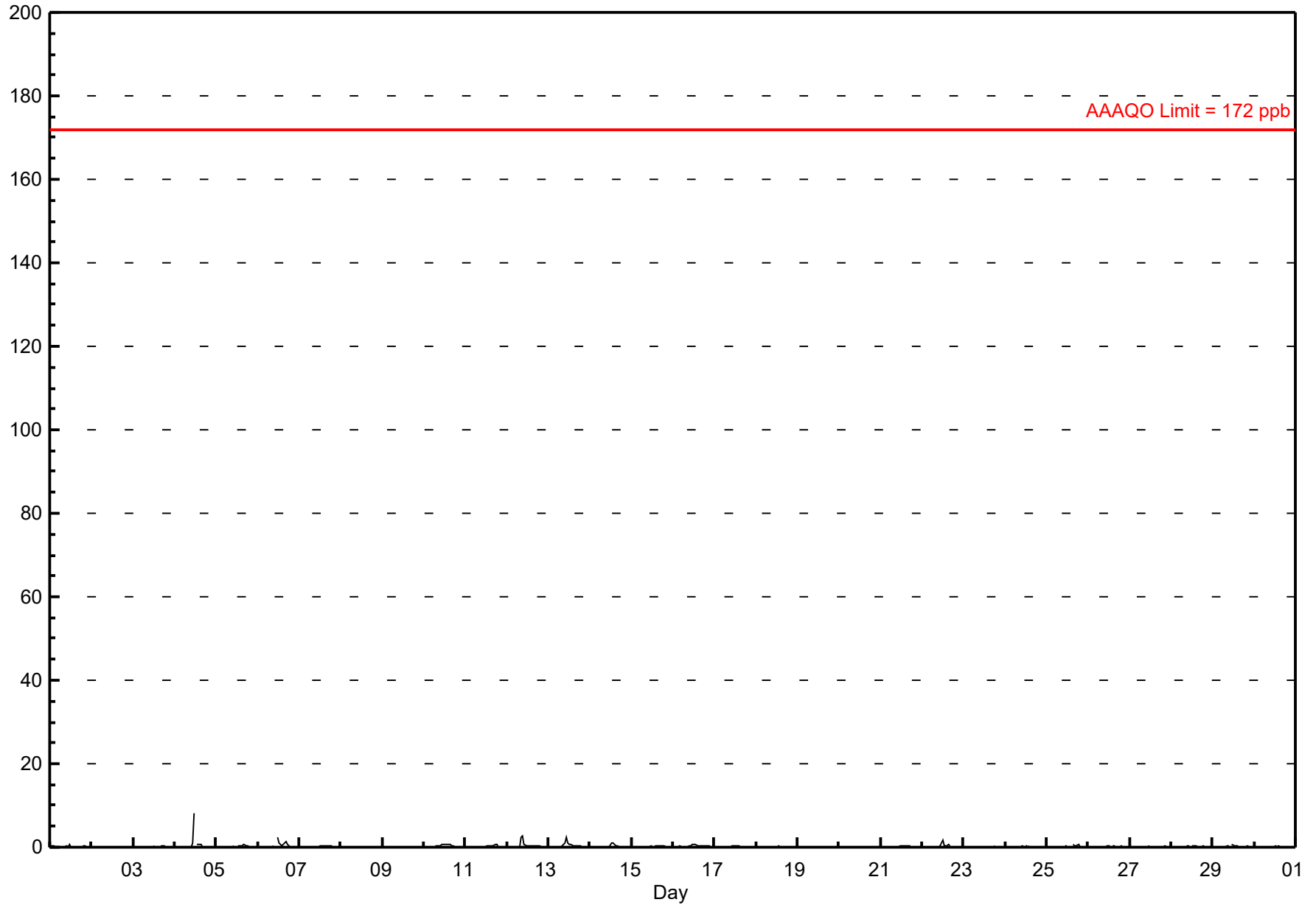
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Evergreen Park - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 720																								
Maximum Value: 8.1 ppb on Sep 4 12:00		Maximum Daily Average: 0.5 ppb on Sep 4																								
Minimum Value: 0 ppb on Sep 1 06:00		Hours of Data: 689																								
Maximum Diurnal Average: 0.6 ppb at hour 12		Hours of Missing Data: 31																								
Monthly Average: 0.15 ppb		Hours of Calibration: 30																								
		Percent Operational Time: 99.9																								
		Minimum Daily Average: 0.0 ppb on Sep 19																								
		Minimum Diurnal Average: 0.0 ppb at hour 4																								
		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.1																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.6
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.1
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Sep	0	0	0	0	0	0	0	0	0	1	8	A	1	1	1	0	0	0	0	0	0	0	0	0	0.5	8.1
5-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.5
6-Sep	0	0	0	0	0	0	0	0	0	0	A	2	1	1	0	1	1	1	0	0	0	0	0	0	0.4	2.4
7-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
8-Sep	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
10-Sep	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.2	0.7
11-Sep	0	0	0	0	0	0	0	0	0	M	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.1	0.6
12-Sep	0	0	0	0	0	A	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.8
13-Sep	0	0	0	0	A	0	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	2.5
14-Sep	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.2	1.1
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
16-Sep	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.0
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4
22-Sep	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	A	0	0	0	0	0	0	0.2	1.5
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	1	0	0	0	0	0	0.1	0.6
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0.2	0.6
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
																								Diurnal Average		
																								Diurnal Maximum		
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.2 0.3 0.6 0.3 0.3 0.2 0.3 0.2 0.2 0.2 0.1 0.1 0.1 0.0 0.0																										
0.2 0.3 0.2 0.1 0.2 0.1 0.2 0.3 2.3 2.8 2.5 8.1 1.5 0.9 0.8 1.1 1.2 0.6 0.6 0.3 0.3 0.2 0.2 0.1																										
C - Calibration M - Maintenance A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - September 2017



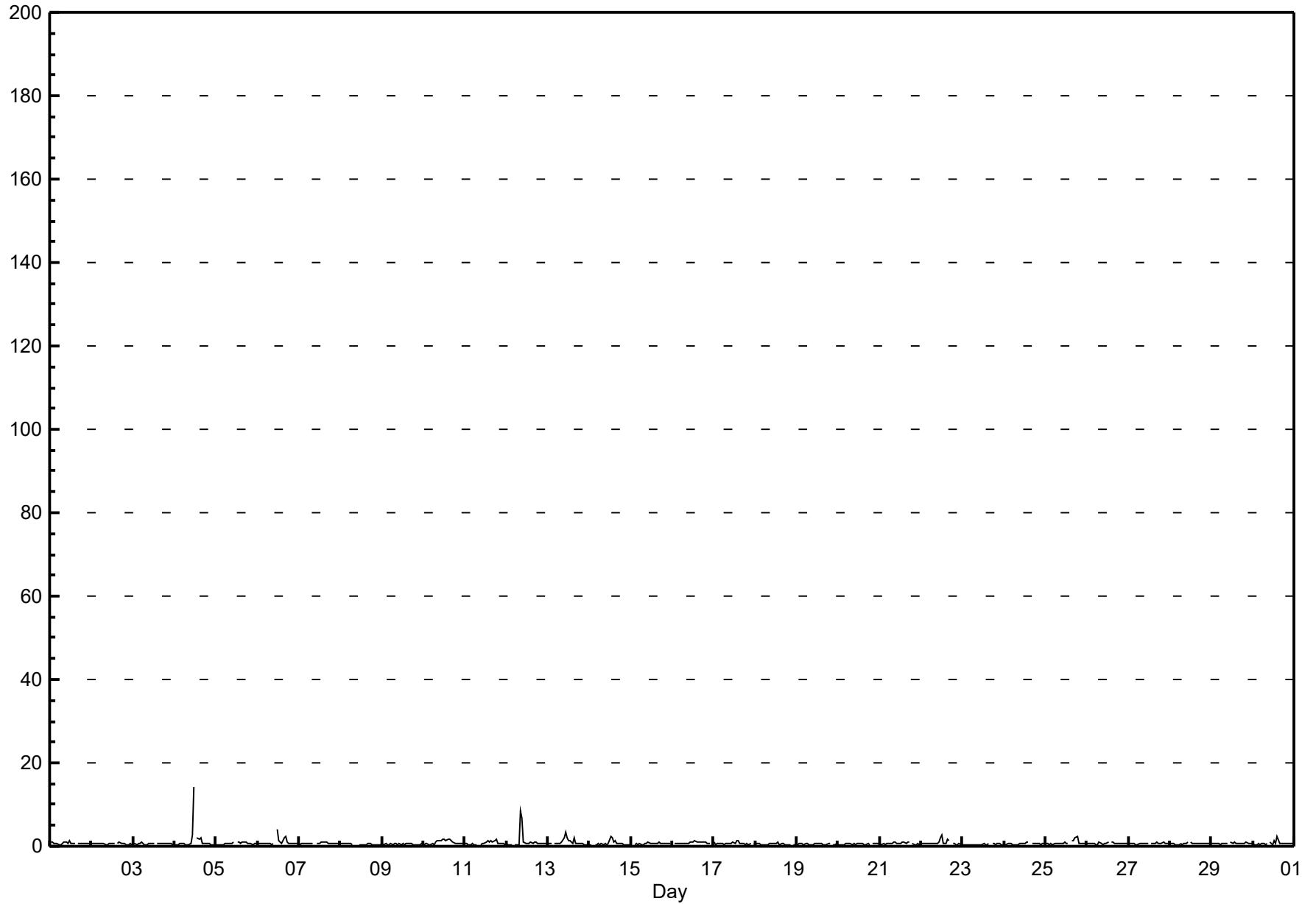
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - September 2017

Maximum Value: 14.2 ppb on Sep 4 12:00		Maximum Daily Average: 1.4 ppb on Sep 4		Hours in Service: 720																																												
Minimum Value: 0 ppb on Sep 15 01:00		Minimum Daily Average: 0.5 ppb on Sep 23		Hours of Data: 689																																												
Maximum Diurnal Average: 1.4 ppb at hour 12		Minimum Diurnal Average: 0.5 ppb at hour 7		Hours of Missing Data: 31																																												
Monthly Average: 0.74 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 1.0 P ₉₉ = 2.6		Hours of Calibration: 30																																												
				Percent Operational Time: 99.9																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.3																						
2-Sep	1	1	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	1	1	1	0	0	1	0	0.6	0.9																						
3-Sep	1	1	0	1	1	1	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0.6	0.9																						
4-Sep	0	0	0	1	1	1	0	0	0	1	3	14	A	2	2	2	1	1	1	1	1	0	0	0	1.4	14.2																						
5-Sep	0	0	0	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0.7	1.1																						
6-Sep	1	1	1	1	1	1	1	1	0	1	A	4	1	1	1	2	2	1	1	1	1	1	1	1	1.0	4.0																						
7-Sep	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0																						
8-Sep	1	1	1	1	1	1	1	1	C	C	C	0	0	0	0	0	1	1	0	0	0	0	0	0	0.5	0.7																						
9-Sep	1	0	1	0	0	1	0	1	1	0	1	0	1	1	1	1	1	1	0	0	0	0	0	1	0.5	0.8																						
10-Sep	0	1	1	0	0	1	0	1	1	1	1	2	2	1	2	2	1	1	1	1	1	1	1	1	1.0	1.8																						
11-Sep	1	1	0	0	1	0	0	0	M	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0.8	1.8																						
12-Sep	1	0	0	0	A	0	0	0	8	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	8.3																						
13-Sep	1	1	1	A	1	1	1	1	1	2	3	2	1	1	1	2	1	1	1	1	1	0	0	0	1.0	3.5																						
14-Sep	0	0	A	0	0	1	0	1	0	1	0	1	2	2	1	1	1	1	1	1	1	0	0	0	0.7	2.4																						
15-Sep	0	A	0	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9																						
16-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.4																						
17-Sep	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	A	1	0.7	1.2																						
18-Sep	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	A	0	0.5	1.1																						
19-Sep	0	1	1	1	0	1	1	0	0	1	1	1	1	1	1	0	0	0	1	1	A	0	0	1	0.5	0.7																						
20-Sep	1	0	0	0	1	1	1	1	0	1	0	1	1	1	1	0	0	1	1	A	1	1	1	1	0.6	0.8																						
21-Sep	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	0	0.7	1.1																						
22-Sep	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	2	1	A	1	1	0	0	1	0	0.9	2.7																						
23-Sep	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	A	1	1	0	1	1	0	0	0.5	0.8																						
24-Sep	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	1.0																						
25-Sep	1	1	0	1	0	1	1	1	1	1	1	1	1	1	A	2	1	2	2	1	1	1	1	1	0.8	2.4																						
26-Sep	1	1	1	1	1	0	0	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.1																						
27-Sep	1	1	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																						
28-Sep	1	1	1	0	0	0	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0																						
29-Sep	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1																						
30-Sep	1	0	0	1	0	1	1	0	1	A	1	0	1	1	2	1	1	1	1	1	1	1	1	1	0.7	2.3																						
																								0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.6	0.9	0.9	0.9	1.4	1.0	0.9	0.9	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	Diurnal Average
																								1.0	1.0	0.8	0.8	0.8	0.9	0.8	1.1	8.3	6.8	3.5	14.2	2.7	2.2	2.3	2.1	2.4	2.0	2.4	0.9	1.1	0.8	0.8	0.8	Diurnal Maximum
C - Calibration																								M - Maintenance						A - Automated Daily Zero Span																		

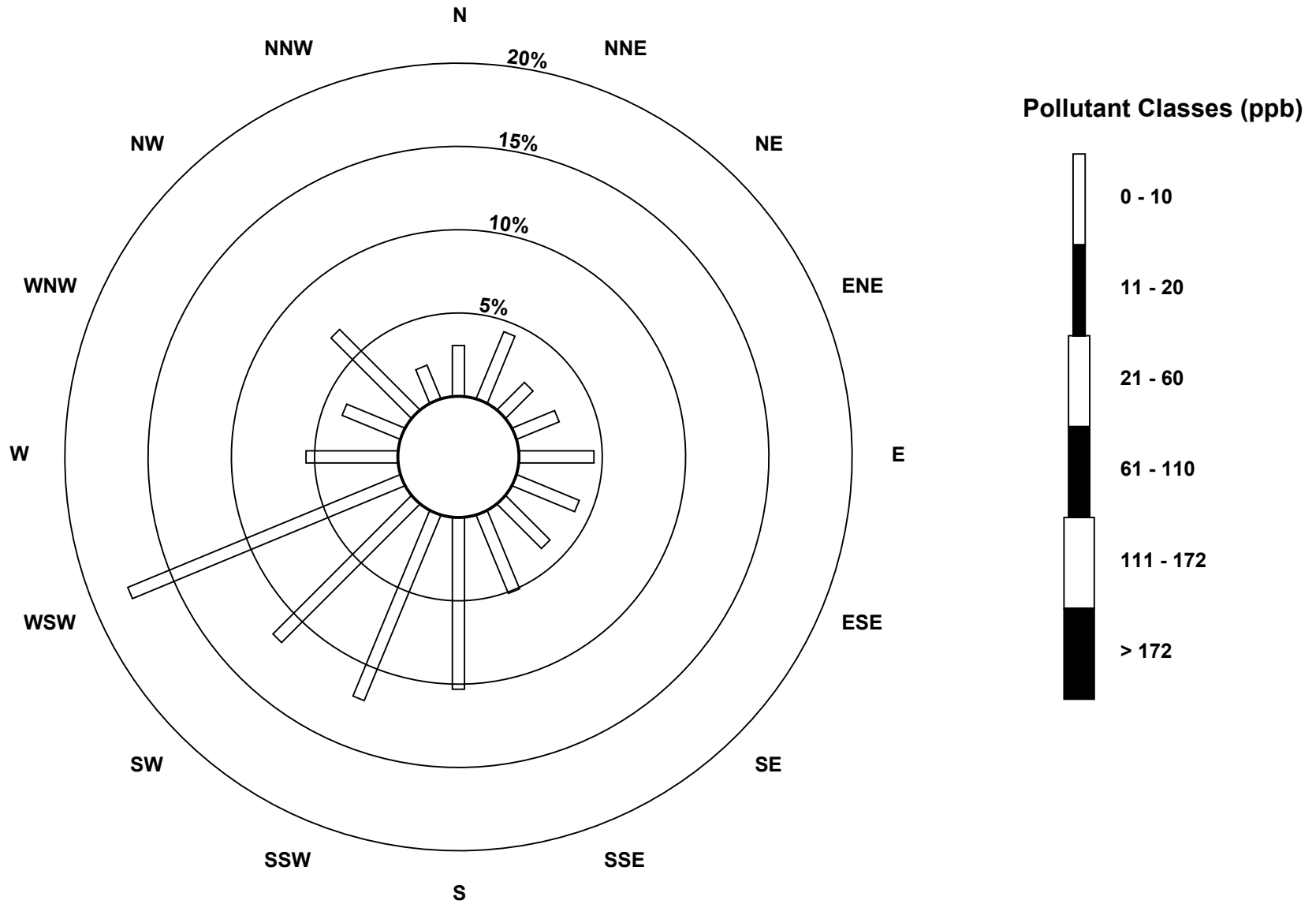
Hourly Maximums

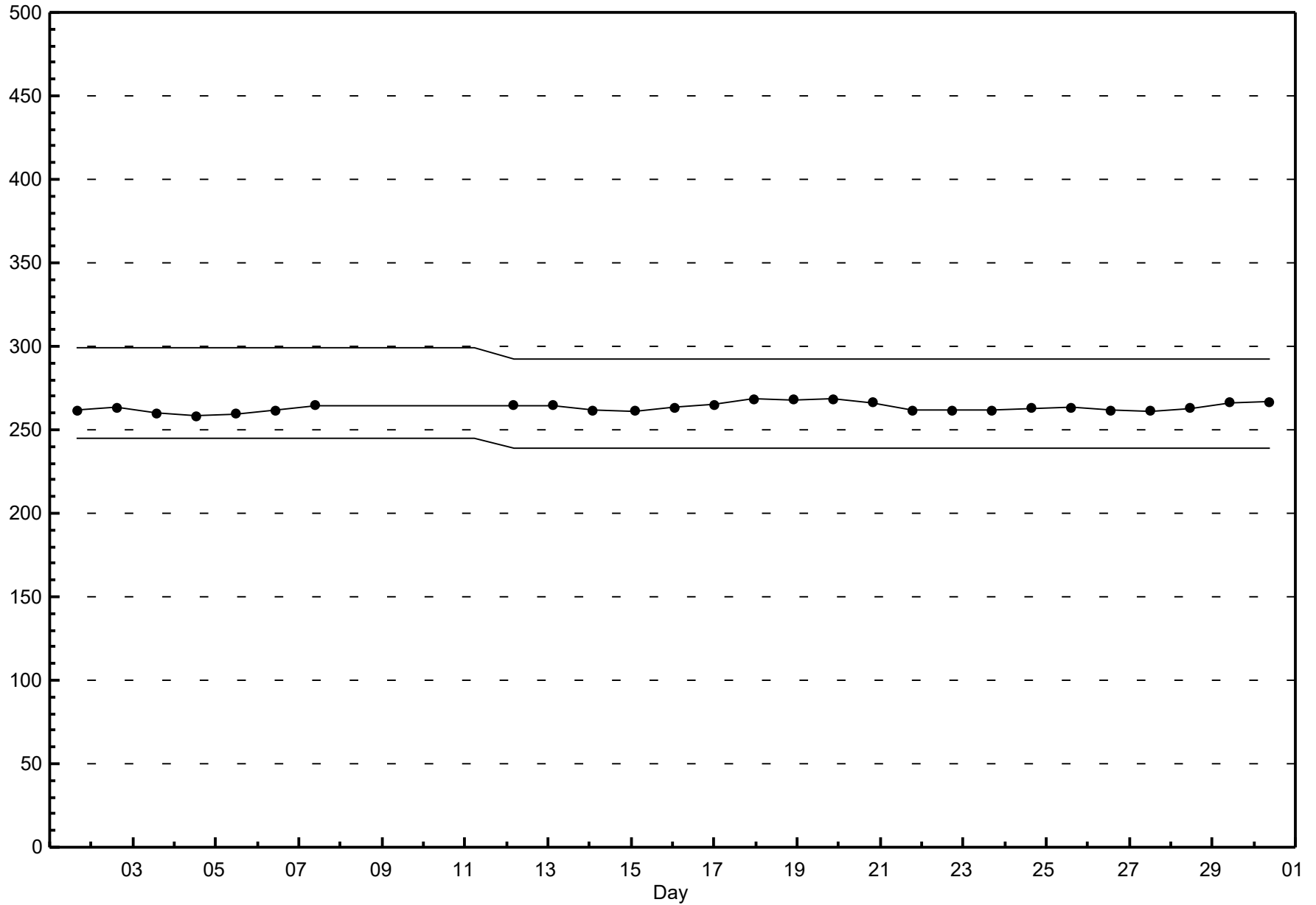
Sulphur Dioxide (SO₂) - ppb
Evergreen Park - September 2017



Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - September 2017

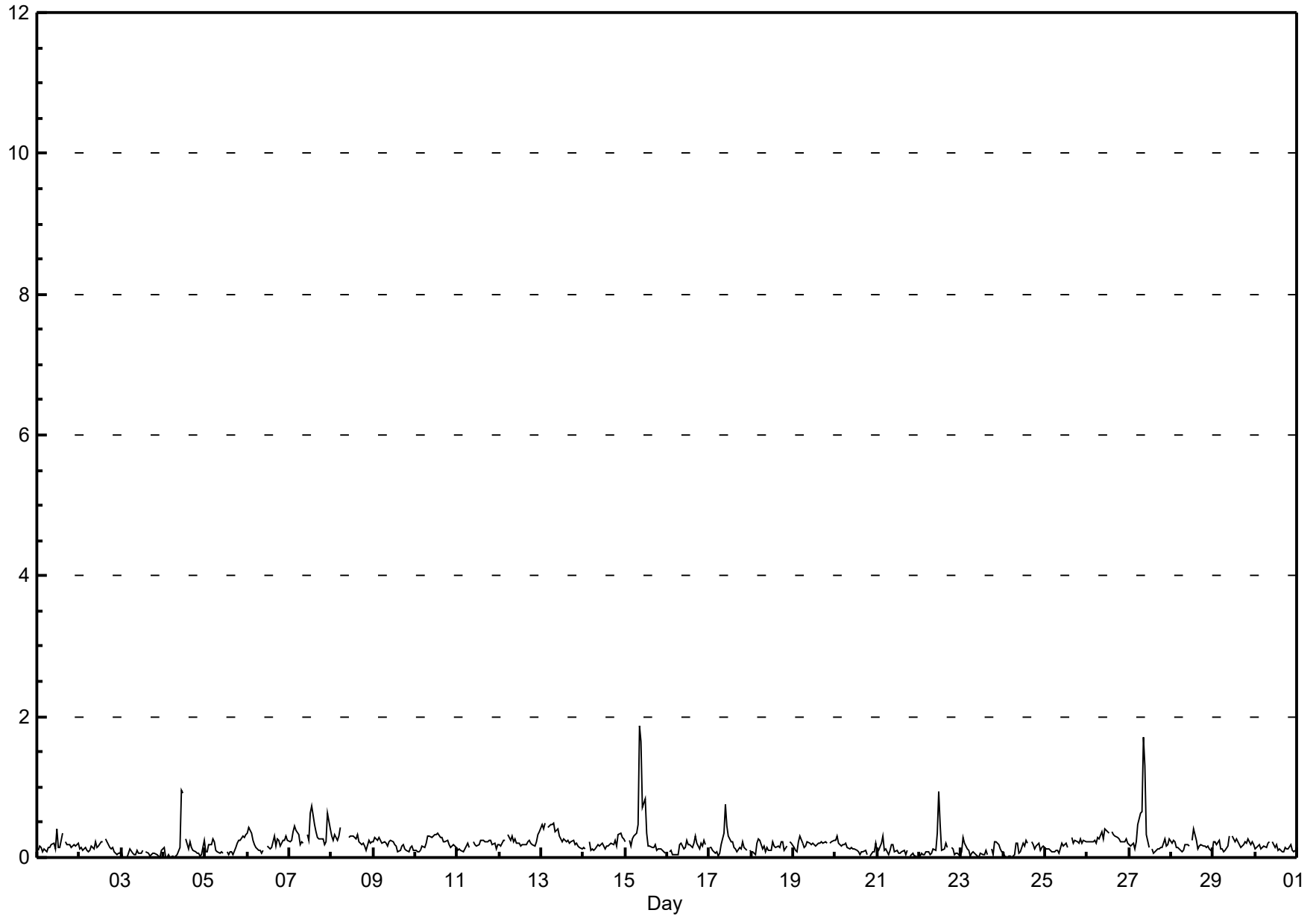




Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - September 2017

Maximum Value: 1.9 ppb on Sep 15 09:00 Minimum Value: 0 ppb on Sep 3 02:00 Maximum Diurnal Average: 0.3 ppb at hour 10 Monthly Average: 0.19 ppb		Maximum Daily Average: 0.4 ppb on Sep 15 Minimum Daily Average: 0.1 ppb on Sep 3 Minimum Diurnal Average: 0.2 ppb at hour 7 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.9		Hours in Service: 720 Hours of Data: 688 Hours of Missing Data: 32 Hours of Calibration: 31 Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
4-Sep	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Sep	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0.3	0.7
8-Sep	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
11-Sep	0	0	0	0	0	0	0	0	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
15-Sep	0	A	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.9
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
17-Sep	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.2	0.3
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0.1	0.3
22-Sep	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.9
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-Sep	0	0	0	0	0	0	1	1	2	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
29-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.5	0.4	0.5	0.4	0.4	0.5	0.6	0.7	1.9	1.6	1.0	0.9	0.6	0.7	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.4	Diurnal Maximum	
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																			



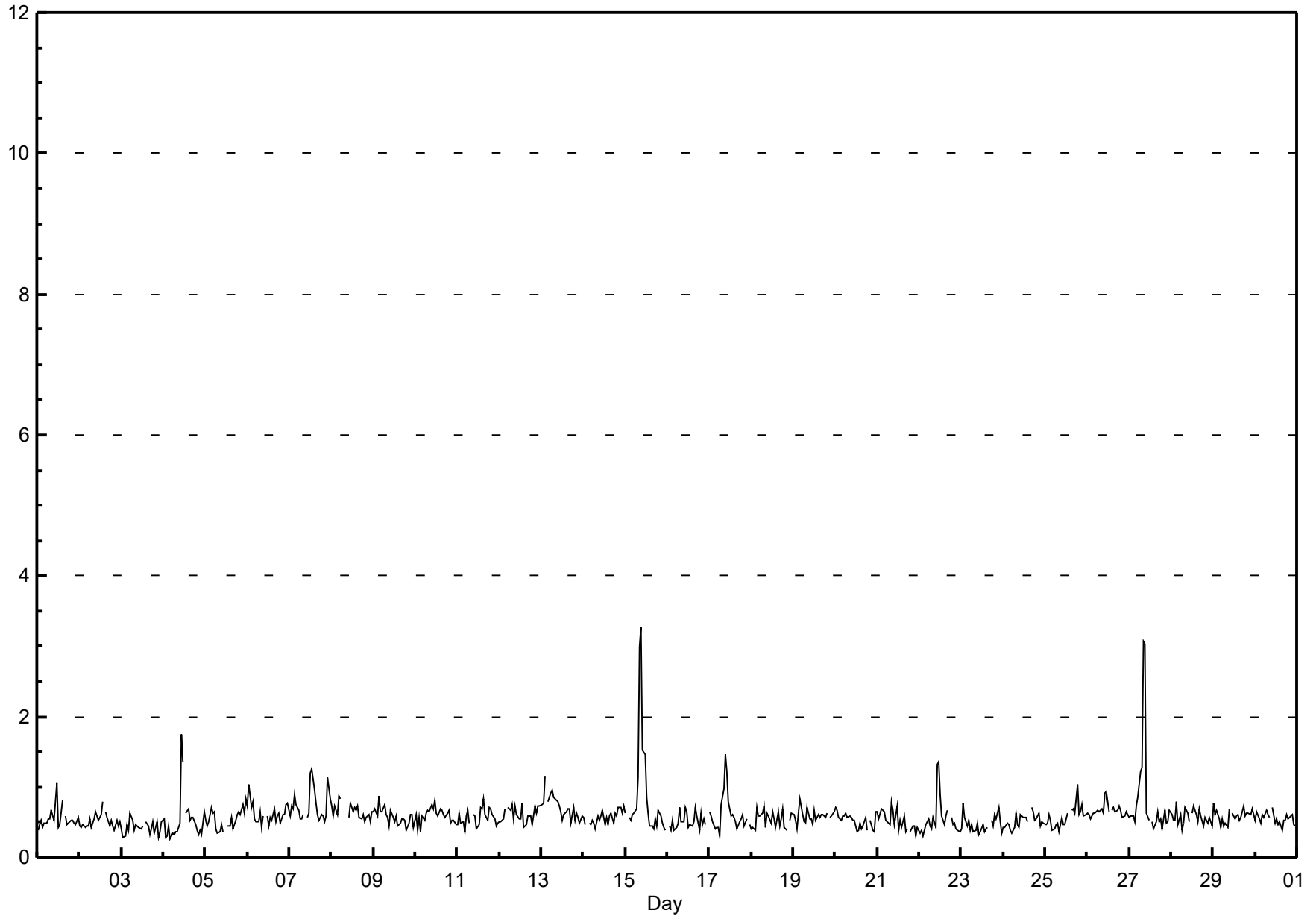
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb Evergreen Park - September 2017

Maximum Value: 3.3 ppb on Sep 15 10:00		Maximum Daily Average: 0.9 ppb on Sep 15		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 4 05:00		Minimum Daily Average: 0.4 ppb on Sep 3		Hours of Data: 688																						
Maximum Diurnal Average: 0.8 ppb at hour 10		Minimum Diurnal Average: 0.5 ppb at hour 20		Hours of Missing Data: 32																						
Monthly Average: 0.59 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.6 P ₉₀ = 0.7 P ₉₉ = 1.4		Hours of Calibration: 31																						
				Percent Operational Time: 99.9																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	1	0	0	0	1	1	1	1	1	1	0	0	1	A	1	0	1	1	1	0	0	1	0.6	1.1
2-Sep	0	0	0	0	0	0	1	0	1	1	1	1	1	1	A	1	1	0	1	0	0	1	0	1	0.5	0.8
3-Sep	0	0	0	0	0	1	1	0	0	0	0	0	0	A	1	0	0	0	0	0	1	0	0	1	0.4	0.6
4-Sep	1	0	0	0	0	0	0	0	0	0	2	1	A	1	1	1	1	1	0	0	0	0	0	1	0.5	1.7
5-Sep	1	0	1	1	1	1	0	0	0	0	0	A	0	0	0	1	0	1	1	1	1	1	1	1	0.5	0.8
6-Sep	1	1	1	1	1	1	1	1	0	1	A	1	0	1	1	1	1	1	1	0	1	1	1	1	0.6	1.0
7-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
8-Sep	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
9-Sep	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	0	0	1	1	0.6	0.9
10-Sep	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.6	0.8
11-Sep	0	1	0	0	0	1	1	0	M	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0.6	0.8
12-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	0.6	0.8
13-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0.7	1.2
14-Sep	1	0	A	0	0	1	0	0	1	1	1	1	0	1	0	1	1	0	1	1	1	1	1	1	0.6	0.7
15-Sep	1	A	1	1	1	1	1	1	3	3	2	1	1	1	0	0	0	1	0	1	1	0	0	0	0.9	3.3
16-Sep	A	0	0	1	0	0	0	1	1	1	1	0	0	0	1	1	1	0	1	0	1	0	1	0	0.5	0.7
17-Sep	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	A	0	0.6	1.5
18-Sep	0	0	0	1	1	1	1	0	1	1	0	1	1	0	1	0	1	1	1	1	0	0	A	1	0.5	0.7
19-Sep	1	1	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8
20-Sep	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	A	1	0	0	1	0.5	0.7
21-Sep	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	0	A	0	0	0	0	0	0.5	0.8
22-Sep	0	0	0	0	0	1	0	0	1	0	1	1	1	0	1	1	A	1	0	0	0	0	0	0	0.6	1.4
23-Sep	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	A	1	0	1	1	1	1	0	0.5	0.8	
24-Sep	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	A	1	1	1	1	1	0	1	0	0.5	0.7
25-Sep	0	0	1	1	0	0	0	0	0	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	0.6	1.0
26-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	0.9
27-Sep	1	1	1	1	1	1	1	1	3	3	1	1	A	1	0	1	1	1	1	0	1	0	1	1	0.8	3.1
28-Sep	1	1	1	1	0	1	0	0	1	1	0	A	1	1	1	1	1	1	0	1	1	0	1	0	0.6	0.8
29-Sep	1	1	1	1	0	1	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
30-Sep	1	1	1	0	1	1	1	1	1	A	1	0	1	0	1	0	1	1	1	1	1	1	0	0	0.6	0.7
		0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.6	Diurnal Average
		0.8	1.0	1.2	0.9	0.9	0.9	1.2	1.3	3.1	3.3	1.7	1.5	1.2	1.3	1.0	0.8	0.7	0.7	1.0	0.7	0.7	0.8	1.1	0.8	Diurnal Maximum
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																		

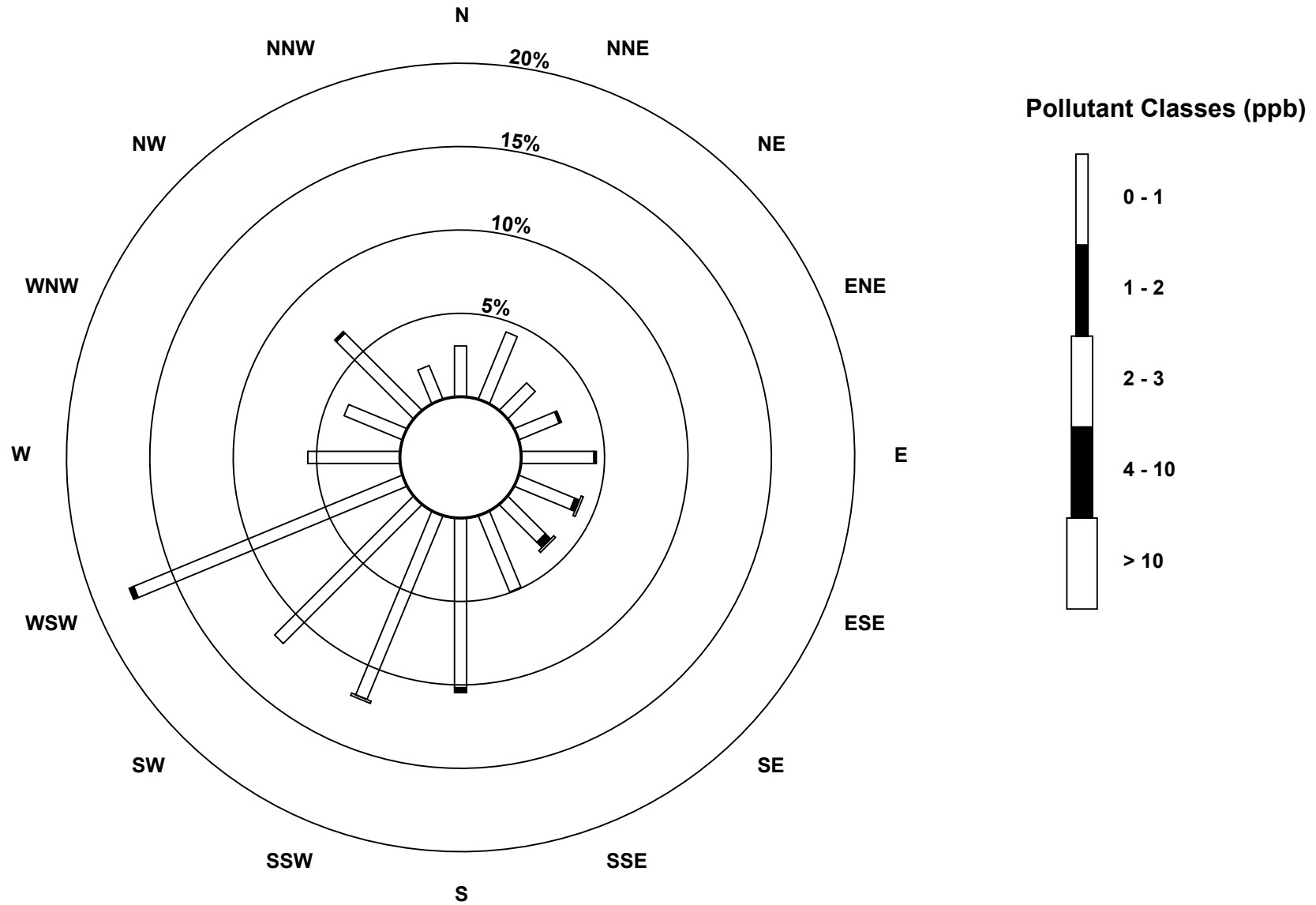
Hourly Maximums

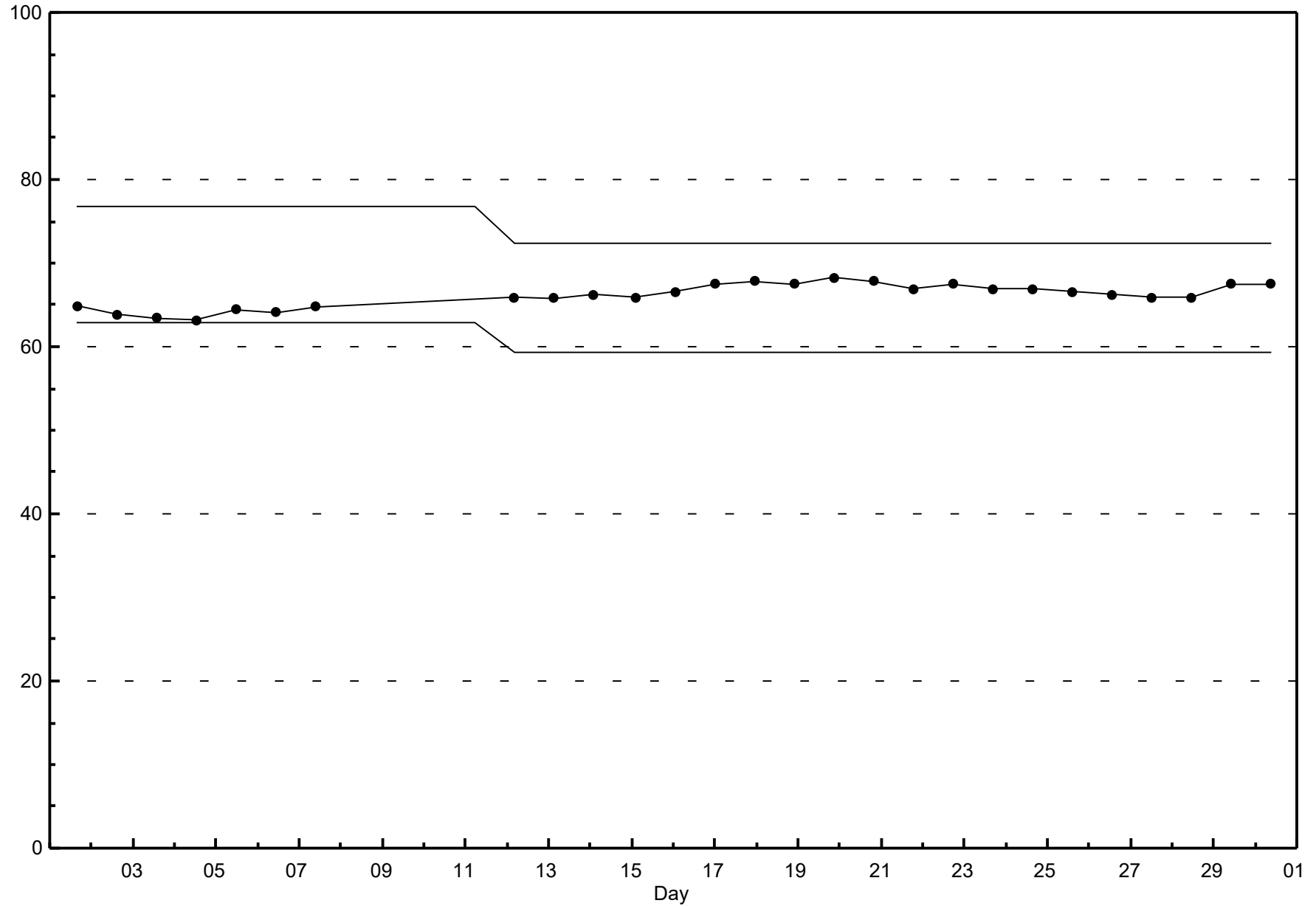
Total Reduced Sulphur (TRS) - ppb
Evergreen Park - September 2017



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - September 2017





Hourly Averages

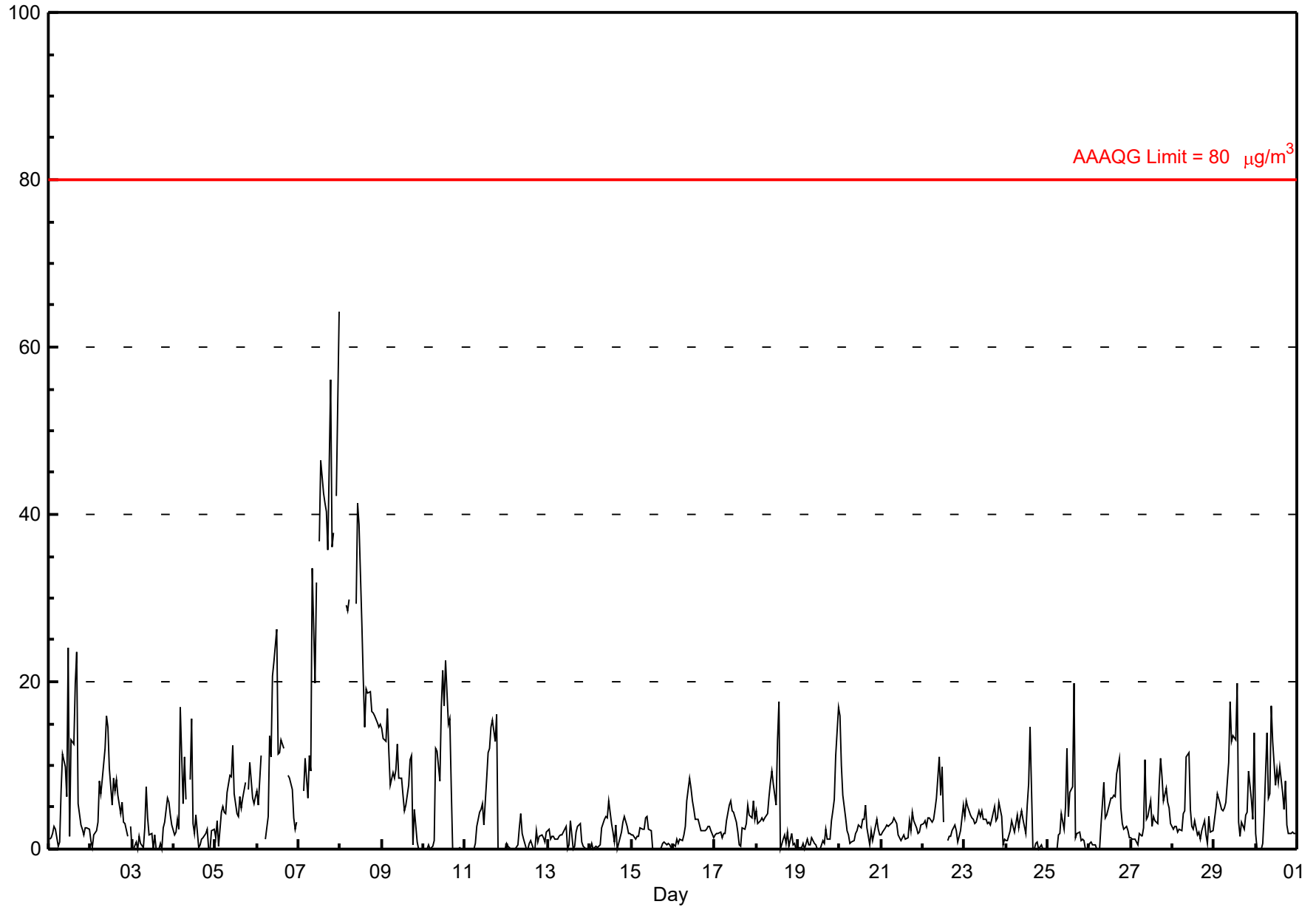
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - September 2017

Number of Exceedences: 1-hr: 0 24-hr: 1	Hours in Service: 720
Maximum Value: 64.3 µg/m ³ on Sep 8 00:00	Maximum Daily Average: 32.1 µg/m ³ on Sep 7
Minimum Value: 0 µg/m ³ on Sep 3 01:00	Hours of Data: 702
Maximum Diurnal Average: 9.0 µg/m ³ at hour 11	Hours of Missing Data: 18
Monthly Average: 5.31 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.0 µg/m ³ on Sep 12	Percent Operational Time: 97.5
Minimum Diurnal Average: 2.6 µg/m ³ at hour 3	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 1.2 Median = 2.9 Q ₃ = 6.1 P ₉₀ = 13.0 P ₉₉ = 41.3	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	1	1	2	3	2	0	1	7	11	10	6	24	1	13	13	20	24	5	3	2	2	3	3	2	6.7	24.1																							
2-Sep	1	0	2	2	3	8	7	8	12	16	15	10	5	8	7	8	6	4	6	3	3	1	N	3	6.1	16.0																							
3-Sep	0	0	1	0	2	1	0	3	8	4	2	2	0	2	0	0	1	0	3	3	6	6	4	3	2.0	7.5																							
4-Sep	2	2	4	2	17	5	11	6	N	8	16	3	2	4	0	0	1	1	2	2	0	0	2	2	4.1	17.0																							
5-Sep	1	3	0	4	5	4	4	7	9	9	12	7	4	4	6	5	6	8	N	7	10	6	5	6	5.9	12.5																							
6-Sep	7	5	11	N	N	1	4	14	11	21	22	26	11	11	13	12	N	N	9	9	7	4	2	3	10.2	26.3																							
7-Sep	N	N	N	7	11	6	11	9	34	20	32	N	37	46	43	41	40	36	56	36	38	N	42	64	32.1	64.3																							
8-Sep	N	27	N	29	29	30	M	M	M	29	41	39	27	20	15	19	19	16	16	16	15	15	15	15	22.9	41.4																							
9-Sep	14	13	13	17	12	8	9	8	9	13	8	8	6	5	5	8	11	11	1	5	1	0	0	0	7.7	16.8																							
10-Sep	0	0	0	0	0	0	1	12	12	8	17	21	17	23	15	16	7	0	0	0	0	0	0	0	6.2	22.5																							
11-Sep	0	0	0	0	0	0	1	3	4	5	5	3	8	12	12	15	15	13	16	0	0	0	0	0	4.7	16.1																							
12-Sep	1	0	0	0	0	0	0	3	4	2	1	0	0	1	1	0	0	2	1	2	2	1	1	2	1.0	4.2																							
13-Sep	2	1	2	1	1	1	2	2	2	2	3	0	1	3	0	0	2	3	3	1	0	0	0	0	1.3	3.4																							
14-Sep	0	1	0	0	0	0	0	3	4	4	4	6	3	2	1	3	0	1	2	3	4	3	2	2	2.0	5.8																							
15-Sep	2	2	1	2	1	3	2	2	4	4	2	2	0	0	0	0	0	0	1	1	0	1	1	0	1.3	4.0																							
16-Sep	1	0	1	1	1	1	2	3	6	8	7	6	5	4	4	3	2	2	2	2	3	3	2	1	2.9	8.5																							
17-Sep	2	2	2	2	1	2	2	3	5	6	5	4	3	2	1	0	3	2	3	5	4	4	6	4	3.0	5.8																							
18-Sep	5	3	3	4	3	4	4	6	8	9	8	5	13	18	0	1	2	1	2	0	2	1	1	0	4.2	17.6																							
19-Sep	0	0	0	1	0	1	0	0	1	1	0	0	0	0	1	1	2	1	1	3	5	6	11	17	2.3	17.0																							
20-Sep	16	10	6	4	2	2	1	1	1	2	2	3	3	4	4	5	3	0	2	1	2	4	2	2	3.3	15.9																							
21-Sep	2	2	2	3	3	3	3	4	3	3	2	1	1	2	1	1	3	2	4	3	3	2	2	3	2.5	4.3																							
22-Sep	3	3	3	4	4	3	4	5	6	11	6	10	3	N	1	2	2	2	3	2	1	2	2	5	3.7	11.1																							
23-Sep	4	6	5	4	4	4	3	3	5	4	5	4	4	3	3	3	4	5	3	4	6	4	0	1	3.7	5.7																							
24-Sep	1	1	2	3	3	2	4	2	4	5	4	2	5	8	15	0	0	1	1	0	1	0	0	0	2.6	14.6																							
25-Sep	0	0	0	0	0	0	2	2	4	2	5	12	4	7	7	20	1	2	2	1	1	1	0	0	3.1	19.9																							
26-Sep	1	1	0	0	0	0	0	3	8	4	4	5	6	6	6	6	9	11	5	3	2	3	2	1	3.6	10.8																							
27-Sep	1	1	1	1	1	2	1	3	11	4	4	6	3	4	3	3	8	11	9	6	7	6	5	3	4.2	10.9																							
28-Sep	2	3	3	2	2	2	4	5	11	11	5	3	2	3	2	2	1	2	3	2	1	4	2	2	3.3	11.5																							
29-Sep	4	5	7	5	5	5	5	6	10	18	13	14	13	20	3	2	3	2	4	4	9	6	4	14	7.5	19.8																							
30-Sep	2	0	0	0	1	4	14	6	7	17	13	8	10	8	10	7	5	8	3	2	2	2	2	2	5.4	17.2																							
																								2.6	3.2	2.6	3.5	3.9	3.4	3.5	4.7	7.6	8.6	9.0	8.0	6.6	8.3	6.4	6.8	6.2	5.4	5.7	4.3	4.6	2.9	4.1	5.3	Diurnal Average	
																								15.9	26.5	12.9	29.2	28.5	29.9	13.8	13.6	33.5	29.4	41.4	38.7	36.7	46.4	42.5	41.3	40.4	35.7	56.0	36.2	37.8	15.1	42.2	64.3	Diurnal Maximum	

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

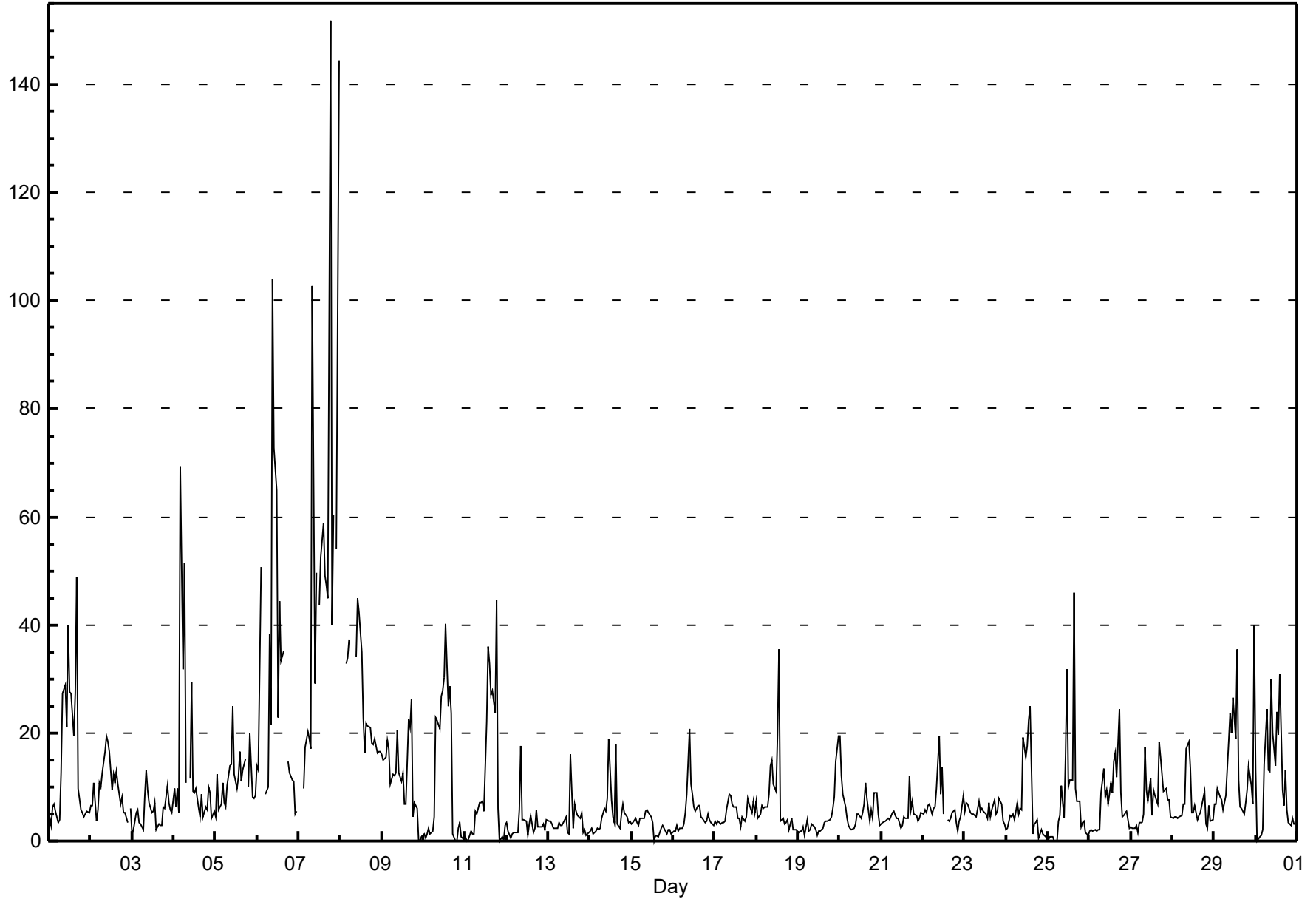


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

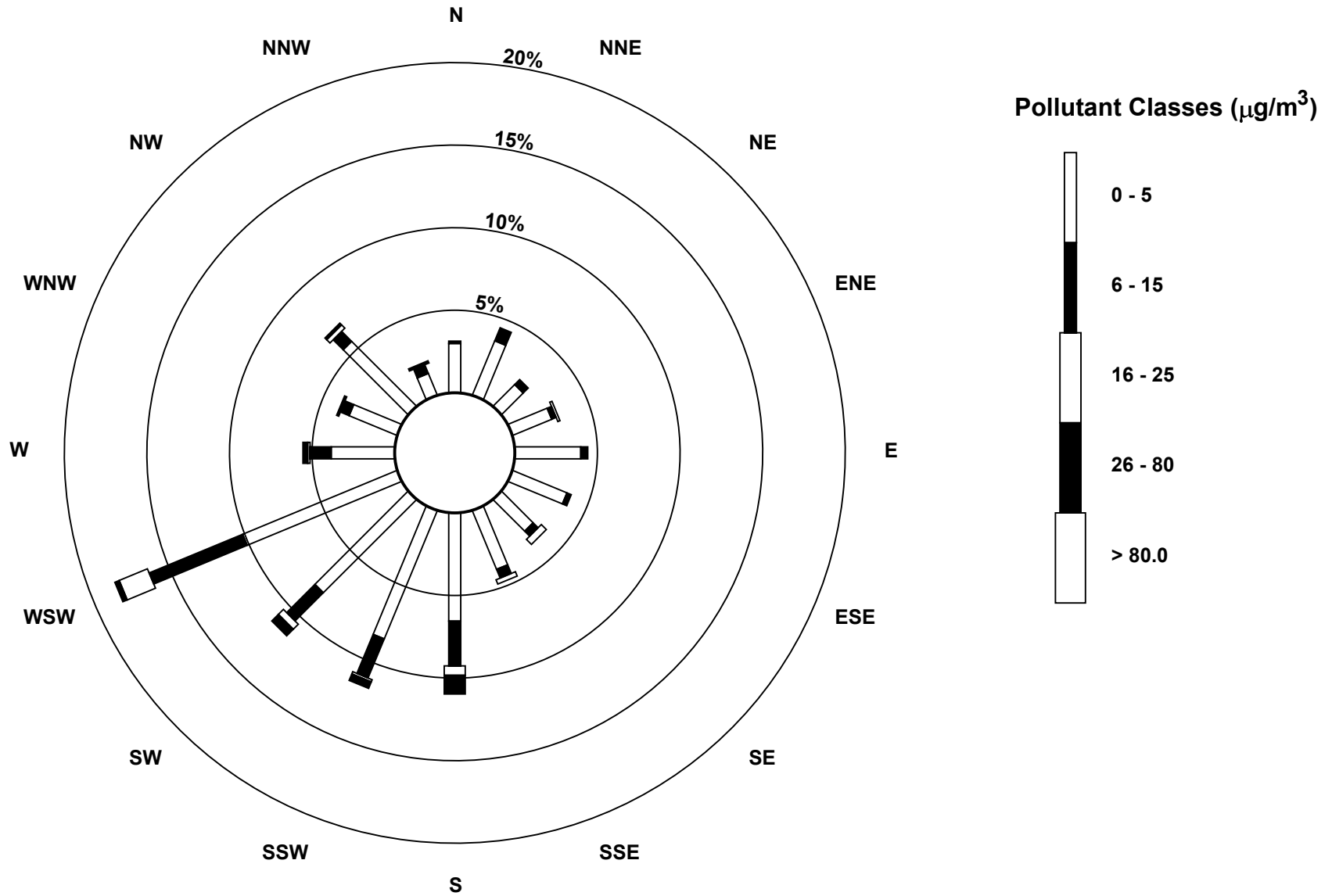
Evergreen Park - September 2017

Maximum Value: 151.8 µg/m ³ on Sep 7 19:00		Maximum Daily Average: 53.2 µg/m ³ on Sep 7		Hours in Service: 720																							
Minimum Value: 0 µg/m ³ on Sep 9 23:00		Minimum Daily Average: 3.0 µg/m ³ on Sep 15		Hours of Data: 702																							
Maximum Diurnal Average: 16.6 µg/m ³ at hour 10		Minimum Diurnal Average: 5.4 µg/m ³ at hour 1		Hours of Missing Data: 18																							
Monthly Average: 10.20 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 1.8 Q ₁ = 3.5 Median = 5.6 Q ₃ = 11.3 P ₉₀ = 22.5 P ₉₉ = 62.8		Hours of Calibration: 0																							
				Percent Operational Time: 97.5																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	4	3	6	7	6	3	4	13	27	29	21	40	28	27	19	27	49	10	6	5	5	5	5	5	14.8	49.0	
2-Sep	7	7	11	4	6	11	10	13	16	20	18	17	10	12	11	13	11	7	8	5	5	3	N	6	9.9	19.6	
3-Sep	1	2	5	6	3	3	2	8	13	10	7	5	5	7	2	3	3	3	6	6	10	7	6	5	5.5	13.2	
4-Sep	10	6	10	5	69	32	52	11	N	12	30	9	9	10	6	4	9	4	6	6	10	9	4	5	14.2	69.3	
5-Sep	4	12	6	7	11	7	6	10	14	14	25	12	10	12	17	11	13	15	N	10	20	8	8	8	11.3	25.0	
6-Sep	14	13	51	N	N	9	10	38	22	104	73	65	23	44	33	35	N	N	15	13	11	11	5	5	29.7	104.1	
7-Sep	N	N	N	10	17	20	19	17	103	29	50	N	44	53	59	49	47	45	152	40	60	N	54	144	53.2	151.8	
8-Sep	N	34	N	33	34	37	M	M	M	34	45	42	35	23	16	22	21	21	18	18	19	16	16	17	26.4	44.9	
9-Sep	16	15	15	19	17	11	12	13	21	13	11	12	7	7	22	21	26	4	7	6	0	0	0	1	12.0	26.4	
10-Sep	1	1	1	2	1	2	5	23	22	21	27	28	30	40	25	29	24	1	0	0	2	3	1	0	12.1	40.3	
11-Sep	1	0	0	2	1	1	6	5	7	7	7	5	22	36	33	27	28	24	45	6	0	1	0	3	11.1	44.6	
12-Sep	4	2	1	1	1	1	1	6	18	4	4	4	1	3	5	2	2	6	3	3	3	3	2	4	3.4	17.7	
13-Sep	4	4	3	2	2	2	3	3	3	4	4	2	1	16	2	7	5	5	4	5	1	2	1	2	3.7	16.1	
14-Sep	2	2	1	2	2	2	2	4	6	5	8	19	8	4	3	18	3	2	5	7	5	4	3	4	5.2	19.0	
15-Sep	3	3	4	3	3	4	4	4	6	6	5	4	4	0	1	1	2	2	3	2	1	2	2	1	3.0	5.9	
16-Sep	2	2	3	2	2	2	3	5	9	21	11	9	6	6	7	7	4	4	3	4	5	4	3	3	5.2	20.8	
17-Sep	4	3	4	3	3	3	4	6	9	8	7	6	6	4	4	2	4	4	5	8	7	5	7	5	5.1	8.6	
18-Sep	7	4	5	7	6	6	6	9	14	15	11	9	20	35	4	4	3	3	4	2	4	2	2	2	7.7	35.4	
19-Sep	1	2	2	3	1	4	2	2	3	3	2	1	2	2	2	4	4	4	4	4	6	8	15	19	4.1	19.3	
20-Sep	20	12	9	6	4	3	2	2	2	3	5	5	4	5	7	11	8	4	6	4	9	9	5	3	6.2	19.6	
21-Sep	3	3	4	4	4	4	5	5	5	4	4	2	3	4	4	4	12	6	7	5	5	4	4	5	4.7	12.0	
22-Sep	5	6	5	7	7	5	6	6	10	20	9	14	5	N	4	4	4	4	5	6	4	2	4	4	8	6.4	19.5
23-Sep	6	7	7	5	5	5	5	4	7	5	6	5	5	4	7	4	6	8	5	5	8	7	4	3	5.6	7.9	
24-Sep	2	2	5	4	5	4	7	5	6	6	19	15	18	22	25	1	3	3	4	1	2	1	1	1	6.8	24.9	
25-Sep	0	1	1	1	0	0	4	5	10	4	16	32	10	11	11	46	10	7	7	3	3	4	1	1	7.9	46.0	
26-Sep	2	2	2	2	2	2	2	9	13	8	9	7	11	9	15	16	12	24	9	4	5	5	4	2	7.4	24.4	
27-Sep	3	2	2	3	2	3	3	5	17	10	7	12	5	10	8	7	18	15	12	9	10	8	8	5	7.7	18.4	
28-Sep	4	5	4	4	4	5	7	7	17	18	14	5	5	7	4	5	5	7	9	3	2	6	4	4	6.5	18.4	
29-Sep	7	7	10	8	8	6	7	8	18	24	20	27	19	36	11	6	6	5	7	10	14	10	7	40	13.3	39.8	
30-Sep	13	0	1	1	2	14	24	13	13	30	20	14	24	20	31	10	7	13	6	3	3	4	3	3	11.4	31.1	
		5.4	5.6	6.3	5.6	8.0	7.1	7.7	9.0	15.1	16.6	16.5	14.7	12.8	16.2	12.8	13.4	11.9	9.8	12.7	6.7	8.1	5.4	6.2	10.5	Diurnal Average	
		19.6	34.2	50.6	32.7	69.3	37.4	51.6	38.3	102.6	104.1	72.8	65.0	43.6	52.5	58.9	49.1	49.0	45.0	151.8	39.9	60.4	16.4	54.0	144.4	Diurnal Maximum	
M - Maintenance		N - Not Valid																									



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - September 2017



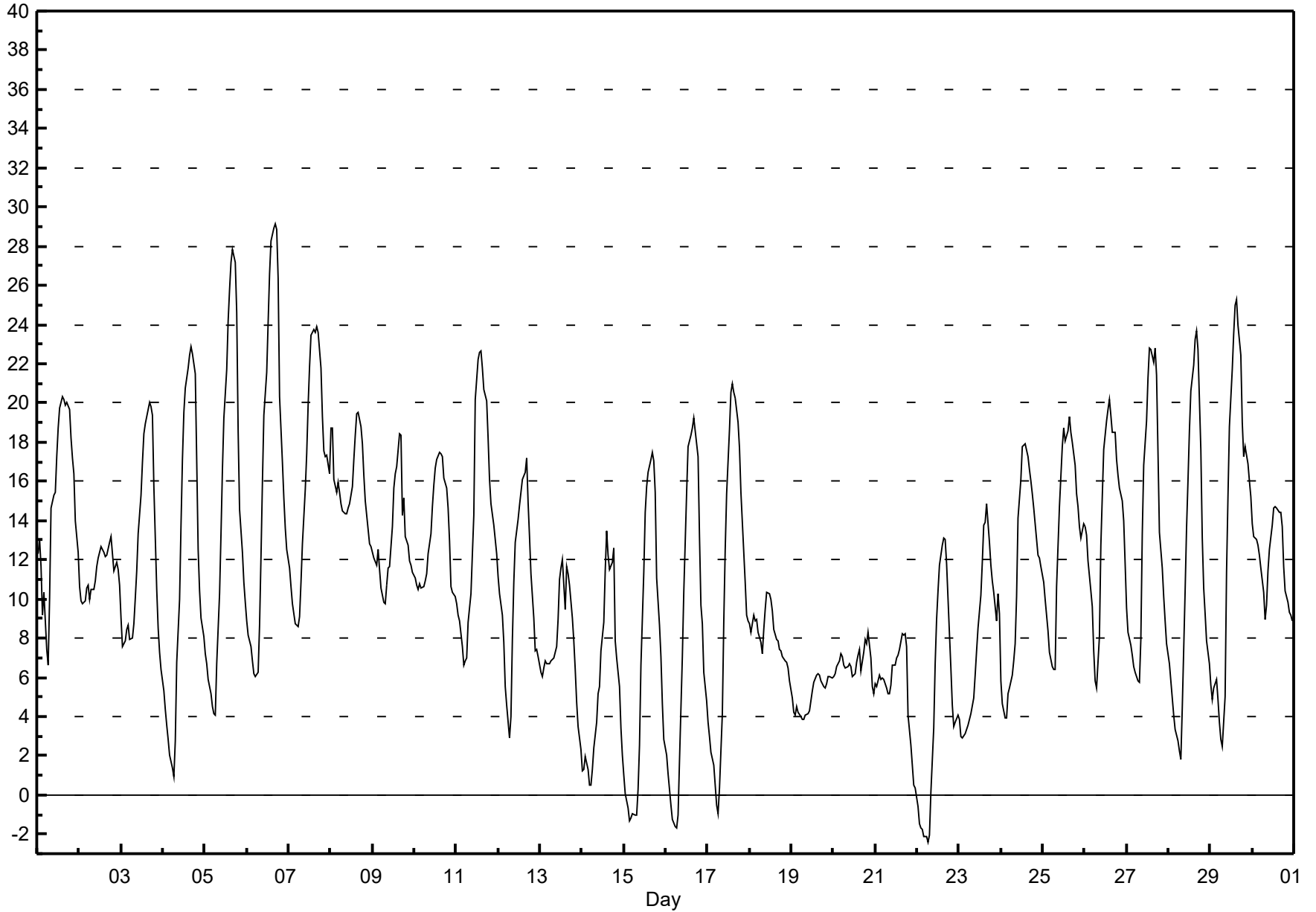
Hourly Averages

External Temperature (ET) - °C
Evergreen Park - September 2017

Maximum Value: 29.2 °C on Sep 6 17:00		Maximum Daily Average: 16.6 °C on Sep 6		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																							
Minimum Value: -2 °C on Sep 22 07:00		Minimum Daily Average: 4.5 °C on Sep 22																									
Maximum Diurnal Average: 17.5 °C at hour 16		Minimum Diurnal Average: 5.3 °C at hour 7																									
Monthly Average: 11.04 °C		Percentiles: P ₁ = -1.7 P ₁₀ = 3.7 Q ₁ = 6.5 Median = 10.5 Q ₃ = 15.4 P ₉₀ = 19.4 P ₉₉ = 27.1																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	12	13	12	9	10	7	7	10	15	15	15	17	19	20	20	20	20	20	18	17	16	14	12	15.0	20.3		
2-Sep	11	10	10	10	11	11	10	10	10	11	12	12	13	13	12	12	12	13	13	12	11	12	12	11	11.4	13.2	
3-Sep	9	8	8	8	9	8	8	9	10	11	13	15	17	18	19	20	20	20	19	16	11	9	7	6	12.4	20.0	
4-Sep	5	4	4	3	2	1	1	3	7	10	14	17	20	21	22	22	23	23	21	17	13	10	9	8	11.6	22.9	
5-Sep	7	7	6	5	4	4	4	7	10	13	17	19	22	24	26	27	28	27	25	19	15	12	11	10	14.5	27.8	
6-Sep	9	8	8	7	6	6	6	9	12	16	19	22	24	27	28	29	29	29	26	20	17	15	14	13	16.6	29.2	
7-Sep	12	11	10	9	9	9	9	11	13	16	17	20	22	23	24	24	24	24	22	19	18	17	17	16	16.4	23.9	
8-Sep	19	19	16	15	16	15	15	15	14	14	15	15	16	17	18	19	20	19	18	16	15	14	13	13	16.0	19.5	
9-Sep	12	12	12	12	12	11	10	10	11	12	12	14	16	16	17	18	18	14	15	13	13	12	12	11	13.1	18.4	
10-Sep	11	11	10	11	11	11	11	11	12	13	15	16	17	17	18	17	17	16	16	15	13	11	10	10	13.3	17.5	
11-Sep	10	9	9	8	7	7	7	9	10	12	14	20	22	23	23	22	21	20	18	16	15	14	13	12	14.2	22.7	
12-Sep	11	10	9	8	6	5	3	4	8	11	13	14	15	15	16	16	17	15	13	11	9	7	7	7	10.5	17.2	
13-Sep	6	6	6	7	7	7	7	7	7	8	9	11	12	12	9	12	11	11	9	8	6	5	3	2	7.8	12.0	
14-Sep	1	1	2	1	0	0	1	2	4	5	6	7	9	11	13	12	12	12	13	8	7	5	3	2	5.8	13.5	
15-Sep	1	0	-1	-1	-1	-1	-1	-1	0	3	7	11	14	16	16	17	17	17	15	11	9	7	5	3	6.8	17.5	
16-Sep	2	1	0	-1	-1	-2	-2	-1	2	7	10	13	15	18	18	19	19	19	17	13	10	9	6	5	8.2	19.3	
17-Sep	4	3	2	2	0	-1	-1	0	4	9	13	15	19	21	21	21	20	19	18	15	14	11	9	9	10.3	21.0	
18-Sep	9	8	9	9	9	8	8	7	8	9	10	10	10	9	8	8	8	7	7	7	7	7	6	6	8.2	10.4	
19-Sep	5	4	4	5	4	4	4	4	4	4	5	5	6	6	6	6	6	6	5	6	6	6	6	6	5.0	6.2	
20-Sep	6	6	7	7	7	7	7	6	7	7	7	6	6	7	7	7	6	7	8	8	8	7	6	5	6.7	8.3	
21-Sep	6	5	6	6	6	6	5	5	5	6	7	7	7	7	7	8	8	8	8	4	3	2	0	0	5.5	8.2	
22-Sep	-1	-1	-2	-2	-2	-2	-2	-2	0	3	7	9	10	12	13	13	13	12	8	6	5	4	4	4	4.5	13.1	
23-Sep	4	3	3	3	3	4	4	4	5	6	7	9	10	12	14	14	15	13	12	11	10	9	10	9	8.1	14.8	
24-Sep	6	5	4	4	5	5	6	7	8	10	14	16	18	18	18	17	17	16	15	15	13	12	12	12	11.3	17.9	
25-Sep	11	10	9	8	7	7	6	6	11	15	16	18	19	18	19	19	19	18	17	15	15	14	13	14	13.5	19.3	
26-Sep	14	13	12	10	10	7	6	5	8	13	15	18	19	20	20	19	18	19	17	16	16	15	14	12	14.0	20.1	
27-Sep	10	8	8	7	7	6	6	6	8	13	17	19	21	23	23	22	23	23	21	18	13	12	10	9	8	13.2	22.8
28-Sep	7	6	5	4	3	3	2	2	4	10	14	16	19	21	22	23	24	23	18	13	11	9	8	7	11.3	23.7	
29-Sep	6	5	5	6	5	4	3	2	5	11	15	19	22	24	25	25	24	22	19	17	18	17	16	15	13.8	25.3	
30-Sep	14	13	13	13	12	12	10	9	10	11	13	14	15	15	15	14	14	14	12	10	10	9	9	9	12.0	14.7	
		7.9	7.3	6.9	6.4	6.1	5.6	5.3	5.9	7.7	10.2	12.2	14.1	15.7	16.7	17.3	17.5	16.8	15.4	13.0	11.4	10.2	9.3	8.6	Diurnal Average		
		18.7	18.7	16.1	15.4	15.9	15.5	14.8	14.5	14.6	15.9	19.4	21.6	24.1	26.6	28.3	29.0	29.2	28.9	26.4	20.3	17.8	17.3	17.3	16.4	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Evergreen Park - September 2017



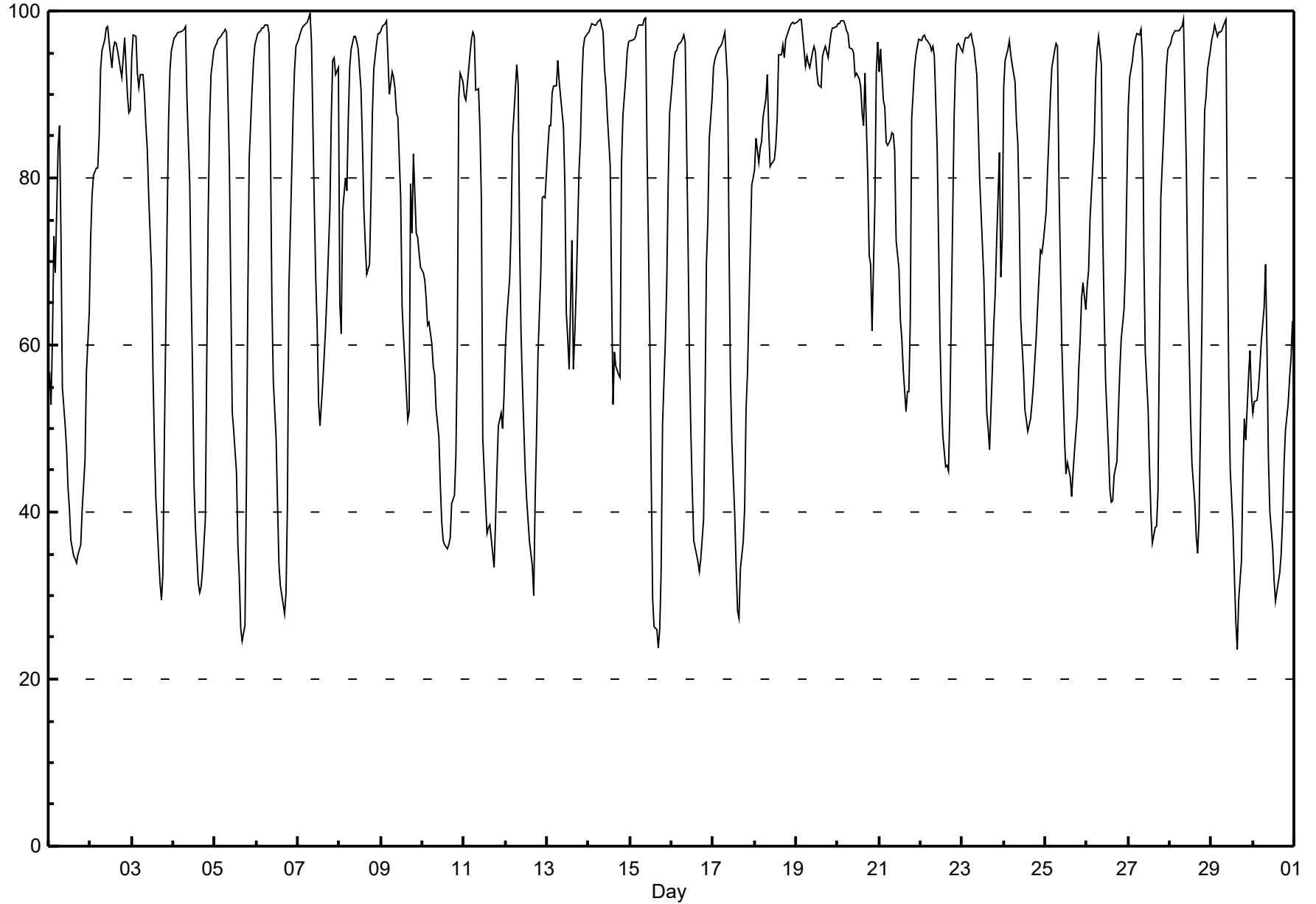
Hourly Averages

Relative Humidity (RH) - % Evergreen Park - September 2017

Maximum Value: 99.6 % on Sep 7 08:00		Maximum Daily Average: 95.6 % on Sep 19		Hours in Service: 720																							
Minimum Value: 24 % on Sep 29 16:00		Minimum Daily Average: 48.8 % on Sep 30		Hours of Data: 720																							
Maximum Diurnal Average: 92.7 % at hour 7		Minimum Diurnal Average: 47.8 % at hour 16		Hours of Missing Data: 0																							
Monthly Average: 73.69 %		Percentiles: P ₁ = 26.3 P ₁₀ = 38.7 Q ₁ = 54.2 Median = 81.0 Q ₃ = 95.3 P ₉₀ = 97.4 P ₉₉ = 99.0		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	57	53	61	73	69	84	86	73	55	50	47	43	40	37	35	34	34	35	36	40	43	46	57	64	52.2	86.3	
2-Sep	73	78	80	81	81	85	93	95	97	98	98	96	93	95	96	96	95	93	92	94	97	90	88	88	90.6	98.2	
3-Sep	94	97	97	93	91	92	92	90	86	83	78	69	57	48	42	35	31	30	33	48	75	87	93	95	72.3	97.0	
4-Sep	97	97	97	97	98	98	98	98	90	79	67	56	43	38	31	30	31	33	39	58	75	87	92	95	71.9	98.2	
5-Sep	96	96	97	97	97	97	98	98	82	66	52	50	45	36	32	26	25	26	43	65	82	90	94	96	70.3	97.8	
6-Sep	97	97	98	98	98	98	98	97	84	66	56	49	41	34	31	29	28	30	41	67	80	88	93	96	70.5	98.3	
7-Sep	97	97	98	98	98	99	99	100	96	76	68	62	53	50	56	59	62	66	76	87	94	94	92	93	82.2	99.6	
8-Sep	65	61	76	80	78	87	93	95	97	97	96	95	91	84	76	72	69	70	77	88	93	96	97	97	84.7	97.3	
9-Sep	98	98	98	99	94	90	93	92	91	88	87	78	65	61	58	51	52	79	73	83	73	73	71	69	79.8	98.9	
10-Sep	69	68	66	62	63	60	57	56	52	49	43	39	37	36	36	36	37	41	42	47	59	89	92	92	55.4	92.5	
11-Sep	90	89	91	95	97	97	97	90	91	86	77	49	41	38	38	38	37	33	39	45	50	52	50	54	65.2	97.5	
12-Sep	60	63	68	74	85	88	94	91	73	62	55	45	41	39	36	34	30	41	49	59	69	78	78	78	62.0	93.5	
13-Sep	84	86	86	90	91	91	94	92	90	86	79	64	61	57	73	57	61	67	81	85	91	96	97	97	81.5	97.2	
14-Sep	97	98	98	98	98	99	99	99	97	93	91	88	82	67	53	59	57	56	56	82	87	92	95	96	85.0	99.0	
15-Sep	96	96	97	97	98	98	98	98	99	99	84	61	44	30	26	26	24	26	33	50	61	68	80	88	69.9	99.1	
16-Sep	92	94	95	95	96	96	97	97	96	72	59	50	43	37	35	34	33	34	39	53	70	75	85	90	69.4	97.2	
17-Sep	93	94	95	96	96	96	97	97	91	72	56	48	40	33	28	27	33	36	40	52	57	72	79	80	67.0	97.5	
18-Sep	81	85	82	84	84	87	90	92	86	81	82	82	84	87	95	95	96	94	97	97	98	99	99	99	89.8	98.6	
19-Sep	99	99	99	99	97	93	95	94	93	95	96	95	93	91	91	95	95	96	94	96	97	98	98	98	95.6	99.0	
20-Sep	98	99	99	99	98	98	97	96	96	95	92	92	92	91	88	86	93	80	71	70	62	77	93	96	89.8	98.7	
21-Sep	93	95	89	88	84	84	85	85	85	83	73	69	63	61	57	52	54	54	63	87	93	95	96	97	78.6	96.7	
22-Sep	96	97	97	97	96	96	95	96	95	84	72	61	53	49	46	46	45	52	76	87	94	96	96	95	79.9	97.1	
23-Sep	95	96	97	97	97	97	96	96	92	87	80	76	68	60	52	50	47	57	63	66	72	83	68	73	77.7	97.3	
24-Sep	91	94	95	96	95	93	92	87	84	76	63	57	52	51	50	51	53	55	58	61	68	71	71	72	72.4	96.5	
25-Sep	76	81	85	90	93	95	96	96	80	60	54	49	45	46	44	42	45	47	52	57	60	66	68	64	66.3	96.1	
26-Sep	67	69	75	81	85	92	95	97	94	73	64	56	48	43	41	41	44	46	52	57	61	64	69	79	66.4	96.9	
27-Sep	88	92	94	96	97	97	97	98	94	71	59	52	45	40	36	38	38	42	61	78	85	90	93	95	74.1	97.8	
28-Sep	96	97	97	98	98	98	98	98	99	82	68	60	51	46	41	37	35	39	62	79	88	90	93	95	76.9	99.0	
29-Sep	97	97	98	97	97	97	98	98	99	74	56	45	38	32	27	24	29	34	45	51	49	56	59	54	64.7	98.9	
30-Sep	52	53	53	55	57	61	65	70	60	47	40	36	32	29	30	33	35	39	45	50	53	56	59	63	48.8	69.6	
		86.1	87.3	88.6	90.0	90.2	91.5	92.7	92.1	87.4	77.7	69.8	62.4	56.0	51.5	49.3	47.8	48.3	51.2	57.6	67.9	74.6	80.4	83.1	85.0	Diurnal Average	
		98.7	98.7	99.0	99.0	98.3	98.7	99.1	99.6	99.0	99.1	98.2	96.2	93.1	95.4	96.2	96.0	96.0	95.8	96.7	97.1	98.1	98.5	98.6	98.5	Diurnal Maximum	

Hourly Averages

**Relative Humidity (RH) - %
Evergreen Park - September 2017**





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	11	13	3	6	7	3	1	5	16	22	29	35	37	39	40	40	45	33	32	24	22	13	4	5	19.5	44.6
Dir	231	236	261	183	198	82	131	224	239	237	238	244	235	247	249	247	246	243	243	238	236	242	202	215	240.0	245.7
2 Spd	2	1	0	2	4	2	1	2	4	4	1	4	2	6	4	5	4	11	8	8	7	9	10	8	3.4	11.3
Dir	163	84	124	194	189	169	54	169	174	191	181	174	297	314	299	293	224	197	217	210	213	232	234	223	217.9	197.3
3 Spd	3	5	7	5	6	6	6	5	5	3	1	4	10	9	15	18	18	18	10	1	1	1	0	0	5.6	17.9
Dir	240	209	224	249	269	307	278	265	255	302	344	329	309	276	306	300	310	320	325	320	188	205	215	241	293.3	319.7
4 Spd	1	1	1	1	0	0	0	1	3	2	5	8	8	10	9	7	6	6	5	2	0	1	1	0	2.8	9.6
Dir	170	200	190	181	245	198	82	148	161	178	127	119	124	143	124	156	122	94	88	70	346	20	27	212	127.9	142.8
5 Spd	1	0	1	0	1	1	2	6	10	6	6	4	4	4	4	4	4	3	2	0	1	0	0	0	2.3	9.5
Dir	24	214	202	167	197	204	203	217	235	239	240	210	222	192	197	162	191	168	117	14	182	31	182	222	209.5	234.5
6 Spd	0	3	1	2	1	2	1	2	6	4	2	5	4	2	3	5	6	5	3	0	0	0	0	0	1.8	6.3
Dir	21	192	210	192	192	194	171	187	219	231	175	202	218	257	139	130	135	134	107	191	189	2	8	205	177.8	218.7
7 Spd	0	0	1	1	2	3	6	5	3	4	7	4	7	4	7	6	4	5	4	3	1	1	3	2	2.8	7.3
Dir	220	37	200	171	200	185	201	195	225	229	233	213	253	253	191	180	169	198	184	199	220	344	316	334	211.8	191.1
8 Spd	9	5	3	4	5	4	3	1	3	5	6	6	7	8	7	7	9	7	5	2	1	0	1	1	2.5	9.5
Dir	296	276	262	230	289	280	318	149	170	172	179	172	176	185	163	146	172	159	154	137	66	65	46	31	191.2	295.7
9 Spd	1	1	2	5	3	3	5	4	3	5	2	2	6	6	6	5	8	17	9	15	20	14	21	26	7.3	25.7
Dir	11	171	202	232	285	270	206	190	218	286	238	122	195	207	223	223	247	244	229	226	233	237	238	235	232.2	235.1
10 Spd	23	19	25	30	34	36	40	34	38	37	42	48	46	43	37	36	34	26	22	13	7	1	2	3	27.3	47.7
Dir	231	223	219	236	232	240	237	244	247	242	244	247	243	248	251	243	236	232	236	225	181	82	94	95	239.0	246.8
11 Spd	3	3	2	2	3	1	3	3	0	0	1	15	32	40	35	36	38	39	38	26	22	17	18	16	14.7	40.0
Dir	78	74	81	60	60	114	180	192	78	98	148	226	232	235	238	259	260	262	254	244	236	247	242	236	244.8	235.2
12 Spd	13	11	10	4	4	2	0	3	6	9	6	12	11	8	12	10	7	12	10	4	3	5	5	3	4.8	12.9
Dir	235	236	245	278	304	235	171	281	270	281	318	329	316	276	289	320	324	3	25	24	19	9	14	280	304.2	234.6
13 Spd	4	2	6	8	7	5	6	8	9	10	6	4	3	9	3	11	5	8	1	3	4	2	0	0	3.7	10.9
Dir	306	264	305	322	305	286	298	284	289	300	325	309	311	317	66	296	238	189	114	65	238	207	183	74	294.0	295.9
14 Spd	1	6	5	4	6	3	1	5	7	6	13	13	10	14	12	9	8	7	2	2	3	1	0	1	4.5	13.7
Dir	207	202	209	205	192	176	184	202	245	267	249	256	233	229	239	306	321	269	280	193	132	182	35	106	240.5	229.4
15 Spd	1	2	0	0	0	1	1	3	3	4	6	8	12	14	13	12	11	10	5	6	6	6	4	2	4.6	13.5
Dir	27	35	84	219	158	33	6	90	126	103	114	133	145	154	147	159	159	153	115	87	90	88	70	55	130.4	154.1
16 Spd	1	0	1	0	0	0	2	2	2	4	4	5	7	6	5	6	8	10	5	2	4	3	3	2	2.1	10.3
Dir	17	356	223	156	203	70	196	172	193	220	152	200	207	218	181	111	107	112	102	97	94	89	59	63	142.1	111.6
17 Spd	1	0	0	0	0	0	0	1	3	5	8	8	9	8	10	4	9	8	6	1	2	1	4	4	3.0	9.9
Dir	9	28	202	2	69	225	120	323	47	79	119	123	116	110	114	127	82	84	98	38	95	353	260	218	104.2	113.8
18 Spd	4	3	7	4	4	4	3	3	5	9	12	15	14	13	7	3	3	5	5	3	5	2	3	4	4.5	15.4
Dir	198	260	226	278	313	178	165	182	268	240	256	283	245	245	257	251	281	307	201	186	164	183	198	190	243.2	283.1
19 Spd	3	2	1	7	10	8	10	11	10	11	14	19	21	24	17	18	13	12	19	11	12	16	17	16	10.9	24.0
Dir	195	198	210	265	282	249	244	248	251	251	258	252	264	260	287	282	309	311	308	329	316	318	321	316	281.8	260.1
20 Spd	10	11	12	14	22	22	20	22	21	20	25	26	16	19	22	22	14	23	21	20	19	6	3	5	15.5	26.3
Dir	326	310	331	6	21	24	22	20	17	11	14	19	4	348	336	335	14	327	3	8	356	53	158	213	2.2	18.9
21 Spd	3	4	8	9	13	15	15	16	15	14	15	17	17	15	12	12	9	6	2	2	2	1	1	0	8.6	17.1
Dir	360	264	301	304	315	321	328	319	313	301	322	316	316	326	326	308	295	270	245	181	186	196	219	156	311.9	316.3
22 Spd	0	1	0	1	1	0	1	2	2	2	3	5	5	5	5	3	6	3	1	0	1	0	1	0	1.6	6.2
Dir	243	133	161	196	209	142	173	179	192	27	71	145	134	137	113	141	178	176	90	25	21	199	39	159	143.4	178.4



Peace Airshed Zone Association

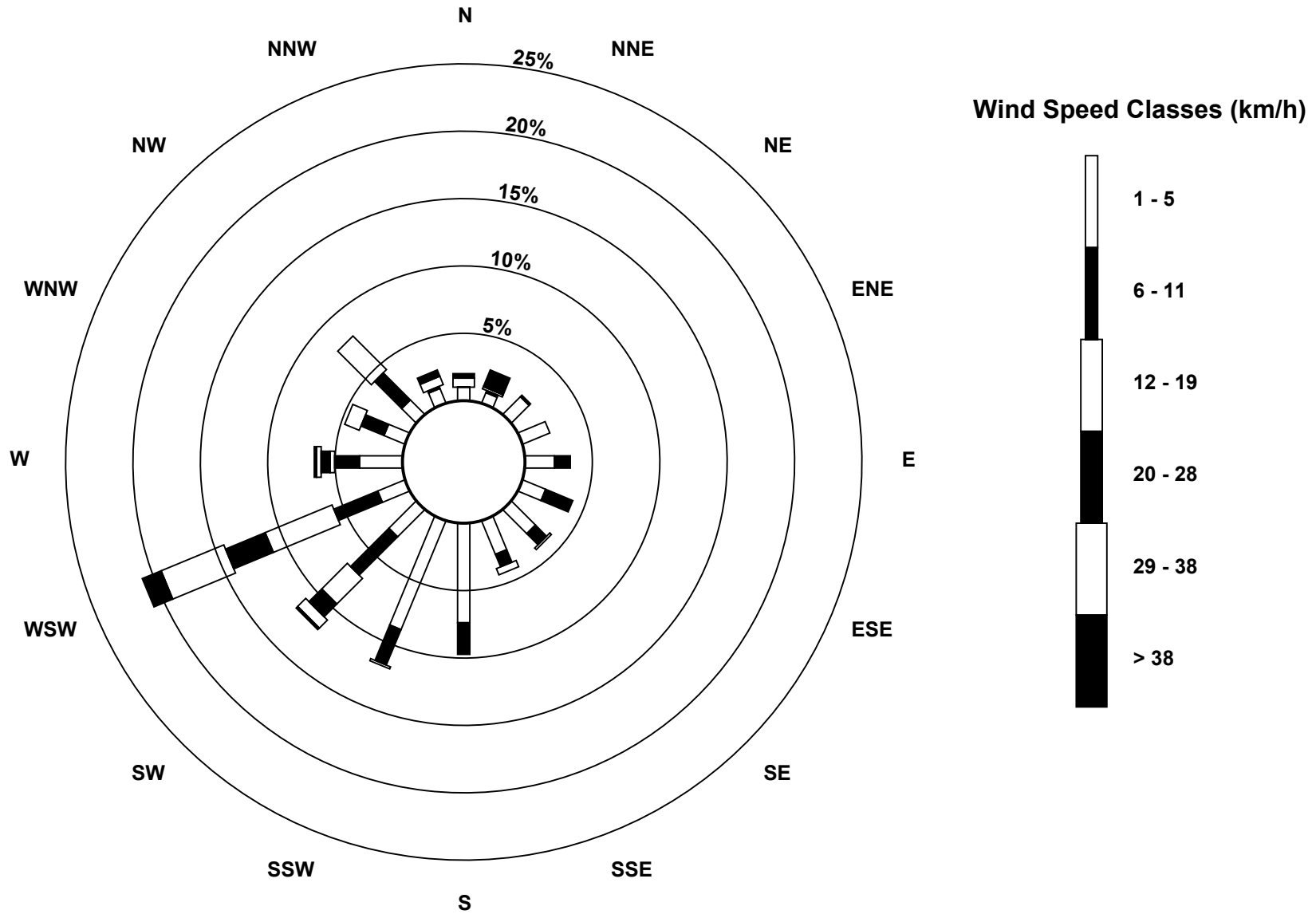
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
23 Spd	0	1	0	4	4	4	3	2	4	4	4	5	8	8	7	8	5	9	5	5	3	1	14	7	4.4	13.8		
Dir	175	186	108	199	191	183	186	174	195	198	207	185	199	194	169	205	189	163	150	155	169	105	238	209	191.4	237.6		
24 Spd	1	0	2	1	0	1	2	4	4	7	9	17	21	27	30	30	26	20	15	12	11	14	14	10	10.5	30.5		
Dir	68	183	42	84	153	142	151	162	154	189	214	249	249	245	243	243	244	239	231	213	213	225	217	233.6	242.9			
25 Spd	9	5	3	2	1	1	1	2	9	20	28	29	29	27	29	31	26	20	17	12	12	8	12	15	13.9	30.9		
Dir	216	214	185	183	152	154	197	172	218	232	241	249	250	246	250	256	255	252	247	236	237	224	225	233	241.9	255.9		
26 Spd	13	6	5	6	4	3	1	1	2	8	8	12	18	21	18	22	23	13	9	16	18	16	11	4	10.6	23.2		
Dir	237	255	257	241	246	278	11	201	306	250	238	236	243	237	247	259	248	236	230	246	239	236	231	241	243.6	248.0		
27 Spd	1	0	1	1	0	0	1	1	3	6	10	15	20	19	23	14	12	8	0	1	1	1	0	1	5.0	22.9		
Dir	5	83	51	186	131	246	56	184	195	189	229	235	243	245	262	287	269	257	173	47	206	212	31	32	249.1	262.5		
28 Spd	0	1	0	0	0	0	0	0	1	0	2	4	3	3	7	7	7	5	2	1	1	1	0	0	1.5	6.8		
Dir	59	175	210	95	225	92	267	360	224	17	95	132	124	97	108	136	119	103	51	9	30	354	7	306	110.8	107.8		
29 Spd	1	2	7	6	2	0	0	0	1	4	1	1	2	4	0	2	5	5	3	1	11	14	10	35	2.9	34.7		
Dir	190	197	206	199	197	236	180	98	258	196	328	340	329	271	39	273	48	52	57	121	267	310	285	250	261.8	250.3		
30 Spd	31	25	19	20	12	11	10	10	16	29	36	36	33	34	33	34	33	37	29	25	19	17	17	17	24.3	37.0		
Dir	248	246	241	246	250	247	254	240	258	251	246	247	250	254	253	249	250	246	252	250	260	250	253	248	249.4	246.0		
Spd	3.6	3.5	3.2	3.2	2.7	2.2	2.3	2.8	4.5	6.0	6.5	8.1	10.1	11.2	9.6	9.9	8.3	7.3	5.0	4.1	4.3	3.4	4.1	4.9	Diurnal Average			
Dir	245.7	238.8	242.3	247.3	263.5	261.3	254.2	245.0	250.2	248.5	246.8	247.0	243.7	245.5	248.6	256.0	249.2	247.0	250.7	241.6	241.2	251.3	248.7	240.5	Diurnal Maximum			
Spd	30.8	25.4	24.5	29.9	33.7	36.1	39.8	33.9	37.6	37.2	42.5	47.7	45.8	43.4	39.6	40.5	44.6	38.6	38.1	25.9	21.6	17.5	20.8	34.7	Diurnal Maximum			
Dir	248.1	246.0	219.0	236.2	232.1	239.7	236.6	243.7	247.3	242.4	244.5	246.8	243.2	248.3	248.8	247.4	245.7	262.4	254.4	243.9	235.8	246.6	237.7	250.3	Diurnal Maximum			
Maximum Speed Value: 48 km/h on Sep 10 12:00																			Minimum Speed Value: 0 km/h on Sep 4 21:00					Hours in Service:				720
Maximum Daily Speed Average: 27.3 km/h on Sep 10																			Minimum Daily Speed Average: 1.5 km/h on Sep 28					Hours of Data:				720
Maximum Diurnal Speed Average: 11.2 km/h at hour 14																			Minimum Diurnal Speed Average: 2.2 km/h at hour 6					Hours of Missing Data:				0
Monthly Average Velocity: 5.43 km/h 247.72 deg																			Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.5 Q ₁ = 1.8 Median = 5.0 Q ₃ = 11.6 P ₉₀ = 21.8 P ₉₉ = 39.6					Percent Operational Time:				100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																												
Frequency Distribution																												
		Speed Range (km/h)																										
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																					
North	27	1	5	10	0	0	43																					
NorthEast	40	2	0	1	0	0	43																					
East	38	15	0	0	0	0	53																					
SouthEast	35	24	3	0	0	0	62																					
South	118	29	2	0	0	0	149																					
SouthWest	56	47	36	24	21	8	192																					
West	26	29	18	11	16	4	104																					
NorthWest	20	24	27	3	0	0	74																					
Total	360	171	91	49	37	12	720																					

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - September 2017

Maximum Speed: 48 km/h on Sep 10 12:00	Maximum Daily Speed Average: 28.5 km/h on Sep 10	Hours in Service: 720
Minimum Speed: 0 km/h on Sep 16 05:00	Minimum Daily Speed Average: 2.6 km/h on Sep 28	Hours of Data: 720
Maximum Diurnal Speed Average: 16.3 km/h at hour 14	Minimum Diurnal Speed Average: 4.9 km/h at hour 3	Hours of Missing Data: 0
Monthly Average Speed: 9.24 km/h	Percentiles: P ₁ = 0.4 P ₁₀ = 1.0 Q ₁ = 2.4 Median = 5.7 Q ₃ = 12.4 P ₉₀ = 22.1 P ₉₉ = 40.2	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	11	14	4	6	8	4	3	5	16	22	30	35	38	40	40	41	45	33	32	24	22	13	5	5	20.8	45.1
2-Sep	3	2	0	3	4	3	2	2	4	5	2	5	3	6	5	6	5	12	8	8	7	10	10	8	5.1	11.7
3-Sep	4	5	7	5	6	6	7	6	6	4	3	5	11	11	17	19	19	18	10	2	2	1	1	2	7.4	19.2
4-Sep	2	1	1	1	1	1	0	1	4	4	6	9	10	11	11	9	7	7	6	2	1	1	1	1	4.0	11.2
5-Sep	1	0	1	1	1	1	2	7	10	6	7	5	6	5	6	5	5	4	2	0	2	0	1	1	3.3	9.7
6-Sep	1	3	1	2	1	2	1	2	7	4	4	6	5	5	5	6	7	5	3	1	1	1	1	1	3.1	6.7
7-Sep	0	1	1	2	2	3	6	5	4	4	7	5	8	5	8	7	5	5	4	3	2	2	3	3	3.9	7.9
8-Sep	10	6	3	4	6	6	4	5	3	5	7	7	7	8	8	7	10	7	6	3	2	1	1	1	5.2	9.9
9-Sep	1	1	2	5	3	3	5	4	4	6	8	3	9	7	7	6	11	18	9	15	21	14	21	26	8.8	25.9
10-Sep	23	19	25	30	34	36	40	34	38	38	43	48	46	44	38	36	35	26	22	14	7	1	2	3	28.5	48.3
11-Sep	4	3	2	2	4	2	3	4	1	1	2	16	33	41	36	37	39	39	39	26	22	18	18	16	17.0	40.6
12-Sep	13	11	10	6	5	3	1	4	7	11	7	13	12	11	15	12	10	14	11	5	3	5	5	4	8.3	14.9
13-Sep	4	3	7	8	7	5	6	8	9	10	7	6	6	14	7	14	7	9	2	8	5	2	1	1	6.6	14.4
14-Sep	1	6	5	4	6	3	2	6	8	7	13	13	10	14	12	11	9	8	3	2	4	2	1	1	6.3	14.3
15-Sep	1	2	1	1	0	1	1	3	3	5	7	9	14	15	15	14	12	11	6	6	6	6	4	2	6.0	15.0
16-Sep	1	0	1	0	0	0	2	2	2	4	6	7	8	7	7	7	9	11	6	2	4	3	3	2	4.0	10.9
17-Sep	1	1	1	0	1	1	1	2	4	7	9	9	10	10	11	5	10	8	8	5	4	3	4	5	4.9	11.0
18-Sep	4	4	8	6	7	5	5	3	6	9	14	16	14	13	10	5	5	5	4	5	2	3	4	4	6.9	16.2
19-Sep	3	2	3	8	10	9	11	12	11	11	14	20	21	25	18	19	16	13	19	12	12	16	17	16	13.2	24.7
20-Sep	10	12	12	15	22	23	20	22	21	20	26	27	17	20	22	23	15	24	22	22	21	9	5	6	18.2	26.9
21-Sep	4	5	9	9	13	15	15	16	16	14	16	18	18	16	13	13	10	7	3	3	2	1	1	1	9.8	17.6
22-Sep	1	1	1	2	2	1	1	2	2	2	5	7	7	8	7	5	8	4	1	0	1	1	1	1	2.9	7.8
23-Sep	1	1	1	4	4	4	3	2	4	4	5	6	8	9	9	9	7	9	5	5	3	2	14	8	5.3	14.3
24-Sep	2	1	2	1	0	1	3	5	4	7	10	17	22	28	31	30	26	20	15	12	11	14	14	10	11.9	31.0
25-Sep	9	5	3	2	1	1	2	2	9	21	29	29	30	27	30	32	26	20	17	12	12	8	12	15	14.7	31.8
26-Sep	13	7	6	6	5	3	1	1	3	8	8	13	19	22	19	23	24	14	9	16	18	17	11	4	11.3	23.5
27-Sep	3	2	2	1	1	0	2	2	3	6	10	16	21	20	24	16	13	9	2	2	1	1	1	1	6.6	23.9
28-Sep	1	1	1	1	1	0	0	1	2	2	4	6	5	4	8	7	7	5	2	1	1	1	1	1	2.6	8.2
29-Sep	2	2	7	6	2	1	1	1	1	4	2	3	3	6	4	5	5	5	4	3	13	14	11	35	5.8	35.3
30-Sep	31	26	20	21	12	11	10	10	17	29	36	36	34	35	34	35	34	37	30	25	19	17	18	18	24.8	37.4
	5.5	4.9	4.9	5.4	5.6	5.2	5.4	6.0	7.7	9.4	11.5	13.8	15.1	16.3	15.9	15.5	14.6	13.7	10.3	8.1	7.8	6.2	6.3	6.7	Diurnal Average	
	31.2	25.8	24.9	30.1	33.9	36.5	40.1	34.3	38.1	37.7	43.0	48.3	46.4	44.2	40.4	41.0	45.1	39.2	39.0	26.2	21.9	17.7	21.0	35.3	Diurnal Maximum	

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - September 2017

Maximum Value: 98.4 deg on Sep 6 20:00																								Hours in Service: 720	
Minimum Value: 6.5 deg on Sep 24 21:00																								Hours of Data: 720	
Percentiles: P ₁ = 7.4 P ₁₀ = 10.1 Q ₁ = 15.1 Median = 31.1 Q ₃ = 58.8 P ₉₀ = 78.3 P ₉₉ = 94.2																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	10	8	65	28	36	53	89	20	11	10	10	10	12	14	12	9	9	11	9	8	7	10	38	27	88.9
2-Sep	59	82	83	67	46	76	67	59	17	21	66	49	73	15	27	33	48	16	15	8	11	12	10	12	83.4
3-Sep	54	54	9	27	22	21	34	36	32	56	75	64	30	42	26	23	20	14	18	73	75	80	81	84	83.8
4-Sep	68	84	86	76	58	92	81	89	36	77	41	41	42	39	40	57	49	34	21	32	82	21	47	63	91.9
5-Sep	37	73	93	83	69	43	32	12	12	31	49	48	55	57	52	51	55	43	44	66	86	78	91	82	92.8
6-Sep	89	55	67	32	78	16	19	30	20	36	74	41	48	76	72	49	35	31	16	98	78	42	47	97	98.4
7-Sep	86	91	93	74	51	27	24	19	27	17	14	50	25	53	24	28	31	17	20	22	71	76	43	68	93.0
8-Sep	13	27	31	20	26	41	41	90	32	20	22	26	30	23	29	33	25	22	16	31	49	69	50	47	90.1
9-Sep	77	61	60	14	31	38	26	48	62	49	85	63	62	31	28	47	58	27	22	11	10	12	9	8	84.7
10-Sep	11	8	11	8	7	8	7	9	9	9	9	10	10	11	12	12	11	10	11	14	13	54	35	21	53.8
11-Sep	17	25	57	51	29	72	43	65	90	90	79	24	19	10	10	13	13	10	12	9	10	10	12	8	89.9
12-Sep	8	11	13	42	48	55	96	61	32	34	47	30	40	60	41	47	47	35	15	16	22	17	13	63	95.8
13-Sep	26	56	21	16	12	19	16	16	20	22	35	61	77	57	75	53	50	24	68	71	43	29	81	71	81.1
14-Sep	81	12	15	26	8	64	70	52	34	22	17	18	15	17	27	47	46	24	55	50	42	86	95	38	95.5
15-Sep	58	49	85	76	63	77	60	25	39	50	43	44	30	29	28	29	22	22	22	10	10	12	14	19	84.6
16-Sep	36	43	72	92	96	87	51	23	19	39	54	49	38	53	59	37	32	19	14	14	14	15	20	54	96.2
17-Sep	60	62	80	75	78	91	86	51	25	42	28	35	27	46	41	42	24	17	41	86	64	72	31	59	90.9
18-Sep	49	66	49	50	57	59	68	57	41	26	33	19	14	18	50	76	60	33	46	45	26	63	34	15	75.7
19-Sep	28	72	85	33	18	20	24	16	17	18	17	9	12	14	18	17	36	21	14	42	11	11	9	9	84.8
20-Sep	14	11	16	17	14	11	12	11	12	13	15	13	19	21	15	20	24	22	21	19	23	50	59	41	59.4
21-Sep	74	32	14	11	11	9	9	10	12	18	19	14	17	17	27	21	29	24	50	18	18	43	46	63	73.8
22-Sep	81	84	64	41	85	77	37	22	78	42	53	48	52	50	77	78	47	46	76	67	60	70	82	70	84.9
23-Sep	83	58	63	41	14	7	14	29	18	22	27	21	14	31	49	35	67	17	20	21	51	82	30	45	83.0
24-Sep	78	87	44	60	60	57	29	27	33	26	28	16	17	11	10	8	9	8	7	9	7	8	10	13	87.1
25-Sep	9	41	60	42	47	52	47	40	21	8	12	14	12	9	11	15	11	12	9	9	9	10	9	8	59.6
26-Sep	8	25	28	11	22	35	61	46	35	22	28	21	17	16	16	15	9	13	8	9	8	7	10	32	60.8
27-Sep	71	75	67	77	88	70	72	84	43	20	19	17	13	20	16	24	28	15	95	91	74	71	93	65	94.8
28-Sep	86	88	77	87	88	78	95	77	79	86	77	66	69	69	46	33	25	18	31	41	49	68	82	82	94.7
29-Sep	78	65	7	18	76	87	93	96	75	16	62	67	75	50	91	88	24	17	13	61	35	12	22	11	96.2
30-Sep	9	10	11	9	14	13	12	14	13	10	9	10	12	15	11	12	10	8	9	7	12	9	11	10	15.5
89.5	91.5	93.0	92.2	96.2	91.9	95.8	96.2	89.9	89.8	84.7	67.4	76.5	76.3	90.9	87.8	66.6	46.5	94.8	98.4	85.5	85.7	95.5	96.9		

PAZA

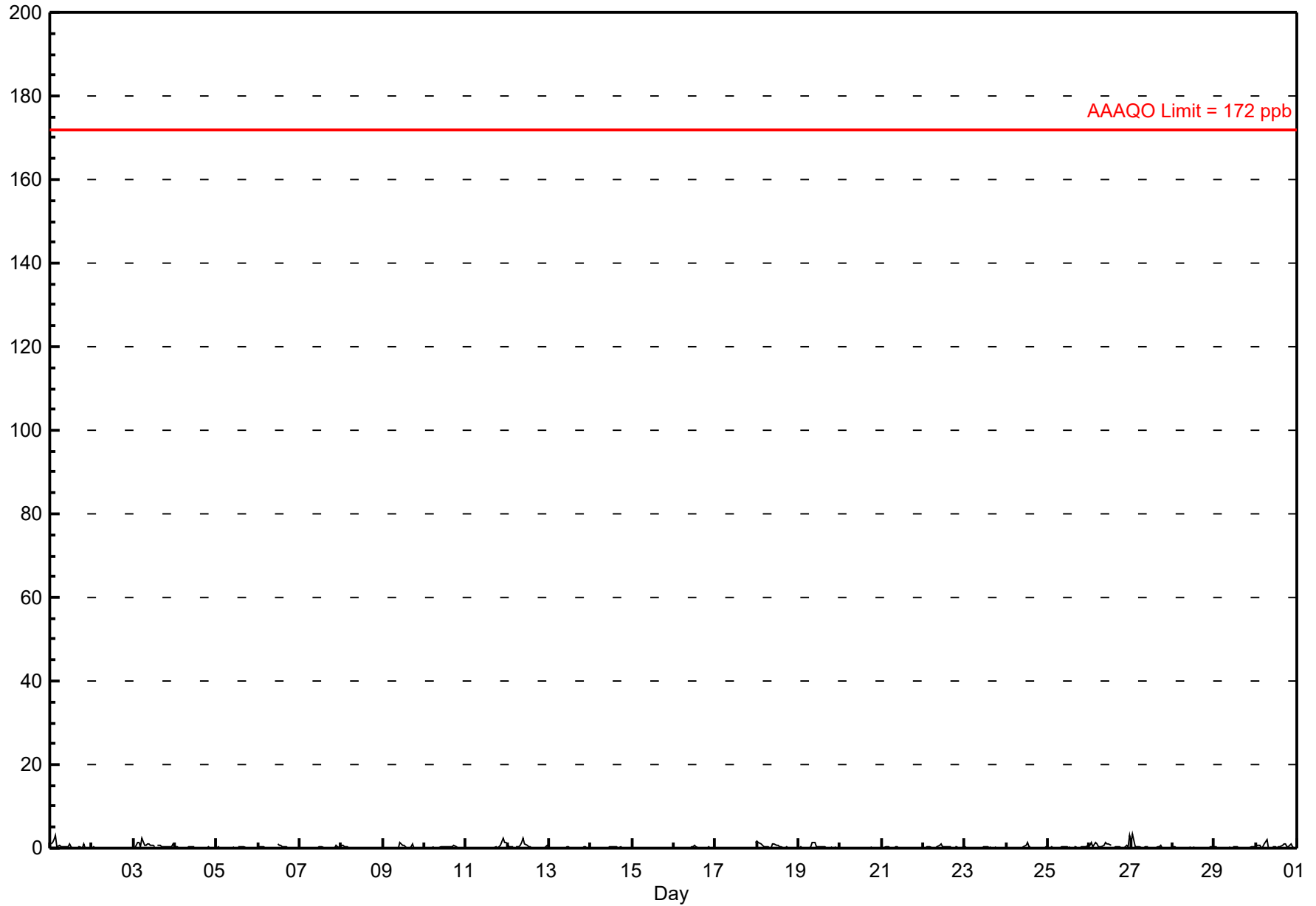
Smoky Heights Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Smoky Heights - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.5 ppb on Sep 27 02:00 Maximum Daily Average: 0.6 ppb on Sep 26											Hours in Service: 720 Hours of Data: 687 Hours of Missing Data: 33 Hours of Calibration: 33 Percent Operational Time: 100.0															
Minimum Value: 0 ppb on Sep 6 06:00 Maximum Diurnal Average: 0.4 ppb at hour 2 Monthly Average: 0.25 ppb											Minimum Daily Average: 0.1 ppb on Sep 15 Minimum Diurnal Average: 0.1 ppb at hour 19 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.6 P ₉₉ = 2.1															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	1	2	3	0	1	0	0	0	0	0	1	0	0	0	A	0	1	0	1	0	0	0	0	0.6	3.0
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2
3-Sep	0	0	1	1	0	2	1	1	1	1	1	1	0	A	1	1	0	0	0	0	0	0	0	1	0.6	2.2
4-Sep	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Sep	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.9
7-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
8-Sep	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
9-Sep	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0.2	1.2
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.6
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	0.3	2.3
12-Sep	1	0	0	0	A	0	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.5	2.4
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0.2	0.6
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.4
18-Sep	2	1	1	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.6
19-Sep	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.5
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
22-Sep	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.9
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3
24-Sep	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.2	1.4
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0.2	0.6
26-Sep	1	1	0	1	1	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	1	0	3	0.6	2.9
27-Sep	2	4	0	0	0	0	0	0	0	0	0	C	C	C	0	1	0	1	0	0	0	0	0	0	0.4	3.5
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
29-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
30-Sep	0	1	1	0	0	1	2	0	0	A	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0.5	2.0
0.3 0.4 0.3 0.3 0.2 0.3 0.2 0.1 0.2 0.4 0.4 0.4 0.3 0.2 0.2 0.2 0.2 0.2 0.1 0.1 0.2 0.2 0.2 0.4 1.6 3.5 2.1 3.0 1.1 2.2 2.0 0.6 1.5 2.4 1.2 1.0 1.4 0.6 0.6 0.7 0.9 1.0 0.3 0.9 1.0 2.3 1.5 2.9																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										



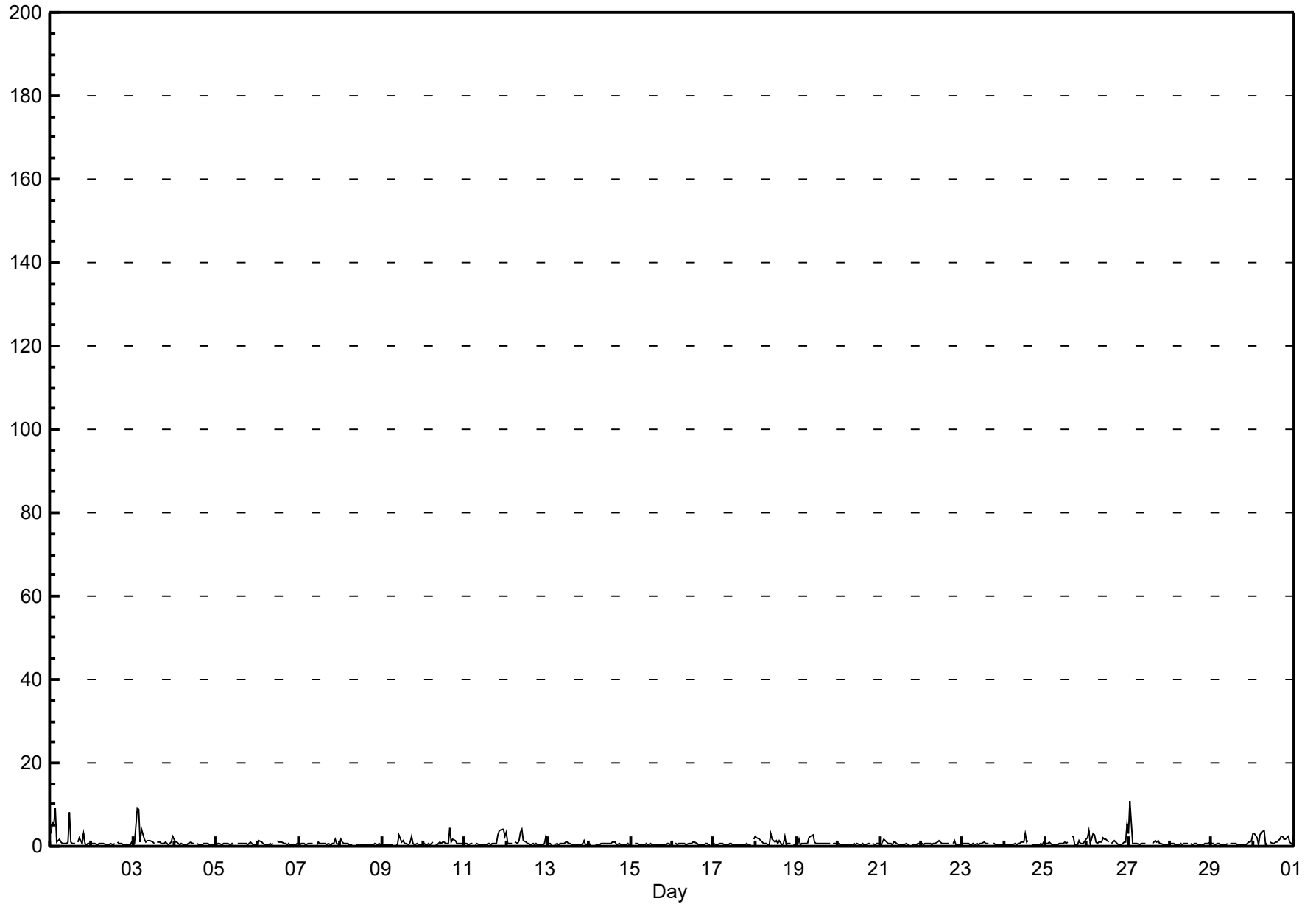
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Smoky Heights - September 2017

Maximum Value: 10.7 ppb on Sep 27 02:00		Maximum Daily Average: 2.2 ppb on Sep 1		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 9 02:00		Minimum Daily Average: 0.5 ppb on Sep 15		Hours of Data: 687																							
Maximum Diurnal Average: 1.4 ppb at hour 2		Minimum Diurnal Average: 0.6 ppb at hour 19		Hours of Missing Data: 33																							
Monthly Average: 0.86 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 1.5 P ₉₉ = 5.3		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	3	6	5	9	1	2	1	1	1	1	1	8	1	1	1	A	1	2	1	3	1	1	1	1	2.2	9.2	
2-Sep	1	1	1	0	1	1	1	1	0	0	0	1	0	1	A	1	1	1	0	0	0	0	0	1	0.6	1.0	
3-Sep	0	1	9	9	1	4	2	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	2	1.8	9.3	
4-Sep	1	1	1	0	1	0	0	0	1	1	1	1	A	1	0	0	0	1	1	1	0	0	0	0	0.6	1.0	
5-Sep	0	1	1	0	1	1	1	1	0	1	0	A	1	1	1	1	1	1	0	1	1	0	0	0	0.6	0.9	
6-Sep	0	1	1	1	0	0	0	1	0	1	A	1	1	1	1	1	1	0	1	0	0	0	0	1	0.7	1.4	
7-Sep	0	1	1	1	0	1	1	1	1	A	0	1	1	1	1	1	0	1	0	1	1	2	1	0	0.6	1.6	
8-Sep	2	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.5	1.6	
9-Sep	0	0	0	0	0	0	0	A	0	0	0	3	1	1	1	1	0	1	2	1	0	1	0	1	0.7	2.7	
10-Sep	1	0	0	1	0	1	A	0	0	0	1	1	1	1	1	4	1	2	1	1	1	1	1	0	0.9	4.3	
11-Sep	1	1	0	1	1	A	0	1	0	0	0	0	0	1	1	0	1	1	1	3	4	4	4	2	1.1	4.1	
12-Sep	3	1	1	1	A	1	1	1	3	4	1	1	1	1	0	1	1	1	0	0	0	0	1	3	1.2	4.1	
13-Sep	1	1	0	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	1	1	1	1	0.6	1.4	
14-Sep	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	0	0.6	0.9	
15-Sep	0	A	1	1	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0.5	0.7	
16-Sep	A	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	1	1	0	0	A	0.6	0.9	
17-Sep	1	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	A	2	0.5	1.7	
18-Sep	2	2	2	1	1	1	1	0	0	3	2	1	1	1	1	0	1	2	0	1	1	A	0	0	1.1	3.1	
19-Sep	0	2	0	1	1	1	1	2	2	3	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	2.9	
20-Sep	1	1	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	1	1	A	1	0	1	1	0.5	0.7	
21-Sep	0	0	2	1	1	1	1	0	1	1	1	0	0	0	1	0	0	A	0	0	0	0	1	1	0.7	1.6	
22-Sep	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	0	1	0.7	1.3	
23-Sep	1	1	1	1	0	0	1	0	1	0	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0.6	0.9	
24-Sep	1	0	1	0	0	1	1	0	1	1	1	1	3	1	1	A	0	0	0	0	0	1	0	1	0.7	3.0	
25-Sep	1	1	1	1	0	0	0	0	1	1	1	1	1	1	A	3	2	0	0	1	1	1	1	2	0.9	2.5	
26-Sep	2	4	1	3	3	1	1	1	1	2	2	2	1	A	1	1	1	1	1	0	0	1	1	5	1.5	5.5	
27-Sep	3	11	1	1	1	1	0	1	1	1	1	C	C	C	1	2	1	1	1	1	0	0	0	0	1.3	10.7	
28-Sep	1	1	1	0	0	0	1	0	1	1	1	A	1	0	1	1	0	0	0	0	1	1	1	1	0.5	0.9	
29-Sep	1	1	0	1	1	0	0	0	0	1	A	1	1	1	1	0	0	0	0	0	0	1	1	1	0.6	1.4	
30-Sep	3	3	2	0	3	3	4	0	1	A	1	1	1	1	1	2	2	2	2	2	2	1	1	0	1.6	3.6	
		1.1	1.4	1.2	1.3	0.7	0.8	0.7	0.6	0.8	1.0	0.9	1.1	0.8	0.7	0.7	0.9	0.7	0.8	0.6	0.8	0.7	0.7	0.7	1.0	Diurnal Average	
		3.4	10.7	9.3	9.2	2.6	4.0	3.6	1.9	3.3	4.1	2.7	8.2	3.0	1.1	1.5	4.3	2.4	2.4	1.7	3.0	3.7	4.1	3.9	5.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

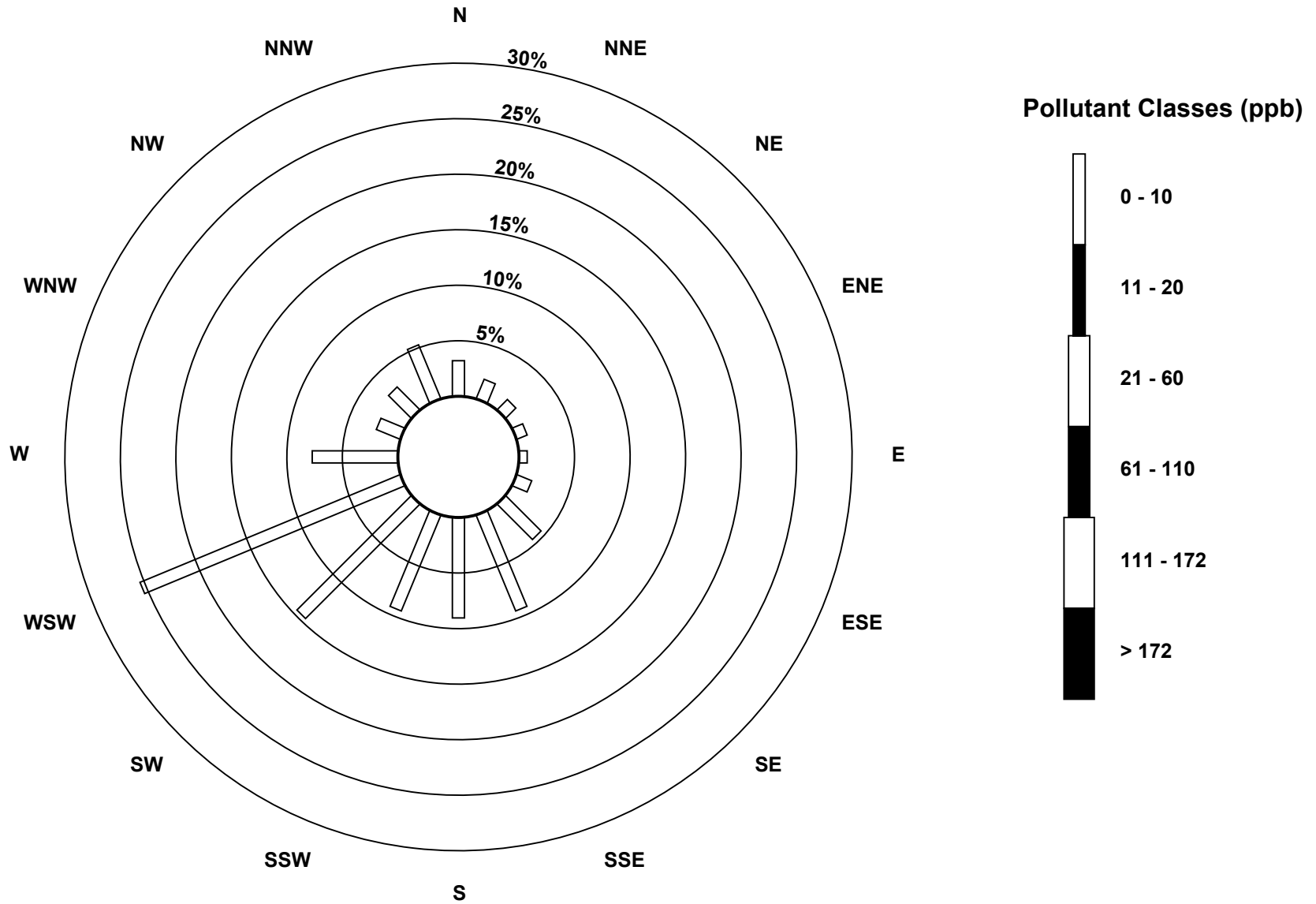
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - September 2017



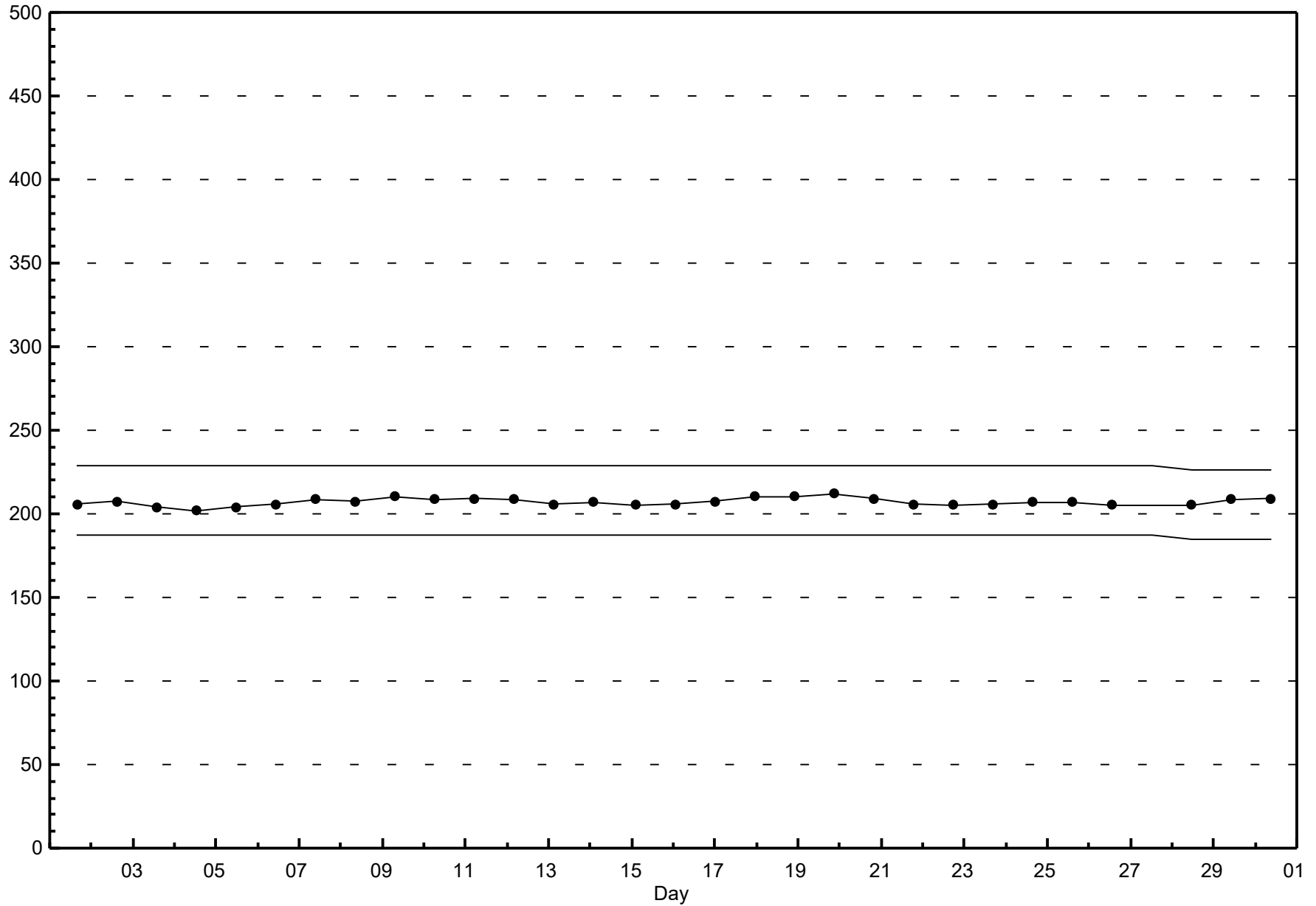
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - September 2017



Span Responses

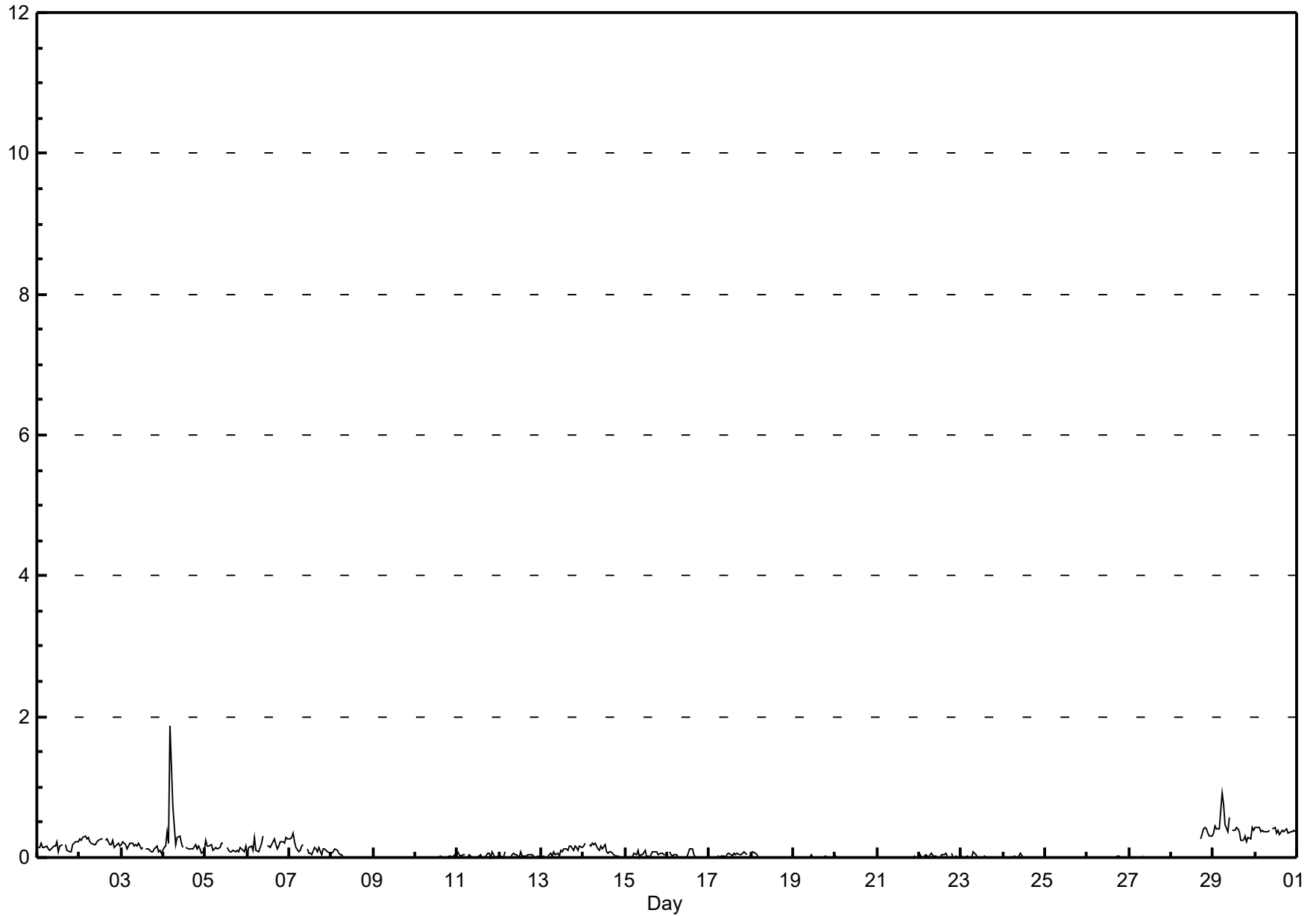
**Sulphur Dioxide (SO₂)
Smoky Heights - September 2017**



Hourly Averages

Total Reduced Sulphur (TRS) - ppb Smoky Heights - September 2017

Maximum Value: 1.9 ppb on Sep 4 05:00		Maximum Daily Average: 0.4 ppb on Sep 29		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 8 10:00		Minimum Daily Average: 0.0 ppb on Sep 25		Hours of Data: 659																						
Maximum Diurnal Average: 0.2 ppb at hour 5		Minimum Diurnal Average: 0.1 ppb at hour 11		Hours of Missing Data: 61																						
Monthly Average: 0.09 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.3 P ₉₉ = 0.5		Hours of Calibration: 34																						
				Percent Operational Time: 96.3																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.2
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Sep	0	0	0	0	2	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
8-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
9-Sep	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.0
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.0
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.0
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.1
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.1
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.1
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.0
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.0
27-Sep	0	0	0	0	0	0	0	0	0	0	M	M	M	M	M	M	M	M	M	M	M	M	M	M	--	0.0
28-Sep	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	C	0	0	0	0	0	0	0	--	0.4
29-Sep	0	0	0	0	1	1	1	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
30-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
		0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average
		0.4	0.5	0.4	0.4	1.9	0.9	0.8	0.5	0.4	0.1	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Maximum
C - Calibration		M - Maintenance					A - Automated Daily Zero Span																			



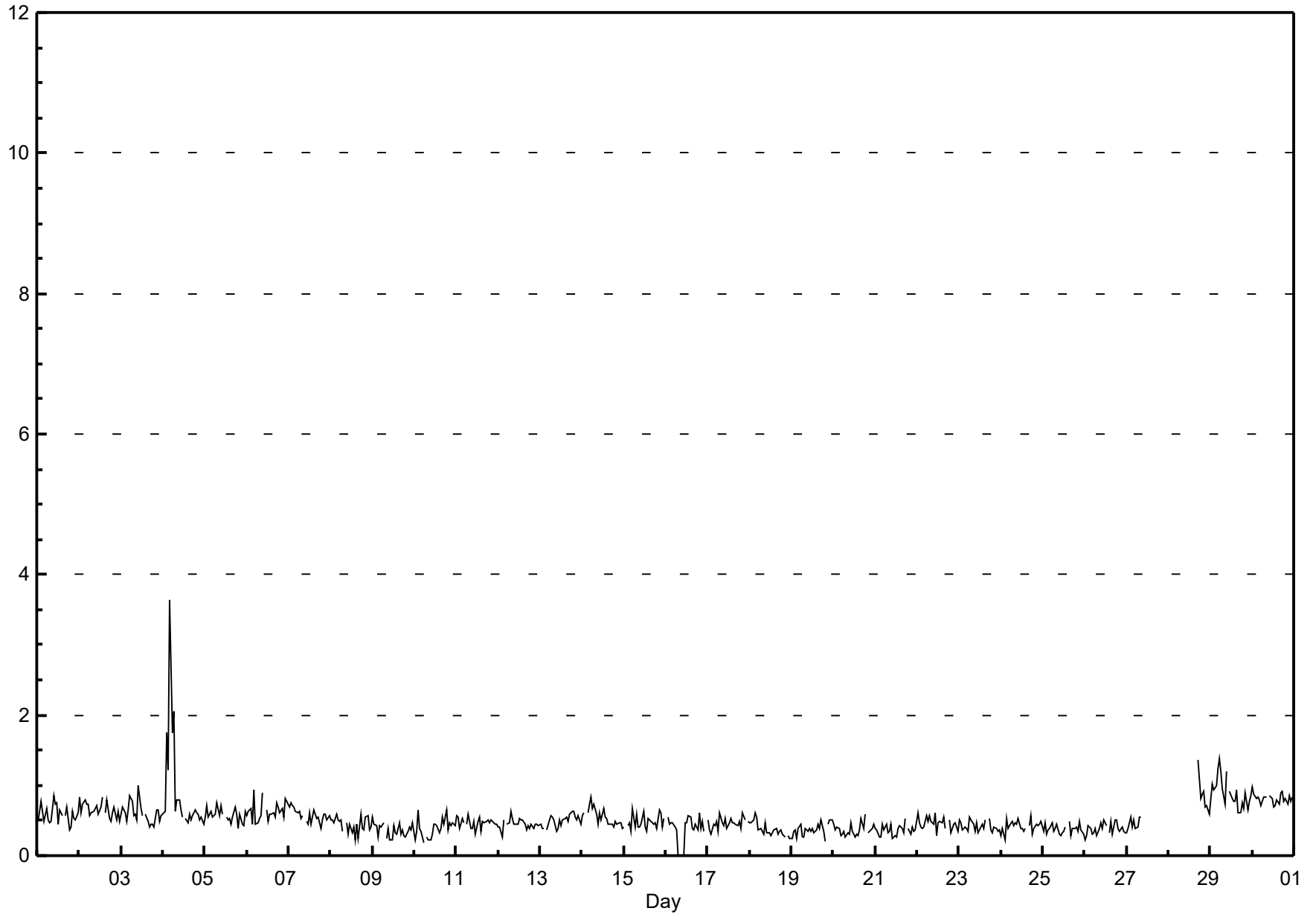
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb Smoky Heights - September 2017

Maximum Value: 3.6 ppb on Sep 4 05:00		Maximum Daily Average: 0.9 ppb on Sep 4		Hours in Service: 720																								
Minimum Value: 0 ppb on Sep 16 08:00		Minimum Daily Average: 0.4 ppb on Sep 21		Hours of Data: 659																								
Maximum Diurnal Average: 0.6 ppb at hour 5		Minimum Diurnal Average: 0.5 ppb at hour 17		Hours of Missing Data: 61																								
Monthly Average: 0.51 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.7 P ₉₉ = 1.2		Hours of Calibration: 34																								
				Percent Operational Time: 96.3																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Sep	1	1	1	1	0	1	1	0	0	1	1	1	0	1	1	A	1	1	0	0	1	1	1	1	0.6	0.8		
2-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	0	0.7	0.8		
3-Sep	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	1	1	0	1	0.6	1.0		
4-Sep	1	1	2	1	4	2	2	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0	1	0	0.9	3.6		
5-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	0	1	0	0	1	0.6	0.7		
6-Sep	1	1	1	0	1	0	0	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9		
7-Sep	1	1	1	1	1	1	1	1	1	A	0	0	1	0	1	1	1	1	0	1	1	1	1	1	0.6	0.7		
8-Sep	1	1	0	1	0	0	1	0	A	A	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0.4	0.6		
9-Sep	1	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
10-Sep	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0.4	0.7		
11-Sep	1	1	0	1	0	A	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0.5	0.6		
12-Sep	0	0	0	1	A	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	0.6		
13-Sep	0	0	0	A	0	1	1	1	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	0	0.5	0.6		
14-Sep	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.6	0.8		
15-Sep	0	A	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0	1	0.5	0.7		
16-Sep	A	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	A	0.4	0.6		
17-Sep	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	1	A	0	0.5	0.6		
18-Sep	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.6		
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0.4	0.5		
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	A	0	0	0	0	0.4	0.6		
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0.4	0.5		
22-Sep	1	0	0	0	0	1	0	1	0	0	1	0	0	0	1	0	A	1	0	0	0	0	0	0	0.5	0.6		
23-Sep	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0.4	0.6		
24-Sep	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	A	0	1	0	0	0	0	0	0	0.4	0.6		
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.5		
26-Sep	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	1	1	0	0	0	0	0	0.4	0.5		
27-Sep	0	0	1	0	1	0	0	1	1	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	--	0.6		
28-Sep	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	C	1	1	1	1	1	1	1	--	1.4		
29-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4		
30-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0		
		0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	Diurnal Average			
		1.0	1.0	1.8	1.2	3.6	1.8	2.0	1.0	0.8	1.2	1.0	0.9	0.8	0.8	0.8	0.9	0.9	1.4	0.8	0.9	0.9	0.9	0.9	0.8	0.9	Diurnal Maximum	
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																				

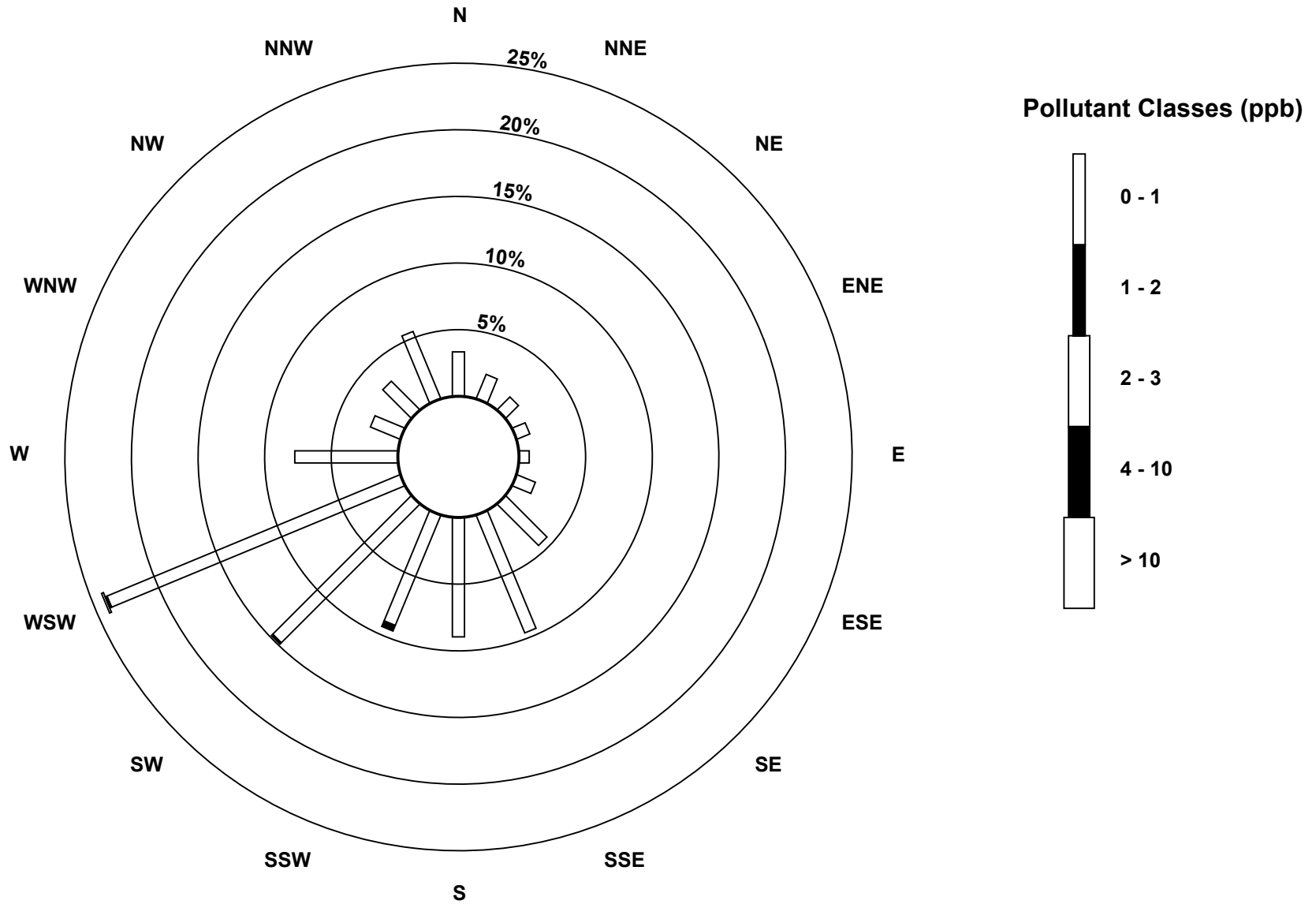
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - September 2017



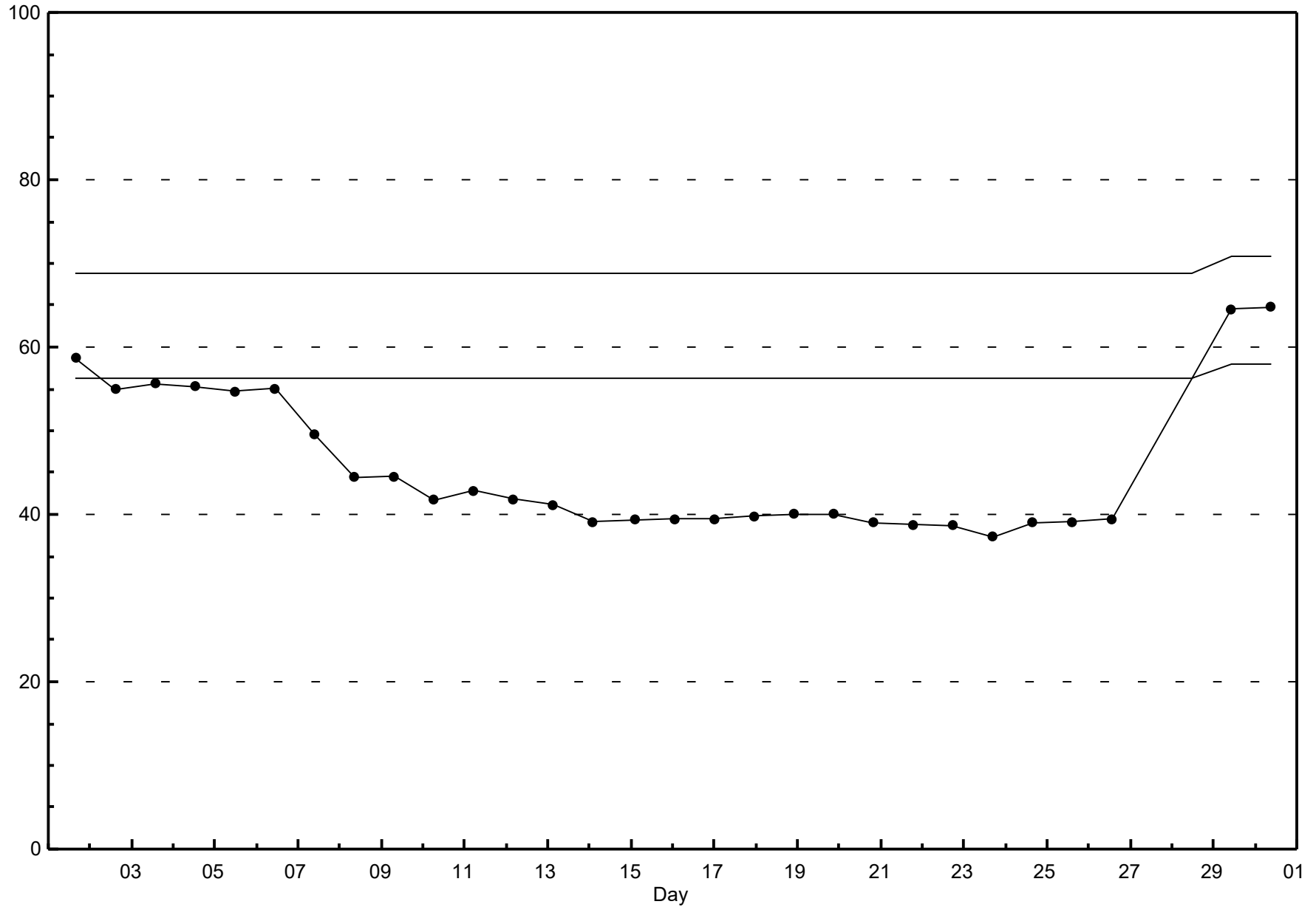
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - September 2017



Span Responses

**Total Reduced Sulphur (TRS)
Smoky Heights - September 2017**



Hourly Averages

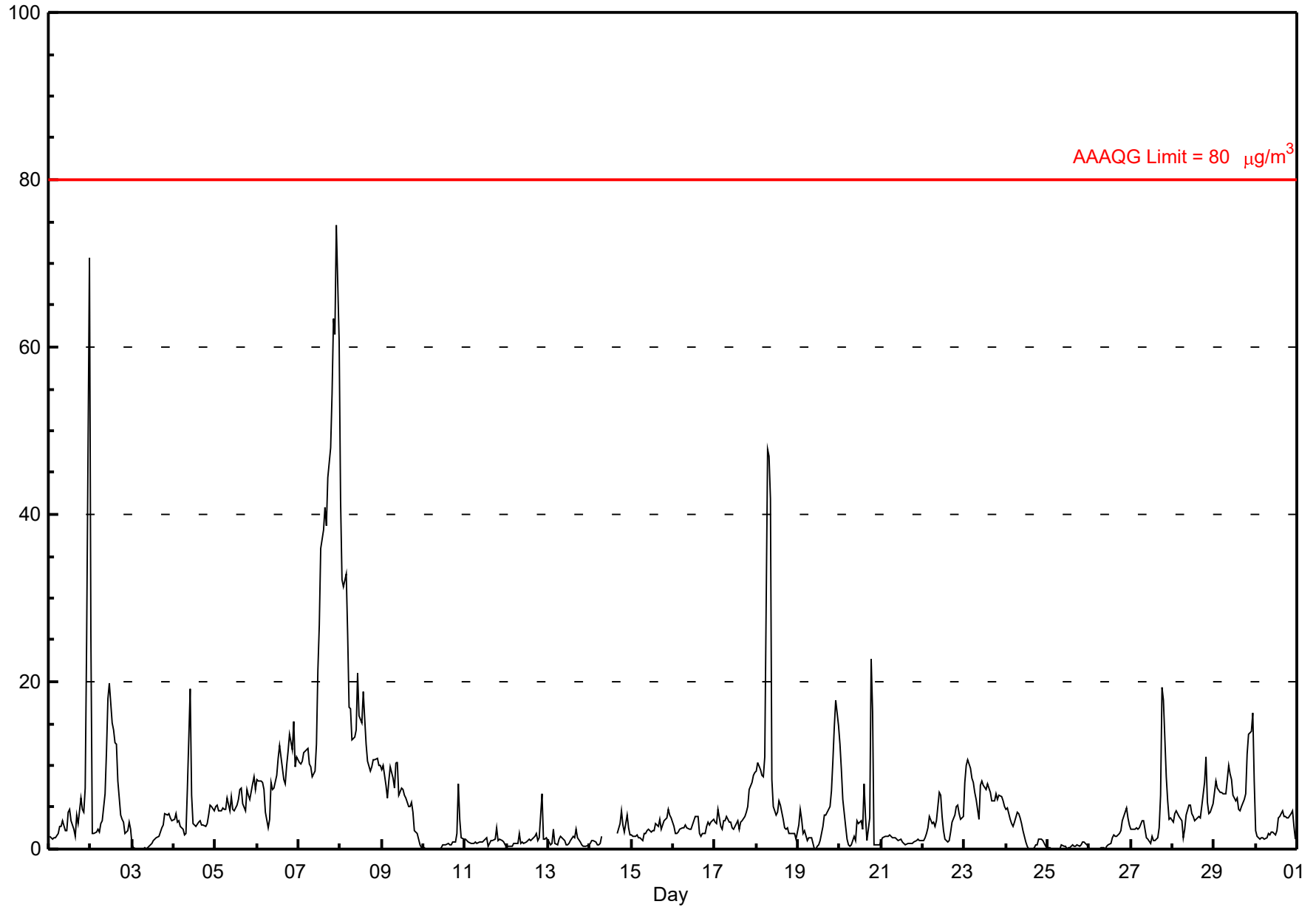
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - September 2017

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 720
Maximum Value: 74.6 µg/m ³ on Sep 7 23:00	Maximum Daily Average: 30.2 µg/m ³ on Sep 7
Minimum Value: 0 µg/m ³ on Sep 3 03:00	Hours of Data: 712
Maximum Diurnal Average: 8.0 µg/m ³ at hour 24	Hours of Missing Data: 8
Monthly Average: 5.27 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 0.3 µg/m ³ on Sep 25	Percent Operational Time: 98.9
Minimum Diurnal Average: 3.5 µg/m ³ at hour 6	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 1.1 Median = 2.9 Q ₃ = 6.1 P ₉₀ = 10.6 P ₉₉ = 44.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	2	1	1	1	1	2	3	3	3	2	2	4	5	3	2	1	4	3	6	5	4	7	25	71	6.8	70.7																						
2-Sep	26	2	2	2	2	2	3	3	7	12	18	20	15	14	13	13	8	4	3	3	2	2	3	2	7.6	25.6																						
3-Sep	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	4	4	4	3	1.4	4.3																						
4-Sep	4	4	3	3	3	2	2	2	7	19	6	3	3	3	3	3	3	3	3	3	4	5	5	5	4.2	19.2																						
5-Sep	5	5	5	5	5	5	5	6	4	6	5	5	6	7	7	5	5	7	6	6	8	9	7	5.8	8.6																							
6-Sep	8	8	8	8	7	4	3	4	8	7	7	9	11	12	11	8	8	10	12	14	12	15	10	11	9.0	15.3																						
7-Sep	10	10	10	12	12	12	10	10	9	9	13	21	27	36	38	41	39	44	48	54	63	61	75	61	30.2	74.6																						
8-Sep	42	32	31	33	26	17	17	13	13	14	21	16	15	19	16	13	10	9	10	11	11	11	10	10	17.4	41.7																						
9-Sep	9	10	8	6	8	10	8	7	10	10	6	7	7	6	6	5	5	6	4	2	2	1	1	0	6.1	10.4																						
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	8	3	1	1	0.9	7.8																						
11-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	2	1	1	1	1	1	0.9	2.5																						
12-Sep	0	0	0	0	1	1	1	2	1	1	1	1	1	1	1	1	2	2	1	1	7	1	1	1	1.2	6.5																						
13-Sep	1	0	1	2	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1	1	0	0	0	0	0.9	2.4																						
14-Sep	1	1	1	1	0	1	1	1	N	N	N	N	N	N	N	N	2	3	5	3	2	4	3	2	--	4.6																						
15-Sep	2	2	2	2	1	1	1	2	2	2	2	2	2	2	3	3	4	2	3	3	4	5	4	4	2.5	4.7																						
16-Sep	3	2	2	2	2	3	3	3	3	2	2	3	3	4	4	2	2	2	2	3	3	3	3	4	2.6	3.9																						
17-Sep	3	3	5	3	2	3	3	4	3	3	2	2	3	3	2	3	3	4	4	5	7	8	9	9	4.2	9.2																						
18-Sep	9	10	10	9	9	11	48	47	42	8	5	4	4	6	5	4	3	2	2	2	2	2	1	1	10.3	47.9																						
19-Sep	3	5	4	2	2	1	1	1	1	0	0	0	1	1	3	4	4	4	5	7	11	15	18	15	4.5	17.8																						
20-Sep	13	10	6	3	1	1	0	1	2	1	3	3	3	2	8	4	1	4	23	16	1	0	0	1	4.4	22.8																						
21-Sep	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7																						
22-Sep	1	1	2	3	4	3	3	3	3	7	7	4	2	1	1	1	2	3	4	5	5	4	4	4	3.2	6.8																						
23-Sep	8	10	11	10	8	8	7	6	4	8	8	8	7	8	7	7	6	6	7	6	6	6	6	5	7.1	10.6																						
24-Sep	5	5	4	3	3	3	4	4	4	3	2	1	0	0	0	0	0	0	1	1	1	1	0	0	1.9	4.9																						
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.3	0.9																						
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	2	3	4	5	4	3	1.3	4.9																						
27-Sep	2	2	2	3	2	2	3	3	2	1	1	1	1	1	1	1	2	6	19	18	9	6	4	4	4.1	19.3																						
28-Sep	3	4	5	4	4	3	1	2	4	5	5	4	4	3	4	4	4	5	8	11	6	4	4	5	4.5	11.0																						
29-Sep	7	8	7	7	7	7	7	7	10	9	8	6	6	6	5	5	5	6	7	11	14	14	16	8	8.0	16.2																						
30-Sep	2	1	1	1	1	1	1	2	2	2	2	2	2	4	4	5	4	4	4	4	4	5	3	1	2.6	4.6																						
																								5.7	4.7	4.4	4.2	3.9	3.5	4.6	4.7	5.1	4.7	4.5	4.5	4.6	5.1	5.2	4.9	4.5	4.9	6.6	6.9	6.8	6.8	7.5	8.0	Diurnal Average
																								41.7	32.2	31.4	32.9	25.6	17.0	47.9	46.9	41.9	19.2	21.0	21.4	26.9	36.0	38.1	40.9	38.6	44.4	48.0	54.4	63.4	61.4	74.6	70.7	Diurnal Maximum

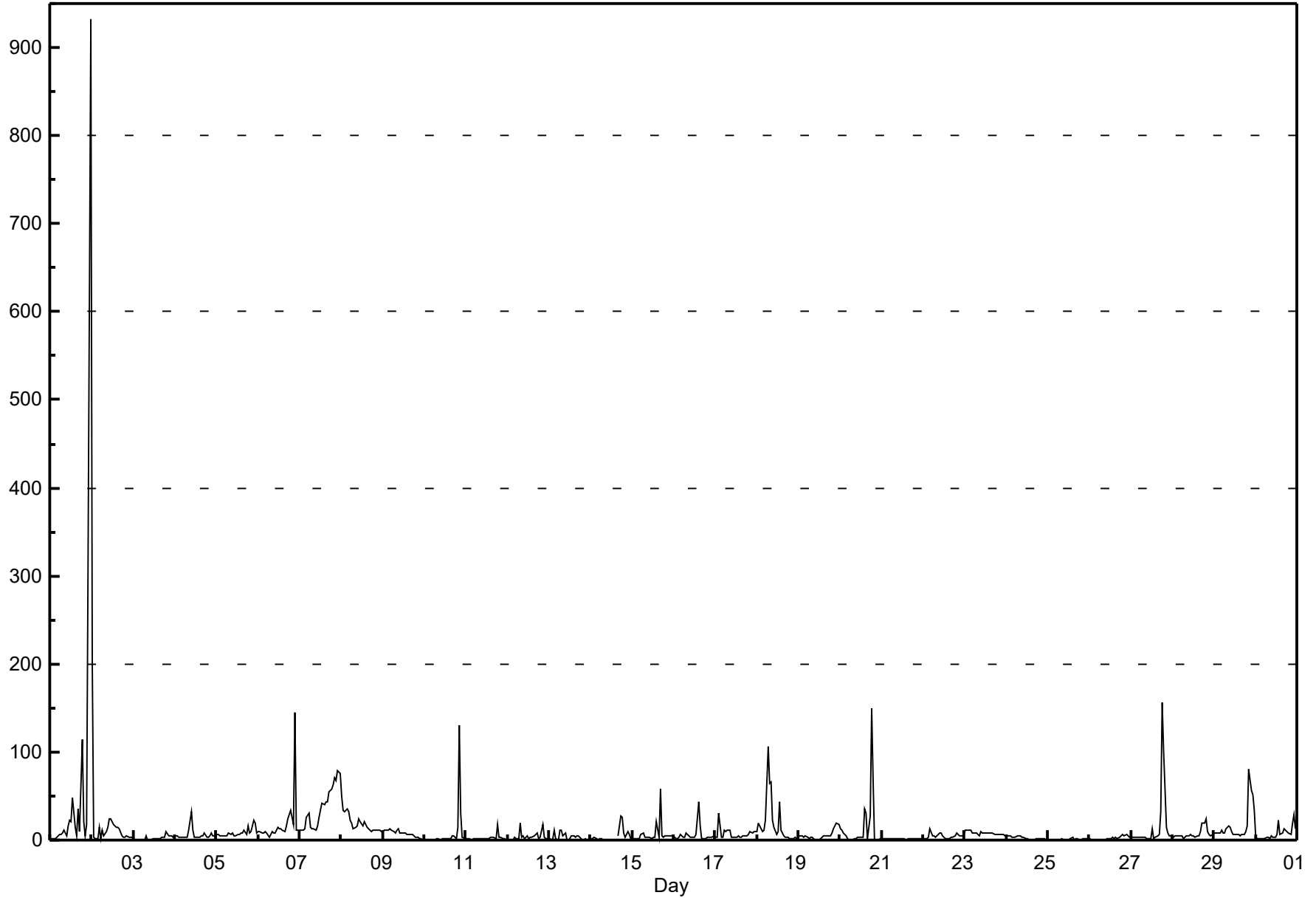
N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³



Hourly Maximums

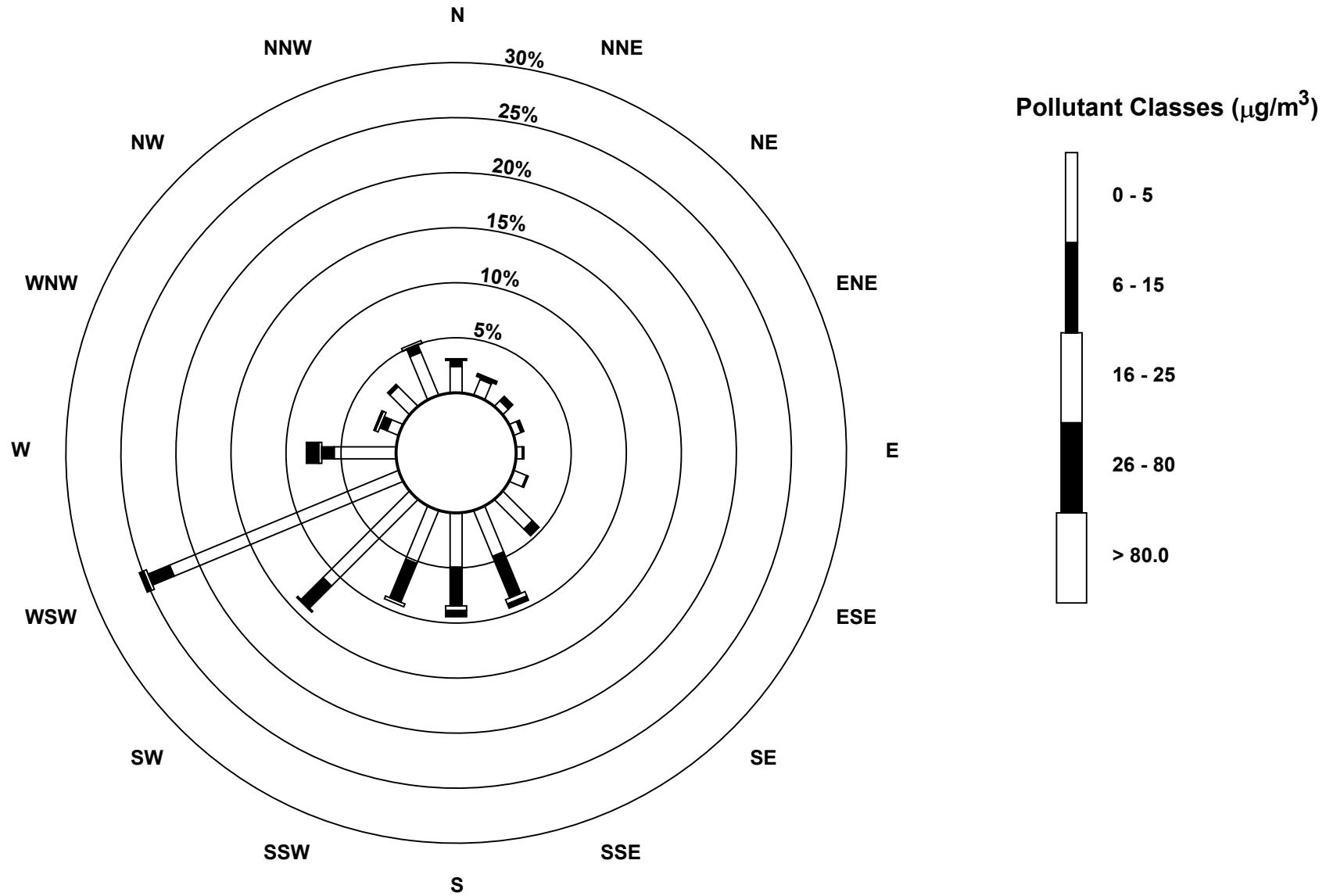
Particulate Matter 2.5 (PM_{2.5}) - µg/m³ Smoky Heights - September 2017

Maximum Value: 932.0 µg/m ³ on Sep 2 00:00		Maximum Daily Average: 67.3 µg/m ³ on Sep 1		Hours in Service: 720																							
Minimum Value: 0 µg/m ³ on Sep 3 03:00		Minimum Daily Average: 0.7 µg/m ³ on Sep 25		Hours of Data: 712																							
Maximum Diurnal Average: 39.0 µg/m ³ at hour 24		Minimum Diurnal Average: 5.2 µg/m ³ at hour 4		Hours of Missing Data: 8																							
Monthly Average: 11.14 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 0.7 Q ₁ = 1.9 Median = 4.4 Q ₃ = 9.5 P ₉₀ = 19.5 P ₉₉ = 122.2		Hours of Calibration: 0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	2	2	1	1	3	7	7	8	12	5	16	23	21	48	15	4	36	10	115	21	5	18	304	932	67.3	932.0	
2-Sep	202	3	2	2	15	2	10	5	9	14	25	25	17	15	14	15	13	5	4	4	4	3	4	4	17.4	202.2	
3-Sep	1	0	0	0	0	0	0	5	0	0	0	1	1	1	2	2	2	3	3	10	5	5	4	4	2.1	9.5	
4-Sep	4	5	4	4	4	3	4	4	11	32	12	4	3	3	4	5	5	7	4	4	5	8	5	5	6.1	32.5	
5-Sep	6	6	5	5	5	5	5	9	7	8	5	5	6	6	8	8	11	6	16	9	9	22	20	8	8.3	22.0	
6-Sep	9	9	9	9	10	8	3	6	9	8	9	15	13	13	12	10	16	24	29	33	17	144	10	12	18.2	144.4	
7-Sep	11	11	11	13	25	31	14	13	12	11	16	26	34	42	40	43	43	54	58	63	70	67	79	76	35.9	78.6	
8-Sep	51	33	32	36	33	22	19	14	14	17	24	22	16	21	18	14	12	10	11	11	11	11	10	10	19.6	50.6	
9-Sep	10	11	11	11	12	12	9	9	12	12	8	8	8	9	7	6	6	7	5	3	3	2	1	0	7.6	12.4	
10-Sep	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	1	4	5	2	14	131	30	3	2	8.4	130.7	
11-Sep	1	1	1	1	1	1	1	1	1	2	1	1	2	1	4	3	4	2	17	3	3	1	2	1	2.4	17.3	
12-Sep	0	0	0	0	3	1	1	19	4	4	1	5	2	3	3	4	6	7	1	4	17	4	2	2	4.0	18.5	
13-Sep	2	1	1	10	1	1	11	10	5	8	1	1	1	4	4	3	5	5	1	1	0	1	1	1	3.3	11.2	
14-Sep	1	1	2	1	1	1	1	2	N	N	N	N	N	N	N	N	4	27	26	8	2	10	7	2	--	26.9	
15-Sep	2	2	2	2	2	7	8	3	3	2	3	2	2	2	21	3	58	5	4	4	5	5	5	4	6.5	57.6	
16-Sep	4	2	2	2	6	3	3	8	7	3	3	3	4	6	44	15	2	2	2	4	4	3	4	4	5.8	43.7	
17-Sep	4	3	31	3	3	11	9	11	11	4	3	3	4	4	3	4	4	5	5	6	10	9	10	10	6.9	31.0	
18-Sep	10	19	14	9	11	23	106	65	65	22	14	6	9	44	11	6	3	3	3	2	2	2	3	1	18.9	106.0	
19-Sep	4	5	4	3	5	3	2	2	4	0	0	0	1	1	4	4	5	5	6	8	12	16	19	18	5.5	19.3	
20-Sep	13	11	8	4	2	1	0	1	2	2	4	3	4	3	35	30	1	28	149	70	1	1	1	1	15.6	149.2	
21-Sep	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1.4	2.2	
22-Sep	1	2	2	4	13	5	5	3	5	8	8	6	3	2	1	1	3	4	5	8	6	5	4	5	4.5	13.2	
23-Sep	10	11	11	11	9	9	8	7	5	9	9	8	8	9	8	8	7	6	7	7	7	7	7	6	8.0	11.5	
24-Sep	5	5	4	4	3	4	5	5	4	3	3	1	1	0	0	0	0	1	1	2	2	1	1	1	2.4	5.4	
25-Sep	0	0	0	0	0	0	0	0	1	1	0	0	0	1	3	1	1	1	0	1	1	2	1	1	0.7	2.7	
26-Sep	1	0	0	0	0	0	0	0	0	0	1	2	1	3	2	3	2	3	6	7	5	6	4	4	2.1	6.8	
27-Sep	3	3	3	3	3	3	4	4	3	2	2	1	13	2	4	5	6	33	156	101	15	8	4	5	15.9	155.6	
28-Sep	4	5	5	5	5	4	2	3	5	6	6	5	4	4	6	5	10	19	19	23	9	6	5	6	7.1	23.4	
29-Sep	8	9	8	9	12	7	7	12	15	14	10	7	6	7	6	5	6	6	9	16	80	56	52	33	16.7	80.1	
30-Sep	3	2	1	2	2	1	2	3	2	4	4	3	7	22	7	8	13	11	9	8	7	20	29	12	7.6	29.3	
		12.5	5.5	5.9	5.2	6.3	5.9	8.3	7.8	8.1	7.1	6.5	6.5	6.7	9.7	9.9	7.5	9.7	10.1	22.4	15.1	15.0	15.8	20.1	39.0	Diurnal Average	
		202.2	33.2	31.8	35.6	33.0	30.8	106.0	64.9	65.4	32.5	24.6	26.1	34.2	48.1	43.7	43.0	57.6	54.5	155.6	100.9	130.7	144.4	304.1	932.0	Diurnal Maximum	
N - Not Valid																											



Pollutant Rose

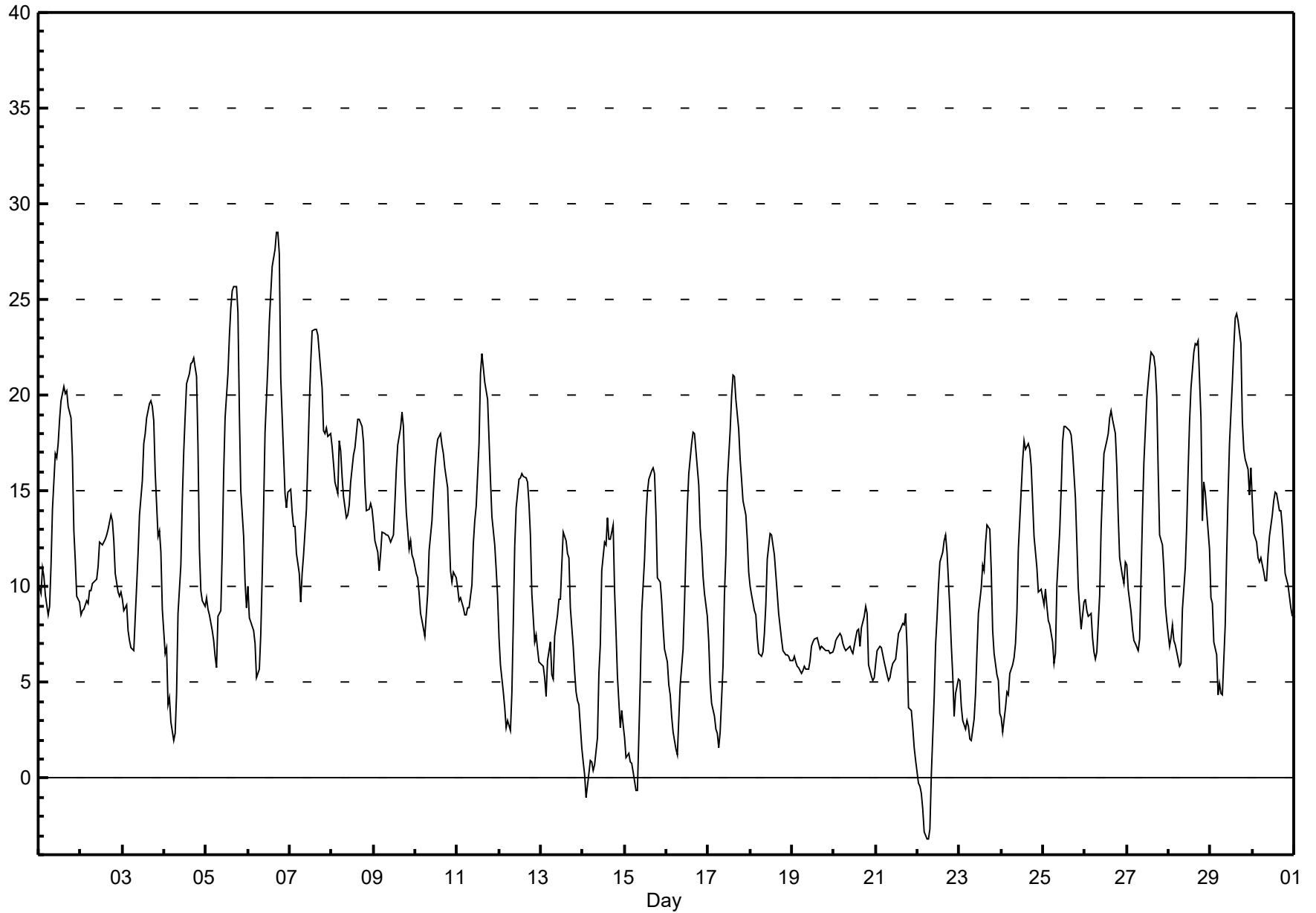
Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Smoky Heights - September 2017



Hourly Averages

External Temperature (ET) - °C Smoky Heights - September 2017

Maximum Value: 28.5 °C on Sep 6 17:00		Maximum Daily Average: 17.0 °C on Sep 7		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																							
Minimum Value: -3 °C on Sep 22 06:00		Minimum Daily Average: 4.5 °C on Sep 22																									
Maximum Diurnal Average: 17.2 °C at hour 16		Minimum Diurnal Average: 5.8 °C at hour 7																									
Monthly Average: 11.06 °C		Percentiles: P ₁ = -0.7 P ₁₀ = 4.2 Q ₁ = 6.8 Median = 10.3 Q ₃ = 15.0 P ₉₀ = 18.8 P ₉₉ = 25.7																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	10	10	11	11	10	9	9	11	14	17	17	17	19	20	20	20	19	19	17	13	11	10	9	14.2	20.5		
2-Sep	9	9	9	9	9	10	10	10	10	10	11	12	12	12	12	13	13	14	13	12	11	10	9	10	10.8	13.7	
3-Sep	9	9	9	8	7	7	7	8	10	12	14	16	18	18	19	20	20	19	19	16	13	13	12	9	12.9	19.7	
4-Sep	7	7	4	4	3	2	2	4	9	11	15	17	19	21	21	22	22	22	21	17	12	10	9	9	12.0	22.0	
5-Sep	9	9	9	8	7	6	6	8	9	12	16	19	21	23	25	25	26	26	24	19	15	13	10	9	14.7	25.7	
6-Sep	10	8	8	8	7	5	6	7	11	14	18	22	24	25	27	28	29	29	27	21	17	15	14	15	16.4	28.5	
7-Sep	15	14	13	13	12	11	9	11	12	14	17	19	22	23	23	23	23	22	20	18	18	18	18	18	17.0	23.5	
8-Sep	17	16	15	15	18	17	16	15	14	14	15	17	17	18	19	19	18	18	15	14	14	14	14	14	16.0	18.7	
9-Sep	13	12	12	11	12	13	13	13	13	12	13	14	16	17	18	19	18	16	14	12	12	12	11	11	13.7	19.1	
10-Sep	11	10	10	9	8	7	9	10	12	13	15	16	17	18	18	17	17	16	15	13	11	10	11	10	12.7	18.0	
11-Sep	10	9	9	9	9	9	9	9	10	12	13	14	17	21	22	21	21	20	18	16	14	12	11	9	13.5	22.2	
12-Sep	7	6	5	4	3	3	2	4	8	12	14	16	16	16	16	16	15	14	13	10	7	7	7	6	9.4	15.9	
13-Sep	6	6	5	4	6	7	5	5	7	9	9	9	11	13	12	12	12	9	7	6	5	4	4	2	7.3	12.9	
14-Sep	1	0	-1	0	1	1	0	1	2	5	7	11	12	12	14	12	13	13	10	8	5	3	4	3	5.7	13.6	
15-Sep	2	1	1	1	1	0	-1	-1	2	5	9	11	14	15	16	16	16	16	14	10	10	9	8	7	7.6	16.2	
16-Sep	6	5	4	3	2	1	1	3	5	7	9	12	14	16	17	18	18	17	15	13	12	11	10	8	9.6	18.1	
17-Sep	7	5	4	3	3	2	2	2	6	10	12	15	18	20	21	21	20	18	17	16	14	14	12	11	11.4	21.0	
18-Sep	10	10	9	9	7	7	6	7	8	9	11	13	13	12	12	10	9	8	7	7	6	6	6	6	8.6	12.8	
19-Sep	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	6.4	7.3	
20-Sep	7	7	7	8	7	7	7	7	7	7	7	7	7	8	8	7	8	8	9	9	6	5	5	5	7.0	9.0	
21-Sep	6	7	7	7	6	6	5	5	5	6	6	6	7	8	8	8	8	9	7	4	4	3	2	1	5.8	8.6	
22-Sep	0	0	-1	-2	-3	-3	-3	-3	0	4	7	8	10	11	12	12	13	12	9	7	5	3	4	5	4.5	12.7	
23-Sep	5	4	3	3	3	3	2	2	3	4	7	9	10	11	11	12	13	13	11	8	7	5	5	3	6.5	13.2	
24-Sep	3	2	4	5	4	5	6	6	7	9	12	15	17	18	17	17	17	16	15	13	11	10	10	10	10.3	17.6	
25-Sep	9	10	9	8	8	7	6	7	10	13	15	18	18	18	18	18	18	17	15	12	10	9	8	9	12.1	18.4	
26-Sep	9	9	8	9	7	7	6	7	10	13	15	17	18	18	19	19	19	18	16	14	12	11	10	11	12.5	19.2	
27-Sep	11	10	9	8	7	7	7	7	10	14	17	20	21	22	22	22	21	20	16	13	12	11	9	8	13.5	22.3	
28-Sep	7	7	8	7	7	6	6	6	9	11	13	16	19	20	22	23	23	23	19	13	15	15	14	12	13.4	22.8	
29-Sep	9	9	7	6	4	5	4	4	8	12	15	17	21	22	24	24	24	23	19	17	17	16	15	16	14.2	24.3	
30-Sep	14	13	12	12	11	12	11	10	10	12	13	14	15	15	15	14	14	13	12	11	10	10	9	8	12.0	15.0	
		8.2	7.7	7.2	6.8	6.4	6.1	5.8	6.4	8.2	10.3	12.2	14.0	15.5	16.6	17.1	17.2	17.1	16.6	14.9	12.5	10.8	9.9	9.3	8.8	Diurnal Average	
		17.4	16.4	15.5	14.9	17.6	17.1	15.8	14.7	14.1	16.9	18.1	21.6	23.8	25.3	26.7	27.6	28.5	28.5	27.4	20.9	18.0	18.3	17.8	18.0	Diurnal Maximum	





Peace Airshed Zone Association

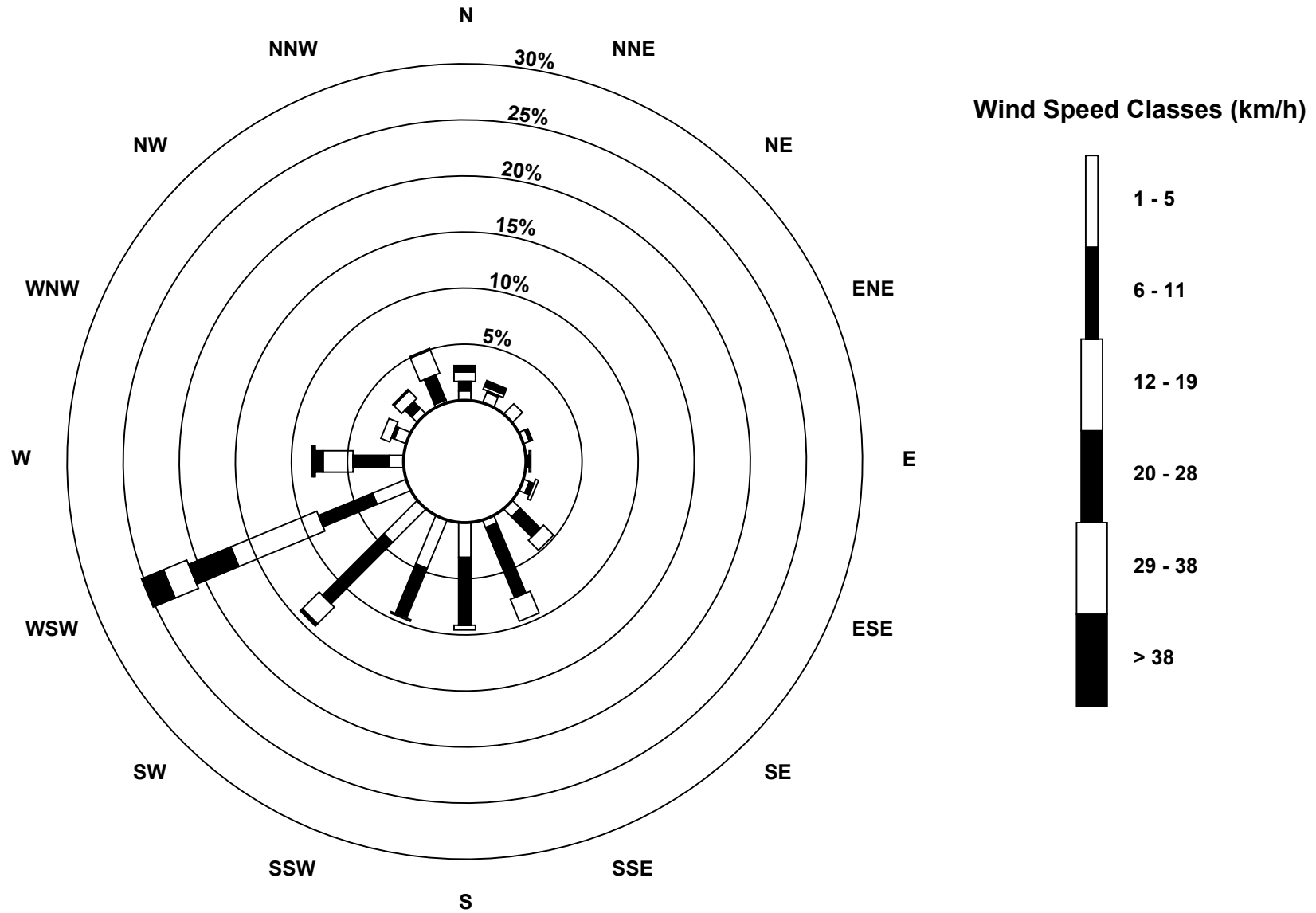
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	4	5	4	5	4	3	2	5	6	6	7	9	9	9	9	10	11	9	7	6	5	5	4	6	5.9	11.3	
Dir	219	218	183	198	199	180	200	217	194	169	175	175	162	194	174	167	173	169	158	147	195	190	218	228	183.0	172.6	
24 Spd	3	7	5	5	5	7	8	8	9	9	10	15	18	18	12	21	21	19	15	13	12	14	14	16	11.1	21.2	
Dir	242	242	212	229	229	198	189	200	189	192	199	233	251	243	238	247	246	241	234	242	250	263	257	257	236.1	246.9	
25 Spd	15	14	11	10	10	10	10	10	8	14	19	28	30	30	24	20	17	14	8	6	7	5	13	13	14.0	30.1	
Dir	254	237	220	232	247	226	223	249	225	226	239	255	259	261	261	257	256	259	250	223	221	253	255	256	247.9	258.7	
26 Spd	13	14	16	16	14	14	14	12	7	11	10	12	18	15	15	20	26	25	13	11	11	11	17	18	14.4	26.2	
Dir	262	256	252	250	260	261	262	259	209	228	226	231	241	225	240	247	258	250	239	233	226	237	251	253	246.4	258.2	
27 Spd	18	13	13	12	11	11	10	9	10	14	14	21	26	15	13	15	14	10	8	3	4	6	3	5	11.4	25.6	
Dir	259	247	242	244	239	242	233	223	228	237	241	248	260	274	255	262	250	245	266	253	254	258	242	239	248.9	260.2	
28 Spd	4	3	5	8	7	7	5	7	9	10	8	7	M	8	7	9	6	1	1	4	10	7	3	4	4.4	9.9	
Dir	248	207	238	240	234	232	239	237	200	183	179	176	M	146	163	132	191	218	38	48	145	154	223	240	192.1	144.7	
29 Spd	7	8	10	8	9	9	6	8	9	10	8	8	7	6	5	5	7	6	4	4	5	7	12	23	5.0	23.3	
Dir	236	233	216	209	206	204	232	223	218	210	171	156	154	159	143	117	122	140	66	69	25	266	262	259	207.8	259.5	
30 Spd	30	25	20	17	14	19	20	25	25	33	37	36	34	32	32	28	27	22	27	26	21	20	14	12	24.7	37.3	
Dir	254	252	241	244	251	253	250	257	257	250	250	256	256	253	253	251	254	249	246	257	261	270	280	286	254.3	249.7	
Spd	6.4	7.1	6.7	6.2	5.9	6.0	5.9	5.8	6.5	8.1	7.3	7.7	8.4	8.2	8.0	8.7	8.8	8.4	6.4	3.9	3.7	5.1	5.6	6.0	Diurnal Average		
Dir	247.0	252.0	245.9	247.1	250.9	248.0	241.9	236.7	225.8	230.9	230.2	233.5	239.3	234.6	235.5	237.2	235.6	245.6	245.2	244.9	238.7	248.1	248.0	243.4	Diurnal Maximum		
Spd	29.7	25.0	20.0	21.0	21.5	19.2	21.3	25.4	32.5	42.2	42.9	43.0	43.5	41.3	39.9	49.5	43.5	41.5	41.6	26.2	21.2	26.0	24.6	23.8	Diurnal Maximum		
Dir	253.8	251.9	252.4	22.7	22.7	252.6	244.5	257.4	244.9	252.9	256.5	256.9	256.4	251.3	250.8	257.1	246.9	254.7	264.6	256.6	261.2	243.1	237.5	233.7	Diurnal Maximum		
Maximum Speed Value: 49 km/h on Sep 11 16:00																		Minimum Speed Value: 0 km/h on Sep 13 08:00						Hours in Service:		720	
Maximum Daily Speed Average: 24.7 km/h on Sep 30																		Minimum Daily Speed Average: 3.2 km/h on Sep 4						Hours of Data:		719	
Maximum Diurnal Speed Average: 8.8 km/h at hour 17																		Minimum Diurnal Speed Average: 3.7 km/h at hour 21						Hours of Missing Data:		1	
Monthly Average Velocity: 6.65 km/h 240.51 deg																		Speed Percentiles: P ₁ = 0.9 P ₁₀ = 3.5 Q ₁ = 5.5 Median = 8.4 Q ₃ = 13.4 P ₉₀ = 20.2 P ₉₉ = 42.2						Percent Operational Time:		99.9	
All monthly, daily, and diurnal averages have been calculated using vector methods																											
M - Maintenance																											
Frequency Distribution																											
Speed Range (km/h)																											
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																				
North	9	12	13	7	0	0	41																				
NorthEast	18	1	1	2	0	0	22																				
East	4	3	1	0	0	0	8																				
SouthEast	11	42	19	1	0	0	73																				
South	37	91	16	0	0	0	144																				
SouthWest	44	100	48	15	1	2	210																				
West	25	40	51	21	16	15	168																				
NorthWest	9	17	26	1	0	0	53																				
Total	157	306	175	47	17	17	719																				

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - September 2017

Maximum Speed: 50 km/h on Sep 11 16:00		Maximum Daily Speed Average: 25.0 km/h on Sep 30		Hours in Service: 720 Hours of Data: 719 Hours of Missing Data: 1																						
Minimum Speed: 1 km/h on Sep 4 01:00		Minimum Daily Speed Average: 5.5 km/h on Sep 4		Percent Operational Time: 99.9																						
Maximum Diurnal Speed Average: 15.7 km/h at hour 16		Minimum Diurnal Speed Average: 8.7 km/h at hour 8																								
Monthly Average Speed: 11.09 km/h		Percentiles: P ₁ = 2.2 P ₁₀ = 4.0 Q ₁ = 5.8 Median = 8.7 Q ₃ = 13.6 P ₉₀ = 20.3 P ₉₉ = 42.3																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	14	18	20	18	12	12	13	12	19	37	39	41	44	37	39	39	37	24	17	8	10	10	6	23.5	44.0	
2-Sep	8	9	9	8	6	5	6	5	7	8	5	5	5	2	4	5	10	15	13	10	8	8	13	14	7.9	15.4
3-Sep	17	18	17	7	12	4	6	3	5	5	4	5	6	7	11	12	8	9	7	5	7	9	8	5	8.2	18.3
4-Sep	1	4	3	2	6	5	2	2	5	7	6	8	10	11	12	12	9	7	5	1	3	3	4	5	5.5	12.5
5-Sep	4	4	6	9	10	9	8	7	7	8	6	7	7	8	7	6	7	7	4	3	4	6	3	4	6.3	10.1
6-Sep	3	3	4	4	5	7	7	6	8	8	9	9	8	7	7	7	6	3	3	6	3	2	4	5.9	9.3	
7-Sep	4	7	9	10	7	10	8	11	8	8	9	9	8	7	10	11	9	5	6	7	10	7	5	8	8.0	10.6
8-Sep	11	10	10	9	15	12	10	4	3	7	11	12	12	13	13	12	13	11	8	4	3	3	4	4	8.9	14.7
9-Sep	5	4	3	5	6	3	6	8	7	8	13	9	6	13	12	12	11	17	18	13	16	26	25	24	11.1	26.1
10-Sep	17	22	19	17	19	17	21	24	33	42	43	43	39	42	40	43	38	32	20	9	3	6	4	2	24.8	43.3
11-Sep	4	3	4	3	3	4	6	5	5	5	4	7	9	26	40	50	44	42	42	25	20	19	17	16	16.7	49.7
12-Sep	14	14	13	9	11	13	13	8	7	7	6	5	6	6	5	4	11	15	10	6	5	7	7	7	8.6	14.7
13-Sep	7	9	5	3	6	7	2	2	4	8	6	5	5	6	11	6	5	8	8	11	10	12	9	7	6.9	11.9
14-Sep	7	4	6	5	5	6	7	7	8	8	9	7	7	9	14	18	13	11	7	4	2	5	6	4	7.4	18.1
15-Sep	3	7	6	6	6	6	7	7	7	8	9	13	15	17	18	17	18	15	12	14	17	15	13	12	11.0	17.7
16-Sep	8	4	8	5	7	7	7	7	12	12	11	10	11	9	9	9	8	8	7	12	14	11	14	7	9.1	14.0
17-Sep	5	5	7	8	8	8	8	6	9	5	7	10	11	12	14	14	15	10	9	10	13	20	16	10	9.9	19.7
18-Sep	7	4	4	4	3	4	4	4	4	10	13	12	12	10	13	14	18	22	16	7	6	4	4	5	8.4	21.9
19-Sep	6	7	8	8	4	6	8	11	16	14	13	16	21	17	11	13	18	14	9	12	14	14	14	12	12.0	21.5
20-Sep	12	14	18	21	22	18	21	21	22	22	25	21	17	19	21	18	17	17	19	17	8	2	6	9	16.9	25.4
21-Sep	7	9	11	13	12	16	13	12	12	13	10	14	14	13	11	11	9	5	5	6	7	8	6	5	10.2	16.1
22-Sep	6	6	5	5	5	6	5	5	5	6	7	9	7	6	7	7	10	7	3	3	3	3	4	3	5.7	9.7
23-Sep	4	5	5	5	5	3	2	5	6	6	7	10	9	10	10	11	11	9	7	6	5	5	4	6	6.5	11.5
24-Sep	3	7	5	5	6	7	8	8	9	9	10	16	19	19	13	21	21	19	15	13	12	14	14	16	12.1	21.4
25-Sep	15	14	11	10	10	10	10	10	8	14	19	29	31	30	24	20	18	14	8	6	7	5	13	13	14.6	30.6
26-Sep	13	14	16	16	14	14	14	12	8	11	10	12	18	15	16	20	26	25	14	11	12	11	17	18	14.9	26.3
27-Sep	18	13	13	12	11	11	10	9	10	14	14	22	26	16	14	15	15	10	8	4	5	7	4	6	12.0	25.9
28-Sep	4	3	5	8	7	7	5	8	9	10	8	7	M	9	8	10	7	3	2	4	10	7	3	4	6.4	9.9
29-Sep	7	8	10	9	9	9	6	8	9	10	8	8	7	6	5	6	7	6	5	4	5	8	12	23	8.2	23.4
30-Sep	30	25	20	17	14	19	20	26	25	33	38	37	35	32	32	28	27	23	27	26	21	20	14	12	25.0	37.5
																								Diurnal Average		
																								Diurnal Maximum		
8.8 9.2 9.4 8.7 8.8 8.9 8.8 8.7 9.8 12.1 12.6 13.9 14.7 14.5 15.1 15.7 15.5 14.3 11.3 9.1 8.8 9.3 9.1 9.1 29.8 25.1 20.1 21.1 21.6 19.2 21.3 25.5 32.6 42.4 43.2 43.3 44.0 41.6 40.2 49.7 43.8 41.8 41.7 26.3 21.3 26.1 24.7 23.8																										
M - Maintenance All monthly, daily, and diurnal averages have been calculated using scalar methods																										

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - September 2017

Maximum Value: 95.5 deg on Sep 18 09:00																								Hours in Service:	720
Minimum Value: 1.7 deg on Sep 26 23:00																								Hours of Data:	719
Percentiles: P ₁ = 3.3 P ₁₀ = 5.4 Q ₁ = 7.6 Median = 12.2 Q ₃ = 20.4 P ₉₀ = 33.9 P ₉₉ = 73.3																								Hours of Missing Data:	1
																								Hours of Calibration:	0
																								Percent Operational Time:	99.9
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	8	14	4	5	7	13	9	6	10	7	6	7	8	10	9	8	7	8	6	8	18	15	12	14	17.6
2-Sep	12	4	10	27	22	32	19	17	11	11	12	22	15	30	24	20	13	7	11	9	4	8	3	6	32.5
3-Sep	3	5	8	47	9	49	31	48	22	24	35	55	68	62	35	37	34	16	11	7	6	6	32	76	76.3
4-Sep	86	22	68	77	8	14	17	25	14	14	21	20	15	23	20	18	28	13	10	57	12	26	14	22	86.4
5-Sep	22	19	10	4	5	10	32	13	7	12	14	22	18	19	19	27	22	11	29	16	7	18	17	47	47.0
6-Sep	31	78	36	11	14	12	7	7	17	15	12	18	20	17	17	18	13	11	32	9	11	17	35	16	78.1
7-Sep	12	5	6	15	14	6	11	8	10	18	9	11	11	18	11	12	11	17	9	33	4	7	30	8	32.8
8-Sep	5	4	4	7	6	11	10	41	34	18	9	17	19	13	10	10	13	9	11	58	65	60	18	36	64.5
9-Sep	21	21	15	15	14	26	21	23	16	17	22	34	32	15	15	32	26	11	6	6	8	5	4	4	33.9
10-Sep	7	6	6	8	5	4	5	3	4	6	7	7	9	7	7	8	7	6	5	22	37	9	28	56	56.1
11-Sep	23	20	23	64	78	45	15	12	26	23	17	17	13	15	7	6	6	6	5	6	6	7	6	6	78.2
12-Sep	9	8	12	9	20	6	5	42	13	24	64	73	43	61	35	41	52	14	16	19	11	10	9	7	73.4
13-Sep	13	6	91	67	24	8	74	93	24	17	29	28	50	61	29	45	30	51	19	11	13	9	9	26	93.1
14-Sep	6	13	11	9	15	12	10	14	12	25	21	19	75	21	16	47	37	17	23	20	37	43	41	40	74.7
15-Sep	24	9	15	10	8	10	15	11	15	13	14	15	13	17	17	14	13	11	9	5	6	6	4	4	23.9
16-Sep	7	27	14	12	7	7	14	11	9	11	16	20	17	17	20	22	21	6	7	6	7	5	4	49	49.3
17-Sep	29	26	10	5	4	14	10	19	10	29	22	12	16	21	18	16	7	8	6	11	23	10	9	14	29.1
18-Sep	9	27	31	38	61	34	25	69	96	17	10	18	15	15	24	16	8	10	5	65	26	33	27	18	95.5
19-Sep	14	7	12	6	24	25	52	12	9	9	17	8	5	12	11	10	7	22	15	6	10	7	9	12	51.7
20-Sep	12	10	9	7	8	8	9	6	7	18	7	12	8	12	16	11	20	10	12	30	11	85	30	89	88.8
21-Sep	52	16	8	8	7	6	8	8	8	8	11	9	11	17	13	16	15	21	28	13	7	2	16	15	51.7
22-Sep	13	11	5	14	29	10	17	17	18	19	26	15	29	48	32	25	24	17	34	6	34	15	17	47	48.0
23-Sep	9	18	19	11	30	12	20	12	19	13	14	17	11	22	28	15	10	10	6	9	16	19	20	9	29.8
24-Sep	42	11	24	16	25	5	5	3	7	9	15	14	18	16	11	8	5	5	4	4	7	4	2	4	42.4
25-Sep	6	5	13	7	7	8	5	5	11	5	9	10	11	10	8	7	10	4	10	13	9	19	4	6	19.1
26-Sep	6	6	4	6	2	5	4	7	12	9	10	14	12	15	9	11	6	5	8	5	8	8	2	3	15.3
27-Sep	4	9	6	5	6	10	9	10	6	5	9	12	9	21	23	12	9	8	7	37	43	13	36	23	42.7
28-Sep	37	26	9	8	14	13	14	8	18	8	15	16	M	19	24	17	34	72	22	27	7	20	38	20	71.7
29-Sep	13	10	10	9	11	7	12	12	13	8	19	13	14	17	27	27	17	6	34	24	14	41	10	5	41.2
30-Sep	5	5	9	5	6	3	5	5	4	5	6	6	9	9	8	5	5	6	4	4	6	4	7	7	9.2
86.4	78.1	91.1	77.5	78.2	48.5	74.0	93.1	95.5	29.1	63.8	73.4	74.7	61.6	34.9	47.0	52.1	71.7	34.1	65.4	64.5	85.3	40.7	88.8		
M - Maintenance																									

PAZA

Beaverlodge Station

Monthly Summary Tables, Graphs and
Roses

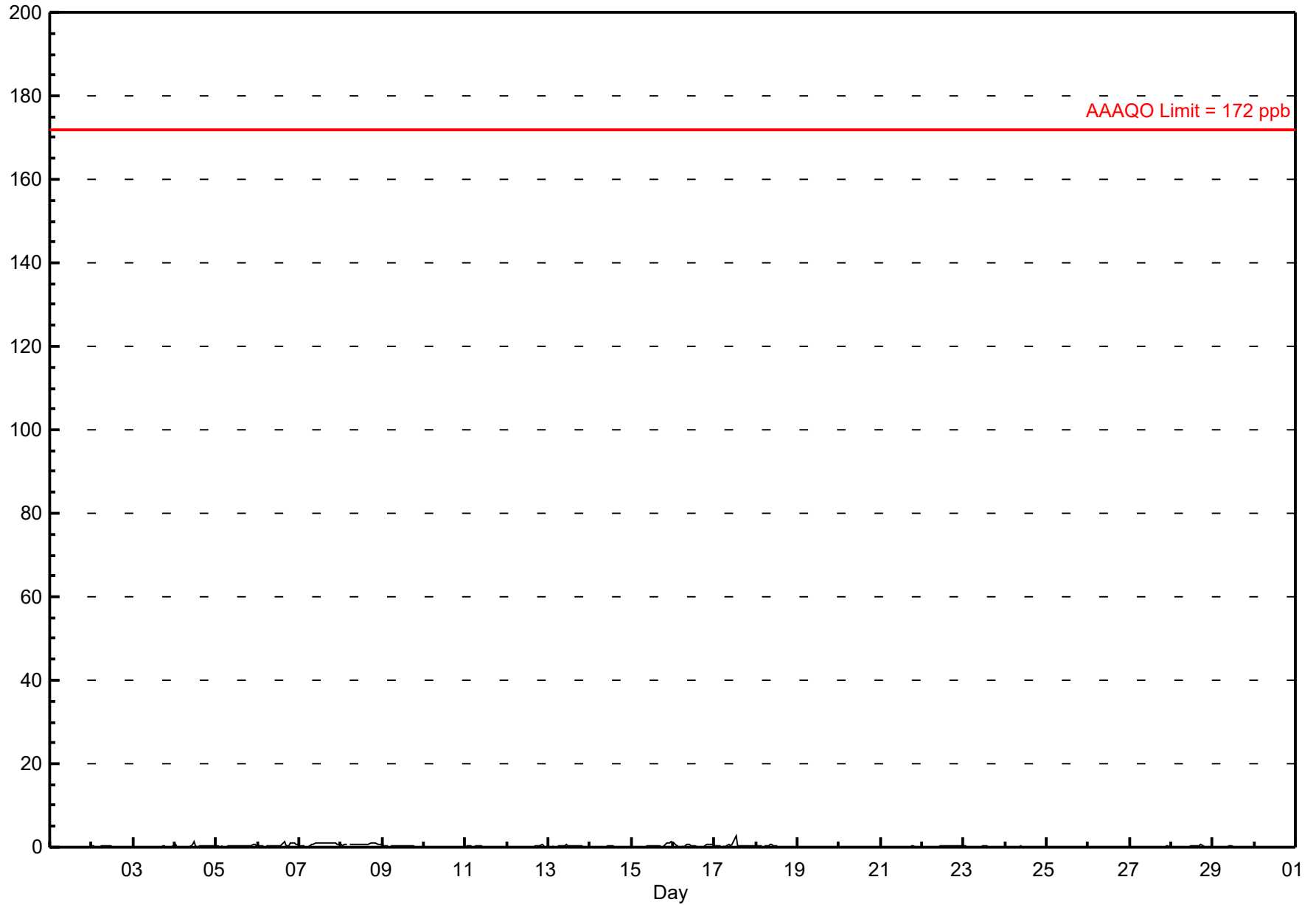
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Beaverlodge - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0										Hours in Service: 720																
Maximum Value: 2.8 ppb on Sep 17 13:00										Maximum Daily Average: 0.8 ppb on Sep 7										Hours of Data: 687						
Minimum Value: 0 ppb on Sep 22 06:00										Minimum Daily Average: 0.0 ppb on Sep 30										Hours of Missing Data: 33						
Maximum Diurnal Average: 0.3 ppb at hour 12										Minimum Diurnal Average: 0.1 ppb at hour 7										Hours of Calibration: 33						
Monthly Average: 0.21 ppb										Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.1										Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
2-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
3-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Sep	1	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
5-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.3	0.6
6-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	1	1	0.5	1.2
7-Sep	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
8-Sep	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
9-Sep	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
10-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
11-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	0.6
13-Sep	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
15-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	1.3
16-Sep	1	1	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	1.0
17-Sep	0	0	0	0	A	0	0	0	1	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0.5	2.8
18-Sep	0	0	0	0	A	0	0	0	1	1	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.2	0.5
19-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
22-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
23-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
24-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
25-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
27-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
28-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6
29-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
30-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
0.2 0.2 0.1 0.1 -- 0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.3 0.2 0.2																								Diurnal Average		
1.0 0.7 0.6 0.6 -- 0.6 0.7 0.7 0.7 0.9 1.0 1.5 2.8 0.9 1.0 1.2 1.1 1.0 1.1 1.1 1.1 1.1 1.2 1.1 1.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - September 2017



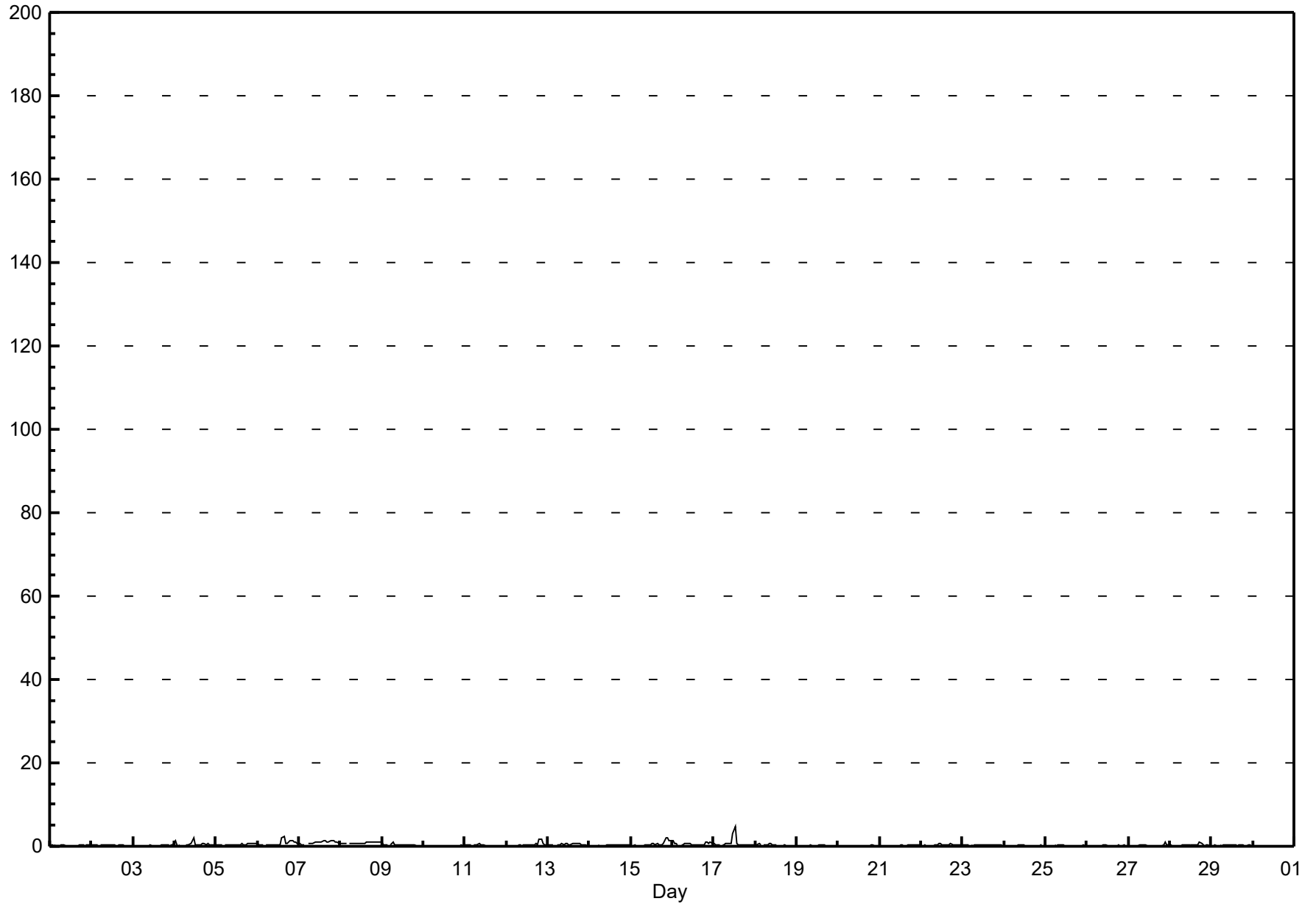
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Beaverlodge - September 2017

Maximum Value: 4.7 ppb on Sep 17 13:00		Maximum Daily Average: 0.9 ppb on Sep 7		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 11 19:00		Minimum Daily Average: 0.1 ppb on Sep 30		Hours of Data: 687																							
Maximum Diurnal Average: 0.5 ppb at hour 12		Minimum Diurnal Average: 0.2 ppb at hour 4		Hours of Missing Data: 33																							
Monthly Average: 0.35 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.8 P ₉₉ = 2.0		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
2-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
3-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
4-Sep	1	0	0	0	A	0	0	0	0	1	1	2	0	0	0	0	1	1	1	1	1	0	0	0	0.5	2.2	
5-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	0.5	0.8	
6-Sep	1	0	0	0	A	0	0	0	0	0	0	0	0	2	2	1	1	1	1	1	1	1	1	1	0.8	2.4	
7-Sep	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
8-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
9-Sep	1	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9	
10-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
11-Sep	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	1	0	0	0.4	1.7	
13-Sep	0	0	0	0	A	0	0	0	1	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0.4	0.8	
14-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
15-Sep	0	0	0	0	A	0	0	0	0	0	1	0	1	1	0	1	0	0	0	1	2	2	1	1	0.6	2.1	
16-Sep	1	1	1	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0.6	1.2	
17-Sep	1	0	0	0	A	0	0	1	1	1	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0.8	4.7	
18-Sep	0	0	1	0	A	0	0	0	1	1	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.4	0.8	
19-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
20-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
22-Sep	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.7	
23-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
24-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
25-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
27-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.9	
28-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.0	
29-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
30-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
		0.3	0.3	0.2	0.2	--	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	Diurnal Average
		1.3	0.8	0.7	0.7	--	0.8	0.9	0.8	0.8	1.0	1.2	3.2	4.7	1.0	2.0	2.4	1.2	1.2	1.2	1.2	1.6	2.0	2.1	1.3	1.5	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																									

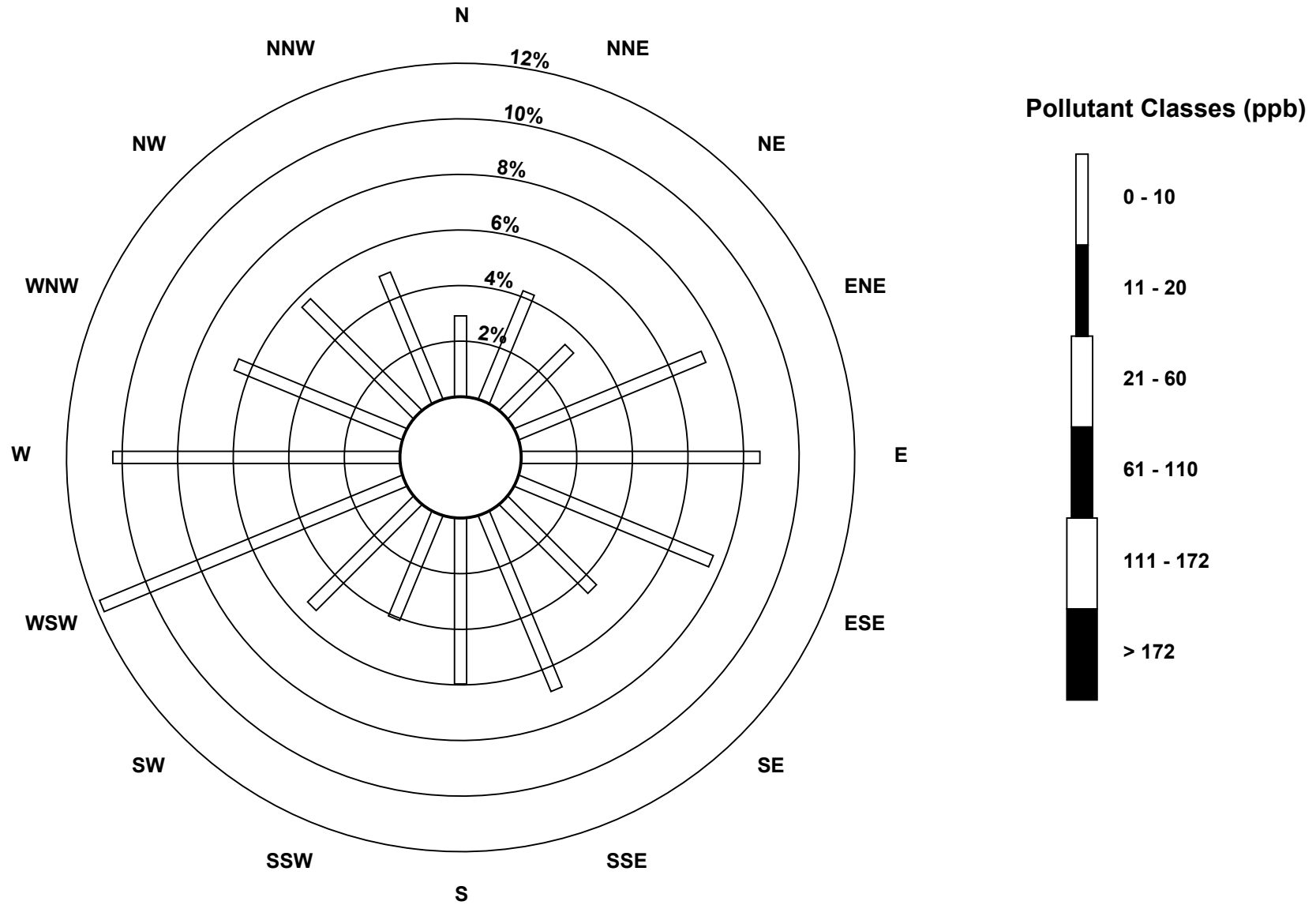
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - September 2017



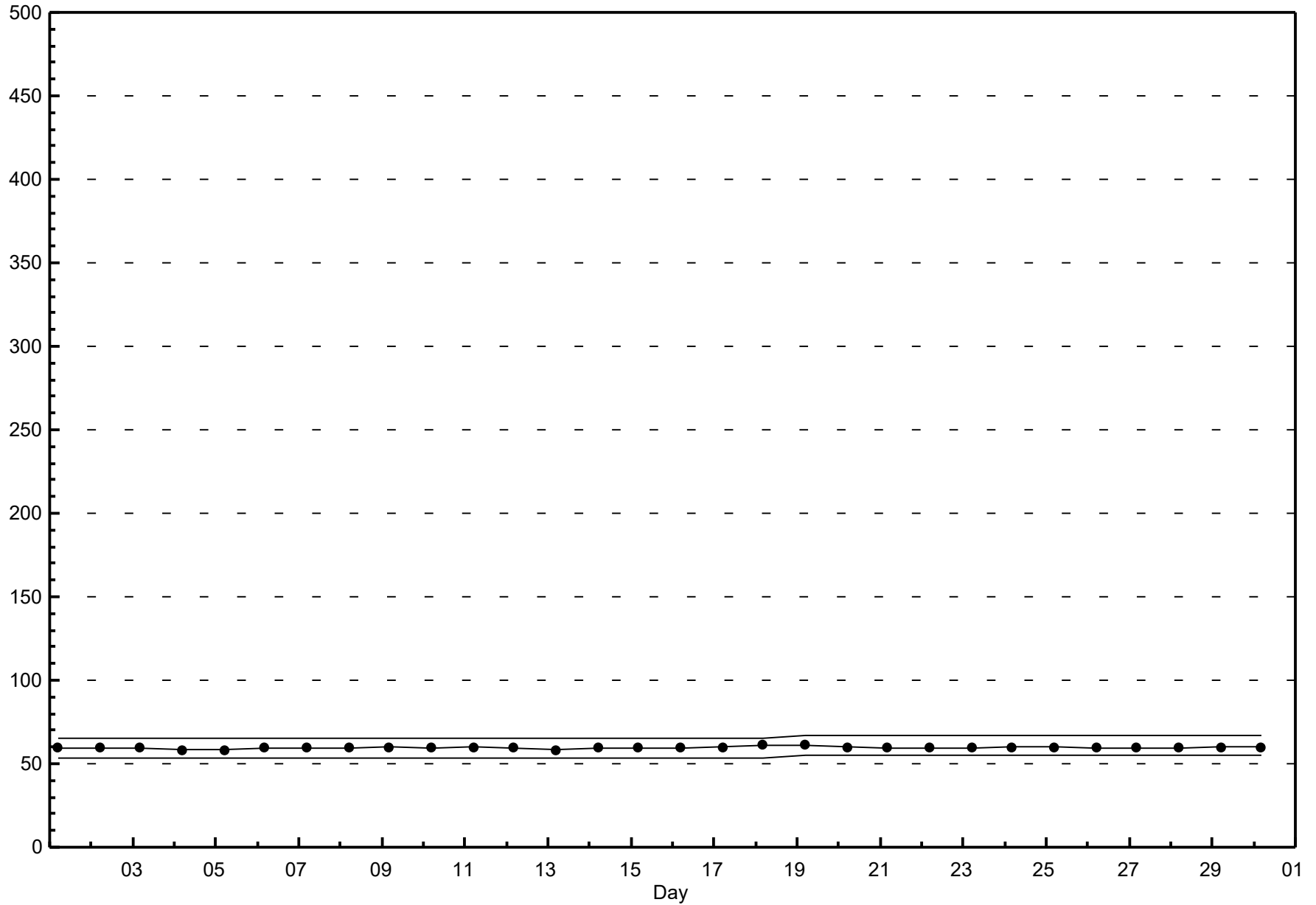
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - September 2017



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - September 2017



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb Beaverlodge - September 2017

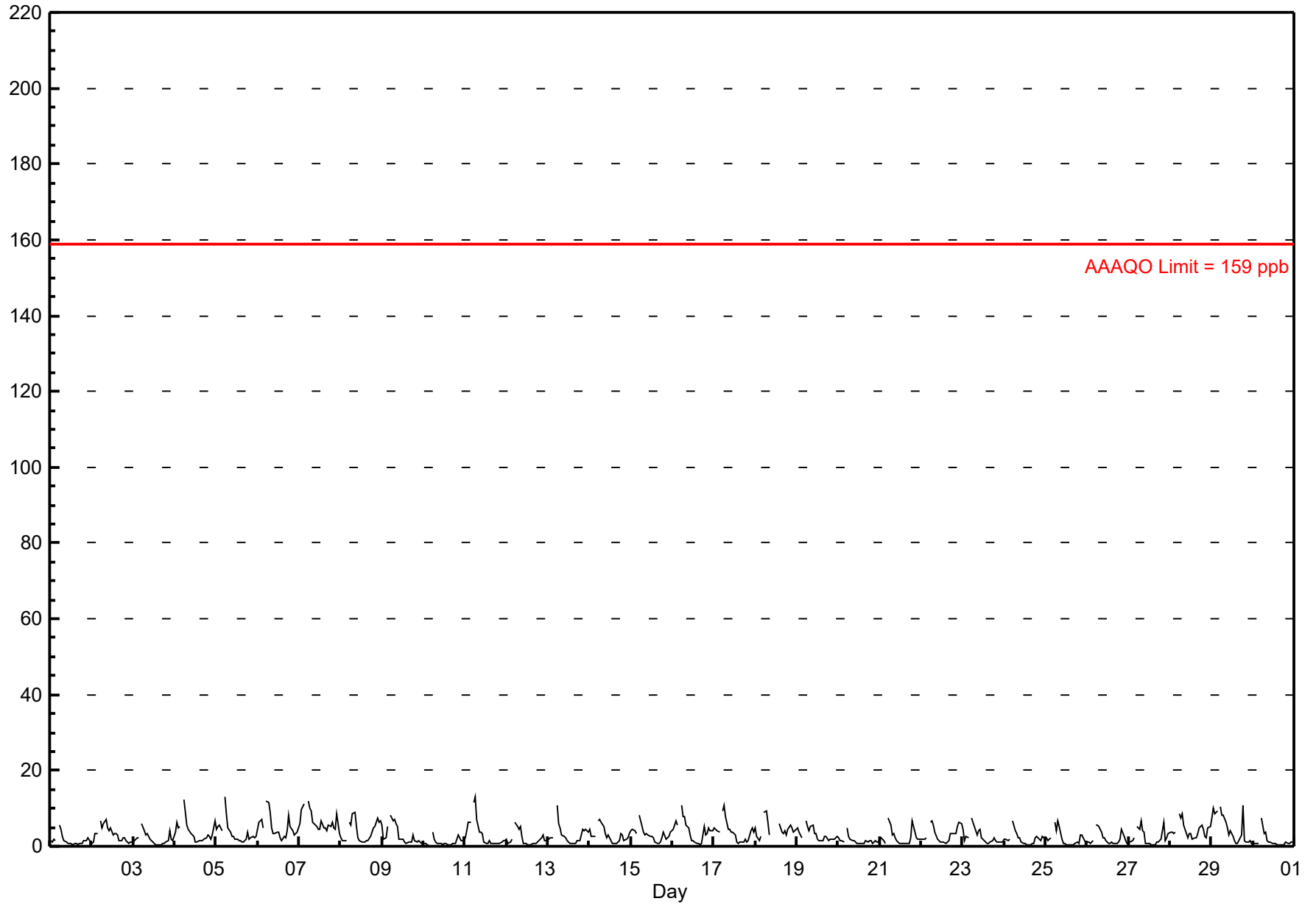
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 720
Maximum Value: 13.1 ppb on Sep 11 07:00	Maximum Daily Average: 6.7 ppb on Sep 7
Minimum Value: 0 ppb on Sep 10 04:00	Hours of Data: 685
Maximum Diurnal Average: 8.0 ppb at hour 6	Hours of Missing Data: 35
Monthly Average: 3.02 ppb	Hours of Calibration: 35
Minimum Daily Average: 1.1 ppb on Sep 10	Percent Operational Time: 100.0
Minimum Diurnal Average: 1.3 ppb at hour 16	
Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 1.2 Median = 2.2 Q ₃ = 4.3 P ₉₀ = 6.5 P ₉₉ = 11.4	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	1	2	1	A	6	4	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1.5	5.8
2-Sep	1	1	3	3	A	7	5	6	7	5	4	5	3	3	3	3	2	1	2	2	2	1	1	1	3.1	7.0
3-Sep	1	1	2	2	A	6	4	3	3	3	2	1	1	1	1	0	0	1	1	1	2	4	2	1	1.9	5.8
4-Sep	4	6	5	5	A	12	9	6	5	4	3	3	1	1	1	1	2	2	2	3	2	2	3	7	3.8	12.2
5-Sep	5	5	6	4	A	13	9	5	4	3	3	2	2	2	2	1	1	2	4	2	2	3	2	3	3.5	13.0
6-Sep	4	6	7	5	A	12	11	9	5	3	3	4	4	2	1	3	2	4	8	5	4	3	3	4	5.0	12.1
7-Sep	6	10	10	11	A	12	10	9	7	5	5	4	5	7	5	5	4	6	5	6	5	4	9	3	6.7	11.8
8-Sep	2	2	2	1	A	6	5	8	9	5	2	1	1	1	1	2	2	2	4	5	5	7	7	7	3.8	8.9
9-Sep	5	2	2	5	A	8	7	7	6	5	2	2	2	1	1	1	1	1	3	1	1	2	1	1	2.9	8.1
10-Sep	1	1	0	0	A	4	2	1	1	1	1	1	1	1	1	0	0	1	1	2	3	2	1	2	1.1	3.9
11-Sep	2	4	6	6	A	12	13	7	4	4	3	1	1	1	1	1	1	1	1	1	1	1	2	2	3.3	13.1
12-Sep	2	1	1	2	A	6	5	4	5	2	1	1	1	0	1	1	1	1	1	1	2	3	1	1	2.0	6.4
13-Sep	2	2	2	2	A	11	6	5	3	3	2	1	1	1	1	1	1	1	1	3	5	4	5	4	2.9	10.7
14-Sep	4	3	3	3	A	7	7	6	5	3	2	3	1	1	1	1	1	1	3	3	2	2	2	3	2.9	7.0
15-Sep	4	4	4	3	A	8	5	4	3	3	3	3	2	2	1	1	1	1	2	4	2	2	3	4	3.1	8.3
16-Sep	4	6	7	5	A	11	8	8	6	5	3	1	2	1	1	1	1	1	5	3	3	5	4	4	4.1	10.7
17-Sep	5	5	4	4	A	9	11	8	5	4	4	4	3	1	1	1	1	1	2	1	2	4	5	4	3.8	11.0
18-Sep	5	3	2	3	A	9	9	6	3	C	C	C	C	C	6	4	3	4	3	4	6	5	4	4	4.6	9.1
19-Sep	5	4	3	2	A	7	5	4	5	6	3	3	2	2	1	1	3	3	1	2	2	2	2	3	3.1	6.7
20-Sep	2	2	1	1	A	5	3	2	2	1	1	1	1	1	1	1	2	1	2	1	1	2	1	1	1.5	5.0
21-Sep	2	2	1	1	A	7	5	3	3	2	2	1	1	1	1	1	1	1	2	7	4	2	2	2	2.3	7.4
22-Sep	2	2	2	2	A	6	7	6	4	2	2	1	1	1	1	1	2	3	3	3	3	5	6	6	3.1	6.8
23-Sep	4	2	3	2	A	8	6	5	3	4	5	2	1	1	1	1	1	2	2	2	1	1	1	1	2.6	7.6
24-Sep	2	2	1	2	A	7	4	3	2	2	1	1	1	1	0	1	1	1	2	3	2	1	3	2	1.9	6.7
25-Sep	2	2	2	2	A	6	4	7	5	2	1	1	1	1	1	0	0	1	1	1	3	3	2	1	2.1	6.8
26-Sep	1	1	1	2	A	6	6	5	4	2	2	1	1	1	1	1	1	1	2	4	3	2	1	1	2.1	5.7
27-Sep	1	1	1	2	A	5	4	7	4	4	1	1	1	1	0	0	1	1	1	2	6	2	2	4	2.3	6.5
28-Sep	4	4	3	4	A	8	7	9	5	3	2	3	3	2	2	2	3	5	5	4	3	2	5	5	4.2	8.6
29-Sep	7	10	9	9	A	10	8	8	6	5	3	4	3	2	1	1	2	3	11	2	1	1	2	1	4.7	10.9
30-Sep	1	1	1	1	A	7	3	4	2	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1.3	7.4
	3.0	3.1	3.3	3.2	--	8.0	6.5	5.6	4.2	3.2	2.3	2.0	1.6	1.3	1.3	1.3	1.3	1.8	2.7	2.6	2.7	2.7	2.8	2.7	Diurnal Average	
	7.4	10.2	10.5	11.3	--	13.0	13.1	9.3	8.9	5.7	5.1	4.7	4.6	6.9	6.0	4.8	4.0	5.8	10.9	6.7	6.2	7.5	8.5	6.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - September 2017



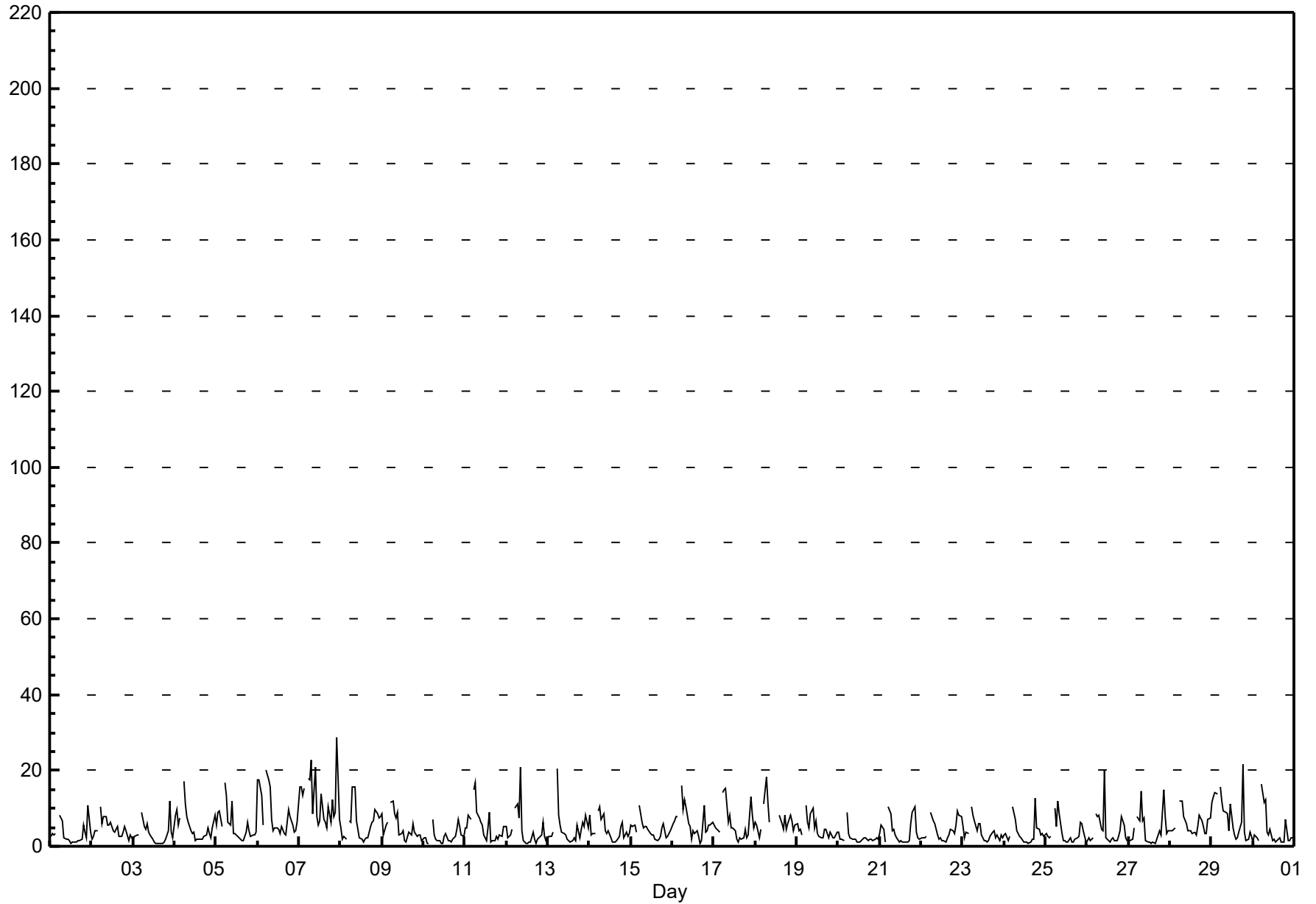
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Beaverlodge - September 2017

Maximum Value: 28.8 ppb on Sep 7 23:00		Maximum Daily Average: 12.2 ppb on Sep 7		Hours in Service: 720																							
Minimum Value: 1 ppb on Sep 10 03:00		Minimum Daily Average: 2.2 ppb on Sep 20		Hours of Data: 685																							
Maximum Diurnal Average: 12.1 ppb at hour 6		Minimum Diurnal Average: 2.2 ppb at hour 17		Hours of Missing Data: 35																							
Monthly Average: 4.96 ppb		Percentiles: P ₁ = 0.8 P ₁₀ = 1.3 Q ₁ = 2.1 Median = 3.8 Q ₃ = 6.4 P ₉₀ = 10.5 P ₉₉ = 20.0		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	3	3	3	3	A	8	7	7	2	2	2	1	1	1	1	1	2	2	2	6	4	2	11	4	3.4	11.0	
2-Sep	2	2	4	4	A	11	6	8	8	5	5	6	4	4	4	5	3	3	4	5	4	1	3	2	4.5	10.5	
3-Sep	2	2	3	3	A	9	5	4	6	4	3	2	1	1	1	1	1	1	2	4	12	4	2	3.2	11.9		
4-Sep	8	10	6	7	A	17	11	8	6	4	3	4	2	2	2	2	3	3	5	3	2	5	8	5.3	17.1		
5-Sep	5	9	9	5	A	17	13	6	5	12	3	3	2	2	2	2	1	4	6	4	3	3	3	4	5.5	16.8	
6-Sep	17	18	13	6	A	20	18	16	7	4	5	5	4	3	5	3	3	6	10	8	5	4	4	6	8.3	20.0	
7-Sep	16	16	13	15	A	18	17	23	9	21	8	5	7	14	7	6	5	11	6	12	8	9	29	7	12.2	28.8	
8-Sep	5	2	3	2	A	7	6	16	16	7	4	2	2	1	2	2	2	5	6	7	10	8	8	8	5.6	15.8	
9-Sep	9	3	6	6	A	12	12	9	8	9	3	4	4	2	1	4	3	3	6	4	2	3	3	1	5.0	12.0	
10-Sep	2	2	1	1	A	7	3	2	1	1	1	1	2	3	1	1	1	2	2	5	7	5	3	3	2.6	7.2	
11-Sep	5	5	8	7	A	15	17	9	7	6	6	3	1	5	9	1	2	2	3	2	3	3	5	5	5.6	16.7	
12-Sep	5	2	3	5	A	10	11	7	21	4	2	1	1	1	1	4	2	1	2	2	3	6	3	1	4.2	20.8	
13-Sep	3	3	2	4	A	21	8	5	4	3	3	2	1	1	1	2	1	6	2	5	6	5	8	5	4.5	20.6	
14-Sep	8	3	3	3	A	9	11	7	8	4	3	4	2	1	1	1	2	3	5	6	2	4	3	3	4.3	10.6	
15-Sep	6	5	6	4	A	11	6	5	5	5	4	3	3	3	2	1	2	3	5	6	2	3	3	4	4.2	10.6	
16-Sep	6	7	8	8	A	16	10	12	10	6	5	2	4	3	4	3	1	2	11	4	4	5	6	6	6.2	15.9	
17-Sep	6	5	4	4	A	14	15	15	6	8	5	5	4	2	1	2	2	2	4	2	3	13	8	5	5.9	15.2	
18-Sep	6	6	2	4	A	11	18	12	6	C	C	C	C	C	8	6	4	8	4	6	8	7	4	6	7.1	18.2	
19-Sep	6	4	5	3	A	11	6	5	9	10	5	7	3	3	2	2	5	4	2	4	3	2	2	4	4.6	10.9	
20-Sep	4	2	2	1	A	9	3	2	2	2	2	1	1	1	2	2	2	2	2	2	1	2	2	2	2.2	8.8	
21-Sep	4	6	4	1	A	11	9	4	4	3	2	1	1	1	1	1	1	6	9	11	4	2	2	3.9	10.6		
22-Sep	2	2	2	3	A	9	8	7	6	3	2	2	1	2	1	2	3	4	4	3	6	9	8	8	4.2	9.2	
23-Sep	5	2	4	4	A	11	8	7	4	6	6	3	2	1	1	2	3	4	4	2	3	2	3	2	3.8	10.5	
24-Sep	3	3	1	2	A	10	7	4	3	3	2	1	1	1	1	1	2	2	13	5	4	3	3	3	3.4	12.7	
25-Sep	3	2	2	3	A	10	5	12	9	3	2	1	1	1	2	1	1	2	2	3	6	6	4	1	3.6	12.0	
26-Sep	2	2	2	2	A	9	8	8	5	4	20	2	1	1	2	2	1	2	2	4	8	6	2	1	4.2	20.1	
27-Sep	2	1	2	5	A	8	7	15	7	7	1	1	1	1	1	1	2	3	4	3	15	8	3	4	4.4	15.0	
28-Sep	4	4	4	5	A	12	12	12	8	6	4	4	4	3	4	3	5	8	7	5	3	4	7	8	5.9	11.8	
29-Sep	12	13	14	14	A	16	12	9	9	9	4	11	5	3	2	2	4	6	21	4	1	2	4	3	7.8	21.4	
30-Sep	1	3	2	2	A	17	12	12	4	3	4	1	2	1	1	2	1	1	7	1	1	2	2	2	3.7	16.6	
		5.3	4.9	4.7	4.5	--	12.1	9.7	8.9	6.9	5.7	4.1	3.1	2.4	2.4	2.5	2.3	2.2	3.5	5.1	4.7	4.8	4.8	5.2	4.0	Diurnal Average	
		17.4	17.7	14.0	15.2	--	20.6	18.2	22.8	20.8	20.8	20.1	11.1	6.7	13.9	8.9	6.3	5.1	10.5	21.4	12.3	15.0	12.9	28.8	8.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

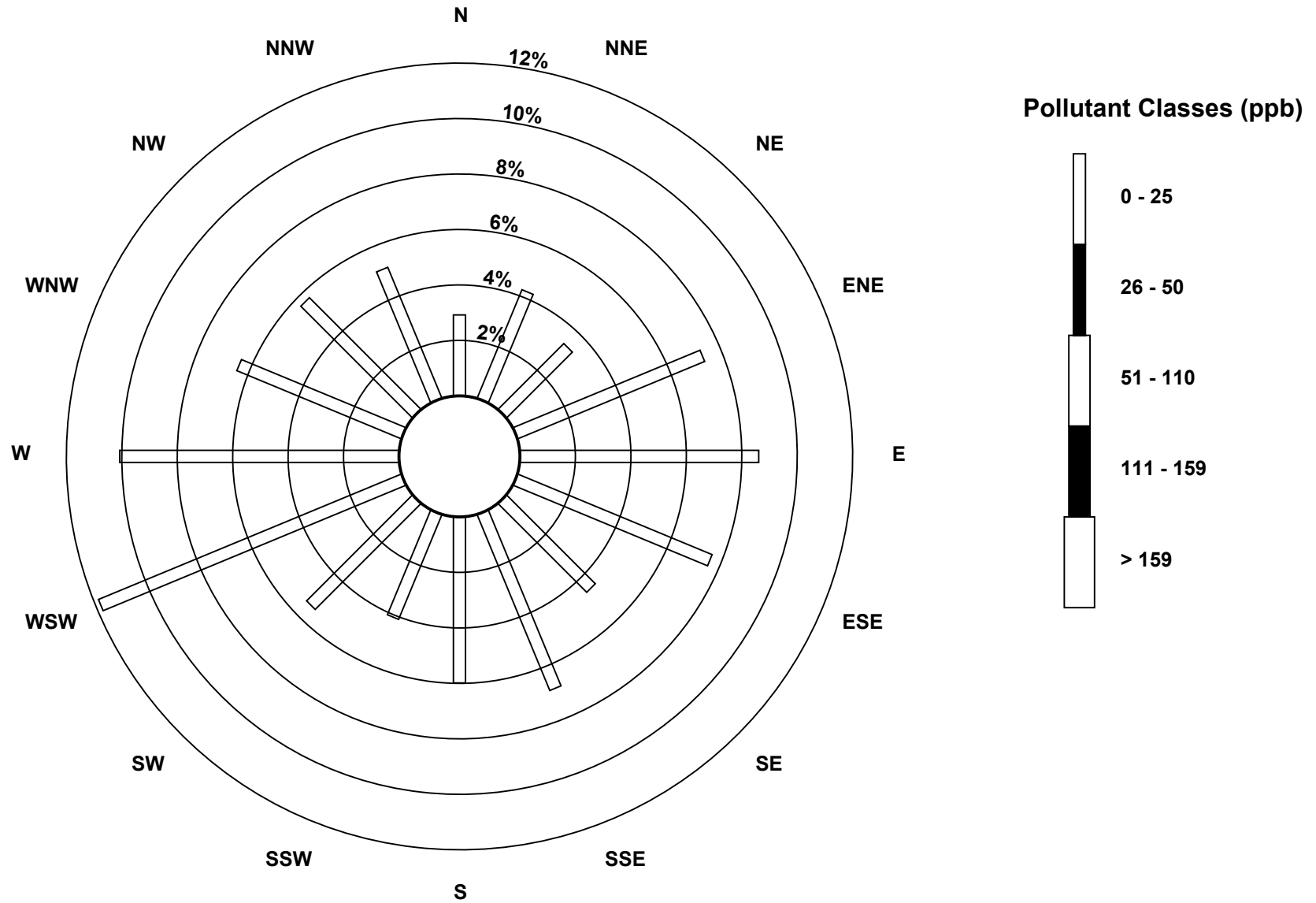
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - September 2017



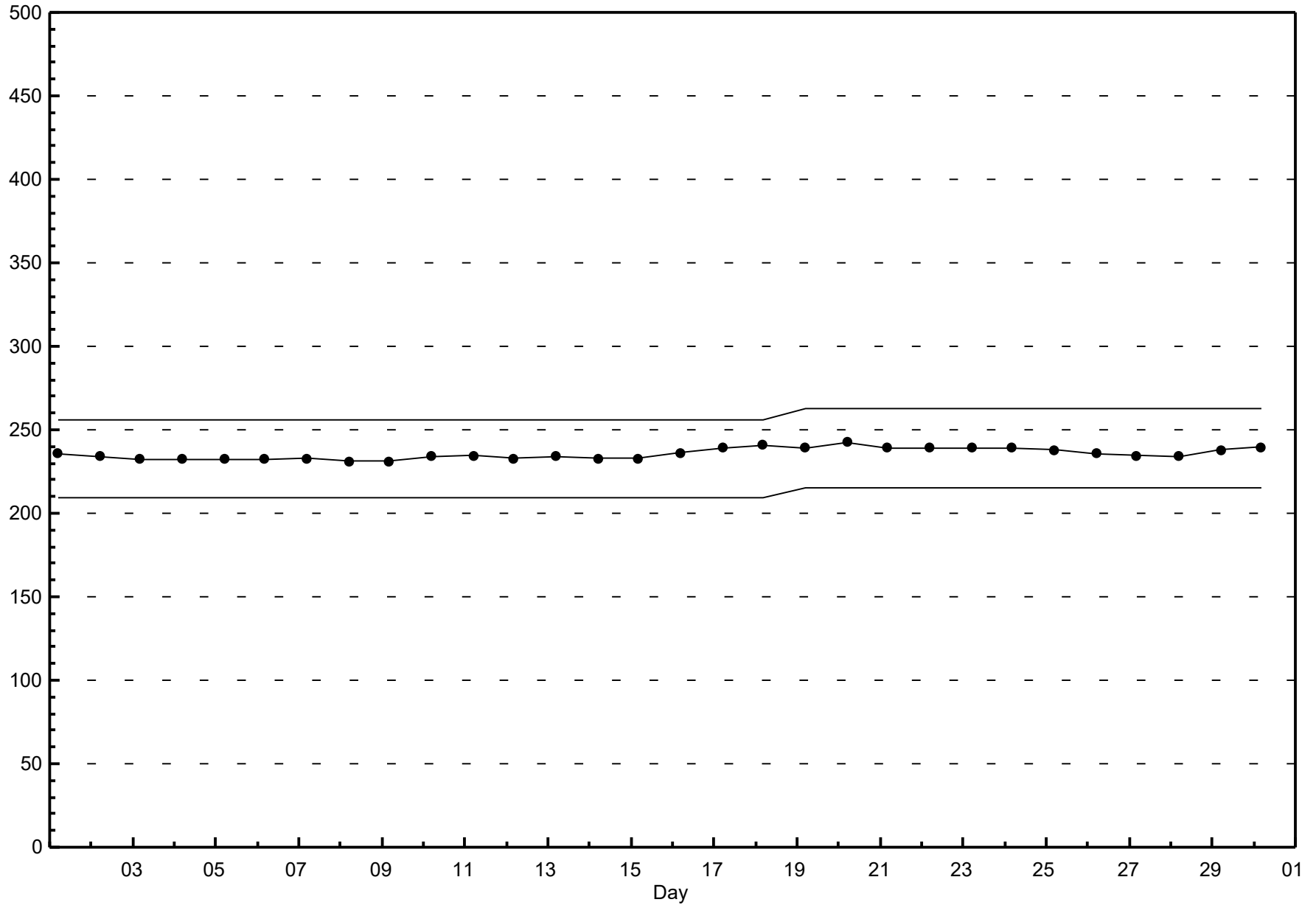
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - September 2017



Span Responses

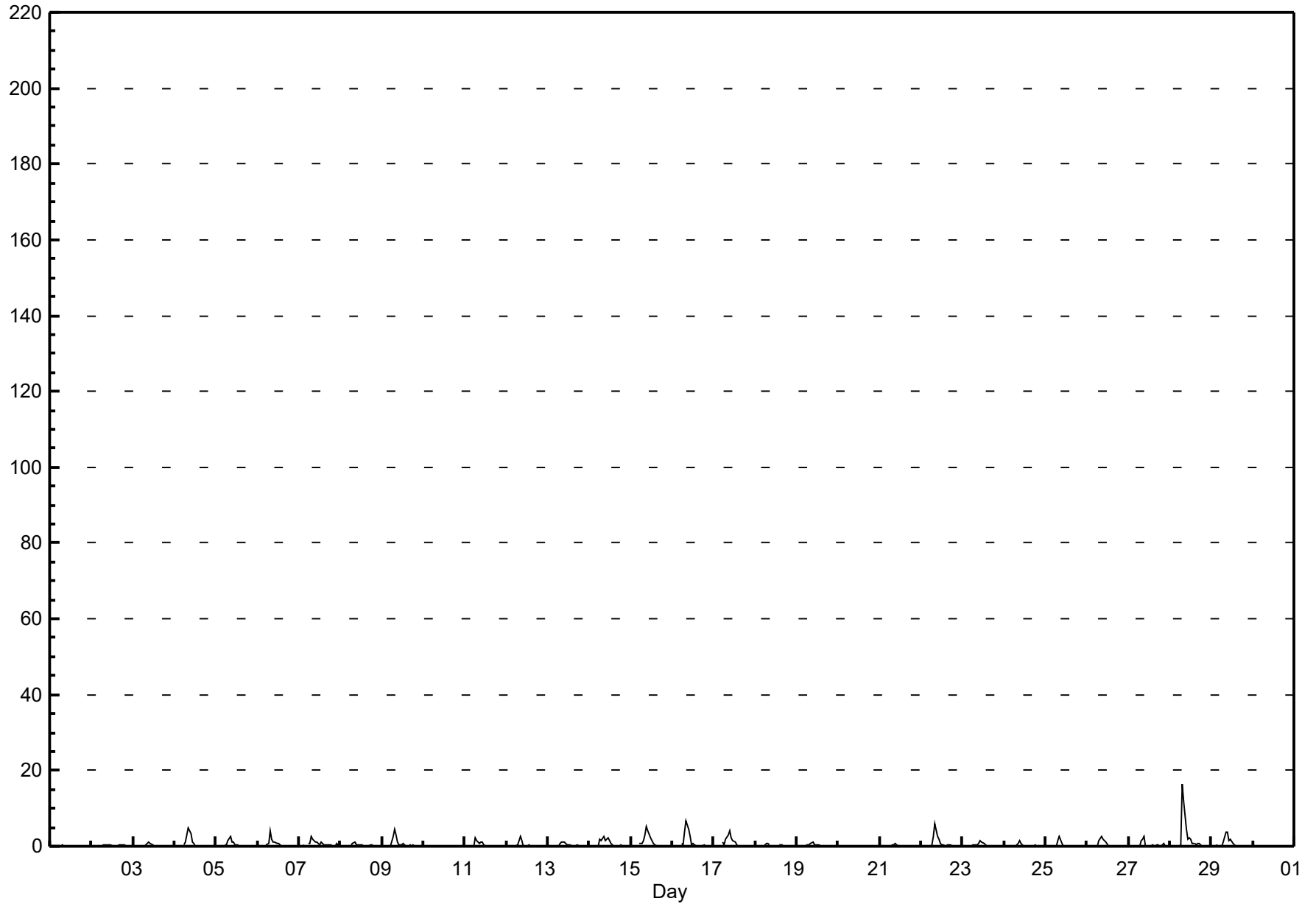
Nitrogen Dioxide (NO₂)
Beaverlodge - September 2017



Hourly Averages

Nitrogen Oxide (NO) - ppb Beaverlodge - September 2017

Maximum Value: 16.6 ppb on Sep 28 08:00		Maximum Daily Average: 1.9 ppb on Sep 28		Hours in Service: 720																									
Minimum Value: 0 ppb on Sep 1 22:00		Minimum Daily Average: 0.0 ppb on Sep 20		Hours of Data: 685																									
Maximum Diurnal Average: 2.3 ppb at hour 9		Minimum Diurnal Average: 0.0 ppb at hour 24		Hours of Missing Data: 35																									
Monthly Average: 0.43 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 1.1 P ₉₉ = 4.5		Hours of Calibration: 35																									
				Percent Operational Time: 100.0																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2			
2-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4			
3-Sep	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0			
4-Sep	0	0	0	0	A	1	1	3	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.9			
5-Sep	0	0	0	0	A	1	0	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5			
6-Sep	0	0	0	0	A	0	1	4	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	3.9			
7-Sep	0	0	0	0	A	1	1	3	2	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0.6	2.7			
8-Sep	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1			
9-Sep	0	0	0	0	A	0	3	4	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	4.4			
10-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1			
11-Sep	0	0	0	0	A	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3			
12-Sep	0	0	0	0	A	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6			
13-Sep	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0			
14-Sep	0	0	0	0	A	0	2	1	3	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0.6	2.6			
15-Sep	0	0	0	0	A	1	1	2	3	5	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0.9	5.1			
16-Sep	0	0	0	0	A	1	0	4	7	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0.9	6.6			
17-Sep	0	0	0	0	A	1	0	2	3	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0.7	4.2			
18-Sep	0	0	0	0	A	0	1	1	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.2	0.7			
19-Sep	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2			
20-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1			
21-Sep	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8			
22-Sep	0	0	0	0	A	0	1	3	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	5.8			
23-Sep	0	0	0	0	A	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7			
24-Sep	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	1.3			
25-Sep	0	0	0	0	A	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8			
26-Sep	0	0	0	0	A	0	0	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.6			
27-Sep	0	0	0	0	A	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	2.6			
28-Sep	0	0	0	0	A	0	0	17	12	5	2	2	2	1	1	0	1	1	0	0	0	0	0	0	1.9	16.6			
29-Sep	0	0	0	0	A	0	0	1	4	4	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.9			
30-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2			
		0.0	0.0	0.0	0.0	--	0.2	0.5	1.9	2.3	1.7	1.0	0.7	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	Diurnal Average			
		0.1	0.2	0.1	0.4	--	1.2	2.7	16.6	12.1	5.1	4.2	2.3	1.8	1.0	0.7	0.5	0.6	0.6	0.5	0.2	0.6	0.1	0.6	0.1	Diurnal Maximum			
C - Calibration					A - Automated Daily Zero Span																								



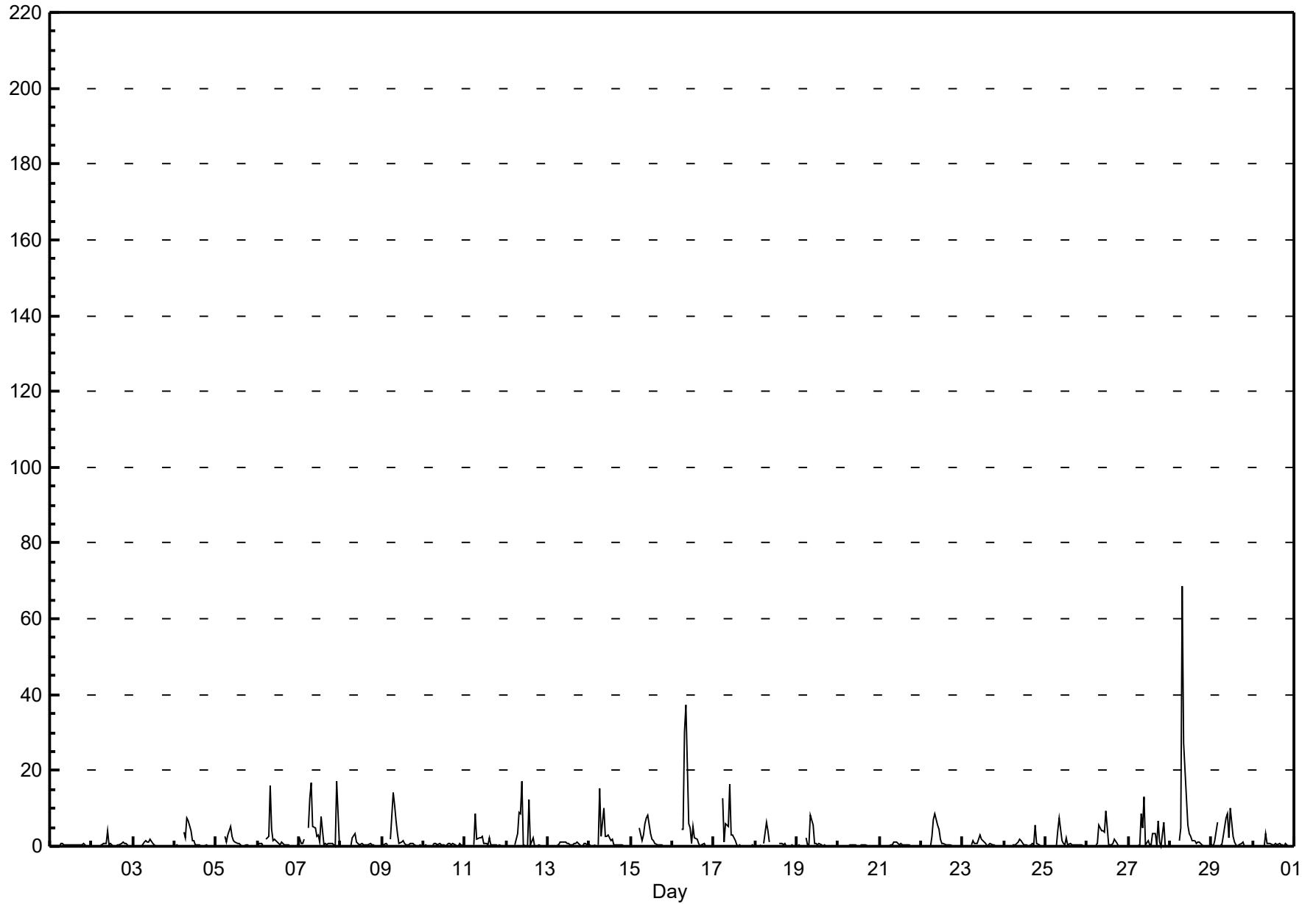
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - September 2017

Maximum Value: 68.8 ppb on Sep 28 08:00		Maximum Daily Average: 5.8 ppb on Sep 28		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 2 02:00		Minimum Daily Average: 0.2 ppb on Sep 20		Hours of Data: 685																						
Maximum Diurnal Average: 7.3 ppb at hour 8		Minimum Diurnal Average: 0.1 ppb at hour 24		Hours of Missing Data: 35																						
Monthly Average: 1.47 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.9 P ₉₀ = 3.8 P ₉₉ = 16.6		Hours of Calibration: 35																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.9	
2-Sep	0	0	0	0	A	0	0	1	1	4	0	1	0	0	0	0	0	1	1	1	1	0	0	0.5	4.0	
3-Sep	0	0	0	0	A	0	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.9	
4-Sep	0	0	0	0	A	4	2	8	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	1.3	7.5	
5-Sep	0	0	0	0	A	3	1	3	5	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0.9	5.4	
6-Sep	0	1	1	0	A	2	3	16	5	1	2	1	1	0	1	0	0	0	0	0	0	0	0	1.6	16.0	
7-Sep	2	1	1	2	A	5	13	17	5	5	3	3	1	8	0	1	0	1	1	1	0	0	17	3.7	17.3	
8-Sep	0	0	0	0	A	0	0	2	3	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0.5	3.3	
9-Sep	0	0	1	0	A	2	14	11	7	3	1	1	1	1	0	0	1	1	1	0	0	0	0	2.0	14.2	
10-Sep	0	0	0	0	A	0	1	1	1	1	0	0	0	1	1	0	1	0	0	0	0	1	0	0.4	0.7	
11-Sep	0	0	0	0	A	0	9	2	2	2	3	1	1	0	2	0	0	0	0	0	0	0	0	1.1	8.5	
12-Sep	0	0	0	0	A	0	3	9	9	17	0	0	0	12	0	2	0	0	0	0	0	0	0	2.4	17.2	
13-Sep	0	0	0	0	A	0	0	1	1	1	1	1	1	0	0	1	1	1	0	0	0	1	1	0.6	1.3	
14-Sep	0	0	0	0	A	0	15	2	10	3	2	3	1	2	0	0	1	0	0	0	0	0	0	1.9	15.4	
15-Sep	0	0	0	0	A	5	1	3	6	7	8	3	2	1	1	0	0	0	0	0	0	0	0	1.7	8.2	
16-Sep	0	0	0	0	A	4	4	30	37	6	5	1	5	2	2	1	0	0	1	0	0	0	0	4.3	37.4	
17-Sep	0	0	0	0	A	13	1	6	5	16	3	3	2	0	0	0	0	0	0	0	0	0	0	2.2	16.4	
18-Sep	0	0	0	0	A	1	6	4	1	C	C	C	C	C	1	1	0	1	0	0	0	0	0	0.9	6.3	
19-Sep	0	0	0	0	A	2	0	0	8	5	1	1	0	1	0	0	0	0	0	0	0	0	0	0.9	8.0	
20-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
21-Sep	0	0	0	0	A	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0.3	1.3	
22-Sep	0	0	0	0	A	0	3	7	9	5	5	2	1	1	0	1	0	0	0	0	0	0	0	1.5	8.6	
23-Sep	0	0	0	0	A	0	2	1	1	2	3	2	1	1	0	0	1	0	0	0	0	0	0	0.6	3.0	
24-Sep	0	0	0	0	A	0	0	1	1	2	1	0	0	0	0	0	1	0	5	1	0	0	0	0.7	5.5	
25-Sep	0	0	0	0	A	0	0	4	7	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0.9	7.4	
26-Sep	0	0	0	0	A	0	1	6	4	4	4	10	0	0	0	1	2	1	0	0	0	0	0	1.5	9.5	
27-Sep	0	0	0	0	A	0	0	8	5	13	0	1	0	0	3	4	1	7	1	0	6	0	0	2.2	13.0	
28-Sep	0	0	0	0	A	2	5	69	27	13	6	3	3	2	1	1	1	1	0	0	0	0	0	5.8	68.8	
29-Sep	0	0	2	6	A	1	0	2	7	8	2	10	3	1	0	0	0	1	1	0	0	0	0	2.0	9.9	
30-Sep	0	0	0	0	A	0	0	4	1	1	1	0	1	1	1	1	0	0	0	1	0	0	0	0.5	3.5	
		0.2	0.2	0.2	0.4	--	1.6	3.0	7.3	6.0	4.6	2.0	1.8	1.0	1.3	0.6	0.6	0.4	0.7	0.6	0.3	0.3	0.1	0.7	0.1	Diurnal Average
		1.7	0.9	1.7	6.5	--	12.5	15.4	68.8	37.4	17.2	8.2	9.9	5.3	12.2	3.2	3.5	1.8	6.8	5.5	0.9	6.3	0.7	17.3	0.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums

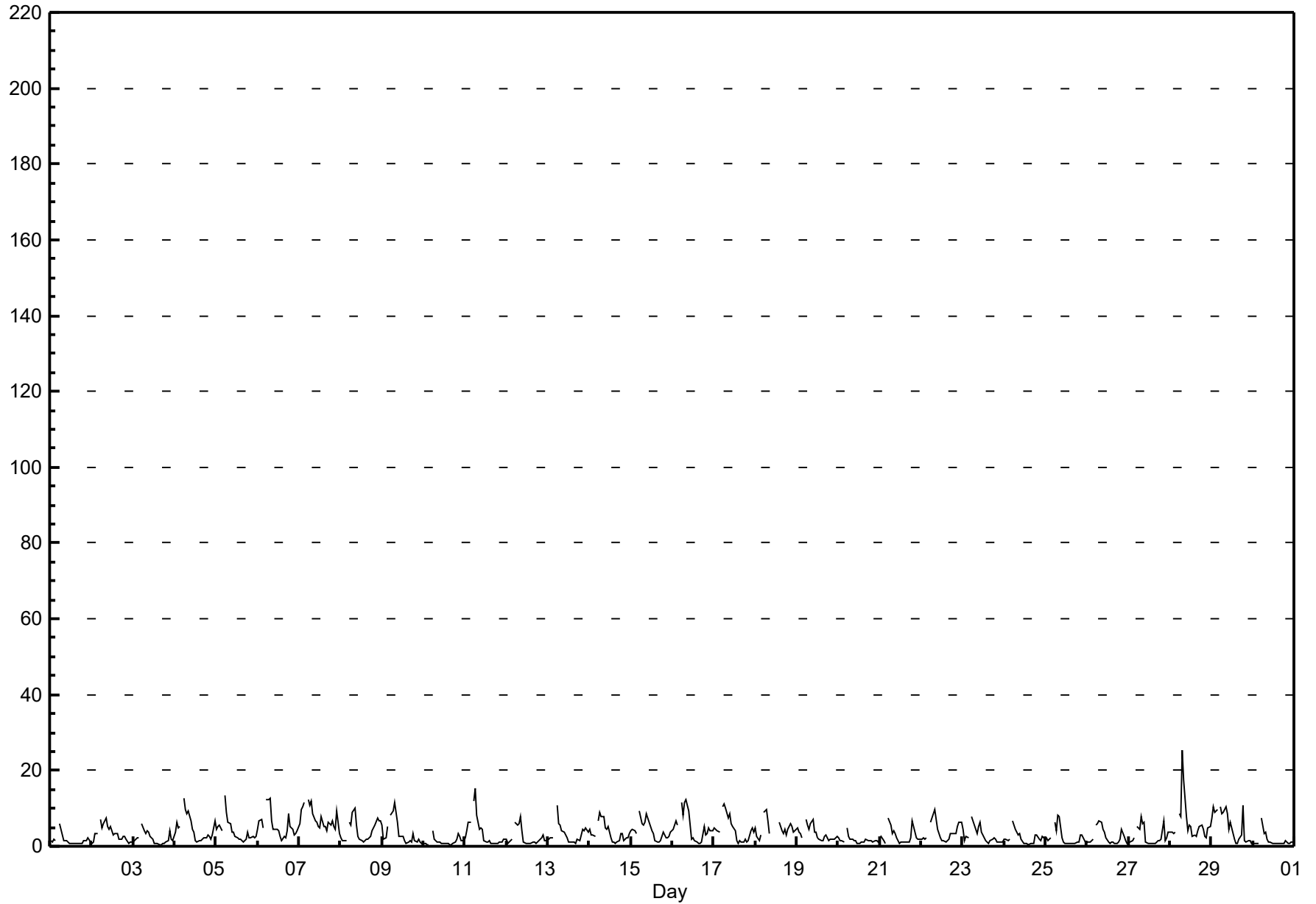
Nitrogen Oxide (NO) - ppb
Beaverlodge - September 2017



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb Beaverlodge - September 2017

Maximum Value: 25.2 ppb on Sep 28 08:00		Maximum Daily Average: 7.3 ppb on Sep 7		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 10 03:00		Minimum Daily Average: 1.2 ppb on Sep 10		Hours of Data: 685																							
Maximum Diurnal Average: 8.3 ppb at hour 6		Minimum Diurnal Average: 1.4 ppb at hour 16		Hours of Missing Data: 35																							
Monthly Average: 3.49 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.8 Q ₁ = 1.3 Median = 2.5 Q ₃ = 4.9 P ₉₀ = 7.5 P ₉₉ = 12.4		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1	1	2	1	A	6	5	3	2	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1.6	5.8	
2-Sep	1	1	3	3	A	7	5	6	7	5	4	5	3	3	3	3	2	2	3	3	2	1	1	1	3.3	7.4	
3-Sep	1	2	2	2	A	6	4	3	4	4	3	2	1	1	1	1	1	1	1	1	2	4	2	1	2.1	5.9	
4-Sep	4	6	5	5	A	13	10	9	9	7	5	4	1	1	2	2	2	2	2	3	3	2	3	7	4.6	12.8	
5-Sep	5	5	6	4	A	14	9	6	6	4	4	3	2	2	2	1	1	2	4	2	2	3	2	3	4.0	13.6	
6-Sep	4	7	7	5	A	12	12	13	7	4	4	5	4	3	1	3	2	4	8	5	4	3	3	4	5.5	12.7	
7-Sep	6	10	11	12	A	12	11	12	9	7	6	5	5	8	5	5	4	6	6	7	5	5	9	3	7.3	12.5	
8-Sep	2	2	2	1	A	6	6	9	10	6	2	2	1	1	1	2	2	3	4	5	5	8	7	7	4.1	10.0	
9-Sep	5	2	2	5	A	8	9	11	9	6	3	3	3	1	1	1	2	1	3	2	1	2	1	1	3.6	11.4	
10-Sep	1	1	0	0	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1	2	1.2	4.0	
11-Sep	2	4	6	6	A	12	15	8	4	5	4	2	1	1	2	1	1	1	1	1	1	1	2	2	3.6	15.3	
12-Sep	2	1	1	2	A	6	6	6	8	4	1	1	1	1	1	1	1	1	1	1	2	3	1	1	2.3	8.0	
13-Sep	2	2	2	2	A	11	6	5	4	4	3	2	1	1	1	1	1	2	2	3	5	4	5	4	3.2	10.8	
14-Sep	4	3	3	3	A	7	9	8	8	5	4	5	2	1	1	1	1	2	3	3	2	2	2	3	3.6	9.0	
15-Sep	4	4	4	3	A	9	6	6	6	9	7	5	4	3	2	1	1	1	2	4	2	2	3	4	4.0	9.2	
16-Sep	4	6	7	5	A	11	8	12	12	9	6	2	2	2	1	1	1	1	5	3	3	5	4	4	5.0	12.3	
17-Sep	5	5	4	4	A	10	11	10	8	9	6	5	4	1	1	1	1	1	2	1	2	4	5	4	4.6	11.4	
18-Sep	5	3	2	3	A	9	10	7	3	C	C	C	C	C	6	4	3	4	3	4	6	5	4	4	4.7	9.9	
19-Sep	5	4	3	2	A	7	6	4	6	7	4	4	2	2	2	1	3	3	1	2	2	2	2	3	3.3	7.0	
20-Sep	2	2	2	1	A	5	3	2	2	2	1	1	1	1	1	1	2	1	2	2	1	2	1	1	1.6	5.0	
21-Sep	2	2	2	1	A	7	6	3	4	3	2	1	1	1	1	1	1	1	2	7	4	2	2	2	2.5	7.5	
22-Sep	2	2	2	2	A	6	7	8	10	5	4	2	1	2	1	1	2	4	3	3	3	5	6	6	3.9	9.5	
23-Sep	4	2	3	2	A	8	7	6	3	5	6	4	2	1	1	1	1	2	2	2	1	1	1	1	2.9	7.8	
24-Sep	2	2	1	2	A	7	4	4	3	4	2	1	1	1	1	1	1	1	3	3	2	1	3	2	2.2	6.8	
25-Sep	2	2	2	2	A	6	4	8	8	2	1	1	1	1	1	1	1	1	1	1	3	3	2	1	2.4	8.1	
26-Sep	1	1	1	2	A	6	6	7	6	4	4	2	1	1	1	1	1	1	2	4	3	2	1	1	2.5	6.8	
27-Sep	1	1	1	2	A	5	5	8	6	6	1	1	1	1	1	1	1	1	2	2	7	2	2	4	2.6	8.0	
28-Sep	4	4	4	4	A	9	8	25	18	8	4	5	5	3	3	3	4	5	6	5	3	2	5	5	6.1	25.2	
29-Sep	7	10	9	10	A	10	8	9	10	9	4	6	3	2	1	1	2	3	11	2	1	1	2	1	5.3	11.0	
30-Sep	1	1	1	1	A	7	3	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	7.4	
		3.1	3.2	3.3	3.3	--	8.3	7.0	7.5	6.5	5.0	3.4	2.8	2.0	1.6	1.5	1.4	1.5	2.0	2.9	2.7	2.8	2.8	2.9	2.8	Diurnal Average	
		7.4	10.3	10.6	11.6	--	13.6	15.3	25.2	17.6	9.4	7.3	6.3	5.2	7.9	6.3	5.2	4.2	6.2	11.0	6.8	6.8	7.6	9.2	6.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



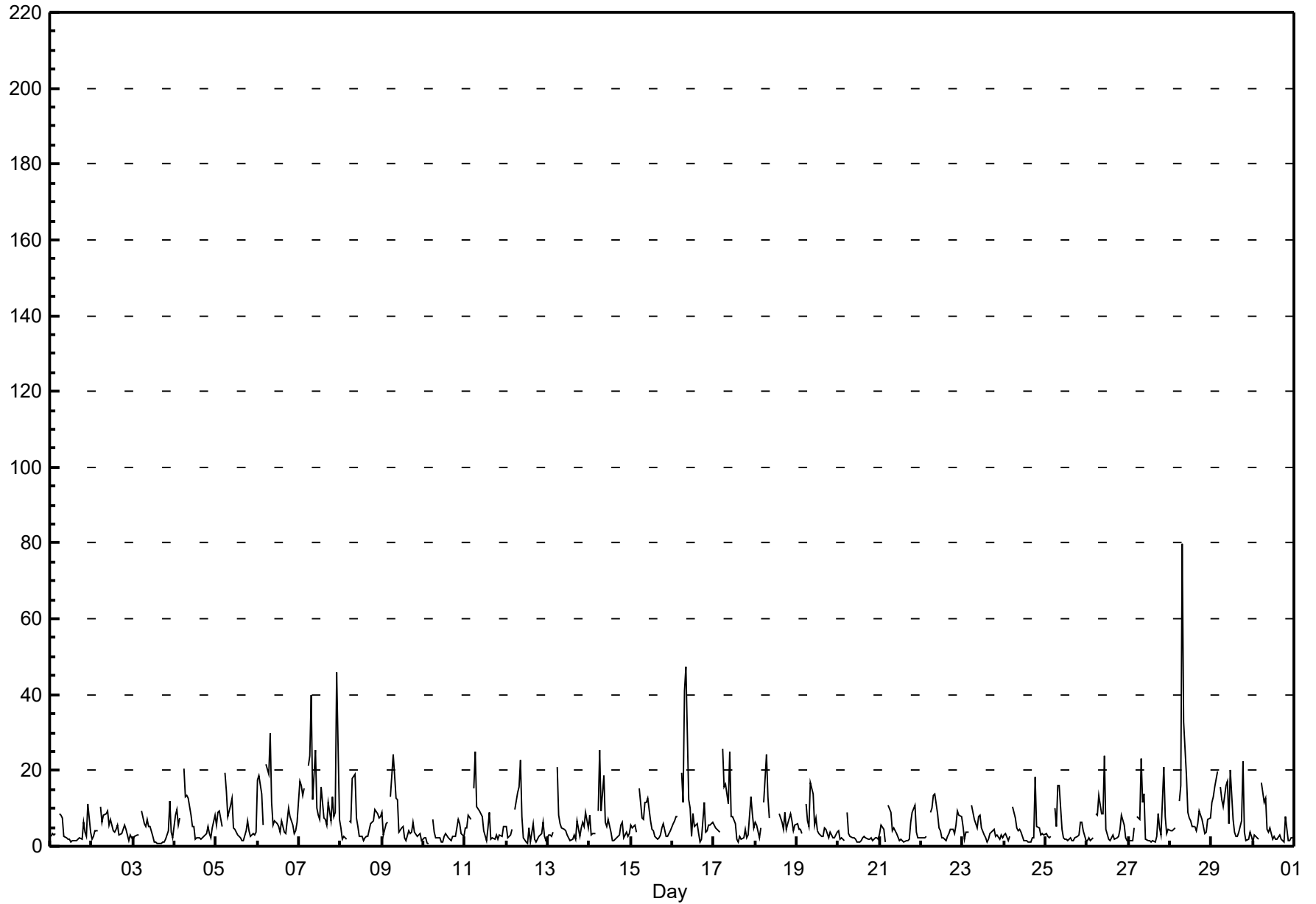
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb Beaverlodge - September 2017

Maximum Value: 79.8 ppb on Sep 28 08:00		Maximum Daily Average: 15.1 ppb on Sep 7		Hours in Service: 720																						
Minimum Value: 1 ppb on Sep 3 16:00		Minimum Daily Average: 2.4 ppb on Sep 20		Hours of Data: 685																						
Maximum Diurnal Average: 15.4 ppb at hour 8		Minimum Diurnal Average: 2.6 ppb at hour 17		Hours of Missing Data: 35																						
Monthly Average: 6.20 ppb		Percentiles: P ₁ = 1.0 P ₁₀ = 1.6 Q ₁ = 2.4 Median = 4.2 Q ₃ = 7.7 P ₉₀ = 13.0 P ₉₉ = 29.0		Hours of Calibration: 35																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	3	3	3	3	A	8	8	7	3	2	2	1	1	2	2	2	2	2	6	4	2	11	4	3.7	11.1	
2-Sep	2	3	4	4	A	11	6	8	8	9	6	7	4	4	5	6	3	3	4	6	4	1	3	2	4.9	10.6
3-Sep	2	3	3	3	A	9	6	5	7	5	5	3	1	1	1	1	1	1	2	4	12	4	2	3.6	11.9	
4-Sep	8	10	6	7	A	20	13	13	13	8	5	5	2	2	2	2	3	3	5	3	2	5	8	6.5	20.5	
5-Sep	6	9	9	5	A	19	15	8	11	13	5	4	3	2	2	2	2	4	7	4	3	3	3	4	6.2	19.4
6-Sep	17	19	14	6	A	22	19	30	12	5	7	6	5	4	7	4	3	7	10	8	6	4	4	6	9.7	30.0
7-Sep	17	16	14	15	A	21	24	40	12	25	10	8	7	16	8	7	5	11	7	13	8	9	46	7	15.1	46.0
8-Sep	5	2	3	2	A	7	6	18	19	8	5	3	2	2	2	3	6	7	7	10	9	8	8	8	6.1	18.9
9-Sep	9	3	6	6	A	13	24	19	13	12	4	5	5	2	1	4	3	4	6	4	3	3	3	2	6.7	24.4
10-Sep	2	2	1	1	A	7	4	2	2	2	1	1	3	3	2	2	1	3	3	5	7	6	3	3	2.9	7.3
11-Sep	5	5	8	7	A	15	25	10	9	9	8	4	2	5	9	2	2	2	3	2	3	3	5	5	6.4	25.1
12-Sep	5	2	3	5	A	10	14	16	23	8	2	1	1	5	1	6	2	1	2	3	3	6	3	2	5.3	22.8
13-Sep	3	3	3	4	A	21	8	6	5	5	4	3	2	2	2	3	2	7	3	5	6	5	9	5	5.0	20.8
14-Sep	8	3	3	4	A	9	26	9	19	7	5	7	4	1	1	2	2	3	6	7	2	4	3	4	6.0	25.5
15-Sep	6	5	6	4	A	15	7	7	11	12	13	7	5	4	3	2	2	3	5	6	2	3	3	4	5.8	15.4
16-Sep	6	7	8	8	A	19	11	41	48	12	10	3	9	5	6	3	1	2	11	4	4	6	6	6	10.2	47.5
17-Sep	6	5	4	4	A	26	16	17	11	25	8	8	6	2	1	3	2	2	5	2	3	13	8	5	7.9	25.8
18-Sep	6	6	2	5	A	12	24	13	7	C	C	C	C	C	9	6	5	9	4	6	8	7	4	6	7.8	24.4
19-Sep	6	4	5	3	A	11	7	5	17	14	5	8	4	3	3	3	5	5	2	4	3	2	2	4	5.4	16.6
20-Sep	4	2	2	1	A	9	3	3	2	2	2	1	1	2	2	3	2	2	2	2	2	2	2	2	2.4	8.9
21-Sep	4	6	4	1	A	11	9	4	5	4	4	1	2	1	1	1	1	2	6	9	11	4	2	2	4.2	10.7
22-Sep	2	2	2	3	A	9	10	13	14	8	5	4	2	2	1	3	3	5	4	4	6	9	8	8	5.6	13.8
23-Sep	5	2	4	4	A	11	9	7	5	8	8	5	3	2	1	2	3	4	5	2	3	2	3	2	4.3	10.8
24-Sep	3	4	1	2	A	10	7	5	4	4	4	2	1	2	1	1	2	2	18	5	5	3	3	3	4.1	18.2
25-Sep	3	3	2	3	A	10	5	16	16	5	2	2	2	2	2	1	1	2	3	3	6	6	4	1	4.4	16.2
26-Sep	2	2	2	2	A	9	8	14	9	8	24	4	2	2	2	3	2	2	3	4	8	6	2	2	5.3	23.9
27-Sep	2	1	2	5	A	8	7	23	12	14	2	2	1	1	1	1	2	9	5	3	21	8	3	4	6.0	23.1
28-Sep	4	4	4	5	A	12	16	80	33	19	9	7	7	5	5	4	6	9	7	5	3	4	7	8	11.5	79.8
29-Sep	12	13	16	20	A	16	12	10	16	17	6	20	7	4	2	2	4	7	23	4	1	2	4	3	9.6	22.6
30-Sep	1	3	2	2	A	17	12	12	4	4	5	2	2	2	2	3	2	2	1	8	1	2	2	2	4.0	16.6
		5.4	5.0	4.9	4.8	--	13.3	12.1	15.4	12.3	9.4	6.0	4.6	3.3	3.1	3.0	2.8	2.6	4.1	5.6	4.9	5.1	4.9	5.8	4.1	Diurnal Average
		17.4	18.5	15.7	19.9	--	25.8	25.5	79.8	47.5	25.5	23.9	20.2	8.7	15.8	9.0	6.9	6.0	11.4	22.6	13.1	20.7	13.1	46.0	8.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

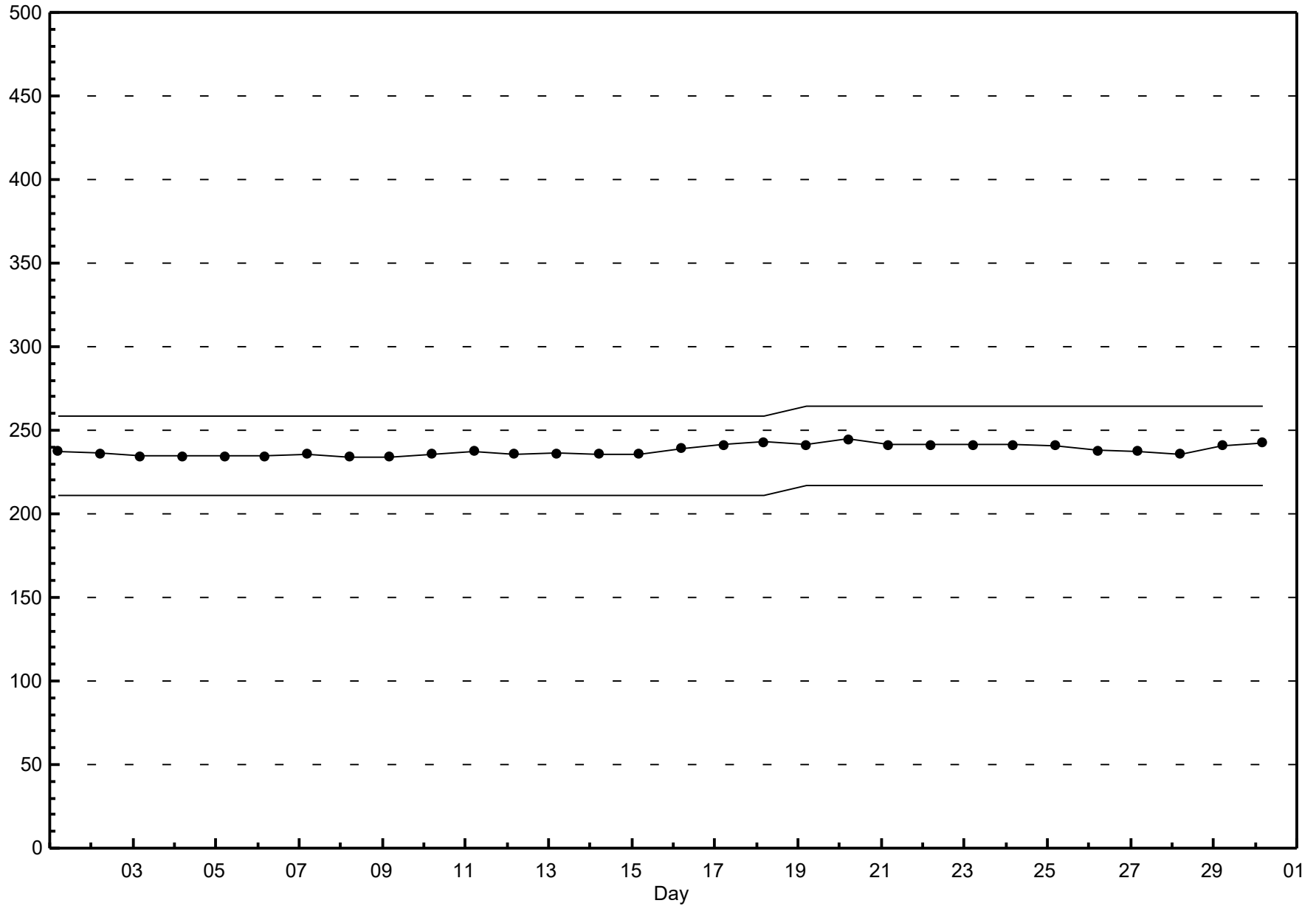
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - September 2017



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - September 2017



Hourly Averages

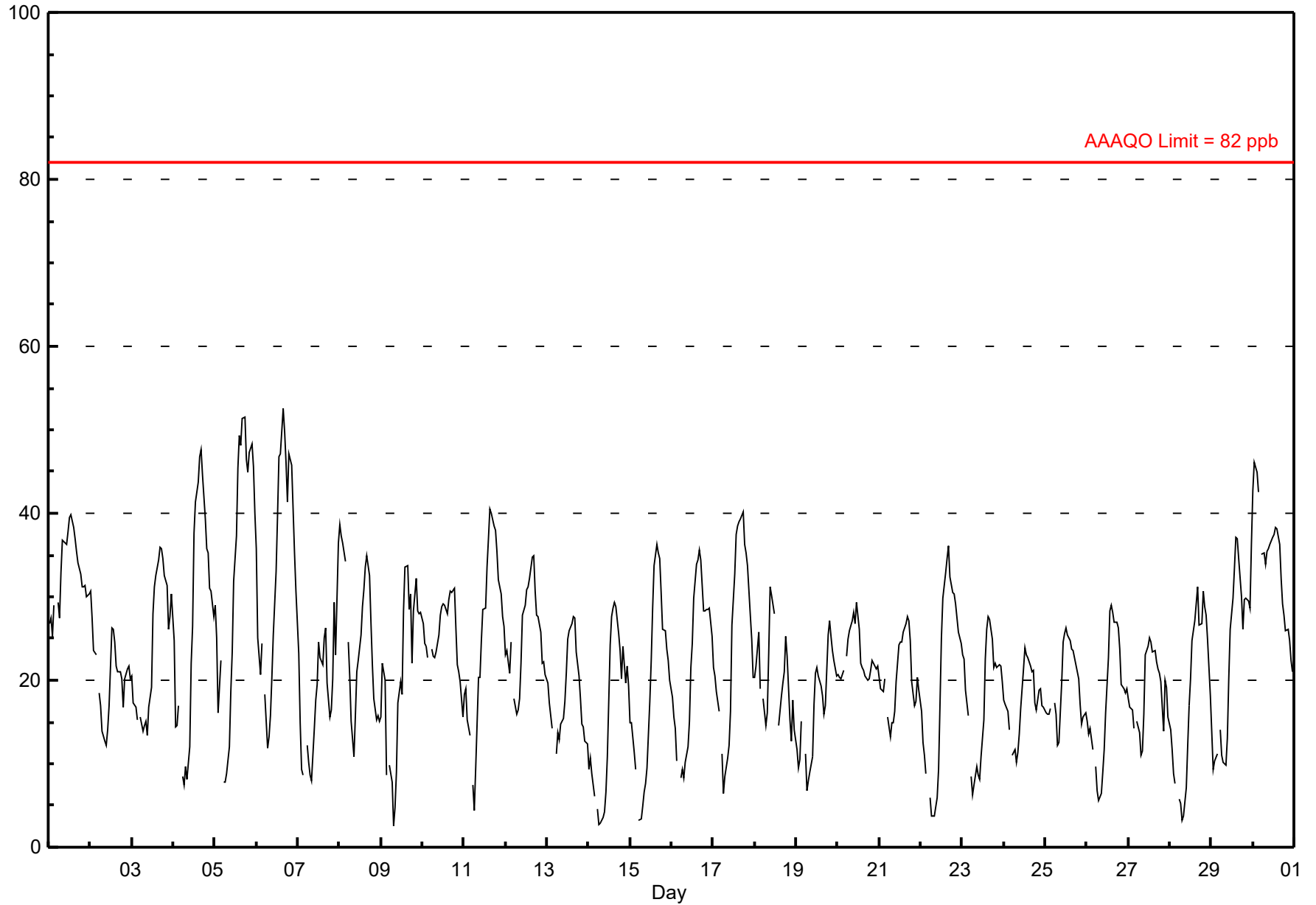
Ozone (O₃) - ppb

Beaverlodge - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 52.5 ppb on Sep 6 16:00 Maximum Daily Average: 34.1 ppb on Sep 30										Hours in Service: 720 Hours of Data: 688																
Minimum Value: 3 ppb on Sep 9 08:00 Minimum Daily Average: 15.8 ppb on Sep 14 Maximum Diurnal Average: 31.7 ppb at hour 16 Minimum Diurnal Average: 12.3 ppb at hour 8 Monthly Average: 22.62 ppb Percentiles: P ₁ = 3.7 P ₁₀ = 9.7 Q ₁ = 15.6 Median = 22.0 Q ₃ = 28.6 P ₉₀ = 35.8 P ₉₉ = 48.0										Hours of Missing Data: 32 Hours of Calibration: 32 Percent Operational Time: 100.0																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	27	28	25	29	A	29	27	33	37	36	36	38	40	40	38	37	35	34	33	31	31	31	30	30	32.9	39.8
2-Sep	31	27	23	23	A	19	17	14	13	12	14	17	26	26	25	22	21	21	20	17	20	21	22	20	20.5	30.6
3-Sep	20	17	17	15	A	16	14	15	15	13	17	19	28	31	33	34	36	36	35	33	31	26	28	30	24.3	35.9
4-Sep	25	14	15	17	A	8	7	10	8	12	22	26	38	41	44	47	48	45	39	36	35	31	31	28	27.2	47.6
5-Sep	29	25	16	22	A	8	8	9	12	19	23	32	37	45	49	48	51	52	46	45	47	48	46	40	33.0	51.5
6-Sep	36	25	21	24	A	18	12	13	16	20	25	33	40	47	47	53	50	46	41	47	46	41	35	31	33.3	52.5
7-Sep	23	15	9	9	A	12	10	9	8	14	18	20	25	23	22	25	26	20	16	16	20	29	23	36	18.6	36.5
8-Sep	39	37	36	34	A	25	20	15	11	16	21	22	25	29	31	34	35	33	27	22	18	15	16	15	25.0	38.7
9-Sep	16	22	20	9	A	10	8	3	5	9	17	20	18	28	34	34	28	30	22	28	32	28	28	28	20.7	33.7
10-Sep	27	24	24	23	A	24	23	23	23	25	28	29	29	29	28	30	31	31	31	26	22	21	20	16	25.5	31.1
11-Sep	18	19	15	13	A	8	4	10	20	20	25	28	29	34	37	41	40	39	38	35	32	30	28	26	25.6	40.6
12-Sep	23	23	21	25	A	18	16	16	18	22	28	29	31	31	32	35	35	31	28	28	26	22	22	21	25.2	34.9
13-Sep	20	17	16	14	A	11	14	13	15	15	17	21	25	26	27	28	28	23	20	18	15	14	13	12	18.3	27.6
14-Sep	9	11	9	6	A	5	3	3	4	4	7	11	24	28	29	29	29	26	23	20	24	20	22	19	15.8	29.4
15-Sep	15	15	11	9	A	3	3	5	7	8	10	17	22	29	34	36	35	35	30	26	26	24	22	20	19.2	36.3
16-Sep	18	16	14	10	A	8	9	8	10	12	15	22	24	30	34	34	36	34	28	28	28	29	29	25	21.9	35.5
17-Sep	22	20	19	16	A	11	6	9	11	12	16	27	33	38	38	39	39	40	36	35	34	28	25	20	25.0	40.2
18-Sep	20	22	26	19	A	18	15	16	23	31	30	28	C	C	15	18	20	21	25	23	15	13	18	14	20.4	31.2
19-Sep	12	9	10	15	A	11	7	8	9	11	17	21	21	20	19	18	16	17	25	27	25	23	22	21	16.8	27.1
20-Sep	21	20	20	21	A	23	25	26	27	28	27	29	26	22	21	21	20	20	20	21	22	22	21	22	22.9	29.3
21-Sep	20	19	19	20	A	16	13	15	15	16	20	24	25	25	26	27	28	27	25	20	17	17	20	19	20.5	27.7
22-Sep	16	13	11	9	A	6	4	4	4	6	9	17	25	30	33	35	36	32	31	30	29	27	26	24	19.8	36.0
23-Sep	23	22	19	16	A	8	6	8	10	9	8	11	15	23	26	28	27	25	21	22	22	22	22	20	17.9	27.7
24-Sep	18	17	16	14	A	11	12	10	11	13	17	21	24	23	23	22	21	21	17	17	19	19	17	17	17.4	23.9
25-Sep	16	16	16	17	A	17	16	12	13	20	25	26	26	25	25	24	24	23	21	20	17	15	16	16	19.3	26.3
26-Sep	15	14	14	12	A	10	7	6	7	9	12	16	23	28	29	28	27	27	26	24	20	19	19	19	17.7	29.0
27-Sep	18	17	16	14	A	15	14	11	12	16	23	24	25	25	23	23	22	21	21	20	14	20	19	16	18.6	25.0
28-Sep	14	12	9	8	A	6	5	3	4	7	12	17	20	25	27	29	31	27	27	31	29	28	25	18	17.9	31.2
29-Sep	14	9	10	11	A	14	11	10	10	13	20	26	30	33	37	37	35	30	26	30	30	29	29	36	23.1	37.2
30-Sep	43	46	45	43	A	35	35	34	35	36	36	37	37	38	38	36	32	29	28	26	26	25	22	21	34.1	46.1
21.5 19.8 18.1 17.2 -- 14.1 12.4 12.3 13.6 16.2 19.8 23.6 27.3 30.0 30.8 31.7 31.4 29.8 27.6 26.7 25.7 24.6 23.8 22.7																								Diurnal Average		
42.8 46.1 45.0 42.5 -- 35.1 35.3 33.9 36.8 36.4 36.3 37.8 39.7 46.8 49.2 52.5 51.4 51.5 46.5 47.1 47.3 48.4 45.6 40.0																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																										

Hourly Averages

Ozone (O₃) - ppb
Beaverlodge - September 2017



Hourly Maximums

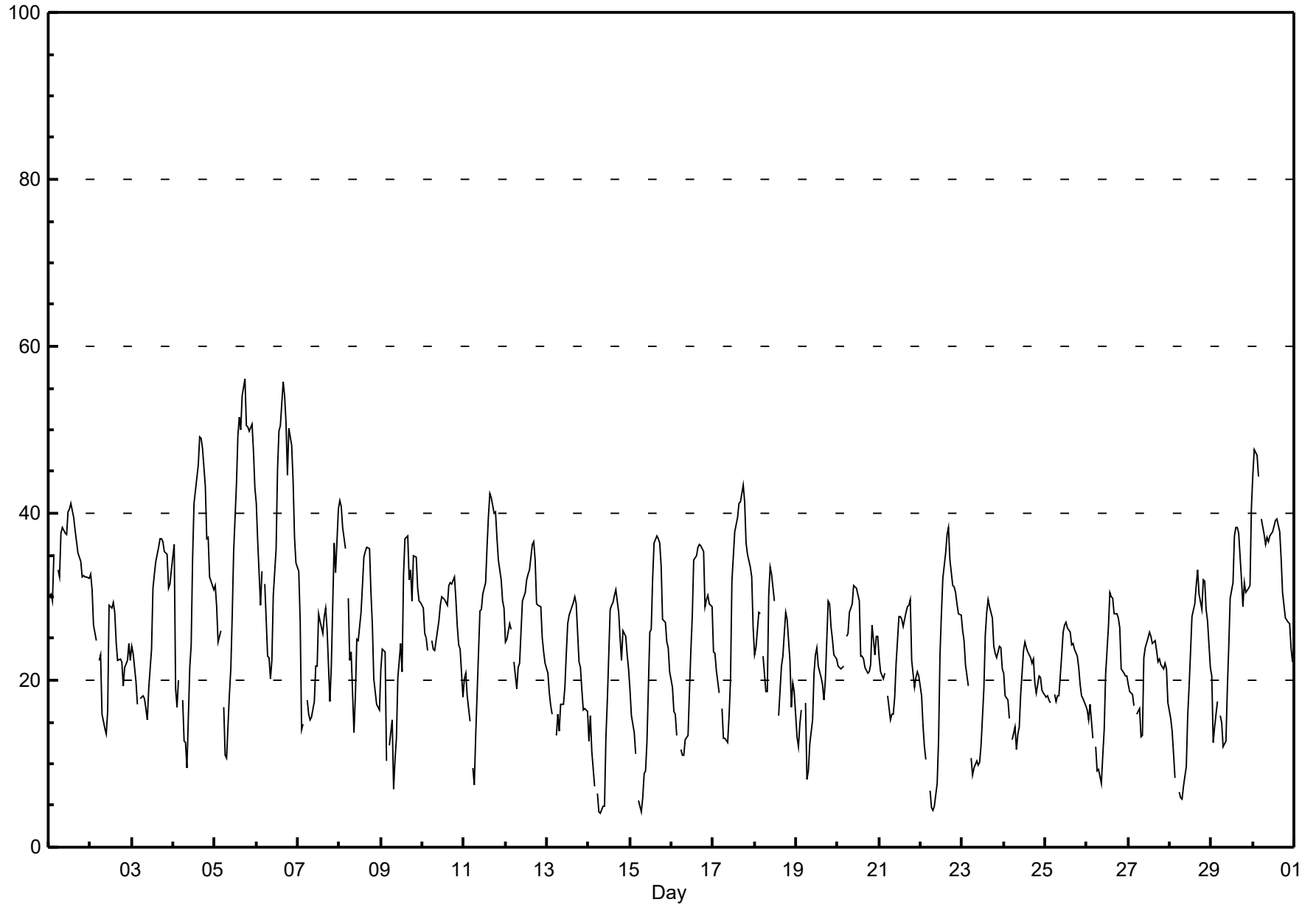
Ozone (O₃) - ppb

Beaverlodge - September 2017

Maximum Value: 56.1 ppb on Sep 5 18:00																			Maximum Daily Average: 38.7 ppb on Sep 6																			Hours in Service: 720						
Minimum Value: 4 ppb on Sep 14 08:00																			Minimum Daily Average: 18.3 ppb on Sep 14																			Hours of Data: 688						
Maximum Diurnal Average: 33.5 ppb at hour 16																			Minimum Diurnal Average: 15.4 ppb at hour 8																			Hours of Missing Data: 32						
Monthly Average: 25.34 ppb																			Percentiles: P ₁ = 4.6 P ₁₀ = 13.0 Q ₁ = 18.2 Median = 24.6 Q ₃ = 31.4 P ₉₀ = 37.6 P ₉₉ = 50.7																			Hours of Calibration: 32						
Percentiles: P ₁ = 4.6 P ₁₀ = 13.0 Q ₁ = 18.2 Median = 24.6 Q ₃ = 31.4 P ₉₀ = 37.6 P ₉₉ = 50.7																			Percent Operational Time: 100.0																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																				
1-Sep	30	30	29	35	A	33	32	38	38	38	37	40	41	39	38	37	35	34	32	33	32	32	32	35.2	41.1																			
2-Sep	33	31	27	25	A	22	23	16	14	14	16	29	29	28	25	22	22	22	19	22	22	24	22	23.3	32.7																			
3-Sep	24	23	20	17	A	18	18	18	17	15	19	24	31	33	34	36	37	37	37	35	35	31	32	33	27.1	37.0																		
4-Sep	36	19	17	20	A	18	13	12	10	22	24	35	41	43	46	49	49	48	43	37	37	32	32	31	31.0	49.1																		
5-Sep	31	29	25	26	A	17	11	11	18	21	28	36	44	49	52	50	54	56	50	50	50	51	48	43	36.9	56.1																		
6-Sep	41	37	29	33	A	31	23	23	20	22	30	36	45	50	51	56	54	51	45	50	48	44	37	34	38.7	55.7																		
7-Sep	33	27	14	15	A	18	16	15	16	17	22	22	28	27	26	28	29	26	17	22	29	36	33	41	24.1	40.5																		
8-Sep	42	41	38	36	A	30	22	23	14	18	25	25	28	31	35	35	36	36	30	27	20	17	17	16	27.9	41.5																		
9-Sep	21	24	23	10	A	12	15	7	11	13	20	24	21	33	37	37	32	33	30	35	35	31	29	29	24.5	37.3																		
10-Sep	29	26	25	24	A	25	24	24	25	27	29	30	30	30	29	31	32	32	32	30	26	24	24	18	27.1	32.4																		
11-Sep	20	21	18	15	A	9	7	13	23	28	28	30	32	36	40	42	42	40	40	37	34	32	29	29	28.2	42.4																		
12-Sep	25	25	27	26	A	22	19	21	22	26	29	30	32	33	33	36	37	34	29	29	29	25	23	22	27.6	36.7																		
13-Sep	21	18	17	16	A	13	16	14	17	17	19	23	27	28	29	29	30	29	22	22	19	17	17	16	20.7	30.0																		
14-Sep	13	16	11	7	A	6	4	4	5	5	13	18	28	29	29	30	31	28	25	22	26	25	23	21	18.3	30.8																		
15-Sep	19	16	14	11	A	6	4	6	9	9	13	26	26	32	36	37	37	36	34	27	27	25	24	21	21.5	37.4																		
16-Sep	19	16	16	13	A	12	11	11	13	13	19	23	28	34	35	36	36	36	35	29	30	30	29	29	24.1	36.3																		
17-Sep	23	23	21	18	A	17	13	13	12	16	20	32	38	39	40	41	41	43	41	37	35	34	32	26	28.5	43.4																		
18-Sep	23	24	28	28	A	23	19	19	30	34	33	29	C	C	16	22	23	26	28	27	22	17	20	19	24.2	33.6																		
19-Sep	13	12	15	16	A	17	8	9	12	15	21	23	24	22	20	19	18	20	29	29	27	25	23	23	19.2	29.4																		
20-Sep	22	22	21	22	A	25	26	28	29	31	31	31	29	23	23	23	22	21	21	22	27	23	25	25	24.8	31.3																		
21-Sep	23	21	20	21	A	18	15	16	16	18	22	28	28	27	26	28	29	29	30	22	19	20	21	20	22.5	29.6																		
22-Sep	18	15	12	10	A	7	5	4	5	8	13	23	28	32	35	38	38	34	31	31	30	29	28	28	21.9	38.3																		
23-Sep	26	25	22	19	A	11	9	9	10	10	10	12	19	25	28	30	29	27	24	23	23	24	24	21	20.0	29.6																		
24-Sep	21	18	18	16	A	13	14	12	14	14	18	24	25	24	23	23	22	22	20	18	21	20	19	18	19.0	24.6																		
25-Sep	18	18	18	17	A	18	17	18	18	23	26	27	27	26	26	24	24	24	23	21	19	18	18	17	21.2	26.9																		
26-Sep	16	15	17	13	A	12	9	9	8	11	14	21	26	31	30	30	28	28	27	26	21	21	20	21	19.8	30.5																		
27-Sep	19	19	18	17	A	16	17	13	13	23	24	25	26	25	24	25	24	22	23	22	21	22	21	17	20.7	25.8																		
28-Sep	15	14	11	8	A	7	6	6	7	10	16	19	23	28	29	31	33	30	28	32	32	29	27	22	20.2	33.3																		
29-Sep	21	13	14	17	A	16	15	12	13	19	24	30	32	37	38	38	38	32	29	32	31	31	31	41	26.2	40.7																		
30-Sep	45	48	47	44	A	39	37	36	37	37	37	38	38	39	39	38	35	30	29	27	27	27	24	22	35.7	47.6																		
																			24.7	22.8	21.1	19.9	--	17.7	15.7	15.4	16.5	19.1	22.7	27.1	30.1	32.3	32.6	33.5	33.2	32.3	30.3	29.2	28.5	27.2	26.2	25.3	Diurnal Average	
																			44.6	47.6	46.9	44.4	--	39.3	37.5	37.7	38.2	37.6	37.4	40.1	45.3	49.9	51.6	55.7	54.1	56.1	50.4	50.4	49.9	50.7	47.5	43.0	Diurnal Maximum	
C - Calibration					A - Automated Daily Zero Span																																							

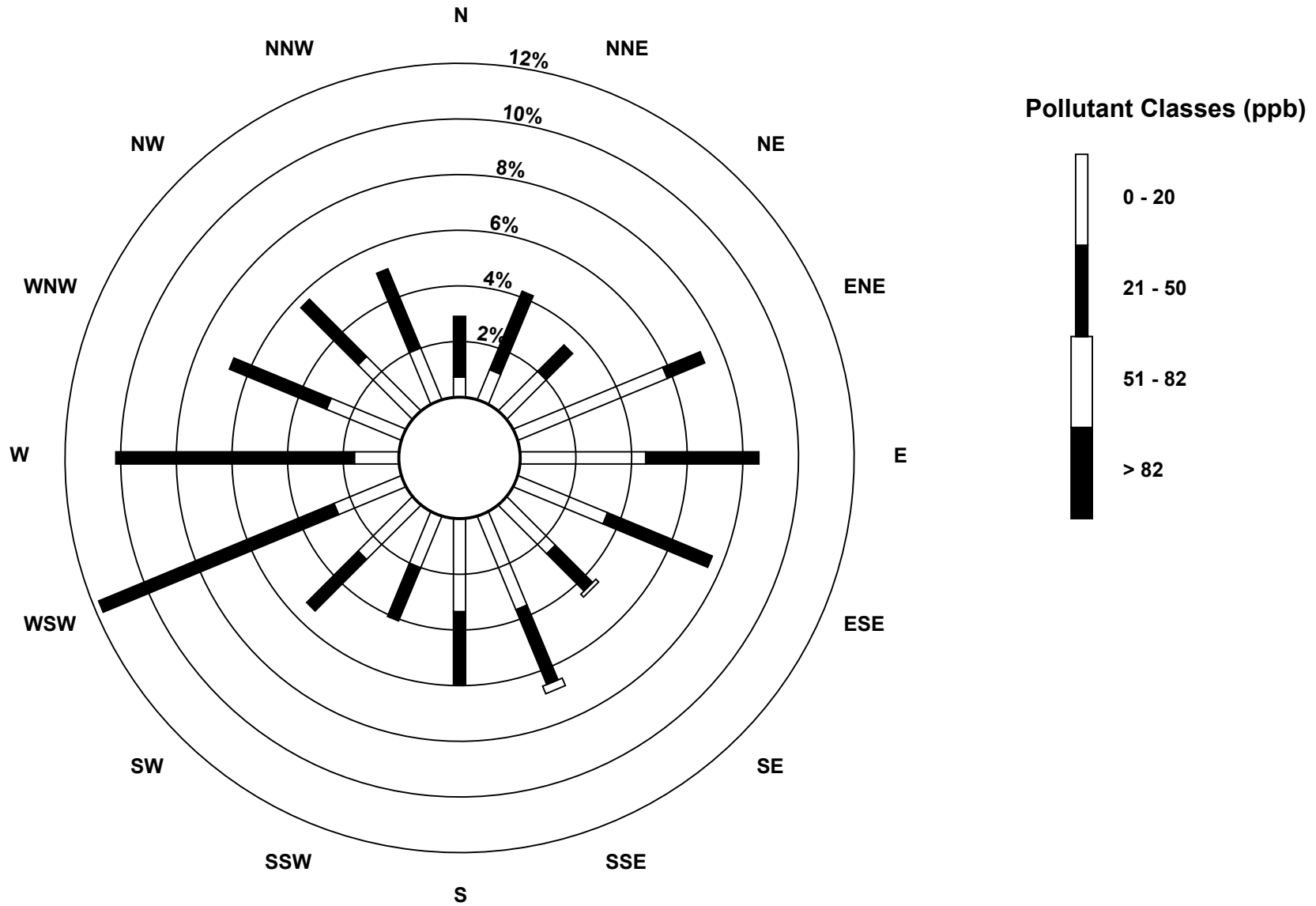
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - September 2017



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - September 2017



Eight Hour Running Averages

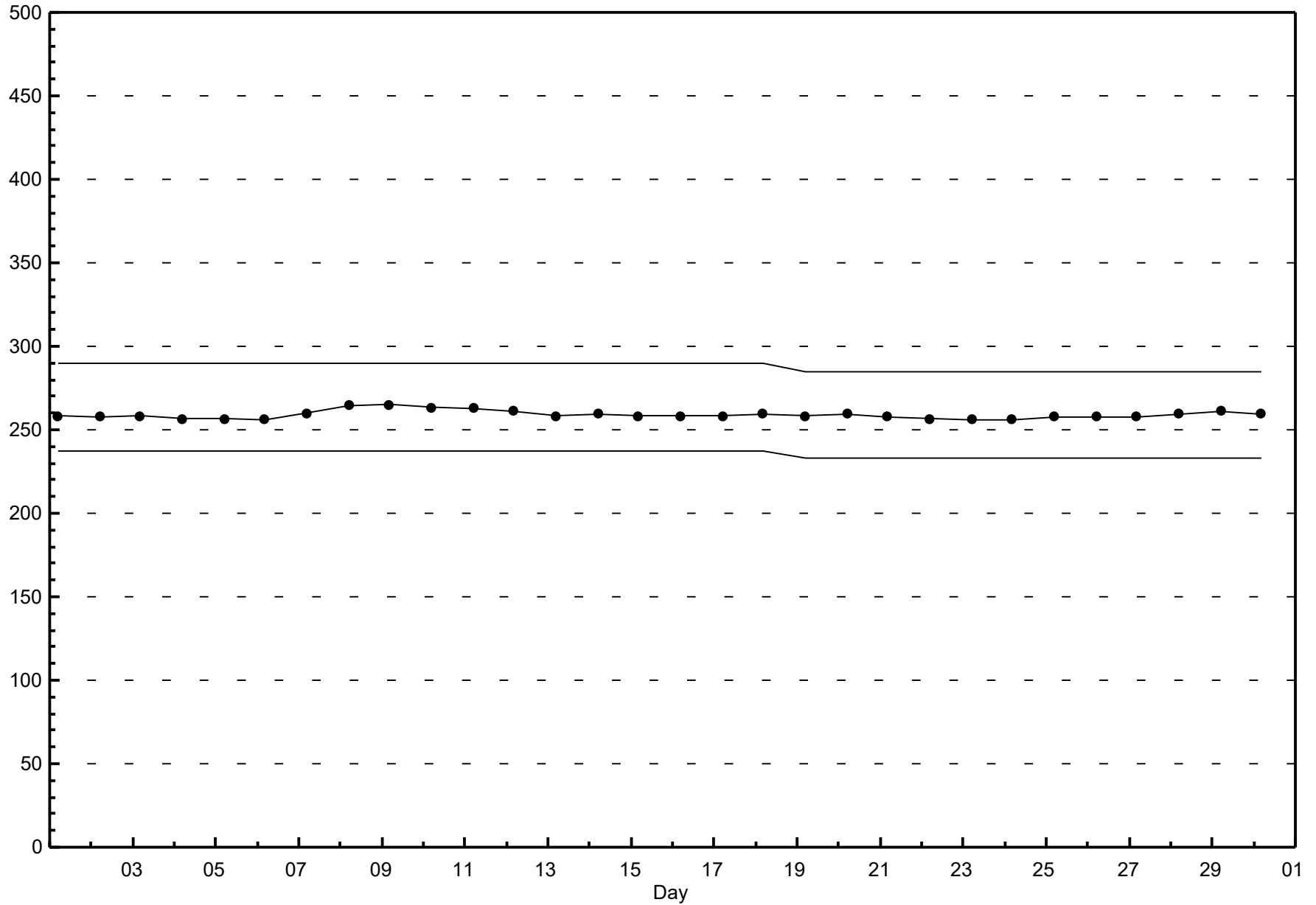
Ozone (O₃) - ppb

Beaverlodge - September 2017

Maximum Value: 48.4 ppb on Sep 5 22:00																					Hours in Service:	720			
Minimum Value: 4.4 ppb on Sep 14 11:00																					Hours of Data:	720			
Percentiles: P ₁ = 6.4 P ₁₀ = 12.3 Q ₁ = 16.5 Median = 21.5 Q ₃ = 27.6 P ₉₀ = 33.8 P ₉₉ = 46.0																					Hours of Missing Data:	0			
																					Hours of Calibration:	0			
																					Percent Operational Time:	100.0			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	30	29	28	28	27	28	28	28	30	31	33	34	35	36	37	38	38	37	37	36	35	34	33	32	37.7
2-Sep	31	31	29	28	28	26	24	22	19	17	16	15	16	17	18	19	20	21	22	22	21	21	20	20	31.4
3-Sep	20	20	19	19	19	18	17	16	15	15	15	16	17	19	21	24	26	29	31	33	34	33	32	32	33.5
4-Sep	30	28	25	23	22	20	17	14	11	11	12	13	16	21	25	30	35	39	41	42	42	41	39	36	42.1
5-Sep	34	32	29	27	26	23	19	17	14	13	14	16	18	23	28	33	38	42	45	47	48	48	48	47	48.4
6-Sep	45	42	38	36	34	30	25	21	18	18	18	20	22	26	30	35	39	43	45	46	47	46	45	42	47.1
7-Sep	39	35	31	26	23	19	16	12	10	10	11	13	14	16	17	19	22	22	22	22	21	22	22	23	38.8
8-Sep	25	27	30	32	34	33	33	30	26	22	20	19	19	20	21	24	27	29	29	29	28	27	25	23	33.6
9-Sep	20	19	18	16	16	15	14	12	11	9	9	10	11	13	17	21	24	26	27	28	30	30	29	28	29.6
10-Sep	28	27	28	27	26	25	25	24	23	24	24	25	26	26	27	28	29	29	30	29	28	27	26	25	29.6
11-Sep	23	22	20	18	18	16	13	12	13	13	14	16	18	21	25	29	32	34	36	36	37	36	35	34	36.9
12-Sep	31	30	27	26	25	23	22	20	20	19	20	21	22	24	26	28	30	31	31	31	31	29	28	26	31.4
13-Sep	25	23	21	20	19	17	16	15	14	14	14	15	16	18	20	22	23	24	25	24	23	22	20	18	24.7
14-Sep	16	14	13	11	11	9	8	6	6	5	4	5	7	10	14	17	20	23	25	26	26	25	24	23	26.0
15-Sep	21	20	18	17	16	14	11	9	8	7	6	8	9	13	16	20	24	27	30	31	31	31	29	27	31.4
16-Sep	25	23	21	19	18	16	14	12	11	10	11	12	14	16	19	23	26	29	30	31	32	31	31	30	31.7
17-Sep	28	26	25	23	23	20	17	15	13	12	12	13	16	19	23	27	30	34	36	37	37	36	35	32	37.5
18-Sep	30	28	26	24	23	21	20	19	20	21	22	23	24	24	24	24	22	21	20	20	19	19	19	19	29.9
19-Sep	18	16	14	13	13	13	11	10	10	10	11	12	13	14	16	17	18	19	20	21	21	21	22	22	22.1
20-Sep	23	23	22	22	21	21	22	22	23	24	25	26	26	26	26	25	24	23	23	22	21	21	21	21	26.5
21-Sep	21	21	21	21	20	20	18	17	17	16	16	17	18	19	21	22	24	25	26	25	24	23	23	22	25.7
22-Sep	20	18	17	15	15	13	11	9	7	6	6	7	9	12	16	20	24	27	30	31	32	32	31	30	32.0
23-Sep	28	27	25	23	23	20	17	15	13	11	9	8	9	11	14	16	18	20	22	23	24	24	24	23	27.9
24-Sep	21	20	20	19	18	17	15	14	13	13	13	14	15	16	18	19	20	21	22	21	20	20	19	18	21.5
25-Sep	18	17	17	17	17	16	16	16	15	16	17	18	19	20	21	23	24	25	24	23	22	21	20	19	24.6
26-Sep	18	17	16	15	14	14	12	11	10	9	9	9	11	13	16	19	21	24	26	26	26	25	24	23	26.5
27-Sep	21	20	19	18	17	17	16	15	14	14	15	16	17	19	20	21	23	23	23	23	21	21	20	19	23.4
28-Sep	18	17	15	14	14	12	10	8	7	6	6	8	9	12	14	18	21	24	25	27	28	29	28	27	28.5
29-Sep	25	22	20	18	16	14	12	11	11	11	13	15	17	19	22	26	29	31	32	32	32	32	31	31	32.2
30-Sep	32	34	36	38	39	39	40	40	39	38	36	36	36	36	37	37	36	36	35	33	32	30	28	26	40.4
45.0 41.7 38.5 37.6 38.7 39.5 40.4 40.1 39.1 37.6 36.3 35.6 35.8 36.2 37.2 37.7 39.3 42.6 45.2 46.8 48.0 48.4 48.0 46.9																									
Diurnal Maximums																									

Span Responses

Ozone (O₃)
Beaverlodge - September 2017



Hourly Averages

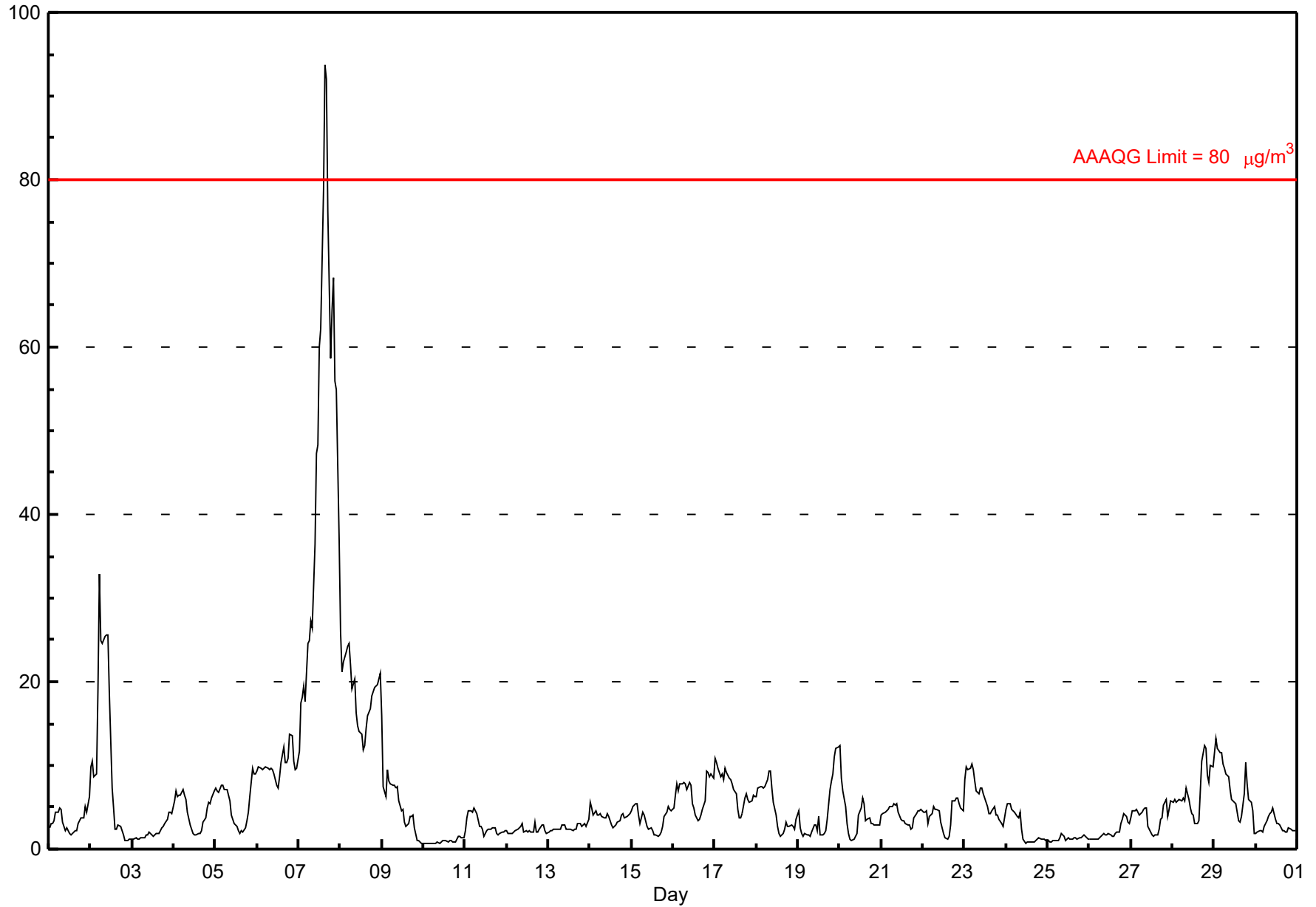
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - September 2017

Number of Exceedences: 1-hr: 2 24-hr: 1	Hours in Service: 720
Maximum Value: 93.7 µg/m ³ on Sep 7 16:00	Maximum Daily Average: 46.7 µg/m ³ on Sep 7
Minimum Value: 1 µg/m ³ on Sep 10 08:00	Hours of Data: 720
Maximum Diurnal Average: 7.1 µg/m ³ at hour 21	Hours of Missing Data: 0
Monthly Average: 6.36 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.0 µg/m ³ on Sep 10	Percent Operational Time: 100.0
Minimum Diurnal Average: 5.1 µg/m ³ at hour 14	
Percentiles: P ₁ = 0.7 P ₁₀ = 1.3 Q ₁ = 2.2 Median = 3.9 Q ₃ = 6.9 P ₉₀ = 10.6 P ₉₉ = 60.7	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	2	3	3	3	4	4	5	5	3	2	3	2	2	2	2	2	3	4	4	4	5	4	6	3.3	6.2	
2-Sep	10	10	9	9	19	33	25	25	25	26	26	19	7	5	2	2	3	3	2	2	1	1	1	1	11.1	32.9
3-Sep	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	4	4	4	4	2.1	4.5	
4-Sep	6	7	6	6	6	7	7	6	4	3	2	2	2	2	2	2	3	4	5	6	5	6	7	4.5	7.2	
5-Sep	7	7	7	8	8	7	7	7	6	4	4	3	3	2	2	2	3	3	4	6	10	9	9	5.4	9.7	
6-Sep	9	10	10	9	10	10	10	10	10	9	9	8	7	9	10	12	10	10	11	14	13	11	9	10	10.0	13.7
7-Sep	12	17	18	19	18	25	25	27	27	36	47	48	60	62	79	94	92	76	59	64	68	56	55	37	46.7	93.7
8-Sep	26	21	22	24	24	25	22	19	20	16	15	14	14	12	12	14	16	17	18	19	19	20	20	21	18.8	26.0
9-Sep	16	8	6	9	8	8	8	8	7	7	6	5	5	3	3	3	4	4	4	2	1	1	1	1	5.3	16.0
10-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1.0	1.5
11-Sep	2	4	5	5	4	5	5	4	3	3	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2.9	4.9
12-Sep	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	3	2	2	2	3	3	2	2	2.3	3.2
13-Sep	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	3	3	3	3	3	3	3	4	2.6	3.5
14-Sep	6	5	4	5	4	4	4	4	4	4	4	4	3	3	3	3	3	3	4	4	4	4	4	4	3.9	5.6
15-Sep	5	5	5	5	4	3	4	4	3	3	2	3	2	2	2	1	2	2	3	4	4	5	5	5	3.5	5.4
16-Sep	5	6	8	7	8	8	8	8	7	8	8	5	5	4	3	3	4	5	6	9	9	9	9	8	6.7	9.3
17-Sep	11	10	10	9	9	8	10	9	8	8	8	7	7	5	4	4	4	6	7	6	6	6	6	6	7.2	10.8
18-Sep	6	7	7	7	7	7	8	9	9	7	6	4	3	2	1	2	2	3	3	3	3	2	4	4	4.9	9.3
19-Sep	5	3	2	2	2	2	2	1	2	3	3	2	4	2	2	2	2	4	7	8	9	11	12	12	4.2	12.1
20-Sep	12	8	7	5	3	2	1	1	1	1	2	4	5	6	5	3	4	4	3	3	3	3	3	3	3.9	12.5
21-Sep	4	4	4	5	5	5	5	5	5	5	4	4	3	3	3	3	3	2	2	4	4	5	5	5	4.1	5.4
22-Sep	4	4	5	3	4	4	5	5	5	5	3	2	2	1	1	1	3	6	6	6	6	5	5	5	4.0	6.1
23-Sep	8	10	9	10	10	9	8	7	7	7	7	7	6	5	4	4	5	5	4	4	4	3	3	4	6.3	10.2
24-Sep	5	5	5	5	5	4	4	4	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.4	5.4
25-Sep	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.2	1.8
26-Sep	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	3	3	2.0	4.2
27-Sep	4	5	5	5	4	4	4	5	5	5	3	2	2	1	2	2	2	4	4	5	6	4	5	6	3.8	5.9
28-Sep	6	6	6	6	6	6	6	6	6	7	6	5	4	4	3	3	3	7	10	12	9	8	10	10	6.7	12.3
29-Sep	11	13	12	12	12	10	10	9	9	7	6	6	5	4	3	3	4	7	10	8	6	6	5	2	7.5	13.3
30-Sep	2	2	2	2	2	3	3	4	4	4	4	5	3	3	3	2	2	2	2	2	2	2	2	2	2.8	4.9
	6.4	6.3	6.2	6.2	6.5	7.1	6.8	6.7	6.6	6.5	6.3	5.7	5.5	5.1	5.5	6.1	6.5	6.6	6.5	7.0	7.1	6.7	6.7	6.2	Diurnal Average	
	26.0	21.2	22.3	23.6	24.2	32.9	25.0	27.2	26.5	36.4	47.2	48.3	60.0	62.2	78.8	93.7	92.1	76.3	58.6	64.4	68.3	56.0	54.8	37.0	Diurnal Maximum	

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

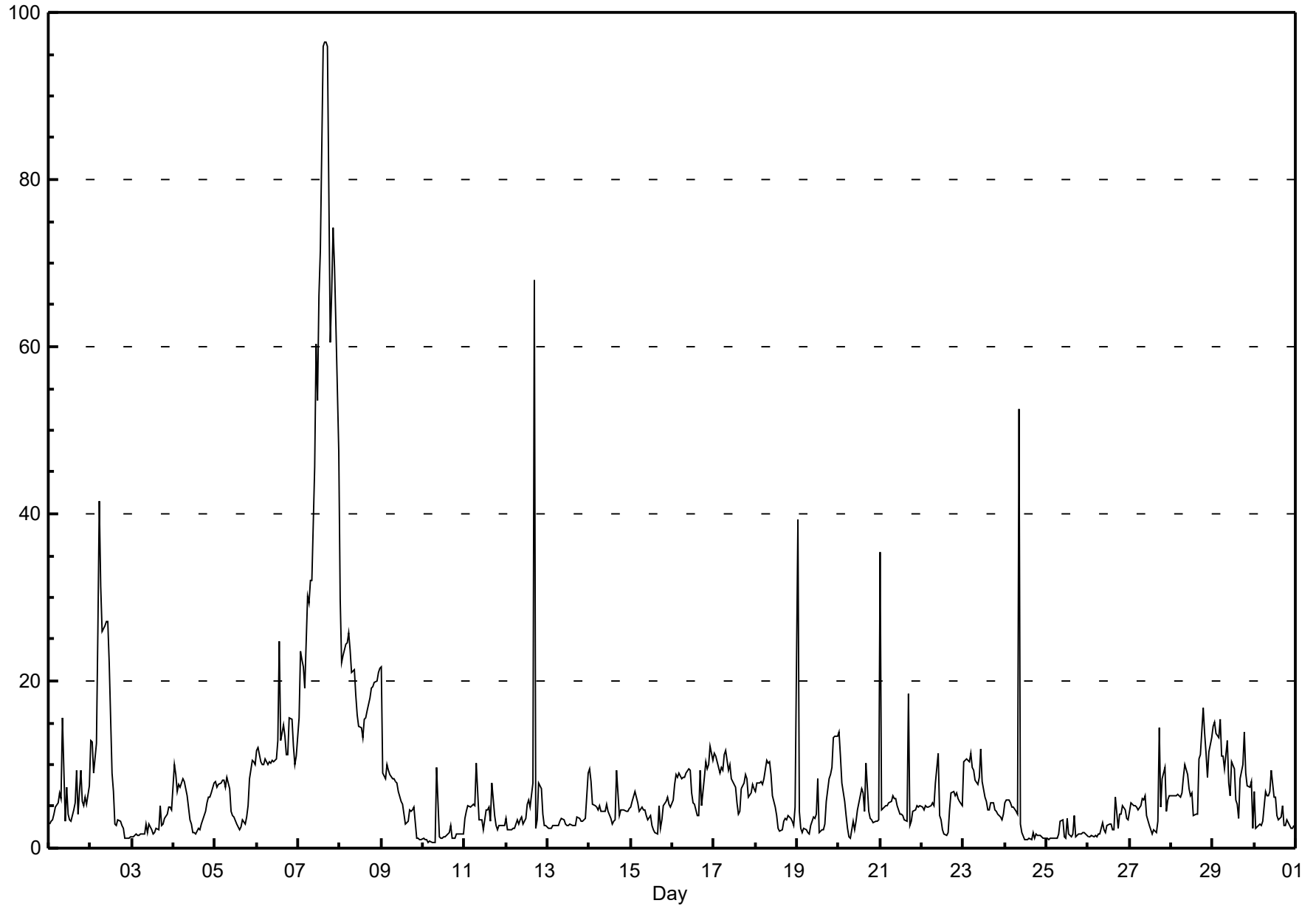


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

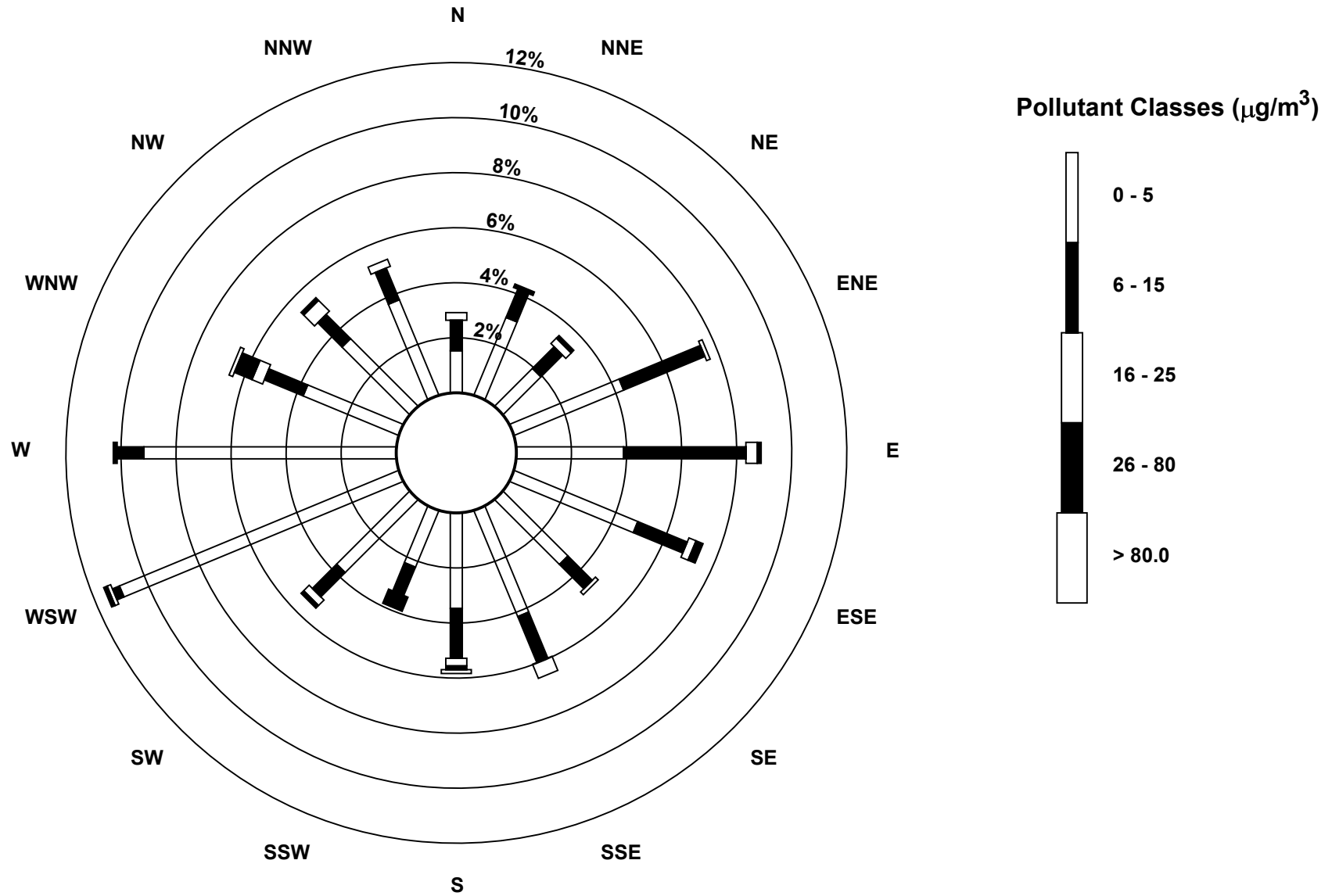
Beaverlodge - September 2017

Maximum Value: 96.5 µg/m ³ on Sep 7 16:00 Minimum Value: 1 µg/m ³ on Sep 10 08:00 Maximum Diurnal Average: 11.7 µg/m ³ at hour 17 Monthly Average: 7.96 µg/m ³		Maximum Daily Average: 53.7 µg/m ³ on Sep 7 Minimum Daily Average: 1.7 µg/m ³ on Sep 10 Minimum Diurnal Average: 6.8 µg/m ³ at hour 14 Percentiles: P ₁ = 1.0 P ₁₀ = 1.7 Q ₁ = 2.9 Median = 4.9 Q ₃ = 8.5 P ₉₀ = 13.7 P ₉₉ = 68.2		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	3	3	3	4	5	5	7	6	16	3	7	4	3	3	5	5	9	4	9	6	5	6	5	8	5.6	15.6
2-Sep	13	13	9	12	26	42	31	26	27	27	27	22	9	7	3	3	3	3	3	2	1	1	1	1	13.0	41.6
3-Sep	1	1	2	1	1	2	2	2	3	2	3	2	2	2	2	2	5	3	3	4	4	5	5	5	2.6	5.1
4-Sep	10	9	7	8	7	8	8	7	6	3	3	2	2	2	2	2	3	3	4	5	6	6	7	8	5.4	10.0
5-Sep	8	7	8	8	8	8	7	9	7	4	4	4	3	2	2	2	3	3	4	5	8	11	10	10	6.1	10.6
6-Sep	12	12	10	10	10	11	10	10	10	10	10	11	13	25	13	15	13	11	11	16	15	12	10	11	12.2	24.7
7-Sep	16	23	22	22	19	30	29	32	32	46	60	54	66	71	96	97	97	96	60	67	74	70	62	47	53.7	96.5
8-Sep	30	22	23	24	25	26	24	21	18	16	15	14	13	15	16	16	18	19	19	20	20	21	22	22	19.9	29.8
9-Sep	22	9	8	10	9	9	8	8	8	8	7	6	5	4	3	3	5	4	5	5	1	1	1	1	6.3	21.8
10-Sep	1	1	1	1	1	1	1	1	10	1	1	1	1	1	2	2	3	1	1	2	2	2	2	2	1.7	9.7
11-Sep	4	4	5	5	5	5	5	10	3	3	3	2	5	5	5	3	8	4	3	2	3	3	3	3	4.2	10.2
12-Sep	4	2	2	2	2	2	3	3	3	4	3	4	5	6	5	8	68	2	3	8	7	4	3	3	6.5	68.0
13-Sep	2	2	2	3	3	3	3	3	4	3	3	3	3	3	3	3	3	4	4	3	3	3	4	9	3.2	9.0
14-Sep	10	8	5	5	5	5	5	4	4	4	4	5	4	4	3	3	3	9	4	5	5	4	4	5	5.0	9.5
15-Sep	5	6	7	6	5	4	5	5	5	4	3	4	3	2	2	2	5	2	3	5	6	6	5	5	4.4	6.8
16-Sep	6	8	9	9	9	8	9	9	9	10	9	7	5	5	4	4	9	5	9	10	10	10	12	10	8.0	12.2
17-Sep	11	11	10	9	10	9	11	12	9	10	8	8	7	5	4	4	7	8	9	8	6	7	8	7	8.3	11.7
18-Sep	7	8	8	8	8	8	10	10	10	9	6	5	4	2	2	2	3	4	3	4	4	3	3	5	5.7	10.5
19-Sep	39	4	2	2	2	2	2	2	3	4	4	4	8	2	2	2	3	6	8	9	10	13	13	13	6.7	39.4
20-Sep	14	11	8	6	4	2	1	1	3	2	3	5	6	7	7	4	10	4	4	3	3	3	3	3	5.0	13.9
21-Sep	35	5	5	5	5	5	6	6	6	6	5	4	4	4	3	3	19	3	3	4	5	5	5	5	6.5	35.5
22-Sep	5	5	5	5	5	5	5	5	8	11	4	3	2	2	1	2	5	7	7	6	7	6	6	5	5.0	11.4
23-Sep	10	10	11	10	11	10	9	8	8	9	12	8	6	6	5	5	5	5	5	4	4	4	3	4	7.2	11.9
24-Sep	5	6	6	5	5	5	4	4	53	3	2	1	1	1	1	1	2	1	2	1	1	1	1	1	4.8	52.6
25-Sep	1	1	1	1	1	1	1	2	3	3	1	1	4	2	1	2	4	1	2	2	2	2	2	1	1.8	3.9
26-Sep	1	1	1	1	1	1	2	2	3	2	2	3	3	3	2	2	6	2	4	4	5	5	4	3	2.7	6.1
27-Sep	4	5	5	5	5	5	5	6	6	6	4	3	2	2	2	2	3	14	5	8	10	4	6	6	5.2	14.4
28-Sep	6	6	6	6	6	6	7	9	10	9	7	6	7	4	4	4	11	11	17	14	11	9	11	13	8.4	16.8
29-Sep	15	15	14	13	15	11	11	10	13	8	6	10	9	6	5	4	8	10	14	9	8	7	8	2	9.6	15.4
30-Sep	7	2	3	3	3	3	7	6	6	7	9	6	6	4	3	4	5	3	3	3	3	2	2	3	4.3	9.2
	10.3	7.4	7.0	7.0	7.4	8.1	8.0	7.9	10.3	8.0	8.0	7.0	7.1	6.8	7.0	7.0	11.7	8.3	7.7	8.1	8.2	7.8	7.7	7.4	Diurnal Average	
	39.4	23.5	23.0	24.5	25.9	41.6	31.3	32.1	52.6	45.5	60.4	53.6	66.1	71.5	96.0	96.5	96.5	96.0	60.5	66.6	74.2	69.5	62.4	47.5	Diurnal Maximum	



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Beaverlodge - September 2017



Hourly Averages

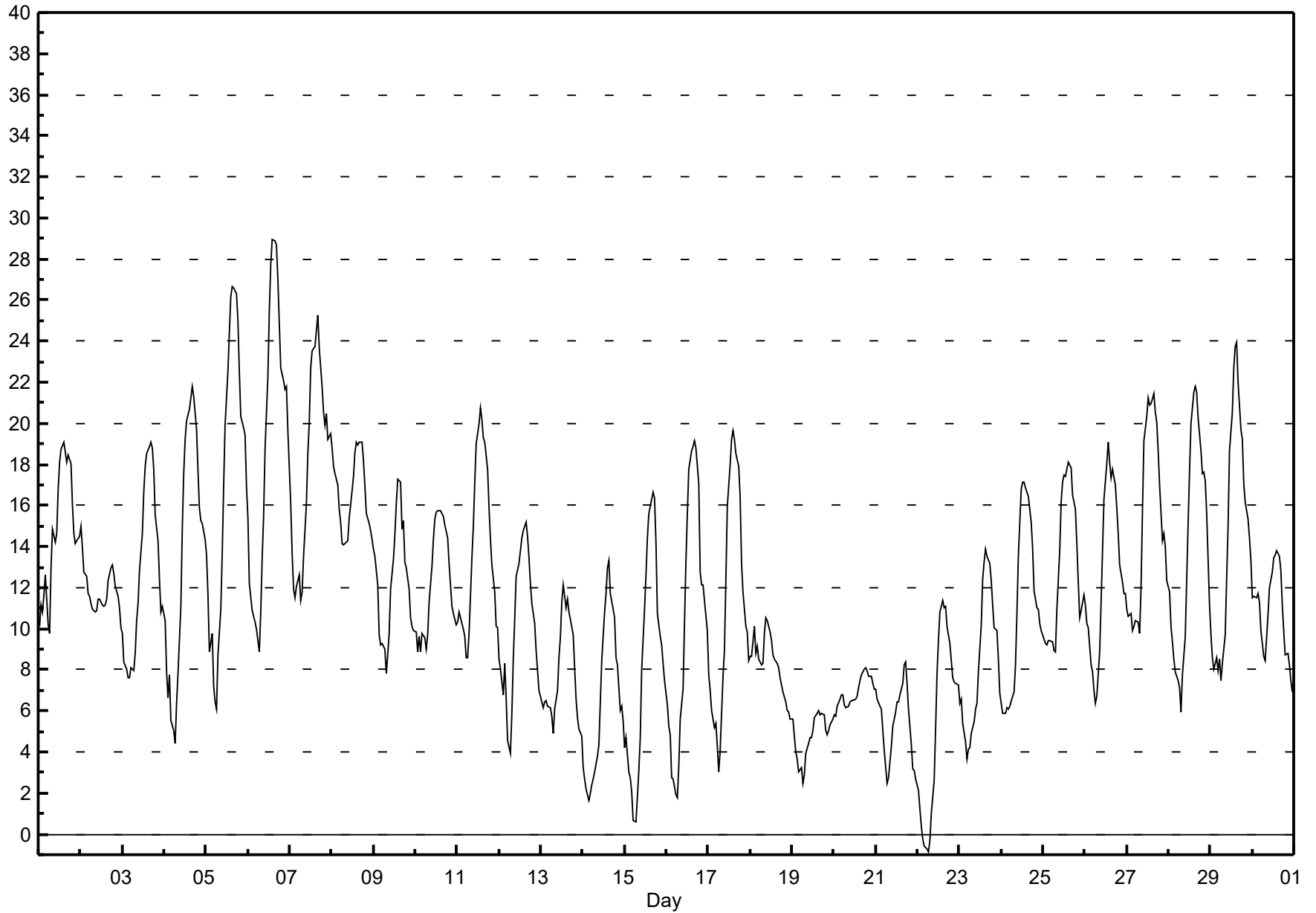
External Temperature (ET) - °C

Beaverlodge - September 2017

Maximum Value: 29.0 °C on Sep 6 15:00 Minimum Value: -1 °C on Sep 22 07:00 Maximum Diurnal Average: 16.7 °C at hour 16 Monthly Average: 11.57 °C		Maximum Daily Average: 19.1 °C on Sep 6 Minimum Daily Average: 4.7 °C on Sep 19 Minimum Diurnal Average: 6.6 °C at hour 7 Percentiles: P ₁ = 0.5 P ₁₀ = 5.0 Q ₁ = 7.5 Median = 10.9 Q ₃ = 15.3 P ₉₀ = 19.1 P ₉₉ = 26.6		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Sep	10	11	11	12	13	10	10	13	15	14	15	17	18	19	19	19	18	18	18	16	15	14	14	15	14.7	19.1
2-Sep	15	14	13	13	12	12	11	11	11	11	11	11	11	11	11	11	12	13	13	13	12	12	11	10	11.9	15.0
3-Sep	10	8	8	8	8	8	8	9	10	11	13	15	17	18	19	19	19	19	18	16	14	12	11	11	12.8	19.1
4-Sep	10	8	7	8	6	5	4	6	8	11	15	18	19	20	21	21	22	21	20	18	16	15	15	14	13.7	21.8
5-Sep	14	12	9	10	7	6	6	9	11	14	17	20	23	24	26	27	27	26	25	22	20	20	19	17	17.1	26.6
6-Sep	15	12	11	11	10	10	9	11	13	15	19	22	26	28	29	29	29	27	25	23	22	22	22	20	19.1	29.0
7-Sep	16	14	12	12	12	13	11	12	14	16	19	20	23	24	24	24	25	24	22	21	20	21	19	19	18.1	25.2
8-Sep	19	18	18	17	16	15	14	14	14	15	16	17	19	19	19	19	19	18	17	16	15	15	14	14	16.6	19.1
9-Sep	14	13	12	10	9	9	9	8	9	10	12	13	15	16	17	17	15	15	13	13	12	11	10	10	12.2	17.3
10-Sep	10	9	10	9	10	10	9	10	11	13	14	15	16	16	16	16	15	15	14	13	12	11	11	10	12.3	15.8
11-Sep	10	11	11	10	10	9	9	10	13	15	17	19	20	21	20	19	19	18	16	14	13	12	10	10	14.0	20.7
12-Sep	9	8	7	8	7	5	4	6	9	10	13	13	14	14	15	15	15	13	12	11	10	9	8	7	10.1	15.2
13-Sep	6	6	6	7	6	6	6	5	6	7	9	10	11	12	11	11	11	10	10	8	7	6	5	5	7.8	12.1
14-Sep	3	3	2	2	2	2	3	3	4	4	6	8	11	12	13	13	12	11	11	9	8	6	6	6	6.6	13.3
15-Sep	4	5	3	3	2	1	1	2	3	5	8	11	13	14	16	16	17	16	14	11	10	9	8	7	8.3	16.6
16-Sep	6	5	5	3	3	2	2	3	6	7	10	13	16	18	19	19	19	19	17	13	12	12	11	10	10.4	19.1
17-Sep	8	7	6	5	5	4	3	4	8	9	12	16	18	19	20	19	19	18	16	13	12	10	10	8	11.3	19.6
18-Sep	9	9	10	9	9	9	8	8	10	11	10	10	9	9	8	8	8	8	7	7	6	6	6	6	8.3	10.5
19-Sep	6	5	4	4	3	3	2	3	4	4	5	5	5	6	6	6	6	6	6	5	5	5	5	6	4.7	6.0
20-Sep	6	6	6	7	7	7	6	6	6	6	7	6	7	7	7	7	8	8	8	8	8	8	7	7	6.9	8.1
21-Sep	7	7	6	6	5	4	2	3	4	4	5	6	6	6	7	7	8	8	7	6	4	3	3	3	5.4	8.3
22-Sep	2	1	0	0	-1	-1	-1	0	1	3	5	8	9	11	11	11	11	10	9	8	8	7	7	7	5.4	11.3
23-Sep	6	7	5	5	4	4	4	5	5	6	6	8	10	12	13	14	14	13	12	11	10	10	9	7	8.4	13.9
24-Sep	6	6	6	6	6	6	7	7	8	11	13	17	17	17	17	16	16	15	14	12	11	11	10	10	11.1	17.2
25-Sep	10	9	9	9	9	9	9	9	11	14	16	17	17	17	18	18	18	17	16	14	12	11	11	12	13.0	18.1
26-Sep	11	10	10	8	8	7	6	7	9	11	14	16	18	19	18	17	18	17	16	15	13	12	12	12	12.7	19.1
27-Sep	11	11	11	10	10	10	10	10	12	16	19	20	21	21	21	21	21	20	19	17	14	15	14	12	15.3	21.4
28-Sep	12	10	9	8	8	8	7	6	8	10	12	15	18	20	22	22	22	20	19	18	18	17	16	11	13.9	21.8
29-Sep	10	9	8	9	8	9	7	8	10	12	15	19	21	23	24	24	22	20	19	17	16	15	14	13	14.6	24.0
30-Sep	11	12	12	12	11	10	9	8	10	11	12	13	13	14	14	14	13	11	10	9	9	8	8	7	10.8	13.8
	9.5	8.8	8.2	7.9	7.5	7.0	6.6	7.1	8.7	10.2	12.2	13.9	15.3	16.2	16.6	16.7	16.5	15.9	14.8	13.2	12.2	11.5	10.9	10.2	Diurnal Average	
	18.8	17.9	17.6	17.0	15.8	15.2	14.2	14.1	14.9	16.1	19.2	22.3	25.5	27.7	29.0	28.9	28.7	27.0	25.0	22.7	22.0	21.7	21.8	19.7	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Beaverlodge - September 2017



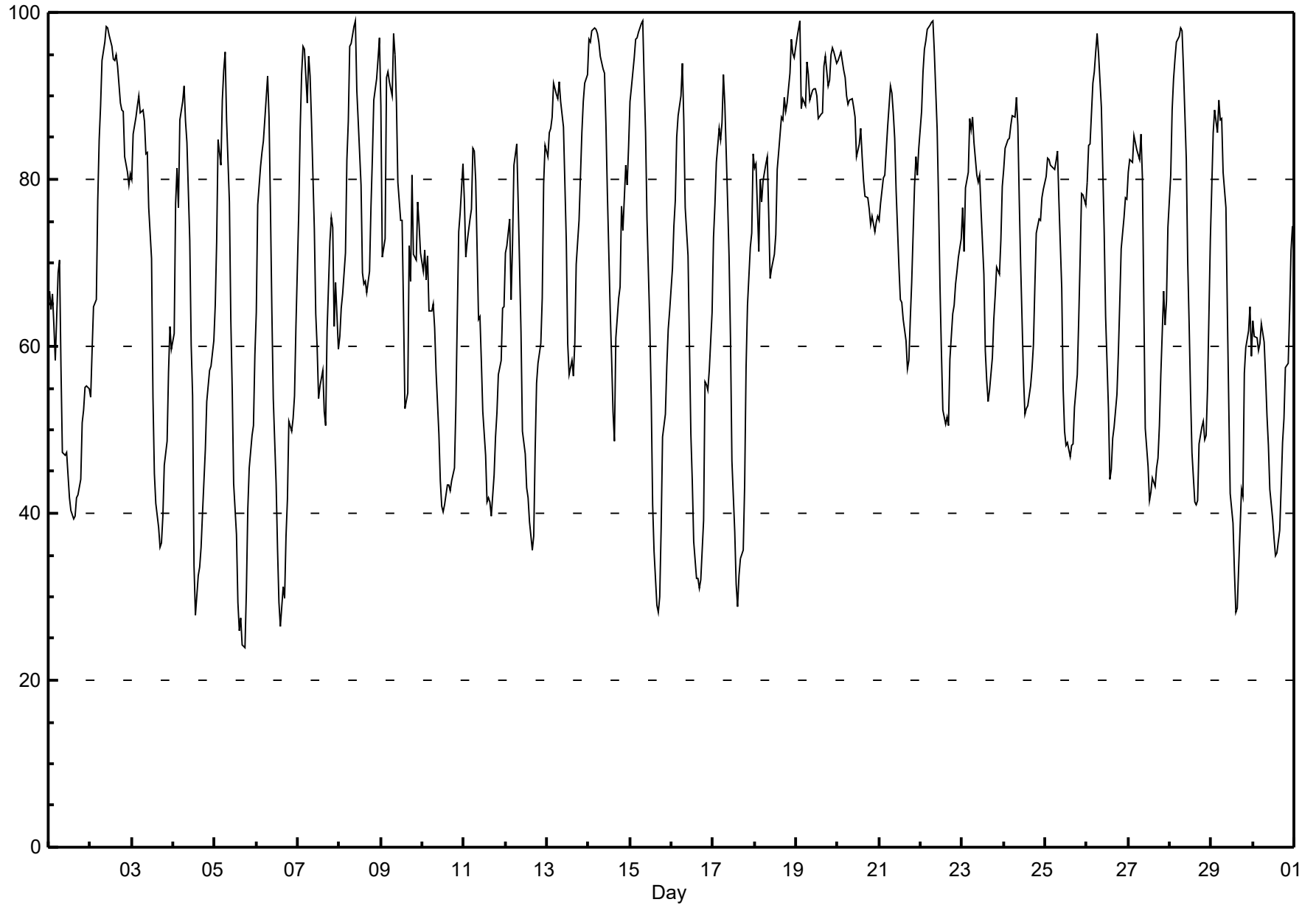
Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - September 2017

Maximum Value: 99.0 % on Sep 22 08:00																				Hours in Service: 720						
Maximum Daily Average: 92.2 % on Sep 19																				Hours of Data: 720						
Minimum Value: 24 % on Sep 5 18:00																				Hours of Missing Data: 0						
Maximum Diurnal Average: 88.3 % at hour 7																				Hours of Calibration: 0						
Monthly Average: 69.54 %																				Percent Operational Time: 100.0						
Percentiles: P ₁ = 28.0 P ₁₀ = 41.8 Q ₁ = 54.9 Median = 72.4 Q ₃ = 86.0 P ₉₀ = 92.9 P ₉₉ = 98.4																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	67	64	66	63	58	69	70	58	47	47	47	45	42	40	39	40	42	42	44	51	52	55	55	55	52.5	70.4
2-Sep	54	60	65	66	77	85	89	94	96	98	98	97	96	94	94	95	93	89	88	88	83	81	79	81	85.1	98.4
3-Sep	80	85	87	89	90	88	88	87	83	83	77	71	54	45	41	38	36	36	40	46	49	57	62	60	65.5	90.0
4-Sep	61	77	81	77	87	89	91	87	84	73	60	54	34	28	32	34	36	40	48	53	55	57	58	61	60.7	91.2
5-Sep	65	72	85	82	89	93	95	87	77	63	55	44	37	29	26	27	24	24	31	40	45	49	50	59	56.3	95.2
6-Sep	64	77	82	83	85	87	92	87	77	64	54	43	36	29	26	31	30	37	42	51	50	51	54	62	58.1	92.4
7-Sep	76	86	93	96	96	89	95	92	87	74	64	60	54	55	57	52	51	62	73	75	74	62	68	60	72.9	95.9
8-Sep	61	65	66	71	82	87	96	96	98	99	91	87	79	69	67	68	67	69	77	83	89	92	94	97	81.3	98.9
9-Sep	89	71	73	92	93	92	90	97	95	89	80	75	75	64	52	54	72	68	81	71	70	77	75	71	77.8	97.4
10-Sep	69	72	68	71	64	64	65	62	57	50	44	41	40	41	43	43	43	44	45	53	64	74	76	82	57.3	81.9
11-Sep	78	71	73	75	76	84	83	80	63	64	58	52	47	41	42	41	40	45	49	52	57	58	65	65	60.7	83.7
12-Sep	71	72	75	66	72	82	84	77	70	62	50	47	43	42	39	36	37	48	56	58	60	66	79	84	61.5	84.3
13-Sep	83	86	86	87	91	90	90	92	89	86	80	73	60	57	58	56	60	70	75	80	86	89	92	93	79.5	92.5
14-Sep	97	96	98	98	98	98	96	95	93	93	87	78	64	59	52	49	61	66	67	77	74	82	79	84	80.8	98.1
15-Sep	89	91	95	97	97	98	99	99	92	86	75	63	54	41	35	29	28	30	38	49	52	58	62	64	67.5	99.0
16-Sep	69	74	77	85	88	90	94	87	77	71	60	49	44	37	32	32	31	32	39	56	56	55	57	64	60.7	93.9
17-Sep	73	77	82	86	85	87	93	89	77	71	61	46	38	32	29	33	35	36	43	57	65	72	73	83	63.4	92.6
18-Sep	81	82	71	80	77	80	82	83	76	68	69	71	73	81	83	87	87	90	88	89	93	97	95	95	82.5	96.8
19-Sep	97	98	99	88	90	89	94	93	89	91	91	91	90	87	88	88	93	95	91	92	95	96	95	94	92.2	98.9
20-Sep	94	95	95	93	92	90	89	89	90	89	87	83	84	86	83	80	78	78	76	75	76	74	75	76	84.4	95.2
21-Sep	75	77	80	80	83	86	91	90	88	85	79	69	66	65	63	61	57	58	63	68	79	83	81	84	75.5	91.2
22-Sep	88	93	96	97	98	99	99	99	95	86	77	67	59	52	51	51	50	58	64	65	67	69	71	73	76.0	99.0
23-Sep	77	71	79	81	87	86	88	84	80	80	81	76	69	59	56	53	55	59	63	66	70	69	73	79	72.5	87.5
24-Sep	81	84	85	85	86	88	87	90	86	78	70	56	52	53	53	55	57	60	67	74	75	75	78	79	73.0	89.8
25-Sep	80	83	82	82	81	81	82	83	78	67	55	50	48	49	47	48	48	53	57	63	70	78	78	77	67.5	83.4
26-Sep	80	84	84	92	93	95	97	95	89	81	74	64	53	44	45	49	50	54	59	65	72	75	78	78	72.9	97.4
27-Sep	81	82	82	85	84	84	82	85	80	65	50	46	42	43	44	43	45	47	51	57	67	63	65	74	64.5	85.4
28-Sep	80	88	92	94	96	97	98	98	93	82	70	63	54	47	41	41	42	48	50	51	49	49	55	73	68.9	98.1
29-Sep	79	86	88	86	89	87	87	81	77	64	53	42	39	33	28	29	34	43	42	57	60	62	65	59	61.2	89.4
30-Sep	63	61	61	59	60	63	60	56	52	48	43	39	37	35	35	38	43	48	51	57	58	64	71	74	53.4	74.5
76.8 79.3 81.5 82.9 85.0 86.5 88.3 86.5 81.2 75.2 67.9 61.4 55.4 51.3 49.5 49.4 50.9 54.3 58.6 64.0 67.0 69.6 72.0 74.6																								Diurnal Average		
97.0 98.0 98.9 98.1 98.0 98.5 98.9 99.0 98.3 98.9 98.2 97.3 95.9 94.5 94.2 94.9 93.5 94.8 91.1 91.9 94.9 96.8 95.3 96.9																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - September 2017





Peace Airshed Zone Association

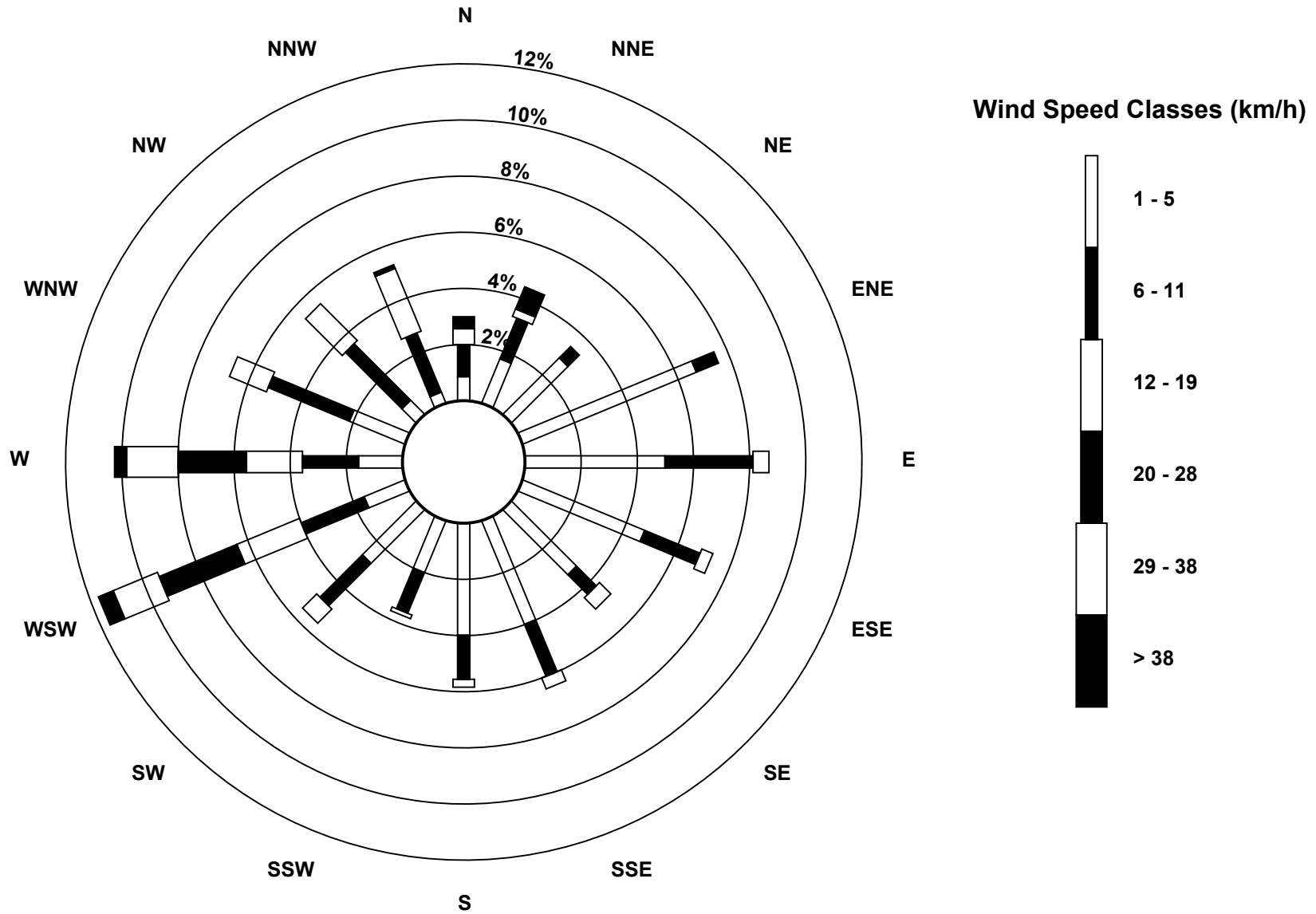
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	2	4	1	2	3	2	2	2	3	3	4	5	6	7	7	5	9	8	7	8	7	3	6	6	3.8	8.8
Dir	210	268	92	235	84	155	154	153	187	153	178	162	166	184	152	160	192	203	219	232	231	229	229	205	194	192
24 Spd	3	2	3	3	4	3	5	4	3	6	11	23	28	28	27	21	20	15	11	10	12	9	3	2	8.3	28.3
Dir	173	97	89	141	120	137	152	131	124	196	222	260	273	263	265	257	256	256	241	237	236	234	192	188	246	273
25 Spd	2	4	2	1	1	2	1	4	2	12	20	26	30	28	29	28	28	22	13	14	11	2	5	7	11.2	29.6
Dir	191	68	114	131	176	103	123	211	186	237	249	261	264	256	263	256	264	267	256	255	234	215	247	243	255	264
26 Spd	4	2	0	4	2	3	3	6	3	4	8	13	18	23	26	24	20	21	17	13	8	4	5	6	7.6	25.5
Dir	241	59	347	57	76	66	74	55	84	169	203	222	240	252	258	248	246	244	262	267	253	255	231	251	246	258
27 Spd	2	3	2	3	3	2	2	2	2	9	24	24	26	24	17	13	11	5	4	4	3	3	4	3	4.7	25.5
Dir	77	69	73	77	85	66	221	71	44	255	265	263	267	267	269	265	287	350	35	50	67	77	105	87	275	267
28 Spd	3	2	2	3	4	4	2	1	2	6	6	7	4	9	9	10	11	9	8	9	8	5	4	2	3.8	10.6
Dir	134	124	116	92	64	57	67	160	120	161	178	196	160	95	147	116	117	93	72	71	70	94	287	13	109	117
29 Spd	0	3	3	2	1	3	3	3	3	2	4	3	4	5	5	3	7	8	3	13	7	6	13	21	0.7	20.8
Dir	76	312	12	39	89	87	83	136	129	163	199	163	185	134	163	119	107	93	38	302	323	339	280	255	258	255
30 Spd	15	13	11	10	13	10	13	13	22	23	31	34	31	33	29	29	32	33	23	13	13	12	9	8	19.5	34.3
Dir	241	245	255	264	262	281	274	280	266	258	260	263	266	265	265	268	265	265	271	269	282	301	296	273	266	263
Spd	1.9	2.4	1.3	1.6	1.7	1.8	1.2	1.4	3.1	4.9	6.7	7.9	9.3	9.3	8.5	7.5	5.8	4.4	3.1	3.1	1.3	1.7	1.4	2.2	Diurnal Average	
Dir	279	295	324	318	311	340	329	292	270	252	262	259	260	261	260	256	243	241	253	283	305	349	325	275	Diurnal Maximum	
Spd	14.8	12.9	20.5	18.7	24.2	26.4	27.0	26.6	25.4	29.7	34.6	36.1	43.9	43.9	44.3	41.7	39.3	35.8	26.2	23.6	21.9	13.9	14.5	20.8	Diurnal Maximum	
Dir	241	243	239	1	249	26	243	239	258	249	261	259	254	256	263	261	264	267	264	268	261	331	329	255	Diurnal Maximum	
Maximum Speed Value: 44 km/h on Sep 11 15:00																		Minimum Speed Value: 0 km/h on Sep 6 04:00						Hours in Service: 720		
Maximum Daily Speed Average: 21.2 km/h on Sep 10																		Minimum Daily Speed Average: 0.7 km/h on Sep 7						Hours of Data: 720		
Maximum Diurnal Speed Average: 9.3 km/h at hour 14																		Minimum Diurnal Speed Average: 1.2 km/h at hour 7						Hours of Missing Data: 0		
Monthly Average Velocity: 3.56 km/h 267.7 deg																		Speed Percentiles: P ₁ = 0.3 P ₁₀ = 1.9 Q ₁ = 3.1 Median = 6.2 Q ₃ = 11.5 P ₉₀ = 20.6 P ₉₉ = 39.2						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	11	18	13	8	0	0	50																			
NorthEast	48	17	1	2	0	0	68																			
East	75	34	7	0	0	0	116																			
SouthEast	52	31	9	0	0	0	92																			
South	45	25	2	0	0	0	72																			
SouthWest	33	29	19	7	0	0	88																			
West	25	30	25	29	27	7	143																			
NorthWest	16	39	35	1	0	0	91																			
Total	305	223	111	47	27	7	720																			

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - September 2017

Maximum Speed: 45 km/h on Sep 11 15:00	Maximum Daily Speed Average: 23.1 km/h on Sep 10	Hours in Service: 720
Minimum Speed: 1 km/h on Sep 6 04:00	Minimum Daily Speed Average: 4.0 km/h on Sep 5	Hours of Data: 720
Maximum Diurnal Speed Average: 15.7 km/h at hour 14	Minimum Diurnal Speed Average: 5.7 km/h at hour 3	Hours of Missing Data: 0
Monthly Average Speed: 9.42 km/h	Percentiles: P ₁ = 1.4 P ₁₀ = 2.9 Q ₁ = 3.9 Median = 7.0 Q ₃ = 11.8 P ₉₀ = 21.1 P ₉₉ = 39.8	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	7	9	5	13	18	7	9	16	26	29	31	32	37	36	40	38	33	25	23	19	9	10	10	8	20.4	39.8
2-Sep	12	7	2	3	9	5	4	3	4	3	1	3	9	6	6	5	11	12	10	11	10	8	7	7	6.6	12.5
3-Sep	5	5	4	3	4	2	5	3	2	2	5	6	12	16	13	12	11	10	8	7	4	3	5	5	6.3	15.8
4-Sep	5	4	5	5	4	2	2	3	3	2	2	7	15	15	11	10	7	10	10	7	8	8	5	1	6.4	15.3
5-Sep	2	2	3	3	3	2	3	2	3	4	4	4	4	4	5	5	6	6	3	6	7	6	5	3	4.0	6.7
6-Sep	1	3	2	1	1	5	4	2	3	4	4	4	3	4	6	8	11	9	6	7	7	7	5	4	4.6	10.7
7-Sep	3	7	4	3	6	4	3	3	3	2	3	3	4	5	5	5	2	4	3	4	4	5	4	7	4.1	6.9
8-Sep	7	9	8	11	10	12	6	4	6	6	8	8	10	10	13	13	10	8	7	6	5	3	4	3	7.8	12.8
9-Sep	8	10	7	3	3	3	6	4	4	6	6	7	7	5	6	8	17	14	9	17	12	7	14	13	8.2	17.3
10-Sep	13	13	21	15	24	23	27	27	24	30	35	36	44	44	38	36	32	22	14	11	5	6	6	9	23.1	44.1
11-Sep	12	10	8	4	5	4	4	3	8	9	12	18	35	44	45	42	40	36	26	24	22	13	5	7	18.2	45.0
12-Sep	8	7	7	8	3	4	5	3	4	7	12	9	10	11	11	11	10	16	9	10	12	13	14	9	8.8	15.9
13-Sep	9	12	7	5	8	10	10	9	13	10	12	11	10	10	10	10	8	8	8	6	6	5	6	3	8.6	12.7
14-Sep	4	4	3	3	2	1	2	2	3	4	3	3	6	6	7	8	16	6	3	4	3	5	6	4	4.6	16.2
15-Sep	7	4	4	3	2	3	5	3	4	5	4	10	14	15	12	13	12	13	12	11	12	12	10	9	8.3	14.6
16-Sep	4	4	3	2	1	1	2	2	3	5	5	6	5	6	7	9	8	9	10	10	7	3	8	6	5.2	9.9
17-Sep	5	3	3	3	3	6	3	5	3	5	5	8	8	8	7	9	13	15	10	16	12	9	8	8	7.2	15.8
18-Sep	11	10	9	8	8	8	8	9	13	16	14	10	12	11	4	8	5	4	4	4	4	5	3	4	8.1	16.4
19-Sep	3	3	3	8	5	5	3	2	4	6	10	14	13	14	19	15	9	9	14	15	15	14	15	13	9.6	19.1
20-Sep	14	13	15	19	22	27	25	21	20	21	23	25	21	19	20	18	17	13	12	14	14	11	9	9	17.6	26.5
21-Sep	10	12	13	14	11	13	11	13	14	13	13	12	11	12	11	8	8	5	5	3	2	4	4	4	9.4	14.4
22-Sep	3	3	3	3	3	4	3	3	3	4	4	6	6	7	9	10	10	9	6	6	6	5	4	4	5.2	10.1
23-Sep	3	4	2	4	3	3	2	2	3	3	5	5	7	8	8	8	9	8	8	8	8	3	6	6	5.1	9.0
24-Sep	4	3	3	3	4	4	5	4	4	6	11	23	29	28	27	22	20	15	11	10	13	9	4	4	10.9	28.7
25-Sep	3	4	2	2	2	2	2	5	5	12	21	26	30	28	29	28	29	22	13	14	11	6	6	7	12.9	30.2
26-Sep	6	4	4	4	3	3	4	6	4	5	8	13	18	23	26	24	20	21	17	13	8	5	5	6	10.5	25.7
27-Sep	4	3	3	3	3	3	3	3	4	10	24	24	26	24	18	13	11	5	4	5	4	4	4	4	8.7	25.9
28-Sep	3	3	3	4	4	4	3	3	3	6	6	7	5	9	9	10	11	9	9	9	8	5	5	4	5.8	10.7
29-Sep	3	4	3	3	3	4	4	3	3	3	4	3	5	5	6	5	8	8	8	14	7	6	14	21	6.1	21.1
30-Sep	15	13	11	11	13	10	13	13	22	23	32	35	31	33	29	30	32	33	23	14	13	12	9	8	20.0	34.6
	6.5	6.4	5.7	5.8	6.4	6.1	6.2	6.0	7.2	8.8	10.8	12.7	14.8	15.7	15.2	14.6	14.5	12.9	10.2	10.1	8.6	7.1	7.0	6.7	Diurnal Average	
	14.9	13.0	20.6	18.8	24.3	26.5	27.1	26.7	25.6	30.0	35.1	36.4	44.1	44.2	45.0	42.1	39.8	36.0	26.3	23.7	22.0	14.0	14.8	21.1	Diurnal Maximum	

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - September 2017

Maximum Value: 93.9 deg on Sep 26 03:00																								Hours in Service: 720	
Minimum Value: 2.6 deg on Sep 1 20:00																								Hours of Data: 720	
Percentiles: P ₁ = 3.8 P ₁₀ = 6.6 Q ₁ = 9.5 Median = 19.6 Q ₃ = 40.1 P ₉₀ = 66.3 P ₉₉ = 87.6																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	34	9	52	19	4	81	36	46	8	6	6	7	8	8	7	7	7	6	7	3	14	8	10	21	80.8
2-Sep	16	28	37	54	10	74	83	54	15	29	74	28	7	27	16	29	11	9	8	8	3	9	16	62	83.4
3-Sep	89	65	55	19	47	54	20	39	38	29	37	26	18	16	20	16	17	19	8	36	47	52	14	9	89.3
4-Sep	89	33	10	82	60	92	58	73	16	29	73	26	16	13	25	28	30	12	3	4	5	5	50	54	92.2
5-Sep	67	37	69	44	70	80	13	42	32	35	31	43	47	31	52	40	17	16	36	8	8	13	10	64	80.5
6-Sep	77	89	75	85	93	64	55	77	76	25	43	42	41	45	38	20	16	8	11	8	5	6	7	81	93.4
7-Sep	74	75	22	79	12	56	27	73	75	56	43	30	59	23	30	27	89	14	28	76	53	38	76	14	88.9
8-Sep	13	7	5	13	11	9	19	55	30	27	13	19	19	15	26	19	11	10	15	15	15	24	21	29	54.9
9-Sep	41	4	49	59	51	18	72	36	68	59	32	53	49	37	36	24	13	9	12	5	15	13	5	5	72.4
10-Sep	5	6	4	7	6	5	3	4	4	8	9	8	5	8	8	6	7	7	7	13	35	40	10	16	40.2
11-Sep	8	9	13	26	42	22	19	32	20	24	11	12	8	7	10	7	9	7	6	7	6	10	57	29	57.2
12-Sep	18	45	85	17	93	25	48	33	77	17	21	43	47	30	29	24	17	23	9	10	7	23	7	9	93.1
13-Sep	13	6	17	34	12	5	6	11	8	11	16	25	26	29	30	78	16	34	12	27	21	65	89	63	89.5
14-Sep	76	71	27	76	81	50	68	57	42	11	37	49	27	37	61	46	15	24	47	14	21	15	8	19	80.8
15-Sep	10	33	19	29	37	28	19	60	22	17	47	25	15	19	21	24	21	12	7	5	3	4	5	7	59.5
16-Sep	42	17	19	43	39	29	64	61	53	21	19	24	37	38	45	47	28	18	15	4	7	72	7	59	72.4
17-Sep	66	48	39	56	94	38	69	37	29	37	37	24	31	33	40	51	14	15	79	11	14	36	55	47	93.7
18-Sep	21	19	42	54	43	34	18	9	14	8	11	13	7	11	20	13	25	67	59	26	54	55	19	17	66.6
19-Sep	42	71	69	21	28	75	24	79	69	29	9	8	9	7	5	11	27	29	7	9	7	8	10	9	79.1
20-Sep	9	10	10	6	8	5	4	6	7	12	11	6	10	9	8	9	9	7	6	11	23	13	34	20	33.5
21-Sep	11	7	5	6	7	7	5	5	7	8	11	15	21	16	19	22	21	28	19	25	25	12	12	11	27.6
22-Sep	17	24	29	44	9	11	14	29	30	17	37	35	41	38	43	13	12	5	11	7	11	24	23	35	43.6
23-Sep	78	24	62	83	33	24	33	33	18	26	17	12	16	36	36	51	10	12	7	6	8	30	17	15	82.9
24-Sep	47	33	19	13	20	29	20	13	37	16	14	15	9	7	5	8	5	8	3	8	6	10	50	61	61.4
25-Sep	57	42	50	64	61	38	69	48	68	8	8	9	11	11	9	9	7	6	9	5	6	79	82	19	81.6
26-Sep	78	74	94	27	57	71	39	12	42	23	20	15	14	8	7	8	7	4	10	7	8	79	46	49	93.9
27-Sep	77	42	66	37	17	29	66	28	79	29	7	9	11	10	14	19	17	14	13	18	68	27	18	27	78.8
28-Sep	36	37	41	26	16	17	36	75	50	21	16	24	31	17	20	15	8	9	6	4	6	33	51	73	75.4
29-Sep	93	60	40	68	66	42	45	32	36	55	28	34	35	36	37	75	34	13	54	10	11	13	17	11	92.6
30-Sep	6	7	6	9	6	7	6	5	9	7	7	8	9	8	12	10	9	4	5	9	6	12	12	6	12.1
92.6	88.7	93.9	85.2	93.7	92.2	83.4	79.1	78.8	58.9	73.9	53.1	58.8	44.6	60.8	78.5	88.9	66.6	79.2	76.1	68.2	79.4	89.5	81.1		

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

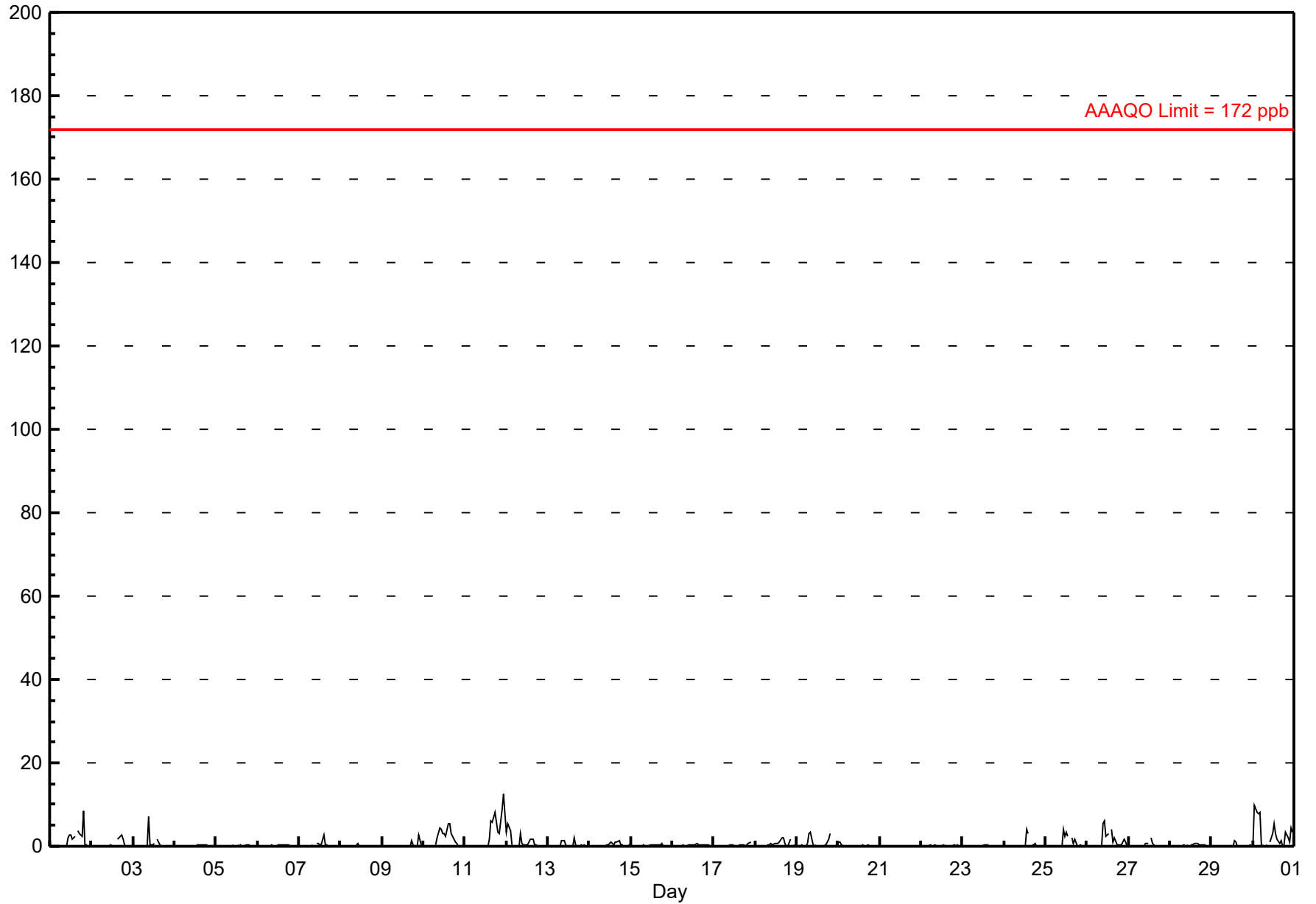
Valleyview - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 12.4 ppb on Sep 11 23:00	Maximum Daily Average: 2.8 ppb on Sep 30		Hours of Data:	685
Minimum Value: 0 ppb on Sep 1 01:00	Minimum Daily Average: 0.0 ppb on Sep 21		Hours of Missing Data:	35
Maximum Diurnal Average: 1.1 ppb at hour 15	Minimum Diurnal Average: 0.0 ppb at hour 6		Hours of Calibration:	35
Monthly Average: 0.57 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 1.8 P ₉₉ = 8.0		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	0	0	0	0	0	2	3	3	2	2	A	4	3	2	9	0	0	0	0	1.3	8.5
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	2	3	2	0	0	0	0	0	0.4	2.6
3-Sep	0	0	0	0	0	0	0	0	0	7	0	0	1	A	2	0	0	0	0	0	0	0	0	0	0.5	7.2
4-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Sep	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	3	0	0	0	0	0	0	0	0	0.3	2.8
8-Sep	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5
9-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	2	0	0	0	3	1	0	0.3	2.8
10-Sep	0	0	0	0	0	0	A	0	2	4	4	3	3	2	5	5	3	2	1	1	0	0	0	0	1.6	5.5
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	2	6	6	8	6	4	3	9	12	8	2.8	12.4	
12-Sep	4	5	4	0	A	0	0	0	3	1	1	0	0	1	2	2	0	0	0	0	0	0	0	0	1.0	5.3
13-Sep	0	0	0	A	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0.3	2.2
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0.3	1.4
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.6
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.5
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0.2	1.1
18-Sep	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	1	0	0	0	2	A	0	0	0.5	2.1
19-Sep	0	0	0	0	0	0	1	3	3	0	0	0	C	C	C	C	0	0	2	3	A	0	0	0	0.7	3.4
20-Sep	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	1.1
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.0
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.4
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	A	0	0	1	0	0	0	0	0	0.4	4.2
25-Sep	0	0	0	0	0	0	0	0	0	0	4	2	3	2	A	2	1	2	0	0	0	0	0	0	0.8	4.1
26-Sep	0	0	0	0	0	0	0	0	0	5	6	2	3	A	4	1	2	0	0	0	0	2	1	0	1.2	6.0
27-Sep	0	0	0	0	0	0	0	0	0	0	1	1	A	2	1	0	0	0	0	0	0	0	0	0	0.2	2.2
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0.2	0.8
29-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0.1	1.4
30-Sep	0	10	8	8	8	0	0	0	0	A	1	3	6	3	2	1	1	0	0	3	2	1	5	3	2.8	10.0

0.2	0.6	0.4	0.3	0.3	0.0	0.0	0.1	0.4	0.8	0.8	0.7	0.9	0.8	1.1	1.0	0.9	0.9	0.6	0.8	0.4	0.6	0.7	0.4	Diurnal Average	
3.6	10.0	8.1	7.6	8.1	0.3	0.6	3.2	3.4	7.2	6.0	3.1	5.6	4.2	5.5	6.0	5.9	8.0	5.8	8.5	3.2	8.7	12.4	7.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



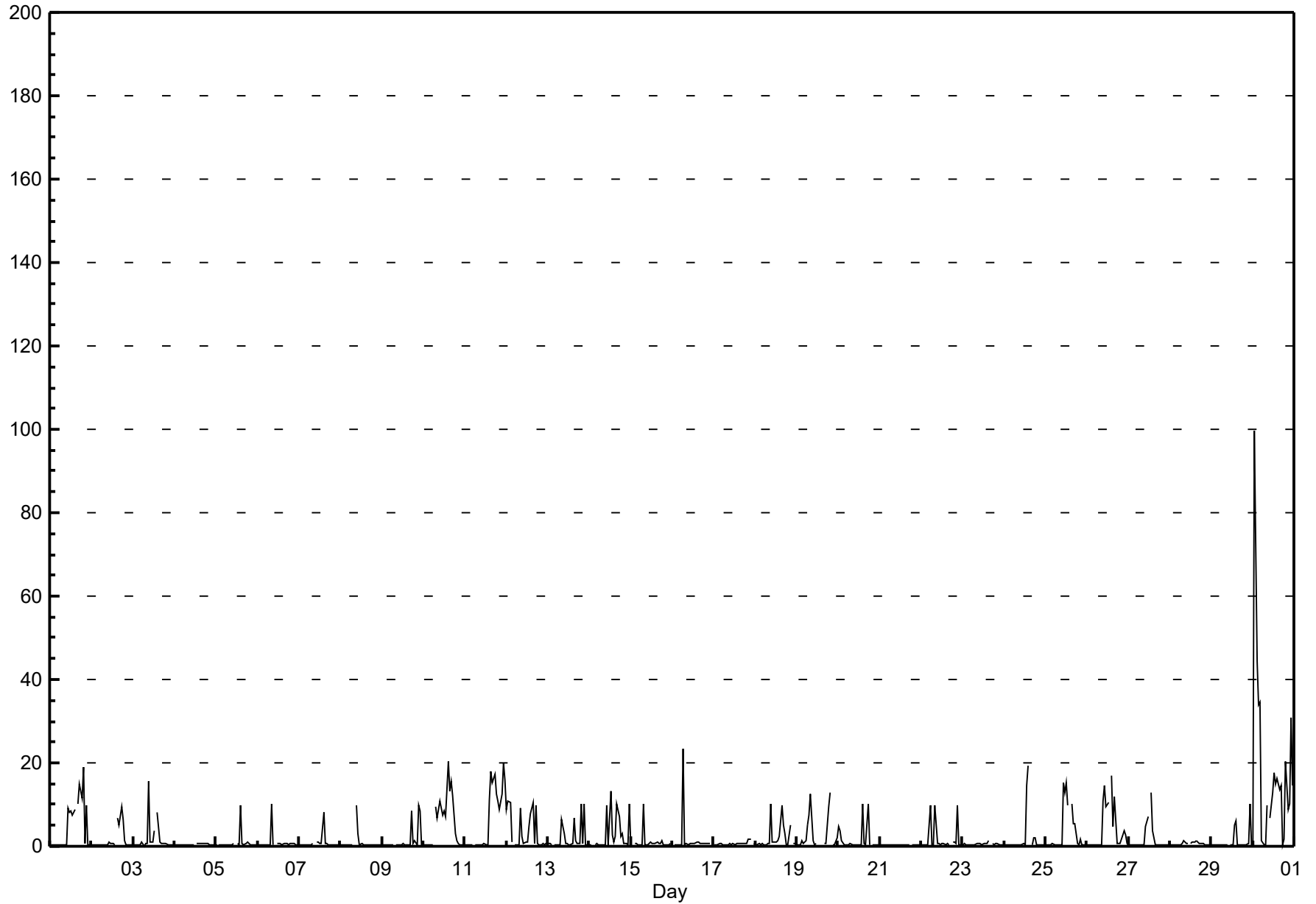
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Valleyview - September 2017

Maximum Value: 99.8 ppb on Sep 30 02:00		Maximum Daily Average: 17.8 ppb on Sep 30		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 5 02:00		Minimum Daily Average: 0.4 ppb on Sep 21		Hours of Data: 685																							
Maximum Diurnal Average: 5.8 ppb at hour 15		Minimum Diurnal Average: 0.8 ppb at hour 6		Hours of Missing Data: 35																							
Monthly Average: 2.60 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 9.9 P ₉₉ = 19.3		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	0	0	0	9	8	8	7	9	A	10	15	11	19	1	10	0	0	4.9	19.1	
2-Sep	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	7	5	9	6	1	0	0	0	0	1.6	9.5	
3-Sep	0	0	0	0	0	1	0	1	1	16	1	1	4	A	8	1	1	1	1	1	0	0	0	0	1.7	15.5	
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0.4	0.8	
5-Sep	0	0	0	0	0	0	0	0	0	0	1	A	1	1	10	1	0	1	1	1	0	0	0	0	0.8	9.9	
6-Sep	0	0	0	0	0	0	0	0	10	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0.9	10.0	
7-Sep	0	0	0	0	0	0	0	0	1	A	1	1	1	1	8	1	1	1	0	0	0	0	0	0	0.8	8.0	
8-Sep	0	0	0	0	0	0	0	0	0	A	10	3	0	1	0	0	0	0	0	0	0	0	0	0	0.9	9.7	
9-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	9	1	1	0	10	8	0	1.6	9.8	
10-Sep	0	0	0	0	0	0	A	9	7	11	9	7	9	7	20	13	16	12	3	1	1	0	0	0	5.6	20.4	
11-Sep	0	0	0	0	0	A	0	0	0	0	0	1	0	0	11	18	15	17	12	11	9	13	20	16	6.5	20.1	
12-Sep	9	11	11	1	A	0	0	0	9	2	1	1	1	5	8	11	1	10	1	0	0	1	0	1	3.6	11.0	
13-Sep	1	1	0	A	0	0	0	0	6	3	1	1	0	0	1	7	1	1	1	10	1	10	0	0	2.0	10.3	
14-Sep	0	0	A	0	1	0	0	0	0	0	10	0	13	3	1	2	10	7	2	3	1	1	0	10	2.9	13.2	
15-Sep	0	A	1	1	0	0	0	10	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1.0	10.0	
16-Sep	A	0	0	0	0	0	24	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.6	23.6	
17-Sep	0	0	0	1	1	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	2	2	A	1	0.6	1.7	
18-Sep	0	0	1	0	1	0	0	1	1	10	1	1	1	1	3	10	5	3	0	0	5	A	1	1	2.1	10.3	
19-Sep	0	0	0	1	1	1	5	7	12	1	1	1	C	C	C	C	1	1	9	13	A	0	0	2	3.1	12.8	
20-Sep	5	4	1	0	0	0	0	1	0	0	0	0	0	0	10	1	0	10	0	A	0	0	0	0	1.7	10.2	
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.5	
22-Sep	0	0	0	0	0	10	0	0	10	1	1	0	1	1	0	1	0	A	1	1	1	10	0	0	1.8	10.0	
23-Sep	0	1	0	0	0	0	0	0	1	1	1	0	1	1	1	1	A	1	0	1	1	0	1	0	0.5	1.3	
24-Sep	0	0	0	0	0	0	0	0	0	0	0	1	0	15	19	A	0	2	2	0	0	0	0	0	2.0	19.4	
25-Sep	0	0	0	0	1	0	0	0	0	0	15	13	15	10	A	10	5	5	1	0	2	0	0	0	3.6	15.4	
26-Sep	0	0	0	0	0	0	0	0	0	11	14	9	11	A	17	5	12	1	1	1	2	4	3	1	4.0	17.0	
27-Sep	0	0	0	0	0	0	0	0	0	0	5	7	A	13	4	0	0	0	0	0	0	0	0	0	1.6	12.9	
28-Sep	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.3	
29-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	5	6	0	0	1	0	0	1	10	0	1.3	10.1	
30-Sep	1	100	45	34	35	1	0	0	10	A	7	13	18	15	16	14	15	0	2	20	9	10	31	15	17.8	99.8	
		0.9	4.3	2.3	1.6	1.6	0.8	1.3	1.3	2.6	2.6	3.0	2.6	3.3	3.3	5.8	4.0	3.6	3.8	2.1	3.1	1.3	2.7	2.8	1.9	Diurnal Average	
		8.7	99.8	44.5	33.9	34.5	9.8	23.6	10.0	12.4	15.5	15.4	12.8	17.8	14.8	20.4	18.0	15.7	17.3	12.4	20.3	9.0	12.6	30.9	16.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

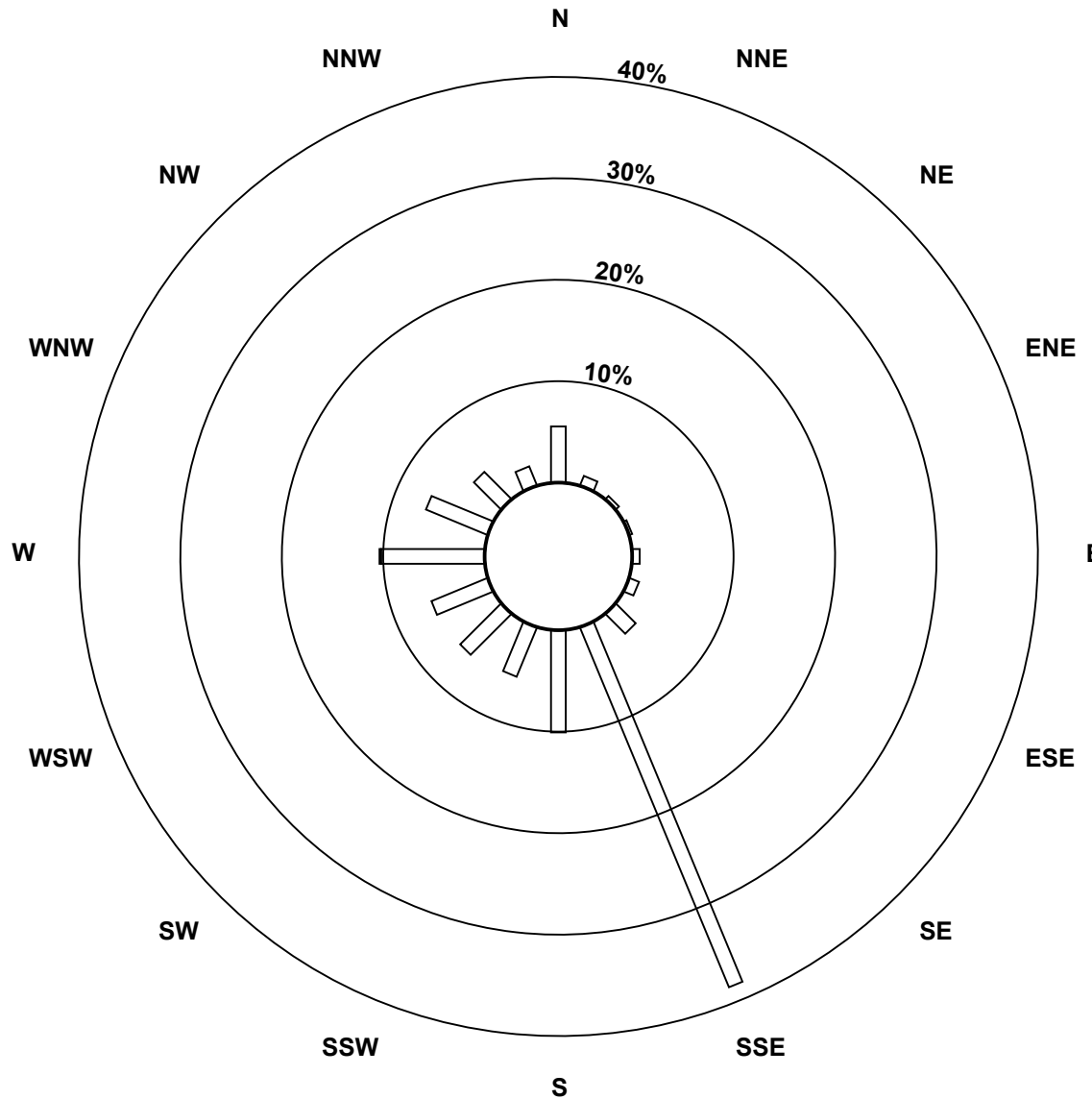
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - September 2017

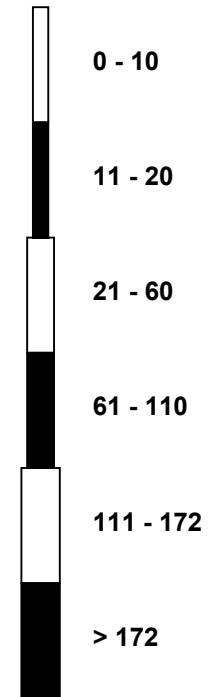


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - September 2017

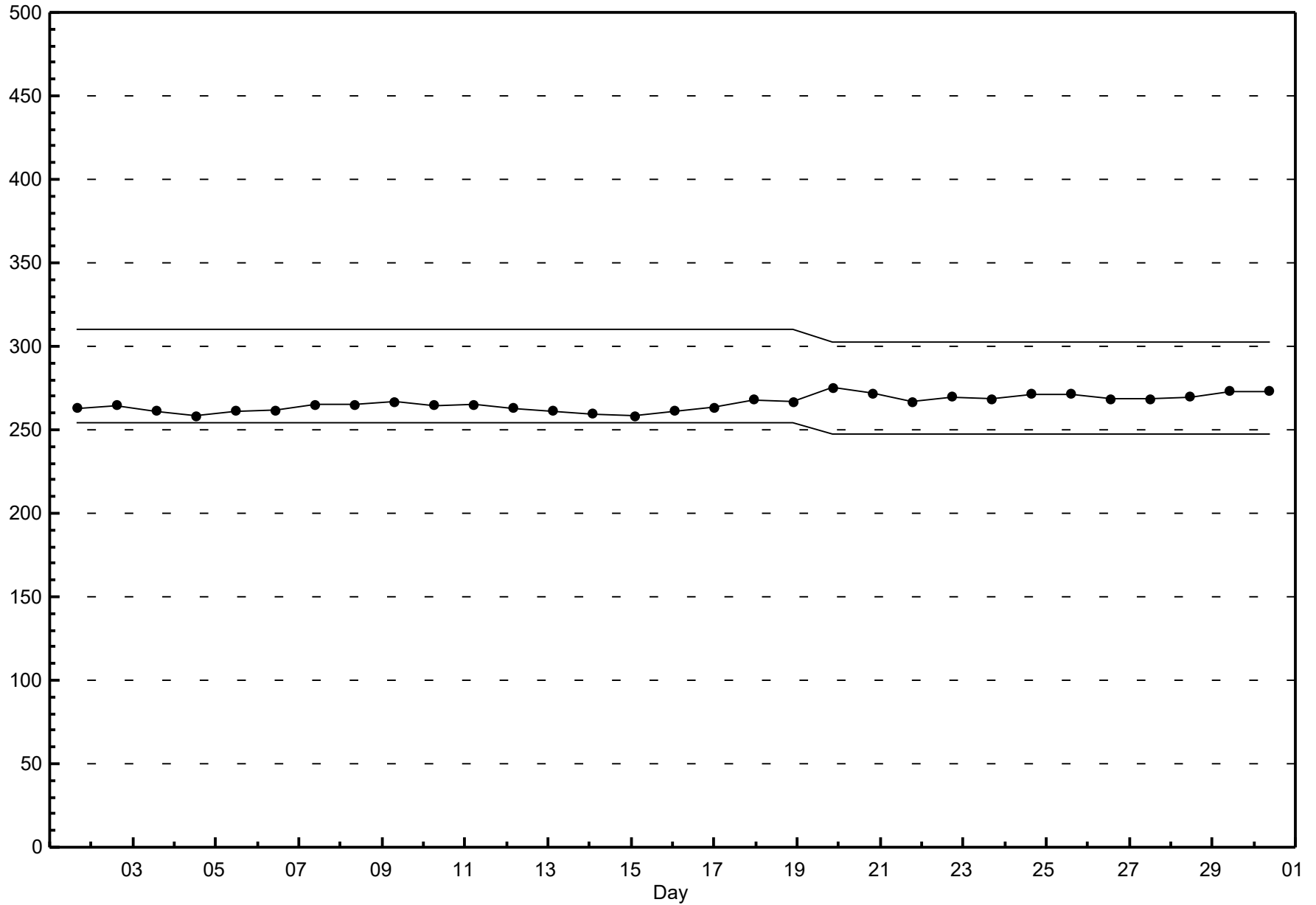


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - September 2017



Hourly Averages

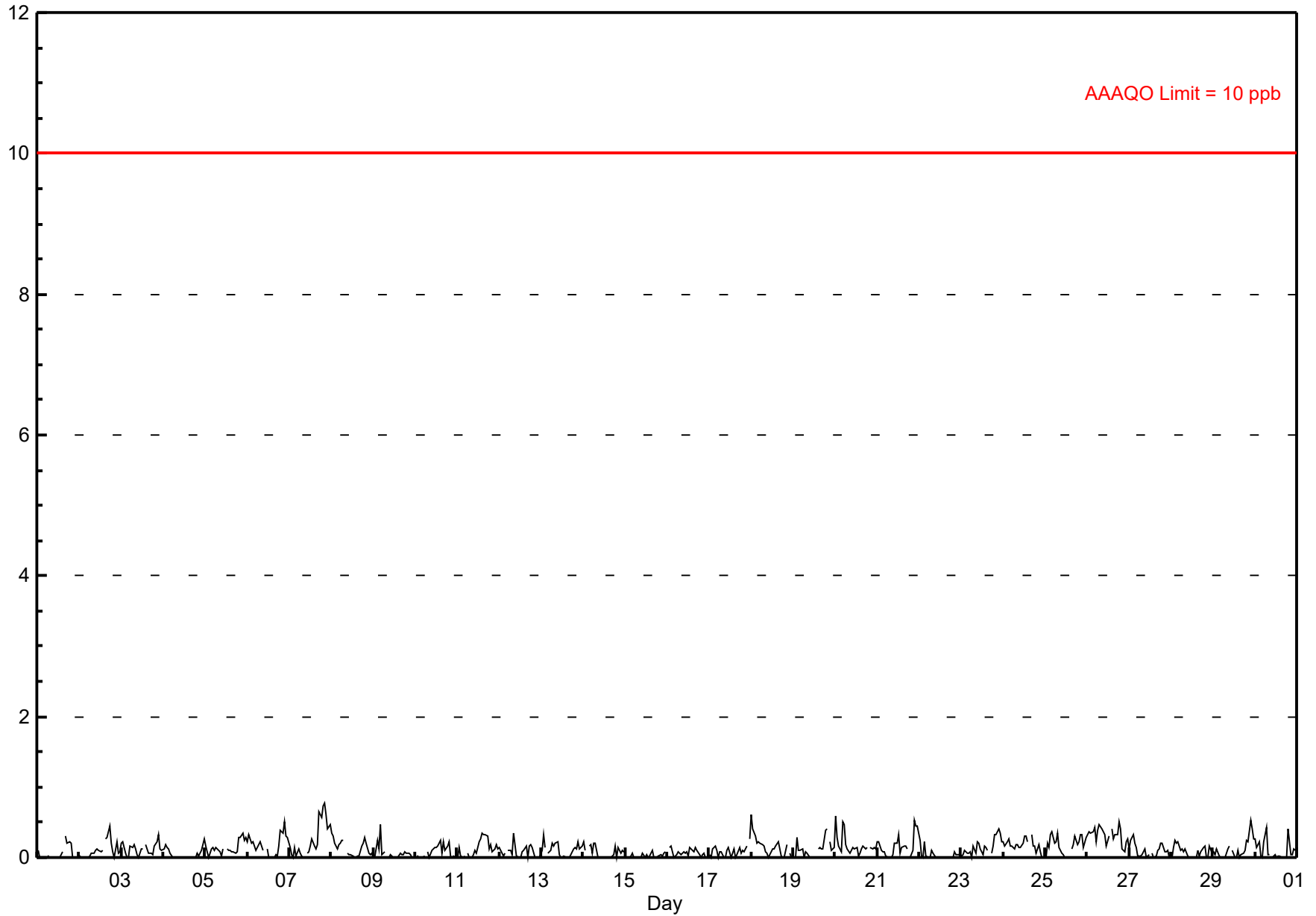
Hydrogen Sulphide (H₂S) - ppb

Valleyview - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.8 ppb on Sep 7 21:00 Maximum Daily Average: 0.3 ppb on Sep 26		Hours in Service: 720 Hours of Data: 685 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0																									
Minimum Value: 0 ppb on Sep 1 02:00 Maximum Diurnal Average: 0.2 ppb at hour 20 Monthly Average: 0.12 ppb		Minimum Daily Average: 0.0 ppb on Sep 15 Minimum Diurnal Average: 0.1 ppb at hour 11 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.6																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.3
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.4
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.5
7-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0.3	0.8
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
9-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
18-Sep	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
19-Sep	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	A	0	0	0	0.1	0.4
20-Sep	1	0	0	0	1	0	0	0	0	0	0	0	C	C	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0.2	0.5
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0.3	0.5
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.5
30-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
																								Diurnal Average	Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Hydrogen Sulphide (H₂S) - ppb
Valleyview - September 2017



Hourly Maximums

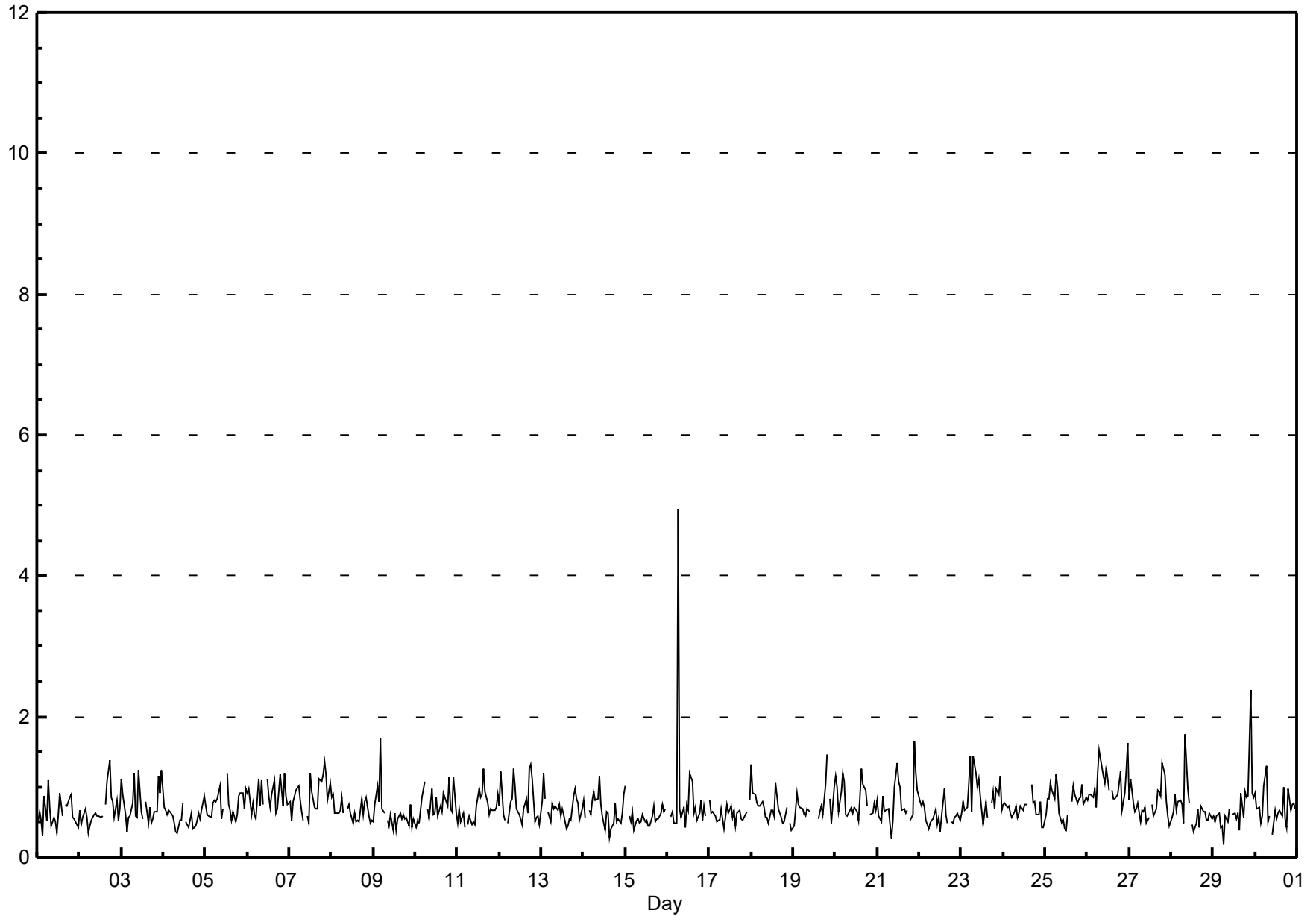
Hydrogen Sulphide (H₂S) - ppb

Valleyview - September 2017

Maximum Value: 5.0 ppb on Sep 16 07:00		Maximum Daily Average: 1.0 ppb on Sep 26		Hours in Service: 720																																													
Minimum Value: 0 ppb on Sep 29 07:00		Minimum Daily Average: 0.6 ppb on Sep 4		Hours of Data: 685																																													
Maximum Diurnal Average: 0.9 ppb at hour 7		Minimum Diurnal Average: 0.7 ppb at hour 14		Hours of Missing Data: 35																																													
Monthly Average: 0.73 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 1.1 P ₉₉ = 1.5		Hours of Calibration: 35																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	1	1	1	0	1	1	1	1	0	1	0	0	1	1	1	A	1	1	1	1	1	1	1	0	0.6	1.1																							
2-Sep	1	0	1	1	1	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.4																							
3-Sep	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0	1	0	1	1	1	1	1	1	0.8	1.3																							
4-Sep	1	1	1	1	1	1	0	0	0	1	1	1	A	1	0	1	1	0	0	1	1	1	1	1	0.6	0.9																							
5-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2																							
6-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2																							
7-Sep	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4																							
8-Sep	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	0	1	1	1	1	1	0	1	0.7	0.9																							
9-Sep	1	1	1	1	2	1	1	A	1	0	1	0	1	0	1	1	1	1	1	1	0	1	0	1	0.6	1.7																							
10-Sep	0	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1																							
11-Sep	0	1	0	1	0	A	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3																							
12-Sep	1	1	1	1	A	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0.8	1.3																							
13-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0.7	1.2																							
14-Sep	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	1	1	1	0	1	1	0.7	1.2																							
15-Sep	1	A	1	1	1	0	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	1.0																							
16-Sep	A	1	1	1	0	0	5	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	5.0																							
17-Sep	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.8																							
18-Sep	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	A	0	0	0.7	1.3																							
19-Sep	0	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	A	1	0	0.7	1.5																							
20-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.3																							
21-Sep	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	0.8	1.6																							
22-Sep	1	1	1	1	1	0	0	1	1	1	0	1	0	1	1	1	0	A	1	0	1	1	1	1	0.6	1.0																							
23-Sep	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	0.9	1.4																							
24-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0.7	1.0																							
25-Sep	1	1	1	1	1	1	1	1	1	0	1	0	0	1	A	1	1	1	1	1	1	1	1	1	0.8	1.2																							
26-Sep	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1.0	1.6																							
27-Sep	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	0	0.8	1.4																							
28-Sep	1	1	1	1	1	1	1	0	2	1	1	A	0	0	0	1	0	1	1	1	1	1	1	1	0.7	1.7																							
29-Sep	1	1	1	1	0	0	0	1	1	1	1	A	1	1	1	0	1	1	1	1	1	2	1	1	0.7	2.4																							
30-Sep	1	1	1	0	1	1	1	1	1	A	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0.7	1.3																							
																								0.8	0.8	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.9	0.7	0.8	Diurnal Average	
																								1.3	1.2	1.0	1.1	1.7	1.4	5.0	1.5	1.7	1.2	1.2	1.4	1.2	1.2	1.1	1.3	1.1	1.4	1.3	1.5	1.4	2.4	1.2	1.6	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									

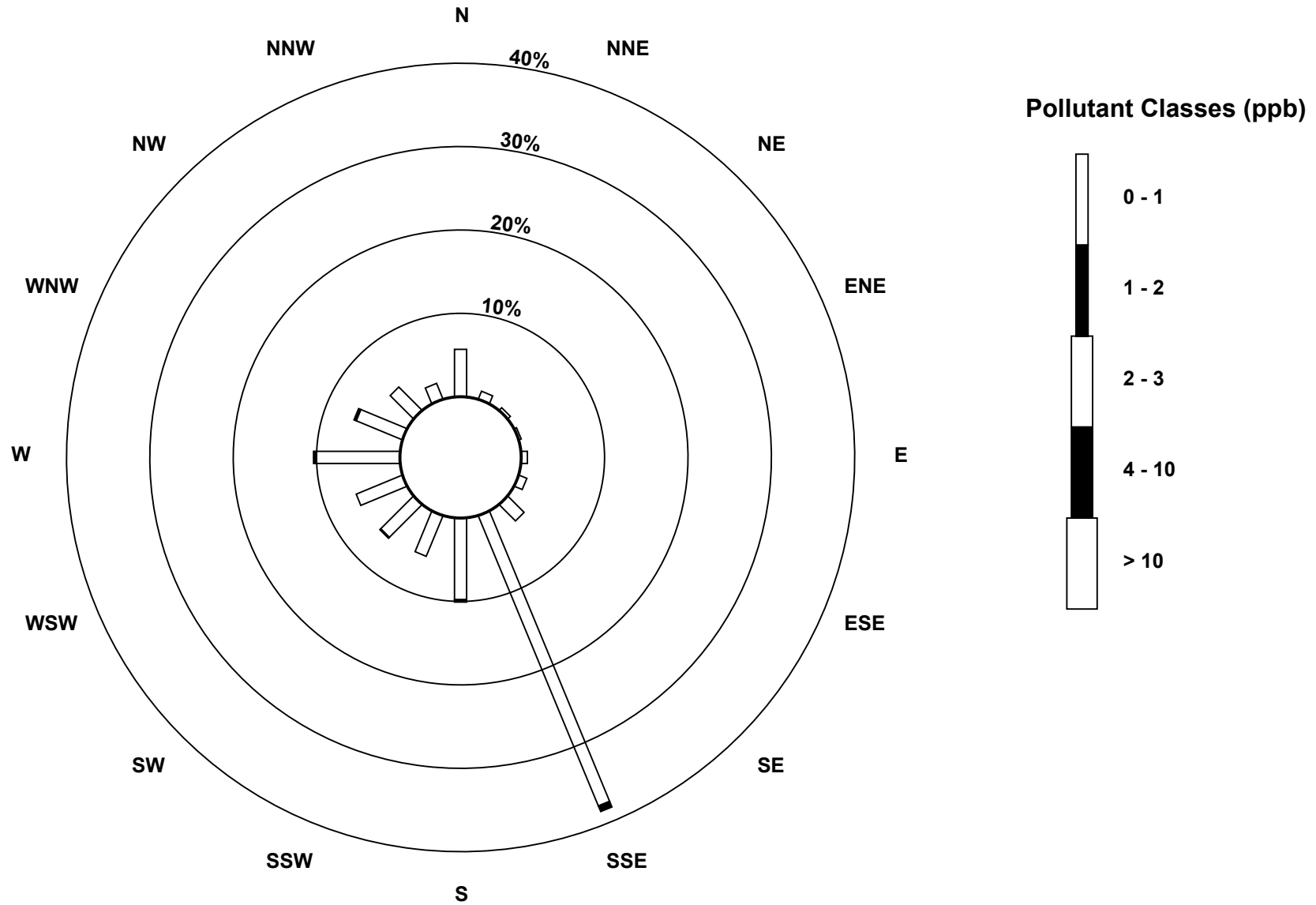
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - September 2017



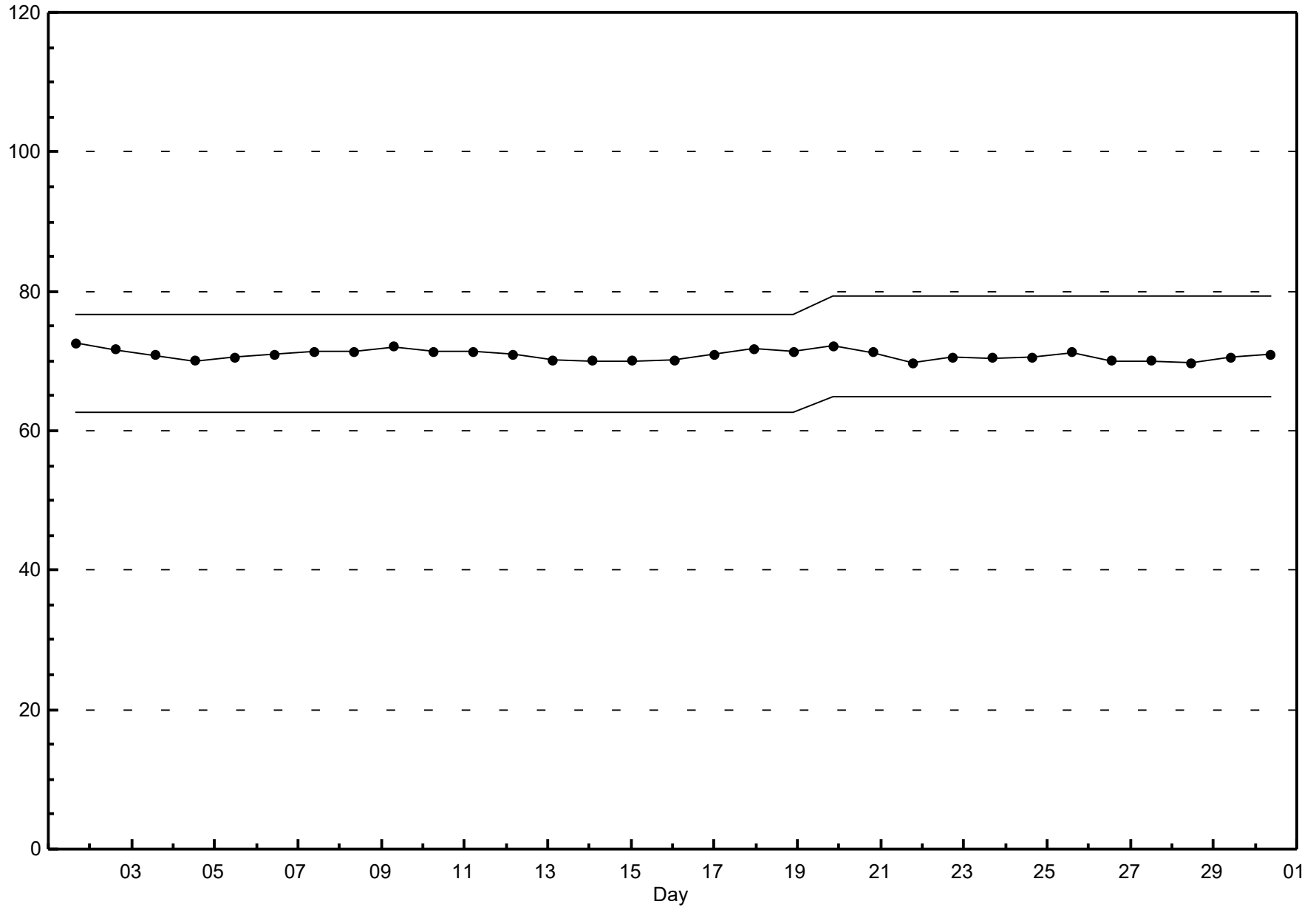
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - September 2017



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - September 2017

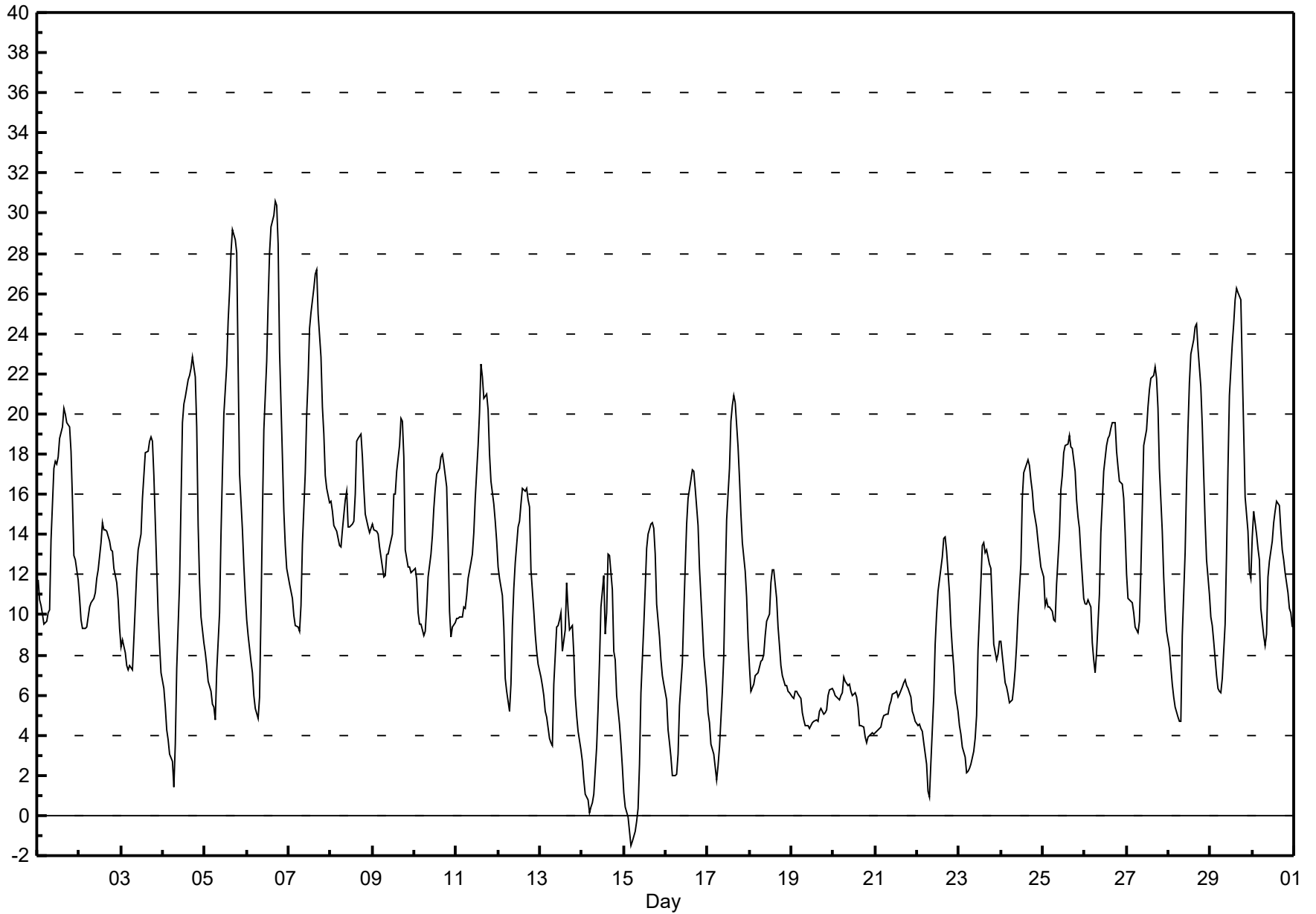


Hourly Averages

External Temperature (ET) - °C

Valleyview - September 2017

Maximum Value: 30.6 °C on Sep 6 17:00 Minimum Value: -1 °C on Sep 15 05:00 Maximum Diurnal Average: 17.6 °C at hour 16 Monthly Average: 11.53 °C		Maximum Daily Average: 17.5 °C on Sep 7 Minimum Daily Average: 5.3 °C on Sep 19 Minimum Diurnal Average: 6.2 °C at hour 7 Percentiles: P ₁ = 0.4 P ₁₀ = 4.4 Q ₁ = 6.5 Median = 10.8 Q ₃ = 15.5 P ₉₀ = 19.6 P ₉₉ = 28.3		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Sep	12	11	10	10	10	10	10	10	14	17	18	18	18	19	20	20	20	19	18	16	13	13	12	14.8	20.3		
2-Sep	11	10	9	9	9	10	10	11	11	11	12	12	14	15	14	14	14	14	13	13	12	12	11	9	11.7	14.6	
3-Sep	8	9	8	7	7	7	7	9	10	12	13	14	16	17	18	18	19	19	19	17	12	10	8	7	12.2	18.8	
4-Sep	6	5	4	4	3	3	1	4	7	12	16	20	20	21	22	22	22	23	22	19	14	12	10	9	12.5	22.8	
5-Sep	8	7	7	6	6	5	5	7	10	14	17	20	22	25	26	28	29	29	28	22	17	14	12	11	15.7	29.1	
6-Sep	10	9	8	7	6	5	5	6	10	15	19	23	26	28	29	30	31	30	28	23	18	15	13	12	16.9	30.6	
7-Sep	12	11	11	10	9	9	9	10	14	17	20	22	24	25	26	27	27	25	23	20	19	17	16	16	17.5	27.2	
8-Sep	16	15	14	14	14	13	13	14	16	16	14	14	14	15	16	19	19	19	18	16	15	14	14	14	15.3	19.0	
9-Sep	14	14	14	14	13	13	12	12	13	13	13	14	16	16	17	18	20	20	18	13	12	12	12	12	14.5	19.8	
10-Sep	12	12	10	10	10	9	9	10	12	13	14	15	16	17	17	18	18	18	16	14	10	9	9	10	12.8	18.0	
11-Sep	10	10	10	10	10	10	11	12	13	13	14	16	18	20	22	22	21	21	20	18	17	15	15	14	15.1	22.5	
12-Sep	12	12	11	9	7	6	5	7	9	11	13	14	15	16	16	16	16	16	15	12	10	9	8	8	11.4	16.3	
13-Sep	7	6	6	5	5	4	4	3	7	9	9	10	10	8	9	12	10	9	9	8	6	5	4	3	7.1	11.6	
14-Sep	3	2	1	1	0	0	1	1	3	5	8	10	12	9	10	13	13	11	8	8	6	5	4	2	5.7	13.0	
15-Sep	1	0	0	-1	-1	-1	-1	0	0	3	6	9	11	13	14	15	15	14	13	10	9	8	7	7	6.3	14.6	
16-Sep	6	4	4	3	2	2	2	3	5	8	10	12	15	16	17	17	17	16	14	12	11	9	8	6	9.2	17.2	
17-Sep	5	5	4	3	2	2	3	3	6	8	12	15	17	20	20	21	21	18	17	15	14	12	11	9	10.9	20.9	
18-Sep	7	6	7	7	7	7	8	8	8	9	10	10	12	12	12	11	9	8	7	7	6	6	6	6	8.2	12.2	
19-Sep	6	6	6	6	6	6	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	5.3	6.3	
20-Sep	6	6	6	6	6	6	7	7	6	7	6	6	6	6	5	4	4	4	4	4	4	4	4	4	5.4	6.9	
21-Sep	4	4	4	4	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	6	6	5	5	5	5.5	6.8	
22-Sep	5	5	4	4	4	3	1	1	3	6	9	10	11	12	13	14	14	13	11	9	8	7	6	5	7.4	13.9	
23-Sep	4	4	3	3	2	2	2	3	3	4	5	8	12	13	14	13	13	12	12	10	9	8	8	9	7.4	13.6	
24-Sep	9	8	7	6	6	6	6	6	7	8	10	13	16	17	17	18	17	17	16	15	14	14	13	12	11.6	17.7	
25-Sep	12	10	11	10	10	10	10	10	12	14	16	17	18	18	18	19	18	18	17	16	15	14	13	11	14.1	18.9	
26-Sep	11	11	11	10	9	8	7	8	11	14	16	17	18	19	19	19	20	20	18	17	17	17	16	14	14.4	19.6	
27-Sep	12	11	11	11	10	9	9	10	12	15	18	19	20	21	22	22	22	22	20	17	14	12	10	9	15.0	22.4	
28-Sep	8	7	7	6	5	5	5	5	9	13	16	19	22	23	24	24	24	24	23	21	19	17	15	13	11	14.3	24.5
29-Sep	10	9	9	7	6	6	6	7	10	13	17	21	24	24	26	26	26	26	22	19	16	14	12	12	15.3	26.3	
30-Sep	14	15	14	13	13	10	9	8	9	12	13	14	15	15	16	15	14	13	13	12	11	10	10	9	12.4	15.6	
	8.7	8.2	7.7	7.2	6.7	6.4	6.2	6.8	8.7	10.8	12.5	14.1	15.6	16.3	17.0	17.6	17.5	17.0	15.9	14.0	12.0	10.8	10.0	9.1	Diurnal Average		
	15.6	15.2	14.5	14.1	13.8	13.4	13.4	14.2	15.7	17.3	20.0	22.6	25.6	28.1	29.3	29.9	30.6	30.4	28.4	23.1	19.0	16.9	16.3	15.6	Diurnal Maximum		



Hourly Averages

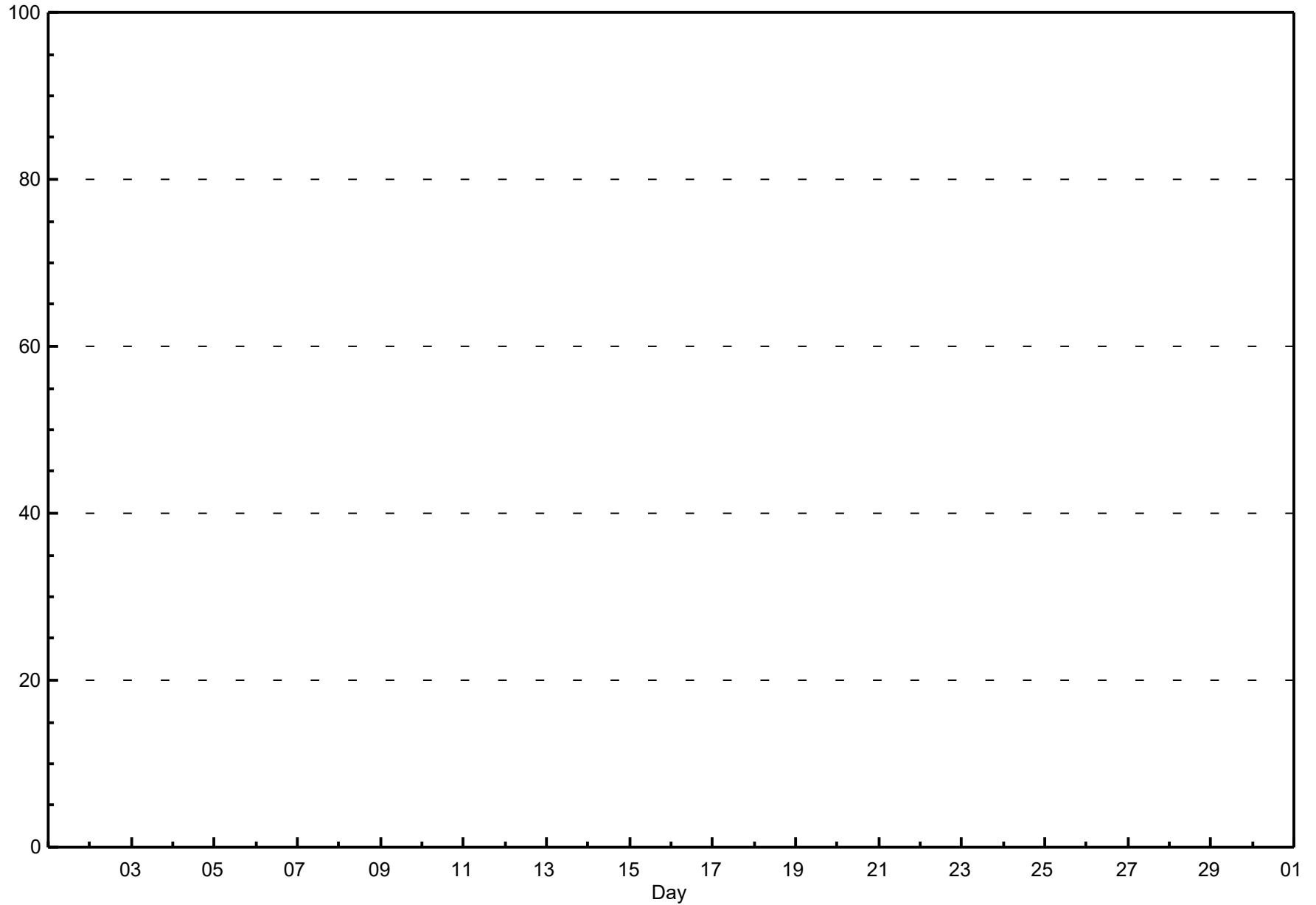
Relative Humidity (RH) - %
Valleyview - September 2017

Maximum Value: -- % on Sep 1 00:00 Minimum Value: -- % on Sep 1 00:00 Maximum Diurnal Average: -- % at hour 0 Monthly Average: -- %		Maximum Daily Average: -- % on Aug 31 Minimum Daily Average: -- % on Aug 31 Minimum Diurnal Average: -- % at hour 0 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.0 P ₉₉ = 0.0		Hours in Service: 720 Hours of Data: 0 Hours of Missing Data: 720 Hours of Calibration: 0 Percent Operational Time: 0.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
2-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
3-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
4-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
5-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
6-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
7-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
8-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
10-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
11-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
12-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
13-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
15-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
16-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
17-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
18-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
19-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
20-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
21-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
22-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
23-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
24-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
25-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
26-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
27-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
28-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
29-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
30-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Average	Diurnal Maximum
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

N - Not Valid

Hourly Averages

Relative Humidity (RH) - %
Valleyview - September 2017





Peace Airshed Zone Association

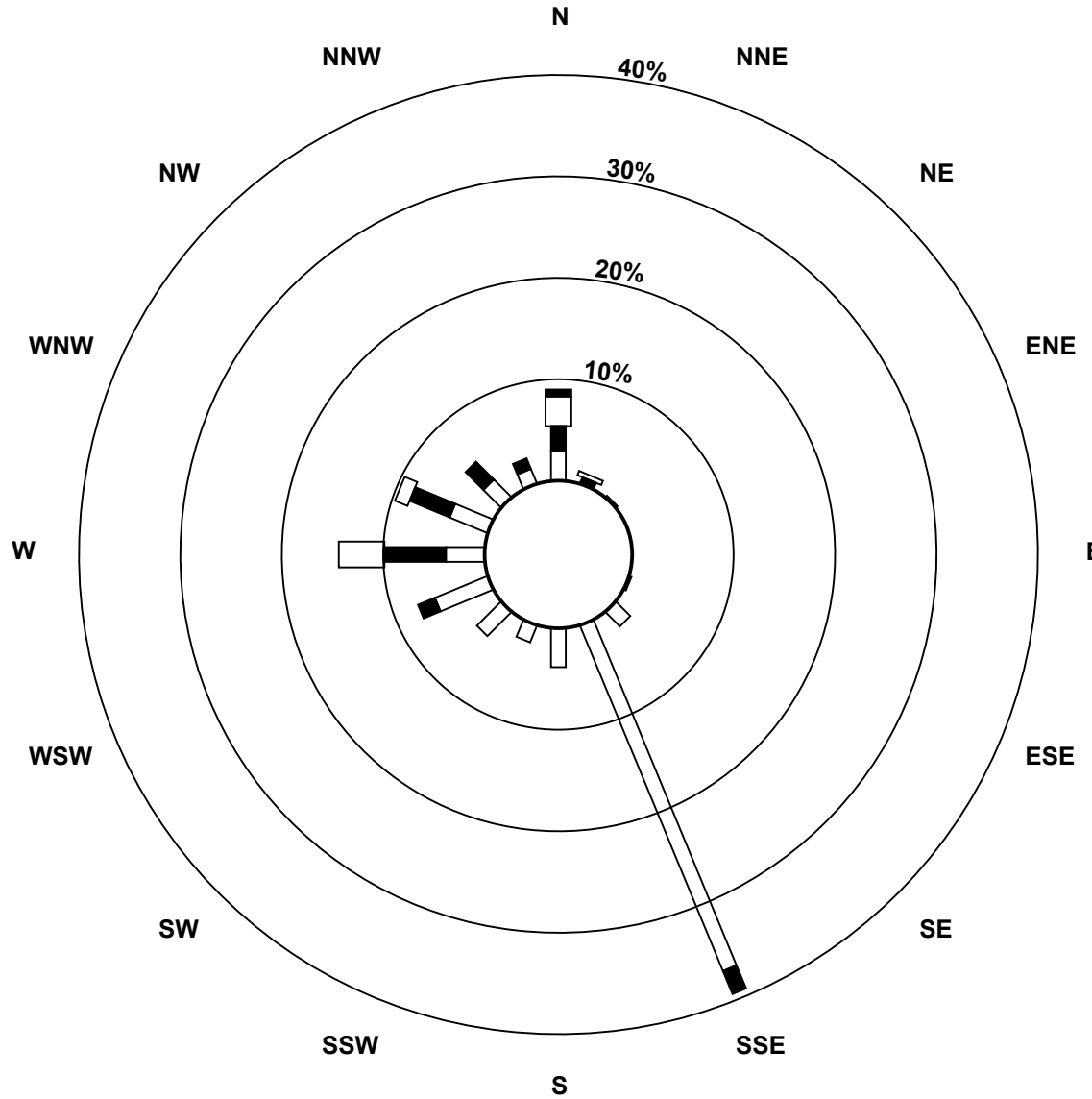
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - September 2017

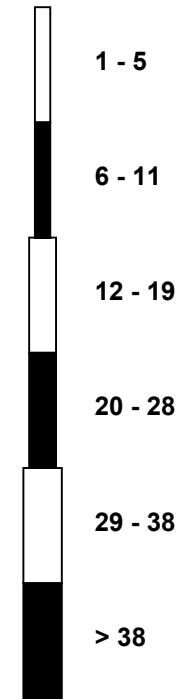
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	2	1	1	0	0	2	3	3	2	3	3	2	2	3	5	3	1	1	0	0	0	0	1	1	1.4	5.0
Dir	155	164	157	167	156	156	155	156	159	153	161	160	177	206	246	241	243	192	153	173	159	158	156	162	179	246
24 Spd	1	1	0	0	0	0	1	2	2	2	3	3	3	3	3	0	1	2	2	2	0	0	1	1	0.9	3.4
Dir	171	162	158	158	162	162	163	162	157	156	163	158	158	265	300	255	174	256	241	238	189	188	205	169	195	300
25 Spd	1	1	2	2	2	2	1	1	2	2	7	8	10	8	8	6	4	1	1	1	1	1	0	0	2.1	9.8
Dir	157	155	154	152	160	156	155	157	161	160	256	259	265	281	268	274	286	236	231	241	232	216	177	164	247	265
26 Spd	0	1	0	0	0	1	1	1	1	6	6	6	7	6	6	5	1	0	0	2	4	5	2	1	2.3	6.9
Dir	167	164	163	174	156	150	159	155	134	277	275	261	277	268	259	254	239	155	232	257	250	257	241	218	257	277
27 Spd	1	0	0	0	1	1	2	1	2	3	4	9	9	8	7	6	2	1	0	1	0	0	0	0	1.4	9.1
Dir	173	193	174	182	182	157	156	157	160	159	249	290	295	284	298	320	17	71	118	142	191	159	190	216	280	295
28 Spd	0	0	0	0	0	0	0	0	0	2	3	3	5	6	5	5	6	4	5	3	0	0	0	0	2.0	5.7
Dir	316	261	178	223	206	173	154	162	190	162	156	161	157	159	161	155	161	156	151	158	167	269	248	198	159	159
29 Spd	0	0	0	0	1	1	1	1	0	3	2	2	2	1	1	1	2	1	0	0	1	1	0	1	0.7	2.5
Dir	164	235	225	188	178	186	176	172	199	158	168	162	175	280	168	195	160	145	81	121	315	297	251	205	180	158
30 Spd	7	8	5	7	7	1	1	1	1	8	9	10	13	12	11	11	11	8	8	9	14	13	13	10	7.9	14.2
Dir	289	274	265	254	258	307	162	180	193	283	289	276	275	280	293	291	301	301	292	275	282	281	276	284	281	282
Spd	0.6	0.8	0.5	0.4	0.6	0.5	0.4	0.4	0.6	1.3	1.8	2.2	2.6	2.9	2.7	3.1	2.5	1.7	1.1	1.0	1.1	1.3	1.1	0.6	Diurnal Average	
Dir	261	252	225	229	227	193	186	212	219	268	276	273	275	282	279	283	290	292	279	280	285	287	278	260	Diurnal Maximum	
Spd	11.2	8.7	4.7	6.6	7.7	9.4	11.0	13.7	14.2	14.9	17.0	16.7	17.8	20.7	21.5	17.0	21.5	16.3	18.2	16.3	14.2	15.1	16.5	16.8	Diurnal Maximum	
Dir	358	2	265	254	326	333	11	11	12	8	8	5	266	4	4	262	5	6	1	359	282	355	352	357	Diurnal Maximum	
Maximum Speed Value: 22 km/h on Sep 20 15:00																		Minimum Speed Value: 0 km/h on Sep 23 04:00						Hours in Service:		720
Maximum Daily Speed Average: 12.3 km/h on Sep 20																		Minimum Daily Speed Average: 0.2 km/h on Sep 5						Hours of Data:		720
Maximum Diurnal Speed Average: 3.1 km/h at hour 16																		Minimum Diurnal Speed Average: 0.4 km/h at hour 8						Hours of Missing Data:		0
Monthly Average Velocity: 1.23 km/h 273.5 deg																		Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 1.5 Q ₃ = 4.3 P ₉₀ = 8.9 P ₉₉ = 17.5						Percent Operational Time:		100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	19	15	17	3	0	0	54																			
NorthEast	4	0	0	0	0	0	4																			
East	7	0	0	0	0	0	7																			
SouthEast	143	6	0	0	0	0	149																			
South	232	13	0	0	0	0	245																			
SouthWest	72	5	0	0	0	0	77																			
West	55	44	26	0	0	0	125																			
NorthWest	35	22	2	0	0	0	59																			
Total	567	105	45	3	0	0	720																			

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - September 2017



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - September 2017

Maximum Speed: 22 km/h on Sep 20 15:00		Maximum Daily Speed Average: 13.1 km/h on Sep 20		Hours in Service: 720																							
Minimum Speed: 0 km/h on Sep 4 21:00		Minimum Daily Speed Average: 0.7 km/h on Sep 5		Hours of Data: 720																							
Maximum Diurnal Speed Average: 6.1 km/h at hour 14		Minimum Diurnal Speed Average: 1.0 km/h at hour 3		Hours of Missing Data: 0																							
Monthly Average Speed: 3.44 km/h		Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.7 Median = 1.7 Q ₃ = 4.6 P ₉₀ = 9.1 P ₉₉ = 17.5		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	2	2	1	1	1	1	1	1	2	7	11	13	15	18	17	16	15	13	11	4	1	1	1	1	6.5	17.5	
2-Sep	0	1	1	1	1	2	1	1	2	1	1	2	1	1	3	3	3	4	3	1	1	1	1	1	1.5	3.5	
3-Sep	1	2	2	1	1	2	1	2	1	5	5	4	4	4	9	11	9	6	3	0	0	0	0	1	3.2	11.4	
4-Sep	0	0	0	0	0	0	1	0	1	2	2	2	3	3	3	3	3	1	1	0	0	0	0	0	1.1	3.2	
5-Sep	0	0	0	0	0	0	0	0	1	2	2	2	2	2	1	1	1	1	0	0	0	0	0	0	0.7	1.9	
6-Sep	0	0	0	0	0	0	0	0	2	1	1	1	2	1	1	2	2	1	1	0	0	1	0	1	0.8	2.3	
7-Sep	0	0	1	0	1	0	0	1	2	2	2	2	1	2	1	0	0	0	1	1	0	1	0	0	0.8	2.2	
8-Sep	0	0	1	0	1	1	1	1	1	3	3	0	1	2	2	1	1	2	2	2	2	0	2	2	1.3	3.4	
9-Sep	1	2	1	0	1	0	1	1	3	5	4	4	2	3	3	2	4	5	1	7	1	6	7	5	2.9	7.3	
10-Sep	7	5	2	2	5	2	3	8	10	11	13	16	18	18	15	17	15	10	4	1	0	1	1	1	7.8	18.4	
11-Sep	1	0	0	1	2	3	4	4	3	3	3	2	2	1	5	14	12	11	10	9	13	12	8	5	5.2	13.8	
12-Sep	3	5	3	1	1	2	1	1	3	5	4	4	9	6	7	4	6	6	2	9	8	4	4	1	4.1	8.7	
13-Sep	3	3	1	2	1	2	0	0	1	3	6	6	8	6	2	2	5	3	2	0	1	1	0	1	2.5	8.4	
14-Sep	0	0	0	0	0	1	1	1	1	1	3	3	3	7	2	1	4	5	1	1	0	0	0	0	1.6	6.7	
15-Sep	0	0	0	0	1	1	2	2	3	3	3	5	6	5	6	6	6	5	5	4	4	2	1	4	3.2	6.4	
16-Sep	2	2	1	1	1	3	5	5	6	7	7	7	5	5	5	5	5	5	4	4	3	2	2	1	3.8	7.0	
17-Sep	0	0	0	0	0	0	1	1	4	5	4	4	3	3	4	4	4	3	4	7	5	3	1	0	2.6	6.5	
18-Sep	0	0	0	1	1	1	1	1	2	2	2	3	2	1	1	9	7	2	4	4	2	1	1	1	2.0	9.4	
19-Sep	1	2	0	1	1	3	7	8	13	15	14	14	10	11	9	8	5	4	3	4	6	6	4	3	6.4	14.6	
20-Sep	4	4	2	1	0	2	11	14	14	15	17	17	18	21	22	17	22	16	18	17	14	15	17	17	13.1	21.9	
21-Sep	11	9	5	7	8	9	9	11	11	13	11	12	9	8	8	6	4	1	1	0	0	0	0	1	6.4	13.4	
22-Sep	1	0	0	0	1	0	0	0	1	1	2	2	3	2	2	2	2	1	5	4	3	4	4	4	1.9	4.6	
23-Sep	2	1	1	0	0	2	3	3	2	3	3	2	2	4	6	4	2	1	0	0	0	0	1	1	1.9	5.5	
24-Sep	2	1	0	0	0	0	1	2	2	2	3	3	3	4	4	1	1	2	2	2	0	0	1	1	1.6	4.2	
25-Sep	1	1	2	2	2	2	1	1	2	2	7	9	10	8	8	7	4	1	1	1	1	1	1	0	3.2	10.2	
26-Sep	0	1	0	0	0	1	1	1	1	6	6	7	7	7	6	5	1	1	1	2	4	5	2	1	2.8	7.4	
27-Sep	1	0	0	0	1	1	2	1	2	3	5	9	10	9	7	6	3	1	0	1	0	0	0	0	2.7	9.9	
28-Sep	0	0	0	0	0	0	0	0	0	2	3	3	5	6	5	5	6	5	5	3	0	0	0	0	2.1	5.9	
29-Sep	0	0	0	0	1	1	2	1	1	3	2	2	2	2	2	1	2	1	1	0	1	1	1	2	1.2	2.6	
30-Sep	8	9	5	7	8	2	1	1	1	8	9	11	14	13	12	12	11	8	8	9	14	13	14	10	8.5	14.3	
		1.8	1.8	1.0	1.1	1.4	1.5	2.1	2.5	3.2	4.7	5.4	5.6	6.0	6.1	6.0	5.9	5.4	4.2	3.5	3.2	3.0	2.7	2.5	2.1	Diurnal Average	
		11.3	8.8	5.0	6.8	7.8	9.4	11.1	13.9	14.3	15.1	17.1	16.9	18.3	21.0	21.9	17.3	21.7	16.5	18.4	16.5	14.3	15.3	16.7	17.0	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg
Valleyview - September 2017

Maximum Value: 96.3 deg on Sep 18 00:00																						Hours in Service:	720		
Minimum Value: 5.3 deg on Sep 2 06:00																						Hours of Data:	720		
Percentiles: P ₁ = 6.6 P ₁₀ = 9.8 Q ₁ = 14.4 Median = 28.1 Q ₃ = 50.4 P ₉₀ = 66.9 P ₉₉ = 89.4																						Hours of Missing Data:	0		
																						Hours of Calibration:	0		
																						Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	30	11	12	7	12	25	56	9	21	21	20	14	17	18	15	16	14	16	14	22	19	29	26	20	56.0
2-Sep	41	17	12	14	8	5	16	12	19	16	40	36	53	90	32	51	26	23	33	52	40	53	45	31	90.3
3-Sep	32	33	26	15	16	34	33	57	47	17	21	31	50	43	19	19	20	15	15	94	63	72	41	55	93.5
4-Sep	92	71	74	70	38	61	23	48	89	47	65	37	32	38	45	51	51	36	29	34	72	61	86	93	92.8
5-Sep	93	36	76	39	52	65	31	76	35	32	47	52	59	52	55	62	51	33	55	80	67	26	53	46	93.1
6-Sep	70	54	63	37	38	32	54	26	16	52	51	42	45	49	70	51	56	39	56	91	95	54	36	61	95.1
7-Sep	77	63	74	59	54	40	45	17	32	25	21	19	33	46	72	60	63	33	45	62	74	32	73	36	76.6
8-Sep	86	88	41	19	28	59	65	84	58	32	55	61	21	14	18	44	29	20	11	12	45	62	42	9	87.6
9-Sep	29	11	31	68	23	43	79	38	14	54	24	17	26	28	34	26	39	26	71	81	43	14	21	21	81.2
10-Sep	19	45	22	30	29	35	39	19	18	16	15	15	15	11	13	12	14	16	12	55	33	49	36	10	55.3
11-Sep	54	87	54	59	9	6	7	5	12	8	7	23	20	47	54	12	11	13	16	12	12	11	12	28	87.0
12-Sep	36	12	43	90	25	23	20	40	35	23	36	69	31	39	41	41	28	16	15	38	11	14	22	35	90.3
13-Sep	16	14	16	20	22	16	65	80	86	69	24	29	16	73	53	66	24	35	73	41	29	48	43	11	86.0
14-Sep	22	75	55	80	57	77	29	88	67	41	55	53	61	47	67	46	60	86	63	36	72	57	58	59	87.5
15-Sep	64	71	76	50	41	22	9	11	15	19	26	13	13	17	14	14	13	11	9	7	6	9	57	9	76.1
16-Sep	23	8	25	17	20	7	14	10	9	9	11	12	13	14	13	15	15	11	9	7	10	9	6	15	24.8
17-Sep	48	77	86	59	62	42	20	33	10	12	16	21	24	29	19	19	19	9	8	8	9	15	33	96	96.3
18-Sep	63	54	56	34	55	61	37	17	12	17	13	35	61	55	12	34	38	32	53	43	67	27	32	32	67.1
19-Sep	40	38	59	53	33	21	13	18	12	10	10	10	15	10	20	12	17	15	17	15	17	15	20	60	59.7
20-Sep	14	14	44	61	74	34	10	9	9	9	7	9	9	9	10	8	8	8	9	9	10	9	10	8	74.3
21-Sep	10	9	22	20	8	7	9	12	8	10	13	10	13	10	18	16	15	23	57	71	41	27	14	12	71.0
22-Sep	10	38	42	20	38	20	50	51	67	63	52	74	58	83	72	73	35	24	10	11	9	10	9	11	82.5
23-Sep	21	13	17	90	58	11	13	12	10	14	13	23	42	44	45	35	53	32	40	64	73	12	7	14	90.3
24-Sep	37	38	43	47	47	49	37	10	12	17	29	14	33	47	21	57	36	45	25	20	29	21	25	13	57.0
25-Sep	9	8	11	8	10	7	10	28	11	23	16	16	20	21	16	20	15	36	27	27	30	33	34	73	72.7
26-Sep	18	9	20	36	23	25	26	32	39	36	19	24	23	31	20	18	35	13	46	23	13	10	30	31	45.6
27-Sep	11	62	37	15	16	9	7	7	10	12	48	18	24	21	31	20	54	37	30	78	57	71	57	54	77.9
28-Sep	76	61	35	43	81	59	47	75	78	42	22	17	14	13	12	15	10	10	7	8	77	40	48	59	81.3
29-Sep	39	41	45	61	27	22	22	35	82	20	31	26	39	63	61	61	27	19	44	41	87	54	70	56	86.7
30-Sep	68	16	29	13	10	66	13	33	27	17	13	18	15	17	21	17	16	15	13	10	9	9	8	10	67.7
93.1	87.6	85.7	90.3	81.3	77.4	78.5	87.5	89.5	69.3	64.9	74.5	60.5	90.3	72.2	73.3	62.8	86.4	72.7	93.5	95.1	72.1	85.5	96.3		

PAZA

Donnelly Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Donnelly - September 2017

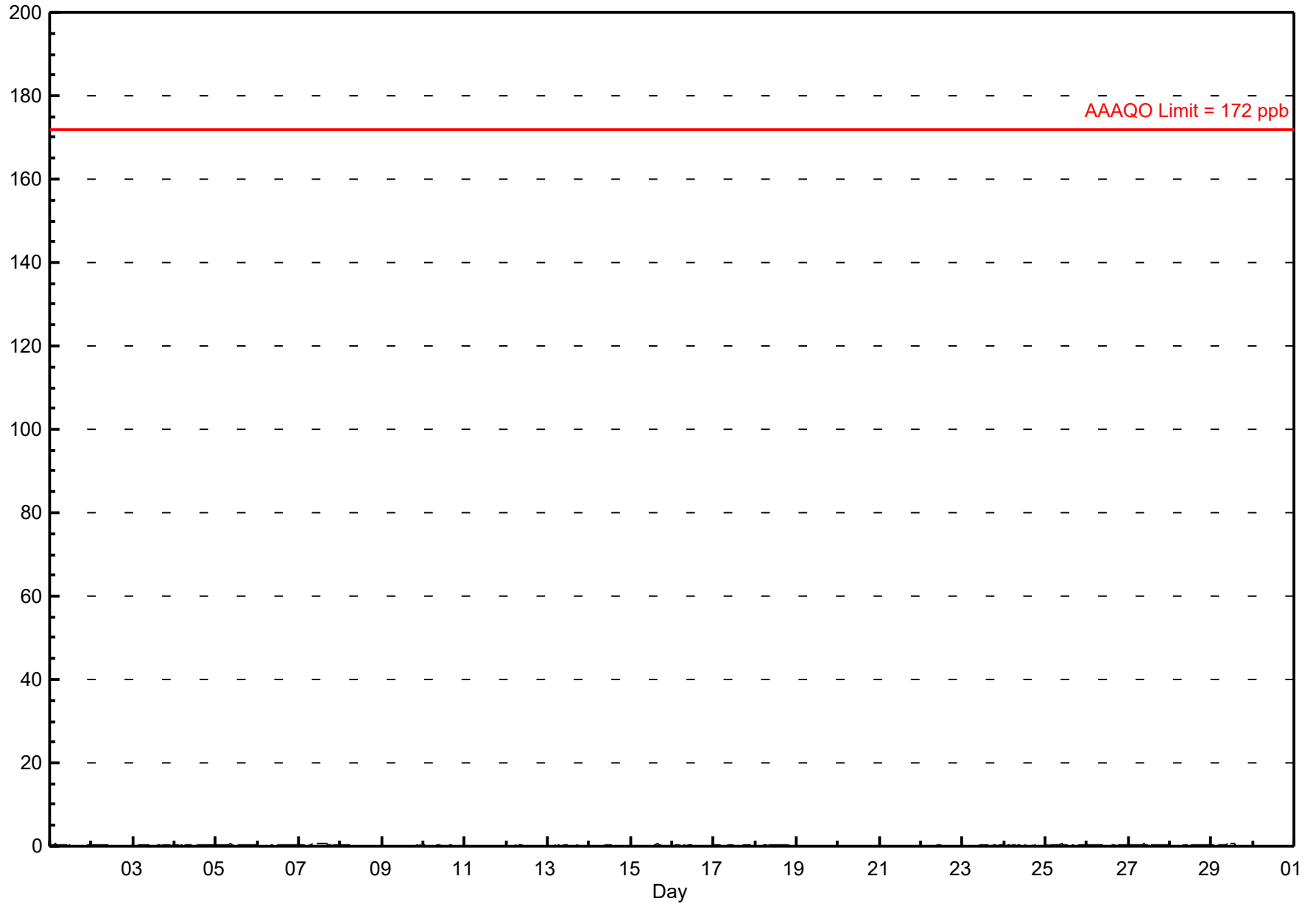
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 0.8 ppb on Sep 29 12:00	Maximum Daily Average: 0.4 ppb on Sep 7		Hours of Data:	686
Minimum Value: 0 ppb on Sep 8 15:00	Minimum Daily Average: 0.0 ppb on Sep 9		Hours of Missing Data:	34
Maximum Diurnal Average: 0.2 ppb at hour 10	Minimum Diurnal Average: 0.1 ppb at hour 20		Hours of Calibration:	34
Monthly Average: 0.17 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.6		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.6
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
5-Sep	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Sep	0	0	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	0.7
8-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
9-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.1
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.2
25-Sep	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.5
26-Sep	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-Sep	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
29-Sep	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.8
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average
	0.4	0.4	0.3	0.6	0.4	0.4	0.4	0.5	0.7	0.2	0.5	0.7	0.8	0.8	0.6	0.7	0.7	0.6	0.3	0.4	0.4	0.3	0.3	0.3	0.4	Diurnal Maximum

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Donnelly - September 2017



Hourly Maximums

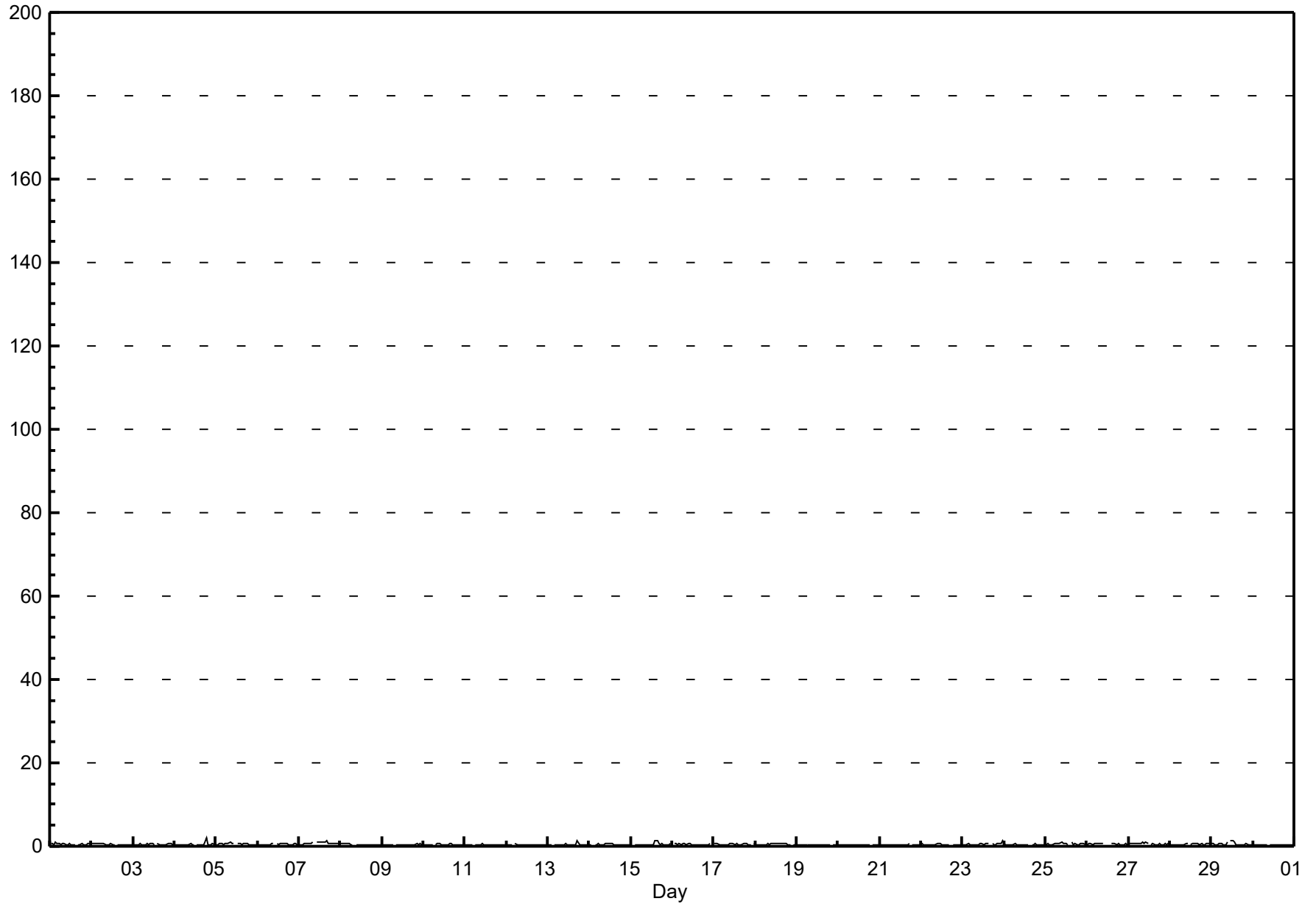
Sulphur Dioxide (SO₂) - ppb

Donnelly - September 2017

Maximum Value: 2.1 ppb on Sep 4 19:00		Maximum Daily Average: 0.7 ppb on Sep 7		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 9 11:00		Minimum Daily Average: 0.3 ppb on Sep 20		Hours of Data: 686																							
Maximum Diurnal Average: 0.6 ppb at hour 10		Minimum Diurnal Average: 0.4 ppb at hour 20		Hours of Missing Data: 34																							
Monthly Average: 0.47 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 1.2		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1	1	0	1	1	1	0	1	1	1	0	1	0	0	0	A	0	0	1	0	0	0	1	1	0.5	1.2	
2-Sep	1	1	1	1	1	1	1	1	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0.5	0.7	
3-Sep	0	0	0	0	1	0	0	0	1	1	1	1	0	A	1	1	0	0	0	0	1	1	1	1	0.5	0.6	
4-Sep	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	1	2	0	0	0	1	0	0.5	2.1	
5-Sep	0	0	1	1	0	1	1	1	1	1	1	A	1	1	1	0	1	1	1	0	0	0	0	0	0.6	0.9	
6-Sep	0	0	0	0	0	0	0	0	1	1	A	1	0	1	1	1	1	1	0	0	0	1	1	1	0.5	0.7	
7-Sep	0	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4	
8-Sep	1	1	1	1	1	1	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
9-Sep	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.3	0.6	
10-Sep	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.4	0.7	
11-Sep	0	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
12-Sep	0	0	0	0	A	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
13-Sep	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0.4	1.3	
14-Sep	0	0	A	0	0	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	0.5	1.3	
16-Sep	A	1	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	A	0.5	0.7
17-Sep	1	1	1	0	0	0	0	0	0	1	1	1	0	1	0	0	0	1	1	1	0	0	A	1	0.5	0.8	
18-Sep	0	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0.5	0.8	
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5	
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.5	
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0.4	0.5	
22-Sep	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.8	
23-Sep	0	0	0	1	0	0	0	0	0	0	1	1	0	1	1	1	A	1	0	0	1	1	1	2	0.5	1.5	
24-Sep	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0.4	0.6	
25-Sep	0	1	0	0	0	1	1	1	1	1	1	1	1	1	A	1	0	1	0	0	1	1	1	0	0.6	1.1	
26-Sep	0	1	1	0	1	1	1	1	1	1	C	C	C	C	1	1	1	0	1	0	0	0	1	0	0.5	0.7	
27-Sep	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	0	0	1	0	0	1	0	1	0.6	1.0	
28-Sep	0	0	0	0	0	0	0	0	0	0	1	A	0	1	1	1	1	0	1	0	0	1	1	1	0.5	0.8	
29-Sep	1	1	0	0	1	1	1	0	0	1	A	1	1	1	0	0	0	0	1	1	0	0	0	0	0.6	1.4	
30-Sep	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
																								Diurnal Average			
																								Diurnal Maximum			
0.5 0.5 0.4 0.4 0.5 0.5 0.4 0.5 0.5 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.4 0.4 0.4 0.4 0.5																											
0.8 0.7 0.7 1.2 0.8 0.8 0.6 0.8 1.2 1.1 1.1 1.2 1.4 1.1 1.3 1.2 1.4 1.3 2.1 0.8 0.6 0.7 0.6 1.5																											
C - Calibration																								A - Automated Daily Zero Span			

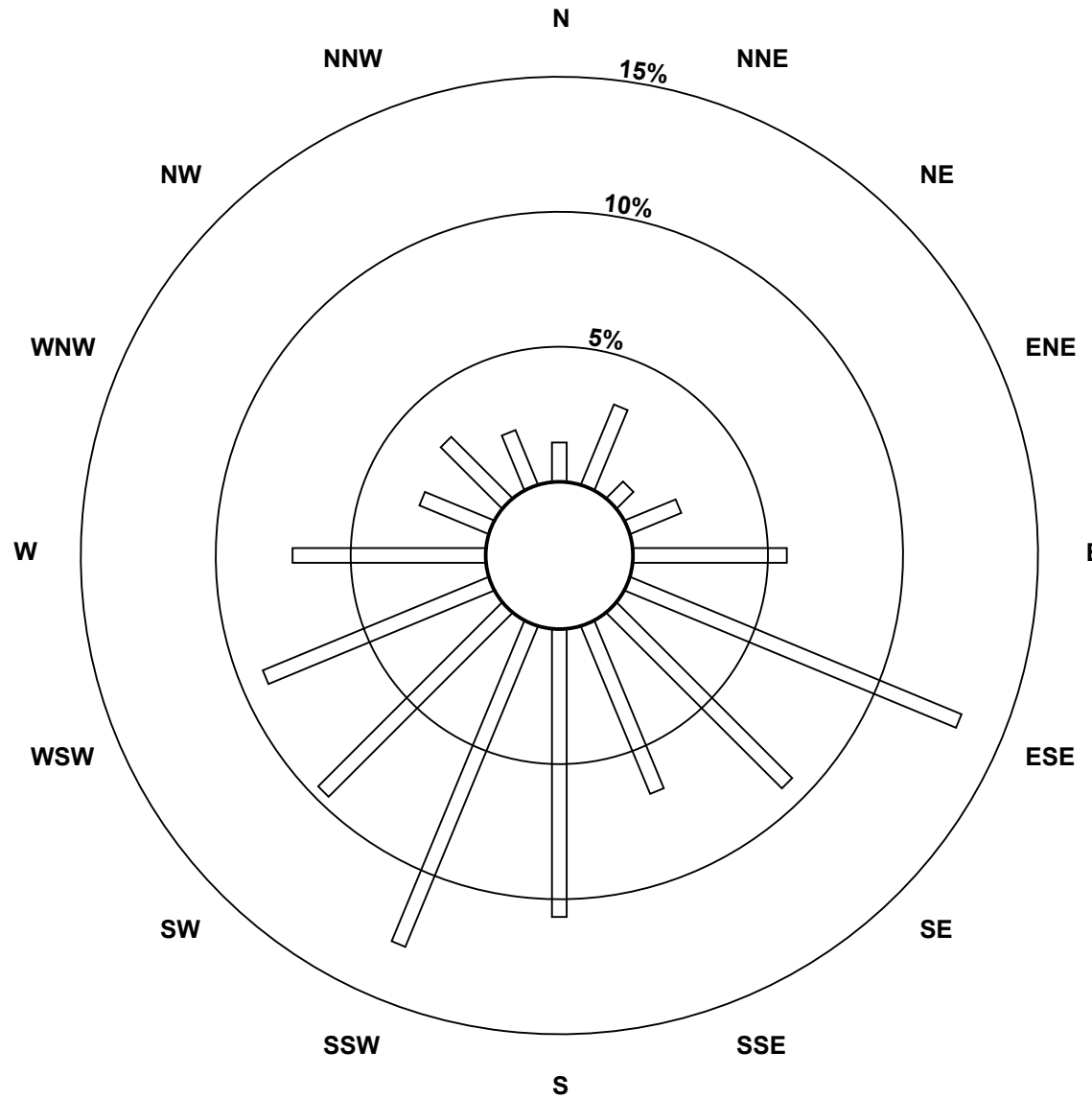
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Donnelly - September 2017

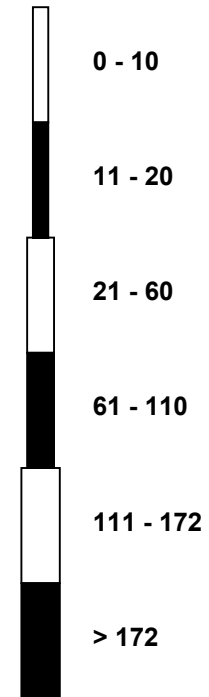


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Donnelly - September 2017

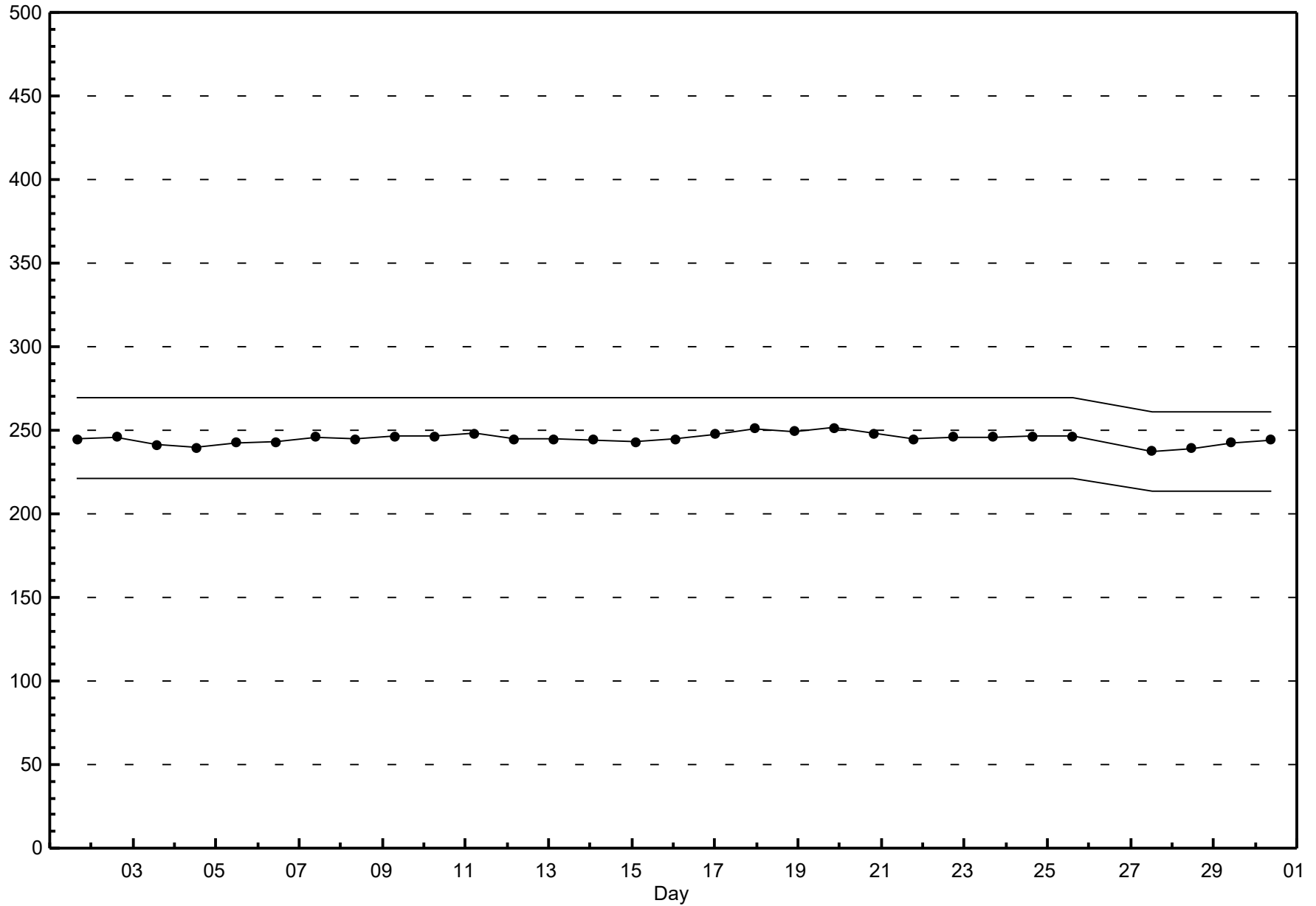


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Donnelly - September 2017

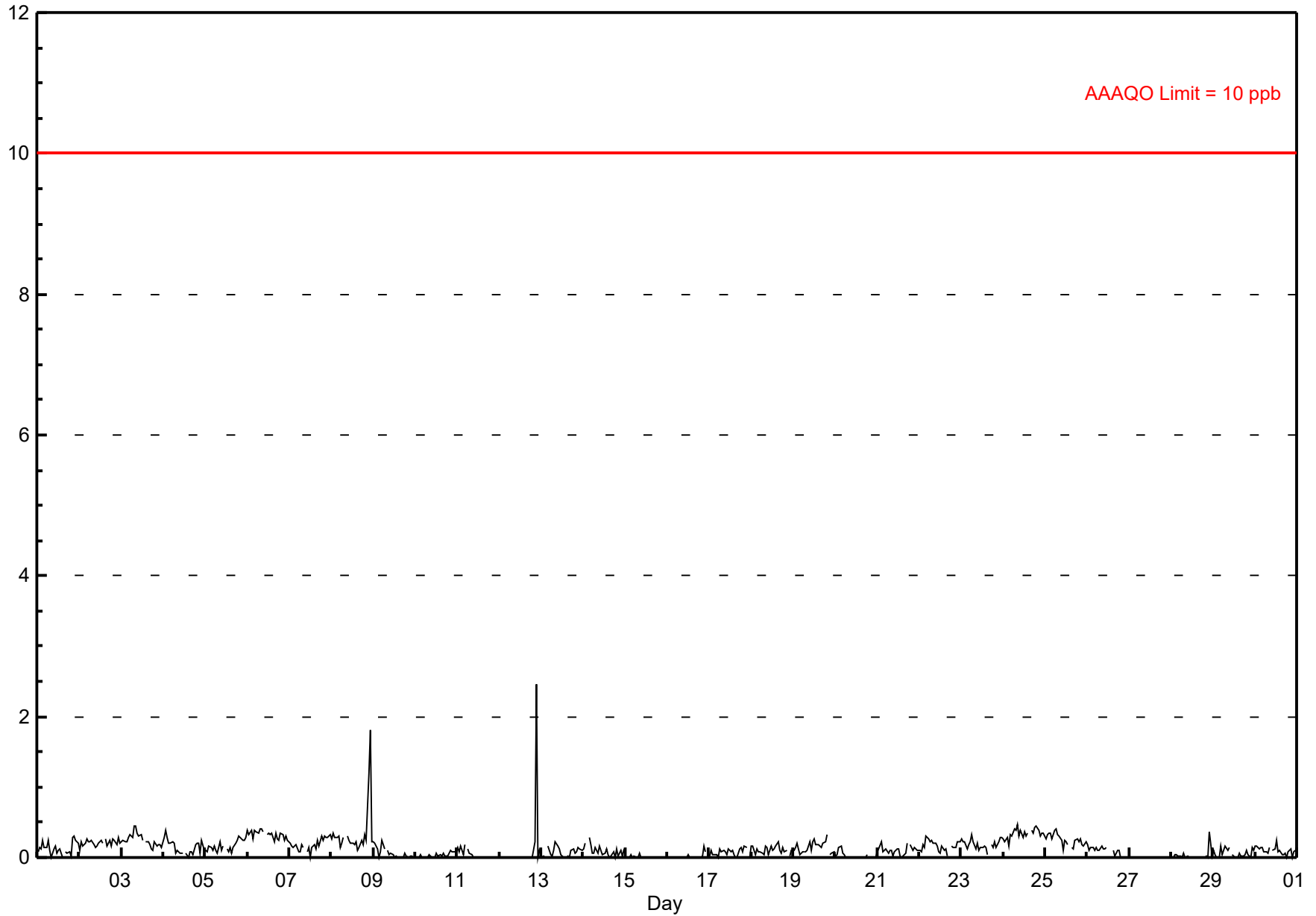


Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Donnelly - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.5 ppb on Sep 12 22:00 Maximum Daily Average: 0.3 ppb on Sep 8		Hours in Service: 720 Hours of Data: 687 Hours of Missing Data: 33 Hours of Calibration: 33 Percent Operational Time: 100.0																																															
Minimum Value: 0 ppb on Sep 1 09:00 Maximum Diurnal Average: 0.2 ppb at hour 22 Monthly Average: 0.13 ppb		Minimum Daily Average: 0.0 ppb on Sep 27 Minimum Diurnal Average: 0.1 ppb at hour 16 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.4																																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3																							
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3																							
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5																							
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4																							
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
7-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	2	0.3	1.8																							
9-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
10-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																							
11-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																							
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.1	2.5																							
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
14-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																							
15-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																							
16-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																							
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																							
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																							
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																							
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0																							
28-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4																							
29-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
30-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																							
																								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
																								0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.1	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
																								Diurnal Average		Diurnal Maximum																							
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																																																	



Hourly Maximums

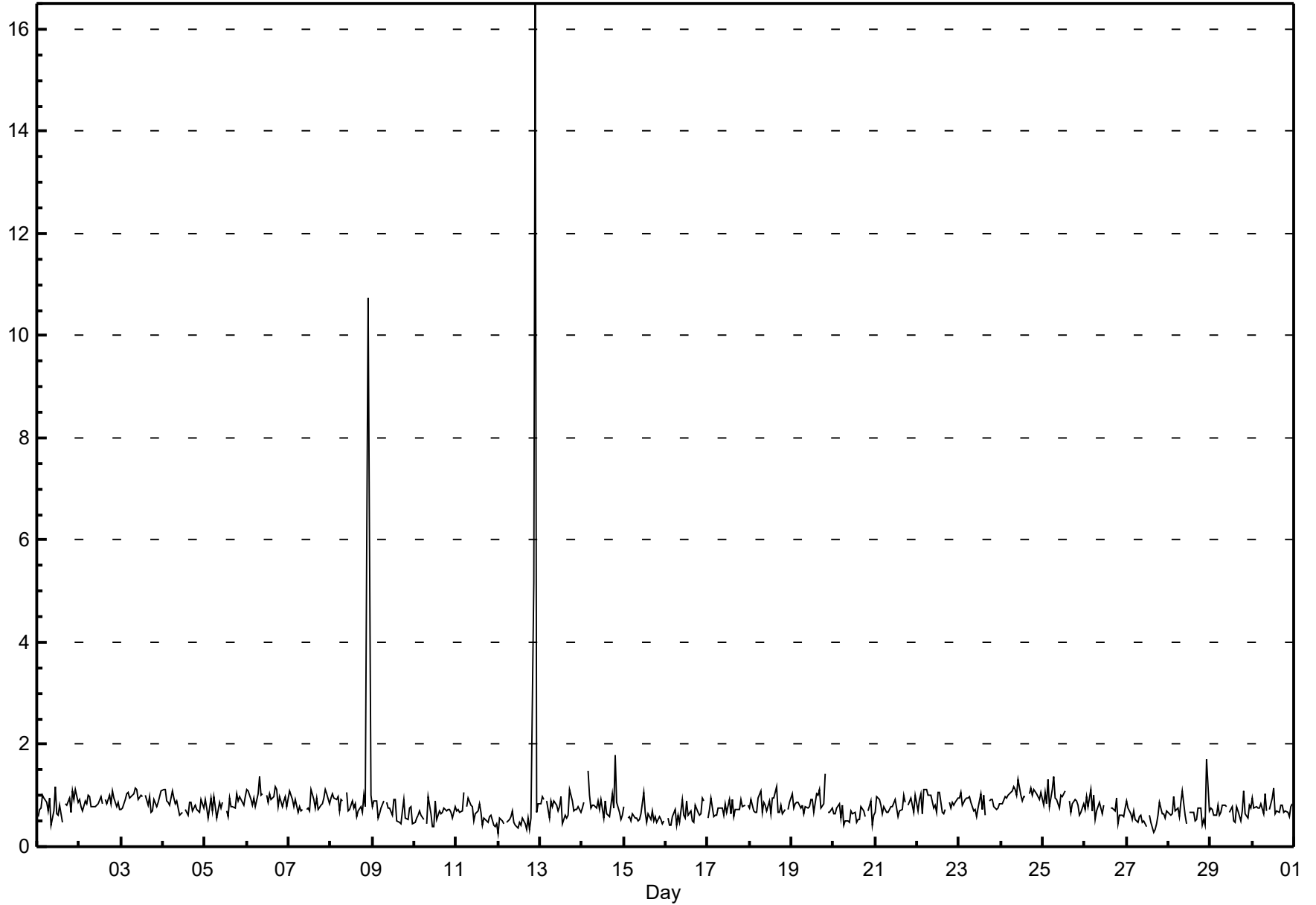
Hydrogen Sulphide (H₂S) - ppb

Donnelly - September 2017

Maximum Value: 16.5 ppb on Sep 12 22:00		Maximum Daily Average: 1.5 ppb on Sep 8		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 12 01:00		Minimum Daily Average: 0.6 ppb on Sep 27		Hours of Data: 687																							
Maximum Diurnal Average: 1.6 ppb at hour 22		Minimum Diurnal Average: 0.7 ppb at hour 16		Hours of Missing Data: 33																							
Monthly Average: 0.83 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 0.9 P ₉₀ = 1.0 P ₉₉ = 1.4		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	0.8	1.2	
2-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.1	
3-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
4-Sep	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
5-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
6-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
7-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
8-Sep	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	11	6	1	1.5	10.7	
9-Sep	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	0.7	0.9	
10-Sep	0	1	1	1	1	1	A	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0	
11-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	0	0.7	1.0	
12-Sep	0	1	0	0	A	0	1	1	1	0	0	0	0	1	0	0	0	1	0	1	5	16	1	1	1.4	16.5	
13-Sep	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
14-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0.8	1.8	
15-Sep	1	A	1	1	0	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1	0.6	1.1	
16-Sep	A	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0.6	1.0	
17-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
18-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
19-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.4	
20-Sep	1	1	1	1	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	A	1	1	0	0.6	0.9	
21-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0	
22-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1	
23-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1	
24-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.3	
25-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.4	
26-Sep	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	0	1	1	1	1	0.8	1.1	
27-Sep	1	1	1	1	1	1	0	1	1	0	0	0	A	1	0	0	0	0	0	1	1	1	1	1	0.6	0.9	
28-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	2	1	0.7	1.7	
29-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	0	1	1	1	1	1	1	0.7	1.1	
30-Sep	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	1.6	1.0	0.8	Diurnal Average		
		1.1	1.1	1.0	1.5	1.1	1.1	1.4	1.4	1.2	1.1	1.3	1.1	1.2	1.1	1.0	1.2	1.2	1.1	1.0	1.8	5.2	16.5	5.8	1.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

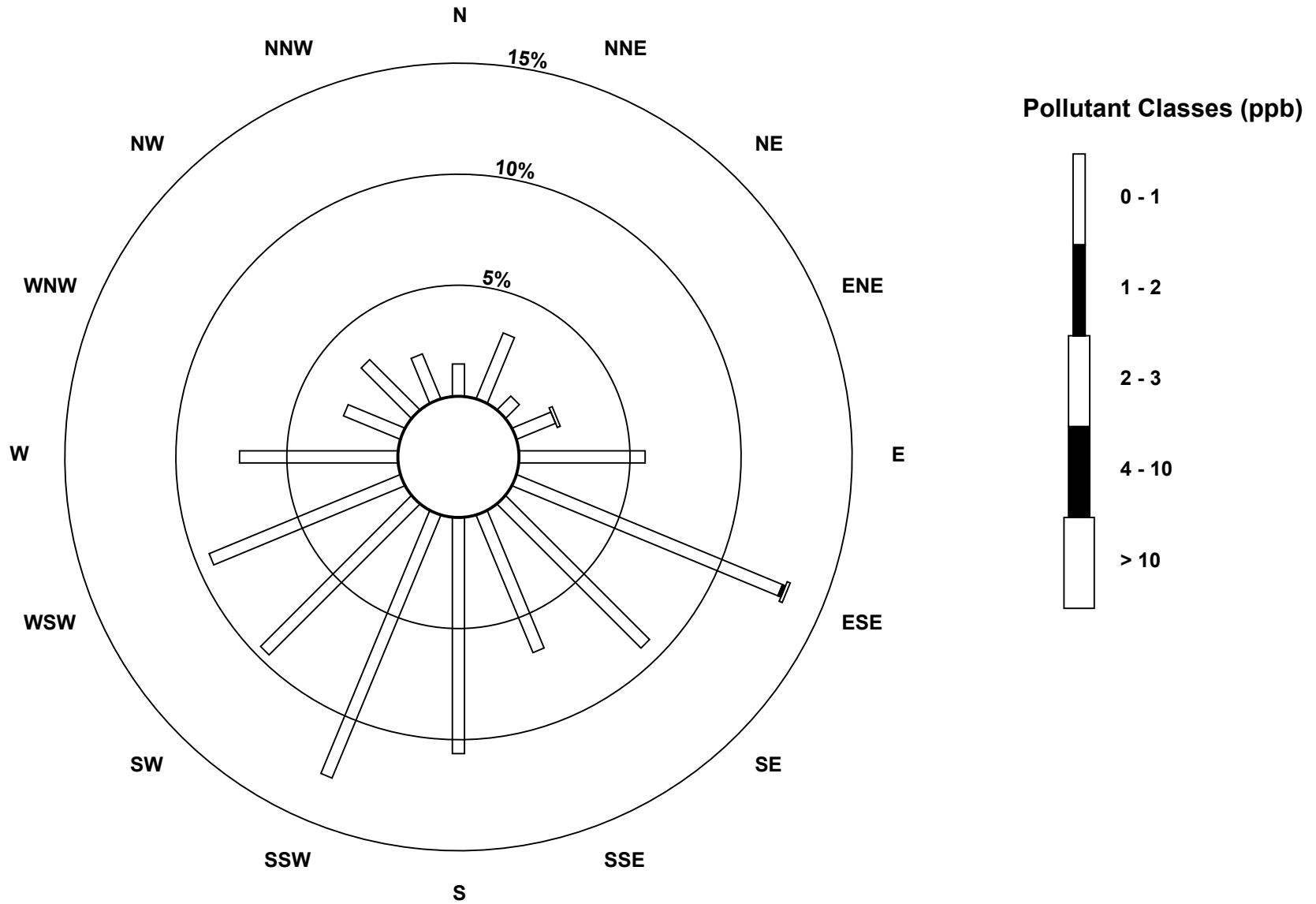
Hydrogen Sulphide (H₂S) - ppb
Donnelly - September 2017



Pollutant Rose

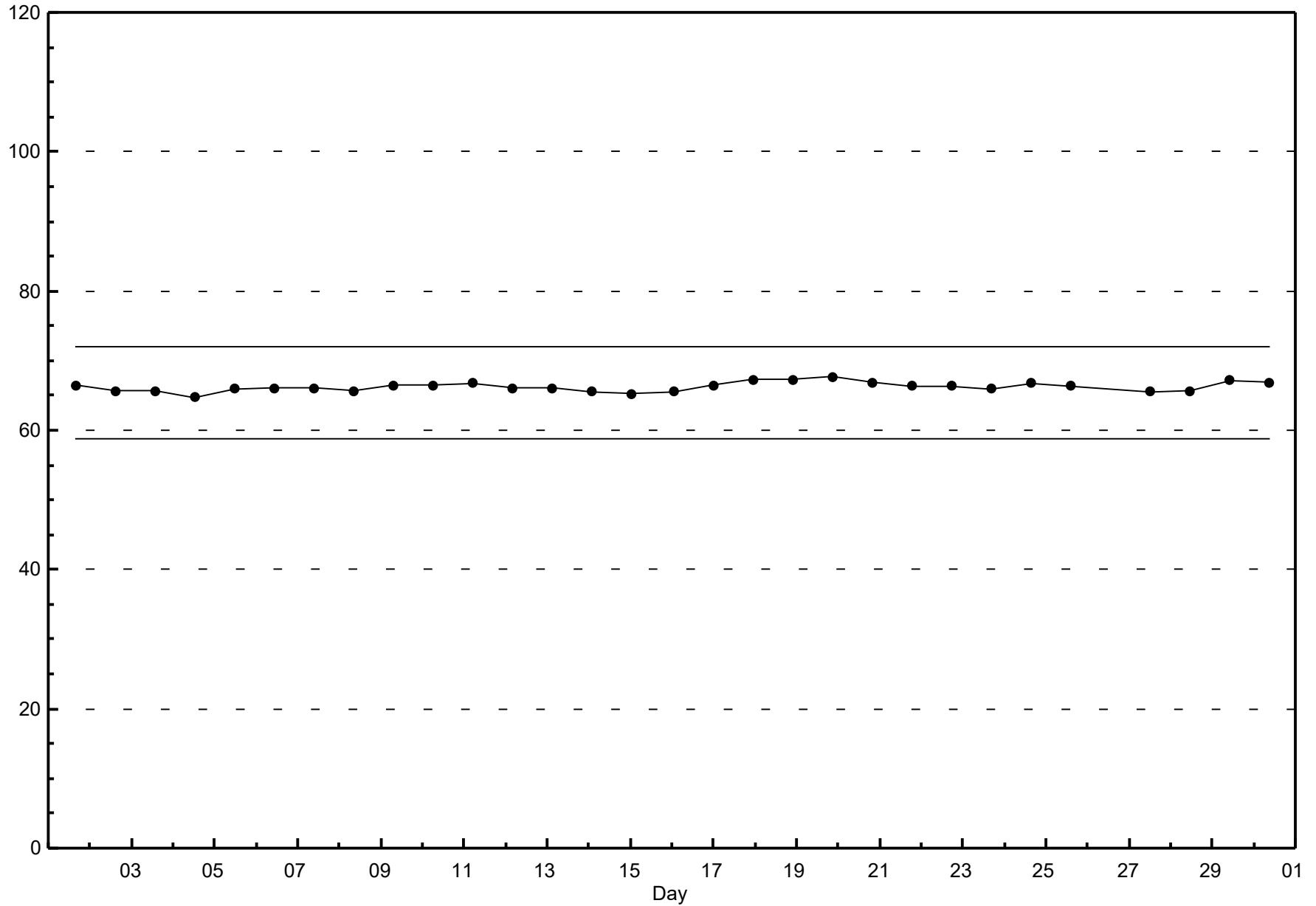
Hydrogen Sulphide (H₂S) - ppb

Donnelly - September 2017



Span Responses

Hydrogen Sulphide (H₂S)
Donnelly - September 2017

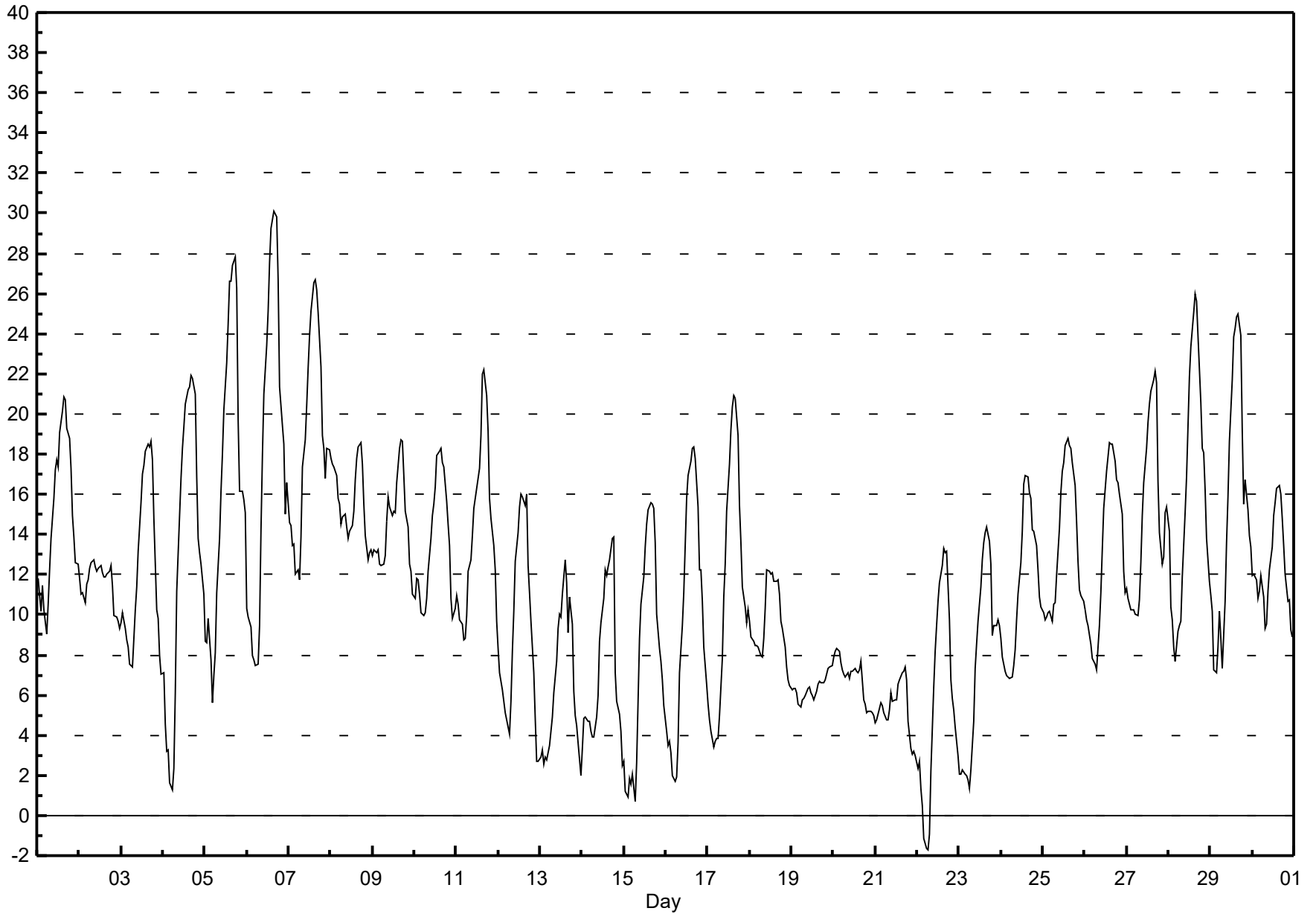


Hourly Averages

External Temperature (ET) - °C

Donnelly - September 2017

Maximum Value: 30.1 °C on Sep 6 16:00 Maximum Daily Average: 18.8 °C on Sep 7																			Hours in Service: 720 Hours of Data: 720							
Minimum Value: -2 °C on Sep 22 07:00 Minimum Daily Average: 5.3 °C on Sep 21 Maximum Diurnal Average: 17.6 °C at hour 16 Minimum Diurnal Average: 7.1 °C at hour 5 Monthly Average: 11.77 °C Percentiles: P ₁ = 1.2 P ₁₀ = 4.7 Q ₁ = 7.4 Median = 11.2 Q ₃ = 15.5 P ₉₀ = 19.0 P ₉₉ = 27.3																			Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	12	11	10	11	10	9	11	12	14	16	17	18	17	19	20	21	21	19	19	17	15	14	13	13	14.9	20.9
2-Sep	12	11	11	11	11	12	12	13	13	12	12	12	12	12	12	12	12	12	12	11	10	10	10	9	11.6	12.7
3-Sep	10	10	9	9	8	8	7	9	10	11	13	16	17	17	18	19	18	19	18	15	10	10	8	7	12.3	18.6
4-Sep	7	5	3	3	2	1	2	6	11	15	17	18	19	21	21	21	22	22	21	17	14	13	13	11	12.7	21.9
5-Sep	9	9	10	8	6	7	8	11	14	16	18	20	23	24	27	27	27	28	26	20	16	16	16	15	16.6	27.8
6-Sep	10	10	9	8	8	7	8	9	14	18	21	23	25	28	29	30	30	30	27	21	19	18	15	17	18.2	30.1
7-Sep	15	14	13	13	12	12	12	14	17	19	20	22	24	25	27	27	26	25	22	19	18	17	18	18	18.8	26.7
8-Sep	18	18	17	17	16	15	15	15	15	14	14	14	14	15	17	18	18	19	18	16	14	13	13	13	15.6	18.6
9-Sep	13	13	13	13	12	12	13	13	15	16	15	15	15	15	17	18	19	19	17	15	14	13	12	11	14.5	18.7
10-Sep	11	12	12	11	10	10	10	11	12	14	15	16	16	18	18	18	18	17	16	14	13	11	10	10	13.5	18.3
11-Sep	11	11	10	10	9	9	10	12	13	14	15	16	17	17	19	22	22	21	19	16	15	13	12	10	14.2	22.2
12-Sep	8	7	6	6	5	5	4	6	8	10	13	14	15	16	16	15	16	12	11	10	7	5	3	3	9.2	16.0
13-Sep	3	3	3	3	3	4	4	5	6	8	9	10	10	11	13	12	9	11	10	6	5	5	4	2	6.5	12.8
14-Sep	3	5	5	5	5	4	4	4	5	6	9	10	11	12	12	12	13	14	14	7	6	5	4	3	7.3	13.8
15-Sep	3	1	1	2	2	2	1	3	6	9	11	12	13	15	15	16	16	15	14	10	8	8	7	5	8.0	15.6
16-Sep	4	3	4	3	2	2	2	4	7	9	11	13	16	17	18	18	18	18	15	12	12	11	8	7	9.8	18.4
17-Sep	6	5	4	3	4	4	4	5	8	11	13	15	18	19	20	21	21	19	15	14	11	10	10	10	11.2	20.9
18-Sep	10	9	9	8	8	8	8	8	9	10	12	12	12	12	12	12	12	11	10	9	8	7	7	6	9.6	12.3
19-Sep	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	6.4	7.5
20-Sep	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	8	6	6	5	5	5	5	5	6.8	8.4
21-Sep	5	5	5	6	5	5	5	5	5	6	6	6	6	7	7	7	7	7	7	5	3	3	3	3	5.3	7.4
22-Sep	2	3	1	1	-1	-2	-2	-1	2	6	8	9	11	12	12	13	13	13	10	7	6	5	4	3	5.7	13.3
23-Sep	2	2	2	2	2	2	1	2	5	7	9	10	11	13	14	14	14	14	12	9	9	9	10	9	7.7	14.4
24-Sep	9	8	7	7	7	7	7	7	8	10	11	13	14	16	17	17	16	16	14	14	13	12	11	10	11.3	17.0
25-Sep	10	10	10	10	10	10	11	11	12	14	16	17	18	18	19	18	18	18	16	15	13	11	11	11	13.6	18.8
26-Sep	10	10	9	9	8	8	8	7	9	11	13	15	17	18	19	19	18	18	17	17	16	15	12	11	13.1	18.5
27-Sep	11	11	10	10	10	10	10	11	13	15	17	18	20	21	21	22	22	22	17	14	13	13	15	15	15.0	22.1
28-Sep	14	10	10	8	8	9	9	10	12	15	17	19	22	23	25	26	26	24	21	18	18	16	14	12	16.1	26.0
29-Sep	11	10	7	7	8	10	9	7	11	14	16	19	22	24	24	25	25	24	19	16	17	15	14	13	15.3	25.0
30-Sep	12	12	12	11	11	12	11	9	9	11	12	13	15	16	16	16	16	15	13	12	11	11	9	9	12.3	16.4
																								Diurnal Average		
																								Diurnal Maximum		



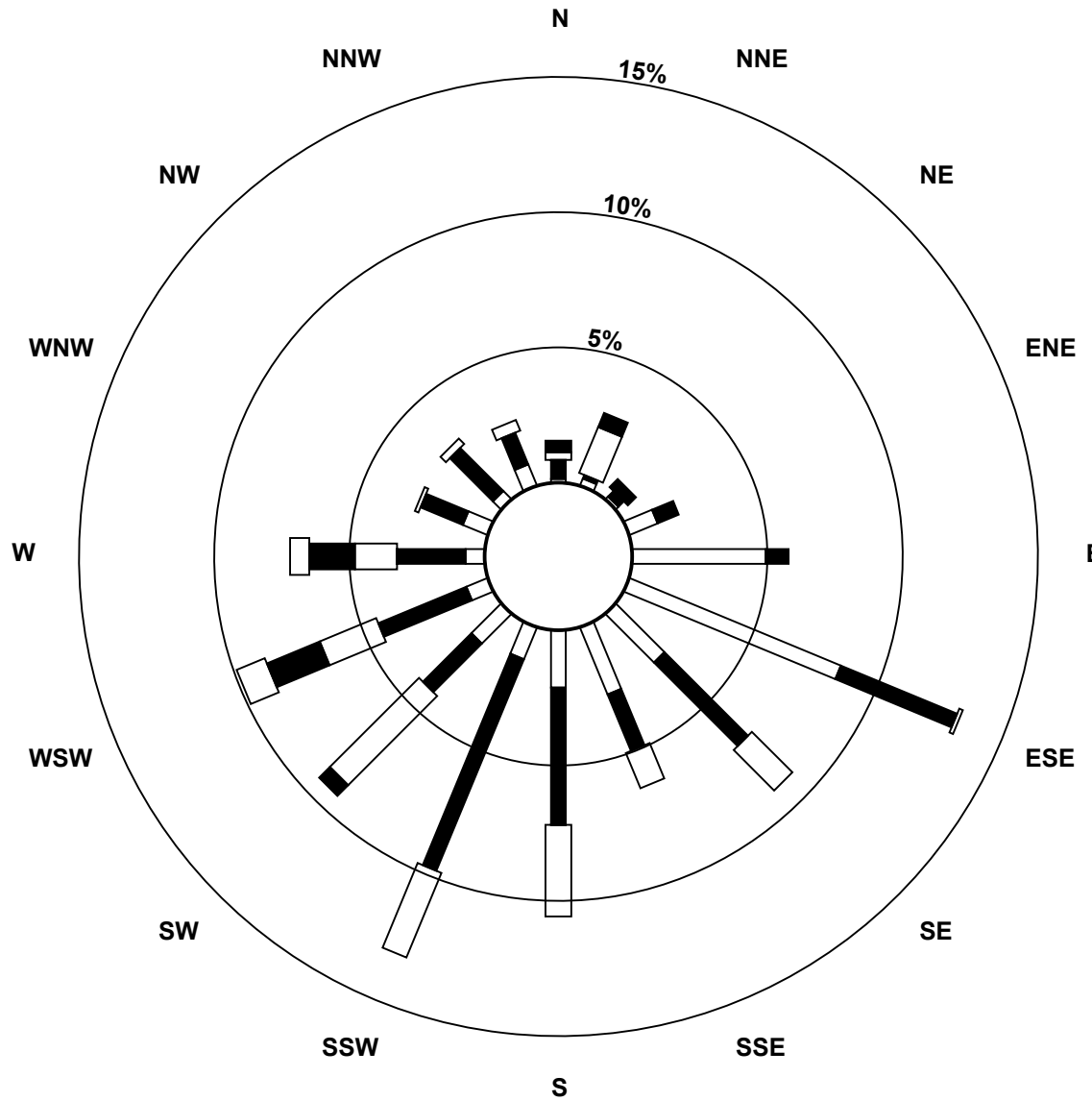
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Donnelly - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	9	7	4	4	5	5	3	4	7	8	9	13	9	9	8	9	8	3	8	7	5	6	6	7	4.5	12.8
Dir	72	82	109	113	114	117	115	112	136	153	187	191	181	208	224	247	241	256	231	189	168	159	155	164	172	191
24 Spd	11	11	8	10	8	10	12	13	13	15	16	17	14	11	13	11	7	7	9	9	13	13	12	13	11.0	17.4
Dir	172	173	166	176	171	173	175	177	175	180	182	179	186	216	230	211	170	194	203	170	201	212	198	202	188	179
25 Spd	13	14	15	13	12	13	13	13	14	18	20	22	19	16	22	18	13	9	9	9	9	12	12	13	12.7	21.7
Dir	200	196	202	202	204	200	202	205	217	231	248	266	261	266	251	250	251	262	246	243	215	204	206	201	229	266
26 Spd	14	13	11	9	9	11	10	10	10	12	11	11	12	14	M	12	14	8	10	14	11	12	11	12	10.6	14.2
Dir	202	201	200	199	207	208	215	217	237	254	242	237	237	252	M	235	234	193	187	229	227	224	207	193	220	252
27 Spd	10	9	9	9	9	10	11	10	11	13	13	14	11	10	8	7	4	1	5	6	4	6	10	9	6.2	13.9
Dir	194	194	195	193	195	191	187	188	205	223	230	262	276	273	281	243	227	11	113	125	121	123	138	159	206	262
28 Spd	10	4	7	3	2	5	6	9	9	6	8	9	10	12	10	8	8	12	8	12	13	12	6	4	7.3	13.1
Dir	169	89	71	97	103	103	96	126	131	144	157	134	143	145	126	118	156	175	153	134	128	123	115	90	132	128
29 Spd	4	5	4	4	3	6	5	3	4	4	4	4	2	3	6	7	6	4	3	3	3	4	5	3	1.4	6.8
Dir	86	95	79	80	115	165	172	154	193	204	211	228	225	223	256	286	317	21	81	102	103	103	101	131	148	286
30 Spd	5	12	12	15	17	16	15	13	12	15	22	23	24	23	25	23	25	24	18	14	15	20	18	16	16.7	25.3
Dir	230	245	246	222	224	234	241	217	218	239	246	248	268	264	253	268	271	270	265	266	270	271	266	275	254	271
Spd	4.2	3.6	3.2	3.1	3.1	3.7	3.6	3.8	4.1	5.2	6.6	6.4	5.9	6.3	5.7	5.8	6.0	4.3	3.3	3.2	4.2	4.3	4.0	4.0	Diurnal Average	
Dir	188	186	187	192	193	193	198	196	204	211	216	223	230	240	239	246	243	235	231	209	191	185	187	190	Diurnal Maximum	
Spd	19.5	22.3	23.1	24.7	21.8	23.7	24.8	24.8	25.9	30.1	32.6	29.7	30.2	30.3	30.1	28.7	37.7	34.1	25.9	20.7	19.2	19.5	17.8	16.8	Diurnal Maximum	
Dir	219	233	236	237	232	238	241	243	252	265	259	260	260	259	257	257	251	242	261	240	241	271	266	218	Diurnal Maximum	
Maximum Speed Value: 38 km/h on Sep 11 17:00																		Minimum Speed Value: 0 km/h on Sep 4 09:00						Hours in Service: 720		
Maximum Daily Speed Average: 22.7 km/h on Sep 10																		Minimum Daily Speed Average: 1.4 km/h on Sep 6						Hours of Data: 719		
Maximum Diurnal Speed Average: 6.6 km/h at hour 11																		Minimum Diurnal Speed Average: 3.1 km/h at hour 5						Hours of Missing Data: 1		
Monthly Average Velocity: 4.18 km/h 212.4 deg																		Speed Percentiles: P ₁ = 0.7 P ₁₀ = 3.0 Q ₁ = 4.7 Median = 8.2 Q ₃ = 12.4 P ₉₀ = 17.7 P ₉₉ = 30.0						Percent Operational Time: 99.9		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
M - Maintenance																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	7	9	11	7	0	0	34																			
NorthEast	5	4	4	5	0	0	18																			
East	60	39	0	0	0	0	99																			
SouthEast	49	57	23	0	0	0	129																			
South	30	72	51	0	0	0	153																			
SouthWest	19	56	55	13	2	0	145																			
West	11	34	22	18	12	0	97																			
NorthWest	12	25	7	0	0	0	44																			
Total	193	296	173	43	14	0	719																			

Wind Rose

Wind Speed (WS) (km/h)
Donnelly - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Donnelly - September 2017

Maximum Speed: 38 km/h on Sep 11 17:00	Maximum Daily Speed Average: 23.8 km/h on Sep 10	Hours in Service: 720
Minimum Speed: 0 km/h on Sep 4 09:00	Minimum Daily Speed Average: 3.9 km/h on Sep 6	Hours of Data: 719
Maximum Diurnal Speed Average: 12.5 km/h at hour 12	Minimum Diurnal Speed Average: 7.5 km/h at hour 5	Hours of Missing Data: 1
Monthly Average Speed: 9.70 km/h	Percentiles: P ₁ = 1.5 P ₁₀ = 3.3 Q ₁ = 5.1 Median = 8.5 Q ₃ = 12.5 P ₉₀ = 17.8 P ₉₉ = 30.4	Percent Operational Time: 99.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	14	14	13	19	16	15	17	15	18	22	30	30	26	31	30	27	26	18	18	16	14	17	14	13	19.8	30.7
2-Sep	12	11	11	8	6	9	8	9	11	12	11	10	5	5	5	3	5	8	8	7	8	8	6	9	8.2	12.3
3-Sep	12	10	9	7	9	9	7	7	9	7	4	3	3	5	8	10	11	9	6	3	4	3	2	4	6.6	11.5
4-Sep	3	2	2	4	4	3	4	2	0	5	9	9	9	9	9	10	7	8	6	4	6	7	5	5	5.5	9.6
5-Sep	8	6	4	4	4	6	4	3	7	6	10	9	9	7	5	7	5	4	2	1	3	6	5	4	5.5	9.8
6-Sep	3	3	4	3	4	4	2	5	3	3	3	5	7	4	5	5	5	4	3	3	5	5	3	3	3.9	7.2
7-Sep	8	7	6	5	3	4	4	7	11	17	14	11	10	10	6	6	7	4	1	3	4	3	7	8	6.9	17.4
8-Sep	6	6	6	6	8	7	6	6	3	4	8	4	8	10	14	12	10	8	5	5	7	4	3	3	6.6	14.1
9-Sep	4	4	3	2	2	4	4	4	5	12	14	15	14	10	16	15	14	14	9	9	14	12	15	17	9.6	16.9
10-Sep	20	22	23	25	22	24	25	25	26	30	33	30	30	31	28	29	28	29	25	21	15	10	10	10	23.8	32.7
11-Sep	7	5	8	6	6	6	6	13	18	18	15	16	15	13	15	26	38	34	27	18	19	18	16	9	15.5	38.0
12-Sep	9	9	9	6	7	7	8	8	8	8	7	8	7	9	9	6	10	16	12	5	3	2	3	3	7.5	15.9
13-Sep	2	2	1	3	5	5	4	7	4	4	10	12	13	9	10	14	17	7	7	7	8	8	8	7	7.2	16.9
14-Sep	8	7	8	7	6	7	4	3	4	2	3	4	4	4	10	6	8	5	2	3	3	6	6	2	5.0	10.0
15-Sep	3	2	4	4	4	2	4	3	3	7	11	14	14	15	15	16	16	13	11	10	11	12	14	12	9.2	16.4
16-Sep	7	5	5	4	4	6	7	5	7	16	17	19	17	18	16	15	15	14	12	11	15	13	8	3	10.9	19.1
17-Sep	4	5	5	3	5	6	6	8	10	11	12	10	11	12	10	9	8	9	9	8	8	10	8	9	8.3	12.3
18-Sep	9	10	8	7	6	7	7	7	7	7	7	6	7	6	2	3	7	8	9	13	15	14	9	9	7.6	15.2
19-Sep	7	8	10	8	5	6	9	11	11	9	9	11	12	10	6	3	3	7	8	7	7	9	11	11	8.2	11.5
20-Sep	13	19	22	24	21	16	17	16	23	22	19	20	20	20	23	22	21	19	18	16	14	14	12	6	18.2	23.7
21-Sep	7	5	6	8	10	11	9	9	9	13	11	9	12	12	12	12	12	9	5	2	3	3	2	3	8.1	13.2
22-Sep	3	6	1	2	1	1	2	3	3	6	9	7	4	4	5	6	6	4	5	5	6	5	4	6	4.4	8.9
23-Sep	9	7	4	4	5	5	3	4	7	9	10	13	10	9	9	9	8	4	8	7	6	6	6	8	7.0	13.0
24-Sep	11	11	9	10	8	10	12	13	13	15	16	17	14	12	13	12	7	8	10	9	13	13	12	13	11.8	17.4
25-Sep	13	14	15	13	12	13	13	13	14	18	20	22	19	18	22	18	13	9	9	10	9	12	12	13	14.3	22.0
26-Sep	14	13	11	9	9	11	10	10	10	12	11	11	12	15	M	12	14	8	11	14	11	12	11	12	11.4	14.5
27-Sep	10	10	9	9	9	10	11	10	11	13	13	14	12	11	9	8	5	2	5	6	4	6	10	9	9.1	14.4
28-Sep	10	6	7	4	2	5	6	9	6	9	6	9	11	12	11	8	9	12	8	12	13	12	6	4	8.3	13.2
29-Sep	4	5	4	5	4	6	6	4	5	4	4	4	3	4	7	7	6	4	3	3	3	4	5	9	4.7	8.5
30-Sep	6	12	12	15	17	16	15	13	12	15	22	23	25	24	25	24	25	24	18	14	15	20	18	16	17.8	25.5
	8.2	8.2	8.0	7.8	7.5	8.2	8.1	8.5	9.4	11.2	12.4	12.5	12.1	11.8	12.4	11.9	12.1	10.7	9.3	8.2	8.8	9.1	8.6	8.0	Diurnal Average	
	19.6	22.4	23.2	24.7	21.9	23.8	24.9	24.9	26.0	30.3	32.7	30.2	30.5	30.8	30.4	29.3	38.0	34.3	26.7	20.7	19.2	19.7	17.8	16.9	Diurnal Maximum	

M - Maintenance
 All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Donnelly - September 2017

Maximum Value: 97.2 deg on Sep 14 11:00																						Hours in Service:	720		
Minimum Value: 1.8 deg on Sep 26 01:00																						Hours of Data:	719		
Percentiles: P ₁ = 2.5 P ₁₀ = 4.4 Q ₁ = 6.6 Median = 11.2 Q ₃ = 20.4 P ₉₀ = 42.2 P ₉₉ = 83.2																						Hours of Missing Data:	1		
																						Hours of Calibration:	0		
																						Percent Operational Time:	99.9		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	5	8	8	3	2	4	8	7	5	7	6	10	9	10	9	10	11	6	6	9	9	7	3	9	10.8
2-Sep	6	5	3	6	9	8	10	3	4	6	5	6	32	14	20	28	30	15	7	8	9	5	4	6	32.1
3-Sep	6	7	6	6	7	5	10	16	13	20	34	83	81	50	42	26	14	13	11	49	9	48	78	6	82.5
4-Sep	11	63	76	14	25	14	12	88	59	38	12	21	25	32	18	26	27	21	10	10	7	8	10	9	88.5
5-Sep	16	17	29	37	23	39	56	56	25	28	14	15	15	29	43	28	47	51	42	40	22	4	8	60	59.6
6-Sep	59	12	16	26	12	4	24	8	78	65	64	50	24	61	41	55	35	25	17	10	8	9	28	24	77.8
7-Sep	10	14	14	15	27	21	55	15	23	6	11	11	17	23	30	19	11	41	89	42	24	50	17	5	88.9
8-Sep	6	20	10	23	5	9	9	20	48	47	24	81	9	15	8	11	14	9	39	4	9	11	15	27	80.9
9-Sep	29	11	42	33	26	15	18	10	19	13	8	7	5	24	27	15	11	8	5	6	5	6	3	4	42.2
10-Sep	4	5	4	3	4	4	3	4	5	8	5	10	8	10	10	11	6	5	3	4	10	9	3	4	11.5
11-Sep	10	15	5	18	14	16	44	9	3	3	5	5	4	9	13	10	6	6	14	6	5	5	4	25	44.0
12-Sep	5	5	8	35	12	7	6	9	11	16	31	33	43	39	61	36	28	7	16	19	12	63	64	35	64.4
13-Sep	75	39	94	91	16	13	78	23	18	26	14	16	18	18	25	22	29	23	8	19	3	5	4	4	93.7
14-Sep	9	10	11	10	12	6	26	65	75	52	97	52	83	62	44	20	23	26	28	9	11	6	19	24	97.2
15-Sep	85	49	21	10	17	45	16	20	41	15	14	13	17	17	16	15	11	11	4	5	4	4	3	4	85.2
16-Sep	7	14	9	11	16	11	10	19	16	9	9	10	12	13	14	12	10	5	4	5	3	3	6	18	18.7
17-Sep	19	12	8	23	24	10	19	6	7	11	12	16	15	12	16	22	14	11	10	11	7	6	6	8	23.8
18-Sep	10	8	16	15	16	9	8	8	10	11	16	16	15	38	25	58	88	14	5	7	23	17	7	8	88.1
19-Sep	7	7	5	6	7	12	6	8	11	8	7	7	13	47	42	43	11	12	13	14	7	6	7	7	47.3
20-Sep	7	5	6	2	4	5	5	6	9	5	6	6	9	6	10	16	15	9	6	6	6	8	5	44	44.4
21-Sep	6	32	11	9	7	5	9	7	11	12	11	10	12	11	12	13	8	10	15	81	10	8	47	12	81.5
22-Sep	42	19	82	65	53	29	23	10	48	19	14	28	55	63	64	29	21	16	11	9	9	11	31	9	81.9
23-Sep	7	16	10	18	8	8	18	16	19	15	15	10	15	16	26	15	19	22	18	10	10	7	10	16	25.8
24-Sep	5	5	12	8	10	8	4	6	6	6	5	5	14	20	19	16	16	32	25	12	7	3	3	2	32.2
25-Sep	3	3	2	2	3	2	2	2	6	6	8	9	14	27	9	6	12	8	12	11	5	4	3	3	26.6
26-Sep	2	3	4	3	10	4	6	3	11	9	13	14	15	12	M	14	10	15	15	4	8	10	9	3	15.5
27-Sep	3	5	3	4	4	6	4	4	6	9	12	16	20	18	31	34	60	63	21	3	5	4	7	6	62.5
28-Sep	8	44	14	22	24	15	12	9	9	21	15	12	12	10	12	13	36	6	12	5	5	3	13	16	44.3
29-Sep	19	7	18	18	23	13	47	15	25	14	22	41	65	56	27	20	26	13	11	10	9	7	58	65.0	
30-Sep	55	10	13	4	5	4	4	7	10	7	6	7	10	12	11	13	6	5	4	6	7	8	4	4	54.8
85.2	63.2	93.7	90.6	52.9	44.5	78.3	88.5	77.8	65.4	97.2	82.5	83.0	62.6	63.5	58.0	88.1	62.5	88.9	81.5	23.7	62.6	77.9	59.6		
M - Maintenance																									

PAZA

Portable – Rycroft Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Portable Rycroft - September 2017

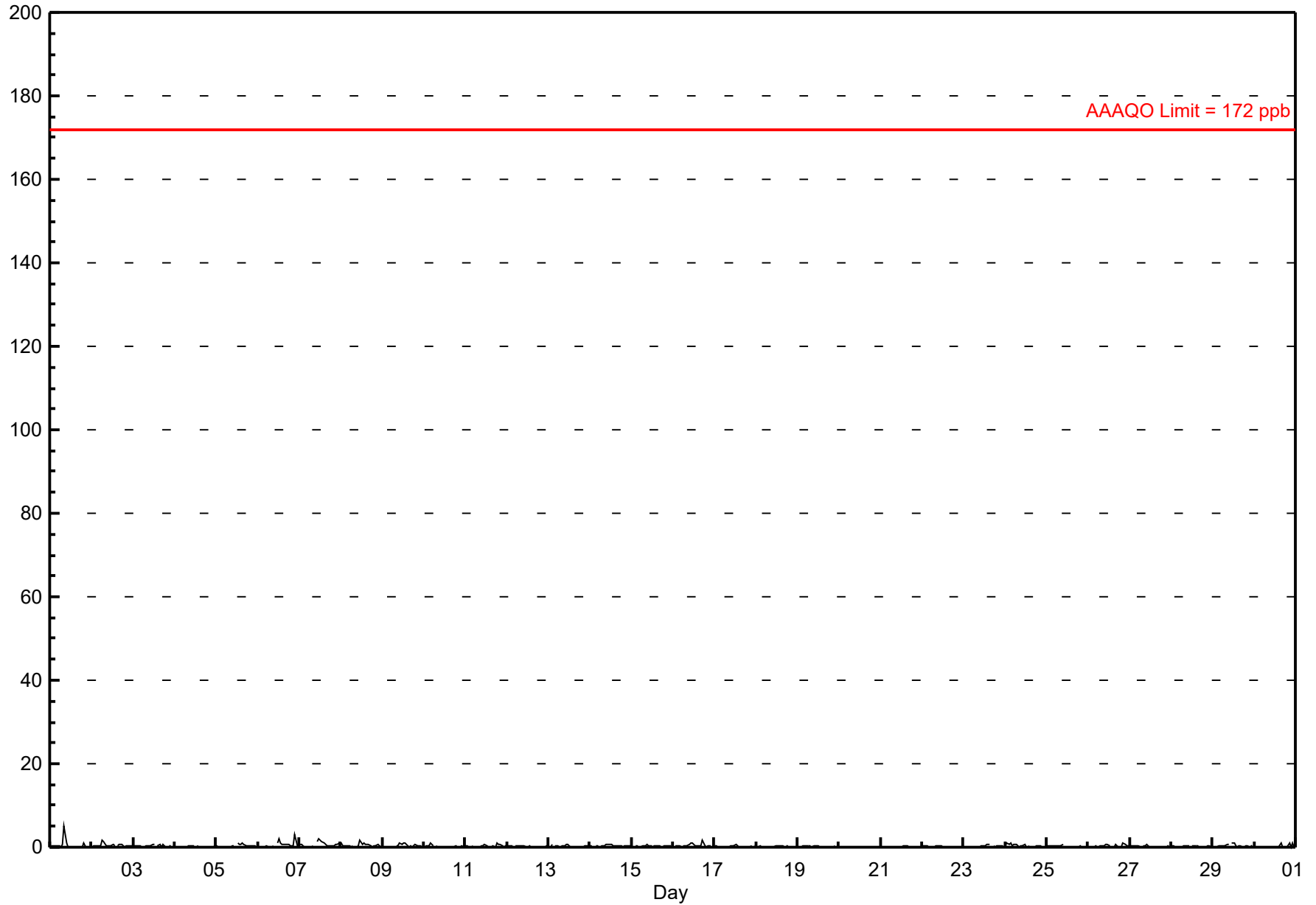
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 5.2 ppb on Sep 1 09:00	Maximum Daily Average: 0.6 ppb on Sep 6		Hours of Data:	685
Minimum Value: 0 ppb on Sep 4 05:00	Minimum Daily Average: 0.0 ppb on Sep 20		Hours of Missing Data:	35
Maximum Diurnal Average: 0.5 ppb at hour 12	Minimum Diurnal Average: 0.2 ppb at hour 6		Hours of Calibration:	35
Monthly Average: 0.27 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.6 P ₉₉ = 1.6		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	0	0	0	0	0	0	0	1	5	1	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0.5	5.2																							
2-Sep	0	0	0	0	0	0	2	2	0	0	0	0	1	0	A	0	1	1	0	0	0	0	0	0	0.5	1.7																							
3-Sep	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	1	0	1	0	0	0	0	0	0	0.3	0.8																							
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																							
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0.3	1.1																							
6-Sep	0	0	0	0	0	0	0	0	0	0	A	1	2	1	1	1	1	1	1	0	0	3	2	0	0.6	3.0																							
7-Sep	1	1	0	0	0	0	0	0	0	A	1	2	2	1	1	1	0	0	0	0	0	1	1	1	0.6	1.9																							
8-Sep	1	0	0	0	0	0	0	0	A	0	0	2	1	1	1	1	1	0	0	0	0	1	0	0	0.5	1.6																							
9-Sep	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0.4	1.1																							
10-Sep	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9																							
11-Sep	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0.3	0.9																							
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																							
13-Sep	0	0	1	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7																							
14-Sep	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7																							
15-Sep	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8																							
16-Sep	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	2	0	0	0	0	0	A	0.5	1.8																							
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8																							
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																							
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3																							
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.1																							
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4																							
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3																							
23-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0.2	0.8																							
24-Sep	0	1	1	1	0	1	1	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.9																							
25-Sep	0	0	0	0	0	0	0	0	0	1	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.2	0.5																							
26-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	1	0	0	0	0	1	1	0	0.3	0.9																							
27-Sep	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																							
28-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																							
29-Sep	0	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0																							
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0.2	1.1																							
																								0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.4	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	Diurnal Average
																								0.9	0.9	0.8	0.9	0.9	0.6	1.7	1.5	5.2	1.0	1.3	1.9	2.1	1.2	0.9	0.9	0.8	1.8	0.9	1.0	1.1	3.0	1.6	0.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Portable Rycroft - September 2017



Hourly Maximums

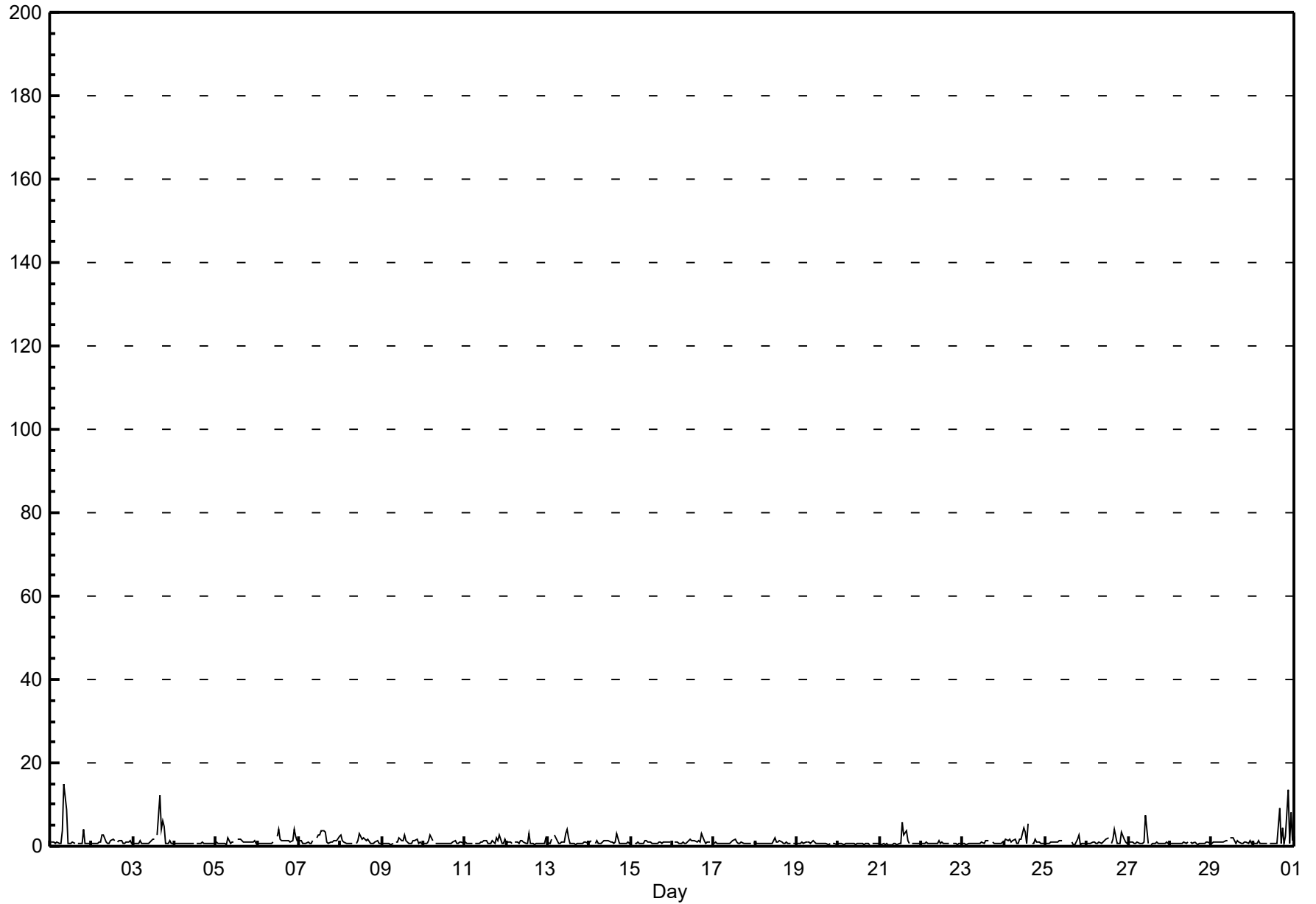
Sulphur Dioxide (SO₂) - ppb

Portable Rycroft - September 2017

Maximum Value: 14.8 ppb on Sep 1 09:00		Maximum Daily Average: 2.2 ppb on Sep 30		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 25 18:00		Minimum Daily Average: 0.7 ppb on Sep 20		Hours of Data: 685																							
Maximum Diurnal Average: 1.8 ppb at hour 16		Minimum Diurnal Average: 0.8 ppb at hour 6		Hours of Missing Data: 35																							
Monthly Average: 1.14 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.1 P ₉₀ = 1.7 P ₉₉ = 7.4		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1	1	1	1	1	1	1	4	15	9	1	1	1	1	1	A	1	1	1	4	1	1	1	1			
2-Sep	1	1	1	1	1	1	3	3	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1			
3-Sep	1	1	1	1	1	1	1	1	1	1	1	2	2	A	3	12	4	6	5	1	1	1	1	1			
4-Sep	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1			
5-Sep	1	1	1	1	1	1	0	2	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1			
6-Sep	1	1	1	1	1	1	1	1	1	1	A	2	4	2	1	1	1	1	1	1	1	4	2	1			
7-Sep	1	1	1	1	1	1	1	1	1	1	A	2	3	3	4	4	3	1	1	1	1	1	1	2			
8-Sep	3	1	1	1	1	1	1	1	1	A	1	3	2	2	2	1	2	1	1	1	1	1	1	1			
9-Sep	1	1	1	1	1	1	1	1	A	1	2	1	1	3	1	1	1	1	1	1	2	1	1	1			
10-Sep	1	1	1	1	3	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
11-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3	1	1	2			
12-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	3	1	1	0	1	1	1	1	1	1	2			
13-Sep	1	1	2	A	3	1	1	1	1	1	3	4	2	1	1	1	0	1	1	1	1	1	1	1			
14-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1			
15-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
16-Sep	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	1	1	1	1	A			
17-Sep	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1			
18-Sep	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1			
19-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1			
20-Sep	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0	A	1	1	1	1			
21-Sep	1	0	1	0	1	0	0	1	1	0	1	1	6	3	4	1	1	A	1	1	1	1	1	1			
22-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1			
23-Sep	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1			
24-Sep	1	2	1	2	1	1	2	1	1	2	2	4	3	1	5	A	1	1	2	1	1	1	1	1			
25-Sep	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	1	0	0	2	3	0	1	1	1			
26-Sep	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1	2	4	1	1	1	4	2	1	1			
27-Sep	1	1	1	1	1	1	1	1	1	1	8	1	A	0	1	1	1	1	1	1	1	1	1	1			
28-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1			
29-Sep	1	1	1	1	1	1	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1			
30-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	9	1	4	1	2	14	1	8	1			
	0.9	0.9	0.8	0.8	0.9	0.8	0.8	1.0	1.4	1.3	1.4	1.5	1.4	1.4	1.3	1.8	1.2	1.2	1.1	1.1	1.4	1.0	1.2	0.9	Diurnal Average		
	2.8	1.6	1.7	1.6	2.7	1.5	2.8	3.9	14.8	8.8	7.6	4.3	4.0	5.8	5.3	12.3	4.2	6.0	4.7	4.2	13.5	4.2	8.1	2.3	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

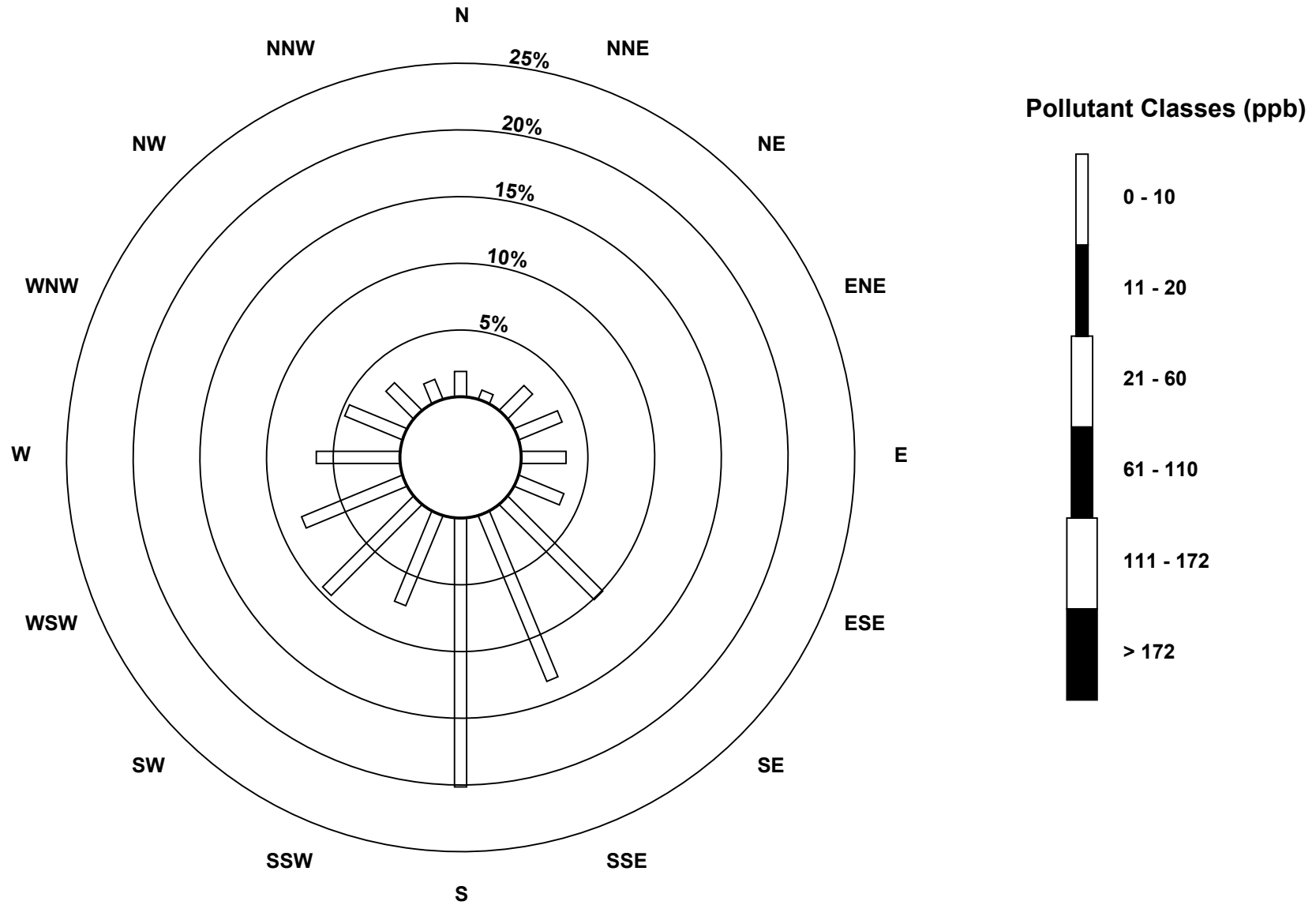
Hourly Maximums

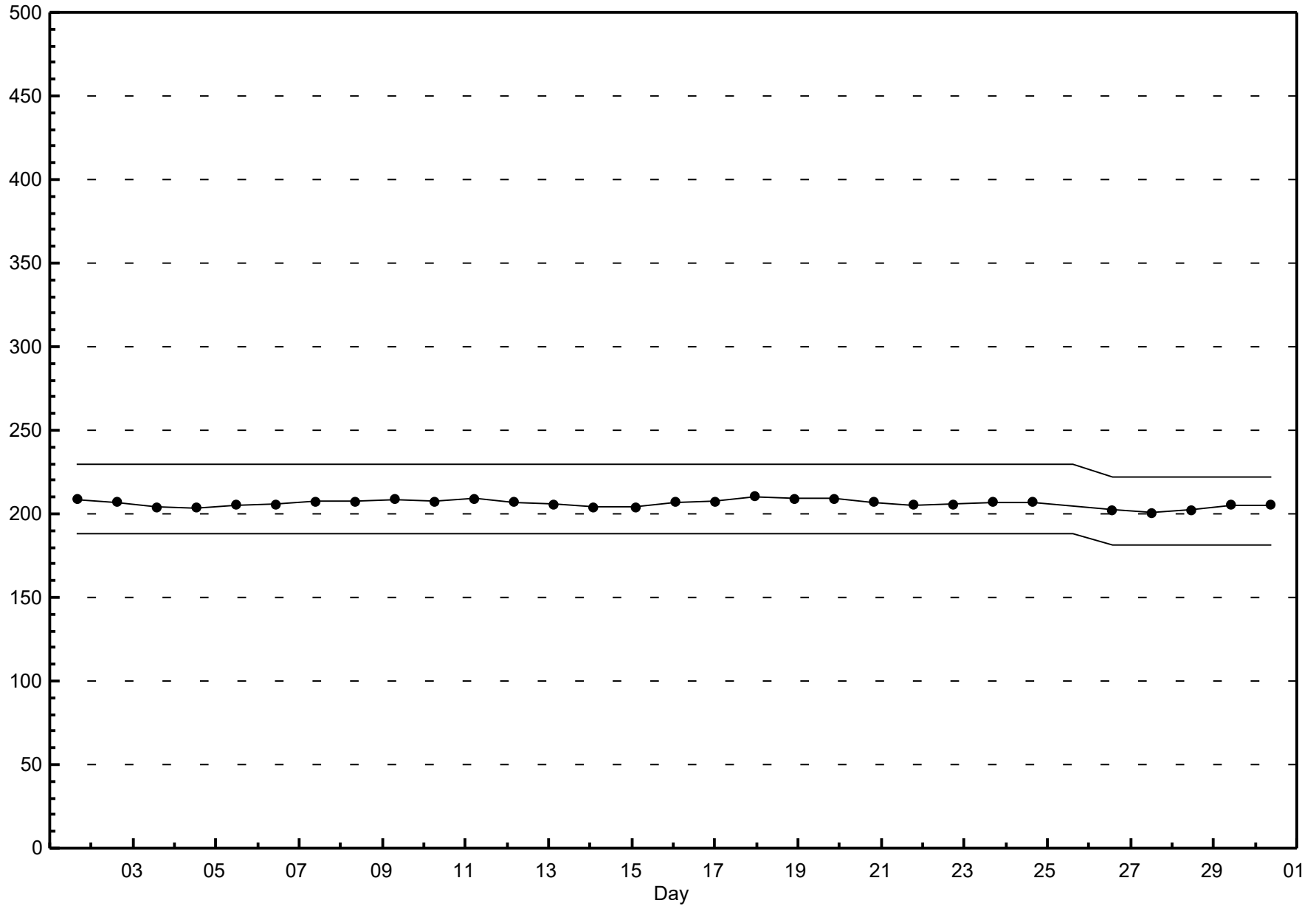
Sulphur Dioxide (SO₂) - ppb
Portable Rycroft - September 2017



Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Portable Rycroft - September 2017

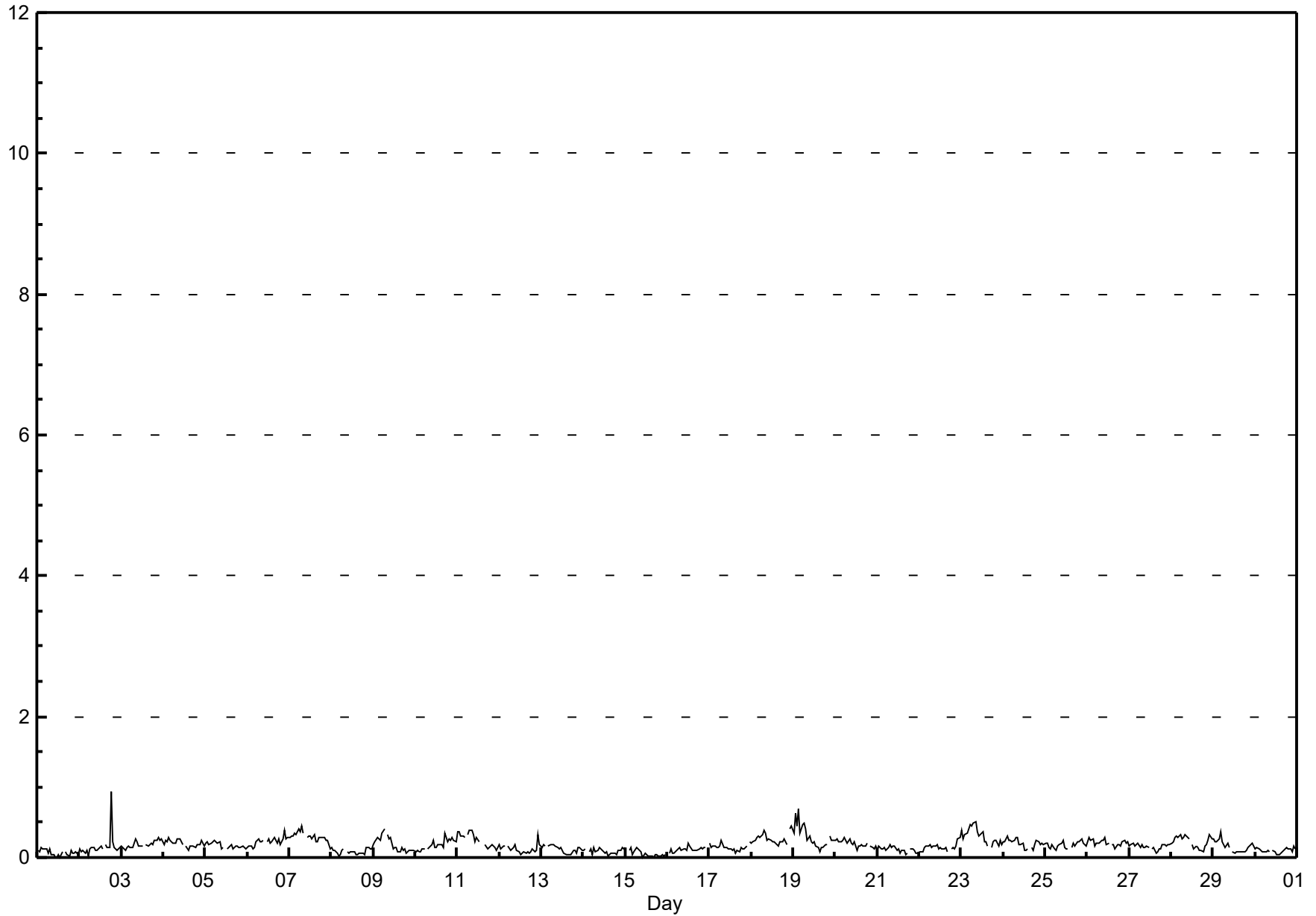




Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Portable Rycroft - September 2017

Maximum Value: 0.9 ppb on Sep 2 19:00		Maximum Daily Average: 0.3 ppb on Sep 23		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 1 11:00		Minimum Daily Average: 0.1 ppb on Sep 15		Hours of Data: 686																							
Maximum Diurnal Average: 0.2 ppb at hour 9		Minimum Diurnal Average: 0.1 ppb at hour 16		Hours of Missing Data: 34																							
Monthly Average: 0.17 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.5		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.1	
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0.2	0.9	
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
5-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
6-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
7-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
9-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
11-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.2	0.4	
12-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
13-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
14-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
15-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
16-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2	
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
19-Sep	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.7	
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3	
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2	
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3	
23-Sep	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.5	
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3	
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3	
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
27-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
28-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
29-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
30-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
		0.4	0.6	0.5	0.7	0.4	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.9	0.3	0.3	0.4	0.4	0.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



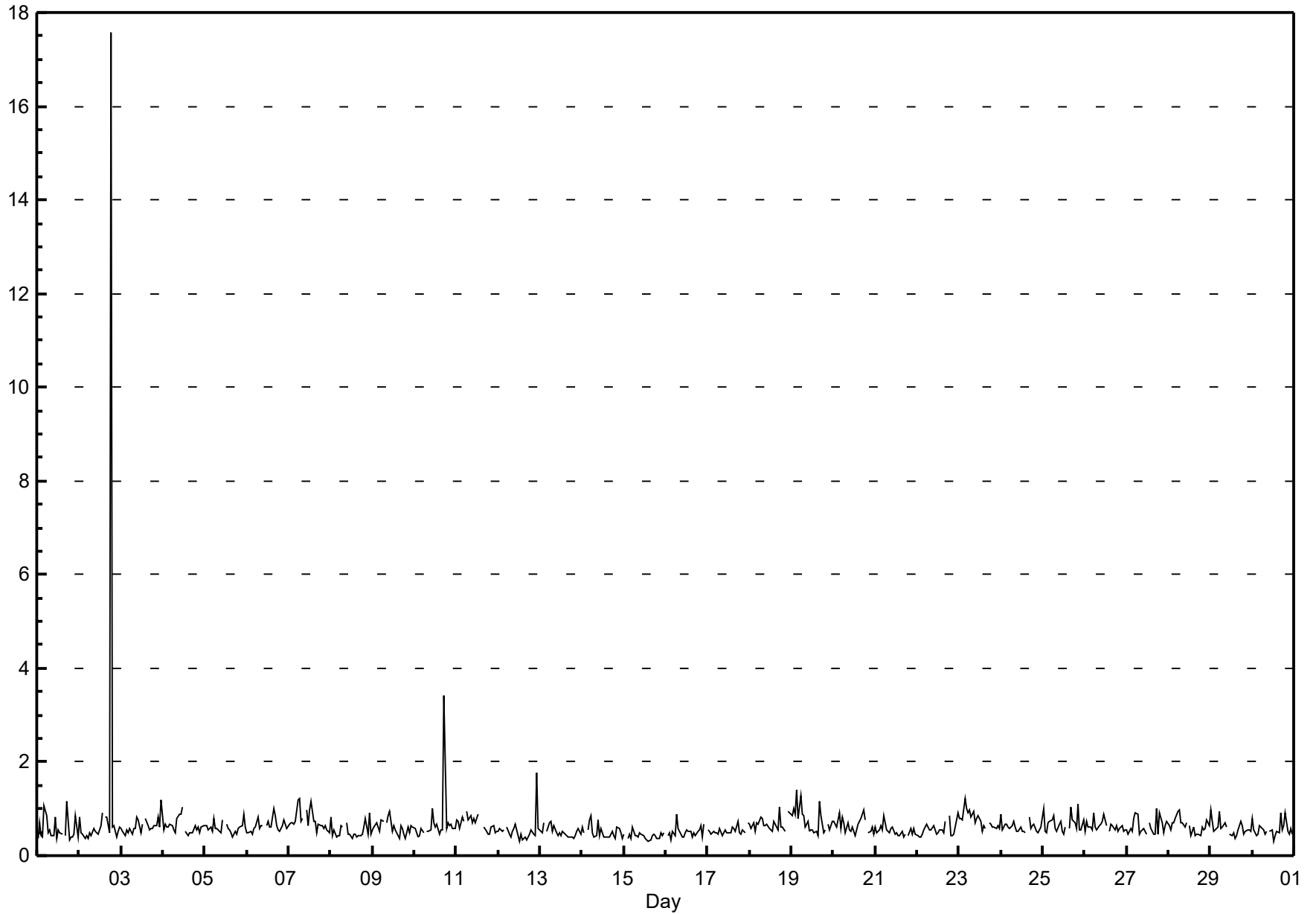
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Portable Rycroft - September 2017

Maximum Value: 17.6 ppb on Sep 2 19:00		Maximum Daily Average: 1.3 ppb on Sep 2		Hours in Service: 720																																												
Minimum Value: 0 ppb on Sep 12 13:00		Minimum Daily Average: 0.4 ppb on Sep 15		Hours of Data: 686																																												
Maximum Diurnal Average: 1.1 ppb at hour 19		Minimum Diurnal Average: 0.5 ppb at hour 15		Hours of Missing Data: 34																																												
Monthly Average: 0.63 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.2		Hours of Calibration: 34																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	0	1	0	0	1	1	0	1	0	0	1	0	1	0	0	A	0	1	0	0	0	0	1	0	0.6	1.1																						
2-Sep	1	0	0	0	0	0	0	0	1	1	0	0	1	1	A	1	1	0	18	1	1	0	1	1	1.3	17.6																						
3-Sep	1	1	0	1	0	1	0	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	0.6	1.2																						
4-Sep	1	1	1	1	1	1	1	0	1	1	1	1	A	1	0	1	0	0	1	1	1	0	1	1	0.6	1.0																						
5-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	0	1	1	1	1	1	0.6	0.9																						
6-Sep	0	0	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0																						
7-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	0	0.8	1.2																						
8-Sep	1	0	1	0	0	0	1	1	A	A	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0.5	0.9																						
9-Sep	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	1	0	0	1	0	1	1	0.6	1.0																						
10-Sep	1	0	0	0	1	0	A	1	1	1	1	1	1	1	0	1	1	3	1	1	1	1	1	1	0.7	3.4																						
11-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	C	C	C	1	1	0	0	1	1	0	1	0.7	0.9																						
12-Sep	1	1	1	1	A	1	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	2	1	0.5	1.8																						
13-Sep	1	0	1	A	1	1	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0.5	0.7																						
14-Sep	1	0	A	1	1	1	1	0	0	1	0	1	0	0	0	0	0	1	0	0	1	1	0	0	0.5	0.8																						
15-Sep	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6																						
16-Sep	A	0	0	0	1	0	1	1	1	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0.5	0.9																						
17-Sep	1	1	0	1	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	0	1	0	1	1	0.5	0.7																						
18-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0																						
19-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	A	1	1	0.8	1.4																						
20-Sep	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	A	0	1	1	0	0.6	1.0																						
21-Sep	1	0	1	1	1	1	1	1	0	1	1	0	0	0	1	0	0	A	0	1	0	1	0	0	0.5	0.9																						
22-Sep	0	0	0	0	1	1	1	1	1	1	1	0	0	1	1	0	1	A	1	0	0	0	1	1	0.6	0.9																						
23-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.2																						
24-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	0	1	0.6	0.9																						
25-Sep	1	1	0	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	0.7	1.1																						
26-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.9																						
27-Sep	1	0	1	1	1	1	1	0	1	1	1	0	A	1	1	0	0	1	0	1	1	0	1	1	0.6	1.0																						
28-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	1	0.6	1.0																						
29-Sep	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	1	1	1	0	1	1	1	0.6	1.0																						
30-Sep	1	1	0	0	1	1	1	0	1	A	1	1	0	0	1	0	1	1	1	1	1	1	0	1	0.6	0.9																						
																								0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.7	1.1	0.6	0.6	0.5	0.7	0.6	Diurnal Average
																								1.0	1.0	0.9	1.4	1.1	1.3	1.2	0.8	0.9	0.6	1.0	1.0	1.0	1.2	0.8	1.0	1.2	3.4	17.6	0.9	1.1	0.8	1.8	1.2	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

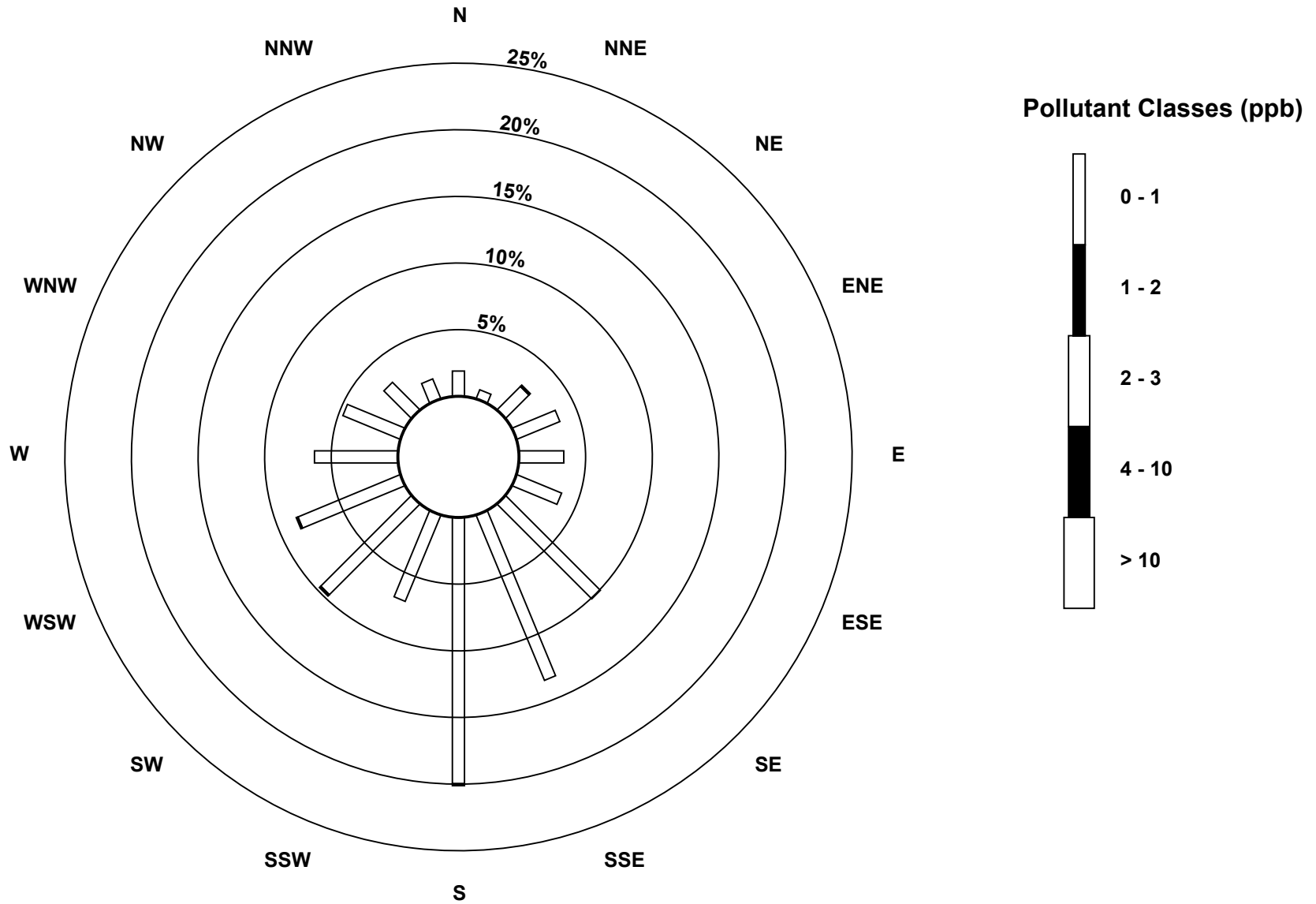
Hourly Maximums

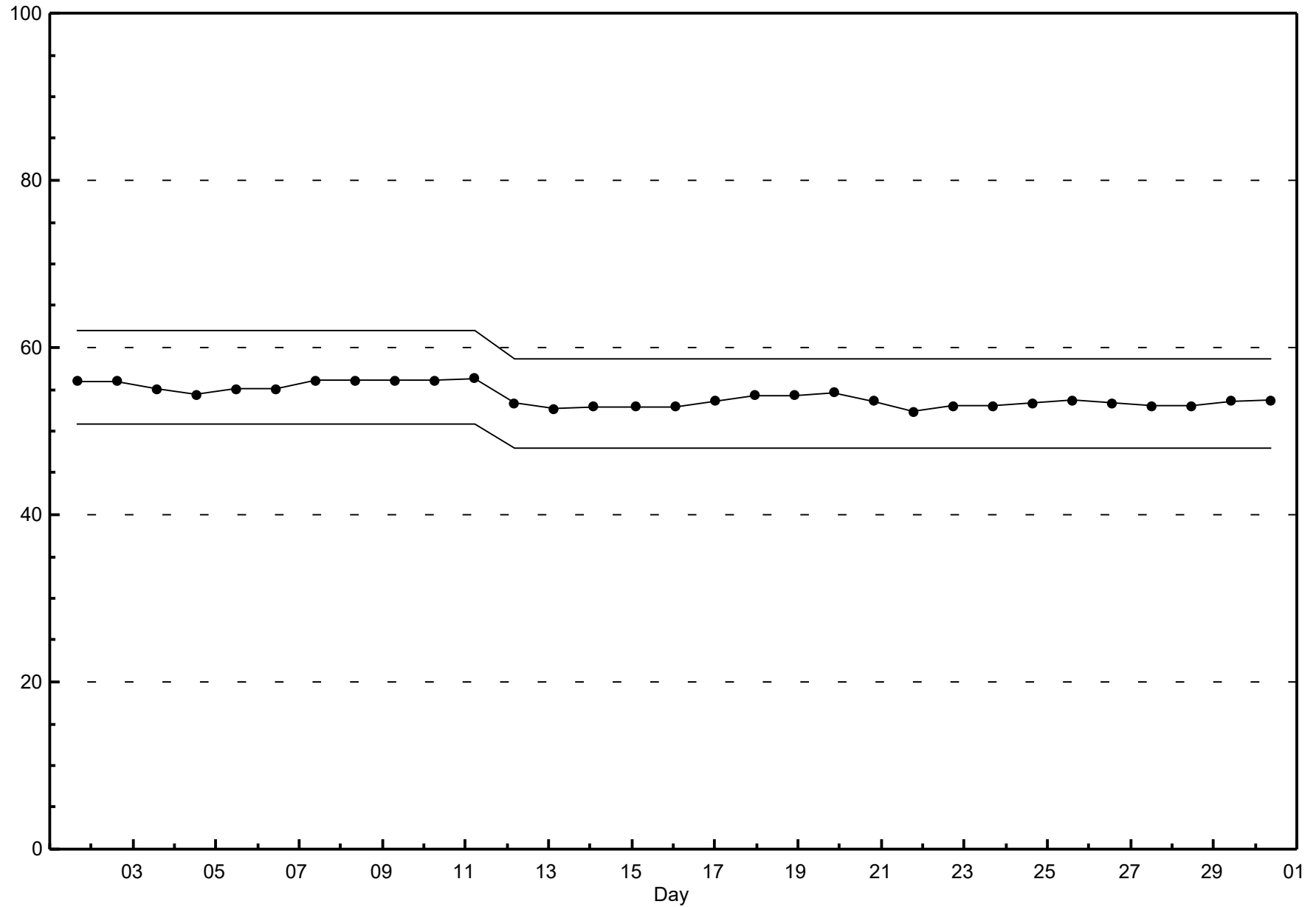
Total Reduced Sulphur (TRS) - ppb
Portable Rycroft - September 2017



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Portable Rycroft - September 2017







Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

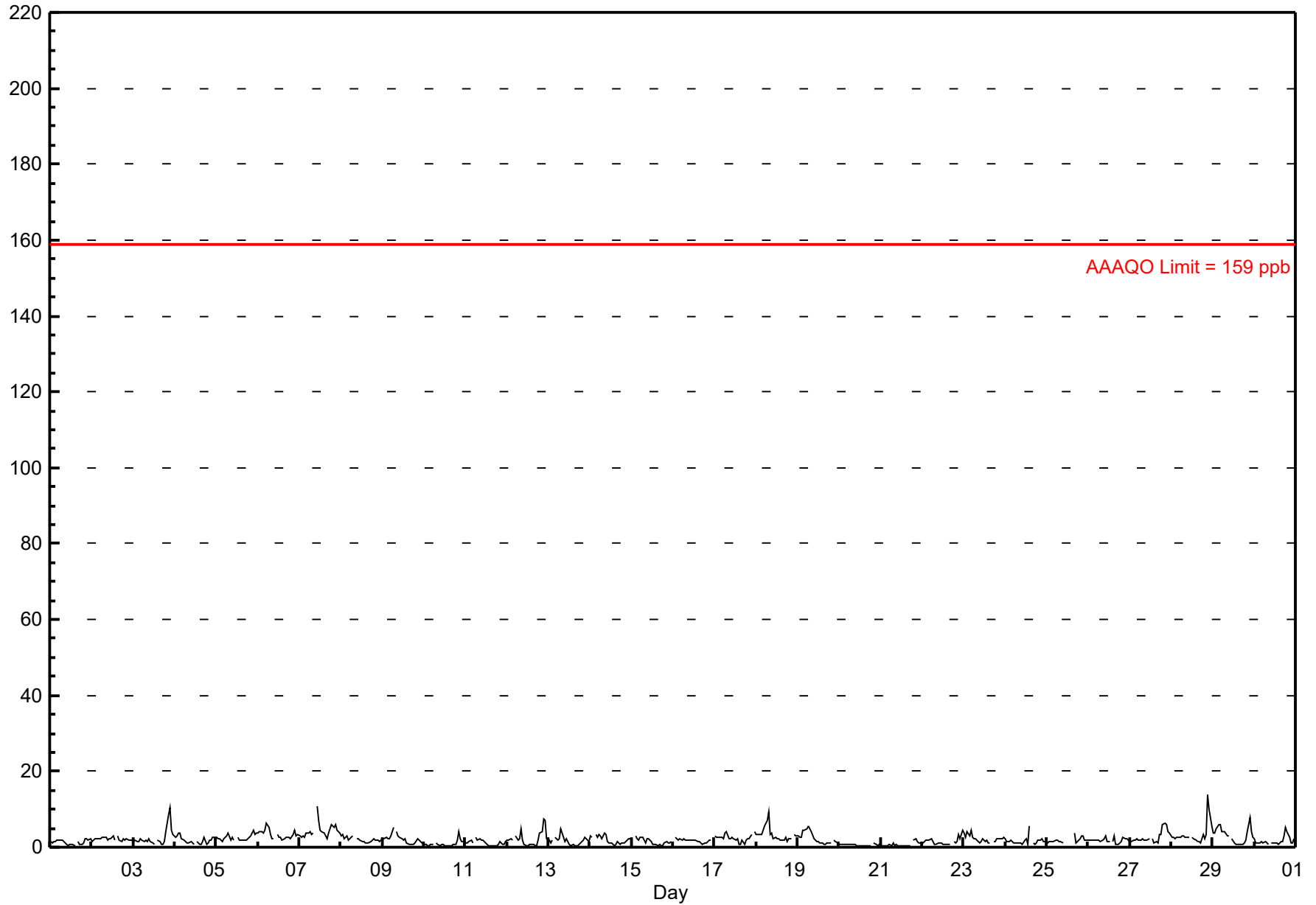
Portable Rycroft - September 2017

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 720
Maximum Value: 13.7 ppb on Sep 28 22:00	Maximum Daily Average: 4.3 ppb on Sep 7
Minimum Value: 0 ppb on Sep 21 13:00	Hours of Data: 684
Maximum Diurnal Average: 3.5 ppb at hour 22	Hours of Missing Data: 36
Monthly Average: 2.09 ppb	Hours of Calibration: 36
Minimum Daily Average: 0.6 ppb on Sep 20	Percent Operational Time: 100.0
Minimum Diurnal Average: 1.2 ppb at hour 16	
Percentiles: P ₁ = 0.3 P ₁₀ = 0.6 Q ₁ = 1.1 Median = 1.8 Q ₃ = 2.5 P ₉₀ = 3.8 P ₉₉ = 7.5	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	1	1	1	2	2	2	2	1	1	1	1	1	1	0	A	2	1	1	1	2	2	2	2	1.3	2.2
2-Sep	2	2	2	2	2	2	3	3	2	2	2	2	3	2	A	3	2	2	2	2	2	2	2	2	2.2	3.1
3-Sep	2	2	2	2	2	2	1	2	2	2	2	1	1	A	2	1	1	1	1	4	9	10	5	3	2.6	10.4
4-Sep	3	3	4	4	2	2	1	1	1	2	1	1	A	1	1	1	2	3	1	1	2	2	3	3	1.9	3.9
5-Sep	3	2	2	1	2	3	3	4	2	3	2	A	2	2	2	2	2	2	2	2	3	4	3	4	2.5	4.5
6-Sep	4	4	4	4	4	6	5	3	2	2	A	3	3	2	2	2	3	3	3	2	3	5	3	3	3.3	6.4
7-Sep	3	3	3	2	4	4	4	3	4	A	11	7	5	4	4	3	2	4	6	6	5	6	5	4	4.3	10.8
8-Sep	3	3	2	3	2	2	3	3	A	A	2	2	2	2	1	1	1	1	2	2	2	1	2	2	2.0	3.2
9-Sep	2	2	3	2	2	3	5	A	4	3	3	2	2	2	1	1	1	1	1	1	2	2	1	1	2.1	5.4
10-Sep	1	1	1	1	1	1	A	1	1	0	1	1	0	0	0	0	0	1	1	2	4	2	2	1	0.9	4.0
11-Sep	1	1	1	2	1	A	2	2	2	2	2	1	1	0	0	0	0	0	0	1	1	1	1	2	1.2	2.5
12-Sep	2	2	2	2	A	3	2	2	5	2	1	0	0	1	1	1	0	0	2	4	4	7	7	2	2.3	7.5
13-Sep	2	1	2	A	2	2	2	5	4	2	2	2	1	0	1	0	0	0	1	1	2	3	2	2	1.7	5.0
14-Sep	3	3	A	3	3	3	3	2	4	3	2	1	1	1	0	1	1	1	1	1	1	2	2	2	1.9	3.6
15-Sep	2	A	3	2	2	3	2	2	1	2	2	2	1	1	1	1	1	0	1	1	1	1	1	1	1.4	3.1
16-Sep	A	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	A	1.7	2.5
17-Sep	3	3	3	3	2	2	4	4	2	2	2	2	2	2	1	1	2	1	2	2	2	4	A	4	2.4	4.0
18-Sep	3	3	3	4	5	6	7	9	3	4	2	3	2	2	2	2	2	2	1	2	2	A	3	3	3.3	9.2
19-Sep	3	2	3	5	4	5	6	5	4	2	2	2	1	1	1	1	1	1	1	1	A	2	2	1	2.4	5.6
20-Sep	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	1	1	1	1	0.6	1.0
21-Sep	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	A	2	2	1	1	1	0.7	2.1
22-Sep	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	3	2	5	1.5	4.6
23-Sep	4	3	4	3	5	3	2	2	1	1	2	2	2	2	1	1	A	2	2	2	2	2	2	3	2.2	4.6
24-Sep	2	2	1	2	1	1	1	1	1	1	1	2	2	1	6	A	1	1	1	2	2	2	2	2	1.6	5.5
25-Sep	1	1	1	2	2	2	2	2	1	1	C	C	C	C	C	C	4	1	2	2	3	3	2	2	1.9	3.7
26-Sep	2	2	2	2	2	2	2	1	2	2	3	2	1	A	1	3	1	1	1	2	3	2	2	2	1.9	3.1
27-Sep	1	2	2	2	2	2	2	2	2	2	2	2	A	2	1	1	1	3	3	6	6	6	4	4	2.6	6.2
28-Sep	3	3	2	2	3	3	3	3	3	3	3	3	A	2	2	2	1	1	3	2	3	14	10	5	3.4	13.7
29-Sep	4	4	5	6	6	4	4	4	4	3	3	A	2	1	1	1	1	1	1	2	4	8	4	3	3.1	7.8
30-Sep	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	2	3	5	4	2	1	1	2	1.7	5.3

2.2	2.0	2.2	2.3	2.4	2.5	2.7	2.6	2.1	1.9	2.0	1.7	1.5	1.4	1.3	1.2	1.2	1.3	1.7	2.2	2.8	3.5	2.7	2.4	Diurnal Average	
3.8	3.9	4.9	5.9	5.9	6.4	7.0	9.2	4.8	3.9	10.8	7.1	4.6	4.0	5.5	3.1	3.7	3.8	6.1	5.9	8.7	13.7	10.1	5.5	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Portable Rycroft - September 2017

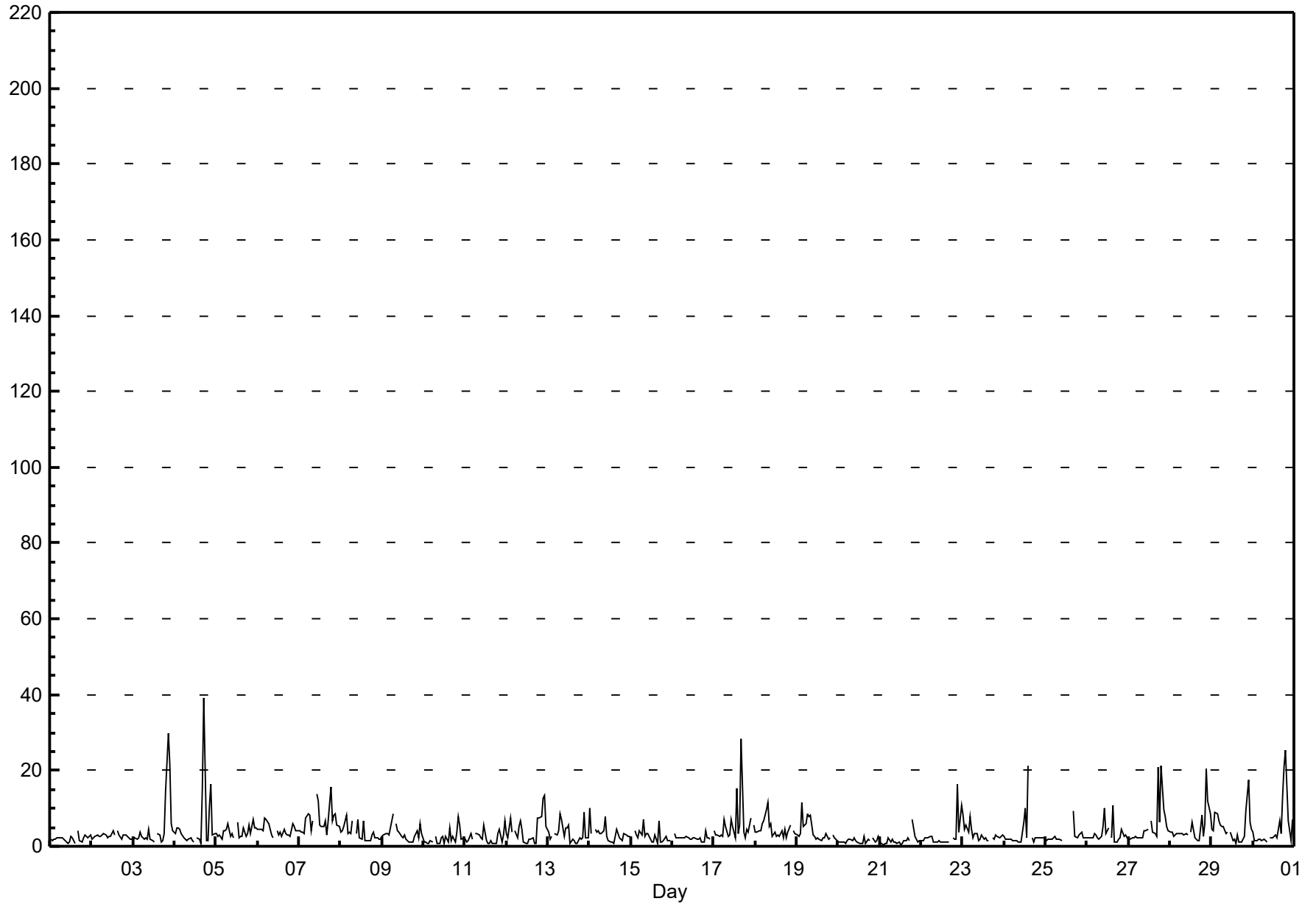
Maximum Value: 39.3 ppb on Sep 4 18:00	Maximum Daily Average: 6.9 ppb on Sep 7	Hours in Service: 720
Minimum Value: 0 ppb on Sep 21 13:00	Minimum Daily Average: 1.4 ppb on Sep 20	Hours of Data: 684
Maximum Diurnal Average: 6.7 ppb at hour 22	Minimum Diurnal Average: 2.6 ppb at hour 2	Hours of Missing Data: 36
Monthly Average: 3.68 ppb	Percentiles: P ₁ = 0.6 P ₁₀ = 1.2 Q ₁ = 1.9 Median = 2.6 Q ₃ = 4.1 P ₉₀ = 7.0 P ₉₉ = 21.2	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	2	1	2	2	2	2	2	2	2	1	1	1	2	2	1	A	4	1	1	2	3	3	2	3	2.0	4.2
2-Sep	2	2	3	3	3	3	3	3	3	2	3	3	4	3	A	4	3	2	3	3	3	2	2	2	2.7	4.1
3-Sep	2	2	2	2	4	3	2	2	2	4	2	1	1	A	3	3	1	2	3	14	30	22	6	4	5.2	29.9
4-Sep	3	5	5	4	3	2	2	2	2	2	2	1	A	2	2	1	15	39	1	2	10	16	3	4	5.6	39.3
5-Sep	3	3	3	2	4	4	4	6	2	3	2	A	6	2	2	2	5	3	3	6	3	7	5	5	3.8	7.0
6-Sep	4	4	5	4	7	7	6	4	3	2	A	4	3	4	2	4	3	3	3	3	6	5	4	4	4.2	7.3
7-Sep	4	4	4	3	7	9	8	4	7	A	14	12	6	5	5	7	3	7	16	7	8	9	5	5	6.9	15.7
8-Sep	4	4	5	8	3	4	3	7	A	3	7	2	2	7	2	1	2	2	3	4	2	2	2	2	3.5	8.3
9-Sep	3	3	3	3	3	5	9	A	6	4	4	2	2	3	2	1	1	1	1	2	4	2	6	3	3.2	8.7
10-Sep	1	1	1	1	2	1	A	3	1	1	2	3	1	3	1	5	1	3	1	4	8	6	2	2	2.2	7.7
11-Sep	2	1	2	3	2	A	3	3	3	2	2	6	1	1	1	1	1	1	1	3	5	1	3	7	2.4	6.8
12-Sep	3	2	8	4	A	4	2	5	7	4	1	1	1	2	2	2	1	1	7	7	8	13	13	5	4.5	13.2
13-Sep	4	2	3	A	3	3	4	9	7	3	5	5	5	1	2	1	1	1	2	2	2	9	2	2	3.3	8.9
14-Sep	10	3	A	4	4	4	3	3	4	8	2	2	1	1	1	3	4	2	2	2	3	3	3	3	3.3	10.1
15-Sep	2	A	4	3	2	4	3	7	2	3	3	2	1	1	3	1	7	1	1	1	2	1	1	2	2.6	7.1
16-Sep	A	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	4	2	2	2	A	2.2	4.1
17-Sep	4	3	3	3	3	2	7	5	3	3	7	5	2	15	4	6	28	4	2	4	4	8	A	6	5.7	28.4
18-Sep	4	4	4	4	6	7	10	11	5	6	3	4	3	3	3	4	2	5	2	4	6	A	4	3	4.6	11.4
19-Sep	3	3	3	12	5	6	9	8	8	3	3	2	2	2	2	2	2	3	2	2	A	3	2	1	3.8	11.5
20-Sep	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	3	1	2	1	A	2	1	1	2	1.4	2.6
21-Sep	2	1	1	1	1	2	1	2	1	1	1	1	0	1	2	1	2	2	A	7	3	2	1	2	1.6	7.2
22-Sep	1	2	2	2	2	3	3	1	1	1	1	1	1	1	1	1	1	A	2	2	2	17	4	11	2.8	16.5
23-Sep	8	4	5	4	8	5	2	3	3	2	2	3	2	2	2	2	A	2	2	3	3	2	3	3	3.2	8.1
24-Sep	3	2	2	2	2	2	2	1	1	1	1	6	10	2	21	A	2	1	2	2	2	2	2	2	3.3	21.2
25-Sep	2	2	2	2	2	3	2	2	2	1	C	C	C	C	C	C	9	3	2	3	3	4	2	2	2.7	9.5
26-Sep	2	2	2	2	3	3	2	2	2	5	10	3	5	A	2	11	1	1	2	2	5	3	3	2	3.4	11.0
27-Sep	2	2	2	2	2	2	2	2	2	4	4	4	A	7	4	3	2	21	6	21	10	8	5	4	5.4	21.2
28-Sep	4	4	3	3	3	3	3	3	3	3	3	A	4	4	6	2	2	2	8	3	6	21	12	8	4.8	20.5
29-Sep	4	4	9	9	7	6	5	5	3	4	A	4	1	2	1	3	1	1	2	3	9	18	6	5	4.9	17.6
30-Sep	4	1	2	2	2	2	2	1	1	A	2	2	3	3	2	7	4	13	21	25	7	4	2	7	5.1	25.3
	3.2	2.6	3.1	3.4	3.4	3.5	3.8	3.9	3.1	3.0	3.3	3.1	2.7	3.1	2.7	3.1	3.9	4.4	3.7	5.1	5.6	6.7	3.8	3.8	Diurnal Average	
	10.1	5.0	8.9	11.5	8.0	8.6	9.7	11.4	8.1	7.8	13.9	12.0	10.2	15.4	21.2	11.0	28.4	39.3	20.9	25.3	29.9	21.7	13.2	10.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

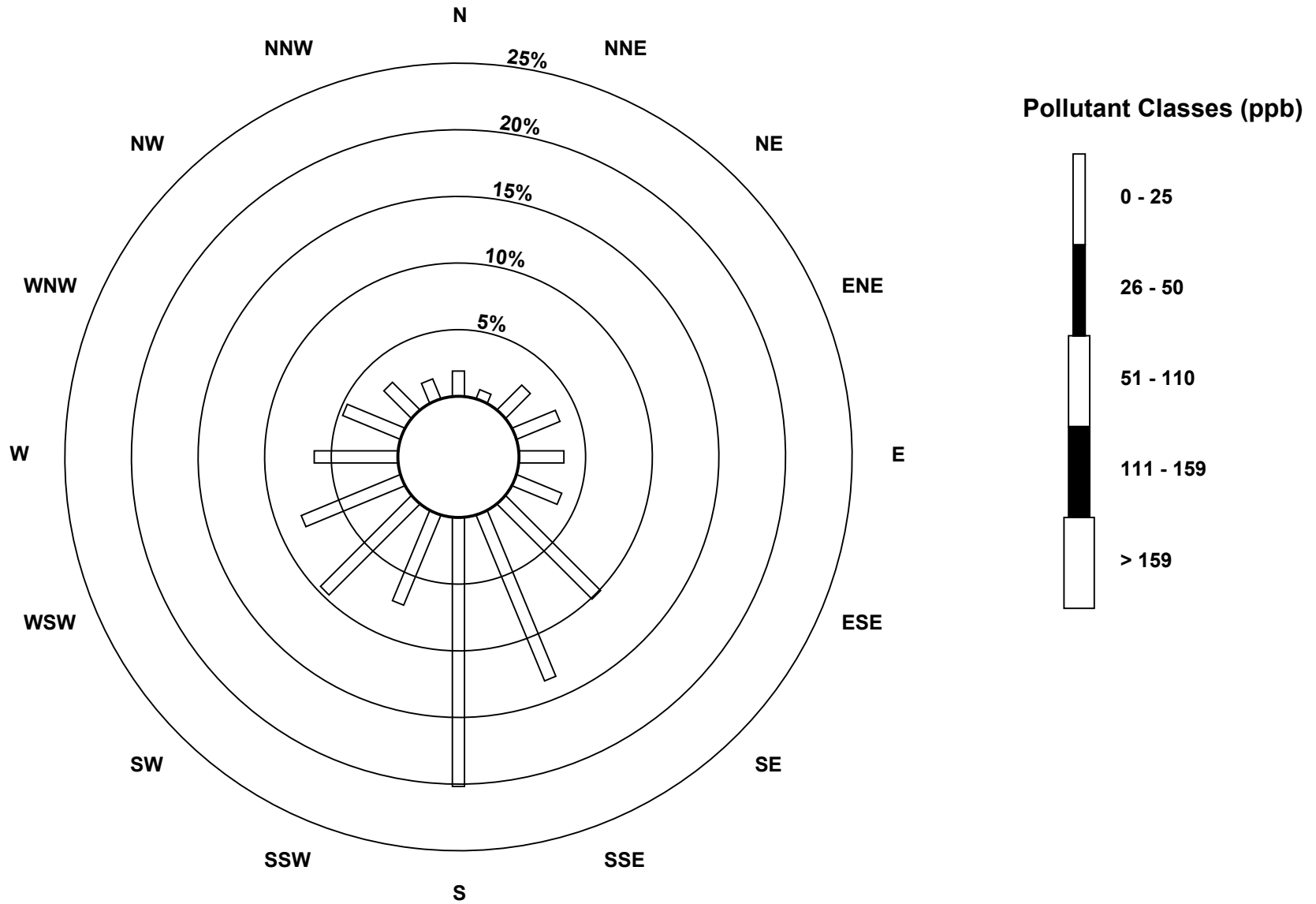
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Portable Rycroft - September 2017



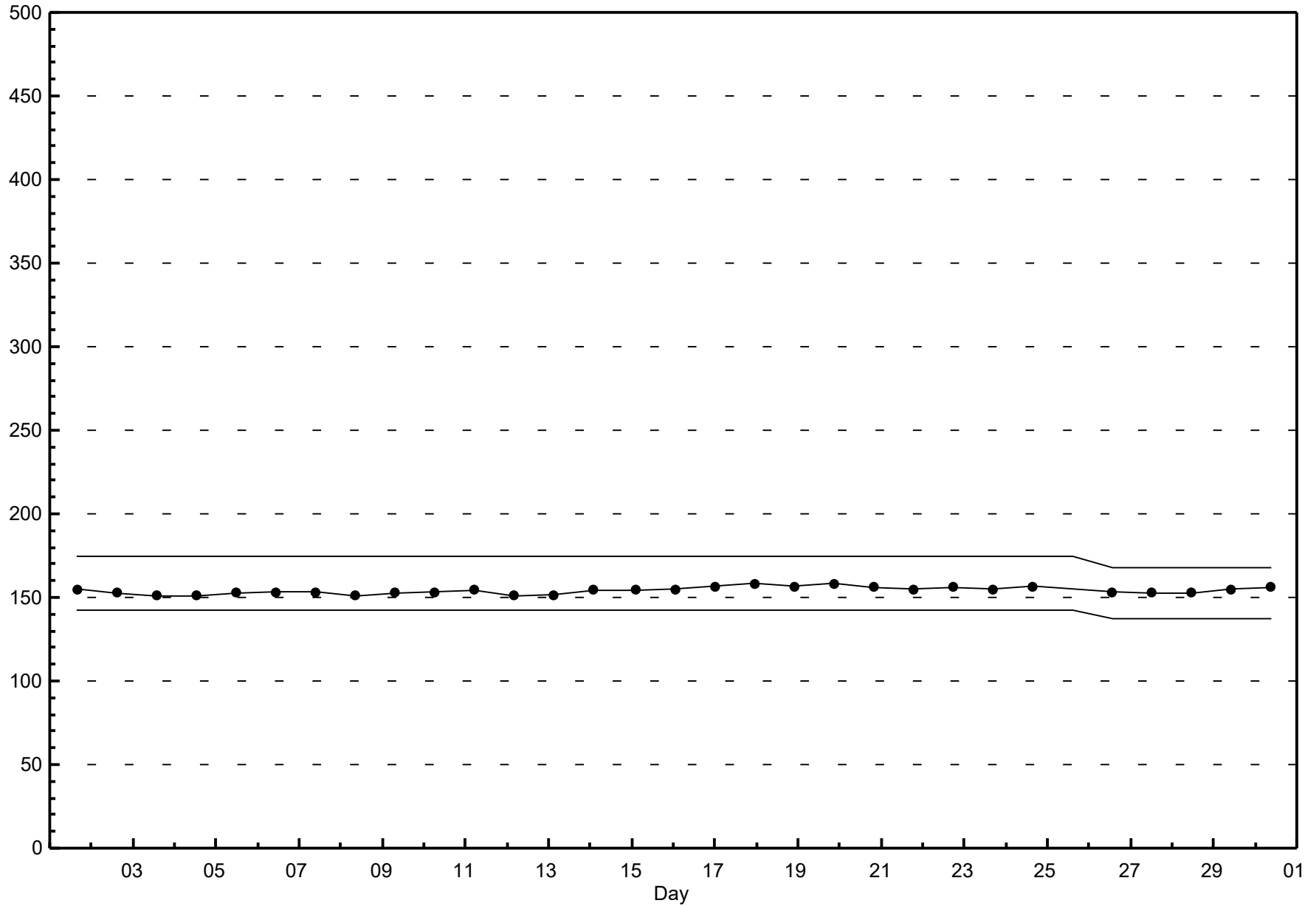
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Portable Rycroft - September 2017



Span Responses

**Nitrogen Dioxide (NO₂)
Portable Rycroft - September 2017**



Hourly Averages

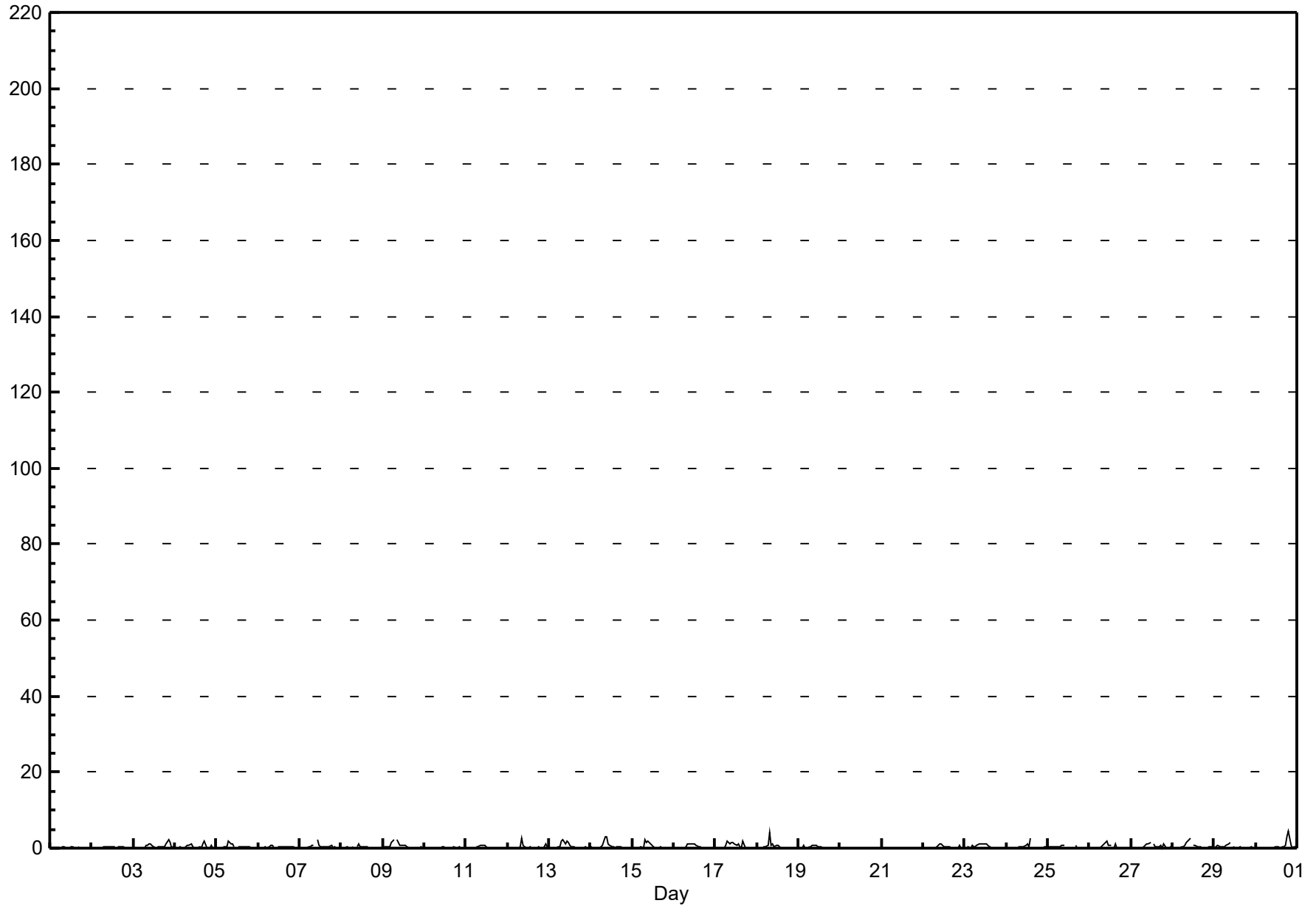
Nitrogen Oxide (NO) - ppb

Portable Rycroft - September 2017

Maximum Value: 4.5 ppb on Sep 30 20:00		Maximum Daily Average: 0.6 ppb on Sep 17		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 10 01:00		Minimum Daily Average: 0.0 ppb on Sep 20		Hours of Data: 684																							
Maximum Diurnal Average: 1.0 ppb at hour 10		Minimum Diurnal Average: 0.1 ppb at hour 2		Hours of Missing Data: 36																							
Monthly Average: 0.35 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.9 P ₉₉ = 2.6		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4	
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Sep	0	0	0	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0	0	1	2	1	0	0	0.5	2.1	
4-Sep	0	0	0	0	0	0	0	1	1	1	0	0	A	0	0	0	1	2	0	0	0	1	0	0	0.4	1.8	
5-Sep	0	0	0	0	0	0	0	2	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0	
6-Sep	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
7-Sep	0	0	0	0	0	0	0	1	1	A	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0.4	2.1	
8-Sep	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
9-Sep	0	0	0	0	0	2	2	A	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	2.3	
10-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
11-Sep	0	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
12-Sep	0	0	0	0	A	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	2.8	
13-Sep	0	0	0	A	0	0	0	2	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	2.4	
14-Sep	0	0	A	0	0	0	0	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.0	
15-Sep	0	A	0	0	0	0	0	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2	
16-Sep	A	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.3	
17-Sep	0	0	0	0	0	0	1	2	1	1	1	1	1	1	0	0	2	0	0	0	0	0	0	0	0.6	1.9	
18-Sep	0	0	0	0	0	0	1	4	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	4.2	
19-Sep	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.9	
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1	
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.1	
22-Sep	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	A	0	0	0	1	0	0	0.3	1.3	
23-Sep	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0.5	1.3	
24-Sep	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3	A	0	0	0	0	0	0	0	0	0.4	2.6	
25-Sep	0	0	0	0	0	0	0	0	1	1	C	C	C	C	C	C	1	0	0	0	0	0	0	0	0.2	0.9	
26-Sep	0	0	0	0	0	0	0	0	1	1	2	1	1	A	0	1	0	0	0	0	0	0	0	0	0.4	1.8	
27-Sep	0	0	0	0	0	0	0	0	1	1	1	1	A	1	0	0	0	1	0	1	0	0	0	0	0.4	1.4	
28-Sep	0	0	0	0	0	0	0	1	2	2	3	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	2.6	
29-Sep	0	0	1	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.4	
30-Sep	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	3	4	1	0	0	1	0.5	4.5	
		0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.7	1.0	1.0	0.9	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	Diurnal Average	
		0.4	0.2	0.6	0.6	0.7	1.5	2.3	4.2	3.0	3.0	2.6	1.5	1.1	1.0	2.6	1.2	1.8	1.8	2.9	4.5	2.1	1.4	1.2	0.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Averages

Nitrogen Oxide (NO) - ppb
Portable Rycroft - September 2017



Hourly Maximums

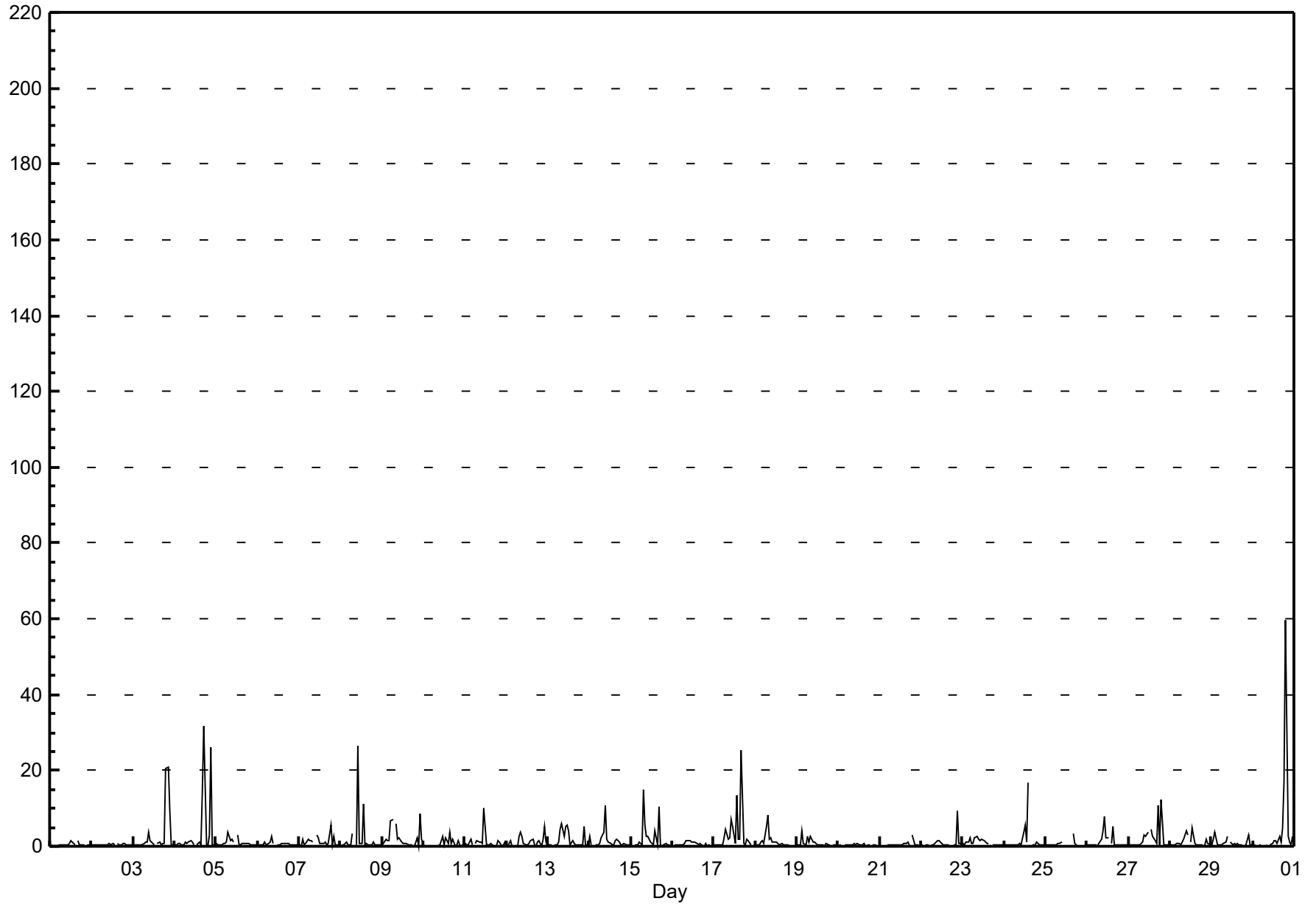
Nitrogen Oxide (NO) - ppb

Portable Rycroft - September 2017

Maximum Value: 59.7 ppb on Sep 30 20:00		Maximum Daily Average: 4.3 ppb on Sep 30		Hours in Service: 720																							
Minimum Value: 0 ppb on Sep 10 01:00		Minimum Daily Average: 0.3 ppb on Sep 20		Hours of Data: 684																							
Maximum Diurnal Average: 3.8 ppb at hour 20		Minimum Diurnal Average: 0.3 ppb at hour 2		Hours of Missing Data: 36																							
Monthly Average: 1.44 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.4 Q ₃ = 1.1 P ₉₀ = 2.7 P ₉₉ = 20.5		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0	0	0	0	0	0	0	1	1	0	0	1	2	1	0	A	2	1	0	0	0	0	0	0	0.4	1.6	
2-Sep	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0.4	0.8	
3-Sep	0	0	0	0	0	0	1	1	1	4	1	1	1	A	1	1	1	1	1	21	21	9	0	0	2.9	21.0	
4-Sep	0	0	1	1	0	0	1	1	1	2	1	0	A	0	1	0	15	32	0	0	3	26	0	0	3.8	31.8	
5-Sep	1	0	0	0	1	1	1	4	1	2	1	A	3	0	1	1	1	1	1	1	0	0	0	0	0.9	3.8	
6-Sep	0	0	0	0	1	0	1	1	3	1	A	0	0	1	1	1	1	1	1	0	0	0	0	0	0.6	2.5	
7-Sep	0	0	2	0	1	2	1	1	1	A	3	2	1	1	1	1	0	1	6	0	3	0	0	0	1.2	5.5	
8-Sep	0	0	1	1	0	0	0	3	A	0	26	1	1	11	0	1	0	0	0	1	0	0	0	0	2.2	26.4	
9-Sep	0	1	2	2	2	7	7	A	6	2	2	1	1	1	1	0	0	0	0	0	2	0	8	2	2.1	8.5	
10-Sep	0	0	0	0	0	0	A	0	0	0	1	2	0	2	1	4	1	2	0	0	1	0	0	1	0.8	3.6	
11-Sep	1	0	0	2	0	A	1	1	1	1	1	10	0	0	0	1	0	0	0	2	1	0	0	1	1.1	10.1	
12-Sep	0	0	1	0	A	0	0	2	4	3	1	0	0	1	2	2	0	0	1	1	0	2	5	1	1.2	5.4	
13-Sep	0	0	0	A	0	0	1	5	6	3	5	5	4	1	1	1	0	0	0	0	0	5	0	0	1.8	5.8	
14-Sep	3	0	A	0	0	0	1	2	4	11	2	1	1	1	0	2	2	1	0	0	1	0	0	0	1.4	10.8	
15-Sep	0	A	0	0	1	1	0	15	6	3	3	1	1	0	4	0	10	0	0	0	1	0	0	0	2.1	15.0	
16-Sep	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	A	0.6	1.4	
17-Sep	0	0	0	0	0	0	2	4	2	2	7	5	1	13	2	2	26	1	1	2	2	0	A	0	3.2	25.5	
18-Sep	0	0	0	1	1	1	5	8	2	2	1	1	1	1	0	1	0	0	0	0	0	A	0	0	1.2	8.0	
19-Sep	0	0	0	4	1	0	3	1	3	1	1	1	1	1	0	0	0	1	0	0	A	0	0	0	0.9	4.2	
20-Sep	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	A	0	0	0	0	0.3	0.8	
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	3	0	0	0	0	0.4	2.9	
22-Sep	0	0	0	0	0	0	0	1	1	1	2	1	1	0	0	0	0	A	0	0	0	9	1	1	0.9	9.4	
23-Sep	1	0	1	1	2	1	1	2	2	2	1	2	1	1	1	1	A	0	0	0	0	0	0	0	1.0	2.5	
24-Sep	0	0	0	0	0	0	0	0	0	1	1	4	5	1	17	A	0	0	0	1	0	0	0	0	1.5	16.8	
25-Sep	0	0	0	0	0	0	0	1	1	1	C	C	C	C	C	C	4	1	0	0	0	0	0	0	0.6	3.5	
26-Sep	0	0	0	0	0	0	0	1	2	4	8	2	2	A	1	5	0	0	0	0	0	0	0	0	1.2	7.9	
27-Sep	0	0	0	0	0	0	0	1	1	3	3	4	A	5	3	1	1	11	0	12	0	0	0	0	2.1	12.4	
28-Sep	0	0	0	0	1	1	0	1	2	4	3	A	1	5	1	0	0	0	0	0	0	2	1	0	1.1	5.0	
29-Sep	0	2	4	0	0	0	0	1	1	3	A	1	0	1	0	1	0	0	0	0	0	3	0	0	0.9	3.7	
30-Sep	0	0	0	0	0	0	0	0	0	A	0	1	1	2	1	3	1	5	17	60	3	1	0	3	4.3	59.7	
		0.4	0.3	0.6	0.6	0.5	0.7	1.0	2.1	1.9	2.1	2.9	1.9	1.2	1.9	1.5	1.1	2.4	2.1	1.1	3.8	1.4	2.2	0.8	0.5	Diurnal Average	
		2.5	1.7	3.7	4.2	2.1	6.9	7.2	15.0	5.8	10.8	26.4	10.1	5.4	13.4	16.8	5.1	25.5	31.8	17.1	59.7	21.0	25.9	8.5	2.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

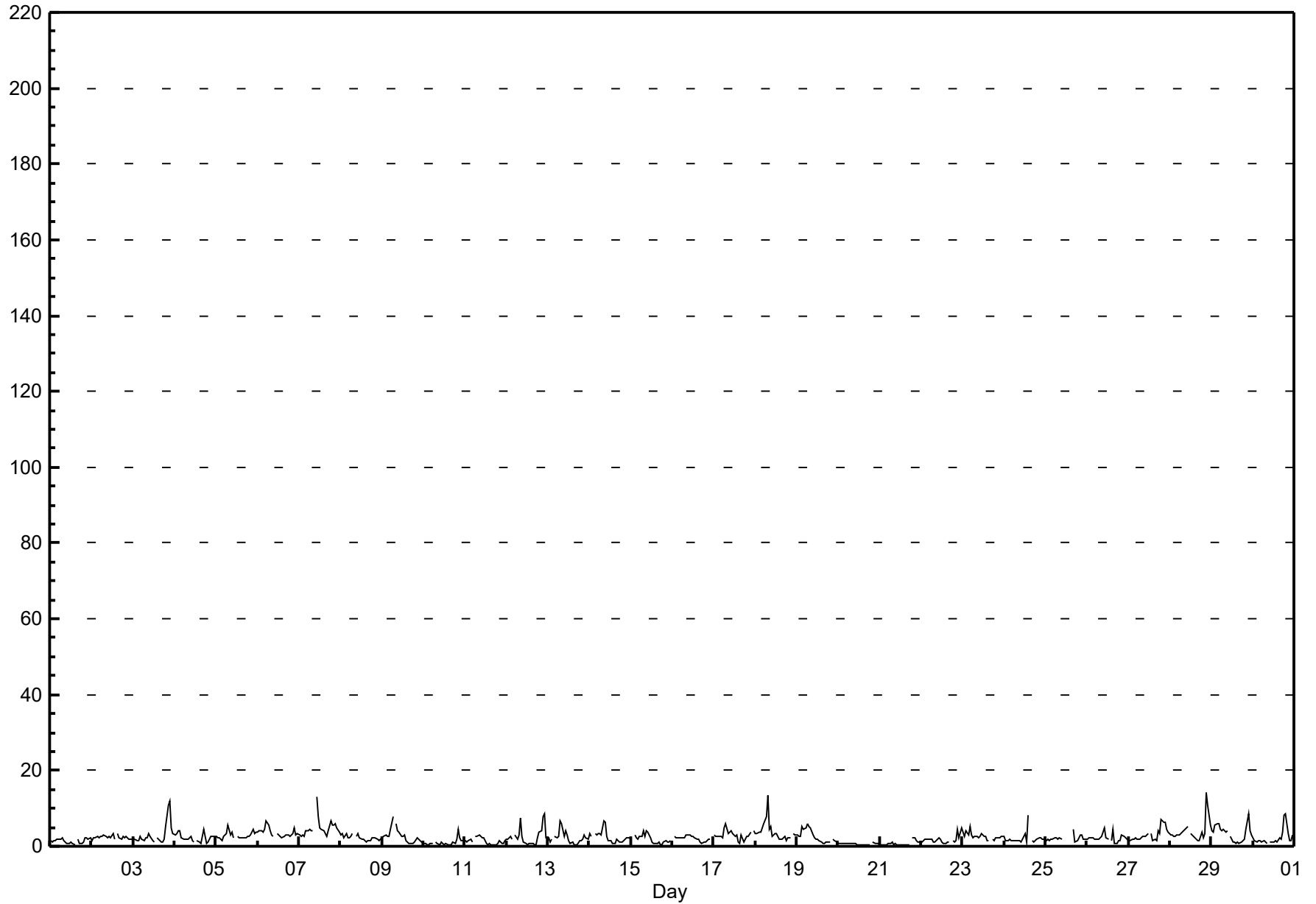
Nitrogen Oxide (NO) - ppb
Portable Rycroft - September 2017



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb Portable Rycroft - September 2017

Maximum Value: 14.3 ppb on Sep 28 22:00		Maximum Daily Average: 4.7 ppb on Sep 7		Hours in Service: 720																						
Minimum Value: 0 ppb on Sep 21 13:00		Minimum Daily Average: 0.6 ppb on Sep 20		Hours of Data: 684																						
Maximum Diurnal Average: 3.7 ppb at hour 22		Minimum Diurnal Average: 1.5 ppb at hour 16		Hours of Missing Data: 36																						
Monthly Average: 2.43 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 1.3 Median = 2.1 Q ₃ = 3.0 P ₉₀ = 4.3 P ₉₉ = 8.1		Hours of Calibration: 36																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	1	1	2	2	2	2	2	2	1	1	1	1	1	0	A	2	1	1	1	2	2	2	2	1.4	2.2
2-Sep	2	2	2	2	2	3	3	3	3	2	3	2	3	2	A	3	2	2	3	2	3	2	2	2	2.4	3.4
3-Sep	2	2	2	2	3	2	2	2	2	3	3	2	1	A	2	2	1	1	2	5	11	12	5	3	3.1	11.9
4-Sep	3	3	4	4	2	2	2	2	2	3	2	1	A	1	1	1	3	4	1	1	2	2	3	3	2.2	4.5
5-Sep	3	2	2	2	3	3	4	6	3	4	2	A	3	2	2	2	2	2	3	3	3	5	3	4	2.9	5.6
6-Sep	4	4	4	4	5	7	5	4	3	2	A	4	3	3	2	3	3	3	3	3	3	5	3	3	3.6	6.5
7-Sep	3	3	3	3	4	4	5	4	4	A	13	8	5	4	4	3	3	4	7	6	6	6	5	4	4.7	13.0
8-Sep	3	3	2	3	2	2	3	3	A	3	3	2	2	2	1	1	1	1	2	2	2	2	2	2	2.2	3.4
9-Sep	2	3	3	3	3	4	8	A	6	4	4	3	2	3	1	1	1	1	1	1	2	2	2	1	2.6	7.7
10-Sep	1	1	0	0	1	1	A	1	1	1	1	1	0	1	0	1	0	1	1	2	4	2	2	2	1.0	4.3
11-Sep	1	1	1	2	1	A	3	2	3	3	2	2	1	0	1	1	0	0	0	1	1	1	1	2	1.3	2.9
12-Sep	2	2	2	2	A	3	2	3	8	3	1	1	0	1	1	1	0	0	2	4	4	8	9	2	2.6	8.5
13-Sep	2	1	2	A	3	2	3	7	6	3	4	3	2	1	1	1	0	0	1	1	2	3	2	2	2.3	6.8
14-Sep	3	3	A	3	3	4	3	3	7	6	3	2	1	1	1	1	2	1	1	1	1	2	2	2	2.4	6.6
15-Sep	2	A	3	2	2	3	3	4	3	4	4	2	1	1	1	1	1	0	1	1	1	1	1	1	1.9	4.2
16-Sep	A	3	2	2	2	2	2	2	3	3	3	3	3	2	2	2	1	1	1	1	2	2	2	A	2.1	3.2
17-Sep	3	3	3	3	3	2	5	6	3	4	4	3	2	3	1	1	3	1	2	3	2	4	A	4	2.9	5.8
18-Sep	3	3	4	4	5	6	8	14	4	5	3	3	3	2	2	2	2	3	1	2	A	A	3	3	3.8	13.5
19-Sep	3	3	3	5	5	5	5	5	5	3	2	2	2	1	1	1	1	1	1	1	A	2	2	1	2.6	6.1
20-Sep	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	0	A	1	1	1	1	0.6	1.0
21-Sep	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	A	2	2	2	1	1	0.7	2.1
22-Sep	1	1	2	2	2	2	2	1	1	2	2	2	1	1	1	1	1	A	2	1	1	4	2	5	1.8	4.8
23-Sep	4	3	4	3	5	3	2	3	3	2	3	3	3	2	2	1	A	2	2	2	2	2	2	3	2.7	5.3
24-Sep	3	2	2	2	2	1	1	1	1	1	1	3	3	1	8	A	1	1	1	2	2	2	2	2	2.0	8.2
25-Sep	2	2	2	2	2	2	2	2	2	2	C	C	C	C	C	C	5	1	2	2	3	3	2	2	2.1	4.7
26-Sep	2	2	2	2	2	2	2	2	3	4	5	2	2	A	2	4	1	1	1	2	3	3	2	2	2.2	4.7
27-Sep	2	2	2	2	2	2	2	2	3	3	3	3	A	3	2	2	1	4	3	7	6	6	4	4	3.1	7.1
28-Sep	3	3	2	3	3	3	3	4	4	5	5	A	3	3	2	2	2	1	4	2	3	14	11	6	4.0	14.3
29-Sep	4	4	5	6	6	4	4	5	4	4	A	3	1	1	1	1	1	1	1	2	4	8	4	3	3.4	8.5
30-Sep	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	4	8	9	3	1	1	3	2.3	8.7
		2.3	2.1	2.3	2.4	2.6	2.7	3.0	3.3	3.1	2.9	2.8	2.3	1.9	1.7	1.6	1.5	1.5	1.6	2.0	2.5	3.0	3.7	2.8	2.5	Diurnal Average
		4.0	4.0	5.5	6.1	6.1	6.5	7.9	13.5	7.6	6.4	13.0	7.9	5.0	4.3	8.2	4.3	4.7	4.5	8.3	8.7	10.9	14.3	10.7	5.7	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								



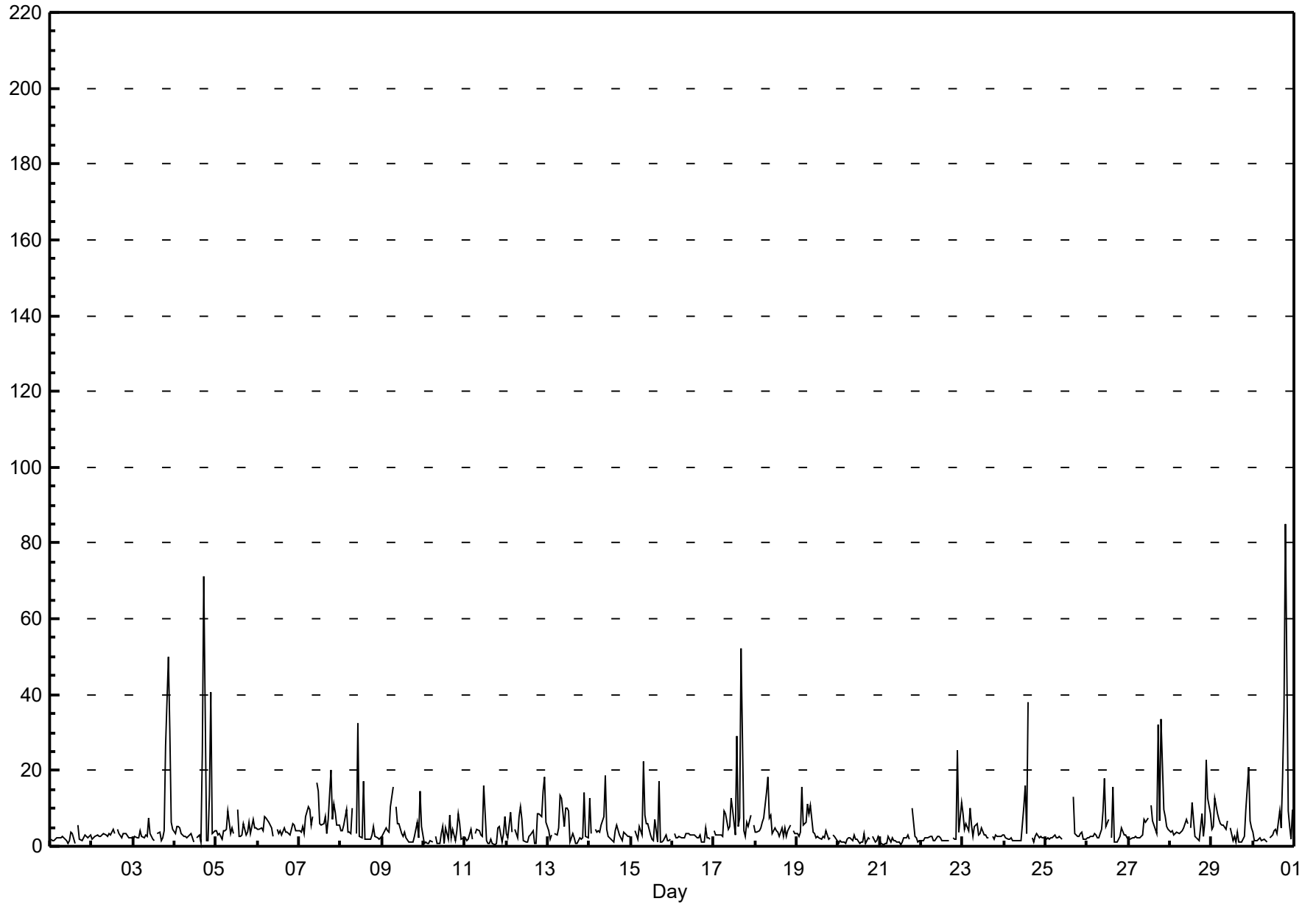
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb Portable Rycroft - September 2017

Maximum Value: 85.1 ppb on Sep 30 20:00		Maximum Daily Average: 9.3 ppb on Sep 30		Hours in Service: 720																																												
Minimum Value: 0 ppb on Sep 21 13:00		Minimum Daily Average: 1.7 ppb on Sep 20		Hours of Data: 684																																												
Maximum Diurnal Average: 8.7 ppb at hour 22		Minimum Diurnal Average: 2.8 ppb at hour 2		Hours of Missing Data: 36																																												
Monthly Average: 4.93 ppb		Percentiles: P ₁ = 0.7 P ₁₀ = 1.4 Q ₁ = 2.1 Median = 3.0 Q ₃ = 5.1 P ₉₀ = 9.4 P ₉₉ = 35.6		Hours of Calibration: 36																																												
				Percent Operational Time: 100.0																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Sep	2	2	2	2	2	2	2	3	2	2	1	2	4	3	1	A	6	2	1	2	3	3	2	3	2.3	5.7																						
2-Sep	2	2	3	3	3	3	3	3	3	3	3	3	5	3	A	4	3	2	4	3	3	2	2	2	3.0	4.6																						
3-Sep	2	3	2	2	4	3	2	3	3	7	3	2	2	A	4	4	2	2	4	26	50	31	6	4	7.4	50.0																						
4-Sep	3	5	5	5	3	2	2	2	3	3	2	1	A	2	3	1	25	71	1	1	14	41	3	4	8.9	71.2																						
5-Sep	4	3	3	2	4	4	4	9	3	5	3	A	10	3	3	3	6	3	4	6	3	7	5	5	4.5	9.7																						
6-Sep	5	4	5	4	8	8	6	6	5	3	A	5	3	4	3	5	4	4	3	3	6	6	4	4	4.6	7.8																						
7-Sep	4	4	5	3	8	10	10	6	8	A	17	15	6	6	6	8	3	7	20	7	11	9	6	6	8.0	20.2																						
8-Sep	4	4	5	10	4	4	3	10	A	3	32	3	2	17	2	2	2	2	3	5	3	2	2	2	5.5	32.3																						
9-Sep	3	3	5	4	4	11	16	A	11	6	6	4	3	4	2	1	1	1	1	2	6	2	14	5	5.0	15.7																						
10-Sep	1	1	1	1	2	1	A	3	1	1	3	5	1	5	2	8	2	4	1	4	9	6	2	2	2.8	8.6																						
11-Sep	2	1	2	5	2	A	4	5	4	3	3	16	2	1	1	2	1	1	1	5	5	1	3	8	3.3	15.9																						
12-Sep	3	2	9	4	A	4	2	8	11	7	2	1	1	3	3	4	1	1	8	9	8	14	18	6	5.7	18.3																						
13-Sep	4	2	3	A	3	3	5	13	13	5	10	10	9	1	3	2	1	1	2	2	2	14	3	2	5.0	14.0																						
14-Sep	13	4	A	4	4	4	4	6	8	19	4	2	2	2	1	4	6	3	2	2	4	3	3	3	4.5	18.6																						
15-Sep	2	A	4	3	2	5	3	22	8	6	6	3	2	2	7	1	17	1	1	2	3	1	1	2	4.6	22.3																						
16-Sep	A	3	2	2	2	2	2	2	4	4	3	3	3	3	2	2	3	1	1	5	2	2	2	A	2.6	4.8																						
17-Sep	4	3	3	3	3	2	9	8	4	5	13	10	3	29	5	8	52	4	2	6	5	8	A	6	8.6	52.3																						
18-Sep	4	4	4	5	6	7	14	18	7	8	4	5	4	4	3	5	2	5	2	4	6	A	4	3	5.6	18.4																						
19-Sep	3	3	4	16	6	6	11	9	11	4	3	2	3	2	2	3	2	4	2	2	A	3	3	1	4.6	15.7																						
20-Sep	1	1	1	1	1	2	2	2	2	3	2	2	1	1	1	3	1	2	2	A	3	1	2	3	1.7	3.4																						
21-Sep	2	1	1	1	1	2	1	2	1	1	1	1	0	1	2	2	3	2	A	10	3	2	1	1	1.9	10.1																						
22-Sep	1	2	2	2	2	3	3	1	2	3	3	2	2	1	2	1	1	A	2	2	2	26	4	12	3.5	25.5																						
23-Sep	8	4	6	4	10	5	3	5	6	3	3	5	3	3	2	2	A	3	2	3	3	3	3	3	4.0	10.0																						
24-Sep	3	2	2	2	2	2	2	2	2	2	2	10	16	3	38	A	2	1	3	3	2	3	2	2	4.7	38.1																						
25-Sep	2	2	2	2	2	3	2	2	3	2	C	C	C	C	C	C	13	3	2	3	3	4	2	2	3.1	13.0																						
26-Sep	2	2	3	3	4	3	2	2	4	9	18	5	7	A	2	16	1	1	2	2	5	3	3	2	4.4	18.1																						
27-Sep	2	2	2	2	3	2	2	3	3	7	6	7	A	11	7	5	3	32	7	34	10	8	5	4	7.3	33.7																						
28-Sep	4	4	3	3	4	3	4	4	5	7	6	A	5	11	3	2	2	2	9	3	6	23	13	9	5.8	22.7																						
29-Sep	4	5	13	9	7	6	6	6	4	7	A	5	2	2	1	4	1	1	2	3	10	21	7	5	5.6	20.9																						
30-Sep	4	2	2	2	2	2	2	2	1	A	2	3	4	4	3	9	5	18	36	85	9	5	2	10	9.3	85.1																						
																								3.4	2.8	3.5	3.7	3.7	4.0	4.6	5.8	4.8	4.9	6.0	4.9	3.8	4.9	4.0	4.1	5.9	6.4	4.6	8.4	6.8	8.7	4.4	4.2	Diurnal Average
																								12.5	5.2	12.5	15.7	10.0	10.5	15.7	22.3	12.8	18.6	32.3	15.9	15.9	29.0	38.1	15.8	52.3	71.2	36.3	85.1	50.0	40.5	18.3	11.6	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

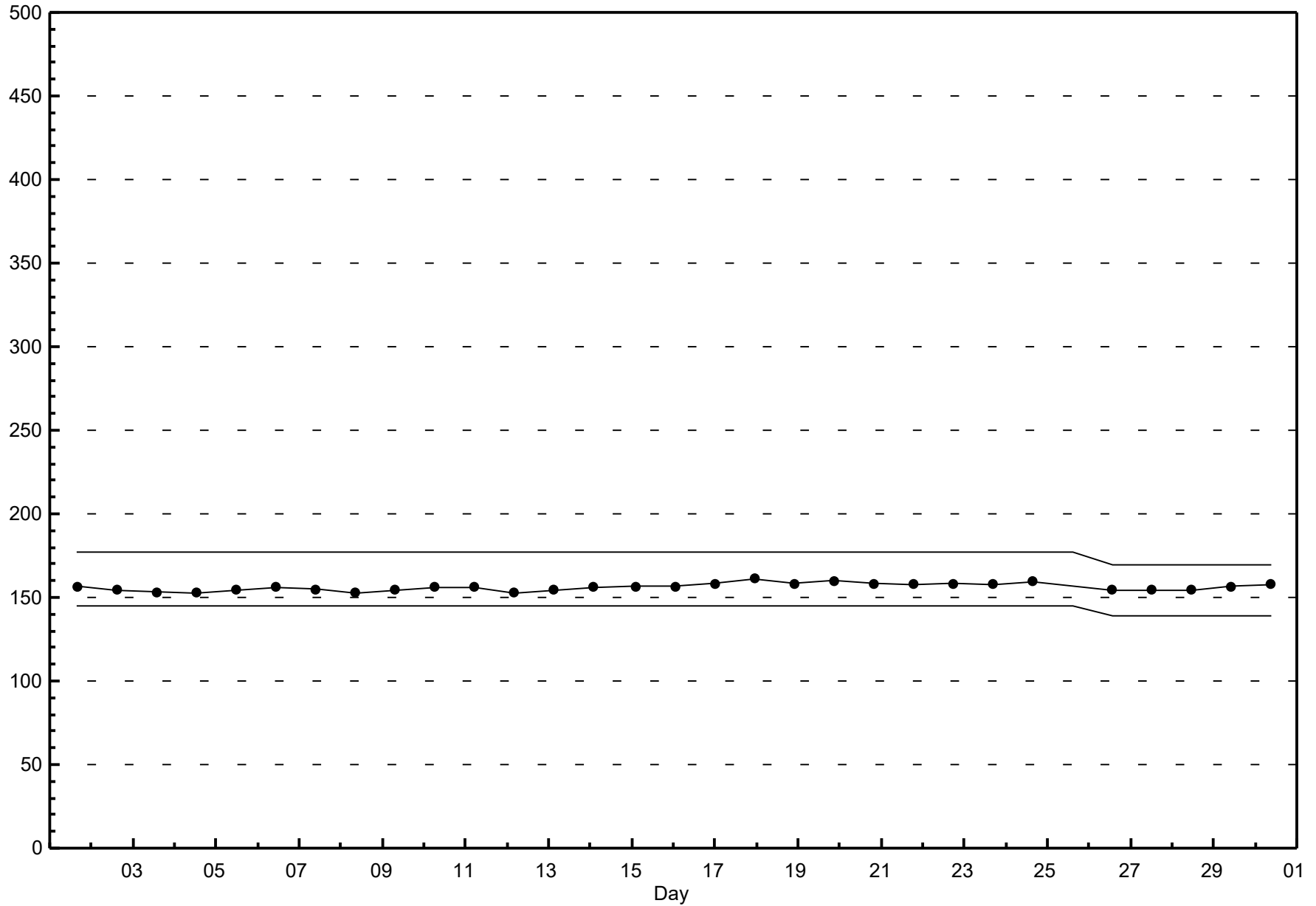
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Portable Rycroft - September 2017



Span Responses

Oxides of Nitrogen (NO_x)
Portable Rycroft - September 2017



Hourly Averages

Ozone (O₃) - ppb

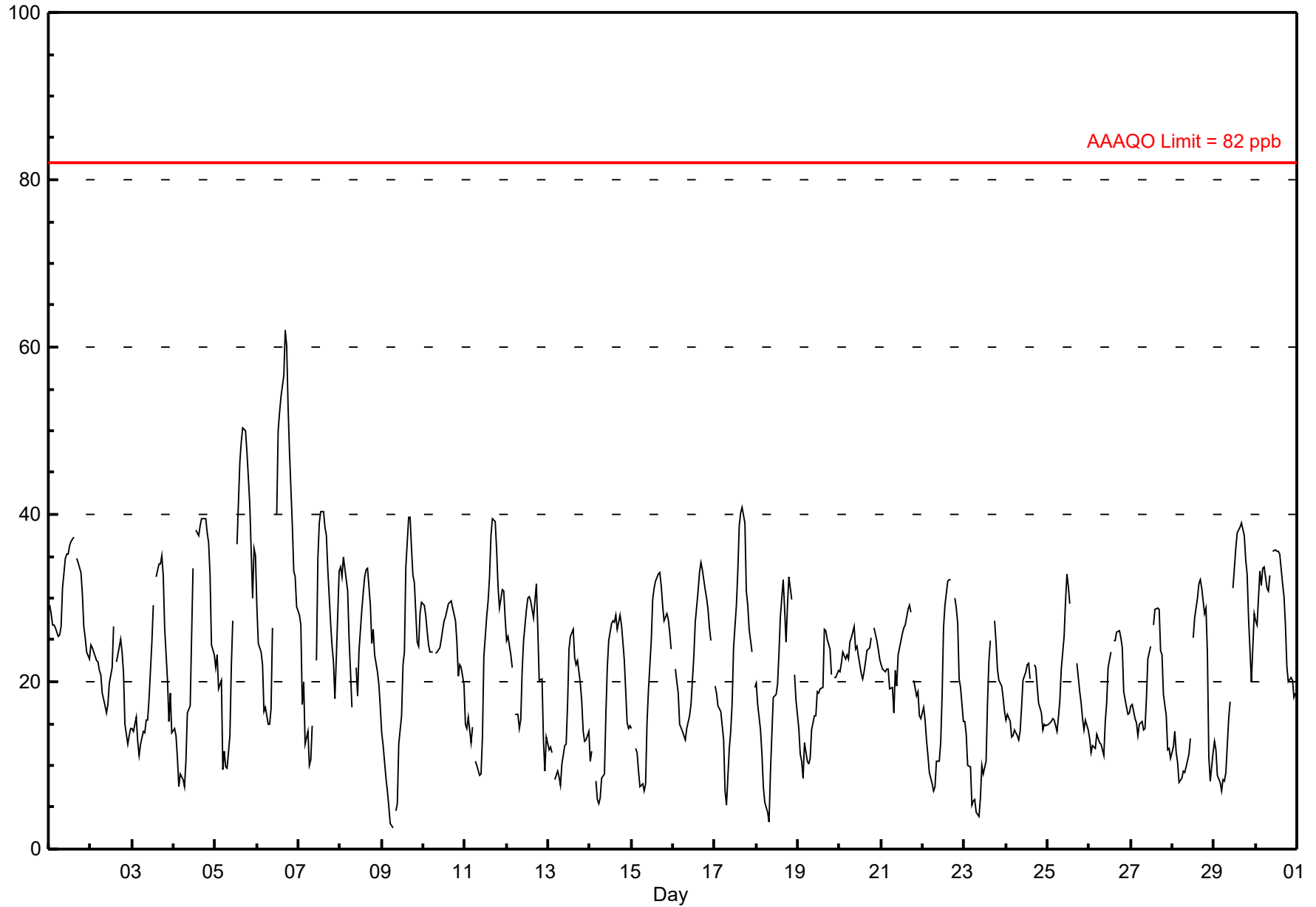
Portable Rycroft - September 2017

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	720
Maximum Value: 62.1 ppb on Sep 6 17:00	Maximum Daily Average: 35.4 ppb on Sep 6		Hours of Data:	687
Minimum Value: 3 ppb on Sep 9 07:00	Minimum Daily Average: 14.0 ppb on Sep 23		Hours of Missing Data:	33
Maximum Diurnal Average: 33.1 ppb at hour 17	Minimum Diurnal Average: 12.9 ppb at hour 7		Hours of Calibration:	33
Monthly Average: 22.07 ppb	Percentiles: P ₁ = 5.0 P ₁₀ = 10.0 Q ₁ = 14.5 Median = 21.7 Q ₃ = 28.3 P ₉₀ = 34.2 P ₉₉ = 49.8		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	29	28	27	27	26	25	26	27	31	35	35	36	37	37	A	35	34	33	31	27	25	24	23	30.1	37.2	
2-Sep	24	24	24	23	22	21	21	19	17	16	17	20	22	27	A	22	23	25	24	21	15	13	14	14	20.3	26.6
3-Sep	14	14	16	13	11	13	14	14	15	15	18	25	29	A	33	34	34	35	33	27	20	15	19	14	20.6	35.1
4-Sep	14	14	11	8	9	8	7	11	16	17	25	34	A	38	37	39	39	39	39	38	37	33	24	23	24.4	39.5
5-Sep	22	23	19	20	10	12	10	10	14	22	27	A	36	41	46	49	50	50	47	44	41	30	36	35	30.2	50.4
6-Sep	29	25	24	22	16	17	15	15	17	26	A	40	50	52	54	57	62	60	53	47	39	33	33	29	35.4	62.1
7-Sep	28	27	17	20	13	14	10	11	15	A	22	35	39	40	40	38	37	33	27	24	22	18	23	33	25.6	40.4
8-Sep	34	33	35	32	31	25	21	17	A	22	18	24	29	31	33	33	34	29	25	26	23	21	20	17	26.6	34.9
9-Sep	14	12	9	7	5	3	3	A	5	5	13	16	22	24	34	40	40	36	33	32	25	24	28	29	19.9	39.7
10-Sep	29	28	26	24	24	24	A	23	24	24	25	26	27	28	29	29	30	29	27	25	21	22	22	20	25.5	29.6
11-Sep	15	14	16	13	15	A	11	10	9	9	13	23	28	30	33	37	39	39	36	31	29	31	31	28	23.4	39.4
12-Sep	25	25	23	22	A	16	16	14	15	21	25	29	30	30	30	28	30	32	27	20	20	13	9	13	22.3	31.6
13-Sep	12	12	12	A	8	9	9	8	10	12	13	17	24	25	26	23	22	23	20	18	14	13	13	14	15.5	26.3
14-Sep	10	12	A	8	6	5	6	8	9	16	22	25	27	27	27	28	26	28	27	25	22	15	14	15	17.8	28.0
15-Sep	14	A	12	12	9	7	8	7	8	15	19	25	30	31	32	33	33	32	29	27	28	28	26	24	21.2	33.1
16-Sep	A	21	20	19	15	14	14	13	14	16	17	20	23	27	31	33	34	33	31	30	29	27	25	A	23.0	34.2
17-Sep	20	19	17	16	15	13	7	5	12	14	17	24	29	33	39	40	41	39	31	29	26	24	A	19	23.0	40.8
18-Sep	20	17	14	11	8	6	4	3	9	14	18	19	20	23	28	32	29	25	29	33	30	A	21	18	18.7	32.6
19-Sep	14	11	10	8	13	10	10	11	14	16	16	19	19	19	19	26	26	25	24	21	A	21	21	21	17.2	26.2
20-Sep	21	22	24	23	23	23	25	25	27	24	24	23	21	20	21	22	24	24	25	A	27	25	24	23	23.5	26.7
21-Sep	22	21	21	21	22	19	19	16	21	20	23	25	26	27	27	29	29	28	A	20	18	19	16	16	22.0	29.1
22-Sep	17	15	13	11	9	8	7	7	10	11	13	18	26	29	32	32	32	A	30	29	27	20	19	15	18.8	32.3
23-Sep	15	14	10	10	5	6	6	4	4	6	10	9	11	18	22	25	A	27	25	22	20	20	18	16	14.0	27.2
24-Sep	15	16	15	13	14	14	14	13	14	17	20	21	22	22	20	A	22	22	20	17	16	14	15	15	17.1	22.2
25-Sep	15	15	15	16	15	14	16	18	22	25	30	33	31	29	C	C	C	22	19	17	16	14	15	14	19.6	32.8
26-Sep	13	12	12	12	14	13	13	13	11	15	17	22	24	A	25	25	26	26	25	24	19	17	16	16	17.8	26.0
27-Sep	17	17	16	15	14	15	15	14	14	18	23	24	A	27	29	29	29	24	23	19	16	12	12	11	18.7	28.7
28-Sep	12	14	12	10	8	9	9	9	10	11	13	A	25	28	30	32	32	31	28	29	23	11	8	12	17.7	32.2
29-Sep	13	12	9	8	7	8	8	9	16	18	A	31	36	38	38	38	39	37	35	33	28	20	24	28	23.1	39.1
30-Sep	27	27	33	31	34	34	31	31	33	A	36	36	36	36	35	32	30	27	22	20	20	20	18	19	29.0	35.8

19.2	18.8	17.6	16.4	14.4	14.0	12.9	13.3	15.0	17.2	20.4	24.9	27.7	29.9	31.7	32.8	33.1	31.6	29.1	26.8	24.1	20.6	20.2	19.8	Diurnal Average	
33.8	32.6	34.9	32.2	33.6	33.7	31.1	30.8	32.7	34.8	35.7	39.9	50.0	52.2	54.1	56.6	62.1	60.1	52.9	47.5	41.1	33.1	36.0	35.1	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na



Hourly Maximums

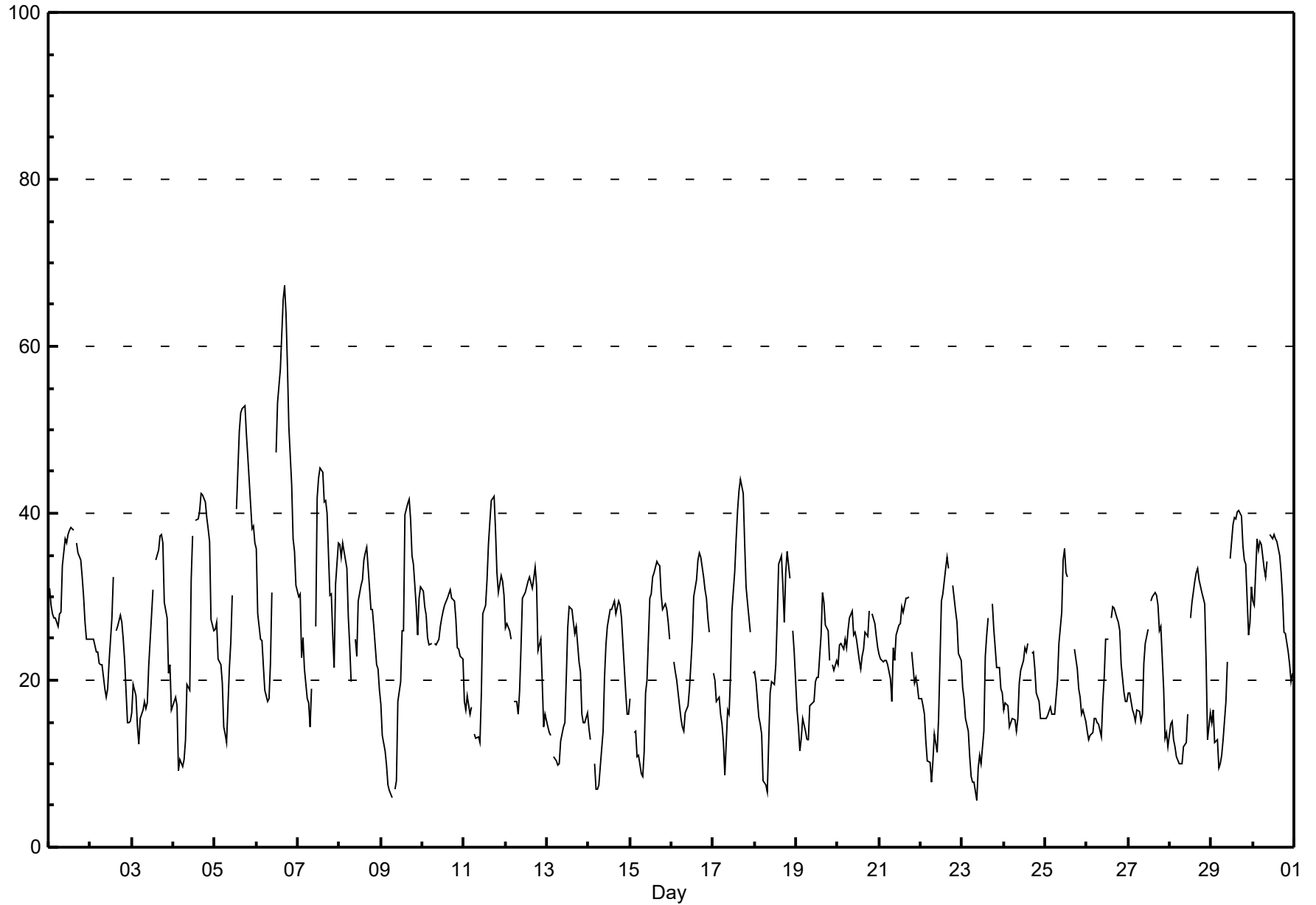
Ozone (O₃) - ppb

Portable Rycroft - September 2017

Maximum Value: 67.3 ppb on Sep 6 17:00		Maximum Daily Average: 39.4 ppb on Sep 6		Hours in Service: 720																																													
Minimum Value: 6 ppb on Sep 23 09:00		Minimum Daily Average: 16.8 ppb on Sep 23		Hours of Data: 687																																													
Maximum Diurnal Average: 35.4 ppb at hour 17		Minimum Diurnal Average: 15.2 ppb at hour 7		Hours of Missing Data: 33																																													
Monthly Average: 24.55 ppb		Percentiles: P ₁ = 7.4 P ₁₀ = 13.0 Q ₁ = 16.8 Median = 24.3 Q ₃ = 30.4 P ₉₀ = 36.9 P ₉₉ = 52.5		Hours of Calibration: 33																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	31	29	28	27	27	26	28	28	34	37	36	37	38	38	A	36	35	34	32	30	27	25	25	31.7	38.2																								
2-Sep	25	25	25	23	23	22	22	22	19	18	19	22	27	32	A	26	26	28	27	25	22	15	15	15	22.8	32.3																							
3-Sep	16	20	18	15	12	15	16	17	17	17	22	28	31	A	34	36	37	37	36	29	27	21	22	16	23.5	37.4																							
4-Sep	17	18	17	9	10	10	11	13	19	19	32	37	A	39	39	40	42	42	41	40	38	37	27	26	27.2	42.5																							
5-Sep	26	27	23	22	20	14	14	13	22	25	30	A	40	45	50	52	52	53	49	47	44	38	38	36	33.9	52.9																							
6-Sep	36	28	25	25	22	19	17	18	22	31	A	47	53	55	57	66	67	64	58	50	43	37	35	31	39.4	67.3																							
7-Sep	30	30	23	25	21	18	17	14	19	A	26	42	44	45	45	41	41	40	30	30	25	21	32	36	30.4	45.4																							
8-Sep	36	35	36	34	33	28	24	20	A	25	23	29	31	32	34	35	36	31	28	28	26	22	21	19	29.1	36.5																							
9-Sep	17	13	12	10	7	7	6	A	7	8	17	20	26	26	40	41	42	39	35	34	29	25	30	31	22.7	41.7																							
10-Sep	31	29	28	25	24	24	A	24	24	25	26	27	28	29	30	30	31	30	29	27	24	24	23	23	26.8	30.9																							
11-Sep	17	16	18	16	17	A	13	13	13	12	18	28	29	32	36	39	41	42	38	33	30	32	32	30	26.0	42.0																							
12-Sep	26	27	26	25	A	17	17	16	19	24	30	30	31	32	32	31	32	34	31	24	25	20	14	16	25.2	33.5																							
13-Sep	14	14	13	A	11	10	10	10	13	14	15	20	26	29	28	27	26	26	22	21	16	15	15	16	17.9	28.9																							
14-Sep	14	13	A	10	7	7	7	10	14	20	24	26	28	28	29	29	28	29	29	27	24	18	16	16	19.9	29.4																							
15-Sep	18	A	14	14	11	11	9	8	11	18	20	30	30	32	33	34	34	34	30	28	29	28	27	25	23.1	34.3																							
16-Sep	A	22	21	20	18	15	14	14	16	17	19	22	25	30	32	34	35	35	32	31	30	27	26	A	24.4	35.3																							
17-Sep	21	20	17	18	16	15	13	9	16	16	20	28	33	37	40	43	44	42	36	31	29	26	A	21	25.7	44.1																							
18-Sep	21	20	16	15	14	8	7	7	13	18	20	22	27	34	35	31	27	33	35	32	A	26	23	21.9	35.5																								
19-Sep	16	14	11	13	15	14	13	13	17	17	20	20	20	25	31	29	27	26	22	A	22	21	22	19.5	30.6																								
20-Sep	22	24	24	24	25	24	26	27	28	25	26	25	22	21	23	24	26	25	28	A	28	27	25	24	25.0	28.4																							
21-Sep	23	23	22	22	22	22	20	17	24	22	25	27	27	29	28	30	30	30	A	23	20	20	19	18	23.7	30.0																							
22-Sep	18	17	16	13	10	10	8	10	14	11	15	22	30	30	33	35	33	A	31	30	28	27	23	22	21.2	34.7																							
23-Sep	19	18	15	14	11	8	8	8	6	9	11	10	14	23	25	27	A	29	26	24	22	22	19	18	16.8	29.1																							
24-Sep	16	17	17	14	15	15	15	14	15	20	21	22	24	23	24	A	23	23	21	18	17	15	15	15	18.5	24.3																							
25-Sep	15	16	16	17	16	16	18	20	24	28	34	36	33	32	C	C	C	24	21	19	18	16	16	15	21.5	35.8																							
26-Sep	14	13	13	14	15	15	15	15	13	17	20	25	25	A	27	29	29	27	27	26	22	18	17	17	19.8	28.8																							
27-Sep	18	18	16	16	15	17	16	15	16	22	24	26	A	29	30	30	30	29	26	26	19	13	14	12	20.9	30.5																							
28-Sep	15	15	13	12	11	10	10	10	10	12	12	16	A	27	29	32	33	33	32	30	29	22	13	16	20.2	33.4																							
29-Sep	15	16	12	13	9	10	11	13	17	22	A	35	39	39	39	40	40	40	36	34	34	25	27	31	26.1	40.3																							
30-Sep	29	29	37	36	37	36	33	32	34	A	37	37	37	37	37	35	33	30	26	26	23	22	20	21	31.5	37.5																							
																								21.3	20.9	19.8	18.6	17.1	16.0	15.2	15.5	17.9	23.1	27.9	30.1	32.3	34.2	35.3	35.4	34.0	31.8	29.4	27.1	23.6	22.6	22.1	Diurnal Average		
																								36.2	34.7	37.0	35.5	36.6	36.2	33.5	32.3	34.2	37.0	37.4	47.2	53.3	55.3	57.4	65.7	67.3	63.9	57.6	50.4	43.9	38.1	38.4	36.5	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									

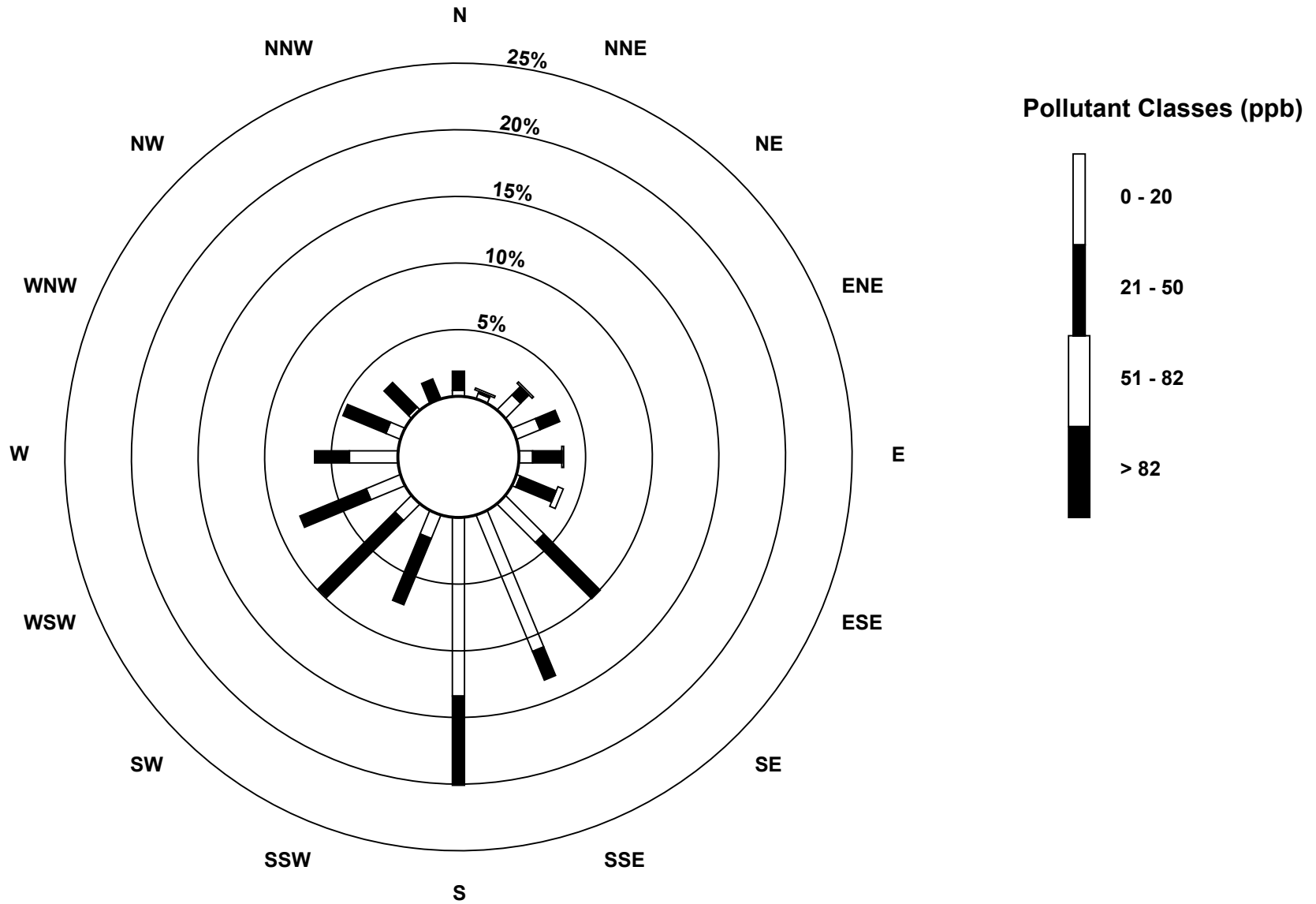
Hourly Maximums

Ozone (O₃) - ppb
Portable Rycroft - September 2017



Pollutant Rose

Ozone (O₃) - ppb
Portable Rycroft - September 2017



Eight Hour Running Averages

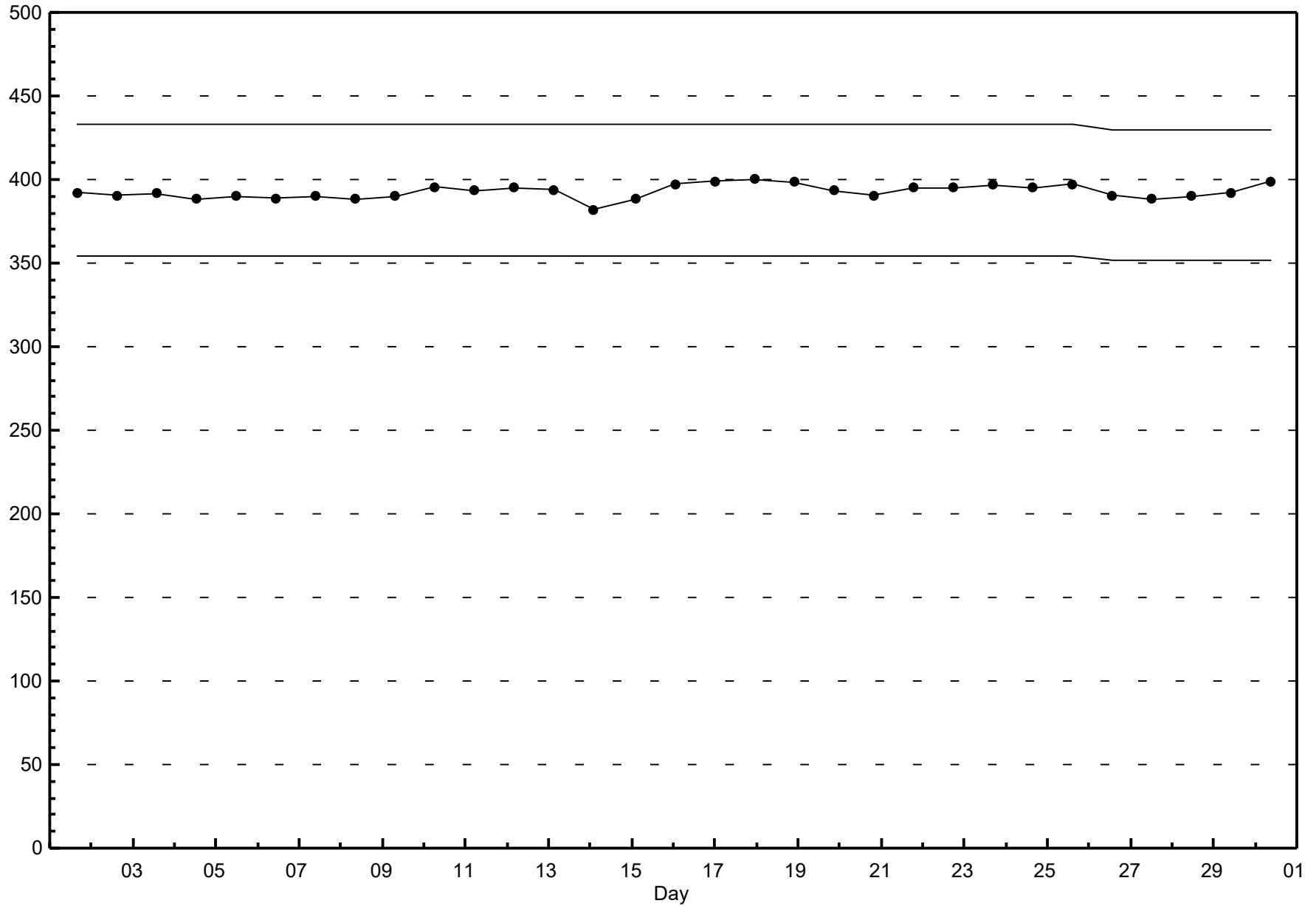
Ozone (O₃) - ppb

Portable Rycroft - September 2017

Maximum Value: 54.4 ppb on Sep 6 20:00																					Hours in Service: 720 Hours of Data: 714 Hours of Missing Data: 6 Hours of Calibration: 6 Percent Operational Time: 100.0				
Minimum Value: 5.2 ppb on Sep 9 10:00																									
Percentiles: P ₁ = 6.9 P ₁₀ = 11.6 Q ₁ = 15.6 Median = 22.0 Q ₃ = 27.5 P ₉₀ = 32.8 P ₉₉ = 47.4																									
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	31	30	29	29	28	28	27	27	27	28	29	30	31	33	34	35	36	36	35	35	33	32	30	29	35.8
2-Sep	28	26	25	24	24	23	23	22	21	20	20	19	19	20	20	20	21	22	23	23	22	20	20	19	27.5
3-Sep	17	16	15	14	14	14	14	14	14	14	14	16	18	19	21	24	27	30	32	32	31	29	27	25	32.0
4-Sep	22	19	17	14	13	12	11	10	10	11	13	16	17	21	26	30	33	36	38	39	38	38	36	34	38.6
5-Sep	32	30	27	25	22	19	17	16	15	14	15	15	19	23	28	34	39	43	46	46	46	45	43	42	46.2
6-Sep	39	36	33	30	27	25	23	20	19	19	18	21	26	31	36	42	49	54	53	54	53	51	48	44	54.4
7-Sep	40	36	32	28	25	23	20	17	16	14	15	17	21	25	29	33	36	36	36	35	33	30	28	27	40.2
8-Sep	27	27	28	29	30	31	30	28	28	26	24	23	22	23	25	27	28	29	30	30	29	28	26	24	30.7
9-Sep	22	20	18	15	13	11	9	8	6	5	6	7	9	12	17	20	24	28	30	32	33	33	32	31	32.8
10-Sep	30	29	28	27	27	27	26	25	25	24	24	24	25	25	26	27	27	28	28	28	27	26	26	24	29.5
11-Sep	22	21	19	18	17	16	15	13	12	12	11	13	15	17	19	23	27	30	33	34	34	34	34	33	34.4
12-Sep	31	29	28	27	26	24	22	20	19	18	19	20	21	23	24	26	28	29	29	28	27	25	22	21	31.2
13-Sep	18	16	14	13	11	11	11	10	10	10	10	11	13	15	17	19	20	22	23	23	21	20	18	17	22.6
14-Sep	16	14	13	12	11	10	9	8	8	8	10	12	15	18	20	23	25	26	27	27	26	25	23	22	26.9
15-Sep	20	19	17	15	13	12	11	10	9	10	11	12	15	18	21	24	27	29	31	31	31	30	29	28	30.9
16-Sep	28	26	25	24	22	20	18	17	16	16	15	15	16	18	20	23	25	27	29	30	31	31	30	30	31.0
17-Sep	28	26	24	22	20	18	15	14	13	12	12	13	15	18	22	26	30	33	34	35	35	34	33	30	35.1
18-Sep	27	24	21	19	16	14	12	10	9	9	10	12	14	17	20	23	24	26	27	29	29	28	26	26	29.3
19-Sep	24	22	20	16	14	13	12	11	11	12	12	14	14	15	17	19	20	21	22	22	23	23	23	23	24.2
20-Sep	22	22	21	22	22	22	23	23	24	24	24	24	24	24	23	23	22	23	23	23	23	24	24	24	24.5
21-Sep	24	24	23	23	22	22	21	20	20	20	20	21	21	22	23	25	26	27	27	26	25	24	23	21	27.2
22-Sep	19	17	17	16	14	13	12	11	10	10	10	10	13	15	18	21	24	26	29	30	30	29	27	25	30.2
23-Sep	22	21	19	16	14	12	10	9	7	6	6	6	7	8	10	13	14	17	19	21	23	23	22	21	23.0
24-Sep	20	19	18	17	16	15	15	14	14	14	15	16	17	18	19	20	21	21	21	21	20	19	18	18	21.4
25-Sep	17	16	15	15	15	15	15	16	16	18	19	22	24	25	27	28	N	N	N	N	N	N	17	17	28.4
26-Sep	16	15	14	14	13	13	13	13	12	13	13	15	16	16	18	20	22	23	25	25	24	23	22	21	24.9
27-Sep	20	19	18	17	16	16	16	15	15	15	16	17	18	19	21	23	25	26	26	25	24	22	20	18	26.3
28-Sep	16	15	13	12	11	11	11	10	10	10	10	10	12	15	18	21	24	27	29	29	27	24	22	22	29.4
29-Sep	19	17	15	12	10	10	10	9	10	10	11	14	18	22	26	31	34	37	37	37	36	34	32	30	36.8
30-Sep	29	28	27	27	28	30	31	31	32	32	33	33	34	34	34	35	34	33	32	30	28	26	24	22	34.6
40.2 36.0 33.0 30.2 29.8 30.7 30.7 31.0 31.7 32.4 32.7 33.4 33.7 33.9 36.3 42.3 48.8 53.6 53.5 54.4 53.0 50.6 47.9 44.5																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Portable Rycroft - September 2017



Hourly Averages

Total Hydrocarbons (THC) - ppm Portable Rycroft - September 2017

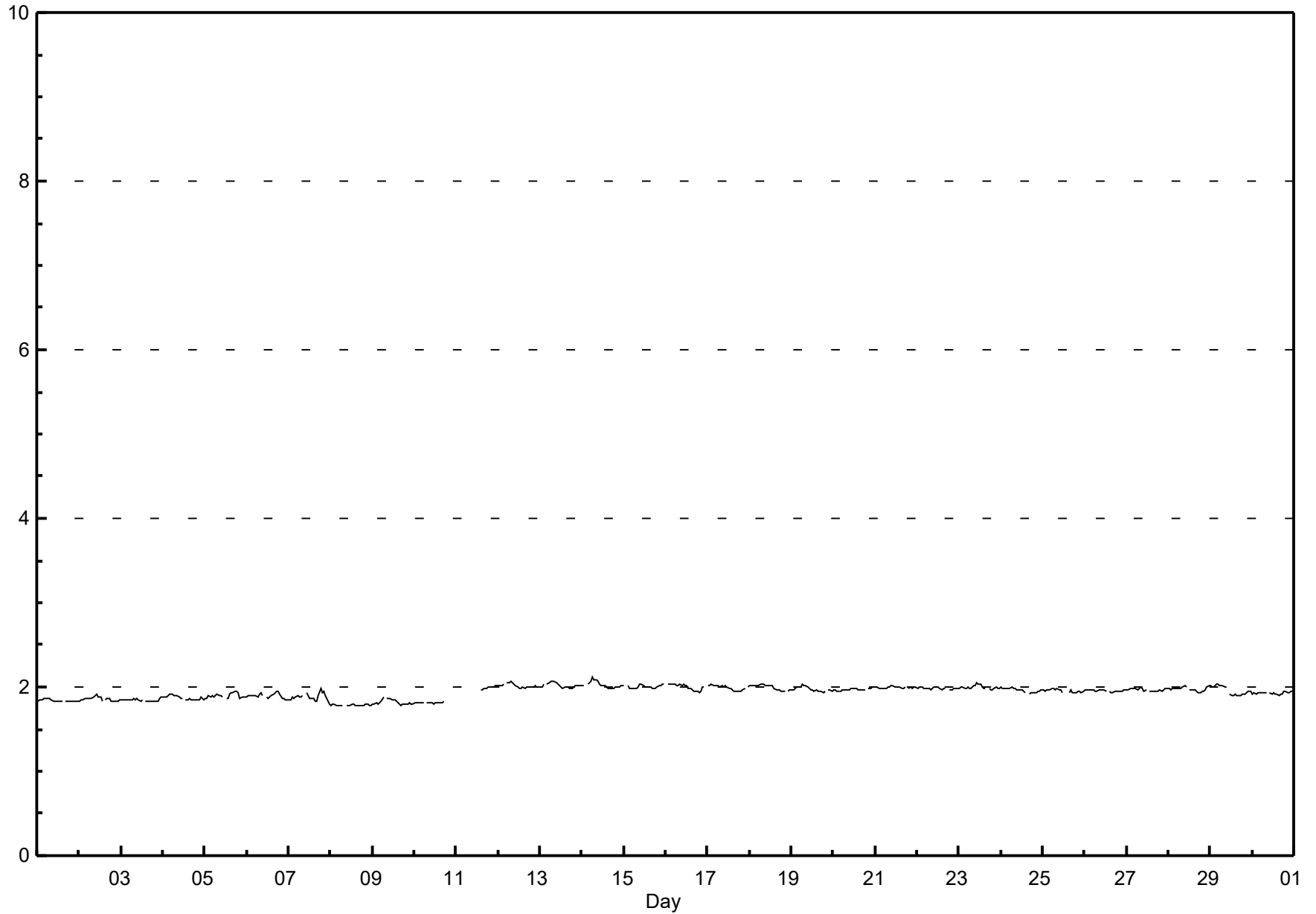
Maximum Value: 2.13 ppm on Sep 14 07:00	Maximum Daily Average: 2.03 ppm on Sep 14	Hours in Service: 720
Minimum Value: 1.8 ppm on Sep 8 19:00	Minimum Daily Average: 1.78 ppm on Sep 8	Hours of Data: 668
Maximum Diurnal Average: 1.96 ppm at hour 9	Minimum Diurnal Average: 1.92 ppm at hour 17	Hours of Missing Data: 52
Monthly Average: 1.939 ppm	Percentiles: P ₁ = 1.78 P ₁₀ = 1.83 Q ₁ = 1.88 Median = 1.96 Q ₃ = 1.99 P ₉₀ = 2.02 P ₉₉ = 2.06	Hours of Calibration: 33
		Percent Operational Time: 97.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	1.87
2-Sep	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.86	1.91
3-Sep	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.85	1.88	
4-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.87	1.91	
5-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.90	1.96	
6-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.90	1.95	
7-Sep	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.88	1.98	
8-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.78	1.80	
9-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.82	1.89	
10-Sep	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	N	N	N	N	N	N	--	1.83	
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.02	
12-Sep	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.06	
13-Sep	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.06	
14-Sep	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.13	
15-Sep	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.03	
16-Sep	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	A	2.00	2.04		
17-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	1.99	2.03		
18-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	A	2.0	2.0	2.00	2.04		
19-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	2.0	A	2.0	2.0	1.98	2.03		
20-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.97	2.00		
21-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.99	2.01		
22-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.98	2.00		
23-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.05		
24-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	2.00		
25-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	M	M	A	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.96	1.99		
26-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.96	1.97		
27-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.97	1.99		
28-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.97	2.01		
29-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.96	2.04		
30-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.95		
1.93 1.94 1.94 1.94 1.94 1.95 1.96 1.96 1.96 1.96 1.95 1.94 1.93 1.93 1.93 1.92 1.92 1.92 1.93 1.93 1.93 1.94 1.94 1.94																								Diurnal Average			
2.02 2.03 2.03 2.04 2.05 2.06 2.13 2.08 2.09 2.06 2.05 2.03 2.03 2.02 2.00 2.01 1.99 2.00 2.01 2.01 2.02 2.02 2.03 2.03																								Diurnal Maximum			

C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span

Hourly Averages

Total Hydrocarbons (THC) - ppm
Portable Rycroft - September 2017



Hourly Maximums

Total Hydrocarbons (THC) - ppm Portable Rycroft - September 2017

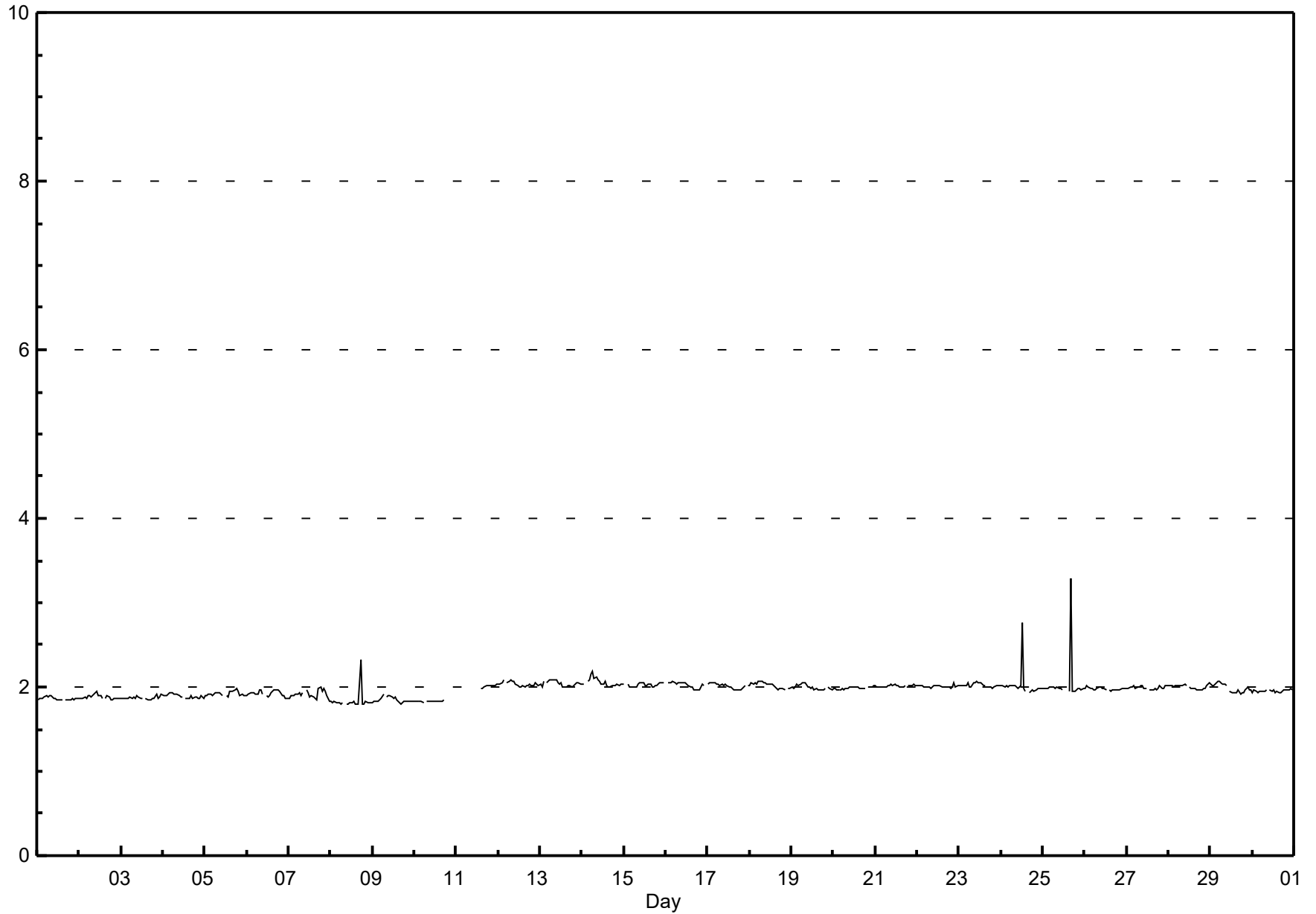
Maximum Value: 3.29 ppm on Sep 25 17:00	Maximum Daily Average: 2.06 ppm on Sep 14	Hours in Service: 720
Minimum Value: 1.8 ppm on Sep 8 11:00	Minimum Daily Average: 1.83 ppm on Sep 8	Hours of Data: 668
Maximum Diurnal Average: 1.99 ppm at hour 9	Minimum Diurnal Average: 1.94 ppm at hour 16	Hours of Missing Data: 52
Monthly Average: 1.967 ppm	Percentiles: P ₁ = 1.80 P ₁₀ = 1.85 Q ₁ = 1.91 Median = 1.98 Q ₃ = 2.02 P ₉₀ = 2.04 P ₉₉ = 2.10	Hours of Calibration: 33
		Percent Operational Time: 97.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.86	1.90
2-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.88	1.95
3-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.87	1.92
4-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.94
5-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.92	1.98
6-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.92	1.97
7-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.8	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.91	2.00
8-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.3	1.8	1.8	1.8	1.8	1.8	1.8	1.83	2.33
9-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	1.92
10-Sep	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	N	N	N	N	N	N	--	1.85
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.04
12-Sep	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.04	2.08
13-Sep	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.09
14-Sep	2.0	2.0	A	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.18
15-Sep	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.05
16-Sep	A	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.02	2.07
17-Sep	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.01	2.06
18-Sep	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.02	2.07
19-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.00	2.06
20-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.99	2.02
21-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.01	2.03
22-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.05
23-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.07
24-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.8	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.76
25-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	M	M	A	2.0	3.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	3.29
26-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.01
27-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.01
28-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.05
29-Sep	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.99	2.07
30-Sep	1.9	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	A	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.95	1.99
1.96 1.96 1.97 1.97 1.97 1.98 1.98 1.98 1.99 1.98 1.97 1.96 1.99 1.95 1.95 1.94 1.99 1.96 1.95 1.95 1.96 1.97 1.96 1.96																								Diurnal Average		
2.04 2.06 2.07 2.08 2.08 2.15 2.18 2.10 2.11 2.09 2.07 2.05 2.76 2.07 2.03 2.03 3.29 2.33 2.04 2.02 2.04 2.06 2.04 2.05																								Diurnal Maximum		

C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span

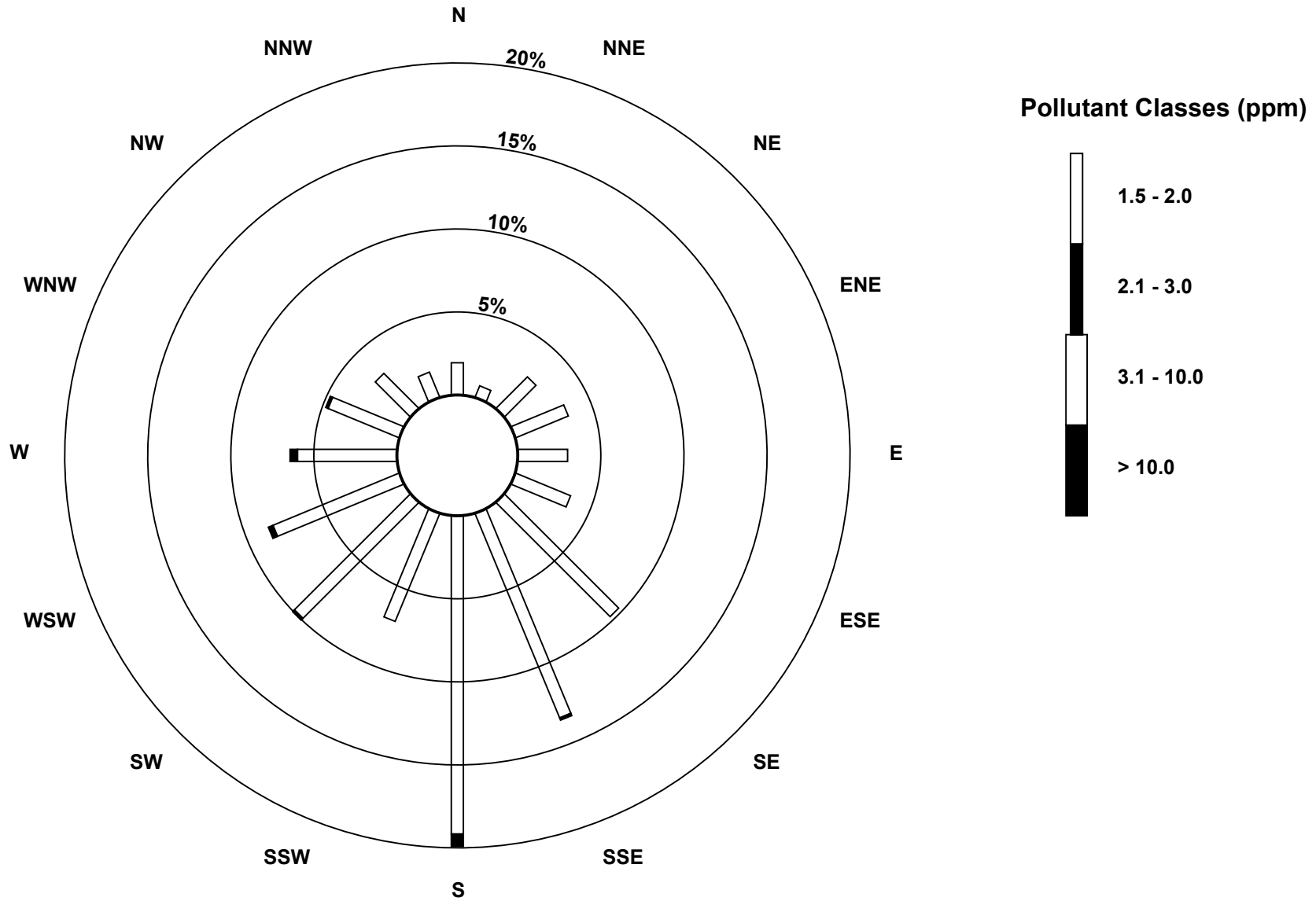
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Portable Rycroft - September 2017



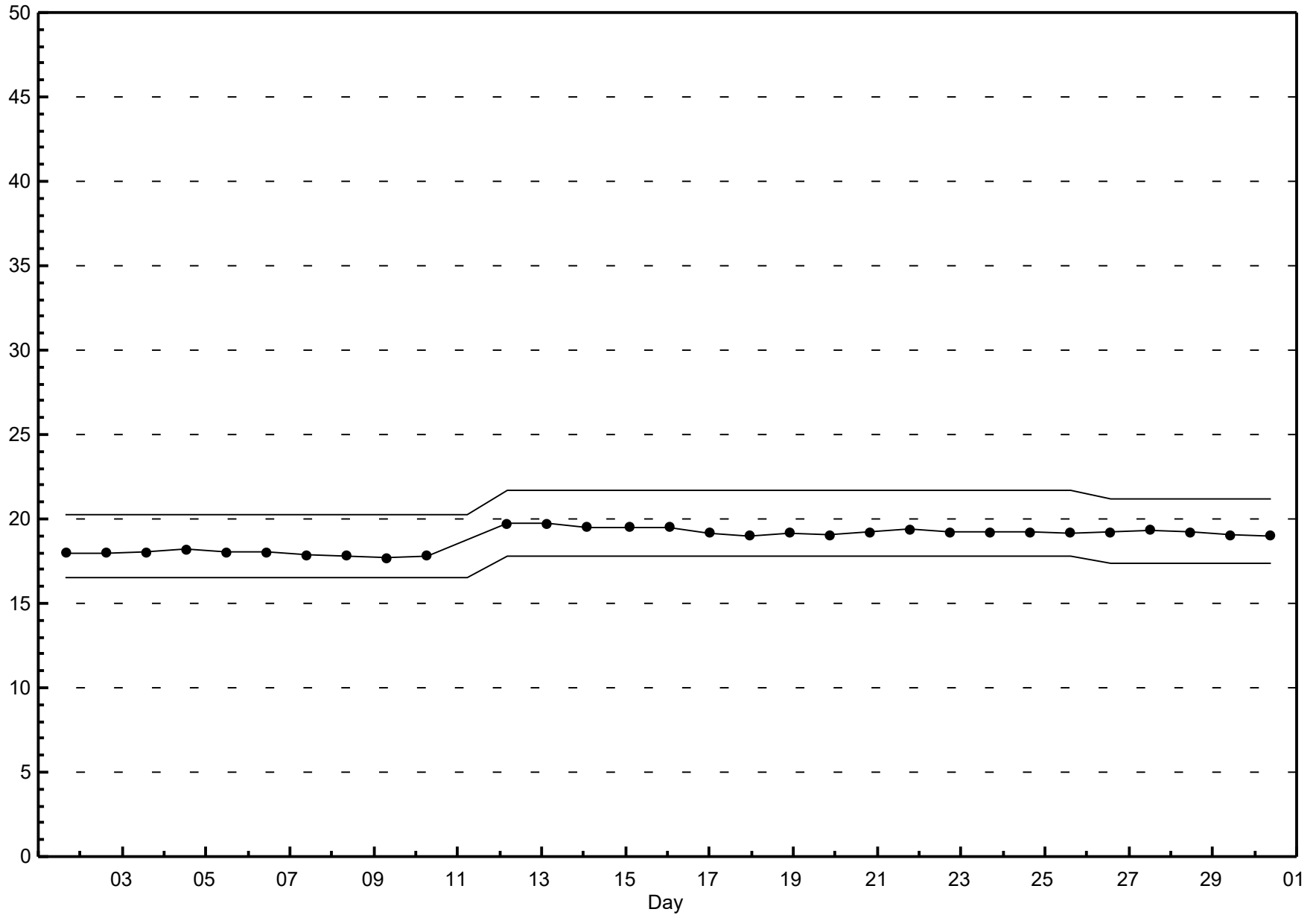
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Portable Rycroft - September 2017



Span Responses

**Total Hydrocarbons (THC)
Portable Rycroft - September 2017**

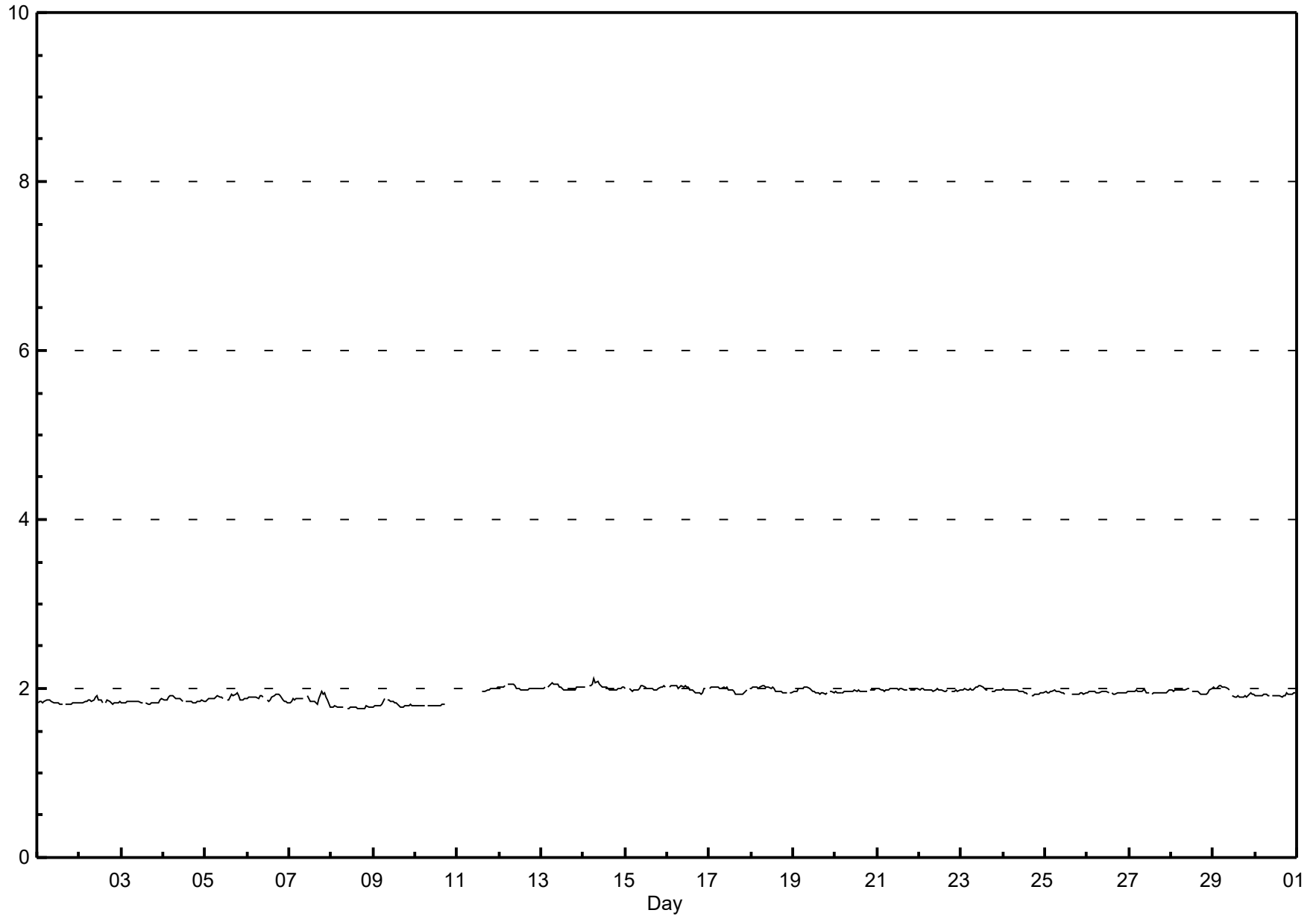


Hourly Averages

Methane (CH₄) - ppm

Portable Rycroft - September 2017

Maximum Value: 2.12 ppm on Sep 14 07:00 Maximum Daily Average: 2.02 ppm on Sep 14 Minimum Value: 1.8 ppm on Sep 8 18:00 Minimum Daily Average: 1.78 ppm on Sep 8 Maximum Diurnal Average: 1.96 ppm at hour 9 Minimum Diurnal Average: 1.91 ppm at hour 17 Monthly Average: 1.933 ppm Percentiles: P ₁ = 1.77 P ₁₀ = 1.82 Q ₁ = 1.87 Median = 1.95 Q ₃ = 1.99 P ₉₀ = 2.01 P ₉₉ = 2.06																								Hours in Service:	720														
																								Hours of Data:	668														
																								Hours of Missing Data:	52														
																								Hours of Calibration:	33														
																								Percent Operational Time:	97.4														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24															
1-Sep	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.83	1.87												
2-Sep	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	1.91												
3-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.84	1.87													
4-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.86	1.91													
5-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.95													
6-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.89	1.94													
7-Sep	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.87	1.97													
8-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.78	1.80													
9-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.81	1.88													
10-Sep	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	N	N	N	N	N	N	--	1.82													
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.02													
12-Sep	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.06													
13-Sep	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.06													
14-Sep	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.12													
15-Sep	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.03													
16-Sep	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	A	2.00	2.03													
17-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	1.98	2.03													
18-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	2.0	1.99	2.03													
19-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	1.9	1.97	2.02													
20-Sep	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.97	1.99													
21-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.99	2.01													
22-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.00													
23-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.04													
24-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	1.99													
25-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	M	M	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	1.98													
26-Sep	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.95	1.97														
27-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.96	1.99														
28-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.97	2.01														
29-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.03													
30-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	1.94													
	1.93	1.93	1.94	1.94	1.94	1.95	1.96	1.95	1.96	1.95	1.95	1.93	1.93	1.92	1.92	1.92	1.91	1.92	1.92	1.92	1.93	1.93	1.93	1.93	Diurnal Average														
	2.02	2.02	2.03	2.03	2.04	2.06	2.12	2.07	2.08	2.06	2.04	2.03	2.02	2.02	2.00	2.00	1.99	1.99	2.00	2.00	2.01	2.02	2.03	2.02	Diurnal Maximum														
C - Calibration																								M - Maintenance				N - Not Valid				A - Automated Daily Zero Span							



Hourly Maximums

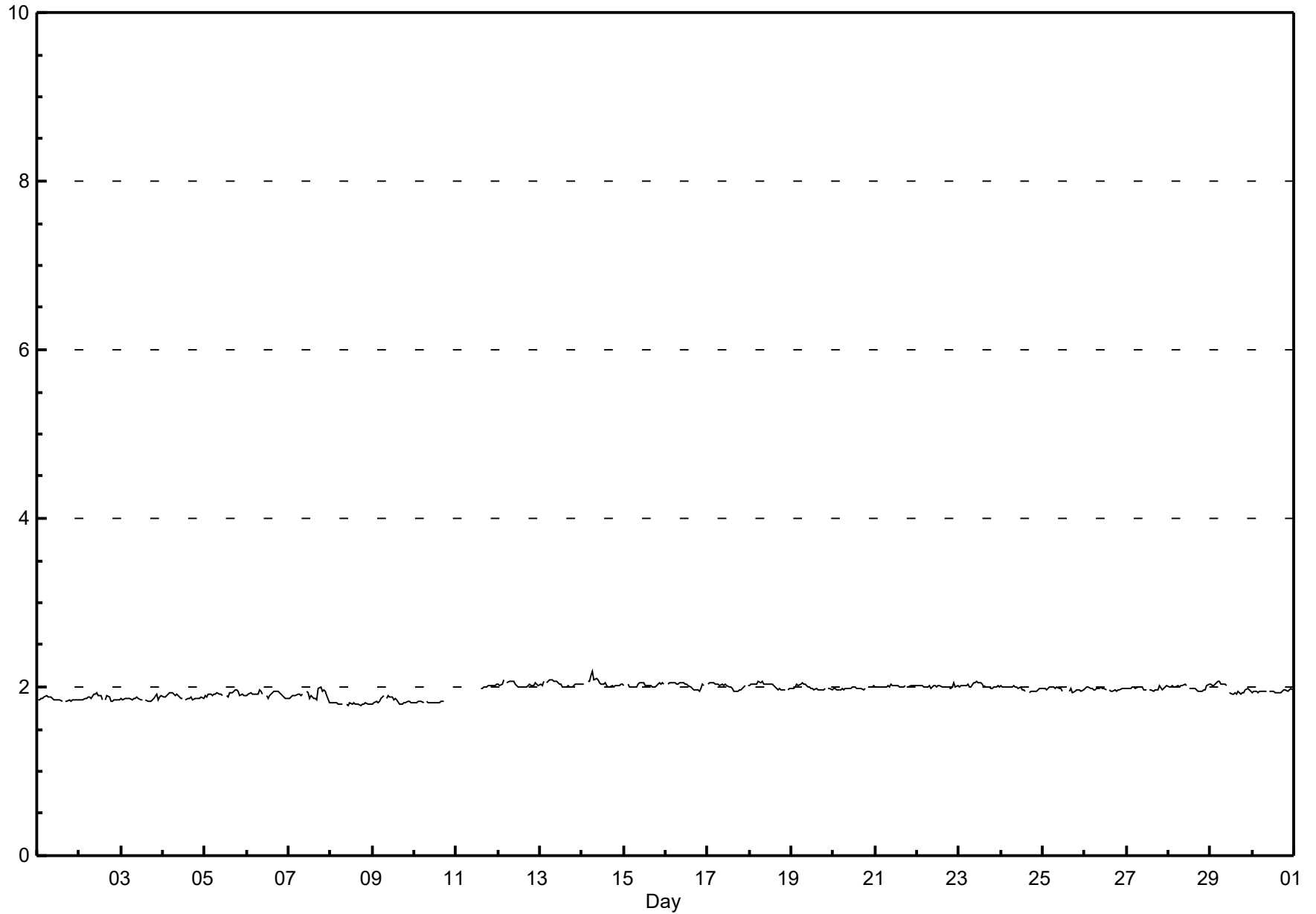
Methane (CH₄) - ppm

Portable Rycroft - September 2017

Maximum Value: 2.18 ppm on Sep 14 07:00		Maximum Daily Average: 2.05 ppm on Sep 14		Hours in Service: 720 Hours of Data: 668 Hours of Missing Data: 52 Hours of Calibration: 33 Percent Operational Time: 97.4																						
Minimum Value: 1.8 ppm on Sep 8 18:00		Minimum Daily Average: 1.80 ppm on Sep 8																								
Maximum Diurnal Average: 1.98 ppm at hour 9		Minimum Diurnal Average: 1.94 ppm at hour 17																								
Monthly Average: 1.957 ppm		Percentiles: P ₁ = 1.80 P ₁₀ = 1.84 Q ₁ = 1.90 Median = 1.98 Q ₃ = 2.01 P ₉₀ = 2.04 P ₉₉ = 2.09																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.85	1.90
2-Sep	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.87	1.94
3-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.86	1.91	
4-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.93	
5-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.92	1.97	
6-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.92	1.97	
7-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.8	2.0	2.0	2.0	2.0	1.9	1.9	1.91	1.99	
8-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.80	1.81	
9-Sep	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	1.90	
10-Sep	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	N	N	N	N	N	N	--	1.84
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.04	
12-Sep	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.08	
13-Sep	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.09	
14-Sep	2.0	2.0	A	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.18	
15-Sep	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.05	
16-Sep	A	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.06	
17-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.01	2.05	
18-Sep	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.01	2.06	
19-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.99	2.05	
20-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.99	2.01	
21-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.01	2.03	
22-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.00	2.05	
23-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.06	
24-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.98	2.01	
25-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	M	M	A	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.97	2.00	
26-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.00	
27-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.01	
28-Sep	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.04	
29-Sep	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.98	2.06	
30-Sep	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.95	1.98	
		1.95	1.95	1.96	1.96	1.96	1.97	1.98	1.97	1.98	1.97	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.95	Diurnal Average	
		2.03	2.05	2.06	2.08	2.07	2.14	2.18	2.09	2.11	2.08	2.06	2.05	2.05	2.03	2.03	2.01	2.01	2.03	2.02	2.04	2.06	2.04	2.04	Diurnal Maximum	
C - Calibration		M - Maintenance						N - Not Valid						A - Automated Daily Zero Span												

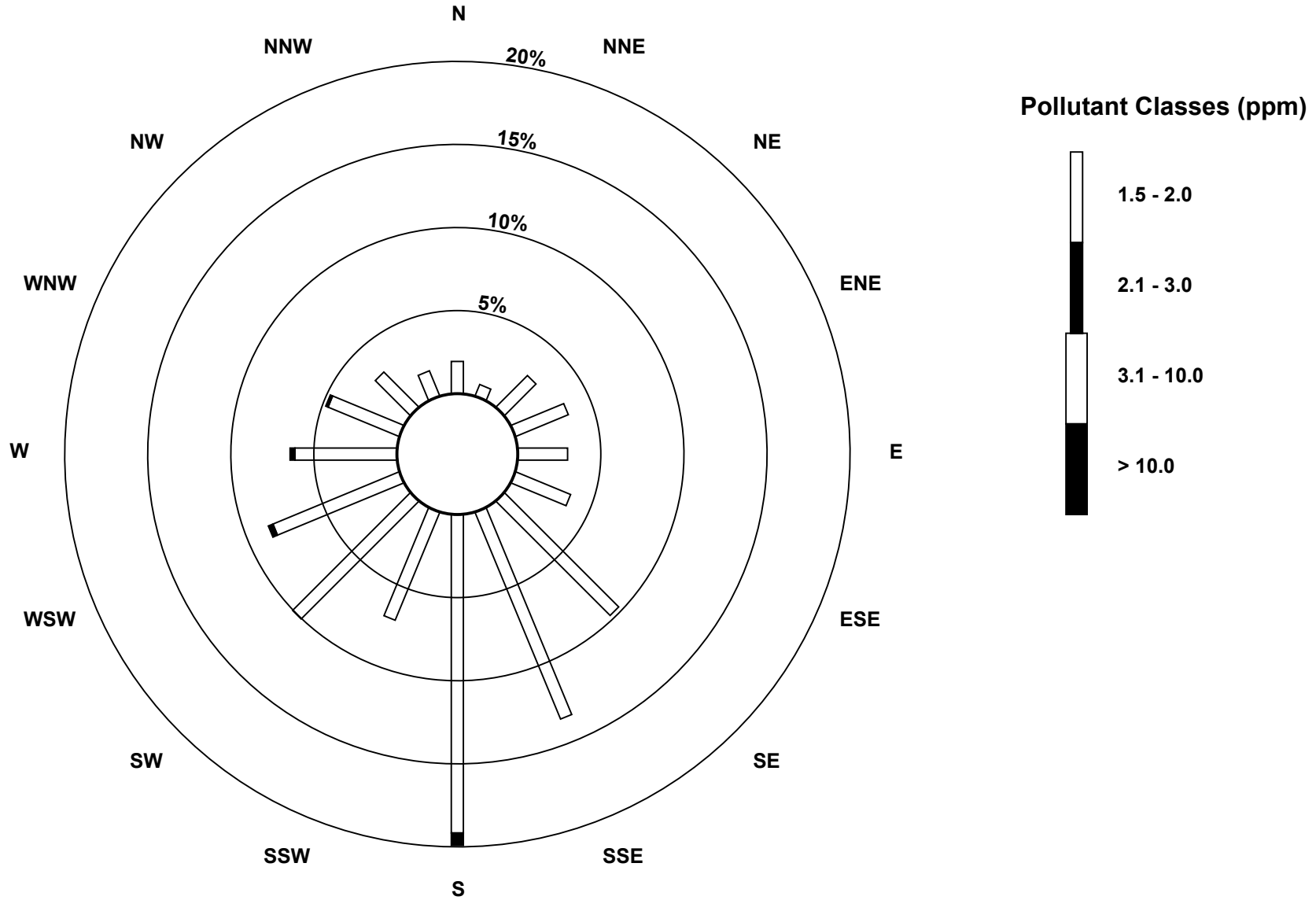
Hourly Maximums

Methane (CH₄) - ppm
Portable Rycroft - September 2017



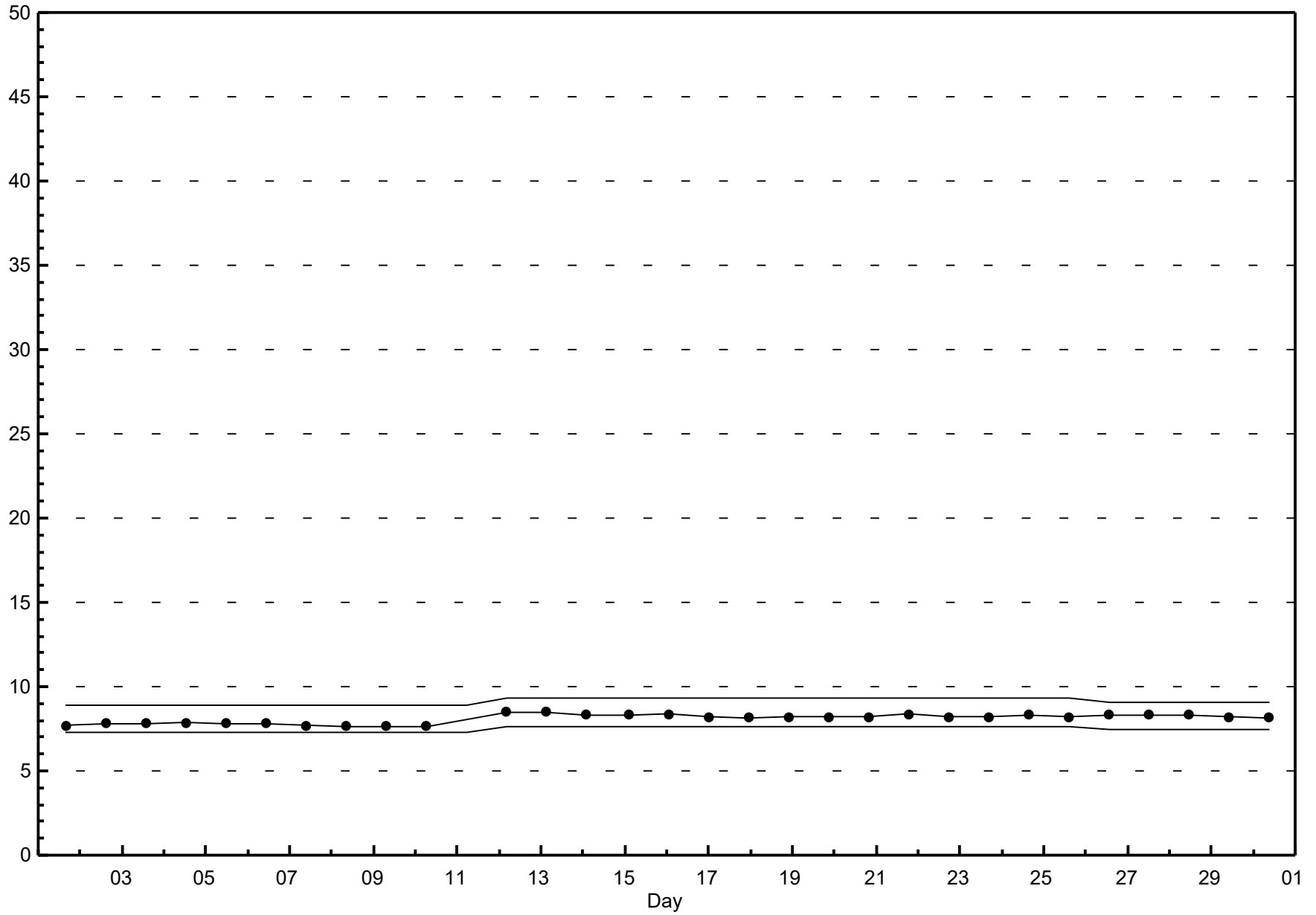
Pollutant Rose

Methane (CH₄) - ppm
Portable Rycroft - September 2017



Span Responses

Methane (CH₄)
Portable Rycroft - September 2017

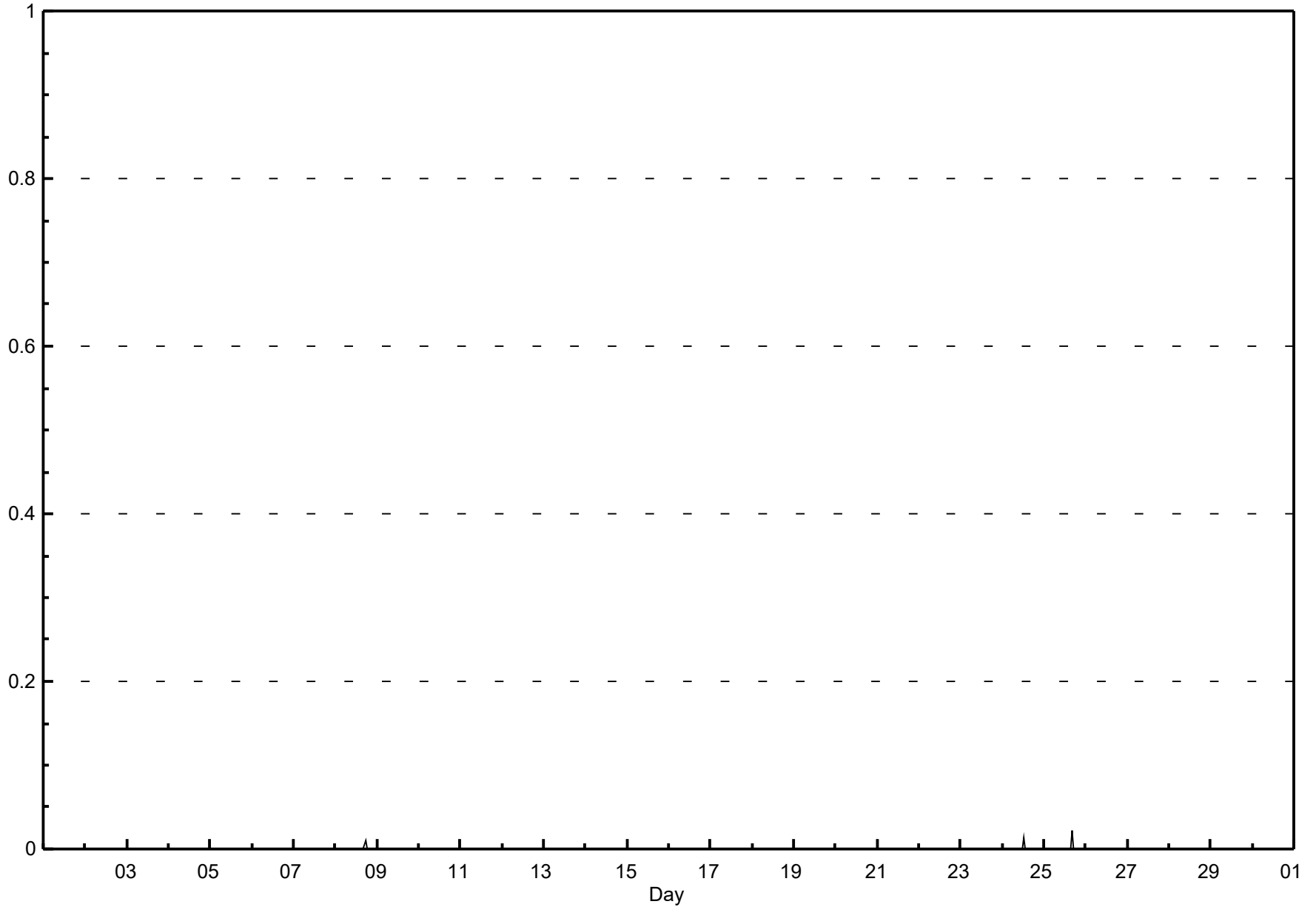


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Portable Rycroft - September 2017

Maximum Value: 0.02 ppm on Sep 25 17:00 Maximum Daily Average: 0.00 ppm on Sep 25 Minimum Value: 0.0 ppm on Sep 1 01:00 Minimum Daily Average: 0.00 ppm on Sep 1 Maximum Diurnal Average: 0.00 ppm at hour 17 Minimum Diurnal Average: 0.00 ppm at hour 5 Monthly Average: 0.000 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	720		
																								Hours of Data:	668		
																								Hours of Missing Data:	52		
																								Hours of Calibration:	33		
																								Percent Operational Time:	97.4		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
6-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01
9-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	N	--	0.00
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00
12-Sep	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
13-Sep	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-Sep	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-Sep	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-Sep	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
18-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
21-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	M	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.02
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																											

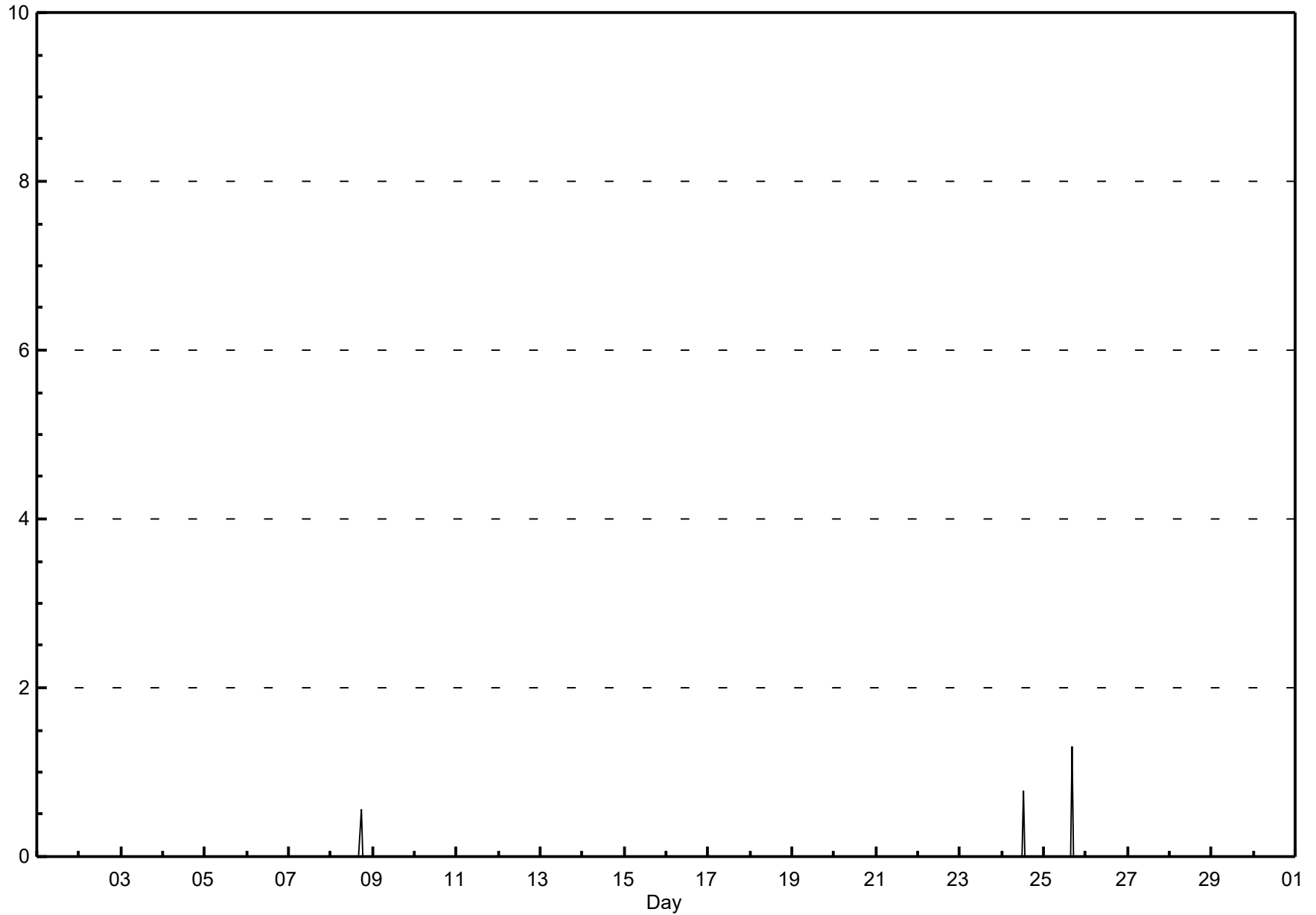


Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Portable Rycroft - September 2017

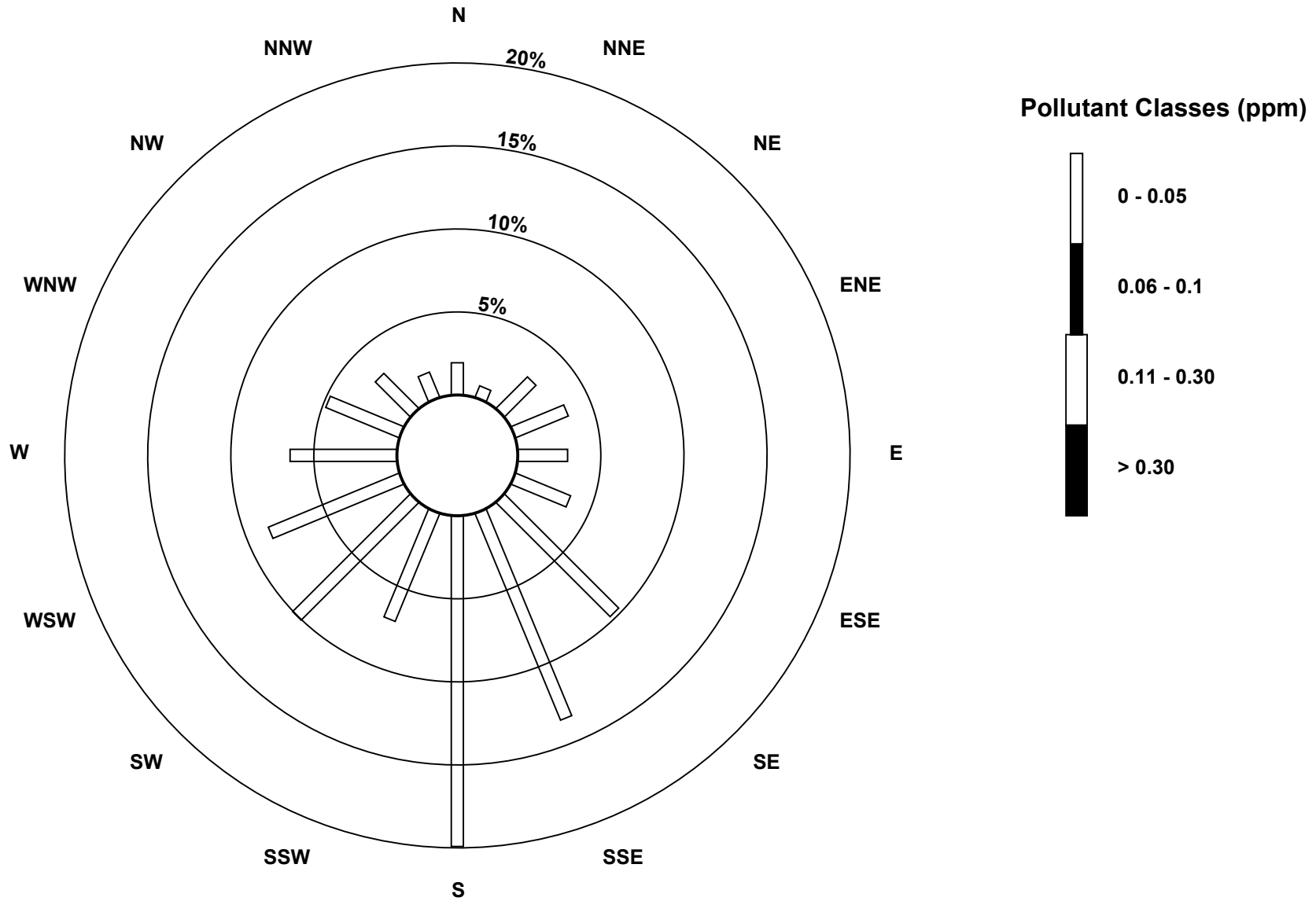
Maximum Value: 1.31 ppm on Sep 25 17:00 Maximum Daily Average: 0.06 ppm on Sep 25 Minimum Value: 0.0 ppm on Sep 1 01:00 Minimum Daily Average: 0.00 ppm on Sep 1 Maximum Diurnal Average: 0.05 ppm at hour 17 Minimum Diurnal Average: 0.00 ppm at hour 2 Monthly Average: 0.004 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	720		
																								Hours of Data:	668		
																								Hours of Missing Data:	52		
																								Hours of Calibration:	33		
																								Percent Operational Time:	97.4		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
6-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.55
9-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	N	--	0.00
11-Sep	N	N	N	N	N	N	N	N	N	N	N	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00
12-Sep	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
13-Sep	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-Sep	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-Sep	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-Sep	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
18-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
21-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.78
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	M	A	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	1.31	
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	1.31	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																											

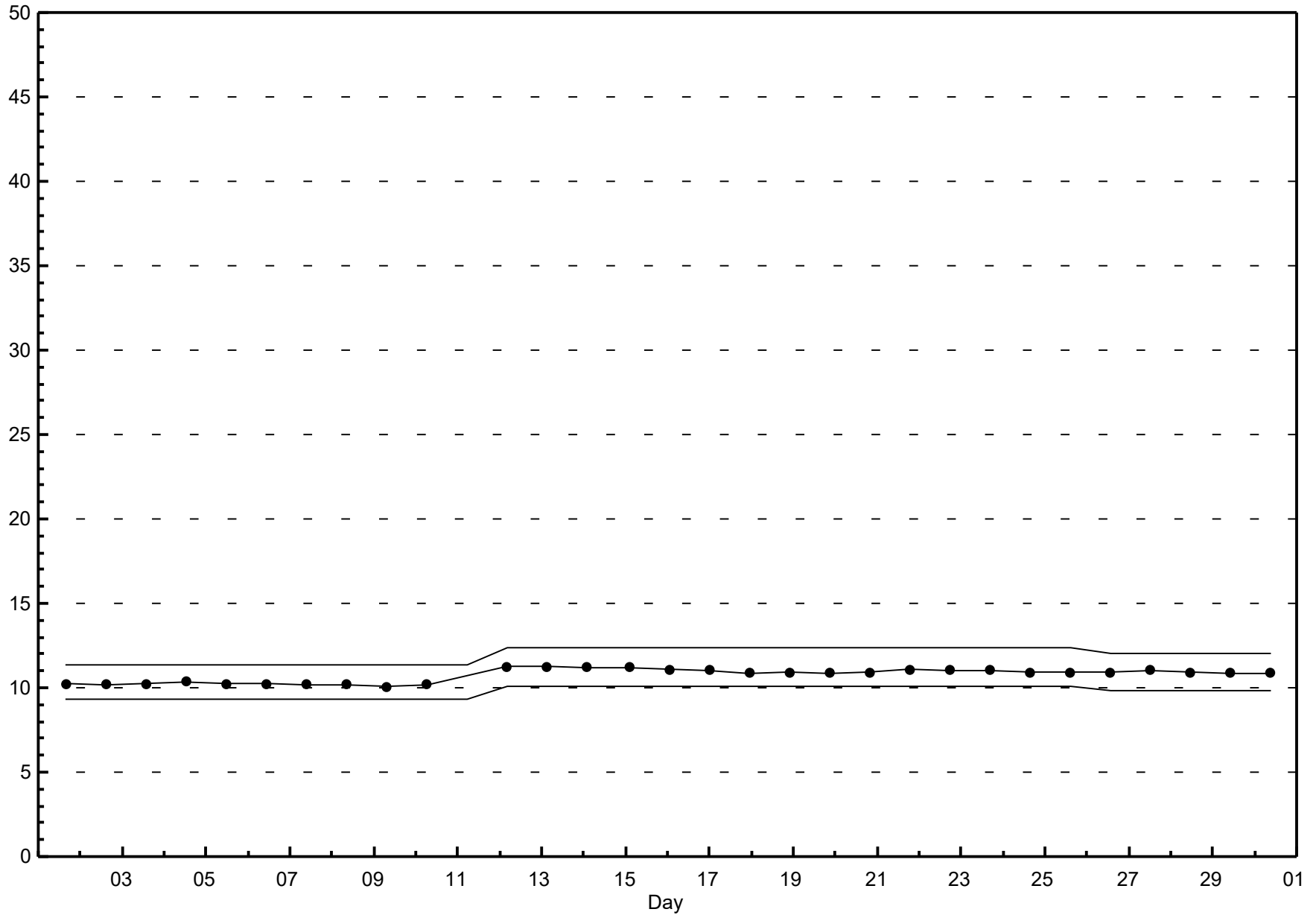


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Portable Rycroft - September 2017





Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³

Portable Rycroft - September 2017

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 720
Maximum Value: 70.2 µg/m ³ on Sep 7 22:00	Maximum Daily Average: 28.1 µg/m ³ on Sep 7
Minimum Value: 0 µg/m ³ on Sep 4 12:00	Hours of Data: 717
Maximum Diurnal Average: 6.3 µg/m ³ at hour 22	Hours of Missing Data: 3
Monthly Average: 3.67 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 0.5 µg/m ³ on Sep 13	Percent Operational Time: 99.6
Minimum Diurnal Average: 2.5 µg/m ³ at hour 6	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.8 Median = 1.7 Q ₃ = 3.7 P ₉₀ = 7.8 P ₉₉ = 40.9	

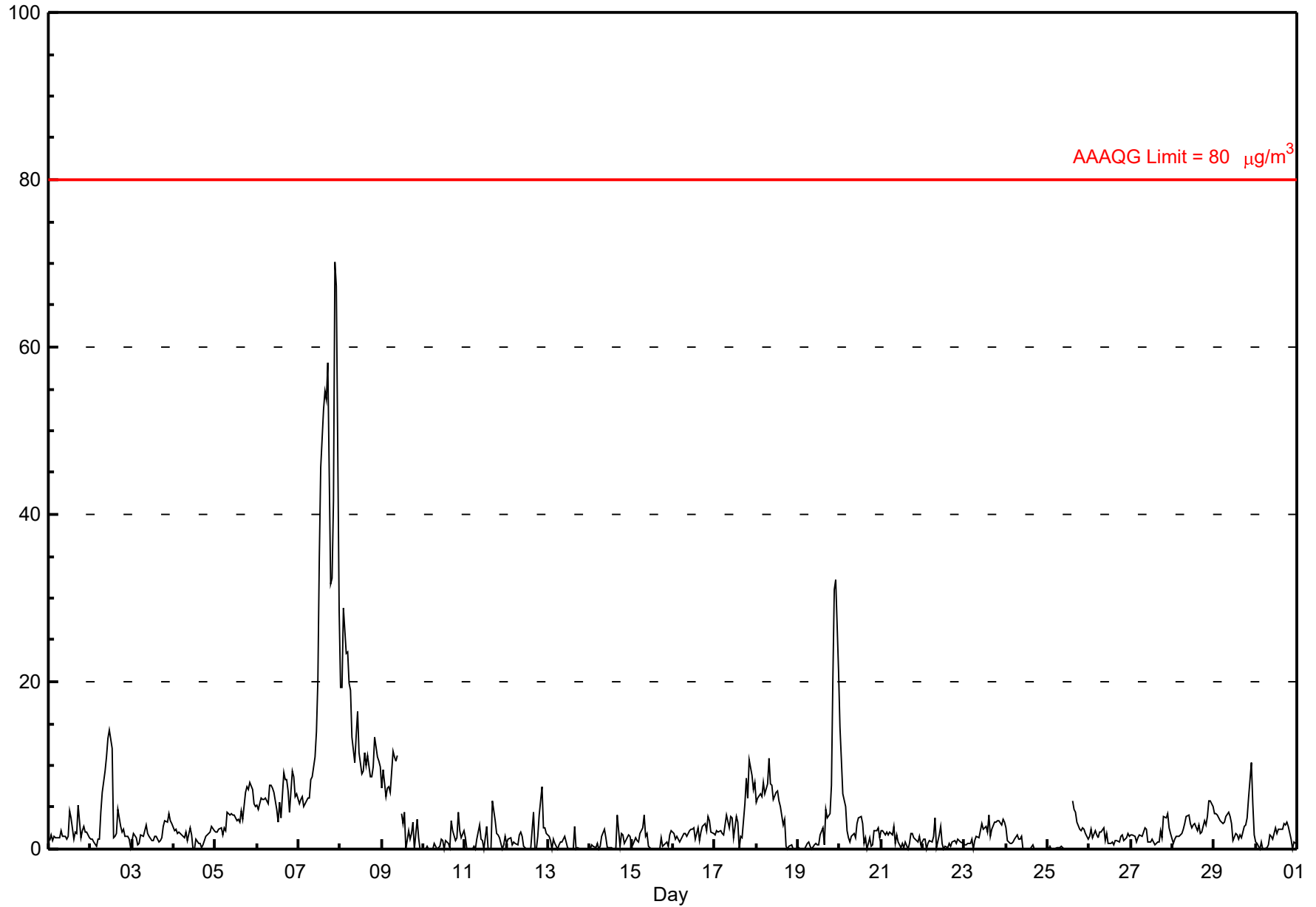
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	1	2	1	2	1	1	1	2	2	2	1	2	5	4	1	2	2	5	1	2	3	2	2	1	2.0	5.3
2-Sep	1	1	1	0	1	1	4	7	9	11	13	14	12	1	1	2	5	3	2	2	1	1	1	0	4.1	14.3
3-Sep	1	2	1	0	1	2	2	2	3	2	1	1	1	2	2	1	1	1	3	3	3	4	3	3	1.9	4.3
4-Sep	2	2	2	2	2	1	1	2	1	3	2	0	0	1	1	1	0	1	2	2	2	2	3	2	1.5	2.7
5-Sep	2	2	2	3	2	2	2	4	4	4	4	4	3	4	3	5	4	7	7	7	8	7	5	5	4.2	8.0
6-Sep	5	5	6	6	6	6	5	8	8	7	7	5	3	6	4	9	8	8	7	4	9	9	6	7	6.4	9.3
7-Sep	5	6	6	5	5	6	6	8	9	11	14	20	35	46	53	55	54	58	32	32	42	70	67	29	28.1	70.2
8-Sep	19	19	29	23	23	20	19	13	10	14	16	12	9	9	12	10	11	9	9	10	13	11	11	10	14.2	28.8
9-Sep	7	9	6	7	7	7	12	11	11	11	N	4	3	4	0	2	1	2	3	0	4	1	0	0	5.0	11.8
10-Sep	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	3	2	1	1	4	2	1	2	1.0	4.4
11-Sep	1	0	0	0	0	0	0	1	3	1	1	0	3	0	0	0	6	3	2	2	1	0	0	2	1.1	5.7
12-Sep	1	1	1	1	1	1	1	2	2	2	0	0	0	0	0	4	0	0	2	4	7	3	3	2	1.5	7.4
13-Sep	2	1	0	1	1	0	0	1	1	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0.5	2.6
14-Sep	0	0	0	0	1	0	0	2	2	1	0	0	0	0	0	0	4	0	2	2	1	1	2	2	0.9	4.0
15-Sep	1	1	1	1	1	2	3	4	2	2	0	0	0	0	0	0	0	1	0	0	1	0	2	2	1.0	4.0
16-Sep	2	1	2	1	1	1	2	2	2	2	2	2	3	1	3	1	2	3	3	2	4	3	2	2	2.0	3.9
17-Sep	2	2	2	2	2	2	3	4	2	4	4	1	4	3	0	1	1	5	8	6	11	9	7	8	3.9	10.7
18-Sep	6	6	7	6	8	7	8	11	8	8	6	7	7	6	5	3	4	0	0	0	1	0	0	0	4.7	10.8
19-Sep	0	0	0	0	0	1	1	0	0	0	1	1	0	2	3	1	5	4	4	8	20	31	32	21	5.6	32.2
20-Sep	15	11	7	5	2	1	1	2	2	1	3	4	4	3	1	1	0	1	0	1	2	2	3	1	3.0	14.6
21-Sep	2	2	2	2	2	2	2	3	1	2	1	0	1	0	1	0	1	2	2	1	1	1	1	0	1.3	2.7
22-Sep	1	1	0	1	1	1	1	4	0	2	3	1	0	0	0	1	0	1	1	1	1	1	1	1	1.0	3.8
23-Sep	1	0	1	1	1	0	1	2	1	2	3	2	3	2	4	2	2	3	3	3	3	3	4	3	2.1	4.2
24-Sep	3	1	1	1	1	1	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.6
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	M	M	6	5	4	3	2	2	3	2	2	1	1.4	5.7
26-Sep	1	2	1	2	2	1	2	2	3	1	2	1	1	1	0	1	1	1	2	2	1	1	2	1	1.4	2.6
27-Sep	2	2	2	1	1	2	2	2	3	2	1	1	1	1	0	1	1	2	1	4	4	4	3	2	1.8	4.2
28-Sep	1	1	2	2	2	2	2	3	4	4	3	2	3	3	2	3	2	3	3	3	4	6	6	5	2.9	5.8
29-Sep	4	4	4	3	3	3	3	4	4	4	3	1	2	2	1	2	1	3	3	4	6	10	5	2	3.4	10.4
30-Sep	1	1	0	1	0	0	0	1	2	1	1	3	2	2	2	2	3	3	3	3	1	0	1	1	1.4	3.1

3.0	2.9	2.9	2.6	2.6	2.5	2.9	3.6	3.3	3.6	3.3	3.0	3.6	3.6	3.5	3.9	4.2	4.5	3.6	3.7	5.4	6.3	5.8	3.8		Diurnal Average
19.4	19.4	28.8	23.4	23.5	19.8	18.9	13.5	10.6	13.6	16.4	20.2	34.7	45.6	52.6	54.7	53.8	58.1	31.7	32.4	41.7	70.2	67.3	28.6		Diurnal Maximum

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAQO): 24-hr 30 µg/m³

Hourly Averages

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - September 2017



Hourly Maximums

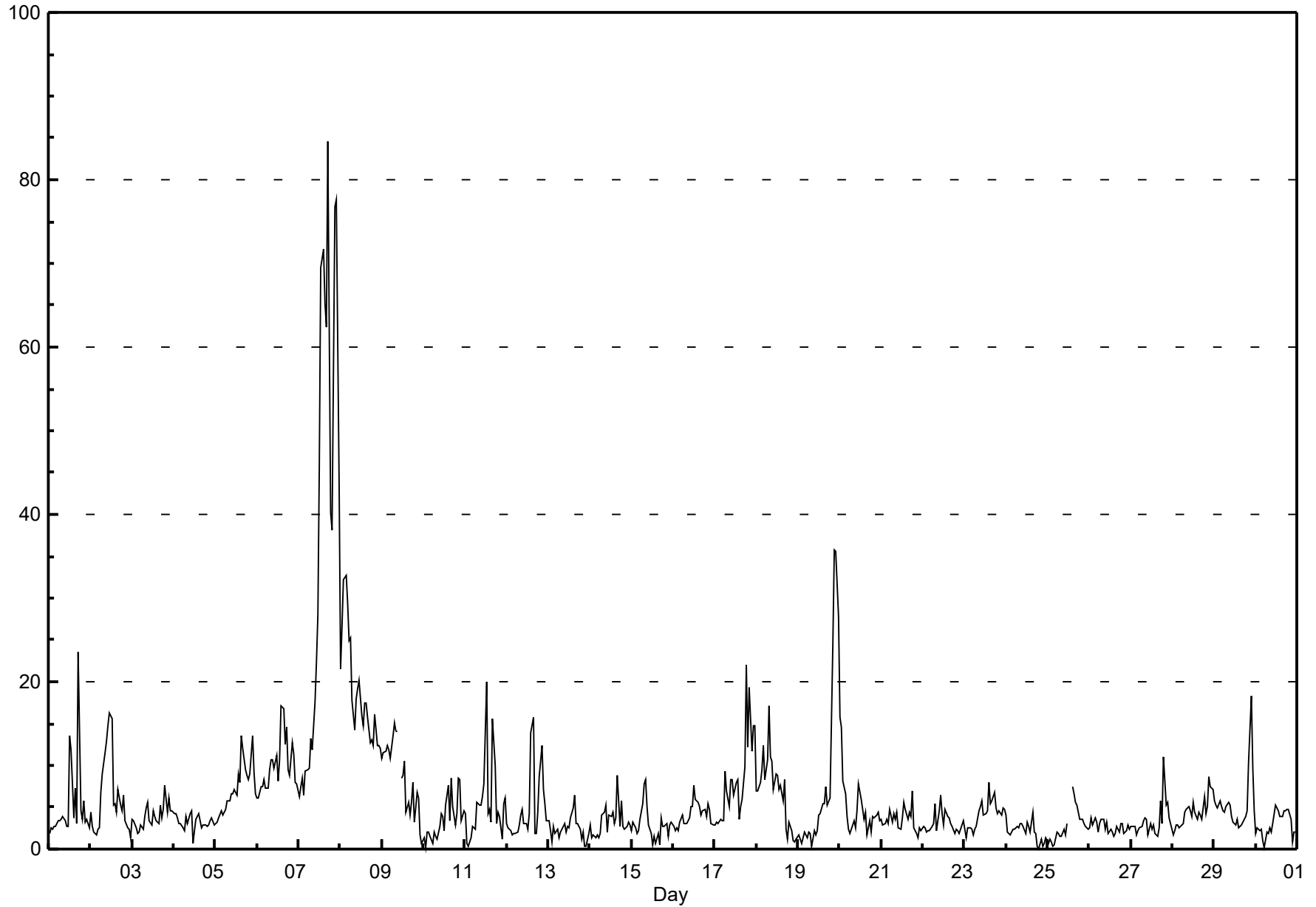
PM2.5 (PM_{2.5}) - µg/m³

Portable Rycroft - September 2017

Maximum Value: 84.5 µg/m ³ on Sep 7 18:00		Maximum Daily Average: 36.8 µg/m ³ on Sep 7		Hours in Service: 720																																													
Minimum Value: 0 µg/m ³ on Sep 24 20:00		Minimum Daily Average: 2.1 µg/m ³ on Sep 24		Hours of Data: 717																																													
Maximum Diurnal Average: 8.7 µg/m ³ at hour 22		Minimum Diurnal Average: 4.2 µg/m ³ at hour 6		Hours of Missing Data: 3																																													
Monthly Average: 6.32 µg/m ³		Percentiles: P ₁ = 0.3 P ₁₀ = 1.8 Q ₁ = 2.6 Median = 3.8 Q ₃ = 6.6 P ₉₀ = 12.5 P ₉₉ = 60.5		Hours of Calibration: 0																																													
				Percent Operational Time: 99.6																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Sep	2	3	2	3	3	3	3	4	4	3	3	14	12	4	7	3	24	5	4	6	3	4	3	5.1	23.5																								
2-Sep	4	3	2	2	2	3	7	9	11	13	15	16	16	5	5	4	7	5	5	6	3	3	2	1	6.3	16.2																							
3-Sep	4	3	2	2	2	3	2	4	5	6	3	3	5	4	3	3	5	4	5	8	4	6	5	5	4.0	7.6																							
4-Sep	4	4	4	3	3	2	2	4	3	4	5	1	2	4	4	3	2	3	3	3	3	3	4	3	3.2	4.6																							
5-Sep	3	3	4	5	4	4	5	6	6	7	7	7	7	9	8	13	12	9	9	8	9	14	9	7	7.2	13.6																							
6-Sep	6	6	8	8	8	7	7	10	11	11	10	11	8	11	17	17	13	15	10	9	13	11	8	8	10.0	17.1																							
7-Sep	6	7	8	6	9	10	10	13	12	18	22	28	46	69	72	65	62	85	40	38	58	77	78	43	36.8	84.5																							
8-Sep	22	27	32	33	29	25	25	18	14	18	19	20	16	15	17	18	16	13	13	12	16	12	12	12	18.9	32.7																							
9-Sep	11	11	12	12	12	11	14	15	14	14	N	8	9	10	4	6	4	6	8	3	7	6	2	1	8.7	15.0																							
10-Sep	1	0	2	2	2	1	2	2	1	3	4	4	2	5	8	3	9	5	3	4	9	8	3	5	3.7	8.5																							
11-Sep	4	1	0	1	3	3	2	6	5	5	6	8	20	4	5	3	16	10	3	4	4	1	5	6	5.3	20.0																							
12-Sep	3	3	2	2	2	2	2	3	4	5	3	3	2	4	14	16	2	2	4	9	12	7	5	3	4.8	15.7																							
13-Sep	3	2	1	3	2	2	1	2	2	3	2	3	3	4	5	7	3	3	2	1	2	0	0	2	2.5	6.5																							
14-Sep	3	1	2	1	2	1	2	4	4	5	2	4	4	4	3	4	9	3	6	3	2	3	3	3	3.3	8.9																							
15-Sep	2	3	3	2	2	4	5	8	8	5	3	2	1	2	1	2	1	4	3	3	3	2	3	3	3.0	8.3																							
16-Sep	3	2	3	2	3	4	3	3	3	4	5	5	8	6	6	5	4	5	5	4	5	5	3	3	4.1	7.6																							
17-Sep	3	3	3	4	3	3	9	7	5	8	8	6	8	8	4	5	6	10	22	12	19	12	15	15	8.3	22.0																							
18-Sep	7	7	8	9	12	8	11	17	11	10	7	9	9	7	8	6	8	2	1	3	2	1	1	1	7.0	17.2																							
19-Sep	2	1	1	1	2	1	2	2	0	2	2	2	4	4	5	5	8	5	6	15	25	36	36	28	8.2	35.8																							
20-Sep	16	15	8	7	4	2	2	2	3	3	5	8	6	5	4	4	2	3	2	4	4	4	4	3	5.0	15.8																							
21-Sep	4	3	3	4	3	5	3	4	4	4	3	2	4	6	5	4	4	4	7	3	2	1	3	2	3.5	7.0																							
22-Sep	3	2	2	2	2	3	3	5	2	4	6	4	3	5	4	4	3	3	2	2	2	2	2	3	3.1	6.4																							
23-Sep	2	1	2	3	2	2	2	3	5	5	6	4	4	5	8	5	6	7	5	4	5	4	5	5	4.1	7.9																							
24-Sep	4	2	2	2	2	2	3	3	3	3	3	2	3	3	2	4	2	2	0	0	1	0	1	1	2.1	4.4																							
25-Sep	1	1	1	0	1	2	2	1	2	2	2	3	M	M	8	7	6	5	4	4	4	3	3	2	2.8	7.5																							
26-Sep	3	4	3	4	3	2	3	4	4	2	3	2	2	2	2	2	3	2	3	3	2	2	3	2	2.7	3.8																							
27-Sep	3	3	3	2	2	3	3	3	4	4	2	3	2	3	2	2	3	6	3	11	5	6	4	3	3.4	11.0																							
28-Sep	2	2	3	3	3	3	3	4	5	5	5	4	6	4	4	4	4	4	6	4	5	9	7	7	4.4	8.6																							
29-Sep	6	5	5	6	5	5	4	5	6	5	4	3	3	4	3	3	3	4	4	5	10	18	10	5	5.3	18.3																							
30-Sep	2	3	2	2	1	0	2	2	3	2	3	5	5	5	4	4	5	5	5	5	3	1	2	2	3.0	5.2																							
																								4.6	4.4	4.4	4.5	4.5	4.2	4.9	5.7	5.5	6.1	5.7	6.1	7.6	7.9	7.8	7.8	7.6	8.5	6.4	6.5	8.2	8.7	8.0	6.2	Diurnal Average	
																								21.6	26.6	32.2	32.7	29.4	24.9	25.3	17.8	14.2	18.0	22.4	28.0	45.6	69.5	71.6	65.3	62.4	84.5	40.2	38.2	57.7	76.8	77.6	43.2	Diurnal Maximum	
M - Maintenance																								N - Not Valid																									

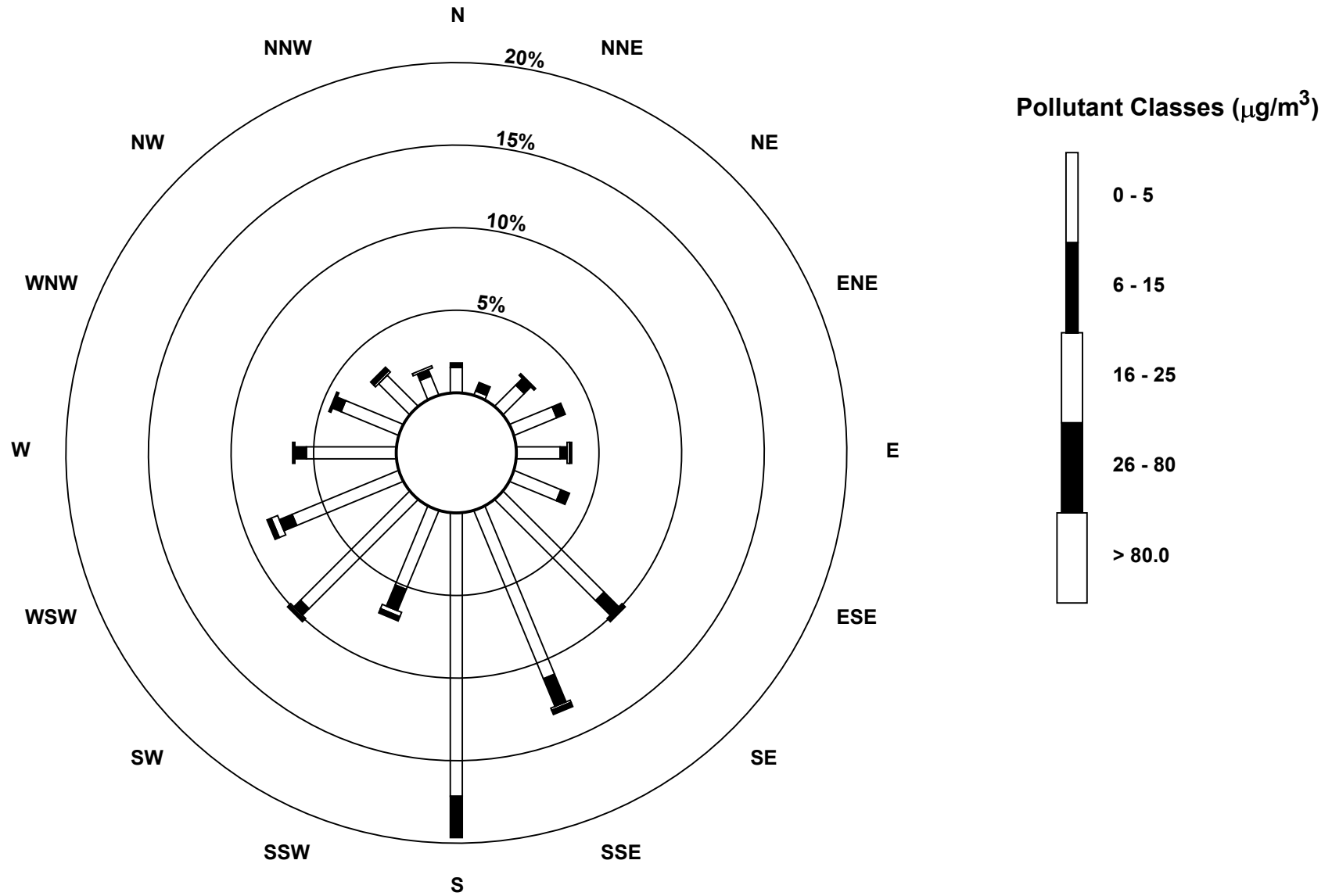
Hourly Maximums

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - September 2017



Pollutant Rose

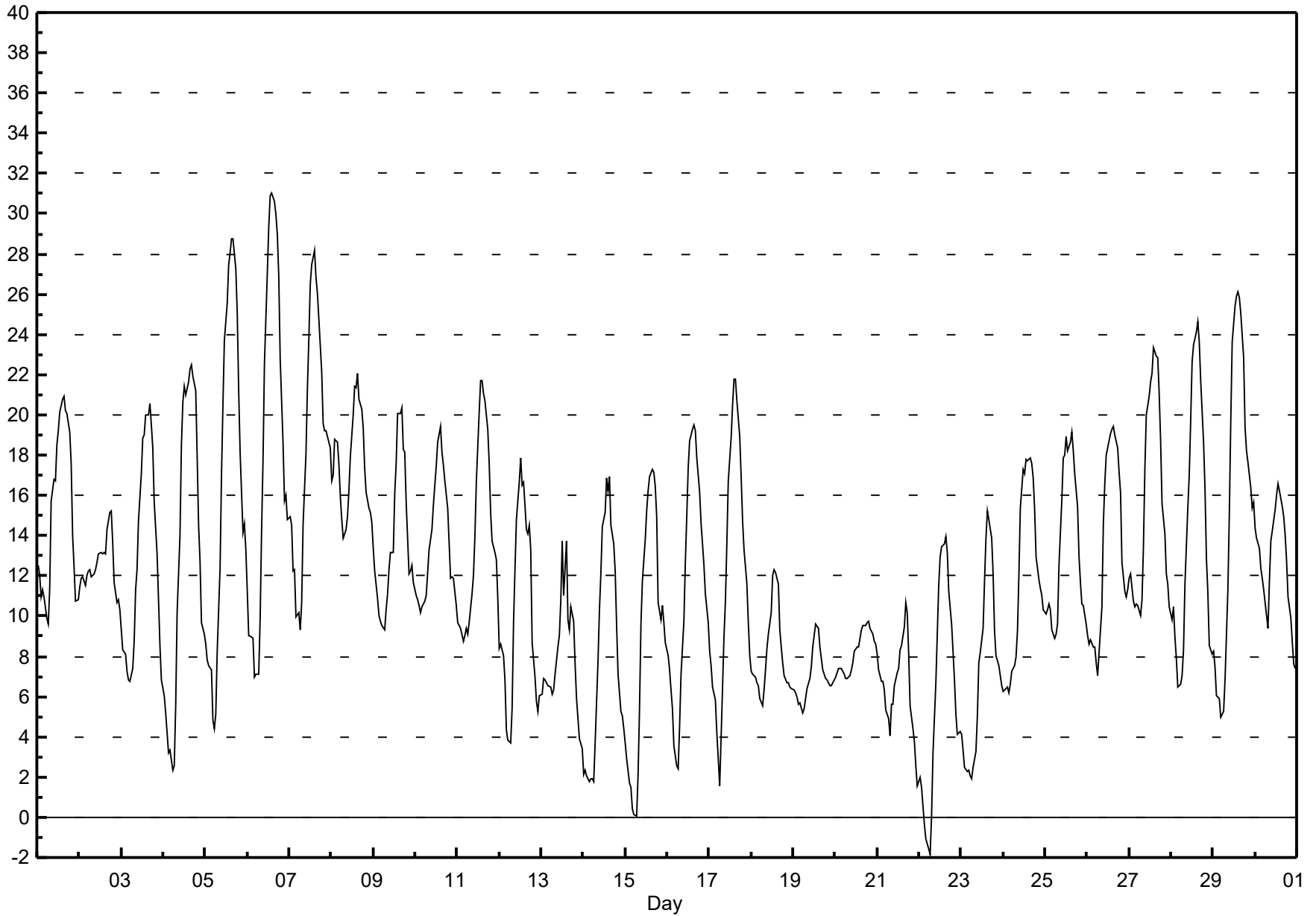
PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - September 2017



Hourly Averages

External Temperature (ET) - °C
 Portable Rycroft - September 2017

Maximum Value: 31.1 °C on Sep 6 15:00 Minimum Value: -2 °C on Sep 22 07:00 Maximum Diurnal Average: 18.7 °C at hour 15 Monthly Average: 12.17 °C		Maximum Daily Average: 18.7 °C on Sep 7 Minimum Daily Average: 6.1 °C on Sep 22 Minimum Diurnal Average: 6.4 °C at hour 7 Percentiles: P ₁ = 0.4 P ₁₀ = 5.2 Q ₁ = 7.5 Median = 11.3 Q ₃ = 16.5 P ₉₀ = 20.5 P ₉₉ = 28.7		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	13	12	11	11	11	10	10	11	16	17	17	18	19	20	21	21	20	20	19	18	14	12	11	11	15.1	20.9
2-Sep	11	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	14	15	15	14	12	11	11	10	12.5	15.3
3-Sep	9	8	8	7	7	7	7	9	11	12	15	17	19	19	20	20	21	20	18	16	13	11	9	7	12.9	20.6
4-Sep	6	5	4	3	3	2	3	6	10	14	19	21	21	21	22	22	23	22	21	18	14	13	10	9	13.0	22.5
5-Sep	9	8	8	7	5	4	5	8	12	17	20	24	26	27	28	29	29	27	25	21	18	14	15	13	16.7	28.8
6-Sep	11	9	9	9	7	7	7	10	14	18	23	27	29	31	31	31	30	29	27	23	19	16	16	15	18.6	31.1
7-Sep	15	15	12	12	10	10	9	11	15	18	21	24	27	27	28	27	26	25	22	20	19	19	19	18	18.7	28.2
8-Sep	17	17	19	19	18	16	15	14	14	15	16	18	20	21	21	22	21	20	19	17	16	15	15	15	17.5	22.1
9-Sep	13	12	11	10	10	10	9	10	11	12	13	13	16	18	20	20	20	18	18	16	12	12	12	12	13.7	20.4
10-Sep	11	11	11	10	10	11	11	12	13	14	16	17	17	19	19	18	18	17	15	14	12	12	12	10	13.7	19.4
11-Sep	10	9	9	9	9	9	9	10	11	12	14	17	20	22	22	21	21	19	18	15	14	13	13	11	14.0	21.7
12-Sep	8	9	8	7	4	4	4	5	10	12	15	17	18	17	17	14	14	15	13	9	7	6	5	6	10.1	17.9
13-Sep	6	7	7	7	7	6	6	6	7	8	9	11	14	11	14	10	9	10	10	8	6	5	4	3	8.0	13.8
14-Sep	2	2	2	2	2	2	2	4	8	10	12	14	15	17	16	17	15	14	12	10	7	5	5	4	8.3	16.9
15-Sep	4	3	2	1	0	0	0	2	5	10	12	14	15	16	17	17	17	16	15	11	10	11	10	9	9.0	17.3
16-Sep	8	7	6	5	4	3	2	5	7	10	13	15	17	19	19	20	19	18	16	15	14	13	11	10	11.4	19.5
17-Sep	8	8	6	6	4	3	2	4	9	11	14	17	19	20	22	22	21	19	17	15	13	12	10	8	12.0	21.8
18-Sep	7	7	7	7	7	6	6	6	7	8	9	10	12	12	12	9	8	8	7	7	7	7	6	6	8.1	12.3
19-Sep	6	6	6	6	6	5	5	6	6	7	7	8	9	10	9	8	8	7	7	7	7	7	7	7	7.0	9.6
20-Sep	7	7	7	7	7	7	7	7	7	7	8	8	8	8	9	9	10	10	10	10	9	9	9	9	8.2	9.8
21-Sep	8	7	7	7	6	5	5	4	6	6	7	7	7	8	9	9	11	10	8	6	4	4	3	2	6.5	10.7
22-Sep	2	2	1	0	-1	-2	-2	0	3	7	9	11	13	13	14	14	13	11	10	8	7	5	4	4	6.1	13.9
23-Sep	4	3	2	2	2	2	2	2	3	5	8	8	9	12	14	15	15	14	12	9	8	8	7	7	7.3	15.2
24-Sep	6	6	6	6	7	7	8	8	9	12	15	17	17	18	18	18	18	17	15	13	12	11	11	10	11.9	17.9
25-Sep	10	10	11	10	9	9	9	10	13	16	18	18	19	18	19	19	18	17	15	13	12	11	11	10	13.5	19.2
26-Sep	9	9	9	8	8	8	7	8	10	15	17	18	19	19	19	19	19	18	17	16	13	11	11	11	13.3	19.4
27-Sep	12	12	11	10	11	11	10	11	13	17	20	21	22	22	23	23	23	23	21	19	16	14	12	10	15.6	23.3
28-Sep	10	10	9	8	6	7	7	8	12	15	17	20	23	23	24	25	24	22	19	16	13	11	9	8	14.4	24.6
29-Sep	8	7	6	6	5	5	5	7	11	15	20	24	25	26	26	26	25	23	19	18	18	16	15	16	15.5	26.1
30-Sep	14	14	13	12	12	11	10	9	12	14	14	15	16	17	16	15	15	14	13	11	10	9	8	7	12.6	16.6
	8.9	8.5	8.0	7.6	6.9	6.6	6.4	7.5	10.0	12.2	14.3	16.1	17.5	18.2	18.7	18.6	18.1	17.2	15.8	13.5	11.7	10.6	9.9	9.3	Diurnal Average	
	16.7	17.0	18.8	18.6	17.6	15.9	14.8	13.9	15.7	18.1	22.6	27.0	29.3	30.9	31.1	30.6	30.0	28.9	26.9	22.8	19.2	19.2	18.9	18.4	Diurnal Maximum	





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)

Wind Direction (deg)

Portable Rycroft - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	9	8	8	9	9	10	9	7	7	17	19	17	30	27	17	22	25	27	20	6	6	6	5	5	12.6	29.8
Dir	188	196	188	188	184	176	171	178	205	226	229	230	241	239	228	240	235	235	233	216	196	188	193	189	220.1	240.7
2 Spd	8	7	7	8	7	9	8	5	5	5	6	4	6	8	4	4	4	4	8	2	5	6	10	9	5.4	10.2
Dir	187	183	183	172	176	171	174	165	176	161	171	192	250	257	224	174	197	221	256	223	162	157	167	164	186.3	166.6
3 Spd	8	2	1	7	7	7	3	3	2	5	4	3	1	5	9	10	9	15	11	6	6	4	6	8	3.9	15.3
Dir	170	38	164	176	182	174	163	194	278	260	281	259	140	246	269	256	314	267	271	254	254	241	180	164	235.6	267.1
4 Spd	7	6	5	5	7	7	4	4	3	2	3	7	9	10	7	8	6	6	2	1	2	4	4	4	4.5	9.5
Dir	175	171	177	190	185	174	162	153	76	81	109	145	142	137	102	132	127	133	129	122	120	150	180	180	148.8	136.7
5 Spd	3	3	6	4	2	5	5	3	2	1	1	2	1	2	3	2	1	4	3	5	6	6	7	7	2.7	7.4
Dir	147	121	176	179	171	181	165	222	132	19	2	337	54	126	122	79	86	108	89	132	142	181	161	156	148.5	161.4
6 Spd	7	7	7	8	2	8	7	5	2	1	2	3	2	2	3	4	4	4	3	6	6	5	5	5	3.1	8.0
Dir	184	180	183	180	190	187	180	188	134	61	32	7	359	17	50	79	108	116	107	157	172	179	153	177	162.0	180.3
7 Spd	5	5	3	6	2	4	2	4	3	2	1	1	1	2	7	15	6	3	5	4	6	2	2	4	2.2	15.4
Dir	154	171	151	131	301	176	205	170	186	232	221	88	50	81	252	266	302	144	144	158	157	196	223	196	194.5	266.2
8 Spd	6	4	12	16	19	12	5	4	5	8	9	8	5	5	4	6	6	5	3	5	7	7	7	5	5.7	18.9
Dir	192	197	243	242	239	240	222	130	151	159	166	183	200	204	201	199	174	195	161	141	138	138	139	162	195.0	239.3
9 Spd	5	5	2	2	1	2	3	3	3	4	6	6	6	3	8	9	10	10	9	8	7	10	11	10	5.5	11.5
Dir	163	156	161	139	166	250	239	235	157	186	184	166	174	200	175	205	223	221	200	221	181	186	187	193	193.2	186.9
10 Spd	8	7	5	5	7	9	10	15	20	23	29	28	22	21	19	22	30	26	8	7	5	7	5	3	13.5	29.6
Dir	194	198	203	202	201	212	217	223	227	230	237	234	230	232	227	231	236	242	210	186	182	170	177	143	223.7	236.5
11 Spd	3	5	4	1	4	4	4	3	2	3	2	8	15	16	14	26	33	28	15	9	7	9	11	12	7.8	32.8
Dir	83	80	78	102	136	145	133	126	173	147	94	155	207	206	210	232	234	229	222	217	217	221	230	254	214.2	233.6
12 Spd	6	12	9	7	6	6	7	5	2	7	6	4	4	6	2	20	16	13	10	6	2	4	8	8	4.8	19.8
Dir	237	233	235	225	187	170	167	181	235	281	310	319	292	275	351	293	303	304	326	8	28	272	253	265	271.7	292.6
13 Spd	9	5	5	7	8	10	8	6	11	11	12	12	8	8	7	7	1	5	6	6	5	5	5	4	5.1	11.9
Dir	273	277	255	268	263	258	268	251	267	274	258	260	256	302	281	43	290	171	179	165	176	185	181	175	252.9	257.8
14 Spd	2	6	5	6	7	6	7	6	3	8	7	3	2	4	5	5	5	12	5	3	1	4	5	5	0.9	11.9
Dir	214	172	179	167	175	179	174	177	189	289	308	309	323	320	352	314	354	43	65	77	112	175	156	160	181.4	43.0
15 Spd	6	4	5	4	2	2	3	4	3	6	10	10	9	9	7	8	7	3	1	4	13	14	11	11	6.1	13.8
Dir	169	175	169	173	152	210	167	145	63	140	139	132	127	132	138	123	131	130	133	80	127	137	141	147	140.5	141.5
16 Spd	12	11	7	7	4	5	5	5	7	6	4	4	5	7	8	8	8	7	6	8	10	11	9	8	6.5	12.5
Dir	143	140	141	136	163	147	146	147	143	147	78	86	78	69	82	102	123	129	134	139	141	143	146	160	131.3	143.0
17 Spd	7	7	7	6	5	3	1	1	2	3	5	7	8	8	8	6	4	5	10	11	7	6	4	5	4.1	11.0
Dir	164	154	150	156	145	113	69	7	63	42	54	78	71	70	100	118	111	76	61	60	50	8	348	45	84.6	59.8
18 Spd	4	6	3	1	2	1	2	2	1	6	7	9	11	13	13	15	11	11	6	8	3	4	3	3	4.3	14.6
Dir	50	71	80	35	262	266	262	292	21	258	293	268	274	286	272	248	235	230	222	233	232	267	182	194	257.7	248.4
19 Spd	3	2	2	4	6	3	6	7	11	21	20	23	24	23	20	20	15	16	13	10	9	13	16	21	11.4	23.5
Dir	177	184	220	216	235	266	239	234	245	265	272	280	277	281	298	304	298	266	277	287	304	311	322	329	282.6	276.6
20 Spd	17	21	28	25	26	21	24	22	22	22	21	23	23	23	25	19	21	18	19	25	22	19	20	16	20.5	28.0
Dir	345	349	343	357	354	345	342	336	329	327	331	330	312	306	300	306	297	294	303	316	314	309	298	311	324.2	343.0
21 Spd	14	13	13	14	16	14	16	14	15	19	18	16	14	14	11	7	5	1	5	5	5	6	4	5	8.7	19.2
Dir	313	302	298	294	297	285	290	274	296	273	283	284	286	278	277	275	287	227	171	156	145	151	136	139	282.2	272.6
22 Spd	7	6	4	4	5	5	5	6	2	1	3	3	4	4	5	5	6	4	2	3	2	1	1	1	2.6	6.6
Dir	158	153	185	188	189	189	167	125	48	359	27	57	125	98	103	112	105	121	121	93	97	160	162	305	133.3	158.3



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)

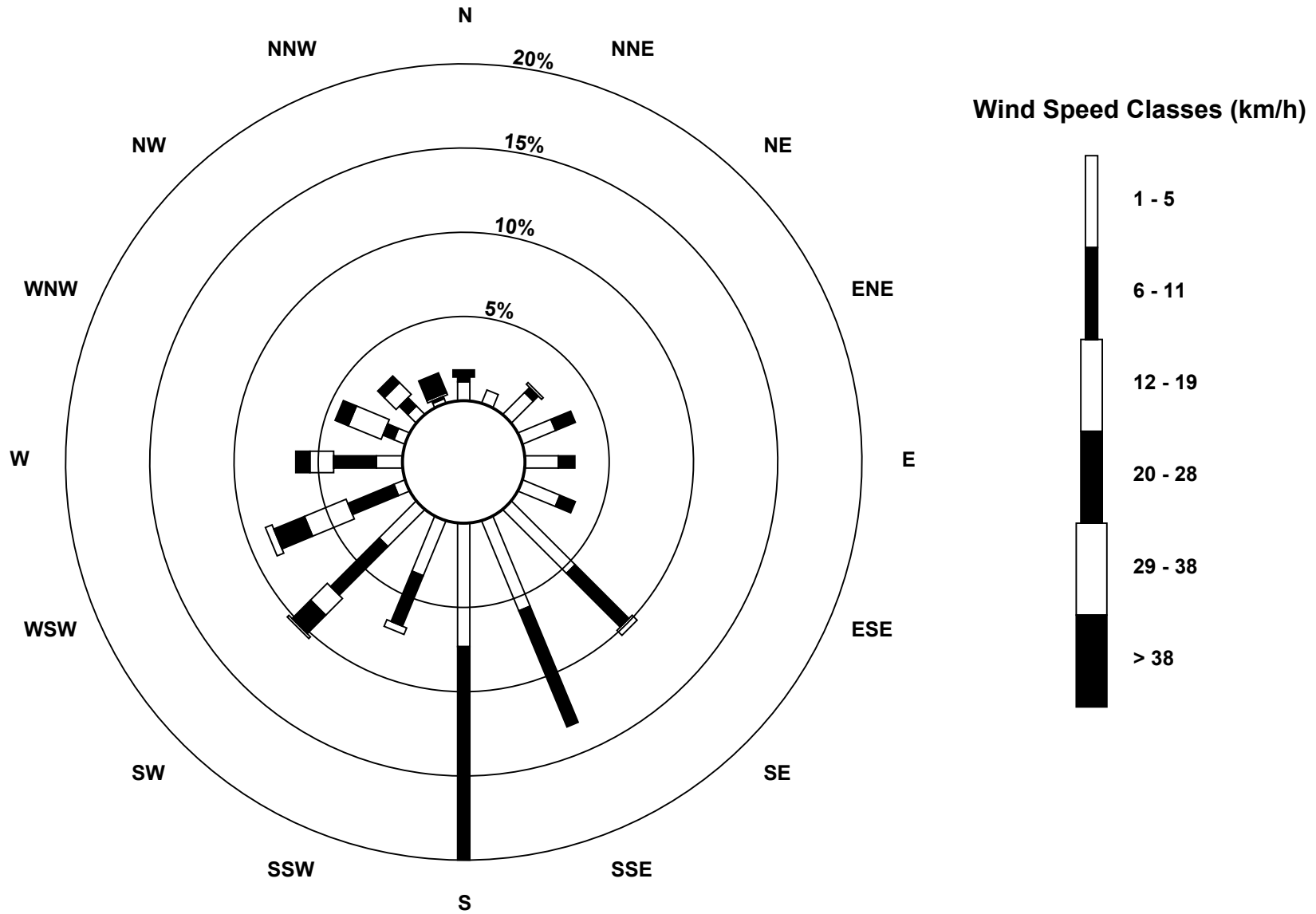
Wind Direction (deg)

Portable Rycroft - September 2017

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	2	2	2	1	2	3	2	2	3	2	3	6	7	7	6	4	4	3	3	5	7	7	6	6	2.6	7.0	
Dir	38	72	221	100	285	68	56	166	34	174	136	46	63	65	83	156	136	147	123	131	144	152	152	151	115.2	144.1	
24 Spd	6	8	8	6	7	7	7	7	9	10	8	11	15	7	11	9	10	7	6	8	8	9	10	9	7.0	14.8	
Dir	158	161	155	149	157	154	150	151	163	162	181	237	243	198	239	235	229	222	203	181	178	176	176	177	188.3	243.1	
25 Spd	9	10	10	8	8	10	11	9	10	7	10	23	13	19	17	18	18	8	4	6	5	7	8	7	9.3	23.3	
Dir	176	182	177	186	189	172	175	177	181	197	222	242	232	242	241	242	248	229	221	189	183	186	180	181	210.5	242.0	
26 Spd	7	9	7	5	3	1	2	5	5	3	4	6	8	11	11	17	9	7	5	6	2	4	6	7	5.5	17.3	
Dir	180	170	172	176	145	167	136	165	179	214	218	245	241	231	229	241	215	199	210	225	209	187	179	178	205.4	240.9	
27 Spd	7	6	5	7	6	6	5	6	6	6	23	23	21	17	8	10	6	6	2	0	4	7	8	8	5.7	23.2	
Dir	186	189	182	169	176	163	154	155	166	202	261	254	252	259	251	260	272	331	38	233	164	159	174	167	223.3	261.3	
28 Spd	7	8	6	3	3	6	6	6	7	3	5	6	6	7	7	6	6	5	4	2	1	4	4	4	4.0	7.6	
Dir	152	167	175	173	173	177	146	147	150	146	67	82	79	81	91	120	126	130	129	103	139	195	199	195	137.4	166.8	
29 Spd	6	5	4	3	5	7	8	9	8	6	6	9	7	9	8	5	3	5	2	4	4	6	3	12	5.0	12.1	
Dir	176	152	227	183	185	168	173	174	166	167	169	182	207	227	196	221	143	137	129	134	207	255	216	243	188.7	242.9	
30 Spd	5	8	10	5	8	7	7	7	8	8	16	23	20	19	18	27	26	23	23	24	20	18	18	17	14.5	26.6	
Dir	225	226	228	198	182	189	191	194	200	209	229	241	237	239	237	255	252	251	250	255	246	248	256	245	238.5	254.9	
Spd	3.7	3.5	3.4	3.4	3.3	3.8	3.3	3.4	2.7	4.2	4.7	5.5	6.1	5.9	5.0	7.0	6.3	5.5	3.4	2.5	2.8	3.9	4.4	4.1	Diurnal Average		
Dir	182.7	180.7	201.4	194.6	207.1	195.1	193.0	192.8	208.0	235.4	246.7	246.2	244.8	247.6	241.1	246.4	242.8	232.6	227.8	211.0	190.3	196.9	195.0	199.1	Diurnal Maximum		
Spd	16.9	21.0	28.0	25.4	26.5	21.2	23.7	22.3	22.0	23.0	28.8	27.5	29.8	27.3	24.5	26.6	32.8	27.9	23.4	24.5	22.4	18.6	19.9	20.9	Diurnal Maximum		
Dir	345.4	349.1	343.0	357.5	354.4	345.0	341.8	336.3	328.9	230.5	236.8	233.8	240.7	239.0	299.9	254.9	233.6	228.9	249.5	316.1	314.2	308.6	297.6	328.8			
Maximum Speed Value: 33 km/h on Sep 11 17:00		Minimum Speed Value: 0 km/h on Sep 27 20:00																Hours in Service: 720									
Maximum Daily Speed Average: 20.5 km/h on Sep 20		Minimum Daily Speed Average: 0.9 km/h on Sep 5																Hours of Data: 720									
Maximum Diurnal Speed Average: 7.0 km/h at hour 16		Minimum Diurnal Speed Average: 2.5 km/h at hour 20																Hours of Missing Data: 0									
Monthly Average Velocity: 3.88 km/h 220.21 deg		Speed Percentiles: P ₁ = 0.8 P ₁₀ = 2.3 Q ₁ = 4.1 Median = 6.3 Q ₃ = 9.3 P ₉₀ = 18.1 P ₉₉ = 27.3																Percent Operational Time: 100.0									
All monthly, daily, and diurnal averages have been calculated using vector methods																											
Frequency Distribution																											
		Speed Range (km/h)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																				
North	10	4	1	5	1	0	21																				
NorthEast	20	10	1	0	0	0	31																				
East	36	15	0	0	0	0	51																				
SouthEast	55	71	5	0	0	0	131																				
South	71	152	2	0	0	0	225																				
SouthWest	29	45	26	21	4	0	125																				
West	17	34	22	14	0	0	87																				
NorthWest	8	9	15	17	0	0	49																				
Total	246	340	72	57	5	0	720																				

Wind Rose

Wind Speed (WS) (km/h)
Portable Rycroft - September 2017



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Rycroft - September 2017

Maximum Speed: 33 km/h on Sep 11 17:00	Maximum Daily Speed Average: 21.9 km/h on Sep 20	Hours in Service: 720
Minimum Speed: 1 km/h on Sep 4 20:00	Minimum Daily Speed Average: 4.3 km/h on Sep 22	Hours of Data: 720
Maximum Diurnal Speed Average: 12.2 km/h at hour 16	Minimum Diurnal Speed Average: 6.4 km/h at hour 21	Hours of Missing Data: 0
Monthly Average Speed: 8.35 km/h	Percentiles: P ₁ = 1.6 P ₁₀ = 3.0 Q ₁ = 4.5 Median = 6.6 Q ₃ = 9.5 P ₉₀ = 18.2 P ₉₉ = 27.6	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	9	8	8	9	9	10	9	8	7	17	19	17	30	28	18	23	25	28	20	6	6	6	5	5	13.8	30.2
2-Sep	8	8	7	8	7	9	8	5	5	5	6	4	6	8	4	4	8	6	8	3	5	6	10	9	6.6	10.2
3-Sep	8	5	2	7	7	7	3	3	3	5	4	4	4	7	9	11	10	16	11	7	6	5	6	9	6.6	15.6
4-Sep	7	6	6	5	7	7	5	4	4	3	4	7	10	10	8	8	6	6	2	1	3	4	4	4	5.5	9.8
5-Sep	4	4	6	5	3	5	5	4	2	2	2	4	3	4	4	4	3	4	3	5	6	6	7	7	4.3	7.4
6-Sep	7	7	7	8	2	8	7	5	3	2	3	3	3	3	4	4	4	4	3	6	6	5	5	5	4.9	8.1
7-Sep	5	6	4	6	4	4	3	4	3	2	2	2	2	2	8	16	6	3	5	4	6	4	3	4	4.5	15.7
8-Sep	6	4	12	16	19	12	5	4	5	8	9	8	6	6	5	7	7	5	3	5	7	7	7	5	7.6	19.0
9-Sep	5	5	3	3	2	3	3	3	3	4	6	6	6	5	8	9	11	11	9	8	7	10	11	10	6.4	11.5
10-Sep	8	7	5	6	7	9	10	15	20	23	29	28	22	22	20	22	30	26	9	7	5	7	5	4	14.4	29.8
11-Sep	3	5	4	2	4	4	4	3	3	3	3	9	16	16	15	26	33	28	15	9	7	9	12	13	10.2	33.0
12-Sep	6	12	9	8	6	6	7	5	3	7	6	6	6	6	5	21	16	13	10	7	3	5	8	8	7.9	20.5
13-Sep	9	5	5	7	8	10	8	6	11	11	12	12	9	9	7	11	4	5	7	6	5	5	5	4	7.6	12.1
14-Sep	3	6	5	6	7	6	7	6	4	9	8	4	4	6	7	8	11	12	6	3	2	4	6	5	6.0	12.0
15-Sep	6	4	5	4	3	3	4	4	3	7	10	11	9	10	10	7	8	8	3	2	4	13	14	11	6.8	13.8
16-Sep	13	11	7	7	5	5	5	6	8	6	5	5	6	7	8	9	8	7	6	8	10	11	9	8	7.5	12.5
17-Sep	7	7	7	6	5	3	3	2	3	4	5	8	8	9	9	7	5	5	10	11	7	7	6	6	6.2	11.0
18-Sep	5	6	4	1	2	4	3	3	3	7	7	10	11	14	14	15	11	11	6	8	3	5	3	4	6.6	15.0
19-Sep	3	3	2	4	6	3	7	7	12	21	20	23	24	23	20	21	16	13	10	9	13	16	21	21	13.1	23.6
20-Sep	17	21	28	25	27	21	24	22	22	23	21	23	24	23	25	19	21	18	20	25	22	19	20	16	21.9	28.2
21-Sep	15	13	13	14	16	14	16	14	15	19	18	16	15	14	12	8	6	3	5	5	5	6	4	5	11.3	19.3
22-Sep	7	6	4	5	5	5	5	8	3	2	4	4	5	6	7	6	6	4	2	3	2	1	2	2	4.3	7.8
23-Sep	2	2	2	1	3	3	3	4	3	3	5	7	7	7	6	7	5	4	4	5	7	7	6	6	4.5	7.2
24-Sep	6	8	8	6	7	7	7	7	9	10	9	12	15	8	12	9	10	7	6	8	8	9	10	9	8.6	14.9
25-Sep	9	10	10	8	8	10	11	9	11	7	10	24	14	19	18	18	18	8	4	6	5	7	8	7	10.9	23.6
26-Sep	7	9	7	6	3	2	2	5	5	4	5	6	9	12	12	18	9	7	6	6	2	5	6	7	6.6	17.5
27-Sep	7	6	5	7	6	6	5	6	6	8	23	23	22	17	9	11	7	7	2	2	4	8	8	8	8.9	23.4
28-Sep	7	8	6	4	3	6	6	6	7	4	5	7	6	8	7	6	6	5	4	3	2	4	4	5	5.4	7.9
29-Sep	6	5	4	4	5	7	8	9	8	6	6	9	8	9	8	6	4	5	2	4	6	8	3	12	6.4	12.2
30-Sep	6	8	10	6	8	7	7	7	8	8	16	24	20	20	18	27	26	23	24	25	20	19	18	17	15.5	26.9
	7.0	7.1	6.9	6.8	6.8	6.9	6.7	6.6	6.8	8.0	9.4	10.8	11.0	11.3	10.5	12.2	11.4	10.2	7.6	6.9	6.4	7.5	7.8	7.8	Diurnal Average	
	17.1	21.2	28.2	25.5	26.5	21.3	23.8	22.4	22.2	23.1	29.0	27.8	30.2	27.6	24.6	26.9	33.0	28.0	23.5	24.8	22.4	18.8	19.9	20.9	Diurnal Maximum	

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg

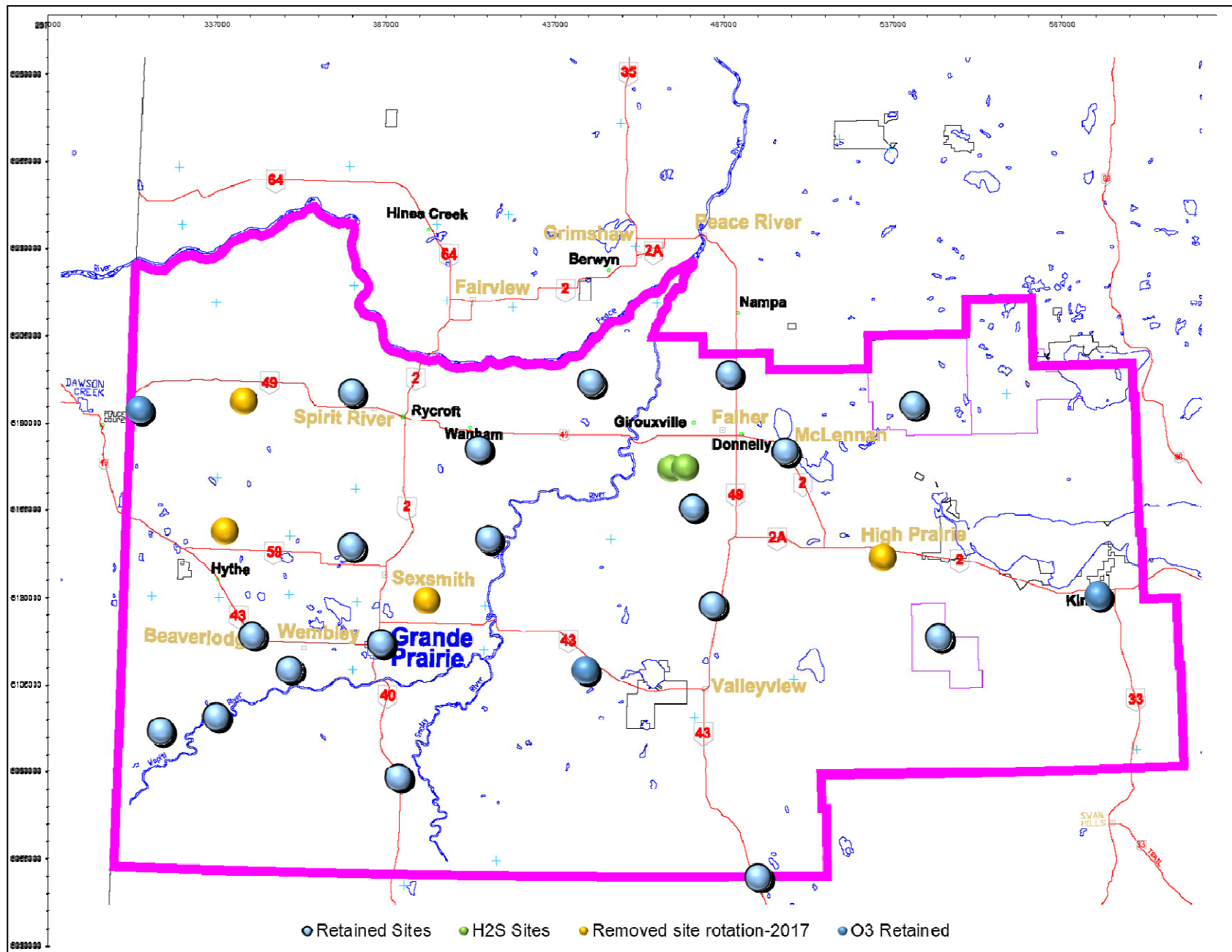
Portable Rycroft - September 2017

Maximum Value: 93.5 deg on Sep 27 20:00																								Hours in Service: 720	
Minimum Value: 2.1 deg on Sep 30 23:00																								Hours of Data: 720	
Percentiles: P ₁ = 3.5 P ₁₀ = 5.6 Q ₁ = 7.9 Median = 14.4 Q ₃ = 27.2 P ₉₀ = 50.5 P ₉₉ = 85.0																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Sep	7	9	5	6	4	5	7	12	14	13	8	14	10	8	12	10	8	7	7	12	11	9	21	10	21.0
2-Sep	4	6	6	7	5	7	6	14	15	12	10	22	20	12	26	14	57	36	6	31	12	9	4	5	57.4
3-Sep	39	85	60	5	6	6	33	28	38	25	37	45	81	53	22	34	28	12	9	31	20	37	9	9	85.4
4-Sep	6	17	27	13	9	4	33	14	35	50	46	25	18	15	26	27	27	18	50	43	16	21	8	10	50.3
5-Sep	44	40	6	38	59	11	31	47	22	65	62	47	87	76	55	56	79	27	29	10	9	8	6	5	86.7
6-Sep	19	5	11	7	21	5	6	6	64	67	55	43	51	62	61	34	27	32	33	12	9	12	15	8	66.9
7-Sep	13	14	26	12	62	24	58	18	30	58	57	86	72	49	79	12	48	22	9	20	11	54	55	30	86.1
8-Sep	12	17	11	6	5	5	30	26	11	6	7	14	23	33	27	31	32	19	20	10	7	6	7	15	33.2
9-Sep	13	12	61	79	62	63	19	33	49	23	25	26	20	53	22	14	18	17	12	15	11	5	4	6	79.1
10-Sep	7	11	13	13	8	10	9	9	6	6	8	8	9	11	12	8	8	7	16	7	15	5	7	27	26.7
11-Sep	20	15	16	81	31	17	24	60	67	23	51	23	13	7	10	6	7	6	7	9	11	9	18	18	80.6
12-Sep	21	5	11	19	19	9	8	28	44	16	32	48	54	43	76	18	10	12	14	27	47	33	12	9	76.3
13-Sep	12	25	6	16	9	16	9	21	7	9	9	12	36	33	39	64	92	24	9	16	18	23	16	19	92.1
14-Sep	49	9	13	13	10	15	8	9	31	25	19	63	80	58	48	78	64	7	18	31	41	20	12	12	80.3
15-Sep	13	24	12	18	17	36	13	20	22	15	11	15	18	24	18	22	18	16	33	90	57	7	6	7	90.1
16-Sep	7	5	10	5	33	5	5	7	27	16	34	36	42	24	20	25	19	20	16	6	6	7	6	6	42.2
17-Sep	10	7	6	22	28	19	74	44	50	37	19	21	26	27	30	30	25	3	4	21	21	69	28	74.0	
18-Sep	15	8	59	64	50	85	30	47	81	36	15	13	16	12	15	14	6	7	16	14	27	35	24	27	84.8
19-Sep	26	19	20	33	27	38	8	7	14	5	9	5	5	5	13	7	18	14	8	19	8	6	6	5	37.9
20-Sep	8	8	6	5	4	3	5	5	8	5	4	6	6	4	5	6	6	5	8	4	3	5	5	6	8.4
21-Sep	4	10	4	4	4	6	6	3	8	5	8	11	11	15	14	22	45	61	7	17	6	9	24	14	60.8
22-Sep	10	7	20	20	9	7	18	34	35	50	27	47	54	56	50	44	24	26	21	13	27	39	57	85	85.2
23-Sep	48	47	33	74	54	23	61	87	53	69	64	28	11	17	26	67	34	31	19	12	6	7	8	7	87.2
24-Sep	6	7	7	7	7	7	8	9	7	13	18	29	10	23	25	14	11	13	16	6	4	4	4	5	28.7
25-Sep	4	6	6	8	4	5	9	4	13	11	15	11	14	10	14	7	6	8	23	8	10	7	6	5	22.7
26-Sep	5	5	8	21	42	82	51	14	9	44	42	48	21	25	20	9	16	11	17	12	13	13	9	5	81.8
27-Sep	9	11	12	4	7	10	13	11	6	35	7	8	12	14	36	29	39	18	30	93	22	9	6	6	93.5
28-Sep	9	8	10	20	41	14	8	7	7	32	20	19	23	23	22	26	19	17	14	16	58	10	13	15	58.0
29-Sep	18	19	23	38	24	7	19	6	7	17	19	17	27	19	16	32	46	9	19	12	44	74	35	11	73.9
30-Sep	18	12	8	20	5	5	5	6	10	12	11	11	10	10	10	9	7	6	7	11	8	12	2	5	19.9
49.3	85.4	60.5	80.6	61.9	84.8	74.0	87.2	81.4	69.4	64.0	86.1	86.7	75.7	79.1	78.1	92.1	60.8	50.3	93.5	58.0	73.9	68.9	85.2		

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for September 2017

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
2a	Bay Tree		23.2			
2b	Bay Tree		24.8			
14a	Sylvester			0.7		
14b	Sylvester			0.4		
24a	Wembley	0.1				
24b	Wembley	0.2				
25a	Pinto Creek			0.5		
25b	Pinto Creek			0.8		
32a	Gold Creek	0.6				
32b	Gold Creek	0.5				
64a	Girouville 4				0.2	
64b	Girouville 4				0.2	
2	Bay Tree	0.1	24.0	1.1		13-16-078-13 W6M
4	Gordondale	0.4		1.2		04-34-078-10 W6M
5	Boone Creek	0.1		0.6		16-36-074-11 W6M
9	Spirit River	0.2		1.1		08-12-079-07 W6M
14	Sylvester	0.1		0.7		08-06-069-12 W6M
16	Beaverlodge	0.2		1.2		15-36-071-10 W6M
18	Saddle Hills	0.3		0.5		04-25-074-07 W6M
19	Wanham	0.3		0.8		16-22-077-03 W6M
21	Eaglesham	0.1		0.7		16-21-079-25 W5M
24	Wembley	0.1		1.9		12-31-070-08 W6M
25	Pinto Creek	0.1		0.5		04-24-069-11 W6M
27	Grande Prairie I	0.2		5.9		08-15-071-06 W6M
28	Clairmont Lake	0.2		1.6		09-06-073-04 W6M
29	Smoky Heights	0.3		1.7		04-06-075-02 W6M
32	Gold Creek	0.6		2.6		06-33-067-05 W6M
35	Jean Cote	0.2		1.1		12-35-079-21 W5M
36	Guy	0.2		0.6	0.1	03-04-076-22 W5M
37	Crooked Creek	0.1	28.2	1.1		16-01-071-26 W5M
39	Clouston Creek	0.2		0.8		12-01-073-22 W5M
40	McLennan	0.2		0.8		03-29-077-19 W5M
43	High Prairie	0.1		0.7		16-13-074-17 W5M
44	Peavine	0.1		0.3		03-05-079-15 W5M
46	Little Smoky	0.1		1.5		12-01-065-21 W5M
47	Kinuso	0.1	20.8	0.4		12-10-073-10 W5M
49	Grande Prairie HP	0.0		BDL		17-26-071-06 W6M
50	East Prairie	0.1		0.3		13-02-072-15 W5M
63	Girouville 3				BDL	14-02-077-23 W5M
64	Girouville 4				0.2	4-08-077-22 W5M

*BDL = Below Detection Level

*NS - No sample

Passive Summary for September 2017

Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂	Hydrogen Sulphide H ₂ S
	ppb	ppb	ppb	ppb

Passive Summary for September 2017 (PAZA Zone)				
Mean	0.2	24.3	1.2	0.1
Standard Deviation	0.1	3.7	1.1	0.1
Minimum	0.0	20.8	0.3	0.1
Minimum At	Grande Prairie HP	Kinuso (#47)	East Prairie (#50)	Guy (#36)
Maximum	0.6	28.2	5.9	0.2
Maximum At	Gold Creek (#32a)	Crooked Creek (#37)	Grande Prairie I (#27)	Girouxville 4 (#64a)

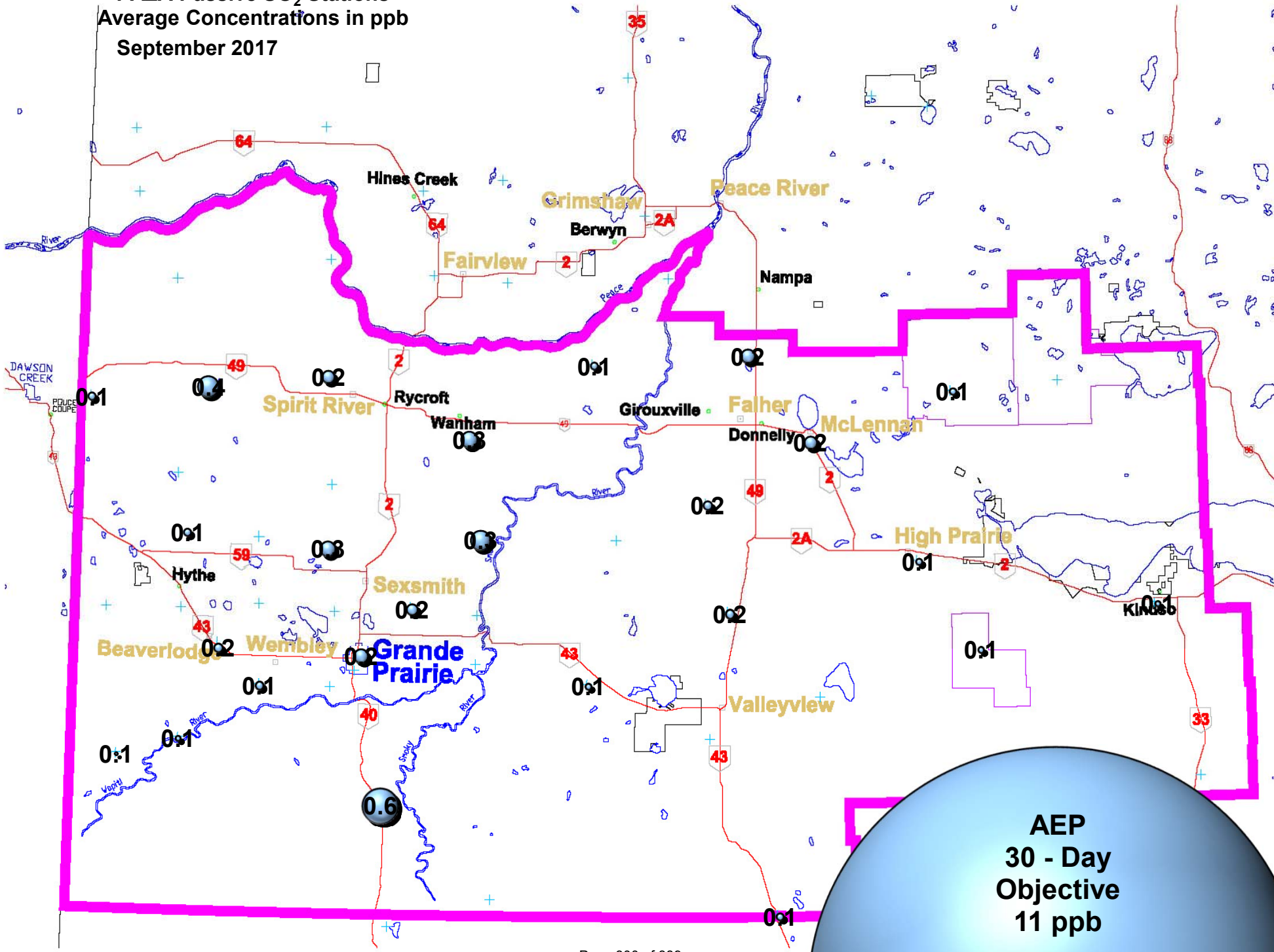
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

	SO ₂	NO ₂
PAZA Beaverlodge station	0.2	3.0
PAZA Beaverlodge passive	0.2	1.2

Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

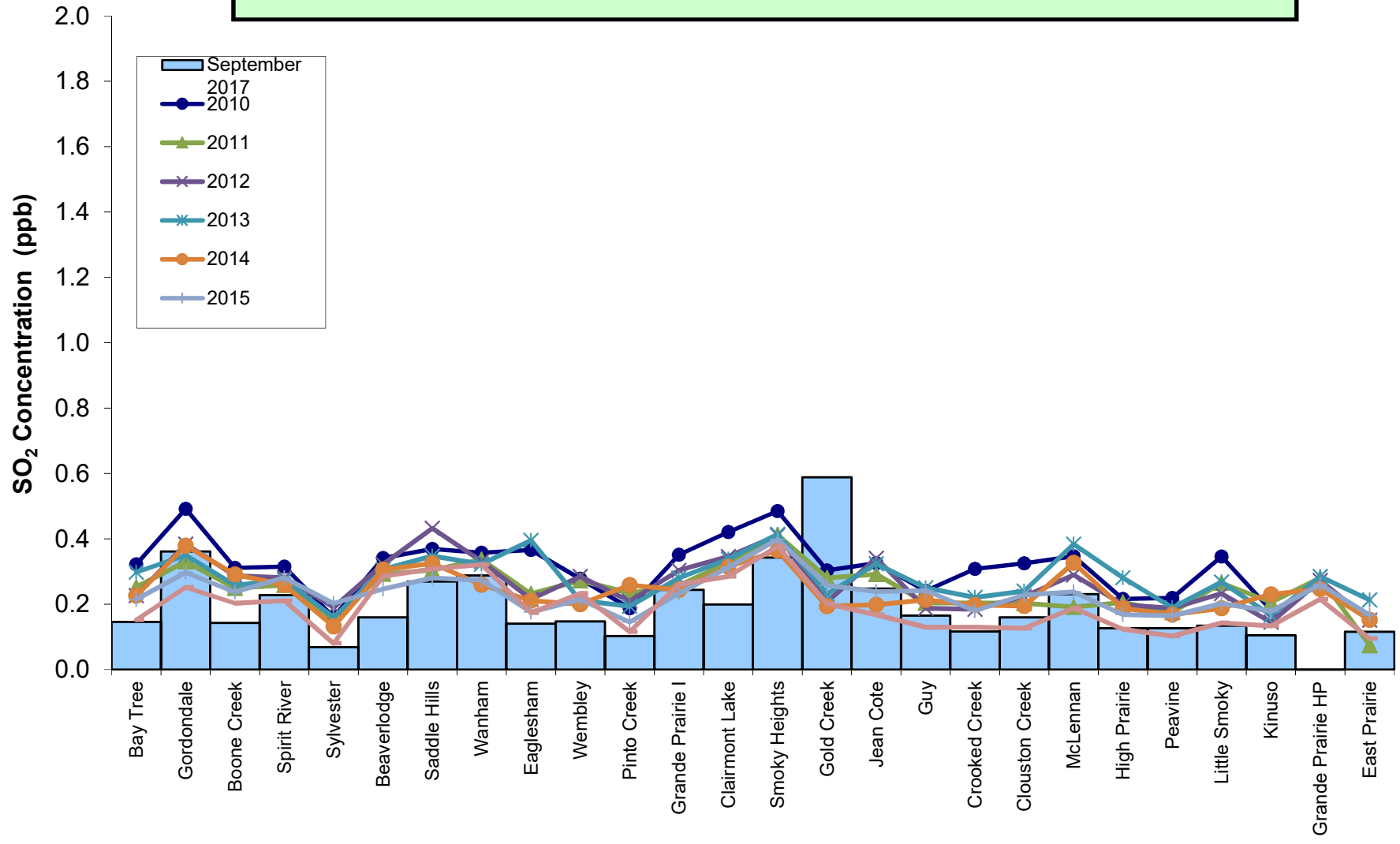
	SO ₂	NO ₂
PAZA Henry Pirker station	0.2	6.8
PAZA Grande Prairie passive	0.2	5.9

PAZA Passive SO₂ Stations
Average Concentrations in ppb
September 2017

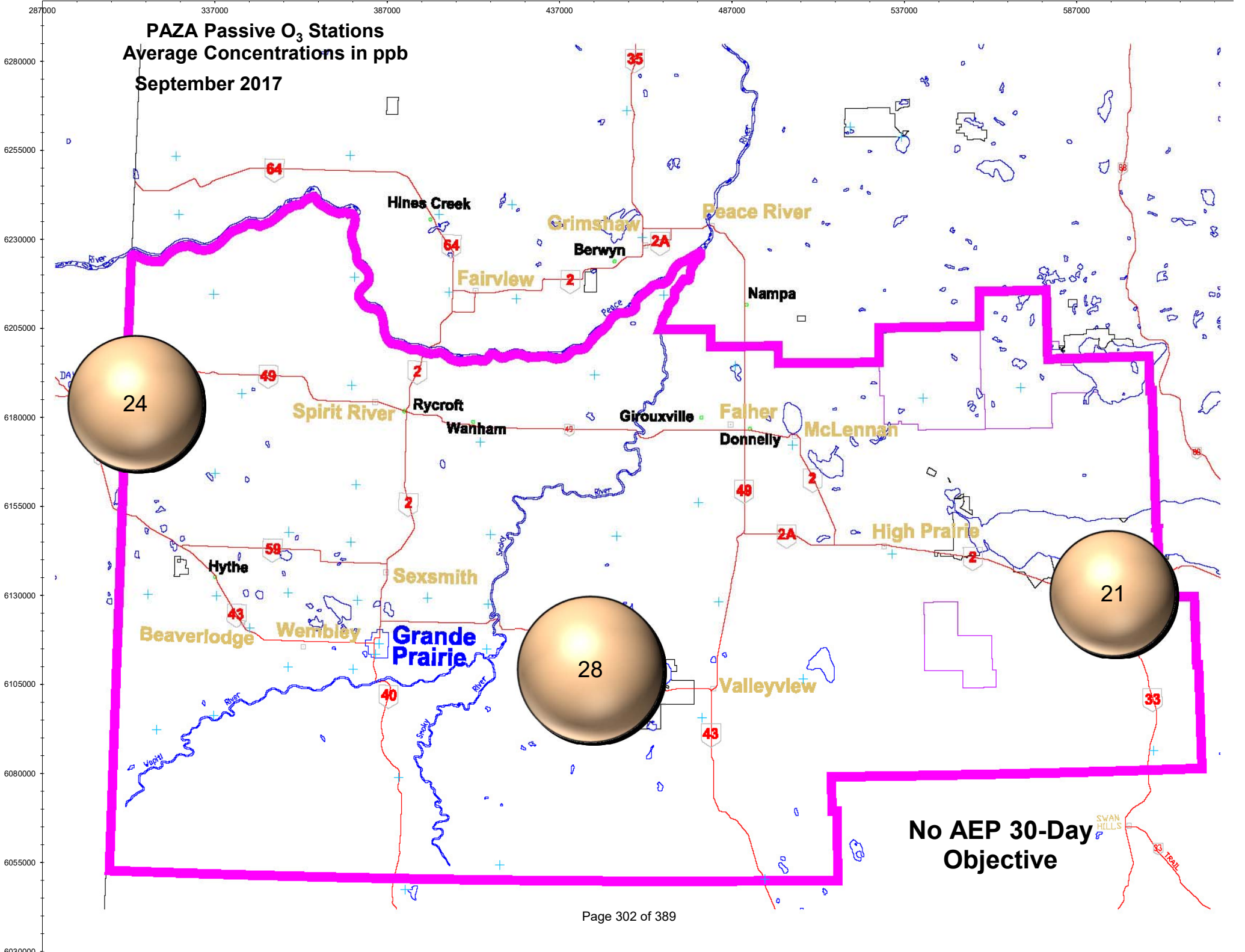


AEP
30 - Day
Objective
11 ppb

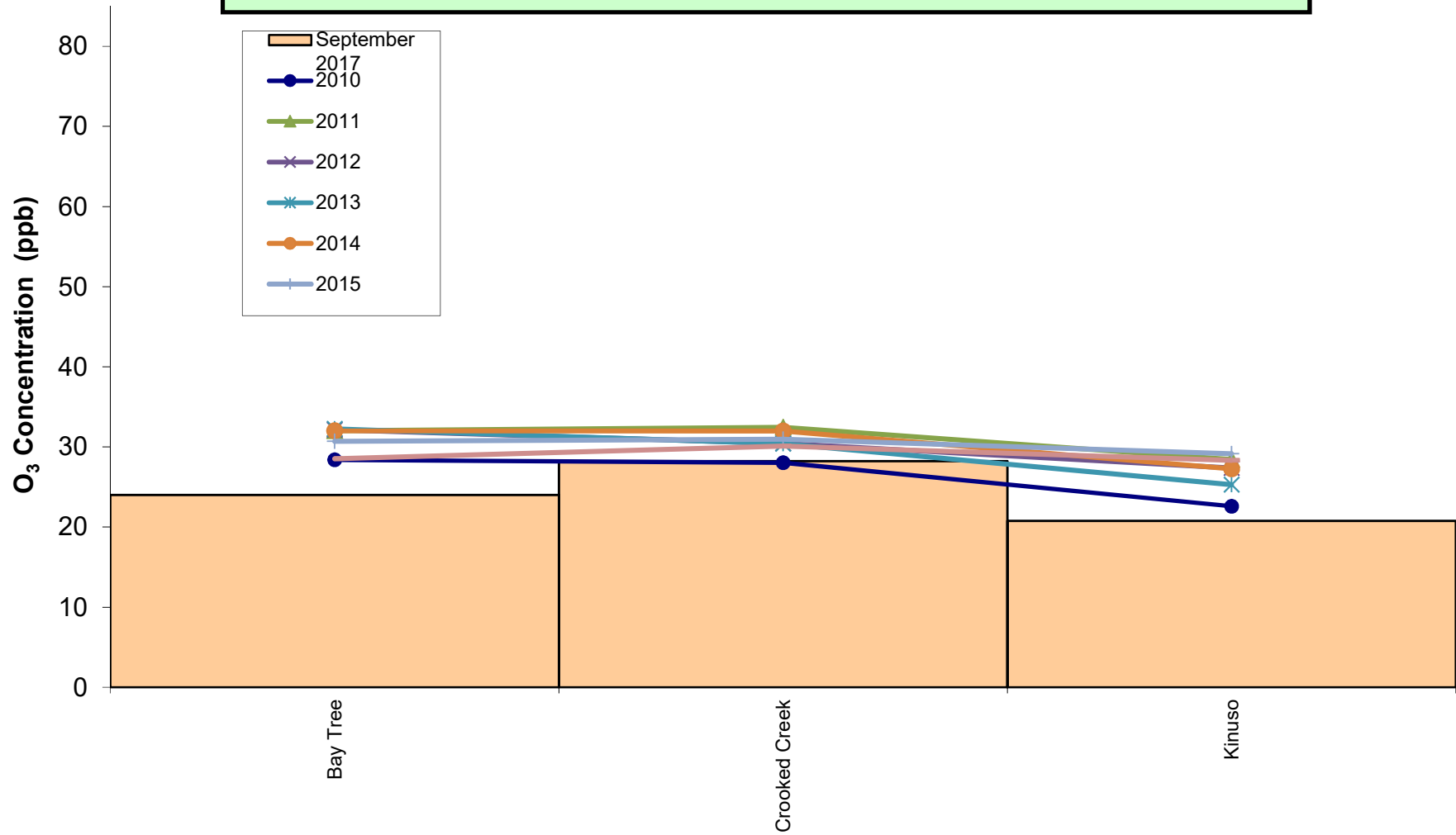
Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb

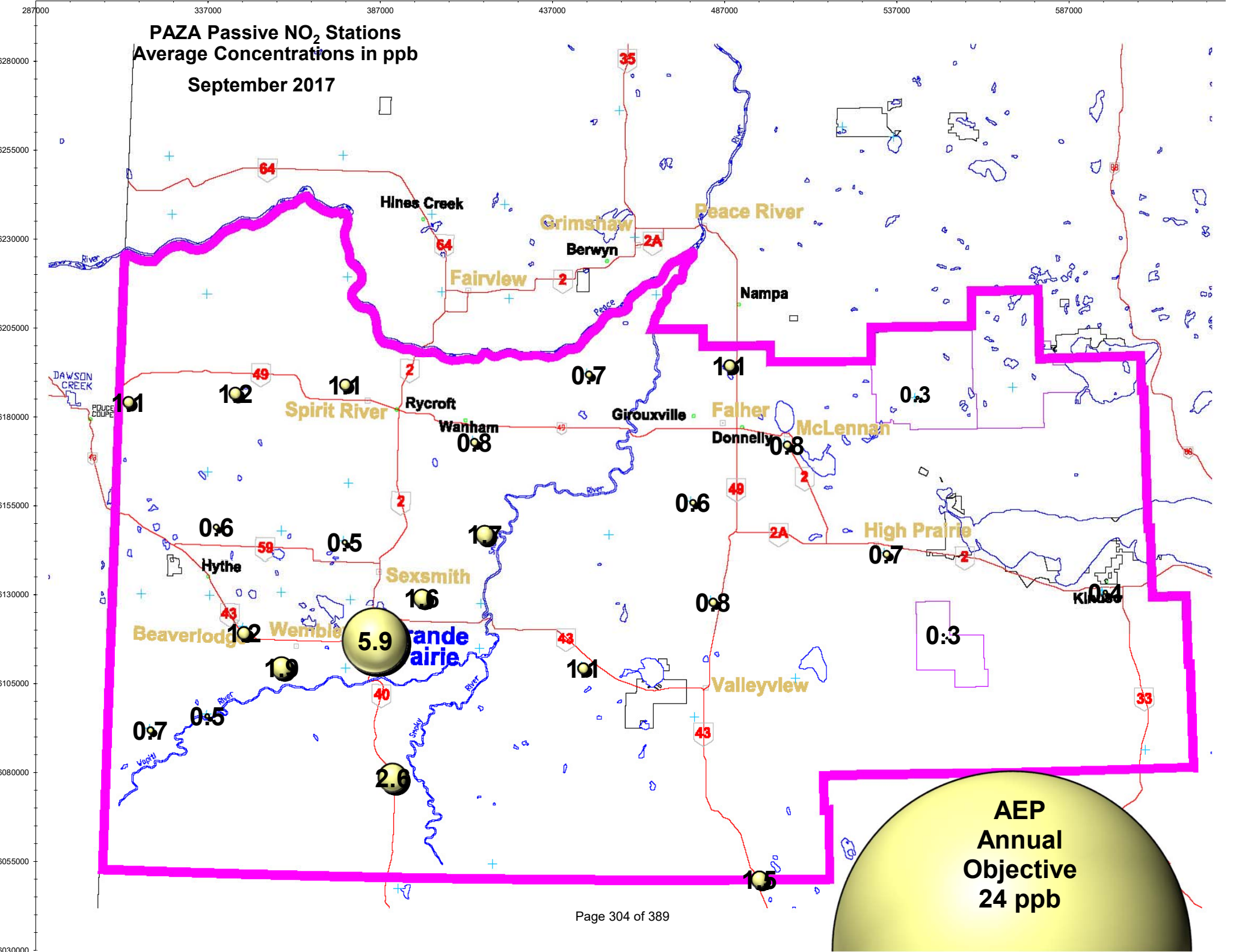


PAZA Passive O₃ Stations Average Concentrations in ppb September 2017

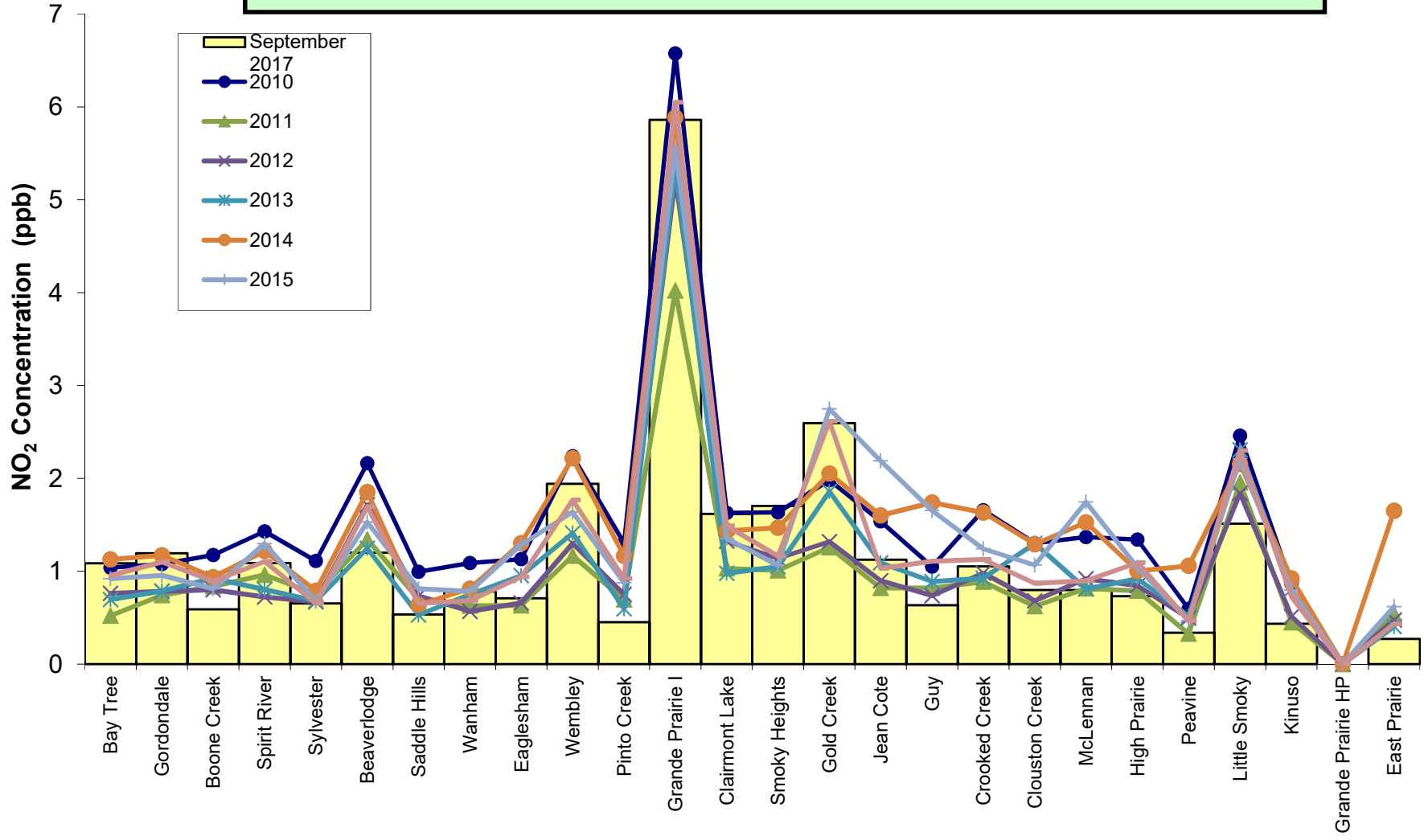


Alberta Ambient Air Quality Objective - No Annual O₃ Objective

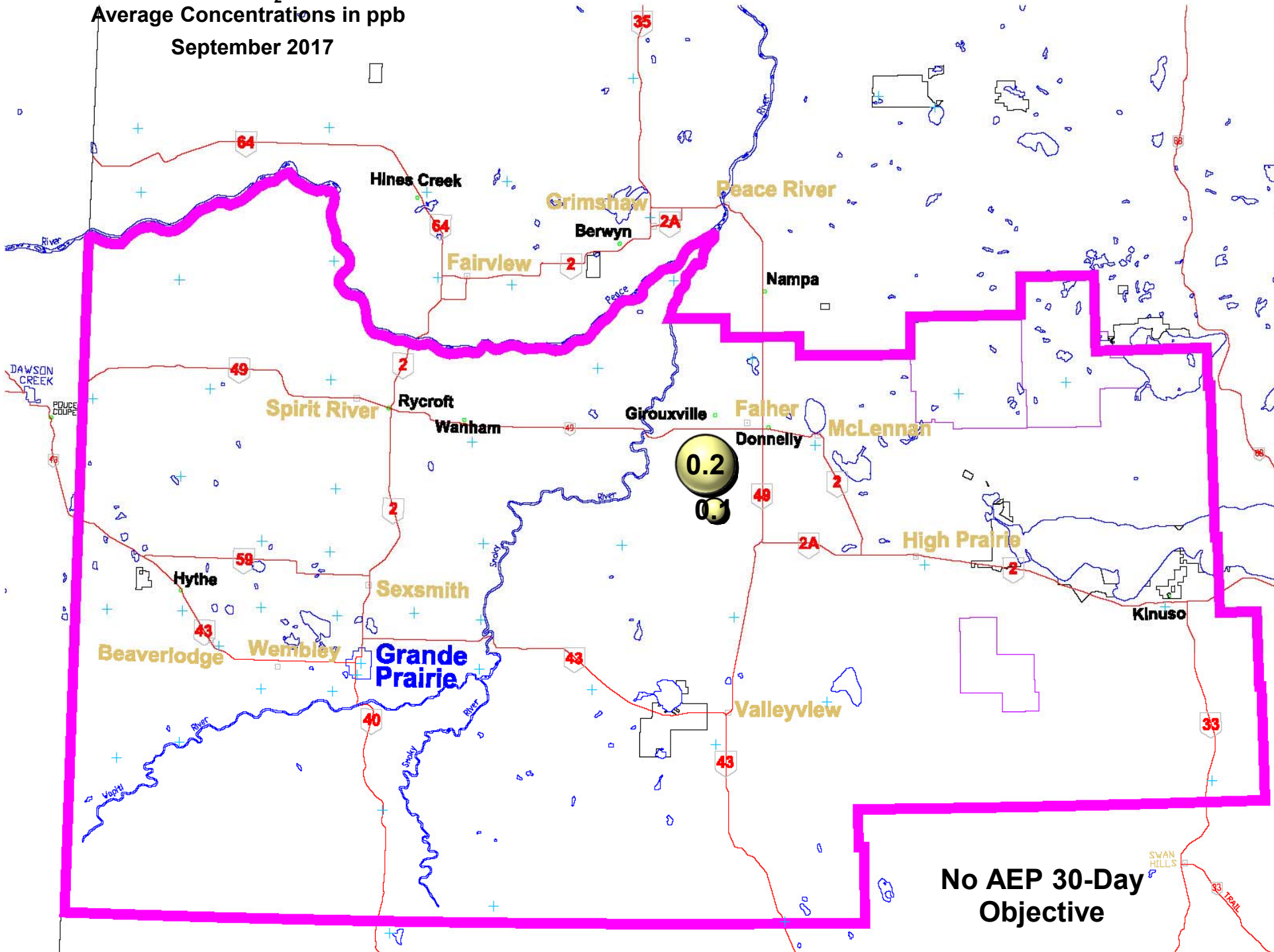




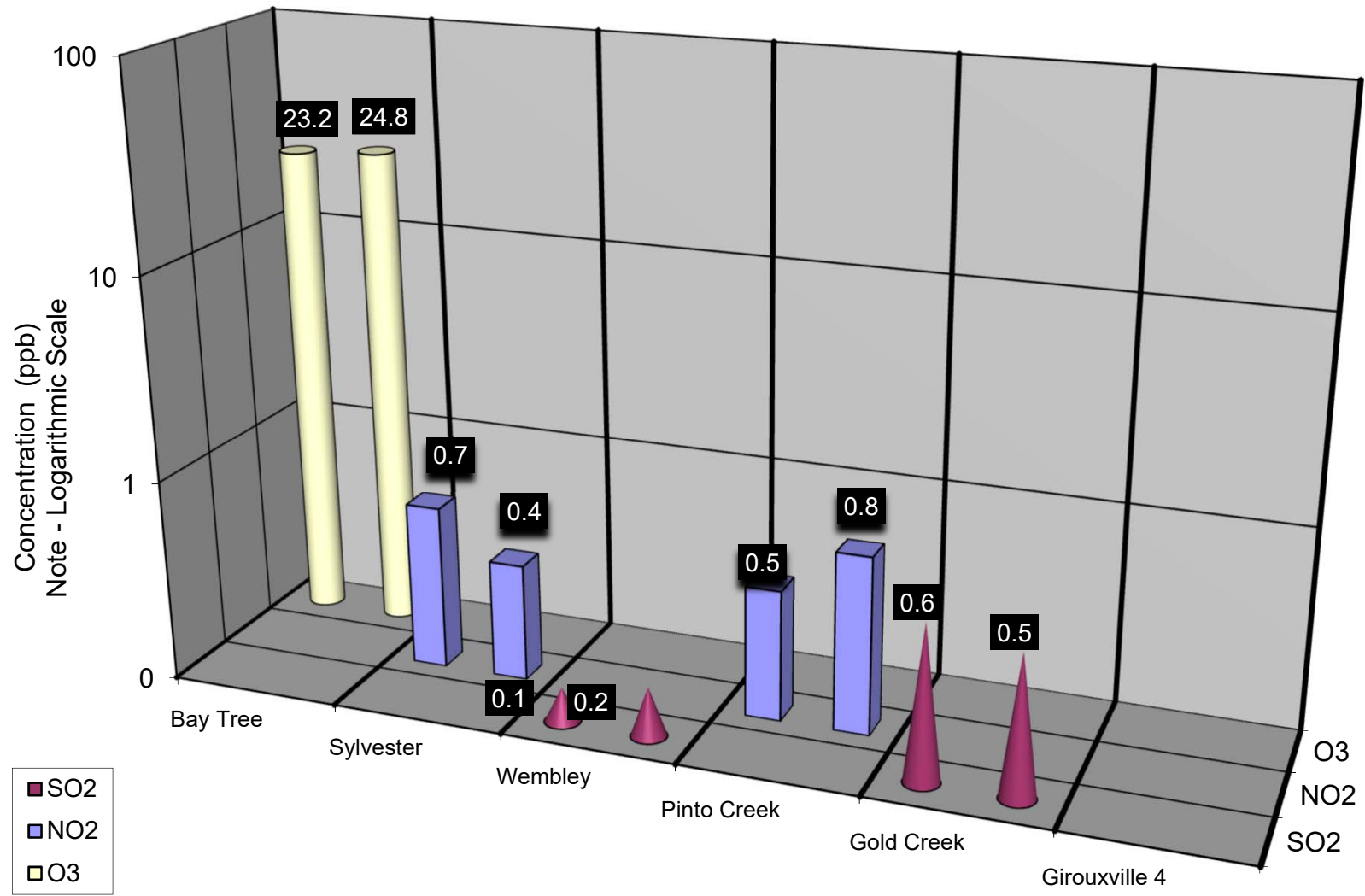
Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 24 ppb



**PAZA Passive H₂S Stations
Average Concentrations in ppb
September 2017**



**No AEP 30-Day
Objective**



Duplicate Summary Chart

September 2017 Calibration Reports

**PAZA - Henry Pirker Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, CO, THC, and TRS**

**PAZA – Evergreen Park Station with the following calibrations:
SO₂ and TRS**

**PAZA – Smoky Heights Station with the following calibrations:
SO₂ and TRS**

**PAZA – Beaverlodge Station with the following calibrations:
SO₂, NO, NO₂, NO_x, and O₃**

**PAZA – Valleyview Station with the following calibrations:
SO₂ and H₂S**

**PAZA – Donnelly Station with the following calibrations:
SO₂ and H₂S**

**PAZA – Rycroft Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, THC, and TRS**

Calibration Report



AIR QUALITY MONITORING

Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:15	End Time (MST)	12:15
Barometric Pressure	918.0 mbar	Station Temperature	22.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Conc	49.4 ppm	Cal Gas Cert Date	02/21/2020
		Cal Gas Cylinder #	EY0000751
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.001255	Calculated slope	1.001848
Calculated intercept	-3.377579	Calculated intercept	-0.917785
Analyzer make	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	1.40		1.40	
Coefficient	0.897		0.897	
Pressure	666.7	mm Hg	668.4	mm Hg
Flow	0.441	lpm	0.441	lpm
Lamp intensity	83	Hz	82	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
5140	0.00	0.0	0.1	N/A
5140	41.32	394.0	393.0	1.0025
5140	19.92	190.7	194.0	0.9829
5140	9.79	93.9	93.9	1.0004
5140	0.00	0.0	0.1	As Found Zero
5140	41.20	392.8	393.0	As Found Span
Average Correction Factor				0.9953

Calculated value of As Found Response: 390.0 ppb Percent Change of As Found: 0.7%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	278.8	ppb	284.2	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



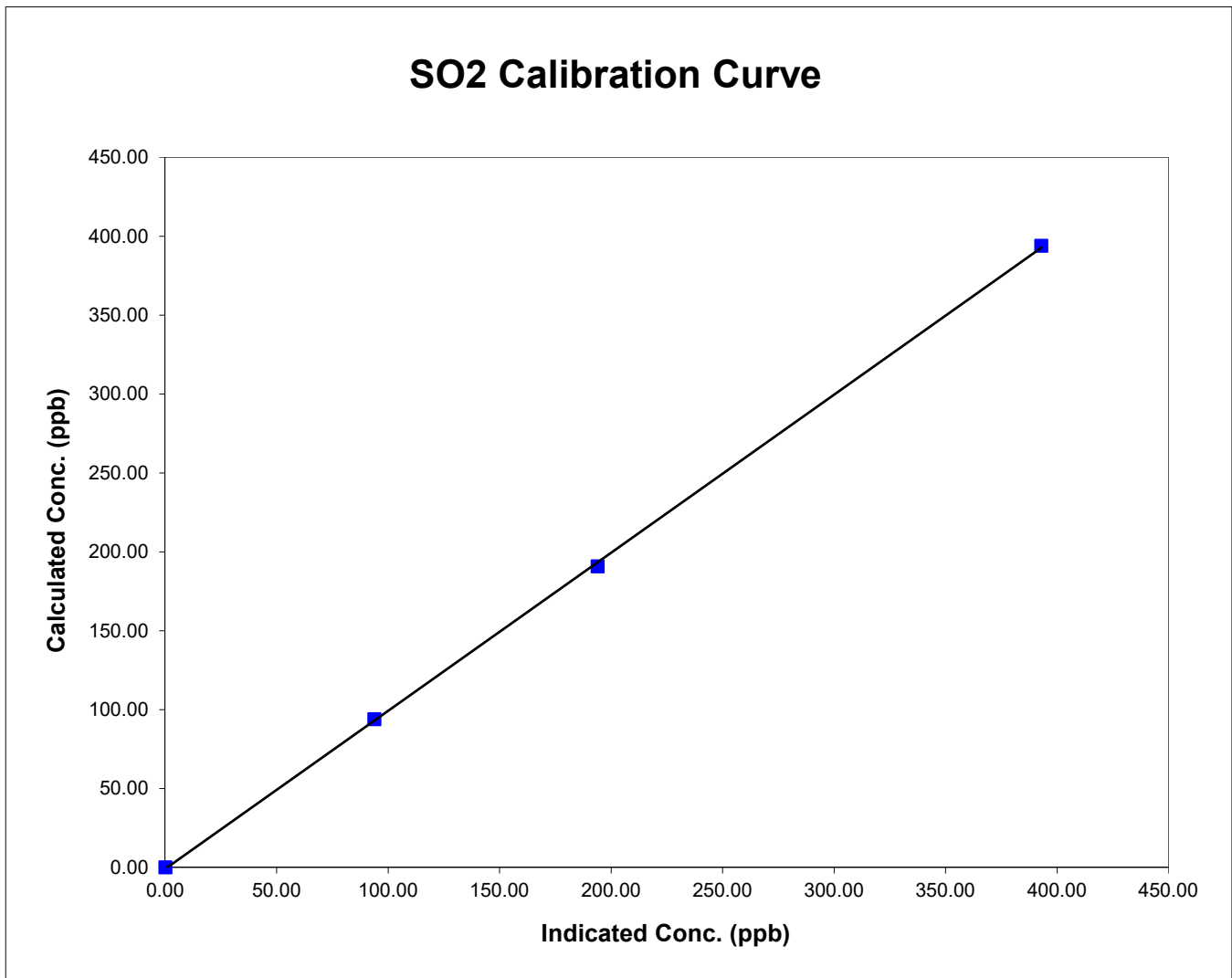
Parameter SO2
 Air Monitoring Network PAZA

Station Information

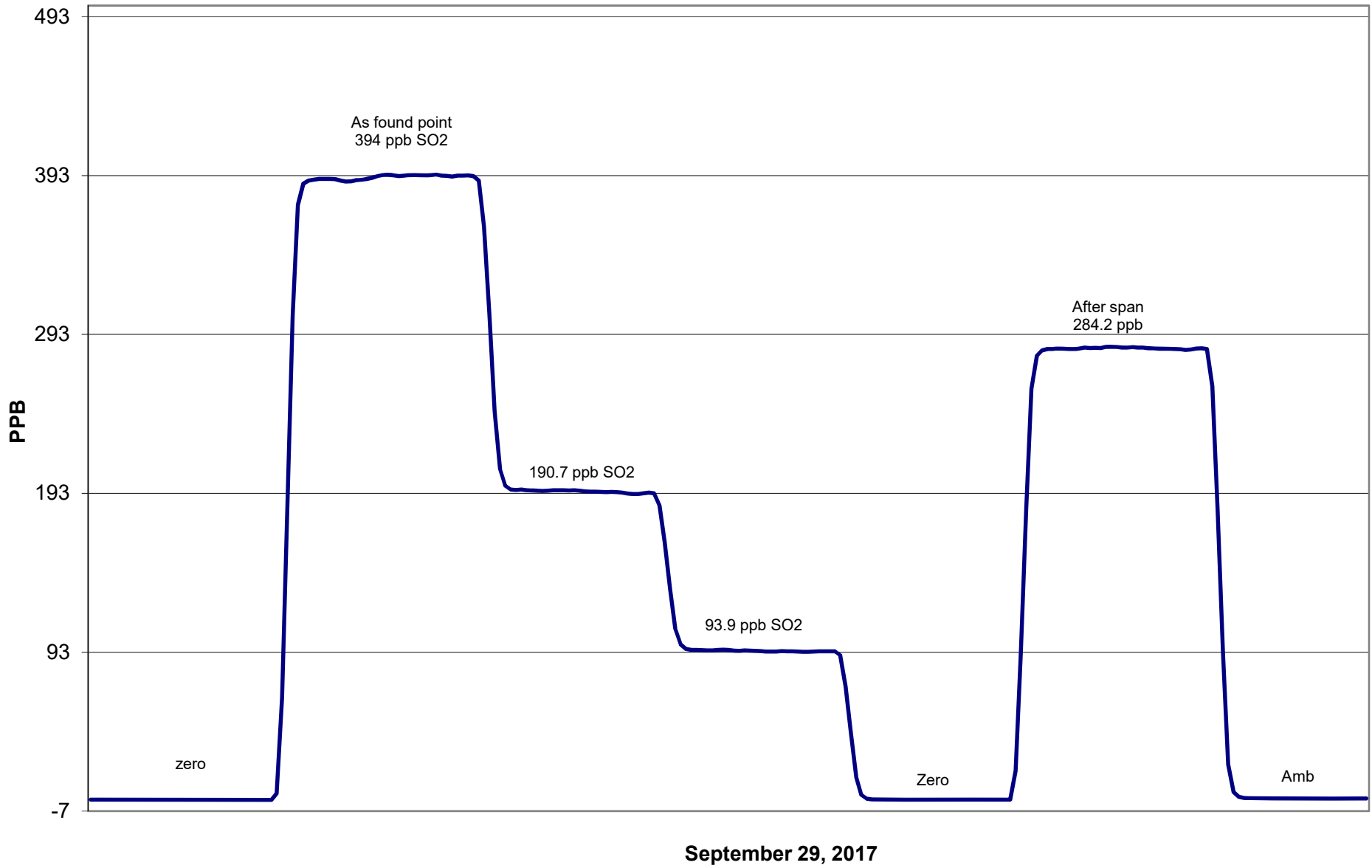
Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:15	End Time (MST)	12:15
Analyzer make/model	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
394.0	393.0	1.0025	Correlation Coefficient	0.999880
190.7	194.0	0.9829		
93.9	93.9	1.0004	Slope	1.001848
			Intercept	-0.917785



SO2 Calibration



Calibration Report

Parameter **NO_x-NO-NO₂**
 Air Monitoring Network **PAZA**



Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal Other:
Start Time (MST)	10:05	End Time (MST)	13:45:00 PM
Barometric Pressure	0.918 mbar	Station Temperature	22.0 Deg C
Calibrator	Envionics	Serial Number	906535067 (AMU 197)
NO Cal Gas Conc	50.4 ppm	Cal Gas Expiry Date	02/21/2020
NO _x Cal Gas Conc	50.5 ppm	Cal Gas Serial #	EY0000751

DACS Information

DACS make	CR3000	DACS serial No.	5408	
	Parameter	NO ₂	NO _x	NO
Before	Data Slope	0.996876	0.992420	0.993265
	Data Offset	-0.214225	-0.972460	-0.985448
After	Data Slope	0.999040	1.017165	1.017128
	Data Offset	0.018375	-0.662299	-0.874598
	Channel #	8	6	7
	Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	42i	Analyzer serial #	906535087	
Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	8.0	mV	8.0	mV
NO _x bkgnd	8.2	mV	8.2	mV
NO coefficient	1.061		1.061	
NO _x coefficient	1.000		1.000	
NO ₂ conv temp	322.1	Deg C	326.0	Deg C
Cooler Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-844.3	mV	-844.4	mV
R Cell Press	203.5	in Hg	204.6	in Hg
Sample Flow	0.554	LPM	0.555	LPM

Notes: No adjustment made

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**

Station Information

Calibration Date: September 29, 2017 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	
zero	5140	0.00	0.0	0.0	0.0	0.0	0.1	0.0	N/A	N/A	
1	5140	41.32	402.7	401.9	0.8	395.5	395.0	0.6	1.0183	1.0177	
2	5140	19.92	195.0	194.6	0.4	194.9	194.7	0.1	1.0001	0.9995	
3	5140	9.79	96.0	95.8	0.2	94.2	94.3	0.1	1.0192	1.0155	
AFZ	5140	0.00	0.0	0.0	0.0	0.0	0.1	0.0	0.0000	0.0000	
AFS	5140	42.32	412.4	411.6	0.8	395.5	395.0	0.6	1.0428	1.0421	
									Average Correction Factor	1.0125	1.0109

As Found Concentrations: NO_x= 391.6 NO= 391.2 As Found Percent Change NO_x= -5.1% NO= -5.0%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency	
0	0.1	0.1	0.0	0.0	0.1	0.0	N/A	N/A	N/A	N/A	
NO point	394.7	394.7	0.0	394.9	394.7	1.2	0.9995	1.0000	N/A	N/A	
300	394.7	97.6	297.1	395.4	97.6	297.8	0.9981	1.0000	0.9977	100.2%	
200	394.7	191.4	203.3	394.9	191.4	202.7	0.9993	1.0000	1.0032	99.7%	
100	394.7	286.9	107.8	396.1	286.9	108.2	0.9963	1.0000	0.9957	100.4%	
							Average Correction Factor	0.9979	1.0000	0.9989	100.1%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.0	0.1	ppb	0.0	0.0	0.1	ppb
Auto span	275.7	273.2	2.3	ppb	279.5	277.1	2.2	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter NO₂

Air Monitoring Network PAZA

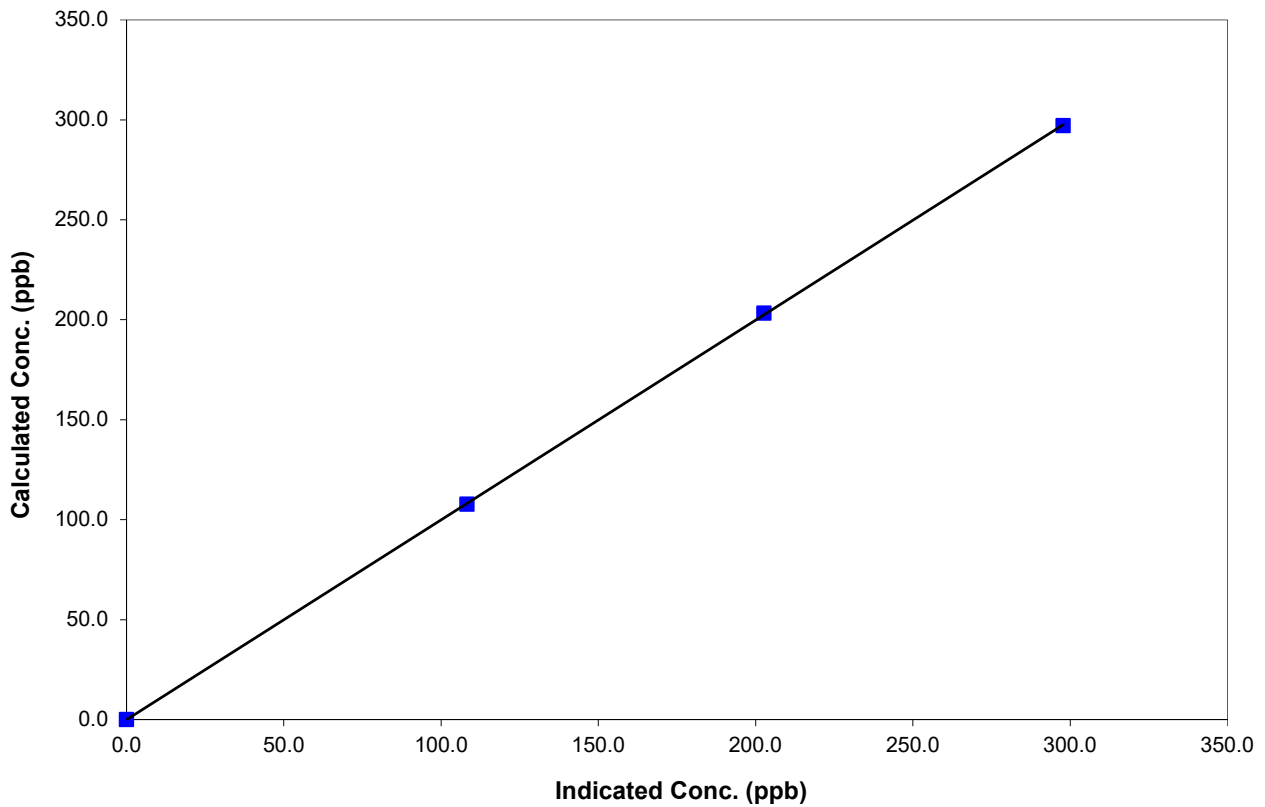
Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:05	End Time (MST)	13:45:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999980
297.1	297.8	0.9977		
203.3	202.7	1.0032		
107.8	108.2	0.9957	Slope	0.999040
			Intercept	0.018375

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PAZA

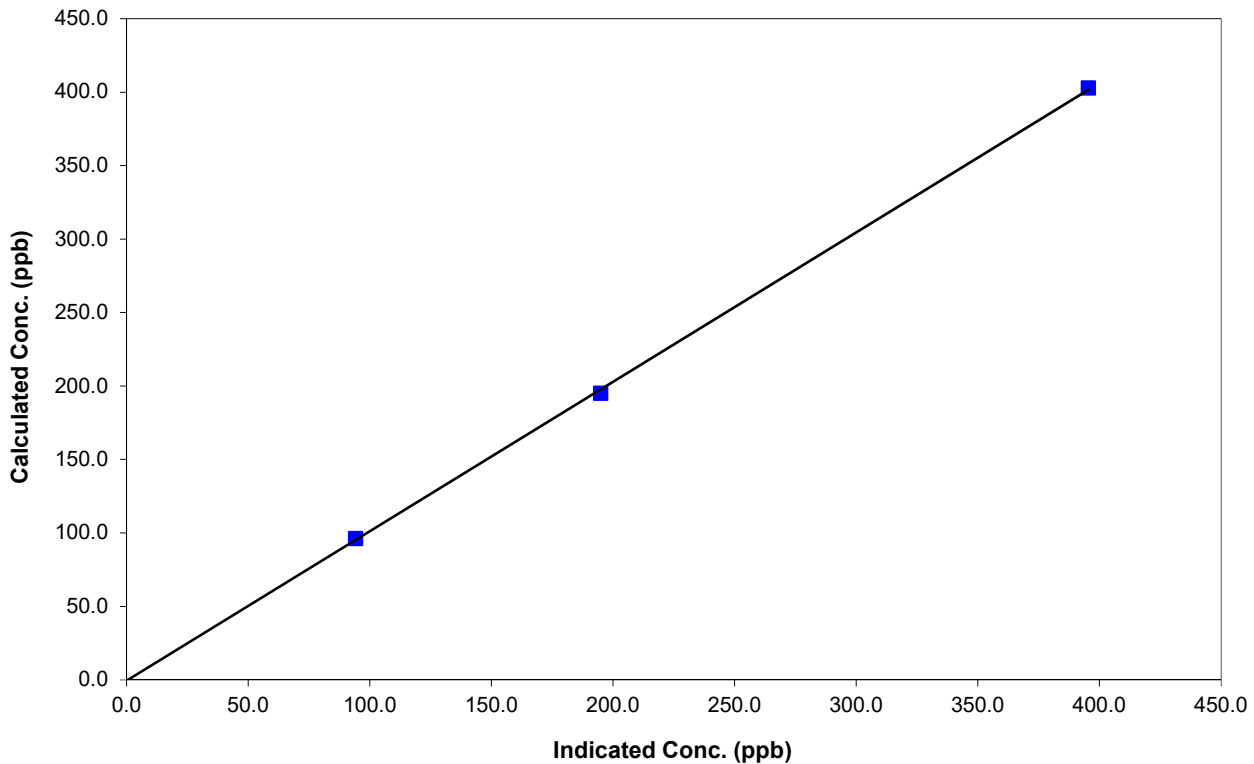
Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:05	End Time (MST)	13:45:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999892
402.7	395.5	1.0183		
195.0	194.9	1.0001		
96.0	94.2	1.0192		
			Slope	1.017165
			Intercept	-0.662299

NO_x Calibration Curve



Calibration Summary



Parameter NO
 Air Monitoring Network PAZA

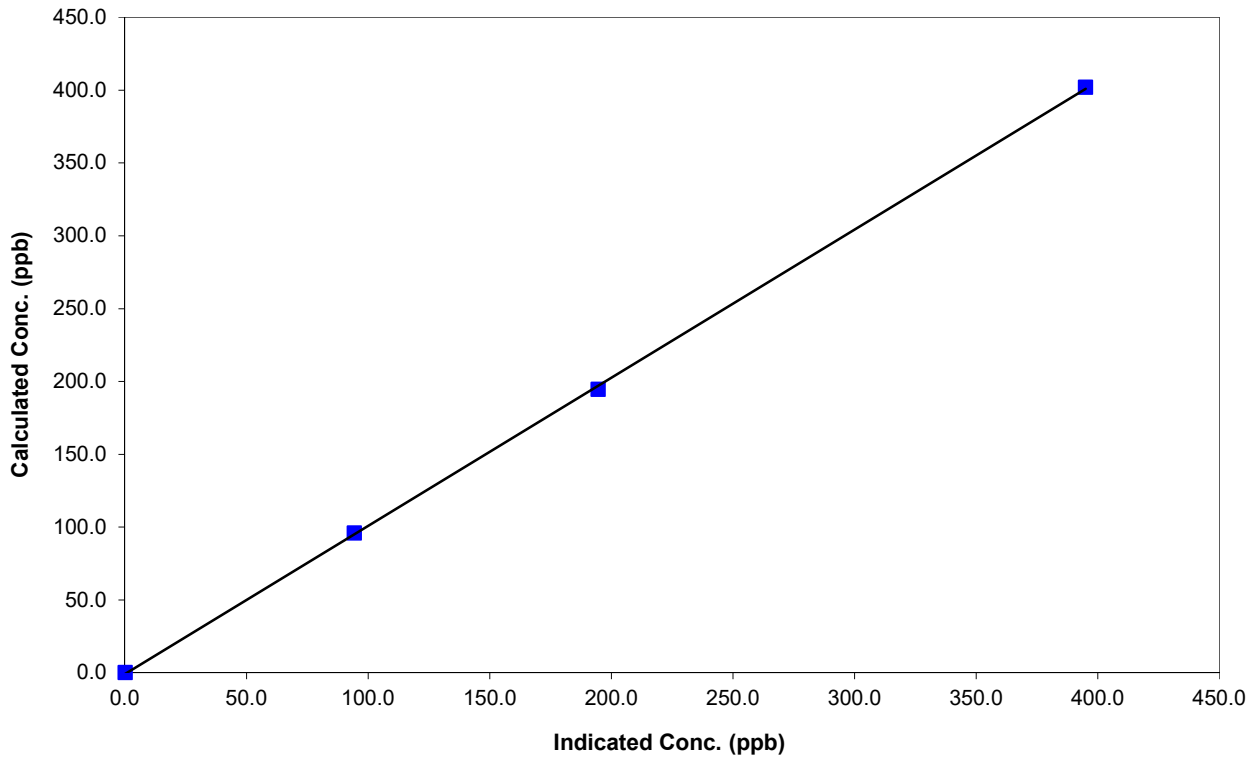
Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:05	End Time (MST)	13:45:00 PM
Analyzer make	42i	Analyzer serial #	906535087

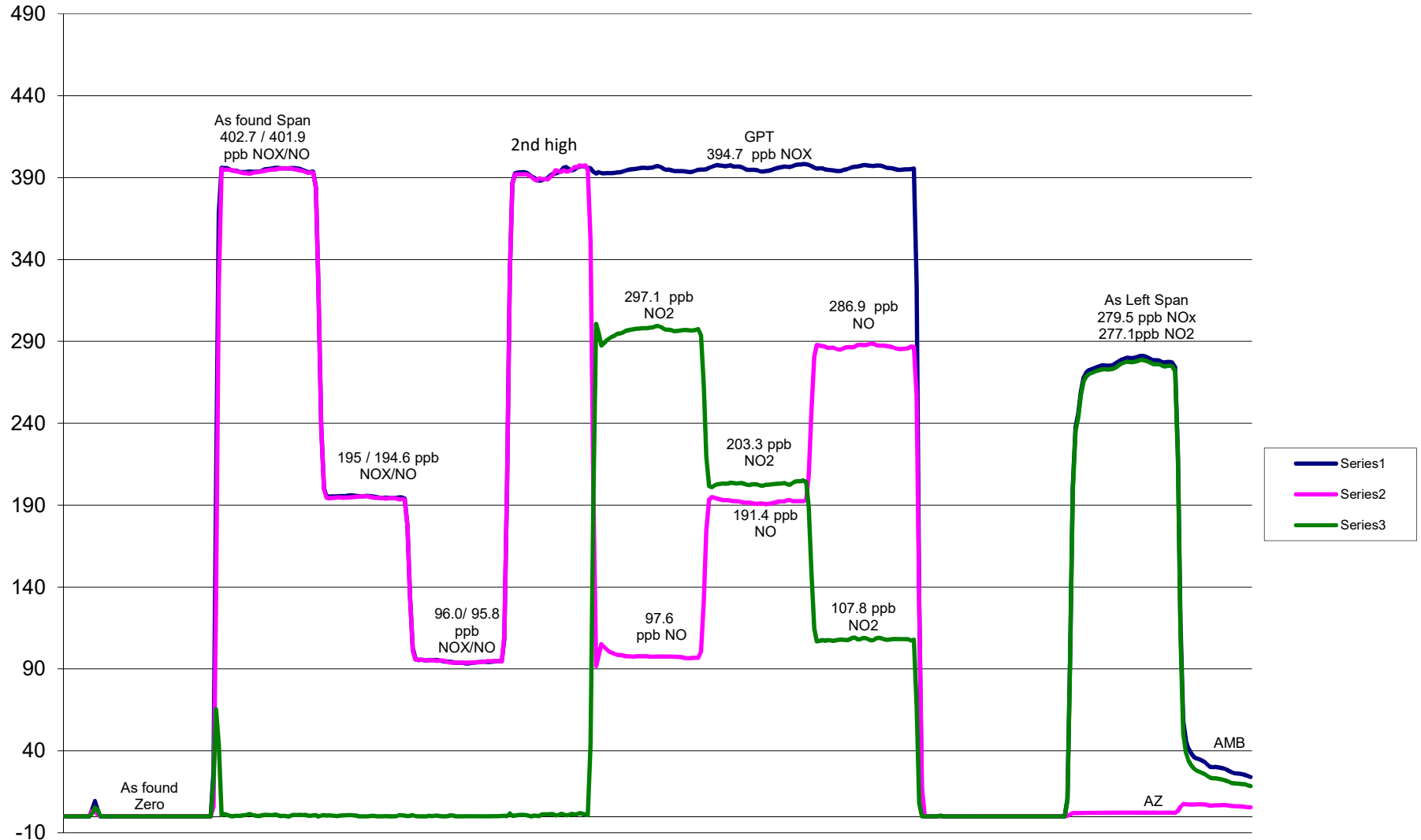
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999901
401.9	395.0	1.0177		
194.6	194.7	0.9995	Slope	1.017128
95.8	94.3	1.0155		

NO Calibration Curve



NO_x Calibration



September 29, 2017

Calibration Report



Parameter 03
Air Monitoring Network _____

PAZA

Station Information

Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	12:30	End Time (MST)	14:30:00 PM
Barometric Pressure	918.0 mm	Station Temperature	22.0 Deg C
Calibrator	Envionics	Serial Number	6586
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.995583	Calculated slope	0.983251
Calculated intercept	0.847902	Calculated intercept	0.093828
Analyzer make	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.60	ppb	-0.60	ppb
slope	1.007		1.007	
Lamp temp	53.6	mV	53.7	mV
Lamp Intensity A/B	67332/72771	mV	67123/73768	mV
Pressure	691.2	mm Hg	695.2	mm Hg
Flow A	0.731	ccm	0.732	ccm
Flow B	0.732	ccm	0.733	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5140	0.0	0.0	-0.3	N/A
5140	0.3	297.1	302.4	0.9824
5140	0.2	203.3	205.7	0.9883
5140	0.1	107.8	110.3	0.9770
5140	0.0	0.0	-0.3	As found zero
5140	0.3	297.1	302.4	As found span
Average Correction Factor				0.9826

Calculated value of As Found Response: 302.2 ppm Percent Change of As Found: 1.7%

	before calibration		after calibration	
Auto zero	-0.1	ppb	0.2	ppb
Auto span	369.6	ppb	373.3	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



AIR QUALITY MONITORING

Parameter O3

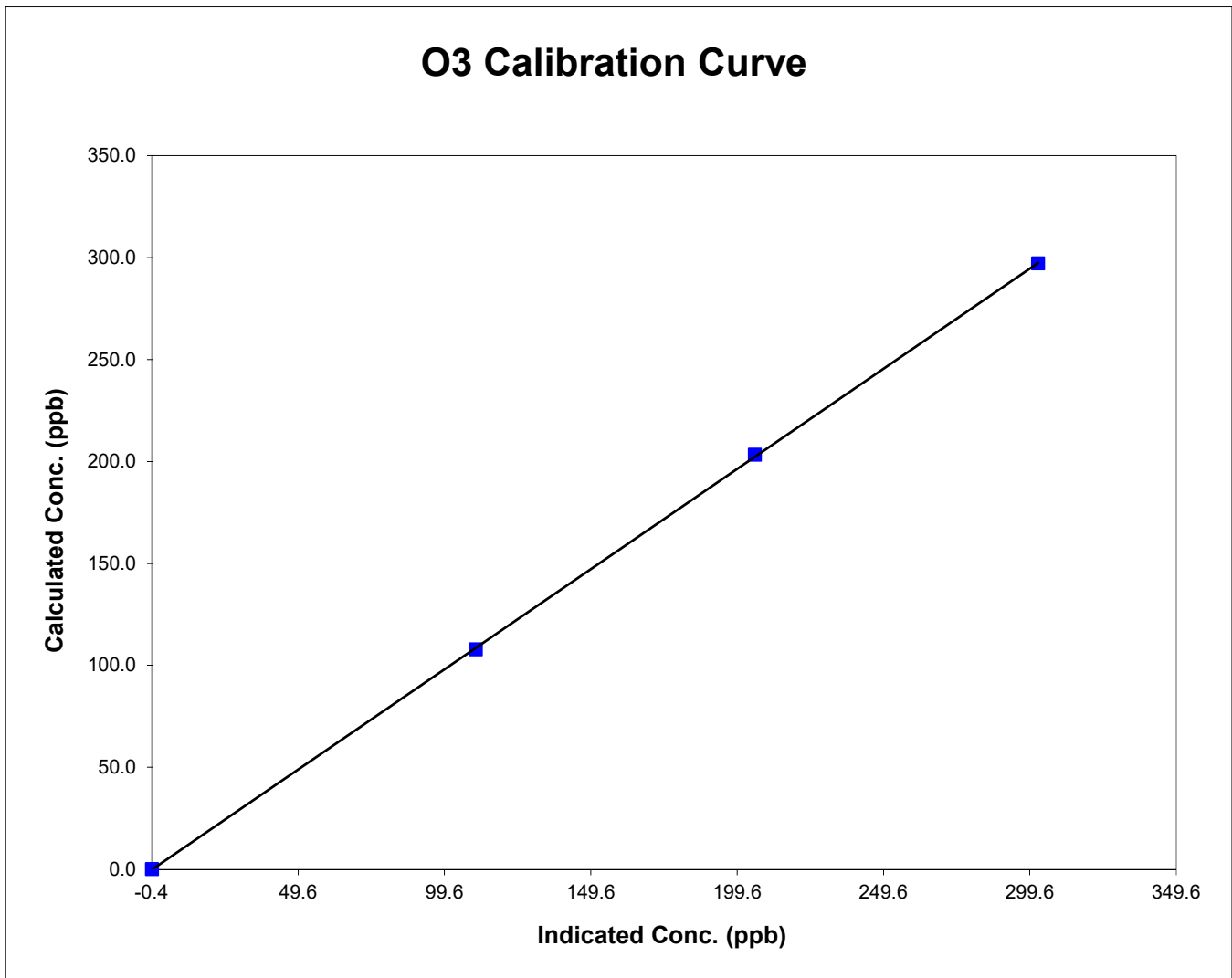
Air Monitoring Network PAZA

Station Information

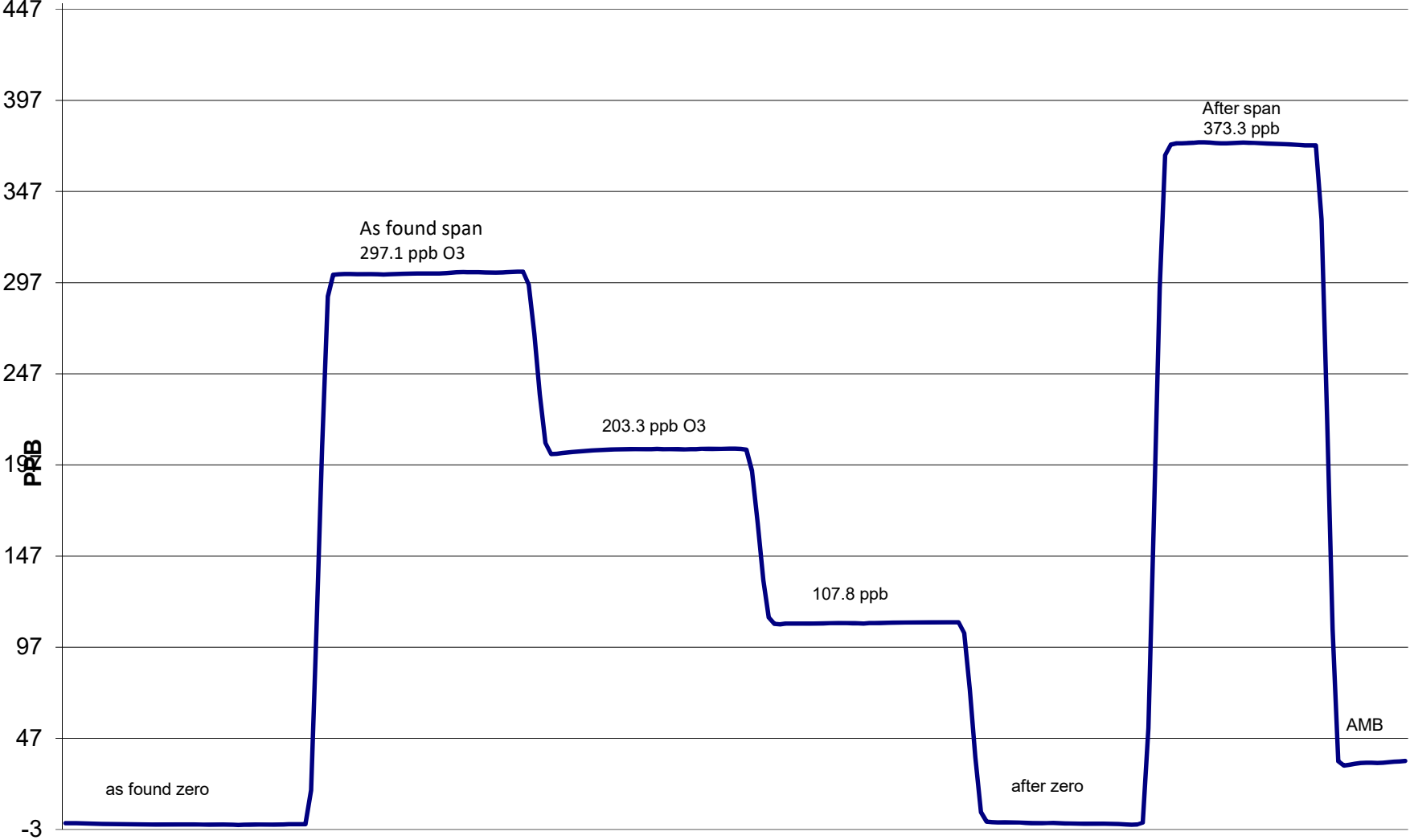
Calibration Date	September 29, 2017	Previous Calibration	August 29, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:30	End Time (MST)	14:30:00 PM
Analyzer make/model	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	NA	Correlation Coefficient	0.999966
297.1	302.4	0.9824		
203.3	205.7	0.9883	Slope	0.983251
107.8	110.3	0.9770		
			Intercept	0.093828



O3 Calibration



September 29, 2017

Calibration Report



AIR QUALITY MONITORING

Parameter CO

Air Monitoring Network PAZA

Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	11:25	End Time (MST)	14:55:00 PM
Barometric Pressure	0.917 mBar	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	6586
Cal Gas Conc	2906 ppm	Cal Gas Expiry Date	7/7/2023
		Cal Gas Cylinder #	LL109096
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.001699	Calculated slope	1.001767
Calculated intercept	-0.273276	Calculated intercept	-0.360941
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	8.274		8.721	
CO span setting	1.061		1.086	
Sample pressure	699.2	mm Hg	696.5	mm Hg
Sample Flow	0.440	LPM	0.439	LPM

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5156	0.00	0.00	0.00	N/A
5156	72.61	40.36	40.45	0.9978
5156	36.33	20.33	20.85	0.9753
5156	18.32	10.29	11.00	0.9350
5156	0.00	0.00	0.21	As Found Zero
5156	72.61	40.36	40.03	As Found Span
Average Correction Factor				0.9694

Calculated value of As Found Response: 39.614 ppm Percent Change of As Found: 1.8%

	before calibration		after calibration	
Auto zero	0.12	ppm	0.00	ppm
Auto span	20.67	ppm	20.94	ppm

Notes: Zero/span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CO
 Air Monitoring Network PAZA



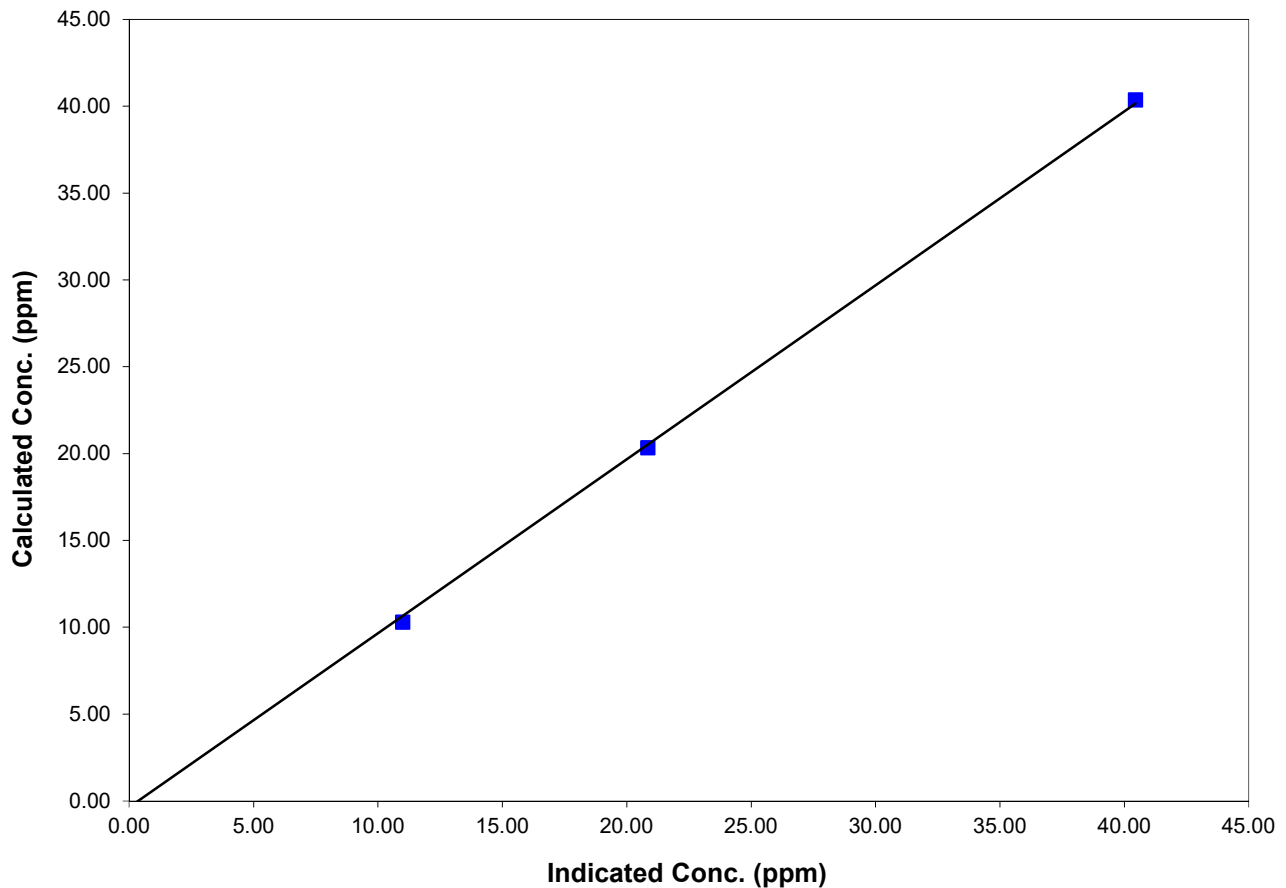
Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:25	End Time (MST)	14:55:00 PM
Analyzer make/model	Model 48I-TLE	Analyzer serial #	1408761378

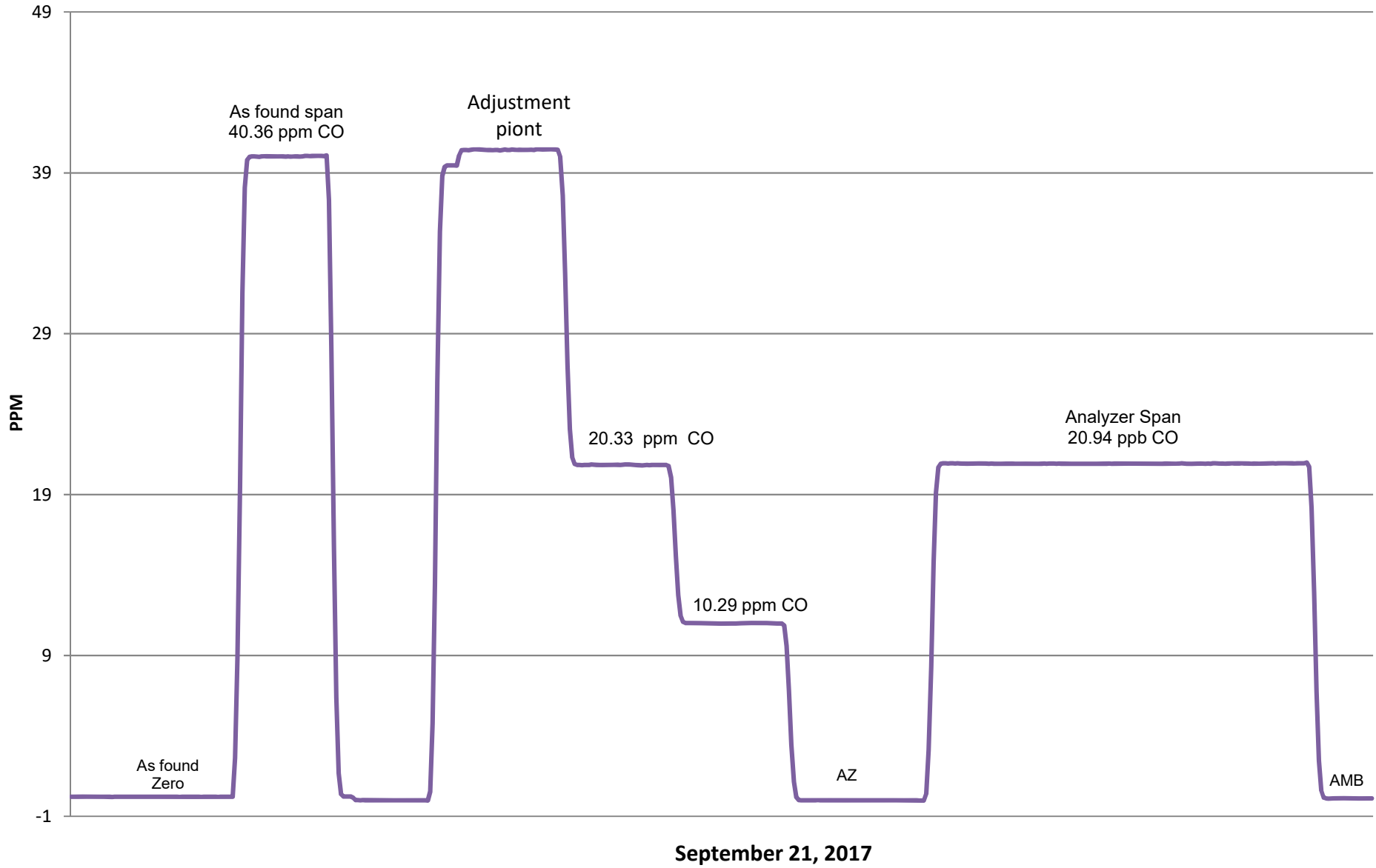
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.003	N/A		
40.356	40.446	0.9978	Correlation Coefficient	0.999609
20.333	20.847	0.9753		
10.289	11.004	0.9350	Slope	1.001767
			Intercept	-0.360941

CO Calibration Curve



CO Calibration



Calibration Report



Parameter CH4 / NMHC / THC

Air Monitoring Network PAZA

Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:40	End Time (MST)	15:50:00 PM
Barometric Pressure	0.917 mBar	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	7/5/2015
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make TEI 551 Analyzer serial # 1134650658

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.8	PSI	27.8	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	5.22		5.22	E ⁻⁴
NMHC cal factor	1.51		1.51	E ⁻⁴
Rt	12.31	Sec	12.31	Sec
Pk Index	23.43		23.43	

CH4 Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2004	0.00	0.00	0.02	N/A
2005	70.65	13.14	13.19	0.9959
2005	42.43	8.00	7.96	1.0048
2005	16.23	3.10	3.20	0.9674
2005	0.00	0.00	0.02	As Found Zero
2005	70.65	13.14	12.25	As Found Span
Average Correction Factor				0.9893

Calculated value of As Found Response: 12.514 ppm Percent Change of As Found: 4.8%

	Before		After
Calculated slope	1.020666	Calculated slope	1.001388
Calculated intercept	0.041197	Calculated intercept	-0.044832

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	8.95	ppm	9.58	ppm

NMHC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2005	0.00	0.00	0.02	N/A
2005	70.65	19.38	19.55	0.9910
2005	42.43	11.80	11.85	0.9957
2005	16.23	4.57	4.74	0.9640
2005	0.00	0.00	0.02	As Found Zero
2005	70.65	19.38	18.37	As Found Span
Average Correction Factor				0.9836

Calculated value of As Found Response: 18.698 ppm Percent Change of As Found: 3.5%

	<u>Before</u>		<u>After</u>
Calculated slope	1.010877	Calculated slope	0.995037
Calculated intercept	0.143400	Calculated intercept	-0.059567

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.58	ppm	13.34	ppm

THC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2004	0.00	0.00	0.04	N/A
2005	70.65	32.51	32.73	0.9936
2005	42.43	19.80	19.79	1.0002
2005	16.23	7.67	7.93	0.9674
2005	0.00	0.00	0.04	As Found Zero
2005	70.65	32.51	30.59	As Found Span
Average Correction Factor				0.9871

Calculated value of As Found Response: 31.219 ppm Percent Change of As Found: 4.0%

	<u>Before</u>		<u>After</u>
Calculated slope	1.015591	Calculated slope	0.997970
Calculated intercept	0.189125	Calculated intercept	-0.095268

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.52	ppm	22.92	ppm

Notes: Span adjustment made _____

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4
 Air Monitoring Network PAZA



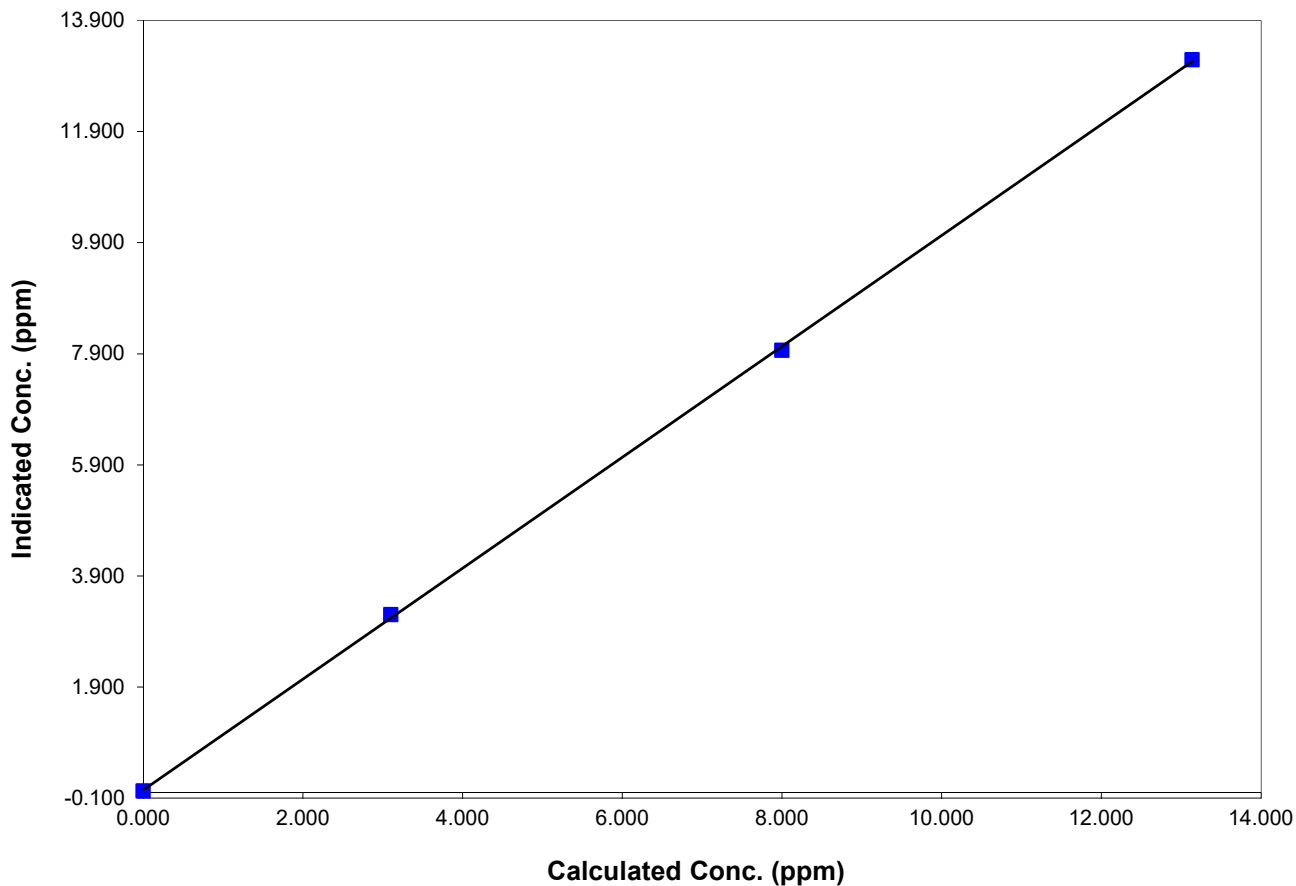
Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:40	End Time (MST)	15:50:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.025	N/A		
13.138	13.193	0.9959	Correlation Coefficient	0.999895
7.999	7.961	1.0048		
3.099	3.204	0.9674	Slope	1.001388
			Intercept	-0.044832

CH4 Calibration Data



Calibration Summary

Parameter NMHC
Air Monitoring Network PAZA



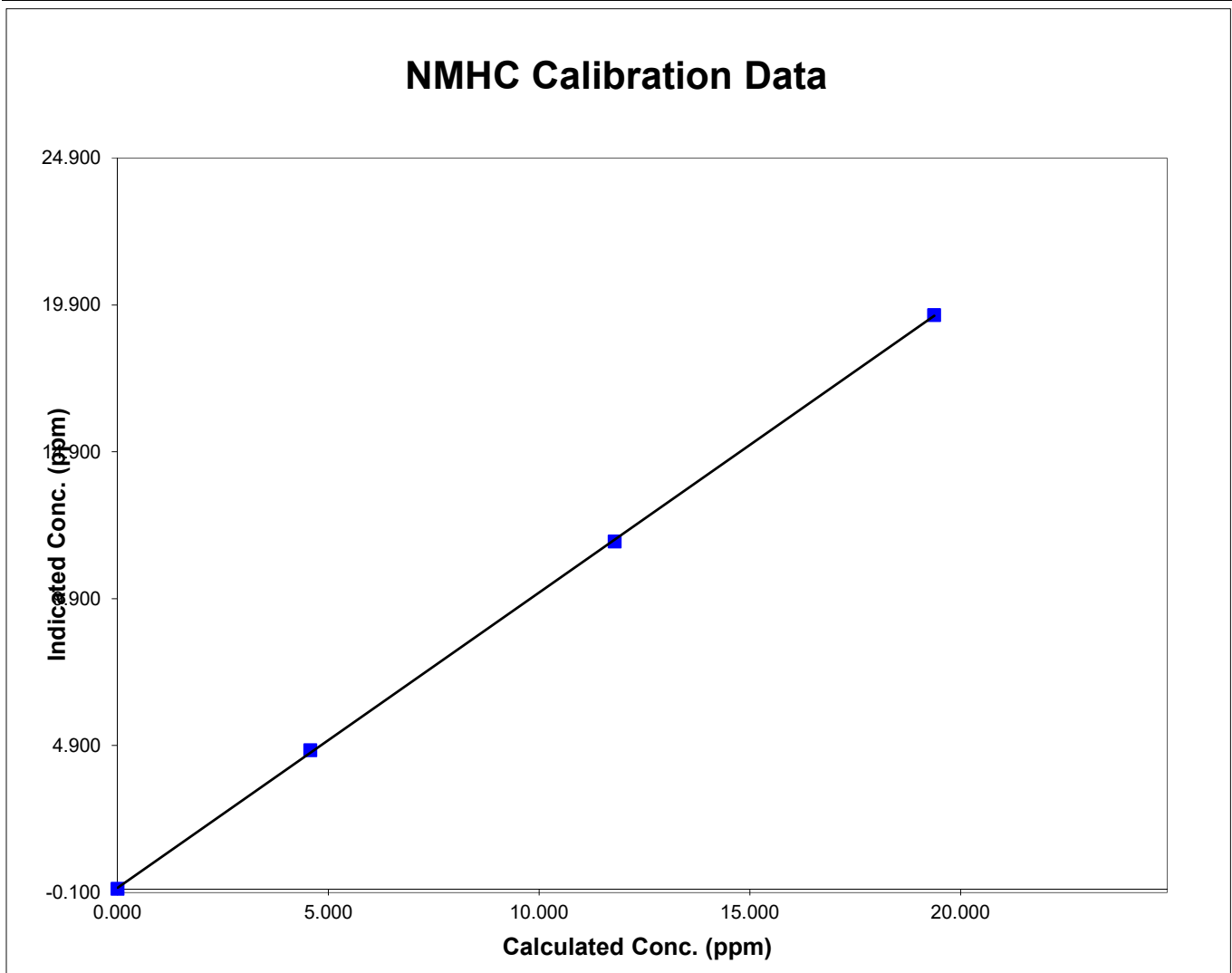
Station Information

Calibration Date	<u>September 21, 2017</u>	Previous Calibration	<u>August 30, 2017</u>
Station Number	<u>1</u>	Station Location	<u>Henry Pirker</u>
Start Time (MST)	<u>12:40</u>	End Time (MST)	<u>15:50:00 PM</u>
Analyzer make/model	<u>TEI 55I</u>	Analyzer serial #	<u>1134650658</u>

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A		
19.376	19.552	0.9910	Correlation Coefficient	0.999934
11.797	11.848	0.9957		
4.571	4.742	0.9640	Slope	0.995037
			Intercept	-0.059567

NMHC Calibration Data



Calibration Summary



Parameter THC
 Air Monitoring Network PAZA

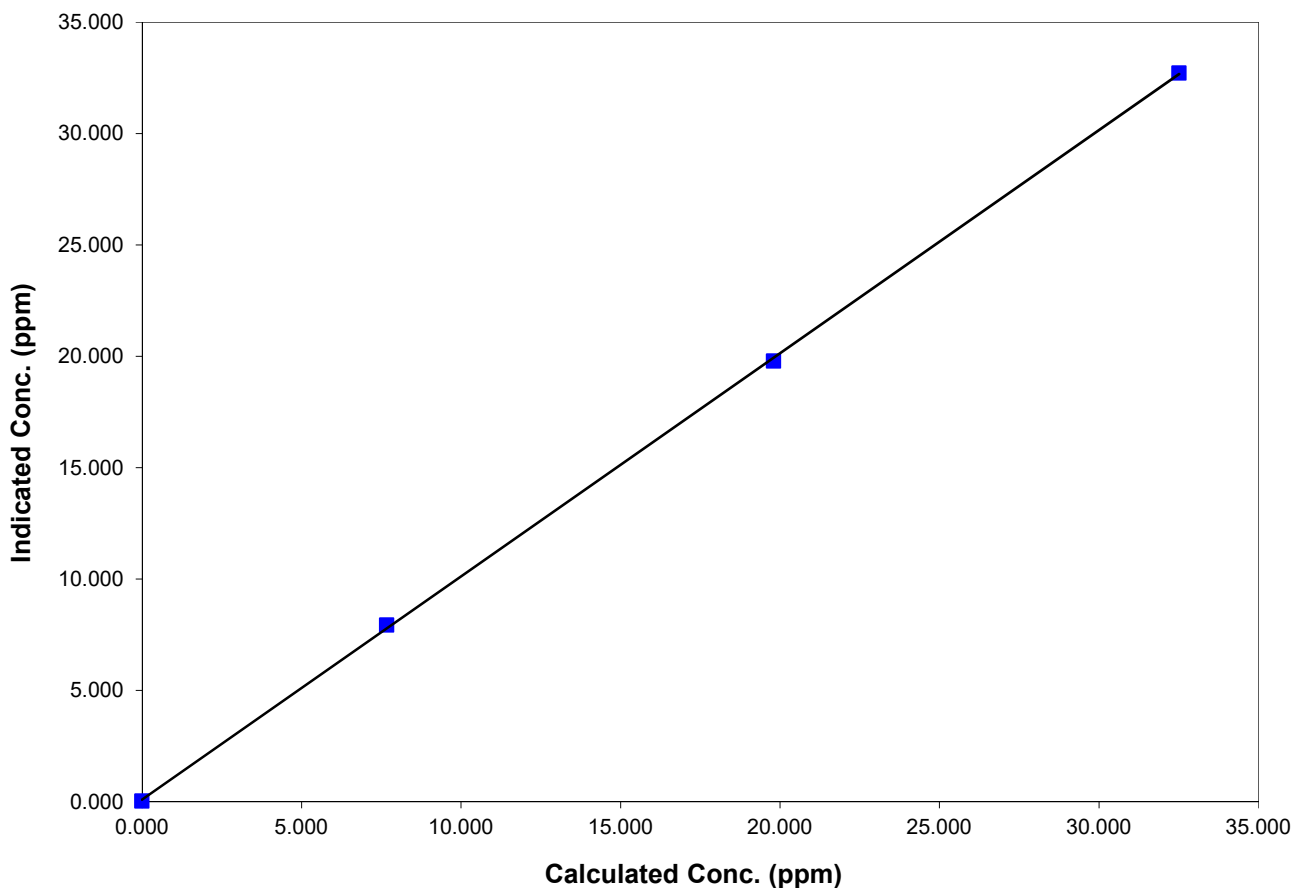
Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:40	End Time (MST)	15:50:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

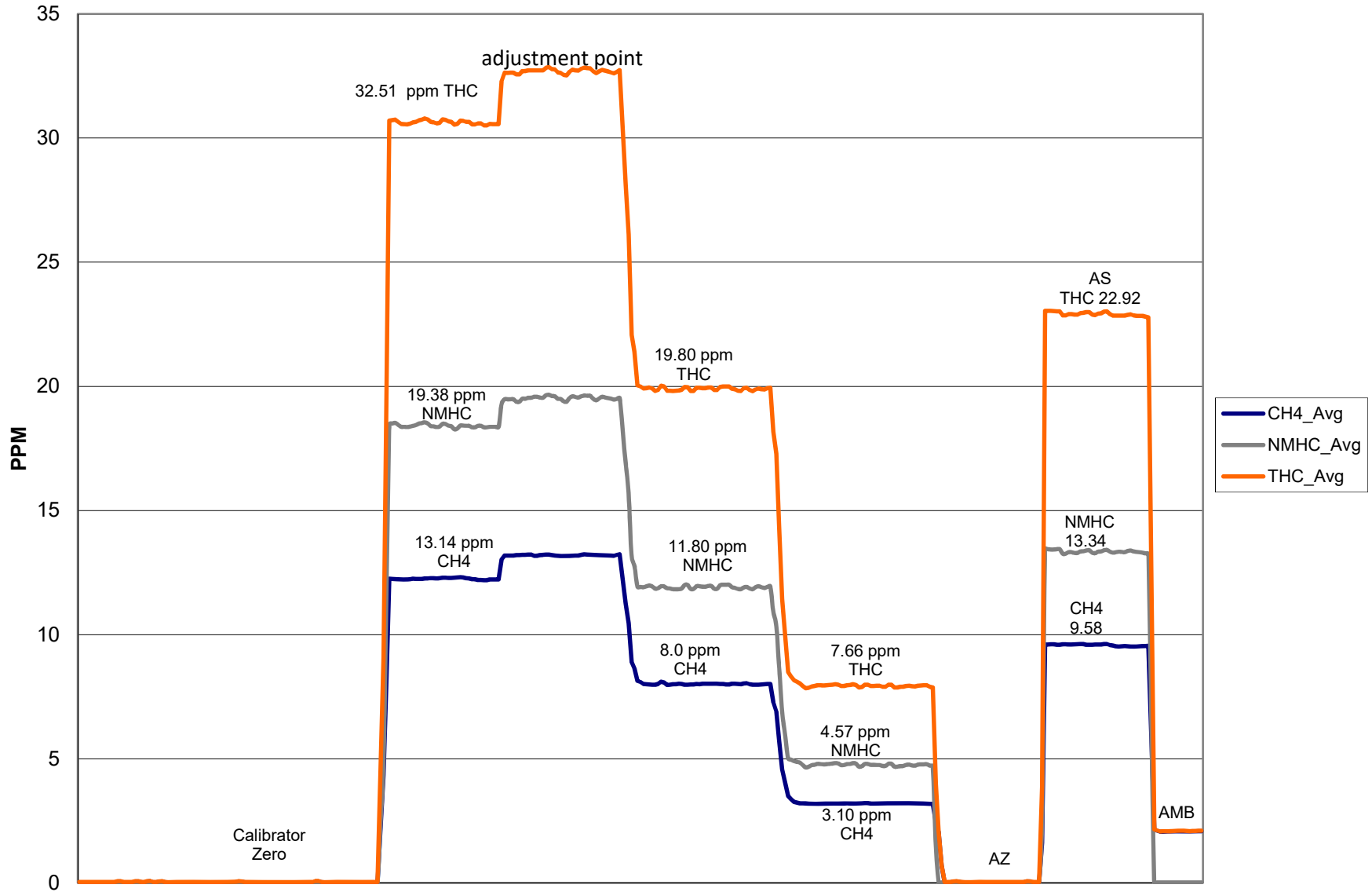
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.039	N/A	Correlation Coefficient	0.999923
32.514	32.725	0.9936		
19.796	19.792	1.0002	Slope	0.997970
7.670	7.929	0.9674		
			Intercept	-0.095268

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report



Parameter
 Air Monitoring Network

Station Information

Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:14	End Time (MST)	23:40
Barometric Pressure	0.917 mBar	Station Temperature	22.0 Deg C
Calibrator	Envionics 6103	Serial Number	6586
Cal Gas Conc	10.3 ppb	Cal Gas Expiry Date	02/23/2019
		Cal Gas Cylinder #	EY0000380
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.982921	Calculated slope	0.989642
Calculated intercept	0.825255	Calculated intercept	-0.055801
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.094		1.094	
Background	13.0		13.0	
Pressure	668.4	mm Hg	669.1	mm Hg
Flow	0.441	ccm	0.440	ccm
Lamp Voltage	896	V	893	V

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5153	0.00	0.00	0.35	N/A
5153	41.20	81.70	82.88	0.9857
5153	20.10	40.02	39.93	1.0023
7298	9.80	13.81	14.01	0.9857
5153	0.00	0.00	0.35	As Found Zero
5153	41.20	81.70	82.88	As Found Span
Average Correction Factor				0.9913

Calculated value of As Found Response: 81.9 ppb Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.15	ppb	0.44	ppb
Auto span	29.17	ppb	30.57	ppb

Notes:

Calibration Performed By:

Calibration Summary



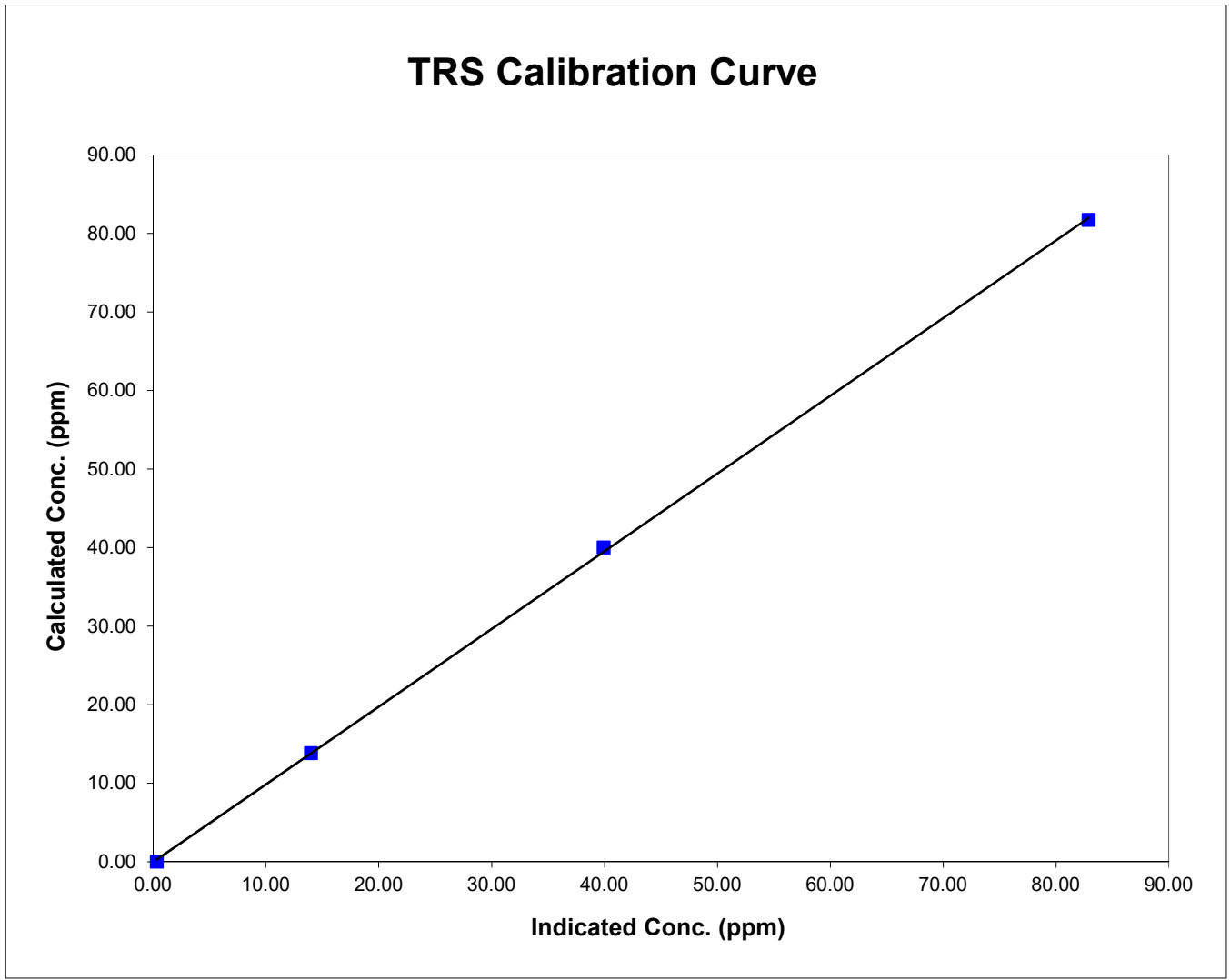
Parameter TRS
Air Monitoring Network PAZA

Station Information

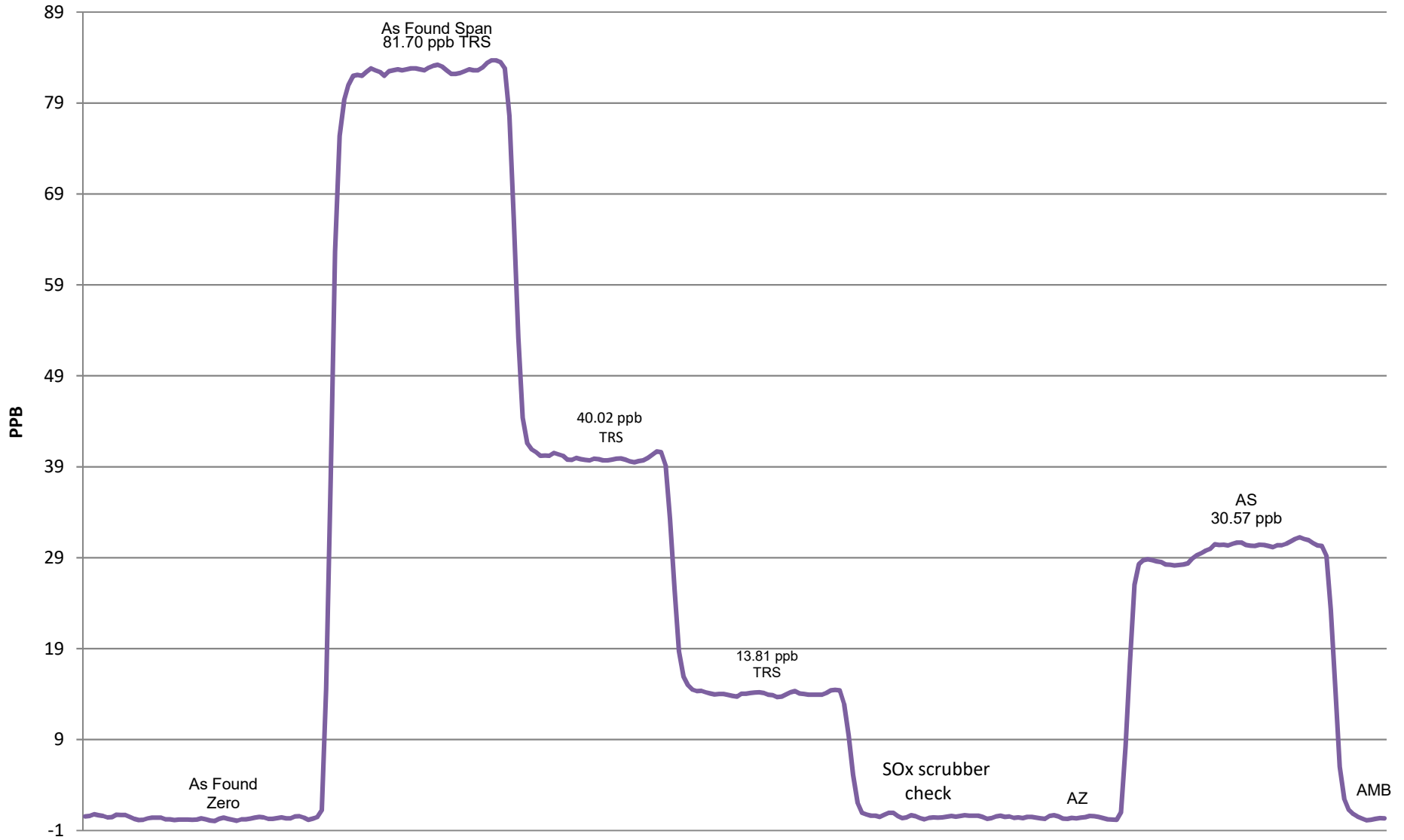
Calibration Date	September 21, 2017	Previous Calibration	August 30, 2017
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:14	End Time (MST)	23:40
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.353	N/A	Correlation Coefficient	0.999877
81.699	82.883	0.9857		
40.020	39.927	1.0023	Slope	0.989642
13.813	14.013	0.9857		
			Intercept	-0.055801



TRS Calibration



September 21, 2017

Calibration Report



Parameter SO₂
 Air Monitoring Network PAZA

Station Information

Calibration Date	September 8 2017	Previous Calibration	August 25 2017
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	8:35	End Time (MST)	10:50
Barometric Pressure	0.920 ATM	Station Temperature	24.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	50 ppm	Cal Gas Expiry Date	02/21/2020
Correction factor	0.030852	Cal Gas Cylinder #	EY0000740
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.998889	Calculated slope	1.005995
Calculated intercept	-3.226125	Calculated intercept	1.435920
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.5		11.5	
coefficient	1.230		1.230	
Lamp Voltage	828	volts	828	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	667.6	mm Hg	667.5	mm Hg
Sample Flow	0.442	ccm	0.442	ccm
Lamp Intensity	89	%	89	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5382	0.0	0.00	1.1	N/A
5382	43.10	397.2	394.7	1.0064
5382	21.90	202.6	198.7	1.0200
5382	11.05	102.4	98.0	1.0458
5382	0.0	0.0	1.1	As Found Zero
5382	43.10	397.2	394.7	As Found Span
Average Correction Factor				1.0241

Calculated value of As Found Response: 389.957 ppm Percent Change of As Found: 1.8%

	before calibration		after calibration	
Auto zero	1.0	ppm	1.0	ppm
Auto span	264.0	ppm	263.4	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



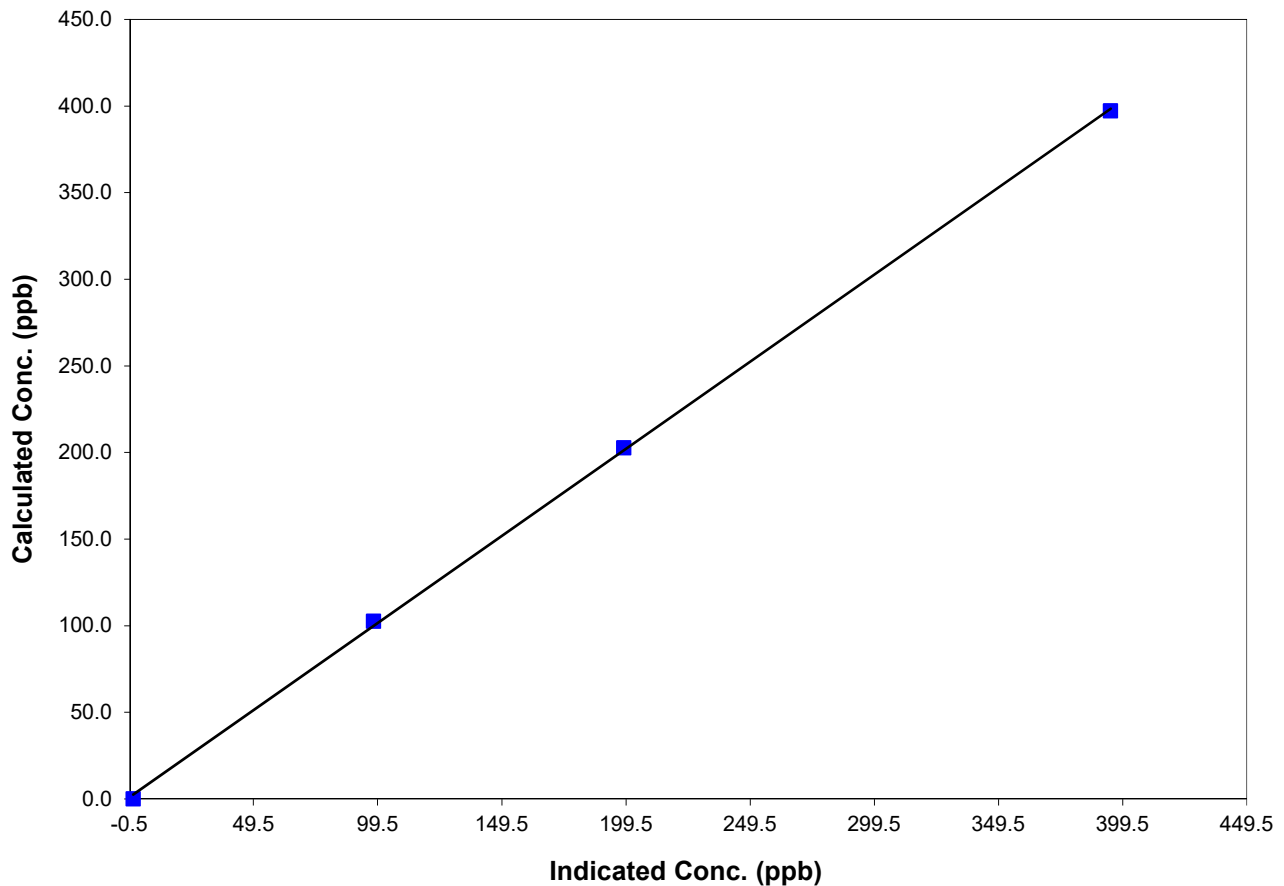
Station Information

Calibration Date	September 8 2017	Previous Calibration	August 25 2017
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:35	End Time (MST)	10:50
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

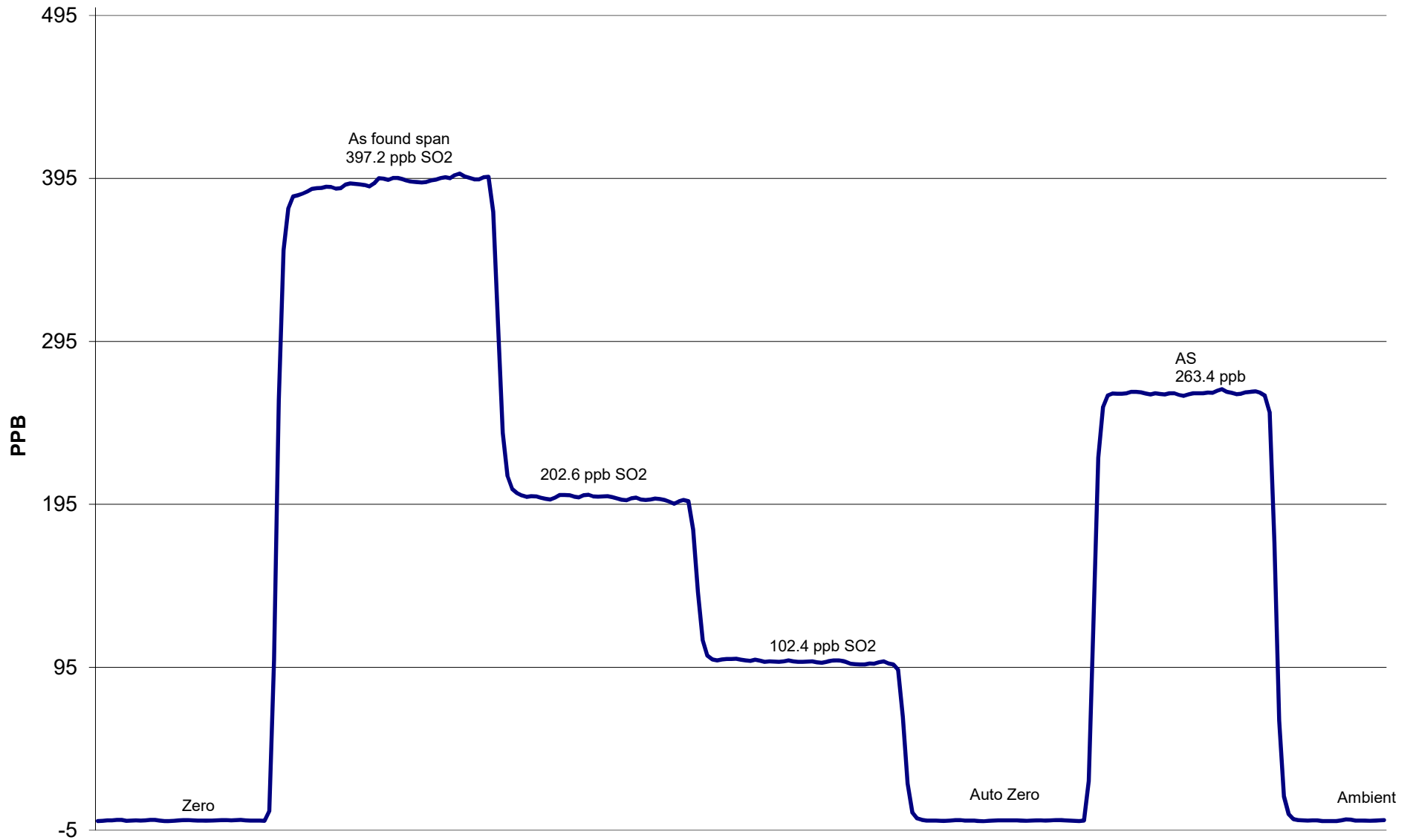
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.1	N/A		
397.2	394.7	1.0064	Correlation Coefficient	0.999815
202.6	198.7	1.0200		
102.4	98.0	1.0458	Slope	1.005995
			Intercept	1.435920

SO2 Calibration Curve



SO2 Calibration



September 8 2017

Calibration Summary

Parameter TRS
 Air Monitoring Network PAZA



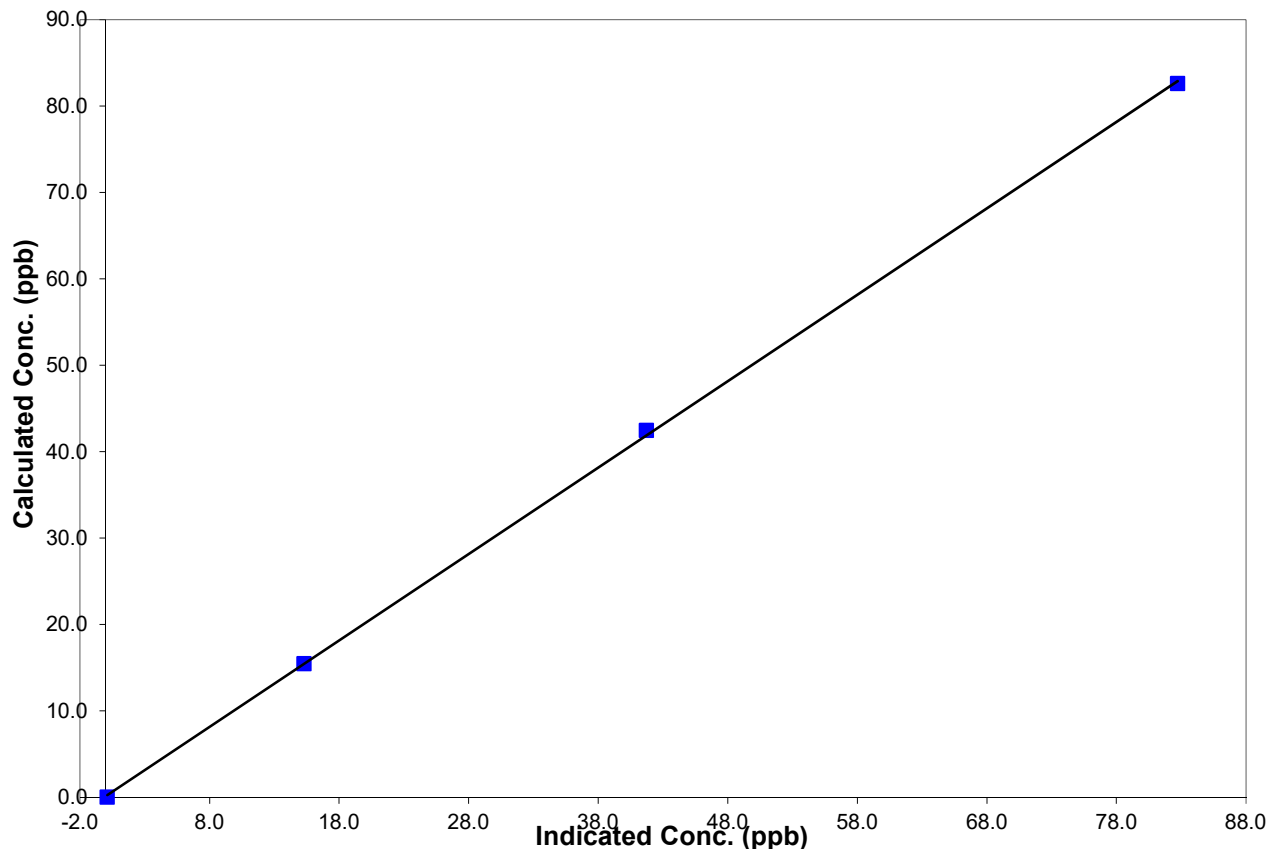
Station Information

Calibration Date	September 8 2017	Previous Calibration	August 25 2017
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	6:20	End Time (MST)	9:35
Analyzer make/model	TEI Model 43C	Analyzer serial #	3199000000491

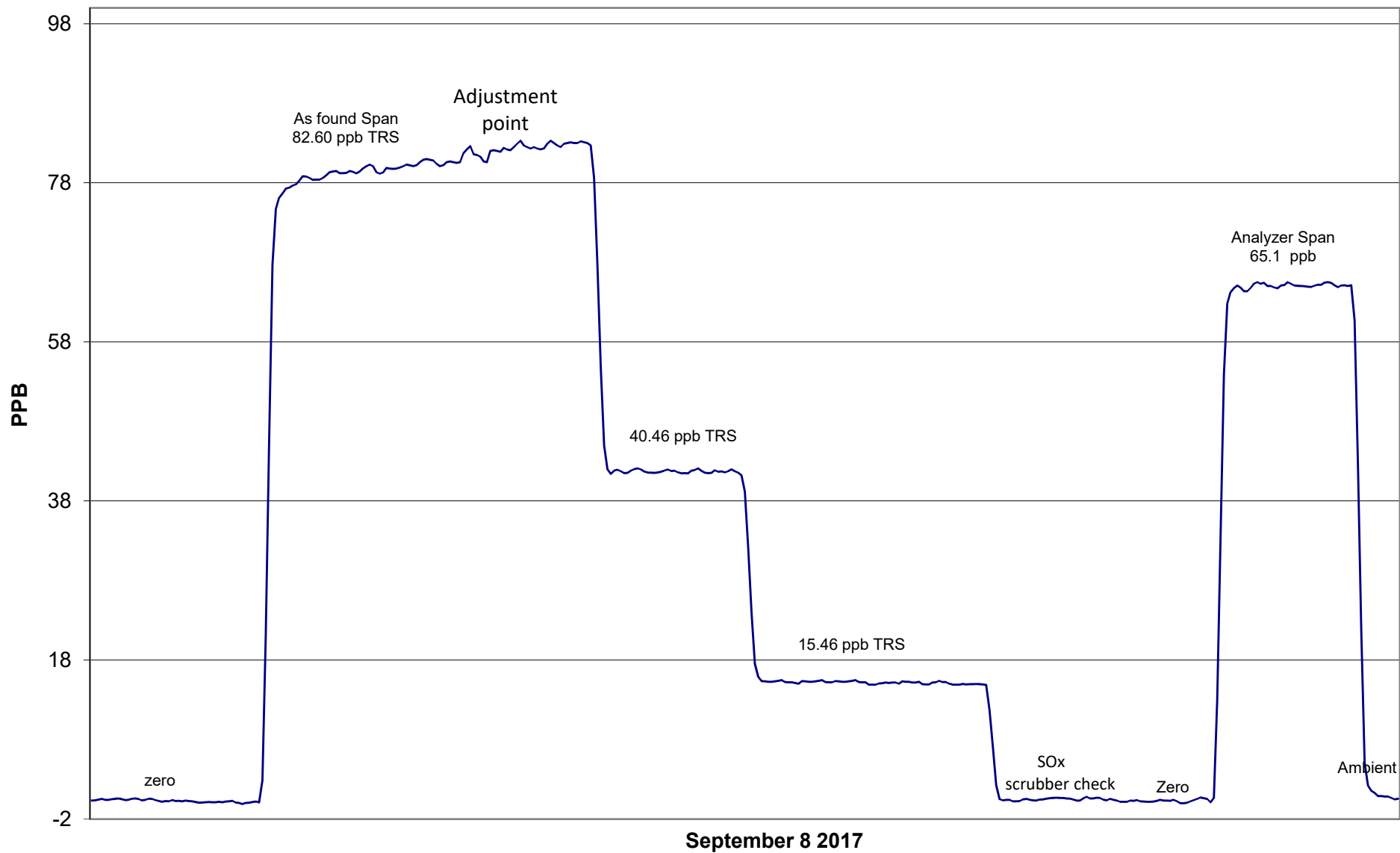
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999877
82.6	82.7	0.9984		
42.5	41.7	1.0175		
15.5	15.3	1.0097	Slope	0.999929
			Intercept	0.159861

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	September 27, 2017	Previous Calibration	August 24, 2017
Station Number	3	Station Location	Smokey Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:25	End Time (MST)	13:35:00 PM
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	49.4 ppm	Cal Gas Cert Date	02/21/2020
Correction factor	0.031409	Cal Gas Cylinder #	EY0000751
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.993663	Calculated slope	0.999088
Calculated intercept	-2.290633	Calculated intercept	-0.671821
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	13.5		13.6	
coefficient	0.919		0.919	
Lamp Voltage	944	volts	941	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	671.7	mm Hg	672	mm Hg
Sample Flow	0.449	lpm	0.450	lpm
Lamp Intensity	86	%	87	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5152	0.0	0.00	0.3	N/A
5152	41.21	392.01	392.5	0.9988
5152	20.14	192.36	194.5	0.9889
5152	9.84	94.17	94.6	0.9957
5152	0.0	0.00	0.3	As Found Zero
5152	41.21	392.01	392.5	As Found Span
Average Correction Factor				0.9945

Calculated value of As Found Response: 387.416 ppm Percent Change of As Found: 1.2%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	209.3	ppb	203.8	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



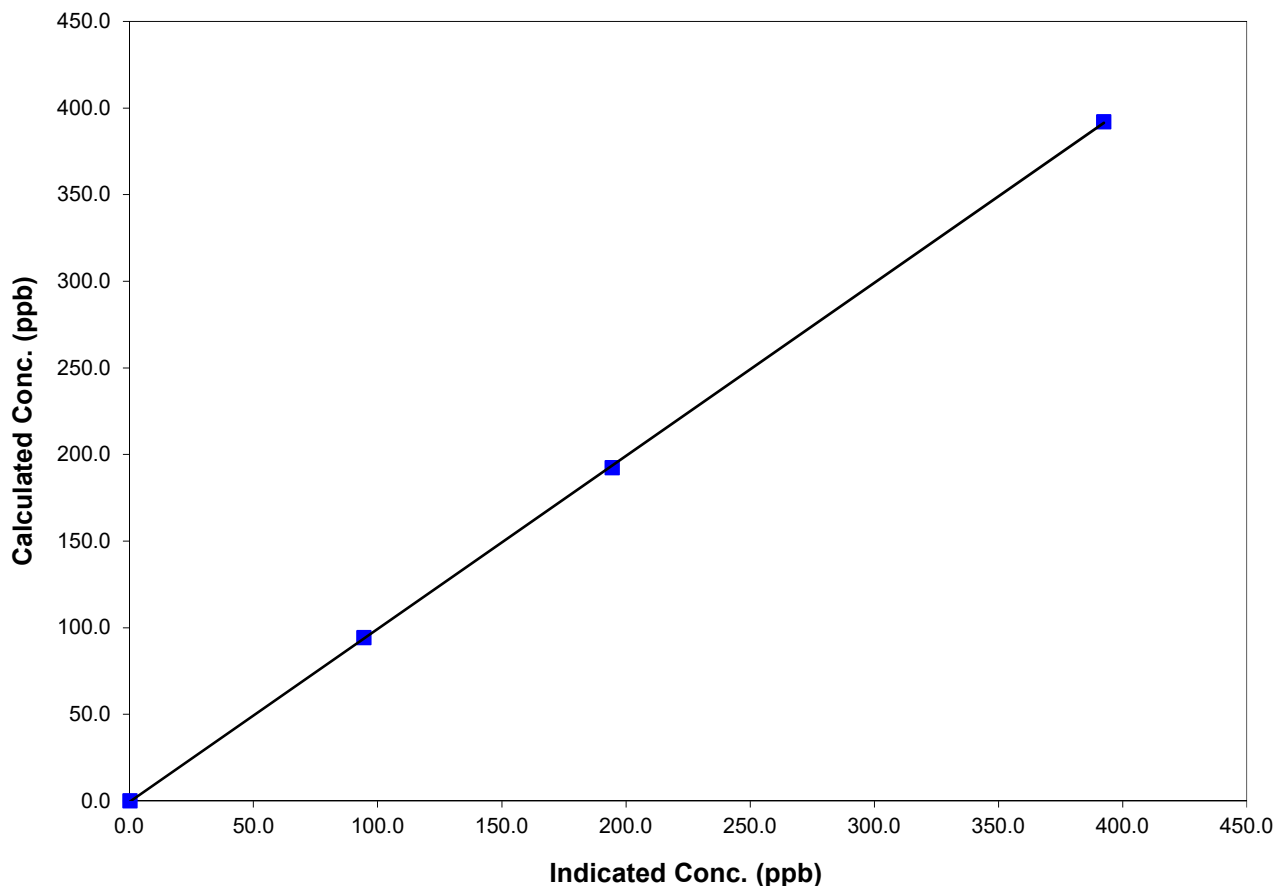
Station Information

Calibration Date	September 27, 2017	Previous Calibration	August 24, 2017
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:25	End Time (MST)	13:35:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999973
392.0	392.5	0.9988		
192.4	194.5	0.9889	Slope	0.999088
94.2	94.6	0.9957		
			Intercept	-0.671821

SO2 Calibration Curve



Smokey Heights SO₂ Calibration



September 27, 2017

Calibration Report



Parameter TRS
 Air Monitoring Network PAZA

Station Information

Calibration Date	September 28, 2017		Previous Calibration	August 24, 2017	
Station Number	3		Station Location	Smokey Heights	
Reason:	Routine	Install	Removal	Other:	
Start Time (MST)	11:30		End Time (MST)	16:25:00 PM	
Barometric Pressure	0.923	ATM	Station Temperature	20.0	Deg C
Calibrator	EnviroNics		Serial Number	3016	
Cal Gas Conc	10.3	ppm	Cal Gas Expiry Date	02/23/2019	
Correction factor	0.031375		Cal Gas Cylinder #	EY0000340	
DACS make	CR3000		DACS serial No.	5238	
DACS voltage range	0 - 5 volt		DACS channel #	5	
	Before			After	
Calculated slope	0.990954		Calculated slope	1.004949	
Calculated intercept	0.128388		Calculated intercept	-0.181137	
Analyzer make	TEI Model 43I APSAA		Analyzer serial #	1153630151	

	before		after	
Concentration range	100	ppb	100	ppb
Background	14.9	ppb	13.7	ppb
coefficient	0.981		0.996	
Lamp Voltage	802	volts	804	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	678.6	mm Hg	672.8	mm Hg
Sample Flow	0.424	lpm	0.420	lpm
Lamp Intensity	93	mv	91	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5152	0.0	0.00	0.2	N/A
5152	41.21	81.73	81.4	1.0039
5152	20.14	40.11	40.3	0.9944
7250	9.84	13.96	13.9	1.0011
5152	9.84			Sox test
5152	0.0	0.00	0.2	As Found Zero
5152	41.21	81.73	81.4	As Found Span
Average Correction Factor				0.9998

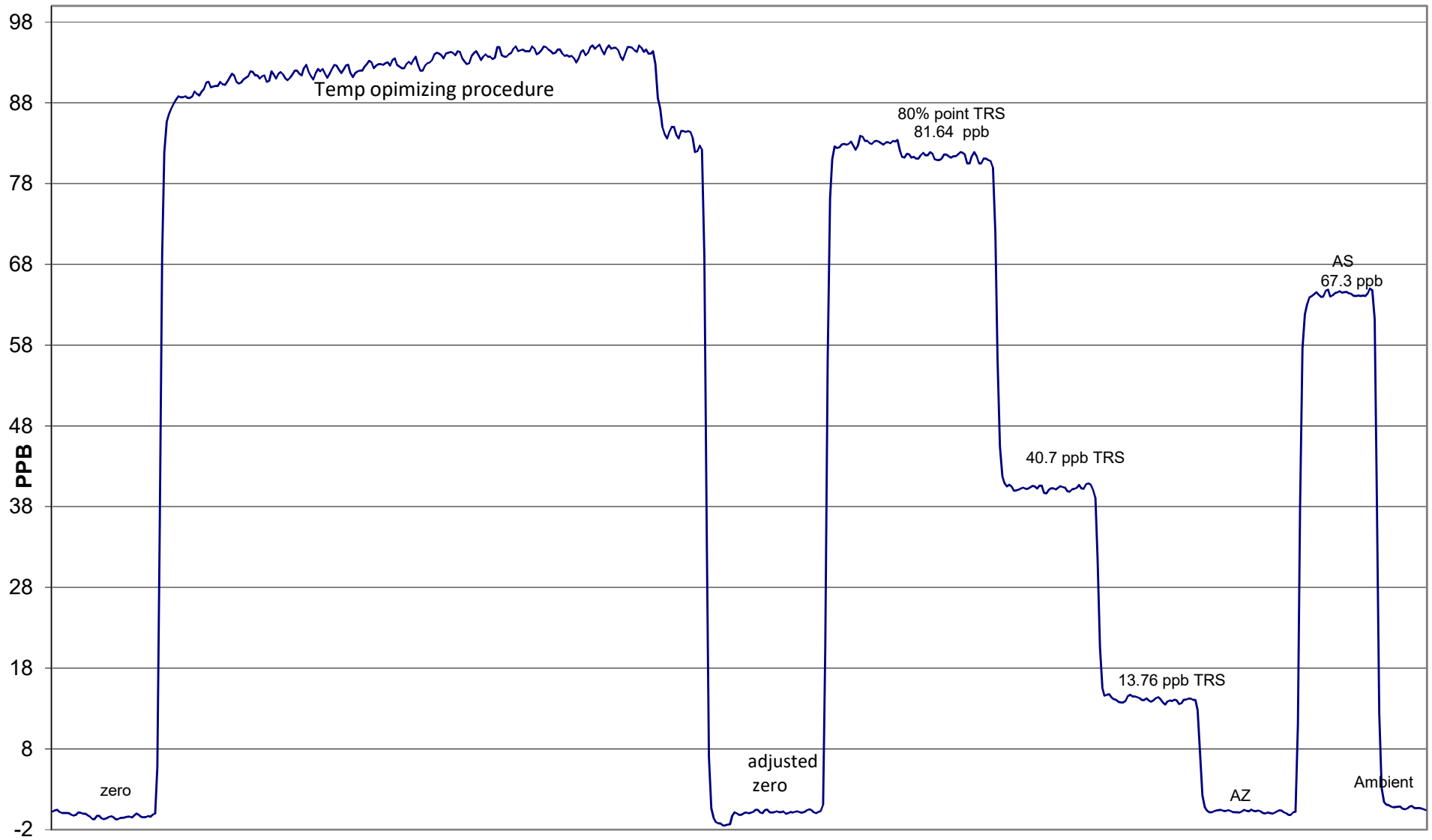
Calculated value of As Found Response: 80.64 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.2	ppm
Auto span	67.3	ppm	64.3	ppm

Notes: Thermo couple replaced, Sox scrubber replaced, span/zero & PMT adjustments made

Calibration Performed By: Dmytro Dolotii

Smokey Heights TRS Calibration



September 28, 2017

Calibration Report



Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	13:30:00 PM	End Time (MST)	15:30:00 PM
Barometric Pressure	0.911 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Concentration	10.5 ppm	Cal Gas Expiry Date	1/12/2019
Gas Cert Reference	FF16108		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.001067	Calculated slope	0.998339
Calculated intercept	-0.197319	Calculated intercept	-0.093275
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.53		2.53	
Coefficient	0.956		0.956	
PMT	-768.5	V	-768.5	V
UV Lamp Voltage	1111	V	1111	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	652.2	mm Hg	653.2	mm Hg
Sample Flow	0.483	LPM	0.482	LPM
Lamp Intensity	96	%	96	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.3	N/A
4995	39.96	83.3	83.6	0.9968
4995	19.95	41.8	42.0	0.9947
4995	9.97	20.9	20.8	1.0066
4995	0.00	0.0	0.3	As found zero
4995	39.94	83.3	83.6	As found span
Average Correction Factor				0.9994

Calculated value of As Found Response: 83.228 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.2	ppb
Auto span	57.7	ppb	60.1	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



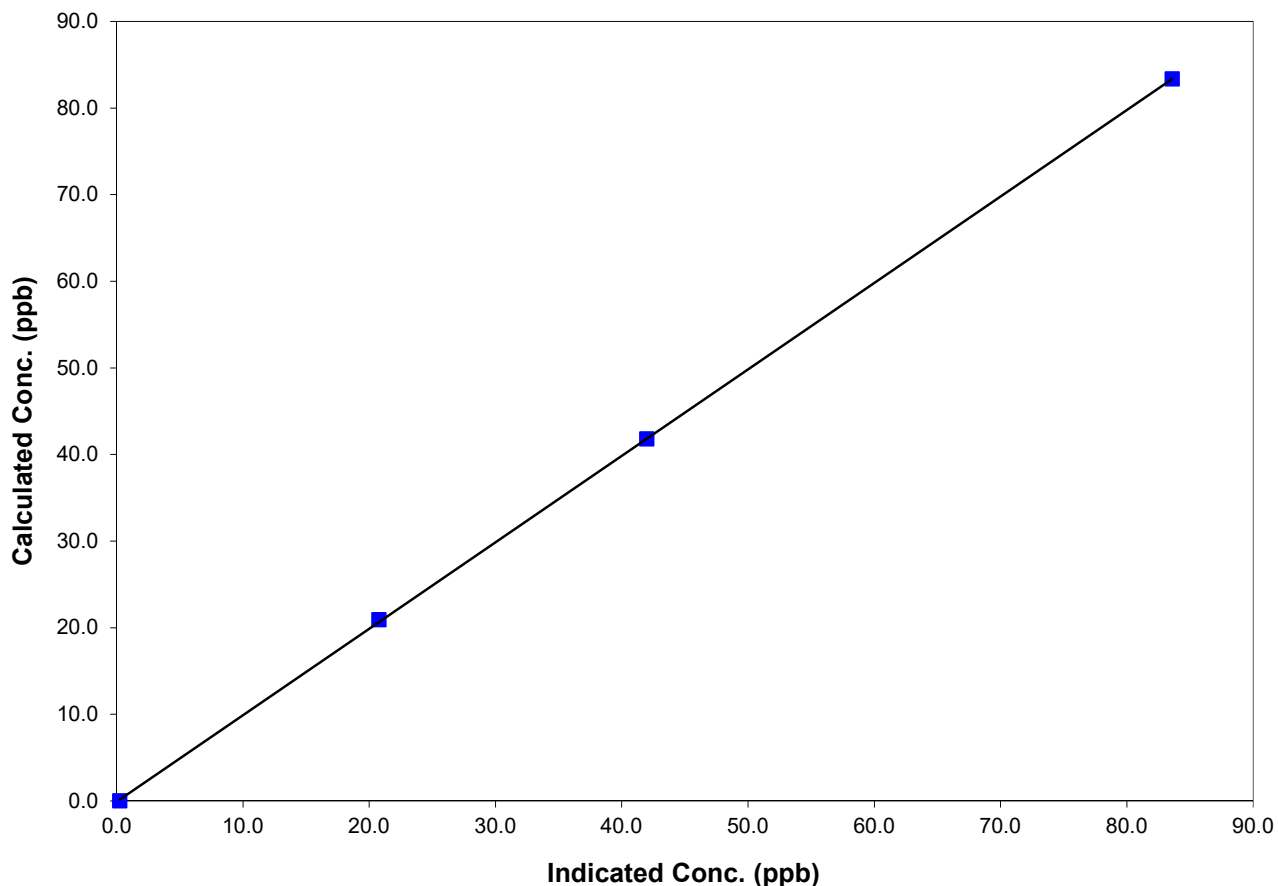
Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:30:00 PM	End Time (MST)	15:30:00 PM
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

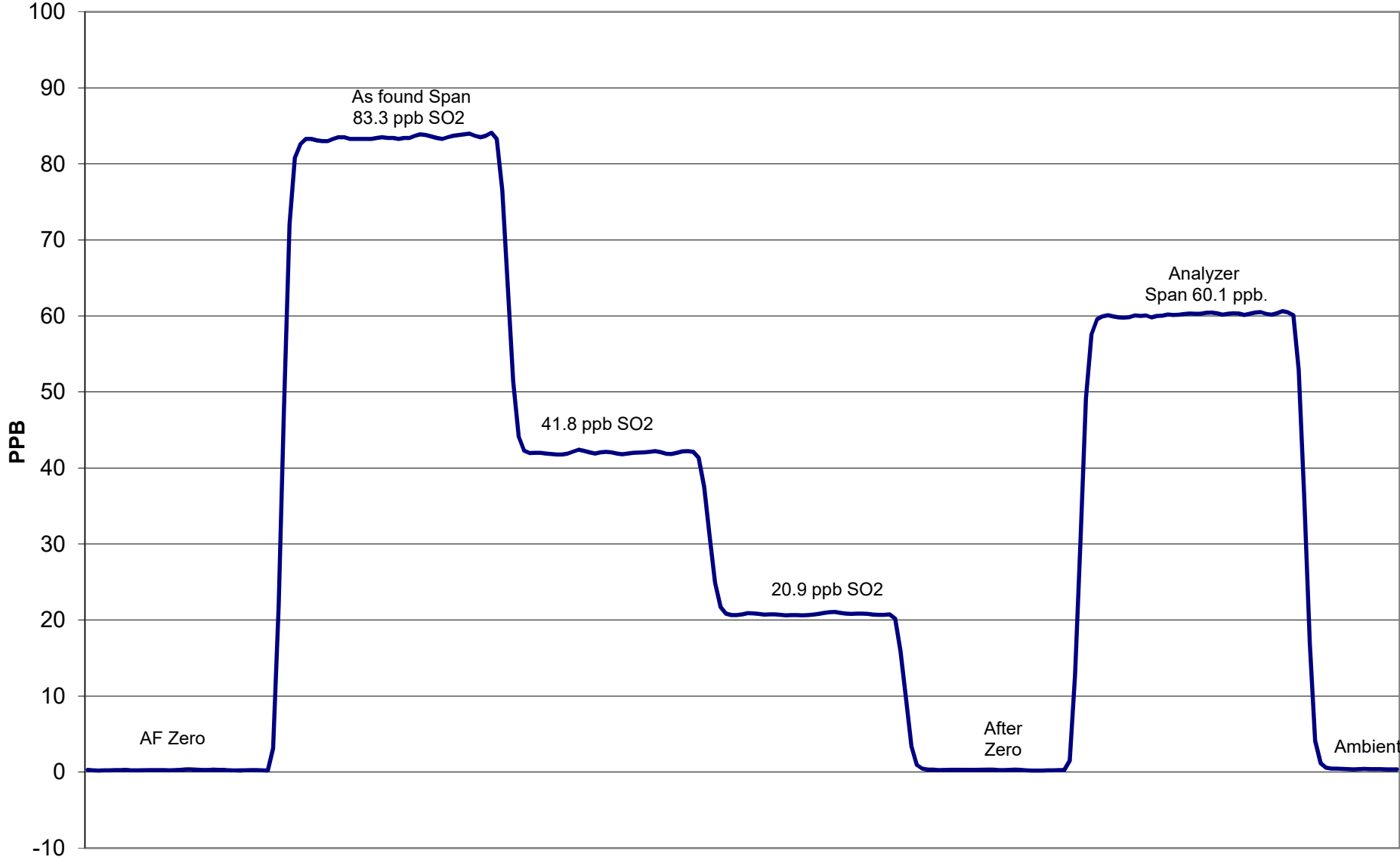
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
83.3	83.6	0.9968	Correlation Coefficient	0.999973
41.8	42.0	0.9947		
20.9	20.8	1.0066	Slope	0.998339
			Intercept	-0.093275

SO2 Calibration Curve



SO2 Calibration



September 18, 2017

Calibration Report

Parameter
Air Monitoring Network

NO_x-NO-NO₂
PAZA



Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017		
Station Number	4	Station Location	Beaverlodge		
Reason:	Routine	Installation	Removal	Other:	
Start Time (MST)	9:45	End Time (MST)	13:25:00 PM		
Barometric Pressure	0.911	Atm	Station Temperature	20.0	Deg C
Calibrator	EnviroNics 6100	Serial Number	3016		
NO Cal Gas Conc	50.4	ppm	Cal Gas Expiry Date	February 2, 2019	
NO _x Cal Gas Conc	50.5	ppm	Cal Gas Serial #	EY0000751	

DACS Information

DACS make	CR3000	DACS serial No.	5237	
Parameter		NO ₂	NO _x	NO
Before	Data Slope	1.000057	0.998828	0.997105
	Data Offset	0.115753	2.035072	2.094997
After	Data Slope	1.000495	0.993301	0.986501
	Data Offset	0.374801	2.194545	2.257208
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	906535068	
Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	3.0	mV	3.0	mV
NO _x bkgnd	3.8	mV	3.8	mV
NO coefficient	0.971		0.971	
NO _x coefficient	0.994		0.994	
NO ₂ conv temp	322.9	Deg C	322.1	Deg C
PMT Temp	-3.0	Deg C	-3.0	Deg C
PMT Volt	-743.3	mV	-743.3	mV
R Cell Press	192.4	in Hg	193.1	in Hg
Sample Flow	0.720	LPM	0.722	LPM

Notes: No adjustment made

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**

Station Information

Calibration Date: September 18, 2017 Station Location: Beaverlodge

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	
zero	4996	0.00	0.0	0.0	0.0	-0.4	-0.5	-0.1	N/A	N/A	
1	4996	39.99	401.0	400.2	0.8	402.3	404.3	-2.8	0.9968	0.9899	
2	4996	19.98	201.2	200.8	0.4	199.6	200.2	-1.4	1.0076	1.0030	
3	4996	9.90	99.9	99.7	0.2	96.5	97.2	-0.9	1.0355	1.0260	
AFZ	4996	0.00	0.0	0.0	0.0	-0.4	-0.5	-0.1	0.0000	0.0000	
AFS	4996	39.94	400.5	399.7	0.8	402.3	404.3	-2.8	0.9956	0.9886	
									Average Correction Factor	1.0133	1.0063

As Found Concentrations: NO_x= 404.3 NO= 405.8 As Found Percent Change NO_x= 0.9% NO= 1.5%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.94 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency	
0	-0.5	-0.5	0.0	-0.4	-0.5	-0.1	N/A	N/A	N/A	N/A	
NO point	402.5	402.5	0.0	400.6	402.5	-2.5	1.0046	1.0000	N/A	N/A	
300	402.5	93.2	309.3	402.9	93.2	309.2	0.9989	1.0000	1.0005	100.0%	
200	402.5	191.8	210.6	402.5	191.8	209.7	1.0000	1.0000	1.0043	99.6%	
100	402.5	291.5	110.9	402.4	291.5	110.2	1.0000	1.0000	1.0064	99.4%	
							Average Correction Factor	0.9996	1.0000	1.0037	99.6%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.4	-0.3	-0.2	ppb	-0.7	-0.3	-0.5	ppb
Auto span	263.4	260.6	1.8	ppb	273.4	270.5	1.9	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter NO₂

Air Monitoring Network PAZA

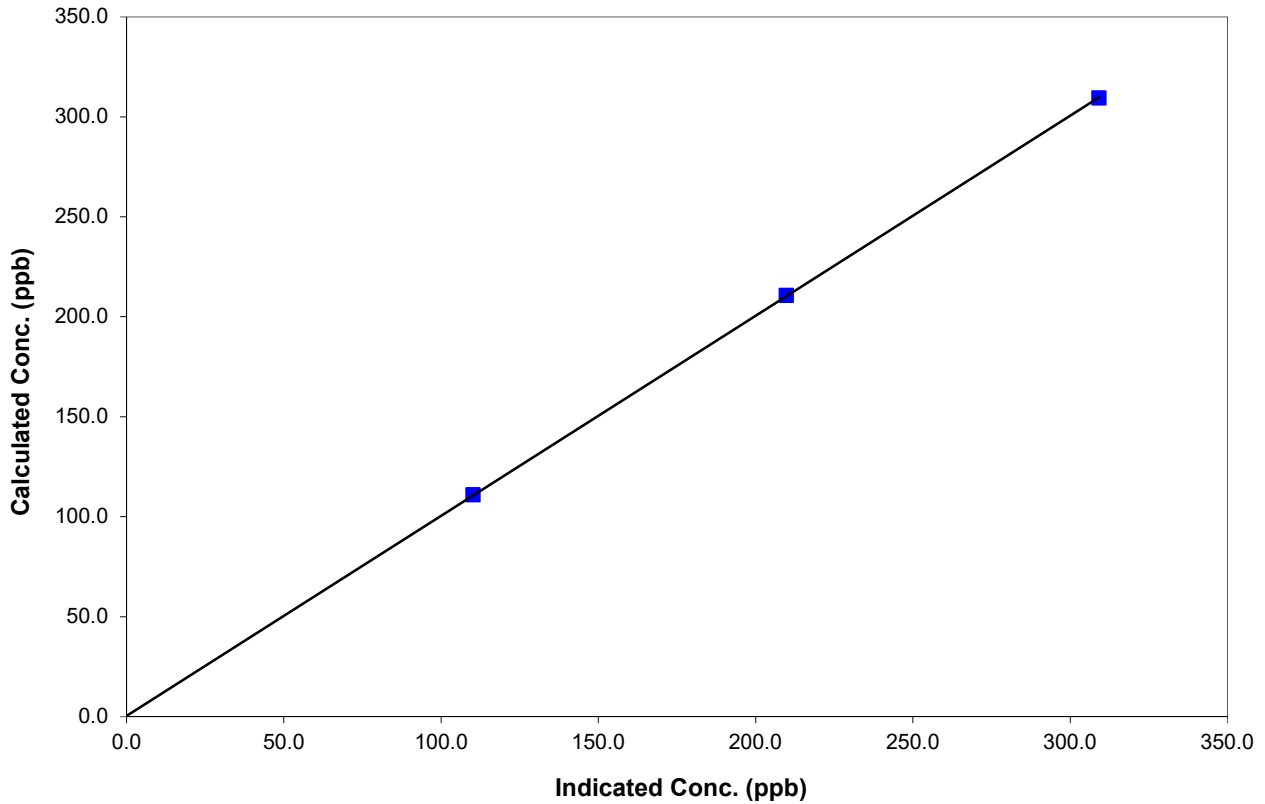
Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	13:25:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999991
309.3	309.2	1.0005		
210.6	209.7	1.0043	Slope	1.000495
110.9	110.2	1.0064		
			Intercept	0.374801

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PAZA

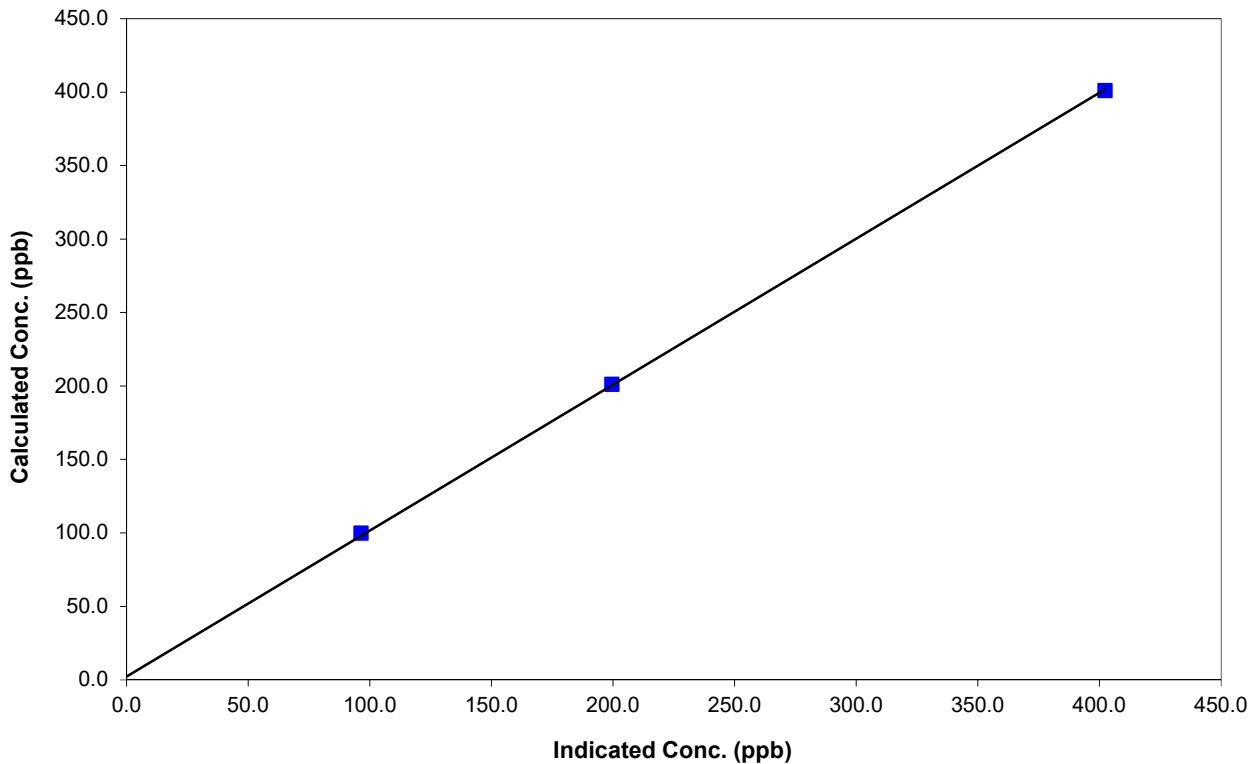
Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	13:25:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A	Correlation Coefficient	0.999913
401.0	402.3	0.9968		
201.2	199.6	1.0076	Slope	0.993301
99.9	96.5	1.0355		
			Intercept	2.194545

NO_x Calibration Curve



Calibration Summary



Parameter NO
 Air Monitoring Network PAZA

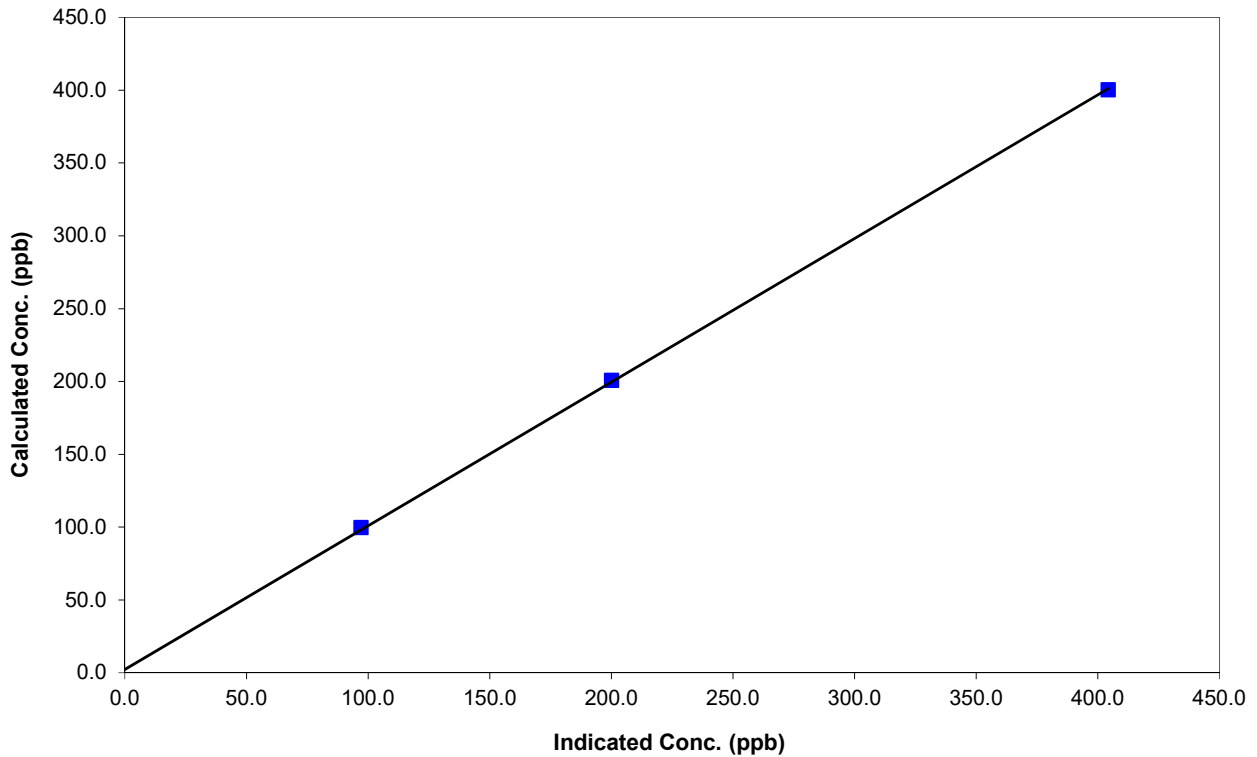
Station Information

Calibration Date	September 18, 2017	Previous Calibration	August 16, 2017
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	13:25:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

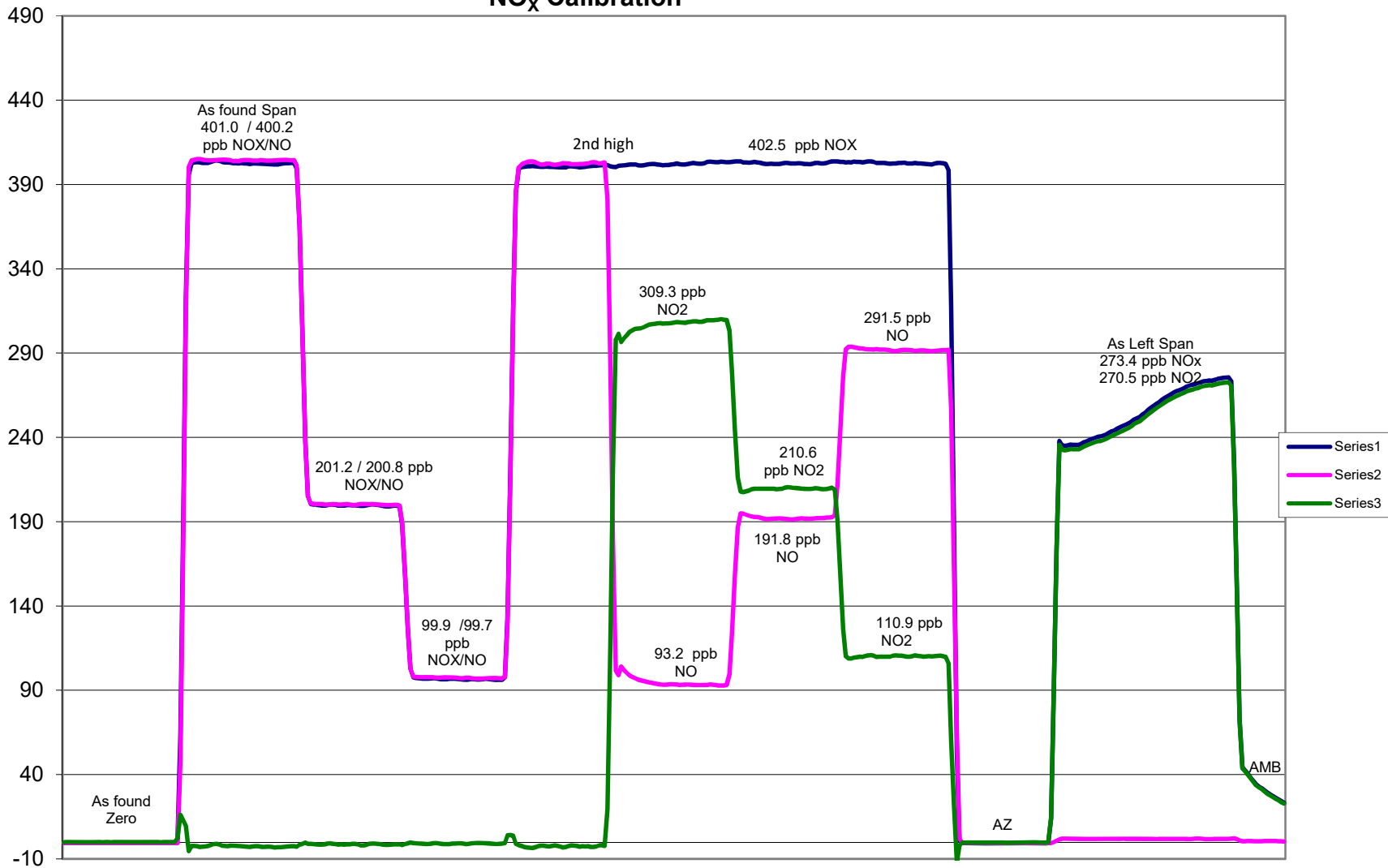
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A	Correlation Coefficient	0.999916
400.2	404.3	0.9899		
200.8	200.2	1.0030		
99.7	97.2	1.0260		
			Slope	0.986501
			Intercept	2.257208

NO Calibration Curve



NO_x Calibration



September 18, 2017

Calibration Report



Parameter 03
 Air Monitoring Network PAZA

Station Information

Calibration Date	<u>September 18, 2017</u>	Previous Calibration	<u>August 16, 2017</u>
Station Number	<u>4</u>	Station Location	<u>Beaverlodge</u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	<u>12:15</u>	End Time (MST)	<u>14:10:00 PM</u>
Barometric Pressure	<u>0.911 atm</u>	Station Temperature	<u>20.0 Deg C</u>
Calibrator	<u>Envionics</u>	Serial Number	<u>3016</u>
Cal Gas Concentration	<u>NA</u>	Cal Gas Expiry Date	<u>NA</u>
DACS make	<u>CR3000</u>	DACS serial No.	<u>5237</u>
DACS voltage range	<u>0 - 5 volt</u>	DACS channel #	<u>9</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>0.999439</u>	Calculated slope	<u>0.996931</u>
Calculated intercept	<u>-0.142833</u>	Calculated intercept	<u>0.004459</u>

Analyzer make Teco 49i Analyzer serial # 1136451236,AMU 1879

	before		after	
Concentration range	<u>0 - 500</u>	<u>ppb</u>	<u>0 - 500</u>	<u>ppb</u>
offset	<u>-0.30</u>	<u>ppb</u>	<u>-0.20</u>	<u>ppb</u>
slope	<u>1.021</u>		<u>1.021</u>	
Lamp temp	<u>53.8</u>	<u>mV</u>	<u>53.8</u>	<u>mV</u>
Lamp Intensity A/B	<u>58237/67026</u>	<u>mV</u>	<u>58774/67386</u>	<u>mV</u>
Pressure	<u>670</u>	<u>mm Hg</u>	<u>671</u>	<u>mm Hg</u>
Flow A	<u>0.790</u>	<u>LPM</u>	<u>0.79</u>	<u>LPM</u>
Flow B	<u>0.735</u>	<u>LPM</u>	<u>0.736</u>	<u>LPM</u>

Calibration Data

Dilution air flow rate (cc/min)	Calibrator Setting	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.3	N/A
4995	0.30	309.3	310.9	0.9949
4995	0.20	210.6	210.2	1.0017
4995	0.10	110.9	111.3	0.9961
4995				
4995	0.00	0.0	0.3	As found zero
4995	0.30	309.3	310.9	As found span
Average Correction Factor				0.9976

Calculated value of As Found Response: 310.3 ppm Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	<u>0.3</u>	<u>ppb</u>	<u>0.3</u>	<u>ppb</u>
Auto span	<u>259.2</u>	<u>ppb</u>	<u>254.5</u>	<u>ppb</u>

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter O3

Air Monitoring Network PAZA

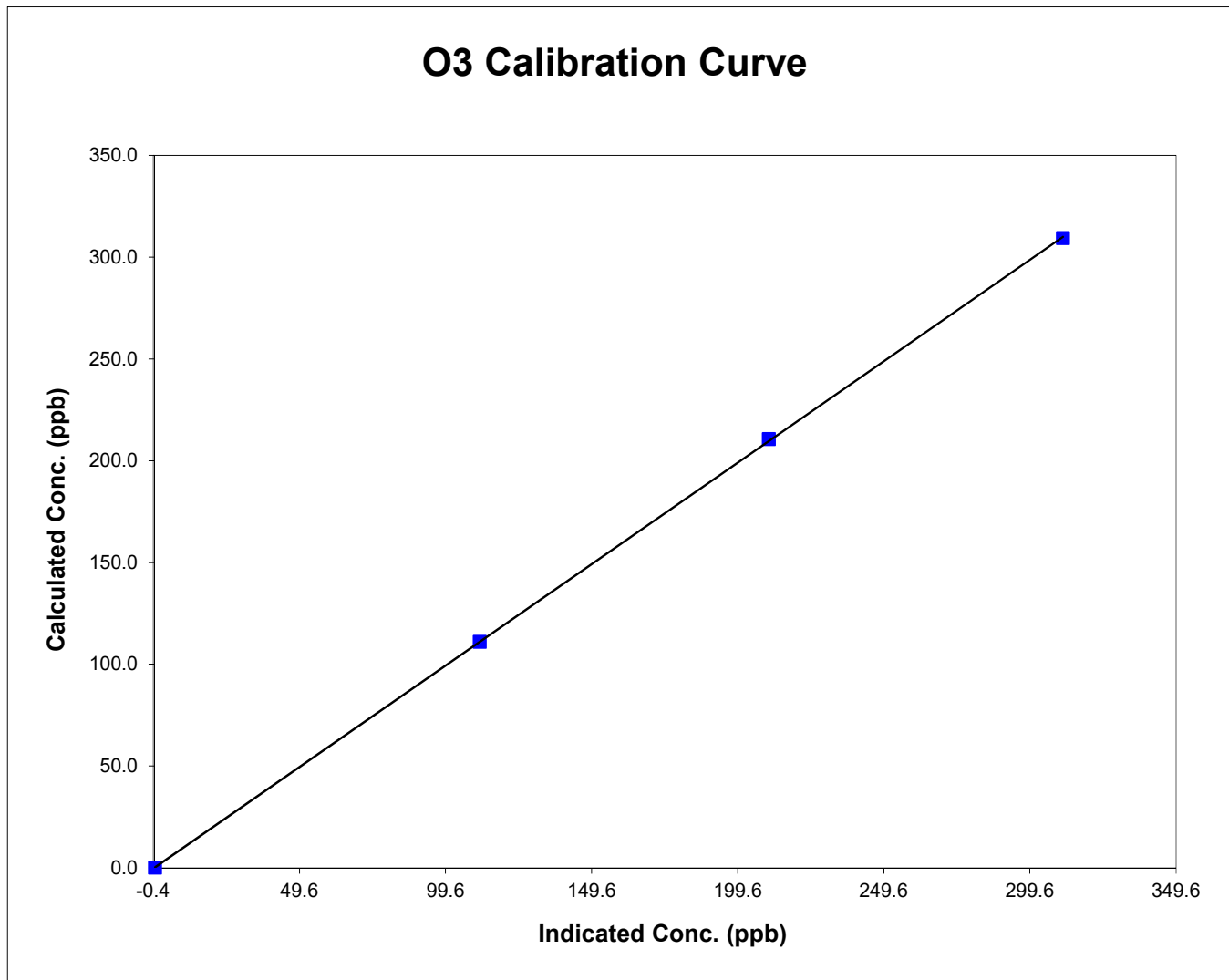


Station Information

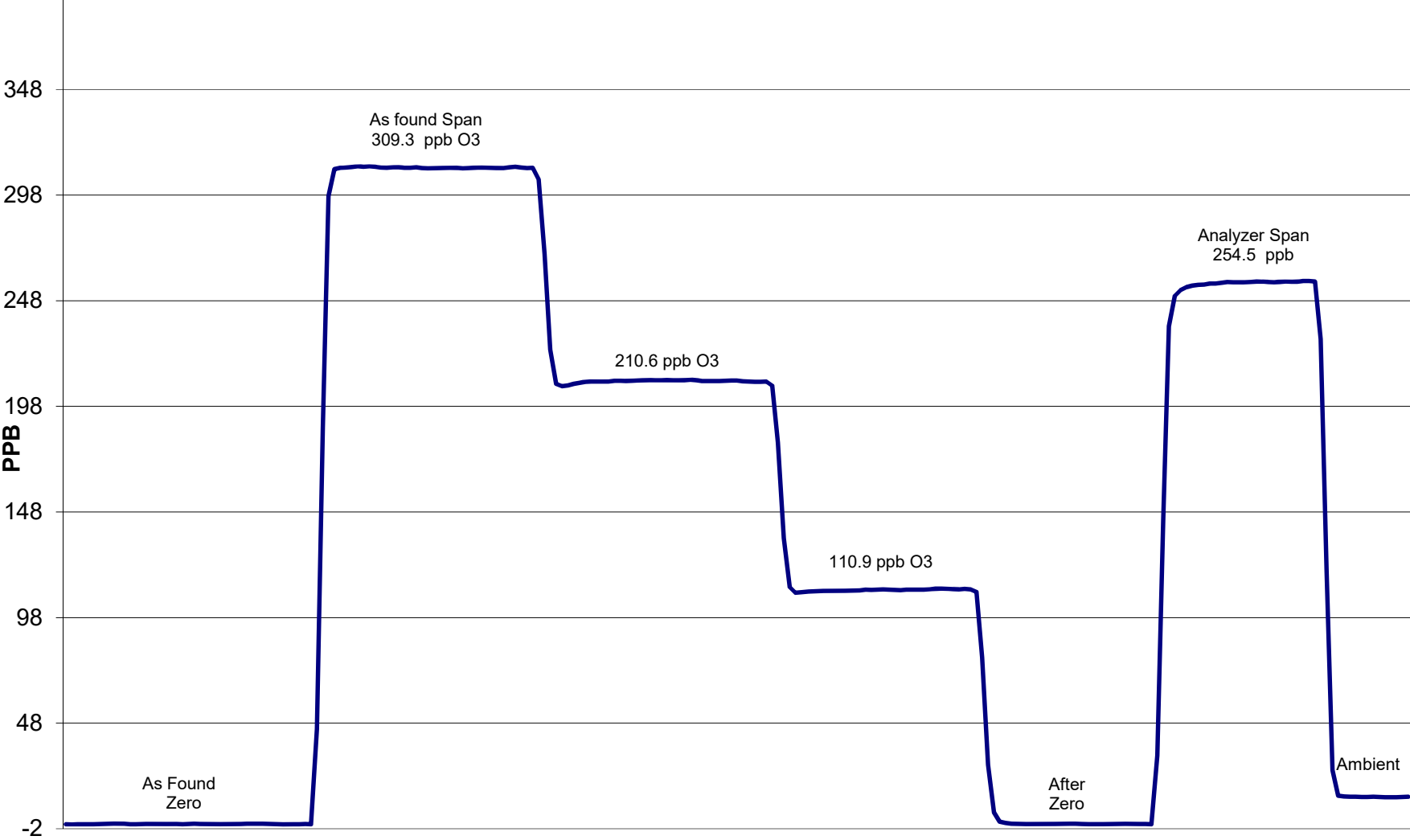
Calibration Date	<u> September 18, 2017 </u>	Previous Calibration	<u> August 16, 2017 </u>
Station Number	<u> 4 </u>	Station Location	<u> Beaverlodge </u>
Start Time (MST)	<u> 12:15 </u>	End Time (MST)	<u> 14:10:00 PM </u>
Analyzer make/model	<u> Teco 49i </u>	Analyzer serial #	<u> 1136451236,AMU 1879 </u>

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	NA		
309.3	310.9	0.9949	Correlation Coefficient	0.999972
210.6	210.2	1.0017		
110.9	111.3	0.9961	Slope	0.996931
			Intercept	0.004459



O3 Calibration



September 18, 2017

Calibration Report



AIR QUALITY MONITORING

Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	September 19 2017	Previous Calibration	August 28 2017
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	12:46	End Time (MST)	15:25:00 PM
Barometric Pressure	0.924 atm	Station Temperature	22.0 Deg C
Calibrator	Envionics	Serial Number	6586
Cal Gas Concentration	49.4 ppm	Cal Gas Exp Date	February 18, 2019
Gas Cylinder Num.	LL105132		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.000118	Calculated slope	0.988990
Calculated intercept	-2.300570	Calculated intercept	-1.815751
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	7.2		7.2	
Coefficient	0.827		0.951	
UV Lamp Voltage	791	LPM	791	LPM
Chamber Temp	45	V	45	V
Perm Gas Temp	45	C	45	C
Pressure	663.6	in Hg	668.8	in Hg
Sample Flow	0.451	LPM	0.452	LPM
Lamp Intensity	91	Hz	92	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5150	0.00	0.0	0.2	N/A
5150	41.22	392.3	397.5	0.9867
5150	20.30	194.0	199.1	0.9741
5150	9.80	93.8	98.1	0.9566
5150	0.00	0.0	0.2	As found zero
5150	41.22	392.3	388.0	As found span
Average Correction Factor				0.9725

Calculated value of As Found Response: 385.5 ppm Percent Change of As Found: 1.7%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.3	ppm
Auto span	262.6	ppm	275.1	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



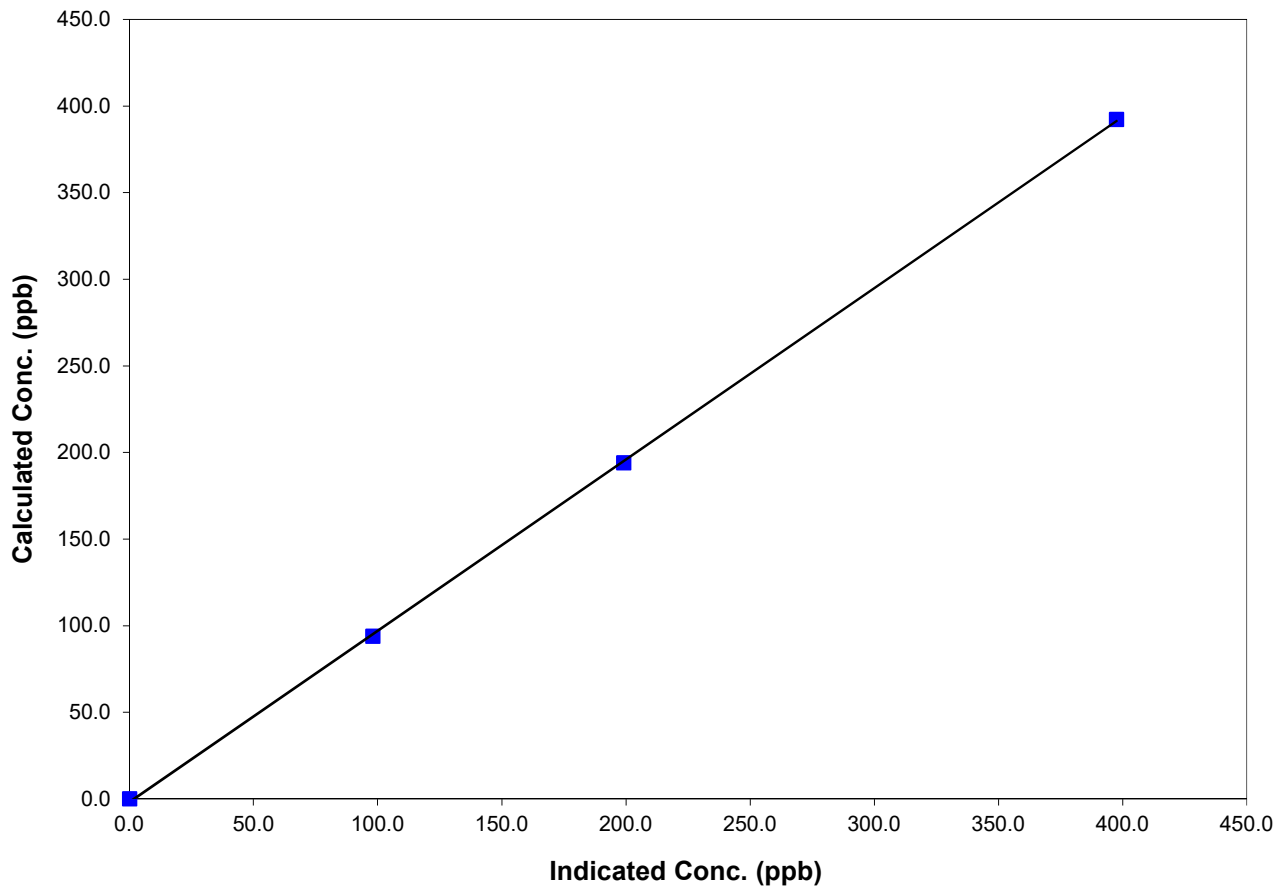
Station Information

Calibration Date	September 19 2017	Previous Calibration	August 28 2017
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:46	End Time (MST)	15:25:00 PM
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

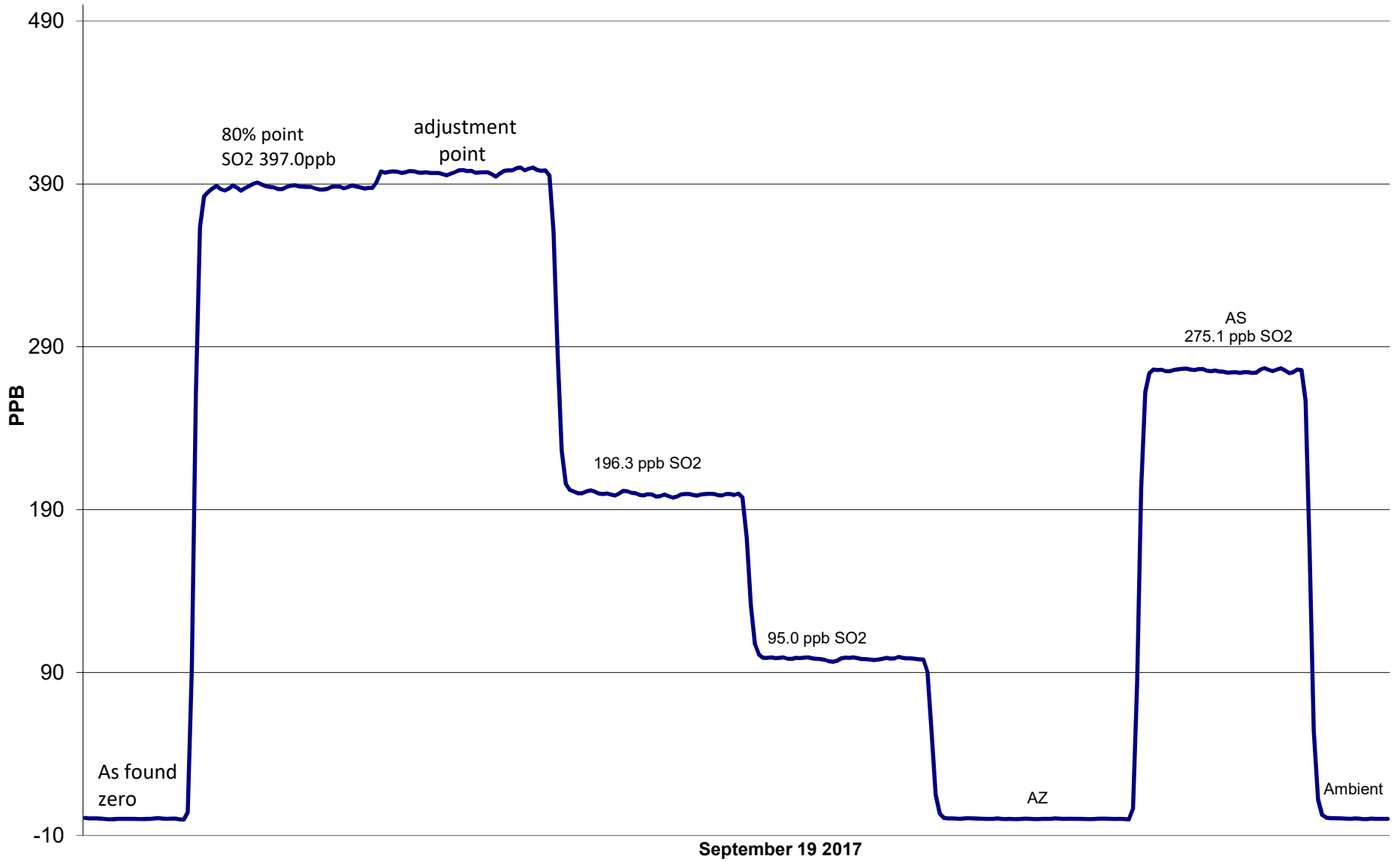
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999923
392.3	397.5	0.9867		
194.0	199.1	0.9741		
93.8	98.1	0.9566	Slope	0.988990
			Intercept	-1.815751

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S
Air Monitoring Network

PAZA

Station Information

Calibration Date	September 19 2017	Previous Calibration	August 28 2017
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	10:45	End Time (MST)	13:35:00 PM
Barometric Pressure	0.924 atm	Station Temperature	22.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	10.3 ppm	Cal Gas Expiry Date	July 03 2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999708	Calculated slope	1.016198
Calculated intercept	-0.637794	Calculated intercept	-0.582512
Analyzer make	TEI Model 450i-APHAA	Analyzer serial #	1170050144

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	13.0	ppb	13.0	ppb
Coefficient	0.980		0.980	
Lamp Voltage	756	V	756	V
Chamber Temp	45.1	c	45	c
Convertor	327.3	c	327.6	c
Pressure	553.80	mm Hg	554.20	mm Hg
Sample Flow	0.928	ccm	0.930	lpm
Lamp Intensity	89	%	89	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5150	0.00	0.0	0.2	N/A
5150	41.22	81.8	80.8	1.0122
5150	20.30	40.4	40.8	0.9917
7251	9.81	13.9	14.5	0.9576
5150	0.00	0.0	0.2	As found zero
5150	41.22	81.8	80.8	As found span
Average Correction Factor				0.9872

Calculated value of As Found Response: 79.99 ppm Percent Change of As Found: 2.2%

	before calibration		after calibration	
Auto zero	0.6	ppm	0.2	ppm
Auto span	72.0	ppm	72.5	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter H2S
Air Monitoring Network PAZA

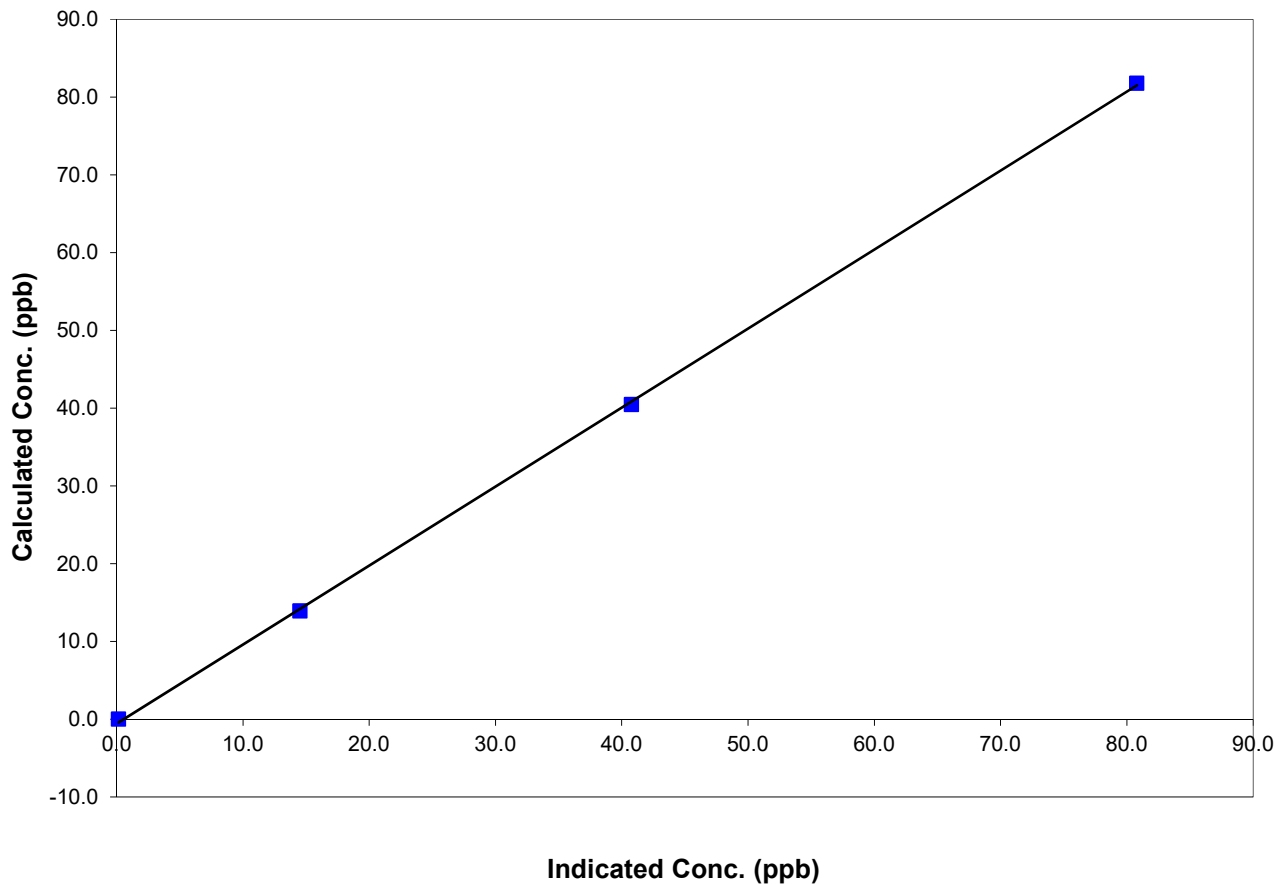
Station Information

Calibration Date	September 19 2017	Previous Calibration	August 28 2017
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:45	End Time (MST)	13:35:00 PM
Analyzer make/model	TEI Model 450i-APHAA	Analyzer serial #	1170050144

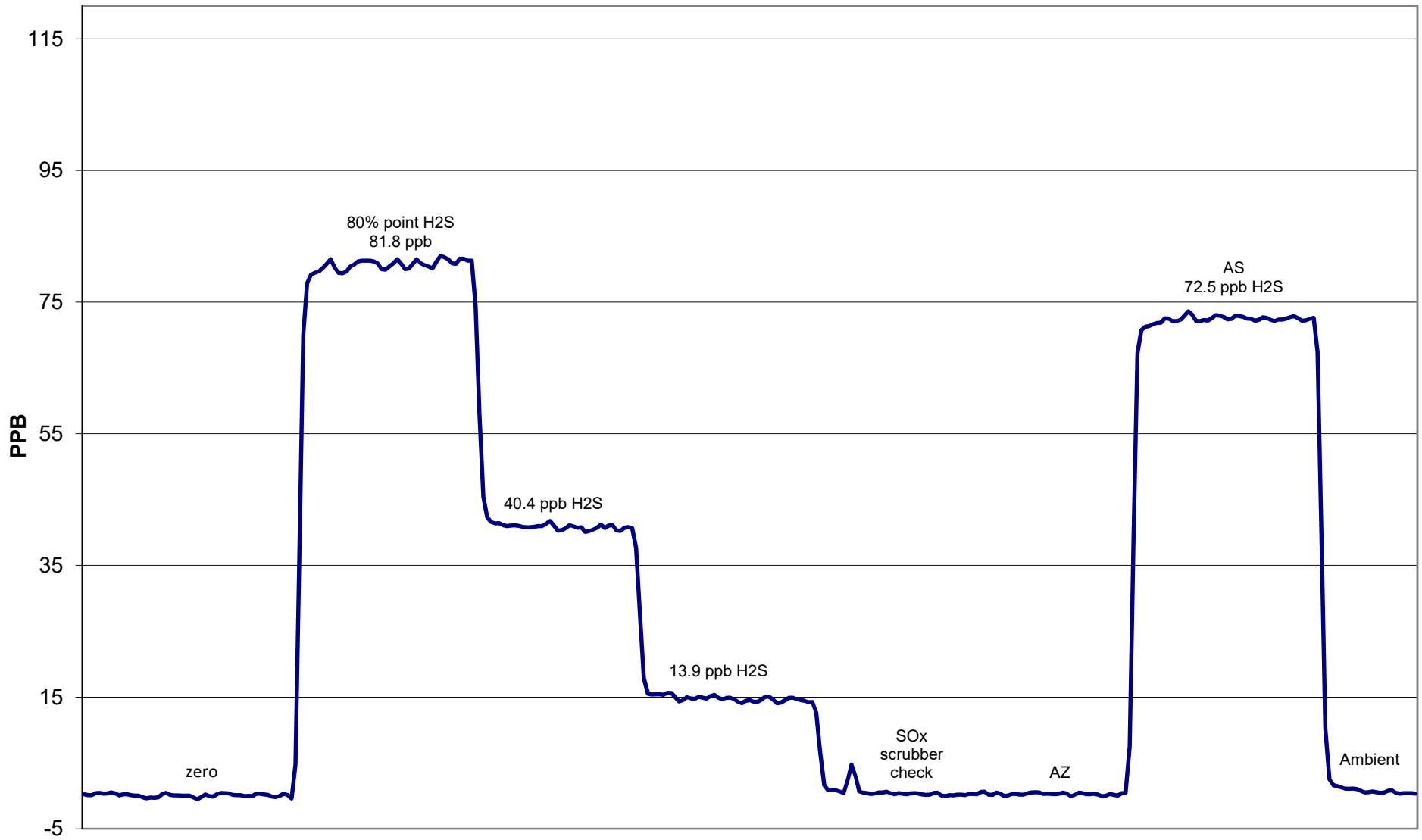
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	
0.0	0.2	N/A		
81.8	80.8	1.0122	Correlation Coefficient	0.999873
40.4	40.8	0.9917		
13.9	14.5	0.9576	Slope	1.016198
			Intercept	-0.582512

H2S Calibration Curve



H2S Calibration



September 19 2017

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	September 26, 2017	Previous Calibration	August 21, 2017
Station Number	1	Station Location	Donnelly
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:45	End Time (MST)	13:25:00 PM
Barometric Pressure	0.926 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	49.4 ppm	Cal Gas Expiry Date	02/21/2020
Correction factor	0.031424	Cal Gas Cylinder #	EY0000740
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.997611	Calculated slope	0.996962
Calculated intercept	-2.881267	Calculated intercept	-0.495845
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.9		6.9	
coefficient	1.056		1.012	
Lamp Voltage	835	volts	835	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	677.9	mm Hg	677.9	mm Hg
Sample Flow	0.437	ccm	0.436	ccm
Lamp Intensity	97	%	97	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5146	0.0	0.00	0.4	N/A
5146	41.25	392.8	394.0	0.9970
5146	20.10	192.2	194.7	0.9872
5146	9.87	94.6	94.5	1.0004
5146	0.0	0.0	0.4	As Found Zero
5146	41.25	392.8	404.0	As Found Span
Average Correction Factor				0.9949

Calculated value of As Found Response: 399.723 ppm Percent Change of As Found: **-1.8%**

	before calibration		after calibration	
Auto zero	0.3	ppm	0.4	ppm
Auto span	243.1	ppm	238.8	ppm

Notes: _____

Calibration Performed By: Dmytro Dolotii

Calibration Summary



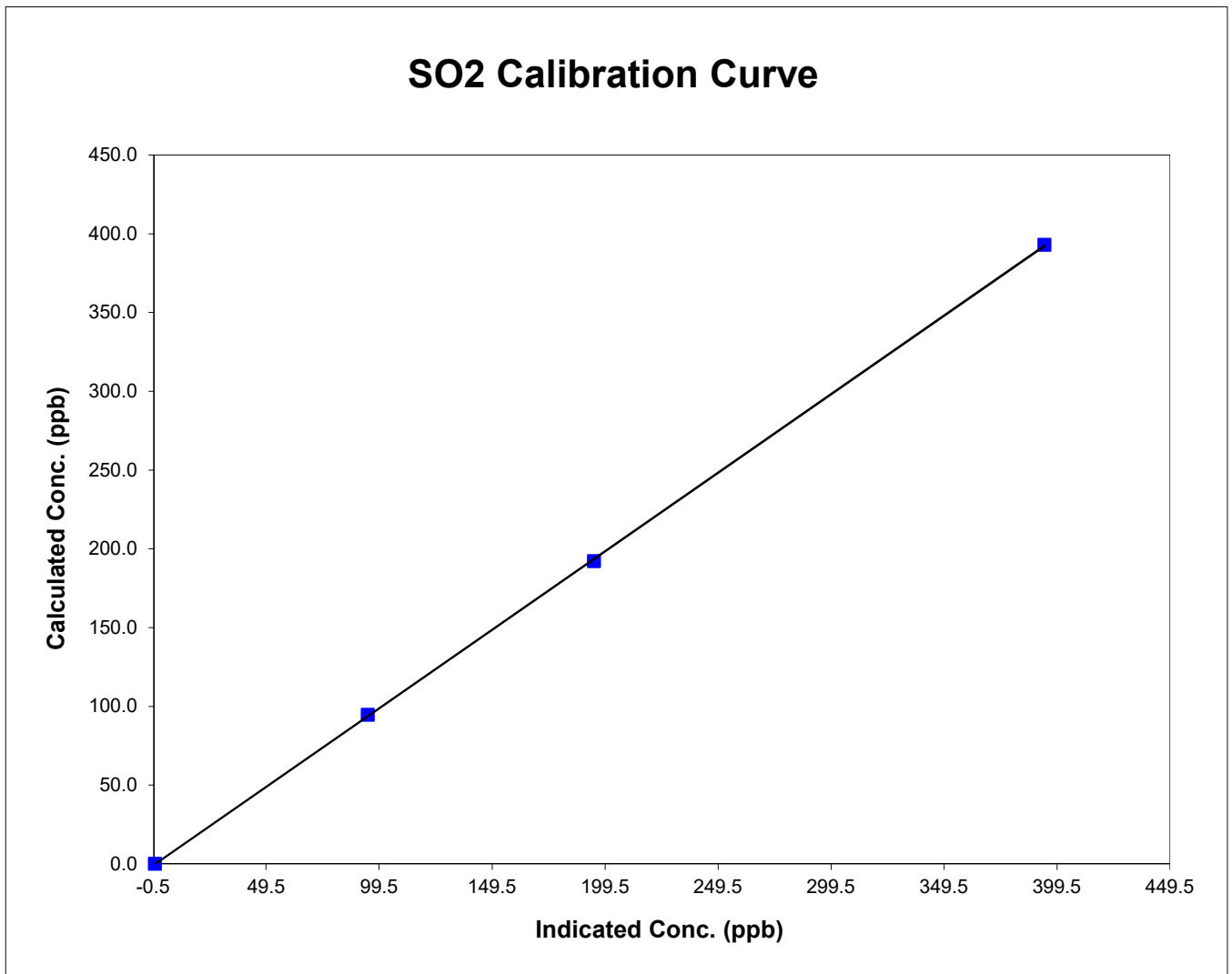
Parameter SO2
 Air Monitoring Network PAZA

Station Information

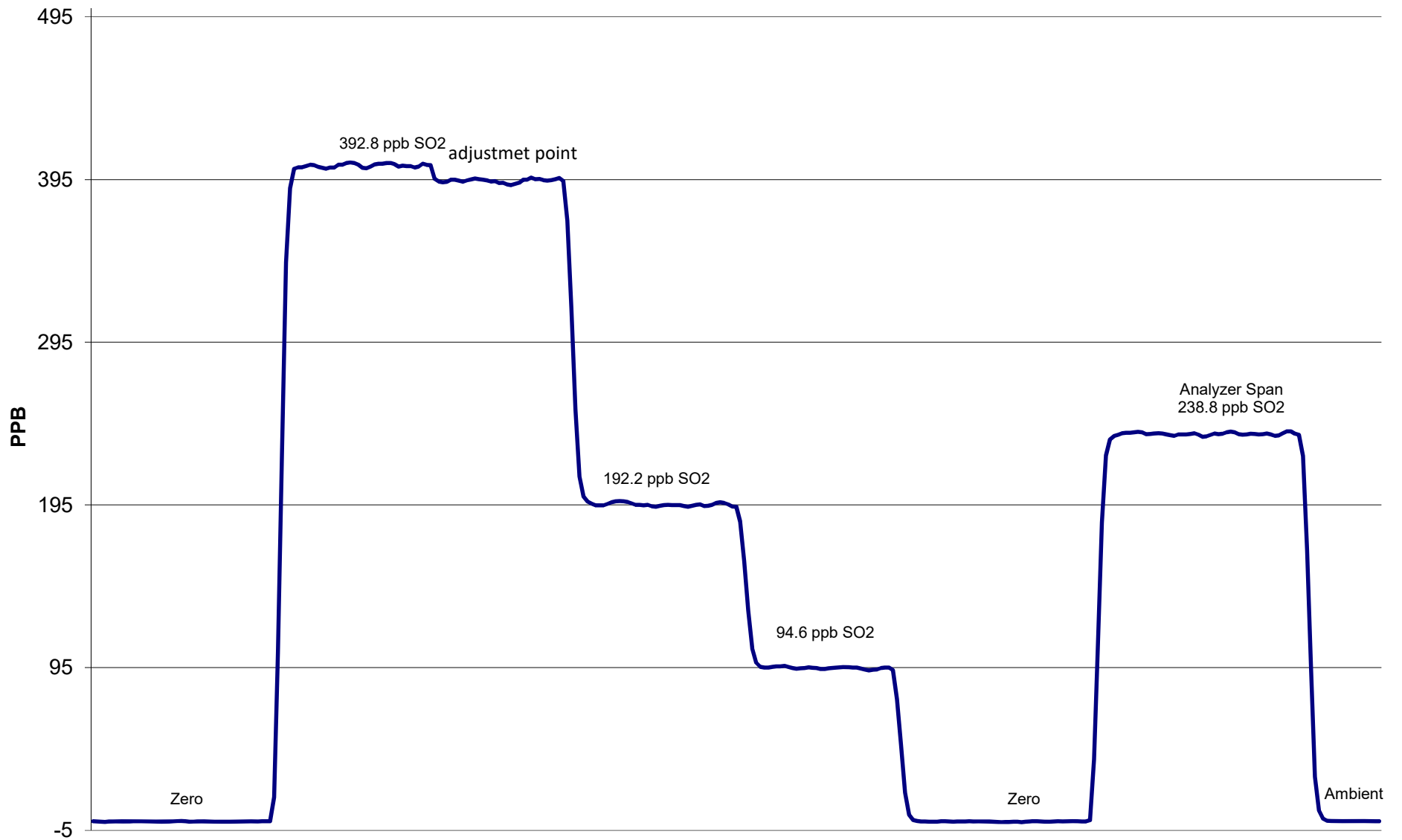
Calibration Date	September 26, 2017	Previous Calibration	August 21, 2017
Station Number	1	Station Location	Donnelly
Start Time (MST)	10:45	End Time (MST)	13:25:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A	Correlation Coefficient	0.999966
392.8	394.0	0.9970		
192.2	194.7	0.9872		
94.6	94.5	1.0004		
			Slope	0.996962
			Intercept	-0.495845



SO2 Calibration



September 26, 2017

Calibration Report



Parameter H2S
Air Monitoring Network _____

PAZA

Station Information

Calibration Date	September 26, 2017	Previous Calibration	August 21, 2017
Station Number	1	Station Location	Donnely
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	12:30	End Time (MST)	14:55:00 PM
Barometric Pressure	0.926 atm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Conc	10.3 ppm	Cal Gas Expiry Date	2/28/2020
Correction factor	0.031424	Cal Gas Cylinder #	EY0000340
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	1.018649	Calculated slope	1.012742
Calculated intercept	-1.025692	Calculated intercept	-0.321811
Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	16.5	ppb	16.5	ppb
coefficient	1.048		1.048	
Lamp Voltage	802	volts	803	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	489.9	mm Hg	490.5	mm Hg
Sample Flow	0.725	lpm	0.724	lpm
Lamp Intensity	90	mv	90	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5146	0.00	0.00	0.2	N/A
5146	41.25	81.91	81.0	1.0116
5146	20.08	40.03	40.4	0.9920
7250	9.87	14.00	14.0	0.9994
5146	0.00	0.00	0.2	As Found Zero
5146	41.25	81.91	81.0	As Found Span
Average Correction Factor				1.0010

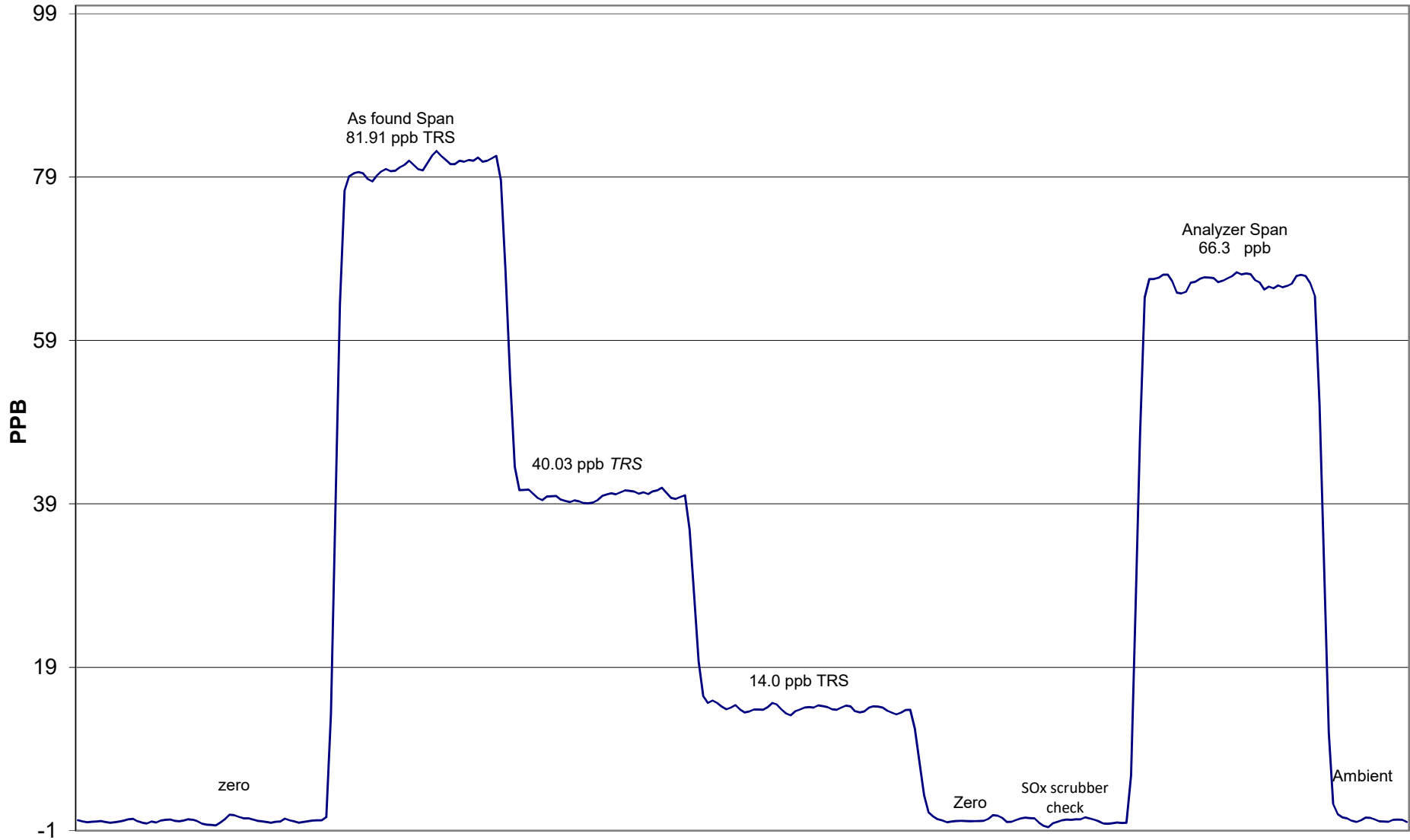
Calculated value of As Found Response: 81.27 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.2	ppm
Auto span	66.2	ppm	66.3	ppm

Notes: No adjutment made

Calibration Performed By: Dmytro Dolotii

H2S Calibration



September 26, 2017

Calibration Report



AIR QUALITY MONITORING

Parameter SO2
Air Monitoring Network _____

PAZA

Station Information

Calibration Date	September 25, 2017	Previous Calibration	August 10, 2017
Station Number	10	Station Location	Rycroft
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	10:30	End Time (MST)	14:20:00 PM
Barometric Pressure	0.933 Atm	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Concentration	49.4 ppm	Cal Gas Expiry Date	02/21/2020
Gas Cert Reference	EY0000751		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.007215	Calculated slope	0.995935
Calculated intercept	-0.837404	Calculated intercept	0.236273
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	24		24.2	
Coefficient	1.056		1.042	
UV Lamp Voltage	890	V	890	V
Chamber Temp	44.6	C	44.7	C
Perm Gas Temp	45	C	45	C
Pressure	672.7	mm Hg	674.6	mm Hg
Sample Flow	0.467	LPM	0.468	LPM
Lamp Intesity	30391	Hz	30429	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5144	0.00	0.0	0.2	N/A
5144	41.26	393.1	395.7	0.9934
5144	20.62	197.2	194.4	1.0144
5144	9.73	93.3	95.1	0.9812
5144	0.00	0.0	0.8	As found zero
5144	41.26	393.1	400.0	As found span
Average Correction Factor				0.9963

Calculated value of As Found Response: 401.256 ppm Percent Change of As Found: -2.1%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	207.2	ppm	204.3	ppm

Notes: Slight zero/span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA

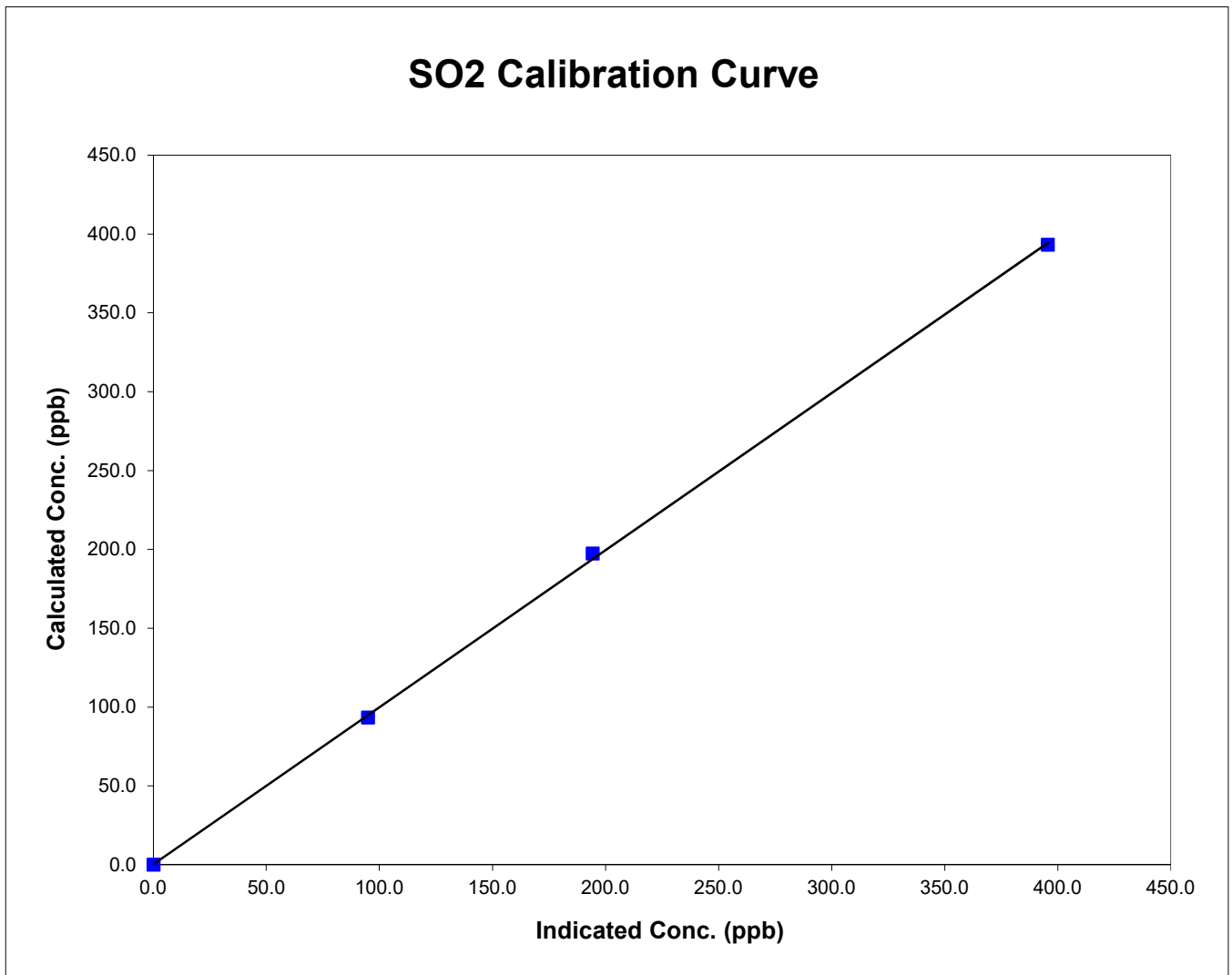


Station Information

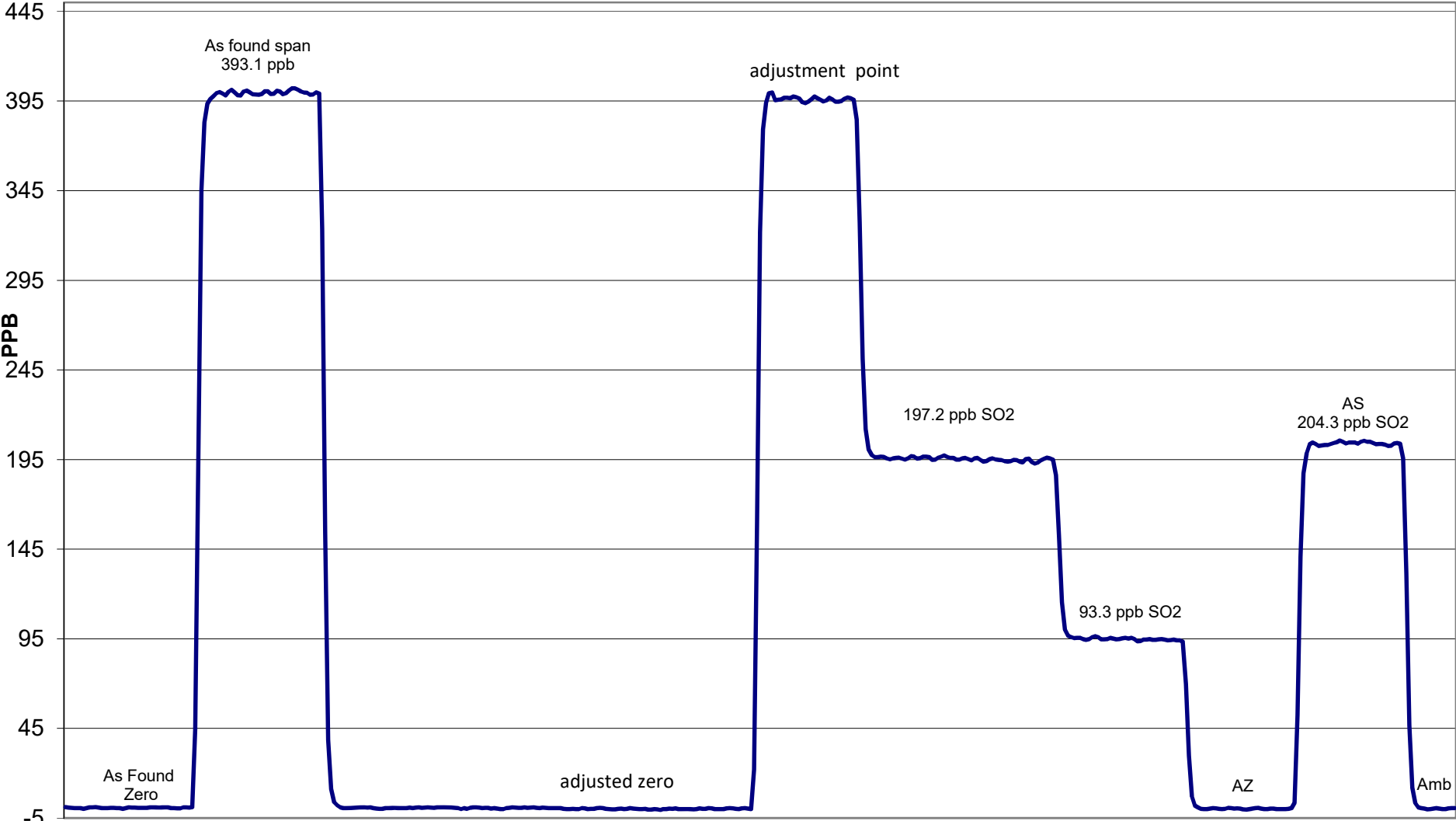
Calibration Date	September 25, 2017	Previous Calibration	August 10, 2017
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:30	End Time (MST)	14:20:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999816
393.1	395.7	0.9934		
197.2	194.4	1.0144	Slope	0.995935
93.3	95.1	0.9812		
			Intercept	0.236273



SO2 Calibration



September 25, 2017

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	September 25, 2017		Previous Calibration	August 10, 2017	
Station Number	10		Station Location	Rycroft	
Reason:	Routine	Installation	Removal	Other: _____	
Start Time (MST)	10:30		End Time (MST)	15:55:00 PM	
Barometric Pressure	0.930	Atm	Station Temperature	22.0	Deg C
Calibrator	EnviroNics		Serial Number	6586	
NO Cal Gas Conc	50.4	ppm	Cal Gas Expiry Date	02/21/2020	
NOx Cal Gas Conc	50.5	ppm	Cal Gas Serial #	EY0000740	

DACS Information

DACS make	CR3000		DACS serial No.	5407	
	Parameter	NO ₂	NO _x	NO	
Before	Data Slope	0.997665	1.007288	1.010727	
	Data Offset	0.653780	-0.047458	0.274200	
After	Data Slope	1.000041	0.998502	1.002762	
	Data Offset	-0.216965	0.023719	0.069609	
	Channel #	8	6	7	
	Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC	

Analyzer Information

Analyzer make/model	TEI 42i		Analyzer serial #	0701120011	
Test Point	before		after		
Concentration range	0-500	ppb	0-500	ppb	
NO offset	5.8	mV	6.4	mV	
NOx bkgnd	5.9	mV	6.4	mV	
NO coefficient	0.962		0.962		
NOx coefficient	1.001		1.001		
NO ₂ conv temp	324.2	Deg C	325.3	Deg C	
PMT Temp	-3.0	Deg C	-3.0	Deg C	
PMT Volt	-835.1	mV	-835.1	mV	
R Cell Press	173.5	in Hg	174.7	in Hg	
Sample Flow	1.640	LPM	0.912	LPM	

Notes:

Replaced flow controller.
Slight zero adjustment.

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**

Station Information

Calibration Date: September 25, 2017 Station Location: Rycroft

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	5144	0.00	0.0	0.0	0.0	0.0	0.0	0.2	N/A	N/A
1	5144	41.26	401.8	401.0	0.8	403.3	400.8	0.9	0.9965	1.0007
2	5144	20.62	201.6	201.2	0.4	199.4	198.0	0.7	1.0109	1.0162
3	5144	9.73	95.3	95.2	0.2	97.0	96.5	0.7	0.9827	0.9863
AFZ	5144	0.00	0.0	0.0	0.0	0.3	0.3	0.1	0.0000	0.0000
AFS	5144	41.26	401.8	401.0	0.8	405.7	403.8	0.3	0.9905	0.9932
Average Correction Factor									0.9967	1.0011

As Found Concentrations: NO_x= 408.3 NO= 408.1 As Found Percent Change NO_x= 1.6% NO= 1.8%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.94 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.3	0.3	0.0	0.0	0.0	0.2	N/A	N/A	N/A	N/A
NO point	401.0	401.0	0.0	403.5	401.0	0.8	0.9937	1.0000	N/A	N/A
300	401.0	94.0	306.9	402.8	94.0	307.0	0.9954	1.0000	0.9996	100.0%
200	401.0	190.6	210.3	403.3	190.6	210.7	0.9943	1.0000	0.9985	100.2%
100	401.0	286.5	114.4	403.2	286.5	114.7	0.9946	1.0000	0.9979	100.2%
Average Correction Factor							0.9947	1.0000	0.9987	100.1%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.7	0.3	0.5	ppb	0.0	0.2	0.0	ppb
Auto span	154.1	151.5	2.0	ppb	154.7	152.9	1.2	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter NO₂

Air Monitoring Network PAZA

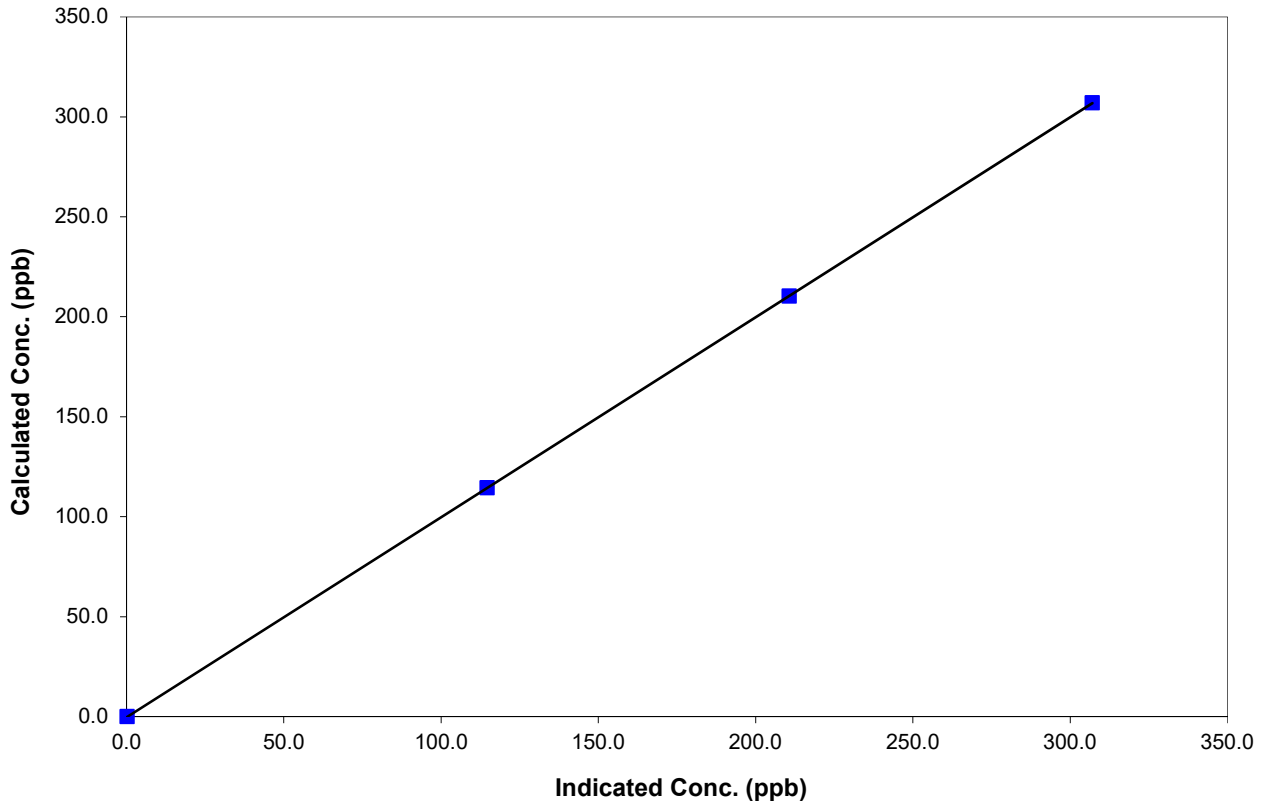
Station Information

Calibration Date	September 25, 2017	Previous Calibration	August 10, 2017
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:30	End Time (MST)	15:55:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	1.000000
306.9	307.0	0.9996		
210.3	210.7	0.9985	Slope	1.000041
114.4	114.7	0.9979		
			Intercept	-0.216965

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PAZA

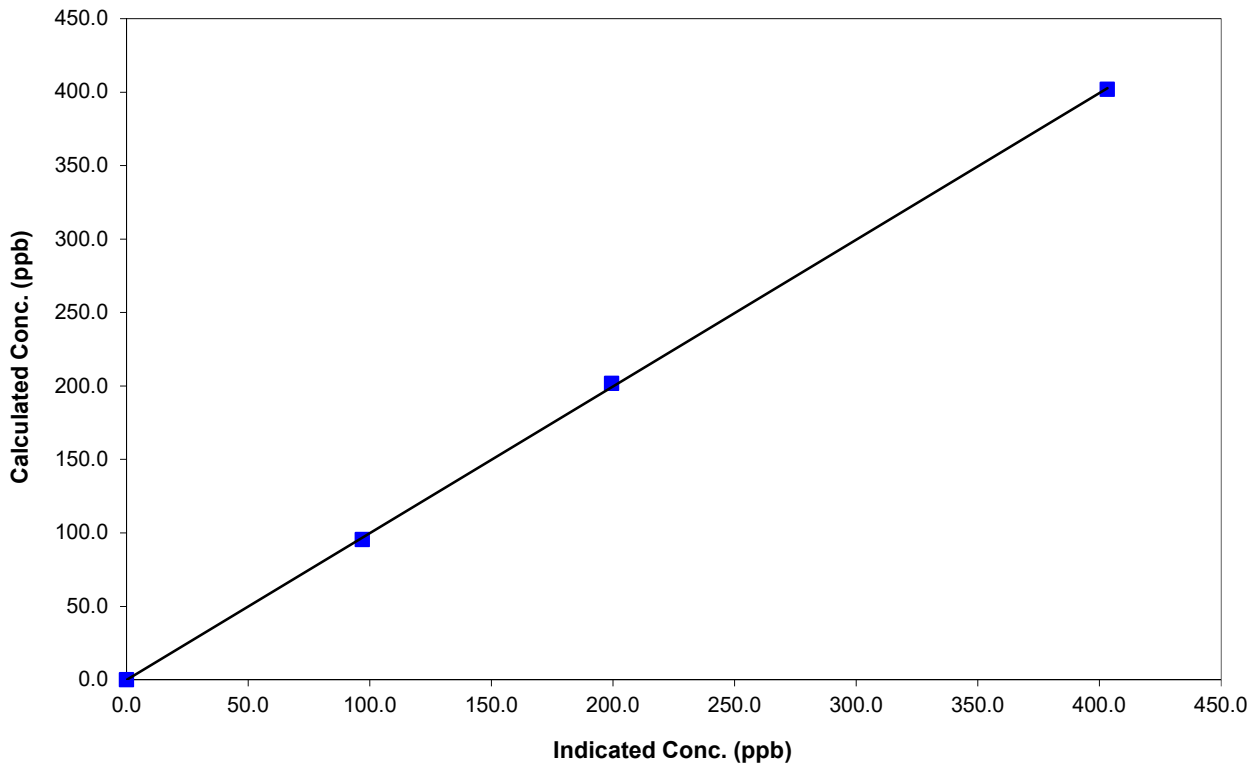
Station Information

Calibration Date	September 25, 2017	Previous Calibration	August 10, 2017
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:30	End Time (MST)	15:55:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999897
401.8	403.3	0.9965		
201.6	199.4	1.0109		
95.3	97.0	0.9827	Slope	0.998502
			Intercept	0.023719

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



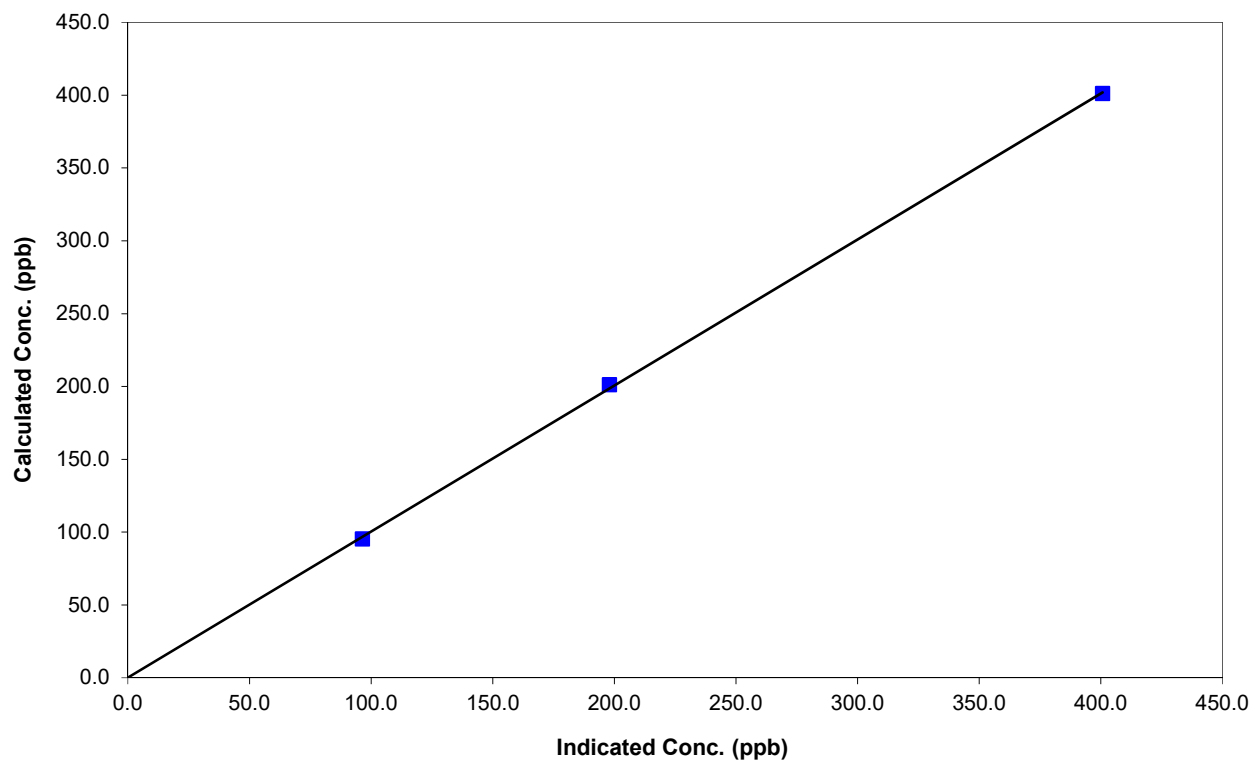
Station Information

Calibration Date	September 25, 2017	Previous Calibration	August 10, 2017
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:30	End Time (MST)	15:55:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

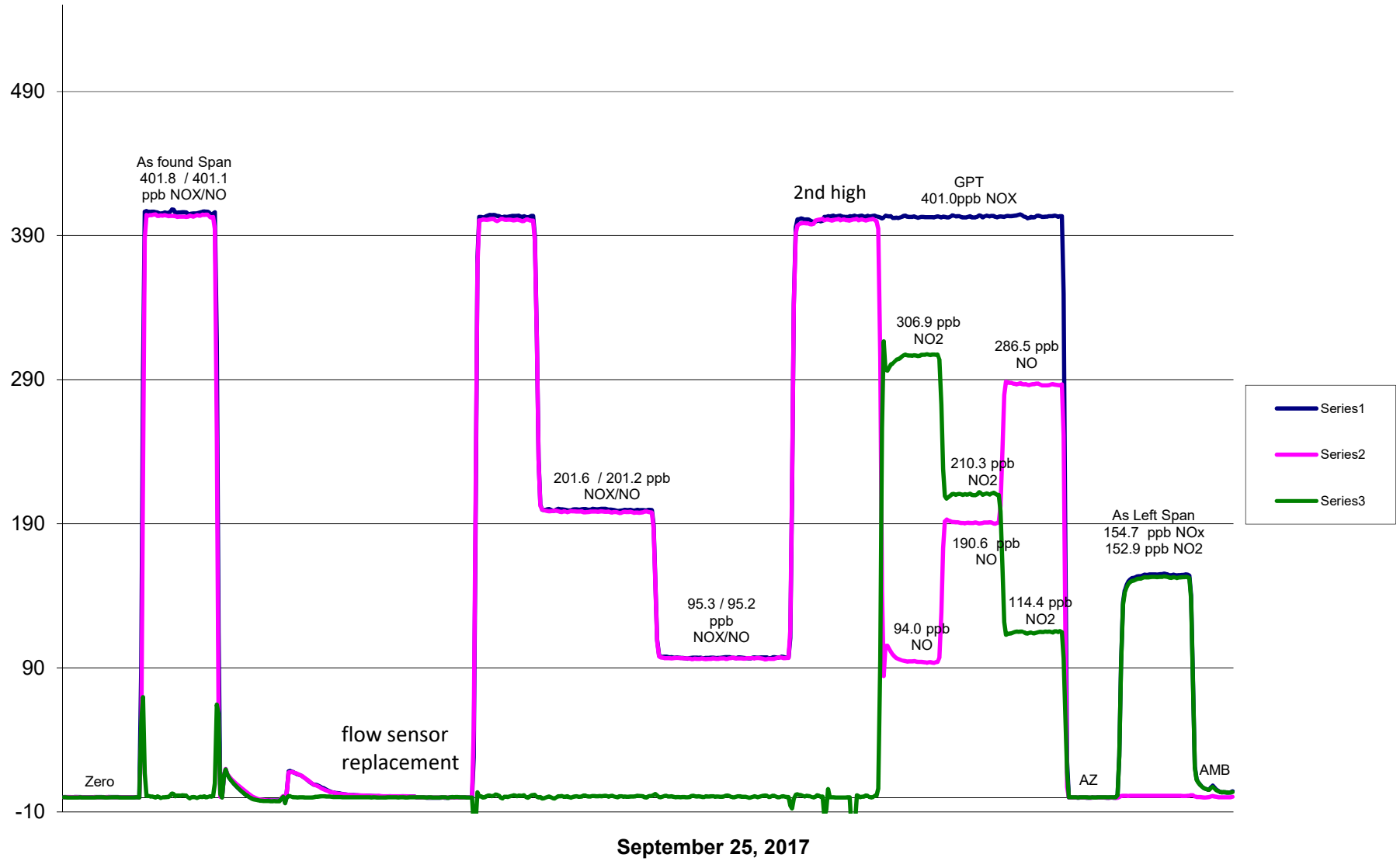
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999884
401.0	400.8	1.0007		
201.2	198.0	1.0162	Slope	1.002762
95.2	96.5	0.9863		
			Intercept	0.069609

NO Calibration Curve



NO_x Calibration



Calibration Report



AIR QUALITY MONITORING

Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	September 25 2017	Previous Calibration	August 10 2017
Station Number	10	Station Location	Rycroft
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	15:00:00 PM	End Time (MST)	17:05:00 PM
Barometric Pressure	0.930 atm	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	1.004365	Calculated slope	1.013688
Calculated intercept	-2.360534	Calculated intercept	0.037783
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-0.5	ppb	-0.5	ppb
Span	0.968		0.968	
Cell A intensity	62487	Hz	62128	Hz
Cell B intensity	637774	Hz	63567	Hz
Pressure	665.90	in Hg	671.20	in Hg
CellA Flow	0.702	ccm	0.703	ccm
Cell B Flow	0.693	cmm	0.694	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5144	0.00	0.0	0.4	N/A
5144	0.30	306.9	303.2	1.0121
5144	0.20	210.3	206.9	1.0163
5144	0.10	114.4	112.3	1.0183
5144	0.00	0.0	0.4	As found zero
5144	0.30	306.9	303.2	As found span
Average Correction Factor				1.0156

Calculated value of As Found Response: 301.8 ppm Percent Change of As Found: -1.7%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.5	ppb
Auto span	499.4	ppb	392.2	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter O3

Air Monitoring Network PAZA



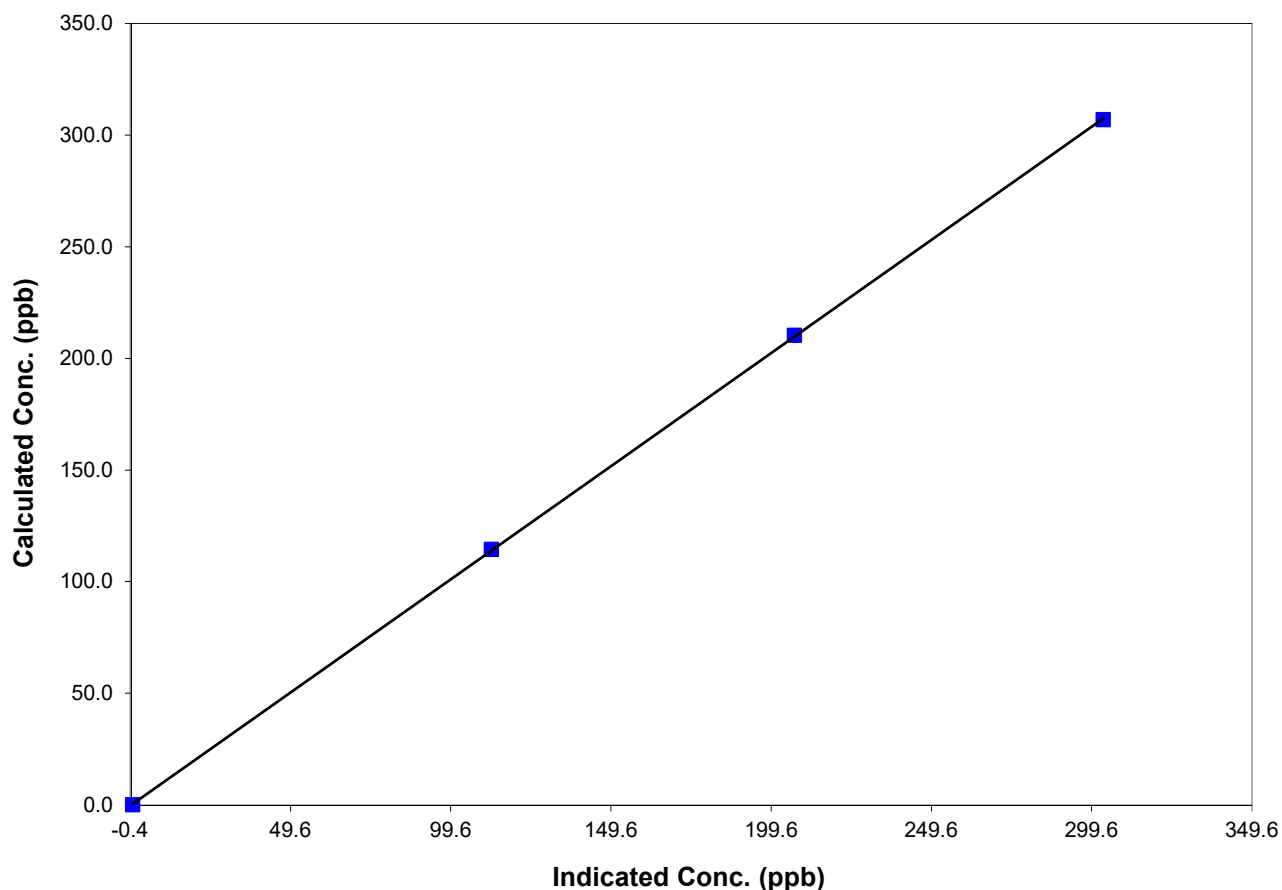
Station Information

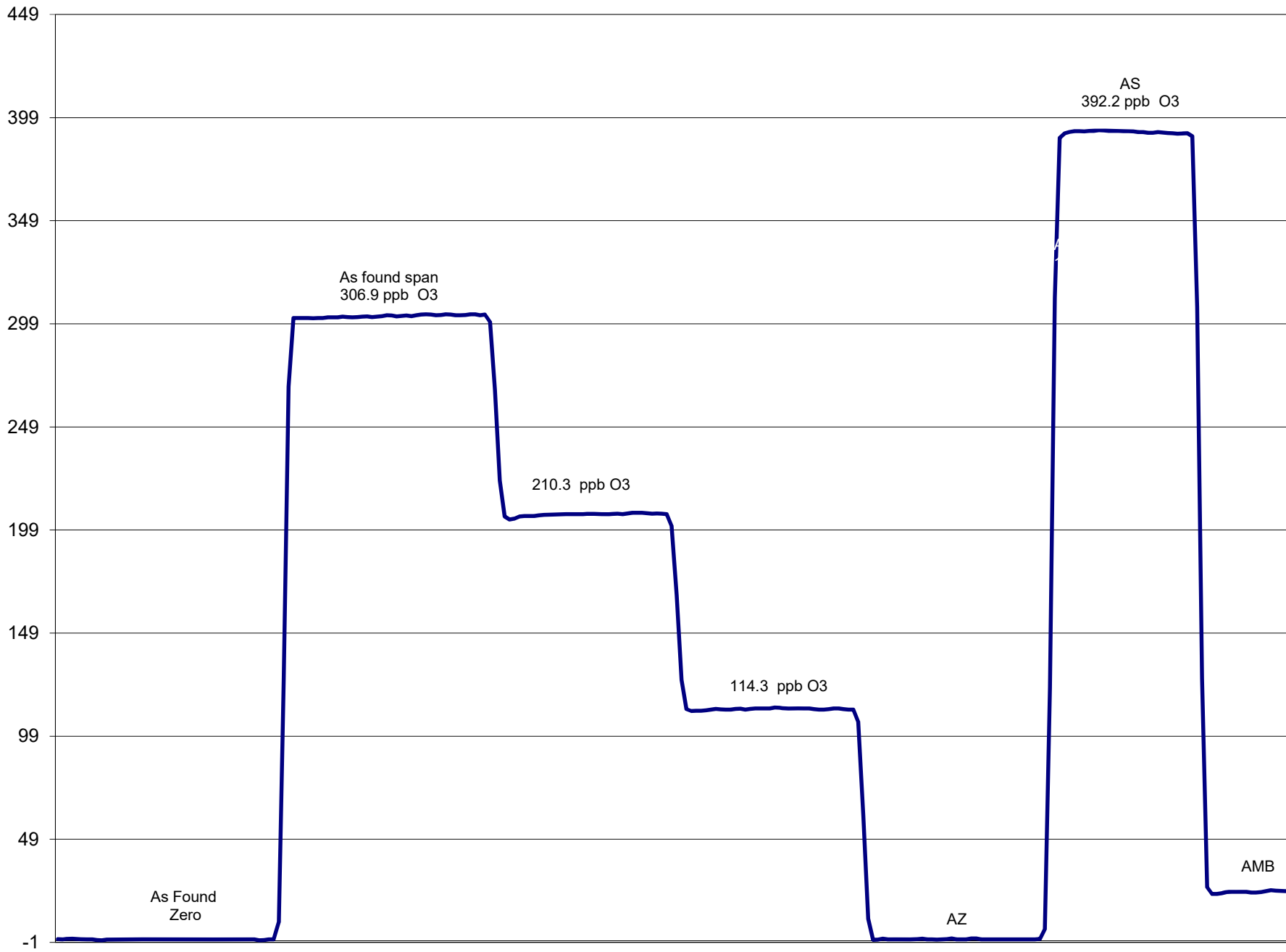
Calibration Date	<u> September 25 2017 </u>	Previous Calibration	<u> August 10 2017 </u>
Station Number	<u> 10 </u>	Station Location	<u> Rycroft </u>
Start Time (MST)	<u> 15:00:00 PM </u>	End Time (MST)	<u> 17:05:00 PM </u>
Analyzer make/model	<u> TEI Model 49C </u>	Analyzer serial #	<u> 49C-0609716240 </u>

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA		
306.9	303.2	1.0121	Correlation Coefficient	0.999981
210.3	206.9	1.0163		
114.4	112.3	1.0183		
			Slope	1.013688
			Intercept	0.037783

O3 Calibration Curve





September 25 2017

Calibration Report



AIR QUALITY MONITORING

Parameter CH4 / NMHC / THC

Air Monitoring Network PAZA

Station Information

Calibration Date	September 11, 2017	Previous Calibration	August 9, 2017
Station Number	1	Station Location	Rycroft
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:40	End Time (MST)	14:05:00 PM
Barometric Pressure	0.928 atm	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas CH4 Conc	404 ppm CH4	Cal Gas Expiry Date	3/28/2014
Cal Gas C3H8 Conc	201 552.75 ppm CH4	Cal Gas Cylinder #	LL34988
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 12,13,14

Analyzer make TEI 55I-A3PHAA Analyzer serial # 1151980005

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	34.7	PSI	34.7	PSI
Fuel pressure	49.4	PSI	49.4	PSI
Carrier pressure	40.1	PSI	40.1	PSI
CH4 cal factor				E ⁻⁴
NMHC cal factor				E ⁻⁴
Rt		Sec		Sec
Pk Index				

CH4 Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2002	0.00	0.00	0.01	N/A
2002	66.12	12.92	12.85	1.0053
2002	42.10	8.32	8.25	1.0085
2002	16.30	3.26	3.26	1.0016
2002	0.00	0.00	0.01	As Found Zero
2002	66.12	12.92	11.70	As Found Span
Average Correction Factor				1.0051

Calculated value of As Found Response: 11.666 ppm Percent Change of As Found: 9.7%

	Before		After
Calculated slope	0.995264	Calculated slope	1.006775
Calculated intercept	0.024838	Calculated intercept	-0.007183

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.00	ppm	0.00	ppm
Auto span	8.17	ppm	8.33	ppm

NMHC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2002	0.00	0.00	0.00	N/A
1997	66.12	17.71	17.72	0.9999
2002	42.10	11.38	11.35	1.0031
2002	16.30	4.46	4.41	1.0128
2002	0.00	0.00	0.00	As Found Zero
2002	66.12	17.67	16.17	As Found Span
Average Correction Factor				1.0053

Calculated value of As Found Response: 16.217 ppm Percent Change of As Found: 8.2%

	<u>Before</u>		<u>After</u>
Calculated slope	0.994781	Calculated slope	0.999337
Calculated intercept	0.134661	Calculated intercept	0.027902

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.00	ppm	0.00	ppm
Auto span	10.61	ppm	11.27	ppm

THC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2002	0.00	0.00	0.01	N/A
2002	66.12	30.59	30.61	0.9994
2002	42.10	19.71	19.60	1.0055
2002	16.30	7.73	7.69	1.0047
2002	0.00	0.00	0.01	As Found Zero
2002	66.12	30.59	27.92	As Found Span
Average Correction Factor				1.0032

Calculated value of As Found Response: 27.863 ppm Percent Change of As Found: 8.9%

	<u>Before</u>		<u>After</u>
Calculated slope	0.992555	Calculated slope	1.000205
Calculated intercept	0.163538	Calculated intercept	0.026639

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.00	ppm	0.00	ppm
Auto span	18.79	ppm	19.61	ppm

Notes: Hydrogen & nitrogen cylinders replaced.
Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4
 Air Monitoring Network PAZA



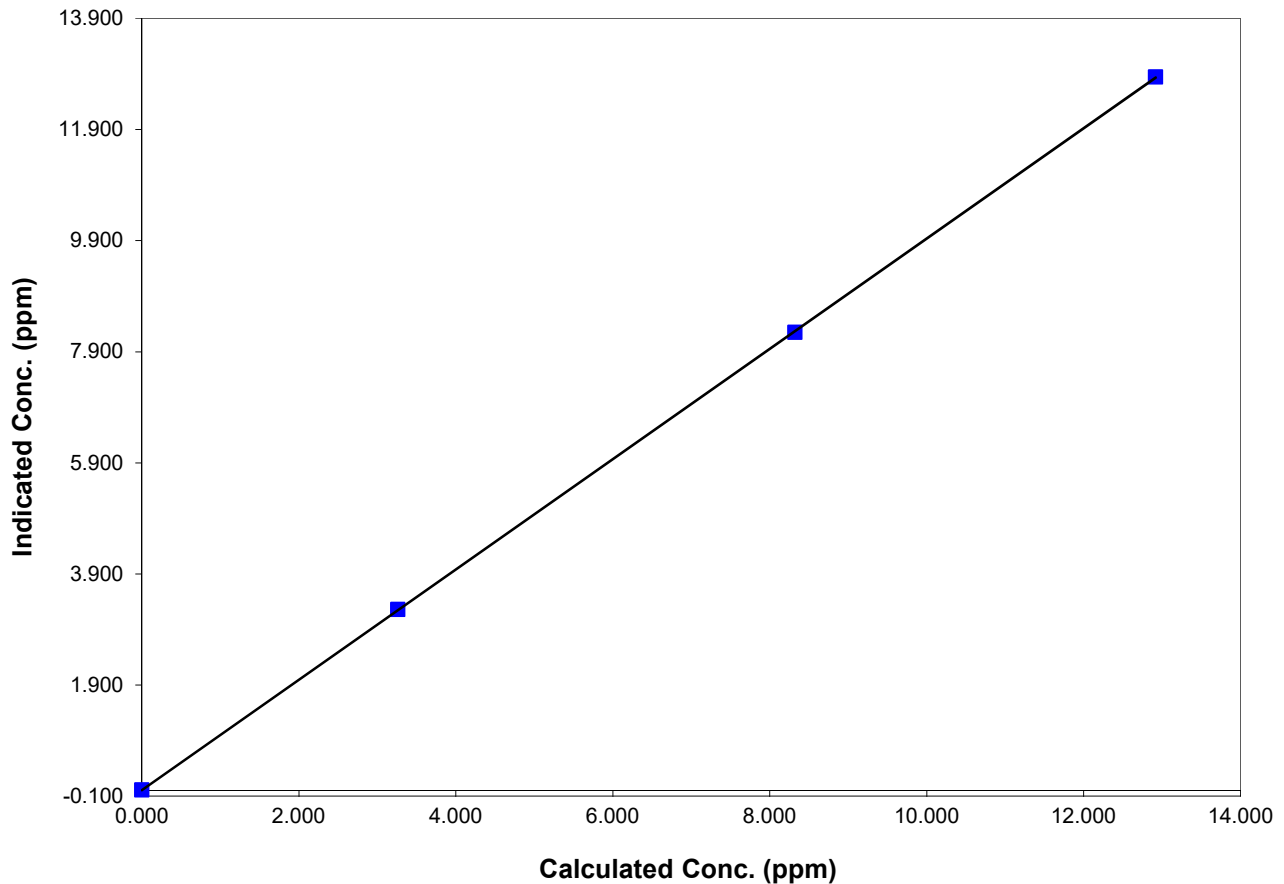
Station Information

Calibration Date	September 11, 2017	Previous Calibration	August 9, 2017
Station Number	1	Station Location	Rycroft
Start Time (MST)	11:40	End Time (MST)	14:05:00 PM
Analyzer make/model	TEI 55I-A3PHAA	Analyzer serial #	1151980005

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.008	N/A		
12.916	12.848	1.0053	Correlation Coefficient	0.999993
8.321	8.251	1.0085		
3.263	3.258	1.0016	Slope	1.006775
			Intercept	-0.007183

CH4 Calibration Data



Calibration Summary

Parameter NMHC

Air Monitoring Network PAZA

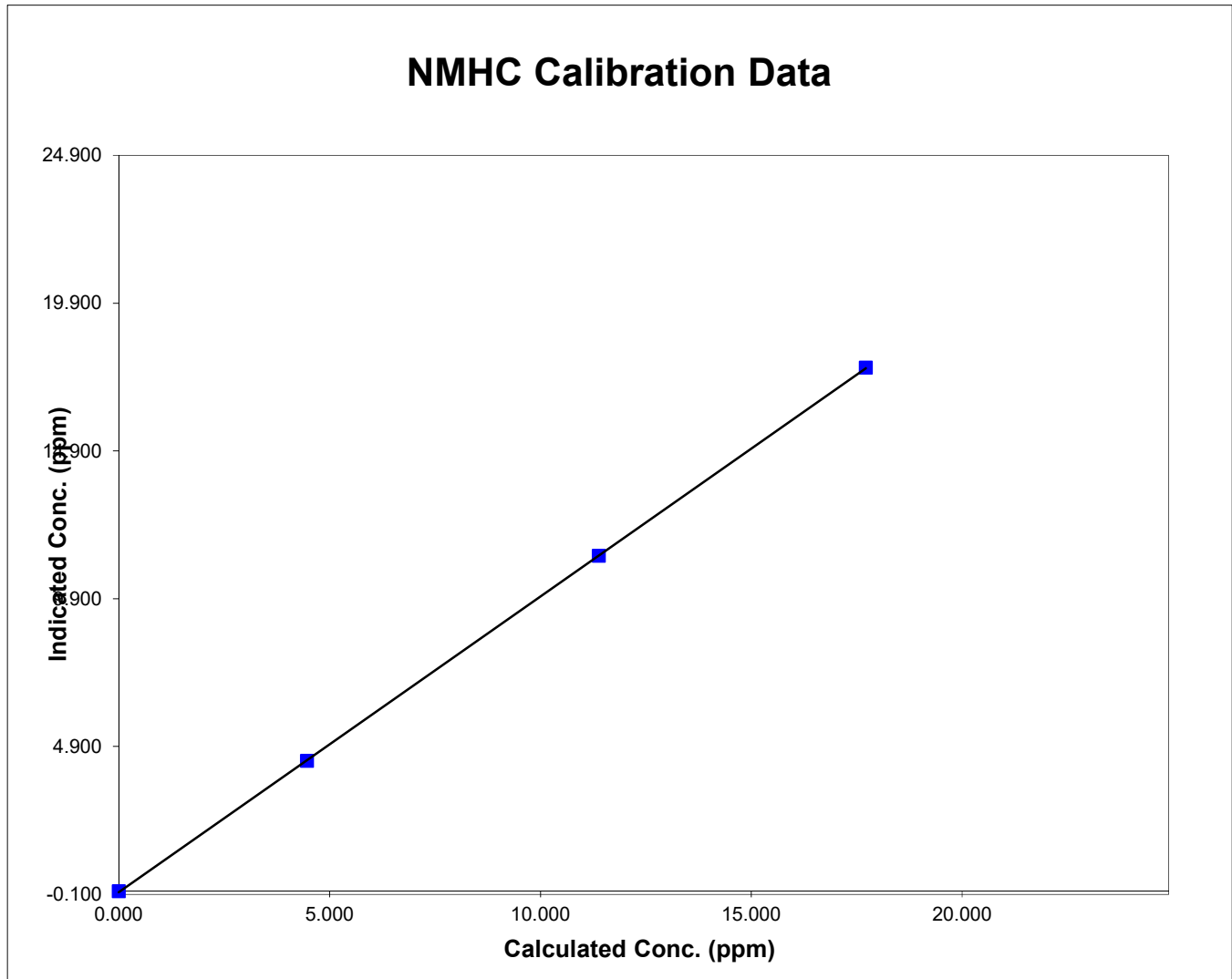


Station Information

Calibration Date	<u> September 11, 2017 </u>	Previous Calibration	<u> August 9, 2017 </u>
Station Number	<u> 1 </u>	Station Location	<u> Rycroft </u>
Start Time (MST)	<u> 11:40 </u>	End Time (MST)	<u> 14:05:00 PM </u>
Analyzer make/model	<u> TEI 55I-A3PHAA </u>	Analyzer serial #	<u> 1151980005 </u>

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			0.000	0.001
17.715	17.716	0.9999	Correlation Coefficient	0.999987
11.384	11.349	1.0031		
4.464	4.408	1.0128	Slope	0.999337
			Intercept	0.027902



Calibration Summary

Parameter THC
 Air Monitoring Network PAZA



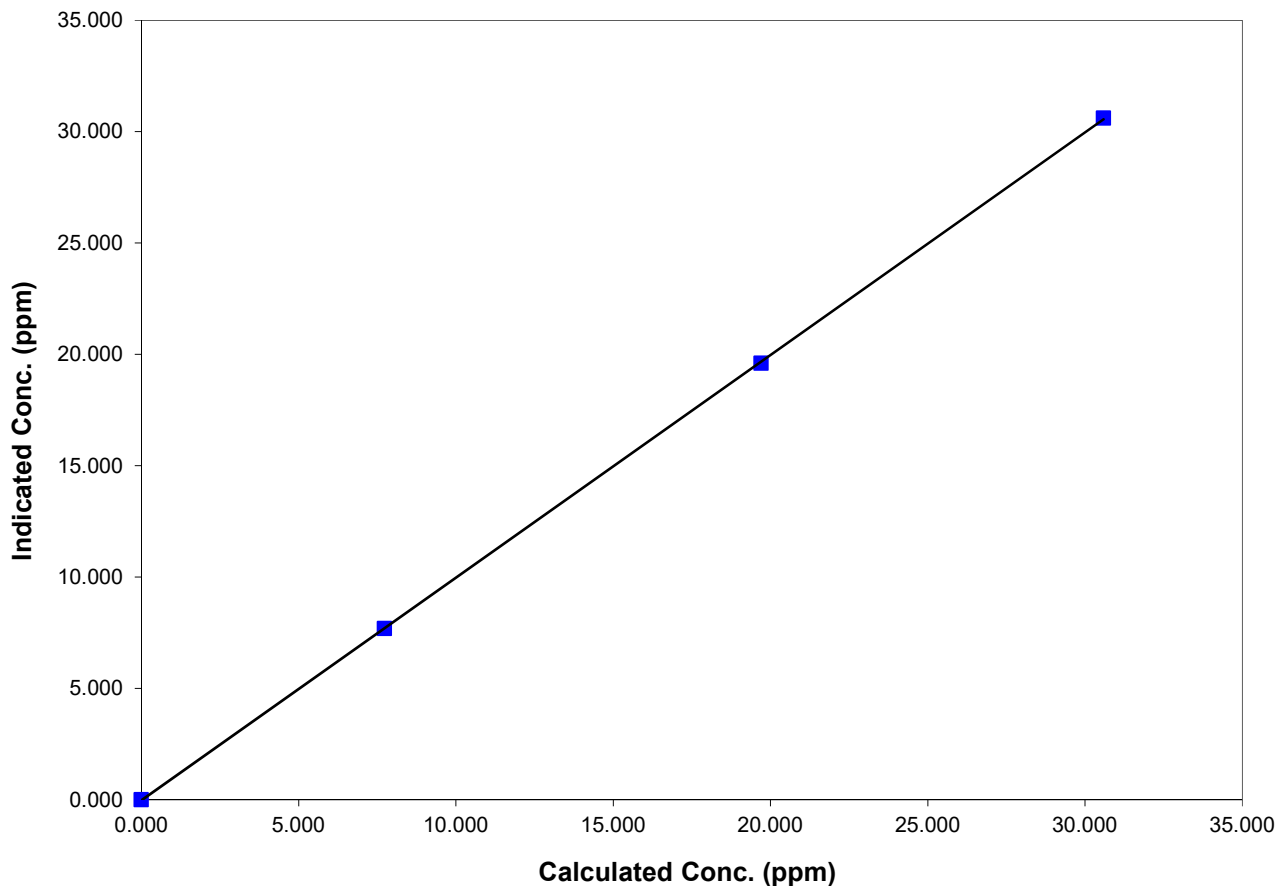
Station Information

Calibration Date	September 11, 2017	Previous Calibration	August 9, 2017
Station Number	1	Station Location	Rycroft
Start Time (MST)	11:40	End Time (MST)	14:05:00 PM
Analyzer make/model	TEI 55I-A3PHAA	Analyzer serial #	1151980005

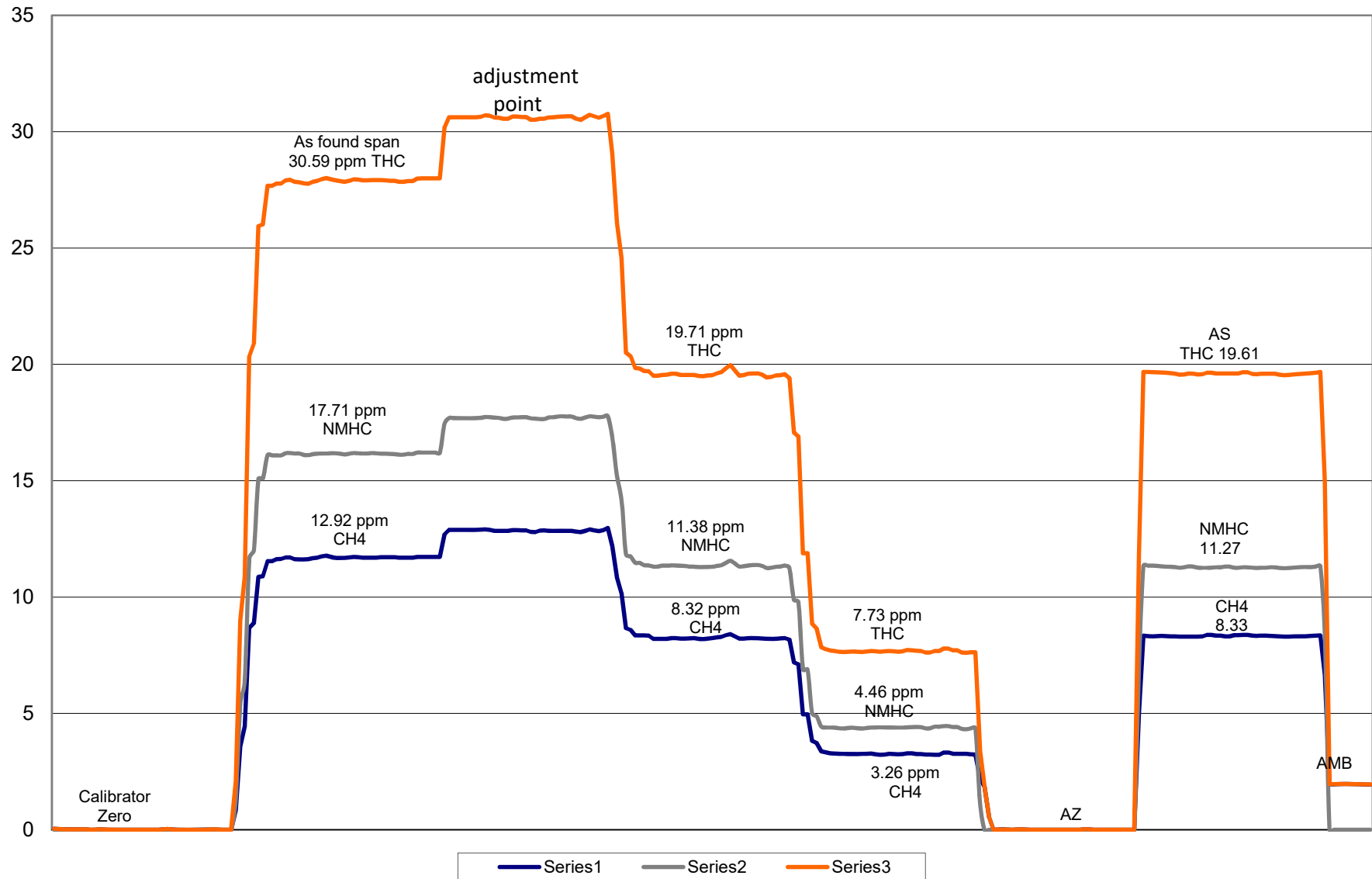
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.007	N/A	Correlation Coefficient	0.999982
30.588	30.607	0.9994		
19.705	19.597	1.0055	Slope	1.000205
7.727	7.690	1.0047		
			Intercept	0.026639

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report



AIR QUALITY MONITORING

Parameter TRS
Air Monitoring Network _____

PAZA

Station Information

Calibration Date	September 11, 2017	Previous Calibration	August 9, 2017
Station Name	PAZA Rover	Station Location	Rycroft
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:20 PM	End Time (MST)	15:35:00 PM
Barometric Pressure	0.928 mbar	Station Temperature	22.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.3 ppm	Cal Gas Expiry Date	2/2/2020
Gas Cert Reference	EY0000340		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	1
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.980977	Calculated slope	1.001949
Calculated intercept	0.462952	Calculated intercept	-0.417812
Analyzer make	TEI 43I	Analyzer serial #	1153630152

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	11.0	ppb	10.8	ppb
Coefficient	1.107		1.062	
Lamp Voltage	773	V	774	V
Chamber Temp	45.01	C	45.01	C
Perm gas Temp	45	C	45	C
Pressure	671.8	mmHg	672.1	mmHg
Sample Flow	0.390	lpm	0.390	lpm
Lamp Intensity	86	Hz	86	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5147	0.0	0.0	0.1	N/A
5147	41.23	81.9	82.0	0.9979
5147	20.53	40.9	41.3	0.9912
7226	9.82	14.0	14.8	0.9474
			0.3	Sox Test
5147	0.00	0.0	0.1	As found zero
5147	41.23	81.9	84.8	As found span
Average Correction Factor				0.9788

Calculated value of As Found Response: 83.55 ppm Percent Change of As Found: -2.1%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.1	ppm
Auto span	57.4	ppm	54.4	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**



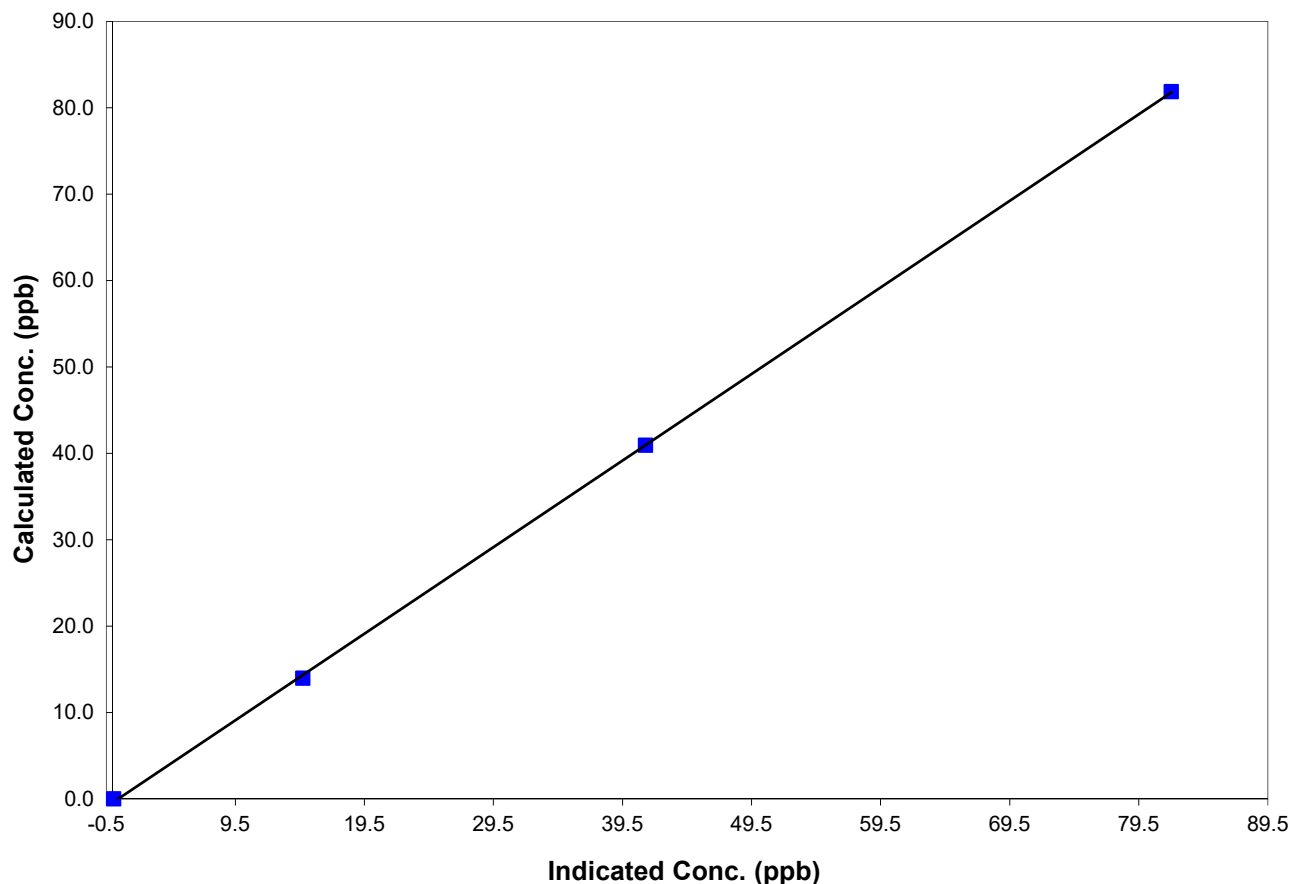
Station Information

Calibration Date	September 11, 2017	Previous Calibration	August 9, 2017
Station Number	PAZA Rover	Station Location	Rycroft
Start Time (MST)	12:20	End Time (MST)	15:35:00 PM
Analyzer make/model	TEI 43I	Analyzer serial #	1153630152

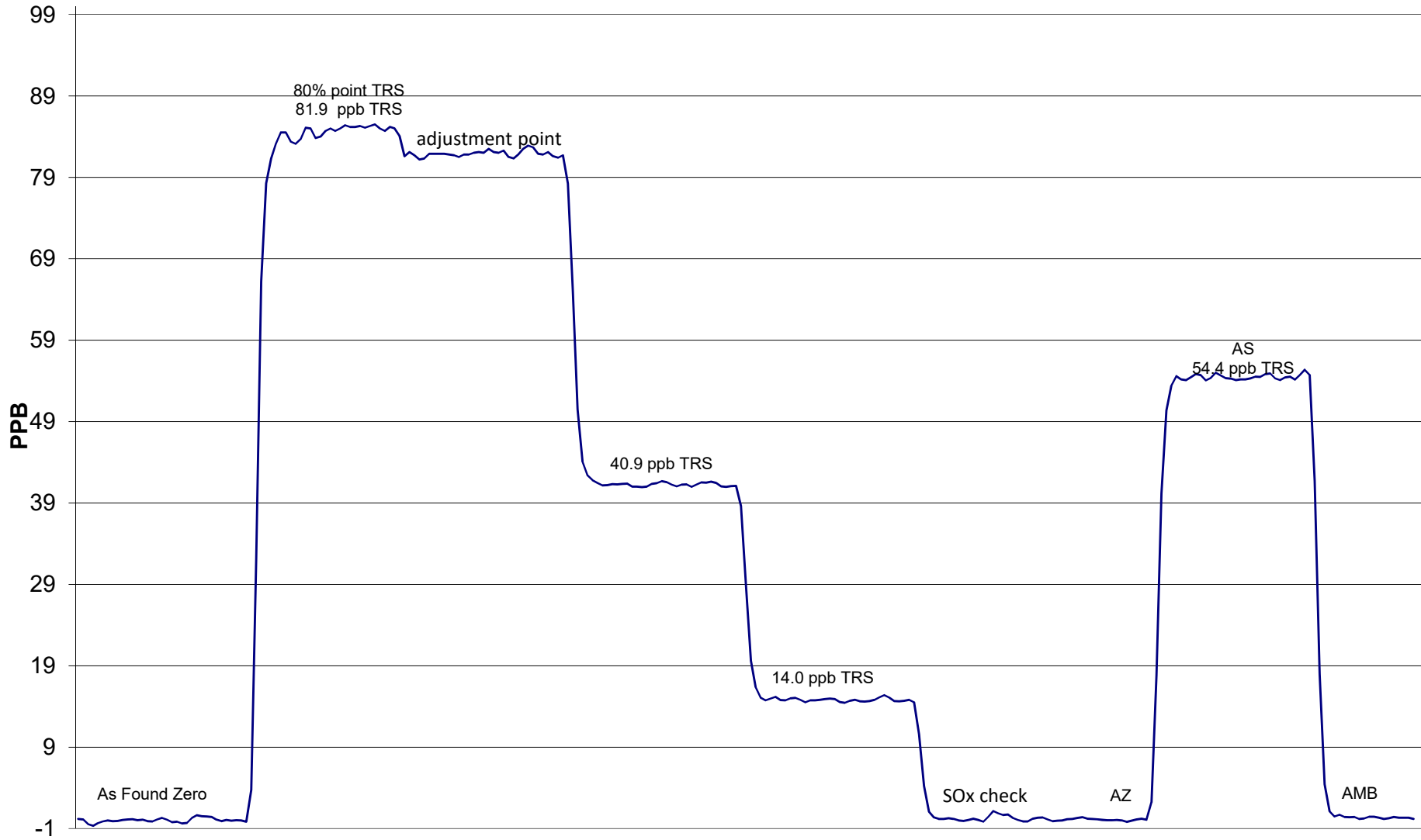
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999932
81.9	82.0	0.9979		
40.9	41.3	0.9912	Slope	1.001949
14.0	14.8	0.9474		
			Intercept	-0.417812

TRS Calibration Curve



TRS Calibration



September 11, 2017