



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
May 2014**

Operations and Reporting



June 30th, 2014

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

RE: Peace Airshed Zone Association (PAZA) – May 2014 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **May 2014**.

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
Canfor Forest Products	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
	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
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
	Pouce Coupe	16-07-078-11-W6	00000614-01-00

Company	Facility	LSD	EPEA Approval Number
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: Seven (7) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, Falher and Portable-Reno.

During the month of **May** the following events were noted:

Henry Pirker Station:

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

Evergreen Park Station:

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

Smoky Heights Station:

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

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station.
- ◆ All analyzers and sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of May with the exception of the PM_{2.5} analyzer, which experienced equipment failure. Replacement parts delivered June 19th. **AE Reference #286016**

Valleyview Station:

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

Reno Station:

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

Falher Station:

- ◆ The measured ambient air quality was within the AAAQO for the Falher station.
- ◆ All analyzers and sensors at the Falher station had an operational uptime greater than 90% for the month of May with the exception of the H₂S analyzer, which recorded one (1) 1-hour exceedences of the guideline of 10 ppb:
 - o May 07 22:00 16.1 ppb Alberta Environment Reference # 283719
- ◆

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of May: Poplar, Saddle Hills, Crooked Creek, Clouston Creek, and Girouxville 3. 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 0.1 ppb to 0.5 ppb, with a mean of 0.1 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.1 ppb to 3.5 ppb, with a mean of 0.8 ppb.
- Monthly average concentrations for O₃ passives ranged from 28.1 ppb to 42.8 ppb, with a mean of 34.6 ppb.
- Monthly average concentrations for H₂S ranged from 0.1 ppb to 0.2 ppb, with a mean of 0.2 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



Shelly Pruden, C. Tech
Environmental Advisor
Veresen Inc.

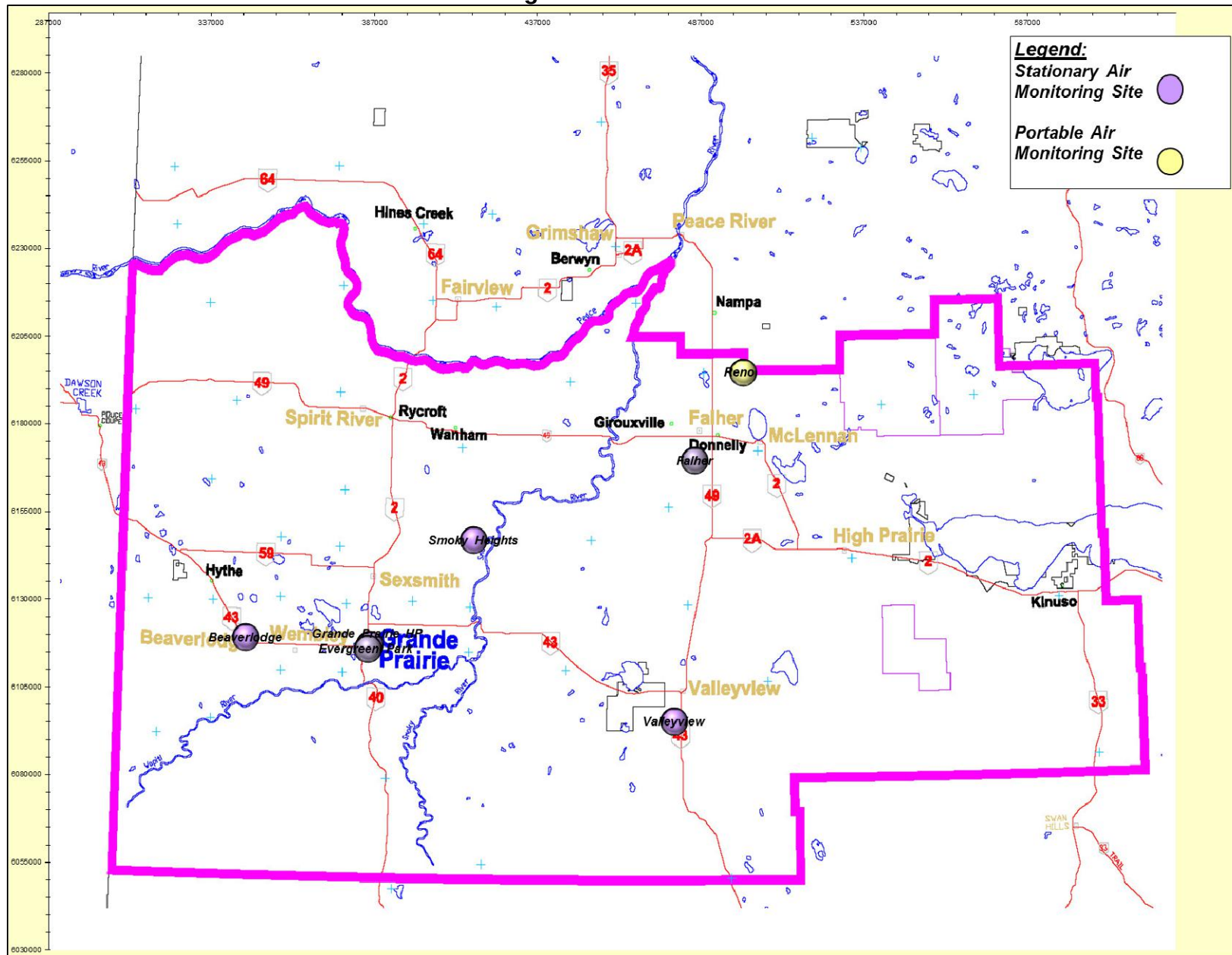


Greg Pippus, MSc., EP.
Environmental Leader
Weyerhaeuser - Grande Prairie Operations



Jeff Cooper, C.Tech.
AQM Operations Manager

Location of PAZA Continuous Monitoring Stations



PAZA Monthly Continuous Data Summary

May-2014 Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr					
SO ₂ (ppb)	172	48	Henry Pirker	0.1	0	0	1.8	May-09 03:00	0.4	May-09	100%
SO ₂ (ppb)	172	48	Evergreen Park	0.1	0	0	1.9	May-01 01:00	0.4	May-01	99%
SO ₂ (ppb)	172	48	Smoky Heights	0.2	0	0	3.0	May-21 07:00	0.6	May-30	100%
SO ₂ (ppb)	172	48	Beaverlodge	0.2	0	0	2.5	May-04 07:00	0.6	May-04	100%
SO ₂ (ppb)	172	48	Valleyview	0.4	0	0	11.8	May-30 06:00	3.4	May-30	97%
SO ₂ (ppb)	172	48	Reno	0.1	0	0	1.2	May-31 06:00	0.3	May-17	100%
SO ₂ (ppb)	172	48	Falher	0.1	0	0	3.1	May-25 09:00	0.3	May-25	100%
NO (ppb)			Henry Pirker	0.9	0	0	14.8	May-23 08:00	2.0	May-20	100%
NO ₂ (ppb)	159	106	Henry Pirker	5.1	0	0	24.9	May-08 06:00	8.4	May-22	100%
NO _x (ppb)			Henry Pirker	5.9	0	0	34.6	May-23 08:00	9.6	May-22	100%
NO (ppb)			Beaverlodge	0.3	0	0	7.9	May-29 07:00	0.9	May-29	100%
NO ₂ (ppb)	159	106	Beaverlodge	1.8	0	0	11.9	May-12 08:00	3.1	May-12	100%
NO _x (ppb)			Beaverlodge	2.1	0	0	17.2	May-12 08:00	3.7	May-12	100%
NO (ppb)			Reno	0.6	0	0	14.8	May-27 06:00	2.5	May-27	100%
NO ₂ (ppb)	159	106	Reno	2.5	0	0	15.0	May-30 02:00	6.2	May-30	100%
NO _x (ppb)			Reno	3.1	0	0	21.6	May-27 06:00	7.3	May-30	100%
O ₃ (ppb)	82		Henry Pirker	32.9	0	-	54.6	May-08 17:00	40.1	May-09	98%
O ₃ (ppb) - 8-hr			Henry Pirker		0				51.6	May-18	
O ₃ (ppb)	82		Beaverlodge	36.0	0	-	54.2	May-07 17:00	44.5	May-09	100%
O ₃ (ppb) - 8-hr			Beaverlodge		0				51.9	May-07	
O ₃ (ppb)	82		Reno	32.5	0	-	54.3	May-19 13:00	42.8	May-18	100%
O ₃ (ppb) - 8-hr			Reno		0				52.2	May-18	
CO (ppm)	13		Henry Pirker	0.18	0	-	0.5	May-25 00:00	0.2	May-18	100%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.3	May-25	

PAZA Monthly Continuous Data Summary – continued

May-2014Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
THC (ppm)			Henry Pirker	2.0	-	-	3.3	May-05 05:00	2.1	May-05	96%
CH ₄ (ppm)			Henry Pirker	1.9	-	-	3.3	May-05 05:00	2.1	May-05	96%
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	May-02 14:00	0.0	May-18	96%
THC (ppm)			Reno	2.05	-	-	2.3	May-11 07:00	2.1	May-12	100%
TRS (ppb)			Henry Pirker	0.4	-	-	1.7	May-05 05:00	0.6	May-19	100%
TRS (ppb)			Evergreen Park	0.3	-	-	2.7	May-08 08:00	0.5	May-22	99%
TRS (ppb)			Smoky Heights	0.1	-	-	0.6	May-14 07:00	0.1	May-14	100%
TRS (ppb)			Reno	0.3	-	-	1.1	May-12 02:00	0.5	May-15	100%
H ₂ S (ppb)	10	3	Valleyview	0.2	0	0	2.5	May-20 02:00	0.4	May-20	97%
H ₂ S (ppb)	10	3	Falher	0.3	1	0	16.1	May-07 22:00	1.5	May-07	100%
PM _{2.5} (µg/m3)	80	30	Henry Pirker	5.0	0	0	23.5	May-11 05:00	8.7	May-18	100%
PM _{2.5} (µg/m3)	80	30	Evergreen Park	3.9	0	0	31.4	May-10 23:00	7.9	May-21	99%
PM _{2.5} (µg/m3)	80	30	Smoky Heights	3.9	0	0	73.3	May-20 22:00	11.0	May-20	100%
PM _{2.5} (µg/m3)	80	30	Beaverlodge	6.7	0	0	35.2	May-11 02:00	9.7	May-11	35%
PM _{2.5} (µg/m3)	80	30	Reno	2.1	0	0	28.6	May-10 20:00	5.2	May-31	997%
RH (%)			Henry Pirker	49.6	-	-	88.9	May-26 06:00	71.9	May-15	100%
RH (%)			Evergreen Park	51.8	-	-	94.4	May-26 07:00	73.6	May-28	99%
RH (%)			Beaverlodge	55.8	-	-	100.0	May-19 04:00	81.2	May-15	100%
RH (%)			Valleyview	54.5	-	-	100.0	May-26 05:00	78.8	May-15	97%
SR (W/m ²)			Henry Pirker	212.7	-	-	831.1	May-17 14:00	292.3	May-09	100%
Temp (°C)			Henry Pirker	10.6	-	-	22.8	May-13 16:00	15.6	May-13	100%
Temp (°C)			Evergreen Park	10.3	-	-	21.8	May-13 18:00	15.2	May-20	99%
Temp (°C)			Smoky Heights	9.9	-	-	21.9	May-23 13:00	14.8	May-13	100%
Temp (°C)			Beaverlodge	9.9	-	-	21.5	May-31 18:00	15.0	May-13	100%
Temp (°C)			Valleyview	10.2	-	-	24.0	May-22 16:00	16.5	May-22	97%
Temp (°C)			Reno	9.4	-	-	23.4	May-23 13:00	15.3	May-22	100%
Temp (°C)			Falher	9.6	-	-	23.3	May-22 17:00	15.7	May-22	100%

PAZA Monthly Continuous Data Summary – continued

May-2014 Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
WSPD s (km/hr)			Henry Pirker	9.2	-	-	36.0	May-14 15:00	16.5	May-14	100%
WSPD s (km/hr)			Evergreen Park	11.4	-	-	51.0	May-14 16:00	21.7	May-14	99%
WSPD s (km/hr)			Smoky Heights	13.0	-	-	41.0	May-30 09:00	25.3	May-30	100%
WSPD s (km/hr)			Beaverlodge	11.4	-	-	42.0	May-14 15:00	21.7	May-21	100%
WSPD s (km/hr)			Valleyview	6.1	-	-	27.0	May-05 18:00	13.4	May-02	97%
WSPD s (km/hr)			Reno	12.8	-	-	43.0	May-21 10:00	22.9	May-05	100%
WSPD s (km/hr)			Falher	14.3	-	-	40.0	May-05 19:00	24.1	May-05	100%
WSPD v (km/hr)			Henry Pirker	2.6	-	-	35.0	May-14 15:00	15.3	May-15	100%
WSPD v (km/hr)			Evergreen Park	4.0	-	-	50.0	May-14 16:00	20.2	May-14	99%
WSPD v (km/hr)			Smoky Heights	3.8	-	-	41.0	May-30 09:00	2.2	May-30	100%
WSPD v (km/hr)			Beaverlodge	2.4	-	-	42.0	May-14 15:00	21.0	May-21	100%
WSPD v (km/hr)			Valleyview	3.0	-	-	27.0	May-05 18:00	12.7	May-02	97%
WSPD v (km/hr)			Reno	1.0	-	-	42.0	May-21 10:00	18.9	May-05	100%
WSPD v (km/hr)			Falher	2.8	-	-	39.0	May-05 19:00	19.8	May-05	100%
WDIR			Henry Pirker	WNW	-	-	-	-	-	-	100%
WDIR			Evergreen Park	NW	-	-	-	-	-	-	99%
WDIR			Smoky Heights	WNW	-	-	-	-	-	-	100%
WDIR			Beaverlodge	NW	-	-	-	-	-	-	100%
WDIR			Valleyview	NNW	-	-	-	-	-	-	97%
WDIR			Reno	W	-	-	-	-	-	-	100%
WDIR			Falher	WNW	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on May 1st (SO₂, NO_x O₃, TRS) and 2nd (CO, THC)

Parameter	Make	Model	Notes
SO ₂	TEI	43C	Analyzer adusted May 20 th .
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	Analyzer replaced with ministry spare on April 30 th , allowed to stabilize and calibrated May 1 st .
CO	TEI	48C	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55I	Analyzer flamed out after hydrogen bottle depleted May 7 th . Bottle replaced, analyzer restarted May 8 th .
TRS	TEI	45C/43C	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

Routine monthly calibration performed on May 5th (SO₂, TRS). Seven (7) hours of data not collected due to power outage on May 15th

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Glassware cleaned during calibration period.
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

Routine monthly calibration performed on May 16th (SO₂, TRS, PM_{2.5}). Brief power outage May 15th caused loss of one (1) hour of data.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Two (2) hours flagged invalid due to negative swings.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations performed on May 12th (SO₂) and 13th (NO_x, O₃).

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}	R&P	1400AB	Analyzer removed from service May 12 th due to frozen switching valve. Part ordered from ESRD. Reference #286016
ET	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on May 15th (SO₂ & H₂S). Power outage May 28th-29th invalidated 23 hours of data.

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	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Portable-Reno

General Station Issues

Routine monthly calibrations were performed on May 22nd (SO₂, NO_x, O₃, TRS) and 23rd (THC).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
NO _x	TEI	42i	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Glassware cleaned during calibration.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Falher Station

General Station Issues

Routine monthly calibrations were performed on May 21st (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	Thermo	450i	One (1) exceedence of the 1-hour AAAQO was observed in May AE Reference#283719
ET	Gill	RM Young 5103	No operational issues observed.
WS / WD	Gill	RM Young 5103	No operational issues observed.

PAZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

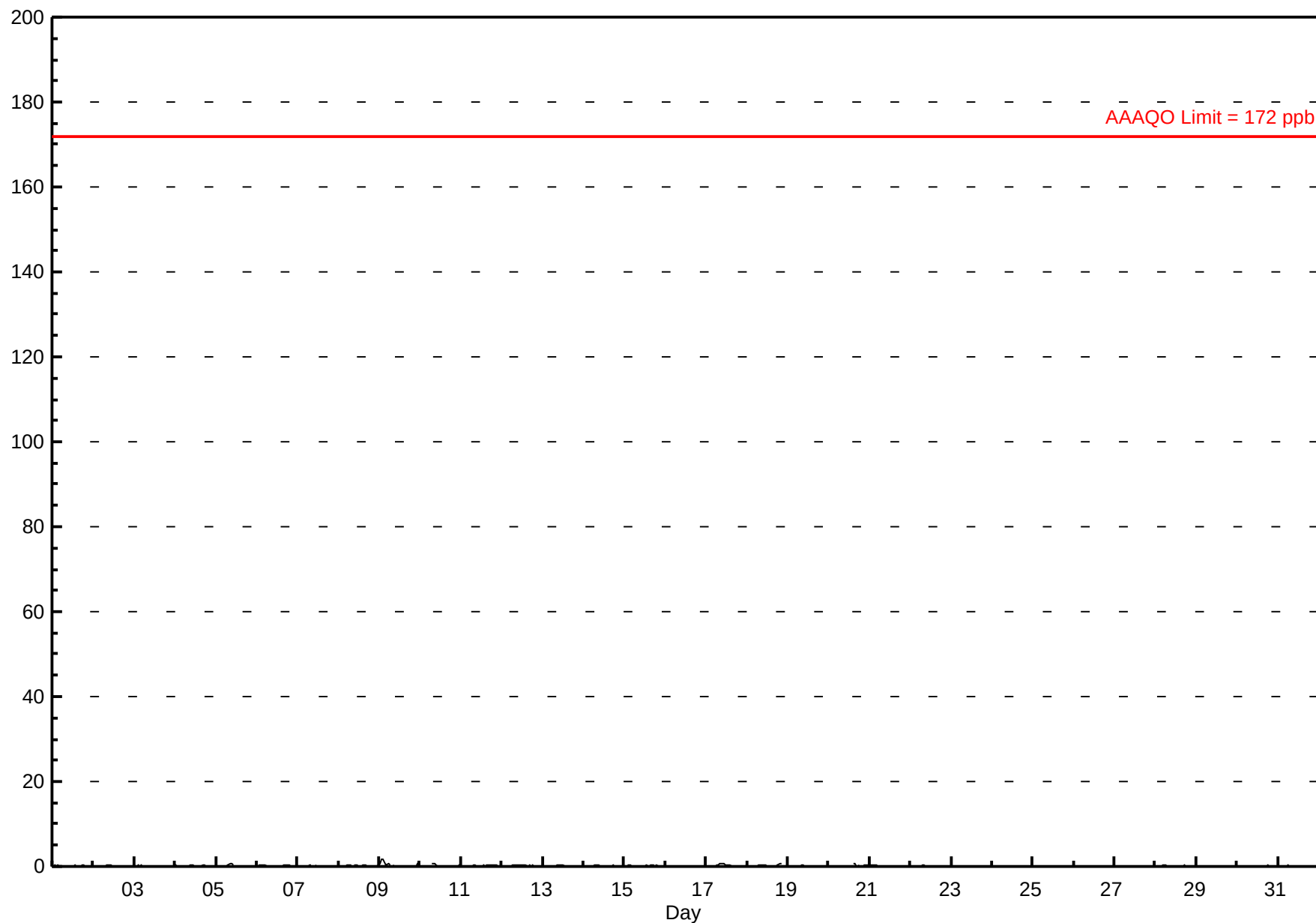
Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.8 ppb on May 9 03:00 Maximum Daily Average: 0.4 ppb on May 9																						Hours in Service: 744				
Minimum Value: 0 ppb on May 1 06:00 Minimum Daily Average: 0.0 ppb on May 24 Maximum Diurnal Average: 0.2 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 22 Monthly Average: 0.11 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.3 P ₉₉ = 0.6																						Hours of Data: 706				
																						Hours of Missing Data: 38				
																						Hours of Calibration: 36				
																						Percent Operational Time: 99.7				
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-May	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4
2-May	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	0.2
3-May	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	0.4
4-May	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	0.5
5-May	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
6-May	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
7-May	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
8-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-May	1	2	2	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	1.8
10-May	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
11-May	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-May	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-May	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-May	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	0.4
15-May	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	0.4
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1
17-May	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
18-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	A	0	0.2	0.7
19-May	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	0.3
20-May	0	0	0	0	0	0	0	0	0	0	0	M	M	1	1	0	0	0	A	0	0	0	0	0	0.1	0.7
21-May	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	0.3
22-May	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-May	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-May	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-May	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-May	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-May	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
28-May	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
29-May	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
30-May	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
31-May	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
0.1 0.1 0.2 0.1 0.1 0.1 0.1 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																									Diurnal Average	
0.7 1.7 1.8 0.9 0.5 0.6 0.4 0.6 0.6 0.6 0.5 0.4 0.4 0.4 0.6 0.7 0.3 0.4 0.3 0.7 0.5 0.2 0.6 0.3																									Diurnal Maximum	
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

Henry Pirker - May 2014



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

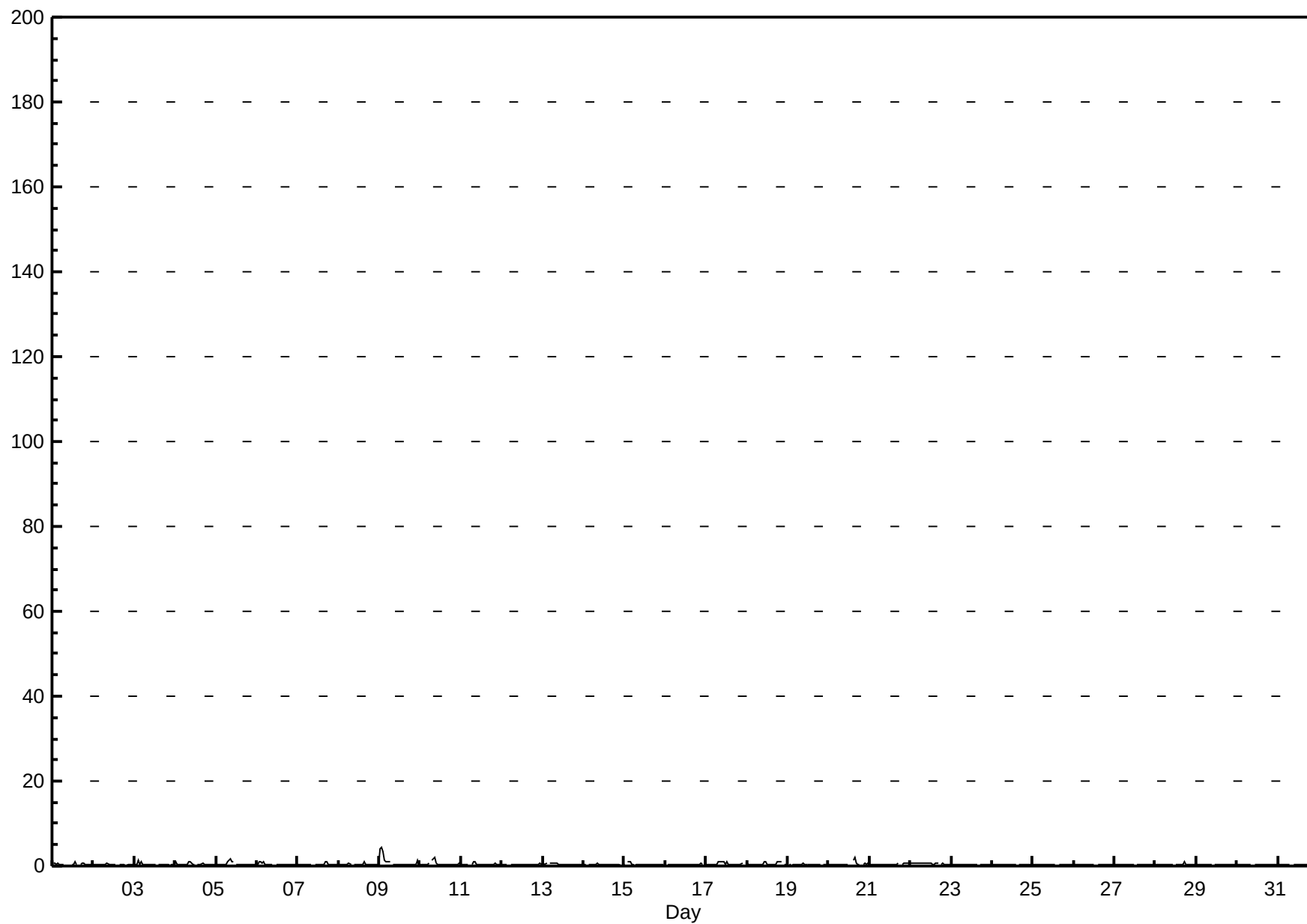
Henry Pirker - May 2014

Maximum Value: 4.5 ppb on May 9 02:00																				Maximum Daily Average: 1.1 ppb on May 9										Hours in Service: 744									
Minimum Value: 0 ppb on May 2 20:00																				Minimum Daily Average: 0.4 ppb on May 2										Hours of Data: 706									
Maximum Diurnal Average: 0.6 ppb at hour 9																				Minimum Diurnal Average: 0.5 ppb at hour 22										Hours of Missing Data: 38									
Monthly Average: 0.51 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.5 P ₉₉ = 1.4										Hours of Calibration: 36									
																				Percent Operational Time: 99.7																			
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-May	1	1	0	1	0	0	0	C	C	C	C	0	0	1	0	A	0	1	1	0	0	0	0	0	0.5	1.0													
2-May	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.8													
3-May	0	0	1	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.5	1.3													
4-May	1	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0.5	1.1													
5-May	0	0	0	0	0	0	0	1	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.6													
6-May	0	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9													
7-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.5	1.0													
8-May	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	1.0													
9-May	4	4	3	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1.1	4.5													
10-May	0	0	0	0	0	1	A	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.6	2.0													
11-May	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.5	0.9													
12-May	0	0	0	0	A	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	0.5	0.5													
13-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0.5													
14-May	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6													
15-May	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0													
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0.5	0.6													
17-May	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1	A	1	0.6	1.0													
18-May	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	1	1	A	0	0	0.6	1.0													
19-May	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.8													
20-May	0	0	0	0	0	0	0	0	0	0	0	M	M	1	2	1	0	0	A	0	1	0	1	0	0.6	2.1													
21-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	1	1	0.5	0.5													
22-May	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	0	1	1	1	0	1	0.5	0.5													
23-May	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	0.5													
24-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.5	0.5													
25-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	0.5													
26-May	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5													
27-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5													
28-May	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0.5	0.9													
29-May	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	0.5													
30-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5													
31-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5													
0.6 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5																									Diurnal Average														
4.1 4.5 3.5 1.5 1.0 1.0 1.0 1.5 2.0 1.1 1.0 1.0 0.9 1.0 1.4 2.1 1.0 1.0 0.9 1.0 1.0 0.7 1.5 0.6																									Diurnal Maximum														
C - Calibration M - Maintenance A - Automated Daily Zero Span																																							

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

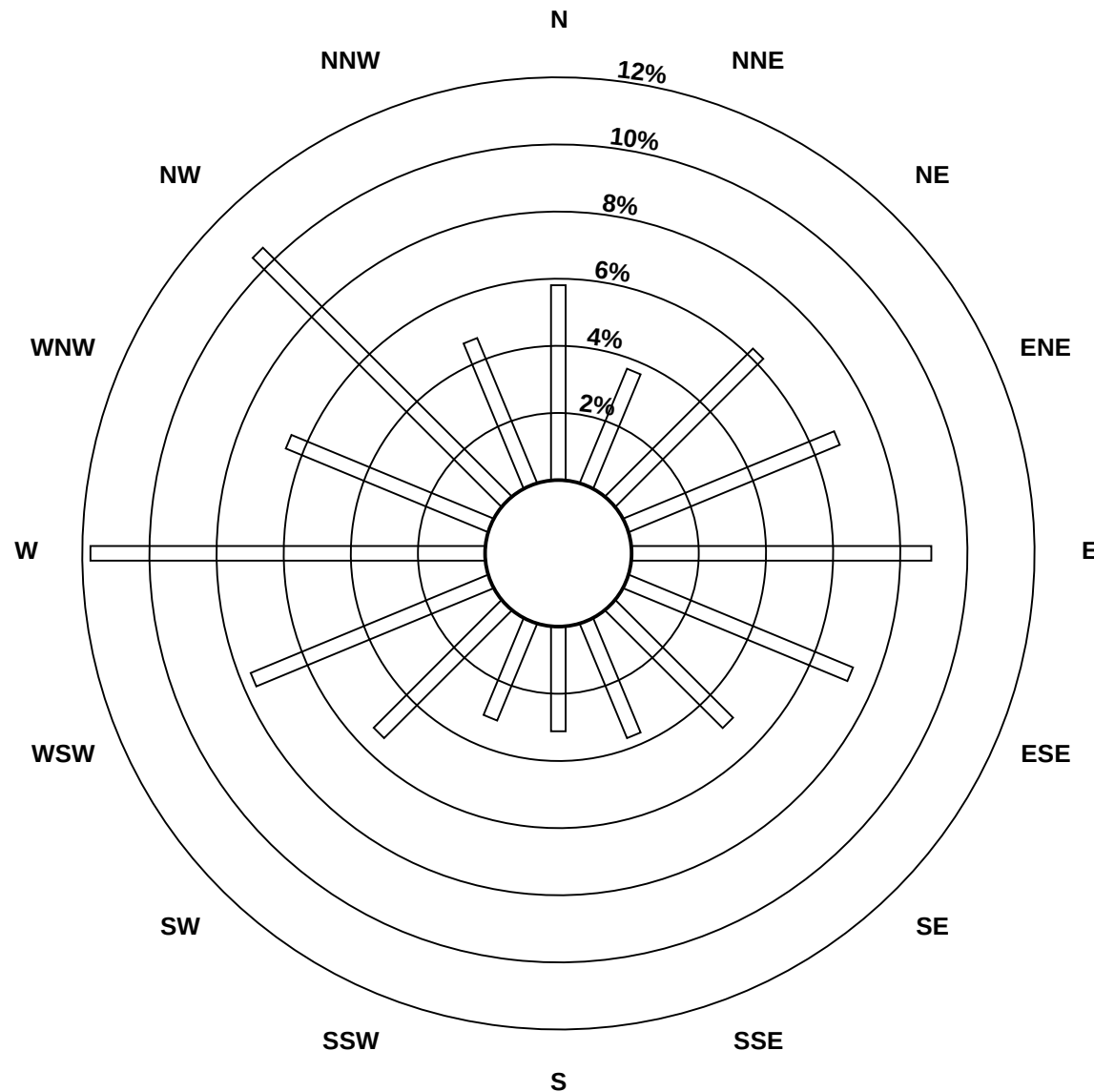
Henry Pirker - May 2014



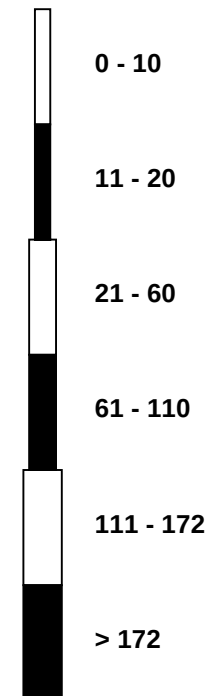
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - May 2014

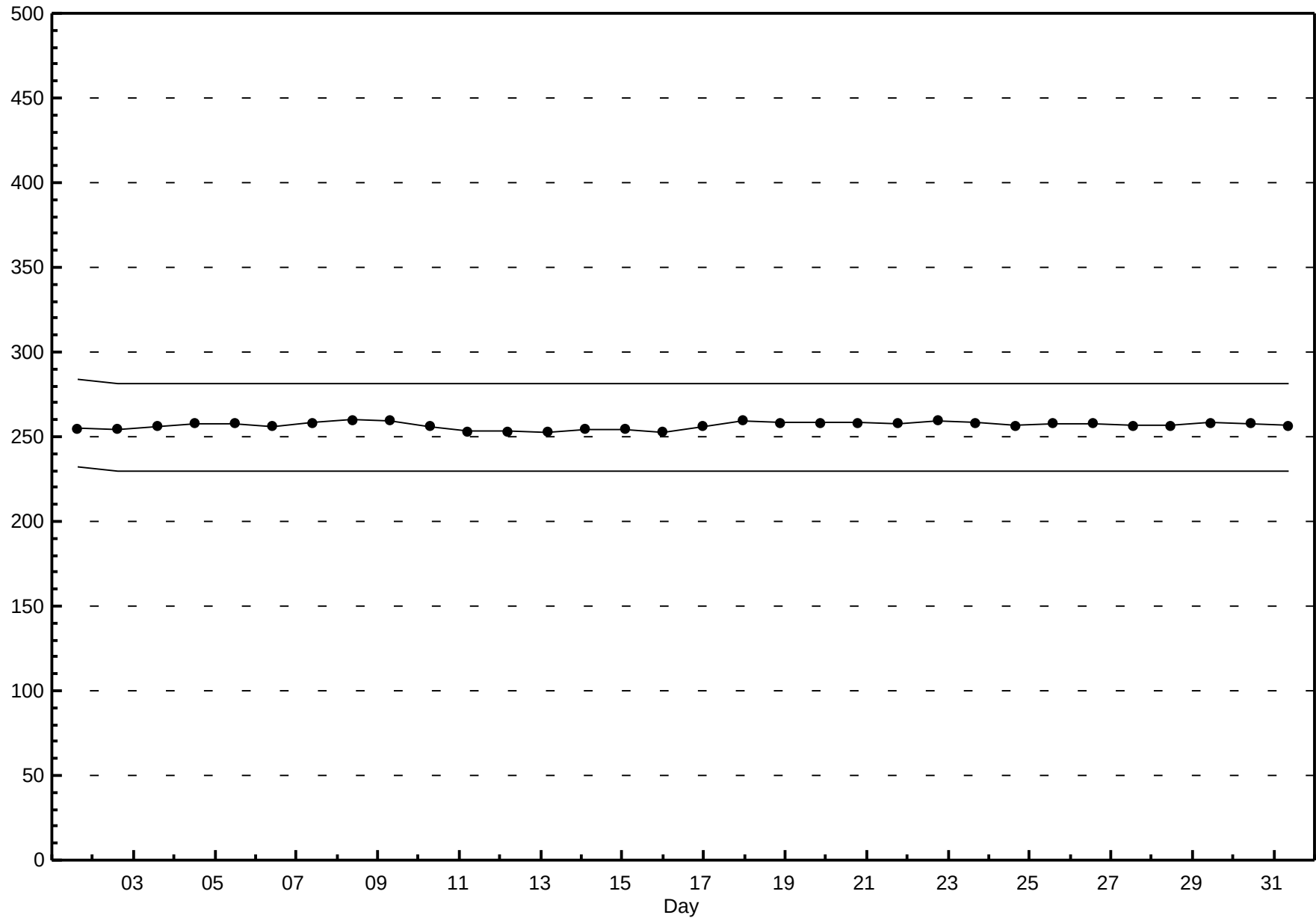


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - May 2014



Hourly Averages

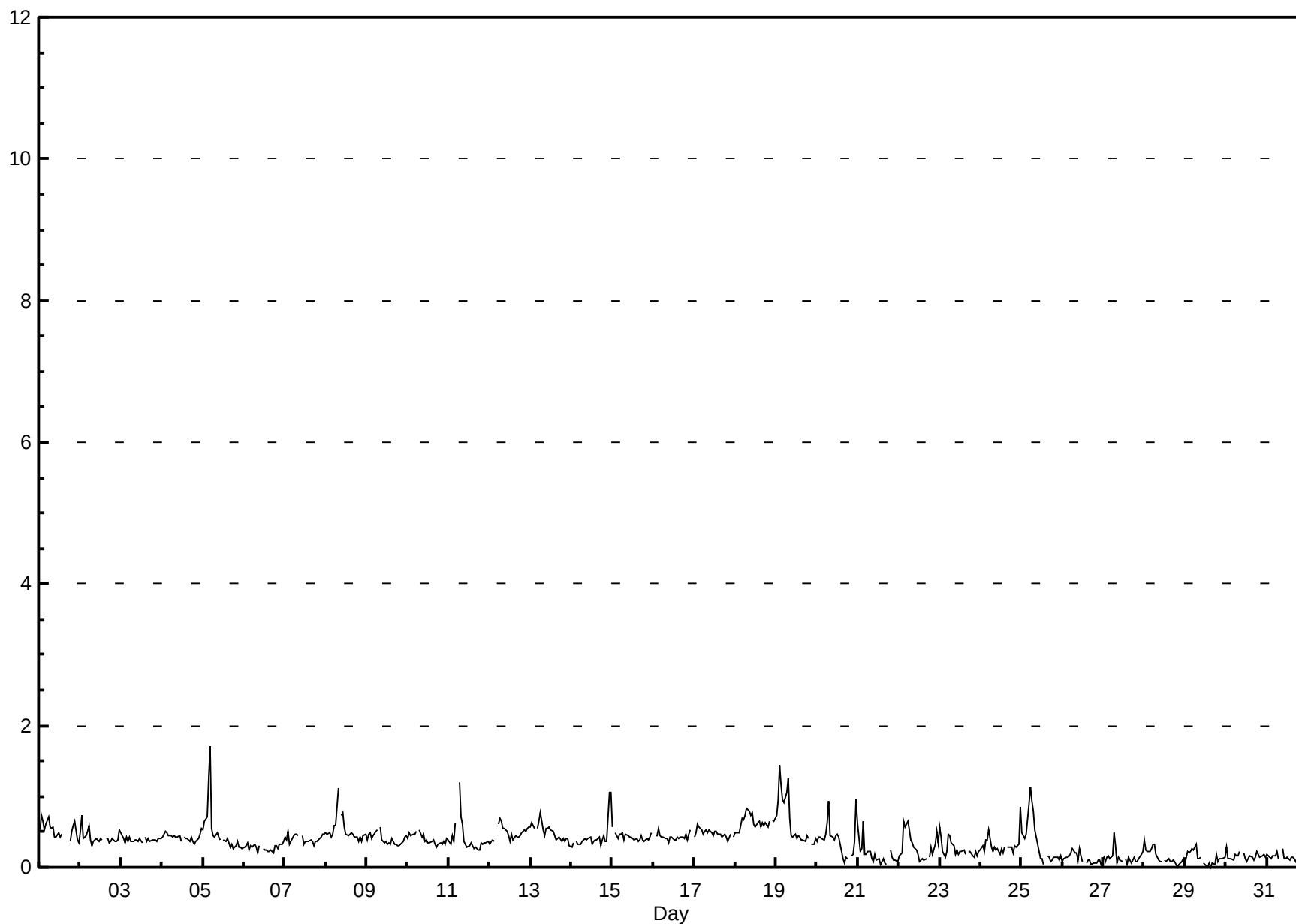
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.7 ppb on May 5 05:00 Maximum Daily Average: 0.6 ppb on May 19																			Hours in Service: 744 Hours of Data: 709								
Minimum Value: 0 ppb on May 28 20:00 Maximum Diurnal Average: 0.5 ppb at hour 7 Monthly Average: 0.37 ppb																			Minimum Daily Average: 0.1 ppb on May 26 Minimum Diurnal Average: 0.3 ppb at hour 18 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 1.1		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-May	1	1	1	1	1	1	1	1	1	0	0	0	0	0	C	C	C	C	0	1	1	1	0	0	0.5	0.7	
2-May	1	1	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0.4	0.7
3-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
4-May	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.4	0.5	
5-May	1	1	1	1	2	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7	
6-May	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-May	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
8-May	0	0	0	0	0	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1	
9-May	0	0	0	0	0	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
10-May	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
11-May	0	0	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
12-May	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.5	0.7	
13-May	1	1	1	A	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0.8	
14-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.1	
15-May	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
16-May	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.4	0.6	
17-May	0	0	1	1	1	0	1	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0.5	0.6	
18-May	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8	
19-May	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.6	1.4	
20-May	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.4	0.9	
21-May	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.7	
22-May	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0.3	0.7	
23-May	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6	
24-May	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0.3	0.8	
25-May	0	0	0	0	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	1.1	
26-May	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
27-May	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	0.5	
28-May	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-May	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	
30-May	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	
31-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
0.4 0.4 0.4 0.4 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 0.4 0.4																									Diurnal Average		
0.7 1.0 1.4 1.3 1.7 1.1 1.2 1.3 0.8 0.7 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 1.1 1.1																									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

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - May 2014



Hourly Maximums

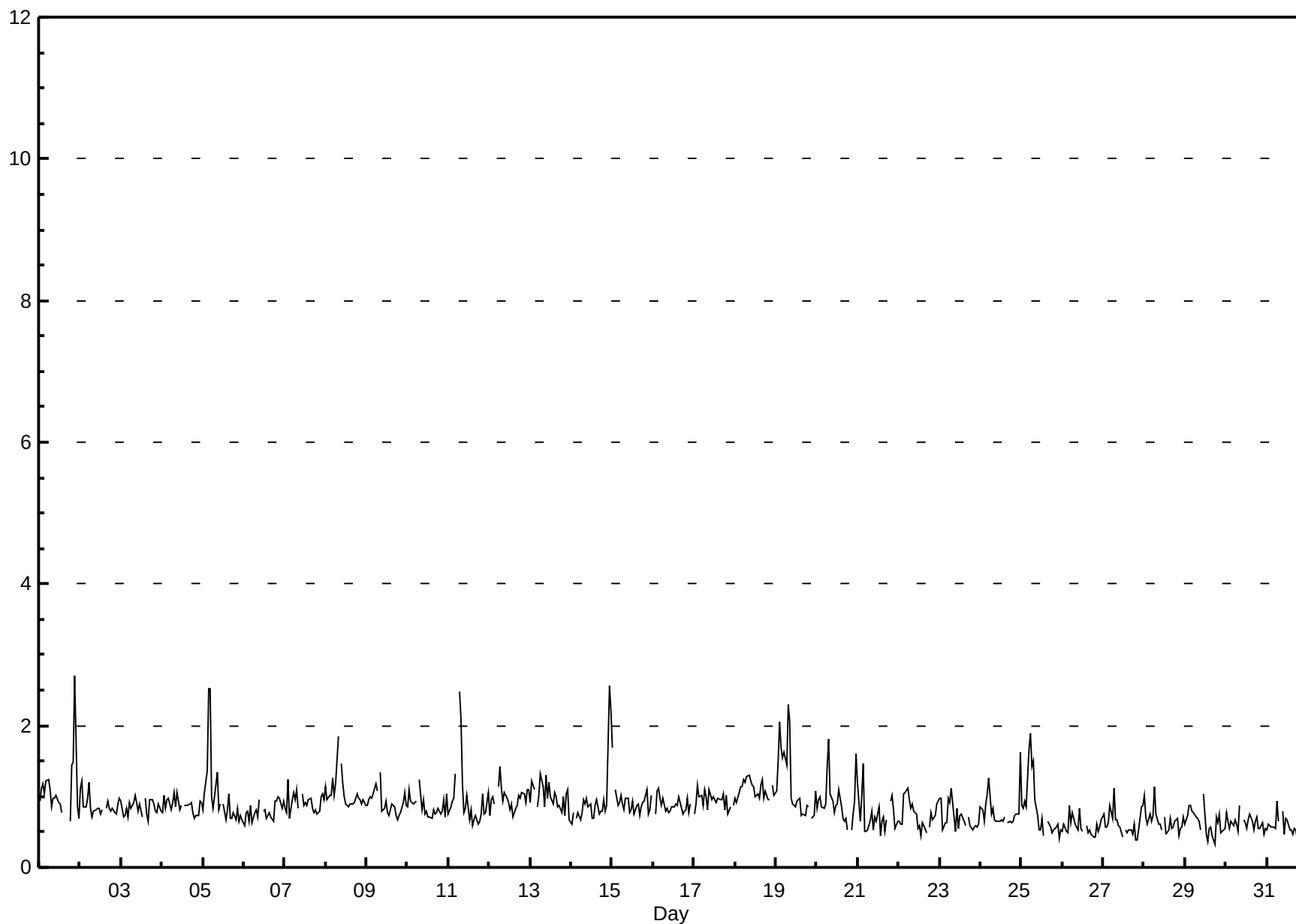
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - May 2014

Maximum Value: 2.7 ppb on May 1 22:00																			Maximum Daily Average: 1.2 ppb on May 19										Hours in Service: 744	
Minimum Value: 0 ppb on May 29 18:00																			Minimum Daily Average: 0.6 ppb on May 26										Hours of Data: 709	
Maximum Diurnal Average: 1.1 ppb at hour 8																			Minimum Diurnal Average: 0.7 ppb at hour 17										Hours of Missing Data: 35	
Monthly Average: 0.86 ppb																			Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.1 P ₉₉ = 2.2										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-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	3	1	1	1.1	2.7				
2-May	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	1.2				
3-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0				
4-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1				
5-May	1	1	1	3	3	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.5				
6-May	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				
7-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2				
8-May	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.9				
9-May	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3				
10-May	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2				
11-May	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.5				
12-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4				
13-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3				
14-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	0.9	2.6				
15-May	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7				
16-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.1				
17-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2				
18-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3				
19-May	1	2	2	2	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.2	2.3				
20-May	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	0.9	1.8				
21-May	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	0	1	A	1	1	1	1	1	0.7	1.5				
22-May	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	A	1	1	1	1	1	1	0.7	1.1				
23-May	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.1				
24-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	0.8	1.6				
25-May	1	1	1	1	2	2	1	2	1	1	1	1	1	0	A	1	1	1	0	1	1	1	0	1	0.8	1.9				
26-May	0	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0	1	0	0	0	1	1	1	1	0.6	0.9				
27-May	1	1	1	1	1	1	1	1	1	1	1	0	A	1	0	1	1	0	1	0	0	1	1	1	0.6	1.1				
28-May	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0	1	1	1	0.7	1.1				
29-May	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	1	0	0	1	1	1	0	1	0.6	1.0				
30-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.6	0.9				
31-May	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	0.6	0.9				
0.9 0.9 0.9 0.9 1.0 1.0 1.0 1.1 0.9 0.9 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 0.9																								Diurnal Average						
1.7 1.5 2.0 2.5 2.5 1.9 2.5 2.3 2.1 1.5 1.2 1.2 1.0 1.1 1.1 1.2 1.2 1.0 1.1 1.4 1.5 2.7 2.6 2.2																								Diurnal Maximum						
C - Calibration																								A - Automated Daily Zero Span						

Hourly Maximums

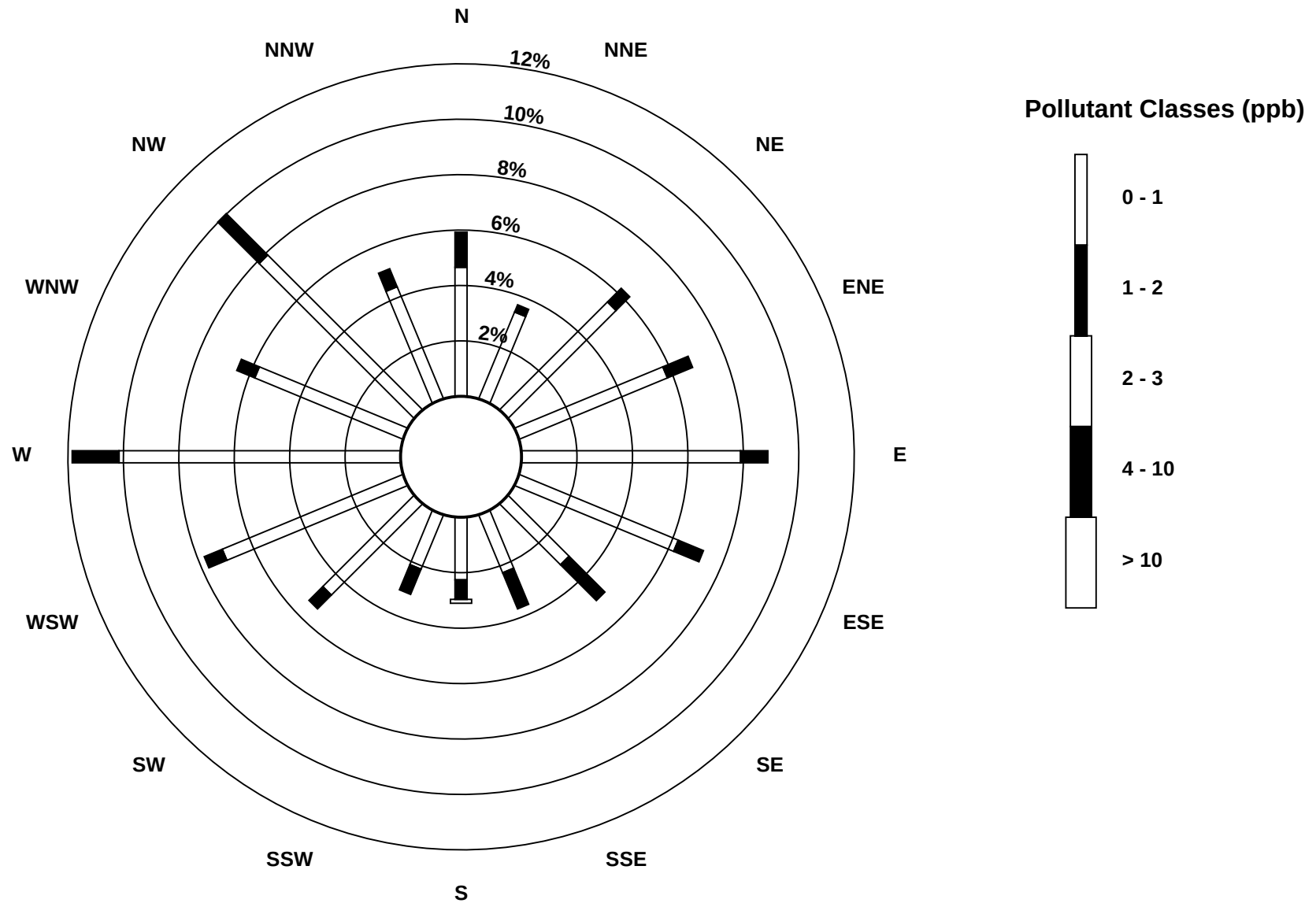
Total Reduced Sulphur (TRS) - ppb
Henry Pirker - May 2014

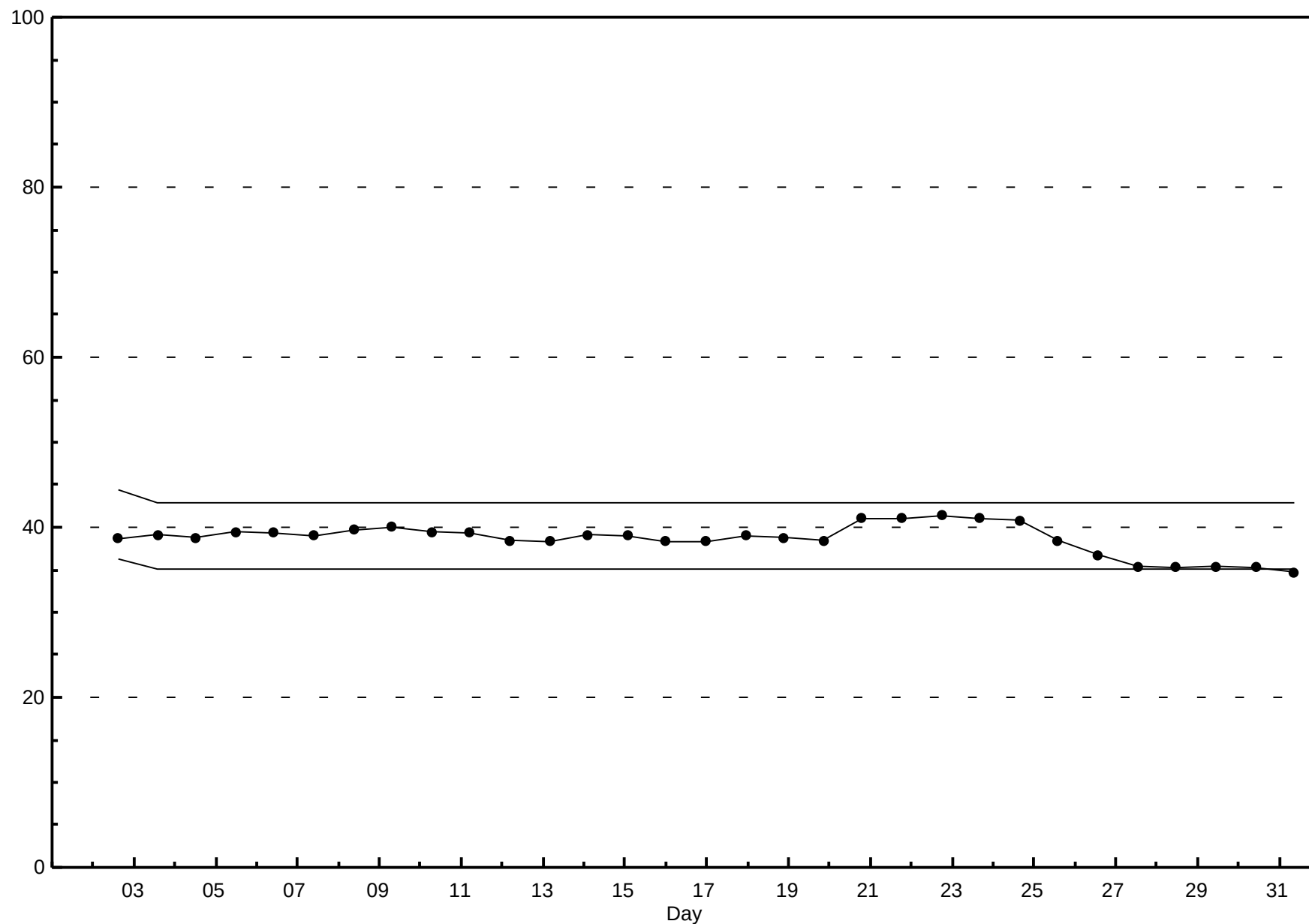


Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - May 2014





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

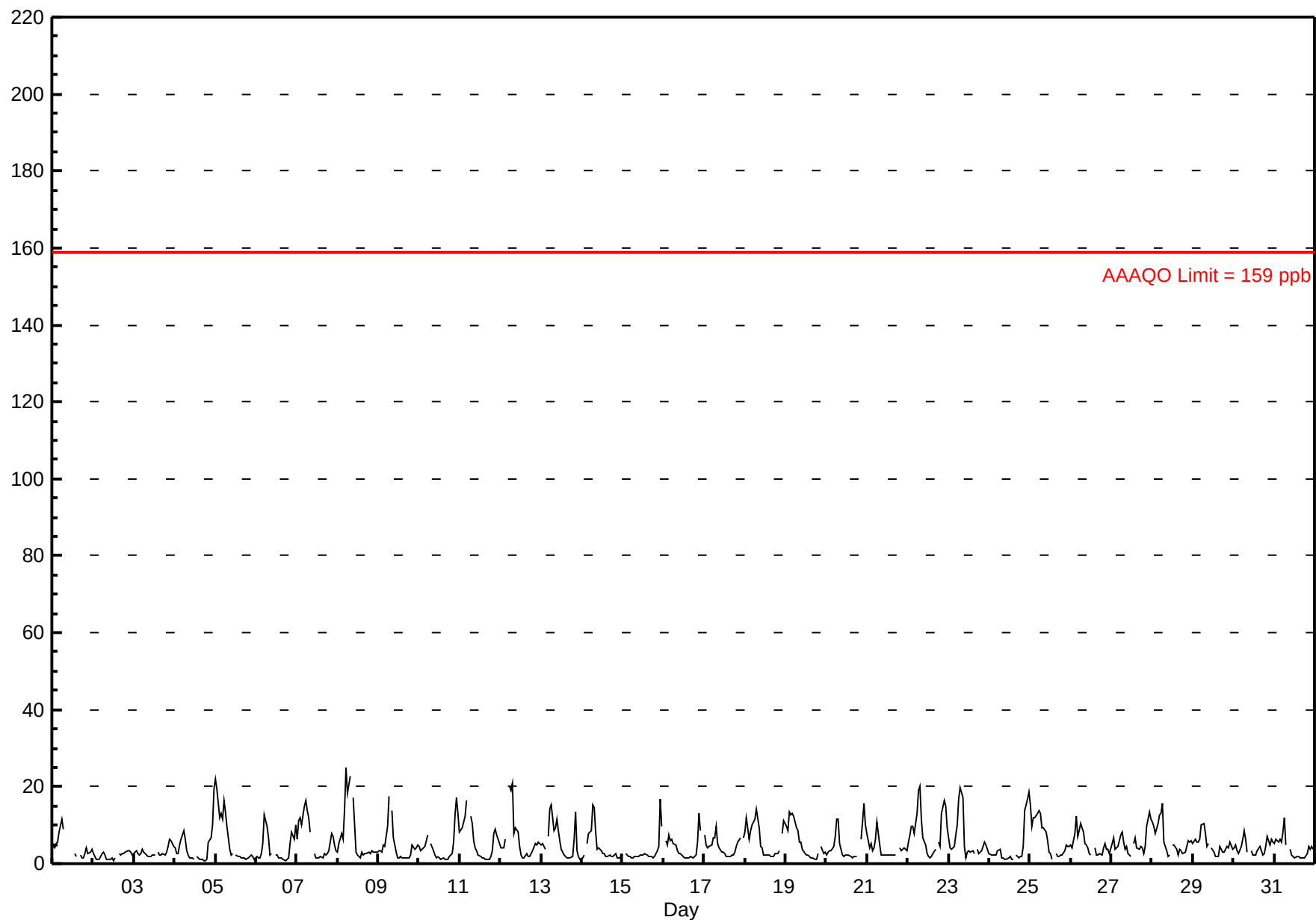
Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 24.9 ppb on May 8 06:00 Maximum Daily Average: 8.4 ppb on May 22																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0						
Minimum Value: 1 ppb on May 2 13:00 Minimum Daily Average: 2.1 ppb on May 2 Maximum Diurnal Average: 11.0 ppb at hour 7 Minimum Diurnal Average: 2.0 ppb at hour 18 Monthly Average: 5.06 ppb Percentiles: P ₁ = 1.0 P ₁₀ = 1.5 Q ₁ = 2.2 Median = 3.5 Q ₃ = 6.4 P ₉₀ = 11.5 P ₉₉ = 19.8																										
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-May	4	4	5	6	8	11	9	C	C	C	C	C	C	3	2	A	2	1	2	3	4	3	3	4	--	11.4
2-May	2	2	1	1	2	3	3	2	1	1	1	1	1	1	A	3	2	3	3	3	4	4	3	2	2.1	3.5
3-May	3	3	3	2	3	4	3	2	2	2	2	2	2	A	3	2	2	2	2	3	4	6	6	4	3.0	6.2
4-May	4	3	3	5	6	9	6	3	2	2	1	1	A	2	1	1	1	1	1	1	6	7	10	19	4.1	19.3
5-May	22	19	12	13	12	16	13	10	4	2	3	A	2	2	2	1	2	1	1	2	2	2	2	1	6.4	22.1
6-May	2	1	2	3	5	13	10	7	2	3	A	2	2	2	2	2	1	1	1	1	5	8	6	10	3.9	12.8
7-May	6	11	12	10	15	16	14	12	8	A	2	2	1	2	2	2	3	2	2	3	8	7	5	3	6.4	16.3
8-May	3	5	8	6	14	25	18	23	A	17	10	3	2	2	3	2	3	3	3	3	3	3	3	3	7.2	24.9
9-May	3	3	3	5	5	10	18	A	14	7	3	2	1	2	1	1	1	1	1	2	5	4	4	5	4.4	17.7
10-May	4	4	4	5	6	7	A	5	3	2	2	2	2	1	1	1	1	1	2	3	6	13	17	13	4.6	17.3
11-May	8	9	11	12	16	A	12	10	6	4	3	2	2	1	1	1	1	1	2	3	8	9	7	5	6.0	16.4
12-May	4	4	4	6	A	20	19	21	8	9	8	4	2	1	1	3	2	2	3	3	5	5	5	5	6.4	20.8
13-May	5	5	4	A	7	14	15	9	9	11	9	6	4	2	2	2	2	1	2	6	14	3	2	1	5.9	15.2
14-May	1	2	A	5	8	9	15	15	8	4	4	3	3	2	2	2	2	2	2	2	3	1	2	2	4.3	15.3
15-May	2	A	3	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	4	17	10	3.1	16.8
16-May	A	6	5	7	6	6	5	5	3	3	3	2	2	1	2	1	2	2	2	2	6	13	9	A	4.2	13.0
17-May	7	5	4	5	5	7	7	10	5	4	3	3	3	2	2	2	2	2	3	5	5	7	A	7	4.5	9.6
18-May	8	12	6	9	10	11	11	14	9	4	4	2	2	2	2	2	2	2	2	3	3	A	8	11	6.1	14.1
19-May	10	9	14	13	13	12	9	8	5	6	4	3	2	2	2	2	1	1	1	2	A	4	3	3	5.6	13.5
20-May	2	3	3	4	5	7	11	12	5	2	2	2	2	2	2	2	2	2	2	A	6	11	16	10	5.0	15.6
21-May	8	4	5	3	4	6	11	5	2	2	2	2	2	2	2	2	2	2	A	4	3	4	4	3	3.8	10.7
22-May	6	7	10	10	8	13	19	20	12	7	5	3	2	1	2	3	4	A	5	4	13	16	15	9	8.4	20.3
23-May	7	4	4	4	8	10	17	20	17	4	2	3	3	3	3	3	A	4	3	3	5	6	5	4	6.1	19.9
24-May	2	2	2	2	2	4	4	2	2	1	1	1	2	1	1	A	2	2	2	2	4	14	17	19	4.0	18.6
25-May	15	10	12	12	13	14	13	9	10	8	6	3	2	1	A	3	2	2	2	2	3	5	5	5	6.9	15.3
26-May	5	4	8	12	7	8	10	8	5	5	4	3	2	A	4	2	2	3	2	4	5	4	4	3	5.0	12.4
27-May	5	7	4	4	5	8	8	6	4	4	2	2	A	5	7	4	4	4	4	3	4	10	13	11	5.6	13.5
28-May	11	10	8	10	13	13	16	6	3	2	2	A	5	5	4	2	4	3	3	3	4	6	6	6	6.2	15.7
29-May	5	6	6	5	7	10	11	8	5	5	A	4	3	2	2	2	5	3	3	4	5	4	5	4	4.9	10.6
30-May	4	5	3	3	5	6	9	6	3	A	3	2	2	2	3	5	3	2	3	4	7	5	6	6	4.3	8.7
31-May	5	6	6	6	6	8	12	5	A	4	2	2	2	2	2	2	2	1	1	3	4	4	5	4	4.0	11.8
5.9 5.9 5.7 6.4 7.4 10.0 11.0 9.1 5.7 4.5 3.4 2.5 2.2 2.1 2.3 2.0 2.2 2.0 2.2 3.0 5.3 6.3 7.1 6.4																								Diurnal Average		
22.1 19.5 13.5 12.9 16.4 24.9 19.1 22.8 17.3 17.0 10.1 6.1 4.7 5.4 6.7 4.6 4.6 4.3 5.5 6.2 13.5 16.4 17.3 19.3																								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

Henry Pirker - May 2014



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

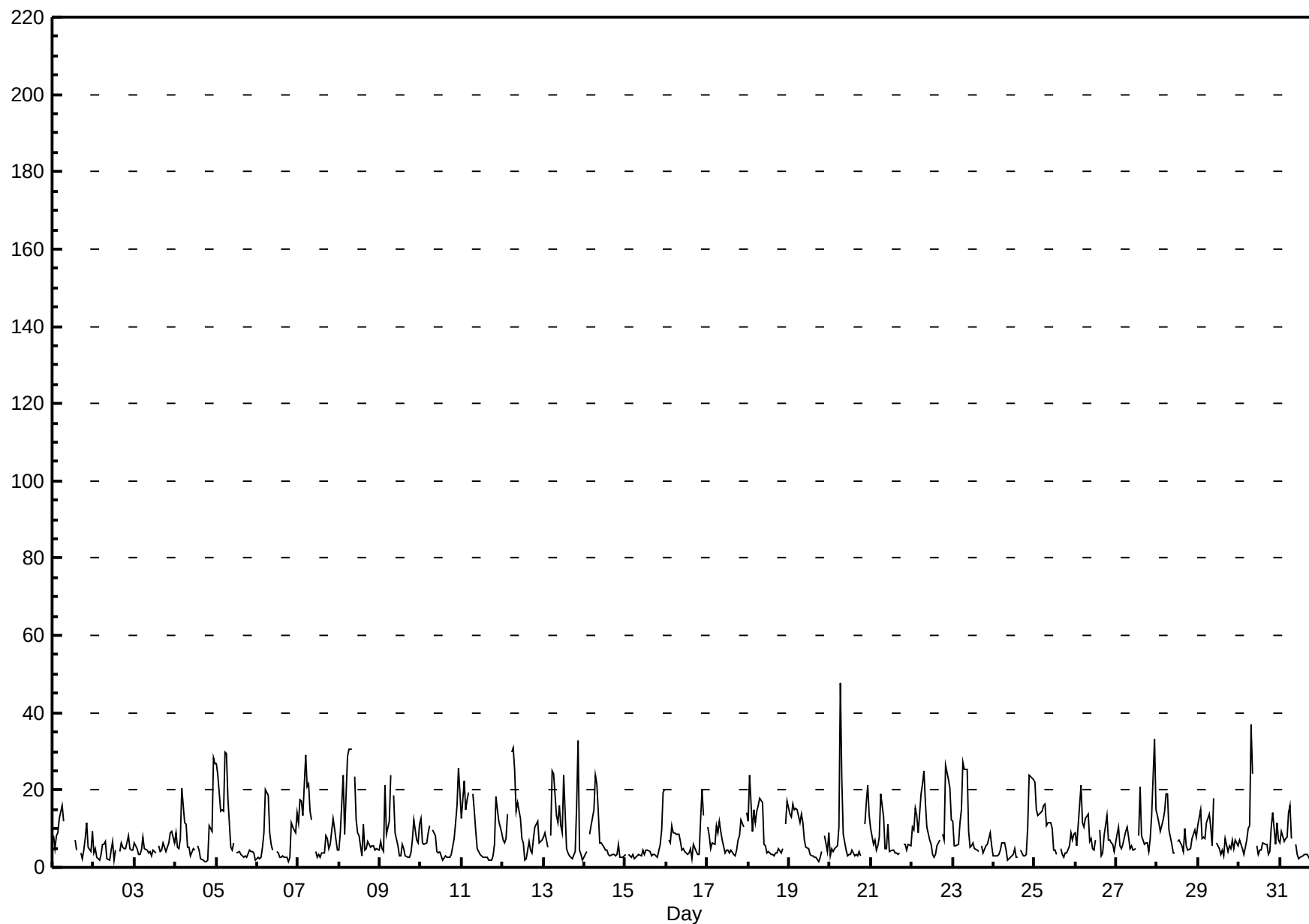
Henry Pirker - May 2014

Maximum Value: 47.7 ppb on May 20 07:00																				Maximum Daily Average: 12.3 ppb on May 22					Hours in Service: 744	
Minimum Value: 1 ppb on May 4 19:00																				Minimum Daily Average: 4.5 ppb on May 2					Hours of Data: 706	
Maximum Diurnal Average: 17.5 ppb at hour 7																				Minimum Diurnal Average: 3.7 ppb at hour 16					Hours of Missing Data: 38	
Monthly Average: 8.32 ppb																				Percentiles: P ₁ = 2.0 P ₁₀ = 2.9 Q ₁ = 3.9 Median = 6.0 Q ₃ = 10.8 P ₉₀ = 16.9 P ₉₉ = 30.7					Hours of Calibration: 38	
																									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-May	8	5	8	9	13	16	12	C	C	C	C	C	C	7	5	A	4	2	5	7	11	5	4	9	--	16.1
2-May	4	5	3	2	3	6	6	7	2	2	4	7	2	5	A	4	6	5	5	5	8	5	5	5	4.5	8.3
3-May	7	5	3	3	4	8	5	4	4	4	3	4	4	A	6	4	5	6	4	5	7	9	9	6	5.2	9.3
4-May	9	5	5	7	21	12	11	5	5	3	5	4	A	6	4	2	2	2	1	2	11	9	28	27	8.2	28.4
5-May	27	24	14	15	14	30	29	18	5	4	6	A	4	4	4	3	2	3	3	5	4	4	4	2	9.9	30.0
6-May	2	2	2	5	9	20	19	9	6	5	A	4	4	3	2	3	3	2	2	3	12	10	9	14	6.5	20.0
7-May	11	17	17	13	29	21	22	14	12	A	4	3	3	3	4	4	8	7	5	6	13	10	7	4	10.4	29.1
8-May	4	9	24	8	19	29	31	31	A	23	12	9	8	3	11	4	5	7	5	5	5	4	5	4	11.6	30.8
9-May	7	5	4	21	9	12	24	A	19	9	6	3	3	6	5	3	3	3	4	7	12	7	7	11	8.1	23.9
10-May	13	6	6	6	9	11	A	10	8	4	4	4	3	2	3	2	2	2	3	7	11	16	26	19	7.8	25.9
11-May	13	22	15	17	19	A	19	14	9	5	4	3	2	2	3	3	2	2	3	6	18	15	12	9	9.5	22.5
12-May	7	6	7	14	A	30	31	25	15	17	13	7	6	2	2	7	4	4	7	10	12	6	7	7	10.7	30.9
13-May	8	9	5	A	8	25	24	14	11	16	11	9	24	5	4	3	2	2	4	16	33	4	3	2	10.6	32.7
14-May	3	4	A	8	11	15	24	22	14	6	6	5	4	5	3	3	3	3	3	3	6	2	2	3	7.0	23.9
15-May	3	A	4	2	3	2	2	3	4	3	5	3	4	4	4	3	4	3	3	3	6	10	19	20	5.1	20.0
16-May	A	7	6	11	9	9	9	9	7	5	5	4	3	4	5	2	6	4	3	3	12	20	13	A	7.1	20.0
17-May	10	8	5	6	6	11	9	12	9	7	4	4	4	4	4	3	3	4	7	8	12	10	A	14	7.3	14.2
18-May	12	24	9	15	11	14	16	18	17	6	5	4	4	3	3	3	4	4	5	4	5	A	11	17	9.4	23.9
19-May	14	13	16	15	15	15	12	14	12	7	5	5	3	3	3	2	2	2	3	4	A	8	4	9	8.1	16.3
20-May	3	5	4	5	5	10	48	23	8	4	3	3	3	4	3	3	3	4	3	A	11	17	21	13	9.1	47.7
21-May	10	6	7	5	5	8	19	13	5	5	11	4	4	4	4	4	4	4	A	6	6	4	6	6	6.5	19.0
22-May	10	10	15	13	9	19	22	25	17	10	7	6	3	2	3	6	7	A	8	7	26	23	21	12	12.3	26.4
23-May	12	5	5	6	12	15	27	25	25	9	5	6	6	5	5	4	A	5	4	6	6	7	9	5	9.4	27.1
24-May	3	3	3	3	5	6	7	5	2	2	2	3	5	3	2	A	4	3	3	4	10	24	23	23	6.5	23.9
25-May	22	15	13	14	14	16	16	11	11	11	10	4	4	3	A	5	3	3	4	4	5	9	7	9	9.4	21.9
26-May	9	5	16	21	12	11	13	14	7	7	5	4	7	A	10	3	4	8	14	7	7	6	6	4	8.7	21.4
27-May	8	10	6	5	6	9	10	8	5	5	5	5	A	8	21	8	6	6	6	4	7	13	33	15	9.2	33.3
28-May	13	11	9	12	14	19	19	10	6	4	4	A	7	7	6	4	10	5	4	5	7	9	10	8	8.9	18.9
29-May	11	15	7	8	7	11	14	10	6	18	A	6	5	3	4	3	8	4	6	5	7	5	7	5	7.7	17.9
30-May	7	6	5	3	7	10	11	37	24	A	5	3	4	4	7	6	6	3	4	10	14	6	11	7	8.8	36.8
31-May	6	9	7	8	8	14	16	7	A	6	3	2	2	3	3	3	3	2	2	5	10	6	6	10	6.3	15.9
9.3 9.3 8.5 9.5 10.6 14.4 17.5 14.4 9.9 7.5 5.8 4.7 5.0 4.0 4.9 3.7 4.3 3.9 4.4 5.8 10.6 9.6 11.2 10.0																									Diurnal Average	
26.9 23.9 23.9 21.4 29.1 30.0 47.7 36.8 25.2 23.5 12.6 9.1 23.7 8.3 20.8 8.3 10.2 8.1 13.6 16.0 32.7 23.9 33.3 27.0																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

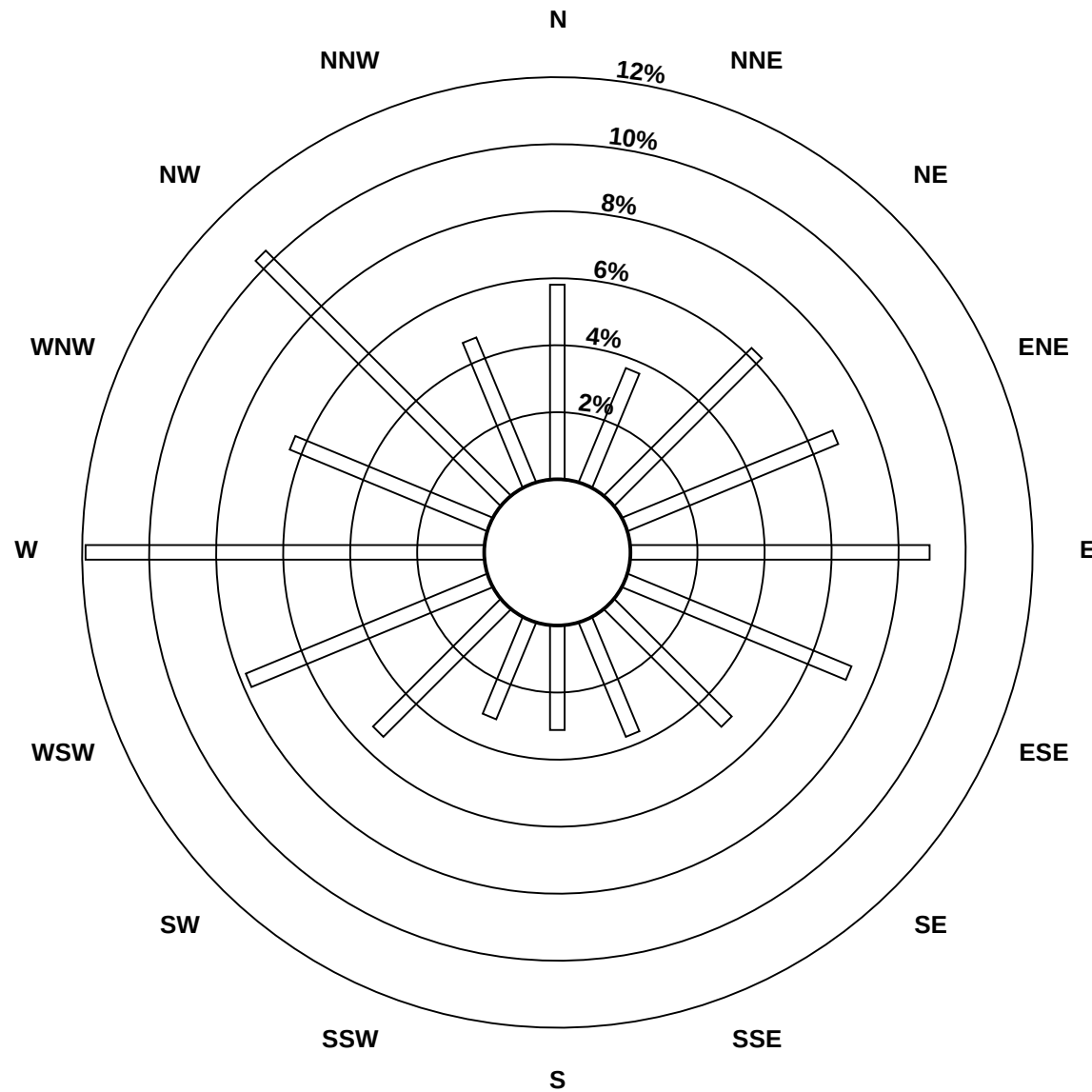
Henry Pirker - May 2014



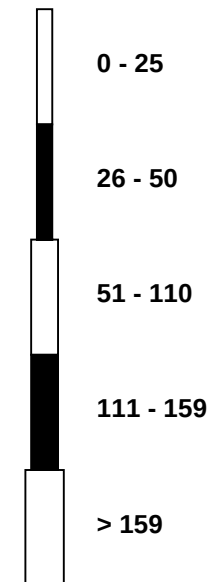
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - May 2014



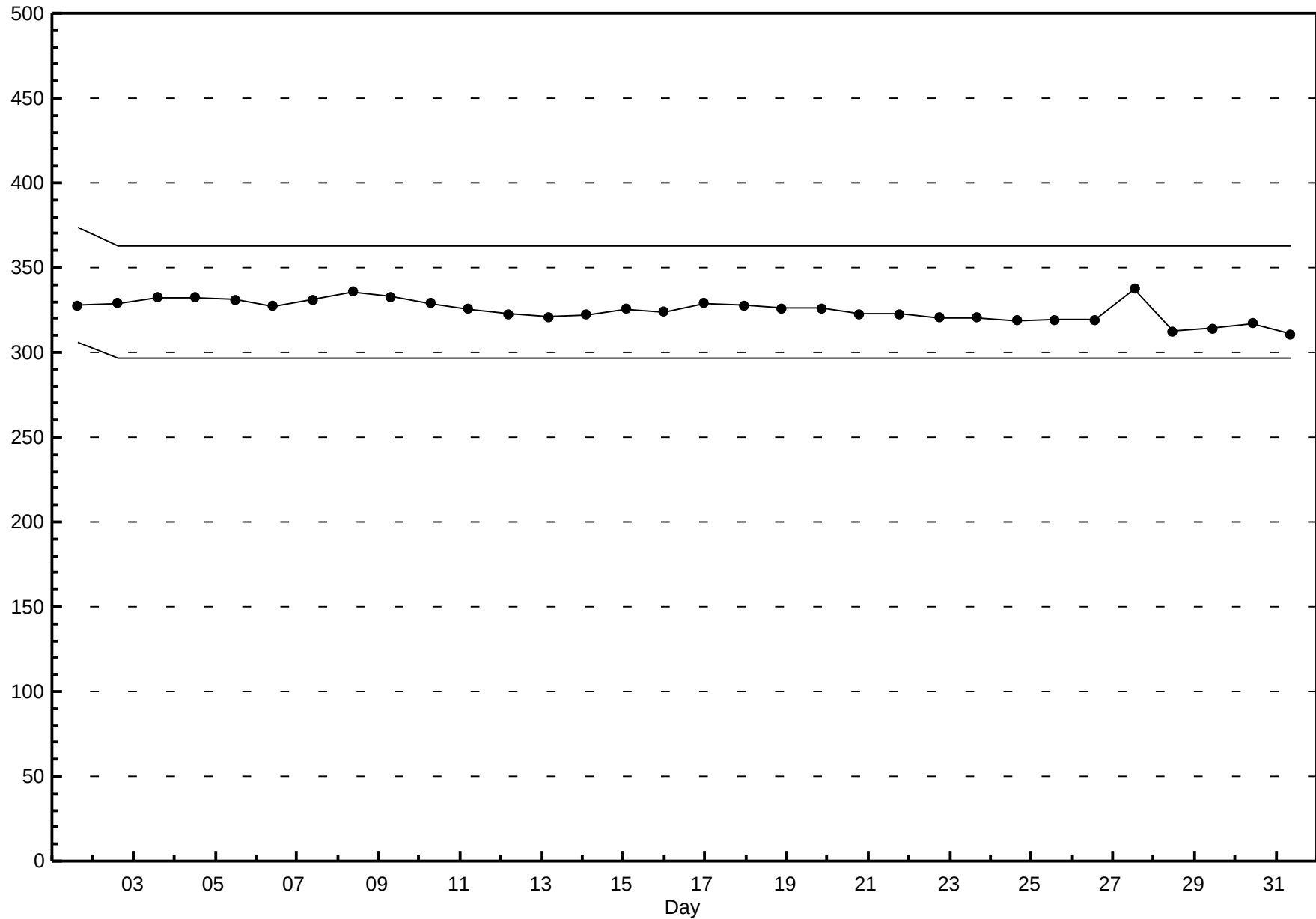
Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)

Henry Pirker - May 2014



Hourly Averages

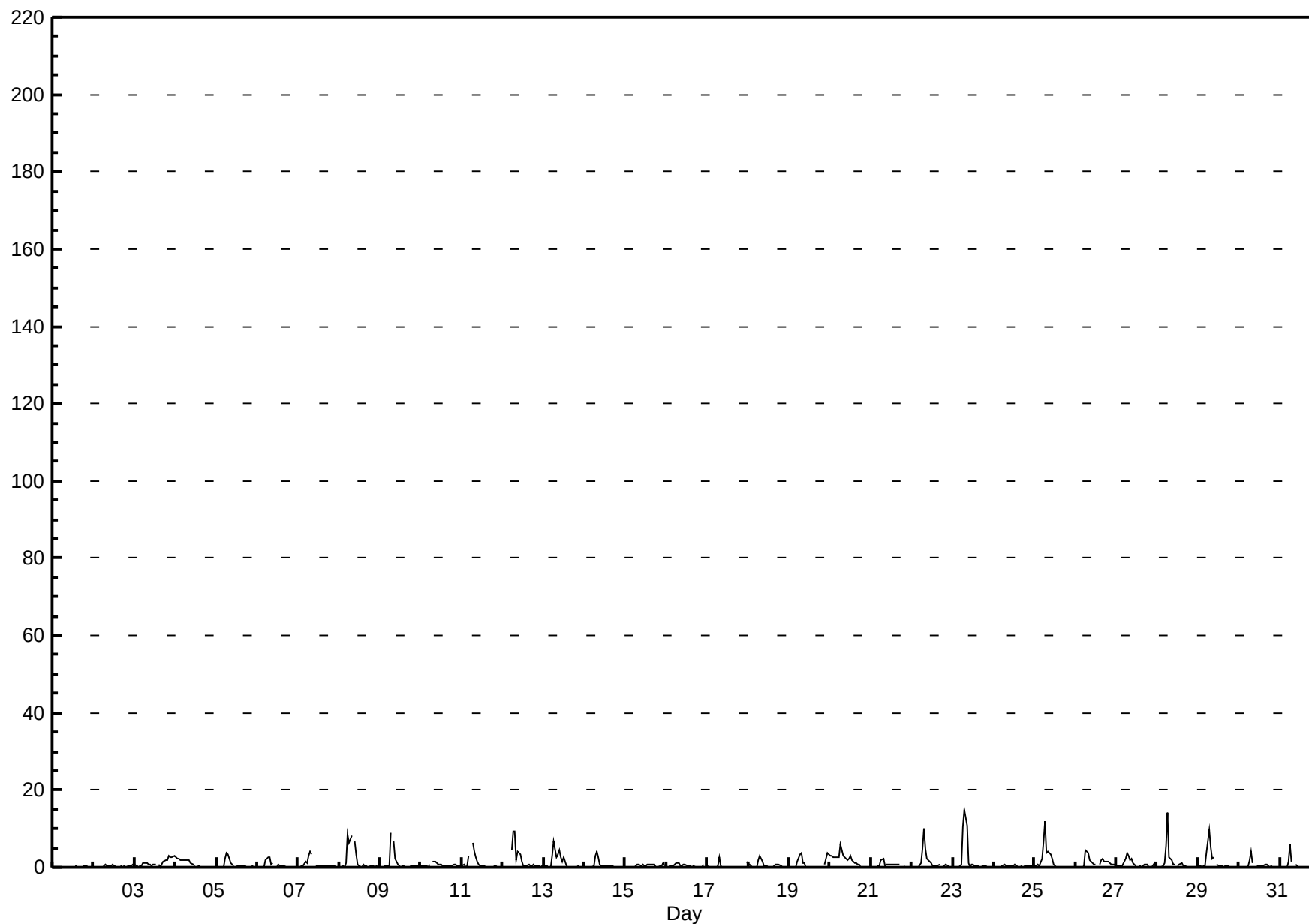
Nitrogen Oxide (NO) - ppb

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 14.8 ppb on May 23 08:00 Maximum Daily Average: 2.0 ppb on May 20																								Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on May 1 01:00 Maximum Diurnal Average: 4.5 ppb at hour 7 Monthly Average: 0.91 ppb												Minimum Daily Average: 0.2 ppb on May 17 Minimum Diurnal Average: 0.3 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.7 P ₉₀ = 2.6 P ₉₉ = 9.3														
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-May	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	A	0	0	0	1	1	0	0	0	--	0.5
2-May	0	0	0	0	0	0	0	1	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	1	0.3	0.7
3-May	1	0	0	0	1	1	1	1	1	1	0	1	1	A	1	0	1	2	2	2	3	3	3	3	1.2	2.9
4-May	3	2	2	2	2	2	2	2	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.9	2.7
5-May	0	0	0	0	0	2	4	3	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.6
6-May	0	0	0	0	0	2	3	3	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	2.7
7-May	0	0	0	0	1	1	3	4	3	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.0
8-May	0	0	0	0	1	9	6	8	A	7	3	1	0	0	1	0	0	0	0	0	0	0	0	0	1.7	8.5
9-May	0	0	0	0	0	0	9	A	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1.0	9.1
10-May	0	0	0	0	0	1	A	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	0.6	1.4
11-May	0	1	0	0	3	A	6	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	6.3
12-May	0	0	0	0	A	4	9	9	2	4	3	2	1	0	0	1	0	0	1	0	0	0	0	0	1.7	9.5
13-May	0	0	0	A	0	3	7	3	3	5	3	1	3	0	0	0	0	0	0	0	0	0	0	0	1.3	6.6
14-May	0	0	A	0	0	0	3	4	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.2
15-May	0	A	0	0	0	0	0	1	1	0	1	0	0	1	1	1	1	1	0	0	0	0	1	0	0.4	1.1
16-May	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	A	0.4	1.2
17-May	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.2	2.6
18-May	1	1	0	0	0	0	2	3	1	0	0	0	0	0	0	0	1	1	1	0	0	A	0	0	0.5	3.0
19-May	0	0	0	0	0	2	3	4	1	1	0	0	0	0	0	0	0	0	0	0	A	1	4	3	0.8	3.8
20-May	3	3	3	3	2	3	6	5	3	2	2	2	3	2	1	1	1	1	0	A	0	0	0	0	2.0	6.1
21-May	0	0	0	0	0	0	2	2	0	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0.5	2.4
22-May	0	0	0	0	0	1	5	10	5	2	1	1	0	0	0	0	1	A	0	0	1	0	0	0	1.3	10.0
23-May	0	0	0	0	0	1	11	15	11	1	0	1	1	1	0	0	A	0	0	0	0	0	0	0	1.9	14.8
24-May	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	1	0.3	0.7
25-May	1	0	1	0	2	7	12	4	4	3	2	1	0	0	A	0	0	0	0	0	0	0	0	0	1.6	12.0
26-May	0	0	0	0	0	0	5	4	2	2	1	1	1	A	1	2	2	2	2	1	1	1	1	1	1.2	4.5
27-May	0	0	0	0	1	2	4	3	2	2	1	0	A	0	1	0	1	1	1	0	0	0	1	0	0.9	3.6
28-May	0	0	0	0	1	6	14	3	2	1	1	A	0	1	1	0	0	0	0	0	0	0	0	0	1.3	14.2
29-May	0	0	0	0	0	4	10	5	2	3	A	1	0	0	0	0	0	0	0	0	0	0	0	0	1.2	9.5
30-May	0	0	0	0	0	0	2	4	1	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.5	4.0
31-May	0	0	0	0	0	2	6	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	6.1
0.4 0.3 0.3 0.3 0.6 1.8 4.5 3.8 2.3 1.6 1.0 0.6 0.5 0.3 0.4 0.4 0.4 0.4 0.3 0.3 0.3 0.3 0.4 0.4 3.1 2.9 2.8 2.6 3.0 8.5 14.2 14.8 10.7 6.6 3.5 2.3 3.0 1.7 1.3 1.8 2.1 1.6 1.8 1.9 2.9 2.6 3.6 3.2																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - May 2014



Hourly Maximums

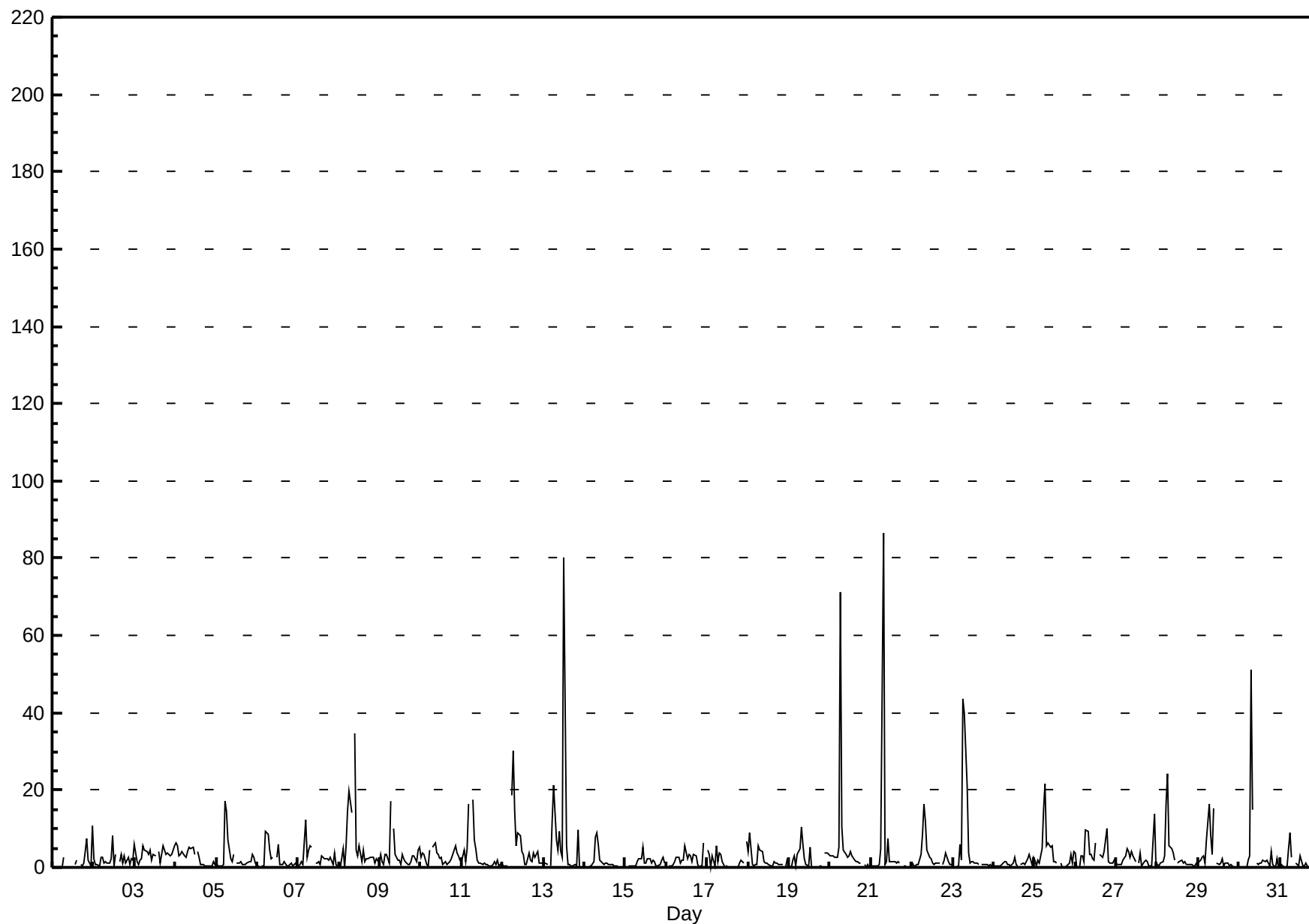
Nitrogen Oxide (NO) - ppb

Henry Pirker - May 2014

Maximum Value: 86.4 ppb on May 21 08:00																				Maximum Daily Average: 7.1 ppb on May 13					Hours in Service: 744	
Minimum Value: 0 ppb on May 1 01:00																				Minimum Daily Average: 1.1 ppb on May 24					Hours of Data: 706	
Maximum Diurnal Average: 12.9 ppb at hour 7																				Minimum Diurnal Average: 1.1 ppb at hour 3					Hours of Missing Data: 38	
Monthly Average: 3.11 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.6 Median = 1.4 Q ₃ = 3.3 P ₉₀ = 5.8 P ₉₉ = 31.6					Hours of Calibration: 38	
																									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-May	0	0	0	0	0	0	3	C	C	C	C	C	C	1	2	A	1	0	1	4	7	2	1	11	--	10.8
2-May	2	1	1	0	2	3	1	2	1	1	2	8	0	3	A	2	3	1	3	1	3	1	2	2	2.0	8.0
3-May	6	1	1	2	2	6	4	4	3	5	2	3	3	A	4	1	3	6	3	4	3	3	3	6	3.5	5.8
4-May	6	5	3	3	4	3	3	4	5	5	5	3	A	4	2	1	1	0	0	0	0	0	2	1	2.7	6.2
5-May	1	0	0	0	1	17	15	7	2	2	3	A	1	1	2	1	1	1	1	1	2	3	3	1	2.9	17.2
6-May	0	0	0	0	0	10	9	5	2	3	A	3	6	1	1	1	2	0	0	1	1	1	1	0	2.0	9.5
7-May	0	1	2	1	12	3	5	6	5	A	1	1	2	1	3	2	2	2	2	3	1	4	1	1	2.5	12.3
8-May	0	0	5	0	6	15	20	14	A	35	5	3	6	1	4	1	2	2	2	3	3	1	2	1	5.7	34.6
9-May	3	2	1	3	4	1	17	A	10	4	2	2	1	3	2	2	1	1	2	3	3	2	5	5	3.3	17.3
10-May	2	4	3	1	0	5	A	5	6	4	3	2	3	1	1	1	1	1	2	4	6	4	3	2	2.8	6.2
11-May	1	4	1	5	16	A	17	7	5	2	1	1	1	1	1	1	0	0	1	2	1	2	0	1	3.1	17.4
12-May	0	1	1	1	A	19	30	15	6	9	8	4	3	1	1	4	2	1	4	3	4	1	1	1	5.1	30.1
13-May	1	1	1	A	0	12	21	7	5	9	4	3	80	6	1	1	0	0	1	0	10	0	0	0	7.1	80.3
14-May	0	0	A	0	0	1	8	9	6	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1.5	8.8
15-May	0	A	0	0	0	0	1	1	2	2	5	1	1	2	2	1	2	1	0	1	1	2	3	1	1.4	5.1
16-May	A	1	1	1	1	1	2	2	1	2	2	6	2	3	3	1	4	3	1	0	1	1	6	A	2.0	6.2
17-May	5	3	0	3	0	6	1	4	3	2	0	0	0	0	0	0	0	0	0	1	2	1	A	7	1.7	6.8
18-May	4	9	1	0	1	1	6	5	4	1	1	1	1	0	0	1	1	1	1	1	1	A	0	2	1.9	9.1
19-May	0	0	2	3	0	3	5	10	6	2	1	0	5	0	0	0	0	0	0	0	A	4	4	3	2.2	10.4
20-May	3	3	3	3	3	5	71	10	4	3	3	3	4	3	2	2	1	1	1	A	1	0	1	0	5.7	71.1
21-May	0	0	0	0	0	1	5	86	1	1	8	1	1	1	1	1	1	1	A	1	1	0	0	0	4.9	86.4
22-May	1	0	0	1	1	3	9	16	12	5	3	2	1	1	1	1	1	A	1	2	4	2	1	1	2.9	16.4
23-May	0	0	0	0	6	2	44	40	21	4	1	1	2	1	1	1	A	1	1	1	1	0	1	0	5.5	43.8
24-May	0	0	0	0	0	1	1	1	1	1	0	1	3	1	1	A	1	1	1	1	2	3	1	3	1.1	3.4
25-May	2	0	2	1	5	15	22	6	6	5	6	1	1	1	A	1	0	0	0	0	1	3	1	4	3.6	21.7
26-May	4	0	0	3	3	1	10	9	3	4	2	2	6	A	4	3	3	4	10	2	1	1	1	2	3.4	9.9
27-May	1	1	1	1	2	3	5	4	3	4	3	2	A	1	4	1	2	2	1	1	0	0	14	1	2.3	14.0
28-May	1	1	1	2	3	16	24	5	5	4	2	A	1	2	2	1	2	1	1	1	1	1	1	1	3.3	24.2
29-May	1	2	3	3	1	7	16	8	3	15	A	1	1	1	2	1	1	1	1	1	0	0	0	0	3.0	16.3
30-May	0	0	0	0	0	2	3	51	15	A	1	1	1	1	2	1	2	1	0	4	1	0	2	0	3.9	51.1
31-May	0	1	0	0	0	5	9	3	A	1	1	1	3	1	1	1	1	0	0	1	3	1	2	0	1.4	8.9
1.5 1.4 1.1 1.2 2.5 5.5 12.9 12.0 5.3 4.8 2.7 2.1 5.0 1.5 1.7 1.2 1.3 1.2 1.4 1.5 2.1 1.4 2.0 1.9																									Diurnal Average	
6.2 9.1 5.0 4.9 16.2 18.8 71.1 86.4 20.8 34.6 8.3 8.0 80.3 5.7 4.4 3.7 3.5 5.8 9.9 4.4 9.8 3.7 14.0 10.8																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - May 2014



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

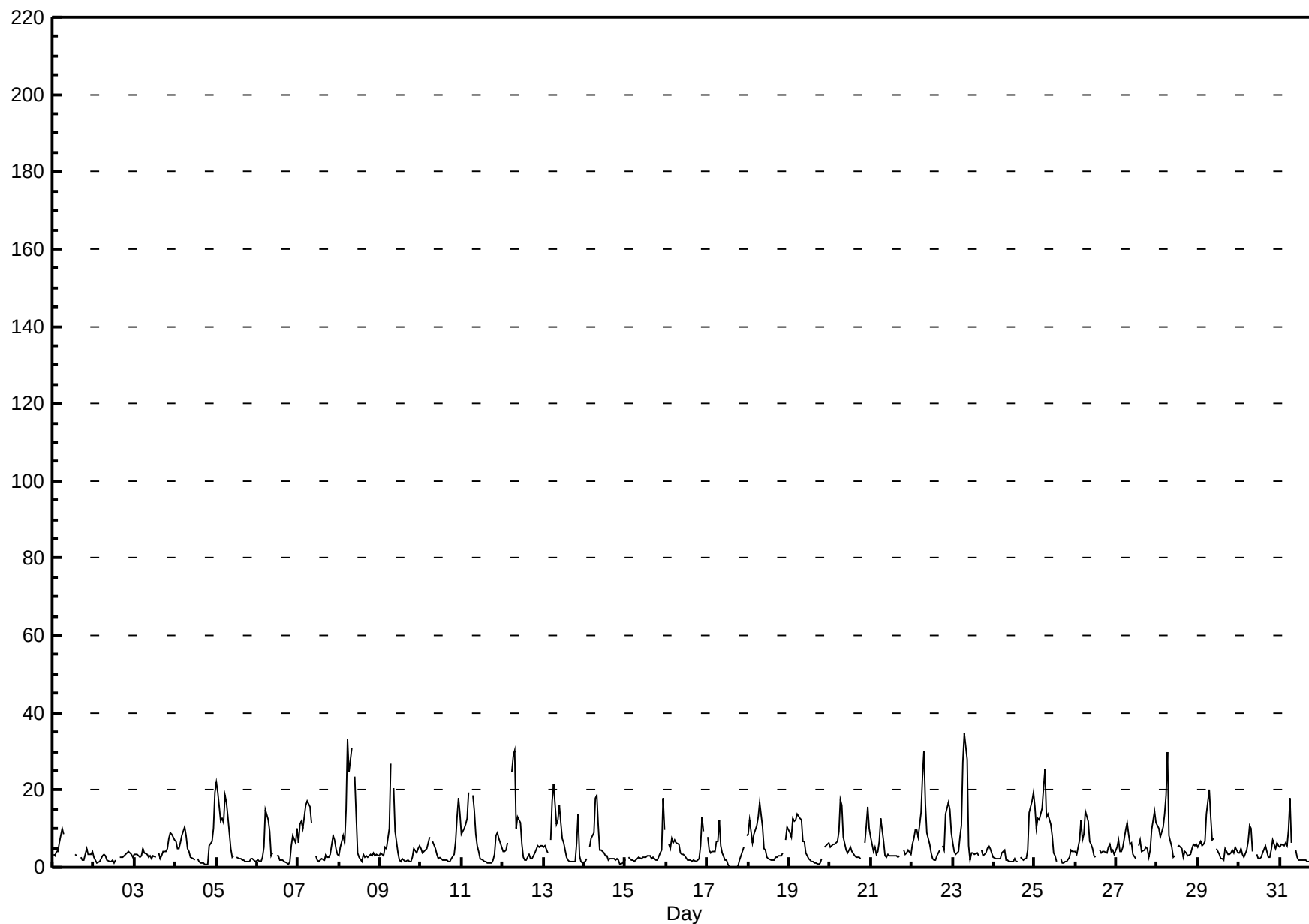
Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 34.6 ppb on May 23 08:00 Maximum Daily Average: 9.6 ppb on May 22																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on May 17 14:00 Maximum Diurnal Average: 15.5 ppb at hour 7 Monthly Average: 5.86 ppb										Minimum Daily Average: 2.4 ppb on May 2 Minimum Diurnal Average: 2.2 ppb at hour 18 Percentiles: P ₁ = 0.8 P ₁₀ = 1.7 Q ₁ = 2.4 Median = 3.9 Q ₃ = 7.1 P ₉₀ = 12.9 P ₉₉ = 27.8																
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-May	3	3	4	4	7	10	9	C	C	C	C	C	C	3	3	A	3	2	2	3	5	3	3	4	--	10.3
2-May	3	2	1	1	2	3	3	3	2	2	1	2	1	2	A	3	2	3	3	3	4	4	3	3	2.4	4.0
3-May	3	3	3	2	3	5	4	3	3	3	2	3	3	A	4	2	3	4	4	5	7	9	9	7	4.1	8.8
4-May	7	5	5	6	8	10	8	5	4	3	2	2	A	2	2	1	1	1	1	1	6	7	10	19	5.0	19.3
5-May	22	20	12	13	12	19	17	13	5	3	3	A	3	2	2	2	2	2	1	2	2	2	2	1	7.0	22.1
6-May	2	1	2	3	5	15	12	9	3	4	A	3	3	2	2	2	1	1	1	1	5	8	6	10	4.4	14.8
7-May	6	11	12	10	16	17	16	16	11	A	3	2	2	2	2	2	3	2	3	3	8	7	5	3	7.1	17.3
8-May	3	5	8	6	15	33	25	31	A	24	13	4	2	2	4	2	3	3	3	3	4	3	3	3	8.8	33.3
9-May	4	3	3	5	5	10	27	A	20	9	4	2	2	2	2	2	2	1	2	3	5	4	5	6	5.5	26.8
10-May	5	4	4	5	6	8	A	7	5	3	2	2	2	2	2	2	2	2	2	3	7	13	18	14	5.1	17.7
11-May	8	10	11	13	19	A	19	14	8	5	4	2	2	2	2	1	1	1	2	3	8	9	7	5	6.9	19.3
12-May	4	4	4	6	A	24	29	30	10	13	12	6	3	2	2	3	2	2	3	4	6	5	6	6	8.1	30.1
13-May	5	5	4	A	7	17	22	11	12	16	11	7	6	3	2	2	2	1	2	6	14	3	2	1	7.0	21.7
14-May	1	2	A	5	8	9	18	19	11	4	5	4	3	3	2	2	2	2	2	2	2	1	1	2	4.8	18.8
15-May	2	A	3	2	2	2	2	2	3	2	3	3	3	3	3	2	3	2	2	2	4	5	18	10	3.5	17.8
16-May	A	6	5	8	6	7	6	6	4	3	3	3	2	2	2	2	2	2	2	2	6	13	9	A	4.6	13.0
17-May	8	5	4	4	4	7	7	12	6	4	2	2	1	0	0	0	0	0	0	2	3	5	A	8	3.6	12.2
18-May	9	12	6	8	10	11	13	17	10	5	4	2	2	2	2	2	3	3	3	3	4	A	7	11	6.5	17.0
19-May	9	8	13	12	12	14	13	12	7	7	4	2	2	2	1	1	1	1	1	2	A	5	6	6	6.1	13.9
20-May	5	6	6	6	7	9	17	16	8	4	4	5	5	4	3	3	3	3	2	A	7	11	16	10	6.9	17.5
21-May	8	4	5	3	4	7	13	7	3	3	3	3	3	3	3	3	3	3	A	4	4	4	4	4	4.3	12.6
22-May	6	7	10	10	8	14	24	30	16	9	6	4	2	2	2	3	4	A	6	5	14	17	15	9	9.6	30.2
23-May	6	4	3	4	8	11	27	35	28	5	2	4	4	3	4	3	A	4	3	4	5	6	5	4	7.9	34.6
24-May	2	2	2	2	2	4	4	2	2	2	1	2	2	1	2	A	2	2	2	2	5	14	17	19	4.2	19.2
25-May	16	10	13	12	15	20	25	13	14	11	8	4	3	1	A	2	1	1	2	2	3	4	4	4	8.2	25.2
26-May	4	4	7	12	7	9	15	12	7	6	5	3	3	A	4	4	4	4	4	5	6	4	4	3	5.9	14.6
27-May	5	7	4	4	5	10	12	8	6	7	4	2	A	6	7	4	5	5	5	3	4	10	14	11	6.4	14.4
28-May	11	10	8	10	14	19	30	8	5	3	3	A	5	5	5	3	4	4	3	3	5	6	6	6	7.6	29.9
29-May	5	7	6	6	7	14	20	13	7	8	A	5	3	2	2	2	5	3	3	4	5	4	5	4	6.1	20.2
30-May	4	5	3	2	4	7	11	10	4	A	3	2	2	3	4	5	4	3	3	5	7	5	6	5	4.7	10.8
31-May	5	6	6	6	6	10	18	7	A	4	3	2	2	2	2	2	2	1	1	3	5	4	5	4	4.5	17.9
6.1 6.0 5.9 6.5 7.8 11.8 15.5 12.8 8.0 6.1 4.3 3.0 2.7 2.4 2.6 2.3 2.5 2.2 2.4 3.1 5.5 6.5 7.4 6.8 22.1 19.5 12.8 12.9 19.3 33.3 29.9 34.6 27.9 23.6 13.5 7.4 6.5 5.6 7.2 5.5 5.0 5.1 5.6 6.2 13.8 16.7 17.8 19.3																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - May 2014



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

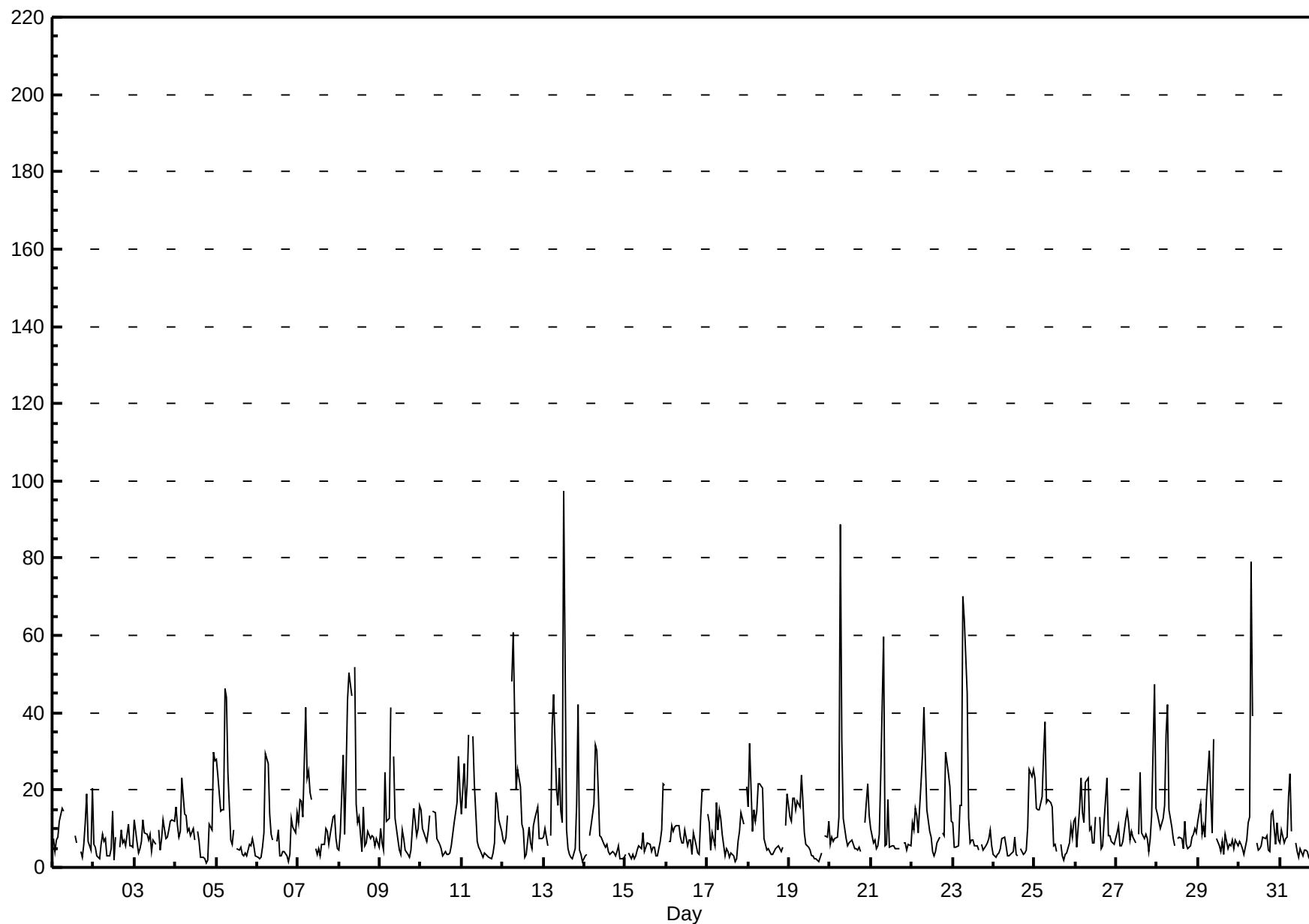
Henry Pirker - May 2014

Maximum Value: 97.4 ppb on May 13 13:00																								Hours in Service: 744	
Maximum Daily Average: 17.1 ppb on May 13																								Hours of Data: 706	
Minimum Value: 1 ppb on May 4 19:00																								Hours of Missing Data: 38	
Maximum Diurnal Average: 28.9 ppb at hour 7																								Hours of Calibration: 38	
Monthly Average: 10.97 ppb																								Percent Operational Time: 100.0	
Minimum Daily Average: 6.1 ppb on May 2																								Daily Average	
Minimum Diurnal Average: 4.7 ppb at hour 16																									
Percentiles: P ₁ = 1.9 P ₁₀ = 3.3 Q ₁ = 5.0 Median = 7.5 Q ₃ = 13.1 P ₉₀ = 21.9 P ₉₉ = 59.2																								Daily Maximum	
Day	Hourly Period Ending At (MST)																								
	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-May	7	4	7	8	12	15	15	C	C	C	C	C	C	8	6	A	4	3	6	12	19	7	4	20	20.4
2-May	6	5	3	2	6	9	7	7	3	3	5	14	2	8	A	5	10	6	7	5	11	5	5	5	6.1
3-May	12	6	4	5	7	12	9	8	7	9	4	7	6	A	10	4	7	12	7	8	10	12	12	12	8.4
4-May	16	11	8	9	23	14	14	9	10	8	10	7	A	9	7	3	3	2	1	2	11	10	30	27	10.6
5-May	28	24	15	15	15	46	44	24	7	6	10	A	5	5	5	3	3	4	3	6	5	7	5	3	12.5
6-May	3	2	3	5	9	29	27	14	8	7	A	7	10	3	3	4	4	3	2	3	13	11	9	14	8.4
7-May	11	18	17	13	41	23	25	19	18	A	5	3	5	3	6	6	10	9	6	8	13	13	7	5	12.5
8-May	5	9	29	9	24	43	50	45	A	52	16	12	13	4	16	6	6	9	8	8	8	6	7	5	16.9
9-May	10	7	5	24	12	13	41	A	29	13	7	5	4	10	7	4	3	3	5	10	15	8	10	16	11.3
10-May	15	10	9	7	9	13	A	14	14	8	7	6	5	3	4	3	3	4	6	12	14	17	29	20	10.0
11-May	14	27	15	21	34	A	34	21	14	7	5	5	3	4	3	3	3	2	4	6	20	17	12	9	12.3
12-May	7	6	8	14	A	48	61	39	20	25	21	11	10	3	3	10	6	5	11	13	16	7	7	8	15.6
13-May	8	10	5	A	8	36	45	20	16	26	14	12	97	10	5	3	3	2	5	16	42	4	3	1	17.1
14-May	3	4	A	8	11	16	32	30	20	8	8	6	5	6	4	3	4	4	3	4	5	2	2	3	8.3
15-May	3	A	4	2	3	2	3	4	6	5	9	4	5	6	6	4	5	5	3	3	7	10	22	21	6.2
16-May	A	7	7	11	9	10	11	11	8	6	7	10	5	7	7	3	9	6	4	3	12	20	20	A	8.7
17-May	14	12	4	9	6	17	10	15	13	8	3	5	4	3	4	3	2	2	7	9	14	11	A	21	8.4
18-May	16	32	9	15	12	14	22	21	20	7	6	5	5	3	4	4	5	5	6	4	5	A	11	19	10.9
19-May	13	12	18	18	15	17	16	24	17	9	6	5	4	3	3	2	2	2	3	4	A	8	8	12	9.6
20-May	6	8	7	7	8	13	89	33	13	8	6	6	7	7	5	5	5	5	4	A	11	17	21	14	13.2
21-May	10	6	7	5	6	9	24	60	6	6	17	5	6	6	5	5	5	5	A	6	6	5	6	6	9.6
22-May	12	10	15	13	9	22	30	41	27	15	9	8	4	3	4	6	8	A	9	8	30	24	21	12	14.8
23-May	12	5	5	6	16	16	70	64	45	13	6	7	7	5	5	4	A	6	5	6	6	8	10	6	14.5
24-May	3	3	3	4	5	7	8	6	3	3	3	4	8	3	3	A	5	4	4	4	11	25	24	25	7.2
25-May	23	15	15	15	18	29	37	17	18	17	16	5	6	4	A	6	3	2	3	4	6	11	8	12	12.6
26-May	13	5	15	23	14	11	22	23	10	11	6	6	13	A	13	5	6	12	23	8	8	7	6	6	11.6
27-May	9	11	6	5	7	12	15	12	7	10	8	6	A	9	25	9	7	8	8	4	7	13	47	15	11.3
28-May	14	12	10	12	16	34	42	15	10	7	5	A	7	8	7	5	12	6	5	5	8	8	10	9	11.7
29-May	12	16	9	11	8	18	30	19	9	33	A	8	6	4	7	3	9	5	6	5	7	5	7	6	10.5
30-May	7	6	5	4	7	11	13	79	39	A	6	4	5	6	8	7	8	4	4	14	14	6	11	7	12.0
31-May	6	10	7	7	8	18	24	9	A	6	4	2	5	3	4	4	4	3	2	6	11	7	8	10	7.4
10.6 10.4 9.1 10.2 12.6 19.4 28.9 24.3 14.8 11.9 8.2 6.6 9.3 5.3 6.5 4.7 5.5 4.9 5.5 7.0 12.2 10.4 12.8 11.6																									Diurnal Average
27.9 32.0 29.0 24.5 41.3 48.1 88.7 78.9 45.1 51.8 20.7 14.4 97.4 9.8 24.6 10.5 11.9 12.2 23.3 16.2 42.2 25.2 47.3 27.5																									Diurnal Maximum
C - Calibration A - Automated Daily Zero Span																									

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

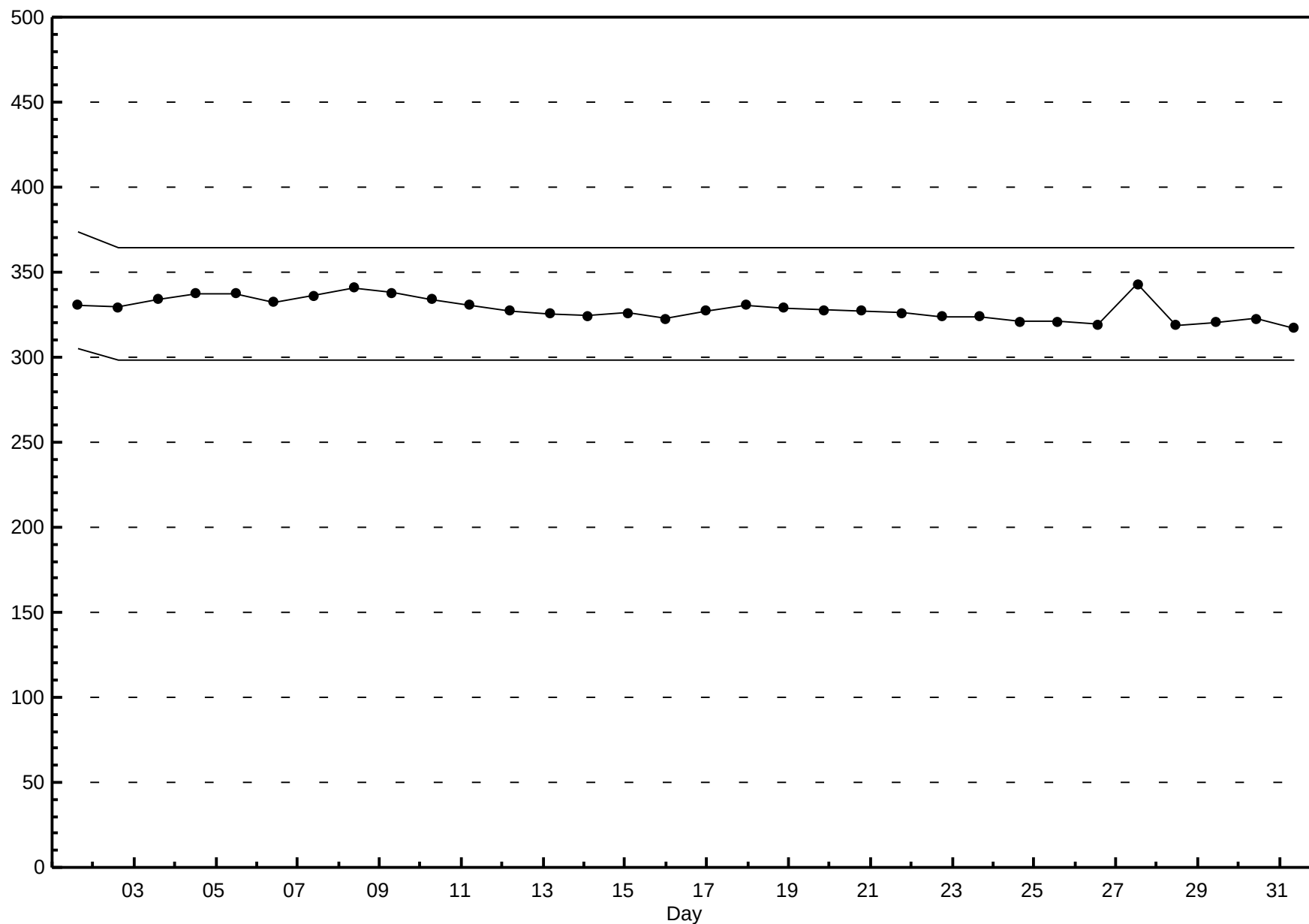
Henry Pirker - May 2014



Span Responses

Oxides of Nitrogen (NO_x)

Henry Pirker - May 2014



Hourly Averages

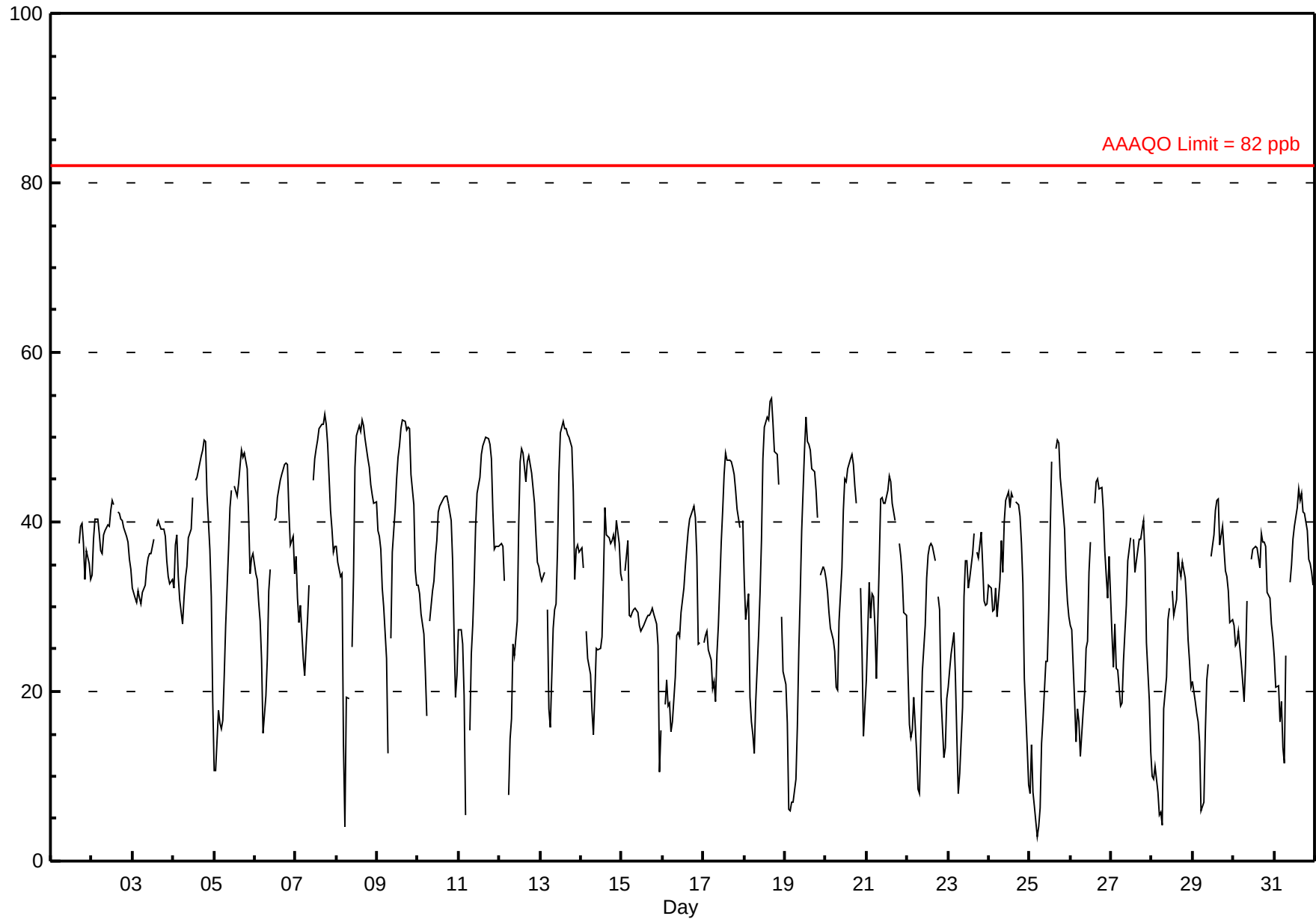
Ozone (O₃) - ppb

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 54.6 ppb on May 18 17:00 Maximum Daily Average: 40.1 ppb on May 9																								Hours in Service: 744 Hours of Data: 697 Hours of Missing Data: 47 Hours of Calibration: 35 Percent Operational Time: 98.4			
Minimum Value: 3 ppb on May 25 05:00 Minimum Daily Average: 22.5 ppb on May 28 Maximum Diurnal Average: 43.8 ppb at hour 16 Minimum Diurnal Average: 18.0 ppb at hour 7 Monthly Average: 32.89 ppb Percentiles: P ₁ = 5.9 P ₁₀ = 16.4 Q ₁ = 25.7 Median = 34.1 Q ₃ = 41.3 P ₉₀ = 47.2 P ₉₉ = 52.0																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-May	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	37	39	40	38	33	37	35	33	--	39.8	
2-May	34	38	40	40	39	37	36	38	39	40	39	41	43	42	A	A	41	41	40	39	38	38	36	34	38.9	42.6	
3-May	32	31	31	32	31	30	32	33	35	36	36	36	38	A	A	39	40	40	39	39	38	35	34	33	33	34.9	40.1
4-May	32	37	39	34	31	28	31	33	35	38	39	43	A	A	45	45	46	48	49	50	49	43	37	31	19	38.3	49.6
5-May	11	11	18	16	16	17	22	28	37	42	44	A	A	44	43	45	47	49	48	48	46	41	34	36	36	33.7	48.5
6-May	34	33	31	28	24	15	20	24	32	34	A	A	40	40	43	44	45	46	47	47	47	41	37	38	34	35.8	47.0
7-May	36	31	28	30	24	22	25	28	33	A	A	45	47	49	50	51	52	52	53	52	49	41	39	36	37	39.6	52.8
8-May	37	35	34	34	14	4	19	19	A	A	25	34	46	50	51	51	52	51	50	47	46	44	43	42	42	38.0	52.0
9-May	39	38	37	32	30	24	13	A	A	26	36	42	45	48	49	51	52	52	51	51	46	42	34	33	40.1	52.1	
10-May	33	32	29	27	22	17	A	A	28	32	33	36	38	41	42	43	43	43	43	42	40	35	27	19	22	33.4	43.0
11-May	27	27	26	20	5	A	15	24	28	33	39	43	45	48	49	49	50	50	49	47	41	37	37	37	36.0	49.9	
12-May	37	37	37	33	A	8	14	17	26	24	28	40	47	49	48	45	47	48	47	46	42	38	35	35	36.0	48.6	
13-May	34	33	34	A	30	18	16	28	30	30	37	46	50	52	51	51	50	50	49	43	33	37	37	36	38.0	51.9	
14-May	37	35	A	27	24	22	18	15	20	25	25	25	26	33	42	38	38	38	38	38	37	40	38	34	31.0	41.7	
15-May	33	A	34	38	29	29	29	30	30	29	28	27	27	28	29	29	29	29	30	29	28	25	11	15	28.1	37.8	
16-May	A	19	21	18	19	15	17	22	27	27	26	29	32	35	37	39	40	41	42	40	36	26	26	A	28.8	41.9	
17-May	26	27	27	25	24	20	21	19	24	28	38	41	46	48	47	47	47	46	46	44	41	39	A	40	35.3	48.1	
18-May	33	28	32	19	16	15	13	19	27	31	38	47	51	52	52	54	55	52	48	48	44	A	29	22	35.9	54.6	
19-May	21	16	6	6	7	7	10	16	25	31	39	49	52	49	49	48	46	46	44	41	A	34	35	34	30.9	52.4	
20-May	33	32	29	28	26	25	20	20	28	35	41	45	45	46	47	48	47	44	42	A	32	25	15	18	33.6	48.0	
21-May	21	33	29	31	31	28	22	35	43	43	42	42	44	46	45	42	41	40	A	37	36	34	29	29	35.8	45.5	
22-May	22	16	15	15	19	13	8	8	15	22	28	33	36	37	37	37	35	A	31	30	19	12	13	19	22.8	37.5	
23-May	20	23	24	27	22	15	8	10	18	31	35	35	32	33	36	39	A	36	36	39	35	31	30	30	28.1	38.8	
24-May	32	32	29	30	32	29	33	38	34	40	42	44	42	43	43	A	42	42	41	37	33	22	13	9	34.0	43.6	
25-May	8	14	8	7	3	4	6	14	17	24	24	30	39	47	A	49	50	49	45	43	39	34	31	29	26.6	49.6	
26-May	28	27	19	14	18	16	12	18	20	25	26	34	38	A	42	45	45	44	44	41	37	34	31	36	30.2	45.1	
27-May	27	23	28	23	23	18	19	24	27	30	35	38	A	38	34	35	38	38	39	40	36	26	19	13	29.1	40.2	
28-May	10	10	11	8	5	6	4	18	22	29	30	A	32	29	31	36	34	33	35	33	30	26	24	21	22.5	36.4	
29-May	21	19	17	16	14	6	7	15	21	23	A	36	38	41	43	43	37	39	37	34	34	32	28	28	27.4	42.6	
30-May	28	25	26	27	23	21	19	23	31	A	36	37	37	37	37	35	39	38	38	37	32	31	28	26	30.8	38.6	
31-May	24	21	21	16	19	13	12	24	A	33	35	38	40	42	44	43	43	41	41	39	36	35	34	33	31.5	43.9	
28.0 27.0 26.2 24.2 21.4 18.0 18.0 23.0 27.8 31.4 35.3 39.2 41.1 42.8 43.3 43.8 43.8 43.5 42.6 41.1 36.7 32.8 29.5 29.0																								Diurnal Average			
39.0 38.2 40.3 40.4 38.7 36.6 36.3 38.5 42.7 42.9 44.9 48.6 52.4 52.4 52.0 54.2 54.6 52.8 51.5 51.0 45.7 43.3 42.2 42.4																								Diurnal Maximum			
C - Calibration M - Maintenance A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																											

Hourly Averages

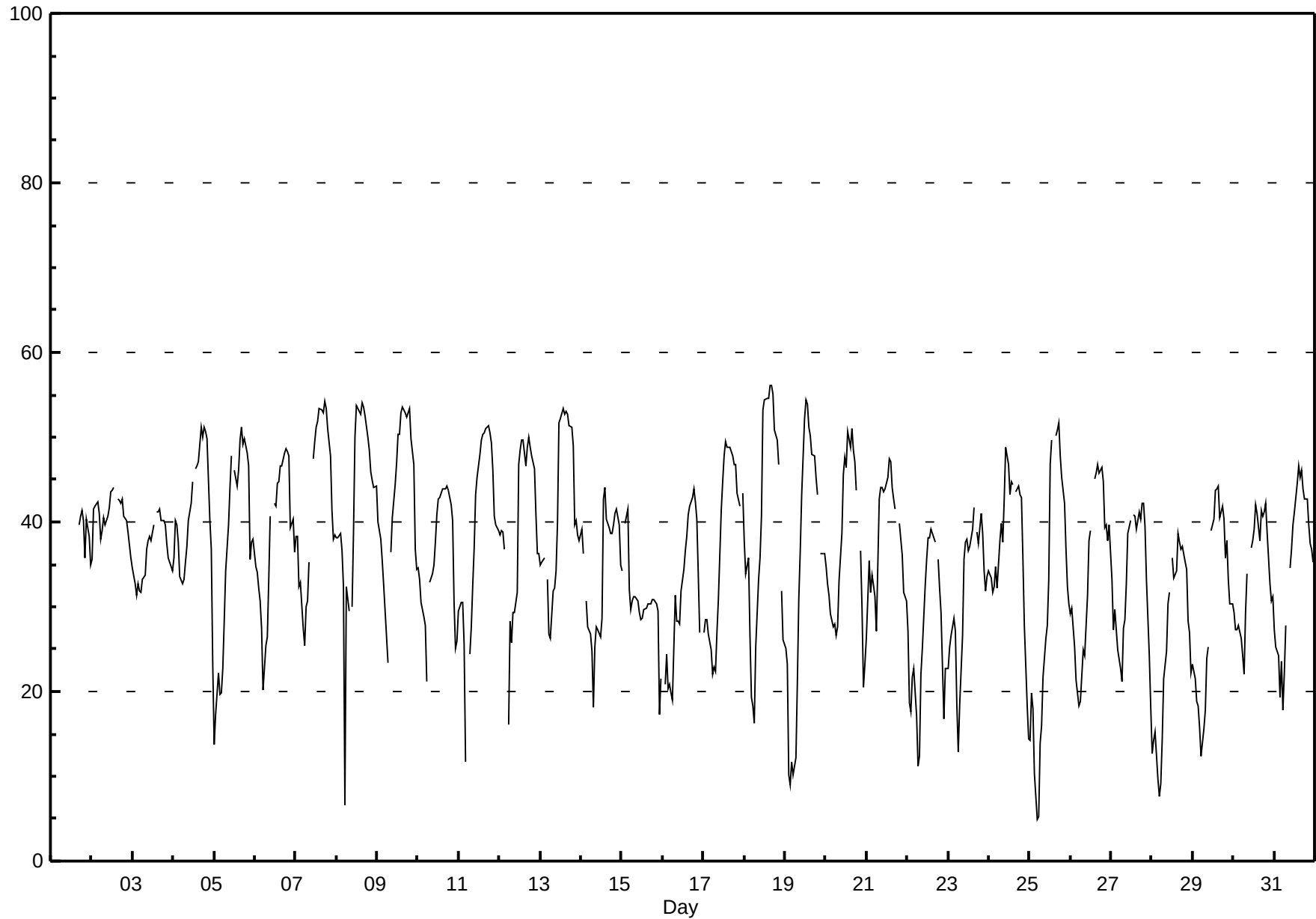
Ozone (O₃) - ppb
Henry Pirker - May 2014



Maximum Value: 56.1 ppb on May 18 16:00																								Maximum Daily Average: 43.0 ppb on May 9								Hours in Service: 744					
Minimum Value: 5 ppb on May 25 05:00																								Minimum Daily Average: 25.7 ppb on May 28								Hours of Data: 697					
Maximum Diurnal Average: 45.7 ppb at hour 16																								Minimum Diurnal Average: 21.8 ppb at hour 6								Hours of Missing Data: 47					
Monthly Average: 35.93 ppb																								Percentiles: P ₁ = 10.1 P ₁₀ = 21.4 Q ₁ = 29.1 Median = 37.2 Q ₃ = 43.6 P ₉₀ = 49.6 P ₉₉ = 54.3								Hours of Calibration: 35					
																																Percent Operational Time: 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-May	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	40	41	41	40	36	40	38	35	--	41.4											
2-May	36	41	42	42	41	38	39	41	40	41	42	44	44	44	A	43	43	42	43	41	40	39	37	36	40.7	44.1											
3-May	34	33	31	33	32	32	33	34	37	38	38	38	40	A	41	41	42	40	40	40	37	36	35	34	36.5	41.5											
4-May	36	40	40	38	34	33	33	35	37	40	42	45	A	46	47	47	51	50	51	51	50	40	37	23	41.1	51.2											
5-May	14	17	22	20	20	23	28	34	40	44	48	A	46	44	46	50	51	49	50	48	47	36	38	38	37.0	51.2											
6-May	35	34	32	31	27	20	25	26	33	41	A	42	42	45	45	47	47	48	49	48	48	39	40	36	38.3	48.7											
7-May	38	38	32	33	27	25	30	31	35	A	47	49	51	52	53	53	53	54	53	51	48	41	38	38	42.4	54.2											
8-May	38	38	39	37	32	7	32	30	A	30	39	50	54	53	53	54	53	52	50	48	46	45	44	44	42.1	54.0											
9-May	40	39	38	35	32	26	23	A	36	41	44	47	50	50	53	54	53	52	53	53	50	47	37	34	43.0	53.5											
10-May	35	33	30	29	28	21	A	33	34	35	38	41	43	43	44	44	44	44	44	42	40	31	25	26	35.9	44.3											
11-May	29	31	31	26	12	A	24	28	32	37	43	45	48	50	50	51	51	51	51	49	46	41	40	39	39.3	51.4											
12-May	38	39	39	37	A	16	28	26	29	29	32	47	48	50	50	47	49	50	49	48	46	41	36	36	39.5	49.9											
13-May	35	35	36	A	33	27	26	32	32	34	40	52	52	53	53	53	53	51	51	49	40	40	39	38	41.5	53.4											
14-May	39	36	A	31	28	27	25	18	25	28	27	26	29	43	44	40	39	39	39	40	41	42	40	35	33.9	44.1											
15-May	34	A	40	42	32	30	31	31	31	31	29	28	29	30	30	30	30	30	31	31	30	29	17	22	30.3	41.5											
16-May	A	21	24	20	21	20	19	31	28	28	28	32	34	37	38	41	42	43	44	42	40	34	27	A	31.6	43.9											
17-May	27	28	28	27	25	22	23	22	27	31	41	45	48	50	49	49	48	48	47	47	43	42	A	43	37.4	49.5											
18-May	38	34	36	27	19	18	16	25	33	36	41	53	54	55	55	56	56	55	51	50	47	A	32	26	39.7	56.1											
19-May	25	23	10	9	12	10	12	21	31	37	43	52	54	54	51	50	48	48	45	43	A	36	36	36	34.3	54.3											
20-May	35	33	31	29	28	28	27	28	33	39	46	48	46	51	49	51	48	47	44	A	37	30	21	23	36.9	50.9											
21-May	26	35	32	34	33	31	27	43	44	44	44	44	45	47	47	44	43	42	A	40	38	36	32	31	38.3	47.4											
22-May	27	19	18	22	23	17	11	12	22	25	33	36	38	38	39	39	38	A	36	32	29	17	23	23	26.7	39.1											
23-May	23	25	27	29	27	19	13	19	27	36	38	38	37	37	39	42	A	39	37	41	39	34	32	34	31.7	41.7											
24-May	34	33	32	32	35	32	38	40	38	43	49	47	43	45	44	A	44	44	43	43	36	28	18	14	37.2	48.8											
25-May	14	20	18	10	5	5	14	16	22	26	28	33	47	50	A	50	51	52	48	45	42	37	32	30	30.2	51.6											
26-May	29	30	25	21	20	18	19	25	24	28	31	38	39	A	45	46	47	46	46	45	39	40	38	40	33.9	46.8											
27-May	33	27	30	27	25	23	21	28	28	33	39	40	A	41	41	39	41	40	42	42	40	33	24	18	32.8	42.2											
28-May	13	14	15	10	8	9	14	22	25	30	32	A	36	33	34	39	38	37	37	35	34	28	27	22	25.7	38.7											
29-May	23	22	19	18	16	12	16	18	24	25	A	39	40	44	44	44	40	42	40	36	38	33	30	30	30.2	44.3											
30-May	29	27	27	28	26	24	22	29	34	A	37	38	39	42	41	38	41	41	41	42	39	33	31	31	34.0	42.3											
31-May	27	25	24	19	24	18	22	28	A	35	37	40	41	45	47	45	46	44	43	43	40	37	37	35	34.8	46.7											
																								Diurnal Average		Diurnal Maximum											
																								40.0		44.3											
C - Calibration																								M - Maintenance				A - Automated Daily Zero Span									

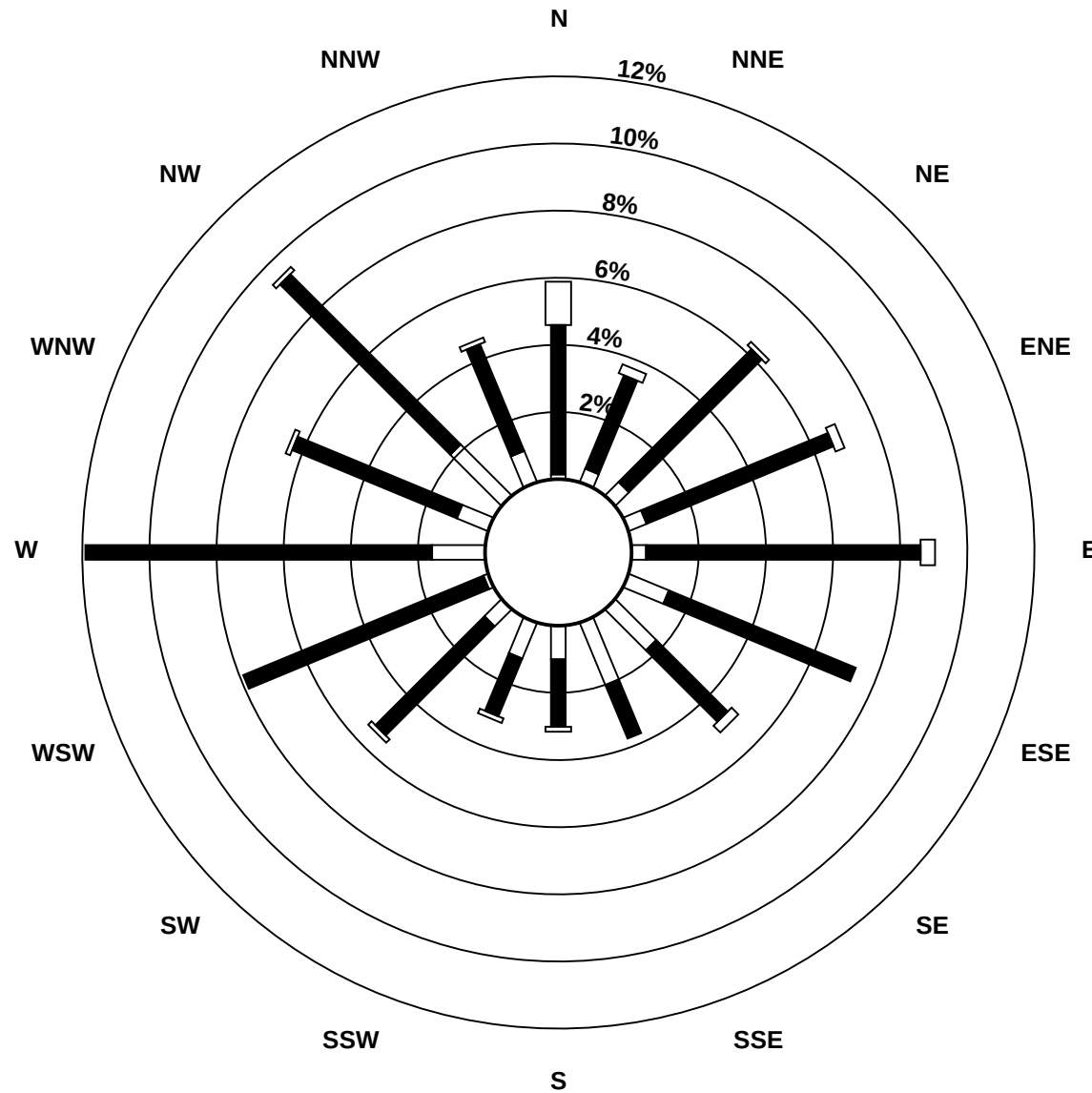
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - May 2014

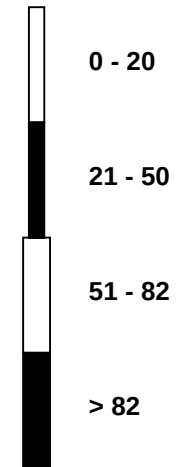


Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - May 2014



Pollutant Classes (ppb)



Eight Hour Running Averages

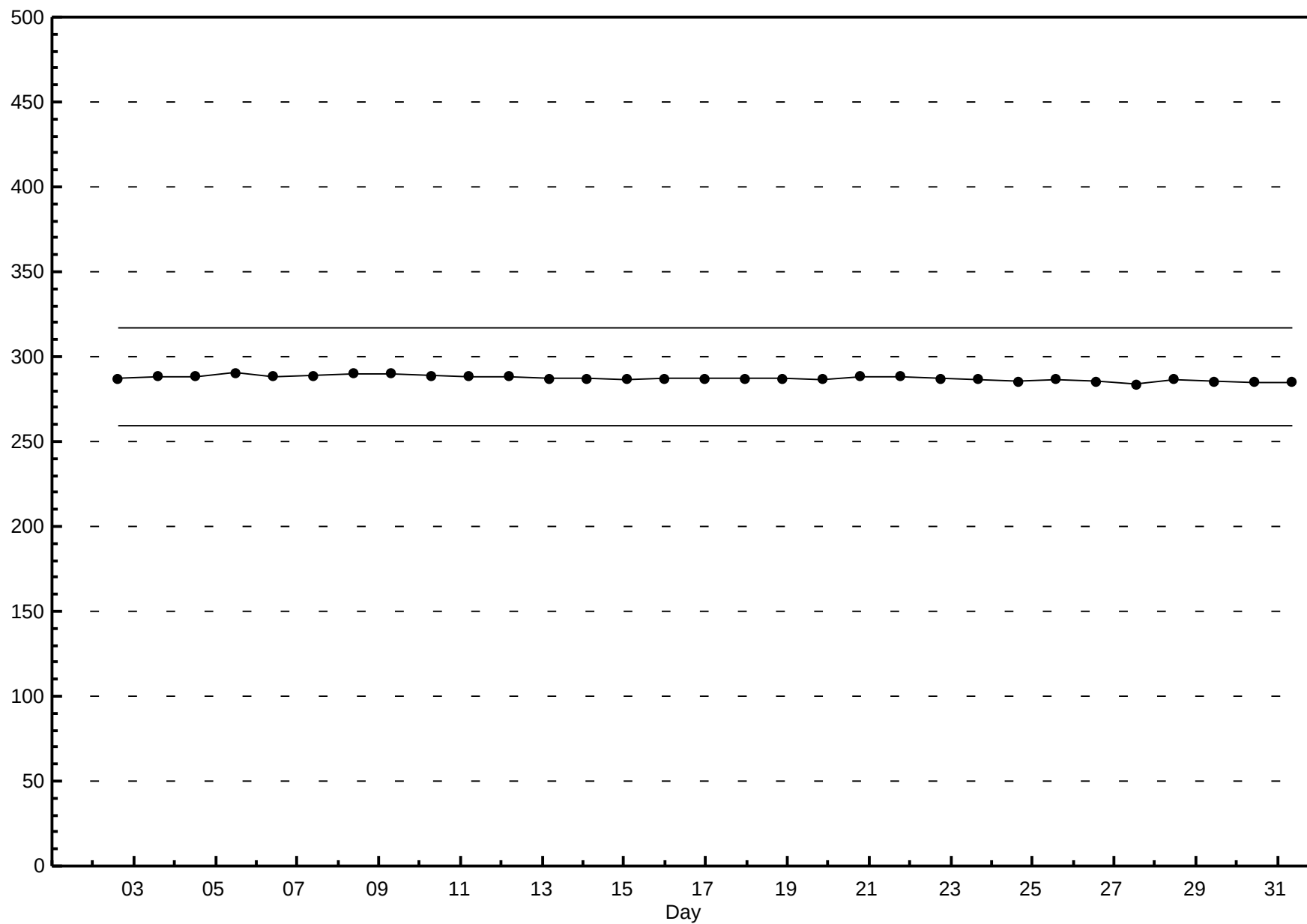
Ozone (O₃) - ppb

Henry Pirker - May 2014

Maximum Value: 51.6 ppb on May 18 20:00																								Hours in Service: 744	
Minimum Value: 7.3 ppb on May 25 07:00																								Hours of Data: 723	
Percentiles: P ₁ = 10.2 P ₁₀ = 20.5 Q ₁ = 26.6 Median = 33.5 Q ₃ = 39.7 P ₉₀ = 44.9 P ₉₉ = 50.4																								Hours of Missing Data: 21	
																								Hours of Calibration: 3	
																								Percent Operational Time: 97.6	
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-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37	37	37	37.4
2-May	36	36	36	36	37	37	37	38	38	39	39	39	39	40	40	41	41	41	41	41	40	40	39	38	41.2
3-May	37	36	35	34	33	32	32	31	32	32	33	34	34	35	36	37	38	38	39	39	39	38	37	36	39.1
4-May	35	35	35	35	34	33	33	33	33	34	34	35	35	38	40	42	43	45	46	47	47	46	44	41	47.4
5-May	36	31	27	23	20	17	16	17	20	24	28	29	33	37	40	43	45	45	46	46	46	45	43	42	46.1
6-May	40	38	36	34	32	30	28	26	26	26	25	27	29	33	37	40	42	44	44	45	45	44	43	42	44.9
7-May	41	39	37	35	32	30	29	28	28	27	30	32	36	40	43	47	49	50	51	51	50	49	47	45	50.7
8-May	43	41	39	37	33	29	27	25	23	21	21	23	28	35	40	44	45	48	50	50	49	48	47	46	49.9
9-May	44	43	42	40	38	36	32	30	29	28	29	31	33	37	42	44	47	49	50	51	50	49	47	45	50.6
10-May	43	40	37	34	31	28	27	27	27	27	28	30	32	36	37	38	40	41	42	42	41	40	37	34	42.5
11-May	32	30	28	25	22	21	20	21	21	22	24	27	33	35	39	42	45	47	48	49	48	47	45	44	48.5
12-May	42	40	39	37	37	32	29	26	25	23	21	22	25	31	35	38	41	44	46	47	46	45	44	42	47.0
13-May	41	39	37	36	34	31	28	27	27	26	27	29	32	36	40	43	46	48	50	50	47	46	44	42	49.9
14-May	40	38	37	35	33	31	28	25	23	21	22	22	22	23	26	29	32	33	35	36	38	39	38	38	40.4
15-May	37	37	36	36	35	33	32	32	31	31	30	29	29	29	28	28	28	28	29	29	29	29	26	25	37.0
16-May	24	22	21	20	18	17	18	19	20	21	21	23	24	27	29	32	33	35	37	38	39	38	36	36	38.8
17-May	34	32	30	27	26	25	24	24	23	24	25	27	30	33	36	40	43	45	46	46	46	45	44	43	46.4
18-May	41	39	37	33	30	26	25	22	21	21	22	26	30	35	40	44	48	50	51	52	51	50	47	43	51.6
19-May	38	33	27	21	15	14	12	11	12	13	18	23	29	34	39	43	46	47	48	47	46	44	42	40	48.0
20-May	38	36	34	32	31	30	28	27	26	26	28	30	32	35	39	42	44	46	46	46	44	41	36	32	45.7
21-May	28	27	25	25	25	26	27	29	31	33	34	36	37	40	42	43	43	43	43	42	41	39	37	35	43.3
22-May	33	29	27	25	22	20	17	15	14	15	16	18	21	24	27	31	33	35	35	35	33	29	26	23	35.4
23-May	21	21	20	20	20	20	20	19	18	19	21	22	23	25	29	33	35	35	35	36	36	36	35	34	36.3
24-May	34	33	32	31	31	31	31	32	32	33	35	36	38	39	41	41	42	43	42	41	40	37	33	30	42.6
25-May	26	22	18	14	10	8	7	8	9	10	12	15	20	25	28	33	37	41	44	46	46	44	42	40	46.1
26-May	37	34	31	28	25	23	20	19	18	18	19	21	24	25	29	33	36	39	42	43	43	41	40	39	42.7
27-May	37	34	32	30	28	26	24	23	23	24	25	27	27	30	32	34	36	37	37	38	37	36	34	31	37.5
28-May	28	24	21	17	13	10	8	9	11	13	15	16	20	23	27	30	32	32	33	33	33	33	32	30	33.0
29-May	28	26	24	22	20	17	15	14	15	15	15	18	21	26	31	35	37	40	39	39	39	37	36	34	39.7
30-May	33	31	29	29	27	26	25	24	24	24	26	27	29	31	34	36	37	37	37	37	36	36	35	34	37.0
31-May	32	30	27	25	23	21	19	19	18	20	22	25	28	32	36	39	40	41	41	42	41	40	39	38	41.5
44.4 42.9 41.6 39.8 38.0 37.0 37.1 37.8 38.5 38.7 38.6 38.7 39.2 39.9 43.2 46.5 49.3 50.2 51.5 51.6 50.7 50.5 47.4 45.9																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Henry Pirker - May 2014



Hourly Averages

Carbon Monoxide (CO) - ppm

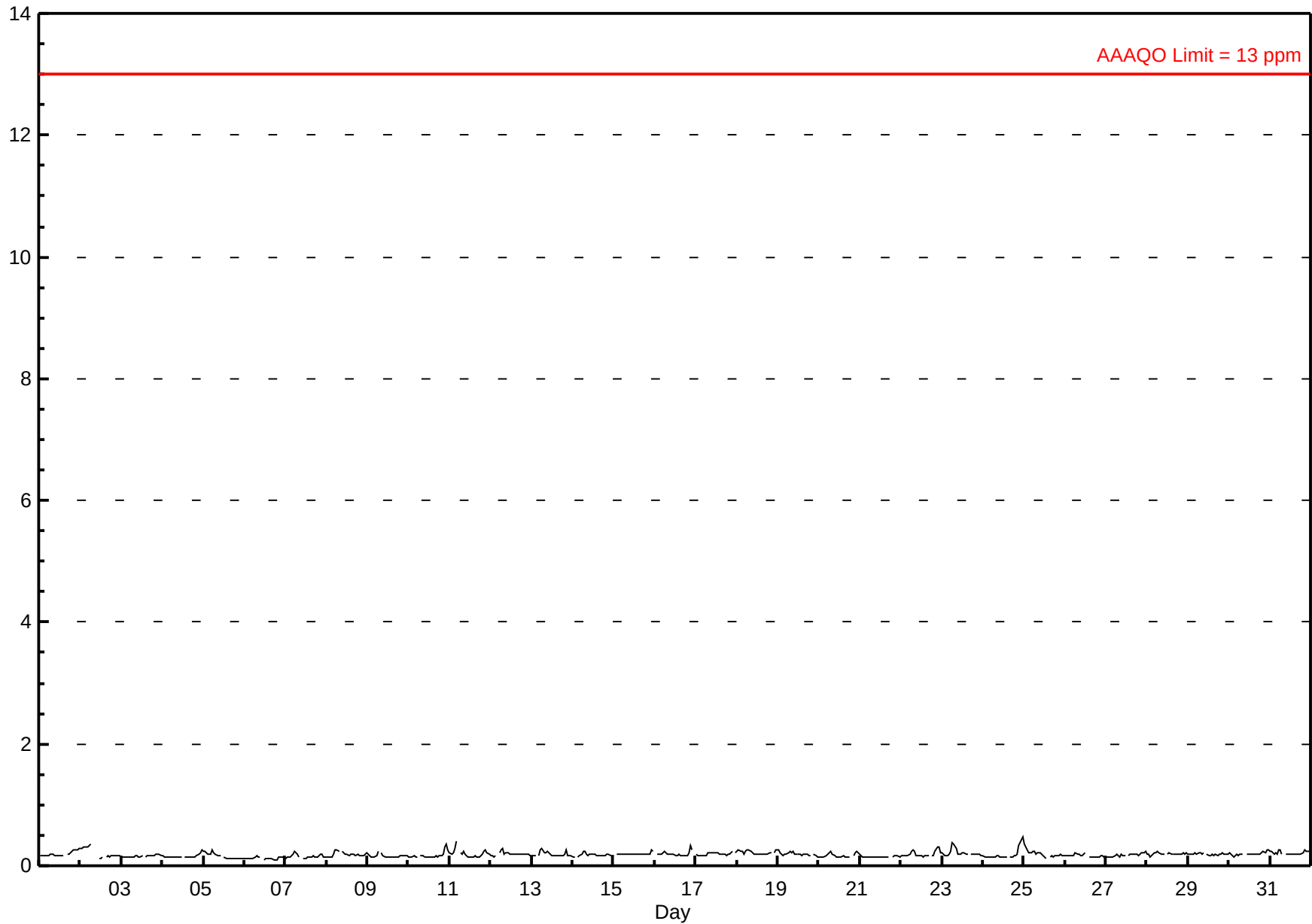
Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.48 ppm on May 25 00:00 Maximum Daily Average: 0.22 ppm on May 18																								Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0			
Minimum Value: 0.1 ppm on May 6 12:00 Minimum Daily Average: 0.12 ppm on May 6 Maximum Diurnal Average: 0.22 ppm at hour 7 Minimum Diurnal Average: 0.16 ppm at hour 14 Monthly Average: 0.184 ppm Percentiles: P ₁ = 0.11 P ₁₀ = 0.14 Q ₁ = 0.15 Median = 0.18 Q ₃ = 0.20 P ₉₀ = 0.24 P ₉₉ = 0.35																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.19	0.29
2-May	0.3	0.3	0.3	0.3	0.3	0.3	0.4	C	C	C	C	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.35
3-May	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.19
4-May	0.2	0.1	0.2	0.1	0.1	0.1	0.1	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	0.2	0.2	0.2	0.3	0.16	0.26
5-May	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	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	0.16	0.26
6-May	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	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	0.2	0.1	0.1	0.12	0.16	
7-May	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	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	0.16	0.24	
8-May	0.1	0.1	0.1	0.2	0.2	0.3	0.3	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	0.2	0.2	0.2	0.2	0.19	0.26	
9-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	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	0.2	0.17	0.24	
10-May	0.2	0.2	0.1	0.2	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	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.17	0.35
11-May	0.2	0.2	0.2	0.3	0.4	A	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.20	0.40
12-May	0.2	0.2	0.2	0.2	A	0.2	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	0.19	0.29	
13-May	0.2	0.2	0.2	A	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	0.3	0.2	0.2	0.19	0.28	
14-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.25	
15-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.20	0.26	
16-May	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.20	0.33
17-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.23
18-May	0.2	0.3	0.2	0.2	0.2	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	A	0.2	0.3	0.22	0.27
19-May	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	A	0.2	0.2	0.2	0.19	0.25
20-May	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	A	0.2	0.2	0.2	0.2	0.17	0.24	
21-May	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	0.2	A	0.2	0.2	0.2	0.2	0.1	0.15	0.20	
22-May	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	A	0.2	0.2	0.2	0.3	0.3	0.2	0.19	0.32	
23-May	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.38	
24-May	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.19	0.48	
25-May	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.35	
26-May	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	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.22	
27-May	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	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	0.17	0.25	
28-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.24	
29-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.21	
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	0.3	0.3	0.20	0.25	
31-May	0.2	0.2	0.2	0.2	0.2	0.3	0.3	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	0.2	0.3	0.2	0.2	0.22	0.27	
0.19 0.18 0.17 0.17 0.18 0.20 0.22 0.21 0.19 0.18 0.18 0.17 0.17 0.16 0.17 0.16 0.17 0.17 0.17 0.17 0.19 0.21 0.21 0.21																								Diurnal Average			
0.35 0.31 0.31 0.30 0.40 0.34 0.38 0.37 0.29 0.24 0.22 0.20 0.22 0.21 0.20 0.20 0.20 0.20 0.21 0.24 0.27 0.33 0.44 0.48																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																											

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - May 2014



Hourly Maximums

Carbon Monoxide (CO) - ppm

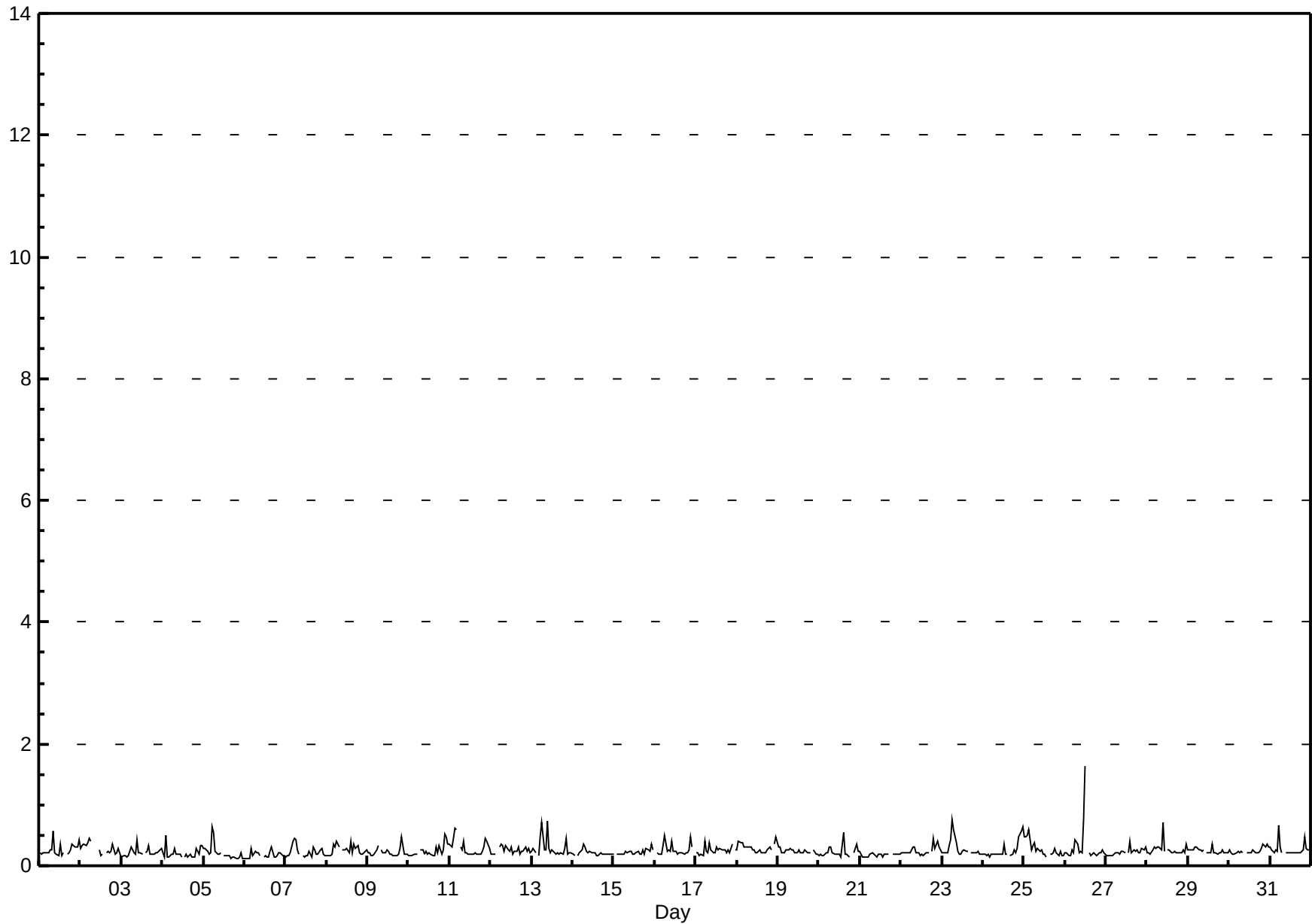
Henry Pirker - May 2014

Maximum Value: 1.63 ppm on May 26 13:00																					Maximum Daily Average: 0.31 ppm on May 26				Hours in Service: 744		
Minimum Value: 0.1 ppm on May 6 04:00																					Minimum Daily Average: 0.18 ppm on May 6				Hours of Data: 708		
Maximum Diurnal Average: 0.34 ppm at hour 7																					Minimum Diurnal Average: 0.19 ppm at hour 14				Hours of Missing Data: 36		
Monthly Average: 0.246 ppm																					Percentiles: P ₁ = 0.12 P ₁₀ = 0.16 Q ₁ = 0.19 Median = 0.21 Q ₃ = 0.26 P ₉₀ = 0.35 P ₉₉ = 0.65				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-May	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.2	0.2	0.2	0.4	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.26	0.56	
2-May	0.3	0.3	0.4	0.3	0.4	0.5	0.4	C	C	C	C	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.28	0.46	
3-May	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.22	0.43	
4-May	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	A	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.21	0.51	
5-May	0.3	0.3	0.2	0.2	0.2	0.6	0.5	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.22	0.63	
6-May	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.30	
7-May	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.23	0.44	
8-May	0.2	0.2	0.2	0.2	0.4	0.3	0.4	0.3	A	0.3	0.3	0.3	0.3	0.2	0.4	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.26	0.41	
9-May	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.22	0.48	
10-May	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.5	0.5	0.4	0.25	0.53	
11-May	0.4	0.3	0.4	0.6	0.6	A	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.30	0.61	
12-May	0.2	0.2	0.2	0.2	A	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.25	0.36	
13-May	0.2	0.3	0.2	A	0.2	0.5	0.7	0.3	0.3	0.7	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.29	0.74	
14-May	0.2	0.2	A	0.2	0.2	0.3	0.4	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	0.21	0.36	
15-May	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	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.23	0.35	
16-May	A	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	A	0.26	0.50	
17-May	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.4	A	0.3	0.25	0.40	
18-May	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	A	0.4	0.5	0.29	0.48	
19-May	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	A	0.3	0.2	0.2	0.23	0.31	
20-May	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.2	0.23	0.55	
21-May	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.18	0.25	
22-May	0.2	0.2	0.2	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	0.2	A	0.2	0.5	0.3	0.4	0.3	0.3	0.25	0.46	
23-May	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28	0.75	
24-May	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	A	0.2	0.2	0.3	0.2	0.3	0.5	0.6	0.6	0.25	0.63	
25-May	0.5	0.5	0.5	0.6	0.3	0.3	0.4	0.2	0.3	0.2	0.3	0.2	0.2	0.1	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.28	0.58	
26-May	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.4	0.2	0.2	0.2	0.8	1.6	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.31	1.63	
27-May	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	0.4	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.22	0.40	
28-May	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.2	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.26	0.70	
29-May	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	A	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.24	0.36	
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.24	0.35
31-May	0.3	0.3	0.2	0.3	0.2	0.7	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	0.3	0.26	0.67	
0.23 0.22 0.23 0.23 0.25 0.30 0.34 0.27 0.26 0.27 0.23 0.22 0.28 0.19 0.24 0.20 0.23 0.20 0.22 0.23 0.26 0.27 0.27 0.26																									Diurnal Average		
0.49 0.47 0.51 0.61 0.60 0.67 0.75 0.58 0.56 0.74 0.41 0.75 1.63 0.25 0.55 0.25 0.37 0.28 0.34 0.46 0.48 0.53 0.58 0.63																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums

Carbon Monoxide (CO) - ppm

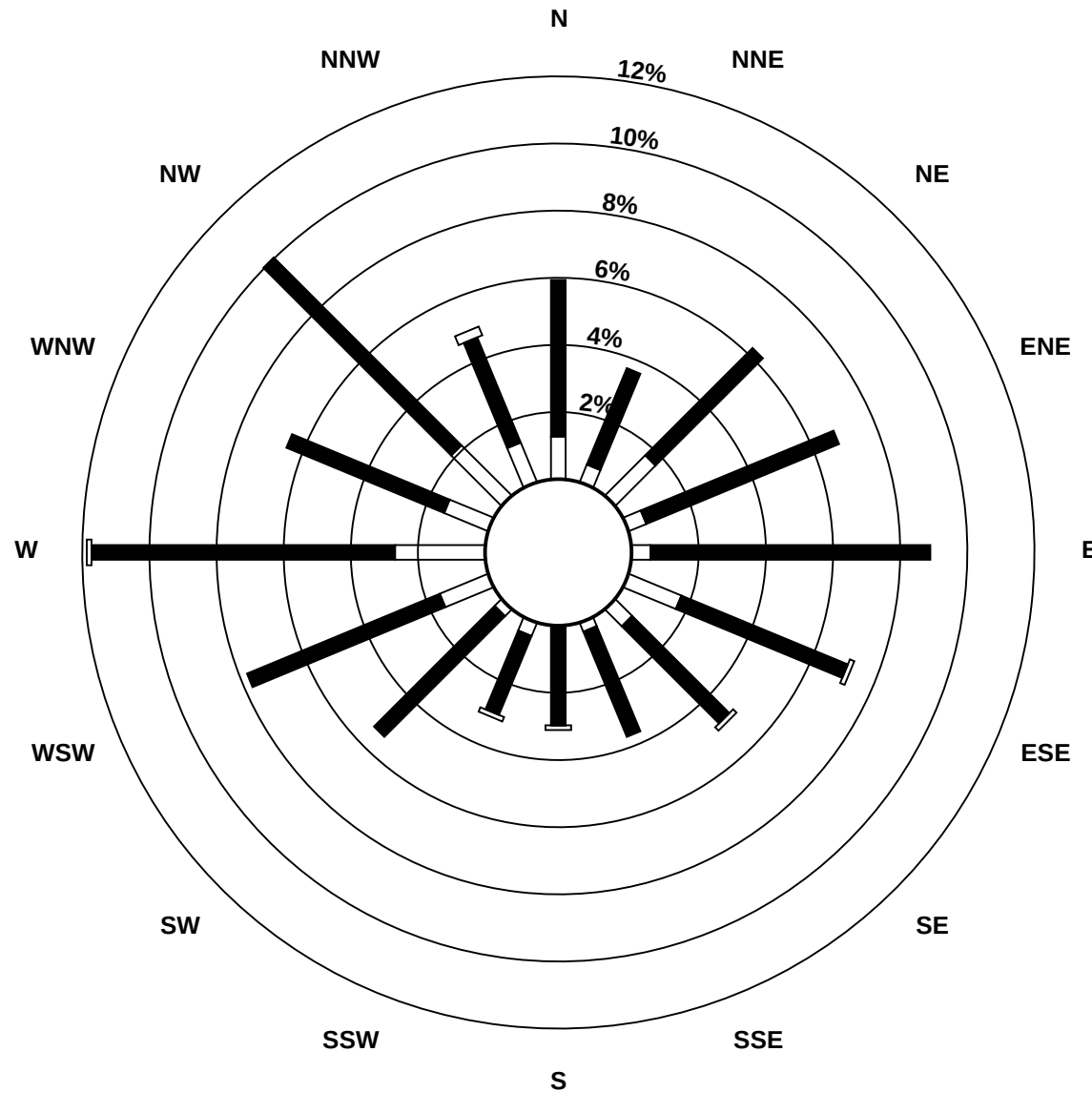
Henry Pirker - May 2014



Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - May 2014



Eight Hour Running Averages

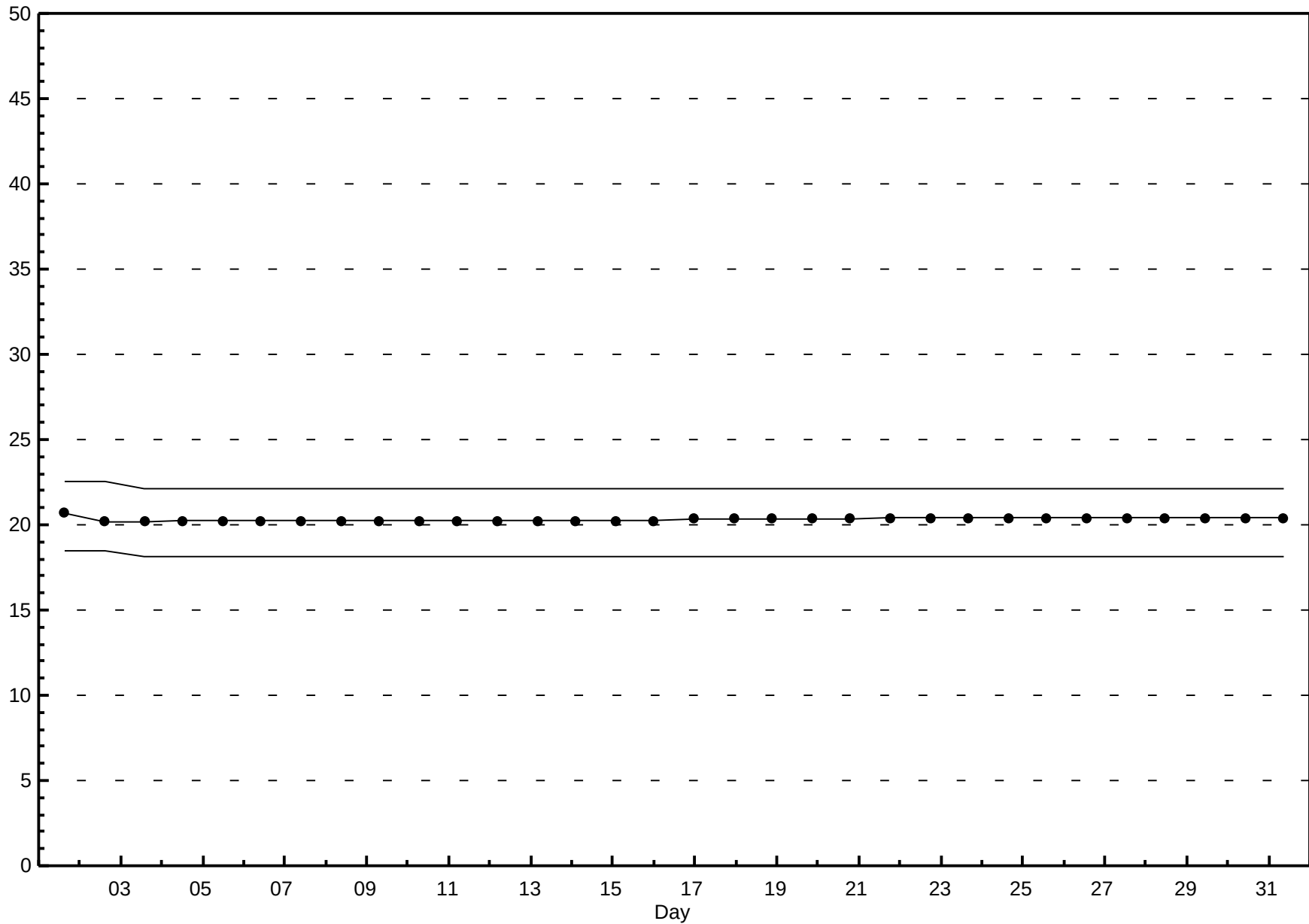
Carbon Monoxide (CO) - ppm

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.32 ppm on May 25 05:00																								Hours in Service: 744 Hours of Data: 736	
Minimum Value: 0.11 ppm on May 6 19:00																								Hours of Missing Data: 8 Hours of Calibration: 8	
Percentiles: P ₁ = 0.11 P ₁₀ = 0.15 Q ₁ = 0.16 Median = 0.18 Q ₃ = 0.20 P ₉₀ = 0.22 P ₉₉ = 0.31																								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-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
2-May	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	N	0.1	0.1	0.2	0.2	0.2	0.2	0.32
3-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
4-May	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.17
5-May	0.2	0.2	0.2	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	0.1	0.22
6-May	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	0.14
7-May	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	0.2	0.2	0.2	0.2	0.18
8-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
9-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
10-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
11-May	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
12-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
13-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
14-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
15-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
16-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
17-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
18-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
20-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.18
21-May	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.19
22-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
23-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
24-May	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	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.26
25-May	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	0.32
26-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.19
27-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
28-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
29-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
31-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
0.28 0.30 0.32 0.32 0.32 0.31 0.31 0.31 0.32 0.25 0.25 0.25 0.26 0.25 0.23 0.21 0.20 0.20 0.20 0.20 0.21 0.21 0.23 0.26																									
Diurnal Maximums																									
N - Not Valid																									
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

Span Responses

Carbon Monoxide (CO)
Henry Pirker - May 2014



Hourly Averages

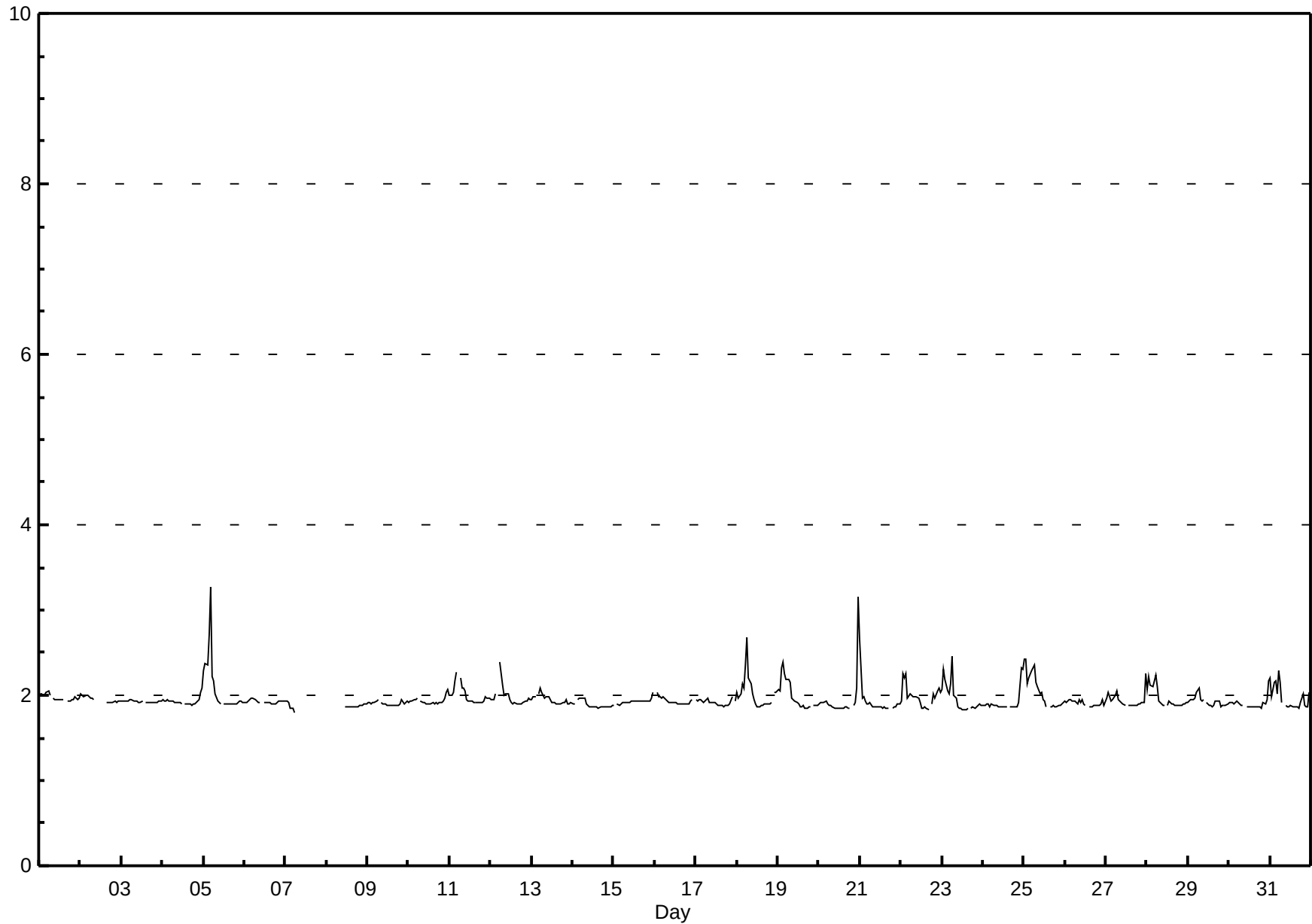
Total Hydrocarbons (THC) - ppm

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.26 ppm on May 5 05:00 Maximum Daily Average: 2.09 ppm on May 5																					Hours in Service: 744 Hours of Data: 680 Hours of Missing Data: 64 Hours of Calibration: 34 Percent Operational Time: 96.0					
Minimum Value: 1.8 ppm on May 7 06:00 Minimum Daily Average: 1.89 ppm on May 14 Maximum Diurnal Average: 2.06 ppm at hour 7 Minimum Diurnal Average: 1.88 ppm at hour 16 Monthly Average: 1.951 ppm Percentiles: P ₁ = 1.85 P ₁₀ = 1.86 Q ₁ = 1.89 Median = 1.92 Q ₃ = 1.96 P ₉₀ = 2.07 P ₉₉ = 2.42																										
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-May	2.0	2.0	2.0	2.0	2.0	2.1	2.0	M	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.97	2.05
2-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.01
3-May	1.9	1.9	1.9	1.9	1.9	2.0	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	1.93	1.95
4-May	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	2.0	2.0	2.1	1.93	2.08
5-May	2.3	2.4	2.4	2.7	3.3	2.2	2.2	2.0	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	2.09	3.26
6-May	1.9	1.9	1.9	2.0	2.0	2.0	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	1.92	1.97
7-May	1.9	1.9	1.9	1.9	1.9	1.8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	1.94
8-May	N	N	N	N	N	N	N	N	N	N	M	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	--	1.91
9-May	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	1.9	1.9	1.90	1.94
10-May	1.9	1.9	1.9	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	1.9	2.0	2.0	2.1	1.93	2.06
11-May	2.0	2.0	2.0	2.2	2.3	A	2.2	2.1	2.1	2.1	2.0	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	2.00	2.27
12-May	2.0	2.0	2.0	2.0	A	2.4	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.98	2.38
13-May	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.95	2.09
14-May	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	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	1.9	1.9	1.89	1.97
15-May	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	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.93	2.03
16-May	A	2.0	2.0	2.0	2.0	2.0	2.0	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	1.9	2.0	A	1.93	2.03
17-May	2.0	1.9	1.9	2.0	1.9	1.9	1.9	2.0	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	2.0	A	1.9	1.92	1.98
18-May	2.0	2.0	2.0	2.1	2.1	2.4	2.7	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.02	2.67
19-May	2.1	2.1	2.3	2.4	2.3	2.2	2.2	2.1	2.0	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	2.00	2.38
20-May	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.8	1.8	A	1.9	1.9	2.1	3.2	1.94	3.16
21-May	2.7	2.0	2.0	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	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.92	2.66
22-May	1.9	2.3	2.2	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.9	1.8	1.8	A	1.9	2.0	2.0	2.0	2.1	2.0	1.99	2.26
23-May	2.1	2.3	2.2	2.1	2.0	2.1	2.5	2.0	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.8	A	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.97	2.45
24-May	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	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.3	1.91	2.31
25-May	2.4	2.4	2.1	2.2	2.3	2.3	2.4	2.2	2.1	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.43
26-May	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.91	1.95	
27-May	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	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	2.2	1.94	2.25	
28-May	2.1	2.2	2.1	2.1	2.2	2.2	2.1	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	1.97	2.24
29-May	1.9	1.9	1.9	1.9	2.0	2.0	2.1	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	2.08
30-May	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	2.2	1.90	2.17	
31-May	2.2	2.0	2.2	2.2	2.0	2.3	2.1	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.0	1.9	1.9	2.0	1.97	2.28	
2.02 2.02 2.01 2.03 2.04 2.04 2.06 1.97 1.95 1.93 1.92 1.90 1.89 1.89 1.88 1.88 1.89 1.89 1.89 1.90 1.91 1.92 1.96 2.02																									Diurnal Average	
2.66 2.43 2.36 2.72 3.26 2.38 2.67 2.21 2.14 2.06 2.04 1.96 1.94 1.95 1.94 1.94 1.94 1.94 1.94 2.02 1.97 2.04 2.31 3.16																									Diurnal Maximum	
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																										

Hourly Averages

Total Hydrocarbons (THC) - ppm
Henry Pirker - May 2014



Hourly Maximums

Total Hydrocarbons (THC) - ppm

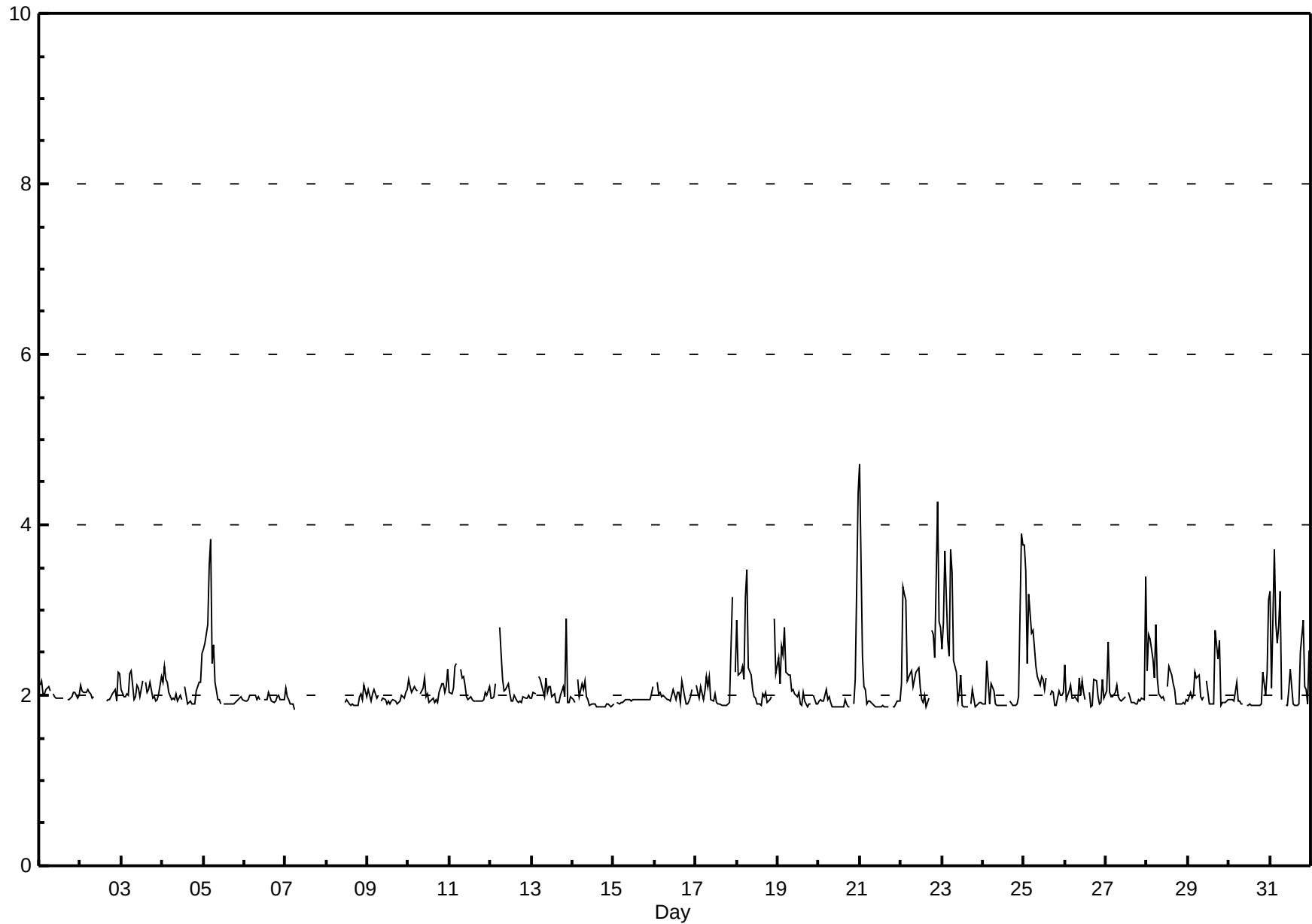
Henry Pirker - May 2014

Maximum Value: 4.70 ppm on May 21 01:00																								Maximum Daily Average: 2.47 ppm on May 22										Hours in Service: 744	
Minimum Value: 1.8 ppm on May 7 06:00																								Minimum Daily Average: 1.95 ppm on May 14										Hours of Data: 680	
Maximum Diurnal Average: 2.32 ppm at hour 24																								Minimum Diurnal Average: 1.93 ppm at hour 16										Hours of Missing Data: 64	
Monthly Average: 2.096 ppm																								Percentiles: P ₁ = 1.86 P ₁₀ = 1.88 Q ₁ = 1.92 Median = 1.98 Q ₃ = 2.11 P ₉₀ = 2.40 P ₉₉ = 3.76										Hours of Calibration: 34	
Percent Operational Time: 96.0																																			
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-May	2.1	2.2	2.0	2.0	2.1	2.1	2.0	M	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.16									
2-May	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	C	C	C	C	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.9	2.3	2.3	2.03	2.26									
3-May	2.1	2.0	2.0	2.0	2.0	2.3	2.3	2.0	2.0	2.1	2.1	2.0	2.2	A	2.2	2.0	2.1	2.2	2.0	2.0	1.9	1.9	2.0	2.2	2.06	2.30									
4-May	2.2	2.3	2.2	2.1	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.2	2.5	2.05	2.49									
5-May	2.5	2.6	2.8	3.5	3.8	2.4	2.6	2.2	2.0	2.0	1.9	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	2.24	3.83									
6-May	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.96	2.03									
7-May	2.1	2.0	2.0	1.9	1.9	1.8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.09									
8-May	N	N	N	N	N	N	N	N	N	N	M	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	--	2.12									
9-May	2.1	2.0	1.9	2.0	2.1	2.0	2.0	A	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.97	2.07									
10-May	2.2	2.1	2.0	2.1	2.1	2.0	A	2.0	2.1	2.2	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.1	2.3	2.05	2.30									
11-May	2.0	2.0	2.1	2.3	2.4	A	2.3	2.2	2.2	2.1	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.05	2.38									
12-May	2.0	2.0	2.0	2.1	A	2.8	2.5	2.2	2.1	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.05	2.79									
13-May	2.0	2.0	2.0	A	2.2	2.2	2.1	2.0	2.2	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.1	2.0	2.9	1.9	1.9	2.0	2.06	2.90									
14-May	2.0	1.9	A	2.2	2.0	2.1	2.1	2.2	2.0	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	1.9	1.95	2.18									
15-May	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.95	2.11										
16-May	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	1.9	2.0	2.0	1.9	2.2	2.0	1.9	1.9	1.9	2.0	2.1	A	2.00	2.17									
17-May	2.1	2.0	2.0	2.1	2.0	2.1	2.2	2.1	2.2	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.1	A	2.3	2.05	3.15									
18-May	2.9	2.2	2.3	2.3	2.2	3.1	3.5	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	A	2.9	2.3	2.25	3.48									
19-May	2.4	2.1	2.6	2.5	2.8	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	2.11	2.80									
20-May	1.9	1.9	1.9	1.9	2.1	1.9	2.0	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	2.2	3.3	4.4	2.09	4.38									
21-May	4.7	2.5	2.1	2.1	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	A	1.9	1.9	1.9	1.9	1.9	2.05	4.70									
22-May	2.1	3.3	3.2	3.1	2.2	2.3	2.3	2.1	2.2	2.3	2.3	2.1	2.0	1.9	2.0	1.9	2.0	A	2.8	2.7	2.4	4.3	2.9	2.8	2.47	4.27									
23-May	2.5	2.8	3.7	2.6	2.5	3.7	3.4	2.4	2.3	1.9	2.0	2.2	1.9	1.9	1.9	1.9	A	1.9	2.1	1.9	1.9	1.9	1.9	1.9	2.31	3.71									
24-May	1.9	1.9	2.4	2.2	1.9	2.1	2.1	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	3.9	3.8	2.11	3.91									
25-May	3.8	3.5	2.4	3.2	2.7	2.8	2.6	2.3	2.2	2.1	2.2	2.2	2.1	2.2	A	2.0	2.1	2.0	1.9	1.9	2.1	2.0	2.0	2.0	2.35	3.76									
26-May	2.4	1.9	2.1	2.1	2.0	2.0	2.0	1.9	2.2	2.0	2.2	2.0	1.9	A	2.0	1.9	1.9	2.2	2.2	2.0	1.9	1.9	2.2	2.0	2.03	2.36									
27-May	2.1	2.6	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	3.4	2.06	3.38									
28-May	2.3	2.7	2.7	2.4	2.2	2.8	2.2	2.0	2.0	2.0	1.9	A	2.1	2.3	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.15	2.83									
29-May	1.9	2.0	2.0	2.0	2.3	2.2	2.2	2.0	2.0	2.0	A	2.2	1.9	1.9	1.9	1.9	2.8	2.4	2.6	1.9	1.9	1.9	1.9	1.9	2.07	2.76									
30-May	1.9	1.9	1.9	1.9	2.1	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	2.3	2.0	2.3	3.1	2.00	3.12									
31-May	3.2	2.1	3.7	2.9	2.6	2.8	3.2	1.9	A	1.9	1.9	2.1	2.3	1.9	1.9	1.9	1.9	1.9	2.5	2.9	2.1	2.1	1.9	2.5	2.35	3.71									
2.32 2.24 2.27 2.27 2.20 2.26 2.27 2.05 2.04 2.00 1.99 2.00 1.96 1.95 1.95 1.93 1.97 1.95 2.01 2.00 2.03 2.10 2.18 2.32																								Diurnal Average											
4.70 3.45 3.71 3.53 3.83 3.71 3.48 2.40 2.27 2.26 2.32 2.24 2.31 2.33 2.24 2.13 2.76 2.42 2.76 2.89 2.90 4.27 3.91 4.38																								Diurnal Maximum											
C - Calibration				M - Maintenance				N - Not Valid				A - Automated Daily Zero Span																							

Hourly Maximums

Total Hydrocarbons (THC) - ppm

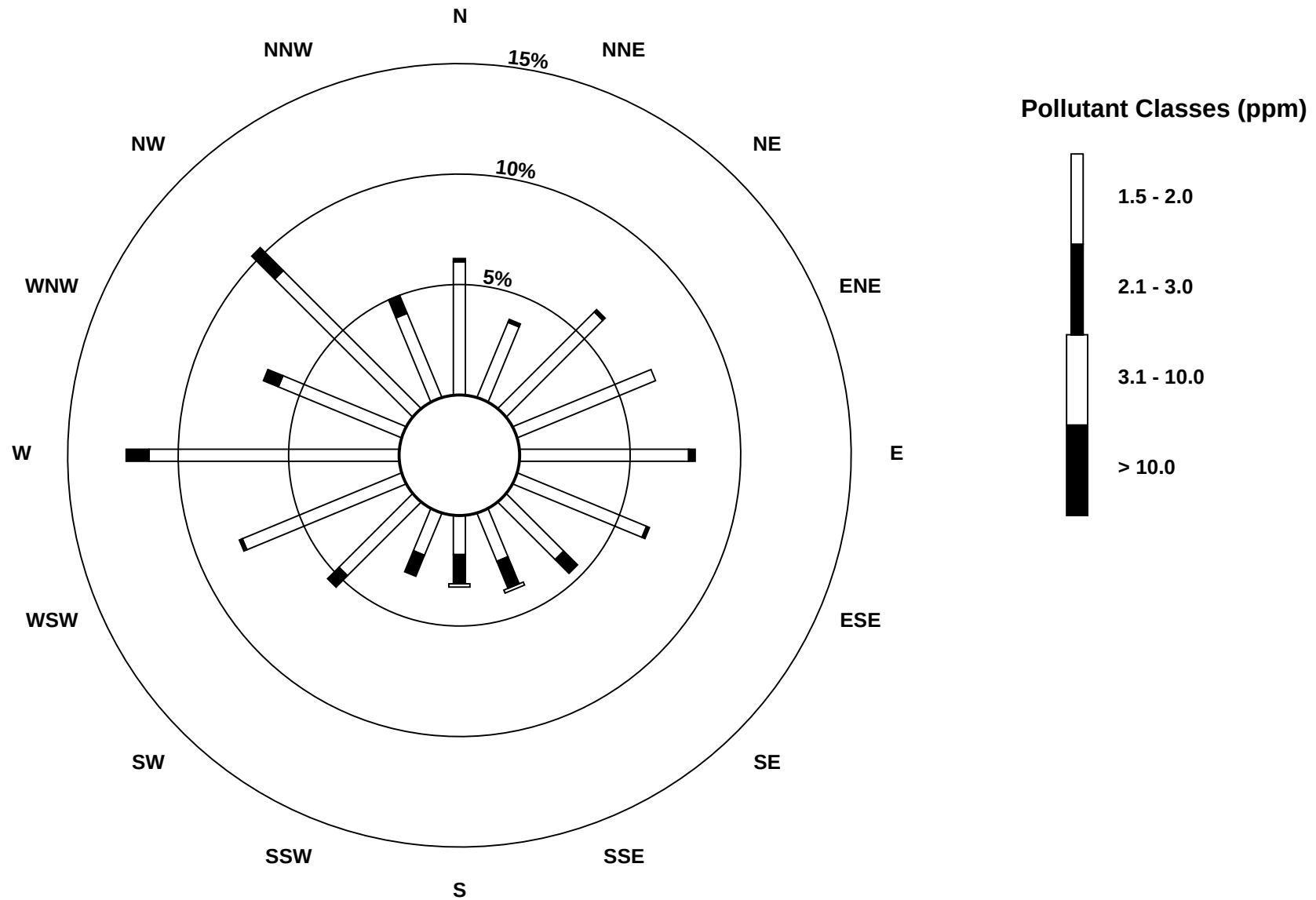
Henry Pirker - May 2014



Pollutant Rose

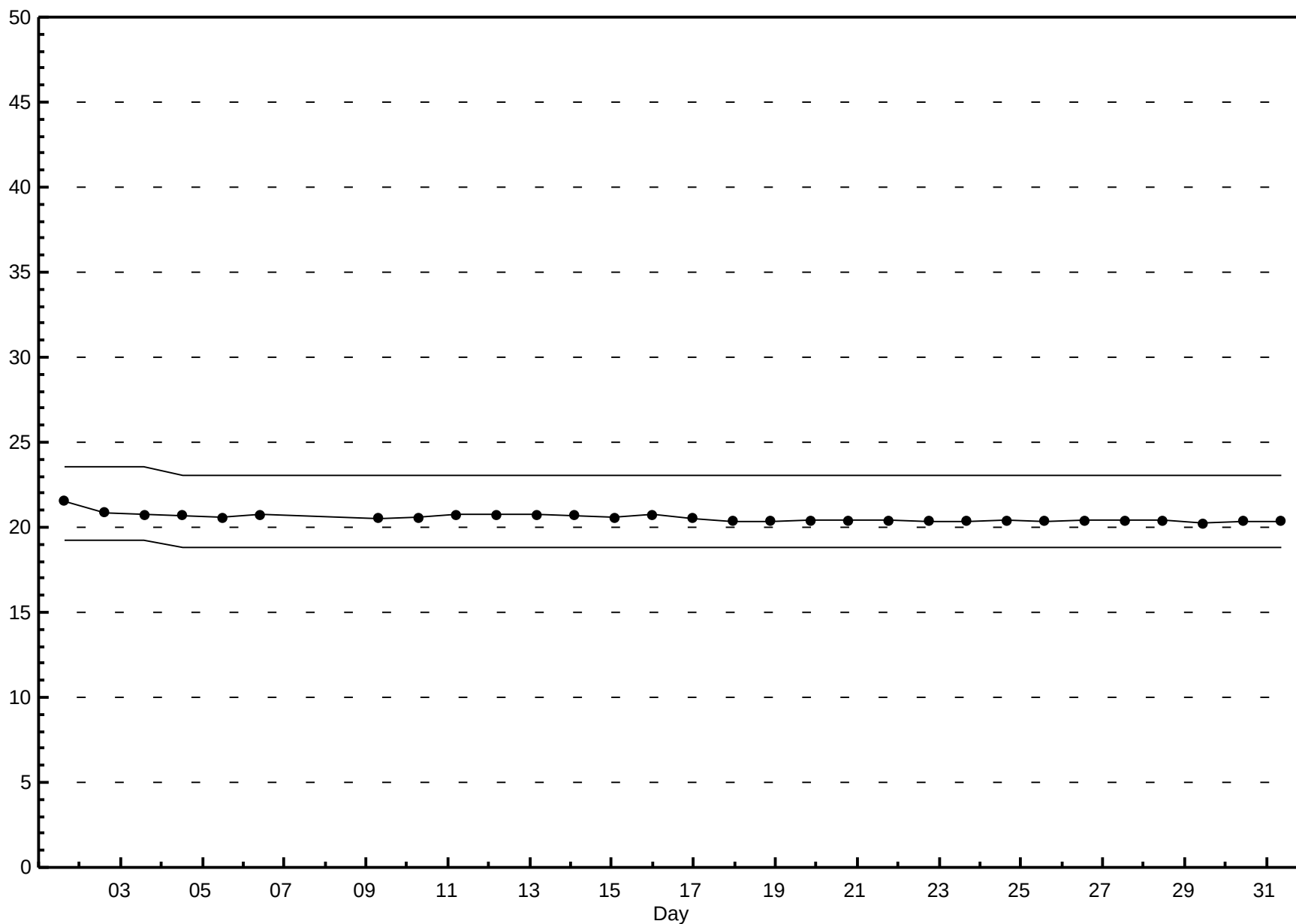
Total Hydrocarbons (THC) - ppm

Henry Pirker - May 2014



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - May 2014



Hourly Averages

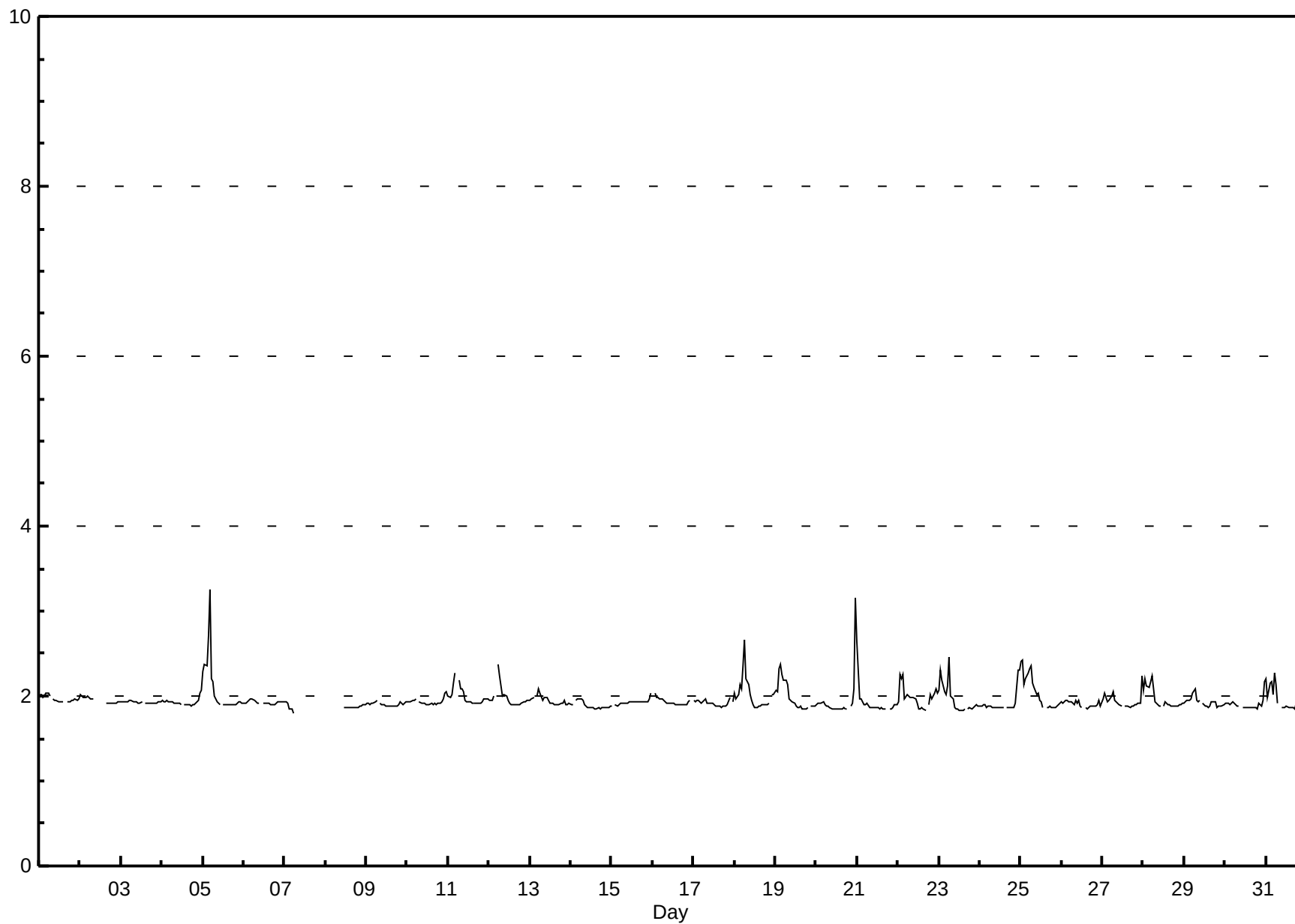
Methane (CH₄) - ppm

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.26 ppm on May 5 05:00 Maximum Daily Average: 2.08 ppm on May 5																				Hours in Service: 744 Hours of Data: 680 Hours of Missing Data: 64 Hours of Calibration: 34 Percent Operational Time: 96.0						
Minimum Value: 1.8 ppm on May 7 06:00 Minimum Daily Average: 1.89 ppm on May 14 Maximum Diurnal Average: 2.06 ppm at hour 7 Minimum Diurnal Average: 1.88 ppm at hour 16 Monthly Average: 1.949 ppm Percentiles: P ₁ = 1.84 P ₁₀ = 1.86 Q ₁ = 1.88 Median = 1.92 Q ₃ = 1.96 P ₉₀ = 2.07 P ₉₉ = 2.42																										
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-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	M	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.97	2.04
2-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.01
3-May	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.95
4-May	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	2.0	2.0	2.1	1.93	2.07
5-May	2.3	2.4	2.4	2.7	3.3	2.2	2.2	2.0	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	2.08	3.26
6-May	1.9	1.9	1.9	1.9	2.0	2.0	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	1.92	1.97
7-May	1.9	1.9	1.9	1.8	1.8	1.8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	1.94
8-May	N	N	N	N	N	N	N	N	N	N	M	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	--	1.90
9-May	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	1.9	1.9	1.90	1.94
10-May	1.9	1.9	1.9	1.9	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	1.9	2.0	2.0	2.1	1.93	2.05
11-May	2.0	2.0	2.0	2.2	2.3	A	2.2	2.1	2.1	2.1	2.0	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	2.00	2.27
12-May	2.0	2.0	2.0	2.0	A	2.4	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.98	2.38
13-May	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.95	2.08
14-May	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	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	1.9	1.9	1.89	1.97
15-May	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	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.93	2.03
16-May	A	2.0	2.0	2.0	2.0	2.0	2.0	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	2.0	A	1.9	1.93	2.03
17-May	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	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	2.0	A	1.9	1.92	1.98
18-May	2.0	2.0	2.0	2.1	2.1	2.4	2.7	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.02	2.67
19-May	2.1	2.1	2.3	2.4	2.2	2.2	2.2	2.1	2.0	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	2.00	2.38
20-May	1.9	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	1.9	1.9	1.8	1.8	A	1.9	1.9	2.1	3.2	1.94	3.15
21-May	2.6	2.0	2.0	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	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.91	2.65
22-May	1.9	2.3	2.2	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.9	1.8	1.8	A	1.9	2.0	2.0	2.0	2.1	2.0	1.99	2.26
23-May	2.1	2.3	2.2	2.1	2.0	2.1	2.4	2.0	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.8	A	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.96	2.45
24-May	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	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.3	1.91	2.31
25-May	2.4	2.4	2.1	2.2	2.3	2.3	2.4	2.2	2.1	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.42
26-May	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.91	1.95	
27-May	2.0	2.0	2.0	1.9	1.9	2.0	2.0	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	2.2	1.94	2.24	
28-May	2.1	2.2	2.1	2.1	2.2	2.2	2.1	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	1.97	2.23
29-May	1.9	1.9	1.9	1.9	2.0	2.0	2.1	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	1.92	2.08
30-May	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	2.2	1.90	2.17	
31-May	2.2	2.0	2.1	2.2	2.0	2.3	2.1	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.0	1.9	1.9	1.9	2.0	1.96	2.27
2.01 2.02 2.01 2.03 2.04 2.04 2.06 1.97 1.95 1.93 1.92 1.90 1.89 1.89 1.88 1.88 1.88 1.89 1.89 1.90 1.91 1.92 1.96 2.02																								Diurnal Average		
2.65 2.42 2.35 2.71 3.26 2.38 2.67 2.20 2.13 2.05 2.03 1.96 1.93 1.94 1.94 1.94 1.94 1.94 1.94 2.02 1.97 2.04 2.31 3.15																								Diurnal Maximum		
C - Calibration				M - Maintenance				N - Not Valid				A - Automated Daily Zero Span														

Hourly Averages

Methane (CH₄) - ppm
Henry Pirker - May 2014



Hourly Maximums

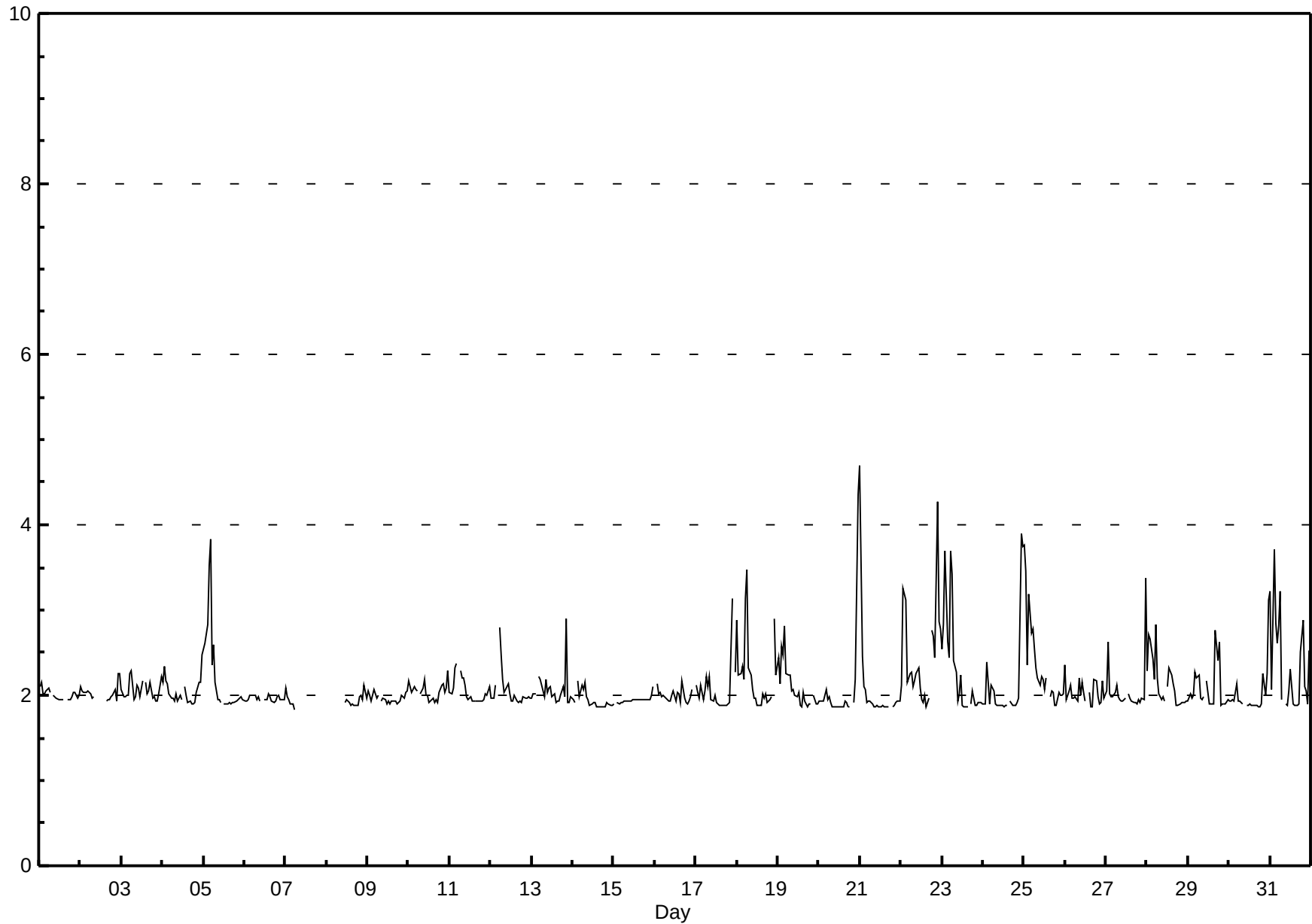
Methane (CH₄) - ppm

Henry Pirker - May 2014

Maximum Value: 4.70 ppm on May 21 01:00																								Maximum Daily Average: 2.47 ppm on May 22										Hours in Service: 744	
Minimum Value: 1.8 ppm on May 7 06:00																								Minimum Daily Average: 1.94 ppm on May 14										Hours of Data: 680	
Maximum Diurnal Average: 2.32 ppm at hour 24																								Minimum Diurnal Average: 1.93 ppm at hour 16										Hours of Missing Data: 64	
Monthly Average: 2.093 ppm																								Percentiles: P ₁ = 1.87 P ₁₀ = 1.88 Q ₁ = 1.92 Median = 1.98 Q ₃ = 2.11 P ₉₀ = 2.39 P ₉₉ = 3.75										Hours of Calibration: 34	
																								Percent Operational Time: 96.0											
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-May	2.1	2.2	2.0	2.0	2.1	2.1	2.0	M	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	2.0	2.0	2.0	2.00	2.15									
2-May	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	C	C	C	C	1.9	A	1.9	1.9	1.9	2.0	2.0	2.1	1.9	2.3	2.2	2.03	2.26									
3-May	2.1	2.0	2.0	2.0	2.0	2.2	2.3	2.0	2.0	2.1	2.1	2.0	2.2	A	2.2	2.0	2.1	2.2	2.0	2.0	1.9	1.9	2.0	2.2	2.06	2.29									
4-May	2.2	2.3	2.2	2.1	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.5	2.04	2.48									
5-May	2.5	2.6	2.8	3.5	3.8	2.4	2.6	2.2	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	2.0	2.0	1.9	2.23	3.83									
6-May	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	A	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.96	2.02									
7-May	2.1	2.0	1.9	1.9	1.9	1.8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.08									
8-May	N	N	N	N	N	N	N	N	N	N	M	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.1	2.0	--	2.11									
9-May	2.1	2.0	1.9	2.0	2.1	2.0	2.0	A	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.96	2.06									
10-May	2.2	2.1	2.0	2.1	2.1	2.0	A	2.0	2.1	2.2	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.1	2.3	2.05	2.29									
11-May	2.0	2.0	2.1	2.3	2.4	A	2.3	2.2	2.2	2.1	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.05	2.38									
12-May	2.0	2.0	2.0	2.1	A	2.8	2.5	2.2	2.0	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.05	2.79									
13-May	2.0	2.0	2.0	A	2.2	2.2	2.1	2.0	2.2	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.1	2.0	2.9	1.9	1.9	2.0	2.06	2.90									
14-May	2.0	1.9	A	2.2	2.0	2.1	2.1	2.2	2.0	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	1.9	1.94	2.18									
15-May	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	1.9	1.9	1.9	1.9	1.9	2.0	2.1	1.94	2.10										
16-May	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	1.9	2.0	2.0	1.9	2.2	2.0	1.9	1.9	1.9	2.0	2.1	A	1.99	2.17									
17-May	2.1	2.0	2.0	2.1	2.0	2.0	2.2	2.1	2.2	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.1	A	2.3	2.05	3.13									
18-May	2.9	2.2	2.3	2.3	2.2	3.1	3.5	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	A	2.9	2.2	2.25	3.47									
19-May	2.4	2.1	2.6	2.5	2.8	2.3	2.2	2.2	2.0	2.1	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	2.11	2.81									
20-May	1.9	1.9	1.9	1.9	2.1	1.9	2.0	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	2.2	3.2	4.4	2.09	4.36									
21-May	4.7	2.5	2.1	2.1	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	A	1.9	1.9	1.9	1.9	1.9	2.05	4.70									
22-May	2.1	3.3	3.2	3.1	2.2	2.2	2.3	2.1	2.2	2.3	2.3	2.1	1.9	1.9	2.0	1.9	2.0	A	2.8	2.7	2.4	4.3	2.9	2.8	2.47	4.26									
23-May	2.5	2.8	3.7	2.6	2.4	3.7	3.4	2.4	2.3	1.9	2.0	2.2	1.9	1.9	1.9	1.9	A	1.9	2.1	1.9	1.9	1.9	1.9	1.9	2.31	3.70									
24-May	1.9	1.9	2.4	2.1	1.9	2.1	2.1	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	3.9	3.8	2.11	3.90									
25-May	3.8	3.4	2.4	3.2	2.7	2.8	2.5	2.3	2.2	2.1	2.2	2.2	2.1	2.2	A	2.0	2.1	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.35	3.76									
26-May	2.3	1.9	2.0	2.1	2.0	2.0	2.0	1.9	2.2	2.0	2.2	2.0	1.9	A	2.0	1.9	1.9	2.2	2.2	2.0	1.9	1.9	2.2	2.0	2.03	2.35									
27-May	2.1	2.6	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	3.4	2.06	3.37									
28-May	2.3	2.7	2.7	2.4	2.2	2.8	2.2	2.0	2.0	2.0	1.9	A	2.1	2.3	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.15	2.83									
29-May	1.9	2.0	2.0	2.0	2.3	2.2	2.2	2.0	2.0	2.0	A	2.2	1.9	1.9	1.9	1.9	2.8	2.4	2.6	1.9	1.9	1.9	1.9	1.9	2.07	2.75									
30-May	1.9	1.9	1.9	1.9	2.1	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	2.3	2.0	2.3	3.1	2.00	3.12									
31-May	3.2	2.1	3.7	2.9	2.6	2.8	3.2	1.9	A	1.9	1.9	2.1	2.3	1.9	1.9	1.9	1.9	1.9	2.5	2.9	2.1	2.1	1.9	2.5	2.35	3.70									
2.32 2.23 2.27 2.26 2.20 2.26 2.27 2.05 2.03 2.00 1.99 1.99 1.96 1.95 1.95 1.93 1.97 1.95 2.01 2.00 2.02 2.10 2.18 2.32																									Diurnal Average										
4.70 3.45 3.70 3.53 3.83 3.70 3.47 2.40 2.27 2.25 2.32 2.24 2.30 2.33 2.24 2.13 2.75 2.41 2.76 2.89 2.90 4.26 3.90 4.36																									Diurnal Maximum										
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																																			

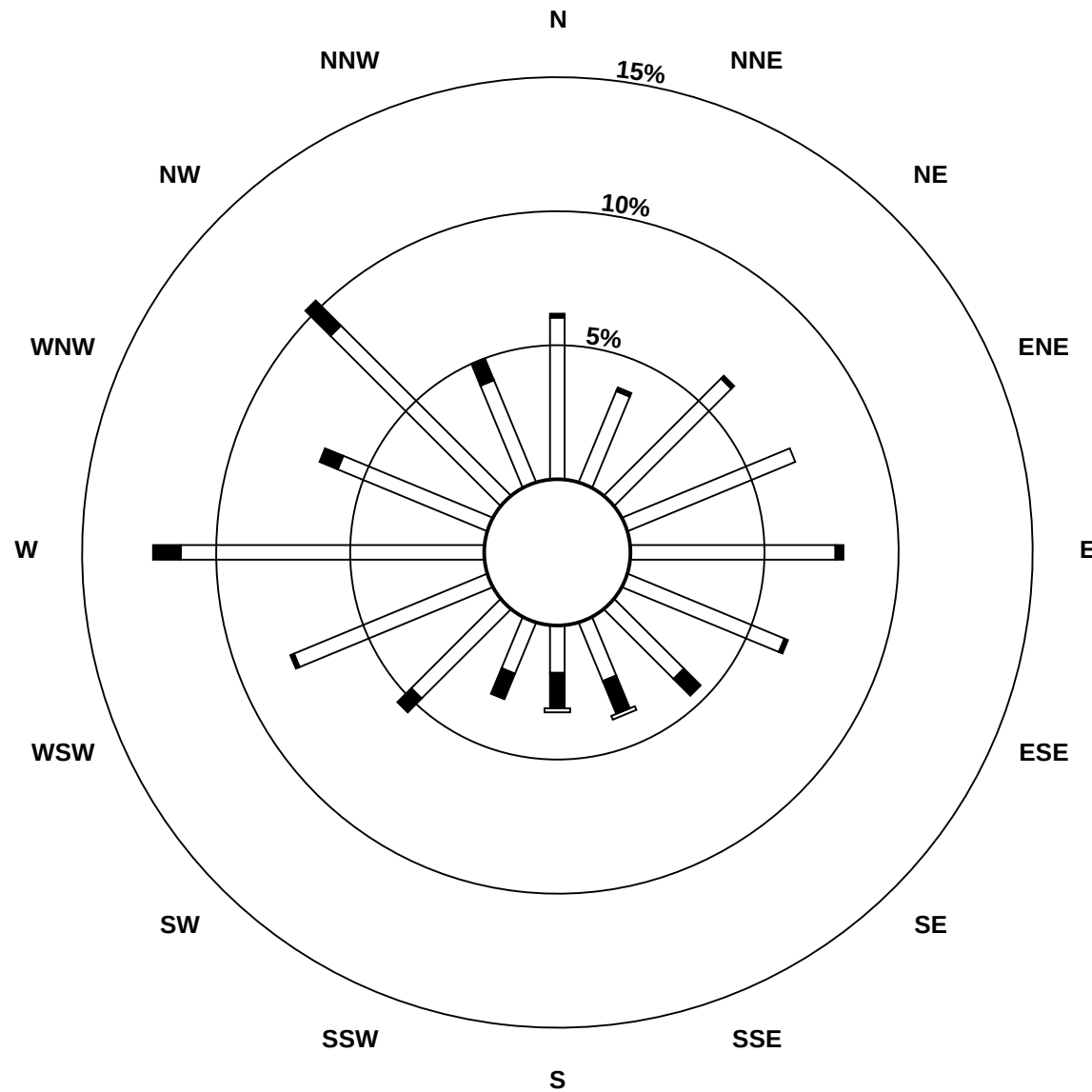
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - May 2014

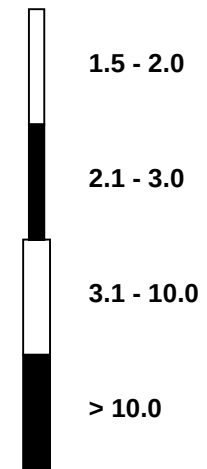


Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - May 2014

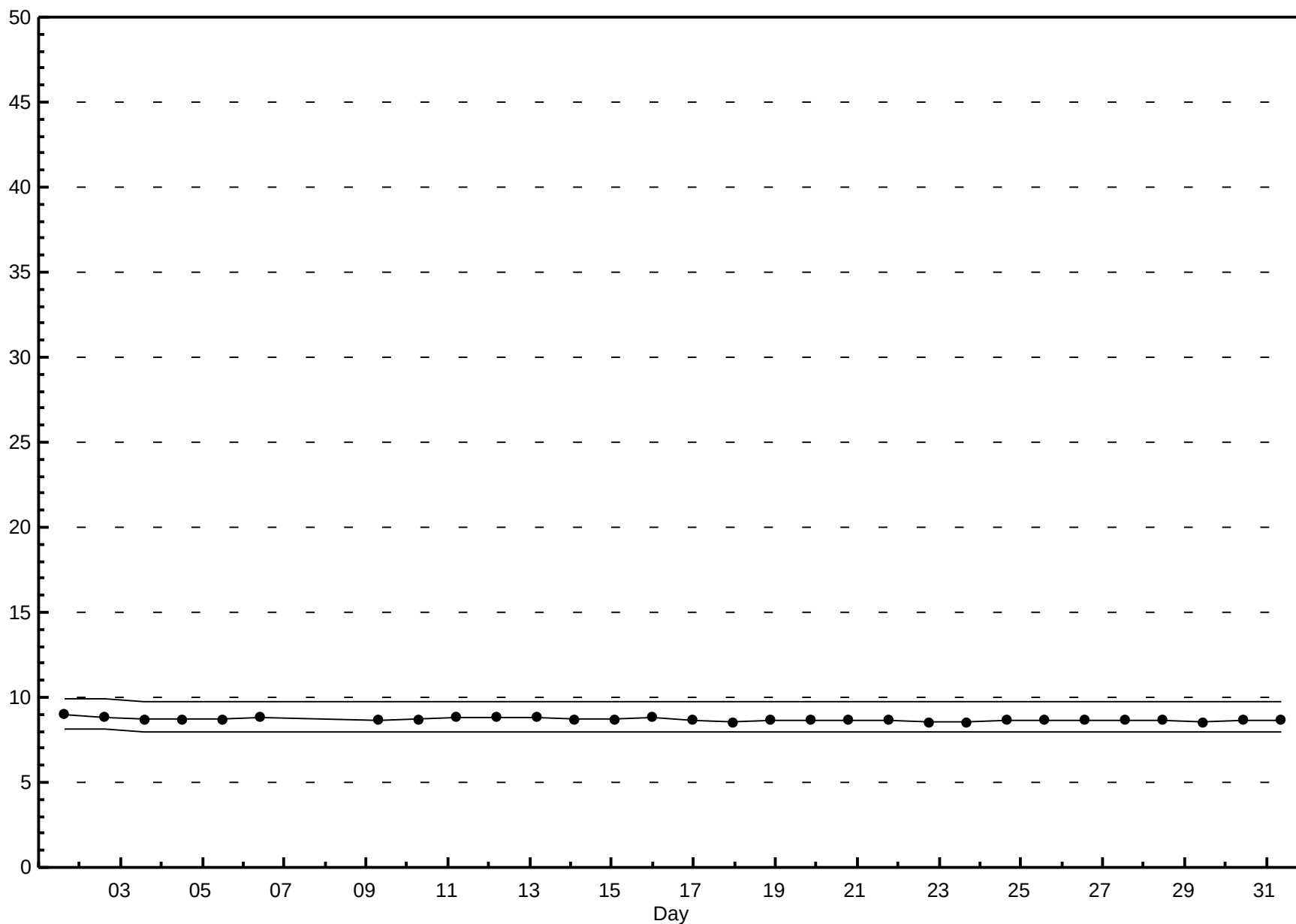


Pollutant Classes (ppm)



Span Responses

Methane (CH₄)
Henry Pirker - May 2014

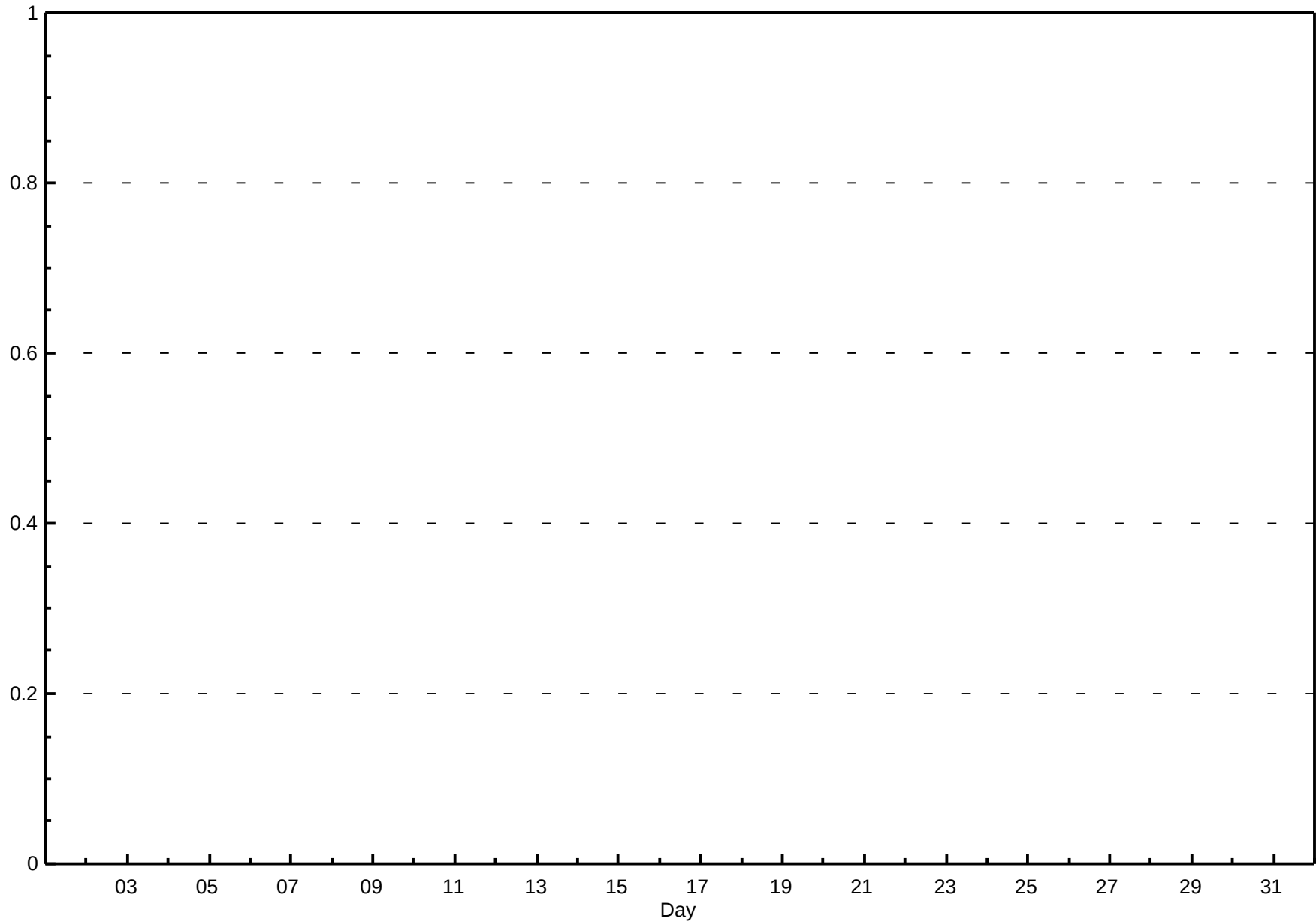


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.00 ppm on May 2 14:00 Maximum Daily Average: 0.00 ppm on May 18																				Hours in Service: 744 Hours of Data: 680 Hours of Missing Data: 64 Hours of Calibration: 34 Percent Operational Time: 96.0						
Minimum Value: 0.0 ppm on May 1 01:00 Maximum Diurnal Average: 0.00 ppm at hour 14 Monthly Average: 0.000 ppm										Minimum Daily Average: 0.00 ppm on May 1 Minimum Diurnal Average: 0.00 ppm at hour 19 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																
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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	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
2-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	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-May	0.0	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
4-May	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
5-May	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
6-May	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
7-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.00
8-May	N	N	N	N	N	N	N	N	N	N	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00
9-May	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
10-May	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
11-May	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
12-May	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
13-May	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
14-May	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
15-May	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
16-May	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	A	0.00	0.00
17-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	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	0.00	0.00
23-May	0.0	0.0	0.0	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-May	0.0	0.0	0.0	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
25-May	0.0	0.0	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
26-May	0.0	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-May	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-May	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-May	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-May	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
31-May	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																								Diurnal Average		
0.00 0.00																								Diurnal Maximum		
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																										

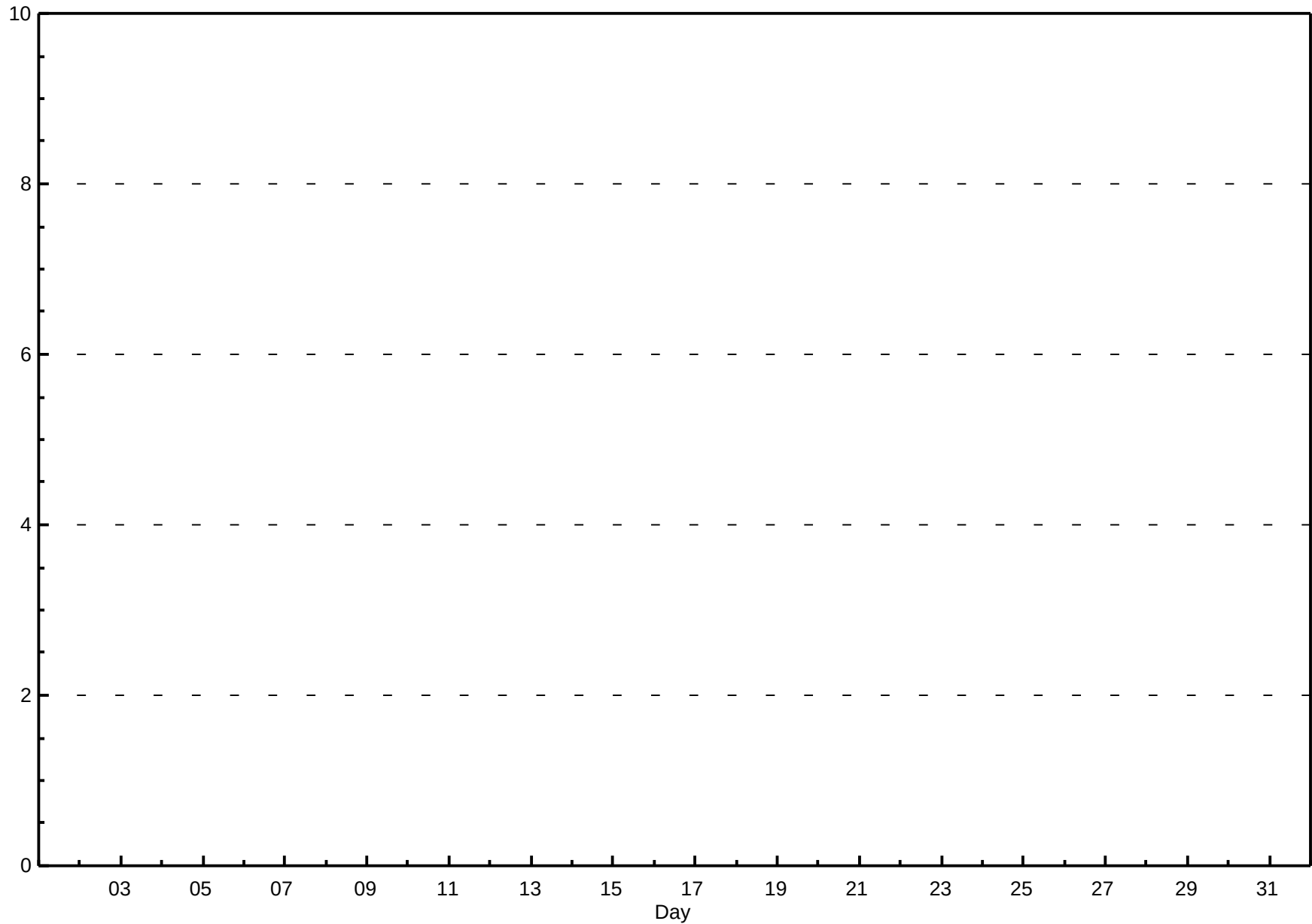


Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - May 2014

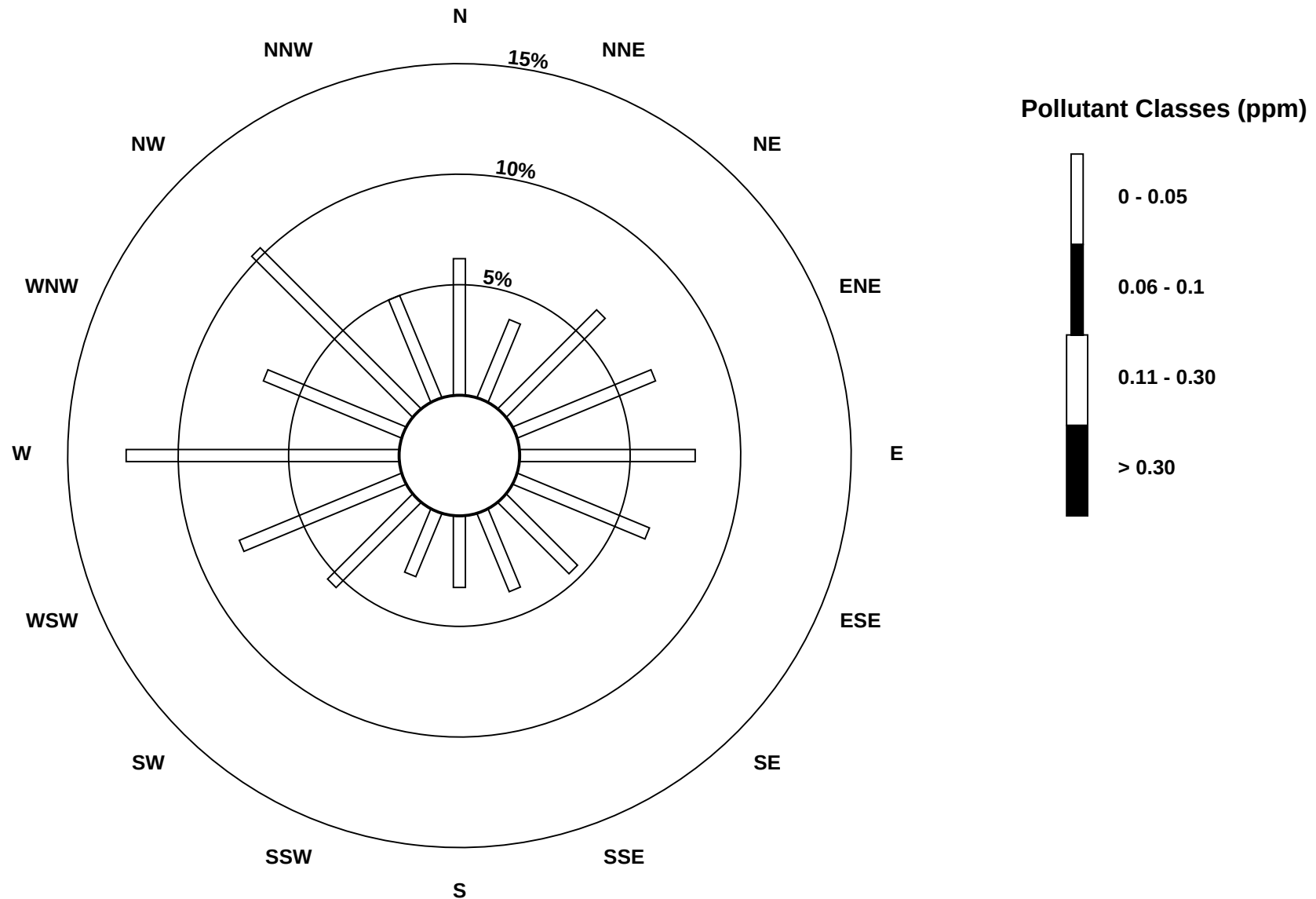
Maximum Value: 0.00 ppm on May 2 14:00																				Maximum Daily Average: 0.00 ppm on May 29					Hours in Service: 744	
Minimum Value: 0.0 ppm on May 13 11:00																				Minimum Daily Average: 0.00 ppm on May 14					Hours of Data: 680	
Maximum Diurnal Average: 0.00 ppm at hour 14																				Minimum Diurnal Average: 0.00 ppm at hour 18					Hours of Missing Data: 64	
Monthly Average: 0.001 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 of Calibration: 34	
																				Percent Operational Time: 96.0						
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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	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
2-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	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-May	0.0	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
4-May	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
5-May	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
6-May	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
7-May	0.0	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.00
8-May	N	N	N	N	N	N	N	N	N	N	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00
9-May	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
10-May	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
11-May	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
12-May	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
13-May	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
14-May	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
15-May	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
16-May	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	A	0.00	0.00
17-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	0.0	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-May	0.0	0.0	0.0	0.0	0.0	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	0.00	0.00
23-May	0.0	0.0	0.0	0.0	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
24-May	0.0	0.0	0.0	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
25-May	0.0	0.0	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
26-May	0.0	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-May	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-May	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-May	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-May	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
31-May	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
0.00 0.00																									Diurnal Average	
0.00 0.00																									Diurnal Maximum	
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																										

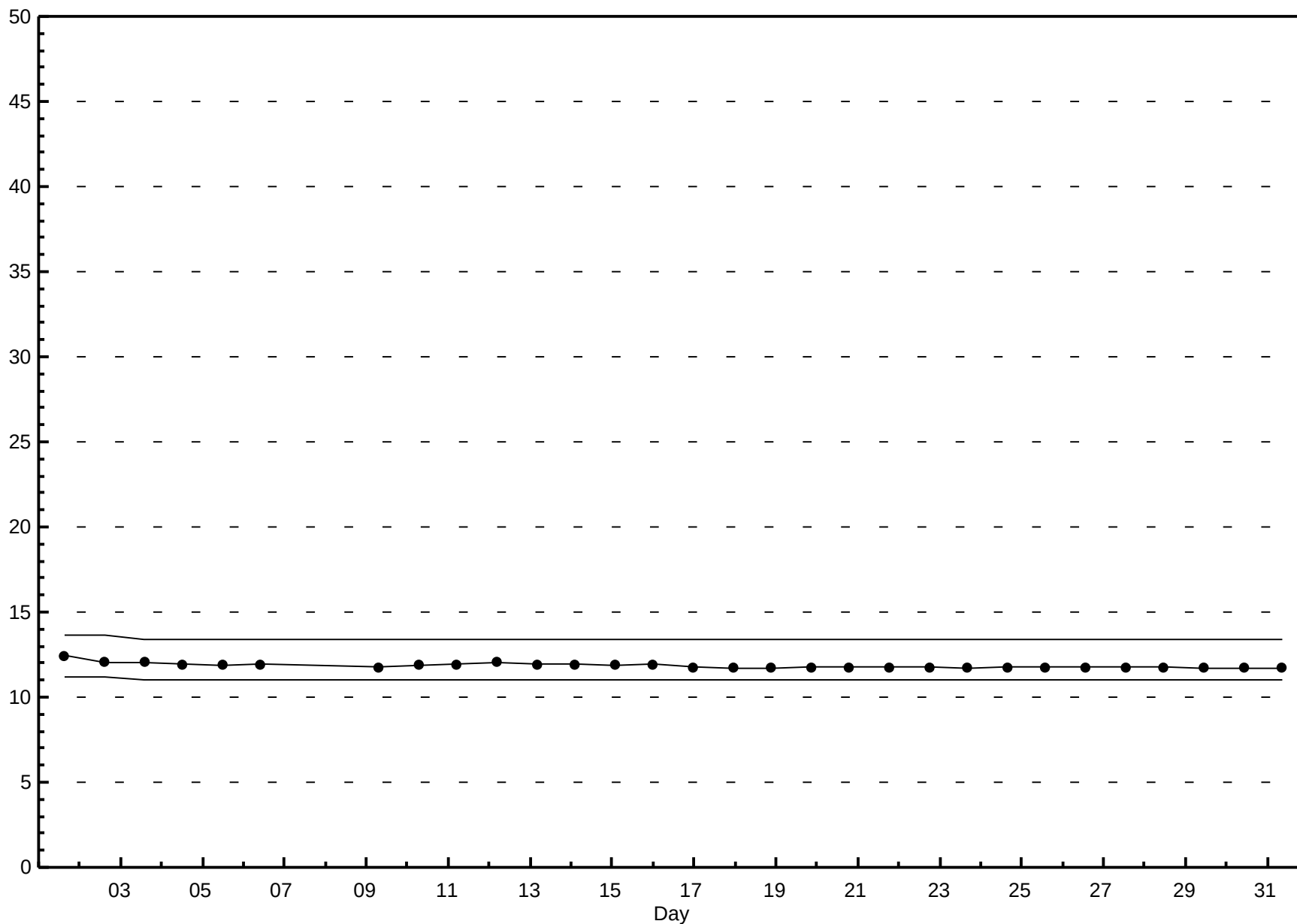


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - May 2014



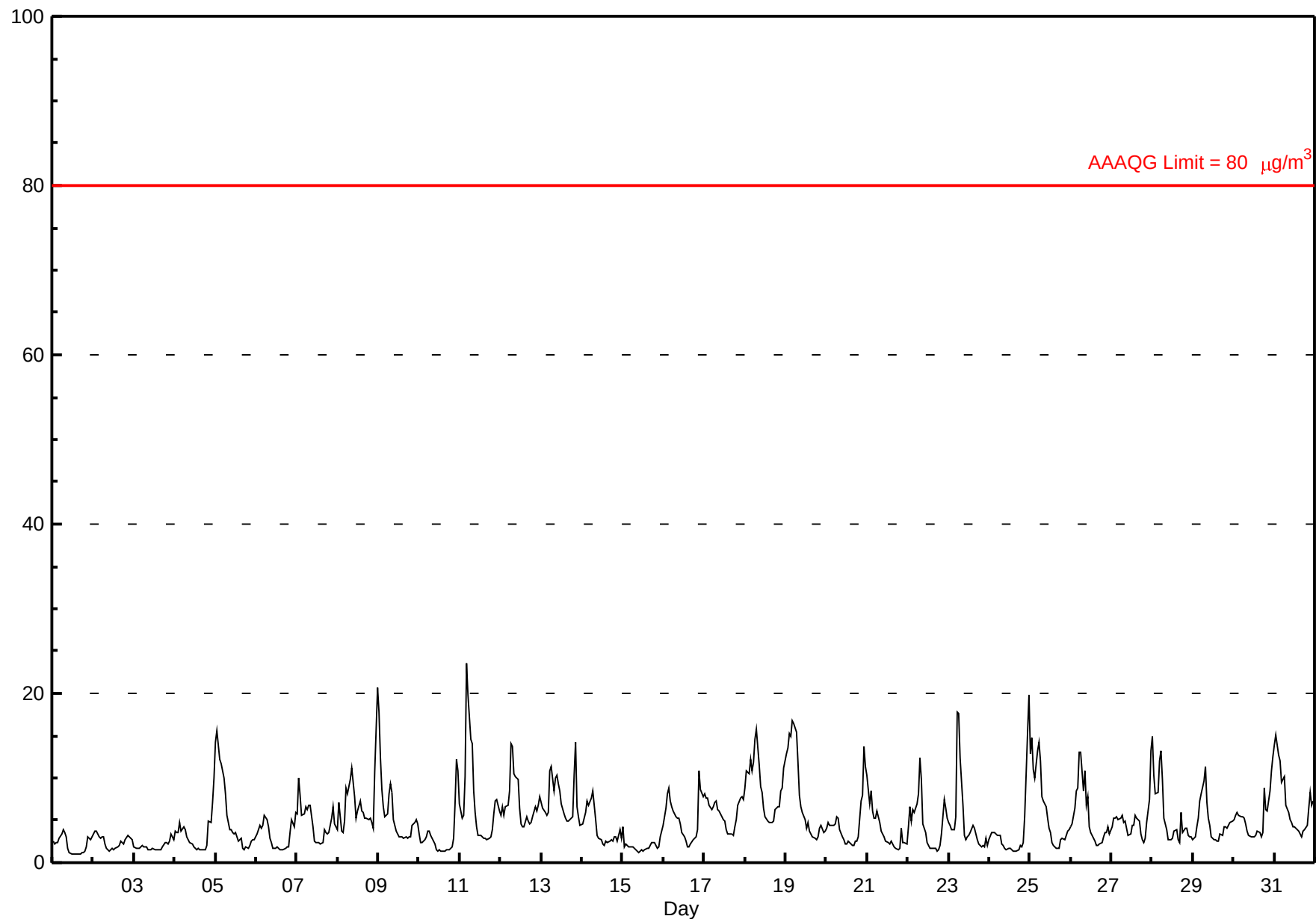


Hourly Averages

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

Henry Pirker - May 2014

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 23.5 µg/m³ on May 11 05:00																								Maximum Daily Average: 8.7 µg/m³ on May 18												Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0			
Minimum Value: 1 µg/m³ on May 1 12:00 Maximum Diurnal Average: 8.1 µg/m³ at hour 7 Monthly Average: 5.03 µg/m³												Minimum Daily Average: 1.9 µg/m³ on May 3 Minimum Diurnal Average: 2.7 µg/m³ at hour 17 Percentiles: P ₁ = 1.2 P ₁₀ = 1.7 Q ₁ = 2.5 Median = 4.0 Q ₃ = 6.5 P ₉₀ = 10.2 P ₉₉ = 17.5																											
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-May	3	2	2	2	3	3	4	4	3	2	1	1	1	1	1	1	1	1	1	1	2	3	3	3	2.1	4.0													
2-May	3	4	4	3	3	3	3	2	2	1	1	2	2	2	2	2	3	2	2	3	3	3	3	3	2.5	3.7													
3-May	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	3	3	1.9	3.3													
4-May	4	4	4	5	4	4	4	3	3	2	2	2	2	2	2	2	1	1	1	2	5	5	7	10	3.3	10.0													
5-May	14	16	12	12	11	10	8	6	4	4	4	3	4	3	3	3	2	2	2	2	2	3	3	3	5.5	15.6													
6-May	3	4	4	4	4	6	5	4	3	2	2	2	2	2	2	2	2	2	2	2	4	5	4	6	3.2	5.9													
7-May	6	10	8	6	6	7	6	7	7	4	3	2	2	2	2	2	4	4	3	4	5	7	5	4	4.8	10.0													
8-May	4	7	4	4	5	9	8	10	11	9	8	5	6	7	6	6	5	5	5	5	5	4	11	21	7.1	20.7													
9-May	18	12	9	7	5	6	8	9	8	5	4	3	3	3	3	3	3	3	3	3	4	5	5	5	5.7	17.8													
10-May	3	2	2	3	3	4	4	3	3	2	1	1	1	1	1	1	1	2	2	2	3	7	12	11	3.2	12.3													
11-May	7	5	6	10	23	20	15	14	8	6	4	3	3	3	3	3	3	3	3	4	6	7	7	6	7.2	23.5													
12-May	6	7	6	7	7	8	14	14	10	10	10	6	5	4	4	5	5	5	5	5	7	6	7	8	7.1	14.0													
13-May	7	6	6	6	6	11	11	8	10	10	9	8	7	6	5	5	5	5	5	10	14	7	5	4	7.5	14.2													
14-May	5	5	6	7	7	8	8	7	5	3	3	3	2	2	3	2	3	3	3	3	3	3	4	3	4.1	8.4													
15-May	4	2	2	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	3	4	2.0	4.2													
16-May	4	6	8	9	7	7	6	5	5	5	5	4	3	3	2	2	2	3	3	3	4	11	9	8	5.1	10.8													
17-May	8	8	8	7	6	7	7	7	6	6	5	5	5	4	3	3	3	3	4	5	7	8	8	7	5.9	8.1													
18-May	9	11	11	12	11	12	15	16	12	9	8	6	5	5	5	5	5	5	6	7	7	8	9	11	8.7	15.8													
19-May	13	14	15	15	17	16	15	12	8	7	6	5	4	5	4	3	3	3	3	3	4	4	4	4	4	7.8	16.8												
20-May	4	5	4	4	4	5	6	5	4	3	3	2	2	3	2	2	2	3	2	3	7	8	14	11	4.5	13.7													
21-May	10	7	8	6	5	5	6	5	4	3	3	2	2	2	2	2	2	2	2	2	4	2	2	2	3.9	10.4													
22-May	4	7	5	6	6	7	8	12	10	5	4	2	2	2	2	2	2	1	2	2	3	8	6	5	4.7	12.4													
23-May	5	4	4	4	5	18	18	12	7	3	3	3	3	4	4	4	3	3	2	2	2	2	3	2	5.0	17.9													
24-May	3	4	4	4	3	3	3	2	2	2	2	2	2	2	1	1	1	2	2	2	2	5	15	20	3.7	19.8													
25-May	13	15	11	10	13	14	12	8	7	7	5	4	4	2	2	2	2	2	3	3	3	3	4	4	6.3	14.7													
26-May	4	5	6	8	9	13	13	8	11	7	8	4	4	3	3	2	2	2	2	3	4	3	4	3	5.5	13.0													
27-May	4	5	5	5	5	5	6	5	5	4	3	3	4	4	6	5	5	3	3	2	3	5	7	13	4.9	13.2													
28-May	15	10	8	8	12	13	10	5	4	3	3	3	3	4	4	3	2	6	3	4	4	3	3	3	5.7	15.0													
29-May	3	3	4	5	7	8	10	11	7	5	4	3	3	3	3	2	3	3	4	4	4	4	5	5	4.8	11.4													
30-May	5	6	6	6	5	5	5	5	4	3	3	3	3	3	4	4	3	4	9	6	6	8	11	13	5.4	12.6													
31-May	14	15	13	12	9	10	10	7	6	5	5	4	4	4	4	3	3	4	4	4	6	8	7	7	7.1	15.0													
6.7 6.8 6.3 6.4 7.0 8.1 8.1 7.1 5.8 4.6 4.0 3.3 3.1 3.0 2.9 2.8 2.7 2.8 3.1 3.4 4.4 5.2 6.2 6.8 17.8 15.6 15.2 14.9 23.5 19.8 17.7 15.8 11.6 10.4 9.8 8.5 7.0 7.2 6.2 6.0 5.3 6.0 8.8 10.3 14.2 10.8 15.3 20.7																																							
Diurnal Average 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

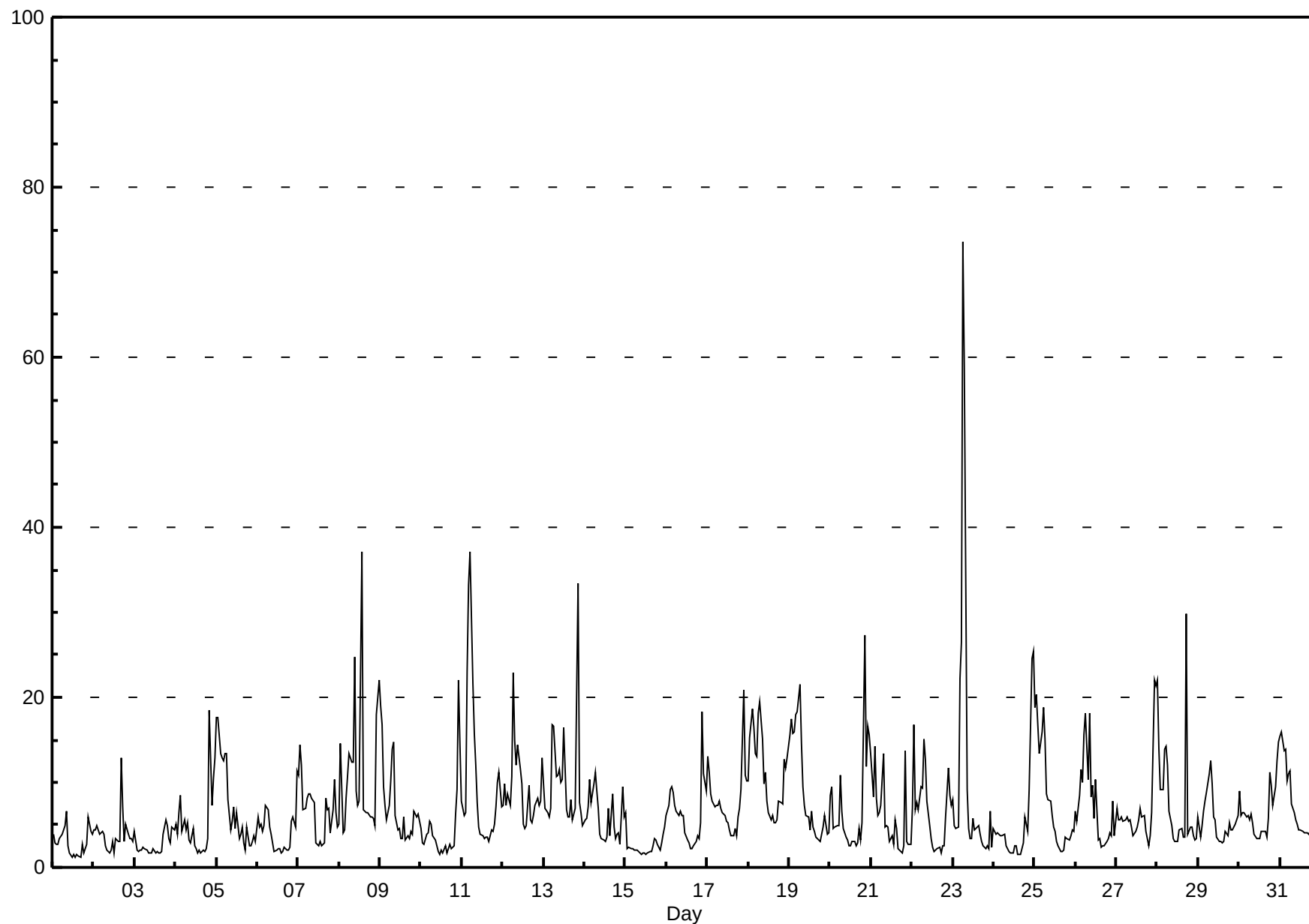
Henry Pirker - May 2014

Maximum Value: 73.6 μg/m³ on May 23 07:00																								Maximum Daily Average: 11.2 μg/m³ on May 23								Hours in Service: 744	
Minimum Value: 1 μg/m³ on May 1 12:00																								Minimum Daily Average: 2.5 μg/m³ on May 15								Hours of Data: 744	
Maximum Diurnal Average: 12.4 μg/m³ at hour 7																								Minimum Diurnal Average: 3.5 μg/m³ at hour 16								Hours of Missing Data: 0	
Monthly Average: 6.90 μg/m³																								Percentiles: P ₁ = 1.5 P ₁₀ = 2.1 Q ₁ = 3.3 Median = 5.2 Q ₃ = 8.0 P ₉₀ = 13.9 P ₉₉ = 26.6								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-May	4	3	3	3	3	4	4	5	7	3	2	1	2	1	2	1	3	2	2	3	6	4	4	2.9	6.6								
2-May	4	4	5	4	4	4	4	2	2	2	3	2	3	3	3	13	7	3	5	4	3	3	3	3.9	12.9								
3-May	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	6	5	3	3	5	4	2.7	5.5								
4-May	5	4	6	8	4	6	4	5	3	3	5	2	2	2	2	2	2	2	3	19	7	11	13	5.1	18.6								
5-May	18	18	13	13	12	13	13	8	4	5	7	5	6	3	4	5	3	2	5	3	3	3	4	3	7.2	17.7							
6-May	6	5	5	4	5	7	7	5	4	3	2	2	2	2	2	2	2	2	2	5	6	5	11	4.1	11.4								
7-May	11	14	12	7	7	8	9	9	8	8	3	3	3	3	3	3	8	7	7	4	7	10	6	5	6.8	14.4							
8-May	5	15	4	4	8	11	13	12	12	25	9	7	8	37	7	7	6	6	6	6	6	5	18	22	10.8	37.2							
9-May	19	17	9	7	6	7	10	14	15	6	4	5	3	3	6	3	4	3	4	4	7	6	6	5	7.3	18.9							
10-May	5	3	3	4	4	5	5	4	3	3	2	2	2	2	2	2	2	3	2	3	6	9	22	15	4.6	22.0							
11-May	8	6	6	23	33	37	22	16	12	8	5	4	4	3	4	4	3	4	4	5	7	10	11	7	10.2	37.2							
12-May	7	10	7	9	7	11	23	15	12	14	12	10	5	5	5	10	6	5	6	7	8	7	8	13	9.2	22.9							
13-May	10	7	7	6	7	17	17	11	11	12	10	10	16	7	6	6	8	6	7	20	33	8	6	5	10.5	33.4							
14-May	6	6	7	10	8	10	11	9	7	4	3	3	3	4	7	4	9	5	3	4	4	3	9	6	6.0	11.3							
15-May	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	2	3	4	5	2.5	6.5							
16-May	6	7	9	10	9	7	7	6	7	6	6	4	3	3	2	2	2	3	4	3	5	18	11	9	6.3	18.3							
17-May	13	11	9	8	7	7	7	8	7	6	6	5	5	4	4	4	5	4	6	7	9	21	11	10	7.7	20.9							
18-May	10	15	19	16	13	13	18	19	15	10	11	8	6	6	6	5	5	6	8	8	7	13	12	13	11.0	19.4							
19-May	16	17	16	16	18	18	21	15	10	7	6	6	4	7	5	4	4	3	3	4	5	6	4	4	9.1	21.5							
20-May	8	9	5	5	5	5	11	7	5	4	3	3	3	3	3	3	3	5	3	5	27	12	17	16	7.0	27.3							
21-May	13	8	14	8	6	6	7	13	5	5	5	3	4	3	6	5	2	2	2	3	14	3	3	3	5.9	14.3							
22-May	7	17	7	8	7	9	9	15	13	8	5	3	2	2	2	2	2	2	2	3	6	12	8	7	6.6	16.9							
23-May	8	5	5	5	22	26	74	59	9	5	3	3	6	4	5	5	4	3	2	2	2	2	7	2	11.2	73.6							
24-May	5	4	4	4	4	4	4	2	2	2	2	2	2	3	2	2	2	3	6	5	4	9	25	25	5.2	25.4							
25-May	19	20	17	13	16	19	15	9	8	8	6	5	4	3	2	2	2	2	4	3	3	4	4	4	8.0	20.4							
26-May	7	5	8	11	10	16	18	10	18	8	10	6	10	3	3	2	2	3	3	3	4	4	8	4	7.4	18.2							
27-May	7	6	6	6	5	6	6	5	6	5	4	4	5	6	7	6	6	4	3	3	4	6	22	21	6.6	22.0							
28-May	22	14	9	9	14	14	12	7	5	3	3	3	3	4	5	4	4	30	4	5	5	4	3	3	7.8	29.8							
29-May	6	4	5	7	8	9	11	13	10	6	6	4	3	3	3	3	4	4	5	4	4	5	5	6	5.7	12.6							
30-May	9	6	6	6	6	6	6	6	5	4	3	3	3	4	4	4	3	6	11	10	7	10	13	15	6.6	14.7							
31-May	15	16	14	14	10	11	11	7	6	6	5	4	4	4	4	4	4	4	4	5	9	10	8	8	7.9	16.0							
9.3 9.1 7.9 8.1 8.8 10.4 12.4 10.3 7.5 6.1 4.9 4.1 4.2 4.6 3.8 3.5 4.1 4.7 4.3 4.8 7.5 7.3 9.1 8.8																									Diurnal Average								
22.0 20.4 18.6 23.1 33.2 37.2 73.6 58.9 18.2 24.8 11.5 10.3 16.4 37.2 7.0 9.7 12.9 29.8 11.1 20.5 33.4 20.9 24.5 25.4																									Diurnal Maximum								

Hourly Maximums

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

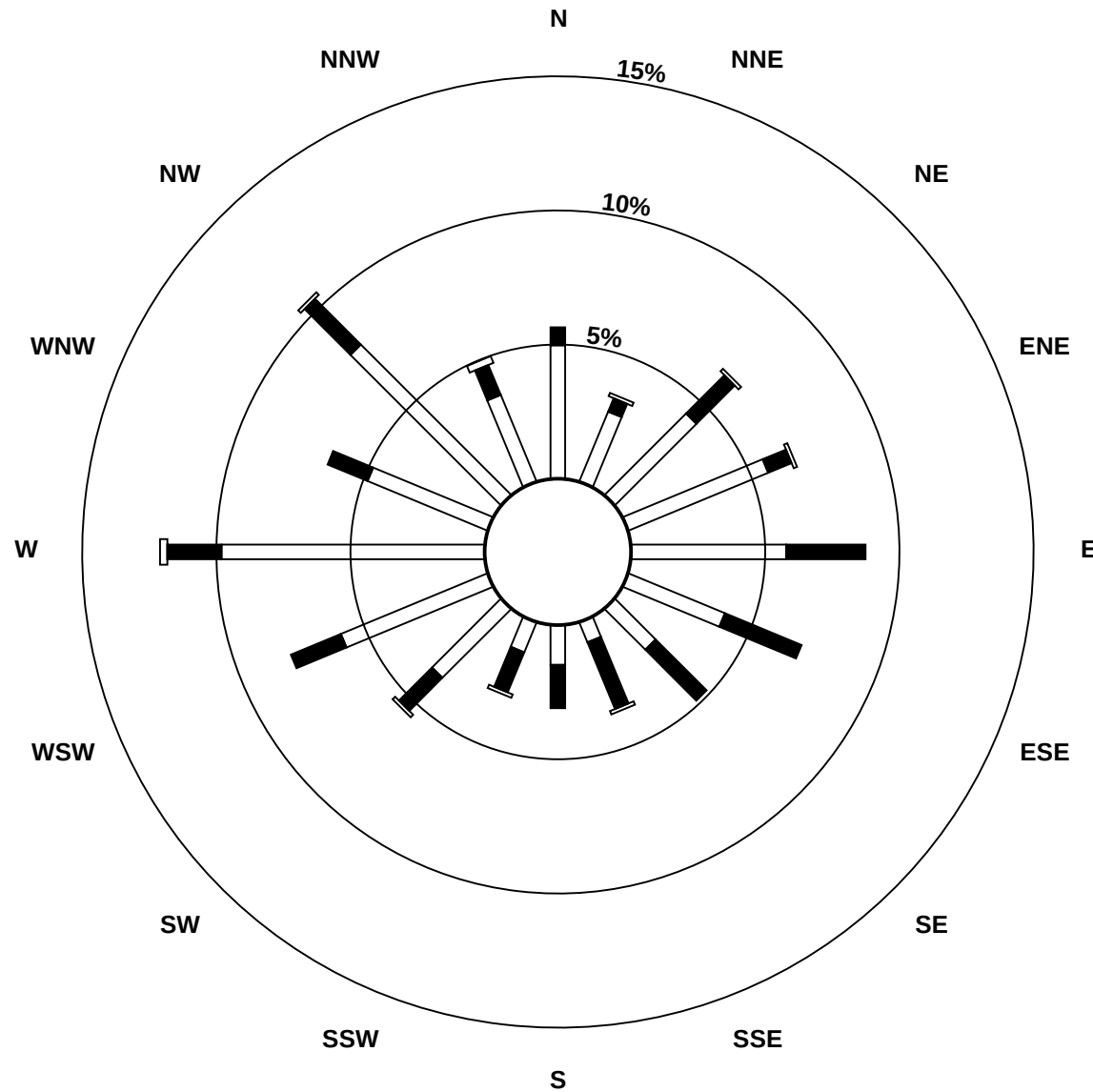
Henry Pirker - May 2014



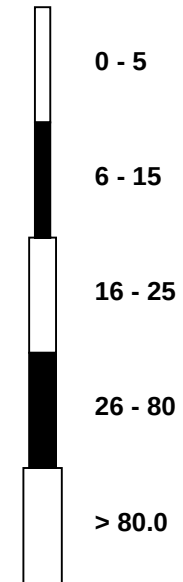
Pollutant Rose

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

Henry Pirker - May 2014



Pollutant Classes (µg/m³)



Hourly Averages

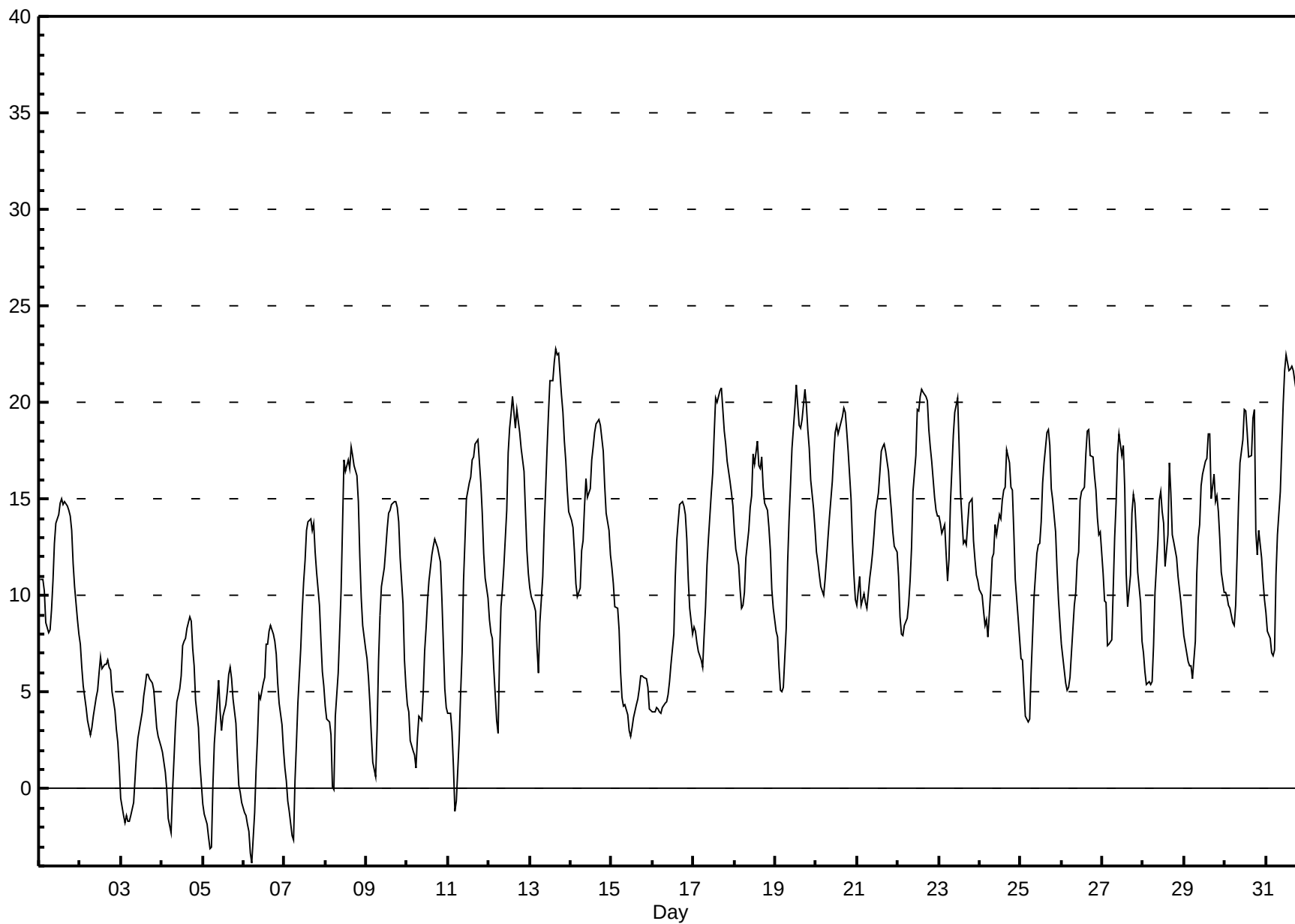
External Temperature (ET) - °C

Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 22.8 °C on May 13 16:00 Maximum Daily Average: 15.6 °C on May 13																							Hours in Service: 744 Hours of Data: 744			
Minimum Value: -4 °C on May 6 06:00 Minimum Daily Average: 2.0 °C on May 5 Maximum Diurnal Average: 15.2 °C at hour 17 Minimum Diurnal Average: 4.5 °C at hour 6 Monthly Average: 10.58 °C Percentiles: P ₁ = -2.3 P ₁₀ = 3.0 Q ₁ = 6.0 Median = 10.8 Q ₃ = 15.0 P ₉₀ = 18.4 P ₉₉ = 21.6																							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-May	11	11	11	10	9	8	8	9	11	13	14	14	15	15	15	15	15	14	14	13	12	10	9	8	11.8	15.0
2-May	7	6	5	4	4	3	3	3	4	5	5	6	7	6	6	6	7	6	6	5	4	3	2	1	4.8	7.5
3-May	0	-1	-2	-1	-2	-2	-1	-1	1	2	3	3	4	5	5	6	6	6	5	5	4	3	3	2	2.2	5.9
4-May	2	1	1	0	-2	-2	0	2	3	4	5	6	7	8	8	8	9	9	7	6	5	3	1	0	3.8	8.9
5-May	-1	-1	-2	-3	-3	-3	0	2	4	6	4	3	4	4	5	6	6	6	5	3	2	0	0	-1	2.0	6.3
6-May	-1	-1	-2	-2	-3	-4	-1	1	3	5	5	5	6	7	8	8	8	8	8	7	5	4	3	2	3.3	8.4
7-May	1	0	-1	-1	-2	-3	0	2	4	7	9	11	12	13	14	14	13	14	12	11	9	8	6	5	6.7	14.0
8-May	4	4	3	3	0	0	4	6	8	10	14	17	16	17	18	17	17	17	16	15	12	10	8	7	10.1	17.7
9-May	7	6	4	3	1	1	3	7	9	10	11	12	13	14	14	15	15	15	15	14	12	10	7	5	9.3	14.9
10-May	4	4	2	2	2	1	3	4	4	5	7	8	10	11	12	13	13	13	12	12	10	7	5	4	7.0	12.9
11-May	4	4	3	1	-1	-1	3	5	7	11	13	15	16	16	17	17	18	18	17	16	14	12	11	10	10.2	18.1
12-May	9	8	8	6	4	3	7	9	10	12	14	17	19	19	20	19	20	19	18	18	16	14	12	11	13.1	20.3
13-May	10	10	10	9	7	6	9	11	14	16	18	20	21	21	22	23	22	23	20	19	18	17	15	14	15.6	22.8
14-May	14	14	12	11	10	10	12	13	15	16	15	16	17	18	18	19	19	19	18	17	16	14	13	12	14.9	19.1
15-May	11	11	9	9	8	6	5	4	4	4	3	3	3	4	4	5	5	6	6	6	6	5	4	4	5.6	11.4
16-May	4	4	4	4	4	4	4	4	5	5	6	6	8	11	13	14	15	15	15	14	13	11	9	8	8.3	14.9
17-May	8	8	8	7	7	6	8	9	12	13	15	16	18	20	20	21	21	20	19	18	17	16	15	15	14.0	20.7
18-May	13	12	12	10	9	10	10	12	13	15	15	17	17	18	17	17	17	16	15	14	14	12	10	9	13.5	18.0
19-May	8	8	6	5	5	5	8	12	14	16	18	20	21	20	19	19	19	21	20	19	18	16	14	13	14.3	20.9
20-May	12	12	11	11	10	11	12	13	14	16	17	18	19	18	19	19	20	19	19	17	15	13	11	10	14.8	19.7
21-May	9	11	9	10	10	10	9	11	12	12	13	14	15	16	17	18	18	17	16	15	14	13	13	12	13.2	17.8
22-May	11	9	8	8	8	9	10	11	12	15	17	20	20	20	21	21	20	20	19	18	17	15	14	14	14.9	20.7
23-May	14	14	13	14	12	11	12	15	18	19	20	20	18	15	13	13	13	14	15	15	13	12	11	11	14.3	20.2
24-May	10	10	9	8	9	8	10	12	12	14	13	14	14	15	15	16	18	17	16	15	13	11	9	8	12.3	17.6
25-May	7	7	5	4	3	4	6	8	10	12	13	13	14	16	17	18	19	18	16	15	13	11	10	9	11.1	18.6
26-May	8	7	5	5	5	6	7	10	10	12	12	15	15	16	17	19	19	17	17	16	15	14	13	13	12.2	18.6
27-May	11	10	10	7	7	8	10	13	15	17	18	17	18	16	11	9	11	14	15	15	13	11	10	8	12.3	18.3
28-May	7	6	5	6	5	6	7	10	13	15	15	14	14	11	13	17	15	13	13	12	11	10	10	9	10.8	16.9
29-May	8	7	7	6	6	6	8	11	13	14	16	16	17	17	18	18	15	16	15	15	14	13	11	10	12.4	18.4
30-May	10	10	9	9	9	8	10	12	15	17	18	20	20	18	17	17	19	20	13	12	13	12	11	10	13.7	19.6
31-May	9	8	8	7	7	7	11	13	15	18	20	22	22	22	22	22	22	21	21	19	16	13	12	11	15.3	22.4
7.5 7.0 6.2 5.6 4.8 4.5 6.3 8.2 9.8 11.4 12.5 13.5 14.2 14.5 14.7 15.1 15.2 15.1 14.3 13.5 12.1 10.5 9.2 8.3 Diurnal Average																										
14.1 13.7 13.2 13.7 12.2 10.9 12.3 14.8 18.3 19.5 19.9 21.7 22.4 21.7 22.1 22.8 22.4 22.6 20.6 19.5 18.0 16.9 15.5 14.7 Diurnal Maximum																										

Hourly Averages

External Temperature (ET) - °C
Henry Pirker - May 2014



Hourly Averages

Relative Humidity (RH) - %

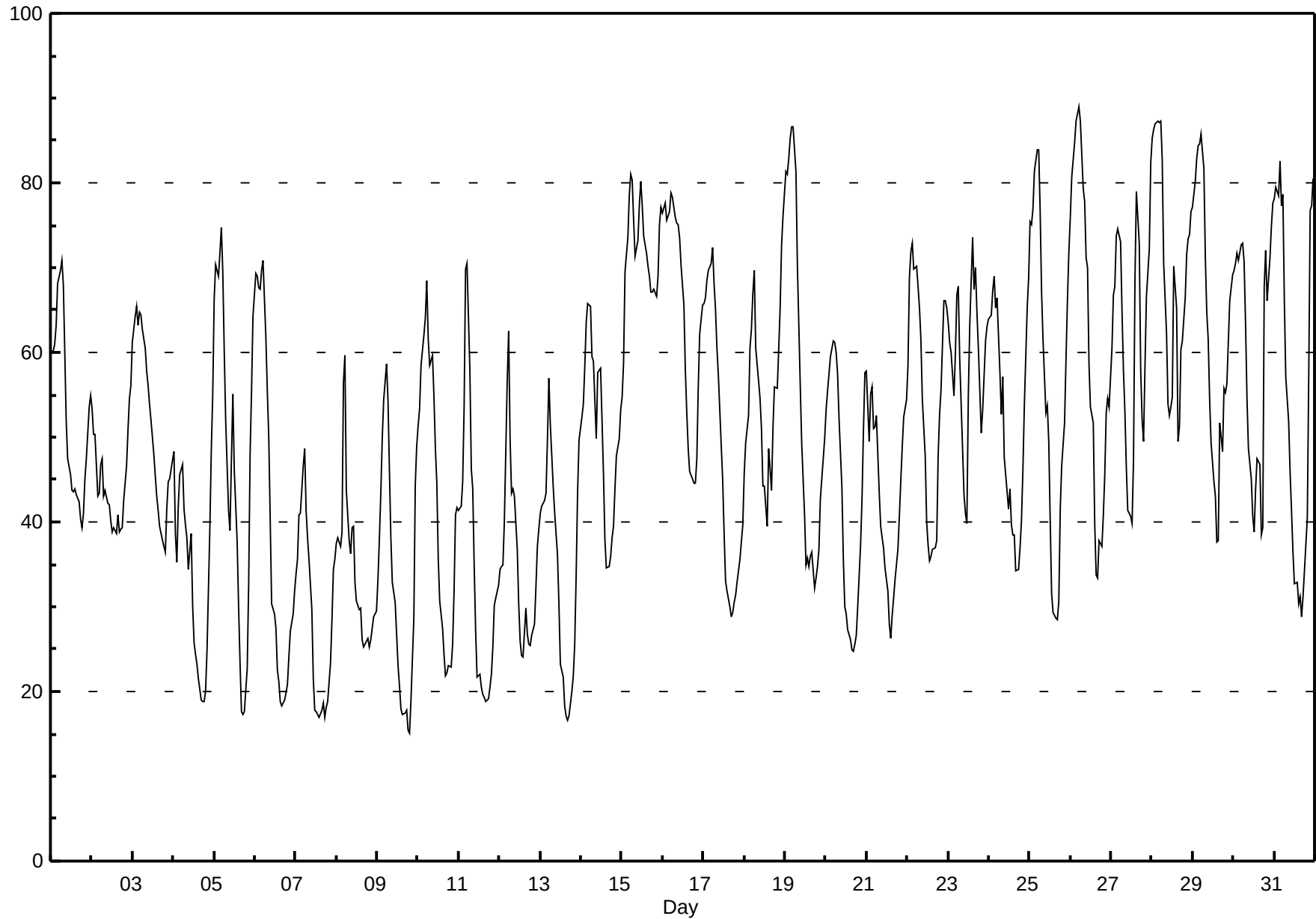
Henry Pirker - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 88.9 % on May 26 06:00 Maximum Daily Average: 71.9 % on May 15																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 15 % on May 9 20:00 Maximum Diurnal Average: 68.7 % at hour 6 Monthly Average: 49.61 %												Minimum Daily Average: 28.9 % on May 7 Minimum Diurnal Average: 34.8 % at hour 18 Percentiles: P ₁ = 17.2 P ₁₀ = 25.6 Q ₁ = 36.4 Median = 48.6 Q ₃ = 64.4 P ₉₀ = 73.4 P ₉₉ = 87.0														
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-May	60	60	61	63	68	70	71	68	60	52	48	46	44	44	44	43	42	40	39	41	45	47	53	55	52.7	70.8
2-May	53	50	50	43	43	47	47	43	44	42	42	40	39	39	39	41	39	39	39	43	47	51	55	56	44.7	56.2
3-May	61	64	65	63	65	64	63	60	58	56	54	52	48	45	43	41	40	39	37	37	42	45	45	47	51.4	65.4
4-May	48	39	35	42	46	47	42	40	38	34	39	30	26	24	23	22	19	19	19	20	25	39	48	55	34.1	55.1
5-May	66	70	69	72	75	70	60	52	41	39	47	55	46	38	30	23	18	17	18	23	33	48	55	64	47.0	74.7
6-May	69	69	68	68	70	71	62	56	50	40	30	29	27	23	21	19	18	19	20	21	24	27	29	32	40.0	70.9
7-May	34	36	41	41	47	49	41	38	36	30	21	18	18	17	17	18	19	17	18	19	23	28	34	36	28.9	48.6
8-May	38	38	37	39	56	60	44	38	36	39	40	33	31	30	30	26	25	26	26	25	26	28	29	29	34.5	59.7
9-May	33	38	43	50	54	59	54	46	38	33	31	27	23	21	18	17	17	18	15	15	19	29	44	49	33.0	58.6
10-May	51	53	59	62	64	68	62	58	60	55	49	45	36	31	27	24	22	22	23	23	26	32	41	42	43.1	68.4
11-May	41	42	45	54	70	71	58	46	44	35	27	22	22	21	20	19	19	19	20	22	25	30	31	33	34.8	70.6
12-May	34	35	35	40	57	63	50	43	44	43	37	30	26	24	24	30	27	26	25	27	28	32	37	39	35.7	62.5
13-May	41	42	43	43	50	57	51	44	41	39	36	30	23	22	18	17	17	17	20	22	26	34	44	50	34.4	56.9
14-May	52	54	58	64	66	65	59	59	54	50	58	58	52	46	38	35	35	36	38	40	44	48	50	53	50.5	65.7
15-May	55	59	69	74	79	81	80	76	71	73	77	80	77	74	72	70	69	67	67	67	67	69	75	77	71.9	81.1
16-May	76	78	76	76	77	79	78	76	75	75	74	70	66	58	53	49	46	45	45	45	48	56	62	66	64.4	78.8
17-May	66	66	68	70	71	72	68	65	61	57	49	45	39	33	32	30	29	29	30	31	33	36	38	40	48.2	72.4
18-May	46	49	52	61	63	67	70	60	57	55	51	44	44	39	49	46	44	51	56	56	60	65	73	76	55.6	76.1
19-May	81	81	83	85	87	87	81	70	63	56	49	41	35	36	35	36	36	32	33	35	37	43	48	50	55.0	86.7
20-May	53	55	57	59	61	61	60	57	52	44	36	30	29	27	26	25	25	26	27	30	37	43	51	58	42.9	61.4
21-May	58	50	55	56	51	51	53	43	39	38	37	35	32	28	26	29	31	33	37	41	45	49	52	54	42.6	57.7
22-May	59	69	72	73	70	70	68	65	62	54	48	40	37	35	36	37	37	38	48	53	56	66	66	65	55.1	72.9
23-May	63	61	60	55	60	67	68	59	49	43	41	40	55	63	74	67	70	65	60	51	53	57	61	63	58.5	73.5
24-May	64	64	67	69	65	66	58	53	57	48	46	42	44	40	39	38	34	34	37	40	46	54	65	69	51.6	69.0
25-May	75	75	77	81	84	84	77	67	62	53	54	49	40	32	29	29	29	31	42	47	52	59	66	72	56.8	83.9
26-May	76	81	85	87	88	89	87	79	78	71	70	59	54	52	40	34	33	38	37	41	46	53	55	54	61.9	88.9
27-May	61	67	68	74	75	73	65	58	53	47	41	41	40	47	68	79	73	58	52	50	59	67	72	82	61.1	82.4
28-May	85	86	87	87	87	87	83	70	62	54	53	53	55	70	65	50	51	60	61	66	72	73	74	77	69.6	87.3
29-May	77	80	83	84	85	86	82	71	65	62	54	49	45	43	38	38	52	48	56	55	56	61	66	69	62.7	85.7
30-May	70	70	72	71	73	73	71	63	55	49	45	41	39	44	47	47	38	39	68	72	66	71	75	78	59.8	77.6
31-May	78	79	78	82	77	79	66	57	52	46	41	36	33	33	30	31	29	31	34	40	57	77	77	80	55.3	82.5
58.9 60.1 61.9 64.1 67.1 68.7 63.8 57.5 53.4 48.8 45.9 42.3 39.4 38.0 37.1 35.8 34.9 34.8 37.1 38.5 42.6 48.9 53.9 57.1																								Diurnal Average		
85.2 86.3 87.0 87.3 88.1 88.9 87.3 79.3 77.8 75.1 77.5 80.2 77.2 73.7 73.5 79.0 72.9 67.1 67.8 72.0 71.5 76.8 77.3 82.4																								Diurnal Maximum		

Hourly Averages

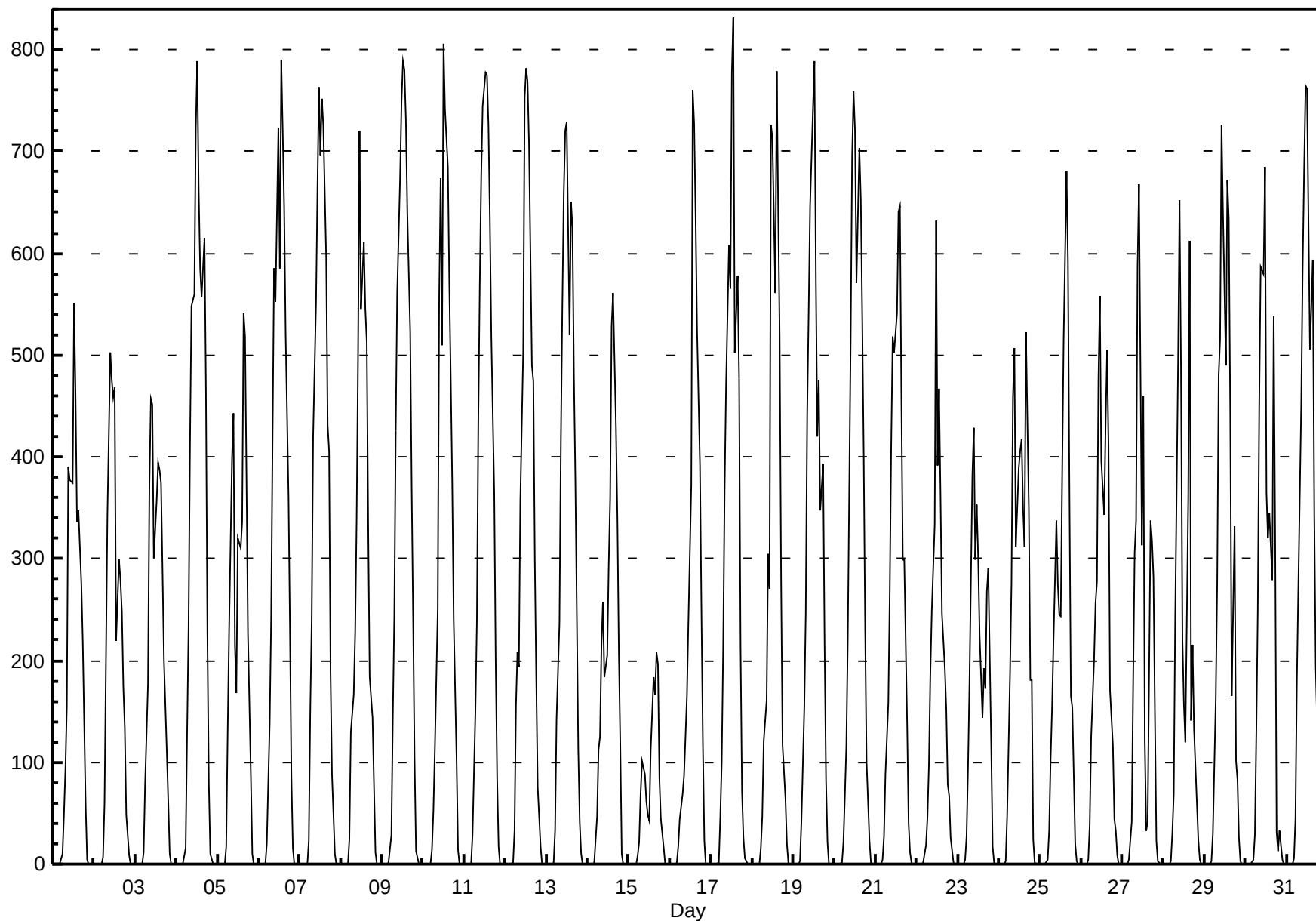
Relative Humidity (RH) - %

Henry Pirker - May 2014



Hourly Averages

Solar Radiation (SR) - W/m²
Henry Pirker - May 2014



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - May 2014

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	4	3	7	6	5	9	8	7	8	6	6	9	11	13	14	16	16	15	12	12	10	13	11	9	8.3	16.4
Dir	272	312	317	317	307	324	333	330	7	347	341	298	319	310	312	306	307	306	322	353	349	23	41	25	329.5	306.5
2 Spd	13	17	15	15	9	11	14	17	16	13	12	9	8	9	14	16	15	15	12	12	12	10	10	11	11.4	17.4
Dir	5	9	9	14	7	352	329	330	321	326	321	334	314	330	346	343	350	353	22	31	32	40	48	60	356.2	330.3
3 Spd	7	8	8	10	8	8	12	13	13	12	11	10	11	11	11	12	11	12	12	11	8	7	5	5	9.4	13.3
Dir	53	45	45	42	50	62	67	83	85	75	77	60	67	60	74	68	75	80	82	88	110	119	74	68	71.6	84.8
4 Spd	6	9	8	4	6	5	6	8	6	6	7	8	3	3	5	3	6	7	9	4	3	6	2	2	3.1	9.2
Dir	67	80	76	46	41	29	35	36	40	31	55	71	41	78	8	339	280	277	311	273	330	151	155	117	37.4	79.7
5 Spd	3	4	4	5	4	3	3	7	17	26	23	22	25	24	25	27	26	25	27	22	19	13	14	14	12.8	27.1
Dir	142	166	171	164	170	129	152	241	287	315	332	308	316	309	318	308	316	329	332	348	354	2	358	348	322.5	332.1
6 Spd	10	8	8	7	6	4	4	4	1	3	4	2	4	2	5	2	8	7	4	3	6	7	7	7	1.9	9.7
Dir	323	313	317	311	330	318	325	309	52	359	44	133	298	204	162	38	347	296	275	319	106	118	122	130	333.9	323.2
7 Spd	7	5	5	5	3	3	6	5	6	6	8	6	6	5	5	5	8	6	8	9	7	8	10	10	5.9	10.4
Dir	153	124	109	108	93	95	108	129	131	124	113	139	108	93	69	81	52	86	91	95	91	85	94	107	103.0	106.8
8 Spd	10	7	5	4	3	0	4	2	0	4	3	3	7	9	13	10	9	9	10	12	11	11	11	9	3.7	12.7
Dir	116	132	113	101	312	57	121	200	243	243	217	265	292	308	357	4	15	18	16	44	62	56	59	54	36.8	357.2
9 Spd	8	7	9	7	5	2	4	2	3	3	5	6	5	8	8	9	9	9	10	11	9	10	7	5	5.7	10.9
Dir	57	54	47	51	47	52	322	305	252	77	38	6	354	26	8	5	355	346	9	2	3	31	51	69	20.5	1.8
10 Spd	5	7	6	2	3	5	5	7	9	10	6	4	12	10	10	8	9	8	8	8	5	3	2	3	5.6	12.5
Dir	60	70	57	58	331	353	53	63	70	74	61	47	6	8	4	359	16	3	18	25	55	84	110	80	34.7	6.4
11 Spd	6	6	4	1	1	2	3	5	4	2	3	1	5	8	7	5	5	4	3	6	7	7	7	8	0.9	8.3
Dir	90	96	105	100	268	274	167	138	202	236	218	206	283	284	313	295	351	339	61	86	102	94	108	99	94.4	98.9
12 Spd	8	7	8	3	3	0	3	2	5	4	3	7	10	8	3	15	8	8	5	4	5	9	8	9	3.9	14.6
Dir	112	111	113	104	314	285	167	182	258	204	15	80	97	106	57	18	24	357	52	36	64	87	91	87	73.4	18.1
13 Spd	7	6	9	8	3	1	2	3	1	3	4	6	2	2	4	3	3	3	2	4	3	15	17	12	0.5	17.0
Dir	89	90	88	92	123	300	112	135	148	139	126	149	162	27	296	359	324	236	267	335	264	266	278	301	274.1	278.3
14 Spd	8	10	8	7	5	4	4	6	8	10	12	10	11	22	35	35	30	28	28	24	22	22	21	14	15.3	35.5
Dir	301	261	247	235	223	261	217	199	217	231	248	225	222	267	270	260	254	257	254	256	277	278	268	261	257.0	270.4
15 Spd	16	18	15	19	25	27	29	27	26	23	21	17	17	18	19	17	15	11	8	7	6	4	4	3	15.1	28.9
Dir	267	293	303	304	309	316	313	312	315	315	314	315	316	315	311	308	308	308	292	307	343	104	119	190	309.2	312.9
16 Spd	3	4	4	3	4	5	7	9	9	10	8	8	7	6	6	6	5	6	6	7	5	4	4	5	5.3	9.5
Dir	176	163	145	145	125	103	114	123	119	106	112	110	113	94	94	91	91	100	97	102	106	53	57	50	107.1	106.3
17 Spd	5	6	7	6	5	4	3	3	4	7	8	10	11	10	11	10	12	11	11	8	6	5	5	4	6.6	11.6
Dir	60	47	44	51	44	45	113	172	101	121	101	92	93	96	90	91	83	88	80	74	67	94	88	99	83.9	83.2
18 Spd	3	4	3	3	2	1	1	1	3	6	7	13	18	8	21	16	11	13	9	7	6	4	3	3	0.6	20.7
Dir	91	108	103	311	44	167	208	230	231	273	295	313	1	66	133	142	171	220	308	311	263	248	330	340	252.0	133.4
19 Spd	2	3	3	2	2	4	1	3	3	5	6	4	1	14	20	15	12	6	7	8	7	10	10	11	5.7	20.0
Dir	353	306	325	322	315	329	312	265	221	212	236	238	204	247	239	215	274	265	266	263	230	231	228	233	247.2	238.6
20 Spd	11	13	12	9	6	8	6	10	13	18	22	20	21	21	20	19	18	23	25	18	8	3	1	4	13.1	24.6
Dir	235	238	239	237	244	251	273	268	270	263	260	257	266	259	255	257	234	273	273	278	285	260	176	166	258.2	272.7
21 Spd	5	8	7	13	15	12	9	17	23	24	24	23	19	24	23	22	23	20	20	16	14	8	7	6	15.3	24.5
Dir	189	233	237	250	259	254	242	276	280	274	274	260	241	250	263	262	262	254	271	272	278	255	239	255	260.8	273.7
22 Spd	3	3	3	3	6	5	3	4	5	6	5	7	10	11	10	12	13	11	8	3	1	4	4	4	4.3	13.4
Dir	311	156	141	144	146	153	144	149	158	174	184	203	235	228	242	247	223	232	232	177	84	140	126	126	201.4	222.7

Hourly Averages

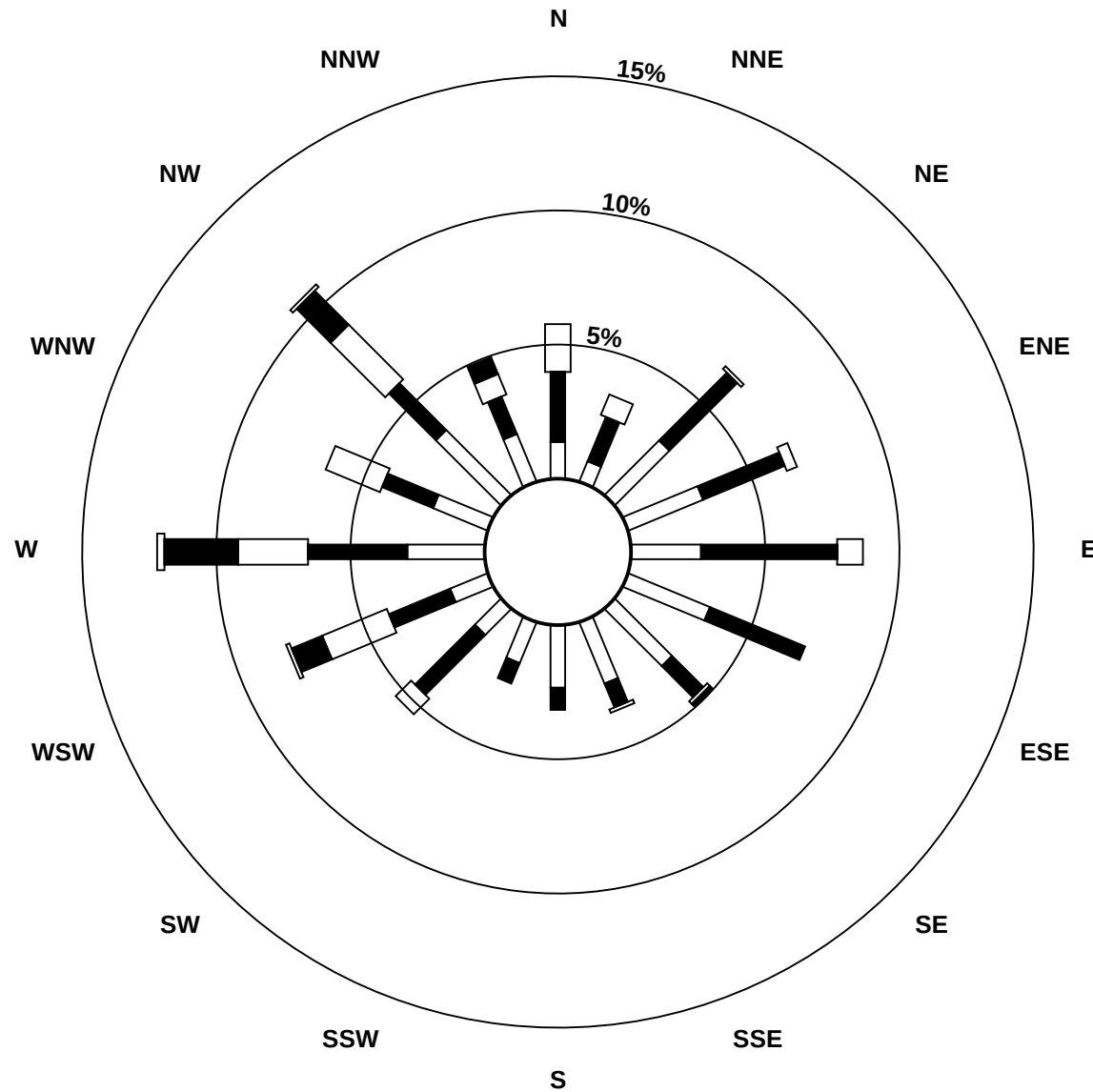
Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - May 2014

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	6	6	7	7	2	1	1	2	3	9	4	3	14	22	24	24	11	13	13	15	15	12	10	12	8.2	24.0
Dir	161	186	187	199	284	15	342	142	196	280	256	185	272	276	279	280	232	226	214	248	244	243	236	248	248.2	279.9
24 Spd	15	16	8	8	14	8	13	17	15	16	16	15	16	16	11	8	5	9	9	13	6	2	3	1	9.5	16.7
Dir	250	253	269	275	271	297	268	297	308	296	297	301	321	294	292	301	288	307	327	332	16	5	169	206	293.3	296.7
25 Spd	2	2	3	1	3	1	2	2	2	3	6	7	7	2	6	3	3	3	13	12	9	7	5	4	2.2	12.5
Dir	192	156	339	265	299	193	237	271	194	171	203	220	213	90	125	104	109	107	100	100	82	76	65	67	119.6	99.7
26 Spd	4	3	2	3	3	5	5	2	5	4	7	3	4	4	3	6	5	4	2	4	11	10	8	6	1.1	10.7
Dir	68	77	24	41	35	18	343	66	162	170	166	144	139	147	29	19	36	115	350	274	266	285	356	46	31.9	265.9
27 Spd	3	5	7	5	8	7	6	6	4	2	4	3	4	9	6	13	5	1	4	3	7	6	5	2	4.1	12.5
Dir	290	254	258	294	268	281	286	276	272	82	78	90	263	256	299	312	322	93	271	254	276	279	318	303	283.7	311.9
28 Spd	4	2	1	2	4	2	1	4	6	9	7	5	7	9	6	4	8	14	10	11	10	8	5	5	4.1	13.5
Dir	304	279	293	331	328	316	344	72	44	94	100	70	135	164	161	176	131	151	136	128	129	134	135	101	124.7	150.9
29 Spd	7	5	5	4	3	3	3	3	3	5	4	4	2	5	8	11	3	8	7	12	13	13	8	10	2.9	13.3
Dir	111	93	104	74	108	324	324	273	287	289	264	198	303	347	319	297	3	170	222	251	252	257	268	269	264.9	252.0
30 Spd	7	7	11	10	5	8	10	16	21	18	17	16	14	16	14	19	19	19	20	12	6	8	4	3	10.7	20.6
Dir	273	256	258	264	246	274	269	263	275	277	281	277	292	307	288	261	249	282	338	351	218	215	192	186	276.3	274.9
31 Spd	5	1	2	3	3	1	2	8	9	10	8	5	7	15	19	16	10	4	1	8	7	8	3	7	4.5	18.7
Dir	185	211	266	274	292	219	227	255	250	253	280	249	226	287	282	286	273	325	218	197	0	51	81	179	266.2	281.8
Spd	0.1	0.2	0.7	1.3	2.3	2.6	1.9	2.5	3.2	3.4	3.1	2.8	3.9	5.5	6.1	6.6	4.7	4.5	3.9	3.0	2.0	0.6	0.9	0.9	Diurnal Average	
Dir	119.9	263.7	347.9	318.8	307.5	317.5	311.7	289.4	286.5	288.4	295.1	283.0	298.2	290.7	294.9	296.1	295.5	289.0	314.7	327.8	331.3	1.9	46.2	70.4	Diurnal Maximum	
Spd	15.9	18.0	15.3	18.7	24.9	27.1	28.9	27.1	25.8	25.6	24.2	22.8	24.6	24.3	35.5	34.9	29.6	28.3	28.1	23.8	21.6	22.2	21.5	14.2	Diurnal Maximum	
Dir	266.6	293.2	8.8	304.0	308.8	315.7	312.9	312.2	315.3	314.5	273.9	260.0	316.4	308.8	270.4	260.4	253.6	257.1	254.4	255.6	276.7	278.5	268.4	347.9		
Maximum Speed Value: 35 km/h on May 14 15:00																								Hours in Service: 744		
Maximum Daily Speed Average: 15.3 km/h on May 15																								Hours of Data: 744		
Maximum Diurnal Speed Average: 6.6 km/h at hour 16																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on May 8 09:00																										
Minimum Daily Speed Average: 0.5 km/h on May 25																										
Minimum Diurnal Speed Average: 0.1 km/h at hour 1																										
Monthly Average Velocity: 2.59 km/h 301.46 deg																								Percent Operational Time: 100.0		
Speed Percentiles: P ₁ = 0.7 P ₁₀ = 2.6 Q ₁ = 4.1 Median = 6.9 Q ₃ = 11.1 P ₉₀ = 16.9 P ₉₉ = 26.2																										
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	17		34		20		2		0		0		73													
NorthEast	32		46		9		0		0		0		87													
East	40		70		12		0		0		0		122													
SouthEast	33		30		3		1		0		0		67													
South	32		16		1		0		0		0		49													
SouthWest	24		31		17		1		0		0		73													
West	34		46		38		28		5		0		151													
NorthWest	38		33		34		16		1		0		122													
Total	250		306		134		48		6		0		744													

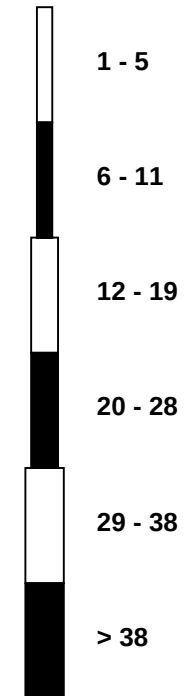
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - May 2014

Maximum Speed: 36 km/h on May 14 15:00																				Maximum Daily Speed Average: 16.5 km/h on May 14										Hours in Service: 744	
Minimum Speed: 1 km/h on May 18 07:00																				Minimum Daily Speed Average: 5.3 km/h on May 25										Hours of Data: 744	
Maximum Diurnal Speed Average: 13.9 km/h at hour 15																				Minimum Diurnal Speed Average: 5.5 km/h at hour 6										Hours of Missing Data: 0	
Monthly Average Speed: 9.17 km/h																				Percentiles: P ₁ = 1.6 P ₁₀ = 3.2 Q ₁ = 5.1 Median = 7.7 Q ₃ = 11.5 P ₉₀ = 17.4 P ₉₉ = 26.4										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-May	5	4	8	7	5	9	8	7	8	7	7	9	12	13	15	16	17	15	13	12	10	15	11	9	10.1	16.8					
2-May	14	17	16	16	10	11	15	18	17	14	13	10	9	10	15	16	16	16	13	12	12	10	10	11	13.3	17.6					
3-May	7	8	8	11	8	8	12	13	14	12	12	11	11	12	12	12	12	12	12	11	8	7	6	6	10.2	13.7					
4-May	6	9	8	4	6	5	7	8	7	7	8	9	6	6	8	6	9	9	9	5	4	7	2	3	6.6	9.5					
5-May	3	4	4	5	4	3	3	8	18	26	23	22	25	25	25	27	27	26	27	23	19	14	14	15	16.2	27.4					
6-May	10	8	8	7	6	4	4	4	4	5	6	7	8	6	8	7	9	8	6	4	6	8	7	7	6.6	9.7					
7-May	7	6	5	5	3	3	6	5	6	7	9	8	8	7	7	7	9	7	8	9	7	8	10	11	6.9	10.5					
8-May	10	7	5	4	3	2	4	3	2	5	4	5	9	13	14	10	11	10	11	13	11	12	11	10	7.9	13.9					
9-May	8	8	9	7	5	3	4	3	3	5	7	7	8	9	10	12	10	10	11	11	9	11	7	5	7.6	11.5					
10-May	5	7	6	3	4	6	5	7	9	11	7	8	13	11	11	10	11	9	9	8	5	3	2	3	7.3	13.5					
11-May	6	6	4	2	1	2	3	5	5	4	4	4	7	10	9	9	7	6	5	6	8	7	7	8	5.6	9.8					
12-May	8	7	8	4	4	1	3	2	5	8	7	8	11	9	8	15	9	9	6	5	5	9	8	9	7.0	15.2					
13-May	7	6	9	8	3	2	3	3	2	4	5	7	6	6	6	6	7	6	4	5	4	16	17	12	6.4	17.2					
14-May	9	11	9	7	5	4	4	7	9	11	12	10	12	24	36	35	30	29	28	24	22	22	22	14	16.5	35.9					
15-May	16	18	15	19	25	27	29	27	26	23	21	18	17	18	19	18	16	11	8	7	6	5	4	3	16.4	29.0					
16-May	4	4	4	3	4	6	8	10	9	10	8	8	7	7	7	7	6	7	7	7	5	4	4	5	6.3	9.8					
17-May	5	7	7	6	5	4	3	3	5	7	9	11	12	11	11	11	12	11	11	8	6	6	5	5	7.6	12.3					
18-May	5	4	3	3	3	1	1	1	4	7	7	13	19	12	21	16	12	14	10	7	7	5	3	3	7.6	21.0					
19-May	2	3	3	2	3	4	2	3	4	6	6	6	5	15	20	15	13	7	8	8	7	11	10	11	7.2	20.3					
20-May	12	13	12	10	6	8	6	10	13	18	22	21	22	22	21	21	19	23	25	18	8	3	2	4	14.2	25.0					
21-May	5	8	7	13	15	12	9	17	23	25	25	23	19	25	25	23	23	20	20	16	14	8	7	6	16.2	24.9					
22-May	4	3	3	3	6	5	3	4	5	6	5	8	11	11	11	13	14	13	8	3	2	5	4	4	6.5	13.7					
23-May	6	6	7	7	5	2	3	3	4	10	6	4	16	22	24	24	12	14	13	16	15	12	10	12	10.5	24.2					
24-May	15	16	10	9	14	9	13	17	15	16	17	16	16	17	12	9	7	12	9	14	6	2	3	2	11.5	17.0					
25-May	2	2	3	2	3	1	2	2	2	4	6	8	7	5	8	6	6	7	13	13	9	7	5	4	5.3	12.8					
26-May	4	4	3	3	3	5	6	4	6	4	8	5	5	6	6	7	9	5	3	5	11	10	9	7	5.8	10.8					
27-May	4	5	7	5	8	7	7	6	4	4	6	6	6	11	11	13	9	6	5	4	7	6	5	3	6.5	13.3					
28-May	4	3	2	2	4	2	2	5	7	10	8	6	8	9	6	6	9	14	11	12	11	8	6	5	6.6	13.8					
29-May	7	5	6	5	4	3	3	3	4	6	5	5	7	7	9	12	10	9	8	12	13	13	8	10	7.2	13.5					
30-May	7	7	11	10	5	9	10	16	21	18	17	17	14	19	16	19	19	23	20	12	6	8	4	3	13.0	22.8					
31-May	5	2	3	3	3	2	2	9	10	10	9	6	8	16	19	17	11	4	2	8	13	9	5	8	7.7	19.3					
6.8 7.0 6.8 6.3 6.0 5.5 6.2 7.6 8.8 10.0 10.1 9.8 11.1 12.7 13.9 13.8 12.5 12.0 11.1 10.3 8.9 8.6 7.4 7.0																									Diurnal Average						
16.1 18.3 15.7 18.8 25.3 27.2 29.0 27.2 25.9 26.1 24.6 23.4 24.9 24.9 35.9 35.3 30.1 28.5 28.5 24.0 22.1 22.4 21.7 14.6																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - May 2014

Maximum Value: 96.0 deg on May 23 07:00																		Hours in Service: 744							
Minimum Value: 3.7 deg on May 5 04:00																		Hours of Data: 744							
																		Hours of Missing Data: 0							
Percentiles: P ₁ = 5.7 P ₁₀ = 8.7 Q ₁ = 11.8 Median = 19.2 Q ₃ = 37.5 P ₉₀ = 60.0 P ₉₉ = 89.7																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-May	40	70	24	21	10	8	10	12	18	38	42	26	24	17	13	13	11	11	21	12	11	27	9	12	70.3
2-May	10	9	13	10	12	11	11	10	12	24	25	35	44	27	17	15	15	21	18	15	14	14	15	13	43.8
3-May	14	15	12	13	15	14	11	14	15	14	21	17	19	18	19	19	22	15	18	11	14	8	35	17	35.4
4-May	14	9	13	23	16	19	17	20	28	31	30	35	86	78	60	62	60	49	20	48	55	15	39	11	86.1
5-May	7	12	8	4	9	22	31	34	20	10	10	10	10	10	11	7	13	9	8	11	10	10	9	13	33.8
6-May	6	6	11	11	9	23	14	31	83	61	54	86	74	73	61	74	36	37	43	64	35	11	7	8	85.8
7-May	8	17	7	10	6	12	10	17	23	25	34	49	44	59	59	54	28	37	23	12	12	9	7	7	59.2
8-May	7	9	13	48	46	92	62	50	94	50	59	59	45	48	27	26	33	30	25	20	12	12	12	13	93.6
9-May	13	17	12	13	21	73	11	49	49	72	48	53	73	51	42	54	34	35	35	12	9	24	15	15	73.3
10-May	17	13	13	60	34	32	22	19	18	18	30	65	25	35	31	43	34	35	29	20	15	11	27	18	65.4
11-May	6	8	13	91	61	48	13	21	32	54	51	87	50	50	51	63	64	54	52	32	8	6	10	11	90.7
12-May	6	5	7	40	51	89	27	44	26	64	64	25	25	38	75	17	28	30	32	23	20	8	7	6	89.0
13-May	7	7	6	31	38	73	61	36	74	51	48	32	85	80	66	84	82	61	64	13	71	9	10	8	85.3
14-May	16	11	9	13	12	29	20	14	16	18	16	13	16	21	9	9	10	8	10	8	12	9	7	7	28.6
15-May	8	12	7	7	10	6	5	5	6	6	6	7	6	6	10	8	9	16	16	15	24	31	14	28	31.2
16-May	28	8	19	19	17	11	11	12	17	14	19	23	32	44	46	45	36	41	31	17	17	13	11	12	45.7
17-May	13	14	14	13	12	19	24	22	37	26	25	18	19	23	21	28	20	19	10	10	11	31	30	31	37.2
18-May	54	16	45	85	40	83	46	58	45	30	26	19	20	42	11	14	21	22	31	16	25	43	63	23	85.4
19-May	54	21	20	37	38	17	45	25	30	40	27	59	93	24	11	15	26	29	27	16	10	12	7	7	92.8
20-May	6	6	6	7	16	12	21	13	12	15	12	15	14	21	18	24	21	11	10	7	4	38	69	10	68.8
21-May	19	11	9	9	7	10	18	9	8	9	10	13	16	15	22	16	13	13	10	9	7	12	8	18	21.6
22-May	44	23	19	22	13	15	17	23	12	17	27	35	30	21	25	24	11	31	33	50	52	19	27	13	52.0
23-May	8	12	7	8	67	84	96	67	43	35	46	54	34	14	10	9	15	12	16	10	9	9	10	8	96.0
24-May	8	8	49	29	10	39	17	10	14	13	16	15	13	16	19	27	46	37	16	15	18	44	16	64	64.3
25-May	45	26	27	58	43	40	52	59	33	48	46	16	24	75	45	66	71	86	13	15	12	11	14	12	86.1
26-May	16	19	39	19	18	14	22	58	33	40	28	67	52	55	69	46	60	42	63	30	9	9	33	45	68.8
27-May	30	13	10	12	13	12	14	23	28	84	59	78	68	52	80	21	90	86	32	37	15	9	20	31	90.2
28-May	23	44	59	60	13	45	80	28	31	24	26	28	27	15	15	76	25	12	16	15	10	9	11	12	80.0
29-May	10	11	16	19	60	21	13	41	39	42	43	58	93	60	38	23	89	23	30	16	11	8	9	12	92.6
30-May	13	14	8	9	30	16	8	9	9	13	12	16	13	35	28	9	10	34	10	25	48	11	35	23	47.6
31-May	9	57	61	38	30	70	47	13	13	16	19	43	38	17	17	15	21	25	58	44	81	19	41	14	80.8
54.1 70.3 61.3 90.7 66.6 91.7 96.0 66.7 93.6 84.1 64.2 86.7 92.8 80.2 79.5 83.6 90.2 86.4 63.9 63.5 80.8 43.5 68.8 64.3																									

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

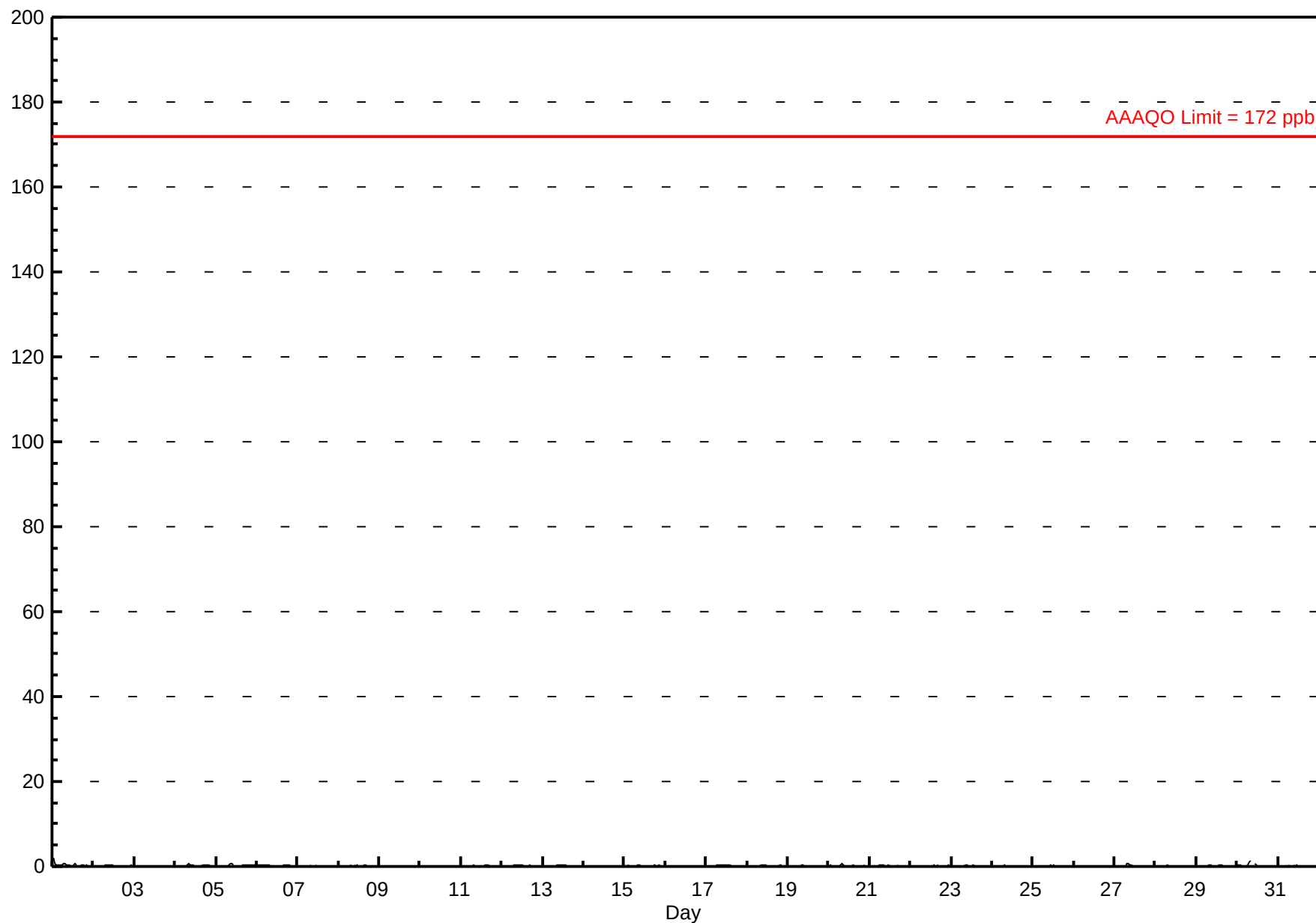
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																		Hours in Service: 744								
Maximum Value: 1.9 ppb on May 1 01:00																		Maximum Daily Average: 0.4 ppb on May 1		Hours of Data: 702						
Minimum Value: 0 ppb on May 2 22:00																		Minimum Daily Average: 0.0 ppb on May 26		Hours of Missing Data: 42						
Maximum Diurnal Average: 0.3 ppb at hour 9																		Minimum Diurnal Average: 0.1 ppb at hour 23		Hours of Calibration: 35						
Monthly Average: 0.11 ppb																		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.3 P ₉₉ = 0.6		Percent Operational Time: 99.1						
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-May	2	1	0	0	0	0	1	1	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0.4	1.9
2-May	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	0.3
3-May	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	0.1
4-May	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
5-May	0	0	0	0	0	0	0	0	1	1	0	A	C	C	C	0	0	0	0	0	0	0	0	0	0.2	0.7
6-May	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
7-May	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
8-May	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	0.4
9-May	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	0.1
10-May	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-May	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	0.4
12-May	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-May	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-May	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	0.1
15-May	0	A	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	0	0	0	0	0	0	0	--	0.4
16-May	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	0.1
17-May	0	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-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.1	0.4
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
20-May	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.7
21-May	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	0.3
22-May	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-May	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-May	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	0.3
25-May	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-May	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-May	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
28-May	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
29-May	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
30-May	0	0	0	0	0	0	0	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
31-May	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	0.3
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 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 0.1																									Diurnal Average	
1.9 0.6 0.4 0.3 0.4 0.5 0.7 1.0 1.3 0.7 0.5 0.4 0.4 0.5 0.4 0.3 0.3 0.4 0.4 0.4 0.3 0.3 0.2 0.3																									Diurnal Maximum	
C - Calibration P - Power Failure 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 - May 2014



Hourly Maximums

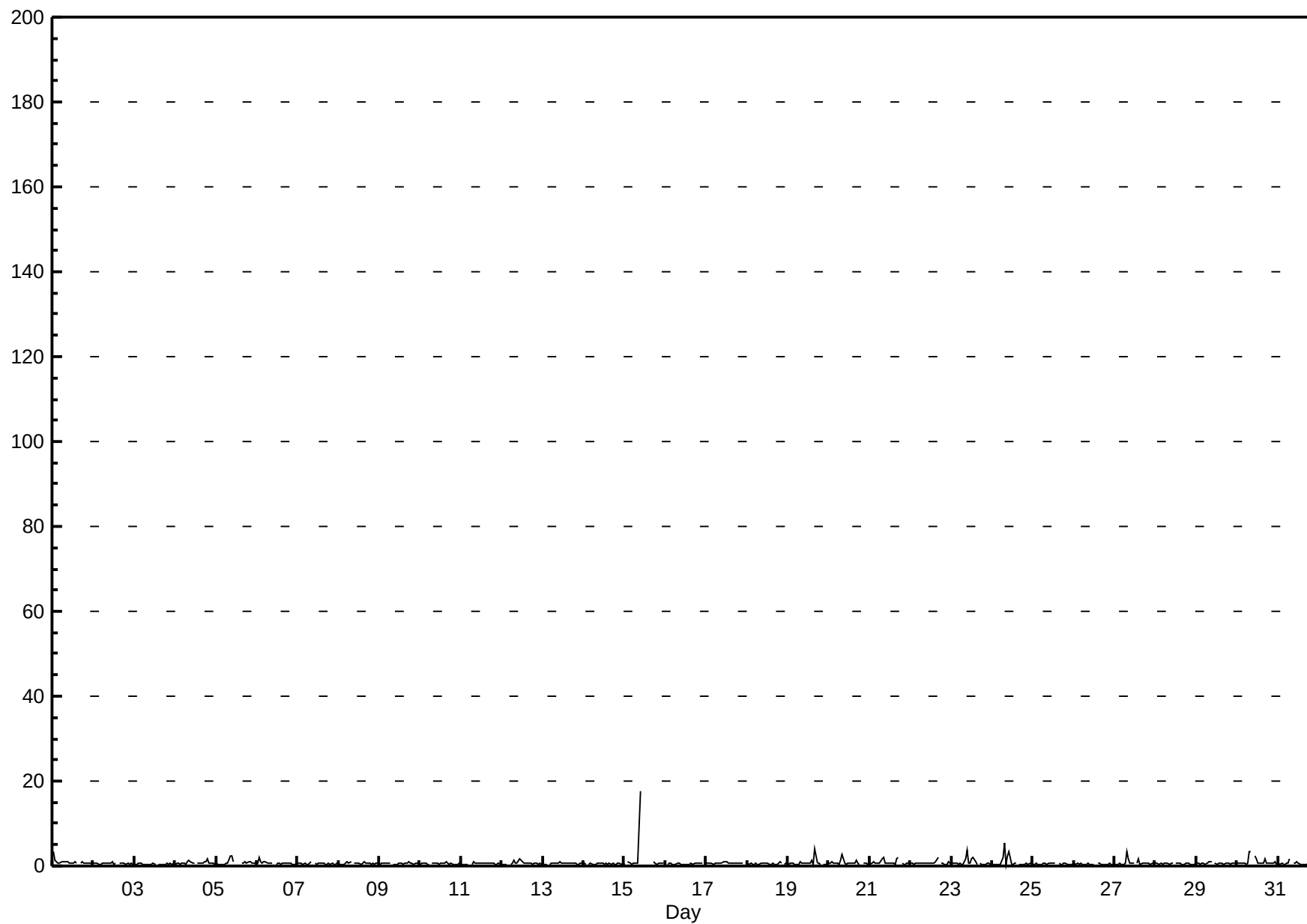
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - May 2014

Maximum Value: 17.5 ppb on May 15 10:00																				Maximum Daily Average: 1.0 ppb on May 30					Hours in Service: 744	
Minimum Value: 0 ppb on May 12 01:00																				Minimum Daily Average: 0.5 ppb on May 3					Hours of Data: 702	
Maximum Diurnal Average: 1.5 ppb at hour 10																				Minimum Diurnal Average: 0.5 ppb at hour 22					Hours of Missing Data: 42	
Monthly Average: 0.69 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 = 3.3					Hours of Calibration: 35	
																				Percent Operational Time: 99.1						
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-May	3	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	3.2
2-May	1	1	1	0	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	0	1	0	1	0	0.6	0.9
3-May	0	0	1	1	1	0	0	0	0	0	0	1	0	A	0	0	0	0	0	1	0	1	0	1	0.5	0.7
4-May	0	1	1	0	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	0	0.7	1.6
5-May	1	0	0	0	1	0	1	1	2	2	1	A	C	C	C	1	1	1	1	1	1	1	1	1	0.9	2.5
6-May	1	2	1	1	1	1	1	1	1	1	A	0	1	1	0	1	1	1	1	1	1	0	0	1	0.7	1.9
7-May	1	1	1	0	1	0	0	1	1	A	1	0	1	1	1	1	0	0	1	0	1	0	0	1	0.5	0.9
8-May	1	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0.6	1.0
9-May	0	1	1	1	1	1	1	A	0	0	0	1	1	1	0	1	1	1	1	1	0	1	1	0	0.6	0.9
10-May	0	1	1	1	0	0	A	1	1	1	1	0	1	1	1	1	1	0	1	0	0	0	0	1	0.5	0.9
11-May	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0.5	1.0
12-May	0	0	0	1	A	0	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	0	1	0	0.7	1.6
13-May	1	0	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0.6	1.0
14-May	1	0	A	0	1	0	0	0	1	1	1	1	0	1	0	1	0	1	0	0	1	1	0	1	0.5	0.7
15-May	0	A	1	1	0	1	1	1	1	17	P	P	P	P	P	P	P	1	1	0	1	1	1	1	--	17.5
16-May	A	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	0	1	1	1	1	1	1	A	0.5	0.8
17-May	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
18-May	1	0	1	0	0	1	0	0	1	1	1	1	1	0	0	1	0	0	0	1	1	A	0	1	0.6	1.1
19-May	0	1	1	1	0	0	0	1	1	1	1	1	1	1	0	4	1	1	1	0	A	0	0	1	0.8	4.1
20-May	1	1	1	1	1	1	0	1	3	1	0	1	1	1	1	1	1	1	0	A	1	1	1	0	0.8	2.7
21-May	0	1	1	1	1	1	1	2	2	1	1	1	1	1	0	2	2	A	1	0	0	0	1	1	0.8	2.1
22-May	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	0	0	0	1	1	0.7	2.1
23-May	1	1	1	1	0	1	0	0	2	4	1	1	2	2	1	0	A	1	0	0	0	1	1	0	0.9	3.7
24-May	0	0	0	0	0	0	2	5	0	2	3	0	0	1	1	A	0	0	0	0	1	0	1	1	1.0	5.3
25-May	0	0	1	1	0	0	1	1	0	1	1	1	1	1	A	1	0	0	1	1	0	0	0	0	0.5	0.7
26-May	1	0	1	0	1	0	0	0	1	0	0	0	0	A	1	1	0	0	0	0	0	1	0	0	0.5	0.7
27-May	0	0	0	1	0	1	1	4	2	1	1	1	A	1	2	1	1	1	1	1	1	0	1	1	0.8	3.5
28-May	1	1	0	1	0	1	1	1	1	1	1	A	1	1	1	0	0	0	1	1	0	0	0	0	0.5	0.7
29-May	1	1	0	1	1	0	1	1	1	1	A	1	0	1	1	1	1	1	1	1	0	1	1	1	0.6	1.0
30-May	1	1	1	1	1	0	1	3	3	A	2	2	1	1	1	1	2	1	1	1	1	1	1	0	1.0	3.4
31-May	1	0	1	0	0	1	1	2	A	1	1	1	1	0	0	1	0	0	1	1	1	0	0	0	0.6	1.5
0.6 0.6 0.6 0.5 0.5 0.6 0.6 1.1 1.0 1.5 0.8 0.7 0.6 0.7 0.7 0.6 0.8 0.7 0.6 0.6 0.5 0.5 0.6 0.5																									Diurnal Average	
3.2 1.9 1.2 0.7 0.9 1.2 2.2 5.3 3.3 17.5 3.5 1.6 1.7 2.1 1.8 1.0 4.1 1.9 0.9 1.6 0.9 0.8 0.9 0.8																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

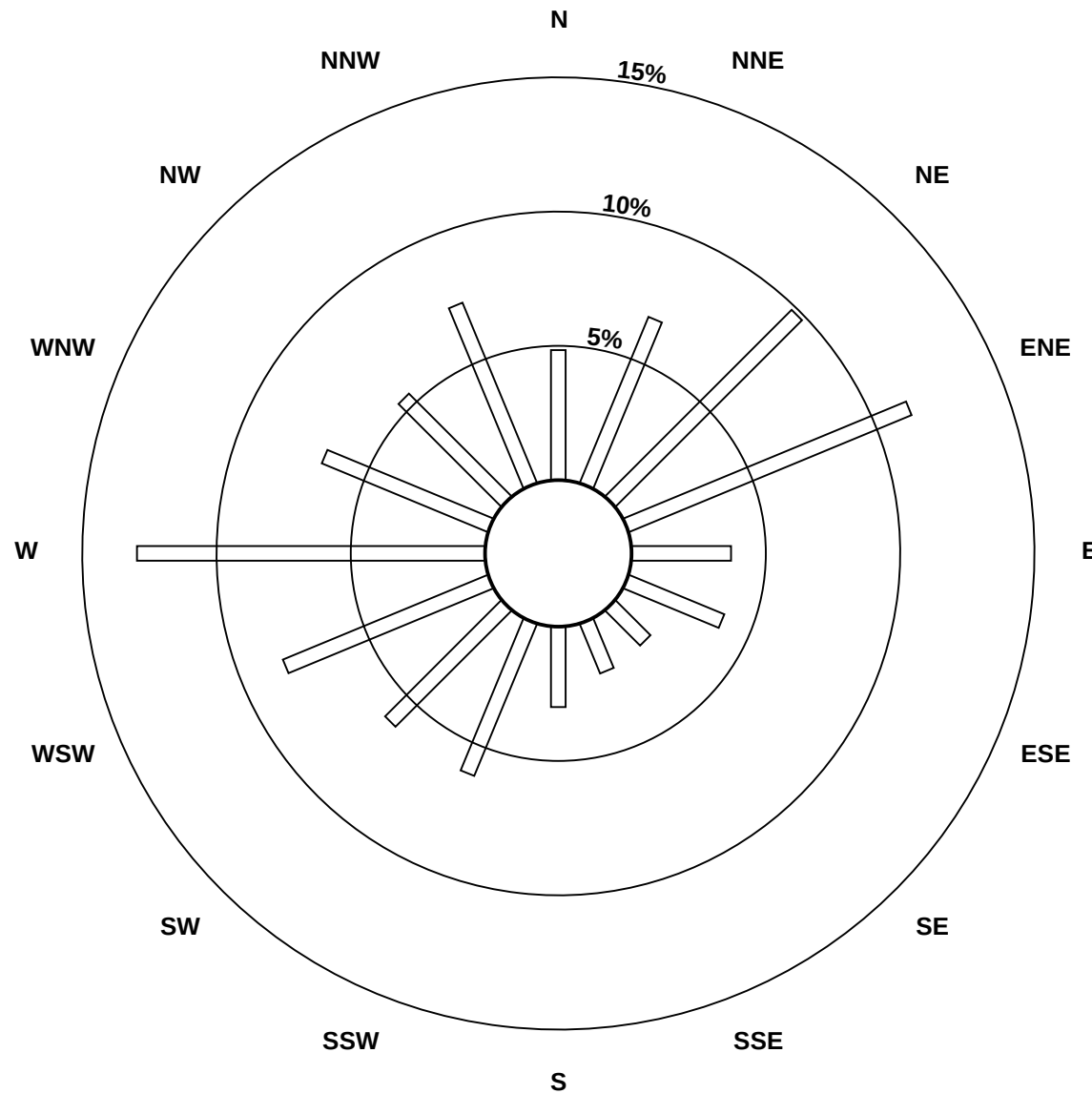
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - May 2014

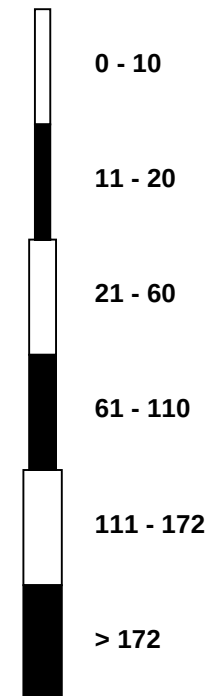


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - May 2014

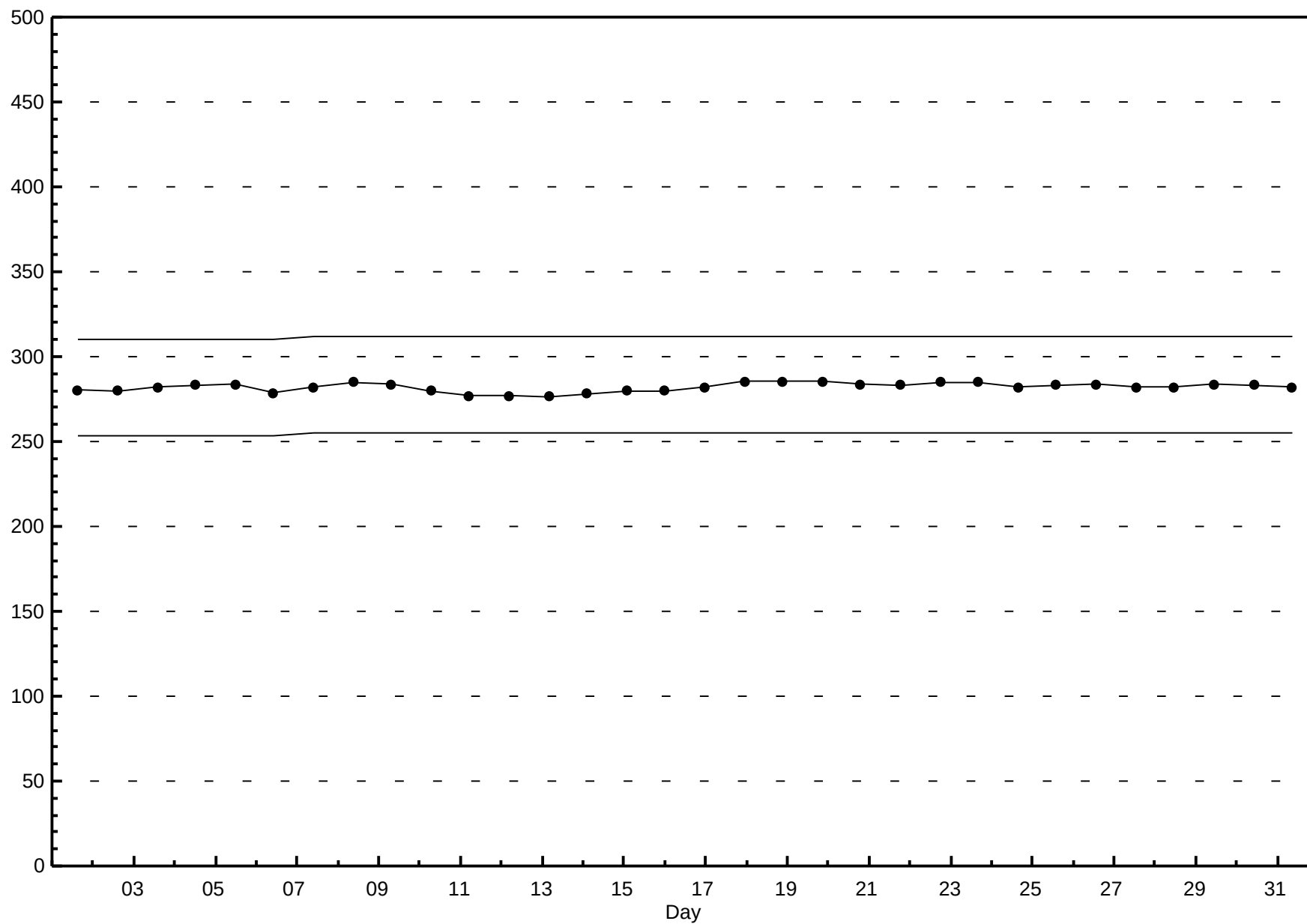


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - May 2014



Hourly Averages

Total Reduced Sulphur (TRS) - ppb

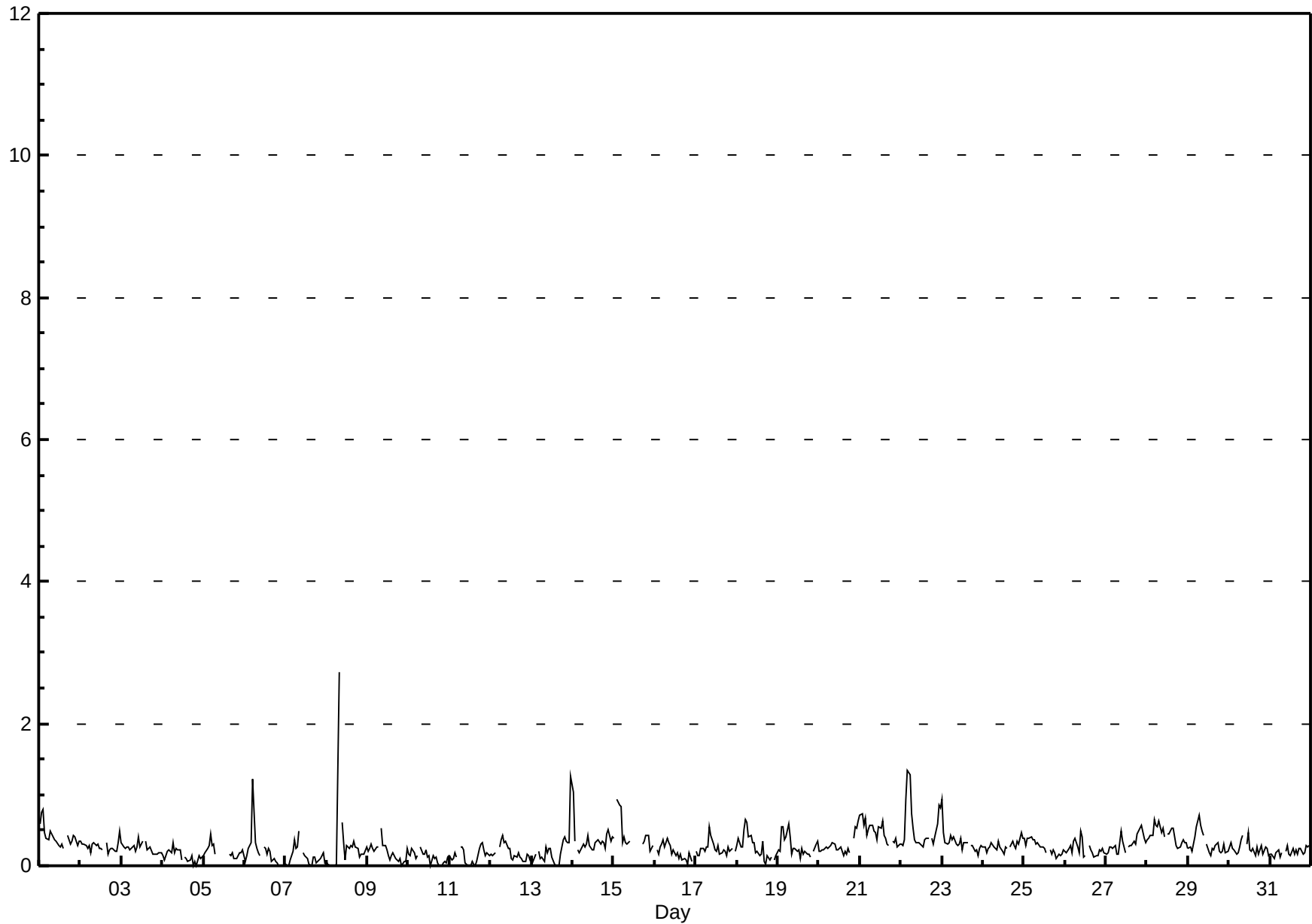
Evergreen Park - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 2.7 ppb on May 8 08:00																				Maximum Daily Average: 0.5 ppb on May 22		Hours of Data: 699				
Minimum Value: 0 ppb on May 4 19:00																				Minimum Daily Average: 0.1 ppb on May 10		Hours of Missing Data: 45				
Maximum Diurnal Average: 0.4 ppb at hour 8																				Minimum Diurnal Average: 0.2 ppb at hour 20		Hours of Calibration: 38				
Monthly Average: 0.27 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.9		Percent Operational Time: 99.1				
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-May	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.8
2-May	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-May	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	0.4
4-May	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-May	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	0.4
6-May	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
7-May	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	0.5
8-May	0	0	0	0	0	0	0	3	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.7
9-May	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
10-May	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-May	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-May	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
13-May	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	1.3
14-May	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.0
15-May	0	A	1	1	1	0	0	0	0	0	P	P	P	P	P	P	P	0	0	0	0	0	0	0	--	0.9
16-May	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-May	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
18-May	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.3	0.7
19-May	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.6
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	0.3	0.6
21-May	1	1	1	1	0	1	1	1	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0.5	0.7
22-May	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	0.5	1.3
23-May	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.9
24-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.5
25-May	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	0.4
26-May	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5
27-May	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0.3	0.6
28-May	0	0	0	0	1	1	1	1	0	1	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0.4	0.7
29-May	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
30-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
31-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
0.3 0.2 0.3 0.3 0.3 0.4 0.3 0.4 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 0.3 0.2 0.3																									Diurnal Average	
1.0 0.7 0.9 0.9 1.3 1.3 0.7 2.7 0.5 0.6 0.4 0.5 0.5 0.6 0.5 0.5 0.4 0.4 0.4 0.5 0.5 0.6 0.8 1.3																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - May 2014



Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

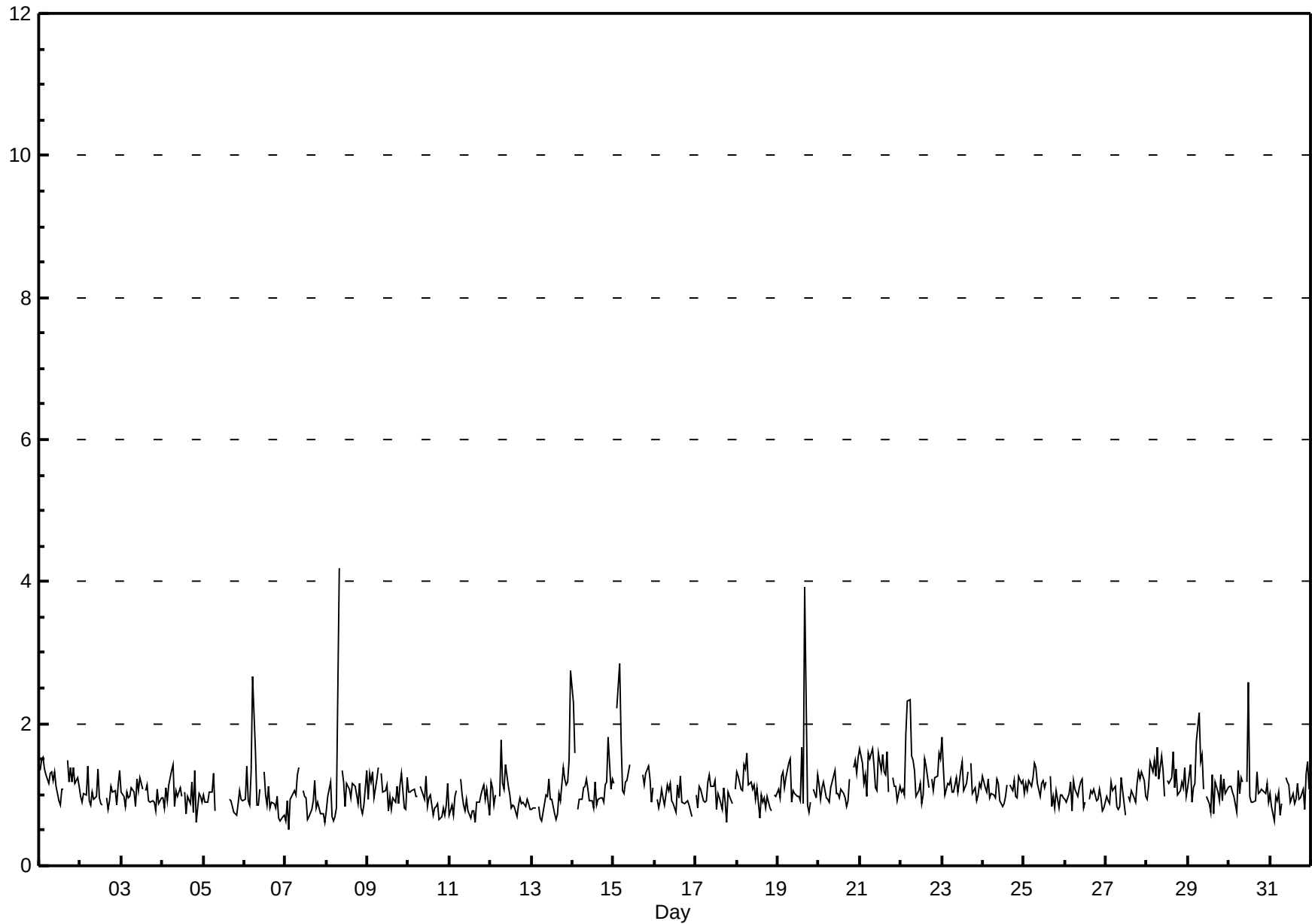
Evergreen Park - May 2014

Maximum Value: 4.2 ppb on May 8 08:00																		Maximum Daily Average: 1.3 ppb on May 22										Hours in Service: 744	
Minimum Value: 1 ppb on May 7 03:00																		Minimum Daily Average: 0.9 ppb on May 11										Hours of Data: 699	
Maximum Diurnal Average: 1.2 ppb at hour 8																		Minimum Diurnal Average: 1.0 ppb at hour 13										Hours of Missing Data: 45	
Monthly Average: 1.08 ppb																		Percentiles: P ₁ = 0.6 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.0 Q ₃ = 1.2 P ₉₀ = 1.4 P ₉₉ = 2.2										Hours of Calibration: 38	
																												Percent Operational Time: 99.1	
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-May	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.5			
2-May	1	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	1.4			
3-May	1	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	1.2			
4-May	1	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	1.4			
5-May	1	1	1	1	1	1	1	1	C	C	C	C	C	C	C	1	1	1	1	1	1	1	1	1	--	1.3			
6-May	1	1	1	1	1	3	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.7			
7-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4			
8-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	4.2			
9-May	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4			
10-May	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3			
11-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2			
12-May	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8			
13-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1.0	2.8			
14-May	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.1	2.3			
15-May	1	A	2	3	2	1	1	1	1	1	P	P	P	P	P	P	P	1	1	1	1	1	1	1	--	2.9			
16-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.3			
17-May	1	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	1.3			
18-May	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.6			
19-May	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	4	1	1	1	A	1	1	1	1.2	3.9			
20-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1.1	1.5			
21-May	2	1	1	1	1	2	1	2	1	1	1	2	1	2	1	1	2	1	A	1	1	1	1	1	1.3	1.7			
22-May	1	1	1	2	2	2	2	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	2	2	1.3	2.3			
23-May	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	1.8			
24-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.1	1.3			
25-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	1.4			
26-May	1	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	1.2			
27-May	1	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	1.3			
28-May	1	1	1	1	1	1	2	1	2	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1.2	1.7			
29-May	1	1	1	1	1	2	2	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.2			
30-May	1	1	1	1	1	1	1	1	1	A	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.6			
31-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5			
		1.1	1.1	1.0	1.2	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.1	1.0	1.1	Diurnal Average				
		2.3	1.6	2.2	2.9	2.3	2.7	2.2	4.2	1.6	1.4	1.4	2.6	1.5	1.6	1.7	1.6	3.9	1.4	1.4	1.3	1.4	1.8	1.6	2.8	Diurnal Maximum			
C - Calibration		P - Power Failure						A - Automated Daily Zero Span																					

Hourly Maximums

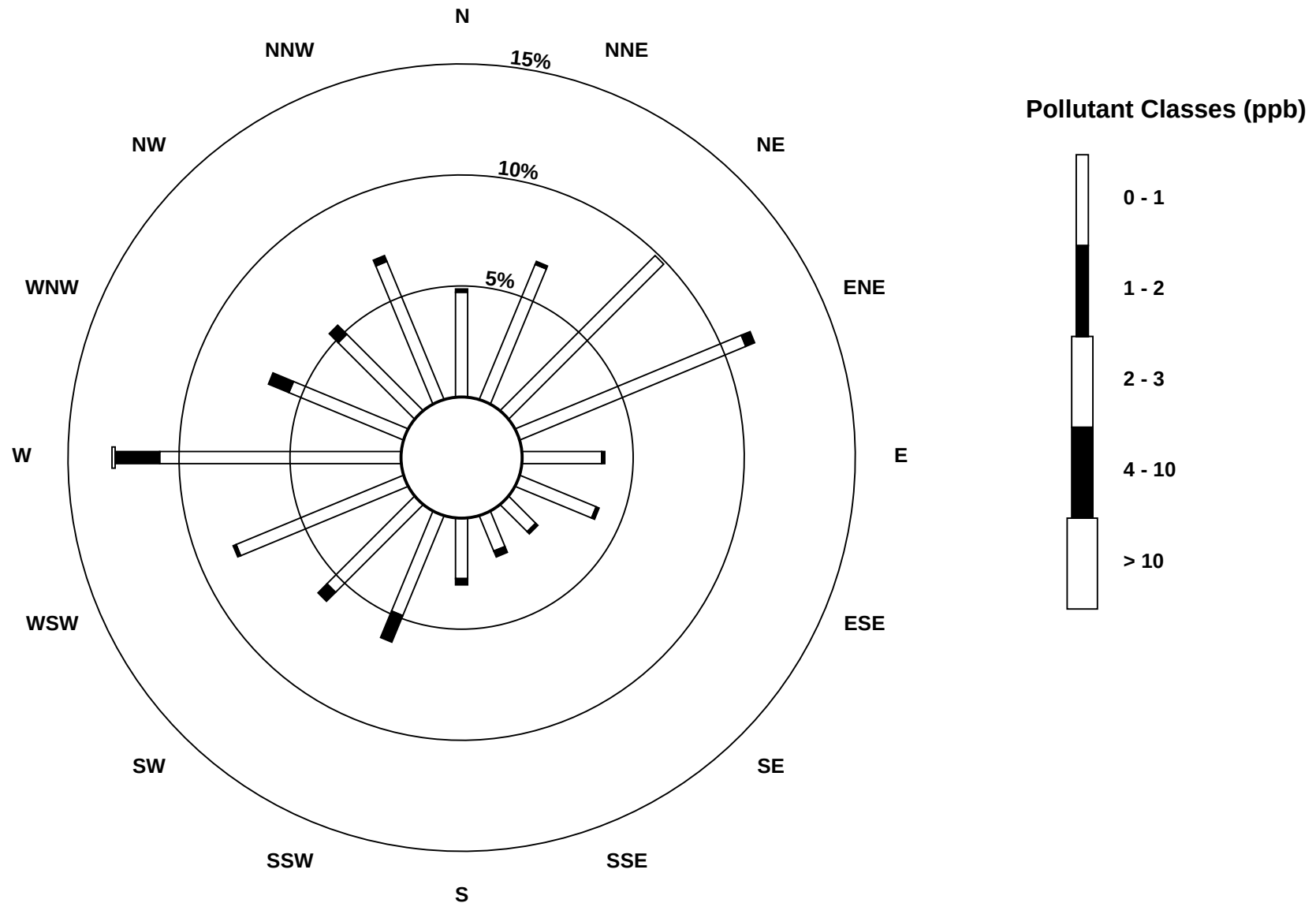
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - May 2014



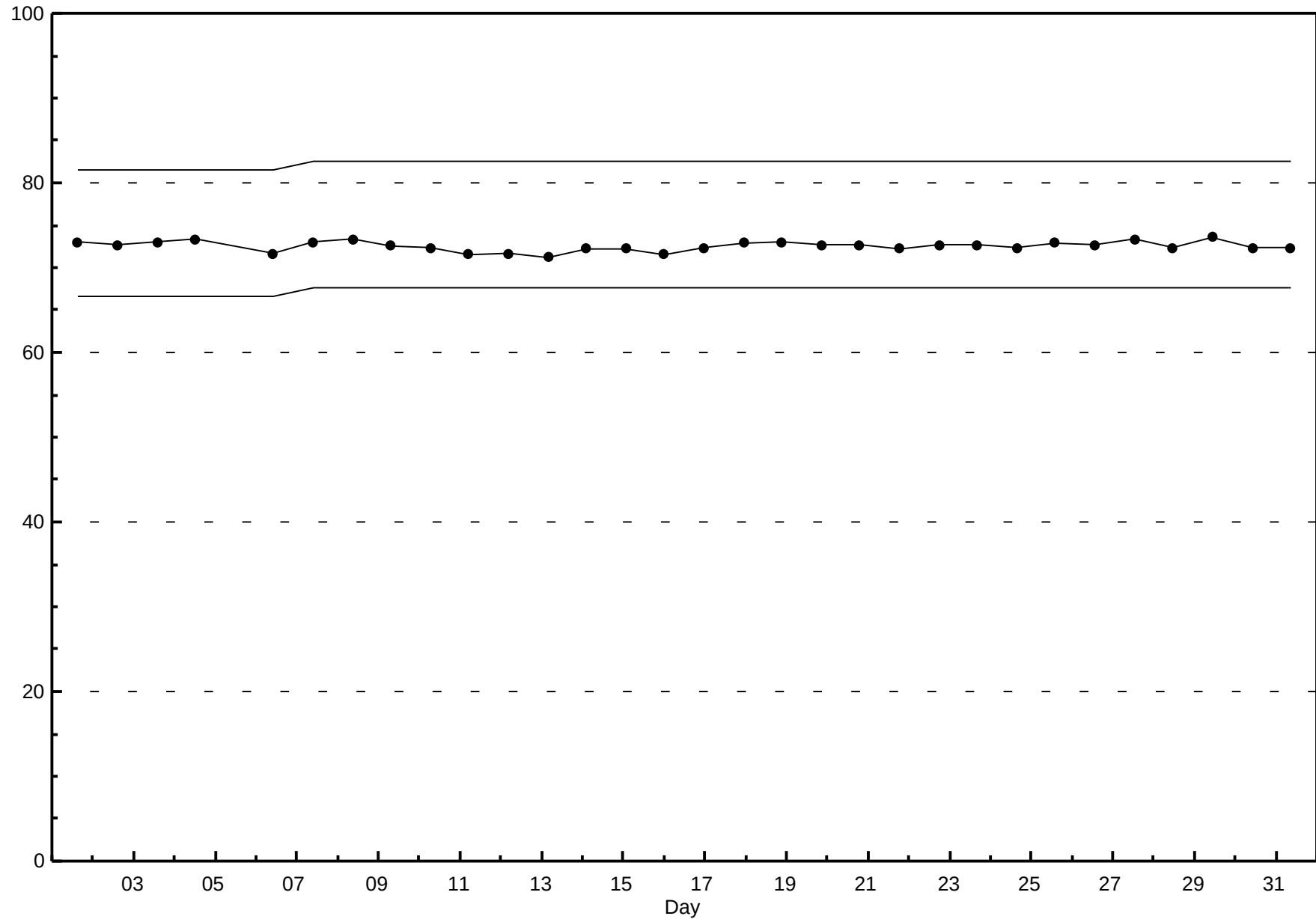
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - May 2014



Span Responses

Total Reduced Sulphur (TRS)
Evergreen Park - May 2014

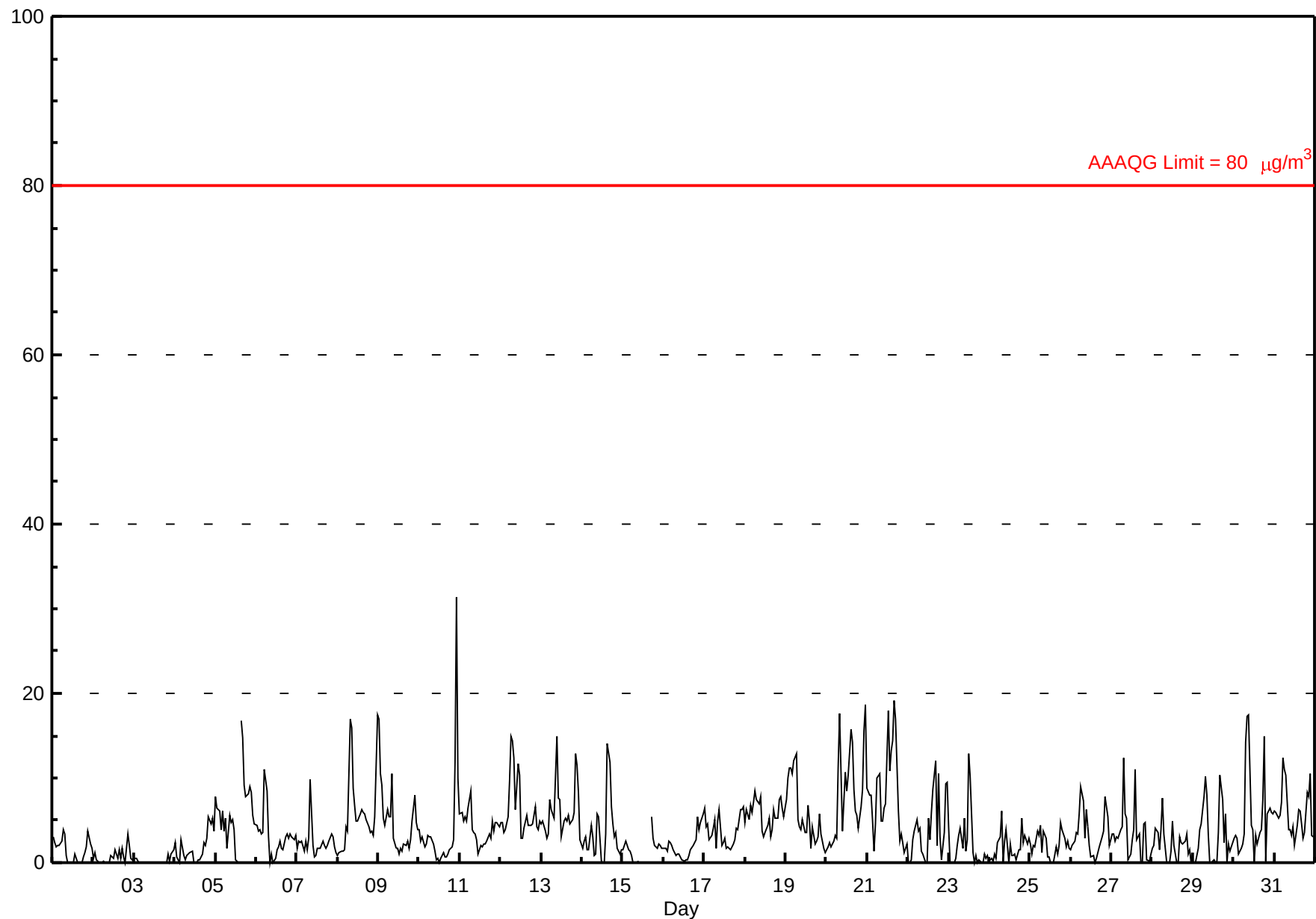


Hourly Averages

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

Evergreen Park - May 2014

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 31.4 µg/m³ on May 10 23:00 Minimum Value: 0 µg/m³ on May 1 10:00 Maximum Diurnal Average: 5.5 µg/m³ at hour 8 Monthly Average: 3.85 µg/m³																								Maximum Daily Average: 7.9 µg/m³ on May 21 Minimum Daily Average: 0.2 µg/m³ on May 3 Minimum Diurnal Average: 2.5 µg/m³ at hour 12 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 1.3 Median = 2.9 Q ₃ = 5.3 P ₉₀ = 8.6 P ₉₉ = 17.4		Hours in Service: 744 Hours of Data: 736 Hours of Missing Data: 8 Hours of Calibration: 0 Percent Operational Time: 98.9	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-May	3	2	2	2	2	2	4	3	1	0	0	0	1	1	0	0	0	1	1	2	4	2	2	1.4	3.8		
2-May	1	1	0	0	0	0	0	0	0	0	1	1	1	2	1	2	1	2	1	0	3	2	0	0	0.7	3.3	
3-May	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0.2	1.6	
4-May	2	1	0	0	3	1	0	1	1	1	1	0	0	0	0	0	1	2	2	3	5	5	5	4	1.6	5.5	
5-May	8	6	6	4	6	4	5	2	6	5	5	4	0	0	M	17	15	9	8	8	9	8	6	5	6.3	16.8	
6-May	4	4	4	3	4	11	8	3	0	1	0	0	2	2	3	2	1	3	3	3	3	3	3	3	3.1	11.0	
7-May	2	3	2	3	1	3	2	3	10	2	1	1	2	2	2	3	2	2	2	2	3	3	2	1	2.4	9.9	
8-May	1	1	1	1	2	4	4	17	16	9	7	5	5	6	6	6	6	5	4	4	4	3	5	17	5.8	17.4	
9-May	17	11	9	5	4	6	5	5	11	3	2	2	1	2	1	2	2	2	2	3	5	8	5	4	4.9	16.9	
10-May	4	3	3	2	2	3	3	3	2	1	0	0	0	0	1	1	1	1	1	2	3	12	31	10	3.8	31.4	
11-May	6	6	5	5	5	6	8	4	3	3	3	1	2	2	2	2	3	3	3	5	4	5	5	4	4.0	8.4	
12-May	5	5	4	4	5	10	15	14	12	6	12	10	3	3	4	6	4	4	4	5	7	4	4	5	6.5	15.0	
13-May	5	5	4	3	3	7	6	5	10	15	8	7	3	5	5	5	6	5	5	6	13	12	8	3	6.4	14.9	
14-May	2	2	3	2	2	4	3	1	1	6	5	0	0	0	3	14	12	7	5	3	3	2	1	2	3.4	14.0	
15-May	1	2	3	1	1	1	0	0	0	0	P	P	P	P	P	P	P	5	3	2	2	2	2	2	--	5.3	
16-May	2	2	1	3	2	2	2	1	1	1	1	0	0	0	0	1	2	2	2	3	5	4	5	6	2.0	5.8	
17-May	6	4	5	3	3	4	5	2	5	6	2	2	3	2	2	2	2	2	3	4	4	6	6	7	3.7	6.6	
18-May	5	6	5	7	6	7	8	8	7	8	4	3	4	4	5	3	4	6	5	5	7	8	7	5	5.7	8.5	
19-May	8	10	11	11	10	12	13	5	4	4	5	3	4	7	5	2	4	2	3	3	6	3	2	1	5.7	12.8	
20-May	2	2	2	2	3	3	3	11	18	4	7	11	8	10	16	14	9	6	6	4	7	9	16	19	7.9	18.7	
21-May	9	8	8	5	1	5	10	11	5	5	7	7	18	11	13	14	19	17	6	2	3	2	1	2	7.9	19.2	
22-May	0	0	0	3	4	5	4	4	1	1	0	0	5	3	6	9	12	2	10	3	0	3	9	10	3.9	12.1	
23-May	4	0	0	0	1	2	3	4	2	5	1	3	13	10	1	0	1	0	0	0	0	1	1	1	2.2	12.8	
24-May	0	0	0	1	0	2	3	6	0	3	4	0	2	1	1	1	0	2	2	5	2	3	2	3	1.9	6.1	
25-May	2	1	2	2	4	3	4	1	4	3	1	1	0	0	0	2	1	2	5	4	3	2	3	2	2.1	4.8	
26-May	2	2	2	4	3	6	9	7	3	6	4	2	1	1	0	0	1	2	3	4	8	7	5	2	3.5	8.9	
27-May	3	3	3	3	3	4	4	12	6	5	0	1	3	4	11	3	3	0	0	5	5	0	0	1	3.5	12.4	
28-May	2	2	4	3	2	4	8	3	0	0	0	1	5	2	0	0	3	2	2	2	3	1	2	0	2.2	7.5	
29-May	0	0	1	2	4	5	8	10	8	3	0	0	0	0	0	4	10	7	2	6	0	2	1	2	3.2	10.4	
30-May	3	3	3	1	2	2	3	14	17	17	4	4	0	3	2	4	4	7	15	0	6	6	6	6	5.6	17.4	
31-May	6	6	5	6	7	12	11	10	4	4	3	4	2	4	6	6	4	3	3	8	8	11	3	3	5.9	12.4	
3.7 3.3 3.2 2.9 3.1 4.6 5.3 5.5 5.1 4.1 2.9 2.5 2.9 2.9 3.4 4.1 4.4 3.7 3.6 3.4 4.4 4.6 4.8 4.2																								Diurnal Average	Diurnal Maximum		
16.9 10.6 11.2 11.1 10.5 12.4 15.0 17.0 17.6 17.4 11.6 10.7 18.0 10.9 15.7 16.8 19.2 16.9 14.9 8.3 12.9 11.8 31.4 18.7																								Diurnal Average	Diurnal Maximum		
P - Power Failure M - Maintenance																											
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

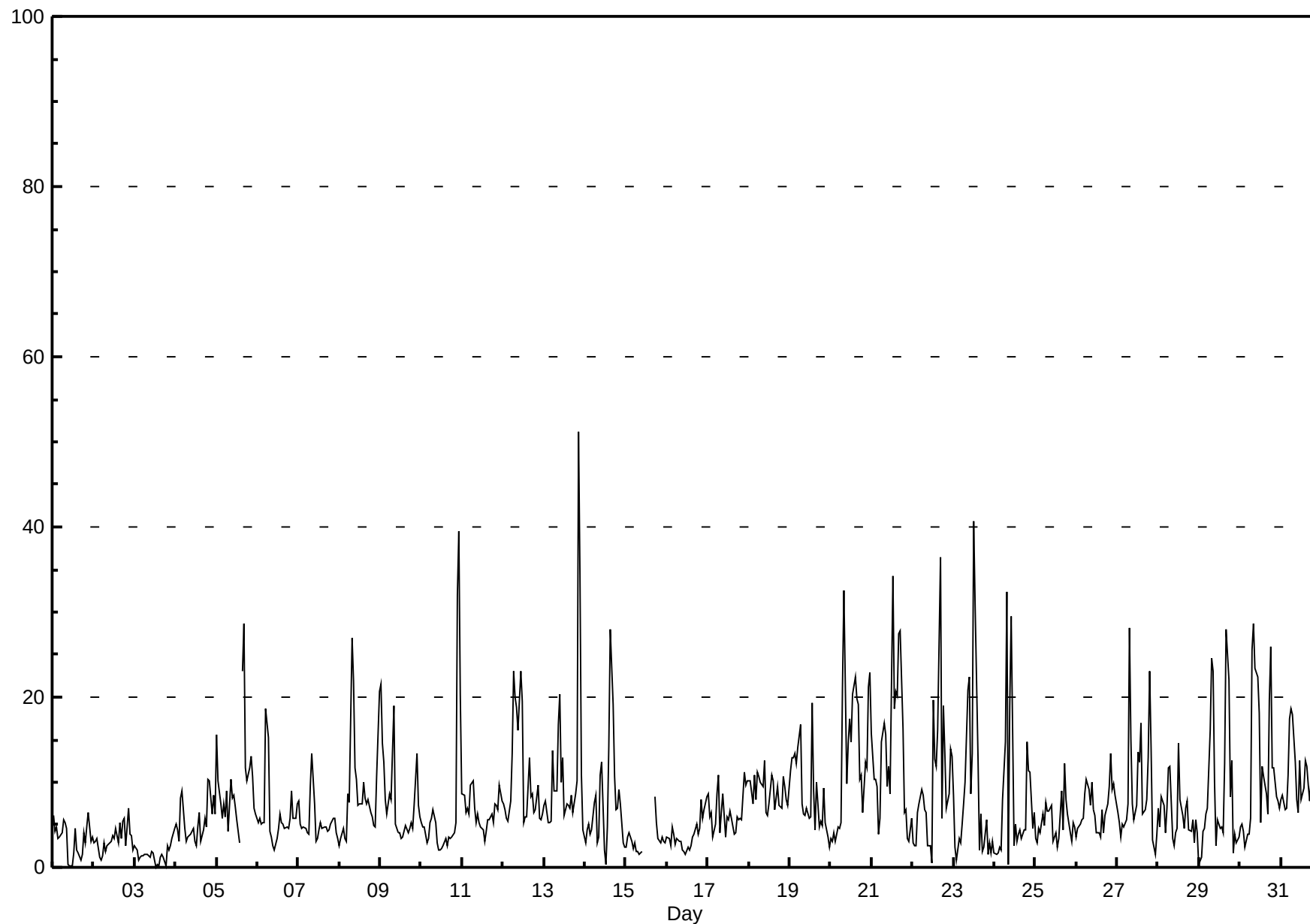
Evergreen Park - May 2014

Maximum Value: 51.2 μg/m³ on May 13 21:00																				Maximum Daily Average: 13.5 μg/m³ on May 21										Hours in Service: 744	
Minimum Value: 0 μg/m³ on May 3 13:00																				Minimum Daily Average: 1.6 μg/m³ on May 3										Hours of Data: 736	
Maximum Diurnal Average: 11.4 μg/m³ at hour 8																				Minimum Diurnal Average: 5.2 μg/m³ at hour 4										Hours of Missing Data: 8	
Monthly Average: 7.82 μg/m³																				Percentiles: P ₁ = 0.4 P ₁₀ = 2.6 Q ₁ = 3.8 Median = 6.0 Q ₃ = 9.4 P ₉₀ = 15.7 P ₉₉ = 31.1										Hours of Calibration: 0	
																														Percent Operational Time: 98.9	
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-May	6	4	5	3	4	4	6	5	5	0	0	0	2	5	2	2	1	2	4	3	5	7	3	4	3.3	6.5					
2-May	3	3	3	1	1	1	3	2	3	3	3	4	3	5	3	5	3	5	6	3	7	4	4	2	3.3	6.9					
3-May	3	2	1	1	1	1	2	2	1	1	2	2	0	0	0	1	2	1	0	3	2	3	3	5	1.6	4.6					
4-May	5	4	3	8	9	5	3	4	4	4	5	3	3	5	6	3	4	6	5	10	10	6	8	6	5.4	10.4					
5-May	16	10	7	6	7	6	9	4	10	8	8	7	6	3	M	23	29	12	10	12	13	11	7	6	10.0	28.7					
6-May	5	6	5	5	5	19	15	4	4	3	2	3	5	6	5	5	5	5	5	6	9	6	6	7	6.1	18.7					
7-May	8	5	5	5	5	4	4	9	13	7	3	3	4	5	5	5	5	4	4	5	6	6	4	3	5.3	13.3					
8-May	3	3	5	3	3	9	8	27	22	12	10	7	7	7	10	8	7	8	6	6	5	5	11	21	8.9	27.0					
9-May	22	15	12	8	6	9	8	14	19	5	4	4	3	4	4	5	4	4	5	5	7	13	7	6	8.1	21.6					
10-May	5	5	5	3	3	5	6	7	5	3	2	2	2	3	3	3	4	3	4	4	5	32	39	20	7.2	39.4					
11-May	9	8	7	7	6	10	10	7	5	6	5	5	4	3	4	6	6	6	5	7	7	7	10	8	6.6	10.2					
12-May	7	7	6	6	8	13	23	20	19	16	23	19	5	6	6	13	8	9	6	7	10	6	6	6	10.6	23.1					
13-May	7	8	5	5	5	14	9	9	17	20	10	13	6	7	7	7	8	7	9	10	51	34	11	4	11.9	51.2					
14-May	3	4	5	4	4	8	8	3	4	11	12	2	0	5	14	28	19	11	7	7	9	7	3	2	7.6	28.0					
15-May	2	4	4	3	2	3	2	2	2	2	P	P	P	P	P	P	P	8	5	3	3	4	3	3	--	8.2					
16-May	4	3	3	5	4	3	3	3	3	2	2	2	2	2	3	4	4	5	4	5	8	6	7	8	3.9	8.2					
17-May	9	6	7	4	5	9	11	4	7	9	4	6	6	7	6	4	4	6	6	6	6	11	10	10	6.6	11.2					
18-May	10	10	7	11	8	11	11	10	9	13	7	6	7	11	10	7	8	9	7	7	11	9	8	7	9.0	12.6					
19-May	11	13	13	13	12	14	17	7	6	6	7	6	6	19	9	4	10	5	5	5	9	5	4	2	8.8	19.4					
20-May	3	3	4	3	5	5	5	21	33	10	15	17	15	20	22	20	19	10	11	6	12	12	21	23	13.2	32.6					
21-May	16	10	10	9	4	6	15	17	16	9	12	9	34	19	21	20	27	28	16	7	7	3	3	6	13.5	34.3					
22-May	3	3	3	7	7	9	8	7	7	3	3	1	20	13	12	16	36	6	19	13	7	9	14	13	9.8	36.5					
23-May	8	2	1	3	3	5	7	10	21	22	9	13	41	31	13	2	6	2	2	6	2	3	2	3	9.0	40.6					
24-May	2	2	2	2	2	8	15	32	0	19	29	3	5	3	4	4	3	4	4	15	11	11	5	7	8.0	32.3					
25-May	3	3	5	4	6	5	8	7	7	7	3	4	4	2	3	9	4	12	8	6	4	3	5	5	5.3	12.2					
26-May	4	5	5	6	6	9	10	9	7	10	7	6	4	4	4	7	4	6	7	9	13	9	10	8	7.0	13.3					
27-May	6	5	4	5	5	6	7	28	15	7	6	7	14	12	17	6	7	8	13	23	14	3	2	4	9.3	28.2					
28-May	7	5	8	7	4	7	12	12	3	3	4	5	15	8	6	5	7	8	4	4	6	3	6	4	6.3	14.6					
29-May	0	1	4	5	6	7	16	25	23	10	3	6	5	5	4	12	28	22	8	13	2	4	3	4	8.9	28.0					
30-May	5	5	4	2	4	4	6	26	29	23	22	18	5	12	11	9	6	20	26	12	12	8	8	7	11.8	28.7					
31-May	8	8	7	7	11	17	19	18	12	8	6	13	8	9	13	12	10	8	10	15	26	26	6	5	11.7	25.8					
6.5 5.6 5.3 5.2 5.2 7.5 9.2 11.4 10.6 8.5 7.6 6.5 8.0 8.0 7.8 8.4 9.6 8.0 7.5 7.8 9.6 8.9 7.6 7.1																									Diurnal Average						
21.6 14.6 12.9 13.3 12.1 18.7 23.0 32.3 32.6 23.3 29.4 19.4 40.6 30.7 22.3 28.0 36.5 27.7 26.0 23.1 51.2 34.3 39.4 22.8																									Diurnal Maximum						
P - Power Failure M - Maintenance																															

Hourly Maximums

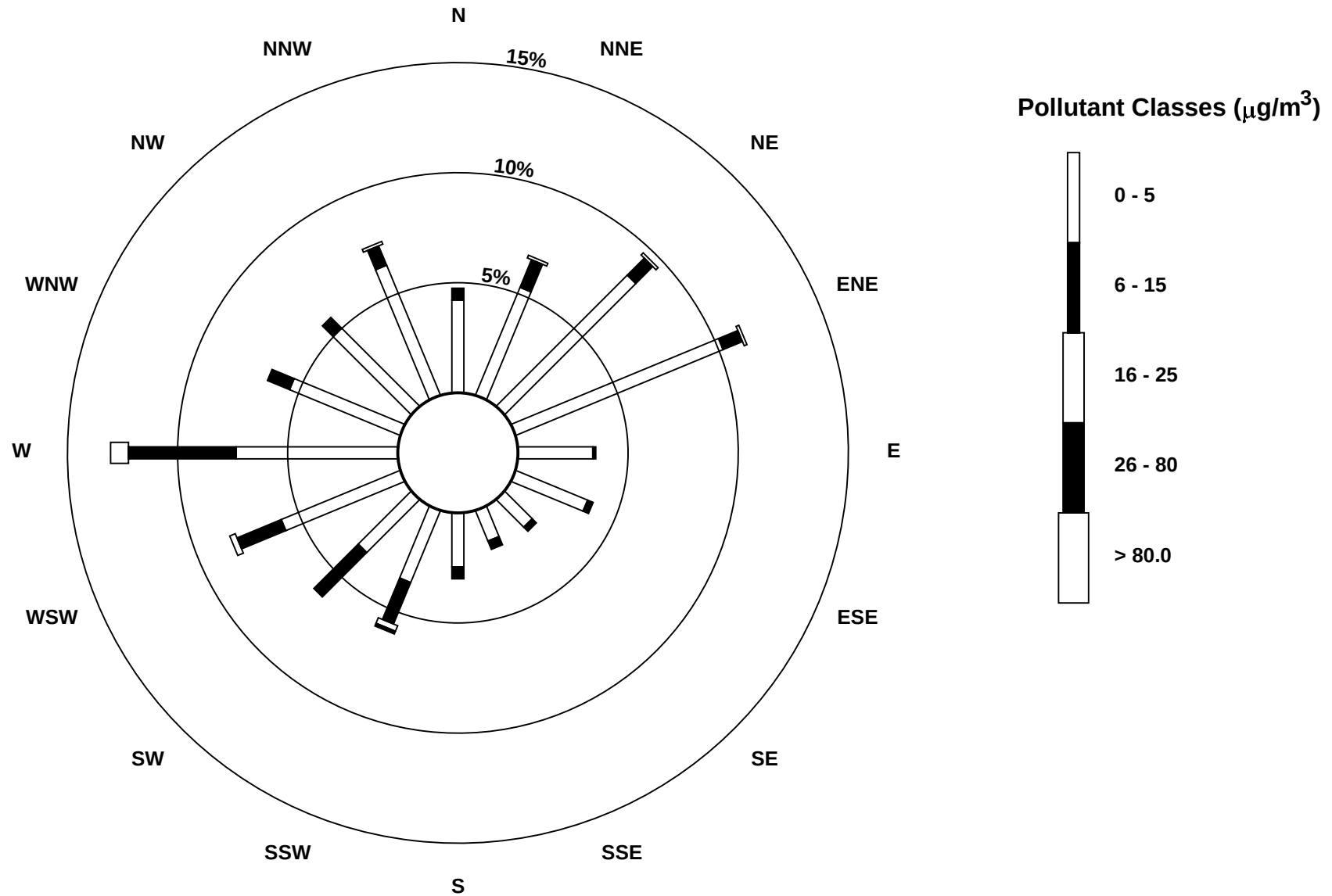
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Evergreen Park - May 2014



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - µg/m³
Evergreen Park - May 2014



Hourly Averages

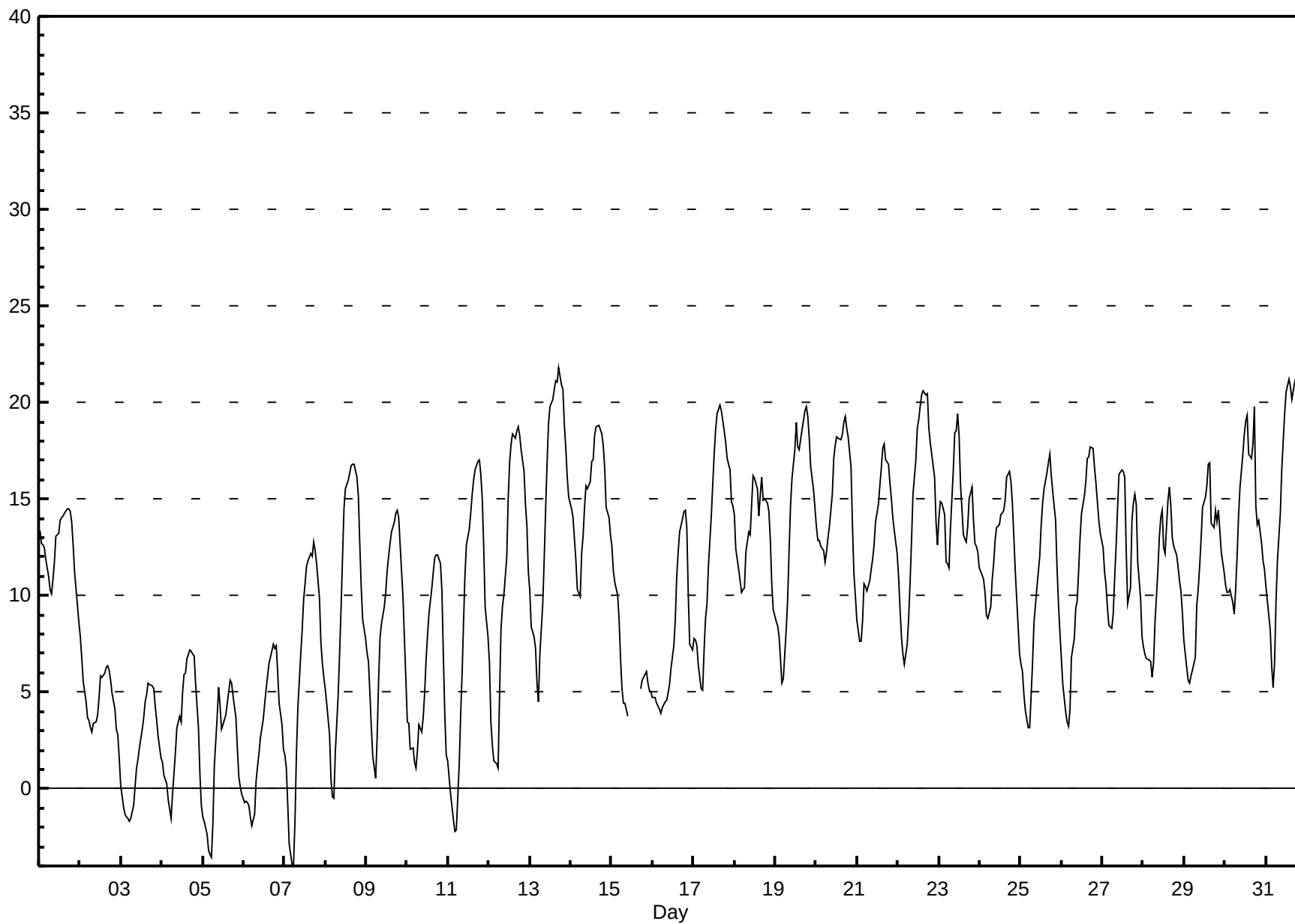
External Temperature (ET) - °C

Evergreen Park - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.8 °C on May 13 18:00 Maximum Daily Average: 15.2 °C on May 20																								Hours in Service: 744 Hours of Data: 737 Hours of Missing Data: 7 Hours of Calibration: 0 Percent Operational Time: 99.1		
Minimum Value: -4 °C on May 7 06:00 Minimum Daily Average: 1.6 °C on May 5 Maximum Diurnal Average: 14.7 °C at hour 17 Minimum Diurnal Average: 4.6 °C at hour 6 Monthly Average: 10.26 °C Percentiles: P ₁ = -2.2 P ₁₀ = 2.0 Q ₁ = 5.6 Median = 11.0 Q ₃ = 14.7 P ₉₀ = 17.8 P ₉₉ = 20.8																										
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-May	13	13	13	12	12	11	10	10	11	12	13	13	14	14	14	14	14	15	14	14	13	11	10	9	12.5	14.5
2-May	8	7	6	5	4	4	3	3	3	3	4	5	6	6	6	6	6	6	6	5	4	3	3	2	4.7	7.8
3-May	0	-1	-1	-1	-2	-2	-2	-1	0	1	1	2	3	4	4	5	5	5	5	5	4	4	3	2	1.9	5.5
4-May	1	1	0	0	-1	-2	0	1	2	3	4	3	5	6	6	7	7	7	7	7	5	3	1	-1	3.1	7.2
5-May	-1	-2	-2	-3	-3	-4	-2	1	4	5	4	3	3	4	4	5	6	6	5	4	2	1	0	0	1.6	5.6
6-May	-1	-1	-1	-1	-1	-2	-1	0	1	2	3	4	4	5	6	6	7	7	7	7	6	4	3	2	2.9	7.5
7-May	2	1	-1	-3	-4	-4	-2	2	4	7	8	10	11	11	12	12	12	13	12	12	10	8	7	6	6.0	12.8
8-May	5	4	3	0	0	-1	2	5	7	9	12	14	16	16	16	17	17	17	16	15	13	10	9	8	9.6	16.8
9-May	7	7	5	3	2	1	3	5	8	9	9	10	11	12	13	13	14	14	14	14	13	10	8	6	8.7	14.4
10-May	3	3	2	2	1	1	2	3	3	4	5	7	8	9	10	11	12	12	12	12	10	7	4	2	6.1	12.1
11-May	1	0	-1	-2	-2	-2	1	4	6	9	11	13	13	14	15	16	16	17	17	16	15	13	9	8	8.7	17.0
12-May	6	3	2	1	1	1	5	8	9	10	12	15	17	18	18	18	19	19	18	18	16	15	14	11	11.5	18.8
13-May	10	8	8	7	5	4	7	10	12	14	17	19	20	20	21	21	21	22	21	21	19	18	16	15	14.8	21.8
14-May	15	14	13	12	10	10	12	13	15	16	16	16	17	17	18	19	19	19	18	18	17	15	14	13	15.2	18.8
15-May	13	11	11	10	9	7	5	4	4	4	P	P	P	P	P	P	P	P	5	6	6	6	5	5	--	12.6
16-May	5	5	4	4	4	4	4	4	5	5	5	6	7	9	11	12	13	14	14	14	14	10	8	7	7.9	14.4
17-May	8	8	7	6	5	5	7	9	10	12	14	16	17	19	19	20	20	19	19	18	17	16	15	15	13.3	19.9
18-May	14	12	11	11	10	10	10	12	13	13	15	16	16	16	14	15	16	15	15	15	14	13	11	9	13.3	16.2
19-May	9	8	8	7	5	6	8	10	12	15	16	18	19	18	18	18	19	20	20	19	18	17	15	14	14.0	19.8
20-May	14	13	13	13	12	12	12	13	14	15	17	18	18	18	18	18	19	19	19	18	17	14	11	10	15.2	19.3
21-May	9	8	8	9	11	10	10	11	11	12	13	14	15	16	17	18	18	17	17	16	15	14	13	12	13.0	17.8
22-May	11	9	8	7	6	7	9	11	13	15	17	19	19	20	20	21	20	20	19	18	17	16	14	13	14.6	20.6
23-May	14	15	15	14	12	12	11	13	16	18	19	19	18	16	13	13	13	14	15	16	14	13	13	12	14.5	19.5
24-May	11	11	11	10	9	9	9	11	12	13	14	14	14	14	14	15	16	16	16	15	13	11	8	7	12.3	16.5
25-May	6	6	5	4	3	3	5	7	9	10	11	12	14	15	16	16	17	17	16	15	14	11	10	8	10.4	17.3
26-May	7	5	4	3	3	4	7	8	9	10	11	13	14	15	16	17	17	18	18	17	16	15	14	13	11.4	17.7
27-May	12	11	11	9	8	8	9	11	13	15	16	17	16	16	12	10	10	14	15	15	15	12	10	8	12.2	16.5
28-May	7	7	7	7	7	6	6	9	11	13	14	14	12	12	15	16	15	13	13	12	12	11	10	9	10.7	15.6
29-May	8	6	6	5	6	6	7	9	10	12	13	15	15	16	17	17	14	14	14	14	14	13	12	11	11.4	16.9
30-May	11	10	10	10	10	9	10	12	14	16	17	18	19	19	17	17	18	20	15	14	14	13	12	11	14.0	19.8
31-May	10	10	8	6	5	6	10	12	14	17	18	19	21	21	21	20	21	21	21	19	17	13	12	12	14.8	21.4
7.7 6.9 6.2 5.5 4.8 4.6 5.8 7.4 8.9 10.2 11.6 12.7 13.5 13.8 14.1 14.5 14.7 14.6 14.3 13.8 12.7 10.9 9.4 8.3																								Diurnal Average		
14.5 14.8 14.8 14.2 12.3 11.7 12.3 13.5 16.5 18.4 18.6 19.5 20.6 21.2 20.8 21.1 21.0 21.8 21.4 20.7 18.8 17.6 16.2 15.1																								Diurnal Maximum		
P - Power Failure																										

Hourly Averages

External Temperature (ET) - °C
Evergreen Park - May 2014



Hourly Averages

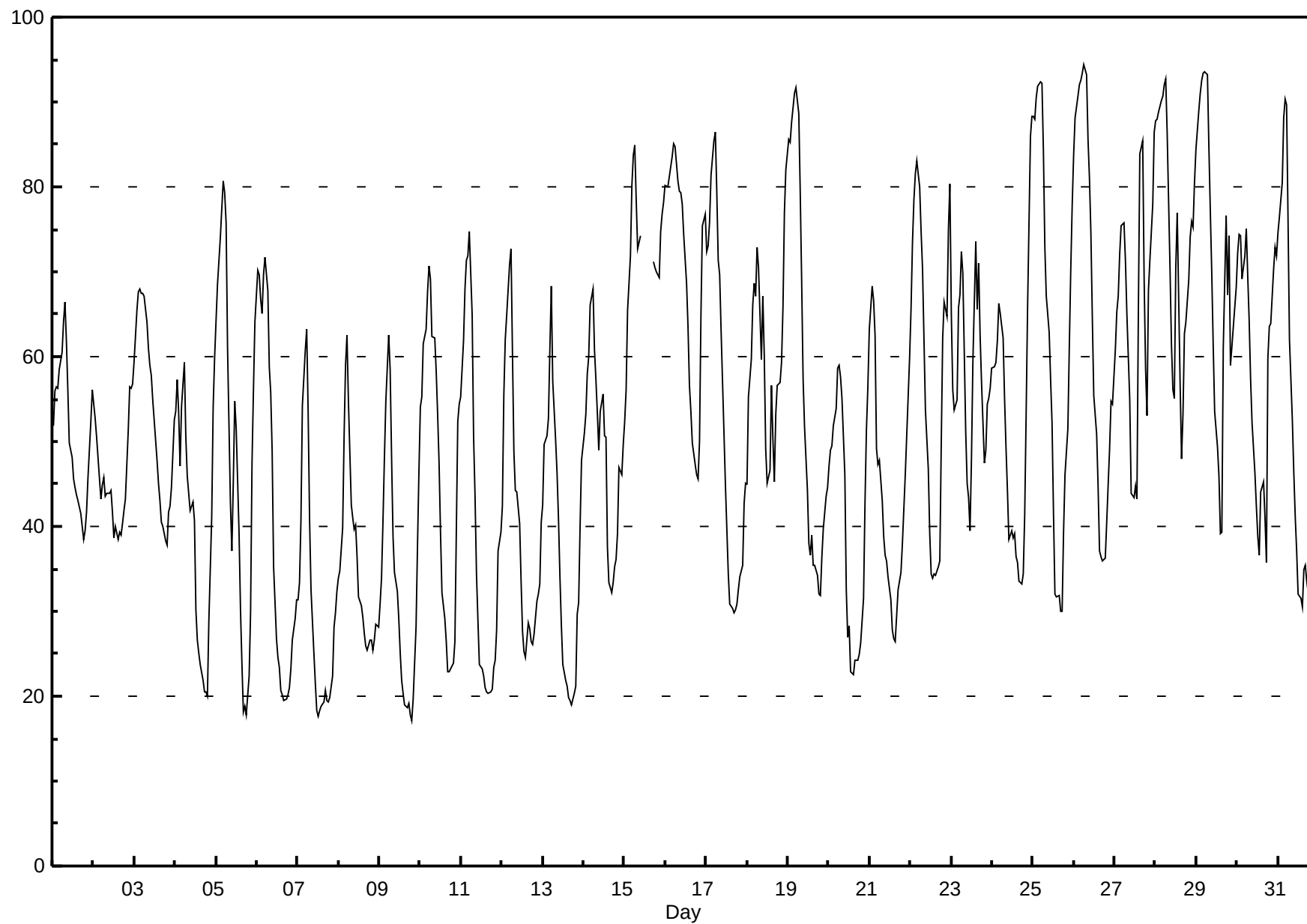
Relative Humidity (RH) - %

Evergreen Park - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 94.4 % on May 26 07:00 Maximum Daily Average: 73.6 % on May 28																								Hours in Service: 744 Hours of Data: 737 Hours of Missing Data: 7 Hours of Calibration: 0 Percent Operational Time: 99.1		
Minimum Value: 17 % on May 9 20:00 Maximum Diurnal Average: 73.2 % at hour 6 Monthly Average: 51.77 %												Minimum Daily Average: 30.9 % on May 7 Minimum Diurnal Average: 35.5 % at hour 16 Percentiles: P ₁ = 18.6 P ₁₀ = 25.8 Q ₁ = 36.1 Median = 50.7 Q ₃ = 66.6 P ₉₀ = 79.4 P ₉₉ = 92.4														
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-May	52	56	57	56	58	61	64	66	62	56	50	48	46	45	44	43	41	40	38	40	42	46	52	56	50.8	66.4
2-May	54	53	50	46	43	45	46	44	44	44	44	42	39	40	39	39	39	40	42	43	51	57	56	57	45.7	56.8
3-May	59	65	68	68	68	67	67	64	61	59	58	55	50	48	45	43	40	40	38	38	42	42	45	52	53.5	67.9
4-May	54	57	54	47	54	59	51	46	44	42	43	41	30	27	25	24	22	20	20	20	29	41	54	60	40.1	59.8
5-May	64	68	74	77	81	79	76	61	43	37	45	55	52	39	30	24	18	19	18	22	30	47	56	64	49.2	80.7
6-May	70	70	67	65	70	72	68	59	56	49	35	27	25	23	21	20	20	20	20	21	23	27	29	31	41.1	71.7
7-May	31	33	41	54	61	63	53	41	33	25	22	18	18	18	19	19	21	19	19	20	22	28	30	32	30.9	63.2
8-May	34	35	40	51	59	63	55	43	41	40	40	36	32	31	29	27	26	25	27	27	25	27	29	28	36.1	62.6
9-May	31	34	41	48	55	62	59	48	39	35	32	29	25	22	20	19	19	19	18	17	20	28	38	46	33.5	62.5
10-May	54	55	62	63	68	71	69	62	62	58	53	47	39	32	29	26	23	23	23	24	26	39	52	54	46.6	70.7
11-May	55	62	68	71	72	75	65	51	44	34	29	24	23	22	21	21	20	20	21	23	24	28	37	39	39.6	74.8
12-May	42	55	62	65	71	73	60	49	44	44	40	34	28	25	25	29	28	26	26	27	31	32	33	41	41.3	72.7
13-May	43	50	51	53	61	68	57	50	46	41	34	28	24	22	21	20	19	19	20	21	30	31	40	48	37.4	68.4
14-May	51	53	58	60	66	68	61	57	53	49	54	56	51	51	38	33	32	33	35	36	39	47	46	50	49.0	67.9
15-May	52	56	65	72	80	84	85	78	73	74	P	P	P	P	P	P	P	71	71	70	69	75	77	78	--	84.8
16-May	80	80	81	82	84	85	85	81	80	79	78	74	69	64	57	54	50	47	46	46	50	65	75	77	69.5	85.1
17-May	72	73	76	81	85	86	79	71	70	63	51	45	40	34	31	30	30	30	31	33	34	35	43	45	52.9	86.4
18-May	45	55	60	66	69	67	73	70	60	67	60	49	45	47	57	50	45	53	57	57	59	66	77	82	59.8	82.1
19-May	86	85	88	89	91	92	89	79	69	57	52	44	38	37	39	35	35	34	32	32	36	40	44	45	57.0	91.8
20-May	47	49	50	52	54	59	59	58	55	46	33	27	28	23	23	24	24	24	25	26	31	43	51	56	40.3	58.9
21-May	63	68	67	62	49	47	48	43	39	37	36	34	31	28	27	26	29	33	35	38	42	46	51	60	43.3	68.4
22-May	66	73	79	81	83	80	75	70	62	54	47	39	34	34	34	34	35	36	50	62	66	65	75	80	59.0	83.1
23-May	65	56	54	55	66	67	72	70	51	45	43	39	48	60	74	66	71	62	57	47	49	54	55	56	57.7	73.6
24-May	59	59	59	62	66	65	62	55	49	44	38	40	39	39	36	36	33	33	34	41	53	66	86	88	51.9	88.4
25-May	88	88	90	92	92	92	84	73	67	63	57	52	42	32	32	32	30	30	39	46	52	61	70	78	61.8	92.4
26-May	84	88	91	92	93	93	94	93	86	81	74	65	55	51	45	37	36	36	36	40	45	49	55	54	65.6	94.4
27-May	61	65	67	72	75	76	71	65	60	55	44	43	45	43	65	84	85	69	59	53	68	71	78	86	65.1	86.4
28-May	88	88	89	90	91	92	93	86	70	61	56	55	70	77	57	48	53	63	64	69	74	76	75	81	73.6	92.8
29-May	84	89	91	93	93	94	93	85	77	70	61	53	49	46	39	39	61	77	67	74	59	61	64	68	70.4	93.6
30-May	72	74	74	69	72	75	69	64	57	52	46	42	39	37	44	45	41	36	60	63	64	70	73	72	58.9	75.0
31-May	75	76	80	88	90	90	76	62	53	46	41	37	32	32	31	35	35	34	32	41	50	77	80	80	57.2	90.4
60.7 63.6 66.1 68.5 71.6 73.2 69.6 62.8 56.4 51.9 46.6 42.7 39.5 37.5 36.5 35.5 35.5 36.6 37.5 39.3 43.1 49.7 55.7 59.6																								Diurnal Average		
88.2 89.1 91.1 92.6 93.4 93.6 94.4 93.3 85.5 81.0 77.9 74.4 70.4 77.0 73.6 84.0 85.4 76.6 70.6 74.2 74.0 76.7 85.9 88.4																								Diurnal Maximum		
P - Power Failure																										

Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - May 2014



Hourly Averages

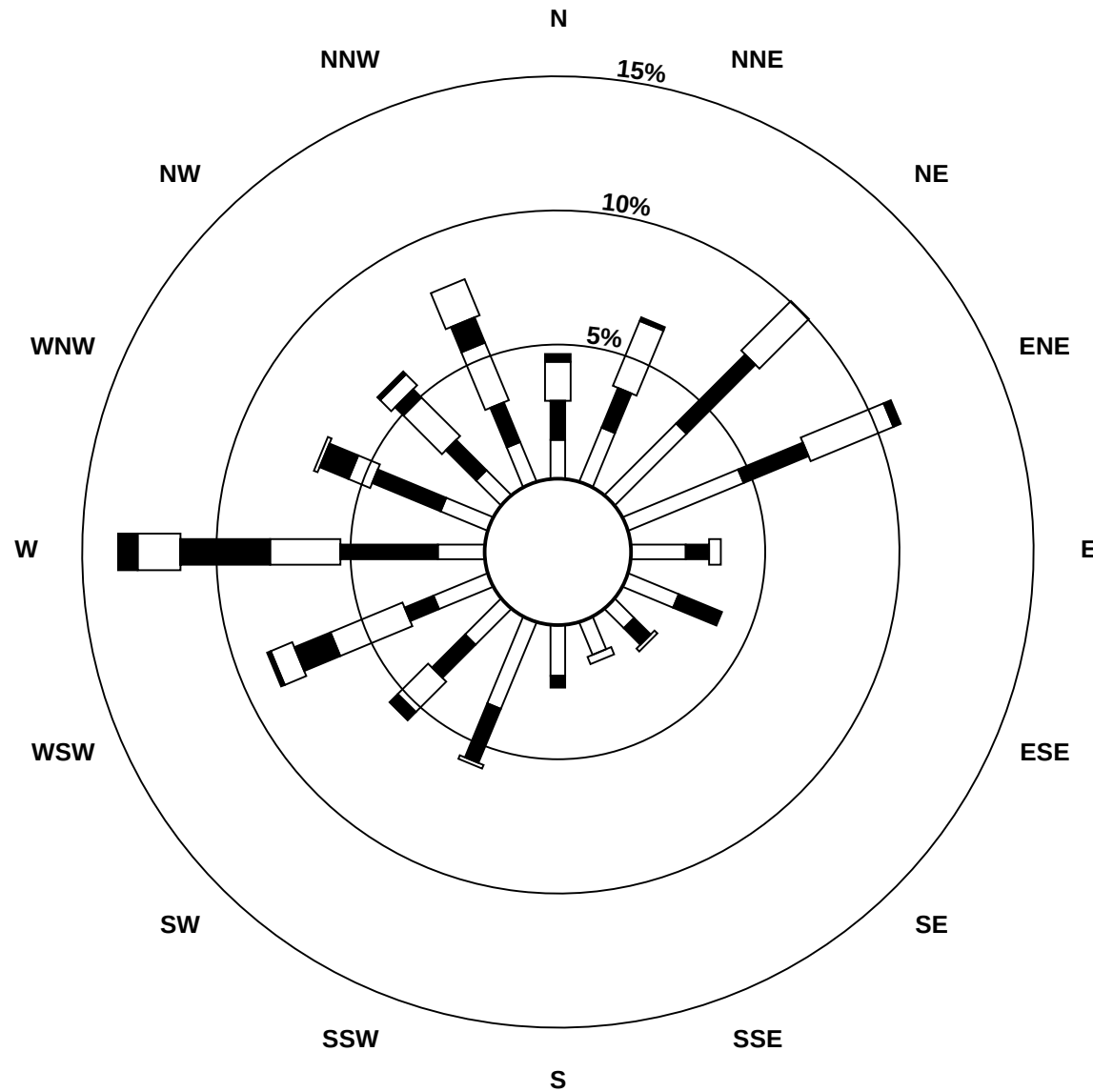
Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - May 2014

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	8	4	7	11	7	13	14	12	9	10	9	11	15	15	18	21	20	19	16	13	8	16	16	7	10.5	21.1
Dir	267	259	284	337	341	335	344	346	28	21	5	329	305	326	329	329	331	323	334	18	0	34	50	40	342.6	328.8
2 Spd	14	19	19	18	14	10	17	27	25	23	18	15	17	12	19	23	18	16	18	17	15	10	14	19	14.6	26.9
Dir	29	33	33	34	33	21	352	338	327	328	314	316	340	341	343	345	358	14	34	40	48	44	56	56	5.8	338.1
3 Spd	14	6	8	10	11	11	12	15	16	16	17	18	18	21	18	20	15	16	15	9	9	6	4	5	12.5	21.1
Dir	58	51	55	53	55	62	73	71	63	59	64	69	70	60	74	65	75	68	72	89	121	110	80	67	68.1	59.8
4 Spd	3	5	5	4	2	3	3	8	8	10	13	13	10	1	6	5	7	15	12	7	3	3	2	2	2.5	14.5
Dir	93	65	51	69	25	17	47	37	10	47	35	55	31	7	336	247	283	282	237	267	127	162	192	51	14.4	282.4
5 Spd	0	2	2	3	7	1	0	8	22	36	31	26	30	34	34	37	38	33	37	27	17	18	13	16	17.0	37.8
Dir	196	173	202	203	205	76	359	236	282	335	343	326	330	328	332	330	332	341	342	354	15	33	25	4	336.8	332.4
6 Spd	17	16	12	10	5	6	6	3	7	6	2	5	9	8	6	5	10	8	12	4	5	3	3	2	4.7	17.1
Dir	342	336	335	336	285	308	346	29	335	320	358	338	344	315	291	14	4	293	232	179	109	119	125	155	330.0	341.6
7 Spd	9	4	4	2	1	2	4	1	4	7	8	7	4	11	11	7	11	12	9	8	5	4	8	8	4.5	11.9
Dir	180	167	75	62	82	51	57	113	162	140	139	130	49	44	29	6	74	68	85	70	77	75	82	96	83.9	68.1
8 Spd	7	3	4	2	1	0	1	3	2	4	12	6	9	13	16	14	13	14	12	17	18	16	13	8	5.4	18.1
Dir	115	114	64	51	40	190	54	268	19	286	226	274	312	324	10	354	31	27	31	51	56	58	58	70	27.8	56.2
9 Spd	7	11	8	5	5	1	2	1	1	7	9	12	13	12	15	12	16	11	12	12	7	11	8	2	7.7	15.7
Dir	55	53	41	42	49	290	4	312	272	16	2	38	333	5	31	8	38	20	31	26	29	44	53	37	26.4	37.7
10 Spd	5	4	6	1	1	4	5	10	14	16	11	11	13	16	13	11	15	13	13	11	5	2	0	1	7.4	16.1
Dir	52	57	57	67	350	47	60	62	64	68	32	24	359	10	342	17	28	34	38	51	56	213	207	23	35.0	67.9
11 Spd	1	1	0	0	1	1	1	4	5	4	6	6	9	12	8	10	5	3	3	5	5	4	1	3	1.5	12.0
Dir	74	62	176	74	78	228	153	185	261	272	247	302	6	336	300	356	286	3	99	73	104	94	106	82	337.9	336.2
12 Spd	2	1	1	2	1	0	2	4	9	4	5	5	13	8	7	16	14	11	10	3	2	9	7	6	3.9	15.9
Dir	69	46	66	47	213	213	216	256	281	263	306	68	59	36	38	30	2	3	56	54	61	76	77	67	32.5	30.1
13 Spd	6	2	8	1	1	0	3	3	3	3	5	4	4	3	8	9	9	3	5	3	3	21	23	14	3.1	23.4
Dir	67	75	72	121	228	219	44	19	302	222	167	120	107	251	326	317	298	298	330	318	258	271	280	294	296.9	280.1
14 Spd	6	6	4	7	0	0	3	10	8	12	14	18	21	21	41	50	49	48	42	41	31	24	27	23	20.2	50.3
Dir	295	261	238	233	171	10	201	216	205	257	252	230	224	259	280	263	255	261	262	260	270	280	264	259	258.6	263.5
15 Spd	21	20	17	19	29	38	39	35	34	32	P	P	P	P	P	P	P	14	8	6	4	4	4	3	--	38.7
Dir	266	284	318	304	312	333	324	318	319	325	P	P	P	P	P	P	P	315	290	299	304	174	175	183	--	324.2
16 Spd	2	1	2	2	2	3	6	9	10	10	10	8	6	11	6	10	9	12	12	8	3	1	1	3	5.2	11.8
Dir	138	148	103	117	94	90	106	117	110	108	108	112	106	44	46	43	58	48	53	55	54	50	25	46	78.2	52.7
17 Spd	4	4	1	1	1	2	1	3	4	4	9	12	11	13	14	17	16	14	11	7	5	4	4	2	5.4	17.1
Dir	51	47	348	17	227	223	187	178	223	224	115	101	72	72	100	66	67	73	72	65	64	132	30	92	80.3	65.8
18 Spd	4	1	1	1	4	0	2	0	5	8	7	16	21	17	19	16	17	20	12	8	7	5	0	2	0.7	20.7
Dir	130	67	164	270	346	143	202	120	257	306	354	345	19	74	142	154	193	233	276	325	228	220	52	32	248.2	18.9
19 Spd	0	1	1	1	1	2	3	9	5	7	6	4	6	24	30	23	17	9	11	9	9	20	17	18	9.0	29.7
Dir	231	210	234	205	25	242	272	264	238	204	222	246	292	252	237	232	255	304	276	271	223	240	246	244	247.3	237.2
20 Spd	11	14	23	16	11	4	3	10	14	23	33	34	28	34	38	35	23	25	31	19	5	0	2	2	17.7	37.7
Dir	241	243	251	244	246	324	342	271	266	267	261	251	266	272	262	251	252	274	275	280	284	196	195	203	261.4	261.9
21 Spd	2	1	2	7	13	13	10	18	24	31	28	32	37	33	27	26	31	31	22	17	14	9	9	1	17.7	36.6
Dir	214	220	302	274	262	263	276	280	285	273	271	265	266	256	264	257	247	244	259	273	278	269	233	177	263.7	266.1
22 Spd	0	2	0	1	0	0	1	1	6	9	6	12	16	15	12	20	19	12	7	1	2	1	1	2	5.2	20.2
Dir	94	176	113	157	177	74	98	162	193	204	207	220	243	223	248	255	248	240	256	70	188	122	176	64	231.7	254.7

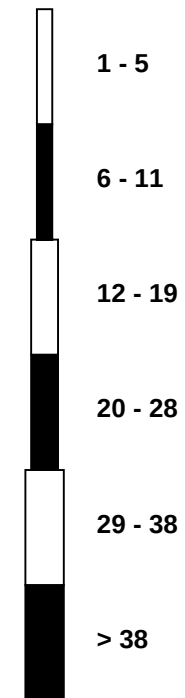
FOCUS
AIR QUALITY MONITORING

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - May 2014

Maximum Speed: 51 km/h on May 14 16:00																								Maximum Daily Speed Average: 21.7 km/h on May 14										Hours in Service: 744	
Minimum Speed: 0 km/h on May 5 01:00																								Minimum Daily Speed Average: 5.5 km/h on May 26										Hours of Data: 737	
Maximum Diurnal Speed Average: 19.9 km/h at hour 16																								Minimum Diurnal Speed Average: 5.4 km/h at hour 5										Hours of Missing Data: 7	
Monthly Average Speed: 11.43 km/h																								Percentiles: P ₁ = 0.6 P ₁₀ = 2.0 Q ₁ = 4.5 Median = 9.6 Q ₃ = 16.0 P ₉₀ = 23.5 P ₉₉ = 38.0										Percent Operational Time: 99.1	
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-May	8	6	8	11	7	13	14	12	10	11	11	13	18	17	19	22	21	20	17	14	8	17	16	8	13.4	21.8									
2-May	14	20	20	19	14	11	18	28	26	24	20	18	20	14	21	24	20	18	18	17	15	10	14	19	18.4	27.6									
3-May	14	6	8	10	11	12	12	16	17	17	18	19	20	22	19	21	16	17	15	9	9	6	4	5	13.6	22.3									
4-May	4	5	6	4	2	4	3	9	10	11	14	14	14	11	9	10	12	16	12	9	5	3	2	2	8.0	16.2									
5-May	0	2	2	3	7	2	2	9	24	37	32	28	31	35	36	38	39	34	38	28	18	18	13	17	20.5	38.7									
6-May	17	16	12	11	6	6	6	5	8	9	10	10	13	14	12	12	13	11	13	5	5	4	3	2	9.3	17.4									
7-May	9	5	4	2	1	2	4	3	6	9	11	11	8	14	14	11	12	14	10	8	5	4	8	8	7.6	14.3									
8-May	7	3	4	2	1	2	2	4	3	7	13	11	11	16	19	17	15	15	12	17	18	16	14	9	9.9	18.9									
9-May	7	11	8	5	5	1	2	3	5	10	13	15	15	16	19	15	17	14	14	13	7	11	8	2	9.9	18.7									
10-May	5	4	6	2	2	5	5	10	15	18	15	15	18	19	16	14	17	14	13	11	5	2	1	1	9.6	18.7									
11-May	2	1	1	0	1	1	1	4	7	6	8	11	12	16	14	14	11	9	5	5	5	4	2	3	6.1	16.0									
12-May	2	1	2	3	2	1	2	5	11	11	9	10	15	12	11	18	17	14	10	3	2	9	7	6	7.7	18.2									
13-May	6	2	8	2	1	2	3	4	4	6	7	9	10	11	11	14	10	6	5	3	4	21	24	14	7.8	23.8									
14-May	6	6	4	7	1	1	4	10	8	13	15	19	22	23	42	51	49	48	42	41	32	25	28	23	21.7	51.2									
15-May	21	21	18	20	30	38	40	36	35	33	P	P	P	P	P	P	P	14	9	7	5	5	4	3	--	39.5									
16-May	2	1	2	2	2	3	6	10	11	11	11	9	10	13	10	13	12	13	13	8	3	2	1	3	7.1	13.0									
17-May	4	4	2	1	1	2	2	4	4	6	11	14	13	15	16	19	17	14	11	7	5	6	4	4	7.8	18.6									
18-May	5	2	2	4	4	2	2	1	6	9	8	18	23	21	20	17	19	21	14	9	7	5	1	2	9.2	23.4									
19-May	2	2	1	1	1	2	3	10	6	9	9	8	9	25	30	23	19	11	12	9	9	20	17	18	10.7	30.4									
20-May	12	14	23	16	12	5	3	10	14	24	34	36	30	35	39	36	25	27	32	20	5	1	3	3	19.1	38.7									
21-May	2	1	3	7	14	13	10	19	25	32	29	33	38	34	29	27	32	31	23	17	14	10	9	2	18.9	37.5									
22-May	1	2	2	2	1	1	2	2	6	9	6	13	17	16	14	22	20	12	9	2	3	2	2	2	7.1	21.7									
23-May	6	8	7	5	4	3	2	3	6	11	12	6	24	32	30	33	16	25	19	23	19	15	18	23	14.6	32.7									
24-May	19	24	17	14	14	10	16	20	25	21	26	25	22	23	18	17	12	15	13	9	5	2	2	2	15.6	26.3									
25-May	1	1	2	1	3	5	10	7	5	6	12	10	14	12	9	10	7	8	14	11	7	5	4	3	6.9	13.9									
26-May	2	2	2	1	2	3	2	6	6	11	6	8	8	8	7	11	7	4	4	5	6	9	7	6	5.5	11.1									
27-May	8	7	8	6	6	6	13	15	10	7	9	9	8	11	12	13	9	5	5	4	1	5	2	1	7.5	14.9									
28-May	4	3	5	5	3	2	2	5	7	10	10	8	7	6	11	8	13	16	10	10	9	6	3	4	7.0	16.3									
29-May	4	3	2	2	2	1	2	3	10	11	9	8	9	10	14	23	12	7	6	9	14	16	13	7	8.2	22.5									
30-May	8	7	7	11	6	10	18	24	28	30	25	24	23	26	17	21	21	30	28	15	17	14	9	10	17.8	30.0									
31-May	6	3	1	2	2	1	2	9	15	15	14	12	17	17	25	24	17	7	5	15	18	15	5	7	10.6	25.3									
6.8 6.3 6.3 5.9 5.4 5.4 6.9 9.8 12.0 14.3 14.2 14.7 16.6 18.1 18.8 19.9 17.5 16.5 14.7 11.9 9.3 9.2 8.1 7.1																								Diurnal Average											
21.2 24.2 23.2 19.6 30.0 38.3 39.5 36.3 34.7 36.7 34.3 35.8 37.5 35.4 42.0 51.2 49.4 48.5 42.3 41.3 31.9 24.9 27.7 23.2																								Diurnal Maximum											
P - Power Failure																																			
All monthly, daily, and diurnal averages have been calculated using scalar methods																																			

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - May 2014

Maximum Value: 98.3 deg on May 20 22:00																			Hours in Service: 744						
Minimum Value: 5.6 deg on May 20 03:00																			Hours of Data: 737						
																			Hours of Missing Data: 7						
Percentiles: P ₁ = 7.0 P ₁₀ = 11.4 Q ₁ = 16.0 Median = 26.4 Q ₃ = 54.4 P ₉₀ = 73.1 P ₉₉ = 93.3																			Hours of Calibration: 0						
																			Percent Operational Time: 99.1						
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-May	29	45	31	10	23	9	12	10	28	31	42	28	31	32	18	16	20	18	16	22	17	22	12	21	45.2
2-May	14	10	13	14	13	20	25	13	20	19	23	38	40	46	25	21	26	25	17	12	15	9	14	10	45.6
3-May	11	13	12	12	11	14	22	21	22	22	24	25	26	20	27	23	27	21	18	23	16	13	11	15	27.4
4-May	22	14	9	22	31	28	29	28	39	36	30	27	54	96	70	66	67	35	23	41	72	36	45	46	96.2
5-May	93	15	26	16	10	45	75	32	24	17	16	20	16	15	16	16	13	18	12	21	17	10	12	18	93.3
6-May	11	12	10	19	15	16	16	65	35	62	93	66	60	67	79	73	47	44	31	55	12	20	22	26	93.5
7-May	12	31	11	20	63	45	16	69	59	45	54	55	75	42	54	70	24	31	33	17	14	63	12	13	74.9
8-May	17	25	16	47	54	93	65	50	64	58	25	73	59	55	32	43	40	21	18	13	11	10	9	17	93.3
9-May	11	12	10	15	18	51	37	83	78	55	56	50	38	48	38	50	28	45	37	21	10	13	8	21	82.6
10-May	10	35	20	96	72	50	24	18	17	26	45	40	52	36	34	50	31	28	20	17	12	64	73	42	96.3
11-May	74	80	88	82	57	59	49	39	49	58	49	71	57	59	64	54	74	76	76	18	12	14	59	25	87.9
12-May	30	22	78	68	71	83	45	71	33	87	66	75	34	63	68	30	34	37	26	13	31	8	8	8	87.1
13-May	7	58	8	61	85	94	14	42	65	80	60	79	80	83	57	63	41	73	23	40	87	9	11	15	94.4
14-May	19	18	24	12	72	82	59	8	19	19	15	13	13	25	13	11	8	8	8	8	12	17	8	6	82.1
15-May	10	17	15	19	15	11	12	14	13	13	P	P	P	P	P	P	P	20	26	23	41	24	26	14	41.4
16-May	22	25	11	14	19	14	25	21	25	26	25	36	61	35	67	46	59	25	23	19	24	85	23	22	84.5
17-May	8	9	56	51	76	37	58	69	37	68	48	33	33	36	33	25	18	19	17	15	23	47	29	60	76.0
18-May	41	70	72	84	43	92	61	87	40	27	32	24	28	36	20	26	24	17	33	36	12	31	89	80	91.9
19-May	85	87	68	66	55	56	25	18	45	47	65	78	55	26	12	15	25	45	29	14	11	9	7	7	87.0
20-May	9	9	6	10	24	38	41	13	14	17	13	19	21	14	13	11	24	27	13	15	22	98	74	35	98.3
21-May	29	59	54	12	15	20	15	14	17	13	16	15	12	14	23	16	16	14	18	12	13	20	11	70	69.9
22-May	83	57	86	85	67	90	70	52	24	17	34	36	28	21	30	25	13	14	64	71	80	85	52	59	90.0
23-May	17	11	10	70	47	86	85	71	36	38	48	59	34	15	12	14	19	13	14	13	9	7	10	7	85.8
24-May	9	7	10	8	7	39	20	15	18	25	26	26	27	23	24	33	43	39	22	85	29	69	18	14	84.7
25-May	71	67	88	72	41	14	16	22	31	57	20	56	23	46	73	69	91	91	27	25	21	11	15	14	91.5
26-May	56	90	56	87	23	28	51	79	56	25	40	85	69	70	77	59	67	86	84	75	30	14	44	29	89.6
27-May	16	17	17	21	16	20	14	16	31	57	73	49	61	89	54	40	70	69	45	39	72	27	26	69	89.2
28-May	22	50	33	27	55	52	59	33	49	49	56	59	73	85	42	61	37	23	27	19	20	26	23	14	85.5
29-May	23	23	23	30	73	25	31	89	26	33	65	73	64	43	45	38	73	40	46	24	19	9	11	16	89.0
30-May	27	23	14	21	39	20	9	11	11	10	21	23	22	27	31	14	12	27	19	31	17	7	10	8	39.4
31-May	10	50	78	75	67	74	41	14	16	18	28	41	24	43	15	32	21	78	62	42	88	26	40	18	87.8
93.3 89.6 88.1 96.3 84.7 94.4 85.2 89.0 77.6 87.1 93.5 84.9 80.0 96.2 78.7 72.5 91.5 91.1 84.5 84.7 87.8 98.3 89.5 79.7																									
P - Power Failure																									

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

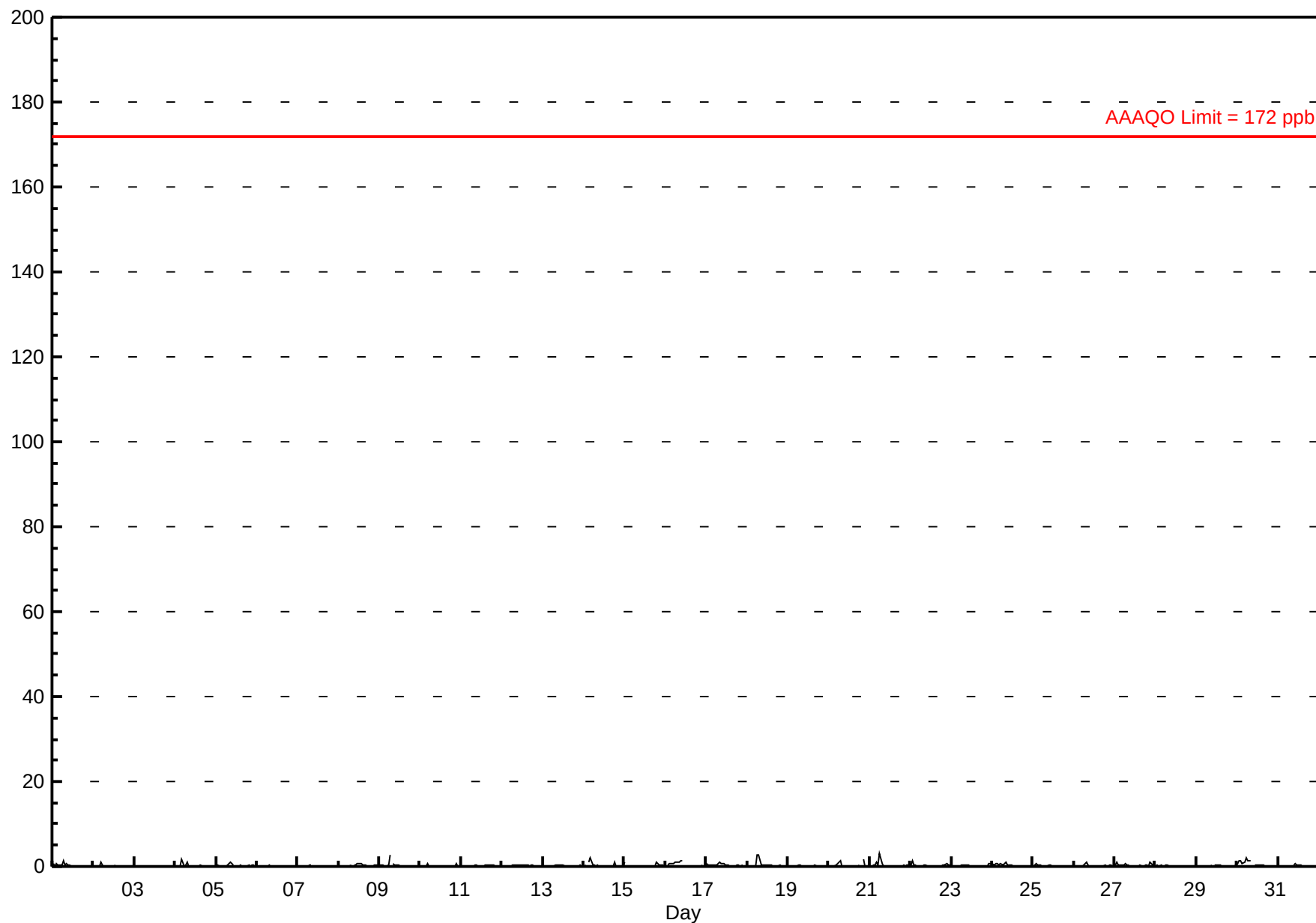
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.0 ppb on May 21 07:00 Maximum Daily Average: 0.6 ppb on May 30																				Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 36 Percent Operational Time: 99.9							
Minimum Value: 0 ppb on May 3 23:00 Maximum Diurnal Average: 0.6 ppb at hour 7 Monthly Average: 0.22 ppb										Minimum Daily Average: 0.1 ppb on May 3 Minimum Diurnal Average: 0.1 ppb at hour 18 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.5 P ₉₉ = 1.7																	
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-May	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0.3	1.5
2-May	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	1.0
3-May	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-May	0	0	0	0	2	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
5-May	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	0.2	0.9
6-May	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
7-May	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
8-May	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
9-May	0	0	0	0	0	0	3	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6
10-May	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	0.6
11-May	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-May	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	0.5
13-May	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	0.2	0.4
14-May	0	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	2.1
15-May	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	0	1	0	0	0	0	0	0.2	1.1
16-May	A	0	1	1	1	1	1	1	1	1	C	C	C	C	0	0	0	0	0	0	0	0	0	A	0.5	1.4	
17-May	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
18-May	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.4	2.9
19-May	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	0.5
20-May	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	A	2	0	0	0	0	0.3	1.8
21-May	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	3.0
22-May	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0.3	1.3
23-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0.2	0.8
24-May	1	0	1	1	0	1	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.9
25-May	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.6
26-May	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
27-May	0	1	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0.3	1.0
28-May	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	0.2
29-May	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
30-May	1	1	1	1	1	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.0
31-May	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	0.1	0.6
0.2 0.2 0.2 0.2 0.4 0.2 0.6 0.5 0.4 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																								Diurnal Average			
1.1 1.4 1.4 1.0 2.1 2.0 3.0 2.9 1.5 1.3 1.4 0.5 0.7 0.6 0.4 0.4 0.5 0.2 1.0 1.1 1.8 1.0 0.8 0.7																								Diurnal Maximum			
C - Calibration P - Power Failure 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
Smoky Heights - May 2014



Hourly Maximums

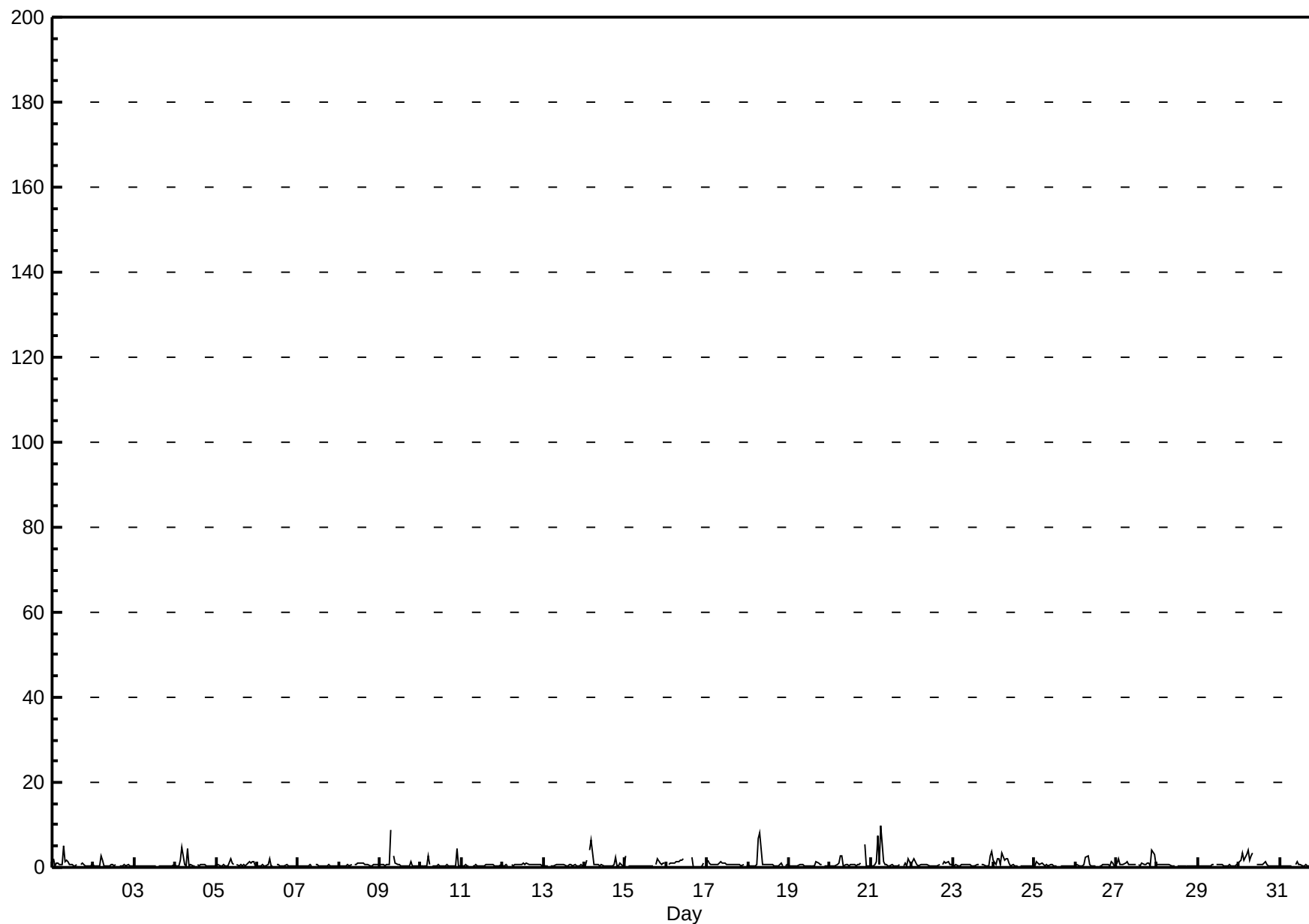
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - May 2014

Maximum Value: 9.9 ppb on May 21 07:00																			Maximum Daily Average: 1.4 ppb on May 21										Hours in Service: 744	
Minimum Value: 0 ppb on May 16 17:00																			Minimum Daily Average: 0.4 ppb on May 3										Hours of Data: 707	
Maximum Diurnal Average: 1.7 ppb at hour 7																			Minimum Diurnal Average: 0.5 ppb at hour 17										Hours of Missing Data: 37	
Monthly Average: 0.76 ppb																			Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 4.9										Hours of Calibration: 36	
																			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-May	2	0	1	1	1	1	5	1	2	1	1	1	0	0	1	A	1	1	1	0	0	0	0	1	1.0	5.2				
2-May	0	0	0	0	3	2	0	0	0	0	1	1	0	1	A	0	0	0	1	1	1	0	0	0	0.6	2.7				
3-May	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	0.6				
4-May	0	0	0	2	5	1	0	4	0	1	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0.9	4.8				
5-May	1	1	0	0	1	0	0	1	2	1	1	A	1	0	1	0	1	0	1	1	1	1	1	0	0.7	2.2				
6-May	0	0	0	1	0	0	1	2	0	0	A	1	1	0	0	0	0	1	0	0	0	0	0	0	0.5	2.0				
7-May	0	0	0	0	0	0	0	1	0	A	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0.4	0.6				
8-May	0	0	0	0	0	1	0	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0.6	1.1				
9-May	1	1	1	0	1	1	9	A	3	1	1	1	0	0	0	0	0	0	1	0	0	0	1	0	1.0	8.8				
10-May	0	0	0	0	3	1	A	0	1	0	1	0	0	0	0	1	0	0	0	0	0	4	1	0	0.7	4.5				
11-May	0	0	1	0	0	A	0	0	1	0	0	1	0	0	1	1	1	1	1	0	0	0	0	1	0.5	0.7				
12-May	0	0	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.9				
13-May	1	0	0	A	0	0	0	1	1	1	1	1	1	0	0	1	1	0	1	0	0	0	1	0	0.6	0.8				
14-May	0	2	A	4	6	1	1	1	1	0	1	0	0	0	0	0	0	1	2	0	0	1	0	0	1.0	6.4				
15-May	3	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	1	2	1	1	1	1	0.7	2.8				
16-May	A	1	1	1	1	1	1	1	2	2	2	C	C	C	C	2	0	0	0	0	0	0	1	A	0.9	2.3				
17-May	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	0	0.8	1.7				
18-May	1	0	1	0	0	1	7	8	1	1	1	1	1	1	1	0	0	0	0	1	0	A	0	1	1.2	8.3				
19-May	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0.6	1.3				
20-May	0	0	0	0	1	1	3	3	0	1	1	0	1	1	1	0	1	1	1	A	5	0	0	0	1.0	5.4				
21-May	0	0	1	1	7	1	10	1	1	1	1	0	1	0	0	0	0	1	A	0	1	0	2	1	1.4	9.9				
22-May	1	2	1	1	0	1	1	1	1	1	0	0	0	0	0	0	1	A	1	1	1	1	1	1	0.8	2.0				
23-May	1	0	1	1	0	1	1	1	1	1	1	0	0	0	1	1	A	1	1	0	0	0	3	4	0.8	3.7				
24-May	2	1	2	2	1	3	2	2	2	1	0	1	0	0	0	A	0	0	0	1	0	0	0	0	1.0	3.4				
25-May	0	1	1	1	1	1	0	1	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.6	1.3				
26-May	0	1	0	0	0	1	2	3	1	0	0	0	0	A	0	0	1	1	1	1	0	1	1	0	0.7	2.6				
27-May	1	2	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	0	4	3	1	1.0	4.0				
28-May	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0.5	0.6				
29-May	1	0	0	0	0	0	0	0	1	1	A	1	1	1	1	0	0	0	1	0	0	0	0	1	0.5	0.9				
30-May	1	2	3	2	3	4	2	3	4	A	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1.3	4.0				
31-May	0	0	0	0	0	0	0	0	A	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.5	1.2				
0.7		0.7	0.7	0.8	1.3	0.8	1.7	1.3	0.9	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.6	Diurnal Average					
2.8		2.1	3.3	4.0	7.4	4.0	9.9	8.3	3.6	1.7	1.9	1.1	1.1	1.0	0.9	2.3	1.3	1.2	2.3	2.1	5.4	4.5	3.1	3.7	Diurnal Maximum					
C - Calibration		P - Power Failure						A - Automated Daily Zero Span																						

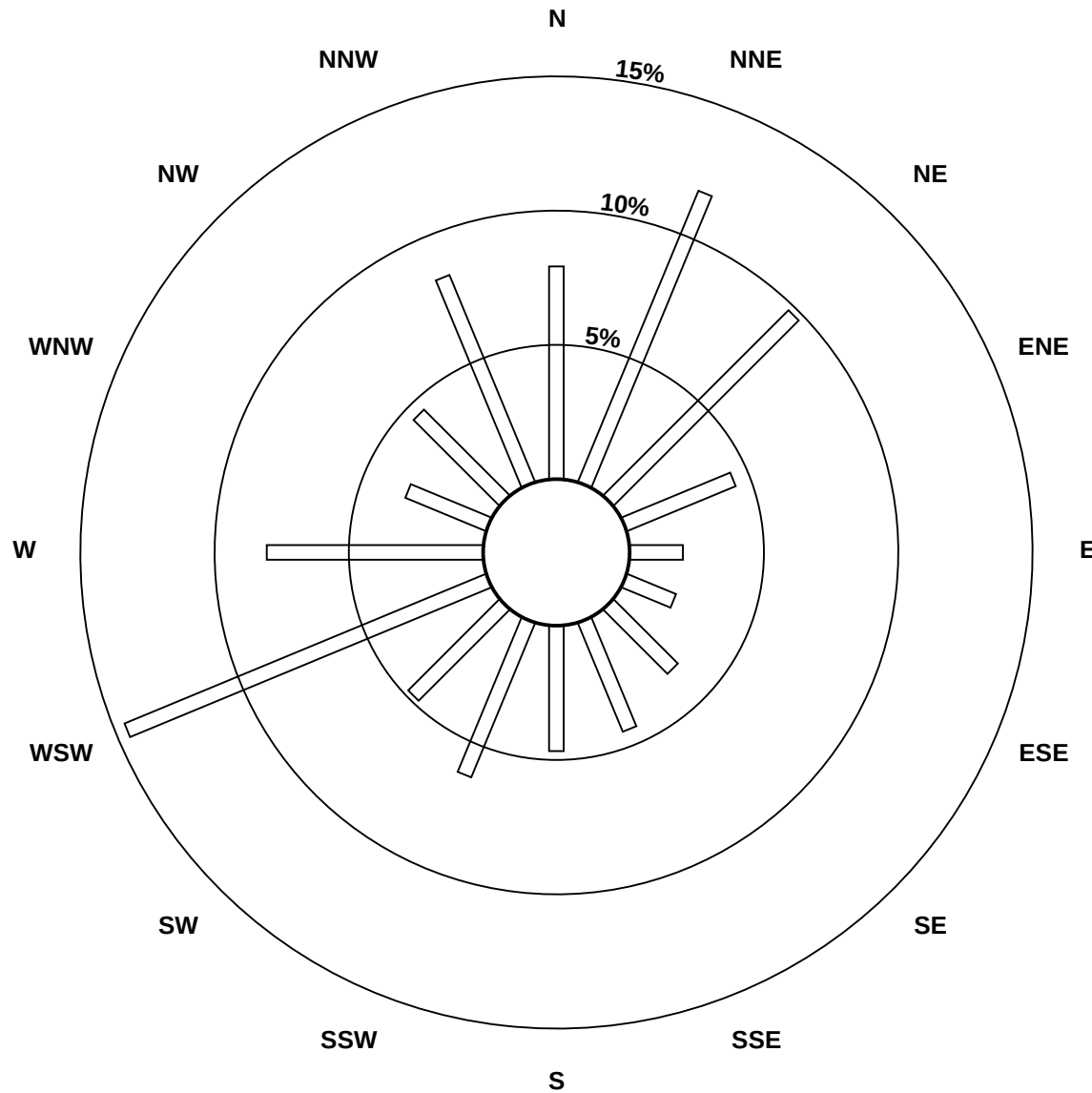
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - May 2014

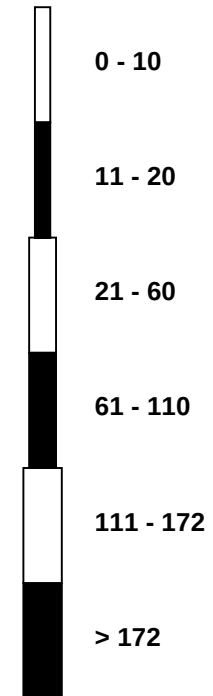


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - May 2014

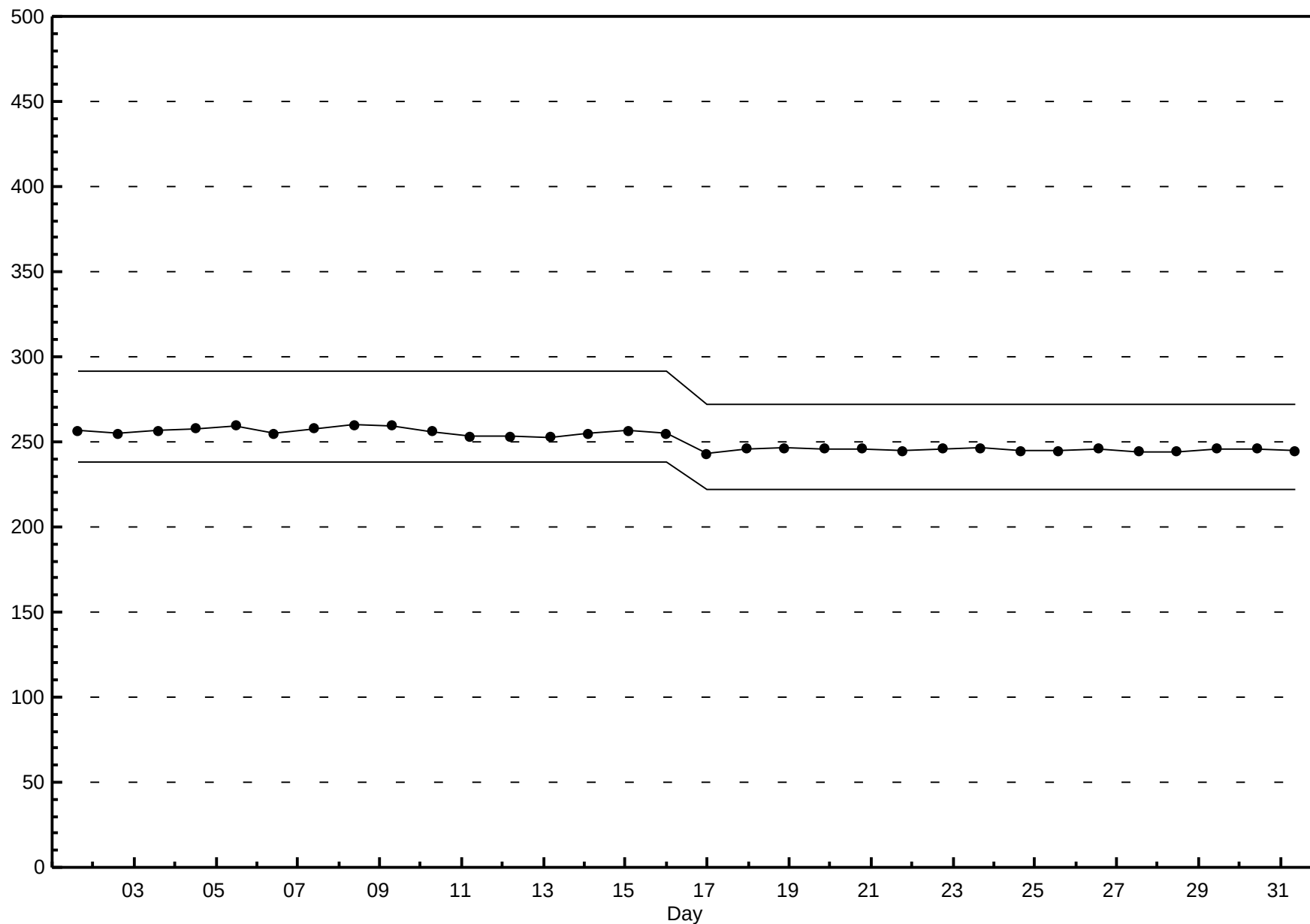


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - May 2014



Hourly Averages

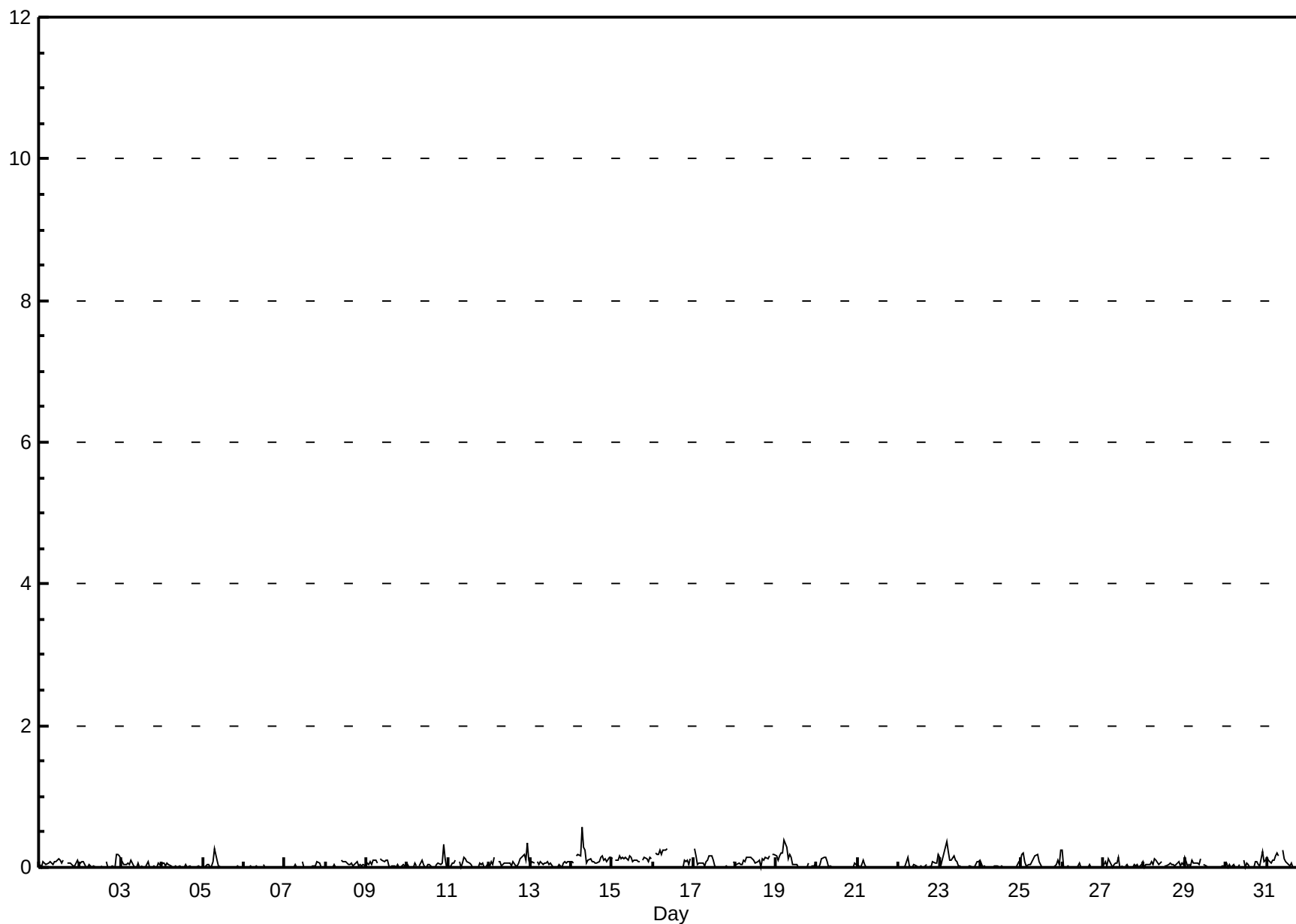
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.6 ppb on May 14 07:00 Maximum Daily Average: 0.1 ppb on May 14																								Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 38 Percent Operational Time: 99.9		
Minimum Value: 0 ppb on May 1 02:00 Maximum Diurnal Average: 0.1 ppb at hour 7 Monthly Average: 0.05 ppb												Minimum Daily Average: 0.0 ppb on May 6 Minimum Diurnal Average: 0.0 ppb at hour 16 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.1 P ₉₉ = 0.3														
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-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0.1	0.1
2-May	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	0.2
3-May	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	0.1
4-May	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	0.1
5-May	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	0.3
6-May	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
7-May	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
8-May	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	0.1
9-May	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	0.1
10-May	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	0.3
11-May	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-May	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-May	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	0.1
14-May	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
15-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	0	0	0	0	0	0	0.1	0.2
16-May	A	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	A	--	0.3
17-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3
18-May	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	0.2
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
20-May	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-May	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	0.1
22-May	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	0.2
23-May	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	0.4
24-May	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-May	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-May	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	0.2
27-May	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	0.1
28-May	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
29-May	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	0.1
30-May	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	0.2
31-May	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
																								Diurnal Average		
																								Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - May 2014



Hourly Maximums

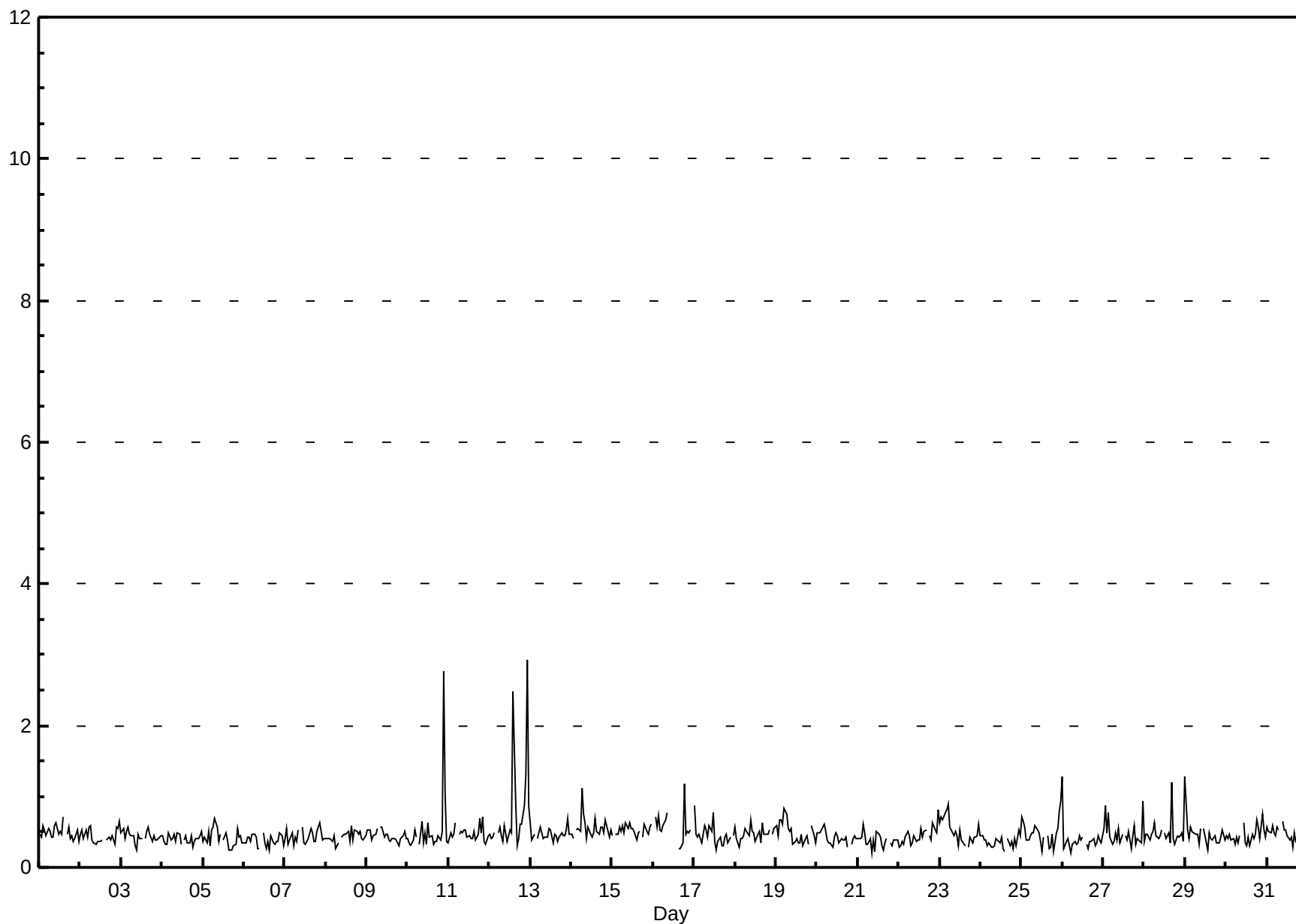
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - May 2014

Maximum Value: 2.9 ppb on May 12 23:00																			Maximum Daily Average: 0.8 ppb on May 12										Hours in Service: 744										
Minimum Value: 0 ppb on May 26 06:00																			Minimum Daily Average: 0.4 ppb on May 24										Hours of Data: 705										
Maximum Diurnal Average: 0.6 ppb at hour 22																			Minimum Diurnal Average: 0.4 ppb at hour 14										Hours of Missing Data: 39										
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 = 0.6 P ₉₉ = 1.1										Hours of Calibration: 38										
																			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-May	0	0	1	1	0	1	1	0	0	1	1	0	1	0	1	A	0	1	0	0	0	0	1	0	0.5	0.7													
2-May	0	1	0	1	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0.4	0.6													
3-May	0	1	0	1	1	0	0	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0.4	0.6													
4-May	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	0.5													
5-May	0	0	0	1	0	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.7													
6-May	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	0.5													
7-May	0	1	0	0	0	0	0	0	1	A	1	0	0	0	0	1	0	0	0	1	1	1	0	0	0.4	0.6													
8-May	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	1	0	1	1	0	1	0	0	0	0.4	0.6													
9-May	1	1	1	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.6													
10-May	0	0	0	0	1	0	A	0	1	0	0	0	1	0	0	0	0	0	0	0	1	3	1	0	0.5	2.8													
11-May	0	0	0	0	1	A	0	1	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0.5	0.7													
12-May	0	0	0	0	A	0	1	0	0	1	0	0	1	0	2	1	0	0	1	1	1	1	3	1	0.8	2.9													
13-May	1	0	0	A	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0.5	0.7													
14-May	0	0	A	1	1	1	1	1	1	0	1	0	0	0	1	1	0	1	1	0	1	1	0	1	0.6	1.1													
15-May	0	A	0	0	1	0	1	0	1	1	1	1	1	1	0	0	1	P	0	1	1	0	1	1	0.5	0.6													
16-May	A	1	1	1	1	1	1	1	1	C	C	C	C	C	C	0	0	0	1	0	1	0	1	A	--	1.2													
17-May	1	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.9													
18-May	1	0	0	0	0	0	1	1	0	1	1	0	0	0	1	0	1	0	0	0	1	A	0	1	0.5	0.7													
19-May	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0.5	0.8													
20-May	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.6													
21-May	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.6													
22-May	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	A	0	0	1	1	0	1	0.4	0.8													
23-May	1	1	1	1	1	1	1	1	0	1	0	0	1	0	0	0	A	0	0	0	0	0	0	1	0.5	0.9													
24-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0.4	0.5													
25-May	1	1	1	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0.5	0.9													
26-May	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	1.3													
27-May	1	1	0	1	0	0	0	0	0	1	0	0	A	0	0	1	0	0	1	0	0	0	0	1	0.5	0.9													
28-May	0	0	0	0	0	1	1	0	0	0	1	A	0	0	0	0	1	0	0	0	0	0	0	0	0.5	1.2													
29-May	1	1	0	1	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	1	0	0.5	1.3													
30-May	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	1	1	0	1	1	0	0.5	0.8													
31-May	1	1	0	1	0	0	1	1	A	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0.5	1.2													
																									Diurnal Average														
																									Diurnal Maximum														
C - Calibration																									P - Power Failure					A - Automated Daily Zero Span									

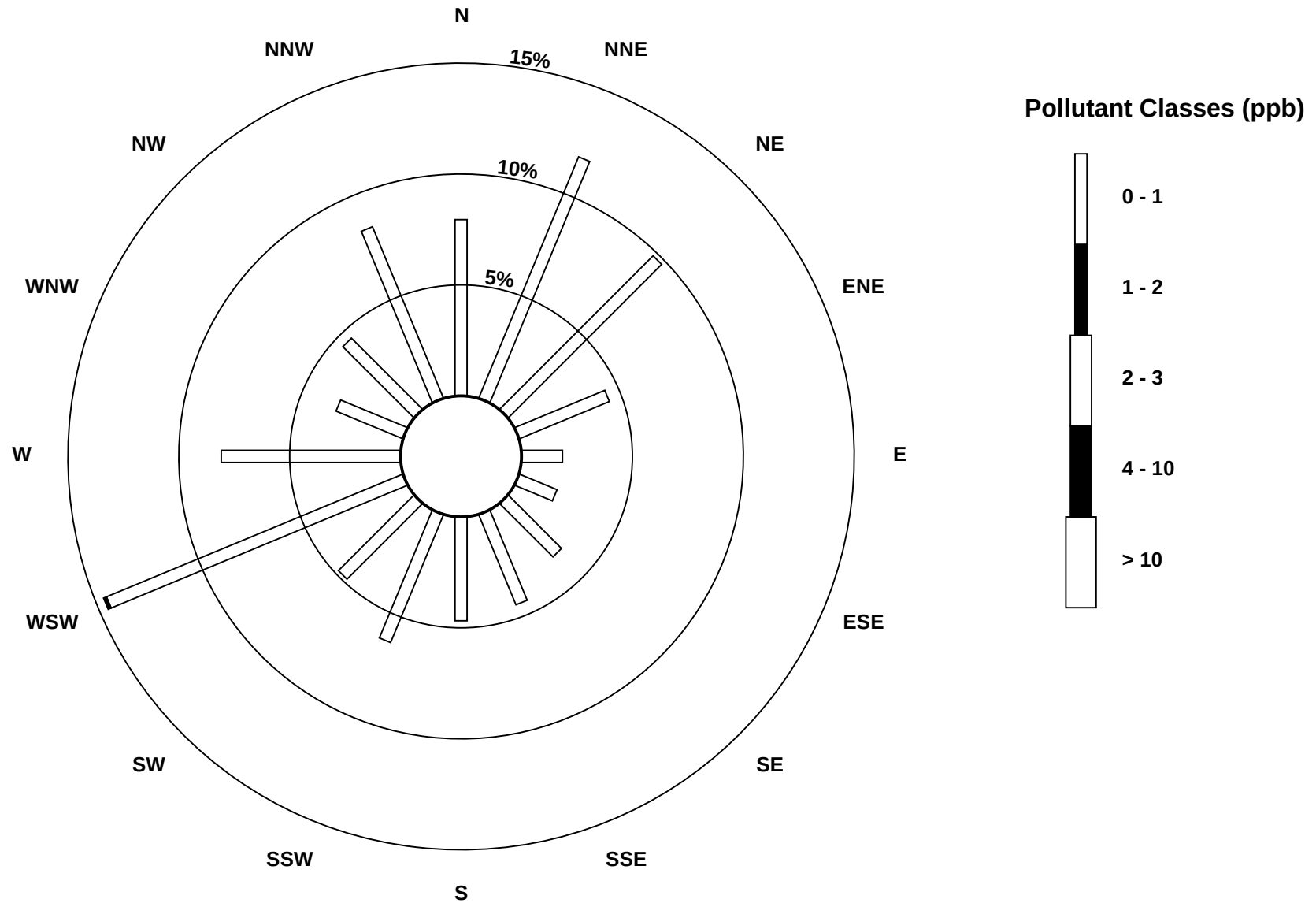
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - May 2014



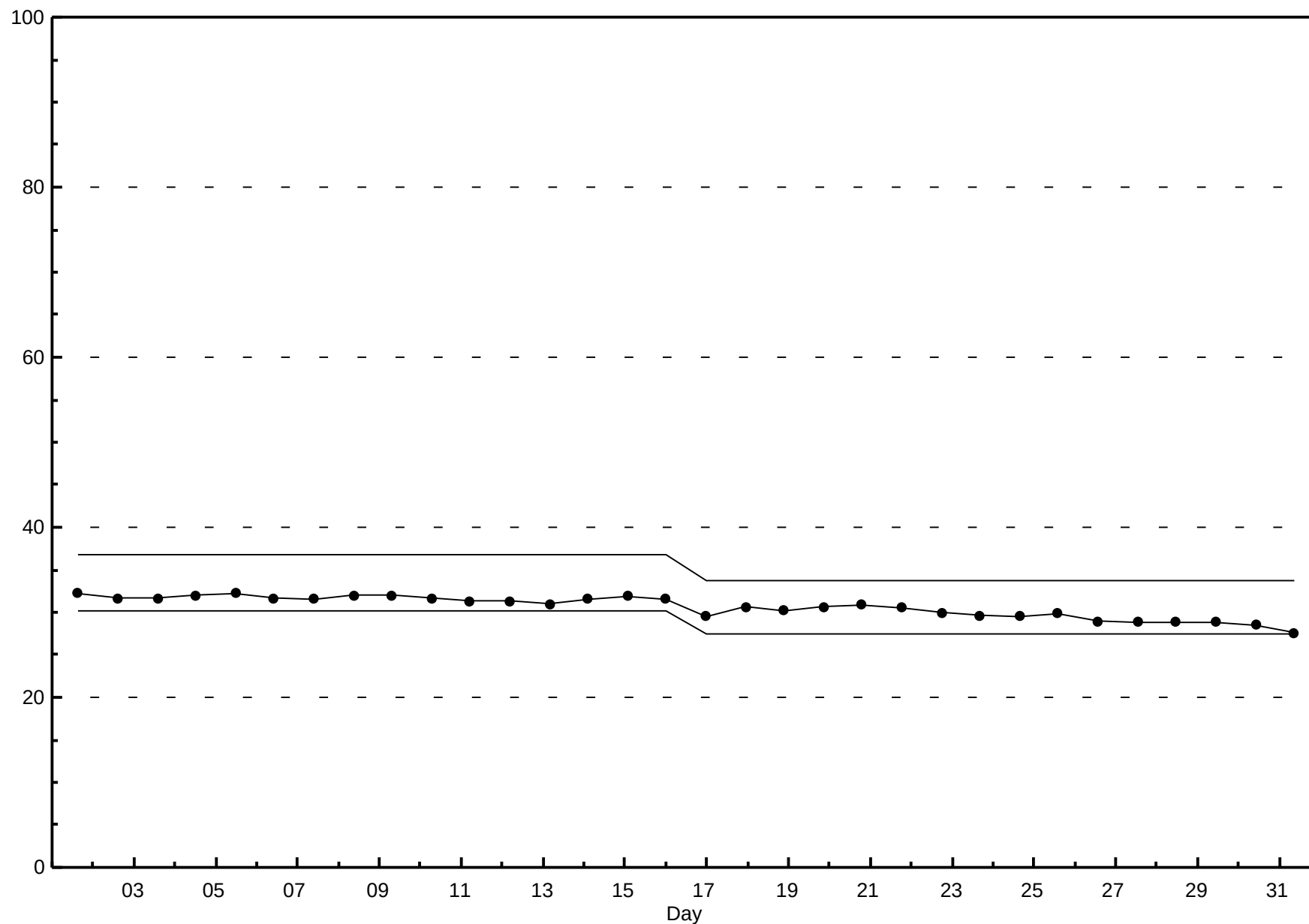
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - May 2014



Span Responses

Total Reduced Sulphur (TRS)
Smoky Heights - May 2014

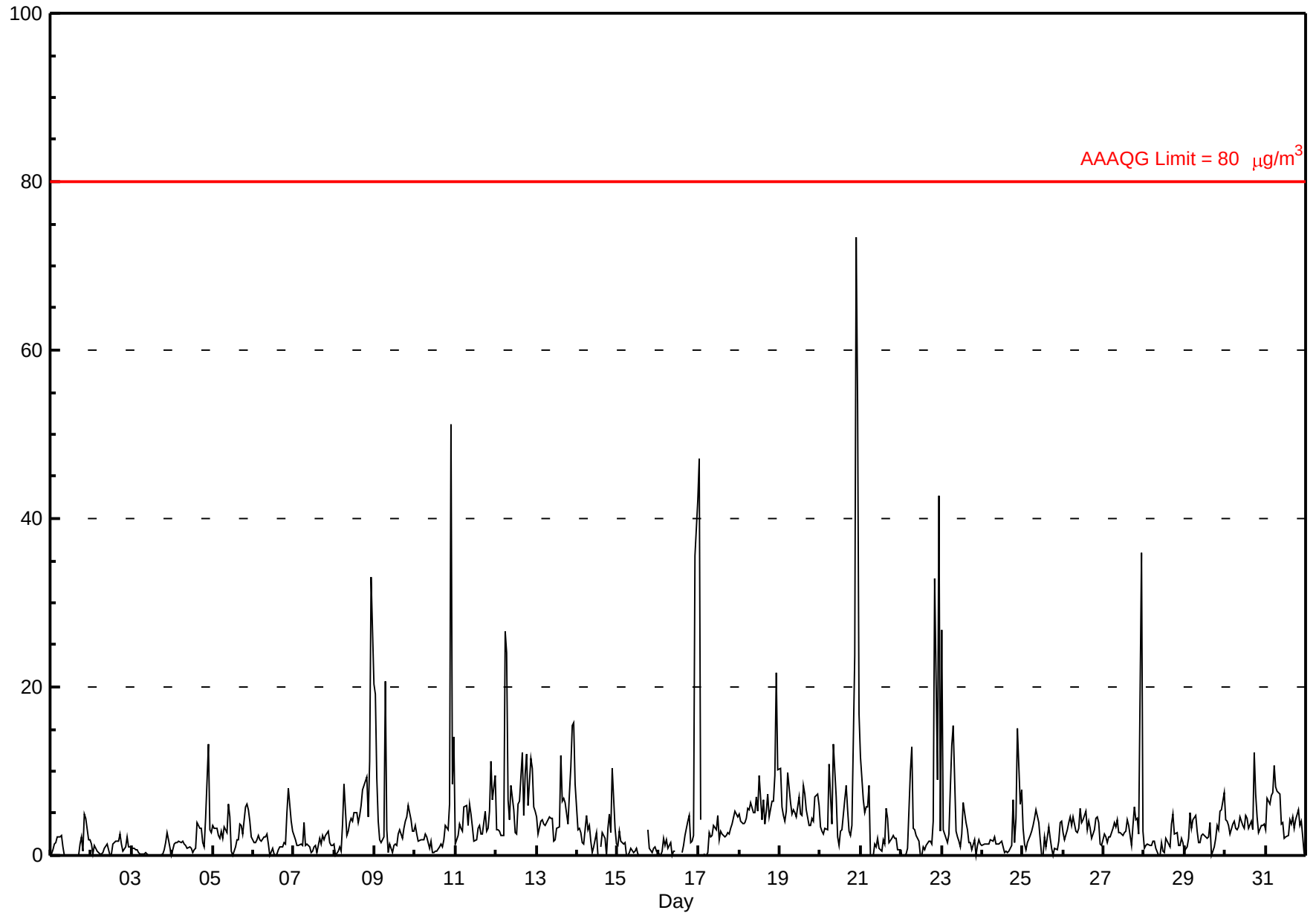


Hourly Averages

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

Smoky Heights - May 2014

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 73.3 µg/m³ on May 20 22:00 Minimum Value: 0 µg/m³ on May 1 09:00 Maximum Diurnal Average: 10.4 µg/m³ at hour 23 Monthly Average: 3.88 µg/m³																								Maximum Daily Average: 11.0 µg/m³ on May 20 Minimum Daily Average: 0.5 µg/m³ on May 3 Minimum Diurnal Average: 1.8 µg/m³ at hour 12 Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 1.2 Median = 2.6 Q ₃ = 4.3 P ₉₀ = 7.2 P ₉₉ = 30.4		Hours in Service: 744 Hours of Data: 738 Hours of Missing Data: 6 Hours of Calibration: 3 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-May	0	1	1	1	2	2	2	1	0	0	0	0	0	0	0	0	0	1	2	1	5	4	2	2	1.2	4.9	
2-May	1	0	1	1	0	0	0	0	1	1	1	0	0	1	2	2	2	3	1	1	1	2	1	1	1.0	2.6	
3-May	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	2	0	0.5	2.7	
4-May	1	1	2	1	2	1	2	1	1	1	1	1	0	1	1	4	3	3	2	1	4	13	3	3	2.2	13.2	
5-May	3	3	3	2	2	3	2	3	3	6	4	0	0	1	2	2	4	3	3	6	6	5	4	2	3.1	6.1	
6-May	2	2	2	2	2	2	2	2	3	1	0	1	0	0	0	1	1	1	2	1	5	8	4	3	1.9	8.0	
7-May	2	2	1	1	1	1	4	1	1	1	0	0	1	1	0	2	1	2	2	2	3	1	1	1	1.5	4.0	
8-May	1	0	1	1	1	4	8	2	3	4	4	4	5	5	4	5	6	8	9	9	5	11	33	20	6.4	33.1	
9-May	19	9	4	2	2	2	21	3	0	1	0	1	1	1	3	3	2	3	4	5	6	4	3	3	4.3	20.7	
10-May	3	2	2	2	2	2	3	2	1	2	0	0	1	1	1	1	1	2	4	3	6	51	8	14	4.7	51.2	
11-May	1	2	4	3	3	6	6	4	6	5	3	2	2	3	4	3	3	5	3	3	5	11	7	9	4.3	11.2	
12-May	3	3	3	2	2	27	24	7	4	8	5	3	2	6	6	12	5	10	12	6	12	10	6	5	7.7	26.7	
13-May	5	3	4	4	4	4	4	5	4	4	2	2	3	3	12	7	7	6	4	7	10	15	16	9	6.0	15.7	
14-May	3	3	3	1	1	5	3	4	2	0	1	3	0	N	1	3	2	0	3	5	3	10	3	1	2.6	10.3	
15-May	1	3	2	1	2	0	0	0	1	0	1	1	0	0	0	0	0	P	3	1	0	1	1	1	0.8	3.0	
16-May	0	0	0	2	1	2	1	2	0	1	0	C	C	C	0	1	2	4	5	2	2	2	36	42	5.0	42.2	
17-May	47	4	N	0	0	0	3	2	2	4	3	5	2	3	2	2	2	3	3	3	4	5	5	5	4.8	47.2	
18-May	5	4	4	4	4	6	5	6	5	5	7	5	9	4	7	4	5	7	5	6	6	9	22	10	6.5	21.7	
19-May	10	6	5	4	5	10	6	5	5	5	5	7	5	5	8	7	5	4	4	4	4	7	7	6	5.8	10.3	
20-May	3	3	3	3	3	11	7	4	13	7	2	1	3	3	7	8	5	3	2	4	24	73	54	17	11.0	73.3	
21-May	12	7	5	6	6	8	0	0	1	1	2	1	1	2	1	6	4	1	2	2	2	2	1	1	3.1	11.7	
22-May	0	0	0	0	1	10	13	3	3	2	2	0	0	1	1	1	2	2	1	4	33	9	43	3	5.6	42.6	
23-May	27	3	2	1	3	8	13	15	3	2	2	1	3	6	4	3	1	1	1	2	0	1	2	1	4.4	26.8	
24-May	1	1	1	1	1	2	2	2	1	1	1	2	1	0	1	0	0	1	7	1	4	15	6	8	2.6	15.1	
25-May	3	1	1	2	2	3	4	4	5	4	2	0	0	2	1	3	2	1	0	1	1	2	4	4	2.2	5.3	
26-May	3	2	3	4	5	4	5	3	3	3	6	4	4	5	3	4	3	2	3	4	4	4	1	1	3.4	5.5	
27-May	3	2	2	2	2	3	4	3	4	3	3	2	3	3	4	4	1	3	6	4	4	3	36	3	4.5	35.9	
28-May	1	1	1	1	1	2	2	1	0	0	1	1	0	2	1	1	4	5	3	3	1	1	2	2	1.5	5.0	
29-May	1	1	2	5	3	4	5	3	1	1	2	3	2	2	2	4	0	1	2	4	3	5	5	7	2.9	7.5	
30-May	4	4	4	3	4	4	3	3	3	5	4	3	5	4	3	4	3	12	7	5	3	4	4	4	4.2	12.3	
31-May	3	7	6	7	7	11	8	8	7	4	4	2	2	2	4	4	5	3	4	5	4	4	2	0	4.7	10.7	
5.5 2.6 2.4 2.4 2.4 4.7 5.2 3.2 2.9 2.7 2.2 1.8 1.9 2.4 2.8 3.2 2.7 3.4 3.4 3.4 5.5 9.6 10.4 6.1 Diurnal Average																											
47.2 9.1 6.0 7.1 7.5 26.7 24.0 15.5 13.3 8.3 6.9 6.9 9.5 6.3 11.8 12.2 6.8 12.3 12.0 9.3 32.8 73.3 53.6 42.2 Diurnal Maximum																											
C - Calibration P - Power Failure 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 Maximums

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

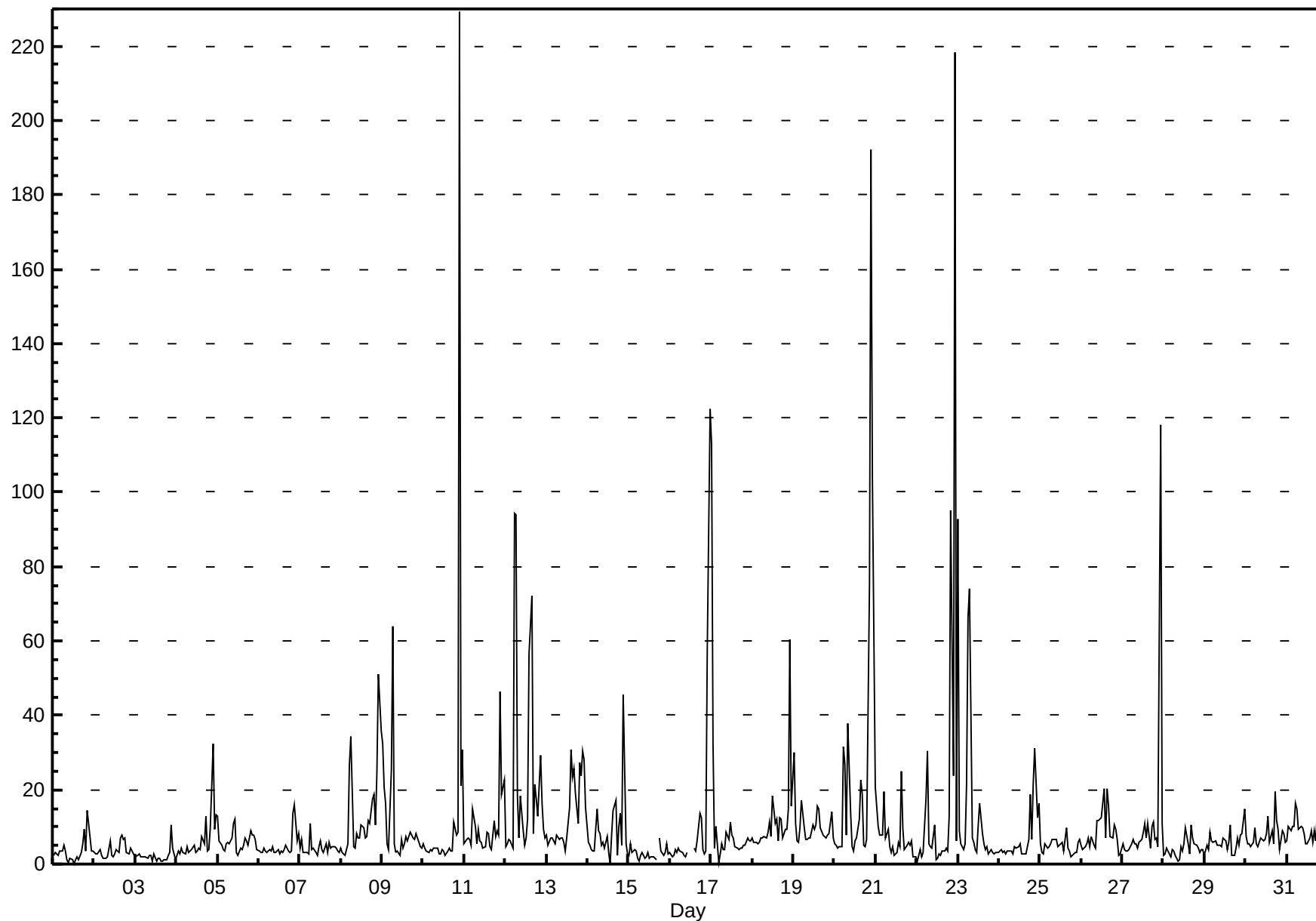
Smoky Heights - May 2014

Maximum Value: 229.4 μg/m ³ on May 10 22:00																					Maximum Daily Average: 27.8 μg/m ³ on May 20										Hours in Service: 744	
Minimum Value: 0 μg/m ³ on May 14 14:00																					Minimum Daily Average: 2.3 μg/m ³ on May 3										Hours of Data: 740	
Maximum Diurnal Average: 26.4 μg/m ³ at hour 22																					Minimum Diurnal Average: 4.5 μg/m ³ at hour 5										Hours of Missing Data: 4	
Monthly Average: 9.79 μg/m ³																					Percentiles: P ₁ = 0.8 P ₁₀ = 2.4 Q ₁ = 3.5 Median = 5.5 Q ₃ = 8.8 P ₉₀ = 16.2 P ₉₉ = 95.9										Hours of Calibration: 3	
																					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-May	2	3	3	2	3	3	5	4	1	0	2	1	0	1	2	1	3	6	10	3	15	11	4	3	3.7	14.5						
2-May	3	3	3	4	2	2	2	2	2	6	2	2	3	4	3	7	8	7	7	3	3	4	3	3	3.6	7.9						
3-May	2	3	3	2	2	2	2	2	2	2	1	3	1	2	2	1	1	1	1	2	3	11	4	1	2.3	10.7						
4-May	2	3	3	4	3	3	5	3	3	4	5	3	3	4	4	7	6	13	4	4	10	32	9	13	6.3	32.2						
5-May	13	6	5	4	3	6	6	6	7	11	12	3	2	4	4	5	7	6	5	9	8	8	7	4	6.3	13.0						
6-May	3	3	3	4	4	3	4	4	5	3	3	4	3	4	3	4	5	3	3	3	13	16	6	8	4.8	16.2						
7-May	4	6	3	3	3	3	11	4	4	3	2	4	6	4	3	5	3	6	4	5	5	4	4	3	4.3	10.8						
8-May	4	3	2	4	6	26	34	5	4	8	7	7	11	10	7	8	12	11	17	19	11	25	51	36	13.6	51.1						
9-May	32	21	16	5	4	25	64	6	3	4	2	7	4	6	7	6	8	8	7	7	8	6	5	4	11.1	64.0						
10-May	5	4	3	3	4	4	4	4	4	3	3	4	3	2	3	4	3	4	11	8	9	229	21	31	15.7	229.4						
11-May	5	6	7	7	5	15	10	5	9	6	6	4	5	9	8	5	4	12	7	9	8	46	19	23	10.1	46.4						
12-May	5	6	7	6	4	94	94	18	7	18	9	5	7	12	57	72	8	21	17	13	29	16	10	7	22.6	94.3						
13-May	8	5	7	7	6	5	8	6	7	7	6	3	7	15	31	23	26	19	11	27	24	31	28	15	13.9	30.8						
14-May	6	5	4	3	3	15	9	8	5	6	4	8	3	0	8	14	17	2	10	14	5	46	5	3	8.5	45.7						
15-May	2	5	3	4	4	1	1	2	3	2	2	3	1	2	2	1	1	P	7	4	3	3	6	3	2.8	6.9						
16-May	3	2	2	4	3	4	4	3	2	2	3	C	C	C	4	3	6	14	13	4	3	3	56	122	12.5	122.4						
17-May	113	32	4	10	0	3	5	4	4	9	7	11	8	7	5	4	4	4	4	5	5	7	6	6	11.2	113.2						
18-May	7	6	6	5	6	7	7	7	7	9	11	8	18	11	12	6	12	12	7	10	9	15	60	16	11.4	60.4						
19-May	30	11	6	6	10	17	10	7	7	7	7	11	9	11	16	15	10	8	7	7	8	8	14	7	10.3	30.1						
20-May	6	5	4	5	5	32	27	8	38	14	5	3	6	7	12	23	19	5	5	7	75	192	104	63	27.8	192.1						
21-May	21	10	8	8	8	20	7	10	5	3	5	2	3	6	5	25	10	4	5	6	5	6	2	2	7.7	25.0						
22-May	1	2	4	2	3	18	30	6	5	4	10	1	1	3	2	4	3	4	3	13	95	24	218	6	19.3	218.4						
23-May	93	9	6	4	6	21	66	74	7	6	4	3	10	16	8	6	4	5	3	4	3	3	3	3	15.3	92.9						
24-May	3	4	3	4	3	3	4	4	3	5	4	5	6	3	3	3	3	7	19	7	21	31	12	16	7.2	31.3						
25-May	6	3	3	6	4	5	5	7	7	7	5	5	5	6	3	10	4	4	2	2	3	3	6	6	4.8	9.8						
26-May	5	4	5	5	7	5	7	5	4	12	12	12	12	20	7	20	16	7	7	11	9	7	3	3	8.5	20.4						
27-May	6	4	4	3	4	6	7	5	6	4	6	6	9	11	7	11	4	10	11	7	7	5	118	11	11.3	118.1						
28-May	2	3	4	3	2	4	4	2	1	1	5	3	5	10	6	3	11	7	5	5	4	3	4	4	4.2	10.5						
29-May	2	5	4	9	6	6	6	5	5	5	5	7	6	4	6	10	2	2	4	7	5	8	8	15	6.0	14.7						
30-May	7	6	5	5	6	10	5	5	6	7	6	6	8	13	6	9	5	20	12	9	4	9	8	6	7.6	19.6						
31-May	6	10	9	10	10	16	15	10	10	10	8	6	5	7	9	6	9	6	13	12	6	7	10	3	8.9	16.5						
13.2 6.4 4.8 4.9 4.5 12.4 15.1 7.7 5.9 6.0 5.4 5.1 5.8 7.1 8.2 10.4 7.6 7.9 7.9 7.8 13.4 26.4 26.3 14.4																									Diurnal Average							
113.2 32.3 16.3 10.3 10.0 94.3 93.8 74.1 37.9 18.4 12.1 11.9 18.3 20.3 56.7 72.0 25.7 21.5 18.8 27.4 95.0 229.4 218.4 122.4																									Diurnal Maximum							
C - Calibration P - Power Failure																																

Hourly Maximums

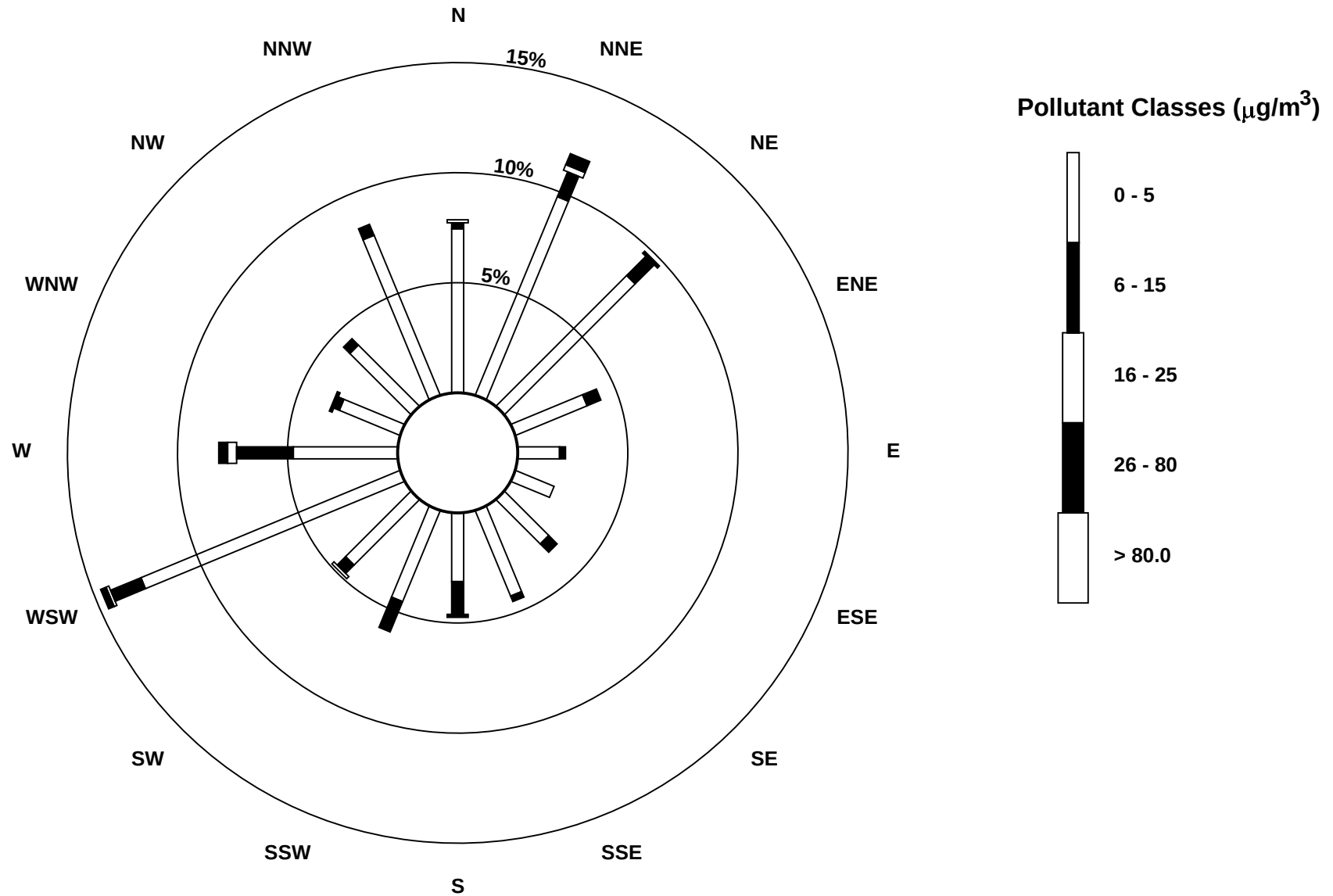
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Smoky Heights - May 2014



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - May 2014



Hourly Averages

External Temperature (ET) - °C

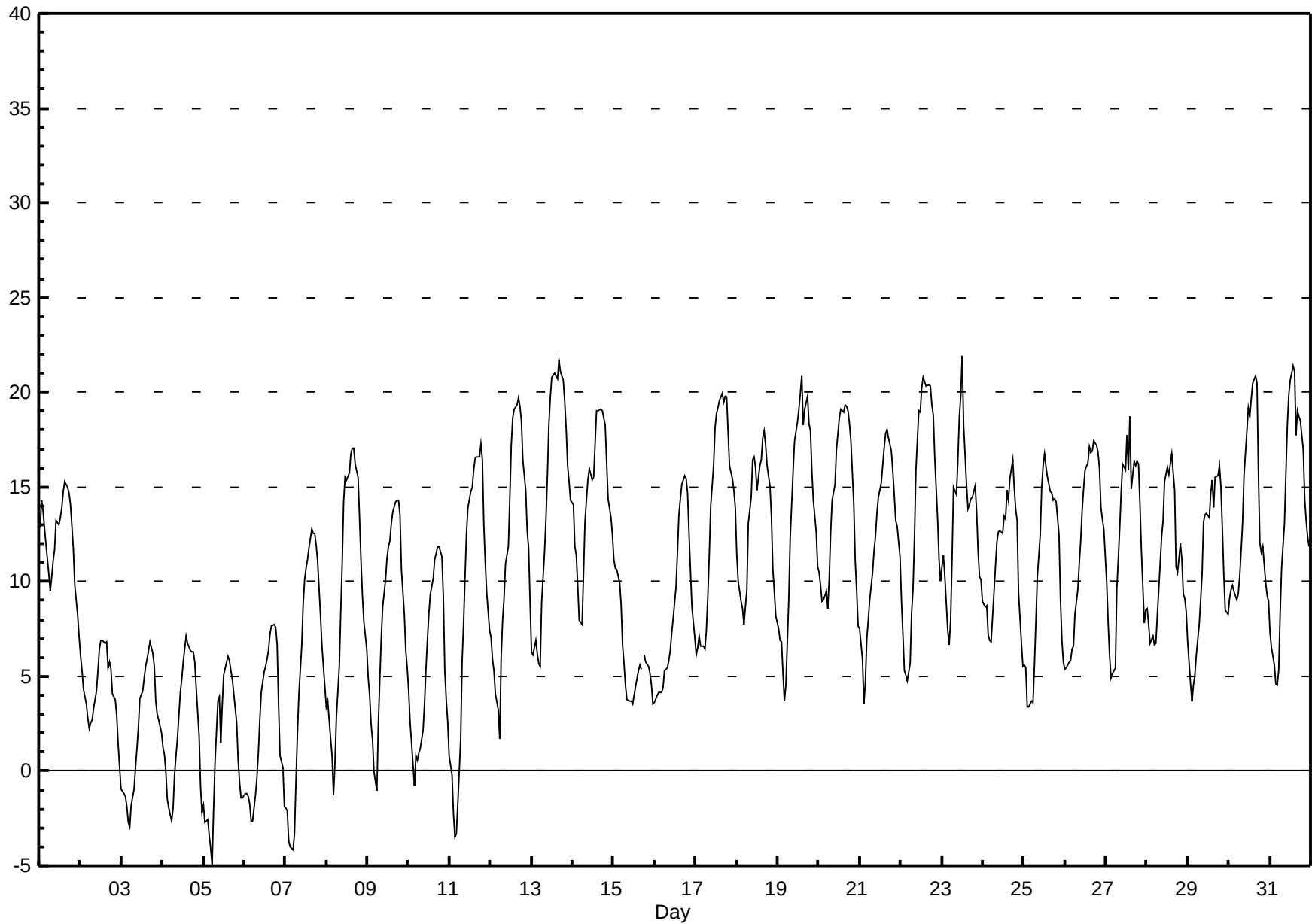
Smoky Heights - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.9 °C on May 23 13:00 Maximum Daily Average: 14.8 °C on May 13																							Hours in Service: 744 Hours of Data: 743 Hours of Missing Data: 1 Hours of Calibration: 0 Percent Operational Time: 99.9			
Minimum Value: -5 °C on May 5 06:00 Minimum Daily Average: 1.2 °C on May 5 Maximum Diurnal Average: 14.9 °C at hour 17 Minimum Diurnal Average: 3.8 °C at hour 5 Monthly Average: 9.93 °C Percentiles: P ₁ = -3.3 P ₁₀ = 1.7 Q ₁ = 5.5 Median = 10.0 Q ₃ = 14.9 P ₉₀ = 18.1 P ₉₉ = 20.8																										
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-May	13	14	14	13	12	10	10	10	11	12	13	13	13	14	15	15	15	15	14	13	12	10	8	7	12.3	15.3
2-May	6	5	4	4	3	2	3	3	3	4	5	6	7	7	7	7	5	6	5	4	4	3	1	0	4.4	6.9
3-May	-1	-1	-1	-2	-3	-3	-2	-1	0	1	2	4	4	5	5	6	6	7	6	6	4	3	3	2	2.1	6.8
4-May	1	1	0	-1	-2	-3	-2	0	1	2	4	5	6	6	7	7	6	6	6	6	4	2	-1	-2	2.5	7.2
5-May	-2	-3	-3	-3	-4	-5	-2	0	4	4	1	3	5	6	6	6	5	5	4	3	1	-1	-1	-1	1.2	6.1
6-May	-1	-1	-1	-2	-3	-3	-1	0	1	3	4	5	6	6	6	7	8	8	8	7	3	1	0	-2	2.4	7.7
7-May	-2	-2	-4	-4	-4	-3	-1	2	4	7	9	10	11	11	12	13	13	13	12	11	8	7	6	4	5.5	12.8
8-May	3	4	2	1	-1	0	3	6	8	11	14	16	15	16	17	17	16	16	13	11	9	8	6	6	9.5	17.1
9-May	5	4	2	2	0	-1	2	5	7	9	10	11	12	12	13	14	14	14	14	14	11	8	6	5	8.1	14.3
10-May	4	3	1	-1	1	1	1	1	2	4	5	7	8	9	10	11	11	12	12	11	9	5	4	3	5.6	11.8
11-May	1	0	-2	-3	-3	-2	2	6	8	10	13	14	15	15	16	16	17	17	17	16	13	11	9	7	8.8	17.3
12-May	7	6	5	4	3	2	6	8	9	11	12	14	17	19	19	19	20	19	19	16	15	13	12	9	11.8	19.7
13-May	6	6	7	6	6	6	9	12	13	16	18	20	21	21	21	21	22	21	21	20	18	16	15	14	14.8	21.7
14-May	14	12	11	10	8	8	10	13	14	15	16	15	16	17	19	19	19	19	19	18	16	14	13	12	14.6	19.1
15-May	11	11	11	10	9	7	6	5	4	4	4	4	4	4	5	6	5	P	6	6	6	5	5	4	6.0	11.2
16-May	4	4	4	4	4	4	5	5	6	6	7	8	10	12	14	14	15	16	15	15	13	11	9	7	8.8	15.6
17-May	6	7	7	7	7	6	7	9	11	14	16	18	19	19	20	20	19	20	20	18	16	15	15	14	13.8	19.9
18-May	11	10	9	9	8	9	10	13	14	16	17	16	15	16	16	18	18	17	16	15	13	11	9	8	13.1	17.9
19-May	8	7	7	5	4	5	9	12	14	16	17	18	19	20	21	18	19	20	18	18	16	14	13	11	13.7	20.9
20-May	10	10	9	9	9	9	10	13	14	15	17	18	19	19	19	19	19	19	18	17	14	11	10	8	14.0	19.4
21-May	7	6	4	5	7	8	9	11	12	12	14	14	15	16	17	18	18	18	17	16	15	13	13	11	12.3	18.1
22-May	9	7	5	5	5	6	8	10	12	16	19	19	20	21	21	20	20	20	19	19	17	13	11	10	13.9	20.8
23-May	11	11	10	7	7	8	11	15	15	16	19	20	22	18	15	14	14	14	14	15	14	12	10	10	13.5	21.9
24-May	9	9	9	7	7	7	9	11	12	13	13	13	13	13	15	14	15	16	15	14	13	9	7	6	11.2	16.4
25-May	6	5	3	3	4	4	6	8	10	12	15	16	17	16	15	15	15	14	14	14	12	9	7	6	10.3	16.7
26-May	5	5	6	6	6	7	8	10	11	12	14	15	16	16	17	17	17	17	17	17	16	14	13	13	12.3	17.4
27-May	10	8	6	5	5	5	10	11	13	15	16	16	18	16	19	15	16	16	16	16	14	12	8	9	12.3	18.7
28-May	9	8	7	7	7	7	8	10	12	13	15	16	16	16	17	16	15	11	10	12	11	9	9	8	11.2	16.7
29-May	7	5	4	5	5	6	8	9	10	13	14	14	13	15	15	14	16	16	16	15	13	10	8	8	10.7	16.1
30-May	9	10	10	9	9	9	10	12	13	16	18	19	19	20	20	21	20	16	12	12	12	10	9	9	13.5	20.9
31-May	7	7	6	5	5	5	8	11	13	16	18	20	21	21	21	18	19	19	18	17	14	13	12	12	13.6	21.4
6.3 5.7 4.9 4.2 3.8 3.9 5.8 7.6 9.1 10.8 12.3 13.1 13.9 14.3 14.8 14.7 14.9 14.8 14.1 13.3 11.5 9.5 8.1 7.1 14.1 14.3 13.8 12.9 12.0 10.4 11.2 15.0 14.6 16.5 19.0 19.9 21.9 21.4 21.1 20.9 21.7 21.1 20.7 19.5 18.1 16.1 15.3 14.3																							Diurnal Average	Diurnal Maximum		
P - Power Failure																										

Hourly Averages

External Temperature (ET) - °C

Smoky Heights - May 2014



Hourly Averages

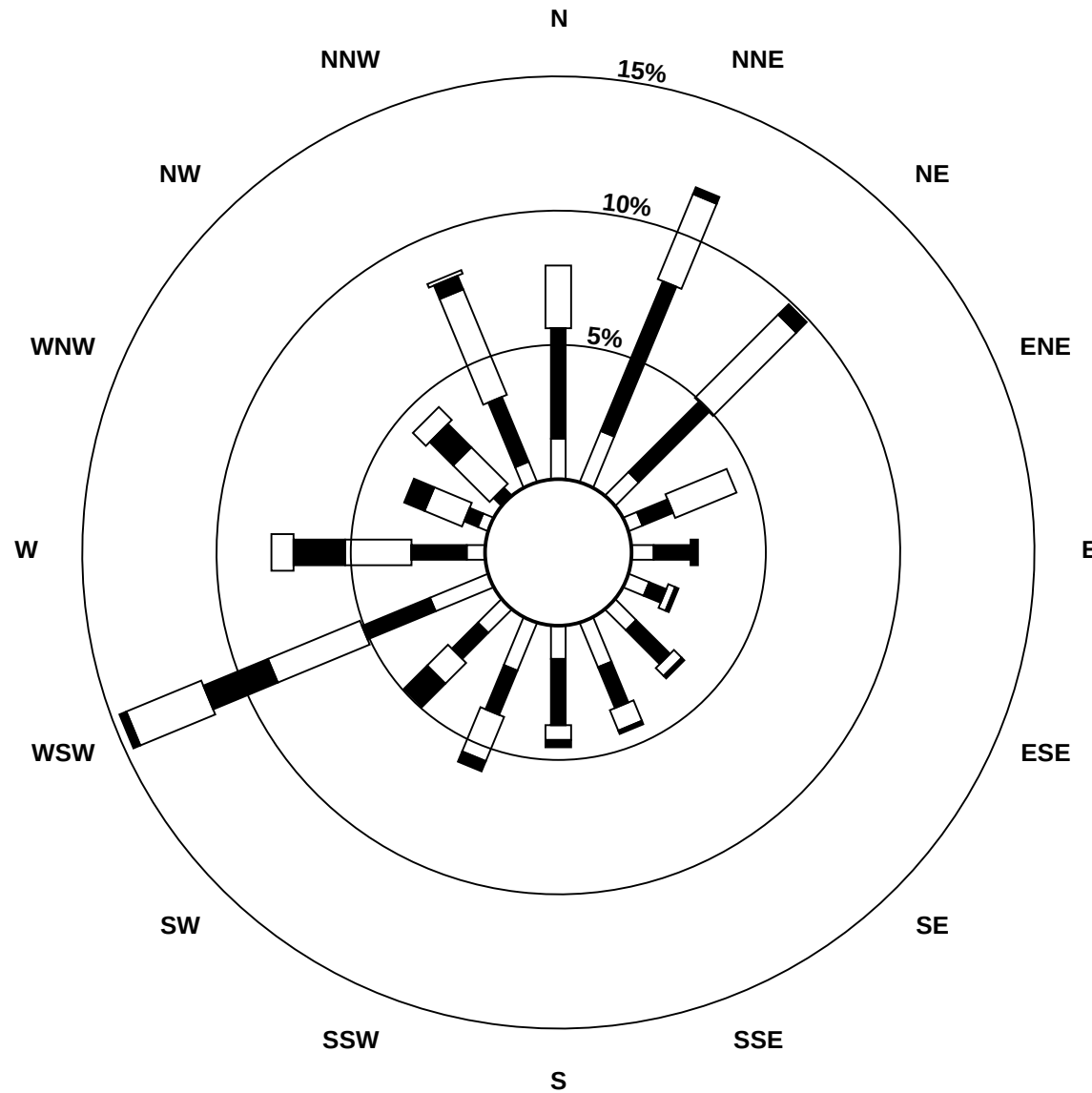
Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - May 2014

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	19	23	21	18	17	12	11	9	14	11	9	10	11	13	10	13	15	13	16	14	13	19	11	11	12.2	23.1
Dir	281	289	287	298	315	343	353	341	343	342	358	329	318	286	328	330	342	346	341	319	355	24	15	351	327.7	288.9
2 Spd	16	17	16	13	13	11	16	19	16	15	14	12	12	14	16	18	12	14	15	8	14	20	21	12	13.6	20.6
Dir	7	12	12	356	347	339	333	337	337	341	350	340	352	352	335	347	345	351	35	43	24	37	35	26	359.7	34.9
3 Spd	11	12	11	11	9	10	14	15	12	14	14	15	14	14	16	16	16	14	12	10	8	6	6	15	11.6	15.9
Dir	19	26	25	29	27	23	38	45	51	34	50	61	64	52	59	49	57	53	61	81	114	99	32	32	47.8	49.4
4 Spd	14	8	5	6	9	9	6	11	13	11	11	12	3	3	5	7	4	4	6	2	2	5	1	3	4.9	14.1
Dir	33	32	32	348	355	3	15	17	27	53	107	147	331	63	13	11	47	3	35	64	25	18	5	241	31.0	32.5
5 Spd	4	6	5	8	7	9	11	12	17	26	18	24	24	24	27	30	30	28	26	22	21	18	15	17	13.9	30.2
Dir	227	227	238	215	210	199	190	211	260	324	300	288	305	312	307	316	319	319	329	346	348	342	331	323	307.5	319.3
6 Spd	18	20	19	14	11	9	9	11	8	7	6	10	7	4	8	8	6	6	2	3	3	2	0	5	6.1	20.2
Dir	323	321	332	338	330	335	358	17	17	29	26	35	7	14	26	10	28	43	137	122	132	174	167	155	356.8	321.1
7 Spd	6	3	2	3	4	5	3	6	6	6	8	8	5	8	5	3	8	8	9	10	11	9	11	2	3.3	10.6
Dir	169	249	256	240	240	244	223	154	126	94	119	151	119	163	152	121	75	24	49	52	57	77	109	152	110.9	108.5
8 Spd	5	7	7	2	0	5	5	4	4	4	2	3	2	2	14	14	15	16	20	23	21	17	16	11	4.9	22.8
Dir	208	193	214	243	249	219	193	174	184	204	149	4	245	42	339	348	351	13	32	33	36	36	32	33	19.0	32.9
9 Spd	9	11	8	7	6	4	7	9	6	6	9	9	11	13	12	12	12	11	13	11	17	15	11	10	9.1	16.6
Dir	19	23	10	2	351	344	5	6	1	5	360	354	347	327	330	343	345	331	327	3	37	42	34	20	1.0	37.2
10 Spd	11	11	9	5	9	10	10	17	19	13	13	11	10	8	10	11	13	12	11	10	6	5	5	5	9.4	18.7
Dir	22	35	19	343	8	12	30	30	39	31	7	352	340	355	322	348	345	351	357	356	17	41	36	38	10.0	39.5
11 Spd	0	1	1	3	5	2	1	3	7	9	4	4	0	5	2	5	6	2	2	2	6	7	7	3	1.5	8.5
Dir	15	17	27	275	279	279	184	168	175	179	194	162	335	201	71	93	39	182	119	49	45	98	136	172	144.5	179.3
12 Spd	4	4	2	4	3	4	3	6	5	1	8	5	3	6	5	4	4	10	13	12	11	7	6	3	2.4	13.0
Dir	199	207	258	255	272	249	231	164	128	81	67	131	131	14	3	332	340	42	48	63	64	60	66	92	61.8	48.5
13 Spd	2	3	6	5	6	5	4	6	6	6	8	5	4	3	6	8	2	3	1	2	3	1	16	20	1.2	20.1
Dir	2	56	21	8	18	18	30	166	172	145	150	104	148	178	238	203	139	250	195	124	294	265	260	267	223.7	266.8
14 Spd	21	10	11	9	8	9	10	15	17	18	24	24	18	22	36	35	34	35	31	31	24	20	20	20	20.4	35.9
Dir	268	237	222	228	250	253	241	243	243	237	249	232	216	230	244	251	255	253	256	267	263	262	262	255	249.0	243.7
15 Spd	19	17	19	21	22	30	27	29	15	15	17	18	19	17	16	14	12	P	6	5	2	2	3	0	13.9	29.8
Dir	249	282	299	303	307	312	315	309	303	296	309	303	312	309	312	323	317	P	343	353	343	162	161	283	305.3	311.9
16 Spd	1	2	2	2	2	4	5	8	11	12	10	8	5	4	6	6	6	8	9	11	10	8	7	6	4.4	11.9
Dir	236	142	166	210	163	159	176	158	140	119	94	98	95	80	81	99	43	47	51	48	49	42	28	22	85.6	119.4
17 Spd	5	7	10	10	10	8	9	8	6	6	7	7	10	9	14	13	13	13	13	12	8	8	8	7	8.6	13.8
Dir	29	19	19	17	16	15	24	32	45	46	46	37	88	75	63	67	73	60	58	59	57	29	41	47	46.8	63.3
18 Spd	4	5	5	5	3	4	5	4	5	5	11	8	13	10	15	16	12	8	9	1	1	1	6	9	1.5	15.9
Dir	12	22	23	4	30	30	32	34	108	79	139	125	274	263	199	194	208	265	298	74	54	222	245	262	233.9	194.5
19 Spd	10	6	8	4	4	5	3	7	8	10	12	13	8	6	10	18	11	11	9	8	9	12	8	7	5.1	17.9
Dir	274	244	266	253	218	204	246	193	179	169	179	185	180	214	202	309	7	271	250	136	150	164	187	174	209.8	308.6
20 Spd	10	11	9	13	13	7	11	15	24	27	27	30	34	35	35	30	31	28	27	23	12	8	7	6	19.1	35.3
Dir	195	196	230	241	251	253	229	241	269	265	242	243	247	245	249	242	244	244	252	247	265	276	260	259	246.5	249.1
21 Spd	7	7	5	11	17	17	14	17	29	35	39	37	33	33	33	28	28	30	29	23	24	14	16	12	22.2	38.5
Dir	258	253	226	253	270	266	250	259	260	258	247	243	248	251	247	253	245	246	243	244	254	263	247	237	250.7	247.3
22 Spd	8	8	3	1	2	0	3	4	8	10	14	20	22	23	26	22	19	18	13	10	5	2	5	2	9.7	26.2
Dir	262	250	205	292	352	307	181	198	192	204	229	237	224	234	237	226	240	238	247	257	285	219	251	213	234.4	236.7

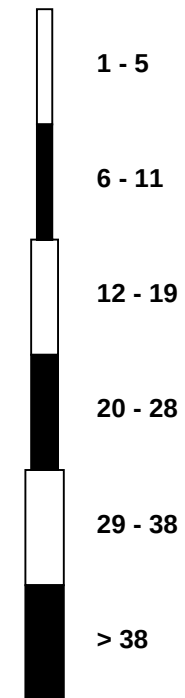
Day		Hourly Period Ending At (MST)																								Daily Average	Daily Maximum									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24											
23 Spd		6	2	3	4	7	4	8	8	9	9	8	13	11	27	34	36	21	20	24	19	23	23	19	19	12.1	35.6									
	Dir	185	165	237	228	257	188	269	226	170	183	137	129	162	273	262	271	256	234	236	225	234	246	256	249	239.5	271.0									
24 Spd		19	18	18	15	15	13	18	26	20	25	27	26	23	17	16	8	7	11	10	18	7	10	5	6	15.3	27.2									
	Dir	260	259	260	262	264	254	250	241	253	276	268	272	269	246	262	254	216	249	285	289	292	274	260	260	262.1	268.5									
25 Spd		7	7	6	9	4	1	1	7	10	9	10	8	10	10	6	23	21	20	15	13	7	9	8	8	4.8	23.2									
	Dir	245	255	202	276	198	277	188	181	156	138	133	189	187	159	168	102	98	92	78	69	54	43	32	24	116.8	101.9									
26 Spd		10	9	12	14	14	15	17	14	15	13	17	16	19	15	13	8	13	6	10	10	9	19	20	14	11.5	20.3									
	Dir	33	5	2	5	11	1	4	24	55	49	42	29	37	26	41	299	42	334	325	348	344	329	323	315	8.8	322.8									
27 Spd		6	16	13	8	6	3	8	12	14	13	13	9	14	16	16	31	23	22	18	16	10	12	12	13	9.3	31.0									
	Dir	333	28	288	271	11	359	40	67	53	58	21	5	44	33	26	346	326	281	279	338	338	317	278	4	352.1	346.4									
28 Spd		14	13	12	14	10	11	16	15	16	16	14	13	8	16	7	14	16	23	12	12	15	14	8	16	7.7	22.9									
	Dir	5	12	14	16	16	22	34	36	36	49	35	24	7	133	91	50	66	140	122	157	161	169	136	140	66.1	139.7									
29 Spd		11	4	6	9	2	12	12	7	12	7	10	8	16	12	18	18	13	12	4	16	12	14	19	15	2.9	19.2									
	Dir	107	203	337	352	4	334	313	188	186	134	126	175	238	233	250	37	50	55	94	212	205	226	258	278	238.3	257.5									
30 Spd		14	18	24	28	33	18	26	33	41	33	19	26	21	15	32	35	36	17	18	23	13	10	19	19	20.9	41.0									
	Dir	255	259	261	252	259	251	244	254	256	272	289	301	210	252	251	247	243	14	328	221	237	231	227	233	255.4	256.3									
31 Spd		17	17	15	17	14	11	18	24	26	26	19	19	21	17	21	29	9	21	19	16	22	12	20	13	11.5	29.2									
	Dir	218	206	199	197	210	200	198	186	186	207	207	211	215	237	266	304	253	164	148	57	38	38	195	179	204.5	303.8									
Spd		3.9	3.8	4.6	5.3	5.2	4.3	3.6	2.7	2.6	2.9	2.2	4.0	4.9	6.0	8.0	7.6	5.2	4.0	4.2	2.8	2.8	2.7	2.9	3.1	Diurnal Average										
Dir		291.4	300.8	300.1	296.2	302.1	308.2	304.9	274.1	255.9	283.3	276.8	266.0	262.0	267.3	274.6	300.8	307.7	300.5	315.0	324.5	353.5	349.7	288.4	291.5	Diurnal Maximum										
Spd		21.5	23.1	24.1	28.0	32.9	29.8	26.6	33.4	41.0	35.2	38.5	37.5	33.8	35.2	35.9	35.6	36.0	35.2	31.3	31.1	24.2	23.2	20.6	20.4	Diurnal Maximum										
Dir		268.5	288.9	260.8	251.8	259.0	311.9	315.0	253.7	256.3	257.7	247.3	242.9	247.1	244.5	243.7	271.0	243.2	252.9	256.3	267.2	263.4	245.6	34.9	254.8	Diurnal Maximum										
Maximum Speed Value: 41 km/h on May 30 09:00																								Minimum Speed Value: 0 km/h on May 8 05:00										Hours in Service:		744
Maximum Daily Speed Average: 22.2 km/h on May 30																								Minimum Daily Speed Average: 1.2 km/h on May 11										Hours of Data:		743
Maximum Diurnal Speed Average: 8.0 km/h at hour 15																								Minimum Diurnal Speed Average: 2.2 km/h at hour 11										Hours of Missing Data:		1
Monthly Average Velocity: 3.84 km/h 293.79 deg																								Speed Percentiles: P ₁ = 0.7 P ₁₀ = 3.4 Q ₁ = 6.0 Median = 10.8 Q ₃ = 16.1 P ₉₀ = 23.0 P ₉₉ = 35.1										Percent Operational Time:		99.9
All monthly, daily, and diurnal averages have been calculated using vector methods																																				
P - Power Failure																																				
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		18				60				52				2				1				0				133										
NorthEast		16				53				68				7				0				0				144										
East		7				18				5				3				0				0				33										
SouthEast		14				22				9				1				0				0				46										
South		26				32				15				4				0				0				77										
SouthWest		25				21				30				22				13				1				112										
West		17				33				33				27				18				1				129										
NorthWest		5				10				34				14				6				0				69										
Total		128				249				246				80				38				2				743										

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - May 2014

Maximum Speed: 41 km/h on May 30 09:00																				Maximum Daily Speed Average: 25.3 km/h on May 30					Hours in Service: 744	
Minimum Speed: 0 km/h on May 8 05:00																				Minimum Daily Speed Average: 4.8 km/h on May 11					Hours of Data: 743	
Maximum Diurnal Speed Average: 18.6 km/h at hour 16																				Minimum Diurnal Speed Average: 8.9 km/h at hour 6					Hours of Missing Data: 1	
Monthly Average Speed: 13.02 km/h																				Percentiles: P ₁ = 1.2 P ₁₀ = 4.5 Q ₁ = 7.2 Median = 11.5 Q ₃ = 16.8 P ₉₀ = 23.8 P ₉₉ = 35.2					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-May	19	23	21	18	17	12	12	9	14	11	10	12	12	13	12	14	15	14	16	14	16	19	11	12	14.5	23.2
2-May	16	17	16	13	13	11	17	19	16	16	15	13	13	15	17	19	13	15	16	9	15	20	21	12	15.2	20.7
3-May	11	12	12	11	9	10	14	15	12	14	15	16	15	15	16	17	17	15	12	11	8	7	6	15	12.7	16.8
4-May	14	8	5	6	9	9	7	11	13	11	13	12	9	7	8	8	6	6	6	2	2	5	1	3	7.6	14.1
5-May	5	6	5	8	7	9	11	12	19	27	18	25	25	25	28	31	31	29	26	22	21	18	15	17	18.3	31.1
6-May	18	20	19	14	11	9	9	11	9	8	8	11	9	9	10	9	8	8	4	4	4	2	0	5	9.2	20.3
7-May	6	3	2	3	4	5	3	6	6	7	9	10	8	9	7	7	9	10	9	11	11	9	11	3	7.0	10.8
8-May	5	7	7	2	0	5	5	4	4	5	5	5	6	5	16	16	17	17	20	23	21	17	16	11	9.9	22.9
9-May	9	11	8	8	6	4	7	9	7	7	10	11	13	14	14	14	14	13	14	12	17	15	11	10	10.7	16.8
10-May	11	11	9	6	9	10	11	17	19	14	14	12	12	10	12	12	15	13	12	10	6	5	5	5	10.7	18.9
11-May	0	1	1	3	5	2	1	3	7	9	6	5	6	7	6	7	8	6	3	2	6	8	7	3	4.8	8.8
12-May	4	4	2	5	3	4	3	6	6	5	10	6	7	7	8	10	6	11	13	12	12	7	6	3	6.7	13.2
13-May	3	3	6	5	6	5	4	6	6	6	9	7	6	9	9	8	4	3	2	2	4	3	16	20	6.4	20.2
14-May	21	11	11	9	8	9	10	15	17	18	25	24	18	23	36	36	34	35	32	31	24	21	20	20	21.3	36.2
15-May	19	17	19	21	22	30	27	29	16	16	17	18	19	17	16	14	12	P	7	6	2	2	3	1	15.2	30.0
16-May	1	2	2	2	2	4	5	8	11	13	10	9	8	7	6	7	8	9	9	11	10	8	7	6	6.9	12.7
17-May	5	7	10	10	10	8	9	8	6	7	8	9	11	10	15	14	14	13	14	12	8	8	8	7	9.6	14.5
18-May	5	5	5	6	4	4	5	4	5	6	12	9	14	10	16	16	13	10	9	3	1	1	6	9	7.4	16.4
19-May	10	6	8	5	6	6	3	7	8	11	13	14	10	7	11	20	12	13	10	9	10	12	9	7	9.4	20.5
20-May	10	11	10	13	13	7	11	16	24	27	27	31	35	36	36	31	31	28	27	23	12	8	7	7	20.1	35.6
21-May	8	7	6	11	17	17	15	17	29	35	39	38	33	34	34	29	28	30	29	23	24	14	16	12	22.8	39.1
22-May	8	8	3	2	3	1	3	4	8	10	15	20	23	24	27	22	19	19	13	10	5	2	6	3	10.7	27.0
23-May	7	4	4	5	7	5	11	13	10	9	9	13	13	29	35	36	22	20	24	19	23	23	19	19	15.8	35.7
24-May	19	18	18	16	16	13	19	27	21	26	28	26	24	17	17	11	9	12	11	19	9	10	5	6	16.5	27.7
25-May	7	7	6	10	7	3	1	7	11	10	11	9	13	13	11	23	22	21	15	13	7	10	8	8	10.5	23.5
26-May	10	9	12	14	14	15	17	15	16	14	19	18	21	17	15	15	16	11	11	11	10	19	20	15	14.8	21.4
27-May	12	19	14	8	7	3	9	12	16	14	19	11	16	17	17	32	24	25	20	20	16	13	12	13	15.4	31.8
28-May	14	13	12	14	11	11	16	15	17	17	16	14	10	18	11	15	19	23	13	13	15	14	20	19	15.0	23.3
29-May	16	14	10	9	9	13	14	15	15	11	12	11	16	14	18	19	13	12	7	17	13	15	20	15	13.6	19.7
30-May	14	18	24	28	33	23	26	34	41	33	23	27	22	17	33	35	36	24	26	24	14	14	19	19	25.3	41.2
31-May	17	18	15	17	14	11	18	24	26	27	20	21	22	19	25	29	17	21	19	23	22	15	22	15	19.9	29.5
10.5 10.4 9.7 9.7 9.8 8.9 10.4 12.9 14.0 14.2 15.0 15.1 15.1 15.3 17.5 18.6 16.5 16.2 14.6 13.5 11.9 11.1 11.4 10.3																									Diurnal Average	
21.5 23.2 24.3 28.2 33.1 30.0 26.9 33.6 41.2 35.4 39.1 37.9 34.6 35.6 36.2 36.2 36.3 35.5 31.7 31.2 24.2 23.2 22.0 20.5																									Diurnal Maximum	
P - Power Failure																										
All monthly, daily, and diurnal averages have been calculated using scalar methods																										

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - May 2014

Maximum Value: 93.0 deg on May 11 13:00																		Hours in Service: 744							
Minimum Value: 2.6 deg on May 20 04:00																		Hours of Data: 743							
																		Hours of Missing Data: 1							
Percentiles: P ₁ = 4.2 P ₁₀ = 6.2 Q ₁ = 9.0 Median = 15.9 Q ₃ = 31.0 P ₉₀ = 50.3 P ₉₉ = 79.2																		Hours of Calibration: 0							
																		Percent Operational Time: 99.9							
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-May	8	5	5	7	12	9	12	10	11	16	22	29	20	16	31	24	12	16	12	6	31	7	7	8	31.4
2-May	8	9	9	13	10	10	9	11	15	23	18	21	21	21	19	21	21	16	24	23	15	9	5	5	23.8
3-May	7	5	7	5	4	5	7	9	16	13	15	18	22	21	15	17	19	16	16	21	8	29	21	4	29.4
4-May	5	8	8	16	10	7	8	13	10	19	33	19	80	82	64	47	47	61	14	50	14	8	40	23	82.1
5-May	20	13	9	8	9	4	5	10	25	10	13	9	18	15	14	14	14	13	11	10	9	10	9	5	24.7
6-May	6	6	7	8	6	12	12	13	19	27	48	29	48	81	48	38	56	46	61	44	35	23	47	23	81.2
7-May	20	14	7	7	10	6	16	17	22	21	31	42	64	37	56	69	39	35	24	7	8	17	10	52	69.2
8-May	12	17	17	9	54	19	18	17	19	25	70	61	91	86	36	24	22	16	10	5	5	6	5	6	91.5
9-May	6	4	8	10	9	33	24	16	35	43	36	44	28	31	42	31	31	28	21	20	9	5	9	5	44.3
10-May	10	6	17	32	8	7	9	7	9	22	22	29	34	49	37	30	25	23	21	15	16	10	6	6	48.7
11-May	20	8	43	10	8	75	34	16	12	14	65	50	93	57	89	56	52	82	53	34	9	22	32	36	93.0
12-May	23	26	23	16	16	12	16	17	19	89	37	43	82	47	68	64	58	24	11	8	8	6	11	48	89.3
13-May	34	29	9	14	8	6	14	29	17	24	22	60	67	81	68	37	65	64	58	48	74	81	14	4	80.8
14-May	3	21	6	5	6	5	6	6	6	9	9	10	8	16	8	16	12	8	9	5	4	10	5	3	21.3
15-May	6	13	8	7	11	7	8	7	32	14	9	10	7	9	13	12	10	P	24	20	20	49	43	38	49.2
16-May	60	16	30	43	45	18	15	19	13	22	19	23	63	69	33	46	49	31	21	6	7	5	6	6	69.1
17-May	8	7	5	5	6	8	6	9	18	49	37	38	32	28	19	25	21	12	16	8	6	12	12	12	48.6
18-May	21	6	16	24	39	15	8	20	27	36	21	20	43	22	30	14	23	40	10	67	30	65	16	9	66.9
19-May	6	11	25	13	44	28	18	14	11	16	16	27	38	56	36	32	21	35	19	17	6	8	27	16	56.2
20-May	13	8	15	3	12	11	6	15	5	7	10	10	12	9	7	10	9	10	7	6	9	8	12	35	34.7
21-May	21	14	32	16	4	4	8	6	6	6	10	9	11	12	12	13	8	8	5	7	8	7	7	5	31.9
22-May	9	11	35	55	35	87	19	19	11	15	24	11	13	17	14	10	9	9	12	7	18	45	37	59	87.3
23-May	31	65	33	21	15	42	54	51	12	29	35	15	34	37	7	5	19	9	6	8	10	4	7	5	65.1
24-May	7	6	5	7	6	8	11	8	22	12	11	10	12	14	18	65	51	29	33	27	40	10	20	17	64.7
25-May	9	12	32	27	54	79	68	13	29	17	31	30	36	41	61	10	9	11	11	10	10	8	8	6	79.3
26-May	12	16	9	11	11	10	10	12	20	23	23	23	27	30	38	72	34	64	19	20	33	14	9	12	71.8
27-May	64	34	31	35	29	27	18	19	22	27	60	46	31	24	21	13	20	34	29	37	53	25	18	14	63.7
28-May	10	8	8	8	9	9	11	13	12	18	26	24	48	35	59	14	34	10	24	29	9	7	78	40	78.4
29-May	53	77	56	22	80	19	33	71	48	54	46	50	15	38	18	26	20	23	63	17	9	16	12	12	79.9
30-May	16	8	6	6	6	56	7	6	6	8	37	18	16	38	13	10	7	51	48	12	22	43	10	7	55.7
31-May	8	12	12	7	9	6	4	6	10	19	28	21	20	28	38	8	57	8	10	48	10	35	24	37	57.0
63.7 77.2 55.7 54.7 79.9 87.3 67.6 71.2 47.9 89.3 70.3 60.7 93.0 85.5 89.3 71.8 65.0 82.3 62.8 66.9 74.5 80.8 78.4 59.0																									
P - Power Failure																									

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

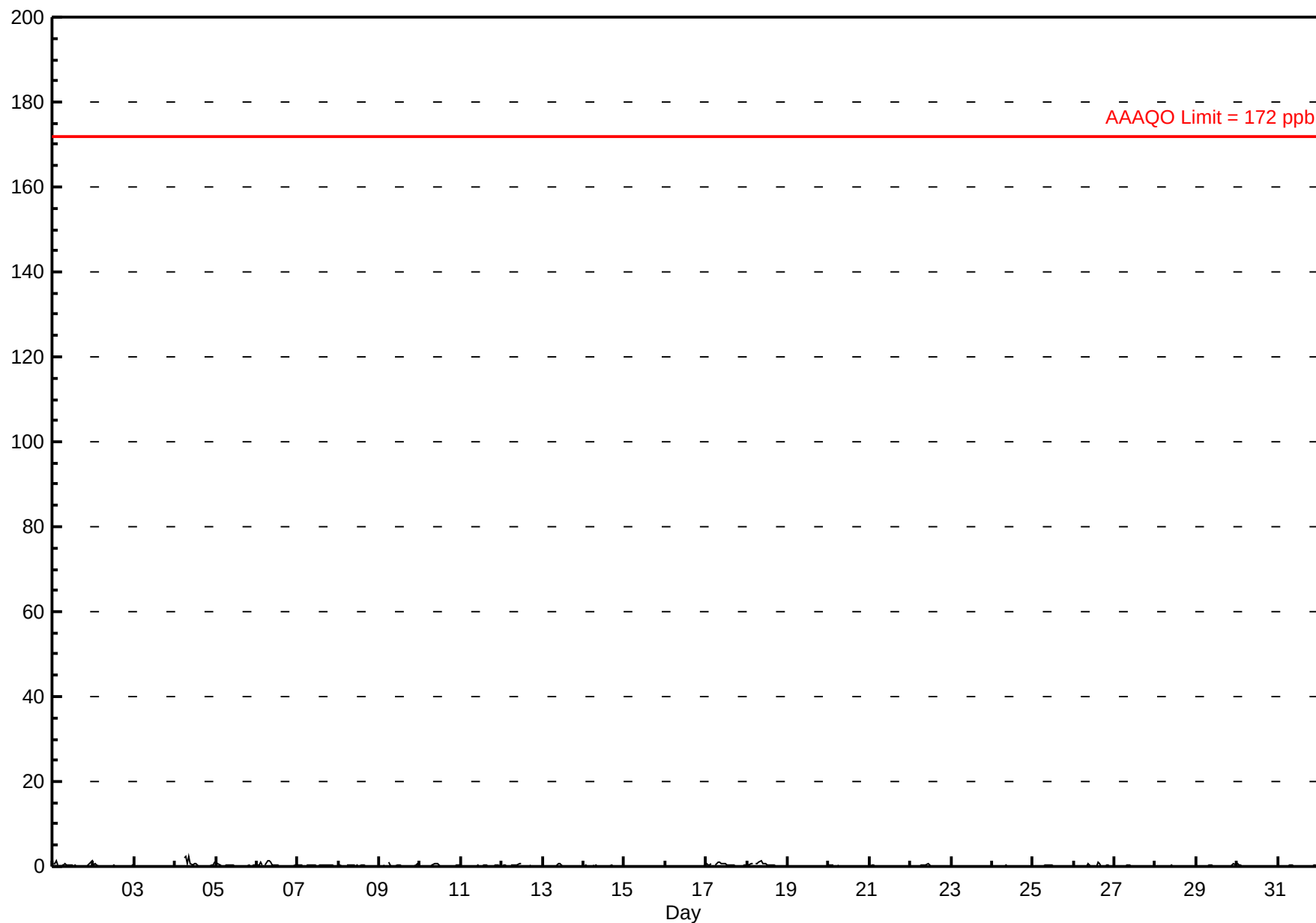
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.5 ppb on May 4 07:00 Maximum Daily Average: 0.6 ppb on May 4																				Hours in Service: 744 Hours of Data: 709						
Minimum Value: 0 ppb on May 12 19:00 Minimum Daily Average: 0.0 ppb on May 21 Maximum Diurnal Average: 0.4 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 19 Monthly Average: 0.18 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.3																				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-May	1	1	1	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.3
2-May	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
3-May	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-May	0	0	0	0	A	2	3	1	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0.6	2.5
5-May	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
6-May	0	0	1	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
7-May	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
8-May	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
9-May	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.9
10-May	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	0.8
11-May	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
12-May	0	0	0	0	A	0	0	0	0	0	1	1	C	C	C	C	0	0	0	0	0	0	0	0	0.2	0.8
13-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
14-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1	0.5
15-May	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
16-May	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
17-May	1	0	0	1	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
18-May	0	0	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
19-May	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-May	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
21-May	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	0.2
22-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
23-May	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
24-May	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-May	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	0.5
26-May	0	0	0	0	A	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	1.1
27-May	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	0.5
28-May	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
29-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
30-May	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
31-May	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
0.2 0.2 0.2 0.2 -- 0.2 0.3 0.3 0.4 0.3 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.2																									Diurnal Average	
1.0 0.7 1.3 0.8 -- 2.1 2.5 1.3 2.4 0.8 0.8 0.8 0.6 0.5 1.1 0.5 0.5 0.3 0.2 0.4 0.4 0.5 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 - May 2014



Hourly Maximums

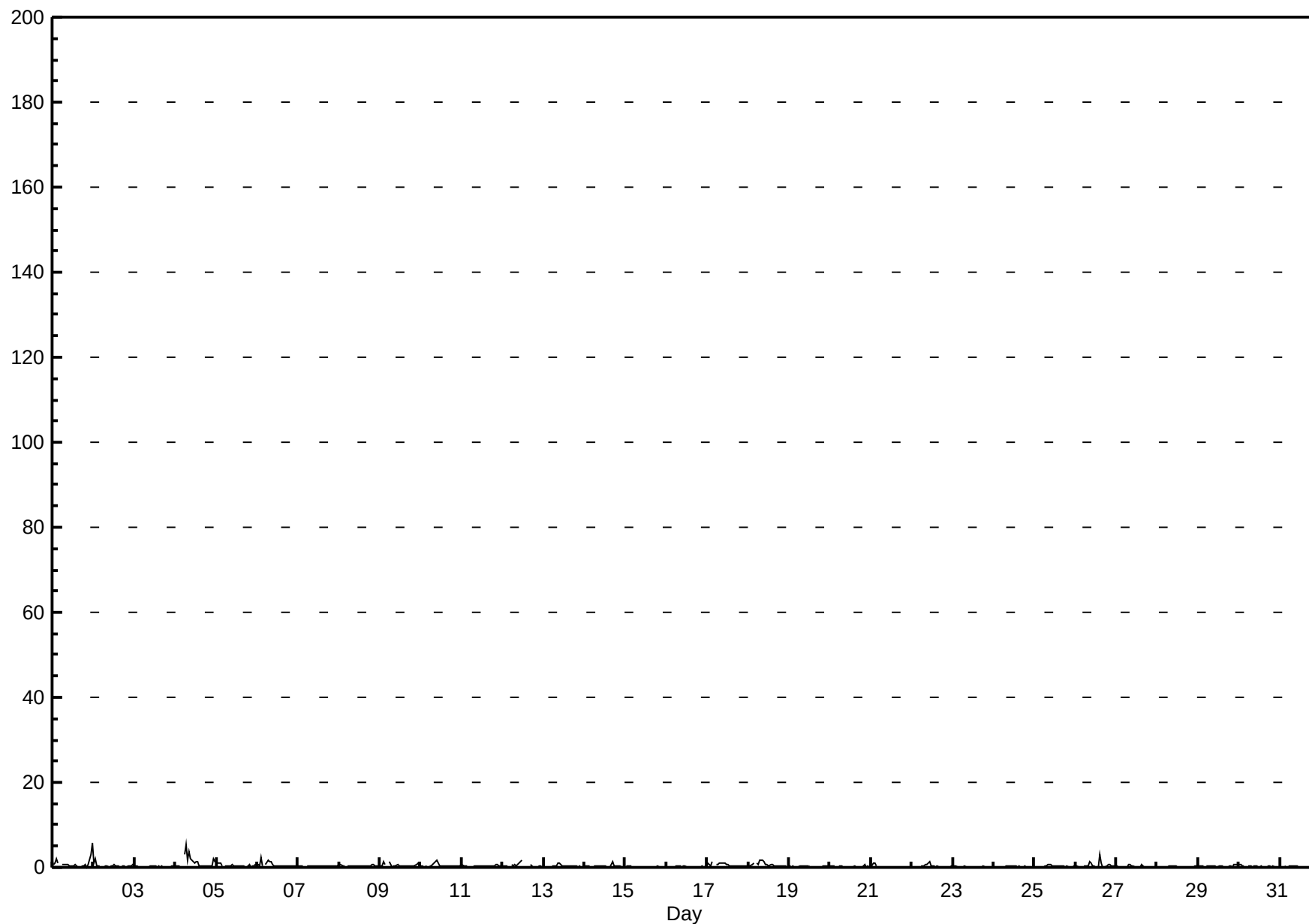
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - May 2014

Maximum Value: 5.9 ppb on May 2 00:00																			Maximum Daily Average: 1.2 ppb on May 4																			Hours in Service: 744	
Minimum Value: 0 ppb on May 13 00:00																			Minimum Daily Average: 0.1 ppb on May 15																			Hours of Data: 709	
Maximum Diurnal Average: 0.6 ppb at hour 9																			Minimum Diurnal Average: 0.2 ppb at hour 19																			Hours of Missing Data: 35	
Monthly Average: 0.36 ppb																			Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.8 P ₉₉ = 2.1																			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-May	1	1	2	1	A	1	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	3	6	0.9	5.9													
2-May	1	2	1	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.4	2.0													
3-May	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-May	0	0	0	0	A	3	5	2	4	2	1	1	1	1	0	0	0	0	0	0	0	0	2	1	1.2	5.4													
5-May	1	1	1	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0.4	1.3													
6-May	1	0	2	0	A	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.5													
7-May	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5													
8-May	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.3	0.7													
9-May	0	0	1	1	A	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0.4	1.4													
10-May	0	0	0	0	A	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6													
11-May	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.3	0.8													
12-May	0	0	0	0	A	1	0	1	0	1	1	2	C	C	C	C	1	0	0	0	0	0	0	0	0.5	1.6													
13-May	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0													
14-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	1.4													
15-May	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													
16-May	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													
17-May	1	1	0	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	1.2													
18-May	0	0	1	1	A	1	1	2	2	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0.6	1.6													
19-May	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													
20-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0.6													
21-May	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2													
22-May	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3													
23-May	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													
24-May	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													
25-May	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	0.7													
26-May	0	0	0	0	A	0	0	0	1	1	0	0	0	0	3	1	0	0	0	1	1	0	0	0	0.5	3.2													
27-May	0	0	0	0	A	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.6													
28-May	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													
29-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	0.8													
30-May	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8													
31-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.2	0.8													
0.4					0.4					0.5					0.2					0.2					Diurnal Average														
1.3					3.2					3.6					3.2					0.8					Diurnal Maximum														
C - Calibration					A - Automated Daily Zero Span																																		

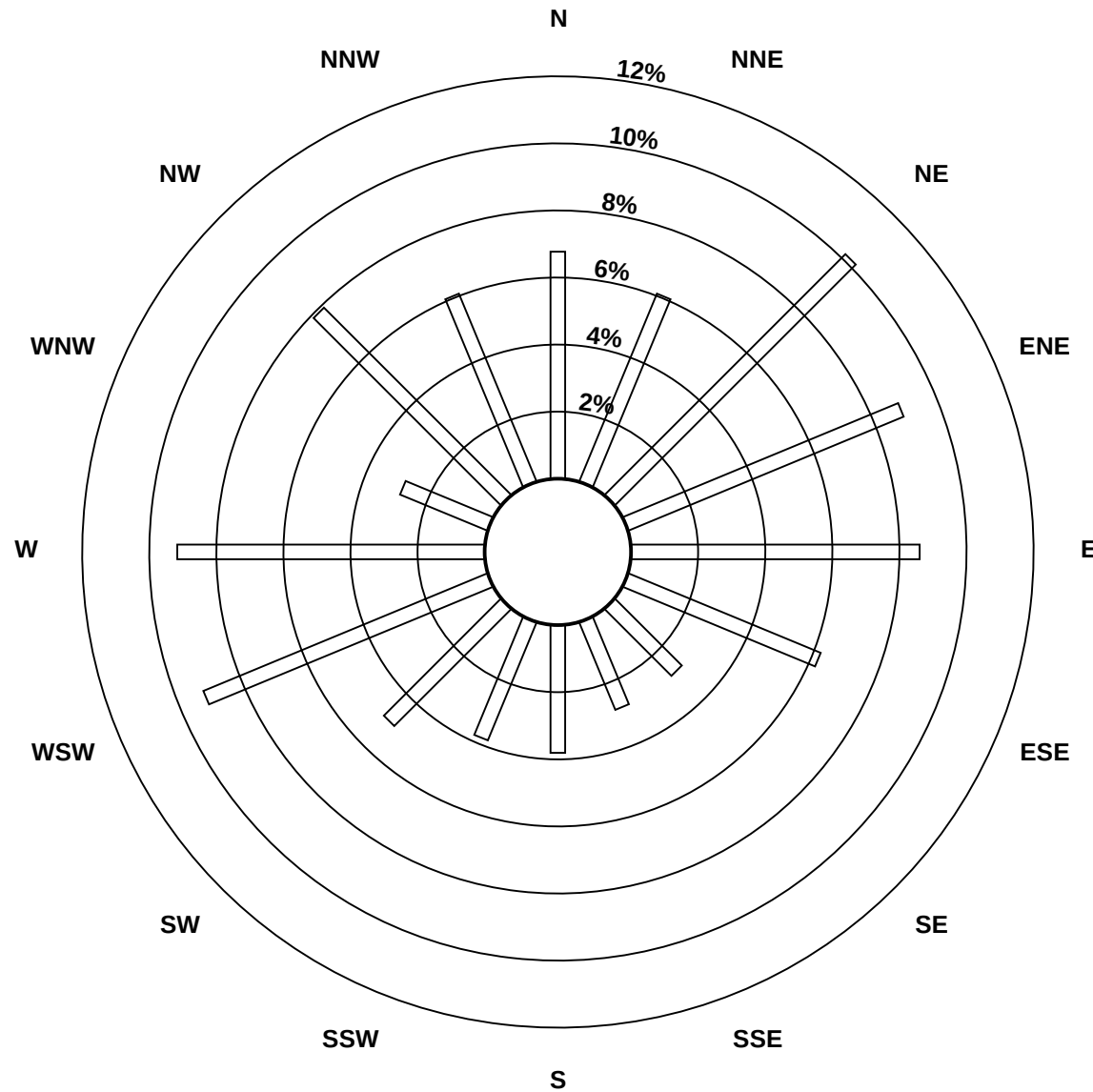
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - May 2014

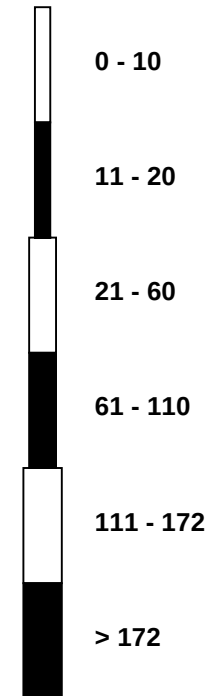


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - May 2014

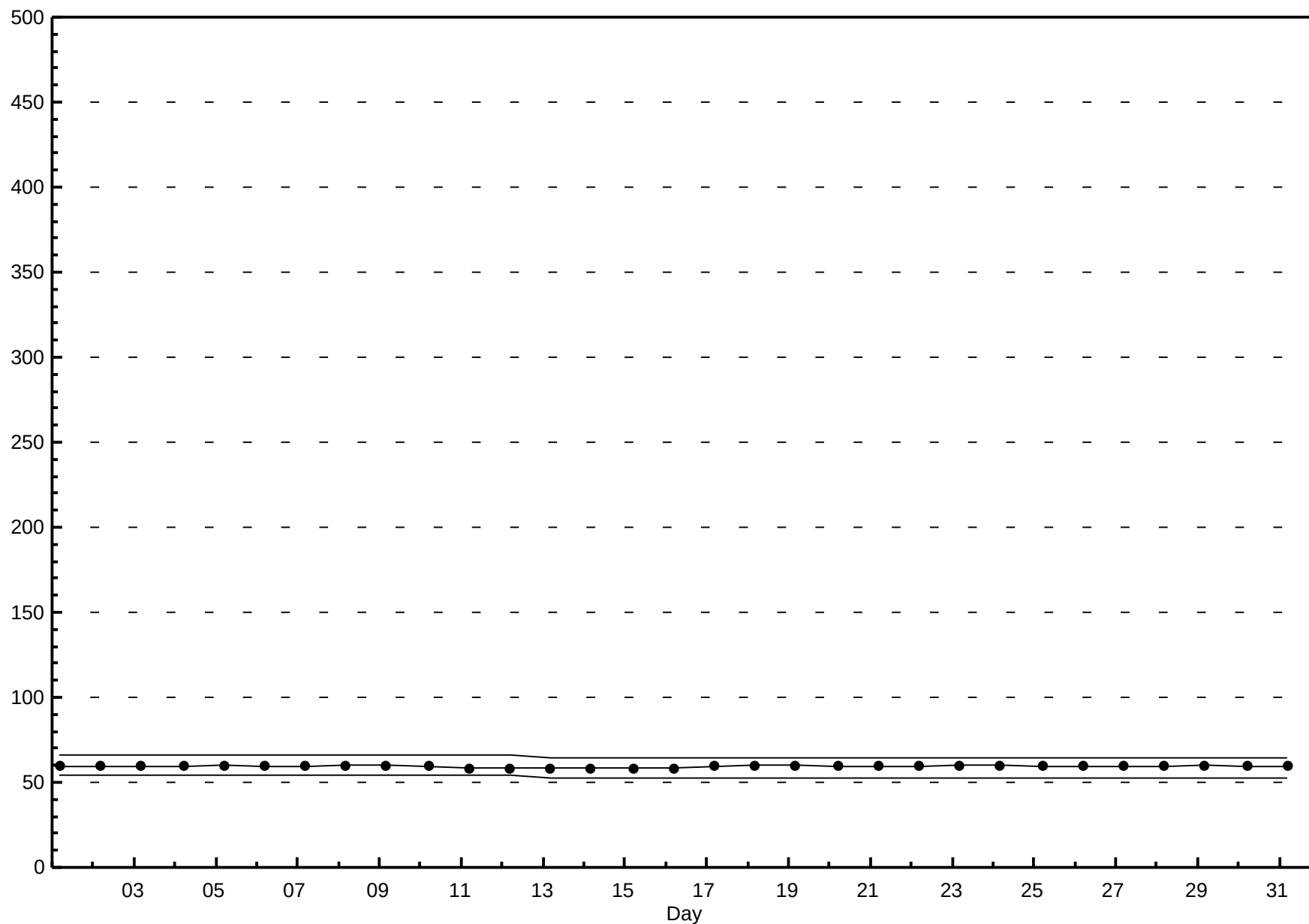


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - May 2014



Hourly Averages

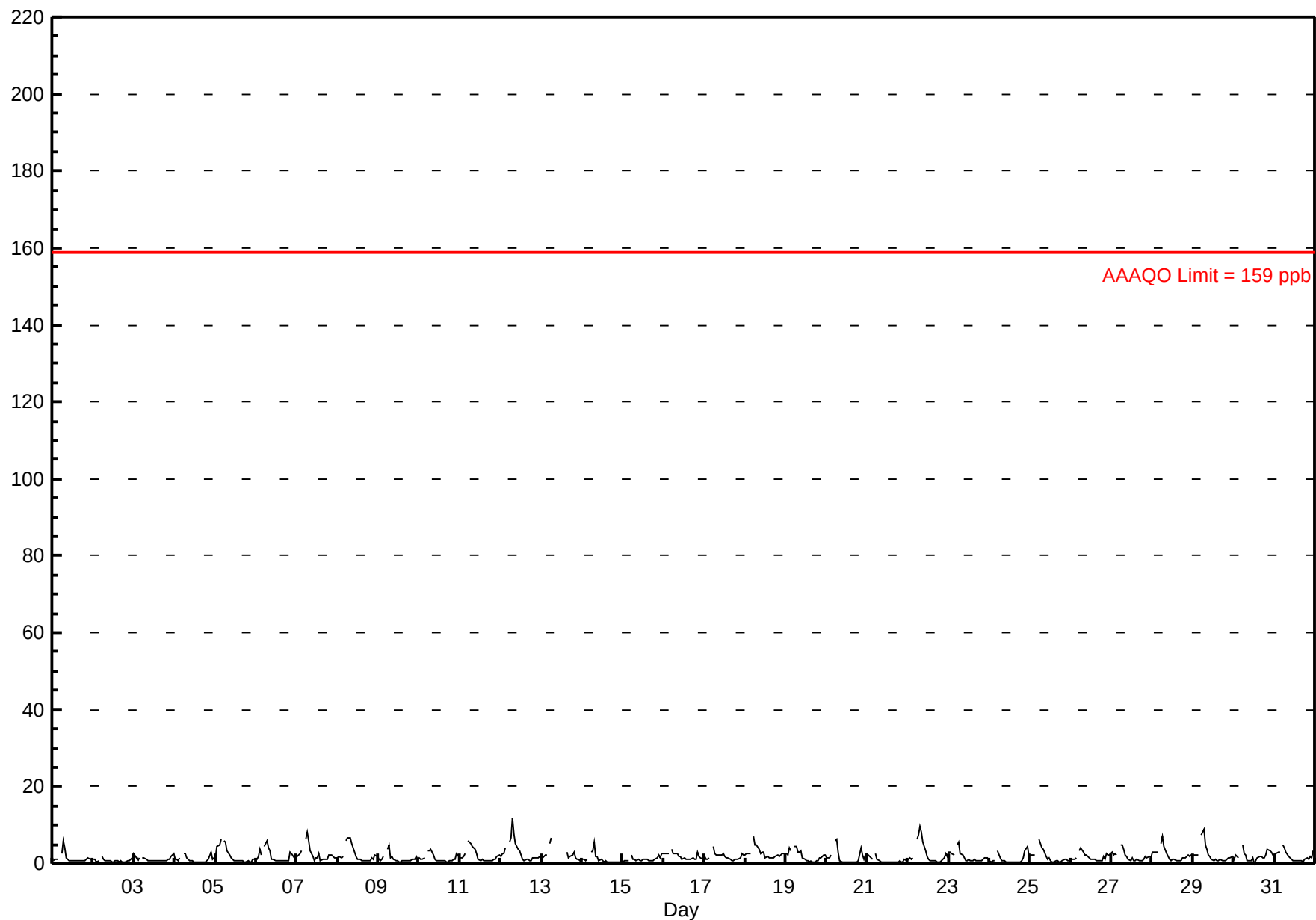
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.9 ppb on May 12 08:00 Maximum Daily Average: 3.1 ppb on May 12																				Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 39 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on May 30 13:00 Maximum Diurnal Average: 4.6 ppb at hour 7 Monthly Average: 1.78 ppb										Minimum Daily Average: 0.8 ppb on May 2 Minimum Diurnal Average: 0.7 ppb at hour 18 Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.7 Median = 1.3 Q ₃ = 2.3 P ₉₀ = 3.6 P ₉₉ = 6.9																
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-May	1	1	1	1	A	3	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	6.1
2-May	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	2	0.8	1.8
3-May	3	1	1	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1.1	2.6
4-May	1	1	1	1	A	3	3	1	1	1	1	1	0	0	0	0	0	1	1	1	1	3	1	2	1.1	3.0
5-May	2	4	5	6	A	6	6	3	2	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2.0	6.4
6-May	1	2	4	2	A	5	6	4	3	1	1	1	1	1	1	1	1	1	1	1	3	3	2	2	1.9	5.9
7-May	2	2	3	3	A	6	8	6	4	2	1	1	2	3	1	1	1	1	1	2	2	2	1	2	2.4	8.3
8-May	2	2	1	2	A	6	7	7	5	4	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2.3	6.8
9-May	1	1	1	2	A	4	5	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.3	5.0
10-May	1	1	1	2	A	3	3	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1.4	3.6
11-May	1	2	2	3	A	6	5	4	4	4	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2.1	6.0
12-May	2	2	3	4	A	5	7	12	8	5	4	3	2	1	1	1	1	1	1	2	2	1	1	2	3.1	11.9
13-May	2	2	2	2	A	5	7	C	C	C	C	C	C	C	C	3	2	2	2	3	1	1	1	1	--	6.6
14-May	1	1	1	1	A	3	3	6	2	2	1	1	1	1	1	0	0	0	0	0	0	0	1	0	1.1	5.5
15-May	0	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	1.1	2.7
16-May	3	2	3	3	A	4	3	3	3	2	2	1	1	1	1	1	1	1	1	1	3	2	2	1	1.9	3.6
17-May	2	1	1	1	A	5	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	3	2	1.8	4.6
18-May	2	3	3	3	A	7	5	5	4	3	3	3	2	2	2	1	2	2	2	2	2	3	3	3	2.7	6.9
19-May	2	2	4	3	A	4	5	3	3	3	1	1	1	1	1	1	0	0	1	1	1	2	2	2	2.0	4.6
20-May	1	1	1	2	A	6	6	3	1	0	0	0	0	0	0	0	0	0	0	1	4	2	1	2	1.6	6.4
21-May	3	2	2	1	A	3	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0.9	2.8
22-May	1	2	1	1	A	6	7	10	8	6	3	2	1	1	1	1	1	1	1	0	1	2	3	2	2.6	9.5
23-May	3	3	3	2	A	5	6	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.8	5.6
24-May	1	0	1	1	A	3	2	1	1	1	1	0	0	0	0	0	0	0	1	1	1	4	4	2	1.1	4.4
25-May	2	2	2	2	A	6	5	4	4	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1.8	6.4
26-May	1	1	1	1	A	3	4	3	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	2	1.7	4.2
27-May	3	2	3	2	A	5	5	4	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1.9	4.7
28-May	3	3	3	3	A	5	7	4	3	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2.2	6.9
29-May	2	2	2	2	A	7	9	5	4	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2.2	9.0
30-May	1	2	2	1	A	5	3	2	1	1	1	1	0	1	1	2	2	1	2	2	4	3	3	2	1.9	4.9
31-May	2	3	3	3	A	5	4	3	2	1	1	1	1	1	1	1	1	1	1	2	1	2	2	3	1.9	4.8
1.7 1.8 1.9 2.1 -- 4.5 4.6 3.7 2.6 1.9 1.4 1.2 0.9 0.9 0.8 0.9 0.8 0.7 0.8 1.1 1.5 1.7 1.8 1.8																								Diurnal Average		
3.2 4.3 4.7 6.4 -- 7.3 9.0 11.9 8.2 5.7 3.6 3.5 2.2 2.6 1.5 3.1 1.7 1.7 2.3 2.8 4.2 3.5 4.4 3.3																								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 - May 2014



Hourly Maximums

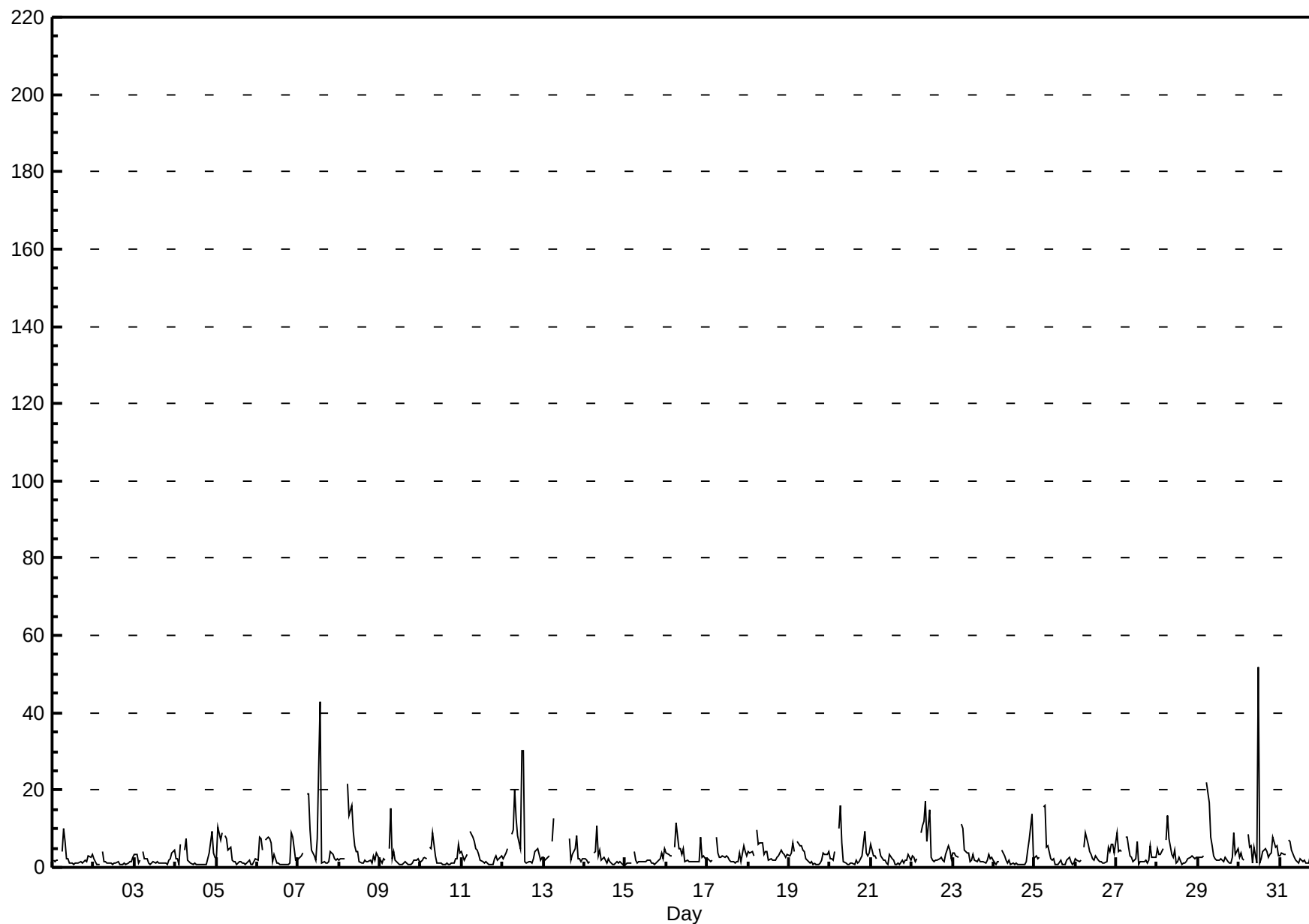
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - May 2014

Maximum Value: 51.7 ppb on May 30 12:00																								Hours in Service:	744
Maximum Daily Average: 7.2 ppb on May 7																								Hours of Data:	705
Minimum Value: 1 ppb on May 24 16:00																								Hours of Missing Data:	39
Maximum Diurnal Average: 8.7 ppb at hour 7																								Hours of Calibration:	39
Monthly Average: 3.41 ppb																								Percent Operational Time:	100.0
Percentiles: P ₁ = 0.7 P ₁₀ = 0.9 Q ₁ = 1.3 Median = 2.2 Q ₃ = 3.9 P ₉₀ = 7.0 P ₉₉ = 21.1																									
Day	Hourly Period Ending At (MST)																							Daily Average	Daily Maximum
1-May	2	2	2	2	A	4	10	7	2	2	1	1	1	1	1	1	1	1	1	2	2	3	3	2.4	10.0
2-May	2	1	1	1	A	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.3	4.0
3-May	3	3	1	2	A	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	1.9	4.5
4-May	2	2	1	6	A	4	7	2	2	1	1	1	1	1	1	1	1	1	2	4	9	4	3	2.5	9.2
5-May	2	10	7	9	A	8	8	5	5	2	1	1	1	1	1	1	1	1	2	1	1	1	2	3.2	10.3
6-May	2	8	7	4	A	7	8	7	6	1	3	1	1	1	1	1	1	1	1	9	8	2	2	3.6	9.0
7-May	2	2	3	4	A	19	19	10	4	3	2	8	26	43	1	1	1	1	1	4	3	2	2	7.2	42.9
8-May	2	2	2	2	A	21	14	16	10	6	4	4	1	1	2	1	1	2	1	3	2	4	2	4.6	21.5
9-May	2	1	2	2	A	5	15	2	4	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2.3	15.2
10-May	2	2	3	2	A	5	5	9	3	1	1	1	1	1	1	1	1	1	1	2	2	6	4	2.4	9.0
11-May	4	2	3	3	A	9	8	7	5	5	3	2	1	1	2	1	1	1	2	3	2	2	3	3.1	9.2
12-May	2	3	4	5	A	9	10	20	13	8	5	30	30	1	1	1	2	1	2	4	5	3	2	7.1	30.2
13-May	3	2	2	3	A	7	13	C	C	C	C	C	C	C	C	8	2	3	5	8	2	2	2	--	12.7
14-May	2	2	1	1	A	4	4	11	3	4	2	3	2	1	2	2	1	1	1	1	2	1	1	2.3	10.8
15-May	1	1	1	1	A	4	2	1	1	2	2	1	1	2	2	1	1	1	1	2	4	2	5	1.8	4.9
16-May	4	3	3	3	A	5	12	5	5	3	5	2	2	1	2	1	2	2	1	2	8	3	3	3.4	11.7
17-May	2	2	1	2	A	8	4	3	3	3	3	3	2	2	2	2	1	2	1	4	1	6	4	2.7	7.6
18-May	4	4	4	3	A	10	6	7	6	3	4	4	2	2	2	2	3	3	5	4	3	3	3	3.8	9.6
19-May	3	4	7	4	A	7	6	6	5	4	2	1	1	1	1	1	1	1	2	4	3	3	4	3.1	6.6
20-May	2	2	2	4	A	10	16	6	1	1	1	1	1	1	1	2	1	1	2	3	9	4	3	3.4	16.0
21-May	6	3	3	2	A	5	3	2	2	1	1	3	2	2	1	1	1	1	2	1	2	2	3	2.2	6.2
22-May	3	3	2	2	A	9	11	12	17	7	15	3	2	2	2	2	3	2	1	3	6	5	2	4.9	17.3
23-May	4	4	3	3	A	11	10	4	4	4	2	2	3	2	2	2	2	1	2	1	2	4	2	3.2	11.3
24-May	2	1	1	1	A	4	3	2	1	2	1	1	1	1	1	1	1	1	1	5	7	14	2	2.3	14.0
25-May	3	3	2	3	A	16	16	5	6	2	2	2	1	1	1	2	1	1	2	3	1	1	1	3.2	15.9
26-May	2	2	2	2	A	5	9	6	4	3	2	2	3	2	1	1	1	1	5	4	6	6	4	3.3	9.0
27-May	9	4	4	4	A	8	8	5	3	3	2	2	7	1	1	2	1	2	2	5	3	3	3	3.6	8.9
28-May	5	3	3	5	A	7	13	8	3	3	5	1	1	3	1	1	2	2	2	3	3	2	3	3.5	13.3
29-May	3	3	3	3	A	22	17	8	5	3	2	2	2	2	2	1	3	1	1	2	9	3	5	4.5	22.1
30-May	3	4	2	2	A	9	5	6	1	5	1	52	1	2	4	5	4	3	3	4	8	5	6	6.0	51.7
31-May	3	4	3	3	A	7	7	4	3	2	2	1	2	1	2	1	1	1	3	3	3	2	3	2.9	7.2
2.9 2.9 2.8 3.1 -- 8.3 8.7 6.3 4.3 2.9 2.6 4.6 3.5 2.8 1.4 1.6 1.3 1.3 1.6 2.4 3.5 3.6 3.3 2.8																								Diurnal Average	
8.9 10.3 7.4 8.9 -- 22.1 19.0 20.1 17.3 8.1 14.7 51.7 30.0 42.9 3.9 7.6 4.2 3.3 5.0 8.1 9.4 9.2 14.0 5.6																								Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																									

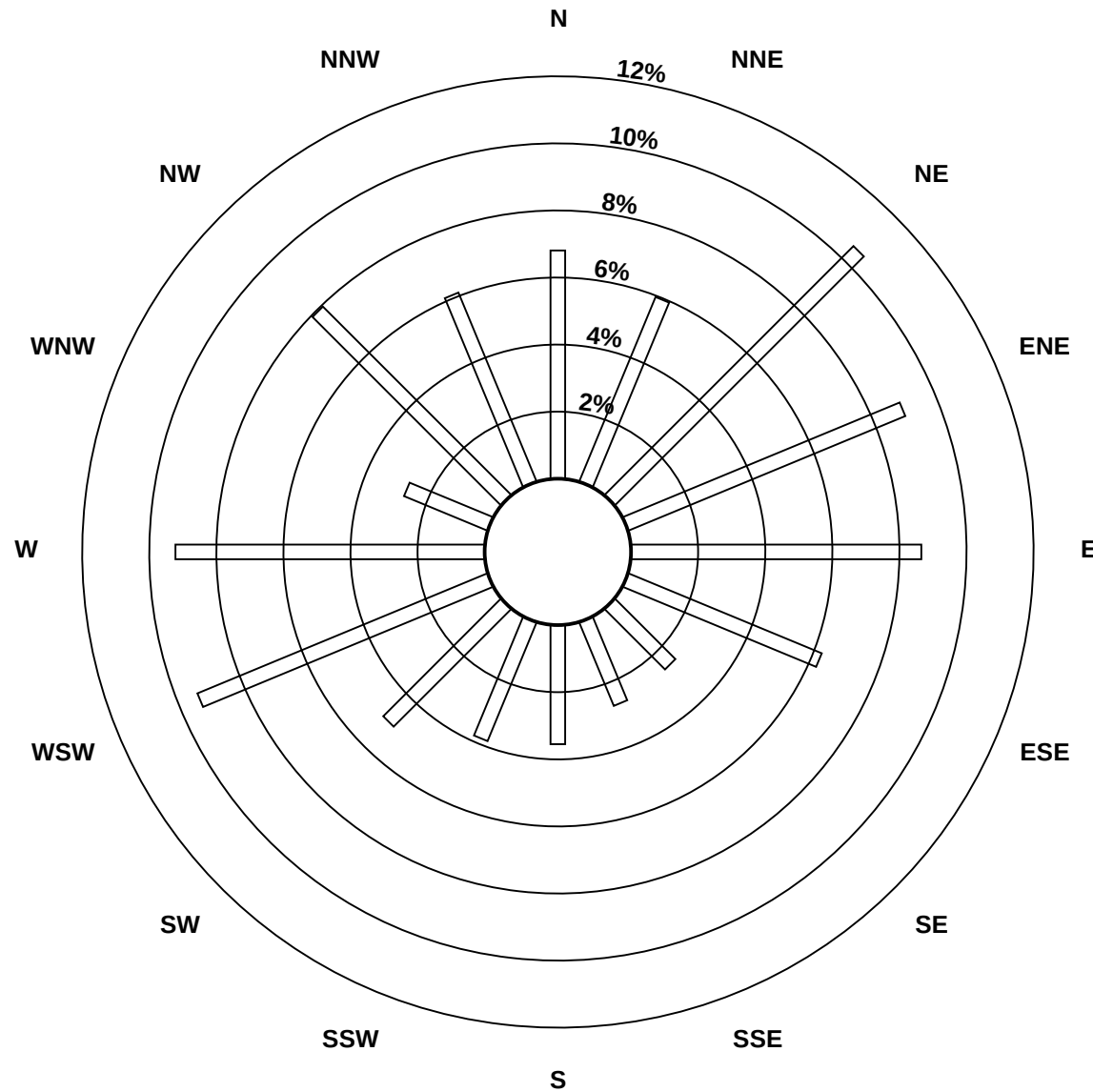
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - May 2014

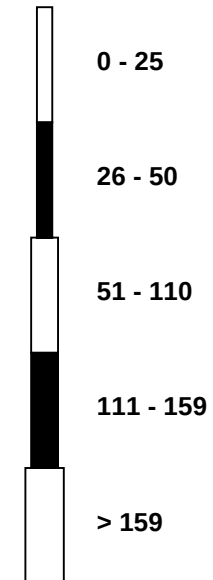


Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - May 2014

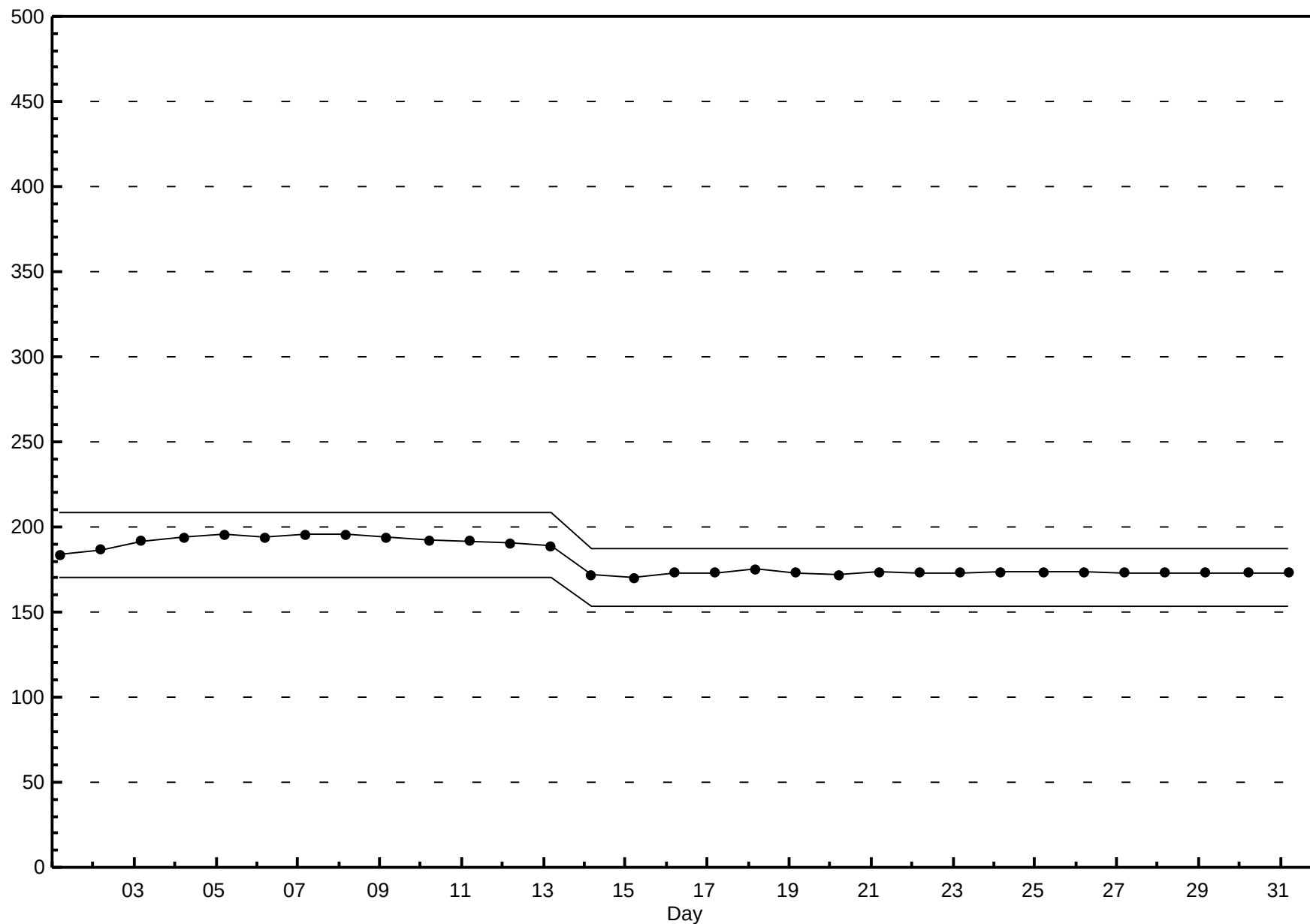


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - May 2014



Hourly Averages

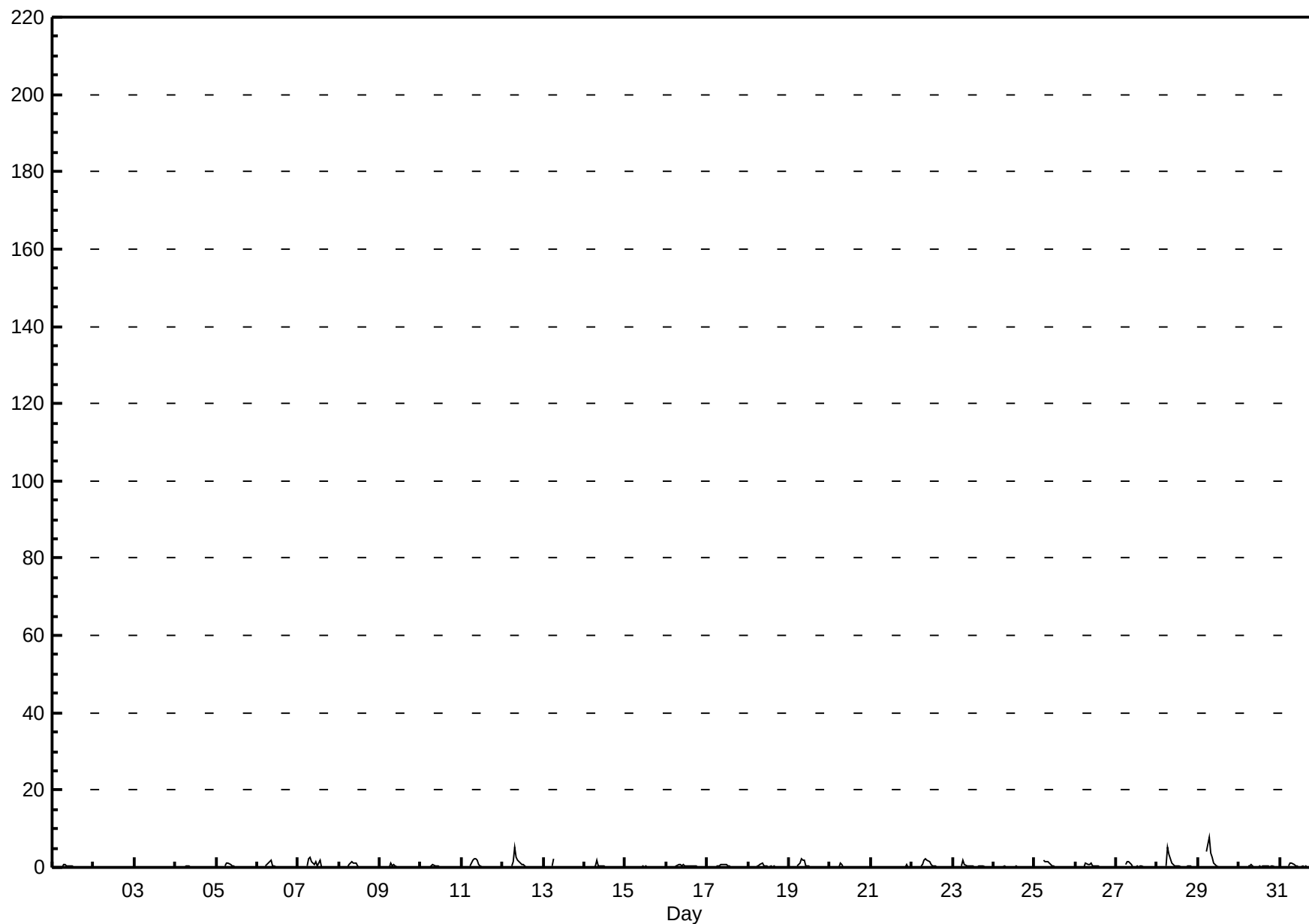
Nitrogen Oxide (NO) - ppb

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 7.9 ppb on May 29 07:00 Maximum Daily Average: 0.9 ppb on May 29																				Hours in Service: 744 Hours of Data: 705						
Minimum Value: 0 ppb on May 2 02:00 Minimum Daily Average: 0.1 ppb on May 2 Maximum Diurnal Average: 1.3 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 2 Monthly Average: 0.29 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.7 P ₉₉ = 2.4																				Hours of Missing Data: 39 Hours of Calibration: 39 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-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
2-May	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
3-May	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-May	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
5-May	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
6-May	0	0	0	0	A	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
7-May	0	0	0	0	A	0	2	3	2	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0.6	2.6
8-May	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4
9-May	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
10-May	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
11-May	0	0	0	0	A	0	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.4
12-May	0	0	0	0	A	0	1	5	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	5.4
13-May	0	0	0	0	A	0	2	C	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	2.1
14-May	0	0	0	0	A	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
15-May	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
16-May	0	0	0	0	A	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
17-May	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
18-May	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	0.9
19-May	0	0	0	0	A	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.3
20-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
21-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.6
22-May	0	0	0	0	A	0	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.3
23-May	0	0	0	0	A	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
24-May	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
25-May	0	0	0	0	A	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
26-May	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
27-May	0	0	0	0	A	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
28-May	0	0	0	0	A	0	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.1
29-May	0	0	0	0	A	4	8	4	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	7.9
30-May	0	0	0	0	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
31-May	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
0.0 0.0 0.0 0.0 -- 0.4 1.3 1.3 0.9 0.6 0.4 0.3 0.2 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.0 Diurnal Average																										
0.1 0.1 0.1 0.1 -- 3.9 7.9 5.4 2.7 1.9 1.5 0.9 1.2 1.9 0.4 0.4 0.5 0.3 0.2 0.3 0.3 0.6 0.1 0.1 Diurnal Maximum																										
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - May 2014



Hourly Maximums

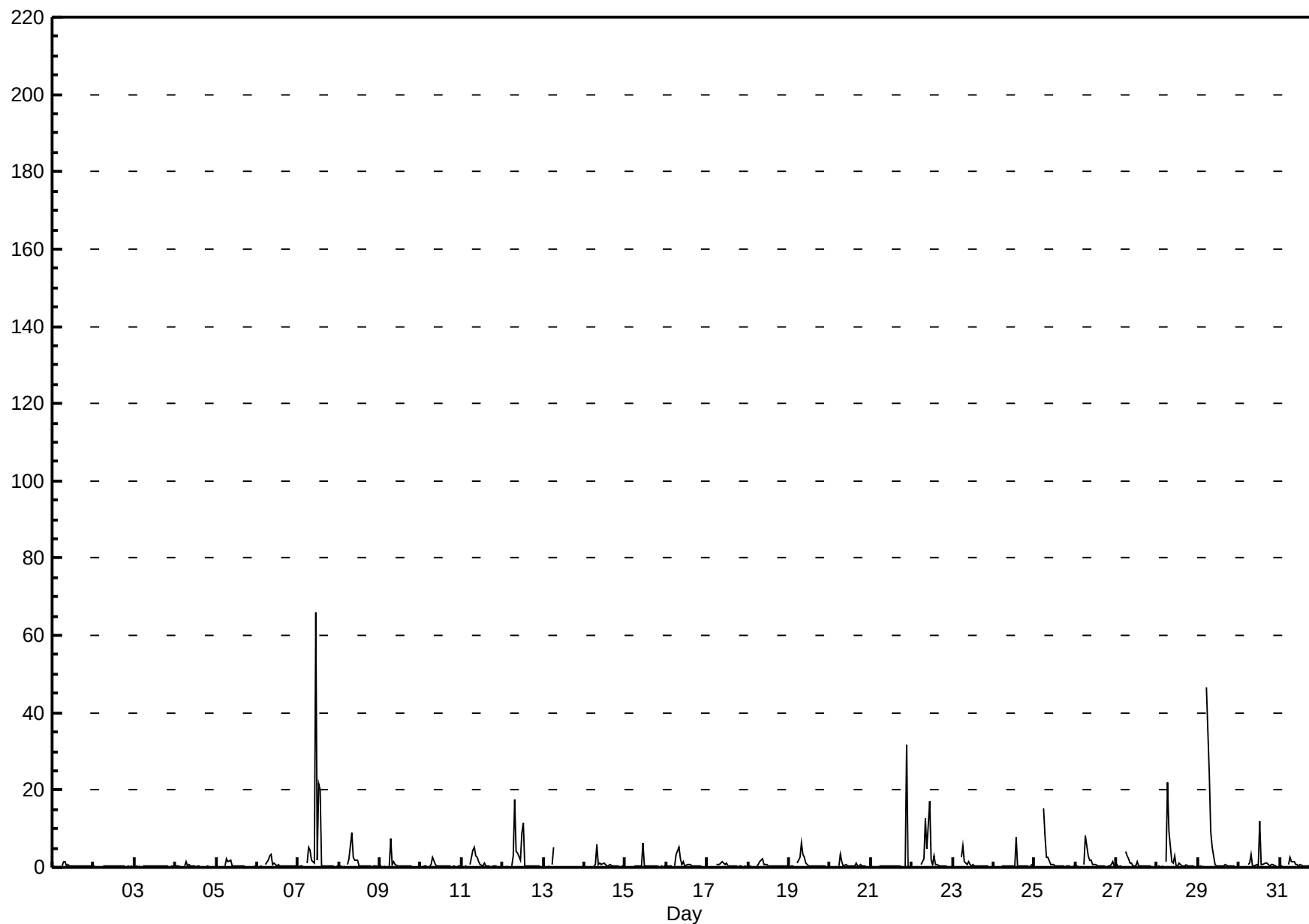
Nitrogen Oxide (NO) - ppb

Beaverlodge - May 2014

Maximum Value: 65.9 ppb on May 7 11:00																								Hours in Service: 744		
Maximum Daily Average: 5.5 ppb on May 7																								Hours of Data: 705		
Minimum Value: 0 ppb on May 13 16:00																								Hours of Missing Data: 39		
Maximum Diurnal Average: 4.0 ppb at hour 7																								Hours of Calibration: 39		
Monthly Average: 1.11 ppb																								Percent Operational Time: 100.0		
Minimum Daily Average: 0.3 ppb on May 2																										
Minimum Diurnal Average: 0.2 ppb at hour 2																										
Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.8 P ₉₉ = 19.4																										
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-May	0	0	0	0	A	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	1.6
2-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
3-May	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
4-May	0	0	0	0	A	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
5-May	0	0	0	0	A	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.2
6-May	0	0	0	0	A	1	2	3	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.4
7-May	0	0	0	0	A	1	5	4	2	1	66	2	22	20	0	0	0	0	0	0	0	0	0	0	5.5	65.9
8-May	0	0	0	0	A	1	2	9	3	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1.0	8.8
9-May	0	0	0	0	A	0	7	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.3
10-May	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5
11-May	0	0	0	0	A	1	5	5	3	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1.0	5.2
12-May	0	0	0	0	A	0	3	18	4	4	2	9	12	0	0	0	0	0	0	0	0	0	0	0	2.4	17.6
13-May	0	0	0	0	A	1	5	C	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	5.2
14-May	0	0	0	0	A	0	1	6	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.7	5.9
15-May	0	0	0	0	A	0	0	0	1	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	6.3
16-May	0	0	0	0	A	0	4	5	2	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0.9	5.3
17-May	0	0	0	0	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5
18-May	0	0	0	0	A	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.2
19-May	0	0	0	0	A	1	3	6	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	6.3
20-May	0	0	0	0	A	0	3	2	0	1	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0.5	3.2
21-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	1.6	31.6
22-May	0	0	0	0	A	1	1	2	13	5	17	2	1	3	1	1	1	0	0	0	0	0	0	0	2.1	17.0
23-May	0	0	0	0	A	3	6	2	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0.8	5.7
24-May	0	0	0	0	A	1	0	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0.6	7.7
25-May	0	0	0	0	A	15	8	3	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.5	15.2
26-May	0	0	0	0	A	1	8	3	2	2	1	1	1	0	0	0	0	0	0	0	0	1	1	0	1.0	8.1
27-May	1	0	0	0	A	4	3	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.8	4.0
28-May	0	0	0	0	A	1	22	9	1	1	3	1	0	1	0	0	0	1	1	0	0	0	0	0	1.9	21.9
29-May	0	0	0	0	A	47	24	9	5	3	1	1	0	0	0	1	1	0	0	0	0	0	0	0	4.1	46.7
30-May	0	0	0	0	A	1	1	3	0	0	1	0	12	1	1	1	1	1	0	1	1	0	0	0	1.1	11.8
31-May	0	0	0	0	A	1	3	2	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0.6	2.7
0.2 0.2 0.2 0.2 -- 2.7 4.0 3.5 2.0 1.2 3.7 0.9 1.9 1.4 0.4 0.4 0.3 0.3 0.3 0.3 0.3 1.2 0.2 0.2																								Diurnal Average		
0.6 0.3 0.3 0.5 -- 46.7 24.2 17.6 12.5 4.8 65.9 8.9 21.7 20.2 0.9 1.0 1.0 0.6 0.6 0.6 0.6 0.7 31.6 1.4 0.6																								Diurnal Maximum		
C - Calibration																								A - Automated Daily Zero Span		

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - May 2014



Hourly Averages

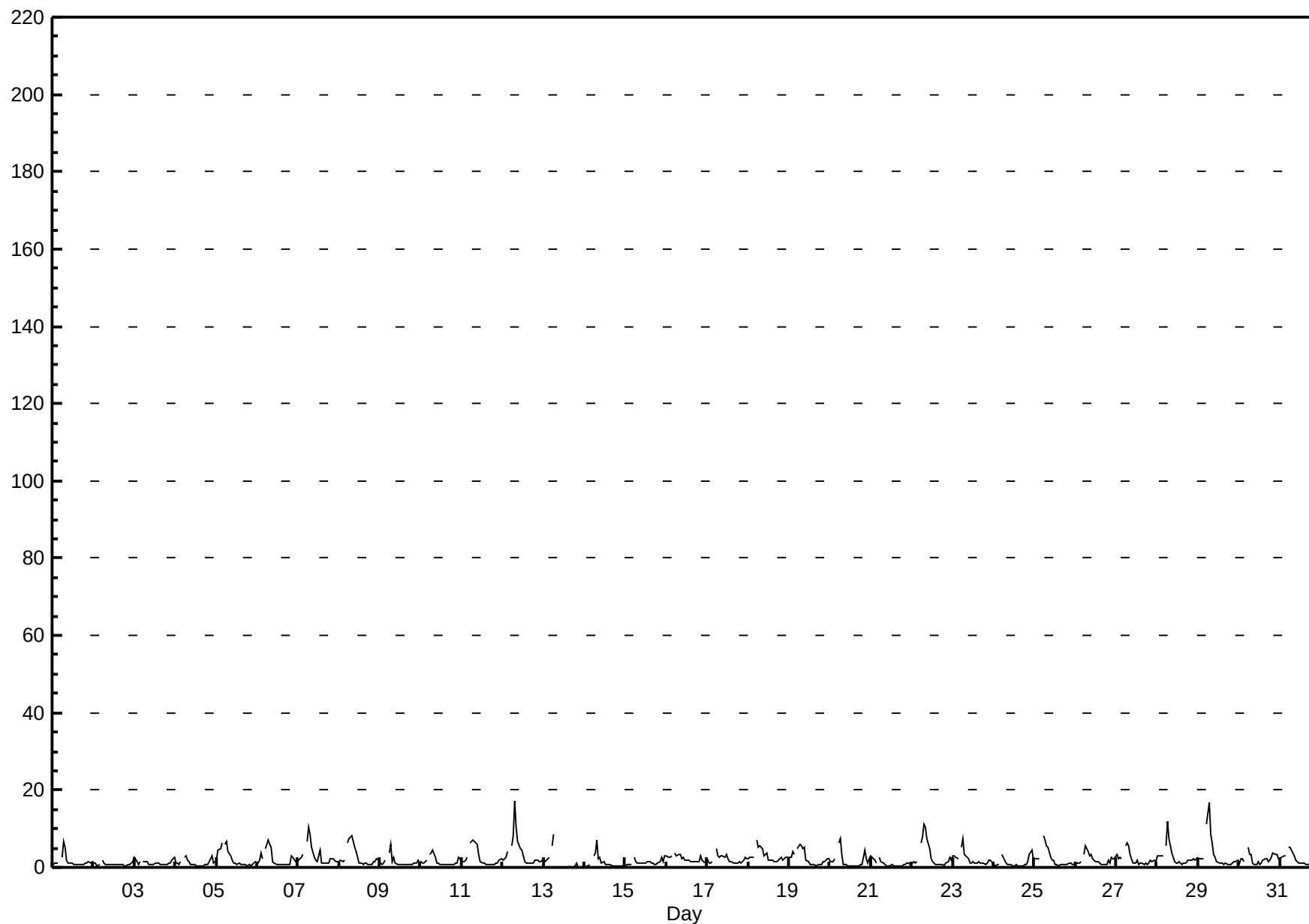
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.2 ppb on May 12 08:00 Maximum Daily Average: 3.7 ppb on May 12																				Hours in Service: 744 Hours of Data: 705							
Minimum Value: 0 ppb on May 13 17:00 Minimum Daily Average: 0.8 ppb on May 2 Maximum Diurnal Average: 5.9 ppb at hour 7 Minimum Diurnal Average: 0.8 ppb at hour 18 Monthly Average: 2.06 ppb Percentiles: P ₁ = 0.2 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 1.4 Q ₃ = 2.5 P ₉₀ = 4.7 P ₉₉ = 10.3																				Hours of Missing Data: 39 Hours of Calibration: 39 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-May	1	1	1	1	A	3	7	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	6.8	
2-May	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.8	1.8
3-May	3	1	1	2	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1.2	2.6	
4-May	1	1	1	1	A	3	3	2	2	1	1	1	0	1	1	1	1	1	1	1	1	3	1	2	1.2	2.9	
5-May	2	4	5	6	A	6	7	4	3	2	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2.2	6.7	
6-May	1	2	4	2	A	5	7	6	5	1	1	1	1	1	1	1	1	1	1	1	3	3	2	2	2.2	7.0	
7-May	2	2	3	3	A	7	10	9	5	3	2	2	3	5	1	1	1	1	1	2	2	2	1	2	3.0	10.4	
8-May	2	2	1	2	A	6	7	8	7	5	4	2	1	1	1	1	1	1	1	1	1	1	2	2	2.7	8.2	
9-May	1	1	1	2	A	4	6	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.4	6.1	
10-May	1	1	1	2	A	3	4	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1.5	4.3	
11-May	1	2	2	3	A	6	7	7	6	6	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2.5	7.0	
12-May	2	2	3	4	A	6	8	17	10	7	5	4	3	1	1	1	1	1	1	2	2	1	2	2	3.7	17.2	
13-May	2	2	2	2	A	6	9	C	C	C	C	C	C	C	C	0	0	0	0	1	0	0	0	0	--	8.7	
14-May	0	0	1	1	A	3	4	7	2	2	1	2	1	1	1	1	0	0	0	0	0	0	1	0	1.3	7.3	
15-May	0	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	1.3	2.8	
16-May	3	3	3	3	A	4	3	3	3	2	3	2	2	2	2	2	2	2	1	1	3	2	2	1	2.2	3.8	
17-May	2	1	1	1	A	5	3	3	3	3	3	3	2	2	1	1	1	1	1	1	1	2	3	2	2.0	4.9	
18-May	2	3	3	3	A	7	5	6	5	3	3	4	2	2	2	2	2	2	2	2	2	2	3	3	2.9	7.1	
19-May	2	2	4	3	A	5	6	5	5	5	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2.4	5.9	
20-May	1	2	1	2	A	6	7	3	1	1	1	0	1	0	0	1	1	1	1	1	4	2	1	2	1.8	7.4	
21-May	3	2	2	1	A	3	1	1	1	0	0	1	1	0	0	0	0	0	0	1	1	1	1	1	1.0	2.8	
22-May	1	2	1	2	A	6	8	11	10	7	5	2	2	1	1	1	1	1	1	1	1	2	3	2	3.0	11.3	
23-May	3	3	3	2	A	5	8	3	3	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2.1	7.6	
24-May	1	1	1	1	A	3	2	1	1	1	1	1	0	1	0	0	0	0	1	1	1	4	4	2	1.2	4.5	
25-May	2	2	2	2	A	8	7	5	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2.2	8.4	
26-May	1	1	1	1	A	3	6	4	3	4	2	2	2	1	1	1	1	1	1	2	1	2	2	2	2.0	5.5	
27-May	3	2	3	2	A	5	6	5	3	2	1	1	2	1	1	1	1	1	1	1	2	2	2	1	2.2	6.2	
28-May	3	3	3	3	A	6	12	8	4	3	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2.8	12.0	
29-May	2	2	2	2	A	11	17	9	6	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	3.2	16.9	
30-May	1	2	2	1	A	5	3	3	1	1	1	2	1	1	2	2	2	2	2	3	4	3	3	2	2.2	5.3	
31-May	2	3	3	3	A	5	5	5	3	2	2	1	1	1	1	1	1	1	1	2	1	2	2	3	2.2	5.4	
1.7 1.9 2.0 2.1 -- 4.9 5.9 5.0 3.6 2.5 1.8 1.5 1.2 1.1 0.9 0.9 0.8 0.8 0.9 1.1 1.5 1.7 1.8 1.8																									Diurnal Average		
3.2 4.3 4.7 6.4 -- 11.2 16.9 17.2 10.5 7.4 4.7 4.4 3.0 4.5 1.7 2.2 2.2 1.7 2.0 2.6 4.4 3.5 4.5 3.4																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - May 2014



Hourly Maximums

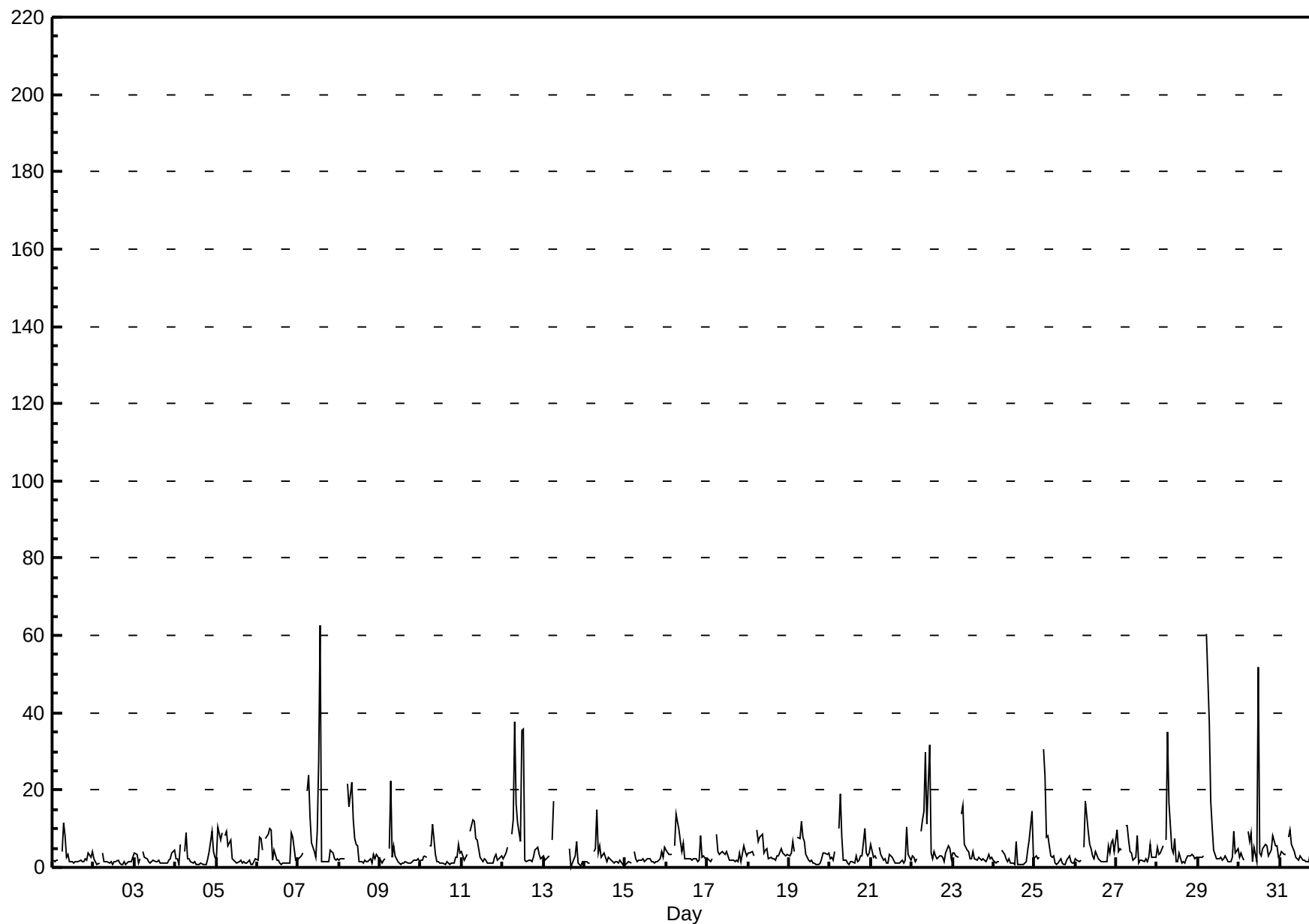
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - May 2014

Maximum Value: 62.6 ppb on May 7 14:00																				Maximum Daily Average: 9.0 ppb on May 12					Hours in Service: 744	
Minimum Value: 0 ppb on May 13 17:00																				Minimum Daily Average: 1.5 ppb on May 2					Hours of Data: 705	
Maximum Diurnal Average: 12.5 ppb at hour 7																				Minimum Diurnal Average: 1.5 ppb at hour 18					Hours of Missing Data: 39	
Monthly Average: 4.19 ppb																				Percentiles: P ₁ = 0.8 P ₁₀ = 1.1 Q ₁ = 1.6 Median = 2.4 Q ₃ = 4.1 P ₉₀ = 8.4 P ₉₉ = 35.0					Hours of Calibration: 39	
																				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-May	2	2	2	2	A	4	12	8	3	3	2	2	1	1	1	1	2	2	2	2	2	4	3	4	2.8	11.6
2-May	2	1	1	1	A	4	1	2	1	1	2	1	1	1	2	1	1	1	2	1	1	1	2	2	1.5	3.9
3-May	4	3	1	2	A	4	3	2	1	1	1	2	2	1	2	1	1	1	1	1	2	2	4	5	2.1	4.6
4-May	2	2	1	6	A	4	9	2	2	2	1	1	1	1	1	1	1	1	1	2	4	9	4	3	2.7	9.2
5-May	2	10	7	9	A	8	10	6	7	2	2	2	1	2	2	1	2	1	1	2	1	1	1	2	3.5	10.3
6-May	2	8	7	5	A	8	9	10	10	2	5	2	2	1	1	1	1	1	1	1	9	8	2	2	4.2	10.2
7-May	2	3	3	4	A	20	24	13	6	4	2	9	28	63	2	2	1	1	1	5	4	2	2	2	8.8	62.6
8-May	2	2	2	2	A	22	16	22	12	7	6	6	2	2	1	2	2	2	2	1	3	2	3	2	5.4	21.9
9-May	2	1	2	2	A	5	22	3	6	3	2	1	1	1	1	2	1	1	1	1	2	2	2	2	2.8	22.2
10-May	2	2	3	2	A	6	6	11	4	2	1	1	1	1	1	1	1	1	1	1	2	2	6	4	2.7	11.2
11-May	4	2	3	3	A	9	12	12	7	7	5	3	1	2	2	1	1	1	1	2	3	2	2	3	3.9	12.5
12-May	2	3	4	5	A	9	12	38	16	12	7	35	36	2	1	2	2	1	3	4	5	3	2	3	9.0	37.6
13-May	3	2	2	3	A	7	17	C	C	C	C	C	C	C	C	5	0	1	3	7	1	1	0	1	--	17.1
14-May	1	2	1	1	A	4	5	15	4	6	2	4	2	2	3	2	1	1	2	2	1	2	1	1	2.8	14.8
15-May	1	1	1	1	A	4	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	4	3	5	2.1	5.1
16-May	4	3	3	3	A	6	14	10	7	4	6	2	2	2	2	2	2	2	2	2	8	3	3	2	4.1	13.7
17-May	2	2	1	2	A	8	4	3	4	4	4	4	3	2	2	2	1	2	2	4	1	6	4	3	3.1	8.5
18-May	4	4	4	3	A	10	7	8	8	4	5	5	2	3	2	2	2	3	3	5	4	3	3	3	4.2	9.7
19-May	3	4	7	4	A	8	8	12	8	7	3	2	2	2	1	1	1	1	1	2	4	4	3	4	3.9	11.8
20-May	2	2	2	4	A	10	19	8	2	2	1	1	1	1	1	3	2	2	3	3	10	4	3	4	3.9	19.0
21-May	6	3	3	2	A	5	3	2	2	1	1	3	3	2	1	1	1	1	2	1	2	10	3	2	2.7	10.4
22-May	3	3	2	2	A	9	12	14	30	11	32	4	2	4	3	2	3	3	3	2	4	6	5	2	6.9	31.7
23-May	4	4	3	3	A	14	16	6	4	4	2	2	4	2	2	3	2	2	2	2	2	4	2	3	4.0	15.9
24-May	2	1	1	1	A	5	3	2	2	2	1	1	1	7	1	1	1	1	1	2	5	7	15	2	2.8	14.7
25-May	3	3	2	3	A	30	24	8	8	3	3	3	1	1	1	2	1	1	1	2	3	1	1	1	4.6	30.4
26-May	2	2	2	2	A	5	17	9	6	5	3	2	4	2	2	1	1	1	2	6	4	6	7	4	4.2	17.1
27-May	10	4	5	4	A	11	11	7	4	4	2	3	8	1	2	2	2	2	1	2	6	3	3	3	4.3	10.9
28-May	5	3	4	5	A	7	35	17	5	4	8	2	2	4	1	1	1	2	3	3	3	3	2	3	5.3	35.2
29-May	3	3	3	3	A	60	38	17	11	5	3	2	2	3	2	2	3	2	1	2	3	9	4	5	8.0	60.4
30-May	3	4	2	2	A	9	7	9	2	5	2	52	4	3	5	6	5	3	4	4	8	5	6	3	6.6	51.7
31-May	3	4	3	3	A	8	10	6	4	2	2	2	3	2	2	2	2	1	4	3	3	3	3	6	3.5	9.7
2.9 3.0 2.8 3.1 -- 10.4 12.5 9.4 6.2 4.1 3.9 5.3 4.1 4.1 1.7 1.9 1.6 1.5 1.8 2.5 3.7 3.9 3.4 2.9																									Diurnal Average	
9.6 10.3 7.5 8.9 -- 60.4 37.6 37.6 29.8 11.7 31.7 51.7 35.7 62.6 4.8 5.9 5.4 3.2 3.7 6.6 10.0 10.4 14.7 5.6																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

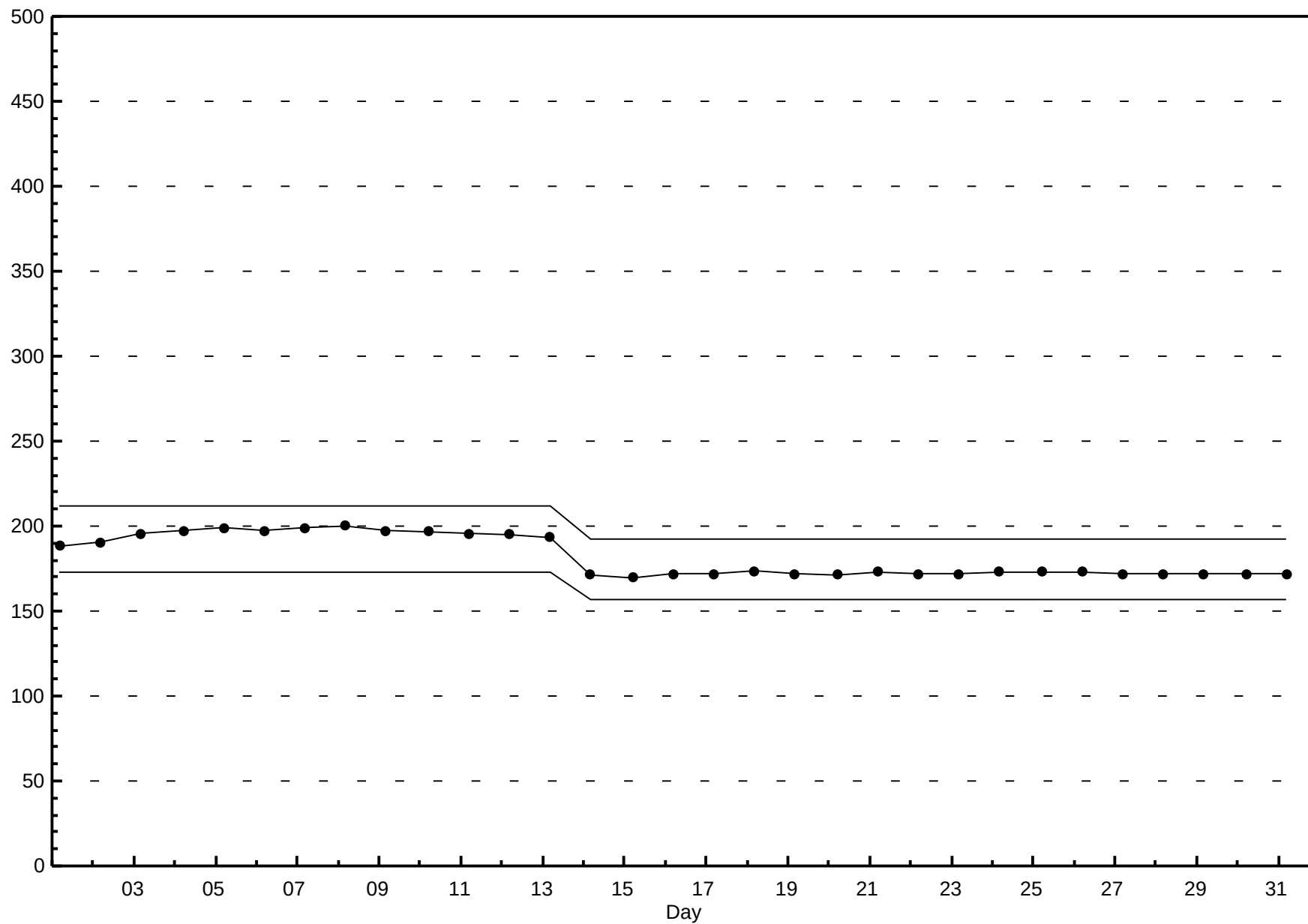
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - May 2014



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - May 2014



Hourly Averages

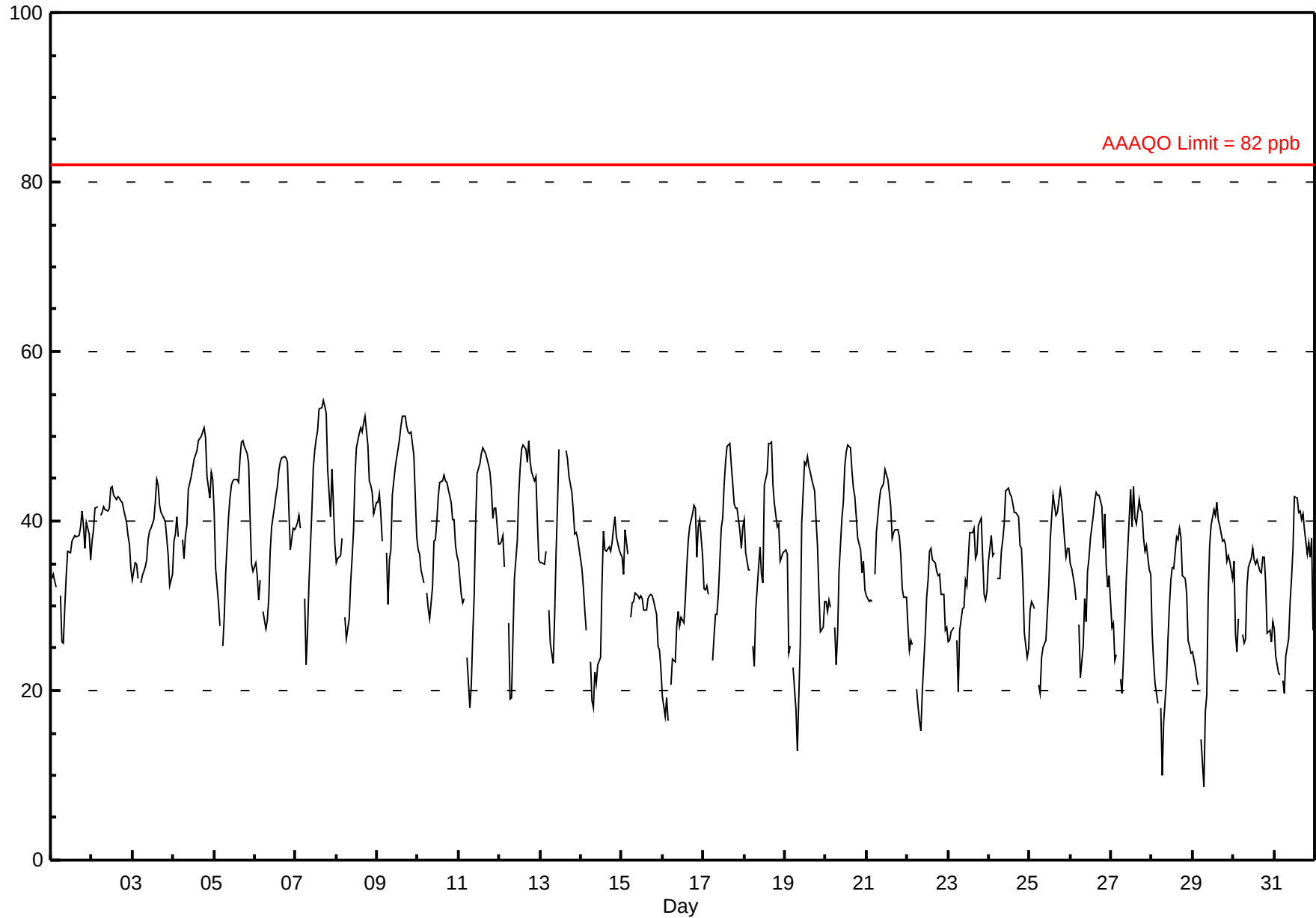
Ozone (O₃) - ppb

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 54.2 ppb on May 7 17:00 Maximum Daily Average: 44.5 ppb on May 9																								Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 9 ppb on May 29 07:00 Maximum Diurnal Average: 43.3 ppb at hour 16 Monthly Average: 36.03 ppb												Minimum Daily Average: 27.8 ppb on May 28 Minimum Diurnal Average: 24.5 ppb at hour 7 Percentiles: P ₁ = 16.3 P ₁₀ = 25.0 Q ₁ = 30.8 Median = 36.6 Q ₃ = 41.7 P ₉₀ = 46.6 P ₉₉ = 52.3														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-May	33	34	33	32	A	31	26	26	30	34	36	36	38	38	38	39	41	39	37	40	38	35	35.3	41.2		
2-May	38	39	41	42	A	41	41	42	41	41	42	44	44	43	42	43	43	42	41	40	38	37	34	41.0	44.1	
3-May	33	35	35	33	A	33	34	35	35	38	39	39	40	42	45	44	42	41	40	40	38	36	32	34	37.5	44.9
4-May	38	38	40	38	A	38	36	38	40	44	45	46	47	48	48	49	50	51	51	50	45	43	46	45	44.1	50.9
5-May	41	34	30	28	A	25	29	34	41	43	44	45	45	45	45	48	49	50	49	48	47	40	35	34	40.3	49.5
6-May	35	34	31	33	A	29	27	28	31	36	39	42	43	44	46	47	48	48	47	47	41	37	39	39	38.7	47.7
7-May	39	40	41	39	A	31	23	27	33	41	46	48	50	51	53	53	54	54	53	46	40	46	42	37	42.9	54.2
8-May	35	36	36	38	A	29	26	28	33	36	39	45	49	50	51	50	51	52	49	45	44	43	41	42	41.2	52.4
9-May	42	43	41	38	A	36	30	35	37	43	46	47	48	50	51	52	52	51	50	50	48	43	38	38	44.5	52.4
10-May	37	36	34	33	A	31	30	28	32	38	38	40	43	45	45	45	45	45	44	42	40	40	37	36	38.4	45.4
11-May	35	31	30	31	A	24	18	21	26	31	40	46	47	48	49	48	48	47	46	44	40	42	42	37	37.8	48.6
12-May	37	38	38	35	A	28	19	19	26	33	38	43	46	48	49	49	47	49	47	46	45	45	40	35	39.2	49.5
13-May	35	35	35	36	A	29	26	23	29	36	42	48	C	C	C	48	47	45	43	41	39	39	38	37	37.6	48.5
14-May	34	32	30	27	A	23	19	18	22	21	23	24	33	39	37	36	37	36	37	39	40	38	37	36	31.3	40.5
15-May	36	34	39	36	A	29	30	31	32	31	31	31	31	30	30	31	31	31	31	31	29	25	25	23	30.7	39.0
16-May	19	17	19	16	A	21	24	23	28	29	28	29	28	31	35	38	39	41	42	42	36	39	40	36	30.4	41.8
17-May	32	32	32	31	A	24	27	29	29	31	39	40	44	47	49	49	47	44	42	41	42	39	37	39	37.7	49.1
18-May	40	36	34	34	A	25	23	29	35	37	34	33	44	46	49	49	49	44	42	39	40	35	36	36	37.9	49.4
19-May	37	36	24	25	A	23	18	13	19	26	40	47	47	48	46	46	45	44	40	37	32	27	27	30	33.7	47.6
20-May	31	29	31	30	A	27	23	27	34	40	42	46	48	49	49	46	44	43	40	38	37	34	35	32	37.2	49.0
21-May	31	31	31	31	A	34	39	42	44	44	44	46	45	43	42	38	39	39	39	38	36	32	31	31	37.8	46.1
22-May	28	25	26	25	A	20	18	16	15	20	27	31	33	36	37	35	35	34	34	34	31	31	27	27	28.1	36.8
23-May	26	26	27	28	A	26	20	27	30	30	33	32	36	39	39	39	36	36	39	40	36	31	31	32	32.0	40.4
24-May	35	38	36	36	A	33	33	36	38	40	44	44	43	43	42	41	41	40	37	37	33	27	24	25	36.8	43.9
25-May	29	31	30	30	A	21	20	24	25	26	29	32	38	40	43	41	41	42	44	43	38	36	37	37	33.7	43.7
26-May	35	34	32	31	A	28	22	25	31	28	34	36	38	41	42	43	43	43	42	37	41	35	32	34	35.1	43.5
27-May	27	28	24	24	A	21	20	24	28	33	37	44	39	44	40	40	42	41	41	38	36	37	34	34	33.8	44.1
28-May	27	23	21	18	A	18	10	16	21	26	30	33	35	34	38	38	39	38	33	33	31	26	25	24	27.8	39.1
29-May	25	23	22	21	A	14	9	17	19	31	37	39	41	41	42	40	39	38	38	37	35	36	35	33	31.0	42.1
30-May	35	27	24	29	A	27	26	26	32	35	36	37	35	35	36	34	34	36	36	33	27	27	26	28	31.2	36.7
31-May	27	24	22	22	A	21	20	24	26	30	33	37	43	43	41	41	40	41	39	36	37	36	38	27	32.6	42.8
33.3 32.2 31.3 30.6 -- 27.1 24.5 26.9 30.3 33.9 37.2 39.7 41.3 42.7 43.3 43.3 43.1 42.8 41.9 40.4 38.2 36.4 35.1 33.9																								Diurnal Average		
42.3 43.2 41.5 41.7 -- 40.7 41.1 42.4 43.7 44.0 46.2 48.5 49.6 50.8 53.1 53.3 54.2 53.5 52.6 50.4 50.5 47.8 45.7 44.9																								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 - May 2014



Hourly Maximums

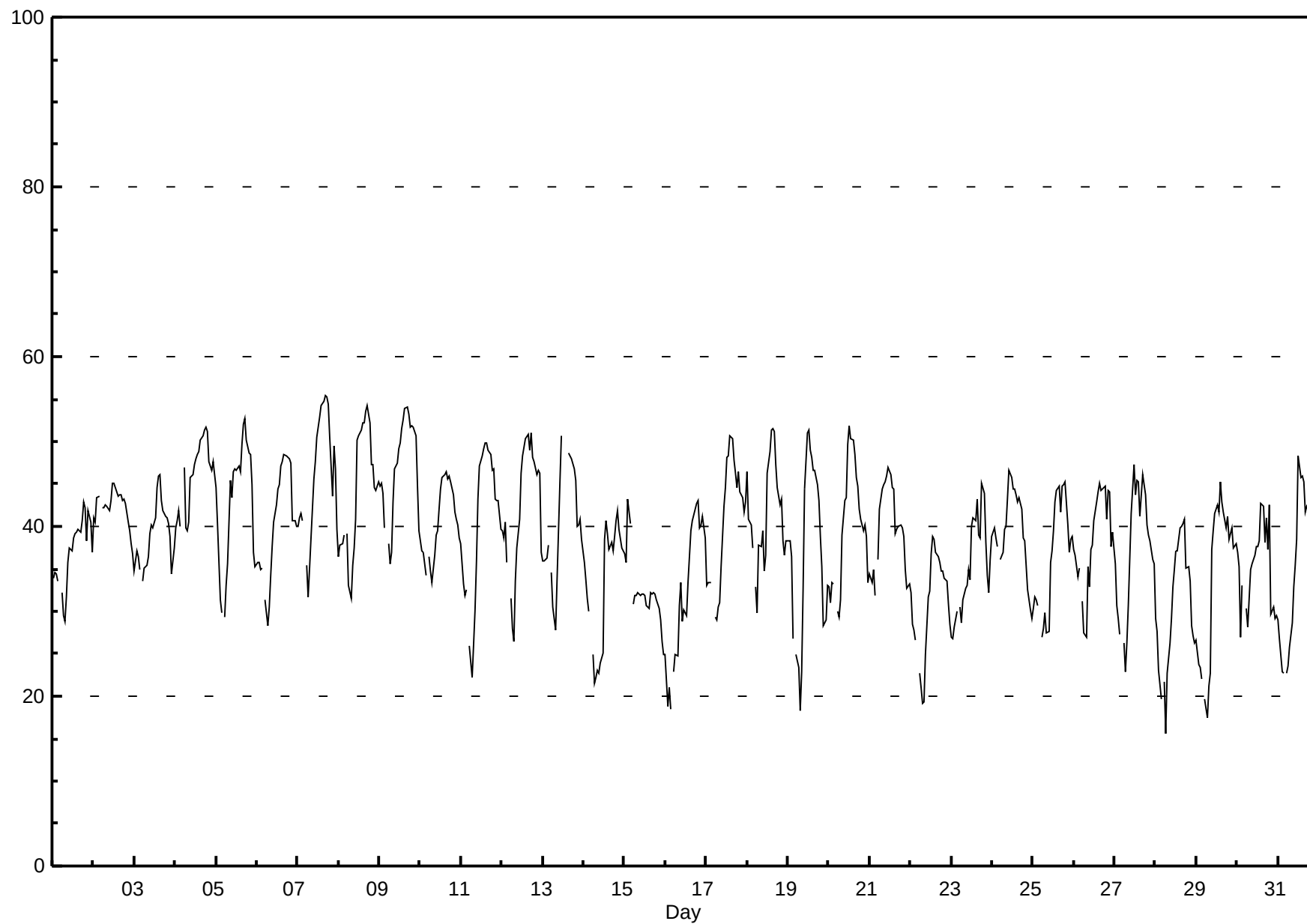
Ozone (O₃) - ppb

Beaverlodge - May 2014

Maximum Value: 55.5 ppb on May 7 17:00																				Maximum Daily Average: 46.8 ppb on May 9										Hours in Service: 744	
Minimum Value: 16 ppb on May 28 07:00																				Minimum Daily Average: 30.6 ppb on May 28										Hours of Data: 710	
Maximum Diurnal Average: 45.3 ppb at hour 16																				Minimum Diurnal Average: 29.2 ppb at hour 7										Hours of Missing Data: 34	
Monthly Average: 38.58 ppb																				Percentiles: P ₁ = 19.6 P ₁₀ = 28.2 Q ₁ = 33.3 Median = 39.1 Q ₃ = 44.4 P ₉₀ = 48.2 P ₉₉ = 53.9										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-May	34	35	34	33	A	32	29	29	32	36	37	37	39	39	39	40	39	41	43	42	38	42	40	37	36.9	42.8					
2-May	41	41	43	44	A	42	42	43	42	42	43	45	45	45	43	44	44	43	43	43	41	39	38	37	42.3	45.1					
3-May	35	37	36	35	A	34	35	35	36	39	40	40	41	45	46	46	43	42	41	41	40	39	34	37	39.1	46.1					
4-May	40	41	42	40	A	47	40	39	41	46	46	47	48	49	49	50	51	51	52	51	48	47	48	46	45.9	51.8					
5-May	45	40	31	30	A	29	33	36	45	43	46	47	47	47	46	50	52	53	50	49	48	45	37	35	42.8	52.8					
6-May	36	36	35	35	A	31	28	31	34	38	41	43	44	45	47	48	48	48	48	48	47	41	41	40	40.5	48.4					
7-May	40	41	41	41	A	35	32	35	39	46	48	50	52	53	54	55	55	55	54	51	43	50	47	40	45.9	55.5					
8-May	36	38	38	39	A	39	33	32	35	37	41	50	51	51	52	52	54	54	52	47	47	45	44	45	44.1	54.2					
9-May	45	45	44	40	A	38	36	37	43	47	48	49	50	52	52	54	54	53	52	52	52	51	45	40	46.8	54.0					
10-May	38	37	37	34	A	36	35	33	37	39	39	42	44	46	46	47	46	46	45	44	42	41	40	39	40.6	46.5					
11-May	38	33	32	33	A	26	22	26	30	36	43	47	48	49	50	50	49	48	47	47	43	43	43	40	40.1	49.9					
12-May	39	39	41	36	A	32	28	26	34	38	41	46	48	49	50	51	49	51	48	48	46	47	46	37	42.1	50.9					
13-May	36	36	36	38	A	34	30	28	34	39	45	51	C	C	C	49	48	48	47	45	40	40	41	39	40.2	50.7					
14-May	36	34	31	30	A	25	22	22	23	23	24	25	38	41	39	37	38	37	39	41	42	40	37	37	33.1	41.9					
15-May	37	36	43	40	A	31	32	32	32	32	32	32	32	31	30	32	32	32	32	31	30	29	26	25	32.3	43.2					
16-May	25	19	21	19	A	23	25	25	31	33	29	30	30	33	36	40	41	42	43	43	40	40	41	39	32.5	43.1					
17-May	33	33	33	33	A	29	29	31	31	35	42	45	48	48	51	50	48	46	45	47	44	43	42	43	40.4	50.7					
18-May	46	41	40	37	A	33	30	38	38	39	35	37	46	49	51	52	51	47	45	43	43	38	37	38	41.5	51.5					
19-May	38	38	36	27	A	25	23	18	23	33	44	51	51	49	48	47	47	45	43	39	35	28	29	33	37.0	51.4					
20-May	33	31	33	33	A	30	29	31	39	43	43	50	52	50	50	49	46	45	42	41	39	40	39	33	40.1	51.8					
21-May	34	33	35	32	A	36	42	44	45	45	46	47	46	45	44	39	40	40	40	40	39	35	33	33	39.7	46.9					
22-May	32	29	28	27	A	23	21	19	19	25	32	32	37	39	38	37	36	36	35	35	34	34	31	29	30.7	38.8					
23-May	27	27	28	30	A	31	29	31	33	33	35	34	40	41	41	43	39	39	45	44	38	34	32	36	35.2	45.1					
24-May	39	40	39	38	A	36	37	40	40	43	47	46	44	44	44	43	43	42	39	38	35	33	30	29	39.5	46.6					
25-May	30	32	31	31	A	27	28	30	27	28	36	37	39	43	44	45	42	45	45	45	40	37	39	39	36.5	45.3					
26-May	37	37	34	35	A	31	27	27	35	33	37	38	41	43	44	45	44	44	45	41	44	44	38	39	38.4	45.1					
27-May	36	31	29	27	A	26	23	26	31	36	42	47	44	45	45	41	46	45	44	40	39	38	36	36	37.1	47.4					
28-May	29	28	23	20	A	22	16	23	26	29	33	35	37	37	40	40	40	41	35	35	34	28	27	26	30.6	40.9					
29-May	27	24	23	22	A	20	17	21	23	37	39	42	42	42	45	43	42	40	41	39	39	40	37	38	34.0	45.2					
30-May	37	35	27	33	A	30	28	32	35	36	37	38	38	38	43	42	38	41	37	43	30	31	29	30	35.0	42.7					
31-May	29	27	23	23	A	23	24	26	29	33	35	39	48	46	46	45	42	42	42	40	41	37	42	30	35.2	48.3					
																									Diurnal Average						
																									Diurnal Maximum						
C - Calibration																									A - Automated Daily Zero Span						

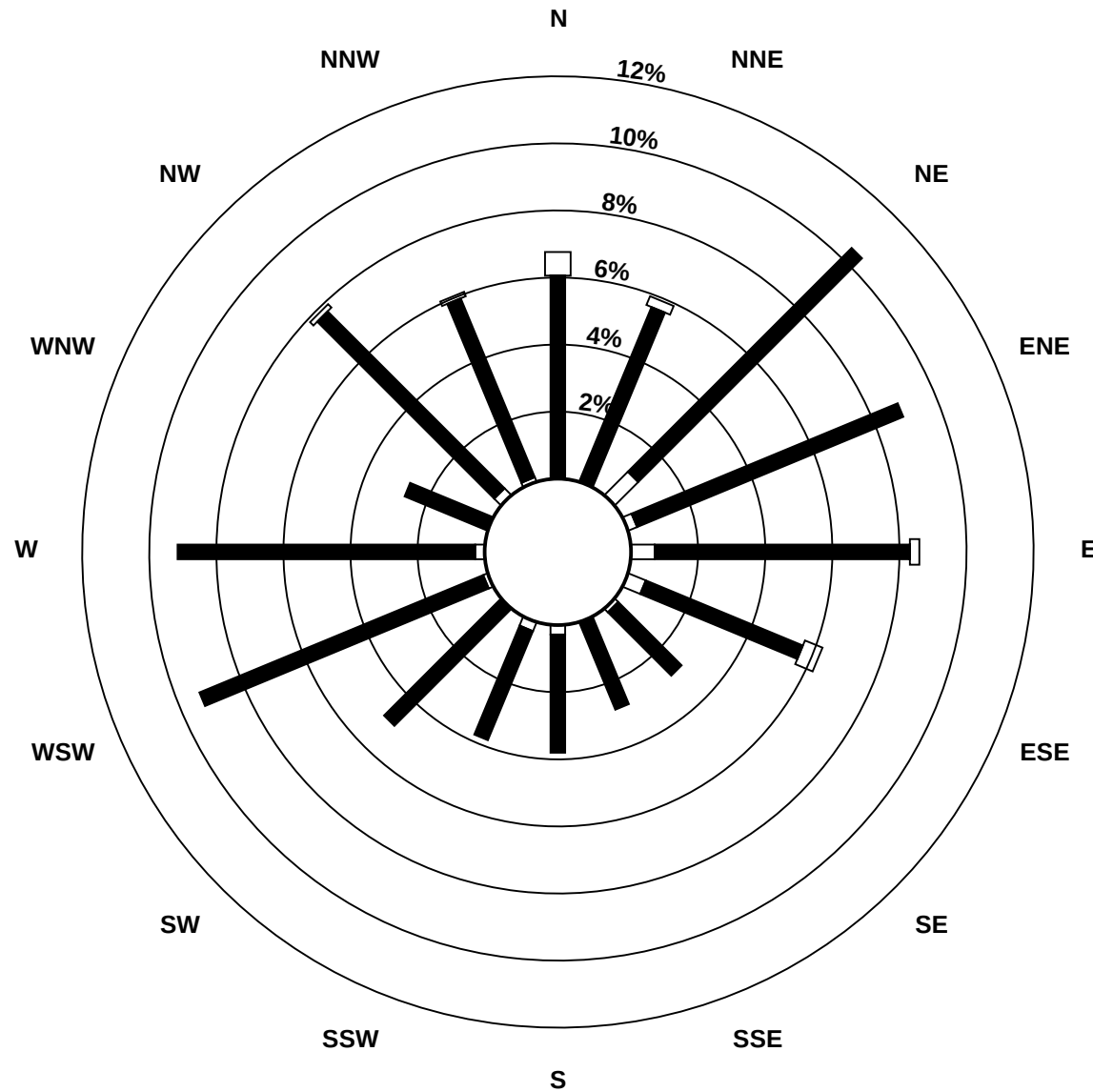
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - May 2014

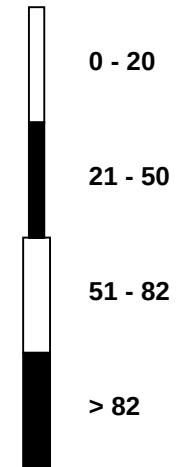


Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - May 2014



Pollutant Classes (ppb)



Eight Hour Running Averages

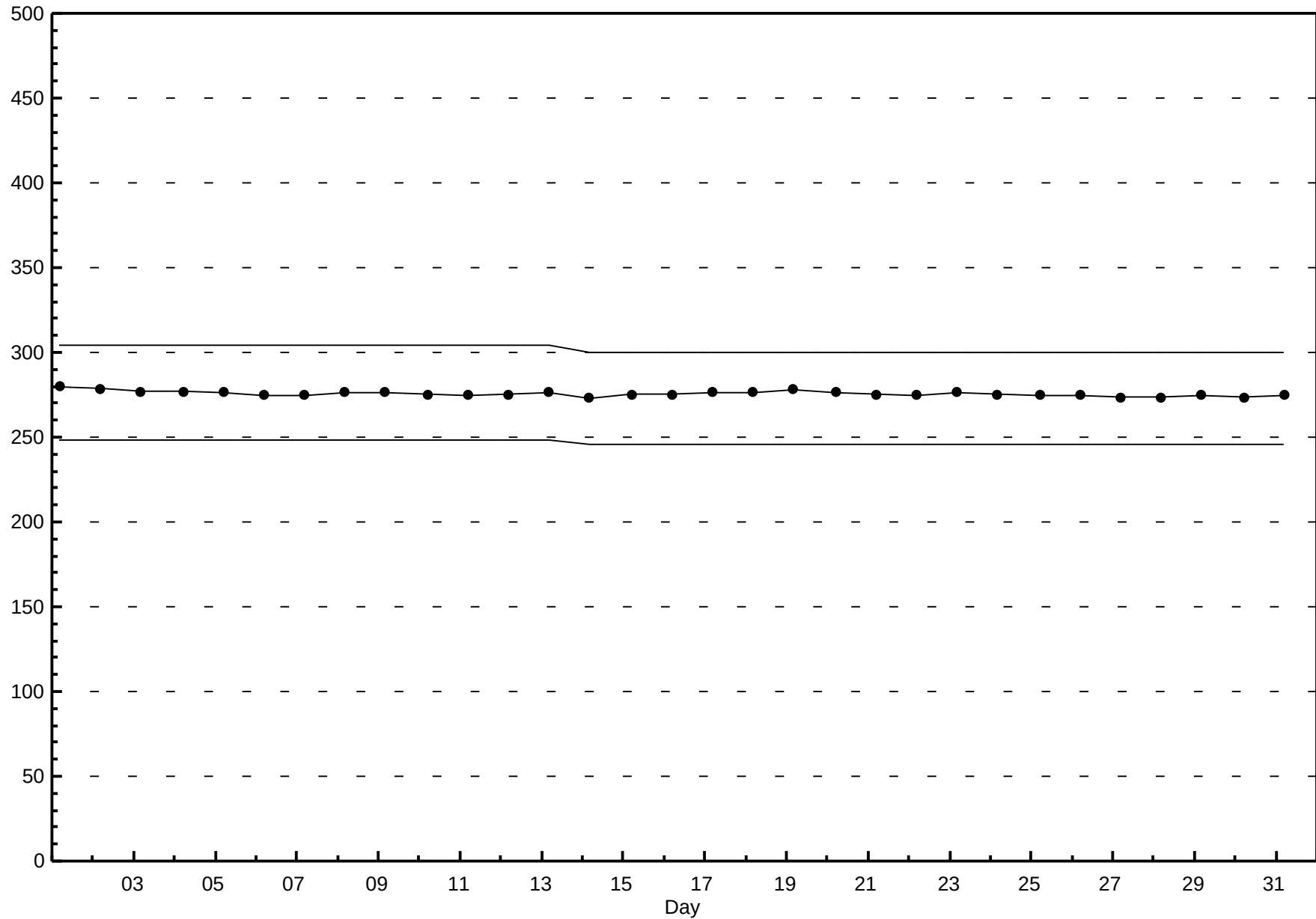
Ozone (O₃) - ppb

Beaverlodge - May 2014

Maximum Value: 51.9 ppb on May 7 19:00																					Hours in Service:		744			
Minimum Value: 17.8 ppb on May 29 09:00																					Hours of Data:		738			
																					Hours of Missing Data:		6			
Percentiles: P ₁ = 19.8 P ₁₀ = 26.4 Q ₁ = 31.0 Median = 36.1 Q ₃ = 40.8 P ₉₀ = 44.6 P ₉₉ = 50.3																					Hours of Calibration:		6			
																					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-May	36	35	35	34	34	33	32	31	30	30	31	31	32	33	34	36	37	38	38	39	39	39	39	39	39	38.9
2-May	39	38	38	39	39	39	40	40	41	41	41	42	42	42	42	43	43	43	43	43	43	42	41	41	40	43.0
3-May	39	38	37	36	35	34	34	34	34	35	35	36	37	38	39	40	41	42	42	42	42	41	39	38	41.8	
4-May	37	37	37	37	37	37	37	38	38	39	40	41	42	43	45	46	47	48	49	49	49	48	48	47	49.3	
5-May	46	44	42	39	38	36	33	32	32	33	35	37	38	41	43	44	45	46	47	47	47	47	46	44	47.4	
6-May	42	40	38	36	35	33	32	31	30	31	32	33	34	36	39	41	43	45	46	46	46	45	44	43	46.2	
7-May	42	41	40	39	39	38	36	34	33	34	34	36	37	40	44	47	50	51	52	52	51	50	49	47	51.9	
8-May	44	42	40	39	39	36	34	33	32	32	33	34	35	38	41	44	46	49	50	50	49	48	47	46	49.8	
9-May	45	44	43	42	41	40	39	38	37	37	38	39	40	42	45	47	49	50	50	51	51	51	50	48	51.0	
10-May	46	44	42	40	38	36	34	33	32	32	33	34	35	37	39	41	42	43	44	44	44	43	42	41	46.0	
11-May	40	38	37	35	34	32	29	27	26	26	27	29	32	35	38	42	45	46	47	47	46	45	44	43	47.2	
12-May	42	41	40	39	38	36	33	31	29	28	28	29	32	34	38	42	44	46	47	48	47	47	46	44	47.7	
13-May	43	41	40	38	37	35	33	31	30	31	32	33	33	34	N	N	N	N	N	N	44	43	43	41	44.0	
14-May	40	38	36	34	34	32	29	26	24	23	22	21	23	25	27	29	31	33	35	37	38	38	38	38	39.5	
15-May	38	37	37	37	36	35	34	33	33	32	31	31	31	31	31	31	31	31	31	31	30	30	29	28	37.5	
16-May	27	25	23	22	21	20	20	20	21	23	24	26	26	27	29	31	32	33	35	37	38	39	40	39	39.5	
17-May	38	37	36	35	35	32	31	30	29	29	30	31	33	36	39	41	43	45	45	45	45	44	43	41	45.4	
18-May	41	40	39	38	37	35	33	32	31	31	31	31	32	35	38	41	43	44	45	45	45	44	42	40	45.4	
19-May	39	38	35	34	33	31	28	25	23	21	23	26	29	32	36	40	43	45	45	44	42	40	37	35	45.2	
20-May	34	32	31	30	29	29	29	28	29	30	32	34	36	39	42	44	46	46	46	45	43	41	40	38	45.9	
21-May	36	35	33	33	32	32	32	34	36	38	40	42	42	43	44	43	43	42	41	40	39	38	36	36	43.8	
22-May	34	32	31	29	28	27	25	23	21	20	20	21	23	25	27	29	32	34	34	35	35	34	33	32	34.8	
23-May	31	30	29	28	27	27	26	26	26	27	28	28	29	31	33	35	35	36	37	38	38	37	36	35	38.0	
24-May	35	35	35	34	34	35	35	36	36	36	37	38	39	40	41	42	42	42	41	41	39	37	35	33	42.3	
25-May	32	30	29	29	28	27	26	26	26	25	25	25	27	29	32	34	36	38	40	41	41	41	40	40	41.5	
26-May	39	38	36	35	35	33	31	30	29	28	28	29	30	32	34	37	38	40	41	41	41	41	39	38	41.5	
27-May	36	34	32	31	29	27	25	24	24	25	27	29	31	34	36	38	40	41	41	41	40	40	39	38	41.5	
28-May	36	34	31	29	28	25	22	19	18	19	20	22	24	26	29	32	34	36	36	36	36	35	33	31	36.1	
29-May	30	28	26	25	24	22	20	19	18	19	21	24	26	29	34	36	39	40	40	40	39	38	37	36	39.8	
30-May	36	35	33	32	31	30	29	28	27	28	30	31	32	33	34	35	35	35	35	35	34	33	31	31	36.0	
31-May	30	28	27	25	25	24	23	23	23	24	25	27	29	32	35	37	39	40	41	40	40	39	39	37	40.5	
46.4 44.4 42.7 41.8 41.5 40.5 39.6 40.5 41.0 41.3 41.3 41.8 42.2 43.4 44.7 46.9 49.6 51.1 51.9 51.7 51.0 50.8 49.7 48.0																										
Diurnal Maximums																										
N - Not Valid																										

Span Responses

Ozone (O₃)
Beaverlodge - May 2014

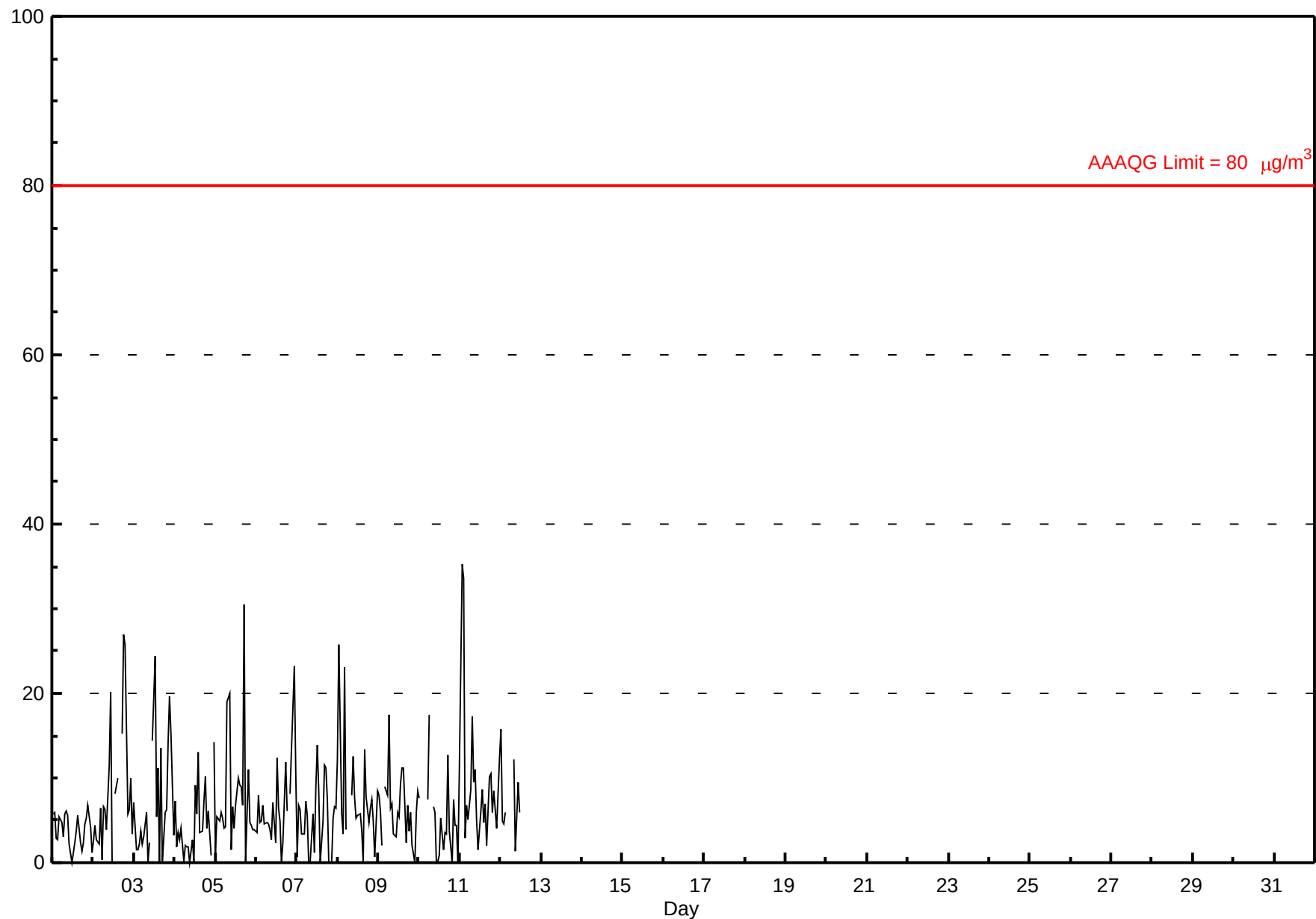


Hourly Averages

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

Beaverlodge - May 2014

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 35.2 µg/m ³ on May 11 02:00 Minimum Value: 0 µg/m ³ on May 1 12:00 Maximum Diurnal Average: 10.4 µg/m ³ at hour 18 Monthly Average: 6.65 µg/m ³																								Hours in Service: 744 Hours of Data: 258 Hours of Missing Data: 486 Hours of Calibration: 0 Percent Operational Time: 34.7		
Maximum Daily Average: 9.7 µg/m ³ on May 11 Minimum Daily Average: 3.8 µg/m ³ on May 1 Minimum Diurnal Average: 3.6 µg/m ³ at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.8 Q ₁ = 3.0 Median = 5.6 Q ₃ = 8.2 P ₉₀ = 13.3 P ₉₉ = 30.2																										
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-May	6	6	3	3	5	5	3	6	6	6	2	0	1	2	4	6	2	1	2	4	5	7	4	1	3.8	6.8
2-May	3	4	3	2	6	0	7	6	4	11	20	0	N	8	10	N	N	15	27	26	6	6	10	3	8.5	27.0
3-May	7	2	1	2	4	2	3	6	0	2	N	14	24	5	11	0	14	0	6	6	14	20	15	3	7.1	24.4
4-May	7	2	4	3	4	0	2	2	2	0	3	0	9	6	13	4	4	7	10	4	6	1	N	14	4.6	14.2
5-May	1	5	5	6	5	4	4	19	20	2	7	4	7	10	9	9	7	30	0	11	5	4	4	4	7.6	30.5
6-May	4	8	5	5	7	5	5	5	4	3	7	2	12	7	5	0	2	12	6	N	8	13	23	10	6.8	23.2
7-May	1	7	6	3	3	7	6	0	0	6	1	9	14	8	0	5	12	11	7	0	0	5	7	6	5.2	13.9
8-May	12	26	6	3	23	4	N	N	8	13	8	5	6	6	4	0	13	8	5	6	7	5	1	8	8.0	25.8
9-May	8	6	2	N	9	8	17	6	7	3	3	6	5	9	11	11	2	7	4	6	2	0	6	8	6.5	17.5
10-May	8	N	N	N	N	8	17	N	7	6	0	0	1	5	1	4	3	13	4	0	7	4	4	0	4.9	17.4
11-May	11	35	34	3	7	5	9	17	10	11	5	2	6	9	5	7	2	10	11	6	9	6	4	12	9.7	35.2
12-May	16	5	5	6	N	N	N	N	12	1	9	6	N	N	N	N	N	N	N	N	N	N	N	N	--	15.8
13-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
31-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
6.9 9.6 6.6 3.6 7.4 4.4 7.3 7.4 6.6 5.3 5.9 4.1 8.6 6.9 6.6 4.5 6.2 10.4 7.4 7.0 6.3 6.5 7.8 6.6																								Diurnal Average		
15.8 35.2 33.5 5.9 23.1 8.0 17.5 18.9 20.0 12.6 20.1 14.5 24.4 10.0 13.0 11.2 13.6 30.5 27.0 25.7 14.1 19.7 23.2 14.2																								Diurnal Maximum		
N - Not Valid																										
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m ³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m ³																										

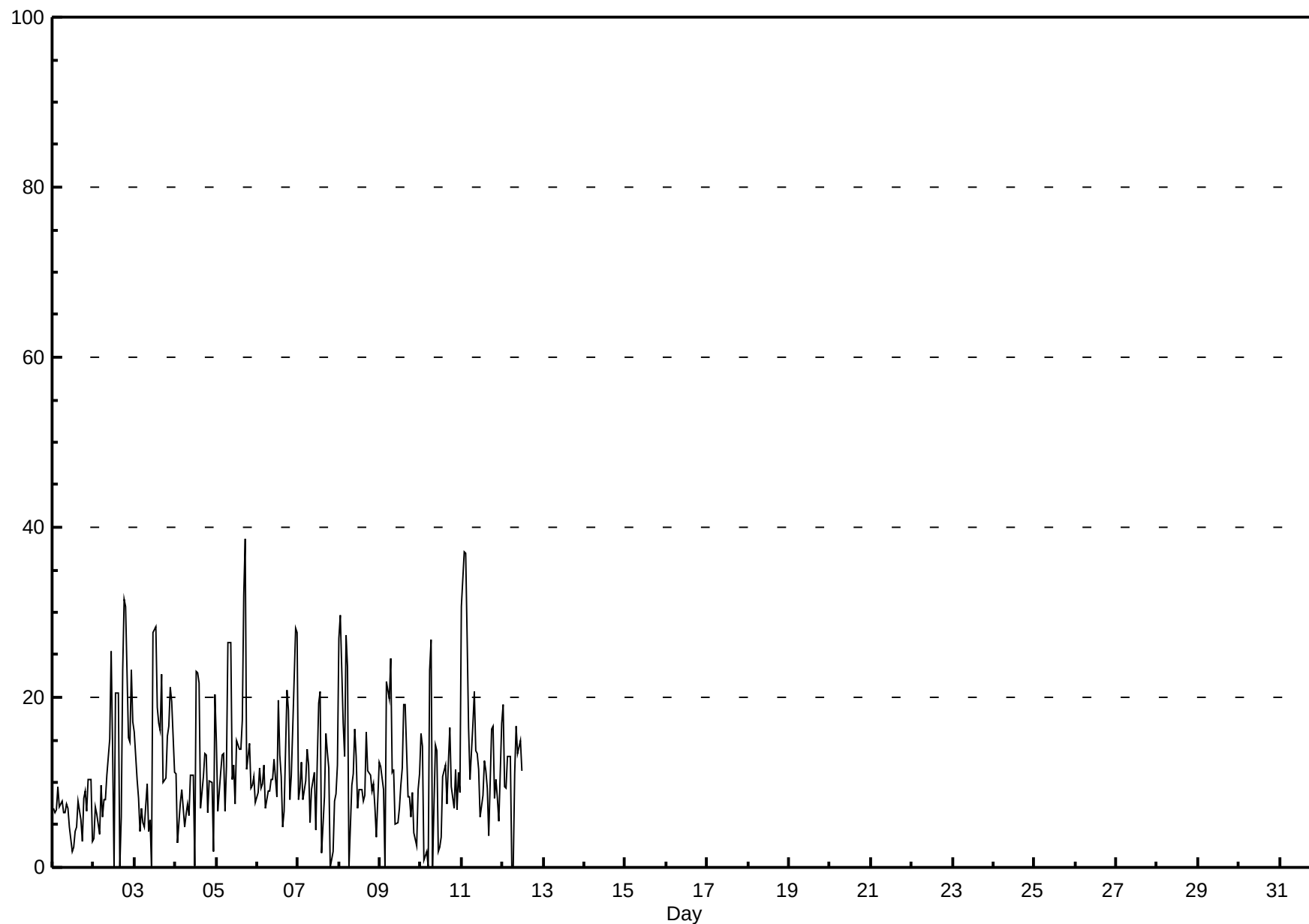


Hourly Maximums

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

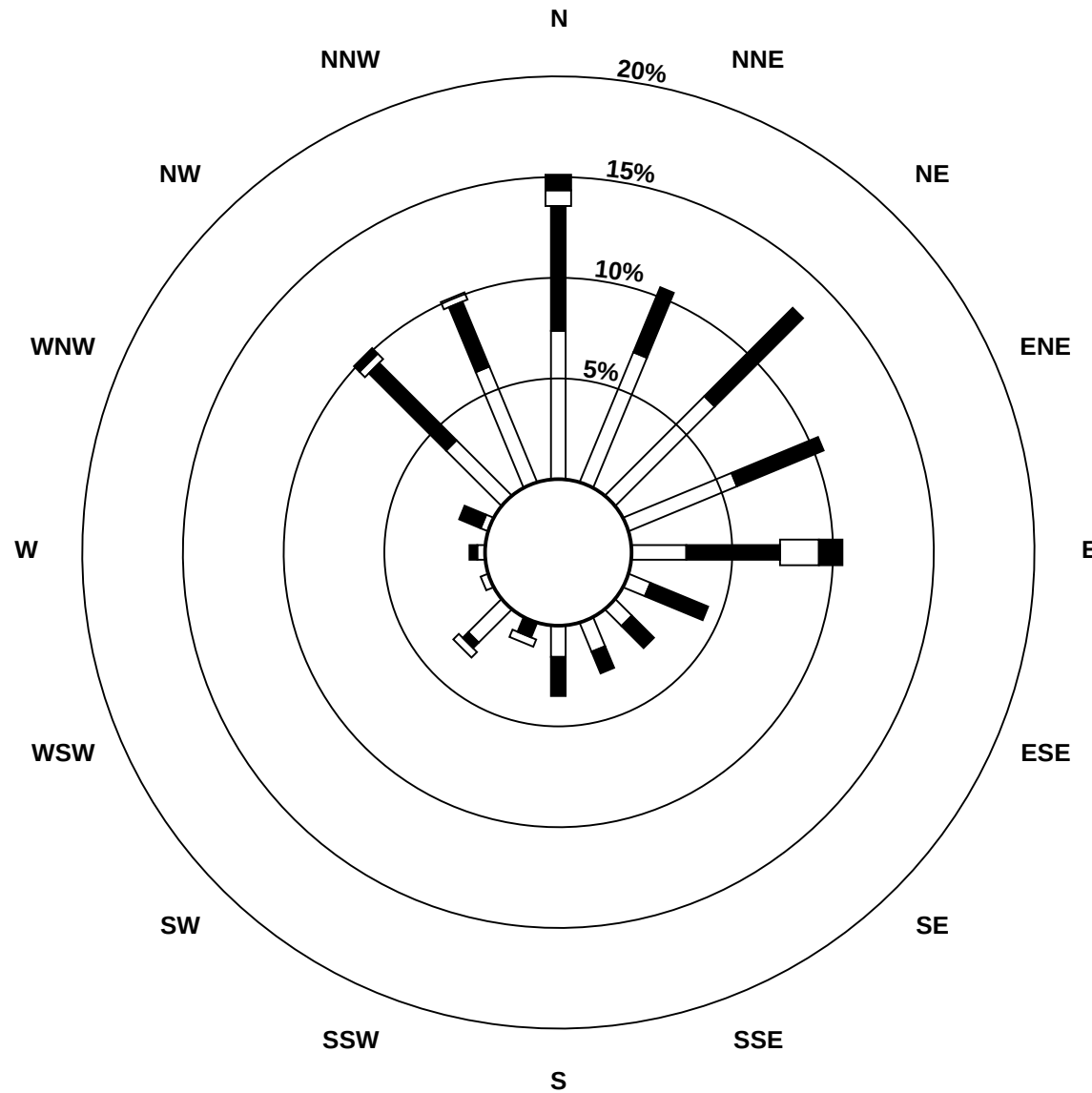
Beaverlodge - May 2014

Maximum Value: 38.6 μg/m³ on May 5 18:00																				Maximum Daily Average: 15.3 μg/m³ on May 11					Hours in Service: 744	
Minimum Value: 0 μg/m³ on May 2 13:00																				Minimum Daily Average: 6.4 μg/m³ on May 1					Hours of Data: 276	
Maximum Diurnal Average: 15.9 μg/m³ at hour 18																				Minimum Diurnal Average: 8.8 μg/m³ at hour 12					Hours of Missing Data: 468	
Monthly Average: 11.66 μg/m³																				Percentiles: P ₁ = 0.0 P ₁₀ = 3.8 Q ₁ = 7.0 Median = 10.3 Q ₃ = 14.9 P ₉₀ = 21.8 P ₉₉ = 36.8					Hours of Calibration: 0	
																				Percent Operational Time: 37.1						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-May	7	7	7	9	7	8	6	6	7	7	5	2	2	4	5	8	6	3	8	9	7	10	10	3	6.4	10.4
2-May	3	7	6	4	10	6	8	8	11	15	25	14	0	21	21	0	6	23	32	31	15	15	23	17	13.4	31.6
3-May	16	10	8	4	7	5	5	10	4	6	0	28	28	19	17	16	23	10	11	16	17	21	19	11	12.9	28.2
4-May	11	3	5	8	9	5	6	7	6	11	11	0	23	23	22	7	11	13	13	7	10	10	2	20	10.1	23.1
5-May	15	7	11	13	13	7	12	26	26	10	12	7	15	14	14	17	32	39	11	15	9	10	11	8	14.8	38.6
6-May	9	12	9	10	12	7	9	9	10	10	13	8	20	13	11	5	7	21	18	8	11	16	28	28	12.6	28.2
7-May	8	9	12	8	10	14	12	5	9	11	4	12	19	21	2	8	16	14	12	0	2	8	9	12	9.9	20.7
8-May	27	30	17	13	27	24	0	10	11	16	13	7	9	9	8	9	16	11	11	9	10	7	3	12	12.9	29.7
9-May	12	11	9	0	22	20	25	11	12	5	5	7	10	12	19	19	8	8	6	9	4	3	9	11	10.6	24.5
10-May	16	14	1	2	0	23	27	0	14	14	2	2	4	11	12	7	12	16	9	7	12	7	11	9	9.7	26.8
11-May	31	37	37	27	16	10	17	21	14	13	12	6	8	13	11	9	4	16	17	8	10	8	5	17	15.3	37.2
12-May	19	10	9	13	13	0	0	11	17	13	15	11	N	N	N	N	N	N	N	N	N	N	N	N	--	19.1
13-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	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-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
31-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14.4 13.0 11.0 9.3 12.3 10.7 10.5 10.4 11.8 11.0 9.7 8.8 12.6 14.4 12.8 9.6 12.7 15.9 13.5 10.6 9.7 10.4 12.0 13.5																									Diurnal Average	
30.6 37.2 36.9 27.1 27.2 23.5 26.8 26.4 26.4 16.3 25.5 27.6 28.2 22.8 21.7 19.1 32.0 38.6 31.6 30.7 16.7 21.2 28.2 27.6																									Diurnal Maximum	
N - Not Valid																										

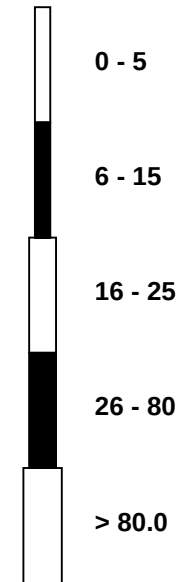


Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - May 2014



Pollutant Classes ($\mu\text{g}/\text{m}^3$)



Hourly Averages

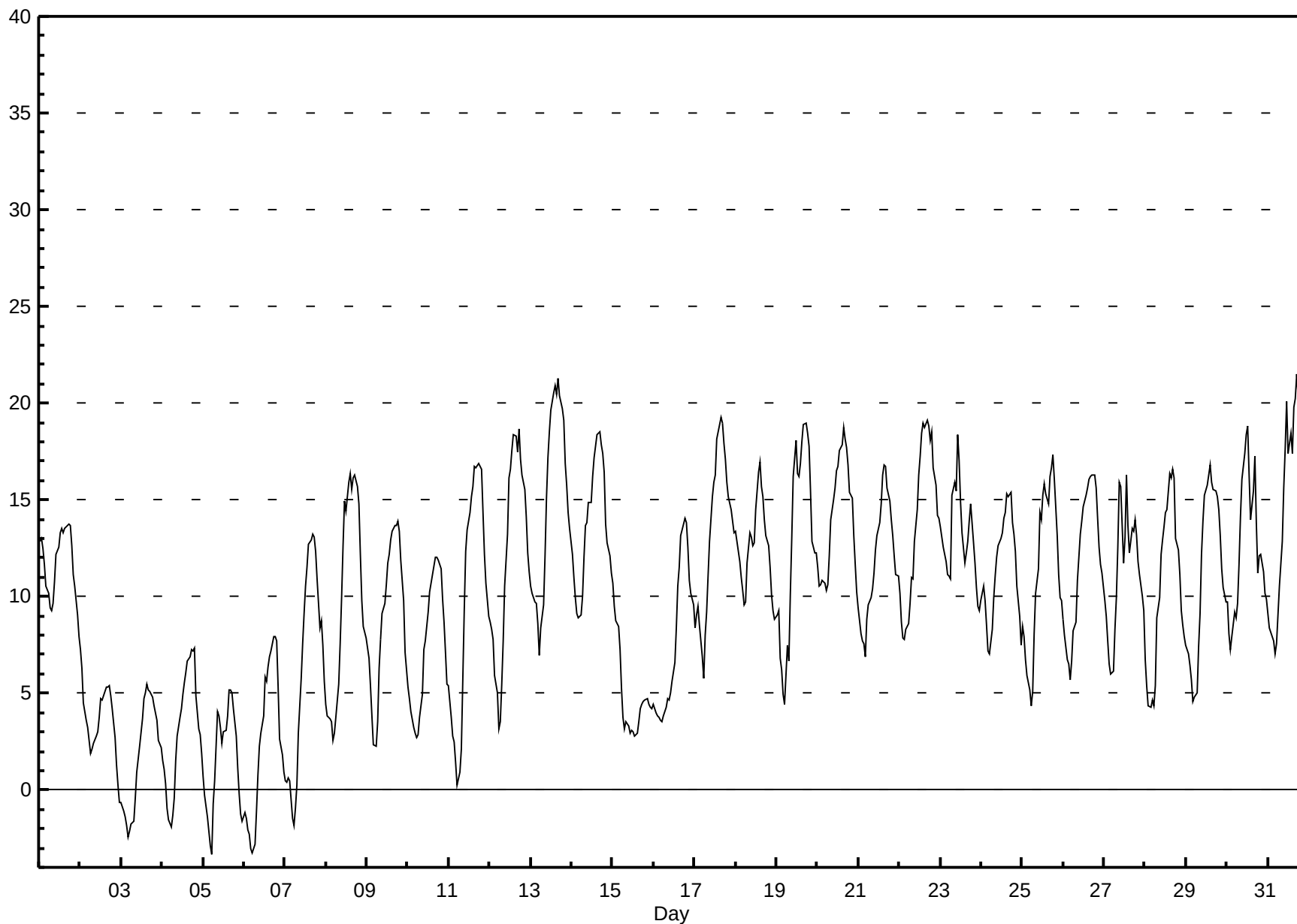
External Temperature (ET) - °C

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.5 °C on May 31 18:00 Maximum Daily Average: 15.0 °C on May 13																									Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0	
Minimum Value: -3 °C on May 5 06:00 Minimum Daily Average: 1.4 °C on May 5 Maximum Diurnal Average: 14.2 °C at hour 17 Minimum Diurnal Average: 4.7 °C at hour 6 Monthly Average: 9.85 °C Percentiles: P ₁ = -2.1 P ₁₀ = 2.7 Q ₁ = 5.4 Median = 10.2 Q ₃ = 13.9 P ₉₀ = 16.7 P ₉₉ = 20.2																										
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-May	13	13	12	12	11	10	9	9	10	11	12	13	13	13	13	14	14	14	14	13	11	11	9	8	11.7	13.8
2-May	7	6	5	4	3	3	2	2	2	3	3	4	5	5	5	5	5	5	5	4	3	1	0	-1	3.6	7.3
3-May	-1	-1	-1	-2	-2	-2	-2	-2	0	1	2	2	4	5	5	5	5	5	5	4	4	4	3	2	1.7	5.4
4-May	2	1	0	-1	-2	-2	-1	0	2	3	4	4	5	6	6	7	7	7	7	7	5	3	3	2	3.1	7.4
5-May	1	0	-1	-2	-3	-3	-1	0	4	4	3	2	3	3	4	5	5	5	4	3	1	0	-1	-2	1.4	5.2
6-May	-1	-1	-2	-2	-3	-3	-3	-1	1	2	3	4	6	6	6	7	7	8	8	8	5	3	2	1	2.4	7.9
7-May	0	0	1	0	-1	-2	-1	0	3	6	8	9	11	12	13	13	13	13	12	11	8	9	7	6	6.3	13.2
8-May	4	4	4	4	3	3	4	5	8	10	13	15	14	16	16	16	16	16	16	15	12	10	8	8	9.9	16.3
9-May	7	7	5	4	2	2	4	6	8	9	10	11	12	12	13	13	14	14	14	13	12	10	7	6	9.0	13.9
10-May	5	5	4	3	3	3	3	4	5	7	8	8	9	10	11	12	12	12	12	11	10	9	7	6	7.4	12.0
11-May	5	4	3	3	1	0	1	2	6	9	12	13	14	15	16	17	17	17	17	17	14	12	11	9	9.8	16.9
12-May	9	8	8	6	5	3	4	5	8	11	13	16	17	18	18	18	17	19	17	16	16	14	12	11	12.0	18.7
13-May	11	10	10	10	9	7	8	10	12	15	17	18	20	21	21	20	21	20	20	19	17	16	14	14	15.0	21.3
14-May	12	11	10	9	9	9	10	12	14	14	15	15	16	17	18	18	19	18	17	16	14	13	12	11	13.7	18.5
15-May	11	9	9	8	7	5	4	3	4	3	3	3	3	3	3	4	4	4	5	5	5	4	4	4	4.9	10.7
16-May	4	4	4	4	4	4	4	4	5	5	5	6	7	8	11	12	13	14	14	14	13	11	10	10	7.8	14.1
17-May	8	9	9	9	7	6	8	9	11	13	15	16	16	18	19	19	19	18	17	16	15	14	14	13	13.3	19.3
18-May	13	13	12	11	10	10	10	12	13	13	13	13	15	16	17	16	15	14	13	13	11	10	9	9	12.5	17.0
19-May	9	9	7	6	5	4	7	7	10	13	16	18	16	16	17	18	19	19	18	18	15	13	12	12	12.8	19.0
20-May	12	11	11	11	11	10	11	12	14	15	16	17	17	18	18	19	18	18	17	15	15	13	12	10	14.1	18.8
21-May	9	8	8	8	7	9	10	10	10	11	12	13	14	15	16	17	17	16	15	14	13	12	11	11	11.9	16.8
22-May	10	9	8	8	8	9	10	11	11	13	14	16	17	18	19	19	19	19	18	19	17	16	14	14	14.0	19.1
23-May	14	13	13	12	11	11	11	15	16	15	18	17	15	13	12	12	13	14	15	13	12	10	9	9	13.1	18.4
24-May	10	11	10	8	7	7	8	10	11	12	13	13	13	14	14	15	15	15	14	13	12	11	9	7	11.4	15.4
25-May	8	8	7	6	5	4	5	8	10	11	14	14	15	16	15	15	16	17	17	16	13	11	10	10	11.4	17.4
26-May	9	8	7	7	6	7	8	9	11	12	13	14	15	15	16	16	16	16	16	16	14	13	12	11	11.9	16.3
27-May	10	9	8	7	6	6	8	10	13	16	16	12	13	16	14	12	13	13	14	13	12	11	10	9	11.3	16.3
28-May	7	5	4	4	5	4	5	9	10	12	13	14	14	14	16	16	17	16	13	12	11	9	9	8	10.4	16.6
29-May	7	7	6	6	5	5	5	7	9	12	14	15	16	16	17	16	16	15	15	15	13	11	11	10	11.2	16.8
30-May	10	8	7	8	9	9	10	12	14	16	17	18	19	16	14	15	17	14	11	12	12	11	10	10	12.5	18.8
31-May	9	8	8	8	7	8	9	11	13	16	18	20	17	18	17	20	20	21	20	18	15	12	12	10	14.0	21.5
7.6 7.0 6.2 5.7 5.0 4.7 5.5 6.8 8.5 10.1 11.4 12.1 12.6 13.2 13.5 13.9 14.2 14.1 13.6 12.8 11.3 9.9 8.8 8.0																									Diurnal Average	
13.6 13.1 12.6 11.8 11.1 11.1 10.9 15.3 15.9 16.1 18.4 20.1 19.6 20.6 20.9 20.5 21.3 21.5 20.3 19.1 16.9 15.7 14.4 14.0																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Beaverlodge - May 2014



Hourly Averages

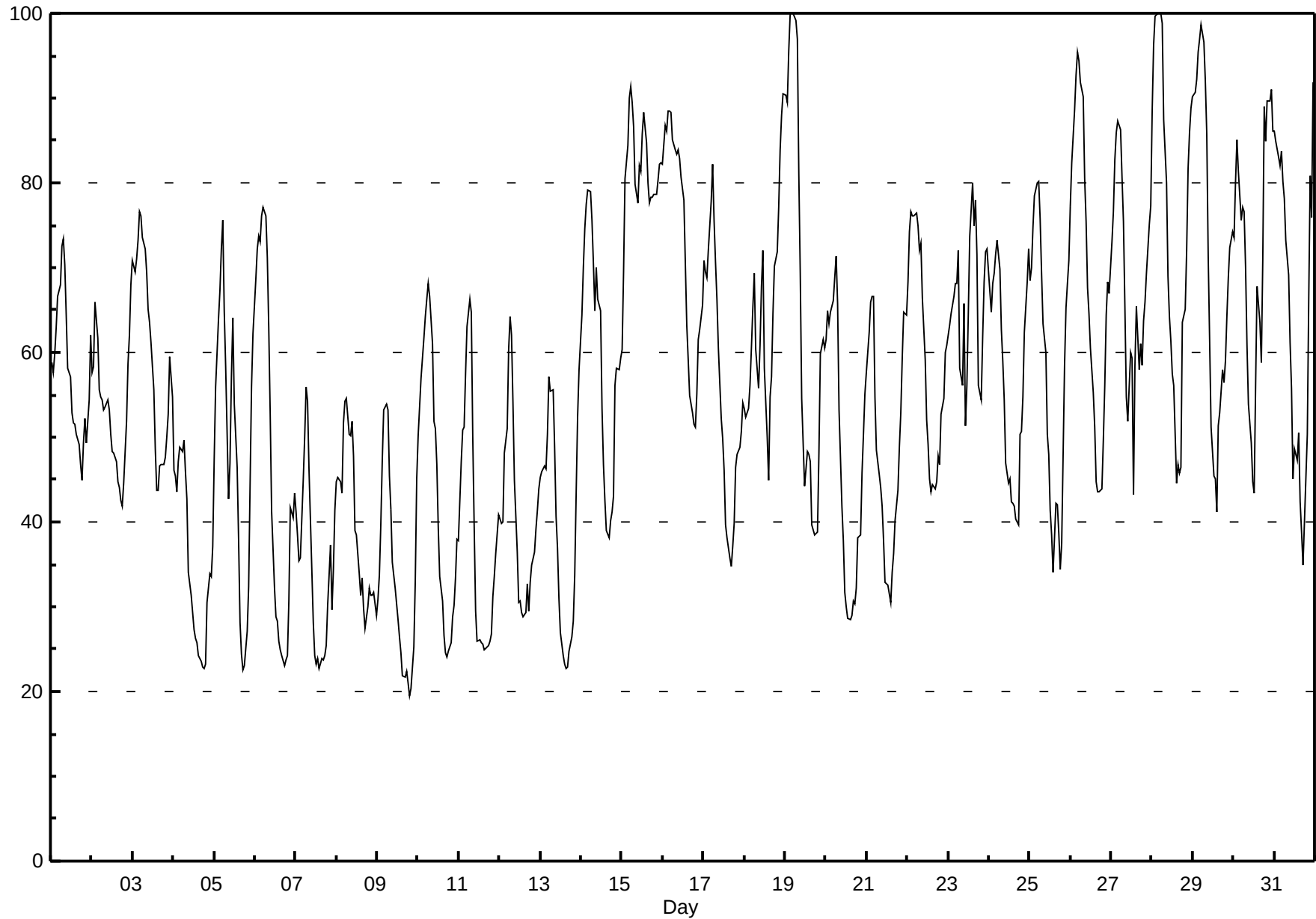
Relative Humidity (RH) - %

Beaverlodge - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 100.0 % on May 19 04:00 Maximum Daily Average: 81.2 % on May 15																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 19 % on May 9 20:00 Maximum Diurnal Average: 73.2 % at hour 6 Monthly Average: 55.77 %												Minimum Daily Average: 33.6 % on May 9 Minimum Diurnal Average: 40.8 % at hour 17 Percentiles: P ₁ = 22.6 P ₁₀ = 29.7 Q ₁ = 41.8 Median = 54.7 Q ₃ = 69.4 P ₉₀ = 82.3 P ₉₉ = 99.3														
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-May	59	58	60	63	67	68	73	73	70	64	58	57	53	52	50	49	47	45	49	52	49	54	62	57.7	73.4	
2-May	58	58	66	62	56	55	54	53	53	54	53	50	48	48	47	45	44	43	42	45	52	59	62	68	53.1	68.0
3-May	71	69	71	73	77	76	74	72	69	65	63	61	56	49	44	44	47	47	47	48	50	53	59	55	59.9	76.6
4-May	46	45	44	47	49	48	50	46	43	34	31	29	27	26	26	24	24	23	23	23	31	34	33	37	35.1	49.7
5-May	47	56	64	67	72	76	65	58	43	47	57	64	54	46	38	28	24	23	23	27	32	44	56	62	48.9	75.6
6-May	69	72	74	73	76	77	76	71	63	53	41	32	29	28	26	25	24	23	24	24	31	42	41	43	47.4	77.2
7-May	41	38	35	36	45	50	56	54	46	34	28	24	23	24	23	24	24	24	25	30	37	30	34	41	34.5	56.0
8-May	45	45	45	43	52	54	55	50	50	52	48	39	39	34	31	33	30	27	30	32	31	31	32	29	39.9	54.6
9-May	31	34	40	47	53	54	53	45	42	35	32	30	29	26	25	22	22	22	21	19	20	25	33	45	33.6	54.0
10-May	50	54	57	62	64	66	68	67	61	52	51	47	39	34	31	27	25	24	25	26	29	30	33	38	44.1	68.2
11-May	38	47	51	51	57	63	66	65	50	39	29	26	26	26	25	25	25	26	27	31	34	36	41		38.8	66.3
12-May	40	40	40	48	51	60	64	62	54	45	36	30	31	29	29	29	33	29	33	35	36	39	41	44	40.9	64.2
13-May	45	46	47	46	50	57	55	56	49	41	37	31	27	24	23	23	23	25	26	28	34	43	52	58	39.5	57.9
14-May	64	70	75	77	79	79	76	71	65	70	66	65	53	47	43	39	38	40	41	43	56	58	58	59	59.7	79.2
15-May	60	69	81	84	90	91	90	87	80	78	82	81	86	88	85	80	78	78	78	79	79	80	82	82	81.2	91.4
16-May	82	87	86	88	89	88	85	84	83	84	83	81	78	71	63	59	55	53	51	51	55	61	63	66	72.8	88.5
17-May	71	69	69	72	78	82	76	71	66	61	52	50	46	40	38	36	35	37	40	46	48	49	51	54	55.6	82.3
18-May	53	52	53	56	60	65	69	60	56	61	68	72	58	50	45	55	57	65	70	72	77	84	88	90	64.1	90.5
19-May	90	90	96	100	100	100	99	97	81	69	55	44	46	48	48	47	40	38	39	39	48	60	62	60	66.5	100.0
20-May	62	65	63	65	66	69	71	66	53	42	38	32	30	29	29	29	31	30	32	38	39	46	50	55	47.0	71.3
21-May	58	62	66	67	67	55	48	46	44	42	38	33	32	32	31	34	36	40	44	49	53	59	65	64	48.5	66.6
22-May	68	74	77	76	76	76	75	72	73	67	59	52	49	45	44	44	44	45	48	47	53	55	60	61	60.0	76.5
23-May	62	63	65	67	68	68	72	58	56	66	51	56	65	74	80	75	78	71	56	54	62	68	72	72	65.8	80.0
24-May	70	65	68	69	72	73	70	63	59	54	47	45	45	42	42	42	40	40	50	51	55	62	68	72	56.8	73.3
25-May	68	70	75	78	80	80	76	69	63	60	50	48	41	39	34	42	42	39	34	38	58	65	68	71	57.9	80.2
26-May	77	82	89	93	95	94	92	90	81	75	68	65	60	55	51	45	44	44	44	50	56	64	68	67	68.7	95.5
27-May	73	77	83	86	87	86	81	75	65	55	52	60	59	43	58	65	58	61	58	64	66	69	75	77	68.1	87.3
28-May	88	96	100	100	100	100	99	87	80	69	64	61	57	56	45	47	46	46	64	65	72	82	86	89	75.0	100.0
29-May	90	91	92	96	97	99	97	92	86	71	61	51	45	45	41	51	53	58	56	59	64	69	72	74	71.3	98.6
30-May	74	80	85	81	76	77	77	70	61	54	49	45	43	56	68	64	59	71	89	85	90	90	91	86	71.6	91.0
31-May	86	85	83	82	84	80	78	73	69	61	56	45	49	47	50	42	39	35	40	50	66	81	76	92	64.6	91.8
62.5 64.9 67.6 69.6 72.0 73.2 72.2 67.9 61.8 56.6 51.8 48.6 46.0 43.7 42.4 41.8 40.8 41.1 42.8 44.9 50.4 55.4 58.8 61.8																								Diurnal Average		
90.3 96.3 99.6 100.0 100.0 100.0 99.2 97.0 85.7 84.0 82.8 81.4 85.8 88.4 84.7 80.1 77.9 78.3 89.0 84.9 89.7 89.6 91.0 91.8																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - May 2014



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - May 2014

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	10	10	9	7	9	11	13	12	11	10	9	11	11	13	14	12	11	13	11	12	18	23	16	10.4	23.4
Dir	297	323	316	319	319	336	337	333	349	353	4	330	304	310	320	321	329	344	358	17	16	22	40	28	345	40
2 Spd	17	14	21	15	14	15	15	18	17	18	16	13	12	14	17	16	16	15	16	19	20	15	14	15	15.2	20.7
Dir	11	3	13	352	356	356	351	345	335	321	326	334	0	326	326	334	348	0	4	0	6	356	354	27	351	13
3 Spd	18	15	13	16	16	16	19	21	19	20	23	21	23	22	22	22	23	23	19	15	10	8	7	13	17.0	23.1
Dir	55	49	39	41	45	50	57	66	77	78	75	79	88	87	81	76	71	84	86	83	69	83	70	51	70	88
4 Spd	17	15	14	12	11	5	7	10	13	18	15	12	7	6	8	6	5	4	4	2	3	4	4	5	7.9	17.8
Dir	58	66	67	34	34	333	354	31	49	51	53	29	1	20	27	32	14	11	335	343	60	72	61	41	39	51
5 Spd	4	3	4	6	4	3	2	5	17	24	24	22	24	24	22	24	22	22	24	24	18	15	11	10	12.2	24.5
Dir	61	130	154	177	171	61	163	216	314	324	329	319	325	325	326	324	324	323	350	2	3	4	358	353	334	324
6 Spd	11	5	9	9	11	8	7	6	4	3	2	3	4	3	3	4	5	4	6	4	8	7	7	6	1.1	11.4
Dir	355	339	336	332	331	335	308	312	233	234	131	178	105	265	231	229	243	167	105	125	128	93	87	99	351	331
7 Spd	7	7	6	5	2	2	1	4	5	8	16	13	8	7	2	12	8	10	10	8	8	8	13	19	7.1	18.9
Dir	82	74	70	79	172	212	150	168	150	124	125	120	128	106	87	110	81	112	116	121	96	47	89	97	106	97
8 Spd	14	8	7	2	1	4	2	1	1	5	4	4	9	6	12	7	7	7	13	12	19	22	21	22	5.3	22.4
Dir	105	99	97	99	84	63	272	161	315	185	189	223	293	345	351	307	316	12	14	35	59	65	54	49	45	65
9 Spd	10	14	15	13	13	11	1	1	3	5	13	5	7	12	9	12	10	11	12	12	13	16	15	12	9.4	15.6
Dir	45	44	34	26	25	24	5	110	222	58	51	48	50	34	357	7	15	355	13	0	357	7	28	35	24	7
10 Spd	7	7	10	9	5	1	7	7	10	8	11	11	14	11	13	13	13	13	13	11	8	6	1	5	7.7	13.6
Dir	44	57	49	59	79	306	1	15	50	55	51	29	11	348	328	327	351	1	360	11	15	29	35	65	18	11
11 Spd	8	9	9	7	5	3	2	3	3	3	3	4	4	8	6	2	7	8	7	6	6	7	8	11	3.2	11.1
Dir	64	88	97	108	213	225	47	198	166	175	170	266	344	7	352	285	35	49	44	48	66	68	73	91	67	91
12 Spd	11	9	4	3	2	2	3	3	6	8	13	15	10	5	5	11	12	6	12	5	6	5	10	15	5.2	15.0
Dir	95	85	130	180	125	86	46	308	314	335	24	92	102	51	248	44	46	12	35	11	33	48	76	89	58	89
13 Spd	15	13	8	4	3	2	1	3	2	4	5	8	6	2	2	2	3	10	6	7	15	18	8	10	1.4	17.7
Dir	87	91	92	122	182	136	169	187	170	131	153	146	116	297	18	237	290	268	292	273	269	271	261	265	225	271
14 Spd	13	11	7	1	2	2	2	3	9	8	20	15	28	36	42	39	35	35	36	27	27	23	24	21	18.4	41.7
Dir	257	250	242	185	184	72	93	170	222	239	222	209	249	256	244	252	257	256	254	257	276	267	267	264	252	244
15 Spd	18	11	14	17	21	24	26	25	27	25	22	22	19	17	15	16	13	10	8	7	3	4	4	3	14.8	27.0
Dir	274	319	312	313	324	328	319	318	316	317	317	317	327	318	314	327	336	340	343	358	319	265	260	237	318	316
16 Spd	1	2	3	6	7	8	11	14	13	14	13	11	8	6	5	7	5	5	6	6	4	4	6	10	6.8	14.4
Dir	89	99	121	107	114	115	109	104	110	120	106	121	77	100	104	136	105	106	110	115	110	48	39	40	103	120
17 Spd	11	8	6	8	12	9	8	8	3	4	10	14	14	15	14	16	17	16	12	12	13	10	8	2	8.3	17.1
Dir	30	61	49	16	11	350	13	36	153	156	97	106	90	112	86	76	81	70	74	93	48	63	148	20	70	81
18 Spd	7	8	6	11	1	10	5	5	10	6	4	9	5	1	8	24	12	13	8	10	11	2	4	5	2.1	24.1
Dir	330	348	6	24	302	324	26	326	330	307	199	4	325	233	170	153	210	261	273	232	233	252	62	44	293	153
19 Spd	5	5	1	2	2	6	2	5	6	6	4	5	21	23	18	5	8	12	14	15	14	11	5	9	6.2	22.5
Dir	46	39	169	156	187	41	73	199	198	202	205	251	260	201	193	305	213	234	234	246	225	223	217	216	222	201
20 Spd	8	5	6	11	10	5	9	14	22	32	32	37	35	31	29	28	29	31	27	14	6	3	3	2	16.8	36.6
Dir	220	167	226	228	240	229	269	275	262	252	250	261	245	243	243	244	248	248	255	261	297	41	102	191	249	261
21 Spd	6	2	2	11	5	17	22	25	31	32	33	41	36	31	33	32	32	30	25	19	18	12	7	8	21.0	40.8
Dir	228	186	211	252	262	260	267	276	265	263	265	258	244	251	256	252	247	248	261	268	268	270	261	255	258	258
22 Spd	1	3	4	4	4	4	4	3	3	4	5	6	8	19	25	20	12	22	23	23	14	4	4	4	6.2	25.1
Dir	50	107	103	93	131	98	103	136	182	103	180	193	182	222	232	243	259	258	251	245	244	242	93	80	227	232

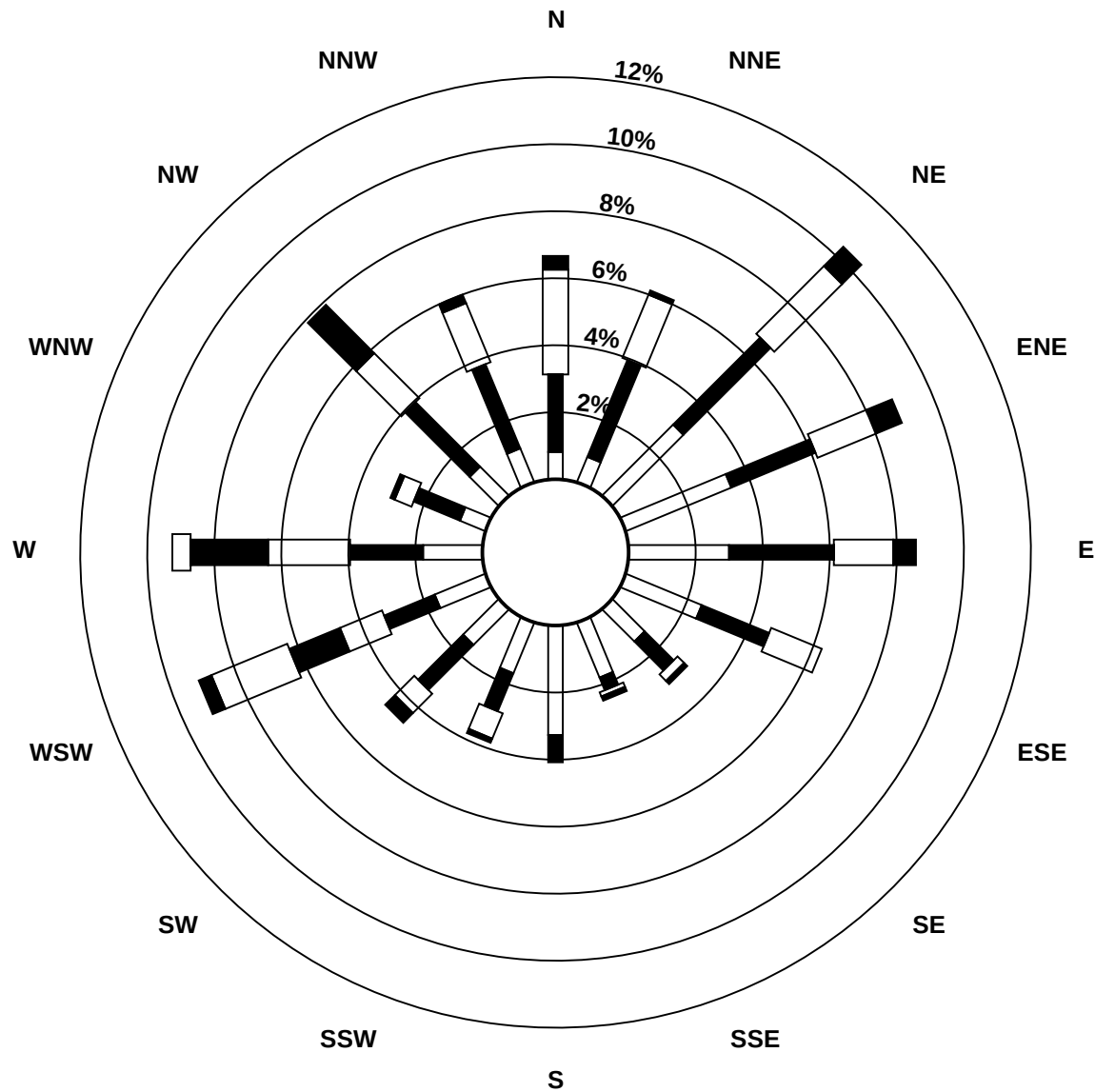
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - May 2014

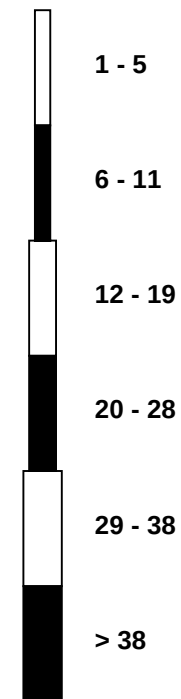
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	4	3	2	4	6	2	3	3	7	9	7	22	22	27	27	10	19	22	30	22	16	9	10	12	9.6	29.8
Dir	121	120	110	38	56	74	66	71	201	234	246	277	245	264	271	239	205	216	240	241	236	242	243	256	243	240
24 Spd	18	23	13	7	9	7	12	18	16	14	15	14	13	11	9	9	16	13	16	8	5	2	2	5	10.0	23.3
Dir	261	260	253	263	288	294	276	280	294	304	293	295	307	288	272	275	271	290	324	332	6	86	119	64	286	260
25 Spd	4	4	3	4	4	1	3	3	4	4	4	15	10	8	9	6	10	5	2	8	17	12	11	11	3.0	17.3
Dir	68	44	60	51	58	2	36	245	233	205	171	150	173	162	134	319	345	358	330	47	75	78	49	49	80	75
26 Spd	8	3	4	5	4	6	5	9	6	9	6	5	6	8	6	6	7	4	4	6	7	0	1	6	2.5	9.5
Dir	61	147	93	48	35	33	4	19	31	164	145	111	118	134	131	47	59	203	251	270	343	25	61	35	71	19
27 Spd	5	8	2	1	1	3	1	4	6	2	7	14	11	8	23	21	15	12	12	14	9	7	8	8	1.5	23.1
Dir	209	251	64	158	273	266	267	289	319	96	45	57	213	204	48	49	53	201	228	257	284	312	324	318	331	48
28 Spd	2	1	4	5	2	4	1	5	8	6	10	12	10	15	14	14	14	19	20	15	13	8	8	7	7.6	19.7
Dir	207	174	63	39	10	341	40	39	47	94	66	52	36	58	68	106	107	90	126	125	112	96	90	86	84	126
29 Spd	8	7	6	2	4	3	2	4	4	2	5	7	8	7	5	18	23	22	19	16	15	13	6	4	5.3	23.2
Dir	74	70	84	86	33	42	315	271	247	276	274	287	338	28	313	233	240	253	264	248	263	258	271	287	266	240
30 Spd	5	1	2	3	9	7	8	11	21	21	20	21	21	11	17	10	12	10	16	4	9	2	2	2	7.3	21.4
Dir	277	169	180	236	277	279	269	266	269	278	283	272	262	322	237	206	207	306	39	322	215	132	100	99	268	272
31 Spd	3	2	4	2	2	2	2	5	6	8	9	4	9	13	15	10	7	3	2	10	11	22	6	8	1.3	21.6
Dir	93	75	74	94	94	87	85	178	191	217	228	211	217	272	310	284	248	251	63	212	359	38	95	177	249	38
Spd	2.9	2.8	3.1	2.7	2.6	3.4	3.2	3.1	3.8	3.1	2.0	2.6	4.3	4.6	5.0	3.7	3.9	4.9	4.2	3.4	3.0	3.4	3.3	3.7	Diurnal Average	
Dir	37	46	45	20	359	349	340	320	298	288	305	293	276	279	283	285	288	281	301	295	334	13	40	44	Diurnal Maximum	
Spd	18.4	23.3	20.7	17.2	20.7	23.8	25.8	25.3	31.5	32.0	33.4	40.8	35.5	35.8	41.7	38.7	35.4	34.8	36.0	27.1	27.4	23.0	24.0	21.6	Diurnal Maximum	
Dir	261	260	13	313	324	328	319	318	265	263	265	258	244	256	244	252	257	256	254	257	276	267	267	49		
Maximum Speed Value: 42 km/h on May 14 15:00																								Hours in Service: 744		
Maximum Daily Speed Average: 21.0 km/h on May 21																								Hours of Data: 744		
Maximum Diurnal Speed Average: 5.0 km/h at hour 15																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on May 26 22:00																								Percent Operational Time: 100.0		
Minimum Daily Speed Average: 1.1 km/h on May 26																										
Minimum Diurnal Speed Average: 2.0 km/h at hour 11																										
Monthly Average Velocity: 2.41 km/h 321.9 deg																										
Speed Percentiles: P ₁ = 0.9 P ₁₀ = 2.5 Q ₁ = 4.7 Median = 8.6 Q ₃ = 14.4 P ₉₀ = 21.8 P ₉₉ = 35.2																										
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	13		34		36		5		0		0		88													
NorthEast	34		52		40		10		0		0		136													
East	43		41		31		10		0		0		125													
SouthEast	23		17		6		2		0		0		48													
South	34		14		2		1		0		0		51													
SouthWest	25		27		15		10		6		1		84													
West	19		27		26		25		17		2		116													
NorthWest	12		34		33		17		0		0		96													
Total	203		246		189		80		23		3		744													

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - May 2014

Maximum Speed: 42 km/h on May 14 15:00																								Maximum Daily Speed Average: 21.7 km/h on May 21										Hours in Service: 744	
Minimum Speed: 1 km/h on May 13 07:00																								Minimum Daily Speed Average: 6.5 km/h on May 26										Hours of Data: 744	
Maximum Diurnal Speed Average: 16.0 km/h at hour 15																								Minimum Diurnal Speed Average: 7.1 km/h at hour 5										Hours of Missing Data: 0	
Monthly Average Speed: 11.38 km/h																								Percentiles: P ₁ = 2.3 P ₁₀ = 3.6 Q ₁ = 5.7 Median = 9.6 Q ₃ = 15.0 P ₉₀ = 22.1 P ₉₉ = 35.6										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-May	12	11	10	9	8	9	11	13	12	11	11	10	12	12	14	15	13	12	13	12	12	18	23	17	12.5	23.5									
2-May	17	15	21	15	14	15	15	18	18	19	16	14	13	15	17	16	16	16	16	19	20	15	14	16	16.3	20.9									
3-May	18	15	13	16	16	16	19	21	19	20	23	22	24	22	22	22	23	23	19	15	10	8	8	13	17.9	23.7									
4-May	17	15	14	12	11	6	8	10	14	18	16	13	10	8	10	9	8	6	5	3	3	4	4	5	9.6	18.1									
5-May	4	3	4	6	5	3	3	6	17	24	24	22	25	24	23	25	22	23	24	24	18	15	11	10	15.2	25.0									
6-May	11	6	9	10	11	8	7	6	4	6	6	5	6	7	7	7	7	7	6	5	8	8	7	7	7.1	11.4									
7-May	7	7	6	5	3	3	2	4	5	9	16	14	9	9	6	12	10	11	10	8	8	9	13	19	8.6	18.9									
8-May	14	9	8	3	3	6	4	3	3	5	5	6	10	10	14	11	9	9	14	12	20	22	21	22	10.0	22.5									
9-May	11	15	15	13	13	11	3	4	4	8	14	8	9	12	11	14	12	12	12	13	13	16	15	12	11.2	15.7									
10-May	7	8	10	10	6	5	7	10	10	9	12	12	15	14	14	15	14	14	13	11	8	6	3	5	10.0	15.2									
11-May	8	9	9	7	5	4	4	3	3	3	4	6	8	11	10	9	8	9	7	6	6	7	8	11	7.0	11.2									
12-May	11	9	6	5	4	4	3	4	6	9	14	16	13	11	8	13	12	8	12	5	6	5	10	15	8.8	15.9									
13-May	15	13	8	5	3	2	1	3	3	4	5	9	8	6	6	7	6	10	6	8	15	18	9	10	7.5	17.9									
14-May	13	11	7	4	3	2	3	4	10	9	20	15	30	36	42	39	36	35	36	27	28	23	24	21	19.9	42.2									
15-May	19	11	14	17	21	24	26	25	27	26	23	22	19	17	15	16	14	11	9	8	3	4	4	3	15.7	27.2									
16-May	2	3	3	6	8	8	11	14	13	15	14	12	9	7	7	8	6	6	7	6	4	4	6	10	7.9	14.7									
17-May	11	8	6	8	12	9	9	8	4	6	11	15	16	16	15	17	17	16	12	13	13	12	8	7	11.2	17.4									
18-May	8	8	7	12	4	12	6	7	11	9	5	10	6	3	10	24	13	13	8	10	11	7	5	5	8.9	24.5									
19-May	5	5	4	3	3	6	2	6	6	6	5	7	22	23	19	9	9	12	14	15	14	11	5	9	9.2	22.8									
20-May	9	5	7	12	10	6	9	14	22	32	33	37	35	32	30	29	29	32	27	14	6	3	3	4	18.2	36.9									
21-May	6	3	4	11	6	17	23	25	32	32	34	41	36	32	34	33	32	30	26	20	18	12	7	8	21.7	41.0									
22-May	4	3	5	4	5	5	4	4	4	5	6	6	9	20	25	20	13	23	23	23	14	6	4	5	9.9	25.4									
23-May	4	4	2	5	6	3	4	4	7	9	8	22	24	27	27	11	19	22	30	22	16	9	10	12	12.9	30.4									
24-May	19	23	13	8	11	7	12	18	17	15	16	16	14	12	10	10	17	14	16	8	6	3	3	5	12.2	23.4									
25-May	4	4	3	4	4	3	3	4	5	5	5	16	11	11	10	11	11	7	4	8	17	12	11	11	7.7	17.4									
26-May	10	5	4	5	5	6	6	10	8	10	7	6	7	9	8	7	7	5	4	6	8	3	2	8	6.5	9.8									
27-May	5	8	4	3	2	3	2	5	6	5	8	20	11	9	25	21	16	12	12	14	9	7	8	8	9.4	24.9									
28-May	3	2	4	5	3	5	3	6	9	7	11	13	11	15	15	15	15	20	20	15	13	8	8	7	9.7	19.8									
29-May	8	7	6	3	5	5	4	4	5	3	6	10	9	8	11	19	24	22	20	16	15	13	7	5	9.8	23.5									
30-May	6	4	3	4	9	7	8	11	21	21	20	22	22	15	18	10	13	21	16	11	9	3	3	2	11.7	21.8									
31-May	3	3	4	3	3	2	3	5	6	9	10	6	22	17	15	11	7	5	4	12	15	22	10	9	8.4	21.7									
9.3 8.1 7.5 7.4 7.1 7.1 7.2 9.1 10.8 11.9 13.2 14.5 15.3 15.2 16.0 15.7 14.8 15.0 14.4 12.6 11.9 10.1 8.9 9.7																									Diurnal Average										
18.8 23.4 20.9 17.3 20.9 24.0 25.9 25.4 31.6 32.3 33.7 41.0 35.9 36.3 42.2 39.1 35.8 35.0 36.1 27.2 28.3 23.1 24.1 21.8																									Diurnal Maximum										
All monthly, daily, and diurnal averages have been calculated using scalar methods																																			

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - May 2014

Maximum Value: 94.8 deg on May 18 05:00																		Hours in Service: 744							
Minimum Value: 2.3 deg on May 9 05:00																		Hours of Data: 744							
Percentiles: P ₁ = 3.0 P ₁₀ = 6.3 Q ₁ = 9.1 Median = 18.1 Q ₃ = 36.8 P ₉₀ = 61.8 P ₉₉ = 85.3																		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-May	20	15	10	11	11	12	9	9	11	18	27	25	28	23	16	21	18	16	18	17	8	14	3	6	28.1
2-May	7	8	8	9	9	11	8	13	11	14	15	19	28	15	16	17	16	13	10	7	5	4	5	24	27.7
3-May	4	6	4	4	3	4	6	7	8	10	9	10	12	11	11	12	13	12	10	9	6	10	27	6	26.8
4-May	9	4	13	8	20	33	28	12	14	10	21	33	46	64	41	64	65	56	35	48	20	38	21	6	64.6
5-May	12	22	28	9	17	56	52	21	16	7	10	10	12	10	12	12	11	11	11	7	7	4	8	8	56.4
6-May	8	32	18	9	3	18	14	46	44	67	78	56	66	75	72	76	50	61	30	40	8	13	7	9	78.4
7-May	4	8	6	14	34	28	71	21	19	16	11	20	30	54	92	21	39	28	15	11	16	34	10	3	91.8
8-May	4	15	19	60	84	60	64	65	87	30	44	60	35	56	35	59	43	51	11	7	7	3	6	7	86.7
9-May	19	22	8	4	2	5	78	72	60	69	26	66	59	25	39	36	39	30	17	12	6	8	9	8	78.0
10-May	11	55	11	26	42	85	29	70	24	52	28	30	25	37	29	29	29	21	20	9	8	5	89	15	88.9
11-May	10	6	3	28	19	77	72	29	44	41	56	69	71	46	54	92	31	54	17	24	15	10	5	6	92.4
12-May	4	5	41	49	59	74	46	44	16	37	27	20	59	71	58	41	19	61	9	8	6	8	14	3	74.2
13-May	3	4	6	32	15	28	52	19	45	32	40	29	61	88	77	75	80	22	10	27	7	7	32	11	88.4
14-May	3	4	10	74	58	64	31	34	12	13	8	9	19	9	9	8	9	6	4	5	14	6	3	3	74.1
15-May	15	7	7	7	9	7	6	6	8	7	9	8	9	9	8	10	16	20	20	16	26	7	12	16	25.7
16-May	68	42	16	7	5	6	7	6	7	13	14	16	21	47	73	41	55	53	28	19	12	18	6	8	72.7
17-May	5	12	19	8	9	9	9	16	51	61	32	21	32	22	21	18	11	7	8	27	11	32	19	69	69.1
18-May	17	16	50	8	95	39	28	46	34	42	43	27	26	85	33	10	22	18	9	9	13	87	20	15	94.8
19-May	15	9	72	54	68	11	43	22	19	18	55	51	18	9	25	87	31	18	9	8	8	4	16	15	86.8
20-May	30	14	36	9	7	20	17	8	11	8	10	7	11	11	14	12	11	7	5	9	15	40	16	62	62.1
21-May	20	49	62	6	86	4	7	6	6	8	8	7	8	10	10	11	12	9	10	7	4	8	8	19	86.3
22-May	75	30	29	24	33	17	9	38	37	26	13	20	27	18	9	6	13	9	5	6	3	70	33	15	74.5
23-May	38	45	47	68	22	64	39	51	19	23	34	9	20	5	4	25	8	6	12	3	4	9	7	12	68.2
24-May	7	6	9	27	39	20	11	9	19	16	20	22	21	31	30	32	24	14	9	14	31	32	67	11	66.8
25-May	7	16	11	11	14	70	37	32	44	18	42	13	29	49	31	86	33	57	79	30	6	5	15	13	86.1
26-May	47	43	25	32	23	12	14	12	59	24	52	42	48	25	39	37	23	34	39	7	32	94	69	56	93.8
27-May	22	17	61	81	58	63	79	34	25	86	37	61	8	25	46	7	33	14	15	8	14	7	5	13	85.8
28-May	29	73	19	8	52	48	73	24	26	43	18	17	22	9	21	19	25	19	7	5	5	8	7	12	73.2
29-May	9	9	20	76	34	62	59	16	40	81	54	50	34	61	65	19	9	10	9	8	12	6	29	58	81.2
30-May	33	68	57	30	8	9	9	35	9	12	11	11	19	45	16	25	17	66	7	69	11	49	37	25	68.6
31-May	30	61	13	16	20	14	32	17	14	18	22	59	66	69	20	28	21	66	78	41	57	7	49	32	78.4
74.5 73.2 72.3 81.2 94.8 84.8 79.4 72.5 86.7 85.8 78.4 69.0 71.1 88.4 91.8 92.4 79.8 65.9 79.0 68.6 57.4 93.8 88.9 69.1																									

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

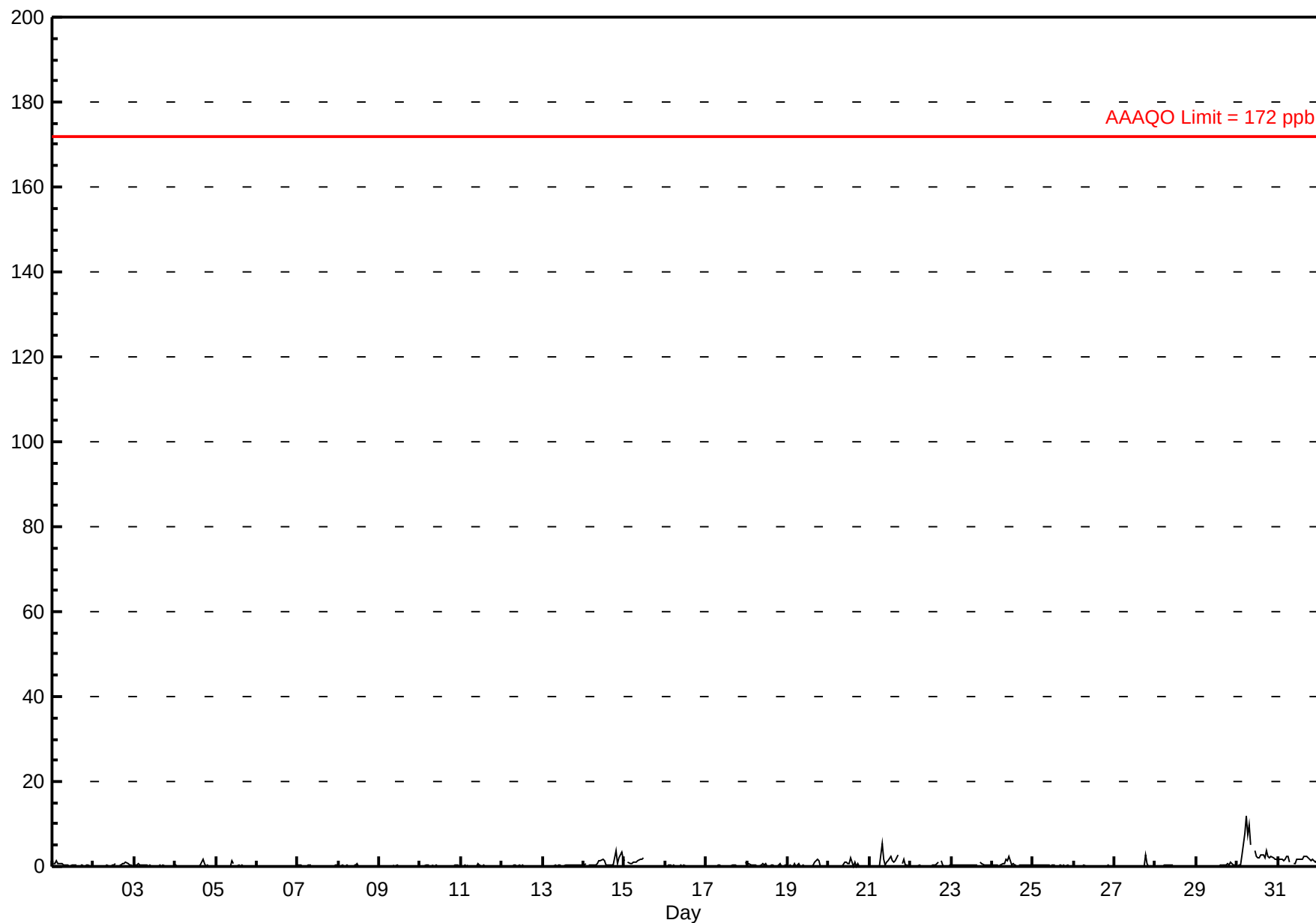
Sulphur Dioxide (SO₂) - ppb

Valleyview - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.8 ppb on May 30 06:00 Maximum Daily Average: 3.4 ppb on May 30																				Hours in Service: 744 Hours of Data: 686 Hours of Missing Data: 58 Hours of Calibration: 35 Percent Operational Time: 96.9							
Minimum Value: 0 ppb on May 2 02:00 Maximum Diurnal Average: 0.8 ppb at hour 8 Monthly Average: 0.43 ppb										Minimum Daily Average: 0.0 ppb on May 6 Minimum Diurnal Average: 0.2 ppb at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 1.3 P ₉₉ = 3.5																	
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-May	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	1.3
2-May	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	1	1	1	1	0	0	0	0	0.3	1.1
3-May	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
4-May	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	0.2	1.8
5-May	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	0.1	1.2
6-May	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	0.1
7-May	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	0.2	0.5
8-May	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
9-May	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	0.3
10-May	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-May	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
12-May	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	0.5
13-May	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	0.2	0.5
14-May	0	1	A	0	0	0	0	0	1	1	2	2	2	0	0	0	0	0	2	4	1	2	3	2	1.0	3.7	
15-May	1	A	1	1	1	1	1	1	1	2	2	2	C	C	C	C	0	0	0	0	0	0	0	0	0	0.7	2.0
16-May	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	0.4	
17-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.1	0.9	
18-May	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	A	0	0	0	0.3	0.6
19-May	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	2	1	0	A	0	0	0	0	0.3	1.7
20-May	0	0	0	0	0	0	0	0	0	1	1	1	1	2	0	1	0	1	0	A	0	0	0	0	0	0.3	1.9
21-May	0	0	0	0	0	0	0	5	2	0	1	1	2	1	1	1	2	3	A	1	2	0	0	0	0	1.0	5.4
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0.2	1.5
23-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0.3	1.0
24-May	0	0	0	0	0	0	1	1	2	1	2	0	1	0	0	A	0	0	0	0	0	0	1	0	0	0.5	2.3
25-May	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	0.3	0.5
26-May	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	0.3
27-May	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	3	1	0	0	0	0	0	0.2	2.6
28-May	0	0	0	0	0	0	0	0	0	0	0	A	0	P	P	P	P	P	P	P	P	P	P	P	P	--	0.5
29-May	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	0	1	0	1	1	0	0	0	--	1.2
30-May	0	0	0	3	8	12	7	10	5	A	4	2	2	2	3	3	2	4	2	2	2	2	2	2	2	3.4	11.8
31-May	1	2	2	1	2	2	2	1	A	1	1	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1.6	2.4
0.2 0.2 0.3 0.3 0.5 0.7 0.5 0.8 0.5 0.4 0.5 0.5 0.4 0.4 0.3 0.4 0.5 0.6 0.5 0.5 0.4 0.3 0.3 0.3																								Diurnal Average			
1.5 1.6 1.6 2.7 7.7 11.8 7.5 9.7 5.0 1.5 3.9 2.2 2.3 2.1 2.7 2.8 2.4 3.8 2.6 3.7 2.3 2.2 3.2 1.8																								Diurnal Maximum			
C - Calibration P - Power Failure 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
Valleyview - May 2014



Hourly Maximums

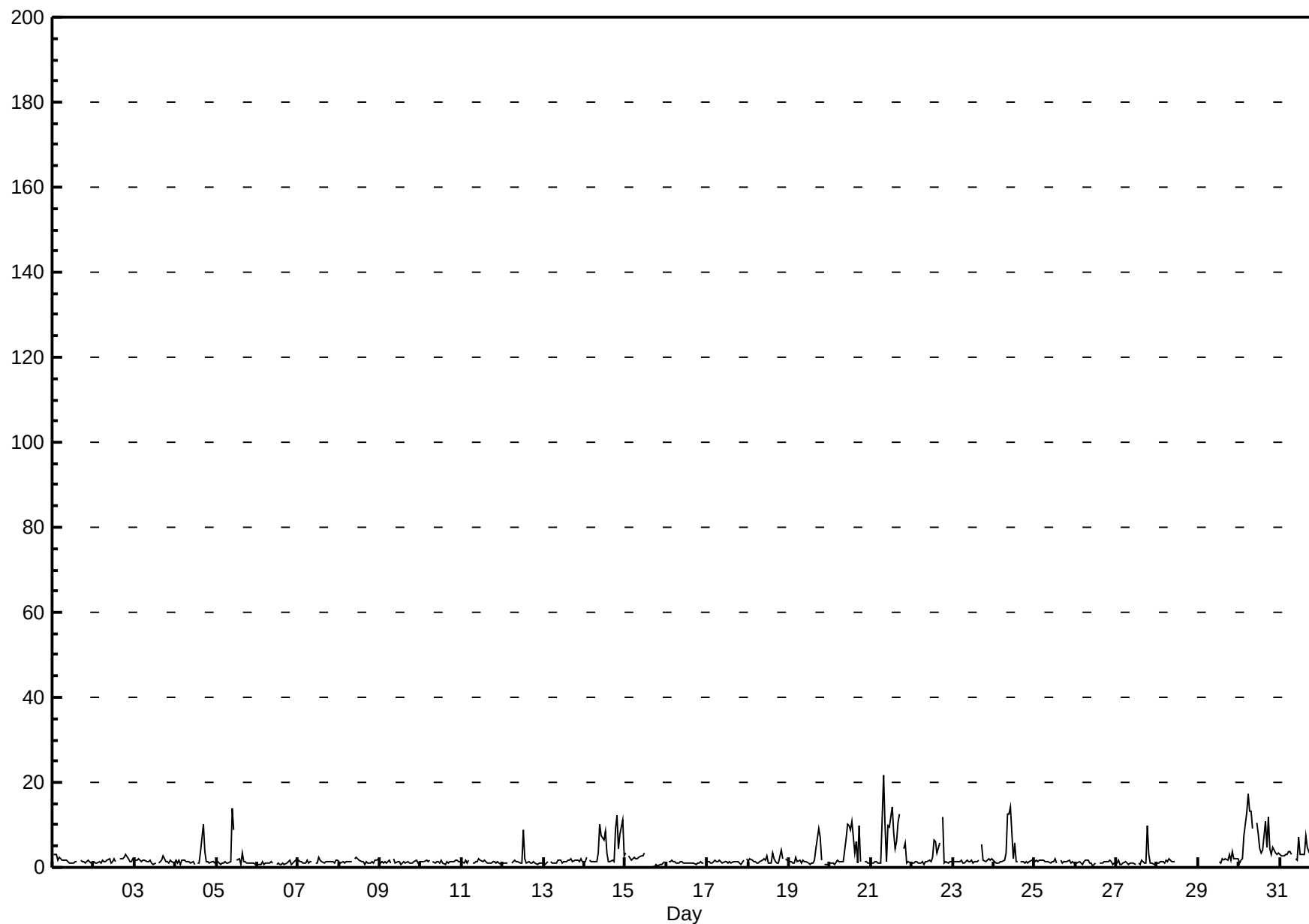
Sulphur Dioxide (SO₂) - ppb

Valleyview - May 2014

Maximum Value: 21.7 ppb on May 21 08:00																				Maximum Daily Average: 6.8 ppb on May 30					Hours in Service: 744	
Minimum Value: 0 ppb on May 15 18:00																				Minimum Daily Average: 1.0 ppb on May 6					Hours of Data: 686	
Maximum Diurnal Average: 3.2 ppb at hour 11																				Minimum Diurnal Average: 1.4 ppb at hour 2					Hours of Missing Data: 58	
Monthly Average: 2.14 ppb																				Percentiles: P ₁ = 0.6 P ₁₀ = 0.9 Q ₁ = 1.1 Median = 1.3 Q ₃ = 1.8 P ₉₀ = 3.6 P ₉₉ = 13.0					Hours of Calibration: 35	
																									Percent Operational Time: 96.9	
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-May	3	3	3	2	3	2	2	2	2	1	1	1	1	2	1	A	2	1	1	1	1	2	1	1	1.6	3.0
2-May	1	1	1	1	1	2	2	1	1	2	1	1	2	2	A	2	2	2	2	3	2	1	1	2	1.7	2.9
3-May	2	2	2	2	1	2	2	1	1	2	1	1	1	A	1	2	2	3	1	1	1	2	1	1	1.4	2.6
4-May	2	1	2	1	2	2	1	1	1	1	1	1	A	1	1	4	10	4	1	1	1	1	1	1	1.9	10.2
5-May	2	1	1	1	1	1	1	1	1	14	9	A	2	2	1	3	1	1	1	1	1	1	1	1	2.1	13.9
6-May	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	2	1	1.0	1.6
7-May	2	1	1	1	1	2	1	2	1	A	1	1	2	2	1	1	1	1	1	1	1	1	2	2	1.4	2.3
8-May	1	1	1	1	1	1	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	1.4	2.4
9-May	1	1	1	1	1	2	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.2	2.1
10-May	1	1	1	2	1	2	A	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	1	1	1.3	1.8
11-May	1	1	2	1	2	A	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1.3	2.0
12-May	1	1	1	1	A	1	1	2	1	1	1	1	9	2	1	1	1	1	1	1	1	1	1	1	1.5	8.8
13-May	1	1	1	A	1	1	1	1	2	2	2	1	1	1	2	2	2	1	2	2	2	1	2	1	1.4	2.1
14-May	1	2	A	2	1	1	2	1	3	10	8	6	8	3	1	1	2	1	9	12	4	8	11	3	4.5	12.3
15-May	4	A	3	2	2	2	2	2	3	3	3	C	C	C	C	0	0	1	0	1	1	1	1	1	1.8	3.5
16-May	A	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.7
17-May	1	1	1	1	2	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	2	A	2	1.3	2.1
18-May	1	2	2	1	1	1	1	1	2	2	2	3	1	1	3	2	1	1	1	4	2	A	2	2	1.7	3.9
19-May	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	2	5	9	7	2	A	1	1	1	1.9	9.0
20-May	1	1	1	1	2	1	1	1	1	7	10	10	9	11	3	6	1	10	1	A	1	1	1	1	3.7	11.0
21-May	1	1	1	1	1	1	1	22	10	1	10	10	14	8	4	6	11	13	A	4	6	1	1	1	5.7	21.7
22-May	1	1	1	1	1	1	1	1	1	1	2	1	2	6	6	3	6	A	12	1	1	1	1	1	2.5	11.9
23-May	1	1	1	2	1	2	1	1	2	2	1	2	1	1	1	2	A	5	2	1	2	2	2	2	1.6	5.3
24-May	2	1	1	1	1	1	2	3	12	13	14	2	6	1	1	A	1	1	1	1	1	2	2	2	3.2	14.3
25-May	1	2	1	2	2	2	1	1	1	1	1	1	2	1	A	2	1	1	1	1	2	1	1	1	1.4	1.9
26-May	1	1	1	1	1	1	2	2	1	1	0	1	1	A	1	1	1	1	1	1	2	1	1	1	1.1	1.7
27-May	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	10	3	1	1	1	1	1.5	9.8
28-May	1	1	1	1	1	2	1	2	1	1	1	A	2	P	P	P	P	P	P	P	P	P	P	P	--	2.0
29-May	P	P	P	P	P	P	P	P	P	P	P	P	1	1	2	2	2	2	3	2	4	2	2	2	--	3.8
30-May	1	2	2	8	13	17	13	13	9	A	11	8	4	3	4	11	5	12	5	3	5	4	3	3	6.8	17.5
31-May	3	3	3	3	3	4	4	3	A	2	2	7	3	3	3	8	5	4	3	3	3	3	3	3	3.5	7.6
1.4 1.4 1.4 1.5 1.8 2.0 1.8 2.6 2.5 2.8 3.2 2.6 2.9 2.3 1.8 2.6 2.4 2.9 2.7 2.1 1.8 1.7 1.8 1.5																									Diurnal Average	
3.5 2.9 3.0 7.5 12.9 17.5 13.3 21.7 12.5 13.9 14.3 9.8 14.2 11.0 6.1 10.8 10.6 12.6 11.9 12.3 5.8 7.7 11.2 3.5																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

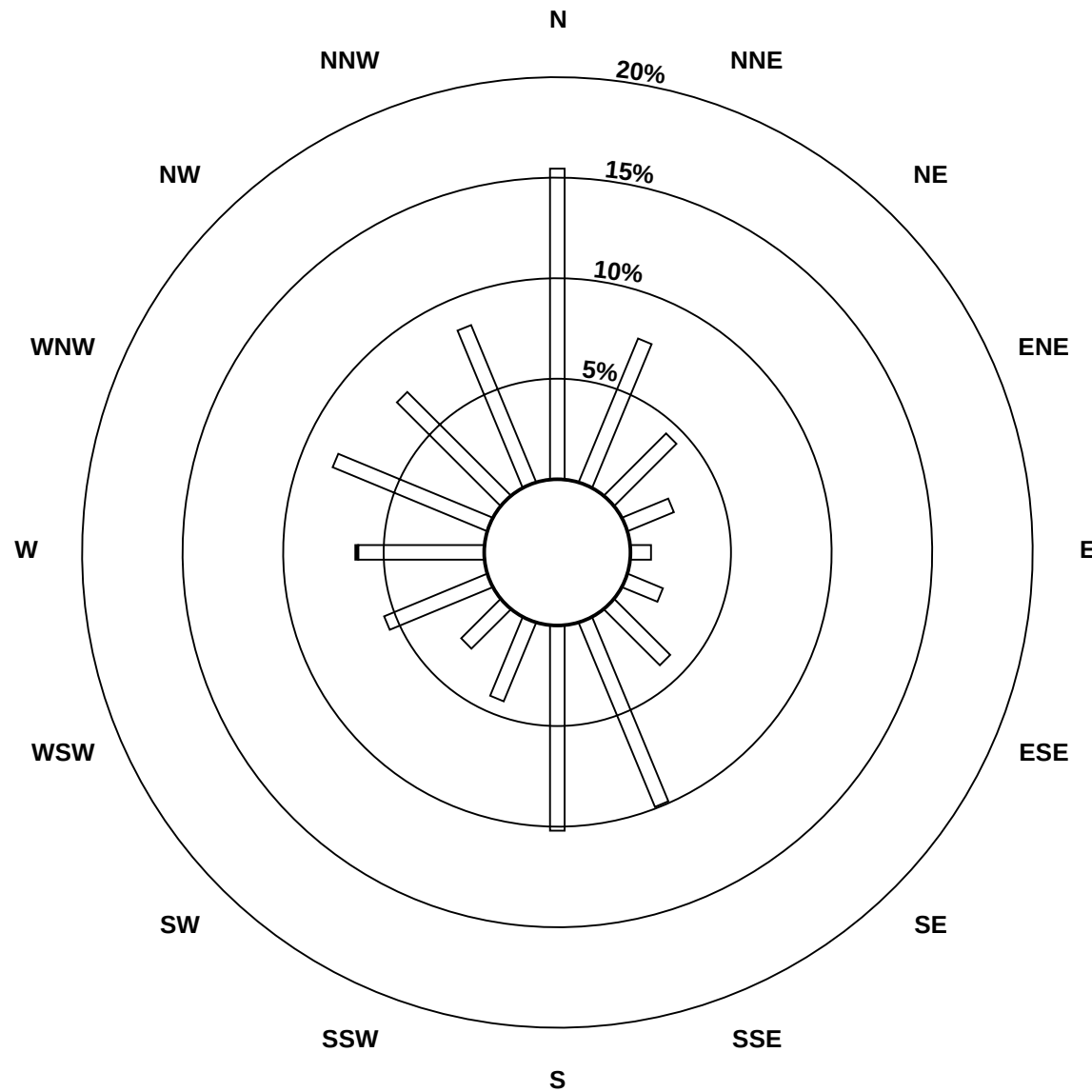
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - May 2014

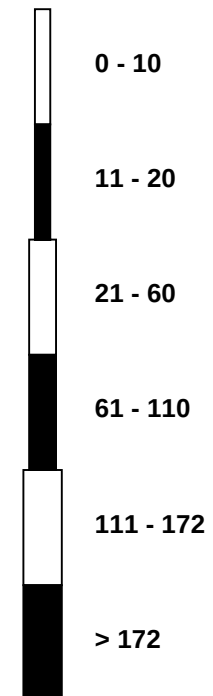


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - May 2014

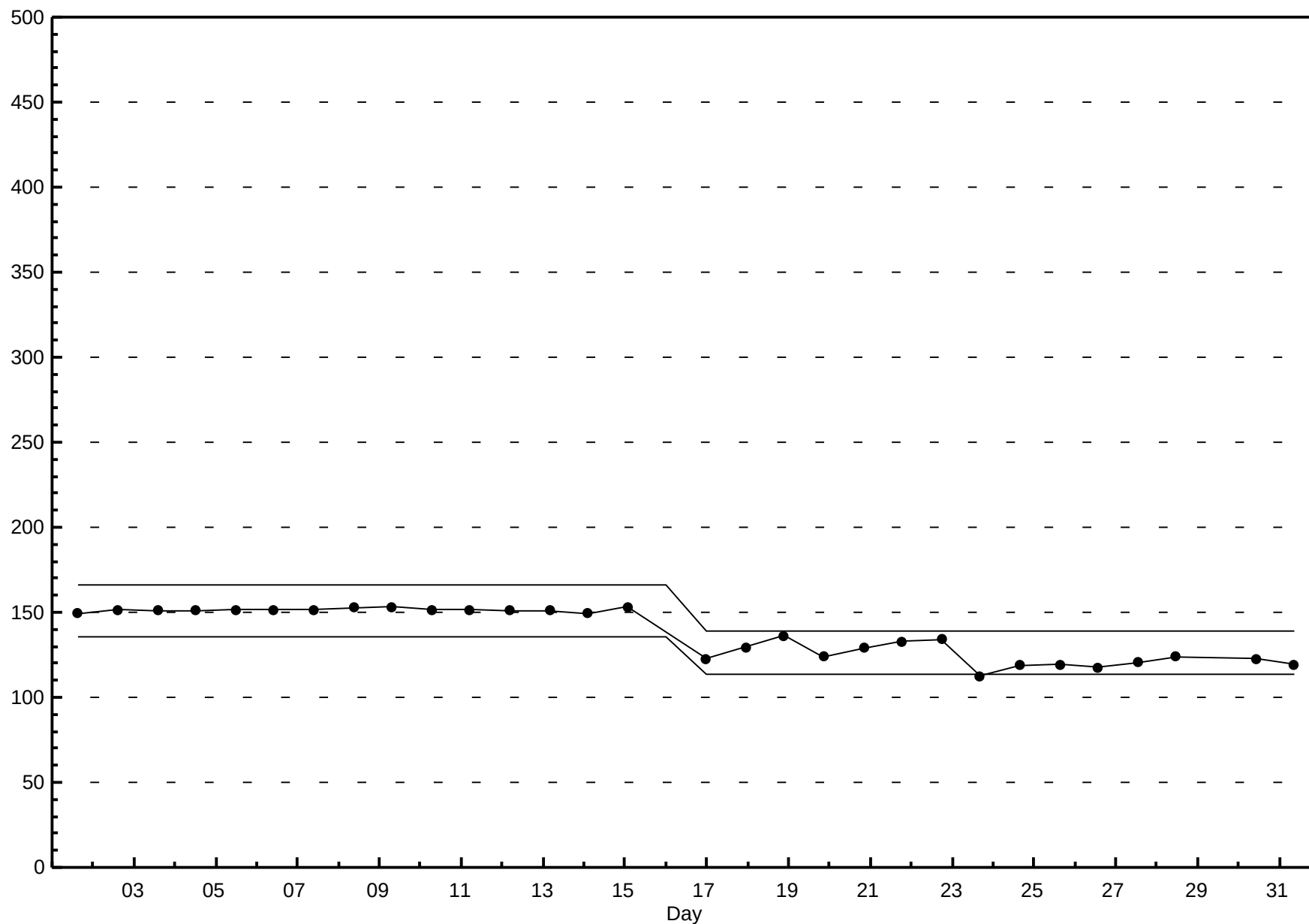


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - May 2014



Hourly Averages

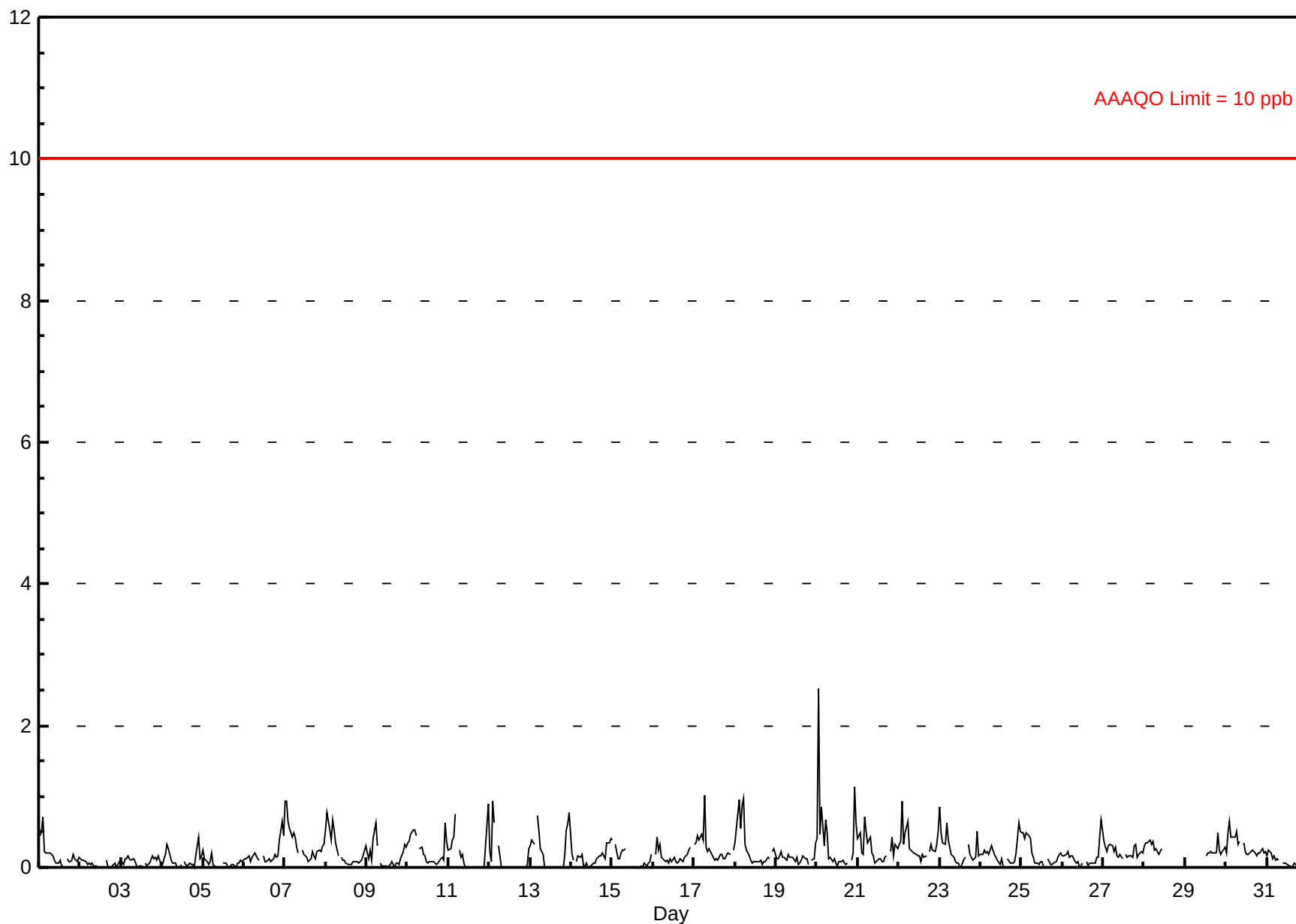
Hydrogen Sulphide (H₂S) - ppb

Valleyview - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																						Hours in Service: 744				
Maximum Value: 2.5 ppb on May 20 02:00																						Maximum Daily Average: 0.4 ppb on May 20		Hours of Data: 683		
Minimum Value: 0 ppb on May 2 11:00																						Minimum Daily Average: 0.0 ppb on May 2		Hours of Missing Data: 61		
Maximum Diurnal Average: 0.4 ppb at hour 3																						Minimum Diurnal Average: 0.1 ppb at hour 14		Hours of Calibration: 38		
Monthly Average: 0.19 ppb																						Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 0.9		Percent Operational Time: 96.9		
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-May	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.7
2-May	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	0.1
3-May	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-May	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-May	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-May	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
7-May	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
8-May	1	1	1	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
9-May	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
10-May	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
11-May	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.9
12-May	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
13-May	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.2	0.8
14-May	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	0.4
15-May	0	A	0	0	0	0	0	0	0	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	--	0.4
16-May	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-May	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	1.0
18-May	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.0
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
20-May	0	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0.4	2.5
21-May	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.7
22-May	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.3	0.9
23-May	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.8
24-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0.2	0.6
25-May	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
26-May	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	0.7
27-May	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
28-May	0	0	0	0	0	0	0	0	0	0	A	0	P	P	P	P	P	P	P	P	P	P	P	P	--	0.4
29-May	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0.5
30-May	0	0	1	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
31-May	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
																								Diurnal Average		
																								Diurnal Maximum		
C - Calibration P - Power Failure 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 - May 2014



Hourly Maximums

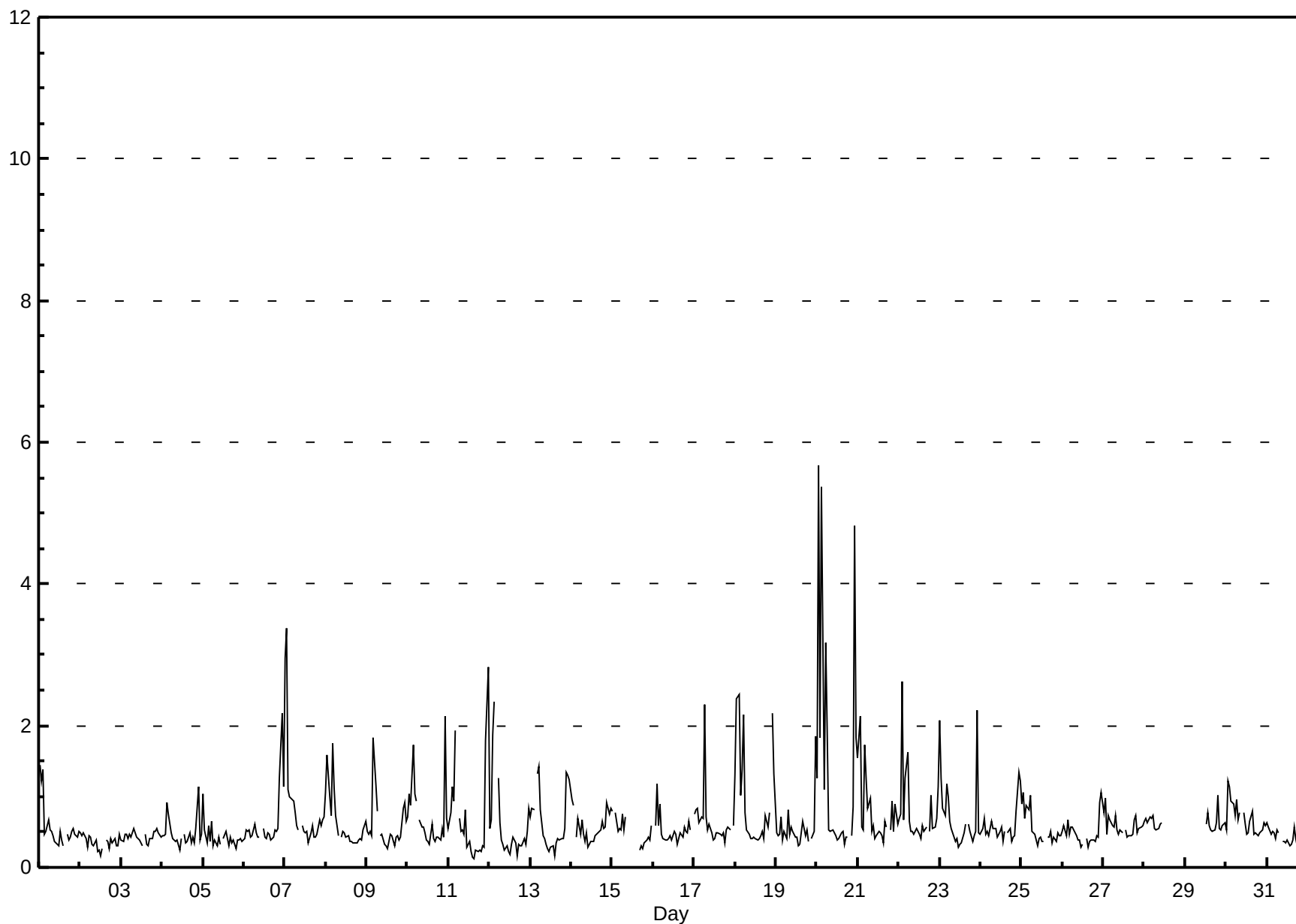
Hydrogen Sulphide (H₂S) - ppb

Valleyview - May 2014

Maximum Value: 5.7 ppb on May 20 02:00																				Maximum Daily Average: 1.5 ppb on May 20										Hours in Service: 744									
Minimum Value: 0 ppb on May 11 16:00																				Minimum Daily Average: 0.4 ppb on May 2										Hours of Data: 683									
Maximum Diurnal Average: 1.1 ppb at hour 2																				Minimum Diurnal Average: 0.4 ppb at hour 12										Hours of Missing Data: 61									
Monthly Average: 0.63 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.0 P ₉₉ = 2.8										Hours of Calibration: 38									
																				Percent Operational Time: 96.9																			
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-May	1	1	1	0	1	1	1	1	0	0	0	0	1	0	0	A	0	0	0	1	1	0	0	1	0.6	1.5													
2-May	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													
3-May	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0.4	0.5													
4-May	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0.5	1.1													
5-May	1	1	0	1	0	1	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0.4	1.0													
6-May	0	1	1	1	0	0	1	0	0	0	A	1	0	0	0	0	0	0	1	1	1	1	2	1	0.6	2.2													
7-May	3	3	1	1	1	1	1	1	1	A	1	1	0	1	0	0	1	0	0	0	1	1	1	1	0.9	3.4													
8-May	1	2	1	1	2	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6	1.8													
9-May	1	0	1	0	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.6	1.8													
10-May	1	1	1	2	1	1	A	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	2	1	0.7	2.1													
11-May	1	1	1	1	2	A	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	0.7	2.8													
12-May	1	1	2	2	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6	2.3													
13-May	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.6	1.4													
14-May	1	1	A	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.6	1.0													
15-May	1	A	1	1	1	1	1	1	1	C	C	C	C	C	C	C	0	0	0	0	0	0	0	1	--	0.8													
16-May	A	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	A	0.5	1.2													
17-May	1	1	1	1	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	A	1	0.6	2.3													
18-May	1	2	2	1	1	2	1	1	0	0	0	0	0	0	0	0	1	0	1	1	1	A	2	1	0.9	2.4													
19-May	0	0	0	1	0	1	0	1	0	1	1	0	0	0	0	0	1	0	1	0	A	0	1	2	0.5	1.9													
20-May	1	6	2	5	1	3	2	1	1	1	0	0	0	0	0	1	0	0	0	A	0	1	5	2	1.5	5.7													
21-May	2	2	1	1	2	1	1	1	0	1	0	0	0	0	0	0	1	1	A	1	1	1	1	1	0.8	2.1													
22-May	1	1	3	1	1	2	1	1	1	0	1	1	0	0	1	1	1	A	1	1	1	1	1	1	0.8	2.6													
23-May	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	A	1	1	0	0	1	2	0	0.7	2.2													
24-May	0	1	1	0	0	0	1	1	1	1	0	1	1	0	1	A	0	1	0	0	0	1	1	1	0.6	1.3													
25-May	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0.5	1.1													
26-May	1	1	0	1	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0.5	1.1													
27-May	1	1	0	1	1	1	1	1	1	0	1	0	A	1	0	0	0	0	1	1	0	1	1	1	0.6	1.0													
28-May	1	1	1	1	1	1	1	1	1	1	1	A	1	P	P	P	P	P	P	P	P	P	P	P	--	0.7													
29-May	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	1	1	1	1	1	1	1	--	1.0													
30-May	1	1	1	1	1	1	1	1	1	A	1	1	0	0	1	1	0	0	0	0	0	1	1	1	0.7	1.2													
31-May	1	1	0	1	0	0	1	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6													
0.9		1.1	0.9	0.9	0.9	0.9	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	1.0	0.9	Diurnal Average														
2.9		5.7	2.6	5.4	1.9	3.2	2.3	1.0	0.8	0.6	0.8	0.6	0.6	0.8	0.7	0.8	0.6	0.6	0.7	1.0	0.9	1.3	4.8	2.8	Diurnal Maximum														
C - Calibration				P - Power Failure				A - Automated Daily Zero Span																															

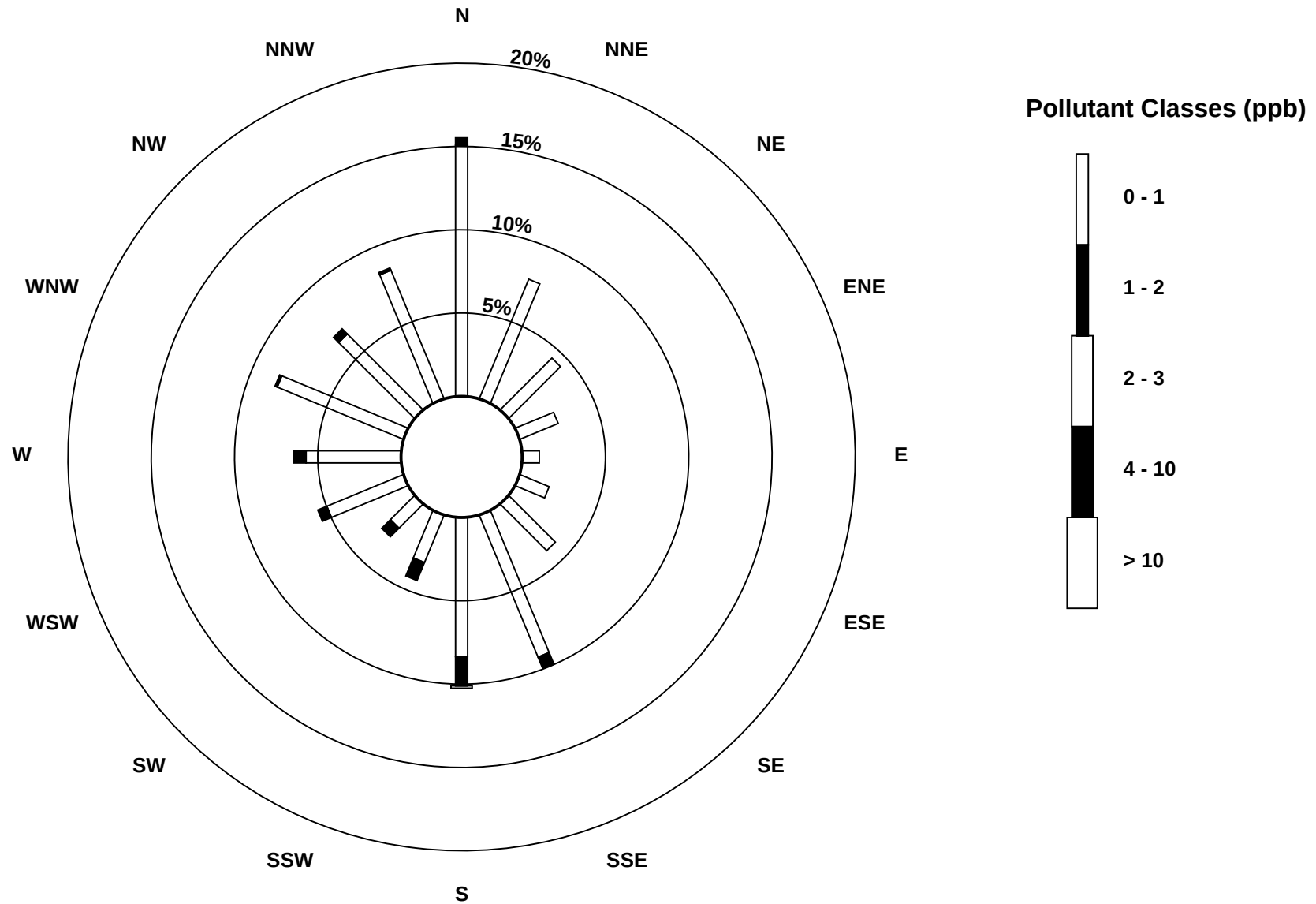
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - May 2014



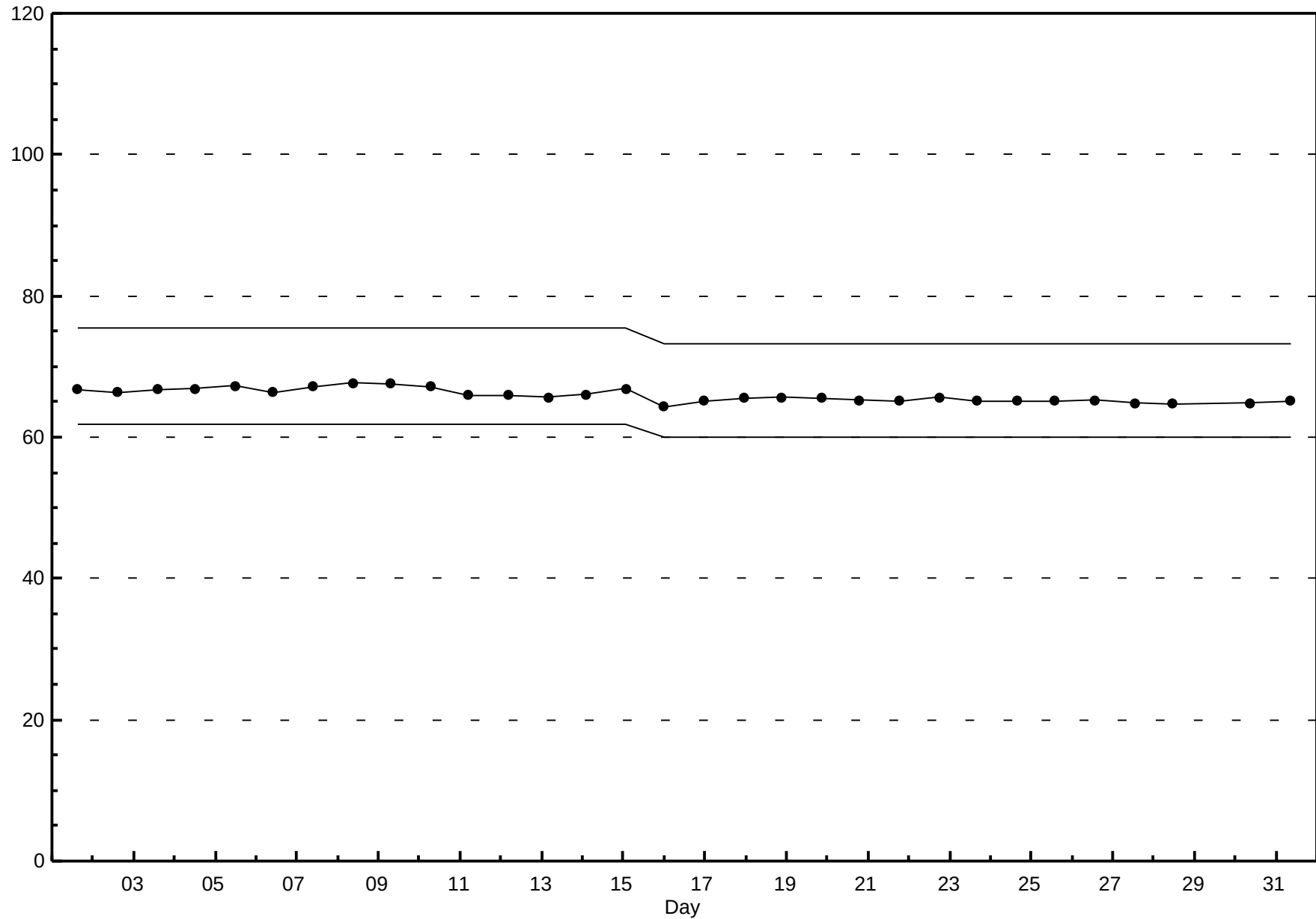
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - May 2014



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - May 2014



Hourly Averages

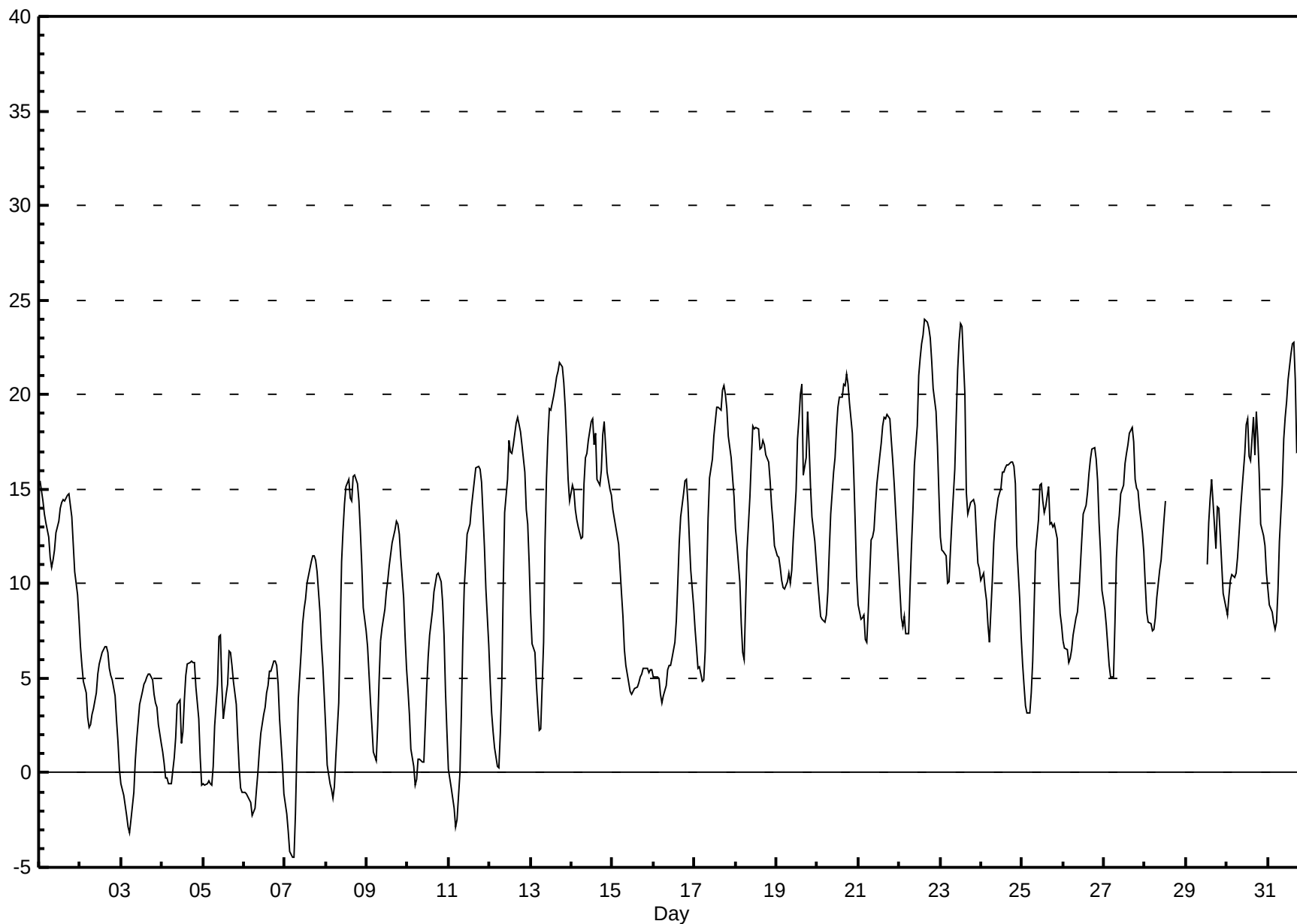
External Temperature (ET) - °C

Valleyview - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 24.0 °C on May 22 16:00 Maximum Daily Average: 16.5 °C on May 22																								Hours in Service: 744 Hours of Data: 721 Hours of Missing Data: 23 Hours of Calibration: 0 Percent Operational Time: 96.9		
Minimum Value: -4 °C on May 7 05:00 Minimum Daily Average: 1.8 °C on May 6 Maximum Diurnal Average: 14.5 °C at hour 16 Minimum Diurnal Average: 4.4 °C at hour 6 Monthly Average: 10.20 °C Percentiles: P ₁ = -2.5 P ₁₀ = 1.2 Q ₁ = 5.2 Median = 10.6 Q ₃ = 15.2 P ₉₀ = 18.2 P ₉₉ = 22.8																										
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-May	15	15	14	14	13	12	11	11	11	12	13	13	14	14	14	14	15	15	14	14	12	11	9	8	12.9	15.5
2-May	7	6	5	4	3	2	3	3	3	4	5	6	6	6	7	7	6	6	5	5	4	3	2	0	4.5	6.7
3-May	-1	-1	-2	-2	-3	-3	-2	-1	1	2	3	4	4	5	5	5	5	5	5	4	4	3	3	2	1.8	5.2
4-May	1	0	0	0	-1	-1	0	1	2	4	4	2	2	4	5	6	6	6	6	6	5	3	1	-1	2.5	5.9
5-May	-1	-1	-1	0	-1	-1	0	2	5	7	7	5	3	4	5	6	6	6	5	4	2	0	-1	-1	2.6	7.3
6-May	-1	-1	-1	-1	-2	-2	-2	-1	0	1	2	3	3	4	5	5	5	6	6	6	5	3	0	-1	1.8	5.9
7-May	-2	-2	-3	-4	-4	-4	-2	1	4	6	8	9	9	10	10	11	11	11	11	11	8	7	6	4	4.8	11.5
8-May	2	0	-1	-1	-1	-1	1	4	7	11	13	14	15	16	15	14	16	16	15	14	13	11	9	8	8.8	15.7
9-May	7	5	4	2	1	1	2	5	7	8	9	10	10	11	12	12	13	13	13	13	11	9	7	6	7.9	13.3
10-May	4	3	1	0	-1	0	1	1	1	1	3	5	6	7	9	10	10	10	11	10	9	7	4	2	4.7	10.6
11-May	0	-1	-1	-2	-3	-2	0	3	7	10	11	13	13	14	15	15	16	16	16	15	14	12	10	7	8.2	16.2
12-May	5	3	2	1	0	0	2	5	10	14	16	18	17	17	17	18	19	18	18	17	16	14	13	11	11.3	18.8
13-May	9	7	6	5	3	2	2	7	12	16	18	19	19	20	20	21	21	22	21	21	19	18	16	14	14.1	21.7
14-May	15	15	14	13	13	12	12	15	17	17	18	19	19	17	18	16	15	16	18	19	17	16	15	15	15.8	18.7
15-May	14	13	13	12	11	9	8	7	6	5	4	4	4	4	5	5	5	5	6	6	6	5	5	5	7.0	13.9
16-May	5	5	5	5	4	4	4	5	5	6	6	6	7	8	10	12	14	15	15	15	14	12	11	9	8.4	15.5
17-May	8	7	6	6	5	5	6	10	13	16	17	18	19	19	19	19	20	20	20	19	18	17	16	15	14.0	20.5
18-May	13	12	10	8	6	6	9	12	15	17	18	18	18	18	17	17	18	17	17	16	15	14	13	12	14.1	18.3
19-May	11	11	11	10	10	10	10	11	10	11	12	15	18	19	20	21	16	17	19	17	15	14	12	11	13.7	20.6
20-May	10	9	8	8	8	8	10	12	14	16	17	18	19	20	20	21	20	21	21	20	18	16	13	10	14.8	21.1
21-May	9	8	8	8	7	7	8	12	12	13	14	15	17	17	18	19	19	19	19	18	17	15	14	11	13.6	19.0
22-May	10	8	8	8	7	7	10	12	14	16	18	21	22	23	23	24	24	23	23	22	20	19	17	15	16.5	24.0
23-May	12	12	12	11	10	10	12	13	16	19	21	23	24	24	20	15	14	14	14	14	14	13	11	11	14.9	23.8
24-May	10	11	10	9	8	7	10	12	13	14	15	15	16	16	16	16	16	16	16	16	15	12	9	7	12.8	16.4
25-May	6	5	4	3	3	4	6	9	12	13	15	15	14	14	14	15	13	13	13	13	12	10	8	8	10.1	15.3
26-May	7	7	7	6	6	6	7	8	9	9	11	12	14	14	15	16	17	17	17	17	15	13	12	10	11.3	17.2
27-May	9	8	7	6	5	5	8	11	13	14	15	15	16	17	17	18	18	18	16	15	15	14	13	12	12.6	18.2
28-May	10	9	8	8	8	8	8	9	11	11	12	13	14	P	P	P	P	P	P	P	P	P	P	P	--	14.4
29-May	P	P	P	P	P	P	P	P	P	P	P	P	11	13	14	16	14	12	14	14	13	11	9	9	--	15.5
30-May	8	9	10	10	10	11	11	13	14	15	17	18	19	17	16	19	17	19	18	16	13	13	12	11	14.0	19.1
31-May	10	9	9	8	8	8	10	12	15	18	19	20	21	22	23	23	21	17	17	18	18	14	13	12	15.1	22.8
7.1 6.4 5.7 5.2 4.5 4.4 5.6 7.4 9.3 10.8 12.0 12.8 13.4 13.8 14.1 14.5 14.3 14.3 14.3 13.8 12.6 10.9 9.4 8.0 Diurnal Average																										
15.5 14.9 14.4 13.7 13.2 12.5 12.5 15.3 16.7 18.8 21.3 22.8 23.8 23.6 23.2 24.0 23.8 23.5 23.0 21.8 20.3 19.1 17.3 14.8 Diurnal Maximum																										
P - Power Failure																										

Hourly Averages

External Temperature (ET) - °C
Valleyview - May 2014



Hourly Averages

Relative Humidity (RH) - %

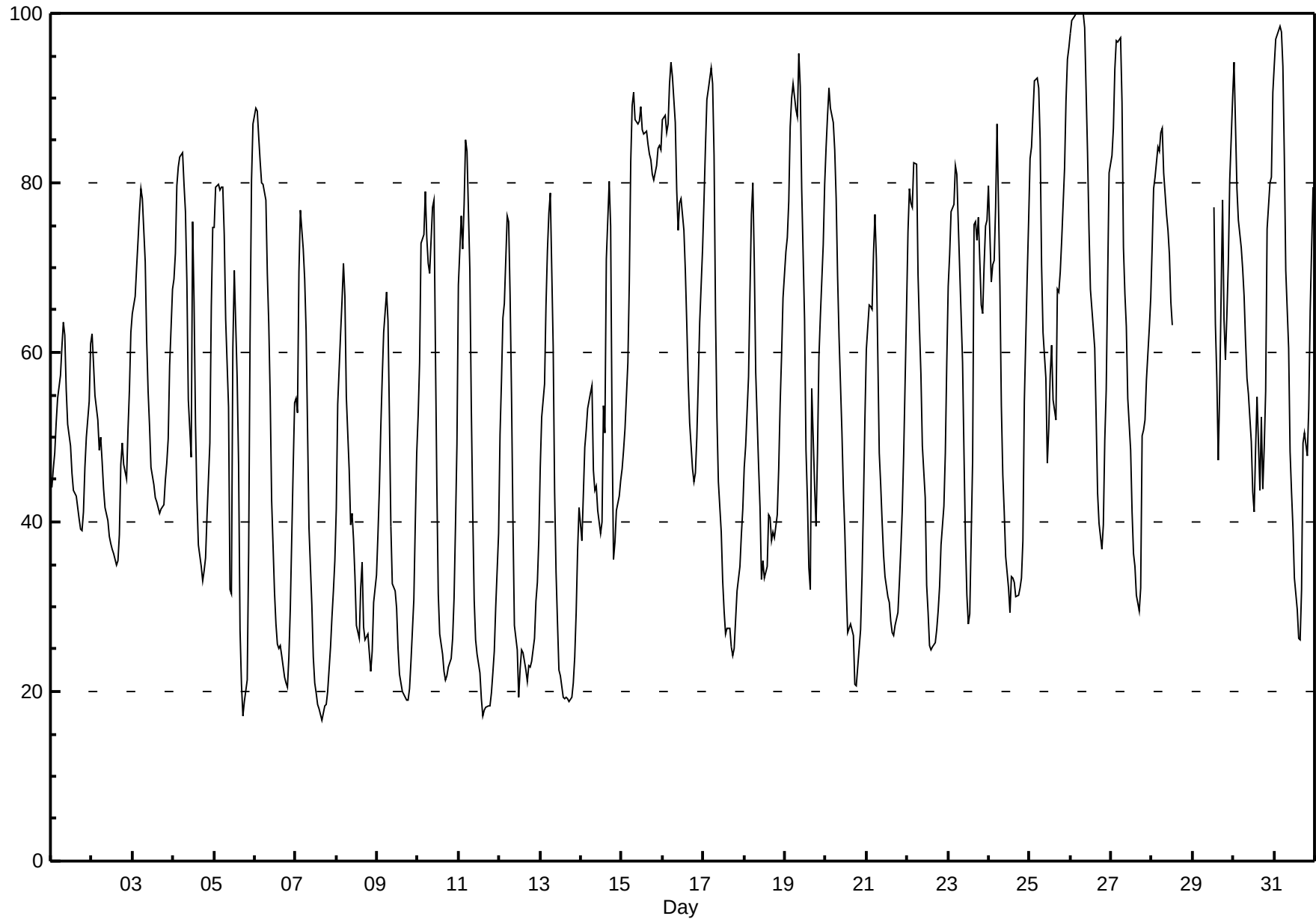
Valleyview - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 100.0 % on May 26 05:00 Maximum Daily Average: 78.8 % on May 15																								Hours in Service: 744 Hours of Data: 721 Hours of Missing Data: 23 Hours of Calibration: 0 Percent Operational Time: 96.9		
Minimum Value: 17 % on May 7 16:00 Maximum Diurnal Average: 79.5 % at hour 6 Monthly Average: 54.52 %												Minimum Daily Average: 36.6 % on May 9 Minimum Diurnal Average: 37.2 % at hour 16 Percentiles: P ₁ = 18.2 P ₁₀ = 25.0 Q ₁ = 35.5 Median = 52.3 Q ₃ = 73.7 P ₉₀ = 85.1 P ₉₉ = 98.9														
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-May	44	46	48	52	55	57	61	64	62	56	52	49	46	44	43	43	40	39	39	41	46	50	54	61	49.7	63.5
2-May	62	59	55	52	48	50	47	44	42	40	38	37	37	36	35	35	39	47	49	47	45	51	56	62	46.4	62.3
3-May	65	67	70	73	77	79	78	71	62	55	51	46	44	43	42	42	41	42	42	45	47	50	58	68	56.6	79.4
4-May	69	72	80	82	83	84	80	77	68	54	48	75	66	51	43	37	35	33	34	36	41	49	65	75	59.8	83.6
5-May	75	79	80	79	79	80	74	64	54	32	32	61	70	57	47	27	21	17	19	21	37	62	80	87	55.5	87.0
6-May	89	88	85	83	80	80	78	69	63	55	43	32	28	26	25	25	24	22	21	21	24	30	46	54	49.6	88.8
7-May	55	53	70	77	72	69	63	51	39	30	24	21	20	18	18	17	18	18	18	20	25	29	32	35	37.1	76.8
8-May	42	54	62	66	70	67	55	46	40	41	38	34	28	26	32	35	28	26	27	25	22	25	30	34	39.6	70.4
9-May	38	44	51	57	62	67	64	52	39	33	32	30	25	22	21	20	19	19	19	20	24	31	40	48	36.6	67.2
10-May	53	59	73	74	79	74	71	69	77	78	61	44	32	27	24	22	21	22	23	24	26	31	40	49	48.0	78.9
11-May	68	76	72	77	85	84	70	54	41	31	26	24	22	19	17	18	18	18	18	20	22	25	30	39	40.6	85.1
12-May	50	57	64	66	76	75	67	55	40	28	25	19	23	25	25	22	21	23	23	24	26	31	33	38	39.0	76.1
13-May	46	52	56	66	72	76	79	61	44	34	28	23	22	19	19	19	19	19	19	21	24	29	37	42	38.6	78.9
14-May	38	43	49	51	53	55	56	46	44	44	41	39	40	54	51	71	80	75	51	36	38	41	43	45	49.3	80.1
15-May	46	48	51	59	68	83	89	91	87	87	87	89	86	86	86	85	83	83	81	80	82	84	84	84	78.8	90.6
16-May	87	88	86	87	92	94	93	87	79	74	78	78	74	70	63	57	52	46	45	46	50	56	63	72	71.6	94.2
17-May	78	84	90	91	93	92	83	65	52	45	39	33	30	27	27	28	25	24	25	28	32	35	38	41	50.2	93.5
18-May	47	49	57	67	76	80	71	58	47	42	33	35	33	35	41	41	38	39	38	41	46	54	60	66	49.7	79.9
19-May	72	73	78	87	90	92	89	88	95	91	79	64	48	43	35	32	56	44	39	48	59	64	73	80	67.5	95.2
20-May	84	88	91	89	87	84	78	69	62	51	44	39	32	27	28	27	27	21	21	23	27	33	42	52	51.1	91.1
21-May	60	66	65	65	72	76	71	48	44	40	36	33	31	31	28	27	27	28	29	33	37	41	48	65	45.9	76.2
22-May	74	79	78	77	82	82	69	63	57	49	43	33	29	25	25	25	26	27	30	32	37	42	48	59	49.7	82.4
23-May	68	72	77	77	82	81	75	70	59	48	38	31	28	29	47	75	75	73	76	66	65	70	75	76	63.9	82.1
24-May	80	68	70	71	77	87	68	54	46	41	36	32	29	34	33	33	31	31	32	33	38	54	69	76	51.0	86.9
25-May	83	84	88	92	92	91	85	70	62	57	47	51	57	61	54	52	68	67	69	73	82	90	95	96	73.6	96.0
26-May	98	99	100	100	100	100	100	100	98	91	84	75	68	63	60	52	43	40	37	40	50	56	68	81	75.1	100.0
27-May	83	86	93	97	97	97	89	72	67	63	55	49	41	36	35	31	29	32	50	51	52	57	63	66	62.2	97.2
28-May	72	79	81	84	84	86	86	81	76	74	72	66	63	P	P	P	P	P	P	P	P	P	P	P	--	86.4
29-May	P	P	P	P	P	P	P	P	P	P	P	P	77	63	57	47	56	78	64	59	64	70	80	90	--	90.0
30-May	94	87	79	76	72	70	67	61	57	55	50	44	41	49	55	44	52	44	49	55	75	80	81	91	63.6	94.2
31-May	94	97	98	99	98	94	83	70	61	48	44	39	33	30	26	26	32	49	51	48	53	65	72	80	62.0	98.5
67.1 69.9 73.2 75.7 78.5 79.5 74.6 65.6 58.8 52.3 46.7 44.2 42.1 39.1 38.1 37.2 38.1 38.2 37.9 38.5 43.2 49.5 56.8 63.7																								Diurnal Average		
97.7 99.2 99.7 100.0 100.0 100.0 100.0 100.0 98.3 91.4 87.2 89.0 86.2 85.8 86.1 84.6 83.4 82.8 81.1 80.3 82.0 89.6 94.6 96.0																								Diurnal Maximum		
P - Power Failure																										

Hourly Averages

Relative Humidity (RH) - %

Valleyview - May 2014



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - May 2014

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	4	3	4	6	6	11	14	10	9	11	11	8	11	15	15	13	11	10	9	7	6	11	13	9	8.8	14.9
Dir	305	279	275	296	305	329	354	359	5	359	350	329	323	333	334	320	308	331	3	350	335	359	8	358	339	334
2 Spd	13	16	15	17	12	11	12	18	14	12	12	14	12	13	14	15	13	15	11	12	11	12	9	7	12.7	17.8
Dir	0	5	4	359	6	353	347	340	340	311	334	344	341	1	340	360	359	358	359	347	359	4	5	2	352	340
3 Spd	7	6	5	5	6	5	5	5	3	5	7	8	8	9	10	13	12	10	8	9	5	3	6	5	5.7	12.9
Dir	8	5	357	9	13	18	18	35	55	78	44	47	45	54	45	37	46	49	62	49	71	129	168	172	44	37
4 Spd	5	2	0	0	1	3	1	1	3	1	2	15	10	5	2	3	4	2	1	2	2	1	1	1	0.6	14.6
Dir	174	345	139	183	173	169	144	3	161	169	142	3	10	5	312	276	270	249	38	211	229	223	161	188	341	3
5 Spd	1	1	3	3	3	2	4	4	5	11	16	21	15	14	15	16	22	27	24	24	22	20	14	13	10.0	26.7
Dir	186	184	172	173	172	170	168	175	182	263	294	323	304	292	312	297	322	332	328	333	338	336	314	316	314	332
6 Spd	13	10	12	9	10	9	14	13	11	10	12	10	12	10	9	7	9	8	7	5	1	1	0	0	7.7	13.5
Dir	325	320	321	318	323	326	339	0	360	3	3	9	356	359	335	341	340	0	7	40	101	164	205	168	346	339
7 Spd	0	0	1	1	1	0	0	2	3	1	2	2	4	3	5	3	4	5	6	6	6	5	3	4	1.4	6.4
Dir	194	180	158	335	335	286	240	153	149	126	173	249	291	255	8	4	34	69	64	62	56	43	14	337	39	56
8 Spd	1	1	1	1	1	0	1	2	3	3	2	3	8	11	11	10	11	12	11	9	10	10	9	8	4.2	12.3
Dir	312	202	187	183	182	231	203	163	146	174	251	349	317	305	19	7	35	16	22	24	18	10	6	18	8	16
9 Spd	7	7	6	4	2	0	1	1	6	12	12	11	12	11	12	9	7	8	7	8	4	5	7	5	6.6	12.5
Dir	17	8	9	338	315	246	300	306	355	11	8	21	17	15	16	6	332	3	13	29	36	33	33	12	11	17
10 Spd	5	3	1	0	1	2	4	12	9	13	13	14	15	12	11	14	12	12	10	4	1	0	0	0	7.3	15.3
Dir	2	5	14	271	311	1	4	13	14	4	0	349	355	3	355	355	8	3	6	19	24	2	258	180	3	355
11 Spd	1	1	1	1	0	0	1	2	2	1	3	1	3	4	9	7	2	4	5	5	3	2	0	1	0.9	9.5
Dir	173	186	191	187	183	193	179	159	144	176	284	38	31	296	326	318	27	30	26	50	76	74	214	218	2	326
12 Spd	1	0	0	0	0	0	0	0	1	0	3	1	5	7	9	5	7	7	9	8	5	4	1	3	2.2	8.7
Dir	165	171	207	199	166	270	220	180	100	325	92	199	245	3	355	360	34	62	44	39	53	65	24	318	30	44
13 Spd	2	2	1	0	0	0	1	1	2	5	5	1	5	5	2	4	3	1	2	0	0	0	1	1	0.2	4.9
Dir	335	324	322	221	190	218	159	133	168	156	152	300	3	31	291	48	1	297	201	203	173	163	358	232	36	152
14 Spd	7	6	2	2	1	1	2	3	6	9	5	7	7	4	8	2	4	5	8	13	10	8	10	10	4.4	12.7
Dir	301	289	158	151	171	170	207	209	246	285	253	258	260	212	171	261	134	154	264	262	289	260	268	277	255	262
15 Spd	12	12	12	11	12	10	15	17	18	16	15	14	15	14	11	11	12	9	7	5	3	3	1	0	10.4	18.3
Dir	276	276	285	299	301	294	313	313	318	313	311	309	313	318	316	315	328	320	319	296	317	341	343	282	308	318
16 Spd	1	1	1	0	0	1	2	2	3	4	6	4	4	5	3	3	5	5	5	4	5	6	3	4	2.1	5.6
Dir	226	297	251	246	170	142	143	140	140	138	125	116	128	135	115	84	63	70	61	55	40	38	1	359	87	38
17 Spd	3	0	3	1	2	0	1	1	2	4	6	6	5	5	6	6	6	5	5	7	4	6	3	2	2.9	6.8
Dir	0	17	348	22	357	352	254	179	144	124	133	115	111	113	116	76	79	75	64	119	120	125	124	119	102	119
18 Spd	2	0	1	0	0	0	1	0	1	2	2	7	7	3	3	9	11	11	12	8	7	5	2	3	2.7	11.6
Dir	143	165	357	291	176	165	163	166	153	26	99	25	22	21	253	299	319	336	323	284	304	344	250	240	325	323
19 Spd	1	1	0	1	1	1	1	1	2	3	4	5	3	3	2	2	17	12	2	5	4	5	4	1	2.0	17.3
Dir	293	182	222	136	174	148	160	241	167	158	132	124	137	116	199	214	256	255	266	156	163	167	163	203	198	256
20 Spd	2	1	1	2	2	1	2	2	2	2	8	4	9	12	10	6	10	12	12	8	5	1	1	1	3.6	12.5
Dir	187	191	193	180	167	182	169	166	172	246	281	251	274	276	288	284	329	295	297	295	309	337	178	184	281	297
21 Spd	1	1	2	2	1	1	1	8	8	9	9	11	12	10	10	11	12	11	13	9	3	3	1	1	5.8	13.4
Dir	185	203	179	182	188	9	282	268	287	290	283	284	278	281	281	281	276	275	278	286	284	297	280	154	278	278
22 Spd	1	1	1	1	0	0	3	3	4	3	4	8	8	8	8	6	8	3	4	4	5	1	1	1	2.6	8.4
Dir	167	168	215	171	223	193	172	166	167	174	178	228	244	249	245	251	250	251	287	294	328	5	321	310	239	244

Hourly Averages

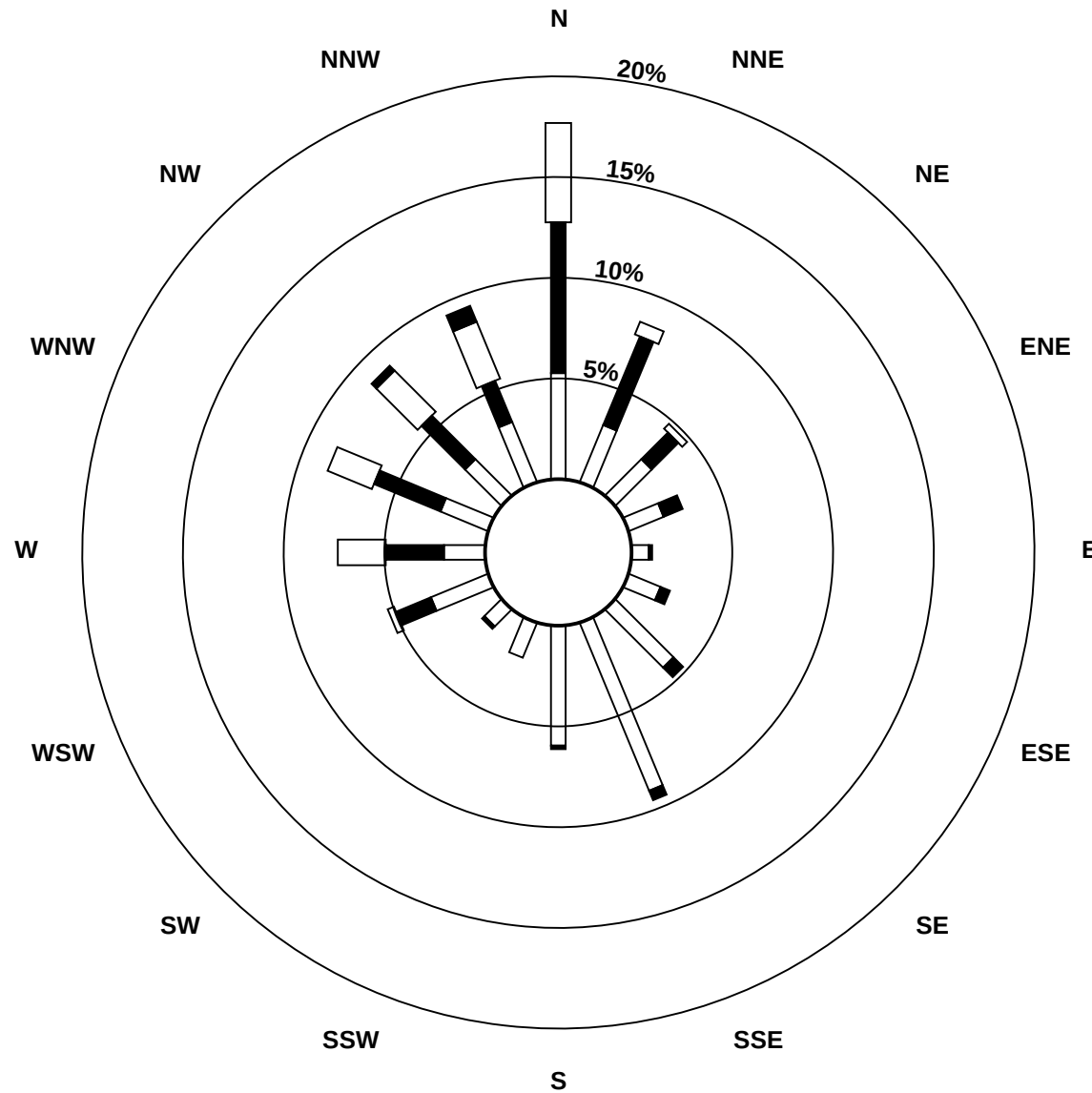
Wind Speed (km/h)
Wind Direction (deg)
Valleyview - May 2014

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	1	0	1	1	1	0	0	2	3	3	5	7	5	4	5	19	14	3	1	4	1	1	2	1	1.8	18.8		
Dir	210	197	172	173	249	206	205	166	167	168	167	157	156	166	249	299	294	273	202	227	179	176	183	164	232	299		
24 Spd	2	3	2	2	1	2	5	11	13	15	15	14	12	15	15	17	16	13	11	8	1	0	0	0	6.7	16.8		
Dir	156	236	254	221	204	164	268	281	278	283	287	293	279	318	327	328	329	341	347	352	355	9	208	184	306	328		
25 Spd	0	0	0	0	0	0	1	2	5	4	5	5	6	8	4	2	5	10	8	4	3	4	4	2	1.3	10.3		
Dir	182	359	173	285	185	237	159	153	133	133	150	179	160	135	126	109	356	9	31	48	18	335	349	4	81	9		
26 Spd	2	1	0	1	2	1	3	5	5	5	5	5	6	9	6	6	14	11	10	6	0	1	0	0	4.3	13.6		
Dir	338	353	297	335	13	321	344	23	6	354	350	8	355	9	20	16	359	2	8	2	341	309	266	156	3	359		
27 Spd	1	0	0	0	0	0	0	1	5	8	10	12	10	11	10	11	11	6	9	9	6	5	5	3	4.3	11.8		
Dir	205	261	166	219	204	176	133	42	350	353	2	2	15	21	25	18	13	351	276	282	293	303	306	349	350	2		
28 Spd	3	1	1	2	1	1	1	2	1	1	0	1	2	P	P	P	P	P	P	P	P	P	P	P	--	2.6		
Dir	323	321	342	356	341	19	31	37	98	55	50	141	172	P	P	P	P	P	P	P	P	P	P	P	--	323		
29 Spd	P	P	P	P	P	P	P	P	P	P	P	P	P	3	4	4	5	12	11	2	3	5	5	1	2	--	11.6	
Dir	P	P	P	P	P	P	P	P	P	P	P	P	P	358	344	318	335	10	359	303	273	254	244	179	181	--	10	
30 Spd	1	3	6	8	10	10	13	13	14	15	12	12	11	8	7	5	8	8	8	10	8	2	2	2	2	6.0	14.7	
Dir	156	260	263	259	258	260	269	261	270	277	277	286	302	343	304	284	242	254	33	20	342	159	173	160	281	277		
31 Spd	1	2	2	2	2	2	3	3	3	3	3	4	3	3	2	4	8	16	1	1	2	6	2	4	1.1	16.2		
Dir	162	156	161	167	165	165	162	168	165	165	232	264	234	200	193	258	267	326	350	142	5	21	342	302	257	326		
Spd	1.6	1.7	1.4	1.4	1.3	1.3	1.8	2.0	1.8	2.7	3.0	4.1	4.5	4.6	4.8	5.9	6.3	6.3	5.3	3.8	3.1	2.4	1.6	1.6	Diurnal Average			
Dir	325	320	316	311	311	312	320	323	319	317	321	331	326	337	335	332	335	343	350	349	349	358	342	329	Diurnal Maximum			
Spd	12.7	16.1	15.4	17.0	12.3	11.4	14.9	17.8	18.3	15.8	16.1	21.0	15.4	14.8	15.4	18.8	22.1	26.7	23.9	24.2	22.0	20.3	13.6	13.4	Diurnal Maximum			
Dir	0	5	4	359	6	353	313	340	318	313	294	323	313	318	327	299	322	332	328	333	338	336	314	316				
Maximum Speed Value: 27 km/h on May 5 18:00																									Hours in Service: 744			
Maximum Daily Speed Average: 12.7 km/h on May 2																									Hours of Data: 721			
Maximum Diurnal Speed Average: 6.3 km/h at hour 17																									Hours of Missing Data: 23			
Minimum Speed Value: 0 km/h on May 24 22:00																									Percent Operational Time: 96.9			
Minimum Daily Speed Average: 0.2 km/h on May 13																												
Minimum Diurnal Speed Average: 1.3 km/h at hour 6																												
Monthly Average Velocity: 3.03 km/h 333.5 deg																												
Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.5 Q ₁ = 1.4 Median = 4.3 Q ₃ = 9.3 P ₉₀ = 12.4 P ₉₉ = 19.8																												
All monthly, daily, and diurnal averages have been calculated using vector methods																												
P - Power Failure																												
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		54	74	49	1	0	0	178																				
NorthEast		26	31	2	0	0	0	59																				
East		12	5	0	0	0	0	17																				
SouthEast		50	11	0	0	0	0	61																				
South		133	4	0	0	0	0	137																				
SouthWest		45	6	0	0	0	0	51																				
West		39	41	22	0	0	0	102																				
NorthWest		40	28	42	6	0	0	116																				
Total		399	200	115	7	0	0	721																				

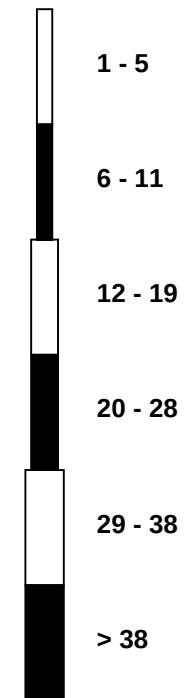
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - May 2014

Maximum Speed: 27 km/h on May 5 18:00																				Maximum Daily Speed Average: 13.4 km/h on May 2										Hours in Service: 744	
Minimum Speed: 0 km/h on May 10 23:00																				Minimum Daily Speed Average: 2.7 km/h on May 13										Hours of Data: 721	
Maximum Diurnal Speed Average: 10.6 km/h at hour 17																				Minimum Diurnal Speed Average: 2.7 km/h at hour 6										Hours of Missing Data: 23	
Monthly Average Speed: 6.11 km/h																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.8 Q ₁ = 1.8 Median = 4.9 Q ₃ = 9.8 P ₉₀ = 12.9 P ₉₉ = 20.3										Percent Operational Time: 96.9	
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-May	4	3	4	6	7	11	15	11	9	12	11	9	12	15	15	14	11	11	10	7	6	11	13	9	9.8	15.5					
2-May	13	16	16	17	12	11	12	18	15	12	13	15	13	14	15	16	14	16	12	12	11	12	9	7	13.4	17.9					
3-May	7	6	5	5	6	5	5	5	4	7	8	9	9	10	11	13	13	11	9	10	5	4	6	5	7.4	13.3					
4-May	5	2	0	0	1	3	2	1	3	3	3	15	11	6	4	4	4	3	3	2	2	1	1	1	3.3	15.3					
5-May	1	1	3	3	3	2	4	4	5	13	17	21	16	14	15	17	23	27	24	24	22	21	14	14	12.9	27.1					
6-May	13	10	12	10	10	9	14	13	11	11	13	11	13	11	10	9	10	9	7	5	2	1	0	1	8.9	13.6					
7-May	1	0	1	1	1	0	1	2	3	3	4	4	6	5	7	5	6	7	6	6	6	5	4	4	3.7	6.9					
8-May	2	1	1	1	1	0	1	2	3	3	4	4	9	13	12	12	12	13	11	9	10	11	9	8	6.3	13.2					
9-May	7	7	6	4	2	1	1	2	7	13	13	12	13	12	13	11	8	9	8	8	4	5	7	5	7.5	13.4					
10-May	5	3	1	1	1	2	4	12	10	13	13	15	16	13	12	14	13	13	12	10	4	1	0	0	7.9	16.0					
11-May	1	1	1	1	0	0	1	2	2	3	4	4	5	6	10	8	6	5	6	5	3	2	0	1	3.3	10.4					
12-May	1	0	0	0	0	0	1	1	2	2	4	4	6	9	9	9	9	8	9	8	5	4	2	3	4.0	9.5					
13-May	2	2	1	1	0	1	1	2	2	5	6	4	6	7	5	5	4	3	3	1	1	1	1	2	2.7	7.1					
14-May	7	7	2	2	1	1	2	4	7	10	6	8	8	5	8	8	5	5	9	13	11	8	10	10	6.5	12.9					
15-May	12	12	12	11	12	11	15	17	18	16	15	14	16	15	11	12	13	9	7	5	3	3	1	1	10.9	18.4					
16-May	1	1	1	0	0	1	2	3	4	4	6	4	4	6	5	4	6	6	5	4	5	6	3	5	3.5	5.6					
17-May	3	1	3	1	2	1	1	1	2	4	6	7	6	6	7	7	7	6	6	7	4	6	3	2	4.2	7.4					
18-May	2	1	1	0	0	0	1	1	1	3	4	10	8	6	4	10	11	11	12	8	8	5	2	4	4.8	11.8					
19-May	2	1	1	1	1	1	1	2	2	3	4	5	4	4	4	4	18	13	2	5	4	5	4	1	3.8	17.5					
20-May	2	1	1	2	2	1	2	2	2	4	8	5	10	13	10	7	10	13	13	8	5	2	1	1	5.1	13.3					
21-May	2	1	2	2	1	1	2	8	8	9	10	12	13	11	11	11	12	12	14	9	3	3	1	1	6.6	13.8					
22-May	1	1	1	1	1	1	3	3	4	3	4	10	9	9	8	7	8	3	4	4	5	2	2	1	4.1	10.2					
23-May	1	1	1	1	2	0	1	2	3	3	5	7	6	5	7	19	15	4	2	4	1	1	2	1	3.8	19.1					
24-May	2	3	2	2	1	2	6	11	14	16	16	14	13	16	16	17	17	13	11	8	1	0	1	0	8.4	17.4					
25-May	0	0	0	1	0	0	1	2	5	4	6	5	7	8	4	3	8	11	8	4	3	4	4	2	3.8	10.5					
26-May	2	1	1	1	2	1	3	5	6	5	6	5	6	10	7	7	14	11	11	7	0	1	0	1	4.8	14.1					
27-May	1	1	1	1	1	0	1	2	6	8	11	12	10	11	11	11	11	8	9	9	6	5	5	3	6.0	12.5					
28-May	3	1	1	2	2	2	1	3	2	2	2	2	3	P	P	P	P	P	P	P	P	P	P	P							
30-May	P	P	P	P	P	P	P	P	P	P	P	P	4	4	5	6	12	11	3	3	5	5	1	2	--	12.0					
31-May	1	4	6	8	10	10	13	13	14	15	12	12	12	9	8	6	8	8	10	10	8	2	2	2	8.5	15.0					
	1	2	2	2	2	2	3	3	3	3	4	6	5	4	4	5	10	17	2	2	2	6	2	4	3.9	16.6					
3.5 3.0 2.9 2.9 2.8 2.7 3.9 5.3 5.9 7.0 7.9 8.9 8.9 9.2 9.0 9.4 10.6 9.8 8.3 7.3 5.3 4.7 3.7 3.4																									Diurnal Average						
12.7 16.2 15.6 17.2 12.3 11.5 15.4 17.9 18.4 16.0 17.3 21.4 16.0 15.8 16.2 19.1 22.6 27.1 24.1 24.3 22.2 20.7 13.8 13.5																									Diurnal Maximum						
P - Power Failure																															
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - May 2014

Maximum Value: 98.5 deg on May 10 05:00																				Hours in Service: 744					
Minimum Value: 4.3 deg on May 2 22:00																				Hours of Data: 721					
																				Hours of Missing Data: 23					
Percentiles: P ₁ = 5.7 P ₁₀ = 9.3 Q ₁ = 13.6 Median = 24.7 Q ₃ = 46.5 P ₉₀ = 68.9 P ₉₉ = 92.4																				Hours of Calibration: 0					
																				Percent Operational Time: 96.9					
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-May	18	23	19	12	12	12	12	10	12	13	18	22	19	14	16	13	15	28	12	14	17	11	6	9	28.0
2-May	6	7	7	10	7	7	9	8	15	20	23	24	24	19	15	17	24	15	10	8	6	4	7	8	23.8
3-May	5	6	5	6	7	7	10	26	49	40	35	34	31	25	23	16	17	21	19	11	18	38	11	7	48.8
4-May	9	68	60	58	11	7	48	80	30	82	86	44	20	55	84	60	33	51	80	27	15	24	10	10	85.7
5-May	12	7	5	8	6	9	9	12	13	44	22	12	14	16	17	17	13	10	8	6	8	13	9	8	44.4
6-May	7	7	7	8	7	8	4	15	14	19	22	36	37	28	34	47	28	36	25	18	31	22	56	28	56.3
7-May	28	34	22	92	72	56	74	31	30	65	81	68	65	75	54	76	63	49	25	17	8	9	29	36	91.8
8-May	70	47	19	14	33	49	53	21	17	31	80	73	36	31	25	38	20	21	14	9	9	8	5	8	80.1
9-May	13	10	7	29	33	54	71	57	34	22	23	21	21	23	25	55	38	32	38	16	11	12	8	11	71.3
10-May	8	23	61	62	98	29	13	10	12	14	16	20	18	29	35	21	25	19	18	11	11	47	88	35	98.5
11-May	9	9	7	14	43	32	34	36	44	68	64	92	73	74	31	47	94	52	42	29	22	17	88	48	93.6
12-May	16	25	29	72	76	61	40	75	82	95	50	91	42	65	29	64	45	28	18	10	10	21	46	42	94.6
13-May	29	41	75	70	62	49	58	33	47	30	32	89	49	55	82	54	61	86	61	77	84	39	80	63	89.5
14-May	12	39	23	16	37	27	23	28	37	20	38	31	33	30	14	93	15	15	47	11	11	11	9	8	92.9
15-May	7	7	10	9	9	13	15	9	7	9	9	10	11	12	10	13	11	12	15	12	17	15	18	84	83.9
16-May	89	52	25	52	42	14	19	22	25	23	13	20	39	32	56	49	31	27	24	15	8	6	8	20	88.9
17-May	11	73	21	54	32	85	53	46	66	26	28	39	41	47	34	27	37	36	37	24	10	7	12	22	84.9
18-May	13	79	86	92	55	53	43	76	69	60	73	55	44	80	63	27	17	9	11	12	23	19	36	28	91.6
19-May	94	35	84	63	25	19	31	54	26	21	13	14	58	69	59	69	10	17	52	19	12	6	13	47	93.6
20-May	26	15	16	11	13	27	12	13	17	54	27	54	32	22	22	38	20	30	13	11	14	78	31	20	78.1
21-May	25	30	26	13	27	92	84	12	15	12	26	24	24	28	36	21	18	20	14	11	14	13	49	26	92.5
22-May	36	27	59	84	43	38	9	12	11	14	16	42	31	31	30	45	31	61	36	15	24	78	67	72	84.4
23-May	44	56	28	42	56	48	94	25	17	21	23	20	35	36	45	9	16	70	29	23	22	10	25	19	93.8
24-May	19	23	68	25	52	37	46	14	15	16	21	19	25	21	20	17	15	16	13	11	47	89	62	41	88.8
25-May	30	66	94	74	91	80	45	20	12	21	28	23	18	13	20	48	68	14	14	30	16	8	11	25	93.7
26-May	12	54	81	52	17	32	13	23	18	21	27	29	30	17	27	23	16	19	11	23	45	22	76	77	81.2
27-May	58	77	42	74	64	54	59	82	27	25	25	19	23	24	31	22	20	48	17	9	13	13	13	22	82.1
28-May	16	78	62	29	78	54	44	43	61	57	86	76	43	P	P	P	P	P	P	P	P	P	P	P	85.7
29-May	P	P	P	P	P	P	P	P	P	P	P	P	26	42	41	39	15	22	52	29	12	32	51	29	52.1
30-May	35	58	26	14	11	12	12	12	13	12	16	17	24	27	39	26	32	22	40	22	47	13	18	12	58.2
31-May	10	11	7	11	8	8	9	15	19	26	50	59	69	58	50	60	39	11	84	30	83	40	70	41	83.6
93.6 79.1 93.7 91.8 98.5 92.5 93.8 82.1 81.9 94.6 85.7 92.4 73.2 79.8 83.8 92.9 93.6 85.6 83.6 77.0 83.9 88.8 88.2 83.9																									
P - Power Failure																									

PAZA

Portable – Reno Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

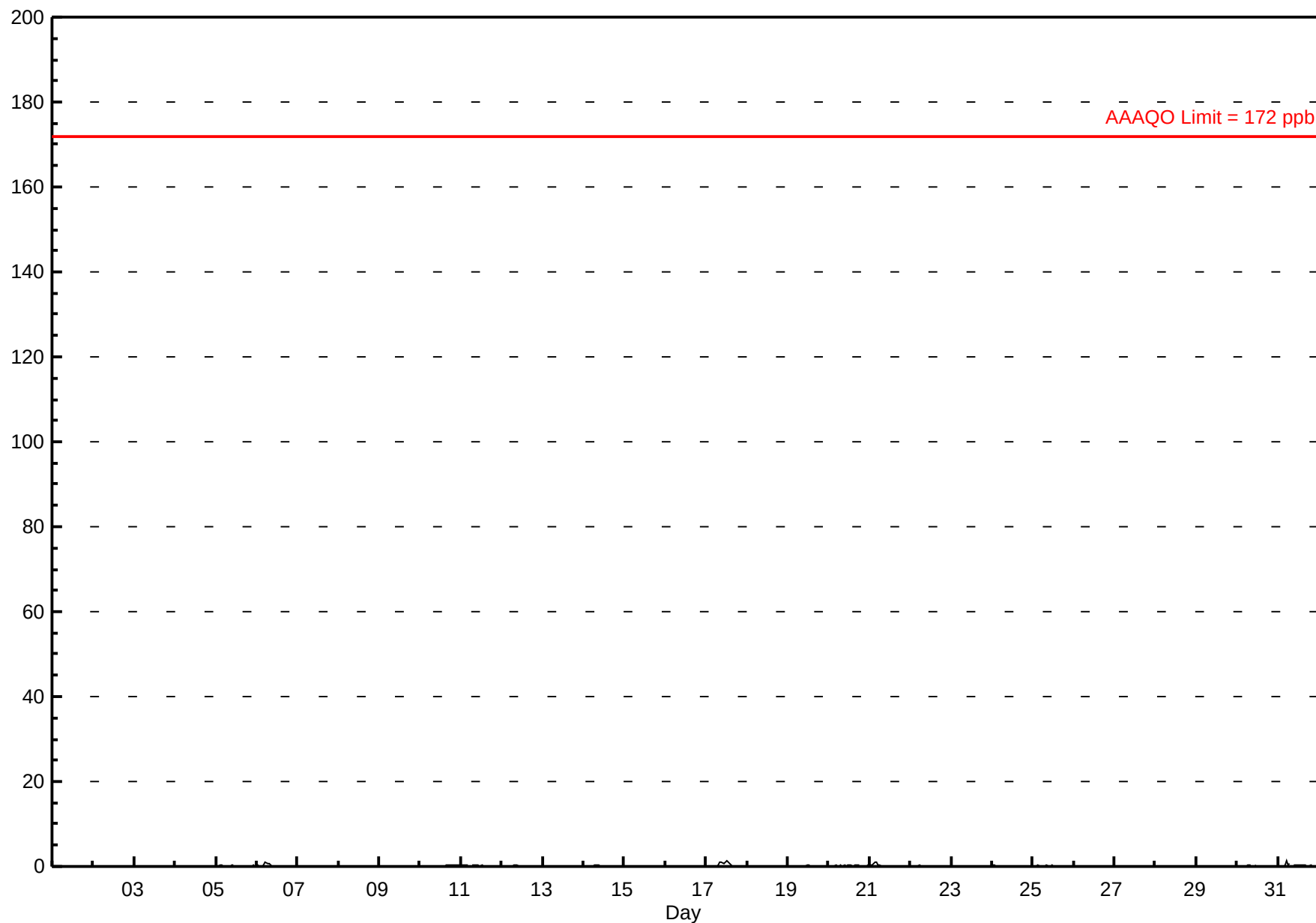
Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744							
Maximum Value: 1.2 ppb on May 31 06:00																				Maximum Daily Average: 0.3 ppb on May 17				Hours of Data: 708			
Minimum Value: 0 ppb on May 1 08:00																				Minimum Daily Average: 0.0 ppb on May 2				Hours of Missing Data: 36			
Maximum Diurnal Average: 0.1 ppb at hour 9																				Minimum Diurnal Average: 0.0 ppb at hour 24				Hours of Calibration: 36			
Monthly Average: 0.08 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 0.9				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-May	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	0.2	
2-May	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	
3-May	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	0.1	
4-May	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	0.1	
5-May	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	
6-May	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9	
7-May	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	
8-May	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	0.1	
9-May	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	0.1	
10-May	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-May	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
12-May	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	0.3	
13-May	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	0.1	
14-May	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	0.4	
15-May	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-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.0	
17-May	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.2	
18-May	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	0.1	
19-May	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	
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4	
21-May	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	1.1	
22-May	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.4	
23-May	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-May	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	
25-May	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	
26-May	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
27-May	0	0	0	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	
28-May	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	
29-May	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	
30-May	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	
31-May	0	0	0	0	0	1	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2	
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 0.0 0.0 0.0 0.0 0.0 0.0 0.0																									Diurnal Average		
0.4 0.3 0.6 0.9 1.1 1.2 0.8 0.8 1.0 0.9 0.6 1.0 1.2 0.9 0.5 0.2 0.3 0.3 0.3 0.3 0.2 0.2 0.3 0.2																									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 Reno - May 2014



Hourly Maximums

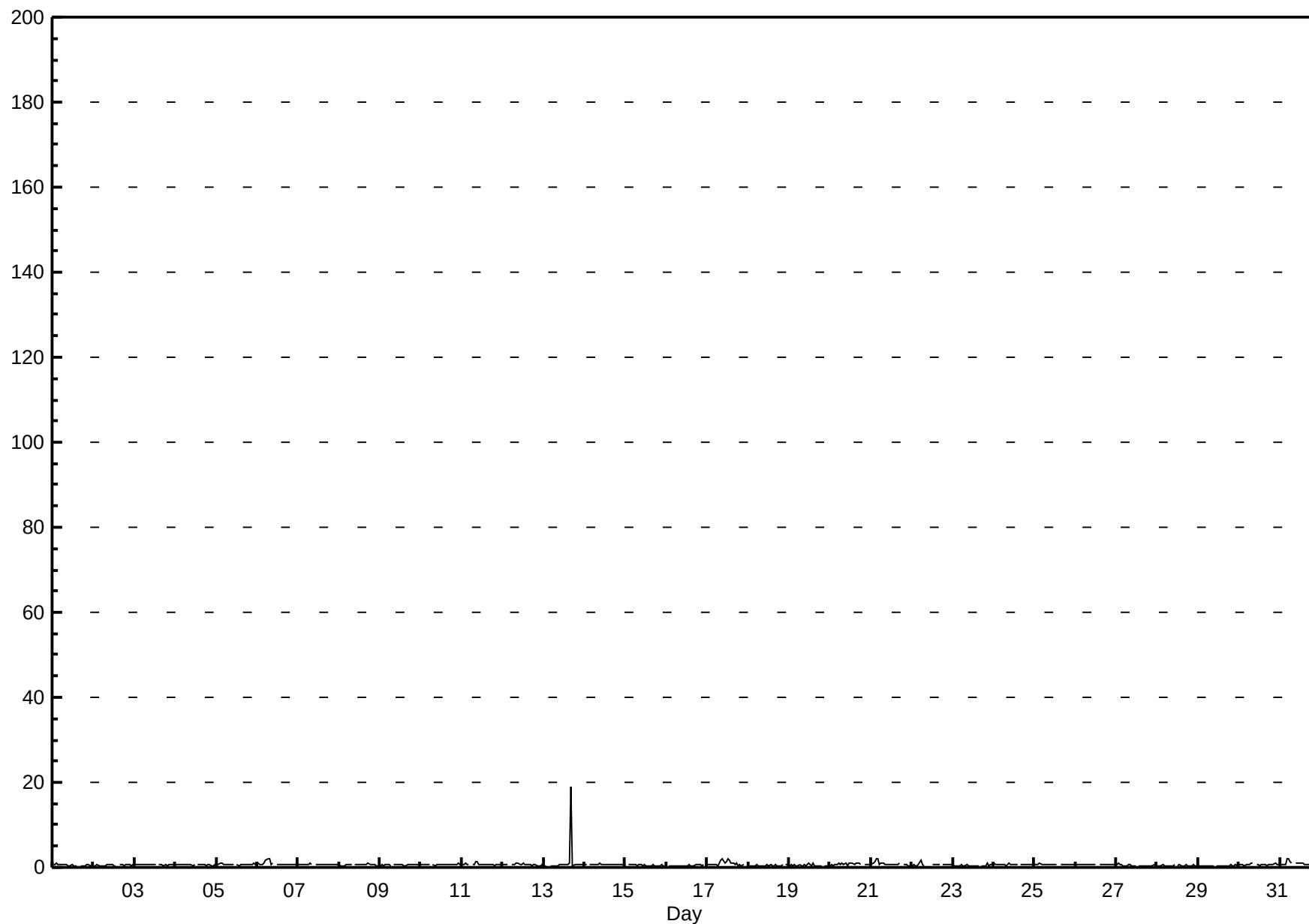
Sulphur Dioxide (SO₂) - ppb

Portable Reno - May 2014

Maximum Value: 19.1 ppb on May 13 17:00																				Maximum Daily Average: 1.3 ppb on May 13					Hours in Service: 744	
Minimum Value: 0 ppb on May 13 03:00																				Minimum Daily Average: 0.5 ppb on May 29					Hours of Data: 708	
Maximum Diurnal Average: 1.2 ppb at hour 17																				Minimum Diurnal Average: 0.6 ppb at hour 19					Hours of Missing Data: 36	
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 = 0.8 P ₉₉ = 2.0					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-May	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	1	1	0	0	0.6	0.9
2-May	0	0	1	1	0	0	0	0	1	1	1	1	1	0	A	1	1	1	0	1	1	1	0	1	0.5	0.6
3-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	0	1	1	1	1	0.6	0.8
4-May	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	0	1	1	0	0	1	0.6	0.8
5-May	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0
6-May	1	1	1	1	1	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.0
7-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
8-May	1	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.6	1.0
9-May	0	1	0	1	1	1	0	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0.6	0.7
10-May	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
11-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.8	1.4
12-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	0.6	1.0
13-May	0	0	0	A	0	1	0	1	1	1	1	1	1	1	1	1	19	0	1	1	1	1	1	1	1.3	19.1
14-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
15-May	1	A	1	1	1	1	1	0	1	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0.5	0.8
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	1	A	0.5	0.7
17-May	1	1	1	1	1	1	0	1	2	2	1	2	2	2	1	1	1	1	0	1	0	1	0	0	0.9	2.0
18-May	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	A	1	0.5	0.7
19-May	0	1	0	1	0	0	1	1	0	1	0	1	1	0	1	0	0	0	0	0	A	0	0	0	0.5	0.9
20-May	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0
21-May	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0.8	2.0
22-May	0	1	0	0	1	2	1	0	C	C	C	C	1	1	1	1	1	A	1	1	1	1	1	1	0.6	1.5
23-May	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	A	0	0	0	1	0	1	1	0.5	0.9
24-May	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	1.0
25-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.1
26-May	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	0.8
27-May	1	1	1	1	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0
28-May	0	0	0	1	1	0	0	0	0	1	1	A	0	1	1	0	0	1	0	0	0	1	0	0	0.5	0.7
29-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	1	0	0.5	0.8
30-May	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
31-May	1	1	1	1	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.1
0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.6 0.7 0.7 0.6 0.6 0.6 1.2 0.6 0.6 0.6 0.6 0.6 0.6 0.6																								Diurnal Average		
1.0 1.0 1.4 2.0 2.0 2.1 2.0 2.0 1.7 2.0 1.0 1.5 2.0 1.6 1.0 1.1 19.1 1.0 0.8 0.8 0.9 1.0 1.0 0.9																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

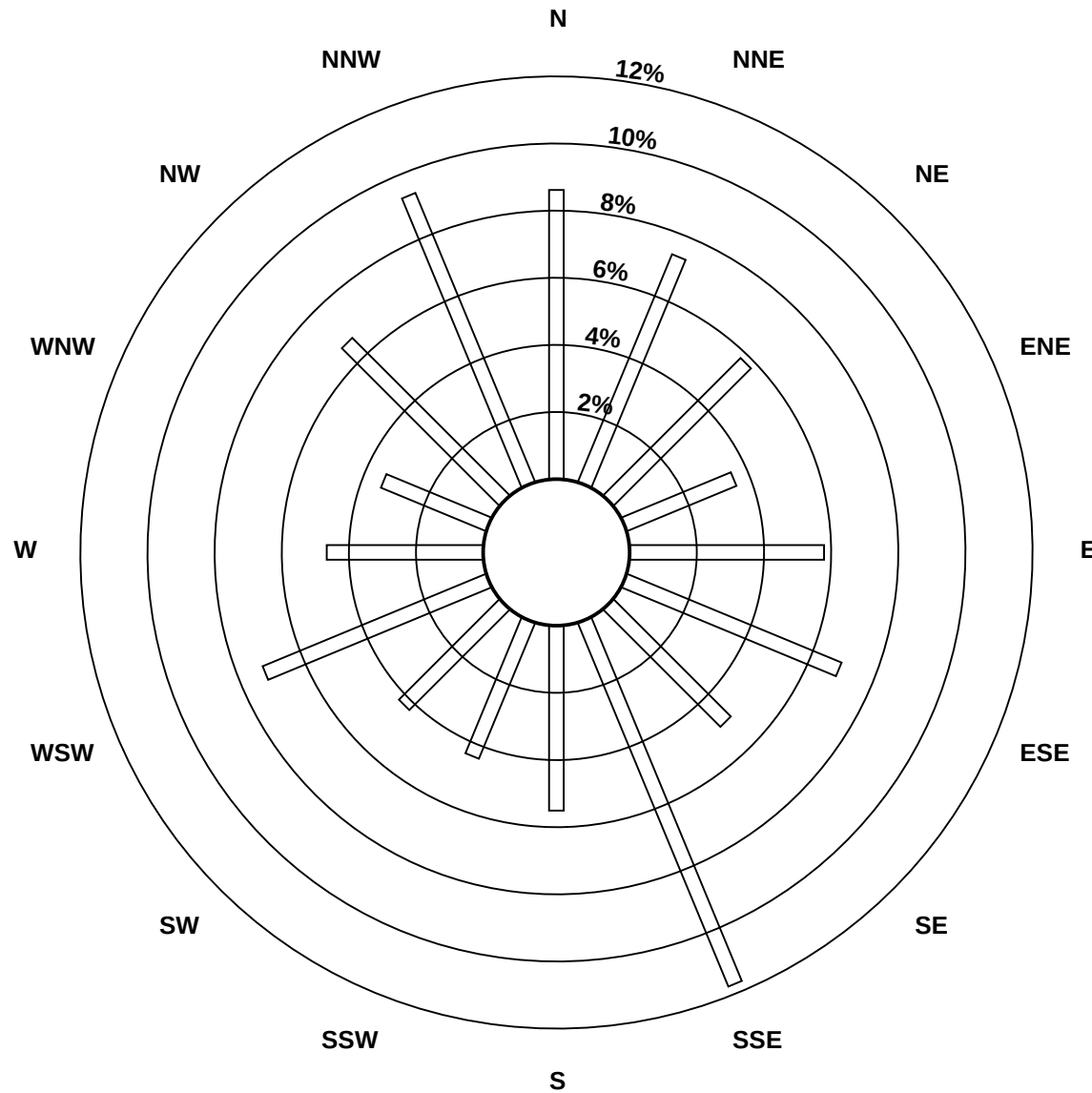
Sulphur Dioxide (SO₂) - ppb
Portable Reno - May 2014



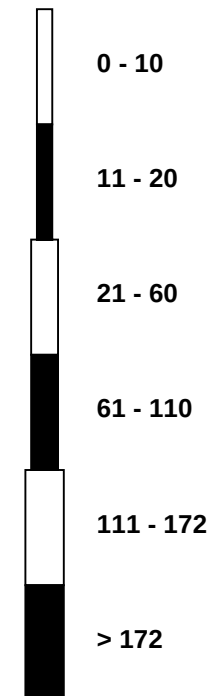
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Portable Reno - May 2014

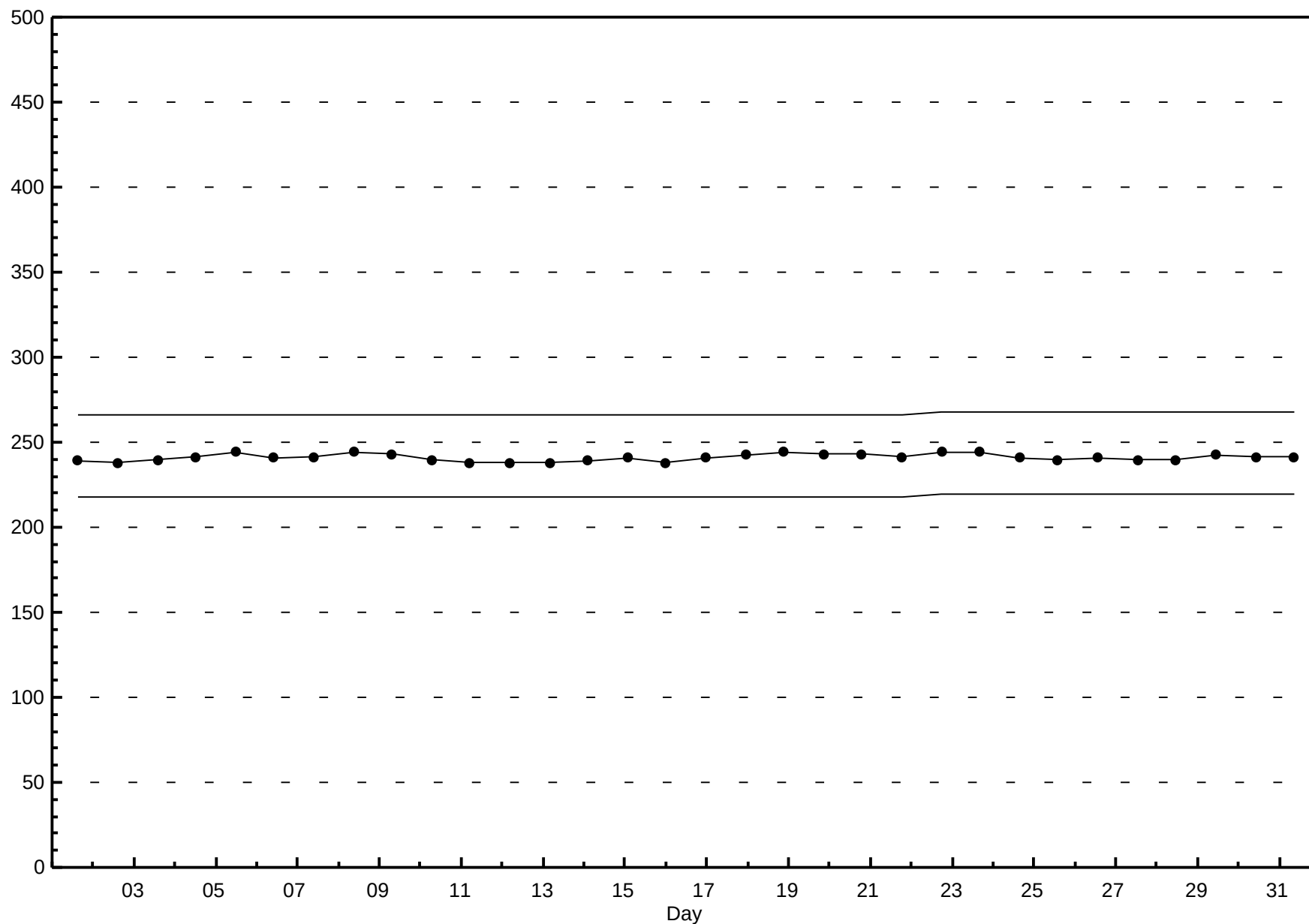


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Portable Reno - May 2014



Hourly Averages

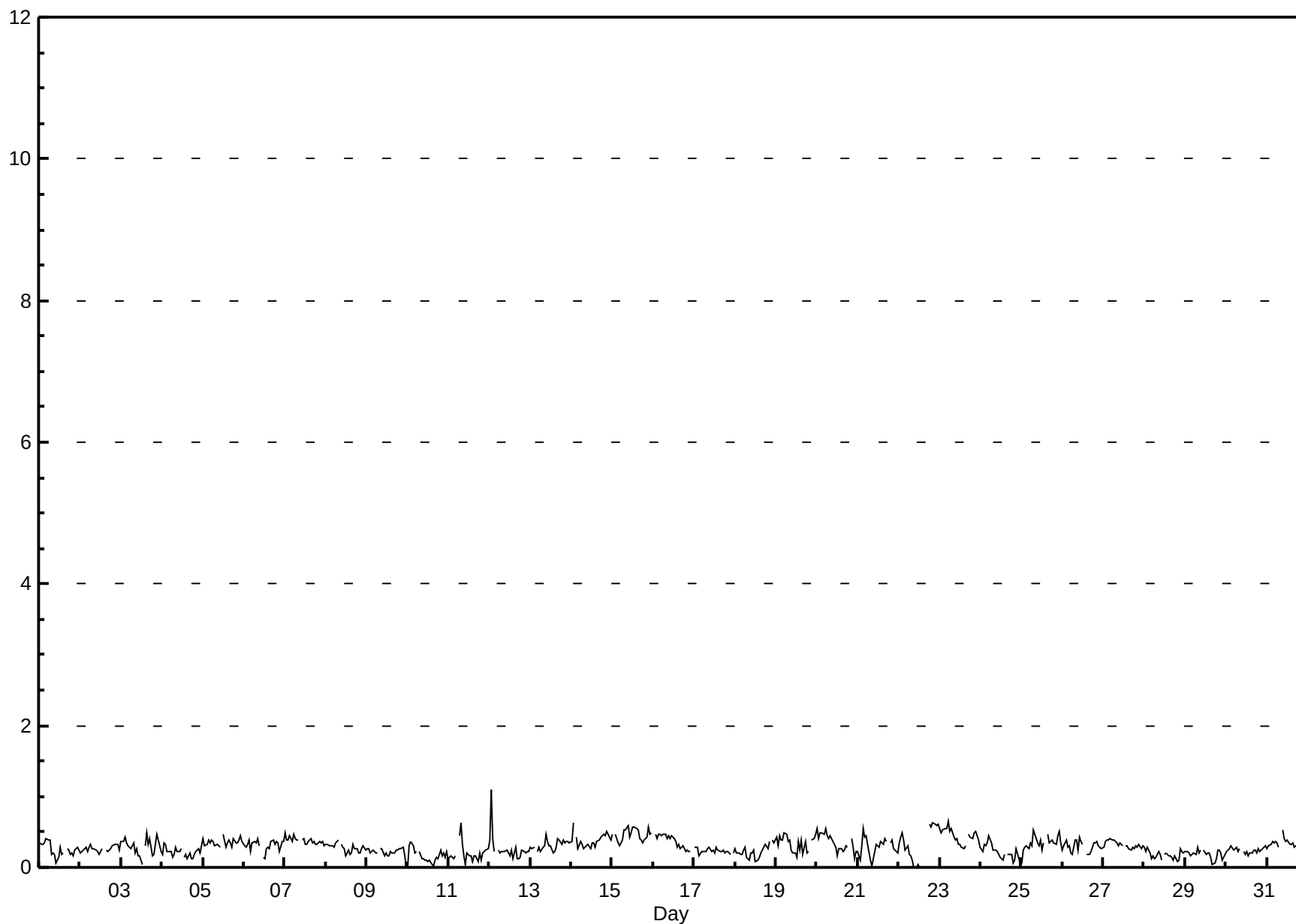
Total Reduced Sulphur (TRS) - ppb

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.1 ppb on May 12 02:00 Maximum Daily Average: 0.5 ppb on May 15																				Hours in Service: 744 Hours of Data: 709						
Minimum Value: 0 ppb on May 22 10:00 Minimum Daily Average: 0.2 ppb on May 10 Maximum Diurnal Average: 0.3 ppb at hour 3 Minimum Diurnal Average: 0.2 ppb at hour 13 Monthly Average: 0.29 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.4 P ₉₉ = 0.6																				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-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4
2-May	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	0.3
3-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.5
4-May	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-May	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	0.5
6-May	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-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
8-May	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	0.4
9-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
10-May	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	0.4
11-May	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-May	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
13-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-May	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.6
15-May	0	A	0	0	0	0	0	1	1	1	0	0	1	1	1	1	0	0	0	0	0	1	0	0	0.5	0.6
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
17-May	0	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-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.2	0.4
19-May	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
20-May	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.6
21-May	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.5
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	1	1	1	1	1	1	0.3	0.6
23-May	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0.4	0.7
24-May	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	0.4
25-May	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0.3	0.5
26-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-May	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
28-May	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
29-May	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
30-May	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
31-May	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.2 0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3																									Diurnal Average	
0.6 1.1 0.5 0.5 0.5 0.7 0.5 0.6 0.5 0.6 0.4 0.5 0.6 0.6 0.5 0.5 0.4 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.6																									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

Total Reduced Sulphur (TRS) - ppb
Portable Reno - May 2014



Hourly Maximums

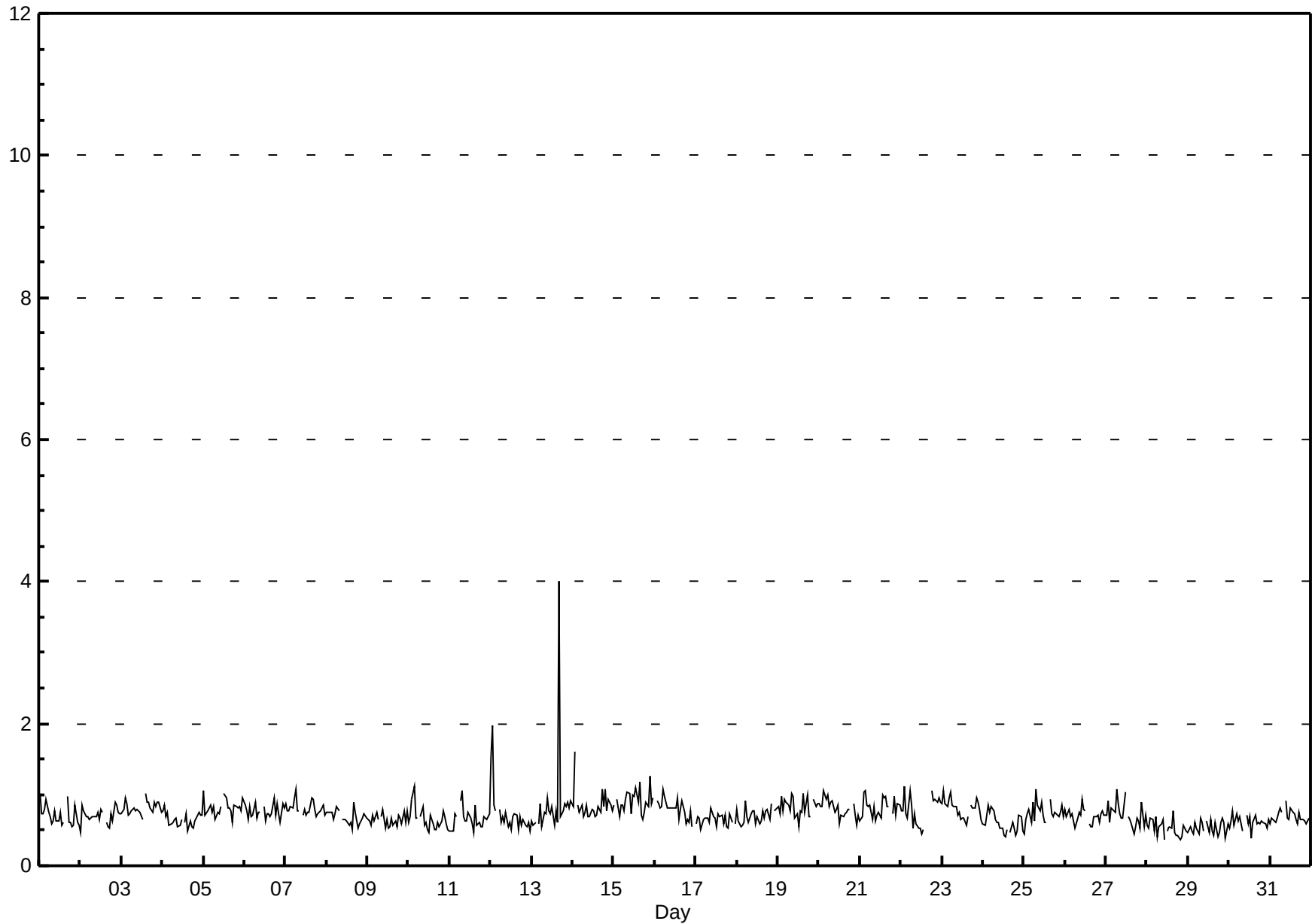
Total Reduced Sulphur (TRS) - ppb

Portable Reno - May 2014

Maximum Value: 4.0 ppb on May 13 17:00																			Maximum Daily Average: 0.9 ppb on May 15										Hours in Service: 744	
Minimum Value: 0 ppb on May 28 20:00																			Minimum Daily Average: 0.5 ppb on May 28										Hours of Data: 709	
Maximum Diurnal Average: 0.8 ppb at hour 6																			Minimum Diurnal Average: 0.7 ppb at hour 13										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 = 0.9 P ₉₉ = 1.1										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-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.0				
2-May	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9				
3-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0				
4-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	0.6	0.9				
5-May	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	1.1				
6-May	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				
7-May	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	1.1				
8-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9				
9-May	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8				
10-May	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1				
11-May	0	0	0	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	1.1				
12-May	2	2	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0.7	2.0				
13-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	1	1	1	1	0.9	4.0				
14-May	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.6				
15-May	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3				
16-May	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	1.1				
17-May	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	0.8				
18-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9				
19-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.0				
20-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.1				
21-May	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	1.1				
22-May	1	1	1	1	1	1	1	1	1	1	1	1	0	1	C	C	C	C	1	1	1	1	1	1	0.8	1.1				
23-May	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-May	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	0	1	1	0	0	1	1	0	0.6	0.9				
25-May	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.1				
26-May	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-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	0.7	1.1				
28-May	1	1	1	1	0	1	0	1	1	1	0	A	0	1	1	1	0	0	0	0	0	1	1	0	0.5	0.8				
29-May	0	1	0	0	1	1	0	1	1	0	A	1	0	1	0	0	1	0	0	1	1	1	0	1	0.5	0.7				
30-May	1	1	1	1	1	1	1	1	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.6	0.8				
31-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9				
0.7		0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	Diurnal Average					
1.5		2.0	1.1	1.1	1.0	1.1	1.1	1.1	1.0	1.0	0.9	1.0	1.0	1.1	1.0	1.2	4.0	1.1	1.1	1.1	1.0	1.3	1.0	1.0	Diurnal Maximum					
C - Calibration		A - Automated Daily Zero Span																												

Hourly Maximums

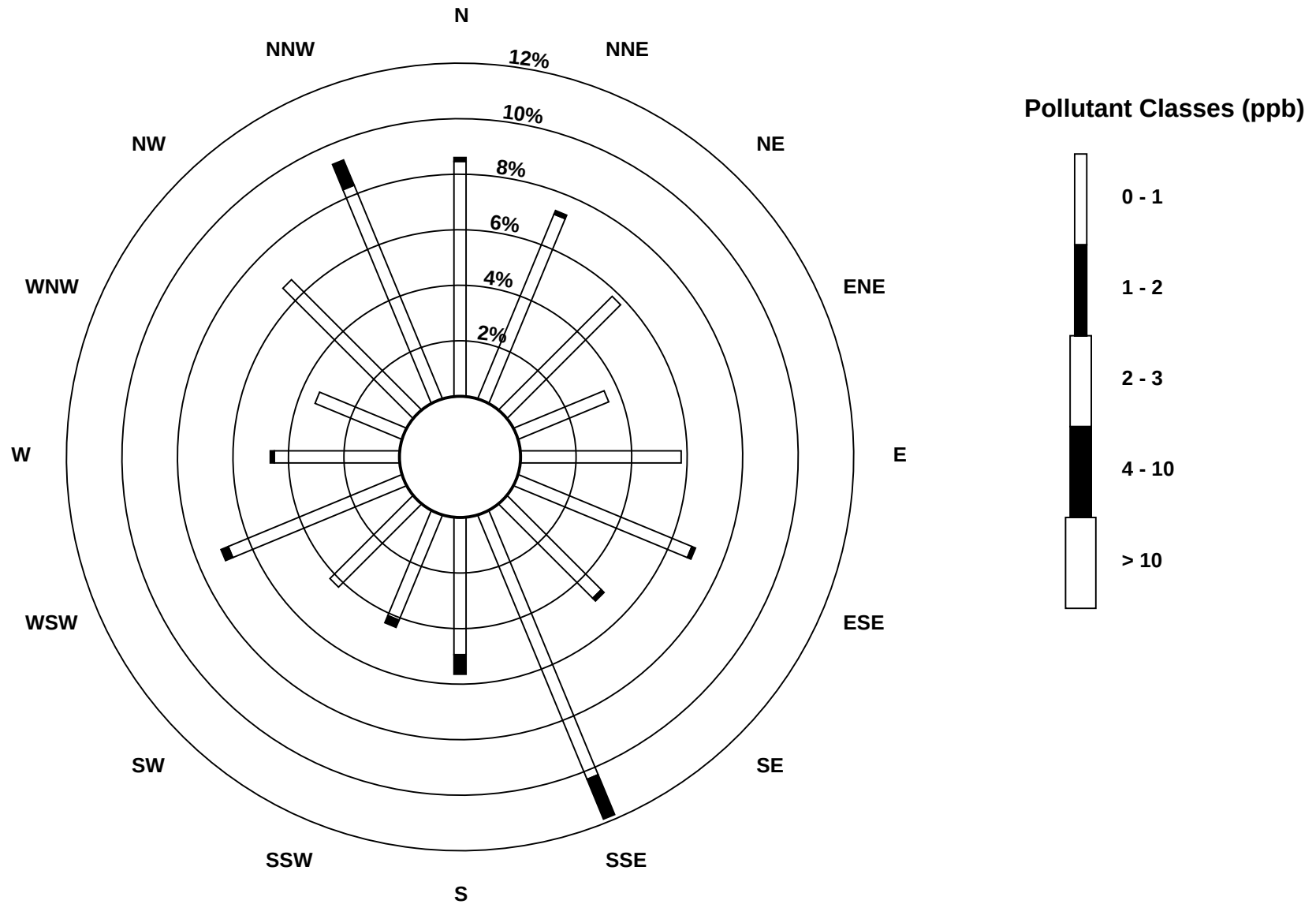
Total Reduced Sulphur (TRS) - ppb
Portable Reno - May 2014



Pollutant Rose

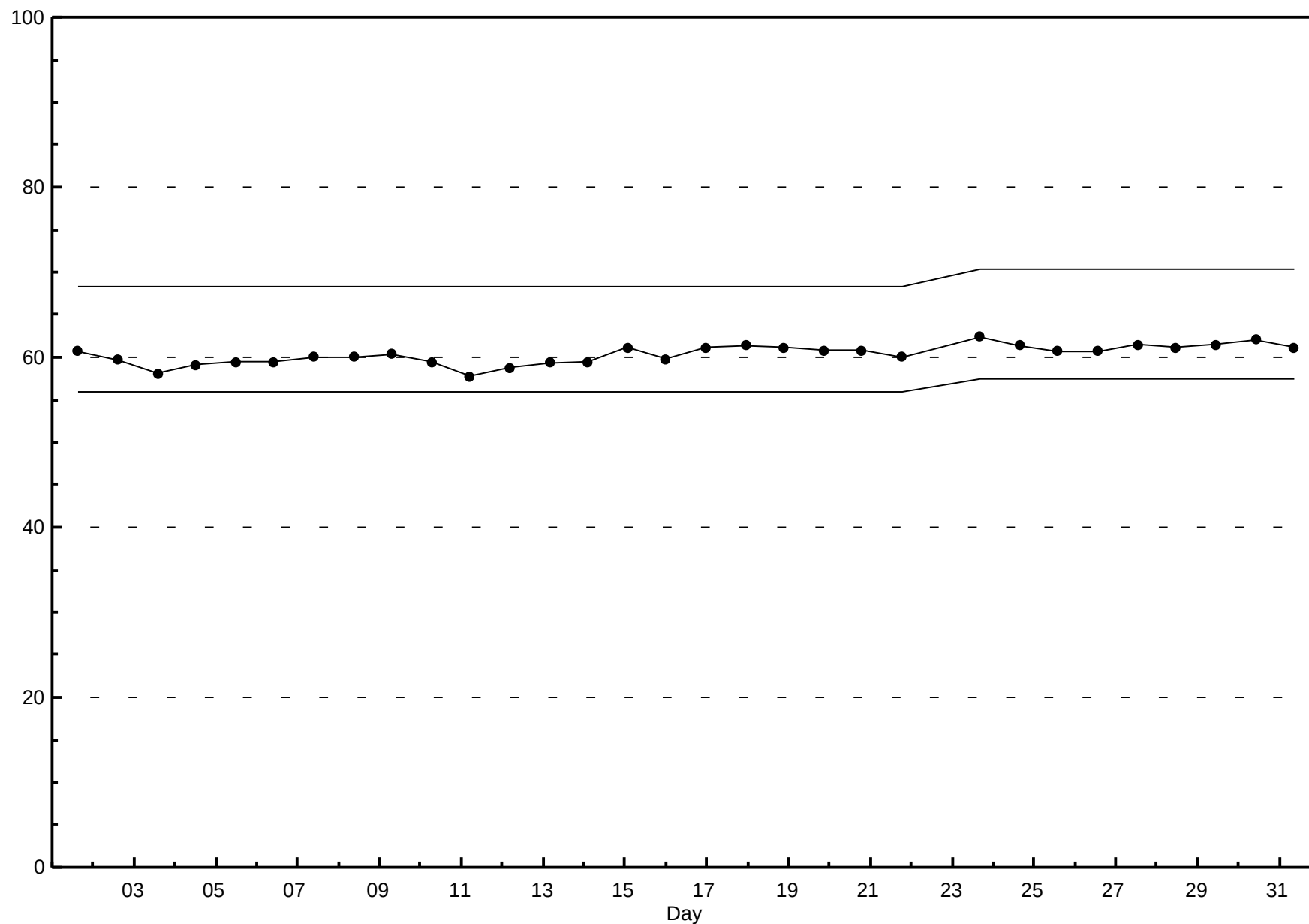
Total Reduced Sulphur (TRS) - ppb

Portable Reno - May 2014



Span Responses

Total Reduced Sulphur (TRS)
Portable Reno - May 2014



Hourly Averages

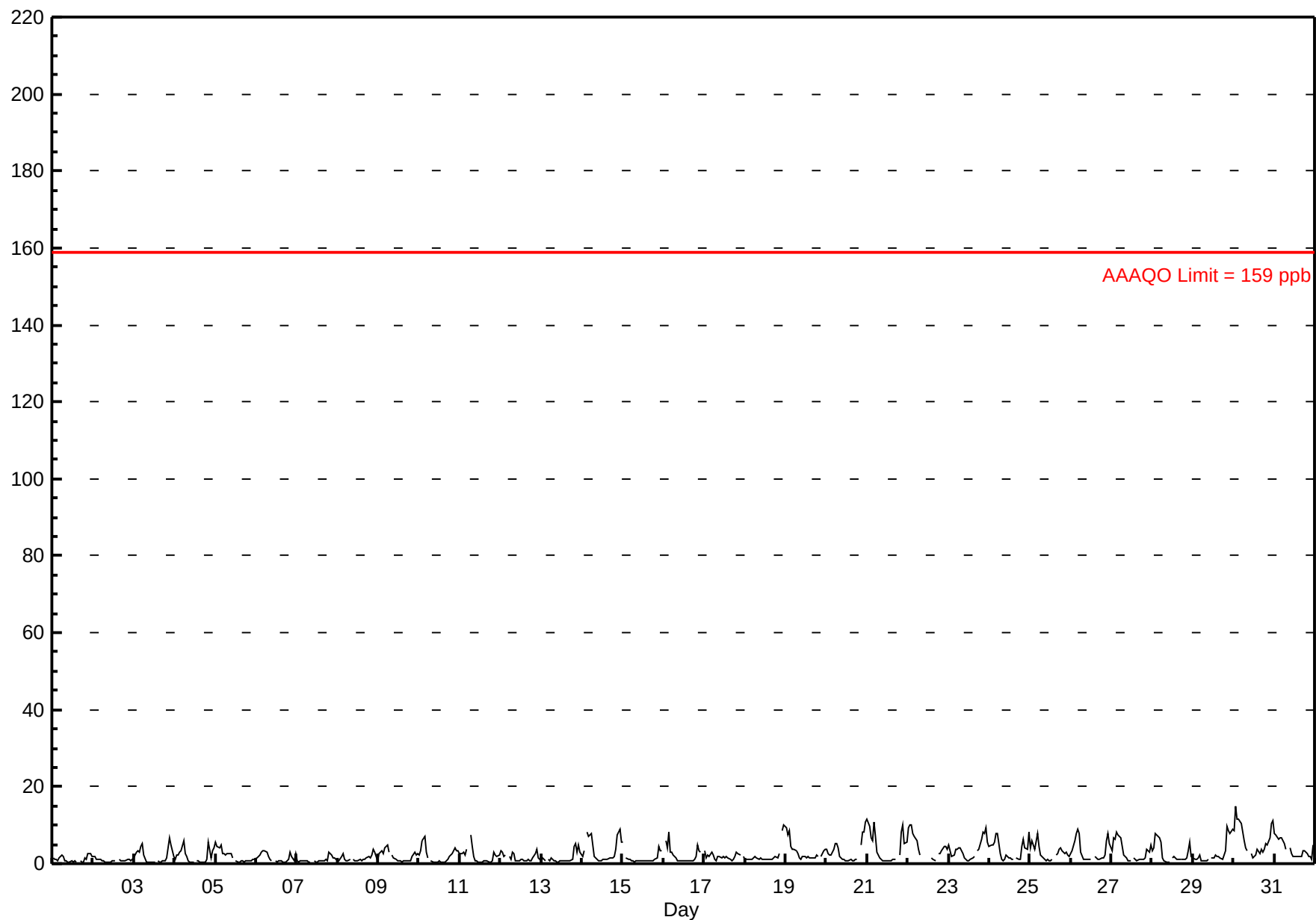
Nitrogen Dioxide (NO₂) - ppb

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 15.0 ppb on May 30 02:00 Maximum Daily Average: 6.2 ppb on May 30																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on May 3 11:00 Minimum Daily Average: 0.9 ppb on May 2 Maximum Diurnal Average: 4.4 ppb at hour 5 Minimum Diurnal Average: 0.9 ppb at hour 12 Monthly Average: 2.52 ppb Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.9 Median = 1.6 Q ₃ = 3.3 P ₉₀ = 6.1 P ₉₉ = 10.9																										
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-May	1	1	1	1	1	2	2	1	1	1	1	1	0	1	0	A	1	1	1	1	1	3	3	2	1.1	2.7
2-May	2	2	1	1	1	1	1	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.8
3-May	2	3	3	3	4	5	2	1	1	0	0	0	0	A	1	0	1	1	1	2	4	7	5	2	2.1	6.6
4-May	1	2	2	3	3	6	3	2	1	0	0	0	A	1	1	0	0	1	0	1	6	2	3	4	1.9	5.9
5-May	6	5	4	5	3	3	2	3	3	2	1	A	1	0	0	1	1	1	1	1	1	1	1	1	1.9	5.8
6-May	2	2	2	3	3	3	3	2	1	1	A	1	1	1	1	1	1	1	1	1	3	2	1	3	1.6	3.5
7-May	1	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	1	1	1	3	2	1	1	1	0.9	3.1
8-May	1	1	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	2	4	3	1	1.4	3.7
9-May	2	3	3	2	4	5	3	A	2	1	1	1	1	1	1	1	1	1	1	1	2	3	2	3	1.9	4.8
10-May	2	3	6	7	3	1	A	1	1	1	0	0	1	0	1	1	1	1	2	2	3	4	3	3	2.1	6.9
11-May	3	3	3	2	4	A	8	5	2	1	1	1	1	1	1	1	1	1	1	3	2	2	2	2	1.9	7.6
12-May	3	3	2	2	A	2	1	3	2	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1.6	3.8
13-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	5	3	5	3	1.5	5.4
14-May	2	3	A	8	7	8	5	2	1	1	1	1	1	1	1	1	2	1	2	2	4	7	9	6	3.3	8.8
15-May	5	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	3	1.4	5.4
16-May	A	6	4	8	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2	5	3	3	A	2.2	8.3
17-May	3	2	2	2	3	2	1	1	2	2	2	2	2	2	1	1	1	1	2	3	3	2	A	2	1.8	3.2
18-May	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	2	2	3	A	8	10	2.1	10.2
19-May	9	8	8	4	4	4	4	3	1	1	2	2	2	2	1	1	1	2	2	2	A	2	3	4	3.1	9.4
20-May	4	3	2	2	4	5	5	4	2	1	1	1	1	1	1	1	1	1	1	A	5	8	8	11	3.2	10.9
21-May	12	10	7	6	11	7	3	2	1	1	1	1	1	1	1	1	1	1	A	2	8	10	5	6	4.2	11.5
22-May	9	10	10	8	7	6	4	2	C	C	C	C	C	C	1	1	1	A	2	2	3	4	4	4	--	10.2
23-May	5	3	2	2	4	4	4	4	3	1	1	1	1	1	2	2	A	3	4	6	8	8	9	5	3.7	9.2
24-May	5	5	5	5	8	8	3	1	1	1	2	2	1	1	1	A	2	1	1	5	6	4	4	8	3.5	8.1
25-May	4	6	5	4	8	5	2	2	1	1	1	1	1	1	A	2	3	4	4	3	3	3	2	2	2.9	7.7
26-May	2	4	6	8	9	8	3	1	1	1	1	1	1	A	2	1	1	1	1	1	2	6	8	5	3.3	9.0
27-May	3	7	6	8	8	7	5	2	2	1	1	1	A	1	1	1	1	1	1	1	2	4	3	5	3.1	8.2
28-May	3	4	8	7	7	5	1	1	1	1	1	A	2	2	1	1	1	1	1	1	2	4	6	2	2.6	7.8
29-May	1	1	1	2	2	1	1	1	1	1	A	2	2	2	2	2	1	1	2	3	10	8	8	9	2.8	9.6
30-May	8	15	12	12	11	8	6	4	3	A	2	2	2	2	4	3	4	3	4	5	5	7	11	11	6.2	15.0
31-May	8	7	6	7	7	6	5	4	A	4	3	2	2	2	2	2	2	3	3	3	2	2	1	5	3.7	8.0
																								Diurnal Average		
																								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
Portable Reno - May 2014



Hourly Maximums

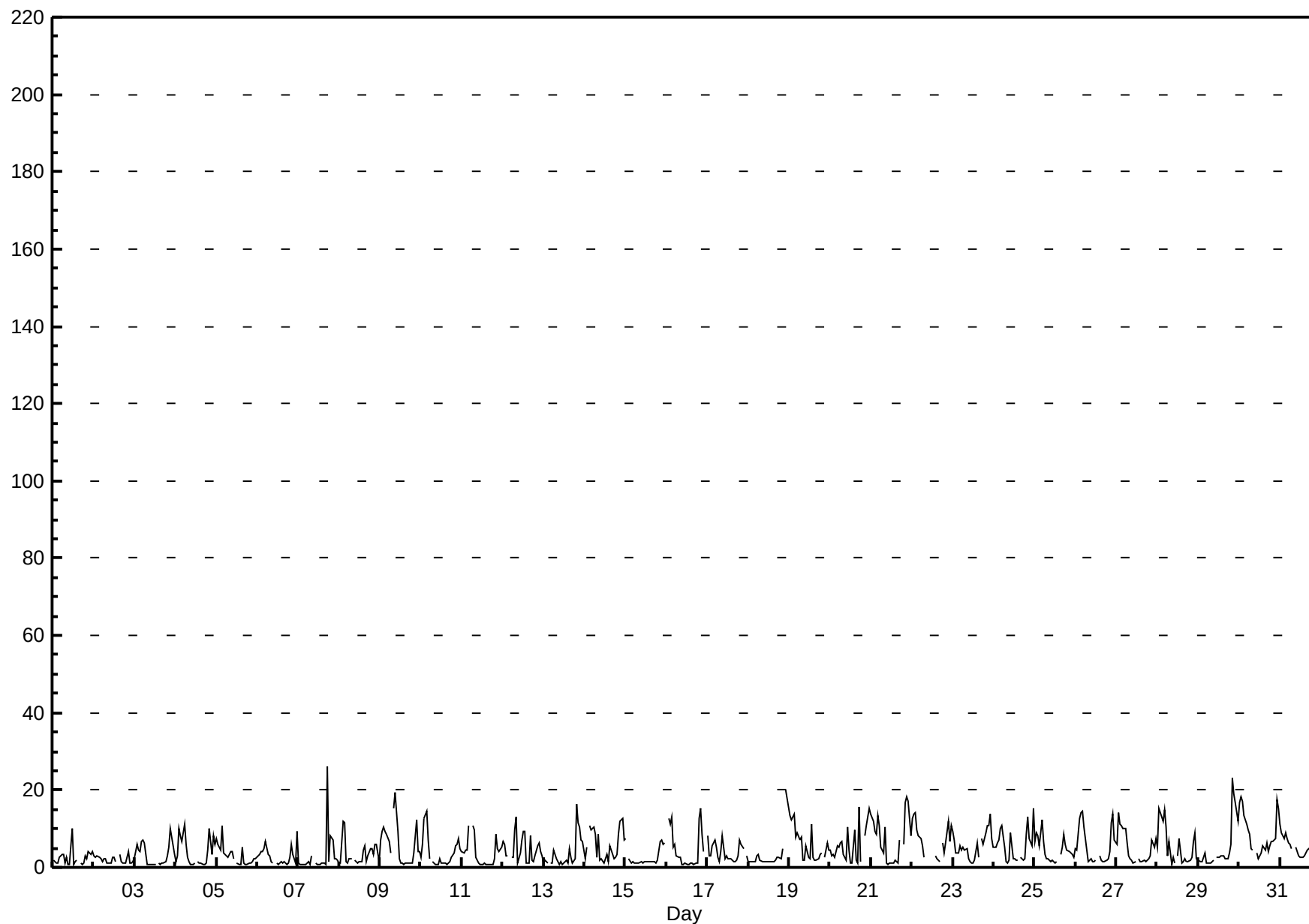
Nitrogen Dioxide (NO₂) - ppb

Portable Reno - May 2014

Maximum Value: 26.2 ppb on May 7 18:00																				Maximum Daily Average: 8.6 ppb on May 30					Hours in Service: 744	
Minimum Value: 1 ppb on May 3 13:00																				Minimum Daily Average: 2.0 ppb on May 2					Hours of Data: 706	
Maximum Diurnal Average: 7.8 ppb at hour 23																				Minimum Diurnal Average: 1.9 ppb at hour 13					Hours of Missing Data: 38	
Monthly Average: 4.62 ppb																				Percentiles: P ₁ = 0.7 P ₁₀ = 1.0 Q ₁ = 1.4 Median = 2.9 Q ₃ = 6.6 P ₉₀ = 10.8 P ₉₉ = 18.2					Hours of Calibration: 38	
																									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-May	2	2	1	1	3	3	4	1	3	1	1	10	1	2	2	A	1	1	1	3	2	4	3	4	2.4	10.2
2-May	3	3	3	2	2	2	2	2	1	1	1	3	3	1	A	3	1	1	1	1	4	1	1	2	2.0	4.1
3-May	2	6	5	4	7	7	7	1	1	1	1	1	1	A	1	1	1	1	1	3	5	10	8	3	3.3	10.0
4-May	1	3	10	8	7	11	6	2	1	1	1	1	A	2	1	1	1	1	1	5	10	3	8	6	4.0	11.2
5-May	7	6	5	11	4	3	3	3	4	4	2	A	1	1	1	5	1	1	1	1	1	1	2	2	3.1	10.8
6-May	3	3	4	4	5	7	3	3	2	1	A	1	1	1	1	1	1	1	1	3	6	3	1	9	2.9	9.2
7-May	1	1	1	1	1	1	1	1	3	A	1	1	1	1	1	1	1	26	1	8	7	2	2	2	2.9	26.2
8-May	1	1	12	12	1	1	2	2	A	2	2	1	2	1	4	6	2	3	5	5	3	6	6	1	3.6	12.0
9-May	7	9	10	9	8	7	4	A	15	19	9	2	1	1	1	1	1	1	1	1	4	12	4	4	5.9	19.4
10-May	3	6	13	14	7	2	A	1	1	1	1	2	1	1	1	1	1	2	3	4	6	6	8	5	3.8	14.5
11-May	4	4	4	4	11	A	11	10	3	2	1	1	1	1	1	1	1	1	1	2	9	5	4	5	3.7	10.9
12-May	7	6	3	3	A	2	3	10	13	1	4	7	9	9	1	1	8	2	1	3	5	6	4	3	4.9	12.9
13-May	1	2	1	A	1	1	4	2	1	1	1	1	1	2	1	5	3	1	2	16	12	11	7	7	3.7	16.3
14-May	2	5	A	11	10	10	8	2	9	2	2	1	2	3	1	6	3	2	3	3	9	12	13	7	5.5	12.8
15-May	7	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	7	7	6	6	2.5	7.3
16-May	A	13	11	13	5	6	3	3	3	1	1	1	1	1	1	1	1	1	1	13	15	9	4	A	4.8	15.1
17-May	8	3	3	6	7	5	2	1	4	8	2	3	2	2	2	2	1	2	3	7	6	5	A	3	3.9	8.1
18-May	2	1	2	1	1	3	3	2	1	2	2	2	1	1	1	1	2	2	2	2	5	A	20	18	3.5	20.0
19-May	13	12	13	14	8	9	7	8	2	2	6	3	2	11	2	2	2	2	3	4	A	3	6	4	6.0	14.0
20-May	4	3	3	3	5	5	6	7	3	2	11	5	1	1	10	2	1	16	1	A	8	11	13	15	6.0	15.6
21-May	14	12	9	8	13	11	5	4	10	1	1	1	1	1	2	1	1	7	A	6	17	18	17	8	7.4	18.2
22-May	13	14	14	10	8	7	5	3	C	C	C	C	C	C	3	2	2	A	6	4	6	12	7	11	--	14.0
23-May	9	7	4	4	5	5	5	5	5	2	2	1	1	2	6	3	A	8	6	9	11	11	14	7	5.7	13.9
24-May	5	5	6	7	10	11	5	1	1	2	9	2	2	2	2	A	2	2	2	9	13	7	6	15	5.6	15.4
25-May	7	9	8	5	12	7	4	2	2	1	2	1	1	1	A	3	5	8	6	4	4	4	3	3	4.6	12.4
26-May	5	4	13	14	15	10	8	2	2	2	1	2	2	A	3	2	1	1	2	2	4	11	14	7	5.5	14.6
27-May	6	14	11	11	10	10	6	3	2	2	1	1	A	2	1	1	2	2	2	2	3	7	5	7	4.9	14.0
28-May	5	15	14	12	15	10	3	7	1	2	1	A	3	8	1	2	2	1	2	2	3	7	9	2	5.5	15.1
29-May	2	2	1	3	4	1	1	1	1	2	A	3	3	3	3	3	2	2	4	6	23	19	17	12	5.1	23.0
30-May	17	18	17	13	11	10	9	5	4	A	4	2	3	4	6	5	6	4	6	7	7	7	17	15	8.6	18.2
31-May	11	9	7	9	7	6	6	5	A	5	4	3	3	2	3	4	5	5	5	3	3	5	4	9	5.4	11.2
5.8 6.6 7.1 7.3 6.9 5.9 4.6 3.3 3.6 2.6 2.7 2.2 1.9 2.5 2.3 2.3 2.1 3.6 2.6 4.7 7.2 7.5 7.8 6.8																									Diurnal Average	
16.6 18.2 17.1 14.5 15.0 11.2 10.9 9.7 15.3 19.4 10.6 10.2 9.2 11.2 9.6 5.6 8.0 26.2 6.3 16.3 23.0 19.1 20.0 17.8																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

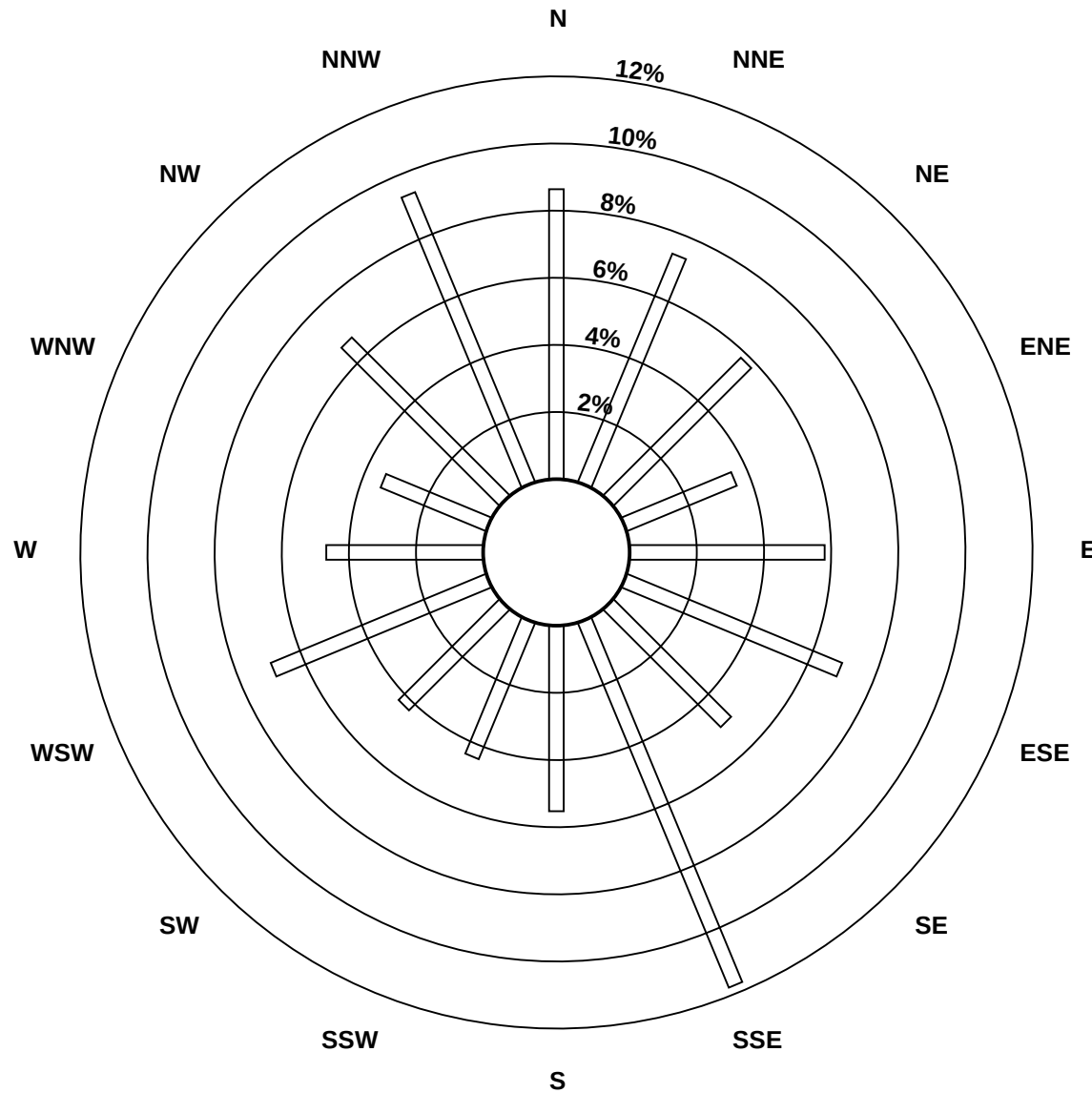
Nitrogen Dioxide (NO₂) - ppb
Portable Reno - May 2014



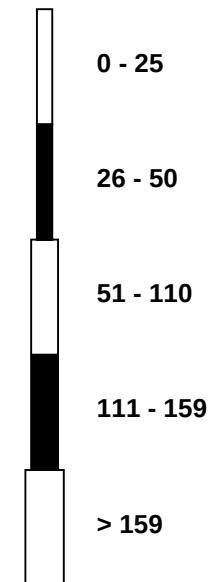
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Portable Reno - May 2014

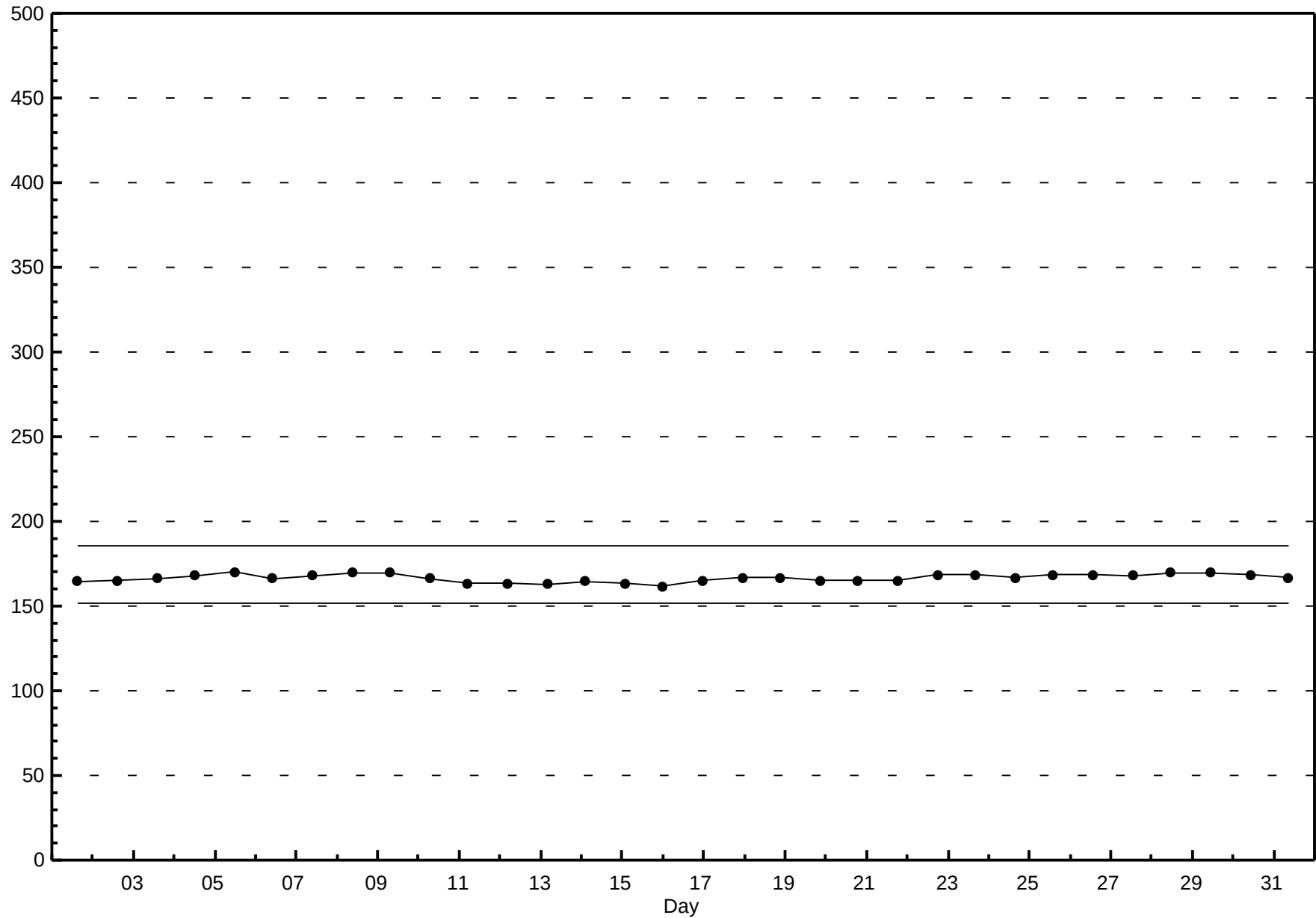


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Portable Reno - May 2014



Hourly Averages

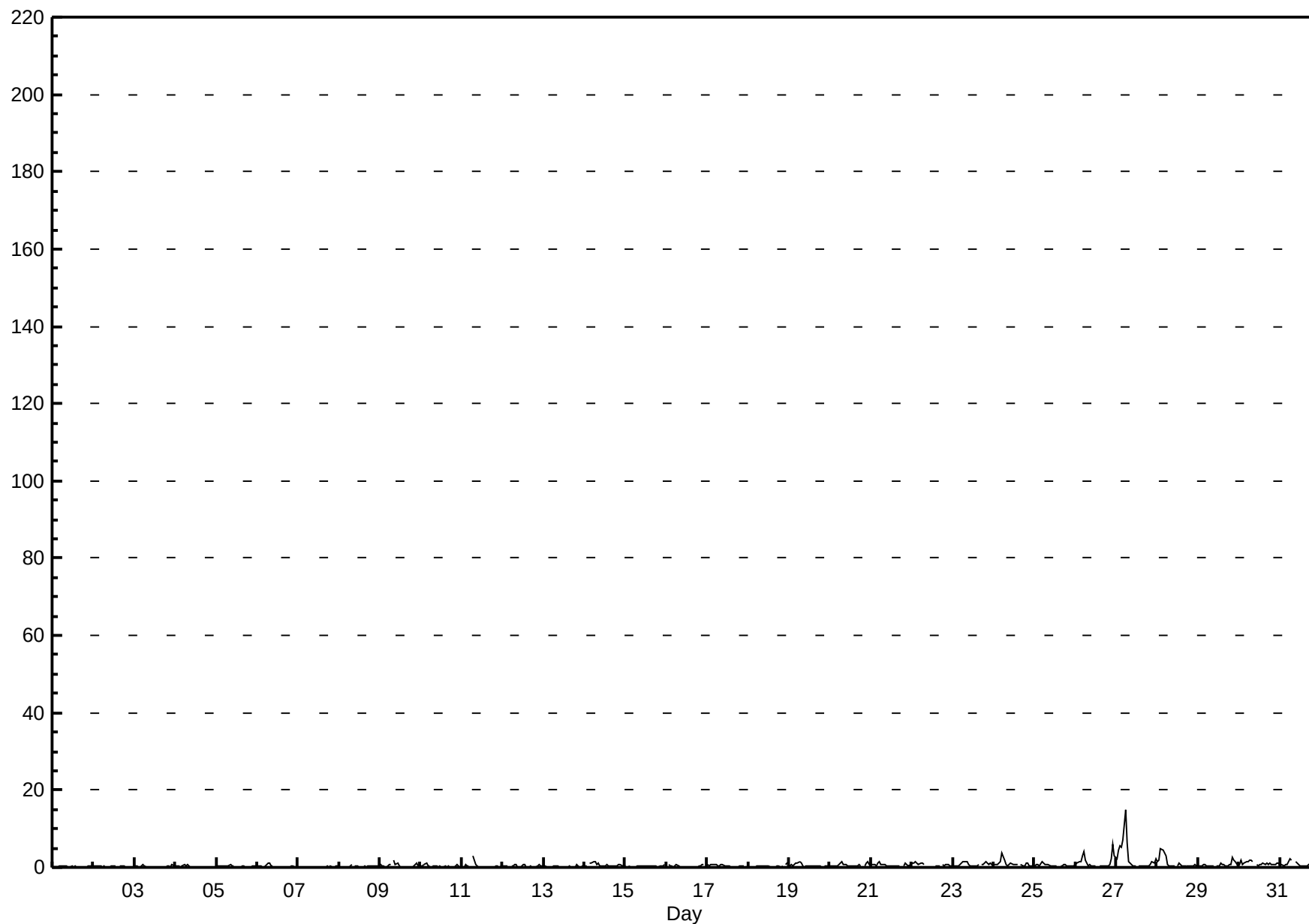
Nitrogen Oxide (NO) - ppb

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 14.8 ppb on May 27 06:00 Maximum Daily Average: 2.5 ppb on May 27																								Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on May 11 20:00 Maximum Diurnal Average: 1.5 ppb at hour 6 Monthly Average: 0.57 ppb												Minimum Daily Average: 0.1 ppb on May 7 Minimum Diurnal Average: 0.3 ppb at hour 17 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.1 P ₉₉ = 4.3														
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-May	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	0.5
2-May	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-May	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0.2	0.8
4-May	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
5-May	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	0.6
6-May	0	0	0	0	0	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
7-May	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
8-May	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
9-May	1	0	0	0	0	1	1	A	A	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0.5	1.9
10-May	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.1
11-May	0	0	1	0	0	A	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.8
12-May	0	0	0	0	A	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0.4	0.9
13-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.7
14-May	0	0	A	1	1	2	1	1	1	0	0	0	0	1	1	0	0	1	0	0	1	1	1	0	0.7	1.6
15-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.6
16-May	A	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0.3	0.9
17-May	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.9
18-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0.2	0.9
19-May	0	1	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	1.6
20-May	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	1	0	A	1	1	1	1	0.6	1.5
21-May	1	1	1	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	0.6	1.5
22-May	1	1	1	1	1	1	1	1	C	C	C	C	C	C	0	0	0	A	1	1	1	1	0	0	--	1.3
23-May	0	0	0	1	1	1	1	2	1	1	0	0	0	0	1	1	A	1	1	1	1	1	1	1	0.7	1.5
24-May	1	1	1	1	1	4	2	1	1	1	1	1	1	1	1	A	1	0	0	1	1	0	0	0	0.9	3.8
25-May	0	1	1	0	2	1	1	1	1	0	0	0	0	0	A	0	1	1	1	0	1	0	0	0	0.6	1.7
26-May	1	1	1	1	3	4	2	1	1	0	0	0	0	A	0	0	0	0	0	0	1	2	6	3	1.3	5.8
27-May	2	4	6	5	7	15	6	1	1	1	0	0	A	1	0	0	0	0	0	0	1	1	1	2	2.5	14.8
28-May	1	2	5	4	4	3	1	1	0	0	0	A	1	0	0	0	1	0	0	0	0	0	1	0	1.2	4.7
29-May	0	0	0	1	1	0	0	0	0	0	A	0	0	1	1	1	1	0	1	1	3	2	2	0	0.7	2.7
30-May	1	2	1	1	1	2	2	2	2	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
31-May	0	1	1	1	1	2	2	2	A	2	1	1	0	0	0	0	0	1	1	1	0	0	0	1	0.7	2.2
0.5 0.7 0.8 0.8 1.0 1.5 1.1 0.7 0.6 0.4 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.4 0.5 0.6 0.7 0.6 2.3 4.3 5.6 5.3 7.2 14.8 6.4 2.0 1.9 1.6 1.2 0.8 0.9 1.0 1.0 0.8 1.0 0.8 1.0 1.4 2.7 2.4 5.8 3.1																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Portable Reno - May 2014



Hourly Maximums

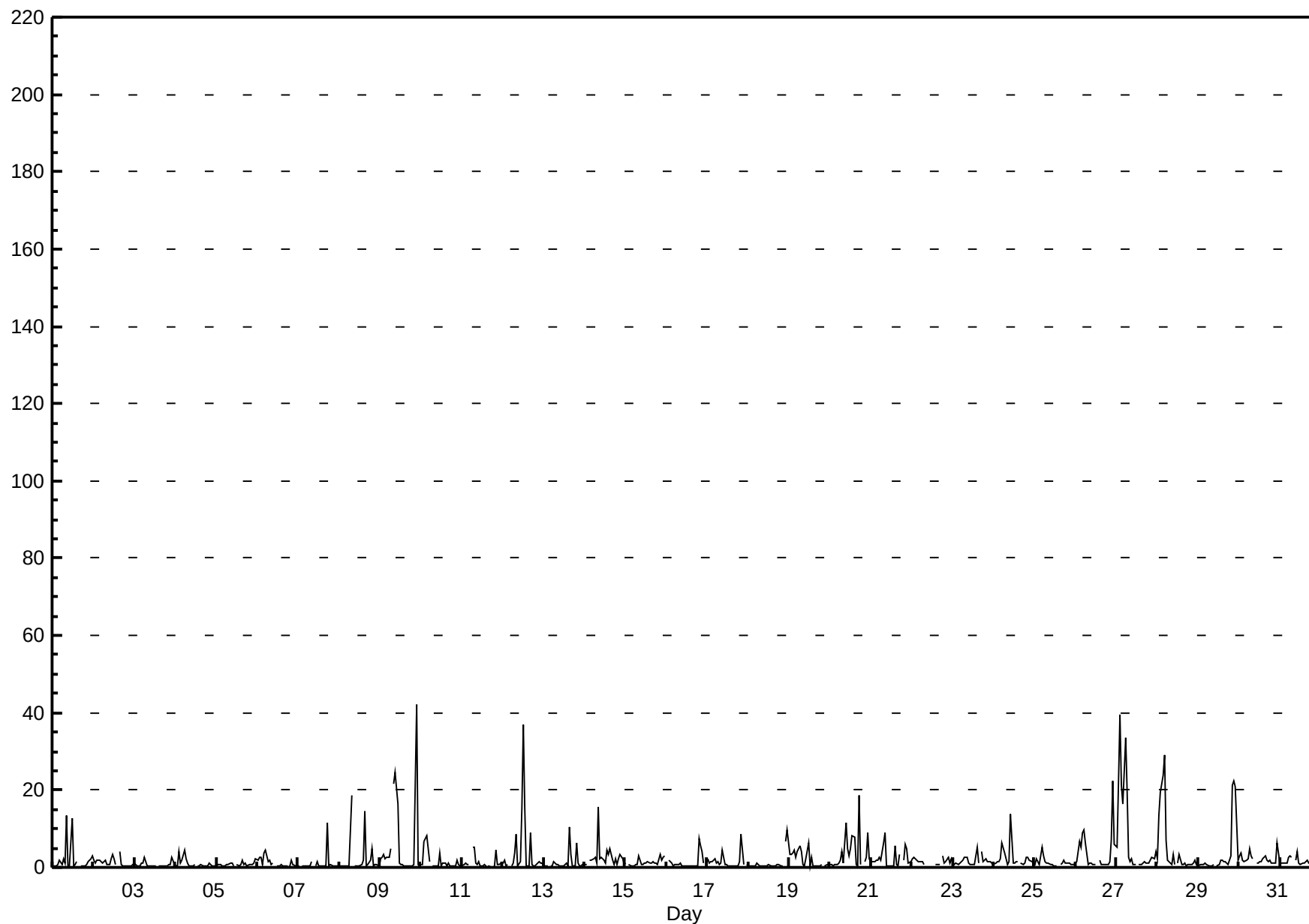
Nitrogen Oxide (NO) - ppb

Portable Reno - May 2014

Maximum Value: 42.2 ppb on May 9 22:00																				Maximum Daily Average: 7.9 ppb on May 27					Hours in Service: 744	
Minimum Value: 0 ppb on May 6 19:00																				Minimum Daily Average: 0.7 ppb on May 3					Hours of Data: 706	
Maximum Diurnal Average: 3.7 ppb at hour 22																				Minimum Diurnal Average: 0.8 ppb at hour 19					Hours of Missing Data: 38	
Monthly Average: 2.33 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 1.0 Q ₃ = 2.0 P ₉₀ = 4.7 P ₉₉ = 23.3					Hours of Calibration: 38	
																				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-May	0	0	0	1	2	1	2	1	13	0	0	13	0	1	2	A	0	0	1	0	1	2	2	3	2.0	13.4
2-May	2	1	2	2	2	1	1	2	1	1	2	3	2	1	A	4	1	0	0	0	0	0	0	1	1.3	4.0
3-May	1	0	1	0	1	1	2	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	3	1	0.7	2.5
4-May	0	1	4	1	2	4	2	1	0	0	1	1	A	0	0	1	0	0	0	0	1	0	1	0	1.0	4.4
5-May	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	0	1	1	1	1	2	0.8	2.2
6-May	2	3	3	1	4	4	2	2	1	1	A	0	0	0	1	0	0	0	0	0	2	1	0	0	1.2	4.3
7-May	0	0	0	0	0	0	0	0	0	2	A	0	2	0	0	0	0	12	0	1	1	0	1	0	0.9	11.6
8-May	0	0	0	0	0	0	1	19	A	0	0	0	0	1	2	14	0	1	2	5	0	1	1	1	2.2	18.6
9-May	2	3	3	2	3	3	5	A	22	25	16	1	1	1	0	0	0	0	0	0	1	42	1	1	5.7	42.2
10-May	1	1	7	8	5	1	A	1	0	0	0	4	0	1	1	0	1	0	0	0	0	2	1	0	1.6	8.0
11-May	1	1	1	1	1	A	5	5	1	1	2	0	0	1	0	0	0	0	0	0	4	1	1	1	1.2	5.2
12-May	1	2	0	1	A	1	1	4	9	0	1	15	37	15	0	0	9	1	0	0	1	2	1	1	4.5	36.9
13-May	0	1	0	A	0	0	1	1	1	0	0	0	0	1	0	10	3	0	0	6	1	0	1	1	1.3	10.4
14-May	1	1	A	2	2	2	3	1	16	2	3	2	1	5	3	5	2	1	2	1	2	3	2	1	2.7	15.8
15-May	1	A	1	0	0	0	1	1	3	1	1	1	1	2	1	1	2	1	1	1	3	2	2	3	1.3	3.4
16-May	A	2	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	8	6	4	1	A	1.4	7.5
17-May	2	1	2	1	2	1	1	1	1	5	1	1	1	0	0	0	0	0	0	1	9	1	A	1	1.4	8.7
18-May	0	0	0	0	0	1	1	0	1	1	1	1	1	0	0	0	0	1	1	0	1	A	7	10	1.2	9.9
19-May	3	3	4	5	3	4	5	4	1	1	2	6	0	3	1	1	0	0	1	1	A	0	1	1	2.1	6.4
20-May	1	1	1	1	1	1	2	4	1	12	5	3	5	8	8	1	1	19	1	A	1	2	9	2	3.8	18.5
21-May	1	1	1	2	2	2	2	6	9	1	0	1	1	1	6	1	1	3	A	2	6	5	1	1	2.4	9.0
22-May	2	3	2	2	2	1	1	1	C	C	C	C	C	C	1	1	1	A	3	1	1	3	1	2	--	2.9
23-May	1	1	1	1	1	2	2	3	2	1	1	1	1	1	5	1	A	4	1	2	2	1	1	1	1.6	5.3
24-May	1	1	1	2	2	6	4	2	1	1	14	1	1	1	1	A	1	1	1	3	3	2	1	1	2.3	13.9
25-May	1	2	1	1	5	3	1	1	1	1	1	1	0	1	A	1	1	2	1	1	1	1	1	1	1.3	5.1
26-May	1	1	7	5	9	10	6	1	1	1	1	1	1	A	2	1	1	1	1	1	2	7	22	6	3.8	22.3
27-May	5	22	40	21	16	34	19	2	1	2	1	1	A	1	1	1	1	1	1	1	2	3	2	4	7.9	39.6
28-May	2	13	19	24	29	7	2	1	1	4	1	A	1	4	1	1	1	1	1	1	1	1	2	1	5.1	29.2
29-May	1	1	1	1	1	1	1	0	0	1	A	1	1	2	2	2	1	1	2	3	21	22	21	2	3.8	22.5
30-May	3	4	2	2	2	2	5	3	2	A	1	1	1	1	2	3	2	2	2	1	1	1	6	4	2.3	6.4
31-May	1	1	1	1	1	3	3	2	A	2	4	1	1	1	1	1	2	1	1	1	1	1	0	3	1.5	4.1
1.3 2.4 3.6 2.9 3.3 3.3 2.8 2.4 3.3 2.3 2.1 2.2 2.1 1.9 1.5 1.8 1.2 1.8 0.8 1.5 2.5 3.7 3.2 1.9																									Diurnal Average	
5.3 22.1 39.6 23.8 29.2 33.7 19.2 18.6 21.6 24.6 16.5 15.4 36.9 15.4 7.9 14.4 8.8 18.5 2.9 7.5 21.4 42.2 22.3 9.9																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Portable Reno - May 2014



Hourly Averages

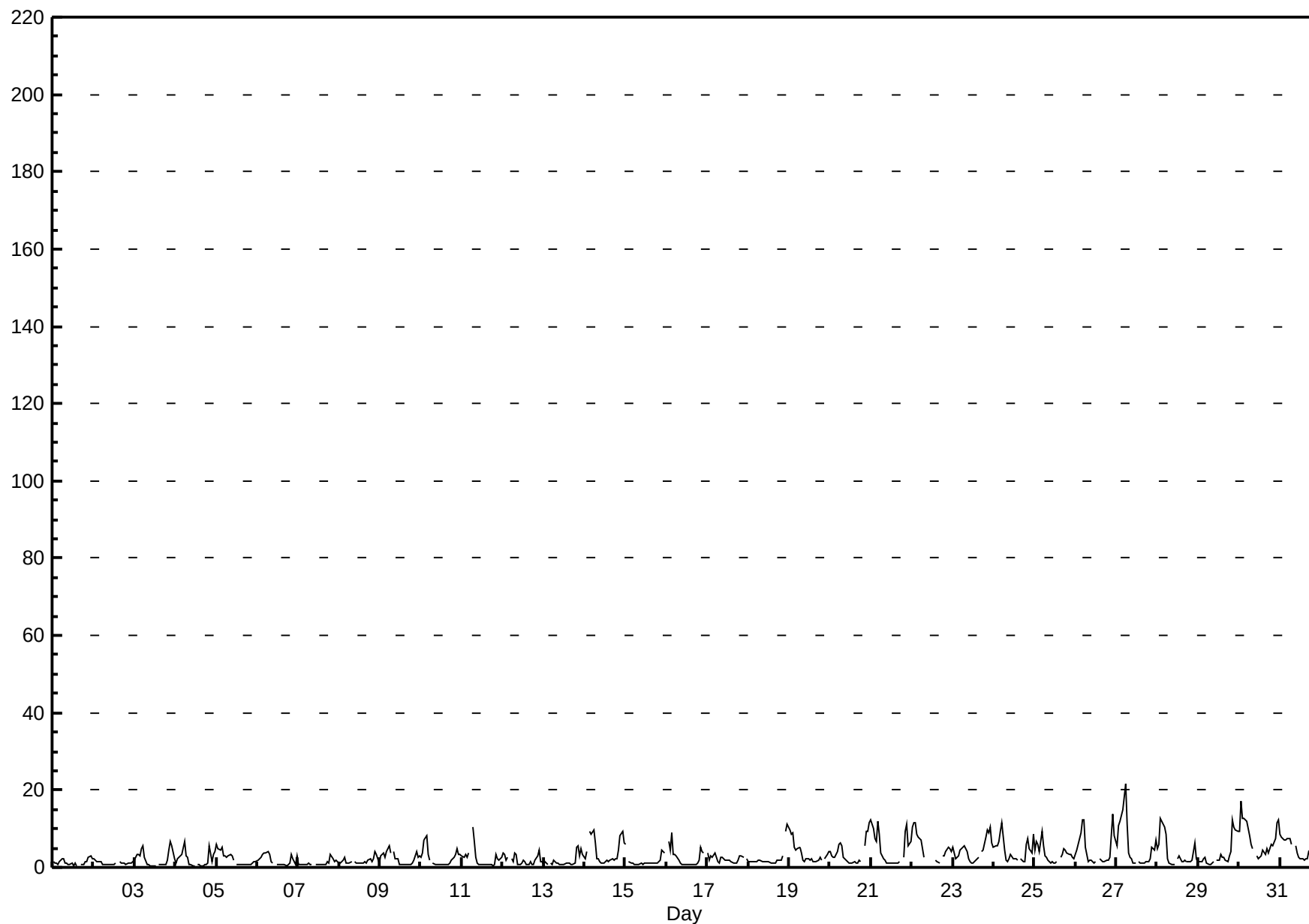
Oxides of Nitrogen (NO_x) - ppb

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.6 ppb on May 27 06:00 Maximum Daily Average: 7.3 ppb on May 30																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0							
Minimum Value: 0 ppb on May 4 17:00 Maximum Diurnal Average: 5.4 ppb at hour 6 Monthly Average: 3.08 ppb										Minimum Daily Average: 1.0 ppb on May 7 Minimum Diurnal Average: 1.2 ppb at hour 12 Percentiles: P ₁ = 0.5 P ₁₀ = 0.7 Q ₁ = 1.1 Median = 2.0 Q ₃ = 3.9 P ₉₀ = 7.5 P ₉₉ = 12.5																	
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-May	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	3	3	2	1.3	3.0
2-May	2	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.1	2.1
3-May	2	3	3	3	5	6	3	1	1	1	0	1	1	A	1	1	1	1	1	2	4	7	6	2	2	2.3	6.8
4-May	1	2	3	3	3	7	3	2	1	1	1	1	A	1	1	1	0	1	1	1	6	2	3	4	4	2.1	6.7
5-May	6	5	5	5	3	3	3	3	3	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2.2	6.1
6-May	2	2	3	3	4	4	4	3	2	1	A	1	1	1	1	1	1	1	1	1	3	2	1	3	3	1.9	4.0
7-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	3	2	2	2	1	1	1.0	3.4
8-May	1	1	2	3	1	1	1	2	A	1	1	1	1	1	1	1	1	2	2	2	2	4	3	1	1	1.6	4.0
9-May	3	3	4	3	4	6	4	A	4	2	2	1	1	1	1	1	1	1	1	1	2	4	3	3	3	2.3	5.7
10-May	2	4	7	8	4	2	A	1	1	1	1	1	1	1	1	1	1	1	2	3	3	5	4	3	3	2.4	8.0
11-May	3	3	4	2	4	A	10	7	3	1	1	1	1	1	1	1	1	1	1	1	3	2	2	3	3	2.3	10.4
12-May	4	3	2	2	A	2	1	4	3	1	1	1	2	2	1	1	1	1	1	2	3	5	2	1	1	2.0	4.6
13-May	1	2	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	5	6	3	5	3	3	1.7	5.6
14-May	2	4	A	9	8	10	6	2	2	1	1	1	2	2	2	2	2	2	2	2	4	8	9	6	4	4.0	9.6
15-May	6	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	4	4	4	1.7	5.8
16-May	A	7	4	9	3	3	3	2	1	1	1	1	1	1	1	1	1	1	1	2	5	4	4	A	4	2.5	8.9
17-May	4	2	3	3	4	3	2	1	3	3	2	2	2	2	2	1	1	1	2	3	3	3	A	2	2	2.2	3.8
18-May	1	1	1	1	1	2	2	2	1	2	2	2	1	1	1	1	1	2	2	2	3	A	9	11	3	2.3	11.2
19-May	10	8	9	5	5	5	5	4	2	1	2	2	2	2	2	2	2	2	2	2	A	2	4	4	4	3.6	9.8
20-May	4	3	3	3	4	6	7	6	3	2	2	1	1	1	1	1	1	2	1	A	5	9	10	12	12	3.8	11.6
21-May	12	10	7	7	12	9	4	2	2	1	1	1	1	1	1	1	1	1	A	3	9	11	6	7	7	4.8	12.5
22-May	11	12	11	9	8	7	5	3	C	C	C	C	C	C	2	1	1	A	3	3	4	5	5	4	4	--	11.5
23-May	5	4	2	3	4	5	5	6	4	2	1	1	1	1	2	3	A	4	5	8	10	9	10	6	6	4.4	10.3
24-May	5	5	6	7	9	12	4	2	1	2	3	2	2	2	2	A	2	1	2	6	7	5	4	9	9	4.4	11.7
25-May	4	7	6	4	9	6	3	3	2	1	1	1	1	1	A	3	3	5	5	4	3	4	3	2	2	3.5	9.4
26-May	3	5	7	9	12	12	5	2	2	2	2	1	2	A	2	2	1	1	2	2	3	8	14	8	8	4.6	13.8
27-May	6	11	12	14	15	22	11	4	3	2	1	1	A	2	1	1	1	1	2	2	2	5	4	7	7	5.6	21.6
28-May	5	6	13	11	11	9	2	1	1	1	1	A	2	3	1	1	2	1	1	1	2	4	6	2	2	3.8	12.5
29-May	2	2	1	2	3	1	1	1	1	2	A	2	2	3	3	3	2	2	3	4	12	10	10	9	9	3.5	12.3
30-May	9	17	13	13	12	10	8	6	5	A	3	2	2	3	5	3	5	4	5	6	6	8	12	12	12	7.3	17.1
31-May	8	8	7	7	8	7	8	6	A	6	4	3	2	2	2	2	2	4	4	3	2	2	1	6	6	4.5	8.5
4.2 4.8 4.8 5.0 5.4 5.4 3.9 2.6 1.9 1.5 1.4 1.2 1.2 1.4 1.4 1.4 1.4 1.6 1.8 2.6 4.1 4.7 5.0 4.8 12.5 17.1 12.5 13.6 14.9 21.6 11.0 6.6 4.9 5.6 3.8 2.5 2.5 3.2 4.7 3.4 4.9 4.7 4.7 7.8 12.3 11.1 13.8 12.4																									Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																											

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Portable Reno - May 2014



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

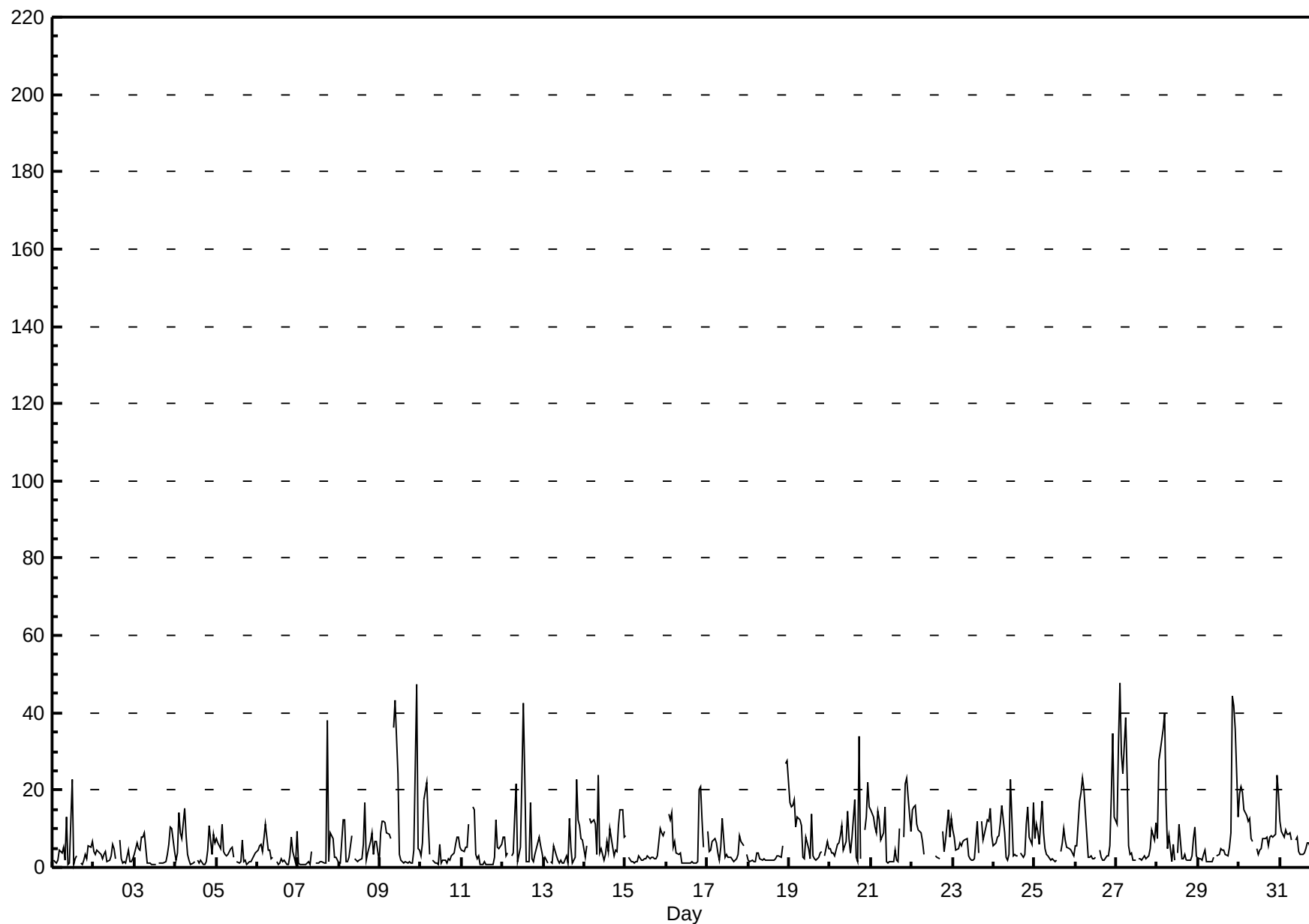
Portable Reno - May 2014

Maximum Value: 47.6 ppb on May 27 03:00																				Maximum Daily Average: 11.9 ppb on May 27					Hours in Service: 744	
Minimum Value: 1 ppb on May 3 11:00																				Minimum Daily Average: 3.1 ppb on May 2					Hours of Data: 706	
Maximum Diurnal Average: 10.9 ppb at hour 22																				Minimum Diurnal Average: 3.1 ppb at hour 17					Hours of Missing Data: 38	
Monthly Average: 6.61 ppb																				Percentiles: P ₁ = 0.8 P ₁₀ = 1.2 Q ₁ = 2.0 Median = 4.1 Q ₃ = 8.3 P ₉₀ = 15.0 P ₉₉ = 39.1					Hours of Calibration: 38	
																				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-May	2	2	1	2	4	4	5	2	13	1	1	23	1	2	3	A	1	1	2	3	2	6	5	7	4.0	22.7
2-May	4	4	5	4	4	2	3	4	2	2	3	6	5	2	A	7	2	1	2	1	4	1	1	2	3.1	6.9
3-May	3	6	5	4	8	8	9	1	1	1	1	1	1	A	1	1	1	1	2	3	6	10	10	4	3.9	10.5
4-May	2	4	14	9	7	15	8	3	2	1	1	2	A	2	1	2	1	1	1	5	11	3	8	6	4.8	15.2
5-May	8	6	5	11	4	3	3	3	5	5	3	A	2	1	1	7	1	2	1	2	2	2	3	4	3.6	11.3
6-May	4	6	6	4	7	11	5	4	2	2	A	1	1	1	2	2	2	1	1	3	8	4	1	9	3.8	11.0
7-May	1	1	1	1	1	1	2	1	4	A	1	1	1	1	2	1	1	38	2	9	7	3	2	2	3.6	38.0
8-May	1	1	12	12	2	1	3	8	A	2	2	1	2	2	6	17	2	4	7	9	3	7	7	2	4.9	16.7
9-May	9	12	12	12	9	9	7	A	36	43	24	3	2	2	1	1	1	1	1	1	4	47	5	5	10.8	47.5
10-May	3	6	18	22	12	3	A	2	1	1	1	6	1	2	2	1	2	2	3	4	6	8	8	5	5.1	22.1
11-May	5	4	5	5	11	A	16	15	3	2	3	1	1	2	1	1	1	1	1	3	12	5	5	6	4.7	15.8
12-May	8	8	3	4	A	3	4	13	21	1	5	23	43	24	2	1	17	2	2	4	6	8	5	4	9.1	42.6
13-May	2	2	1	A	1	1	6	3	2	1	2	1	1	3	1	13	5	1	3	23	12	11	7	7	4.8	22.6
14-May	3	6	A	13	11	12	11	3	24	4	5	2	3	7	4	10	5	3	5	4	11	15	15	8	8.0	24.0
15-May	8	A	3	1	1	1	1	2	3	2	2	2	2	3	2	3	3	2	2	3	10	9	8	9	3.6	9.9
16-May	A	14	12	14	5	7	4	3	4	1	1	1	1	1	1	1	1	1	1	20	21	12	5	A	6.1	20.9
17-May	9	4	4	7	7	6	4	2	5	13	3	4	3	3	3	2	2	2	3	8	7	6	A	3	4.7	12.7
18-May	2	2	2	2	2	4	4	2	2	2	2	2	2	2	2	2	2	3	3	3	5	A	27	28	4.5	27.7
19-May	17	16	16	18	10	13	12	11	3	2	8	5	2	14	3	2	2	3	4	4	A	3	7	5	7.8	17.6
20-May	5	4	4	3	6	6	8	11	4	7	14	8	4	8	18	3	2	34	2	A	10	13	22	16	9.1	34.0
21-May	15	13	10	9	15	12	7	9	16	1	1	1	1	1	4	2	2	10	A	8	22	23	18	9	9.2	23.2
22-May	15	16	16	11	10	9	7	3	C	C	C	C	C	C	3	3	2	A	9	4	7	15	8	13	--	16.0
23-May	10	8	4	5	6	6	7	7	7	3	2	2	2	2	12	4	A	12	7	10	12	12	15	8	7.1	15.4
24-May	6	6	8	8	12	16	9	3	2	3	23	3	3	3	3	A	4	2	3	11	16	8	6	17	7.6	22.6
25-May	7	11	9	6	17	9	5	3	3	2	2	2	2	2	A	4	6	10	7	5	5	4	4	3	5.6	17.2
26-May	6	6	17	19	23	20	14	3	3	3	2	2	3	A	4	3	2	2	3	3	5	18	35	13	9.1	34.8
27-May	11	32	48	30	24	39	24	6	4	4	2	2	A	2	2	2	3	2	3	3	5	10	7	12	11.9	47.6
28-May	7	28	30	36	40	17	5	8	2	6	2	A	4	11	2	2	3	2	2	2	3	7	11	3	10.1	40.0
29-May	2	2	2	3	4	2	1	1	2	2	A	3	4	5	4	4	3	3	5	9	44	42	36	13	8.6	44.4
30-May	19	21	19	15	13	12	13	7	7	A	5	3	4	5	8	7	8	5	8	8	8	8	24	19	10.7	23.9
31-May	12	9	8	10	8	9	9	7	A	7	8	4	3	3	4	5	6	6	5	4	4	5	4	12	6.7	11.9
6.8 8.6 10.0 9.9 9.6 8.7 7.2 5.1 6.5 4.5 4.5 4.1 3.6 4.1 3.5 3.8 3.1 5.3 3.3 6.0 9.3 10.9 10.7 8.4																								Diurnal Average		
19.1 32.4 47.6 35.7 40.0 38.7 23.6 15.0 36.0 43.3 24.2 22.7 42.6 23.8 17.7 16.7 16.9 38.0 9.2 22.6 44.4 47.5 35.7 27.7																								Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

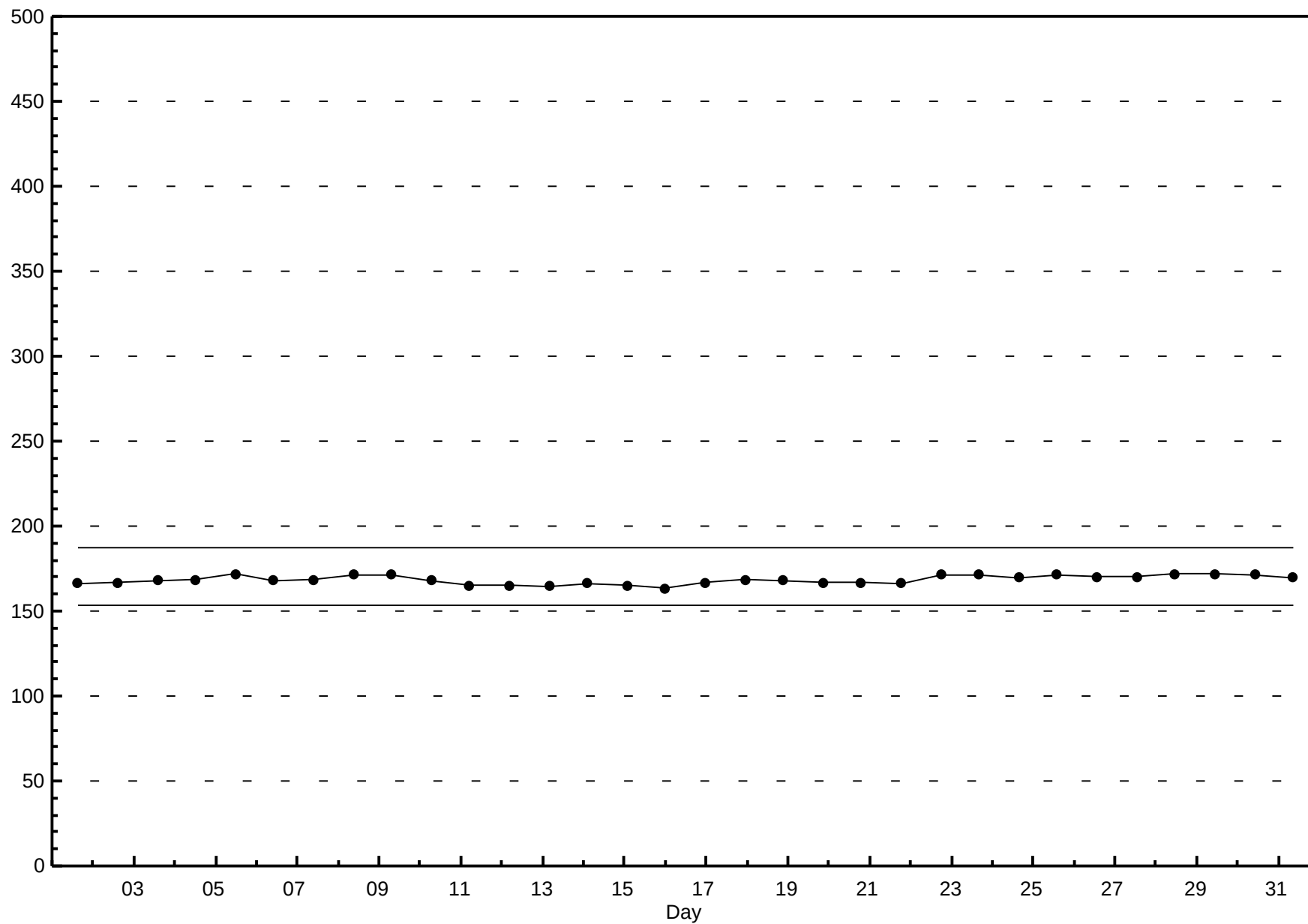
Portable Reno - May 2014



Span Responses

Oxides of Nitrogen (NO_x)

Portable Reno - May 2014



Hourly Averages

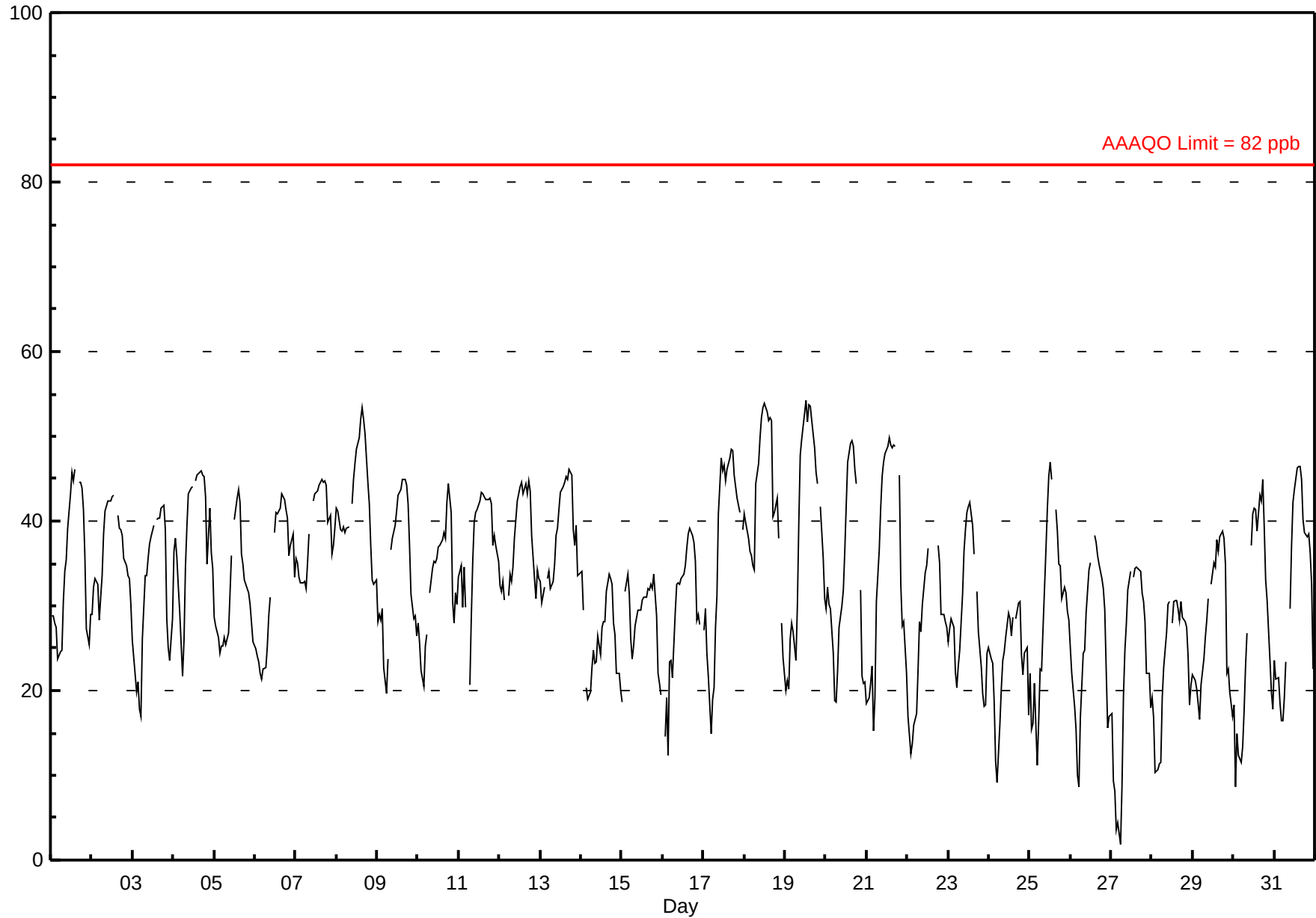
Ozone (O₃) - ppb

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 54.3 ppb on May 19 13:00 Maximum Daily Average: 42.8 ppb on May 18																								Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0		
Minimum Value: 2 ppb on May 27 06:00 Minimum Daily Average: 22.4 ppb on May 27 Maximum Diurnal Average: 42.3 ppb at hour 16 Minimum Diurnal Average: 21.6 ppb at hour 6 Monthly Average: 32.49 ppb Percentiles: P ₁ = 9.1 P ₁₀ = 19.4 Q ₁ = 25.2 Median = 32.6 Q ₃ = 40.4 P ₉₀ = 44.9 P ₉₉ = 52.6																										
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-May	29	29	28	27	24	25	25	30	34	35	39	43	46	45	46	A	45	45	44	41	36	27	25	29	34.7	46.0
2-May	29	32	33	33	28	31	34	39	41	42	42	42	43	43	A	41	39	39	38	36	35	34	33	30	36.4	43.0
3-May	26	22	20	21	18	17	26	33	34	36	37	38	39	A	40	40	40	41	42	39	28	25	24	28	31.1	41.8
4-May	36	38	36	32	29	22	26	35	39	43	44	44	A	45	45	46	46	45	45	43	35	41	36	34	38.6	45.9
5-May	29	28	26	24	25	25	26	25	27	31	36	A	40	43	44	42	36	35	33	32	32	30	28	26	31.5	43.8
6-May	25	24	23	22	21	22	23	25	29	31	A	39	41	41	41	41	43	43	41	40	36	37	39	33	33.1	43.2
7-May	36	35	33	33	33	33	32	35	38	A	42	43	43	44	44	45	45	45	44	40	41	36	37	39	39.0	45.0
8-May	42	41	39	39	39	39	39	39	A	42	45	47	48	50	52	53	52	50	45	42	37	33	33	33	42.6	53.3
9-May	28	29	28	30	23	20	24	A	37	38	40	41	43	43	44	45	45	44	42	37	31	29	29	26	34.6	44.9
10-May	28	26	22	20	25	27	A	32	34	35	35	36	37	37	38	39	38	42	44	41	30	28	31	30	32.9	44.4
11-May	33	35	30	35	30	A	21	29	35	40	41	41	42	43	43	43	43	43	43	42	37	38	37	35	37.3	43.4
12-May	32	32	33	31	A	31	34	33	35	38	42	43	44	45	43	44	43	45	44	38	33	31	34	33	37.5	44.7
13-May	33	30	32	A	33	34	32	33	35	38	39	41	43	44	45	45	45	46	45	39	37	40	33	34	38.2	46.1
14-May	34	29	A	20	19	20	23	25	23	23	26	24	27	28	28	32	34	33	32	28	27	22	22	20	26.1	34.1
15-May	19	A	32	34	31	26	24	25	28	29	29	30	31	31	31	32	32	33	32	34	29	22	21	20	28.4	33.8
16-May	A	15	19	12	23	24	22	29	33	33	32	33	34	35	37	38	39	38	37	35	28	29	28	A	29.7	39.1
17-May	27	30	24	22	15	19	20	27	31	41	47	46	47	45	46	47	48	48	45	44	43	41	A	39	36.7	48.4
18-May	41	40	38	36	36	35	34	44	47	50	52	53	54	53	52	52	52	41	41	43	38	A	28	24	42.8	53.9
19-May	20	21	20	26	28	27	24	30	40	48	50	53	54	52	54	54	52	49	46	44	A	42	36	31	39.1	54.3
20-May	30	32	30	30	24	19	19	22	27	30	32	36	42	47	49	49	49	46	44	A	32	22	21	21	32.8	49.4
21-May	19	19	21	23	15	19	30	37	42	45	47	48	49	50	49	49	49	49	A	46	33	28	28	22	35.4	49.7
22-May	17	15	13	14	16	17	22	28	27	30	34	35	37	C	C	C	40	A	37	35	29	29	28	27	26.5	40.5
23-May	26	27	29	28	22	20	23	25	31	36	39	41	42	42	39	36	A	32	27	23	20	18	18	24	29.1	42.2
24-May	25	24	23	19	12	9	16	20	24	25	26	29	28	26	29	A	28	30	30	24	22	24	25	17	23.4	30.5
25-May	22	15	16	21	11	16	22	22	27	36	41	45	47	45	A	41	39	35	35	31	32	31	29	28	30.0	46.9
26-May	25	22	18	15	10	9	17	24	25	29	32	34	35	A	38	38	36	35	33	32	30	22	16	17	25.7	38.4
27-May	17	9	8	4	4	2	9	19	25	28	32	34	A	33	34	35	34	34	32	31	28	22	22	18	22.4	34.6
28-May	19	17	10	11	11	12	19	23	27	30	31	A	28	31	31	30	28	30	29	28	28	24	18	21	23.2	30.7
29-May	22	21	20	18	17	21	24	26	28	31	A	33	35	35	38	36	38	39	38	35	22	23	20	17	27.7	38.9
30-May	18	9	15	12	12	13	18	23	27	A	37	41	42	41	39	43	42	45	39	33	31	24	20	18	27.9	44.8
31-May	24	21	21	18	17	16	19	23	A	30	37	42	44	46	46	46	45	40	39	38	38	36	33	23	32.3	46.5
27.0 25.5 24.7 23.7 21.8 21.6 24.2 28.8 32.0 35.3 38.2 39.9 40.9 41.5 41.6 42.3 41.5 40.7 38.9 36.5 31.9 29.6 27.7 26.6																								Diurnal Average		
41.6 41.2 39.0 38.8 39.3 38.7 39.2 44.5 46.8 49.8 52.1 53.4 54.3 52.8 53.8 53.6 52.0 50.3 45.8 45.5 42.7 41.7 38.5 39.2																								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
Portable Reno - May 2014



Hourly Maximums

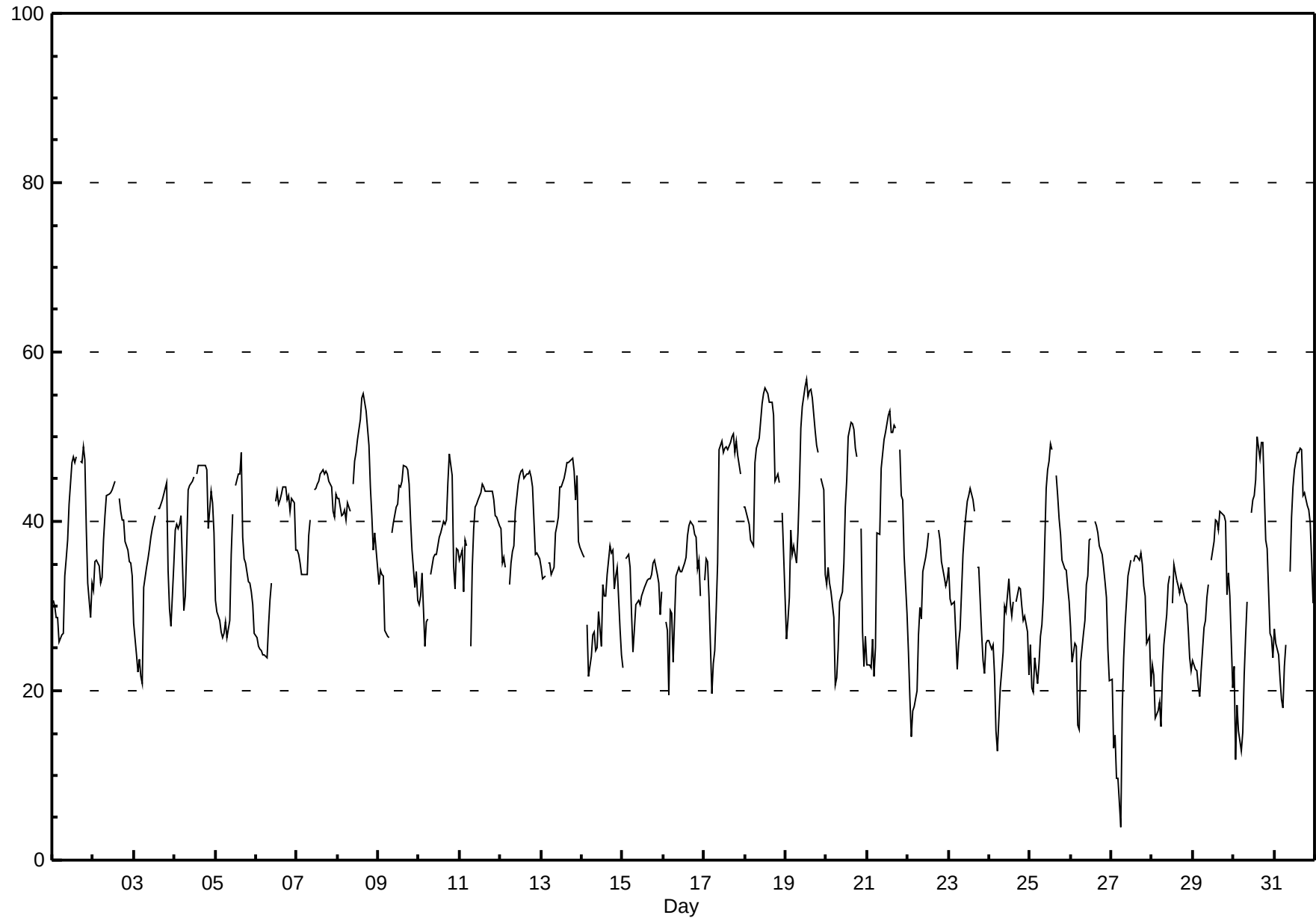
Ozone (O₃) - ppb

Portable Reno - May 2014

Maximum Value: 56.8 ppb on May 19 13:00																				Maximum Daily Average: 46.9 ppb on May 18					Hours in Service: 744	
Minimum Value: 4 ppb on May 27 06:00																				Minimum Daily Average: 25.7 ppb on May 27					Hours of Data: 709	
Maximum Diurnal Average: 44.4 ppb at hour 16																				Minimum Diurnal Average: 25.1 ppb at hour 6					Hours of Missing Data: 35	
Monthly Average: 35.80 ppb																				Percentiles: P ₁ = 14.6 P ₁₀ = 23.5 Q ₁ = 29.2 Median = 35.6 Q ₃ = 43.1 P ₉₀ = 47.6 P ₉₉ = 55.0					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-May	31	30	29	29	26	27	27	34	36	38	42	47	48	47	48	A	47	47	49	47	39	33	29	33	37.3	48.7
2-May	32	35	35	35	33	33	38	41	43	43	43	44	44	45	A	43	41	40	40	38	37	35	35	34	38.5	44.7
3-May	28	24	22	24	22	21	32	35	36	37	38	39	41	A	41	41	42	43	44	45	34	30	28	35	33.9	44.5
4-May	39	40	39	40	41	30	31	37	44	44	45	45	A	46	47	47	47	47	47	46	39	44	42	39	41.8	46.7
5-May	31	29	28	27	26	27	28	26	28	36	41	A	44	46	46	48	38	36	35	33	33	32	30	27	33.7	48.2
6-May	26	25	25	25	24	24	24	28	31	33	A	42	44	42	43	43	44	44	43	43	41	43	42	37	35.4	44.1
7-May	37	36	35	34	34	34	34	38	40	A	44	44	44	45	46	46	46	46	46	45	44	41	40	43	40.9	46.2
8-May	43	43	41	41	41	40	42	41	A	44	47	48	50	52	55	55	54	53	49	44	41	37	39	35	44.9	55.1
9-May	32	34	34	34	27	26	26	A	39	40	42	42	44	44	45	47	47	46	44	40	37	32	34	31	37.7	46.6
10-May	30	31	34	25	28	29	A	34	36	36	36	37	38	39	40	40	40	45	48	45	35	32	37	37	36.1	48.0
11-May	36	37	32	38	37	A	25	35	39	42	42	43	43	44	44	44	44	44	44	44	43	41	41	39	39.9	44.4
12-May	39	35	36	35	A	33	35	36	37	41	44	45	46	46	45	46	46	46	45	44	36	36	36	36	40.2	46.0
13-May	35	33	34	A	35	35	34	35	39	40	41	44	44	45	46	47	47	47	48	46	43	45	38	37	40.6	47.5
14-May	36	36	A	28	22	24	27	27	25	25	29	25	32	31	31	34	37	36	37	32	34	34	27	24	30.2	37.1
15-May	23	A	36	36	35	29	25	27	30	31	30	31	32	32	33	33	33	34	35	35	34	33	29	32	31.6	36.2
16-May	A	28	27	19	29	29	23	34	34	35	34	34	35	36	38	40	40	40	39	38	34	35	31	A	33.3	40.1
17-May	33	36	35	31	20	23	25	29	35	48	49	48	49	49	49	49	50	50	48	49	48	46	A	42	40.9	50.3
18-May	42	41	40	38	37	37	47	49	50	52	54	55	56	55	54	54	54	53	45	46	45	A	41	36	46.9	55.7
19-May	26	28	31	39	36	37	35	39	44	51	54	56	57	55	55	56	55	51	49	48	A	45	44	34	44.5	56.8
20-May	33	35	33	32	29	21	22	25	31	32	35	42	45	50	52	52	51	49	48	A	39	27	23	26	36.0	51.7
21-May	23	23	23	26	22	25	39	39	46	48	50	51	53	53	51	50	51	51	A	49	43	43	36	29	40.1	53.0
22-May	25	19	15	18	18	20	27	30	29	34	36	37	39	C	C	C	42	A	39	38	35	33	32	33	29.9	42.4
23-May	35	31	30	31	27	23	26	27	36	39	41	42	43	44	43	41	A	35	35	27	24	22	26	26	32.6	44.0
24-May	26	25	25	22	15	13	20	22	25	30	29	33	30	29	30	A	30	32	32	30	28	29	27	22	26.4	33.2
25-May	25	20	20	24	21	23	26	28	31	44	46	47	49	48	A	45	43	40	38	35	34	34	32	31	34.2	49.1
26-May	27	23	26	25	16	15	23	27	28	32	34	38	38	A	40	40	39	37	36	35	33	31	25	21	30.0	40.1
27-May	21	13	15	10	10	4	18	24	28	31	34	35	A	35	36	36	35	36	35	32	31	26	26	21	25.7	36.3
28-May	23	22	17	18	19	16	22	25	29	32	33	A	30	35	33	32	31	33	32	30	30	27	24	22	26.8	34.8
29-May	24	22	22	20	19	22	28	28	31	33	A	35	38	40	40	39	41	41	41	40	31	34	31	20	31.4	41.2
30-May	23	12	18	15	13	15	22	26	31	A	41	42	43	45	50	48	49	49	44	38	37	27	26	24	32.1	50.1
31-May	27	26	24	21	19	18	23	25	A	34	41	44	46	48	48	49	48	43	43	42	41	40	35	30	35.5	48.6
30.3 29.1 28.6 27.9 26.0 25.1 28.4 31.7 34.8 38.1 40.5 42.0 42.9 43.8 43.8 44.4 43.8 43.0 41.8 40.1 36.7 34.9 32.9 31.1																								Diurnal Average		
42.6 42.6 40.7 40.9 41.3 40.2 46.9 48.6 49.9 51.9 54.0 56.0 56.8 55.0 55.4 55.6 54.6 53.0 48.9 49.5 47.7 45.7 43.7 43.2																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

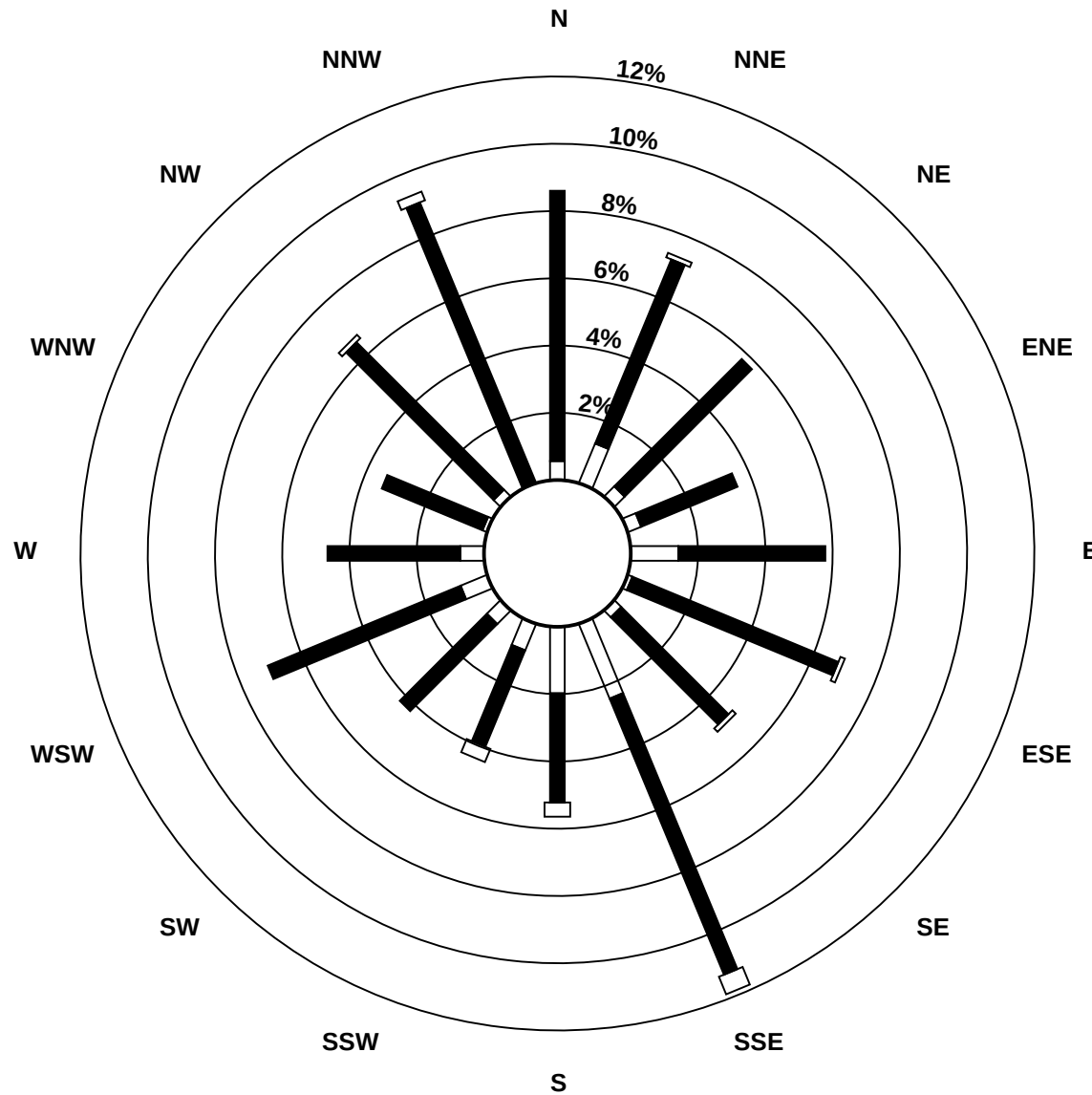
Hourly Maximums

Ozone (O₃) - ppb
Portable Reno - May 2014

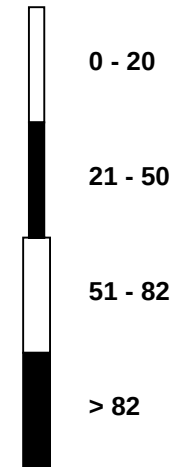


Pollutant Rose

Ozone (O₃) - ppb
Portable Reno - May 2014



Pollutant Classes (ppb)



Eight Hour Running Averages

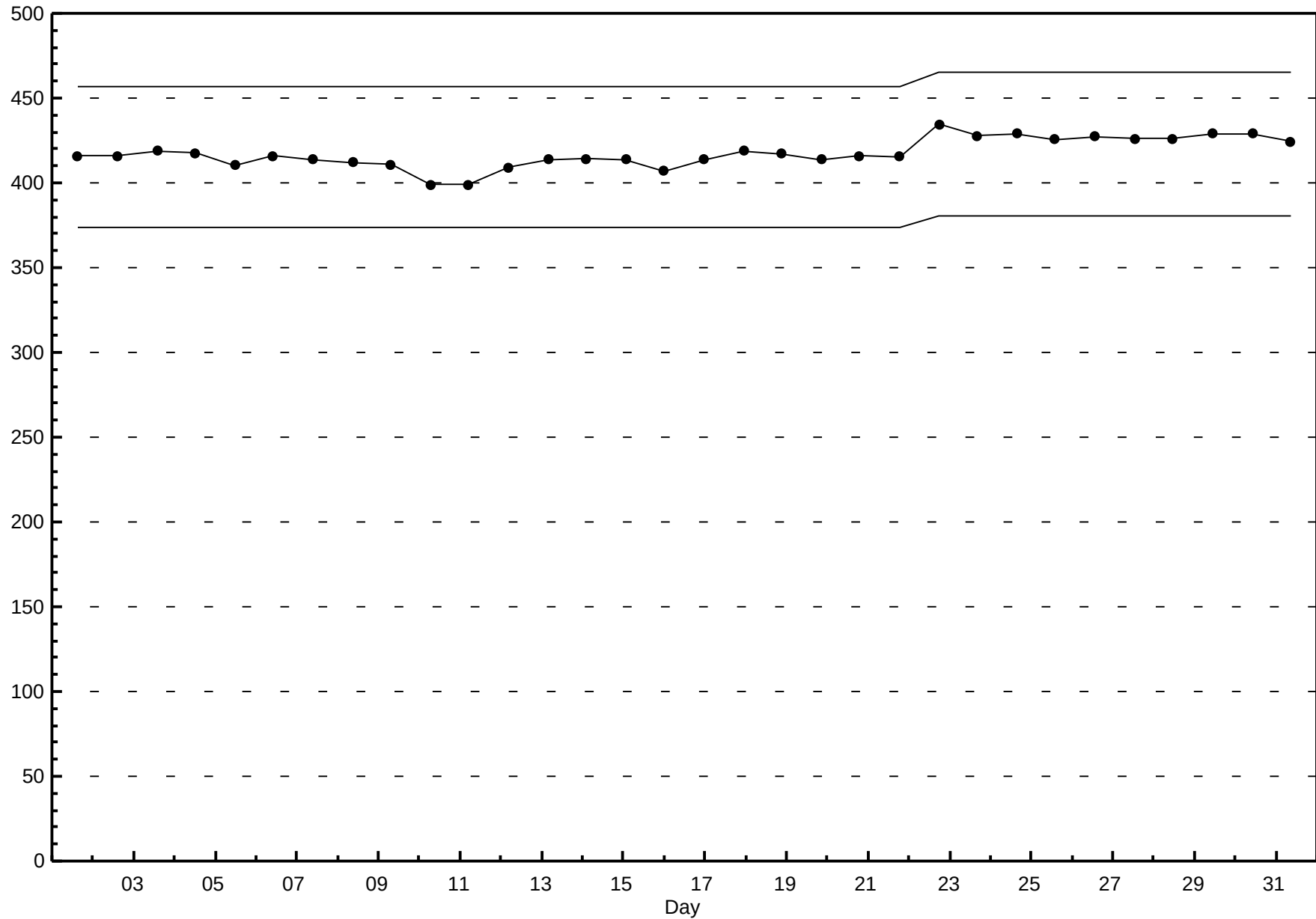
Ozone (O₃) - ppb

Portable Reno - May 2014

Maximum Value: 52.2 ppb on May 18 17:00																								Hours in Service: 744	
Minimum Value: 8.8 ppb on May 27 07:00																								Hours of Data: 737	
Percentiles: P ₁ = 14.5 P ₁₀ = 21.1 Q ₁ = 26.3 Median = 32.6 Q ₃ = 39.1 P ₉₀ = 43.4 P ₉₉ = 50.3																								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-May	33	31	30	30	29	28	27	27	28	29	30	32	35	37	40	41	43	44	45	44	43	41	38	36	44.7
2-May	35	33	32	31	30	30	31	32	34	35	36	37	39	41	42	42	42	41	41	40	39	37	37	36	42.1
3-May	34	32	29	28	25	23	22	23	24	26	28	30	33	35	37	38	39	40	40	40	39	37	35	34	40.4
4-May	33	33	32	31	31	31	31	32	32	33	34	35	36	39	42	44	45	45	45	45	44	43	42	41	45.2
5-May	39	36	34	32	31	29	27	26	26	26	28	28	30	33	35	38	39	39	39	38	37	35	33	31	39.4
6-May	30	29	27	26	25	24	23	23	24	25	25	27	30	33	35	38	40	41	41	41	41	40	40	39	41.5
7-May	38	37	36	35	35	34	33	34	34	34	35	37	38	40	41	43	44	44	44	44	43	42	42	41	44.1
8-May	40	40	39	39	39	39	40	40	39	39	40	41	43	44	46	48	49	50	50	49	48	46	43	41	49.7
9-May	38	35	33	31	30	28	27	26	27	28	30	32	35	38	41	41	42	43	43	43	41	40	38	35	43.4
10-May	33	31	29	26	26	25	25	26	27	28	30	32	34	35	35	36	37	38	39	40	39	38	37	36	39.5
11-May	35	34	32	32	31	32	30	30	31	31	33	34	36	37	39	41	42	42	43	43	42	41	41	40	42.7
12-May	38	37	36	34	34	33	33	32	33	33	35	37	37	39	40	42	43	44	44	43	42	40	39	38	43.9
13-May	36	35	33	32	32	33	33	33	33	34	35	36	37	38	40	41	43	44	44	44	43	43	41	40	44.4
14-May	39	36	35	33	30	27	26	24	23	22	22	23	24	25	26	27	28	29	30	30	30	29	29	27	38.6
15-May	25	24	24	25	26	26	26	27	28	29	28	28	28	28	29	30	31	31	31	32	32	31	29	28	31.9
16-May	27	24	23	20	19	19	19	21	22	24	26	29	30	31	33	34	35	36	36	37	36	35	34	34	36.7
17-May	32	31	29	27	25	23	22	23	24	25	28	31	35	38	41	44	46	47	47	46	46	45	45	44	46.9
18-May	43	42	41	40	39	38	37	38	39	40	42	44	46	48	51	52	52	51	50	48	46	45	42	38	52.2
19-May	33	31	28	25	24	24	24	25	27	30	34	37	41	44	47	50	52	52	52	51	50	49	46	43	52.0
20-May	40	37	35	33	32	29	27	26	25	25	25	26	28	32	36	39	42	44	45	47	45	42	38	34	46.7
21-May	29	25	22	22	20	20	21	23	26	29	32	35	40	43	46	47	48	49	49	48	46	43	40	36	48.8
22-May	32	27	25	21	19	18	17	18	19	21	24	26	29	30	32	N	N	N	N	N	N	N	33	32	33.1
23-May	30	30	29	28	27	26	25	25	26	27	28	30	32	35	37	38	39	39	37	34	31	28	25	23	39.4
24-May	23	22	22	21	20	19	19	19	18	18	19	20	22	24	26	27	27	28	29	28	27	27	26	25	28.8
25-May	24	23	21	20	19	18	18	18	19	22	25	28	32	36	38	41	42	42	41	39	37	35	34	33	42.1
26-May	31	29	27	25	22	20	18	18	18	18	20	22	26	28	31	33	35	35	36	35	35	33	30	28	35.6
27-May	25	22	19	15	12	10	9	9	10	12	15	19	21	26	29	32	33	34	34	33	33	31	30	28	33.8
28-May	26	24	21	18	16	15	15	15	16	18	20	22	24	27	28	29	30	30	29	29	29	28	27	26	29.7
29-May	25	24	23	22	20	20	20	21	22	23	24	26	28	30	32	34	35	36	36	37	35	34	31	29	36.8
30-May	26	23	20	17	16	14	14	15	16	17	20	24	29	33	36	38	41	41	42	41	39	37	35	31	41.5
31-May	29	26	24	22	20	19	19	20	20	21	23	26	30	34	38	42	42	43	44	43	42	41	39	36	43.6
43.1 41.9 40.8 39.7 39.0 39.3 39.6 39.6 39.3 40.1 41.8 43.9 46.2 48.4 50.7 51.6 52.2 52.0 51.6 50.5 50.0 48.6 46.0 44.1																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Portable Reno - May 2014



Hourly Averages

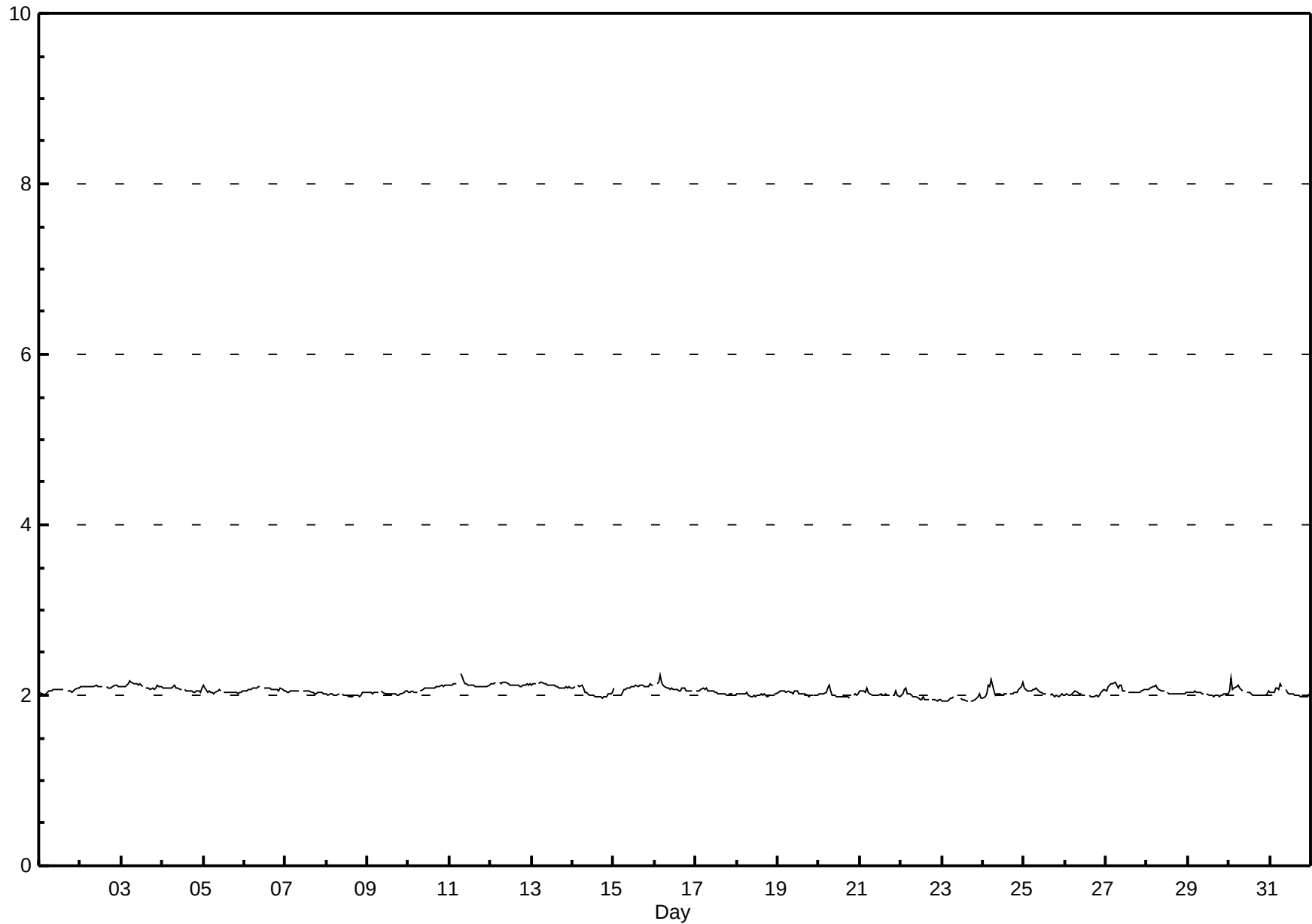
Total Hydrocarbons (THC) - ppm

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.25 ppm on May 11 07:00 Maximum Daily Average: 2.13 ppm on May 12																							Hours in Service: 744 Hours of Data: 709			
Minimum Value: 1.9 ppm on May 23 16:00 Minimum Daily Average: 1.96 ppm on May 23 Maximum Diurnal Average: 2.08 ppm at hour 7 Minimum Diurnal Average: 2.03 ppm at hour 19 Monthly Average: 2.049 ppm Percentiles: P ₁ = 1.94 P ₁₀ = 1.99 Q ₁ = 2.01 Median = 2.04 Q ₃ = 2.09 P ₉₀ = 2.12 P ₉₉ = 2.16																							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-May	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.05	2.09
2-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.10	2.12
3-May	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.16
4-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.07	2.11
5-May	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	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	2.04	2.11
6-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.07	2.10
7-May	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	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	2.04	2.06
8-May	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	2.0	2.0	2.0	2.01	2.04
9-May	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	2.0	2.0	2.0	2.0	2.02	2.05
10-May	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.12
11-May	2.1	2.1	2.1	2.1	2.1	A	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.13	2.25
12-May	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.13	2.15
13-May	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.15
14-May	2.1	2.1	A	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	2.0	2.0	2.03	2.12
15-May	2.1	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.13
16-May	A	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	2.09	2.24
17-May	2.0	2.1	2.1	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	A	2.0	2.04	2.08
18-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.01	2.04
19-May	2.0	2.0	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	A	2.0	2.0	2.0	2.02	2.06
20-May	2.0	2.0	2.0	2.0	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	A	2.0	2.0	2.0	2.0	2.01	2.12
21-May	2.0	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	A	2.0	2.0	2.1	2.0	2.0	2.02	2.08
22-May	2.0	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	1.9	1.9	1.9	A	2.0	1.9	2.0	1.9	1.9	1.9	1.98	2.09
23-May	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	C	C	C	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.96	2.02
24-May	2.0	2.0	2.0	2.1	2.1	2.2	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	2.1	2.1	2.1	2.04	2.19
25-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	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	2.0	2.0	2.0	2.03	2.09
26-May	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.01	2.06	
27-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.07	2.15
28-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	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	2.05	2.12
29-May	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	2.0	2.02	2.04
30-May	2.0	2.2	2.1	2.1	2.1	2.1	2.1	2.1	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	2.04	2.20
31-May	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	A	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
2.05 2.06 2.06 2.07 2.06 2.07 2.08 2.07 2.06 2.06 2.05 2.04 2.04 2.04 2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.05 2.05 2.05 2.14 2.20 2.16 2.24 2.15 2.19 2.25 2.22 2.17 2.15 2.14 2.13 2.12 2.12 2.12 2.12 2.12 2.12 2.11 2.11 2.11 2.12 2.13 2.12 2.15																									Diurnal Average	Diurnal Maximum
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Total Hydrocarbons (THC) - ppm
Portable Reno - May 2014



Hourly Maximums

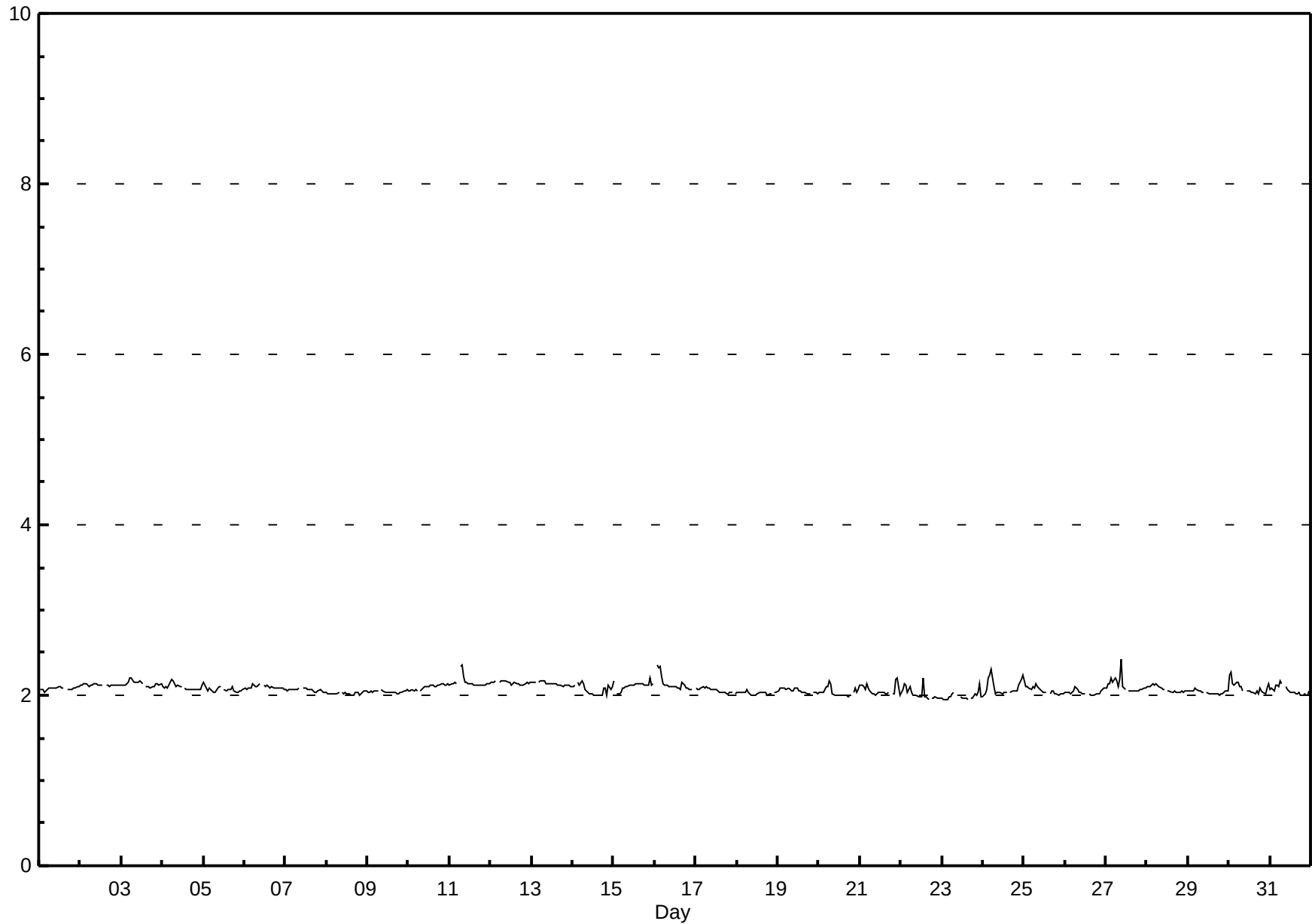
Total Hydrocarbons (THC) - ppm

Portable Reno - May 2014

Maximum Value: 2.42 ppm on May 27 10:00																								Hours in Service: 744			
Maximum Daily Average: 2.16 ppm on May 11																								Hours of Data: 709			
Minimum Value: 2.0 ppm on May 23 16:00																								Hours of Missing Data: 35			
Maximum Diurnal Average: 2.11 ppm at hour 7																								Hours of Calibration: 35			
Monthly Average: 2.076 ppm																								Percent Operational Time: 100.0			
Minimum Daily Average: 1.99 ppm on May 23																											
Minimum Diurnal Average: 2.05 ppm at hour 16																											
Percentiles: P ₁ = 1.96 P ₁₀ = 2.01 Q ₁ = 2.03 Median = 2.07 Q ₃ = 2.12 P ₉₀ = 2.14 P ₉₉ = 2.31																											
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-May	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.11	
2-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.12	2.14	
3-May	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.13	2.20	
4-May	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.10	2.18	
5-May	2.2	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.07	2.16	
6-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.14	
7-May	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.06	2.08	
8-May	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	2.0	2.0	2.0	2.02	2.05	
9-May	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	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	2.1	2.1	2.04	2.07	
10-May	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.10	2.14	
11-May	2.1	2.1	2.1	2.1	2.1	A	2.3	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.16	2.36	
12-May	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.15	2.17	
13-May	2.1	2.1	2.2	A	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.17	
14-May	2.1	2.1	A	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.06	2.16	
15-May	2.2	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.11	2.21	
16-May	A	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.13	2.35	
17-May	2.1	2.1	2.1	2.1	2.1	2.1	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	A	2.0	2.06	2.11	
18-May	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	2.0	A	2.0	2.0	2.03	2.07	
19-May	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.05	2.09	
20-May	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	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	2.1	2.0	2.1	2.04	2.18	
21-May	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	A	2.0	2.0	2.2	2.2	2.0	2.06	2.20	
22-May	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.20	
23-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.99	2.13	
24-May	2.0	2.0	2.1	2.2	2.2	2.3	2.1	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	2.1	2.1	2.2	2.2	2.08	2.31	
25-May	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.17	
26-May	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.03	2.10	
27-May	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.4	2.1	2.1	A	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.11	2.42	
28-May	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.07	2.14	
29-May	2.1	2.0	2.0	2.1	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	2.0	2.0	2.0	2.0	2.1	2.1	2.04	2.09	
30-May	2.2	2.3	2.1	2.1	2.2	2.1	2.1	2.1	2.1	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	2.1	2.1	2.09	2.28	
31-May	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	A	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	2.1	2.06	2.17	
		2.08	2.09	2.09	2.10	2.10	2.11	2.11	2.09	2.08	2.09	2.07	2.07	2.06	2.07	2.05	2.05	2.06	2.05	2.05	2.05	2.06	2.08	2.08	2.08	Diurnal Average	
		2.23	2.35	2.32	2.34	2.24	2.31	2.34	2.36	2.22	2.42	2.15	2.17	2.14	2.20	2.15	2.14	2.15	2.14	2.13	2.14	2.14	2.21	2.20	2.24	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																											

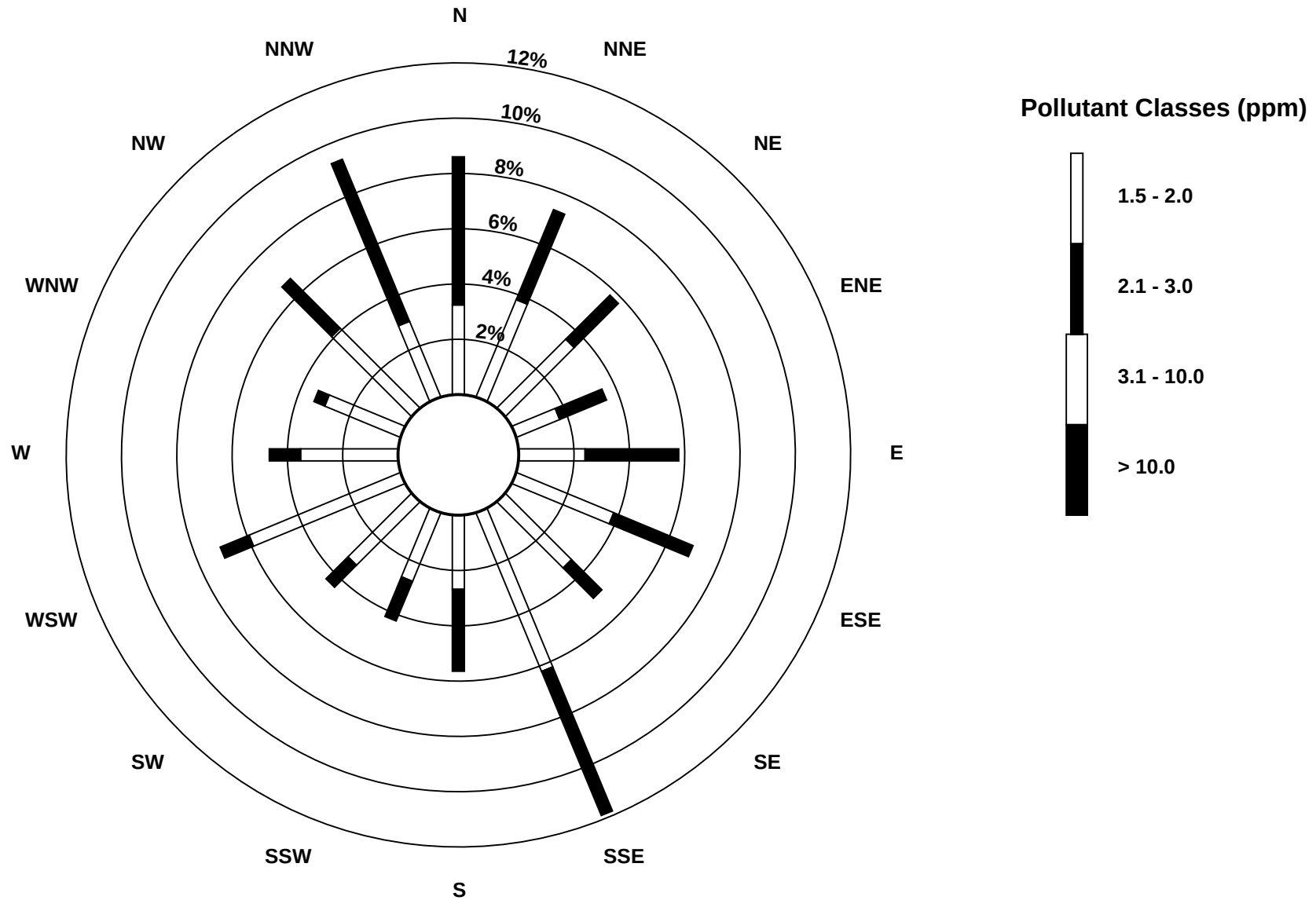
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Portable Reno - May 2014



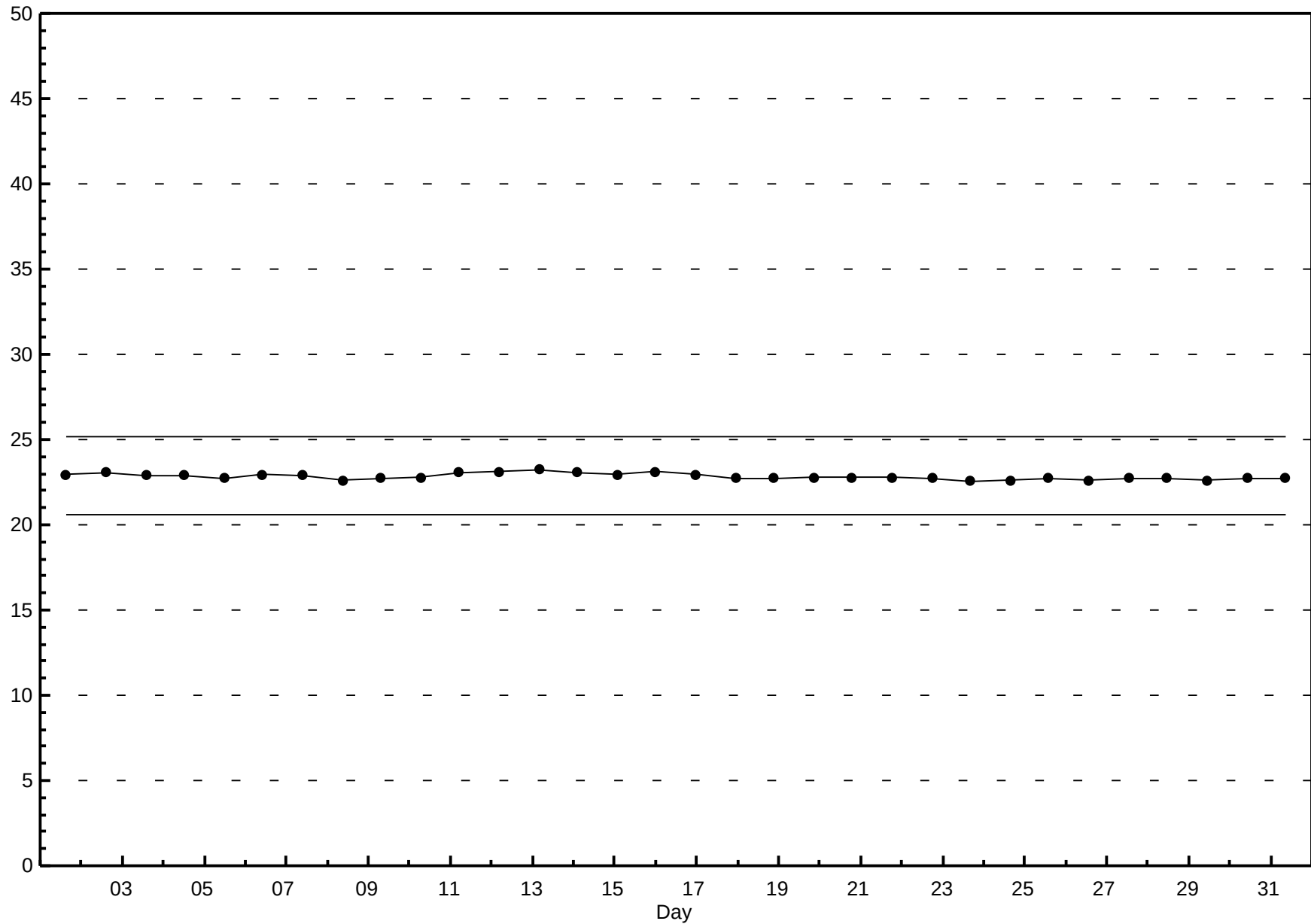
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Portable Reno - May 2014



Span Responses

Total Hydrocarbons (THC)
Portable Reno - May 2014



Hourly Averages

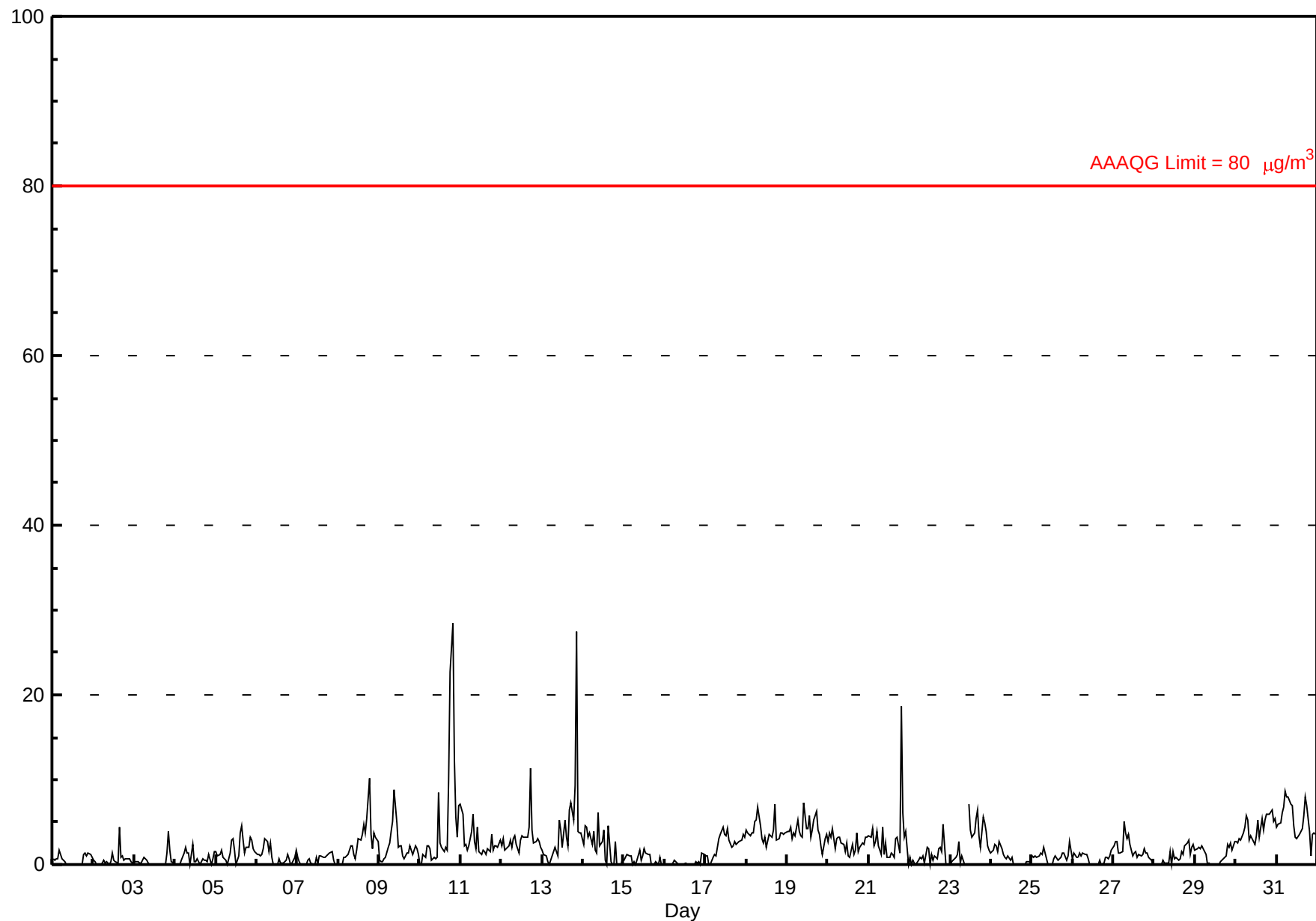
PM2.5 (PM_{2.5}) - µg/m³

Portable Reno - May 2014

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 28.6 µg/m³ on May 10 20:00																									Maximum Daily Average: 5.2 µg/m³ on May 31					Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7				
Minimum Value: 0 µg/m³ on May 1 10:00 Maximum Diurnal Average: 3.7 µg/m³ at hour 20 Monthly Average: 2.05 µg/m³															Minimum Daily Average: 0.2 µg/m³ on May 16 Minimum Diurnal Average: 1.5 µg/m³ at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 1.4 Q ₃ = 3.1 P ₉₀ = 4.4 P ₉₉ = 9.2																			
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-May	1	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.5	1.7								
2-May	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	4	1	1	1	1	1	1	0	0	0.6	4.4								
3-May	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	4	2	0	0	0	0.5	3.9								
4-May	0	0	0	0	0	1	2	1	1	0	2	0	0	1	0	0	1	1	1	0	1	0	1	2	0.7	2.4								
5-May	2	1	1	2	1	1	1	0	1	3	3	2	0	1	4	4	3	1	2	2	3	3	2	2	1.8	4.5								
6-May	1	1	1	1	2	3	3	2	3	1	0	0	0	1	0	0	0	0	1	1	0	0	1	2	1.0	3.1								
7-May	1	0	0	0	0	0	1	1	0	0	0	1	0	1	1	1	1	1	1	2	1	0	0	0	0.5	1.5								
8-May	0	0	0	1	1	1	1	2	2	1	1	2	3	3	4	5	4	5	10	4	2	4	3	3	2.5	10.2								
9-May	1	0	0	1	1	2	3	4	5	9	5	2	2	2	1	1	1	1	2	2	1	2	2	1	2.1	8.9								
10-May	0	0	1	1	2	2	2	0	1	1	1	9	3	2	2	2	2	10	23	29	12	6	3	7	5.0	28.6								
11-May	7	6	2	2	2	2	4	6	3	2	4	2	1	2	2	1	2	1	4	2	2	2	2	3	2.7	7.2								
12-May	2	3	2	2	2	3	2	3	3	2	1	3	3	3	3	3	4	11	4	2	3	3	3	2	3.1	11.3								
13-May	2	1	1	0	0	0	1	2	1	1	5	4	2	5	3	2	7	7	5	9	27	4	4	4	4.1	27.4								
14-May	2	5	4	3	4	2	4	2	1	6	2	3	4	0	0	5	0	0	0	3	0	0	0	1	2.1	6.1								
15-May	1	1	1	1	1	0	0	0	0	2	1	1	2	1	1	1	0	0	0	0	0	1	0	0	0.6	1.8								
16-May	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	1.4								
17-May	1	1	0	0	1	1	1	2	3	4	4	4	3	4	3	2	2	3	2	2	3	3	4	3	2.3	4.4								
18-May	4	4	3	4	4	5	5	7	5	3	2	3	2	4	3	3	4	7	3	3	4	4	4	4	3.9	7.2								
19-May	4	4	4	3	4	3	5	4	3	3	7	4	4	6	3	4	5	6	4	4	2	1	3	4	4.0	7.3								
20-May	3	4	3	4	2	3	3	3	3	2	2	3	1	1	2	1	2	4	2	2	3	2	3	3	2.5	4.2								
21-May	3	3	4	2	3	4	2	1	4	1	3	1	1	1	1	1	3	3	1	19	6	3	4	0	3.2	18.6								
22-May	1	0	1	0	0	1	1	1	1	0	2	2	0	1	1	1	1	2	2	2	5	0	0	0	0.9	4.7								
23-May	0	0	0	1	1	3	0	1	0	M	M	7	4	3	4	5	7	3	2	6	5	4	2	2	2.8	7.2								
24-May	1	2	2	2	2	3	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.8	2.7								
25-May	1	1	1	1	1	1	1	2	1	0	0	0	0	1	1	1	1	1	1	1	1	1	3	2	1.0	2.6								
26-May	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	1	1	1	2	0.7	1.6								
27-May	2	3	3	1	1	2	5	4	3	4	2	1	1	1	1	1	1	1	2	1	1	1	1	0	1.8	5.1								
28-May	0	0	0	0	0	1	0	0	0	1	0	2	1	1	1	1	2	1	2	3	3	1	2	2	1.0	2.8								
29-May	2	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	1	1	1	2	2	3	2	3	1.1	2.6								
30-May	3	3	3	3	4	4	6	5	3	3	3	2	3	5	3	5	4	5	6	6	6	6	5	5	4.3	6.5								
31-May	4	5	5	6	7	9	8	8	7	7	5	3	3	4	4	4	6	8	7	4	1	3	4	4	5.2	8.6								
1.6 1.7 1.6 1.5 1.6 2.0 2.2 2.1 1.9 1.9 1.9 2.0 1.5 1.8 1.5 1.9 2.0 2.8 2.9 3.7 3.3 2.0 1.9 1.9 Diurnal Average																																		
7.2 5.9 4.9 6.1 6.7 8.6 8.0 8.0 7.2 8.9 7.3 8.6 4.2 5.7 3.9 5.5 6.5 11.3 22.7 28.6 27.4 6.5 5.0 6.9 Diurnal Maximum																																		
M - Maintenance																																		
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																																		

Hourly Averages

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Reno - May 2014



Hourly Maximums

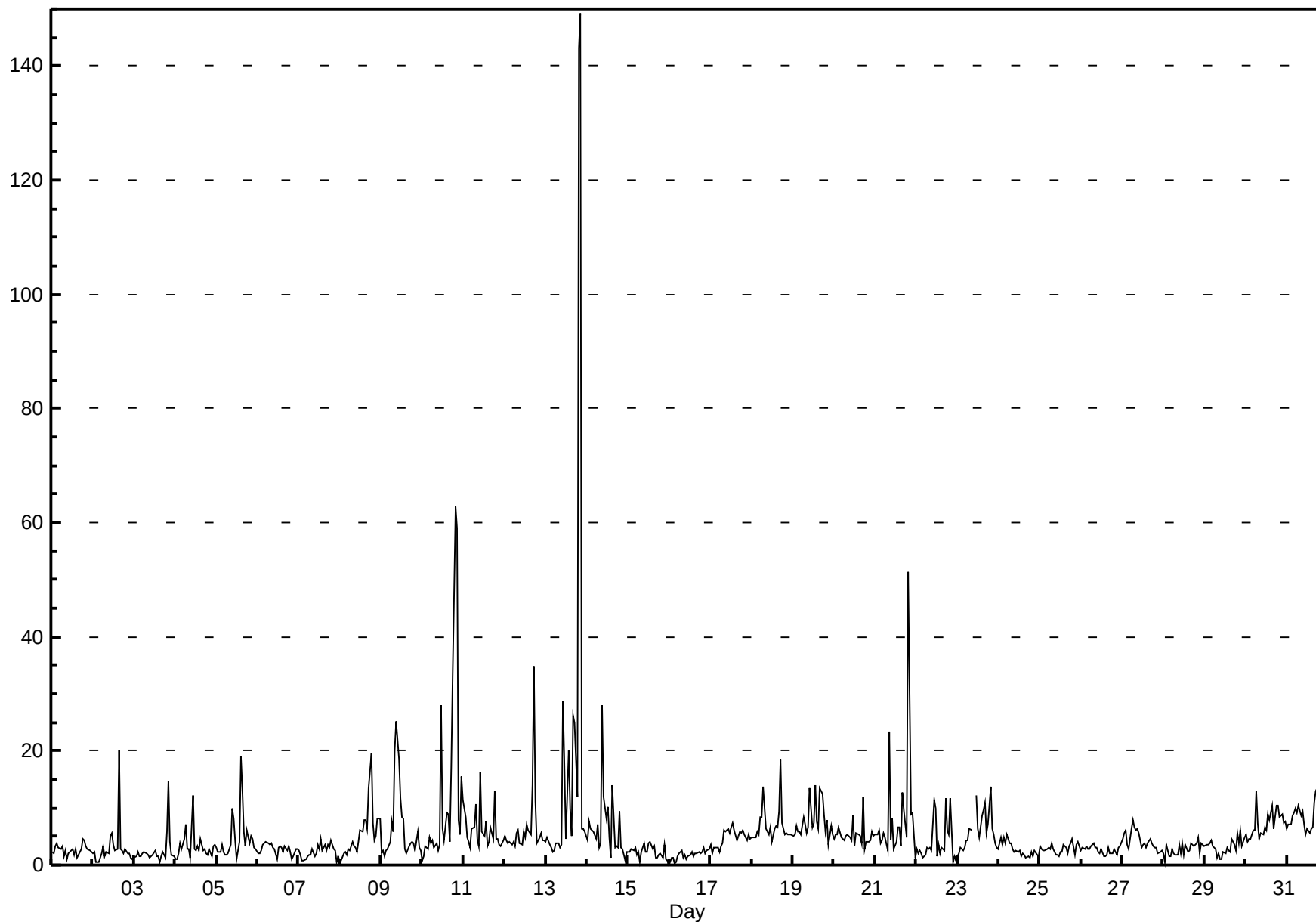
PM2.5 (PM_{2.5}) - µg/m³

Portable Reno - May 2014

Maximum Value: 149.2 μg/m ³ on May 13 21:00																				Maximum Daily Average: 20.6 μg/m ³ on May 13					Hours in Service: 744	
Minimum Value: 0 μg/m ³ on May 16 01:00																				Minimum Daily Average: 1.7 μg/m ³ on May 16					Hours of Data: 742	
Maximum Diurnal Average: 12.8 μg/m ³ at hour 20																				Minimum Diurnal Average: 3.3 μg/m ³ at hour 1					Hours of Missing Data: 2	
Monthly Average: 5.39 μg/m ³																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.6 Q ₁ = 2.4 Median = 3.6 Q ₃ = 5.8 P ₉₀ = 9.0 P ₉₉ = 32.3					Hours of Calibration: 0	
																									Percent Operational Time: 99.7	
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-May	2	2	3	4	3	3	3	2	3	1	2	3	3	2	3	1	2	3	5	4	3	3	2	2	2.7	4.7
2-May	2	2	1	1	1	2	3	2	2	2	5	6	3	3	3	20	3	3	2	3	2	2	1	1	3.1	20.2
3-May	1	1	2	2	1	2	2	2	2	1	1	2	3	2	1	1	2	2	1	6	15	4	2	2	2.5	14.7
4-May	1	1	2	4	3	5	7	3	3	1	12	3	3	3	3	5	2	3	2	2	3	1	3	3	3.2	12.3
5-May	3	2	2	4	2	2	2	2	3	10	8	4	1	4	19	13	6	3	6	4	5	5	3	3	4.8	19.0
6-May	2	2	3	4	4	4	4	4	4	3	3	1	3	3	3	2	3	3	3	2	1	2	3	3	2.8	4.0
7-May	2	2	1	1	1	2	2	2	3	2	2	4	3	5	3	3	2	3	3	4	3	2	0	2	2.3	4.6
8-May	1	1	2	2	2	3	3	4	3	3	2	4	6	6	8	8	6	13	20	7	4	5	8	8	5.4	19.5
9-May	2	2	1	2	3	4	8	6	20	25	19	12	8	8	3	2	3	4	4	4	3	6	3	3	6.5	25.1
10-May	1	1	3	3	5	4	4	3	4	3	4	28	6	4	9	9	4	17	34	63	59	8	5	16	12.3	62.7
11-May	11	8	5	4	3	6	7	11	5	3	16	6	5	8	3	4	7	5	13	5	5	4	3	4	6.3	16.4
12-May	5	4	4	4	4	4	3	6	6	4	4	6	5	7	6	5	14	35	11	4	5	5	4	4	6.6	34.9
13-May	4	5	3	3	2	3	4	4	3	4	29	18	5	20	10	5	26	25	12	143	149	6	6	6	20.6	149.2
14-May	4	8	6	6	6	4	7	3	4	28	12	8	10	5	1	14	3	3	3	9	3	3	1	2	6.4	27.9
15-May	2	2	3	2	3	2	2	1	2	4	2	2	4	4	3	3	1	1	2	2	1	4	1	1	2.3	4.1
16-May	0	1	1	0	1	2	2	3	1	2	1	2	2	2	1	2	2	2	2	2	3	2	2	3	1.7	3.0
17-May	4	2	3	3	3	2	3	4	6	6	6	6	7	7	6	4	5	6	6	6	5	4	5	5	4.8	7.4
18-May	5	5	5	6	5	8	8	14	6	6	6	5	7	4	6	7	6	9	18	7	5	6	5	5	6.9	18.5
19-May	5	5	7	6	6	5	8	7	6	7	13	7	7	14	8	6	13	12	9	6	8	4	7	5	7.6	14.1
20-May	5	5	5	7	5	5	4	5	5	5	4	9	3	6	5	5	4	12	3	4	4	4	6	5	5.2	11.9
21-May	5	5	6	4	4	6	5	2	23	4	8	3	4	7	7	3	13	10	5	51	30	9	9	1	9.4	51.4
22-May	3	2	3	2	1	2	3	3	3	3	11	10	2	4	2	3	3	12	6	5	12	1	2	1	4.0	11.7
23-May	2	2	3	3	3	4	4	6	6	M	M	12	6	5	9	10	11	6	7	14	6	5	4	3	6.0	13.8
24-May	3	5	4	5	4	5	4	4	3	2	3	2	3	2	2	2	1	1	1	2	2	2	2	1	2.7	5.4
25-May	3	3	2	2	3	3	3	4	3	2	2	1	2	2	3	3	2	3	4	5	2	4	4	3	2.9	4.5
26-May	3	3	3	3	3	3	3	4	3	3	2	2	3	1	1	2	3	2	2	3	2	2	3	3	2.6	3.8
27-May	5	6	6	4	3	6	8	7	6	6	6	3	4	4	3	4	5	4	3	3	3	2	2	2	4.3	7.8
28-May	2	1	3	2	2	3	2	2	2	4	2	4	2	4	2	3	4	4	3	4	5	2	4	3	2.8	4.8
29-May	3	4	4	4	4	3	3	1	2	1	1	2	2	3	3	2	5	4	3	6	4	6	3	5	3.2	6.1
30-May	5	4	5	4	6	6	13	7	5	6	5	6	6	9	8	10	6	8	10	10	8	9	7	8	7.3	13.0
31-May	6	7	7	9	9	10	9	10	9	9	7	5	6	6	6	7	11	13	13	7	5	6	5	7	7.9	13.4
3.3 3.4 3.5 3.5 3.4 4.0 4.7 4.4 5.0 5.3 6.6 6.0 4.2 5.3 4.9 5.4 5.9 7.7 6.6 12.8 11.8 4.1 3.8 3.9																									Diurnal Average	
11.4 8.3 7.2 8.8 9.1 10.0 13.0 13.7 23.4 27.9 28.8 28.0 10.1 20.0 19.0 20.2 26.2 34.9 33.6 143.1 149.2 9.0 9.2 15.6																									Diurnal Maximum	
M - Maintenance																										

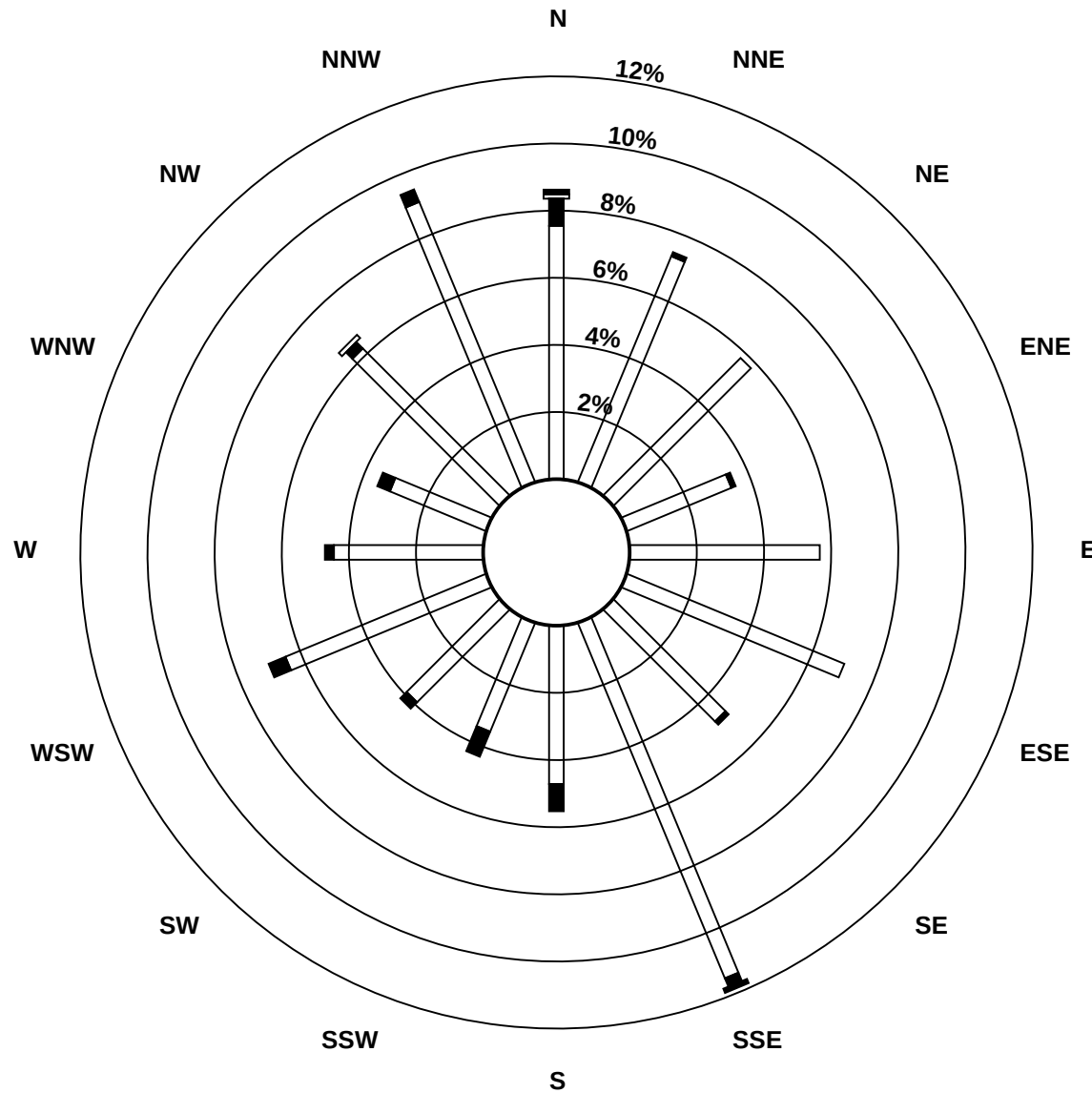
Hourly Maximums

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Reno - May 2014

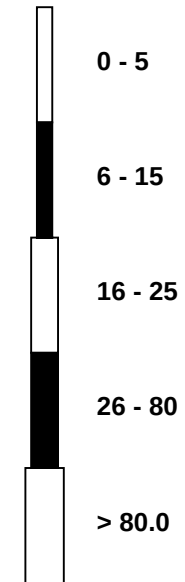


Pollutant Rose

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Reno - May 2014



Pollutant Classes ($\mu\text{g}/\text{m}^3$)



Hourly Averages

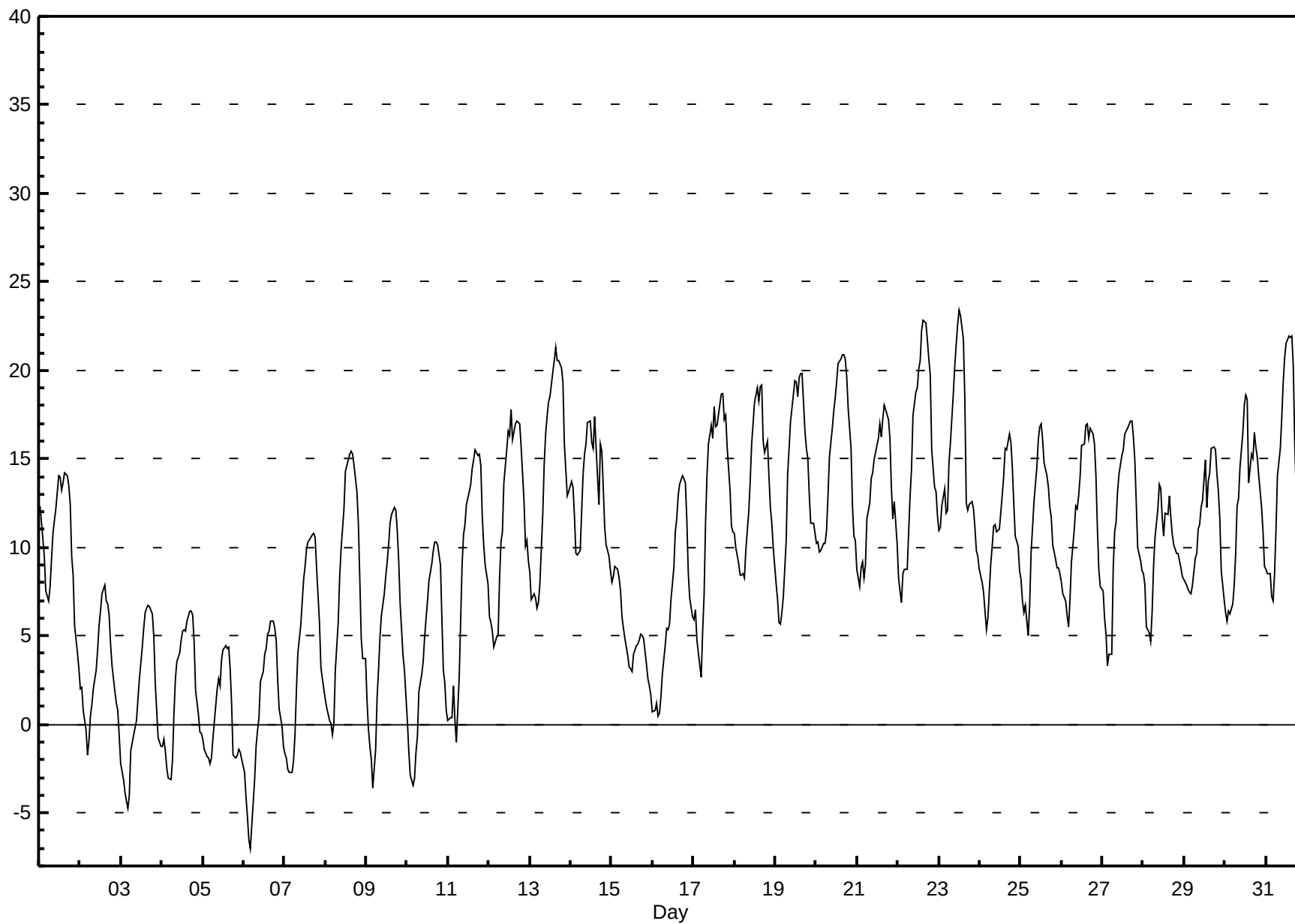
External Temperature (ET) - °C

Portable Reno - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 23.4 °C on May 23 13:00 Maximum Daily Average: 15.3 °C on May 22																							Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0			
Minimum Value: -7 °C on May 6 05:00 Maximum Diurnal Average: 14.2 °C at hour 16 Monthly Average: 9.37 °C											Minimum Daily Average: 0.5 °C on May 5 Minimum Diurnal Average: 3.6 °C at hour 5 Percentiles: P ₁ = -4.0 P ₁₀ = 0.2 Q ₁ = 5.1 Median = 9.7 Q ₃ = 14.1 P ₉₀ = 17.2 P ₉₉ = 21.7															
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-May	12	11	10	9	8	7	8	9	11	12	12	14	14	13	14	14	14	13	12	9	8	6	4	3	10.4	14.2
2-May	2	2	1	0	-2	-1	0	1	2	3	4	6	6	7	8	7	7	6	4	3	2	1	1	-1	3.0	7.8
3-May	-2	-3	-4	-4	-5	-4	-2	-1	0	0	1	3	4	5	6	7	7	7	6	5	2	1	-1	-1	1.2	6.7
4-May	-1	-1	-2	-2	-3	-3	-2	1	3	4	4	5	5	5	5	6	6	6	6	5	2	1	0	-1	2.0	6.4
5-May	-1	-1	-2	-2	-2	-2	-1	0	2	3	2	4	4	4	4	4	3	1	-2	-2	-2	-1	-2	-2	0.5	4.5
6-May	-3	-4	-5	-7	-7	-6	-3	-1	0	0	2	3	4	4	5	5	6	6	5	5	2	1	0	-1	0.5	5.8
7-May	-2	-2	-3	-3	-3	-2	-1	2	4	6	7	8	9	10	10	11	11	11	11	9	6	3	3	2	4.4	10.8
8-May	1	1	0	0	-1	0	3	6	8	10	11	12	14	15	15	15	15	15	13	11	8	5	4	4	7.8	15.4
9-May	1	0	-1	-2	-4	-1	2	3	5	6	7	8	9	10	11	12	12	12	11	9	7	4	3	2	5.3	12.3
10-May	0	-2	-3	-3	-3	-2	-1	2	3	4	5	6	7	8	9	10	10	10	10	9	6	3	2	1	3.8	10.3
11-May	0	0	0	2	0	-1	3	6	9	11	11	12	13	14	14	15	15	15	15	15	12	10	9	8	8.7	15.5
12-May	6	6	5	4	5	5	8	10	11	14	16	17	16	18	16	17	17	17	17	16	13	10	10	9	11.8	17.8
13-May	9	7	7	7	7	7	8	12	15	16	17	18	19	20	21	21	21	21	20	19	16	14	13	13	14.5	21.3
14-May	14	13	12	10	10	10	12	14	15	16	17	17	16	16	17	16	12	16	15	13	11	10	9	9	13.4	17.4
15-May	8	8	9	9	8	8	6	5	5	4	3	3	3	4	4	5	5	5	5	5	3	3	2	2	5.1	8.9
16-May	1	1	1	0	1	1	3	4	5	5	6	7	9	11	12	13	14	14	14	14	12	9	7	6	7.0	14.1
17-May	6	6	5	4	3	5	7	11	14	16	17	16	18	17	17	18	19	19	17	17	16	13	11	11	12.7	18.7
18-May	11	10	9	8	8	9	8	10	12	14	16	17	18	19	18	19	19	16	15	16	14	12	11	10	13.4	19.2
19-May	8	7	6	6	6	7	10	14	16	17	18	19	19	18	20	20	20	17	16	15	13	11	11	11	13.6	19.8
20-May	10	10	10	10	10	10	11	13	15	17	18	18	19	20	21	21	21	21	20	18	16	12	11	10	15.1	20.9
21-May	9	8	9	9	8	9	12	13	14	14	15	15	16	17	16	17	18	18	17	16	13	12	13	10	13.2	18.1
22-May	8	8	7	9	9	9	11	13	14	17	19	19	20	21	22	23	23	22	21	20	16	13	13	12	15.3	22.8
23-May	11	11	12	13	12	12	15	16	19	20	21	23	23	23	22	18	12	12	12	13	12	11	10	9	15.2	23.4
24-May	9	8	7	6	5	6	9	10	11	11	11	11	12	13	14	16	16	16	16	14	12	11	10	9	11.0	16.4
25-May	8	7	6	7	5	7	10	11	13	15	16	17	17	16	15	14	13	12	12	10	9	9	9	9	11.1	17.0
26-May	8	7	7	6	5	7	9	11	12	12	13	14	16	16	17	17	16	17	16	16	14	11	9	8	11.9	16.9
27-May	8	6	5	3	4	4	9	11	11	13	14	15	16	16	17	17	17	17	16	15	13	10	9	9	11.4	17.2
28-May	8	8	5	5	5	6	9	11	12	14	13	12	11	12	12	13	12	11	10	10	10	9	9	8	9.7	13.6
29-May	8	8	8	7	7	8	9	10	11	11	12	13	15	12	14	14	16	16	16	14	13	12	9	7	11.2	15.6
30-May	6	6	6	6	7	8	10	12	13	15	16	18	19	18	14	15	15	16	16	15	14	12	11	9	12.4	18.6
31-May	9	8	8	7	7	9	11	14	16	17	19	21	22	22	22	22	20	16	13	12	11	11	10	9	14.0	22.0
5.6 5.0 4.5 4.1 3.6 4.2 6.2 8.2 9.7 10.8 11.8 12.6 13.3 13.7 13.9 14.2 13.9 13.6 12.8 11.8 9.8 8.0 7.1 6.2																									Diurnal Average	
13.7 13.4 12.3 13.3 11.9 12.1 14.8 15.9 18.7 20.2 21.5 22.6 23.4 23.1 22.3 22.8 22.7 21.7 20.6 19.7 15.8 14.4 13.2 13.2																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Portable Reno - May 2014



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Reno - May 2014

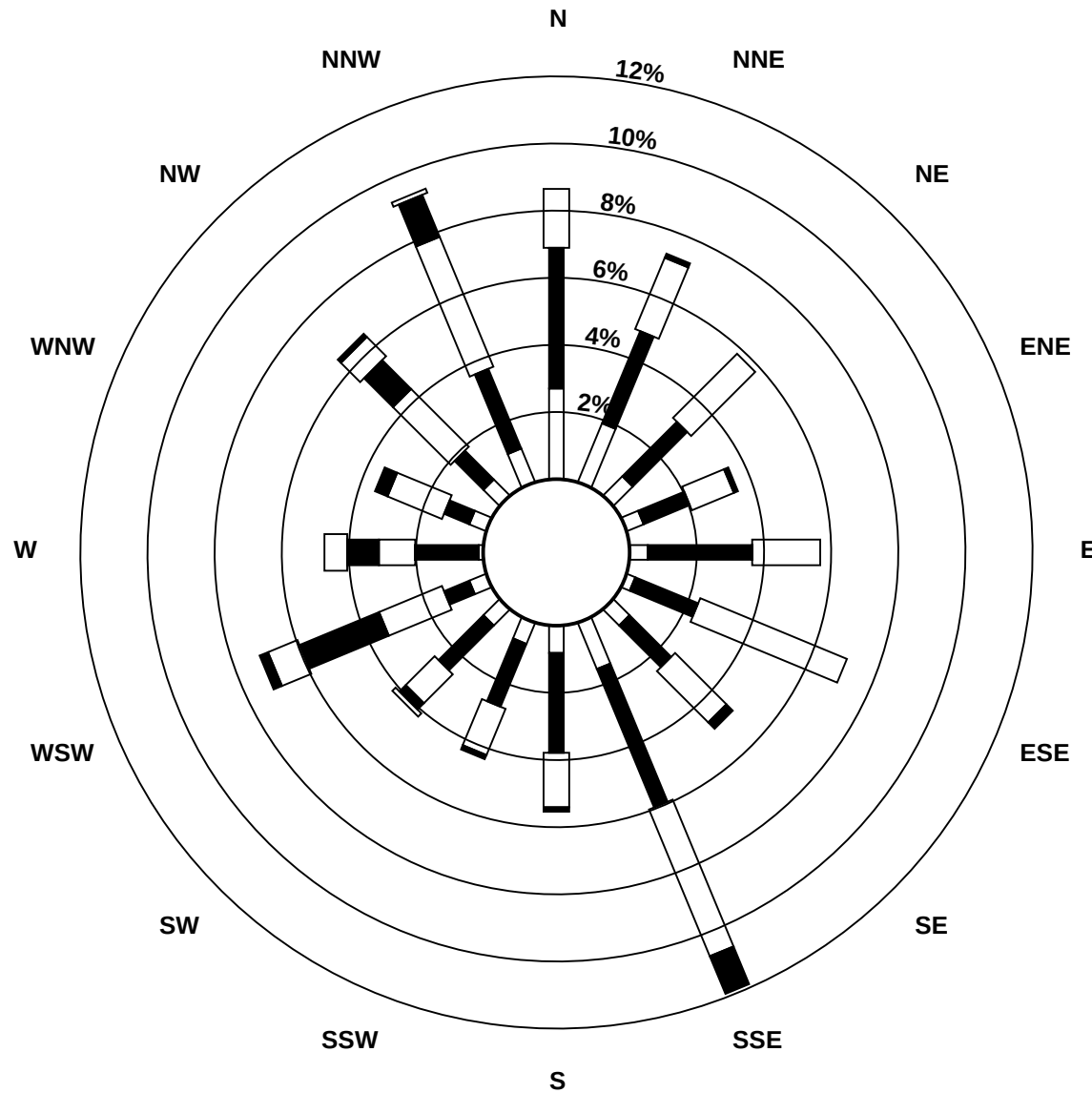
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	26	28	26	23	12	3	4	16	19	16	14	13	16	11	14	16	18	20	18	11	11	6	6	8	13.0	28.5
Dir	269	271	282	308	335	28	327	321	326	326	330	333	324	338	305	303	285	309	322	0	10	357	360	3	313.1	271.0
2 Spd	6	9	13	12	12	16	20	22	20	22	18	16	18	15	15	16	14	14	12	14	13	9	11	7	13.7	22.1
Dir	358	343	338	339	320	323	325	329	328	325	329	342	335	351	350	357	356	349	358	14	15	11	12	10	343.3	324.7
3 Spd	5	5	4	4	7	4	6	8	7	8	9	10	11	11	12	12	12	12	10	8	8	5	7	16	6.7	15.7
Dir	4	11	16	16	24	18	46	57	18	38	36	36	50	35	49	53	45	40	68	131	165	197	101	68	50.2	68.0
4 Spd	18	17	9	6	2	3	4	8	8	10	10	10	8	13	8	10	9	6	6	6	1	3	8	10	4.1	18.0
Dir	73	84	50	29	349	3	350	11	3	4	346	339	342	331	352	315	314	347	281	271	216	170	157	155	6.1	73.2
5 Spd	12	15	14	15	15	15	19	20	19	19	20	22	28	30	30	27	25	35	33	36	39	26	16	11	10.3	39.0
Dir	161	161	161	160	161	162	161	157	174	247	308	330	320	323	323	326	333	326	307	315	325	335	343	344	308.9	325.2
6 Spd	10	10	9	5	5	5	4	5	7	10	9	9	8	8	8	11	7	7	8	7	7	10	12	15	5.5	14.8
Dir	343	338	342	355	345	334	354	356	345	331	350	354	353	348	338	20	14	23	19	63	84	97	117	121	12.8	120.9
7 Spd	16	16	14	14	15	16	18	17	17	15	10	2	1	5	5	5	8	4	5	2	5	12	16	15	8.5	17.8
Dir	120	121	118	113	110	110	118	123	117	123	157	130	67	232	236	193	274	292	218	216	153	141	144	137	131.6	118.0
8 Spd	14	14	13	14	13	13	13	13	16	19	19	13	6	7	16	14	16	14	14	12	16	13	15	21	5.1	20.5
Dir	128	123	124	126	128	126	136	148	159	167	157	148	126	264	311	330	332	2	1	12	23	30	43	67	95.9	67.3
9 Spd	12	2	1	1	3	2	6	11	12	14	15	17	18	14	13	13	12	11	14	20	15	12	10	10	9.3	19.9
Dir	75	92	346	326	309	4	330	331	337	337	340	334	330	338	340	350	349	3	15	30	33	35	31	34	358.9	29.8
10 Spd	13	6	4	5	6	6	7	10	13	13	13	14	16	19	18	19	15	17	11	8	5	6	3	2	9.5	19.0
Dir	35	22	310	323	332	359	351	360	358	4	345	341	333	322	329	328	340	334	351	360	360	23	14	167	345.5	328.3
11 Spd	2	2	11	12	10	7	6	9	10	7	7	4	6	9	6	5	6	4	5	1	6	9	11	11	1.5	11.8
Dir	174	65	81	99	120	154	183	183	200	246	298	304	312	308	318	357	347	36	314	46	92	109	120	108	113.6	98.6
12 Spd	8	10	11	12	14	13	12	12	10	8	4	10	6	3	15	8	9	6	6	10	11	11	12	14	6.5	14.8
Dir	145	117	112	120	122	116	122	137	137	116	131	183	215	348	34	29	359	4	12	42	72	84	100	97	99.7	34.1
13 Spd	13	14	16	15	17	16	17	12	11	8	7	5	6	8	4	8	6	2	6	6	8	10	13	17	7.3	17.2
Dir	105	113	106	105	105	105	113	144	150	162	187	203	62	211	172	228	257	305	265	216	156	150	158	153	138.9	113.3
14 Spd	20	16	8	9	10	11	15	18	16	20	25	23	27	27	27	20	12	12	22	12	5	8	6	13	13.1	27.1
Dir	152	199	210	220	227	215	227	242	247	256	260	249	248	230	211	260	299	277	272	321	2	175	222	245	240.6	211.5
15 Spd	8	8	15	19	20	28	29	31	27	22	27	25	20	16	19	17	11	9	7	6	3	1	1	5	14.3	30.7
Dir	268	305	305	297	284	309	319	330	334	335	330	331	337	342	333	337	343	349	358	8	347	4	168	147	324.8	330.0
16 Spd	5	6	5	8	7	9	6	9	11	15	13	11	6	4	7	9	4	4	3	2	0	6	8	9	4.7	14.7
Dir	160	161	166	168	150	142	149	165	170	164	175	153	159	182	197	226	252	251	295	281	29	45	54	63	163.5	163.9
17 Spd	10	9	7	9	10	4	9	8	5	6	8	3	6	14	11	9	7	10	7	4	8	11	15	17	7.8	17.4
Dir	90	106	99	93	86	101	86	120	149	174	184	82	93	70	76	88	99	91	110	104	97	96	92	94	98.0	94.0
18 Spd	17	17	18	19	17	12	13	27	24	26	21	17	15	13	11	11	5	11	14	14	11	5	4	4	9.4	27.0
Dir	100	102	110	112	119	119	128	137	139	159	186	183	183	159	105	143	28	356	22	30	44	24	30	354	122.8	136.8
19 Spd	4	4	2	5	7	7	3	4	3	2	5	7	13	16	15	19	13	21	6	10	18	14	15	18	5.5	20.7
Dir	6	39	146	116	97	110	125	159	146	36	294	211	195	211	164	152	149	303	38	107	125	122	151	161	149.9	302.8
20 Spd	20	20	20	21	17	13	11	12	20	23	23	22	27	27	29	27	29	29	31	23	14	12	11	8	16.2	30.6
Dir	162	159	158	159	175	158	174	207	250	253	257	247	241	244	231	249	254	260	258	249	254	239	232	199	228.5	258.3
21 Spd	10	10	15	9	10	12	22	27	39	42	38	35	37	36	35	32	30	20	17	12	3	4	16	11	18.9	42.5
Dir	179	169	159	165	180	228	249	255	250	252	255	248	251	260	256	260	267	278	278	320	349	176	238	235	249.3	252.3
22 Spd	11	9	11	11	11	16	16	21	19	17	19	22	20	19	27	28	28	29	22	21	19	4	9	11	13.5	29.1
Dir	213	190	165	161	163	161	163	166	166	185	232	240	242	237	227	242	244	257	259	256	269	154	149	148	216.9	256.8

FOCUS
AIR QUALITY MONITORING

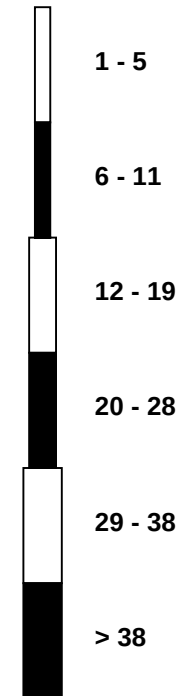
Wind Rose

Wind Speed (WS) (km/h)

Portable Reno - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Reno - May 2014

Maximum Speed: 43 km/h on May 21 10:00																				Maximum Daily Speed Average: 22.9 km/h on May 5										Hours in Service: 744	
Minimum Speed: 1 km/h on May 16 21:00																				Minimum Daily Speed Average: 7.5 km/h on May 16										Hours of Data: 744	
Maximum Diurnal Speed Average: 16.5 km/h at hour 16																				Minimum Diurnal Speed Average: 9.7 km/h at hour 22										Hours of Missing Data: 0	
Monthly Average Speed: 12.84 km/h																				Percentiles: P ₁ = 2.0 P ₁₀ = 5.4 Q ₁ = 8.3 Median = 11.8 Q ₃ = 16.0 P ₉₀ = 20.5 P ₉₉ = 35.7										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-May	26	29	26	23	12	4	4	16	19	17	15	14	16	12	14	17	18	20	18	11	11	6	6	8	15.1	28.5					
2-May	6	9	13	12	12	16	20	22	21	22	18	16	19	16	15	16	15	14	12	14	13	9	11	7	14.6	22.4					
3-May	5	5	4	4	7	4	6	8	8	9	10	11	12	12	14	13	13	12	11	10	8	6	8	16	9.0	15.9					
4-May	18	17	9	6	3	4	4	8	8	11	11	12	10	14	9	12	10	9	11	6	1	3	9	10	9.0	18.2					
5-May	12	15	14	15	15	15	19	20	20	22	20	22	29	30	30	28	25	35	34	36	39	27	16	11	22.9	39.2					
6-May	10	10	9	5	5	5	4	5	7	10	10	10	10	10	10	11	9	8	9	8	7	10	12	15	8.8	14.9					
7-May	16	16	14	14	16	16	18	17	18	15	11	7	6	10	8	7	9	6	6	2	5	13	16	16	11.7	17.8					
8-May	14	14	14	14	13	13	13	13	17	19	19	13	7	14	16	14	17	14	14	13	16	14	15	21	14.6	20.6					
9-May	12	3	1	2	4	3	6	12	12	15	16	18	18	15	14	14	13	11	14	20	15	12	10	10	11.3	20.0					
10-May	13	6	4	5	6	6	7	10	14	13	15	15	17	20	18	20	16	18	11	8	5	6	3	3	10.8	19.6					
11-May	2	2	11	12	10	8	6	9	11	9	9	7	10	11	9	7	8	6	5	2	7	9	11	12	8.0	11.8					
12-May	9	10	11	12	14	13	12	12	11	8	7	11	9	9	15	10	10	9	8	10	11	11	12	14	10.8	15.2					
13-May	13	14	16	15	17	16	17	12	11	9	9	8	8	9	7	10	8	6	7	6	8	10	13	17	11.2	17.3					
14-May	20	18	9	9	10	11	15	18	17	20	25	24	27	27	27	28	12	13	22	13	7	9	6	14	16.7	27.9					
15-May	8	8	15	19	20	29	29	31	27	23	28	25	20	16	19	18	11	9	8	6	4	1	2	5	15.9	30.8					
16-May	5	7	5	8	7	9	6	9	12	15	14	12	7	6	8	9	6	6	5	2	1	6	8	9	7.5	15.1					
17-May	10	9	7	9	10	4	9	8	6	8	9	7	8	16	12	10	9	11	7	4	8	11	15	17	9.4	17.4					
18-May	17	17	18	19	17	13	14	28	24	26	22	18	16	17	12	11	7	12	14	14	11	5	4	4	15.0	27.8					
19-May	5	6	3	6	7	7	5	4	3	4	6	9	15	17	17	19	17	21	7	10	19	14	16	18	10.7	21.5					
20-May	20	20	20	21	17	13	11	12	20	23	24	23	27	28	30	28	30	30	31	24	14	12	12	8	20.6	30.8					
21-May	10	10	15	9	11	13	22	27	39	43	38	36	37	36	35	32	31	22	18	13	4	5	16	12	22.2	42.8					
22-May	11	10	11	11	11	16	17	21	19	19	20	22	21	19	29	28	29	29	22	21	19	5	9	11	17.9	29.3					
23-May	11	12	15	14	16	15	11	12	13	12	12	15	19	17	18	31	28	7	8	11	11	14	14	16	14.6	30.6					
24-May	16	18	17	13	6	7	10	13	9	12	18	17	12	18	12	10	11	10	8	6	3	7	8	7	11.2	18.1					
25-May	9	9	13	12	12	11	7	14	12	12	13	12	13	19	27	19	16	13	10	9	13	12	15	15	13.2	26.6					
26-May	15	12	7	4	2	2	5	7	6	8	9	11	11	10	9	12	18	15	15	15	15	11	9	12	10.1	17.7					
27-May	12	7	2	3	2	2	3	7	14	11	13	12	15	14	12	9	10	10	17	15	19	12	11	10	10.2	18.9					
28-May	11	10	6	6	5	5	13	16	15	11	10	16	17	18	19	19	17	16	13	14	15	10	7	8	12.4	19.4					
29-May	10	11	12	8	6	8	8	5	3	5	3	5	7	19	14	18	13	8	14	8	2	3	2	3	8.2	19.5					
30-May	6	9	7	10	18	17	12	15	12	7	11	13	13	14	19	20	10	14	15	15	15	12	4	6	12.2	19.6					
31-May	10	12	11	13	13	10	9	7	9	9	9	11	13	13	7	9	10	29	16	16	17	18	12	9	12.2	29.1					
11.8 11.5 10.9 10.8 10.4 10.1 11.1 13.5 14.0 14.4 14.7 14.6 15.1 16.3 16.4 16.5 14.7 14.3 13.2 11.7 11.1 9.7 10.1 11.0																									Diurnal Average						
26.2 28.5 25.7 23.4 20.3 28.9 29.2 30.8 39.3 42.8 38.3 35.7 37.1 36.2 35.1 32.0 30.6 35.0 33.5 35.9 39.2 26.6 16.4 20.6																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable Reno - May 2014

Maximum Value: 90.4 deg on May 12 14:00																								Hours in Service: 744	
Minimum Value: 1.3 deg on May 5 02:00																								Hours of Data: 744	
																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
Percentiles: P ₁ = 2.5 P ₁₀ = 4.6 Q ₁ = 7.8 Median = 13.4 Q ₃ = 24.6 P ₉₀ = 46.8 P ₉₉ = 76.2																								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-May	4	3	8	9	17	55	60	6	8	14	12	16	13	22	18	14	12	13	8	14	10	12	9	8	59.8
2-May	10	9	8	8	5	4	7	7	12	10	13	16	16	19	15	16	14	14	11	9	8	8	6	8	18.8
3-May	9	8	8	5	4	6	19	21	23	31	30	29	32	29	33	24	27	18	24	36	9	31	30	8	36.3
4-May	7	4	25	11	54	75	20	11	15	19	25	32	37	25	38	41	32	47	75	11	34	9	6	3	74.9
5-May	3	1	2	2	2	3	4	4	16	28	10	14	10	11	10	18	11	10	10	7	5	8	10	10	28.2
6-May	8	6	10	11	8	6	11	14	15	13	20	27	34	35	45	19	31	52	20	14	8	8	8	5	51.6
7-May	3	3	4	3	4	5	4	7	11	15	26	77	90	75	72	69	36	54	44	41	30	6	4	5	89.6
8-May	3	3	5	2	4	5	6	9	8	7	12	19	47	72	21	19	26	19	10	10	4	5	11	5	71.8
9-May	6	84	74	72	30	58	13	9	15	15	18	18	17	22	25	24	21	18	16	7	6	5	12	11	83.7
10-May	7	24	39	16	14	15	12	15	16	18	24	19	19	17	16	15	17	20	16	11	11	7	26	74	74.3
11-May	18	26	8	4	7	20	13	9	20	39	57	71	60	49	57	55	49	57	46	74	24	10	8	10	73.8
12-May	26	5	4	4	3	2	5	8	21	14	58	28	48	90	16	47	29	52	53	16	8	8	5	5	90.4
13-May	5	8	4	4	5	5	5	10	11	30	42	70	50	42	64	43	62	85	49	16	14	5	3	4	84.6
14-May	4	28	17	9	6	11	14	10	11	10	10	12	10	7	9	45	18	12	10	24	46	22	21	8	45.8
15-May	31	9	9	5	5	15	5	6	8	10	7	7	9	11	9	9	12	14	13	13	33	24	87	13	86.6
16-May	21	21	20	7	6	3	7	8	11	16	11	26	39	54	39	22	57	53	56	40	47	9	4	10	56.8
17-May	22	4	6	40	23	49	13	14	27	41	40	66	60	24	16	36	48	38	12	11	5	6	3	3	65.5
18-May	3	3	5	2	4	50	30	13	9	6	11	17	19	39	24	28	64	29	15	11	7	16	39	22	64.0
19-May	16	49	61	25	8	14	70	17	46	61	59	50	32	19	23	11	46	23	35	17	11	5	23	3	70.1
20-May	3	5	6	4	8	4	13	11	13	10	11	13	14	11	13	16	11	9	7	10	8	6	10	18	18.2
21-May	6	7	3	10	8	16	7	6	7	7	8	9	10	10	8	9	12	23	21	7	30	67	15	13	67.1
22-May	7	17	5	4	4	4	8	5	6	23	14	12	17	15	16	12	14	6	5	5	20	50	6	3	49.8
23-May	6	7	8	14	5	5	7	11	21	18	26	30	22	21	12	7	10	36	36	14	4	6	16	9	36.3
24-May	4	7	8	4	15	13	9	10	21	17	10	10	12	13	15	30	22	46	36	11	35	6	11	16	46.0
25-May	5	5	3	5	5	10	11	16	10	17	27	27	26	17	8	15	8	8	22	16	11	6	5	5	27.4
26-May	6	7	32	21	23	18	29	23	21	21	12	17	25	24	26	24	12	13	12	15	6	4	4	7	32.3
27-May	4	68	34	40	56	31	69	19	13	21	20	23	18	28	31	26	34	26	28	8	5	6	12	6	68.8
28-May	11	21	62	25	8	22	14	11	16	23	25	11	11	9	11	12	26	9	7	6	10	9	17	3	61.8
29-May	4	5	5	5	11	4	10	10	60	32	54	54	66	11	10	9	26	51	17	35	53	42	76	16	76.3
30-May	11	14	19	23	3	4	38	20	13	23	22	26	24	28	19	28	28	8	26	11	6	8	56	12	56.1
31-May	9	18	23	11	3	4	9	17	18	22	23	30	24	41	49	31	40	24	21	11	23	6	17	37	48.5
	31.2	83.7	74.4	72.4	56.4	74.9	70.1	23.4	60.0	61.2	58.7	76.5	89.6	90.4	71.8	69.1	64.0	84.6	74.8	73.8	53.4	67.1	86.6	74.3	

PAZA

Falher Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

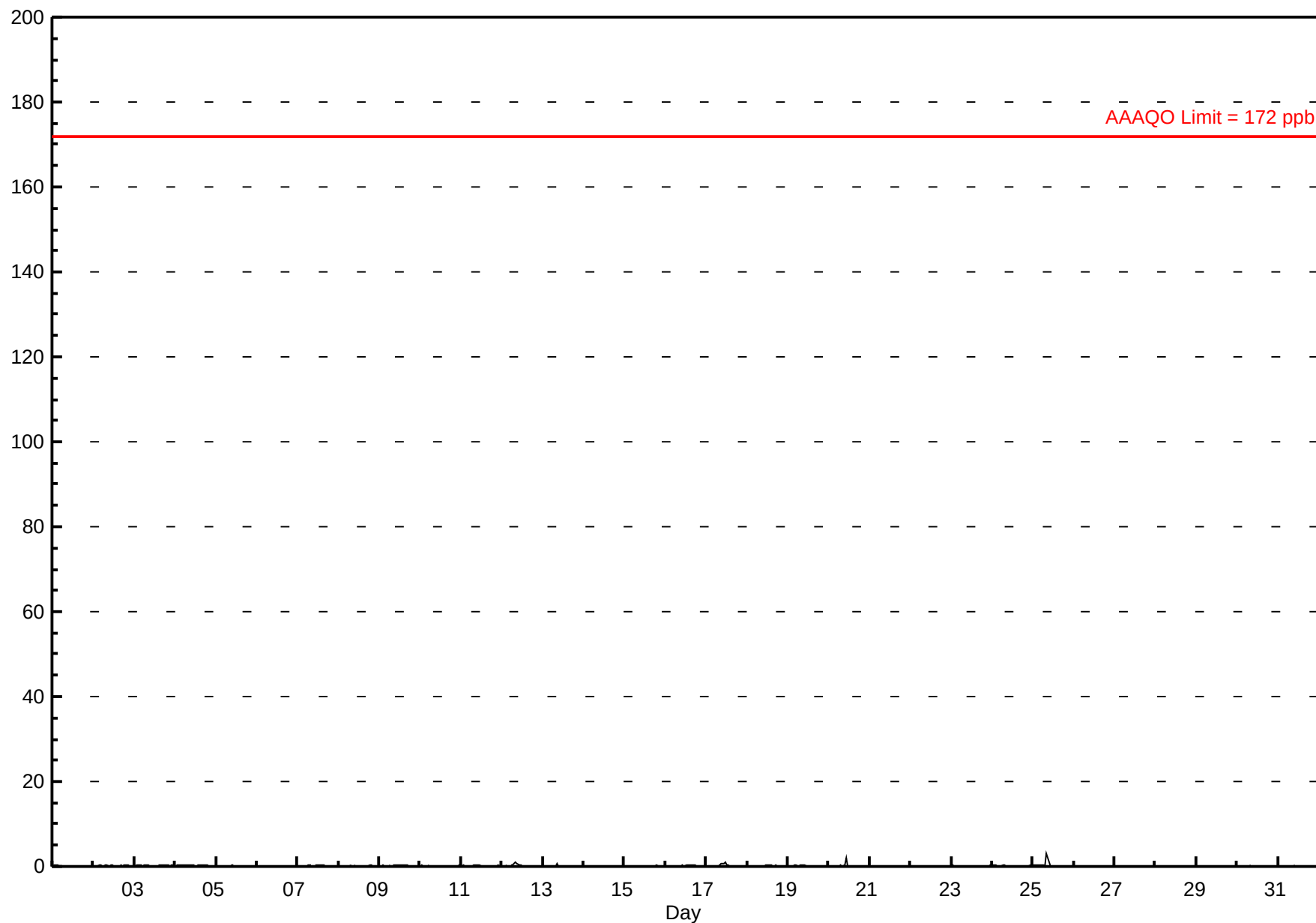
Falher - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.1 ppb on May 25 09:00 Maximum Daily Average: 0.3 ppb on May 25																						Hours in Service: 744				
Minimum Value: 0 ppb on May 5 07:00 Minimum Daily Average: 0.0 ppb on May 26 Maximum Diurnal Average: 0.3 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 19 Monthly Average: 0.10 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.2 P ₉₉ = 0.6																						Hours of Data: 708				
																						Hours of Missing Data: 36				
																						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-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0.1	0.2
2-May	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	0.2
3-May	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-May	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-May	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	0.3
6-May	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	0.1
7-May	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
8-May	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
9-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
10-May	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-May	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-May	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
13-May	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.6
14-May	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	0.1
15-May	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	0.3
16-May	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-May	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
18-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.1	0.4
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
20-May	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.1
21-May	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	A	0	0	0	0	0	0	0.0	0.1
22-May	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
23-May	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-May	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	0.4
25-May	0	0	0	0	0	0	0	0	3	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	3.1
26-May	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0.0	0.0
27-May	0	0	0	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
28-May	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
29-May	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
30-May	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	0.2
31-May	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
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 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																								Diurnal Average		
0.4 0.3 0.2 0.2 0.2 0.2 0.3 0.5 3.1 0.9 2.1 1.1 0.4 0.4 0.3 0.3 0.4 0.3 0.2 0.3 0.2 0.2 0.2 0.3																								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

Falher - May 2014



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

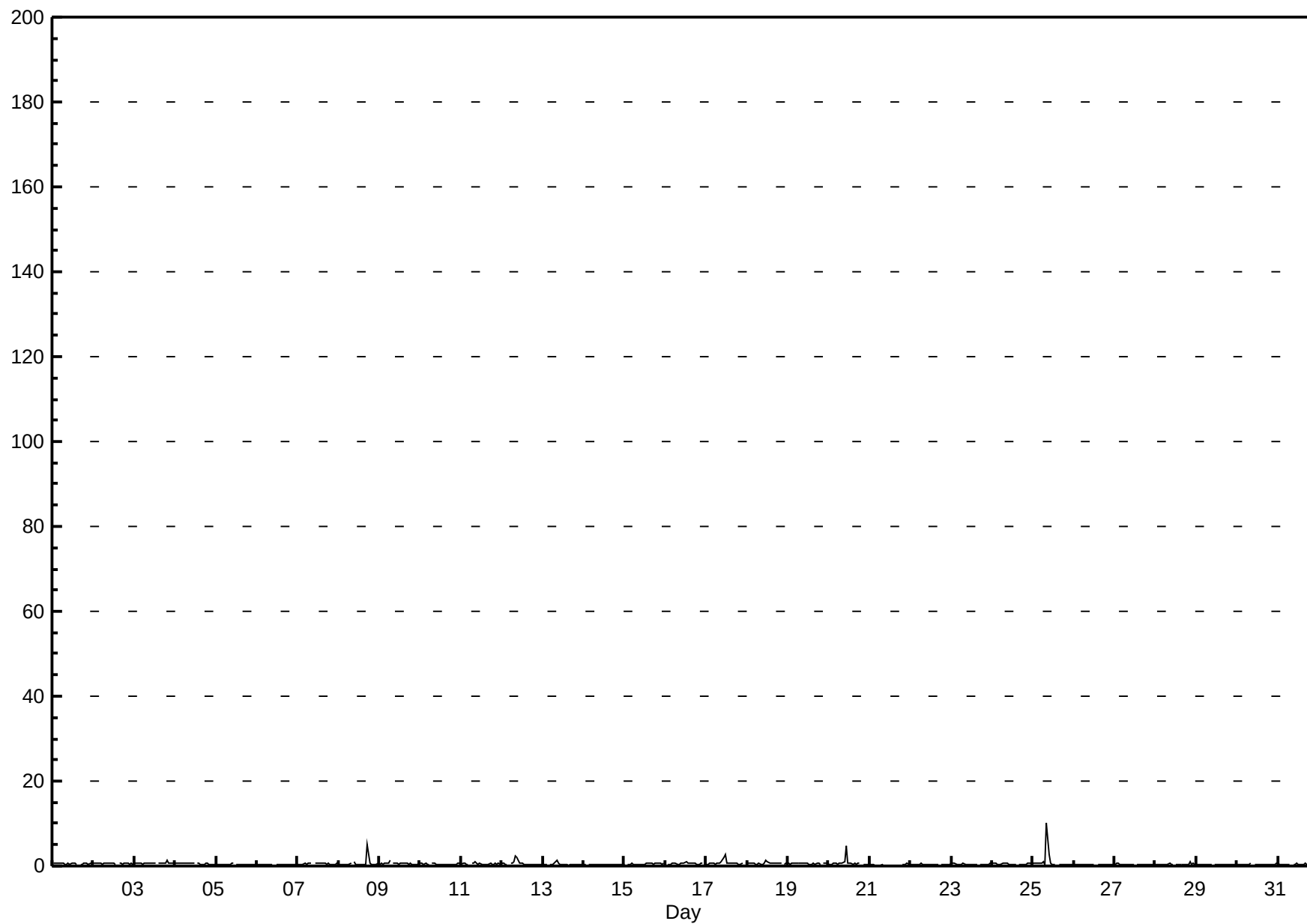
Falher - May 2014

Maximum Value: 10.1 ppb on May 25 09:00																				Maximum Daily Average: 1.0 ppb on May 25					Hours in Service: 744	
Minimum Value: 0 ppb on May 21 09:00																				Minimum Daily Average: 0.2 ppb on May 21					Hours of Data: 708	
Maximum Diurnal Average: 0.9 ppb at hour 9																				Minimum Diurnal Average: 0.4 ppb at hour 15					Hours of Missing Data: 36	
Monthly Average: 0.50 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 1.9					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-May	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	A	0	1	1	1	1	0	1	1	0.5	0.6
2-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	0	1	0	0.6	0.8
3-May	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	1.3
4-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	1	1	0	0	0	0	0.6	0.8
5-May	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
6-May	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	0.5
7-May	0	0	0	0	1	0	1	1	1	A	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0.5	0.7
8-May	0	0	0	0	0	0	0	0	1	A	1	0	1	0	0	0	0	5	1	0	0	0	0	1	0.6	5.1
9-May	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	1	0.6	1.2
10-May	1	1	0	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.8
11-May	1	1	1	0	0	A	1	1	1	1	0	1	0	0	0	0	0	1	0	0	1	0	1	0	0.5	0.9
12-May	1	1	1	1	A	1	1	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4
13-May	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
14-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
15-May	0	A	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	0.5	0.7
16-May	A	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	A	0.6	0.9
17-May	0	0	1	1	1	0	1	1	1	1	2	3	1	1	1	1	1	1	1	0	0	1	A	1	0.7	2.6
18-May	1	1	1	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0.6	1.2
19-May	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	A	1	1	1	0.6	0.8
20-May	0	0	0	1	1	1	1	1	1	1	5	1	1	1	0	1	0	1	1	A	0	0	0	0	0.7	4.9
21-May	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	A	0	1	0	1	0	0.2	0.5
22-May	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
23-May	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0.4	0.6
24-May	1	1	1	0	0	0	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0.5	0.8
25-May	1	1	1	1	1	1	1	1	10	3	1	0	0	0	A	0	0	0	0	0	0	0	0	0	1.0	10.1
26-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-May	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
28-May	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	1	0	1	0	0.4	1.2
29-May	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
30-May	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.5
31-May	1	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6
0.5 0.5 0.5 0.4 0.5 0.4 0.5 0.5 0.9 0.7 0.7 0.5 0.5 0.5 0.4 0.4 0.4 0.6 0.4 0.4 0.5 0.4 0.4 0.5																									Diurnal Average	
0.8 0.8 0.7 0.7 0.7 0.7 1.2 1.1 10.1 2.9 4.9 2.6 1.1 0.8 0.7 0.7 0.7 5.1 0.7 1.3 1.2 0.8 0.7 0.8																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

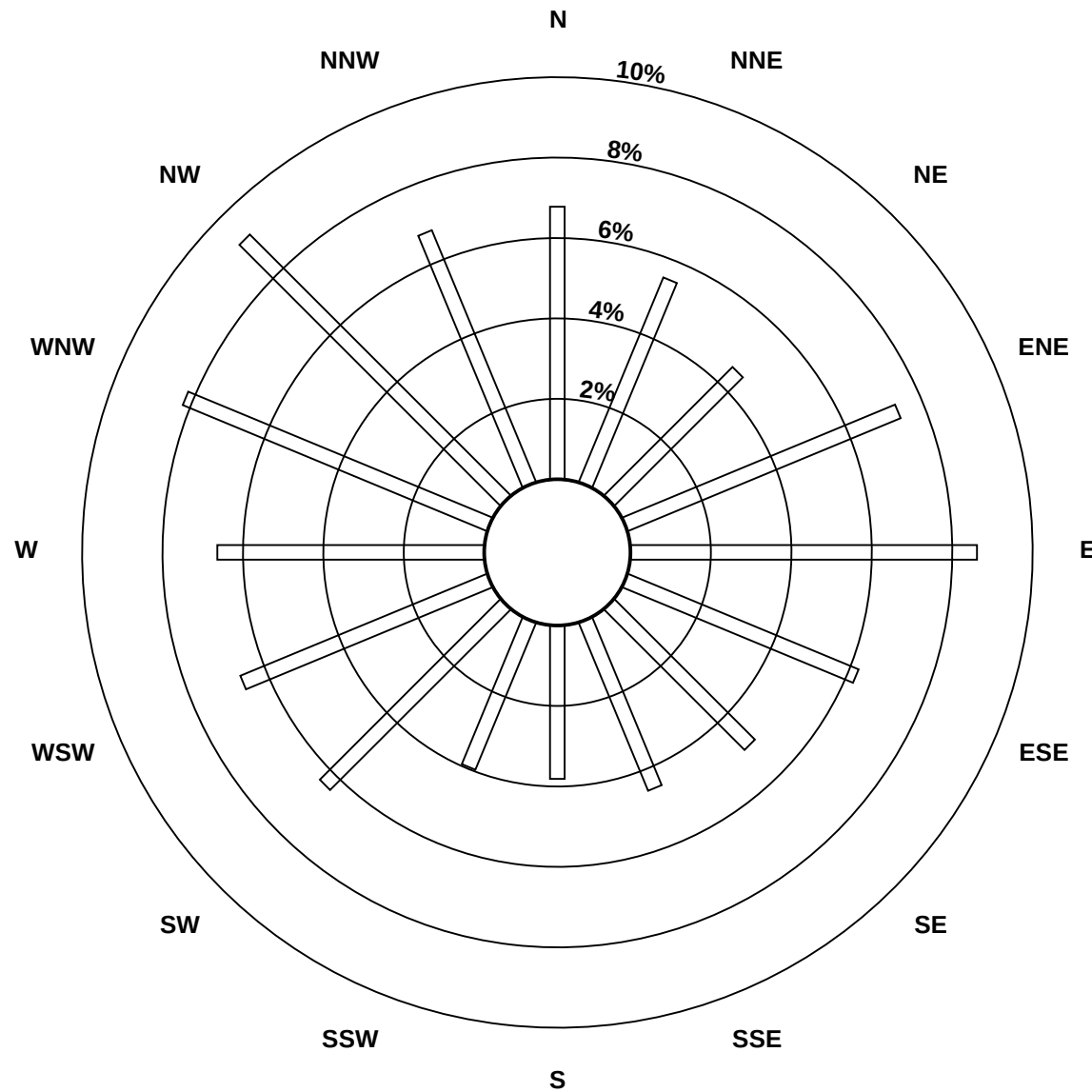
Falher - May 2014



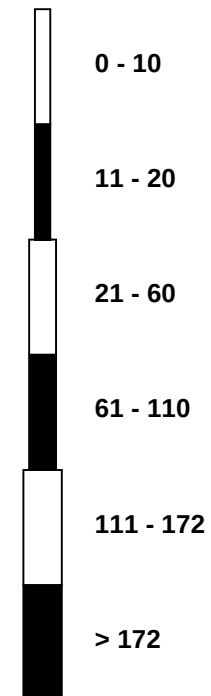
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Falher - May 2014



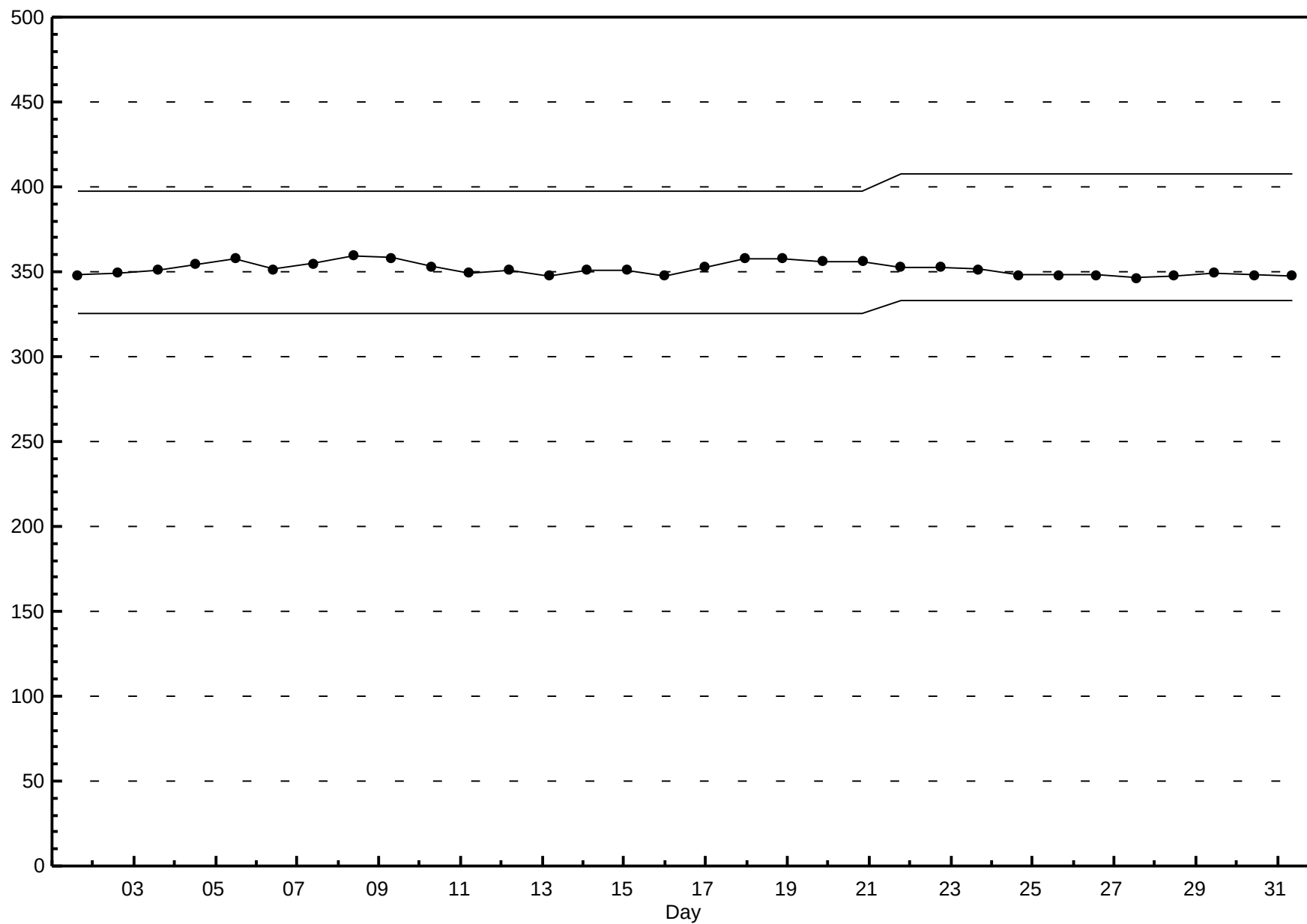
Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)

Falher - May 2014



Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

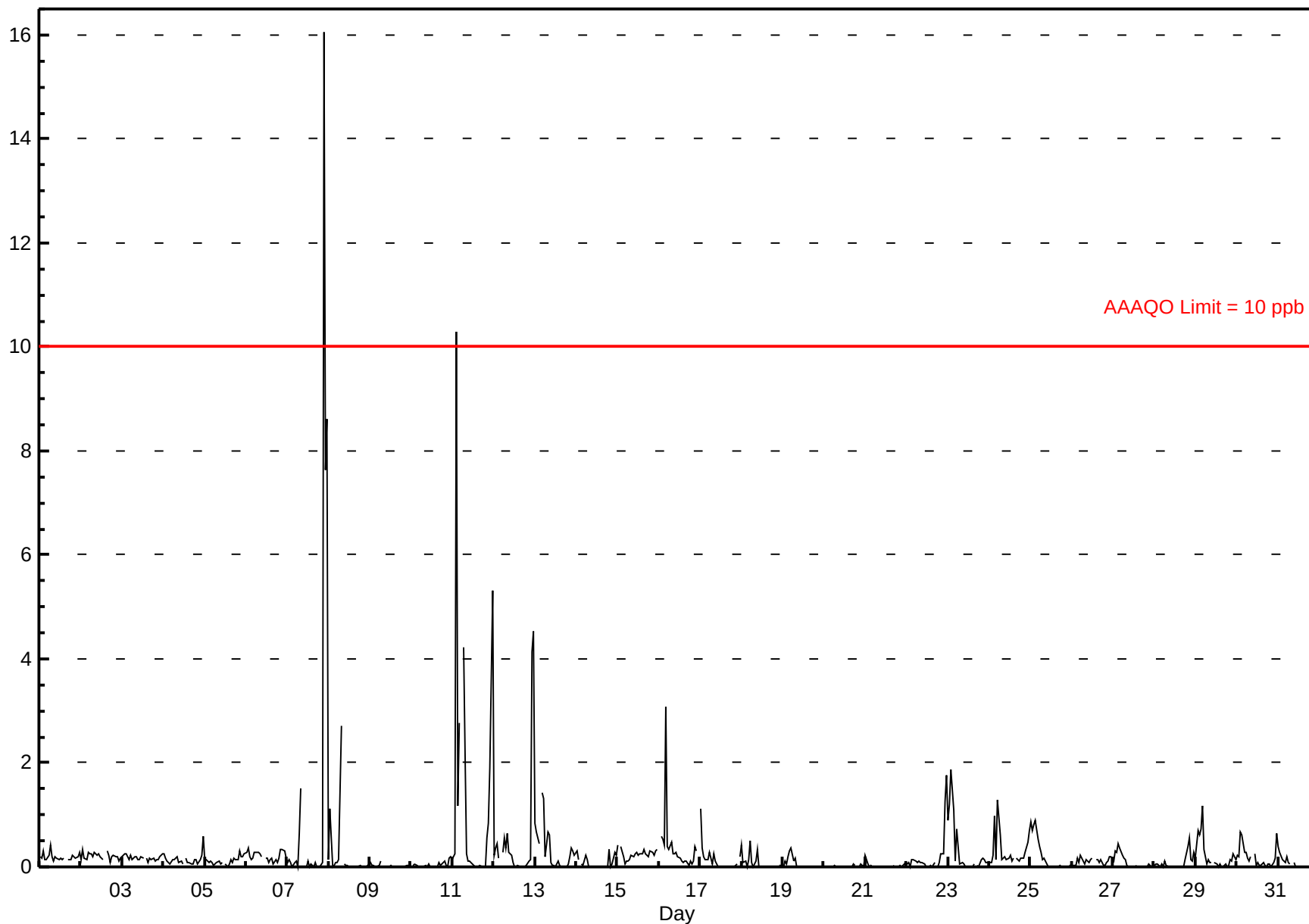
Falher - May 2014

Number of Exceedences (AAAQO): 1-hr: 1 24-hr: 0 Maximum Value: 16.1 ppb on May 7 22:00 Maximum Daily Average: 1.5 ppb on May 7																				Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0							
Minimum Value: 0 ppb on May 5 14:00 Maximum Diurnal Average: 0.9 ppb at hour 24 Monthly Average: 0.25 ppb										Minimum Daily Average: 0.0 ppb on May 20 Minimum Diurnal Average: 0.0 ppb at hour 14 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 = 4.0																	
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-May	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	0.4	
2-May	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-May	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-May	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	0.6	
5-May	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-May	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-May	0	0	0	0	0	0	0	1	2	A	0	0	0	0	0	0	0	0	0	0	0	16	8	9	1.5	16.1	
8-May	0	1	0	0	0	0	0	3	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.7	
9-May	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	0.1	
10-May	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	0.2	
11-May	0	0	10	1	3	A	4	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	5	1.3	10.3	
12-May	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	0.5	4.5	
13-May	1	1	0	A	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4	
14-May	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	
15-May	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	0.4	
16-May	A	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	3.1	
17-May	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	1.1	
18-May	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5	
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4	
20-May	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-May	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	0.2	
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	2	0.2	1.8	
23-May	1	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.9	
24-May	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0.3	1.3	
25-May	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.9	
26-May	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	
27-May	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	
28-May	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0.1	0.6	
29-May	0	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2	
30-May	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7	
31-May	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	0.4	
																									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

Falher - May 2014



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

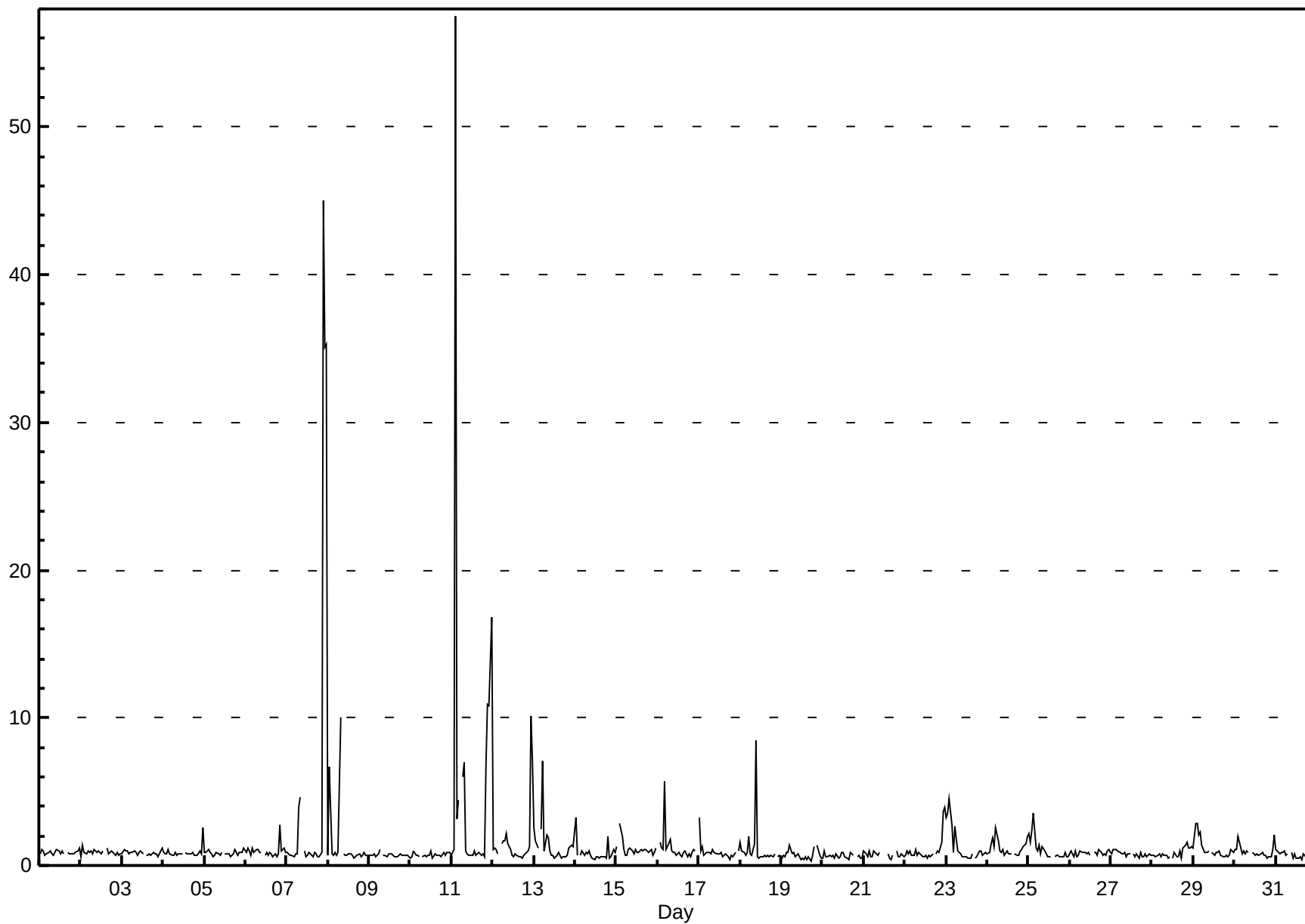
Falher - May 2014

Maximum Value: 57.5 ppb on May 11 03:00																				Maximum Daily Average: 6.0 ppb on May 7					Hours in Service: 744				
Minimum Value: 0 ppb on May 19 18:00																				Minimum Daily Average: 0.6 ppb on May 20					Hours of Data: 708				
Maximum Diurnal Average: 3.1 ppb at hour 3																				Minimum Diurnal Average: 0.7 ppb at hour 16					Hours of Missing Data: 36				
Monthly Average: 1.30 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.4 P ₉₉ = 10.7					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-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.2			
2-May	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			
3-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.2			
4-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	3	0.9	2.6			
5-May	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-May	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	3	1	1	1	1.0	2.7			
7-May	1	1	1	1	1	1	1	4	5	A	1	1	1	1	1	1	1	1	1	1	1	45	35	35	6.0	45.1			
8-May	1	7	1	1	1	1	1	10	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	10.0			
9-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1			
10-May	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0			
11-May	1	1	58	3	4	A	6	7	1	1	1	1	1	1	1	1	1	1	1	1	7	11	11	17	5.8	57.5			
12-May	1	1	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	0	1	1	1	1	10	7	1.7	10.1			
13-May	3	2	1	A	2	7	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	7.1			
14-May	3	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	2	1	1	1	1	0.8	3.2			
15-May	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.8			
16-May	A	2	1	1	6	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	5.7			
17-May	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	0.9	3.2			
18-May	2	1	1	1	1	2	1	1	1	8	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1.1	8.4			
19-May	0	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	0	1	1	A	1	1	1	0.7	1.4			
20-May	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	0.6	1.0			
21-May	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	0	0	1	A	1	1	1	1	1	0.7	1.0			
22-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	4	4	1.1	4.0			
23-May	3	4	5	3	1	3	2	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	1.3	4.6			
24-May	1	1	2	2	1	3	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1.2	2.6			
25-May	2	2	2	4	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	3.6			
26-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.1			
27-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	0.8	1.1			
28-May	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	0.8	1.5			
29-May	1	3	3	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.9			
30-May	1	1	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	2.1			
31-May	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0.7	1.1			
1.2 1.3 3.1 1.2 1.2 1.2 1.1 1.5 1.1 1.1 0.8 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.8 1.1 2.7 2.8 3.0																								Diurnal Average					
3.2 6.7 57.5 3.6 5.7 7.1 6.0 10.0 4.6 8.4 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.1 1.2 1.9 6.8 45.1 35.1 35.3																								Diurnal Maximum					
C - Calibration A - Automated Daily Zero Span																													

Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

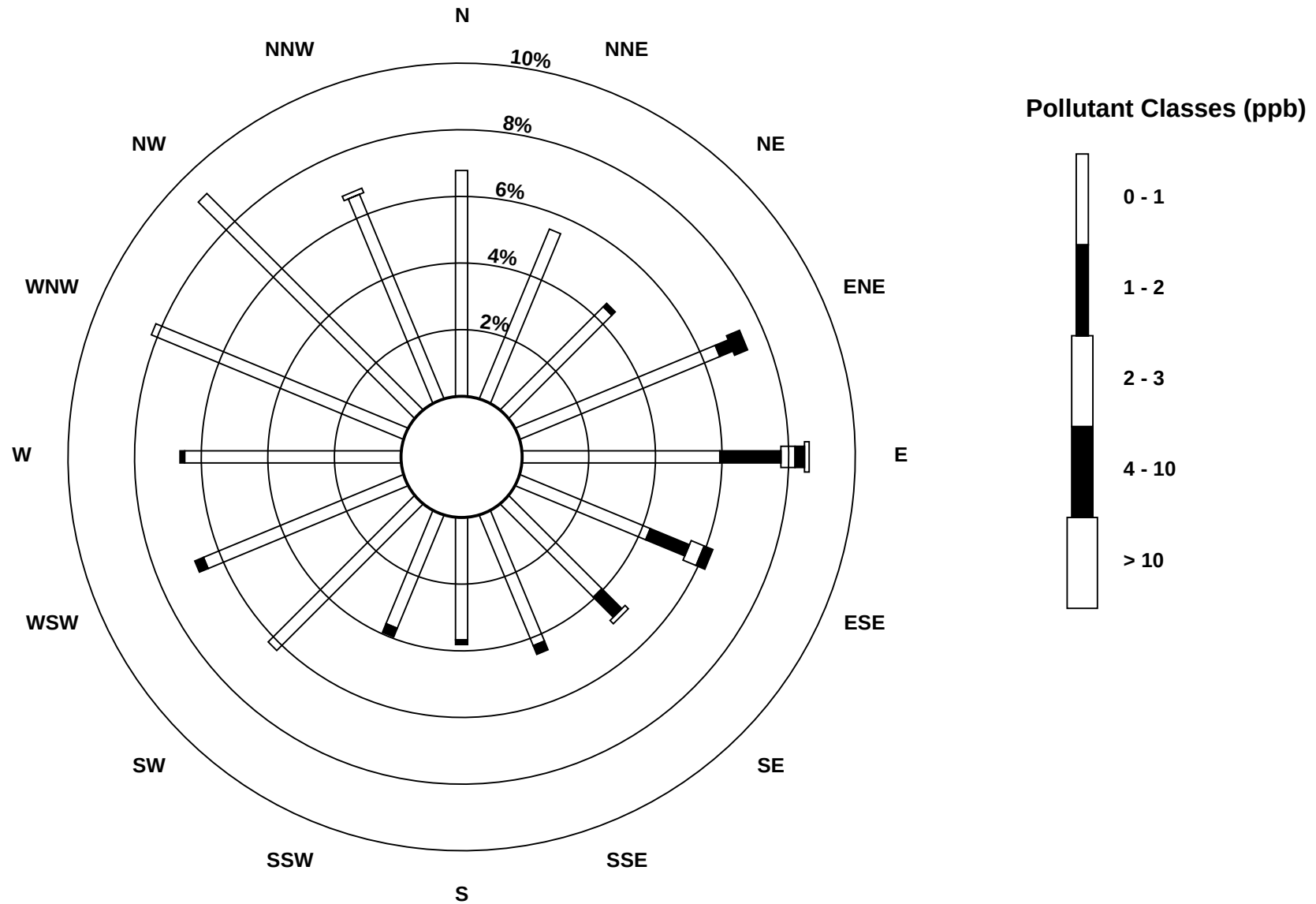
Falher - May 2014



Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb

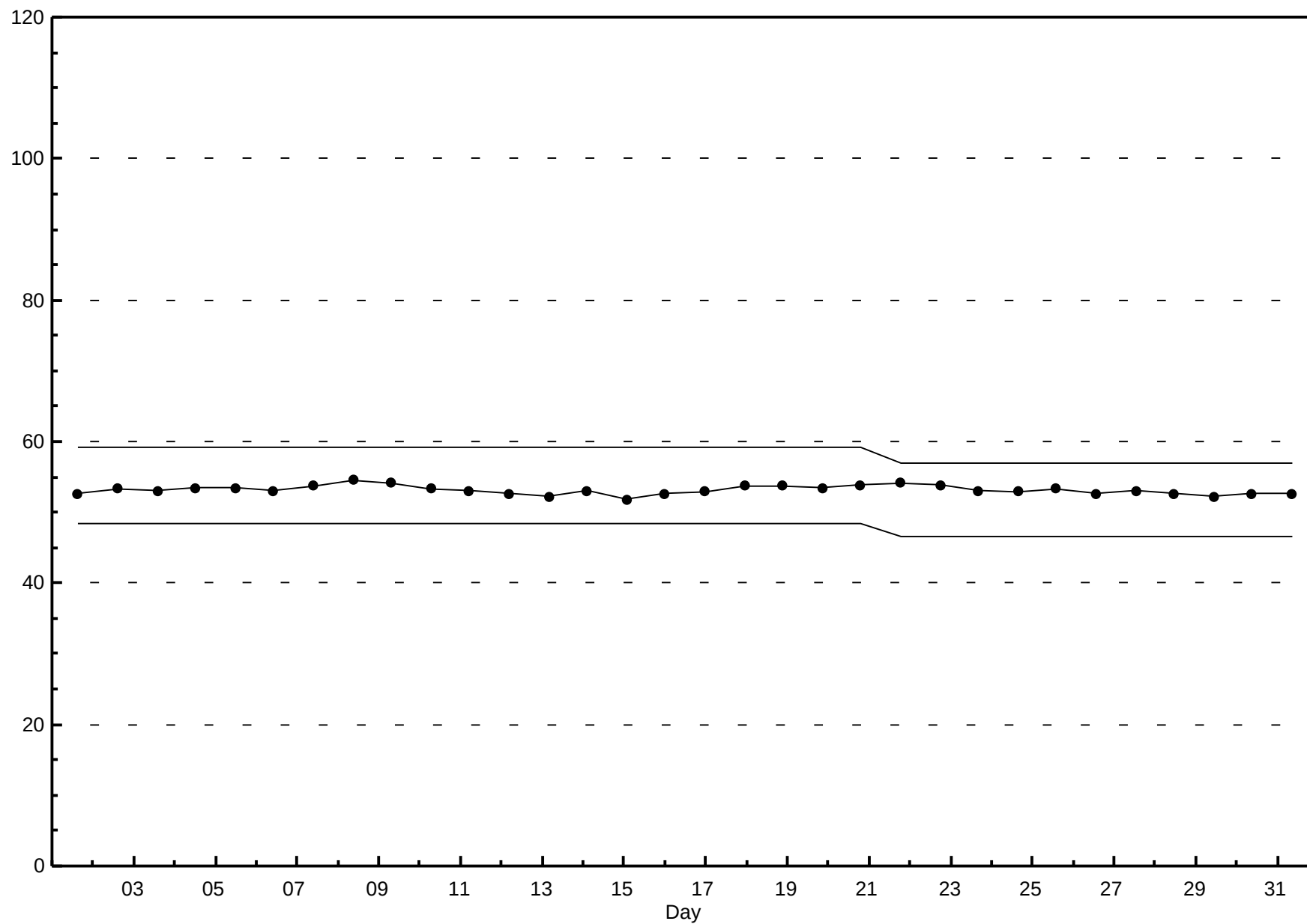
Falher - May 2014



Span Responses

Hydrogen Sulphide (H₂S)

Falher - May 2014



Hourly Averages

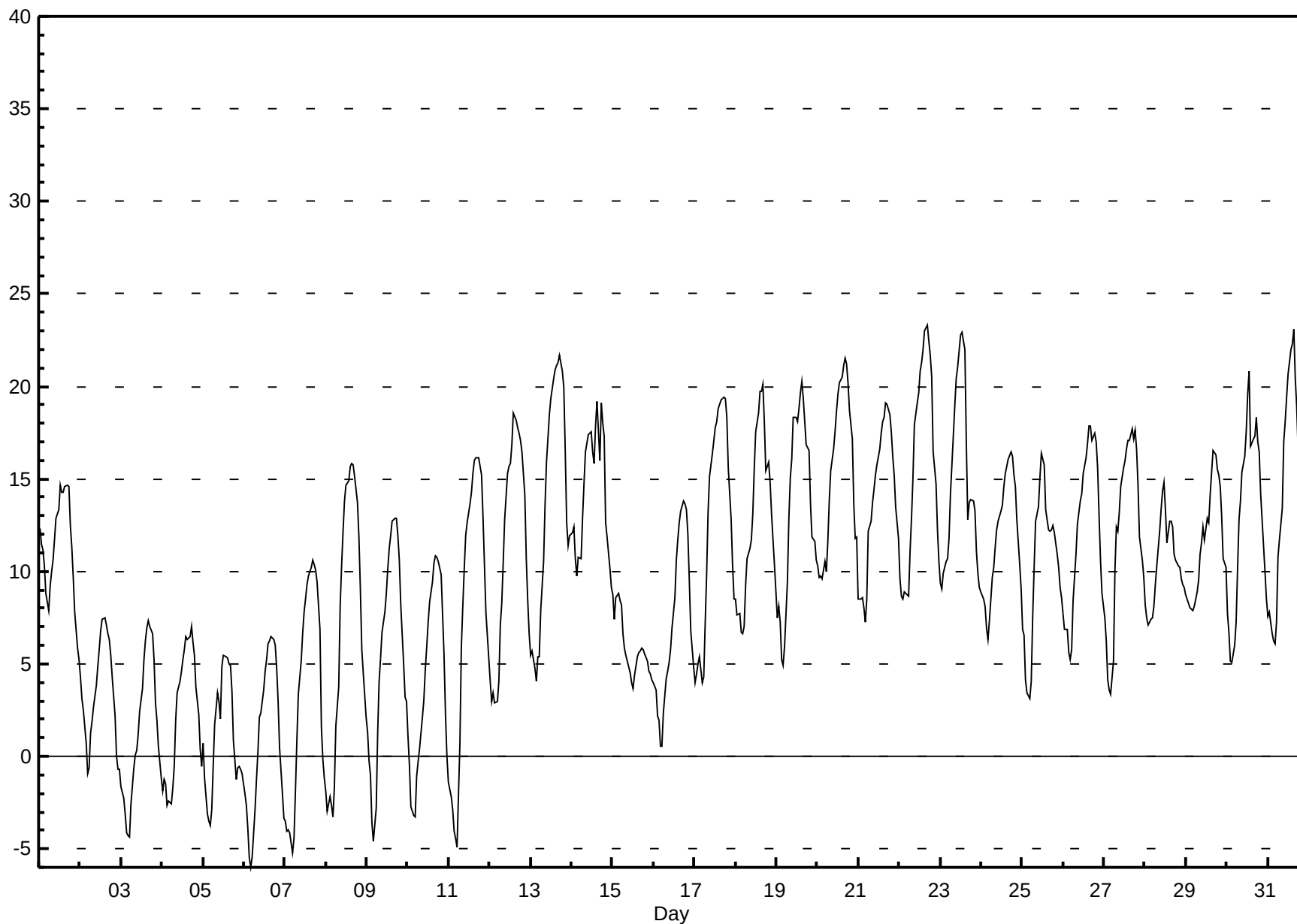
External Temperature (ET) - °C

Falher - May 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 23.3 °C on May 22 17:00 Maximum Daily Average: 15.7 °C on May 22																					Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0					
Minimum Value: -6 °C on May 6 05:00 Maximum Diurnal Average: 14.8 °C at hour 16 Monthly Average: 9.55 °C										Minimum Daily Average: 0.9 °C on May 6 Minimum Diurnal Average: 3.1 °C at hour 5 Percentiles: P ₁ = -4.4 P ₁₀ = -0.2 Q ₁ = 5.2 Median = 9.9 Q ₃ = 14.7 P ₉₀ = 18.1 P ₉₉ = 22.1																
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-May	12	11	11	10	9	8	9	10	11	12	13	13	15	14	14	15	15	15	12	11	10	8	6	5	11.2	14.7
2-May	4	3	2	1	-1	-1	1	2	3	4	5	6	7	7	8	7	7	6	5	4	2	0	-1	-1	3.4	7.5
3-May	-2	-2	-3	-4	-4	-4	-3	-1	0	0	1	2	4	5	6	7	7	7	7	5	3	2	1	-1	1.4	7.3
4-May	-2	-1	-1	-3	-2	-3	-2	-1	2	3	4	5	5	6	6	6	6	7	6	5	4	2	0	-1	2.3	7.0
5-May	1	-1	-3	-3	-4	-3	-1	2	3	3	2	5	5	5	5	5	5	4	1	-1	-1	-1	-1	-1	1.1	5.5
6-May	-2	-3	-4	-5	-6	-5	-3	-1	0	2	2	4	5	5	6	6	7	6	6	5	3	0	-2	-3	0.9	6.5
7-May	-3	-4	-4	-4	-5	-4	-2	1	3	5	7	8	8	9	10	10	11	10	10	9	7	2	0	-1	3.4	10.6
8-May	-2	-3	-2	-3	-3	-2	2	4	8	10	12	14	15	15	16	16	16	15	14	12	9	6	4	2	7.3	15.9
9-May	1	0	-1	-4	-5	-3	1	4	5	7	8	9	10	11	12	13	13	13	12	11	8	5	3	3	5.7	12.8
10-May	1	0	-3	-3	-3	-1	0	0	2	3	5	6	7	8	9	10	11	11	11	10	8	5	2	0	4.1	10.8
11-May	-1	-2	-3	-4	-4	-5	1	6	8	10	12	13	14	14	15	16	16	16	16	15	13	10	8	5	7.8	16.2
12-May	4	3	3	3	3	4	7	8	10	13	15	16	16	17	19	18	18	17	17	16	14	11	8	7	11.2	18.6
13-May	5	6	5	4	5	5	8	11	14	16	17	18	19	20	21	21	21	22	21	20	17	13	11	12	13.9	21.7
14-May	12	12	11	10	11	11	13	15	16	17	17	18	16	16	18	19	16	19	18	17	13	12	10	9	14.4	19.2
15-May	9	7	9	9	8	8	7	6	5	5	5	4	4	4	5	6	6	6	6	6	5	5	4	4	5.9	8.8
16-May	4	4	2	2	1	1	2	4	5	5	6	7	9	11	12	13	13	14	14	13	12	9	7	5	7.2	13.8
17-May	4	4	5	5	4	4	7	10	13	15	16	17	18	18	19	19	19	19	19	18	16	13	10	9	12.6	19.4
18-May	8	8	8	7	7	7	9	11	11	12	13	16	18	19	20	20	20	18	15	16	15	13	12	10	13.0	20.2
19-May	7	8	7	5	5	6	9	13	15	16	18	18	18	19	20	20	19	17	17	17	14	12	12	11	13.5	20.3
20-May	10	10	10	10	11	10	12	14	15	17	18	19	20	20	21	21	22	21	20	19	17	14	12	12	15.5	21.5
21-May	8	8	9	8	7	9	12	13	14	14	15	16	17	17	18	18	19	19	18	18	16	15	13	12	13.9	19.1
22-May	10	9	8	9	9	9	11	13	15	18	19	20	21	21	22	23	23	22	22	21	16	15	12	11	15.7	23.3
23-May	9	9	10	11	11	12	14	16	19	20	21	22	23	23	22	17	13	14	14	14	13	11	10	9	14.8	22.9
24-May	9	8	8	7	6	7	10	10	11	12	13	13	14	15	15	16	16	16	16	15	15	13	10	9	11.9	16.5
25-May	7	7	4	3	3	4	8	10	13	14	15	16	16	16	13	12	12	12	12	12	11	10	9	9	10.4	16.4
26-May	8	7	7	6	5	6	8	11	13	13	14	14	15	16	17	18	18	17	17	17	16	13	11	9	12.3	17.8
27-May	8	6	4	4	3	5	10	12	12	13	15	16	16	17	17	17	18	17	18	17	15	12	11	10	12.1	17.7
28-May	8	8	7	7	7	8	9	10	12	13	14	15	13	12	13	13	12	11	11	10	10	10	9	9	10.5	14.8
29-May	9	8	8	8	8	8	9	10	11	12	12	12	13	13	14	15	17	16	16	15	15	13	11	10	11.7	16.6
30-May	8	7	5	5	6	7	10	13	14	15	16	18	20	21	17	17	17	18	17	16	14	11	10	9	13.0	20.8
31-May	8	8	7	6	6	7	11	12	13	17	18	19	21	22	22	23	20	19	16	13	12	12	11	9	13.9	23.1
5.2 4.6 4.1 3.4 3.1 3.7 6.1 7.9 9.6 10.9 11.9 12.8 13.5 14.1 14.6 14.8 14.6 14.4 13.7 12.8 11.0 8.9 7.2 6.1																									Diurnal Average	
12.3 12.4 11.1 10.5 10.8 11.8 14.2 15.7 18.9 20.4 21.1 21.9 22.8 22.9 22.3 23.1 23.3 22.4 21.7 20.5 17.2 15.2 13.5 12.0																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Falher - May 2014



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - May 2014

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	17	17	20	19	20	14	12	15	17	18	16	15	15	15	17	17	16	19	20	17	23	15	13	16	15.1	22.5
Dir	248	244	254	273	289	299	306	286	294	298	303	306	288	315	324	303	307	289	292	341	339	328	326	319	299	339
2 Spd	14	17	21	13	11	17	16	23	23	23	21	22	21	23	25	26	26	27	32	29	22	14	12	12	18.8	31.6
Dir	318	298	313	288	254	262	273	294	296	289	290	306	308	319	319	322	324	336	343	341	339	327	321	321	312	343
3 Spd	10	11	10	8	10	10	12	9	9	11	9	9	11	9	8	11	12	12	11	13	8	5	2	5	5.8	13.0
Dir	307	303	301	313	320	324	350	31	1	339	345	355	8	27	14	49	48	54	68	120	143	238	299	10	3	120
4 Spd	15	15	11	7	7	5	7	11	12	17	15	11	13	13	12	10	6	7	5	6	5	5	9	9	6.1	16.9
Dir	32	46	25	19	36	11	342	344	353	342	355	317	303	318	310	307	342	270	266	287	274	114	131	129	347	342
5 Spd	11	13	13	13	12	14	18	20	20	23	19	24	28	28	31	30	33	37	39	35	33	30	25	23	13.3	38.9
Dir	127	137	127	116	110	121	135	143	183	248	242	286	295	303	302	302	298	300	284	260	273	280	283	274	272	284
6 Spd	22	19	16	14	13	10	12	14	13	12	12	12	12	14	14	13	10	9	4	10	11	12	14	16	6.5	21.5
Dir	263	262	256	248	249	264	295	321	324	310	329	327	322	306	315	321	315	26	79	63	75	78	75	73	314	263
7 Spd	15	16	16	16	15	16	18	21	20	19	17	11	10	5	7	6	3	10	9	9	11	15	12	15	12.4	20.8
Dir	66	67	67	63	64	64	83	94	101	100	84	124	77	92	62	26	128	80	72	49	83	98	102	93	81	94
8 Spd	14	12	13	13	12	15	16	15	15	15	21	8	19	19	19	19	24	24	29	26	16	12	10	13	6.5	28.6
Dir	81	74	63	72	64	71	84	101	119	134	147	183	265	275	293	321	329	348	354	352	346	342	355	6	15	354
9 Spd	13	10	4	4	7	6	8	16	16	16	22	20	19	19	19	16	17	15	21	22	16	12	11	12	12.9	22.4
Dir	17	17	26	301	286	302	302	326	326	320	312	307	313	310	323	327	338	343	2	3	8	10	359	353	335	3
10 Spd	8	1	4	7	10	16	21	25	23	24	20	20	20	20	20	20	19	21	20	18	13	11	8	6	14.8	24.7
Dir	351	260	237	288	294	318	323	329	320	325	326	310	307	303	310	315	322	330	332	341	352	351	359	358	323	329
11 Spd	5	6	5	3	2	5	4	4	8	6	5	6	7	7	7	8	7	5	3	3	6	10	12	10	0.5	11.5
Dir	340	28	122	187	331	49	69	138	209	224	269	305	294	297	257	314	316	321	17	93	124	98	114	92	15	114
12 Spd	8	10	12	13	13	10	14	13	13	12	9	9	15	10	9	8	12	14	14	12	10	13	16	12	9.2	15.7
Dir	80	74	73	72	80	75	92	90	101	104	96	72	352	14	323	13	10	3	357	17	31	58	66	70	54	66
13 Spd	13	12	11	12	11	13	18	17	13	14	13	10	7	6	9	5	9	2	3	5	13	10	11	10	7.3	17.6
Dir	82	73	78	68	69	103	100	103	109	145	149	128	108	266	353	260	315	299	54	101	118	116	131	106	101	100
14 Spd	12	12	11	9	11	12	16	17	21	20	20	25	26	24	27	27	19	17	22	20	18	9	13	11	14.3	27.5
Dir	119	230	246	232	215	191	207	227	252	247	238	234	235	206	203	225	285	270	269	281	336	267	215	212	237	203
15 Spd	6	11	14	20	20	27	26	30	28	29	28	27	22	20	20	21	19	16	13	12	10	4	2	3	15.8	29.9
Dir	243	263	253	267	259	276	286	285	289	290	300	300	297	302	315	318	325	332	340	344	347	354	56	65	297	285
16 Spd	4	4	2	6	8	8	9	13	14	7	8	7	5	4	5	3	4	5	8	8	7	6	7	5	5.4	13.9
Dir	158	161	137	123	84	82	80	89	90	104	123	110	134	133	170	160	82	72	62	54	73	36	17	63	92	90
17 Spd	7	8	10	9	10	9	15	14	12	10	11	17	14	9	16	14	13	13	13	16	13	14	10	13	11.2	17.1
Dir	50	44	36	41	50	53	91	99	106	115	106	98	103	85	49	72	77	82	81	96	93	96	64	55	79	98
18 Spd	15	13	17	15	15	13	12	21	25	20	20	18	8	10	4	7	5	21	26	18	10	8	7	5	6.4	26.1
Dir	72	81	88	92	94	98	85	68	82	124	136	159	155	181	213	238	260	329	352	6	342	334	344	359	74	352
19 Spd	8	12	1	2	2	3	2	0	1	3	4	8	24	17	13	11	19	24	5	20	21	15	14	17	4.4	24.0
Dir	302	13	130	179	201	155	108	357	240	77	151	171	186	191	183	162	276	307	139	116	102	124	127	141	158	186
20 Spd	18	17	14	10	16	12	11	17	21	23	24	25	24	27	25	28	24	27	27	24	17	13	10	11	16.9	28.0
Dir	152	155	148	143	176	175	209	224	230	236	243	233	229	227	242	225	239	237	241	232	237	227	229	227	221	225
21 Spd	13	16	16	15	12	13	16	19	29	36	32	29	30	34	33	30	27	28	21	12	14	28	15	12	19.8	35.5
Dir	165	163	161	167	195	230	238	233	234	236	242	241	231	237	251	241	248	253	264	283	245	225	230	221	233	236
22 Spd	8	12	12	12	17	15	16	19	17	15	18	21	19	24	22	21	24	21	20	16	12	2	9	12	11.9	23.8
Dir	189	175	168	165	164	139	141	154	166	202	224	231	229	219	222	236	245	254	243	247	268	194	123	114	205	219

Hourly Averages

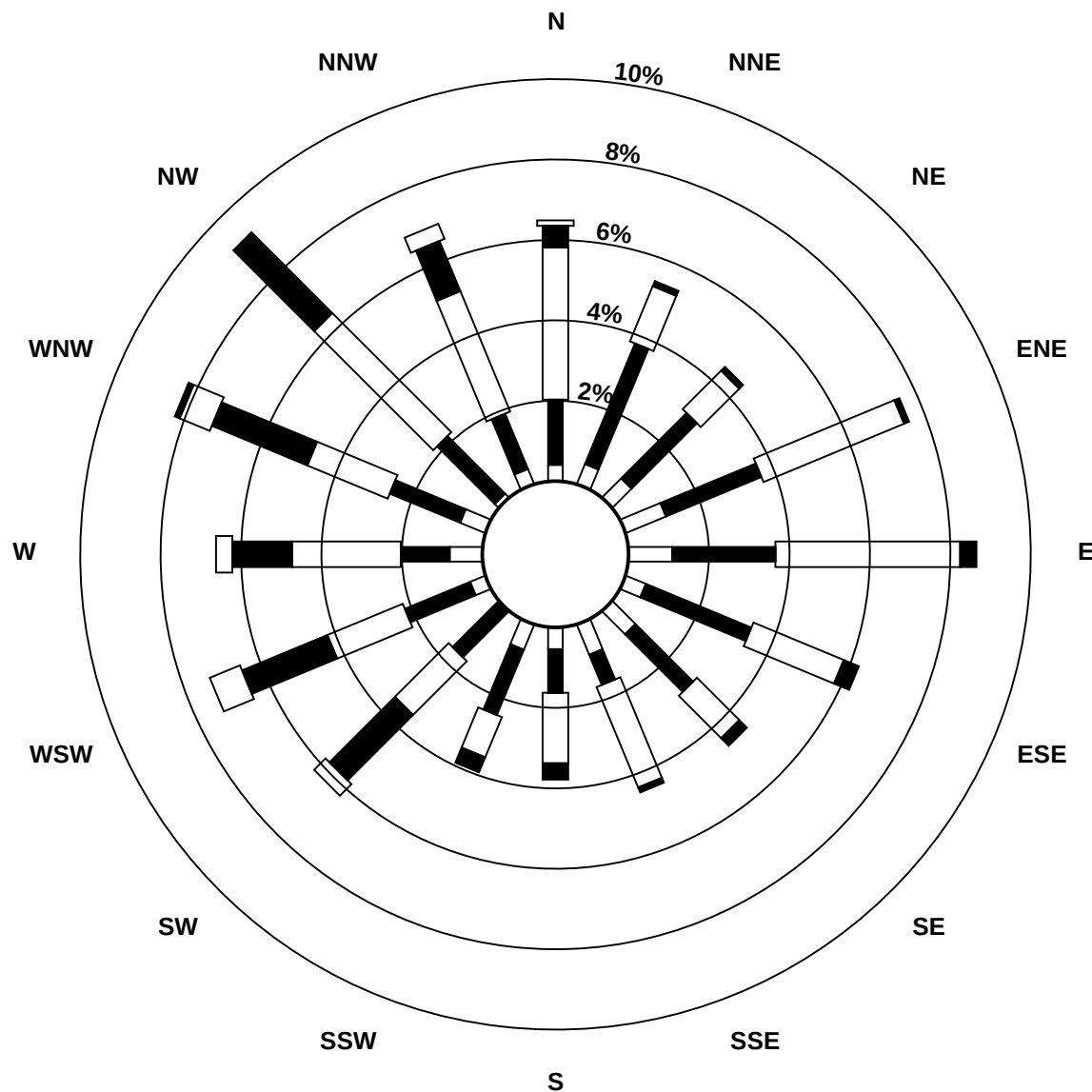
Wind Speed (km/h)
Wind Direction (deg)
Falher - May 2014

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	12	10	9	8	10	9	7	11	9	7	9	12	18	11	11	32	21	10	7	12	12	14	14	16	8.6	32.2
Dir	132	112	106	129	133	126	145	180	236	241	211	184	207	211	229	252	254	268	192	170	195	179	189	205	197	252
24 Spd	18	14	11	11	12	10	13	19	14	15	22	23	20	17	12	11	7	8	6	5	3	7	5	7	10.4	23.3
Dir	217	223	250	252	246	253	267	274	279	257	263	271	269	263	262	277	251	274	307	286	197	150	166	122	256	271
25 Spd	3	5	7	5	8	6	8	6	10	10	15	15	14	12	22	20	17	10	5	10	12	12	16	15	5.4	21.7
Dir	83	123	110	86	83	71	131	108	113	139	169	169	168	156	196	186	191	209	171	69	40	17	16	25	135	196
26 Spd	13	6	7	5	6	6	9	10	13	16	19	15	15	14	12	14	15	17	16	19	11	9	9	9	10.9	18.8
Dir	38	31	20	339	326	323	359	14	350	357	357	5	341	341	338	338	6	28	27	3	29	52	45	32	6	357
27 Spd	7	4	4	6	8	6	1	9	18	16	15	15	16	16	16	12	14	15	19	15	12	14	10	11	10.5	19.1
Dir	55	58	26	30	30	27	39	348	6	4	344	7	8	5	2	358	357	327	308	344	34	44	35	33	5	308
28 Spd	10	10	9	10	12	12	13	10	10	13	10	8	10	16	22	12	14	19	16	17	14	10	11	10	10.5	21.6
Dir	47	33	34	31	24	42	61	68	63	65	62	82	356	31	38	64	88	92	112	106	101	104	114	105	67	38
29 Spd	10	9	10	8	7	7	11	8	3	4	2	5	6	9	4	14	13	14	12	8	7	7	7	9	0.8	14.0
Dir	99	101	100	109	99	91	99	97	79	74	69	198	150	241	288	317	274	272	353	335	291	297	274	297	353	272
30 Spd	8	10	8	11	12	10	11	18	19	17	16	15	18	19	29	23	20	25	21	21	18	7	3	8	10.7	28.8
Dir	225	212	206	213	217	214	234	255	275	258	268	279	286	276	336	342	317	280	219	222	212	219	35	154	261	336
31 Spd	11	14	13	13	12	9	9	8	7	4	6	11	12	11	10	8	23	22	17	22	19	17	7	2	4.3	22.5
Dir	188	190	166	155	154	160	193	196	188	239	184	196	198	216	224	238	248	300	346	26	63	99	117	265	192	248
Spd	2.1	1.7	1.8	1.3	1.1	0.8	0.9	0.4	2.3	4.4	5.0	5.9	7.7	8.0	8.5	8.6	9.6	10.0	7.4	5.4	3.5	1.6	2.0	2.4	Diurnal Average	
Dir	93	120	117	130	146	100	106	305	283	269	267	265	272	275	293	291	299	310	322	347	4	45	60	58	Diurnal Maximum	
Spd	21.5	18.6	20.6	19.9	20.0	26.8	26.2	29.9	28.8	35.5	32.0	29.3	29.9	34.1	33.5	32.2	32.5	37.4	38.9	35.1	33.4	30.0	24.9	23.4	Diurnal Maximum	
Dir	263	262	313	267	259	276	286	285	234	236	242	241	231	237	251	252	298	300	284	260	273	280	283	274		
Maximum Speed Value: 39 km/h on May 5 19:00																								Hours in Service: 744		
Maximum Daily Speed Average: 19.8 km/h on May 5																								Hours of Data: 744		
Maximum Diurnal Speed Average: 10.0 km/h at hour 18																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on May 19 08:00																								Percent Operational Time: 100.0		
Minimum Daily Speed Average: 0.5 km/h on May 11																										
Minimum Diurnal Speed Average: 0.4 km/h at hour 8																										
Monthly Average Velocity: 2.76 km/h 299.2 deg																										
Speed Percentiles: P ₁ = 1.7 P ₁₀ = 5.5 Q ₁ = 9.0 Median = 12.6 Q ₃ = 17.4 P ₉₀ = 22.5 P ₉₉ = 33.2																										
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	4	31	51	8	3	0	97																			
NorthEast	9	39	31	2	0	0	81																			
East	11	43	61	6	0	0	121																			
SouthEast	7	30	30	5	0	0	72																			
South	11	13	31	4	0	0	59																			
SouthWest	5	22	30	27	9	0	93																			
West	7	19	33	31	8	1	99																			
NorthWest	4	26	44	42	6	0	122																			
Total	58	223	311	125	26	1	744																			

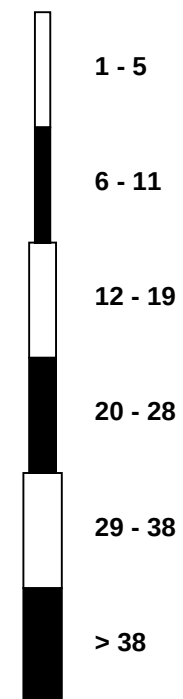
Wind Rose

Wind Speed (WS) (km/h)

Falher - May 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - May 2014

Maximum Speed: 40 km/h on May 5 19:00																				Maximum Daily Speed Average: 24.1 km/h on May 5										Hours in Service: 744	
Minimum Speed: 1 km/h on May 19 08:00																				Minimum Daily Speed Average: 7.3 km/h on May 11										Hours of Data: 744	
Maximum Diurnal Speed Average: 17.5 km/h at hour 18																				Minimum Diurnal Speed Average: 10.5 km/h at hour 4										Hours of Missing Data: 0	
Monthly Average Speed: 14.25 km/h																				Percentiles: P ₁ = 2.6 P ₁₀ = 6.7 Q ₁ = 9.8 Median = 13.1 Q ₃ = 17.9 P ₉₀ = 23.4 P ₉₉ = 32.8										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-May	17	17	20	19	20	14	12	15	17	18	17	16	16	15	18	17	17	19	21	19	23	15	13	17	17.1	22.6					
2-May	15	18	21	13	11	17	16	23	23	23	22	23	22	24	25	27	26	28	32	29	22	14	12	12	20.7	31.8					
3-May	10	11	10	8	10	10	12	9	10	12	10	11	12	10	11	13	13	12	13	13	9	5	4	6	10.2	13.3					
4-May	15	15	12	7	7	8	7	11	12	17	16	13	15	14	15	13	9	9	7	8	5	6	9	9	10.8	17.3					
5-May	11	13	13	13	12	14	18	20	21	23	19	25	29	28	31	31	33	38	40	35	33	30	25	24	24.1	39.7					
6-May	22	19	16	14	13	10	12	15	13	12	13	13	14	15	16	14	11	12	6	10	11	12	14	16	13.5	21.6					
7-May	16	16	16	16	15	16	18	21	20	20	18	12	12	9	10	10	7	11	10	10	11	15	12	15	13.9	20.9					
8-May	14	12	13	13	12	15	16	16	15	16	21	12	21	21	20	20	25	25	29	26	16	12	10	14	17.1	28.9					
9-May	13	11	5	5	7	6	9	16	17	16	23	21	20	20	20	17	18	16	21	23	16	12	11	13	14.8	22.8					
10-May	8	2	5	8	10	16	21	25	23	24	21	21	21	21	21	21	20	21	20	18	13	11	8	6	16.0	24.9					
11-May	5	6	7	3	2	5	4	5	8	7	8	10	9	9	9	10	9	9	7	4	6	11	12	10	7.3	12.0					
12-May	8	11	12	13	14	10	14	13	13	13	10	11	17	11	10	10	14	15	15	12	10	14	16	12	12.4	16.8					
13-May	13	12	11	12	11	13	18	17	13	14	13	11	9	9	11	7	10	3	4	6	13	10	12	11	11.1	17.6					
14-May	12	13	11	9	12	12	16	17	21	20	20	25	27	24	28	32	20	19	22	23	18	12	13	11	18.3	32.5					
15-May	6	11	14	20	20	28	26	30	28	29	28	27	22	20	20	21	19	17	13	12	10	4	2	4	18.0	30.0					
16-May	4	4	3	6	8	8	9	13	14	8	9	8	7	6	7	5	6	7	9	8	7	7	7	6	7.4	14.1					
17-May	7	8	10	9	10	9	15	14	12	11	12	18	16	12	16	15	14	14	14	16	13	14	11	14	12.7	17.9					
18-May	15	13	17	15	15	14	13	21	25	22	20	18	8	12	7	8	7	23	26	18	11	8	8	6	14.7	26.3					
19-May	9	12	6	3	3	4	2	1	2	3	6	9	25	18	14	12	24	24	10	20	21	16	14	17	11.4	24.6					
20-May	18	17	14	11	16	12	11	17	22	23	24	26	24	28	25	29	24	28	27	24	17	13	10	12	19.7	28.7					
21-May	14	16	16	15	12	13	16	20	29	36	32	30	30	35	34	31	28	28	21	13	15	28	15	12	22.5	35.7					
22-May	9	12	12	12	17	15	16	19	17	16	18	22	19	24	23	22	24	21	20	16	13	3	10	12	16.4	24.4					
23-May	12	10	9	9	11	9	7	11	10	8	10	14	19	13	12	33	21	11	9	12	12	14	14	16	12.7	32.6					
24-May	18	14	12	12	13	10	13	19	14	16	23	24	20	18	12	12	9	9	7	5	3	7	6	7	12.5	23.7					
25-May	4	5	8	6	8	7	10	7	10	11	16	16	16	17	22	20	18	10	5	10	12	12	16	15	11.7	22.2					
26-May	13	7	7	6	6	6	9	10	13	16	19	16	15	15	13	14	16	18	16	19	11	9	9	9	12.3	19.2					
27-May	8	4	4	6	8	6	2	10	18	16	16	17	17	17	17	14	15	16	20	20	12	14	10	11	12.4	20.0					
28-May	10	10	9	10	12	12	14	11	11	14	11	10	11	16	22	13	15	19	17	17	14	10	11	10	12.7	21.7					
29-May	10	9	10	8	7	7	11	8	4	4	3	5	7	10	7	15	14	15	13	8	7	8	8	9	8.7	14.8					
30-May	9	10	8	11	12	11	11	18	19	17	17	16	20	19	30	25	21	25	22	21	18	7	4	9	15.8	30.3					
31-May	11	14	13	13	12	9	9	9	7	5	7	12	13	12	12	10	23	24	18	23	20	17	11	3	12.9	24.5					
11.4 11.4 11.1 10.5 11.1 11.1 12.5 14.9 15.5 15.8 16.2 16.4 17.2 16.9 17.4 17.5 17.1 17.5 16.5 16.1 13.6 12.0 10.9 11.2																								Diurnal Average							
21.6 18.6 20.7 20.0 20.0 27.6 26.4 30.0 29.0 35.7 32.4 29.9 30.5 34.8 34.2 32.6 33.0 37.6 39.7 35.2 33.5 30.1 25.0 23.6																								Diurnal Maximum							
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

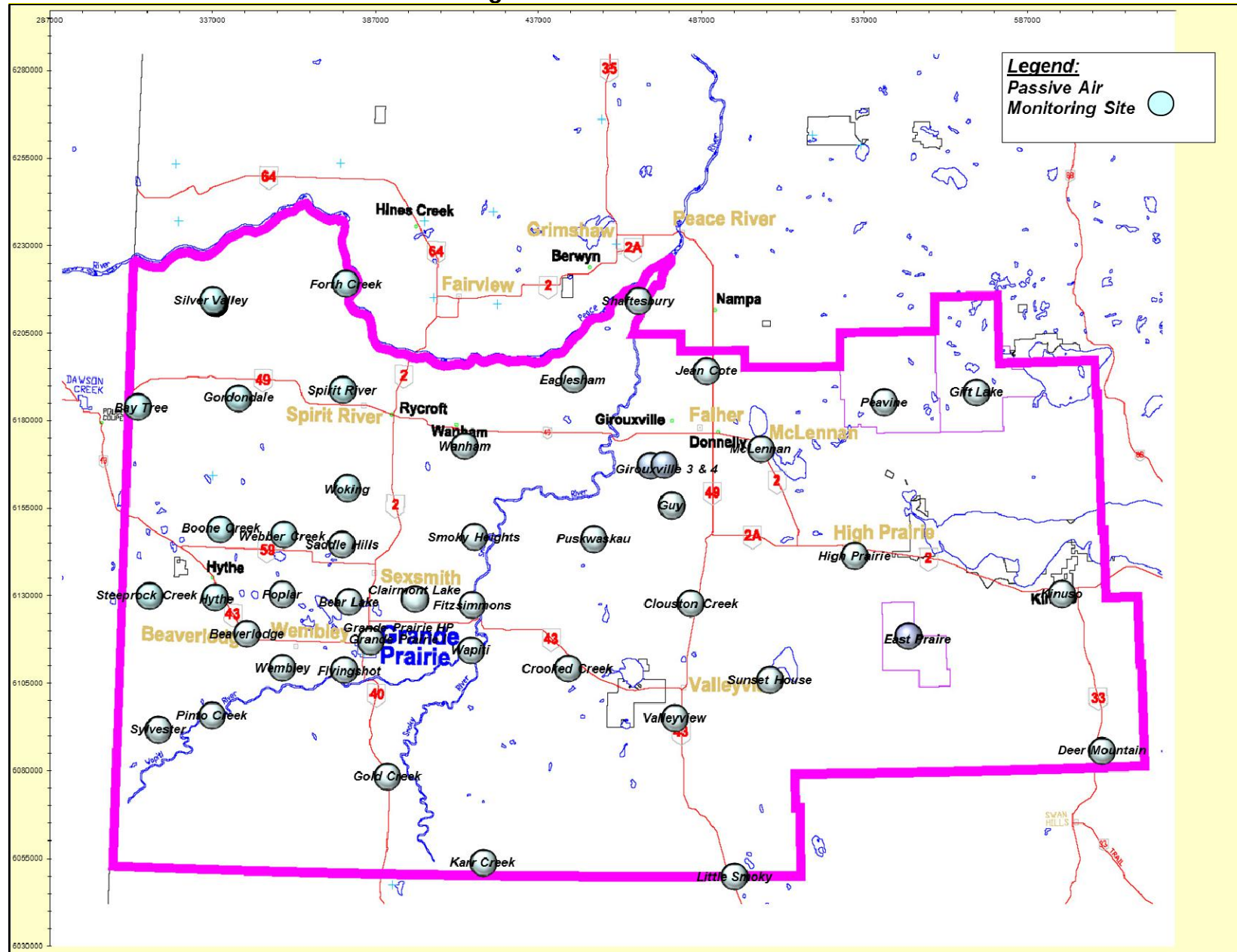
Falher - May 2014

Maximum Value: 89.3 deg on May 19 09:00																				Hours in Service: 744					
Minimum Value: 1.5 deg on May 7 03:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 2.3 P ₁₀ = 4.2 Q ₁ = 6.9 Median = 12.4 Q ₃ = 23.5 P ₉₀ = 42.1 P ₉₉ = 75.8																				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-May	4	3	5	8	7	4	9	7	8	11	14	17	19	16	14	14	13	9	15	26	4	4	4	5	25.8
2-May	9	8	7	13	6	10	5	10	12	10	15	12	19	13	13	12	10	10	6	5	6	4	4	6	18.5
3-May	5	3	5	6	2	6	10	21	23	19	41	50	32	31	42	32	25	22	28	7	38	23	65	32	64.8
4-May	7	5	25	15	9	48	10	11	12	13	19	39	36	26	53	51	56	43	57	40	17	46	5	8	57.2
5-May	3	8	6	6	5	4	9	4	19	11	6	22	13	11	11	8	10	7	11	4	4	3	4	7	21.8
6-May	3	2	5	3	6	13	11	9	11	21	15	25	32	30	32	31	35	47	48	12	6	9	3	4	48.1
7-May	3	3	1	2	2	4	7	6	8	11	15	22	38	68	50	63	84	36	25	13	15	4	4	4	84.3
8-May	4	8	3	4	4	8	6	12	11	14	14	61	21	21	19	20	15	16	8	3	5	6	7	9	61.2
9-May	7	24	32	24	9	14	18	8	10	15	14	17	17	19	19	27	22	21	8	10	4	4	8	6	31.9
10-May	33	81	34	12	6	6	4	7	14	12	16	13	19	19	18	20	17	11	9	6	4	4	8	18	81.1
11-May	20	24	34	43	44	22	9	30	17	40	58	70	50	54	46	46	65	66	69	48	9	25	15	19	69.6
12-May	4	7	4	4	4	8	4	6	11	16	27	31	25	41	38	50	31	18	14	7	9	12	4	4	50.1
13-May	8	3	5	4	7	19	5	5	11	17	22	38	49	65	44	76	30	66	43	23	5	3	13	25	75.8
14-May	22	28	3	7	10	6	4	9	11	11	11	10	8	10	8	39	15	24	11	30	15	38	7	7	38.9
15-May	15	17	12	6	3	13	6	5	4	4	9	5	6	5	7	7	6	10	11	12	5	8	32	42	42.2
16-May	12	19	39	18	10	4	3	7	10	30	30	33	44	58	54	66	67	45	32	14	13	24	8	29	66.9
17-May	8	12	7	6	10	13	8	6	11	22	29	17	29	42	14	24	26	23	17	13	2	3	17	9	41.9
18-May	6	4	2	2	3	4	19	7	10	24	10	14	37	41	72	44	49	32	6	6	24	11	15	33	71.5
19-May	12	12	75	73	60	44	58	83	89	50	76	39	17	14	14	31	60	9	61	11	4	19	10	6	89.3
20-May	3	4	11	20	4	7	12	4	10	6	11	16	15	16	14	12	15	14	10	5	5	8	11	11	19.5
21-May	13	4	3	15	8	6	8	8	7	5	9	12	11	12	12	10	14	9	12	25	14	7	11	6	24.8
22-May	24	9	2	8	5	7	11	4	11	21	15	16	17	10	15	14	14	9	5	8	17	66	34	5	65.7
23-May	9	7	6	19	15	19	18	8	24	25	25	27	21	37	20	9	7	23	60	10	13	11	12	2	59.7
24-May	4	5	14	7	8	6	8	7	14	13	10	10	9	11	14	26	39	20	37	26	23	7	26	25	39.4
25-May	43	11	12	57	12	10	34	32	12	28	12	16	36	63	12	5	7	11	22	24	12	8	5	4	62.8
26-May	6	20	22	31	11	9	17	12	13	12	13	17	16	21	24	19	21	10	12	11	15	4	4	3	30.8
27-May	17	31	13	12	10	8	73	38	11	16	20	22	21	20	24	33	22	18	19	40	6	7	7	7	73.4
28-May	10	9	12	15	7	8	12	12	19	23	33	45	27	17	6	14	12	6	7	4	3	7	6	4	45.3
29-May	7	6	5	3	4	6	8	12	38	37	71	31	32	23	78	24	20	16	16	11	18	29	31	13	78.3
30-May	32	9	13	4	6	14	8	12	9	9	10	14	20	18	22	25	16	12	22	8	3	44	43	44	43.7
31-May	8	6	11	3	2	6	13	10	16	47	38	25	28	28	36	50	17	25	24	16	19	4	64	60	63.5
43.4 81.1 75.5 73.0 59.9 48.4 73.4 82.6 89.3 50.0 75.9 69.6 49.9 68.1 78.3 75.8 84.3 66.3 68.5 48.2 38.0 65.7 64.8 60.4																									

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for April 2014

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
17a	Poplar	0.3	32.0	2.1		
17b	Poplar	0.2	35.2	1.7		
18a	Saddle Hills	0.2	34.6	0.3		
18b	Saddle Hills	0.2	37.2	0.4		
37a	Crooked Creek	0.1	37.5	0.4		
37b	Crooked Creek	0.1	34.3	0.5		
39a	Clouston Creek	0.0	33.1	1.1		
39b	Clouston Creek	0.1	35.9	0.7		
63a	Girouxville 3				0.2	
63b	Girouxville 3				0.3	
1	Silver Valley	0.1	34.1	0.4		08-27-081-11 W6M
2	Bay Tree	0.1	37.4	0.4		13-16-078-13 W6M
3	Fourth Creek	0.1	42.8	0.5		04-13-082-07 W6M
4	Gordondale	0.2	39.3	0.5		04-34-078-10 W6M
5	Boone Creek	0.2	35.9	0.6		16-36-074-11 W6M
7	Steeprock Creek	0.1	41.0	0.2		09-35-072-13 W6M
9	Spirit River	0.1	34.8	0.8		08-12-079-07 W6M
10	Woking	0.2	33.3	0.5		01-13-076-07 W6M
11	Webber Creek	0.2	29.4	1.2		09-36-074-09 W6M
12	Hythe	0.2	32.7	0.8		14-36-072-11 W6M
14	Sylvester	0.1	31.0	1.0		08-06-069-12 W6M
16	Beaverlodge	0.2	39.8	0.7		15-36-071-10 W6M
17	Poplar	0.2	33.6	1.9		13-06-073-08 W6M
18	Saddle Hills	0.2	35.9	0.4		04-25-074-07 W6M
19	Wanham	0.1	38.8	0.4		16-22-077-03 W6M
20	Shaftesbury	0.2	33.8	0.6		04-03-082-23 W5M
21	Eaglesham	0.1	31.3	0.8		16-21-079-25 W5M
23	Bear Lake	0.2	38.2	1.7		15-31-072-06 W6M
24	Wembley	N/S	N/S	N/S		12-31-070-08 W6M
25	Pinto Creek	0.1	37.4	0.3		04-24-069-11 W6M
26	Flyingshot	0.3	37.8	0.9		15-36-070-07 W6M
27	Grande Prairie I	0.1	33.1	3.5		08-15-071-06 W6M

PAZA Passive Results for April 2014 (Continued)

28	Clairmont Lake	0.2	37.0	0.8	09-06-073-04 W6M
29	Smoky Heights	0.2	38.1	0.5	04-06-075-02 W6M
30	Fitzsimmons	0.1	28.1	0.6	15-36-072-03 W6M
32	Gold Creek	0.2	31.2	0.7	06-33-067-05 W6M
33	Wapiti	0.1	34.2	0.4	02-25-071-03 W6M
34	Puskwaskau	0.1	31.9	0.3	15-35-074-25 W5M
35	Jean Cote	0.1	34.0	1.6	12-35-079-21 W5M
36	Guy	0.2	33.8	1.6	03-04-076-22 W5M
37	Crooked Creek	0.1	35.9	0.5	16-01-071-26 W5M
38	Karr Creek	0.2	30.9	0.4	10-16-065-02 W6M
39	Clouston Creek	0.1	34.5	0.9	12-01-073-22 W5M
40	McLennan	0.5	31.1	1.8	03-29-077-19 W5M
41	Valleyview	0.1	37.3	0.7	09-30-069-22 W5M
42	Sunset House	0.1	41.9	0.2	05-32-070-19 W5M
43	High Prairie	0.1	34.8	0.9	16-13-074-17 W5M
44	Peavine	0.1	32.2	0.1	03-05-079-15 W5M
45	Gift Lake	BDL	29.7	0.4	0.1 10-07-079-12 W5M
46	Little Smoky	0.1	33.5	1.0	12-01-065-21 W5M
47	Kinuso	0.1	31.2	0.3	12-10-073-10 W5M
48	Deer Mountain	BDL	29.7	0.2	15-22-068-09 W5M
49	Grande Prairie HP	0.1	37.3	1.6	17-26-071-06 W6M
50	East Prairie	BDL	29.0	0.2	13-02-072-15 W5M
63	Girouxville 3			0.2	14-02-077-23 W5M
64	Girouxville 4			0.2	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Passive Summary for April 2014

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

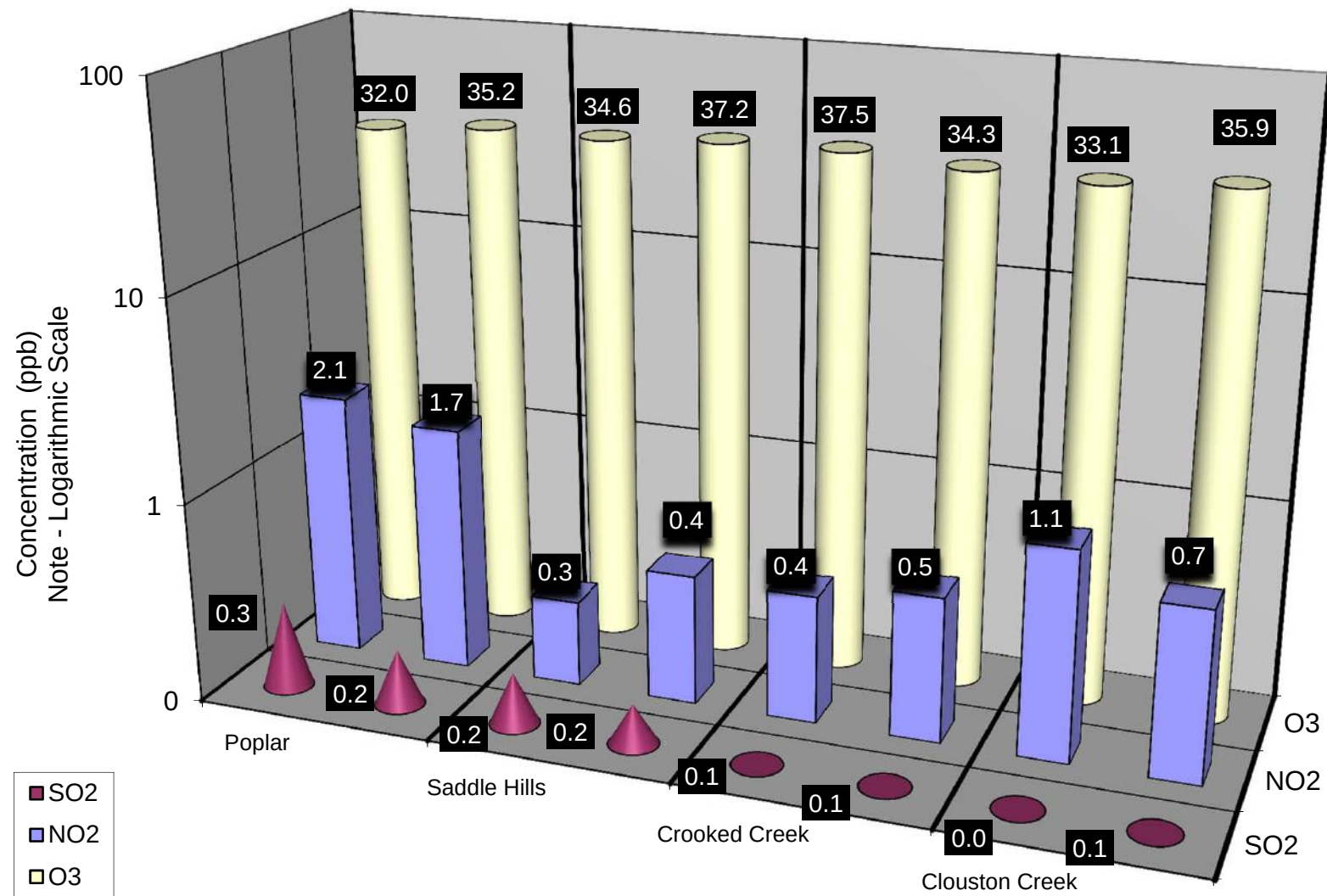
Passive Summary for May 2014 (PAZA Zone)				
Mean	0.1	34.6	0.8	0.2
Standard Deviation	0.1	3.6	0.6	0.1
Minimum	0.1	28.1	0.1	0.1
Minimum At	Kinuso (#47)	Fitzsimmons (#30)	Peavine (#44)	Gift Lake (#45)
Maximum	0.5	42.8	3.5	0.2
Maximum At	McLennan (#40)	Fourth Creek (#3)	Grande Prairie I (#27)	Girouxville 3 (#63)

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

	SO ₂	O ₃	NO ₂
PAZA Beaverlodge station	0.2	36.0	1.8
PAZA Beaverlodge passive	0.2	39.8	0.7

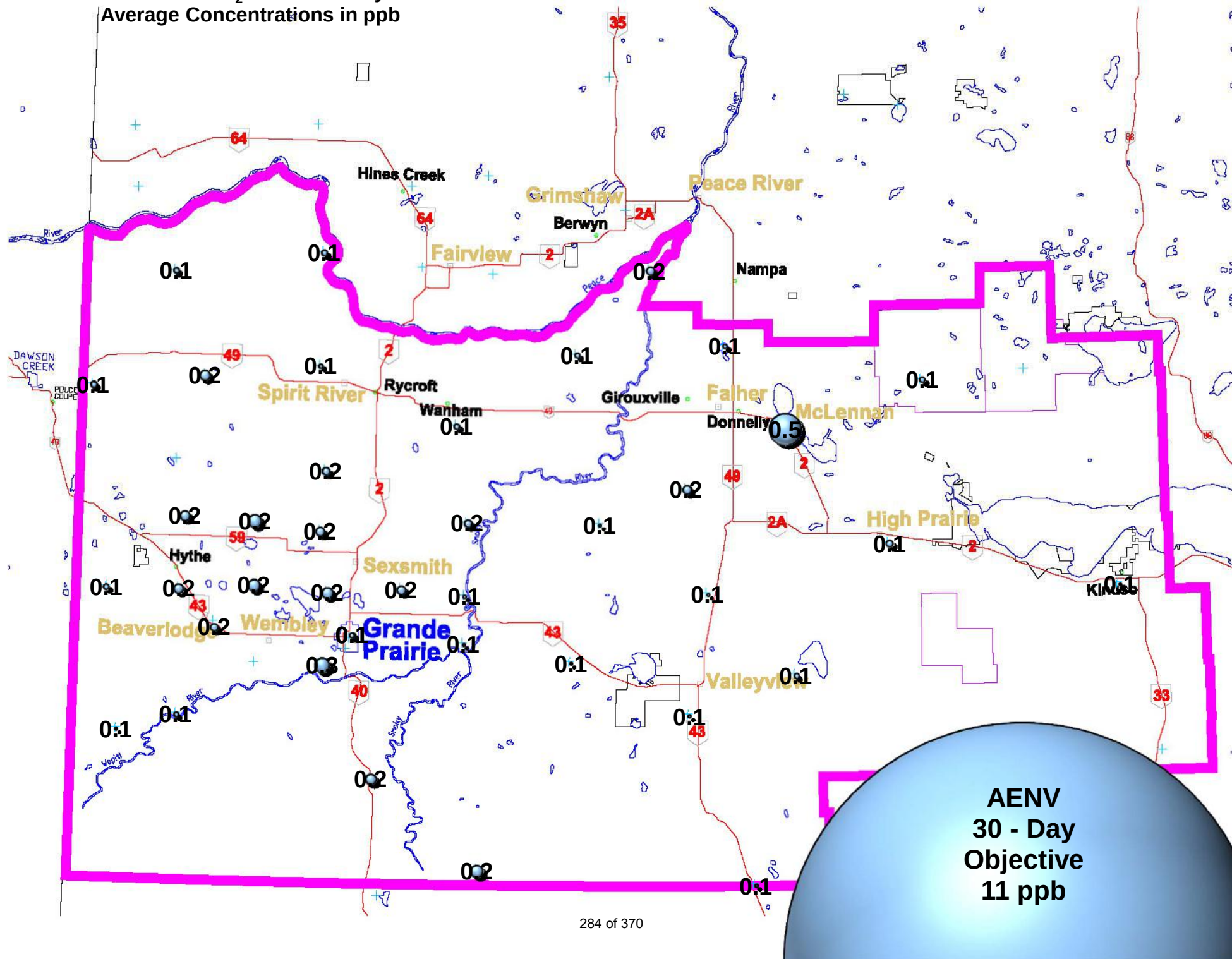
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO ₂	O ₃	NO ₂
PAZA Henry Pirker station	0.1	32.9	5.1
PAZA Grande Prairie passive	0.1	37.3	1.6



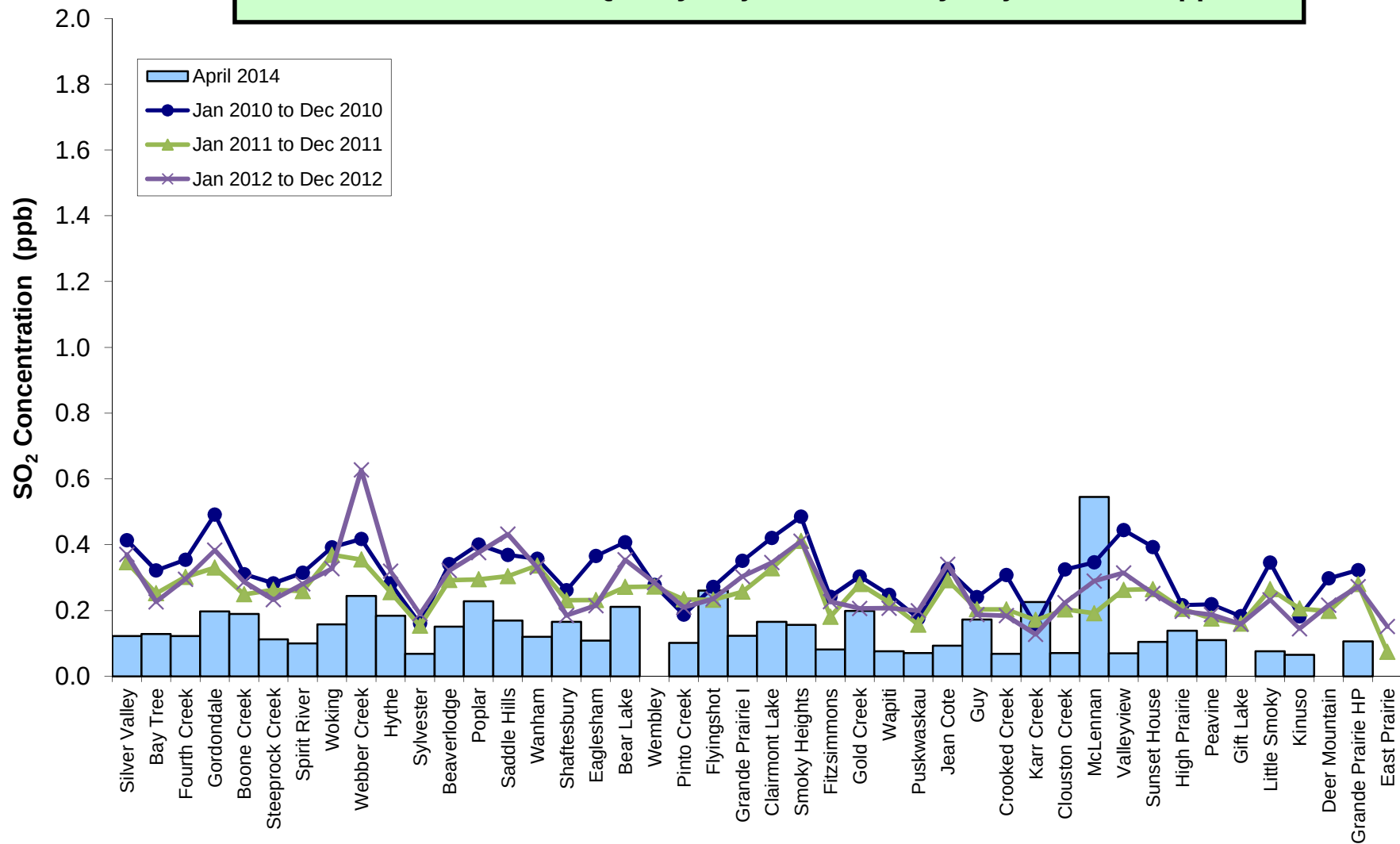
Duplicate Summary Chart

PAZA Passive SO₂ Stations - May 2014
Average Concentrations in ppb

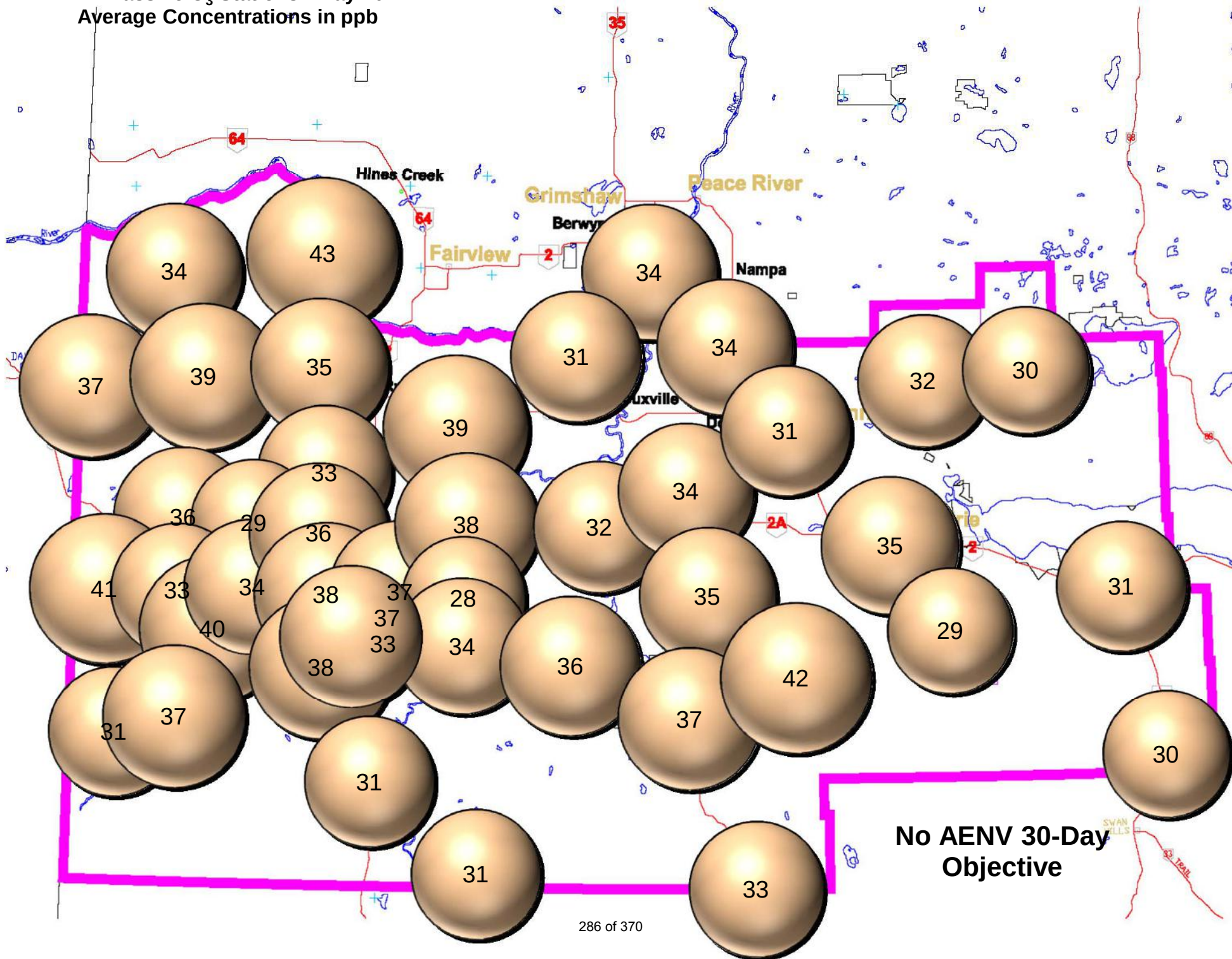


AENV
30 - Day
Objective
11 ppb

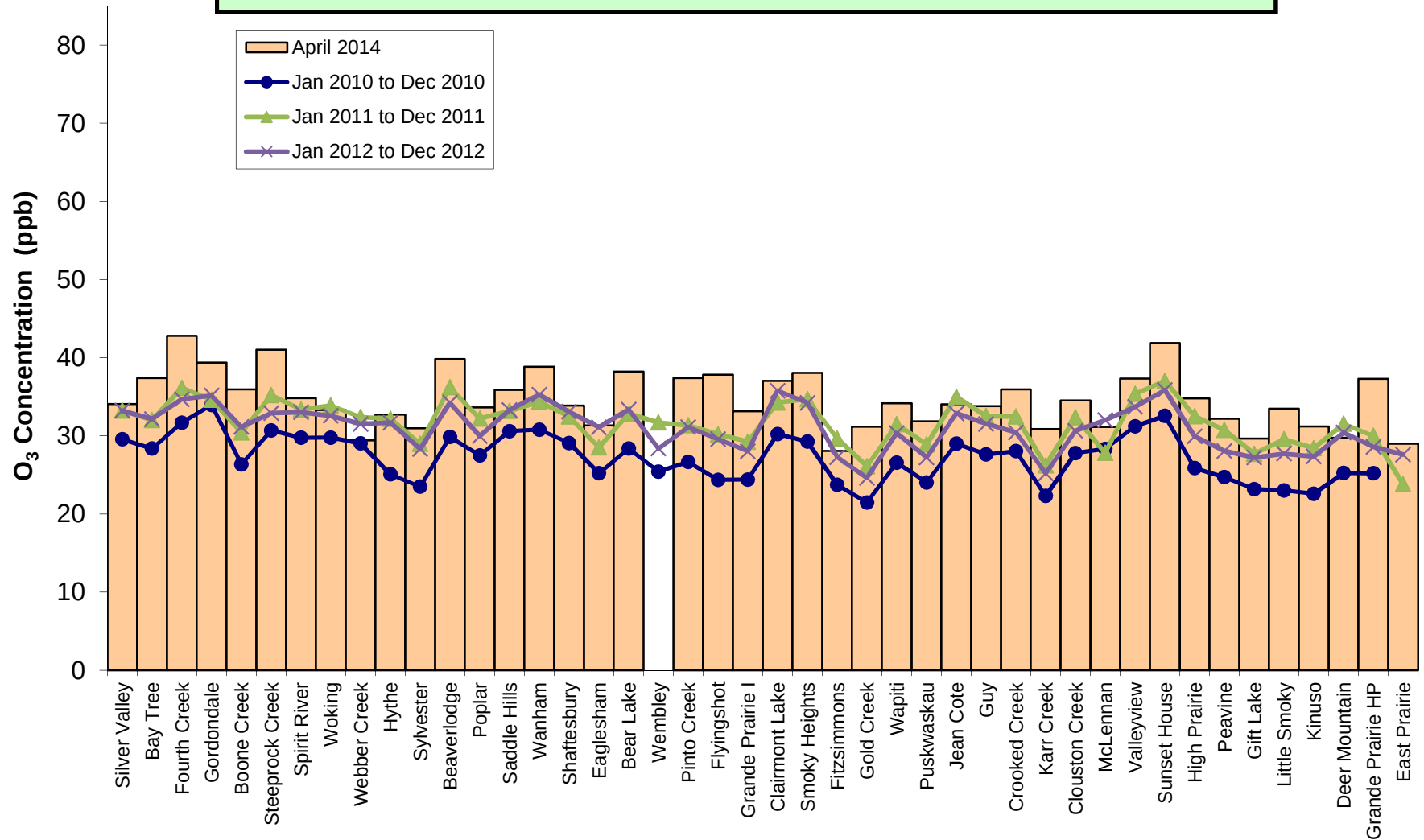
Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb



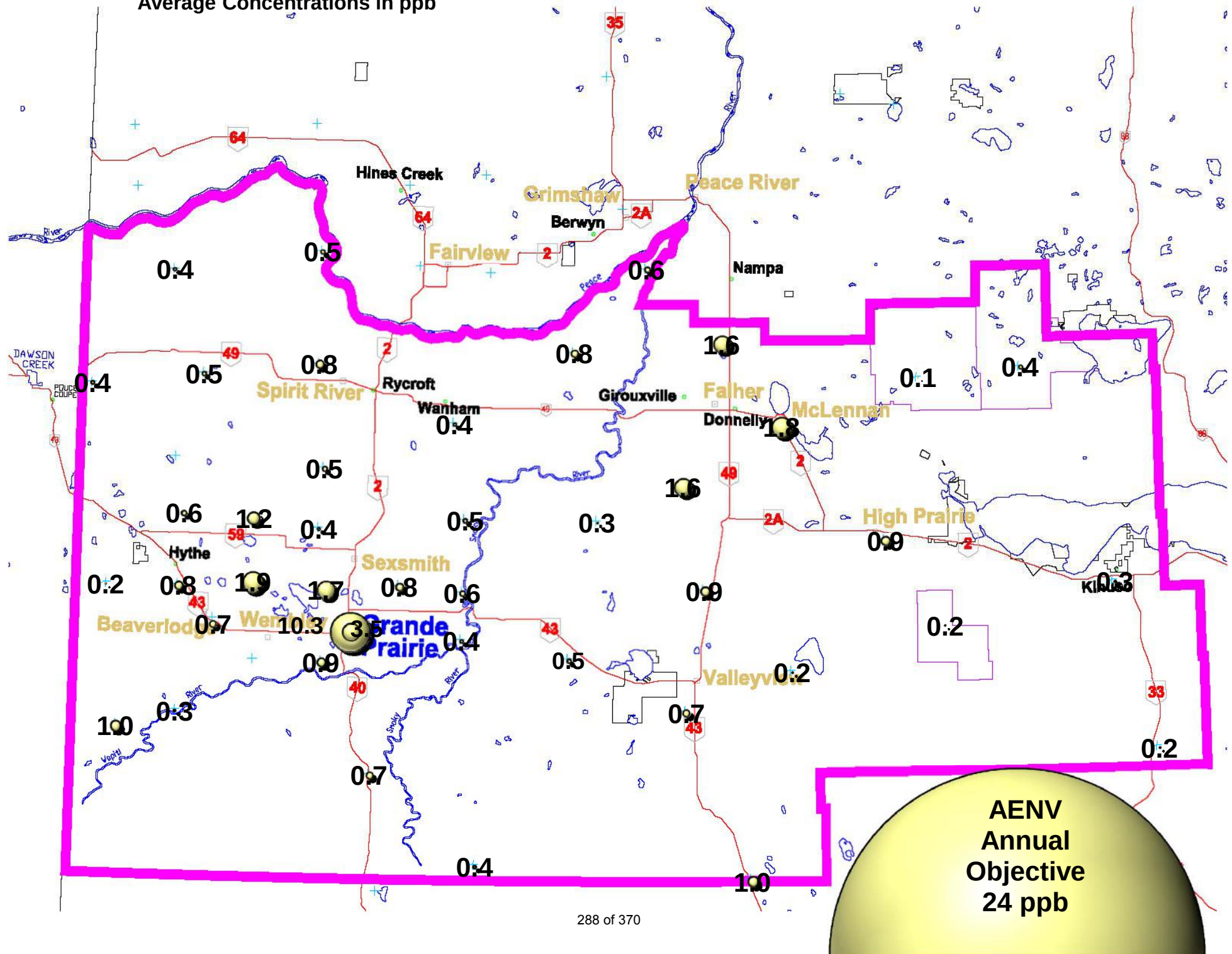
PAZA Passive O₃ Stations - May 2014
Average Concentrations in ppb



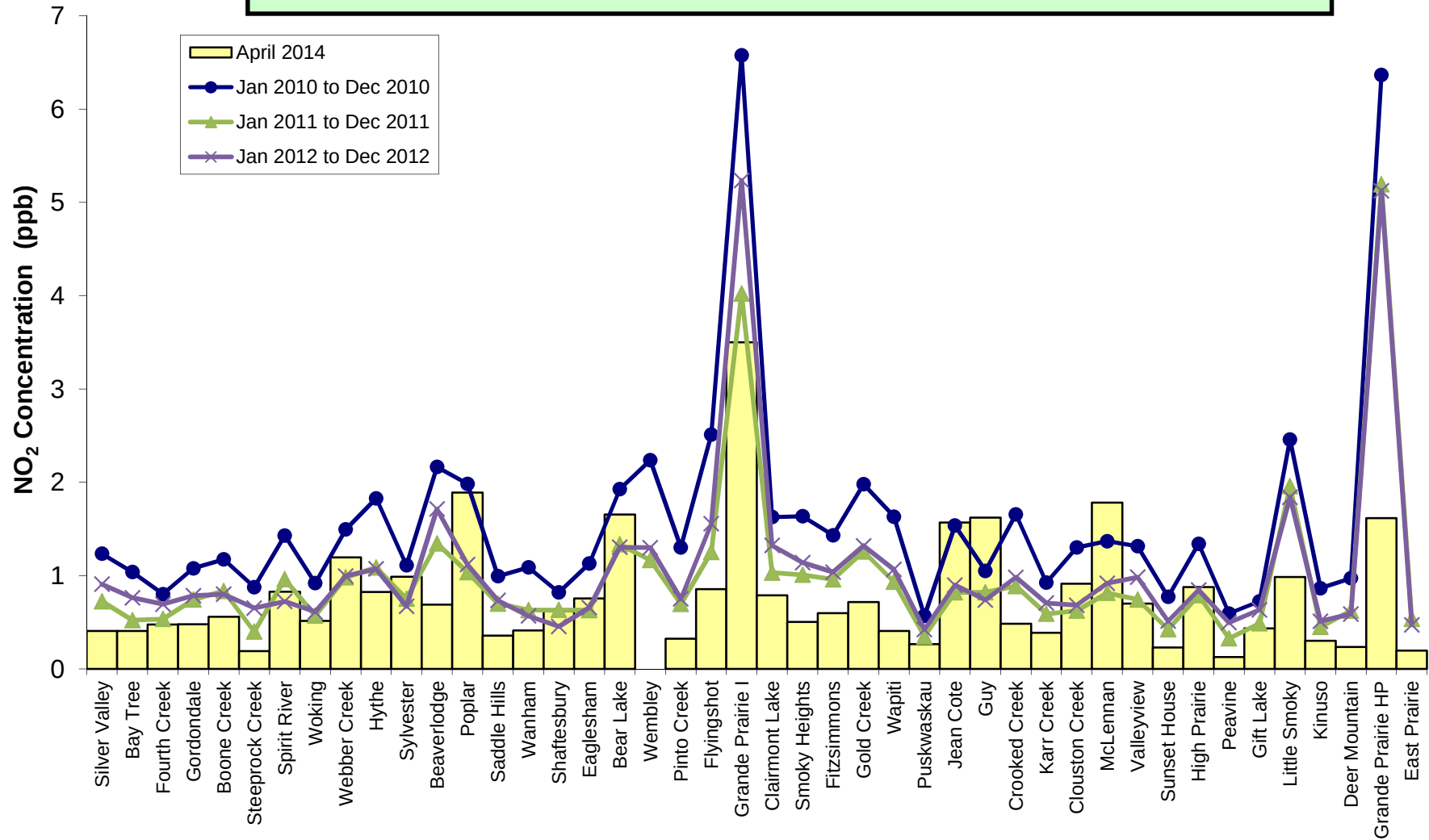
Alberta Ambient Air Quality Objective - No Annual O₃ Objective



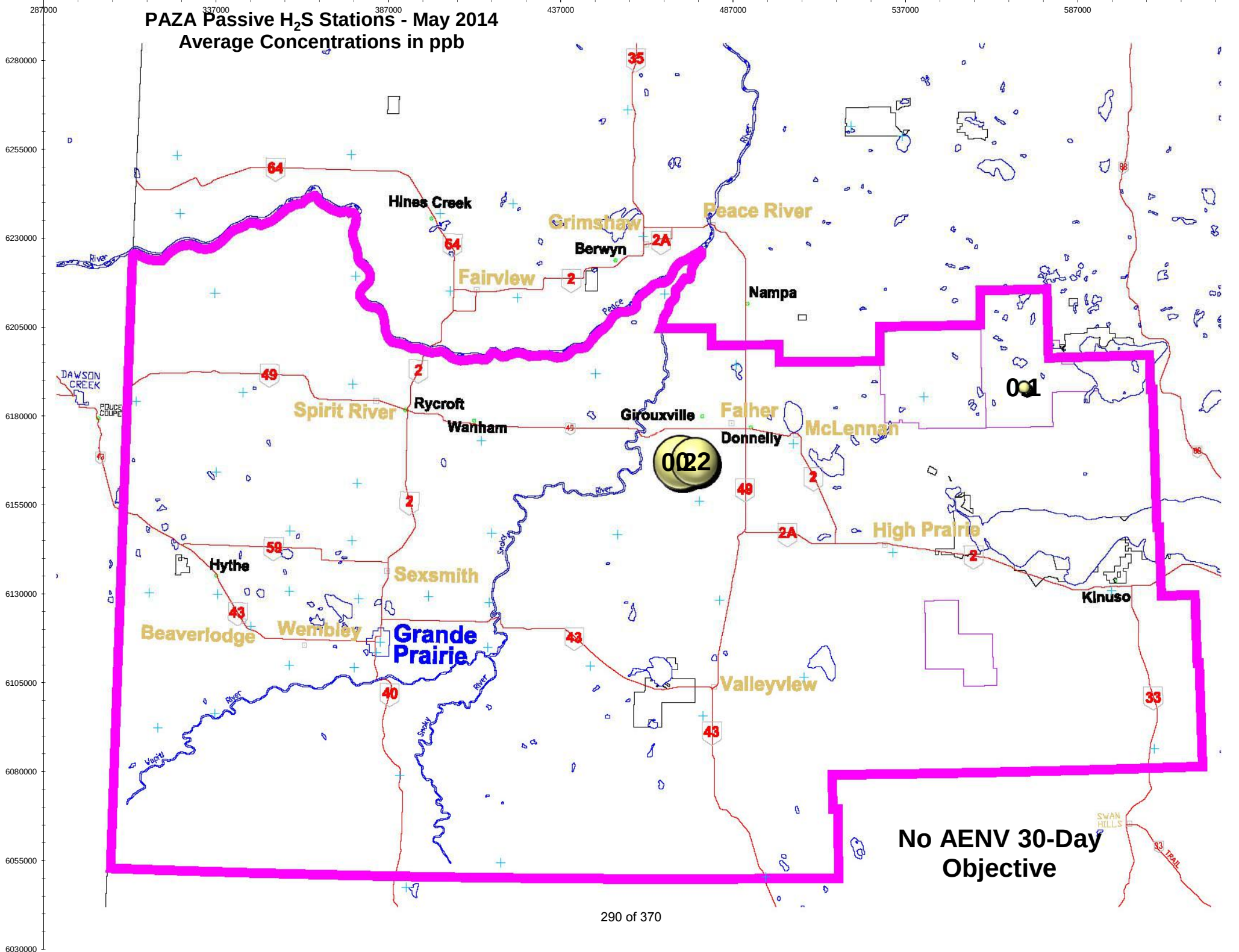
PAZA Passive NO₂ Stations - May 2014
Average Concentrations in ppb



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



PAZA Passive H₂S Stations - May 2014
Average Concentrations in ppb



PAZA

ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCES INCIDENT REPORT

May 2014

Air Monitoring Directive Exceedence Report

Alberta Environment and Sustainable Resource Development

Energy & Environmental Response

111 Twin Atria Building

4999 – 98th Avenue

Edmonton, Alberta T6B 2X3

erc.environment@gov.ab.ca

Phone: (780) 422-4505

Fax: (780) 427-1044

Reference Number:	283719	Reported To (AESRD Contact):	Taryn
Date & Time Incident Reported to AESRD:	May 7, 2014 22:30	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	Not Applicable
Location(s) of Incident:	Fahler Station		
Start Date & Time of Incident:	May7, 2014 22:00	End Date & Time of Incident:	May7, 2014 23:00
Reason or Nature of Incident:			
H2S hourly expedience Time. 22:00 H2Sppb:16.3 WS:15.2 WD:98.2			
Immediate Actions Taken:			
Contacted Alberta Environment			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	May 7, 2014
7-Day Letter Due Date:	May 14, 2014		

Air Monitoring Directive Exceedence Report

Alberta Environment and Sustainable Resource Development

Energy & Environmental Response

111 Twin Atria Building

4999 – 98th Avenue

Edmonton, Alberta T6B 2X3

erc.environment@gov.ab.ca

Phone: (780) 422-4505

Fax: (780) 427-1044

Reference Number:	286016	Reported To (AESRD Contact):	Jasmina
Date & Time Incident Reported to AESRD:	June 30 th , 2014 15:50	Reported By:	Patrick Andersen
Reported on Behalf of:	PAZA	Approval Number (if applicable):	Not Applicable
Location(s) of Incident:	Beaverlodge Station		
Start Date & Time of Incident:	May 12, 2014	End Date & Time of Incident:	June 23, 2014
Reason or Nature of Incident:			
Switching valve found seized. ESRD owned equipment, replacement part ordered from them same day, received June 19 th , installed June 23 rd .			
Immediate Actions Taken:			
Contacted Alberta Environment			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Patrick Andersen	Date Report Submitted:	June 30, 2014
7-Day Letter Due Date:	July 6, 2014		

May 2014 Calibration Reports

PAZA - Henry Pirker Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃, CO, THC, TRS

PAZA – Evergreen Park Station with the following calibrations:

SO₂, TRS

PAZA – Smoky Heights Station with the following calibrations:

SO₂, TRS, PM_{2.5}

PAZA – Beaverlodge Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃

PAZA – Valleyview Station with the following calibrations:

SO₂ & H₂S

PAZA – Reno Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃, TRS

PAZA – Falher Station with the following calibrations:

SO₂ & H₂S

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	7:25	End Time (MST)	11:15
Barometric Pressure	717.000 mm	Station Temperature	20.5 Deg C
Calibrator		Serial Number	3016
Cal Gas Conc	51.5 ppm	Cal Gas Cert Date	March 12, 2014
		Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.003625	Calculated slope	0.996544
Calculated intercept	1.595514	Calculated intercept	1.989159
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.3		9.3	
Coefficient	0.781		0.781	
Pressure	652.5	mm Hg	647.5	mm Hg
Flow	0.477	lpm	0.473	lpm
Lamp intensity	44109	Hz	44013	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)
4995	0.00	0.0	0.0	N/A
4995	39.93	408.4	409.1	0.9985
4995	19.97	205.1	202.1	1.0149
4995	9.97	102.6	99.5	1.0310
4995	0.00	0.0	0.0	As Found Zero
4995	39.93	408.4	409.1	As Found Span
Average Correction Factor				1.0148

Calculated value of As Found Response: 412.2 ppb Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	250.7	ppb	253.1	ppb

Notes: No adjustments made.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



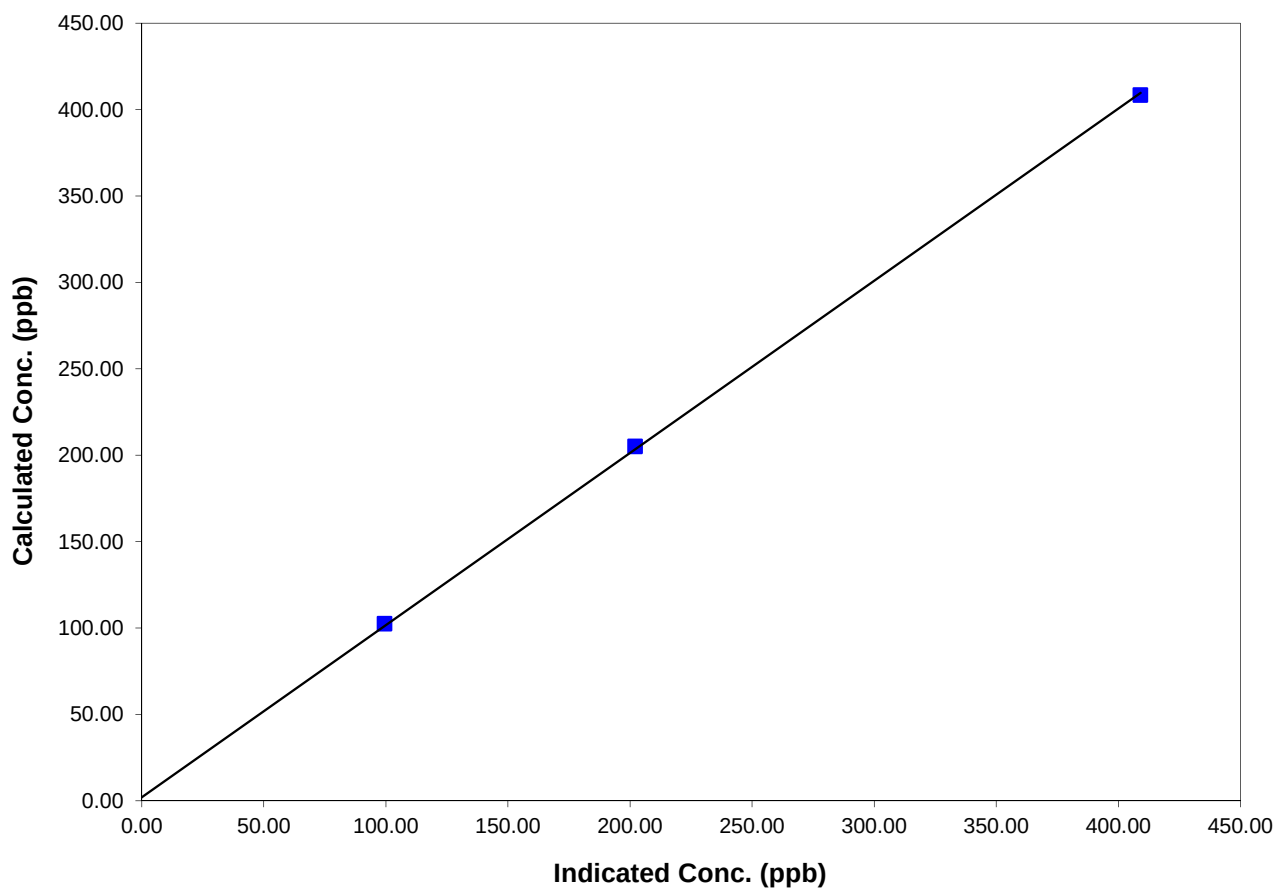
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:25	End Time (MST)	11:15
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

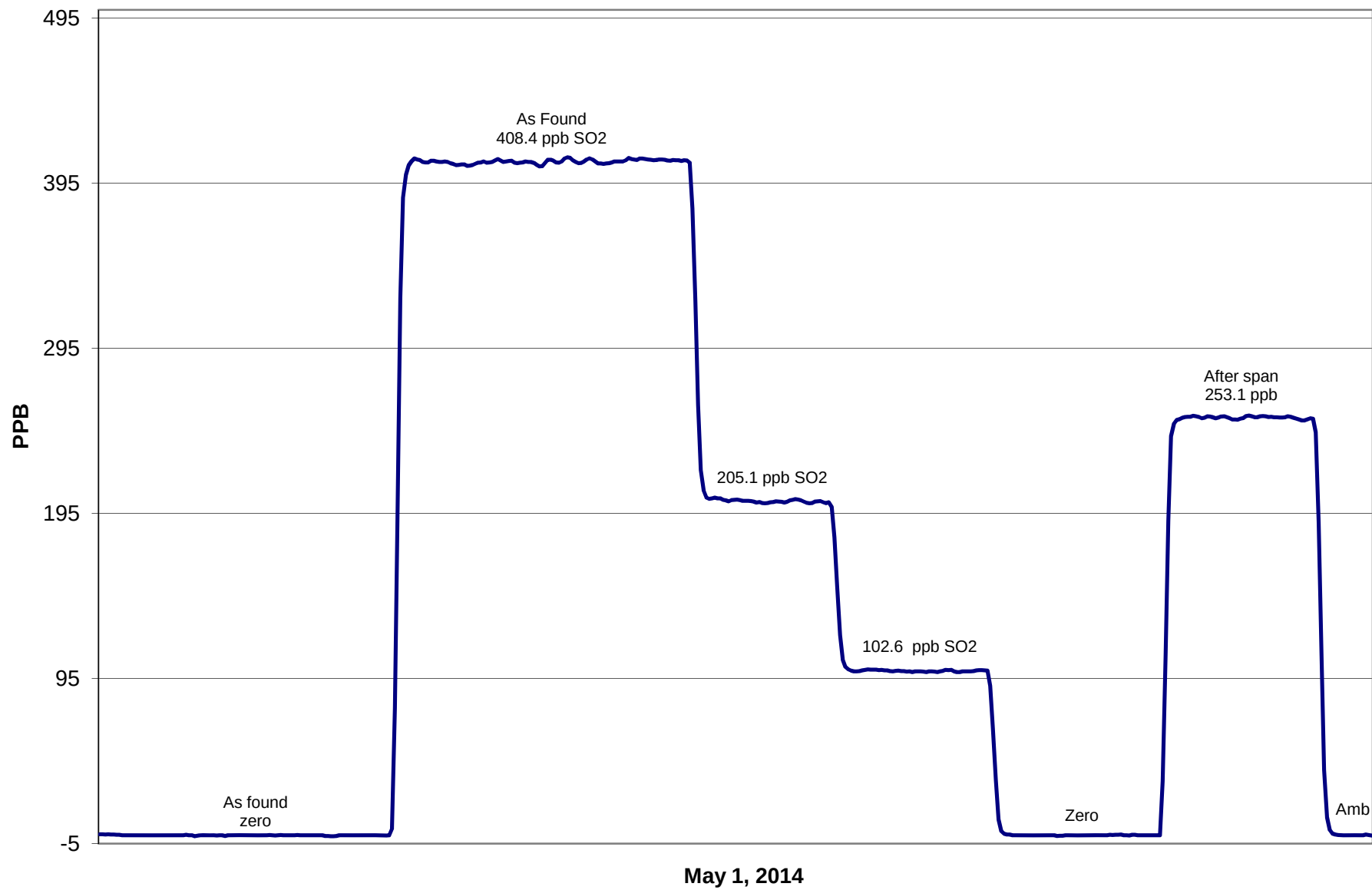
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999887
408.4	409.1	0.9985		
205.1	202.1	1.0149		
102.6	99.5	1.0310	Slope	0.996544
			Intercept	1.989159

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Start Time (MST)	7:29	End Time (MST)	13:00:00 PM
Barometric Pressure	717.000 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
NO Cal Gas Conc	51.3 ppm	Cal Gas Expiry Date	March 12, 2014
NO _x Cal Gas Conc	51.4 ppm	Cal Gas Serial #	LL105159

DACS Information

DACS make	CR3000	DACS serial No.	5408
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Parameter	NO ₂	NO _x	NO
Before			
Data Slope	0.998626	0.999166	0.999069
Data Offset	0.491737	1.412593	1.412778
After			
Data Slope	0.997642	0.995667	0.995102
Data Offset	-0.167972	1.311673	1.698860
Channel #	8	6	7
Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42C	Analyzer serial #	508011073
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	13.2	mV	10.6	mV
NO _x bkgnd	13.6	mV	10.8	mV
NO coefficient	1.075		1.097	
NO _x coefficient	1.000		1.000	
NO ₂ conv temp	318.0	Deg C	318.0	Deg C
Cooler	-2.5	Deg C	-2.5	Deg C
PMT Volt	-774.0	mV	-774.0	mV
R Cell Press	206.3	in Hg	206.3	in Hg

Calibration Report

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



Calibration Date: May 1, 2014

Station Location: Henry Pirker

	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	4995	0.00	0.0	0.0	0.0	0.0	-0.1	0.0	N/A	N/A
1	4995	39.93	407.6	406.8	0.8	408.8	408.0	0.7	0.9971	0.9972
2	4995	19.97	204.7	204.3	0.4	203.4	202.6	0.7	1.0062	1.0081
3	4995	9.97	102.4	102.2	0.2	100.3	99.4	0.7	1.0212	1.0277
AFZ	4995	0.00	0.0	0.0	0.0	-3.0	-2.9	-0.1	0.0000	0.0000
AFS	4995	39.93	407.6	406.8	0.8	401.5	400.4	1.0	1.0152	1.0162
Average Correction Factor									1.0082	1.0110

As Found Concentrations:

NO_x= 405.9

NO= 404.7

As Found Percent Change

NO_x= -0.4%

NO= -0.5%

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	-2.9	-2.9	0.0	0.0	-0.1	0.0	N/A	N/A	N/A	N/A
NO point	408.1	408.1	0.0	408.8	408.1	0.5	0.9984	1.0000	N/A	N/A
300	408.1	97.4	310.7	408.7	97.4	311.4	0.9986	1.0000	0.9976	100.2%
200	408.1	198.5	209.6	408.8	198.5	210.4	0.9982	1.0000	0.9961	100.4%
100	408.1	298.9	109.2	408.7	298.9	109.8	0.9985	1.0000	0.9944	100.6%
Average Correction Factor							0.9985	1.0000	0.9961	100.4%

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.0	-0.1	ppb	0.0	0.0	-0.1	ppb
Auto span	329.9	327.5	2.4	ppb	330.7	329.1	1.9	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



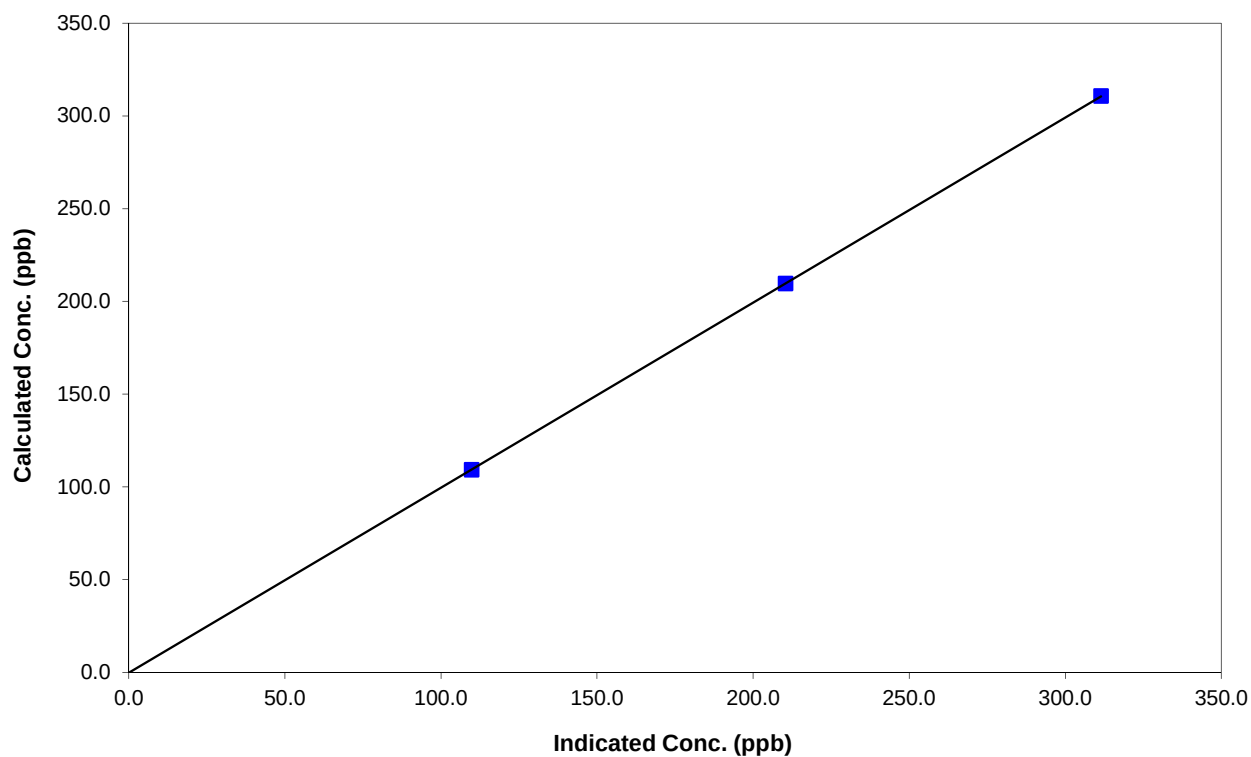
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:29	End Time (MST)	13:00:00 PM
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999998
310.7	311.4	0.9976		
209.6	210.4	0.9961		
109.2	109.8	0.9944	Slope	0.997642
			Intercept	-0.167972

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



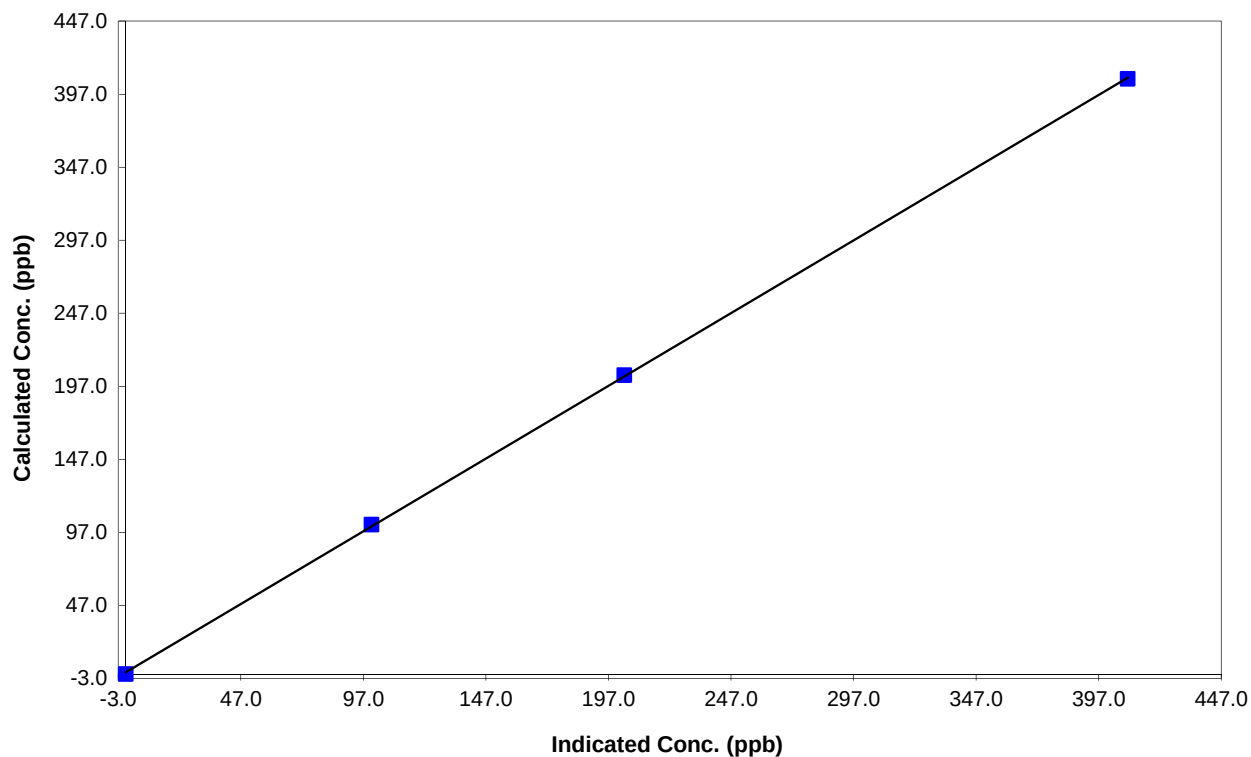
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:29	End Time (MST)	13:00:00 PM
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999950
407.6	408.8	0.9971		
204.7	203.4	1.0062		
102.4	100.3	1.0212	Slope	0.995667
			Intercept	1.311673

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



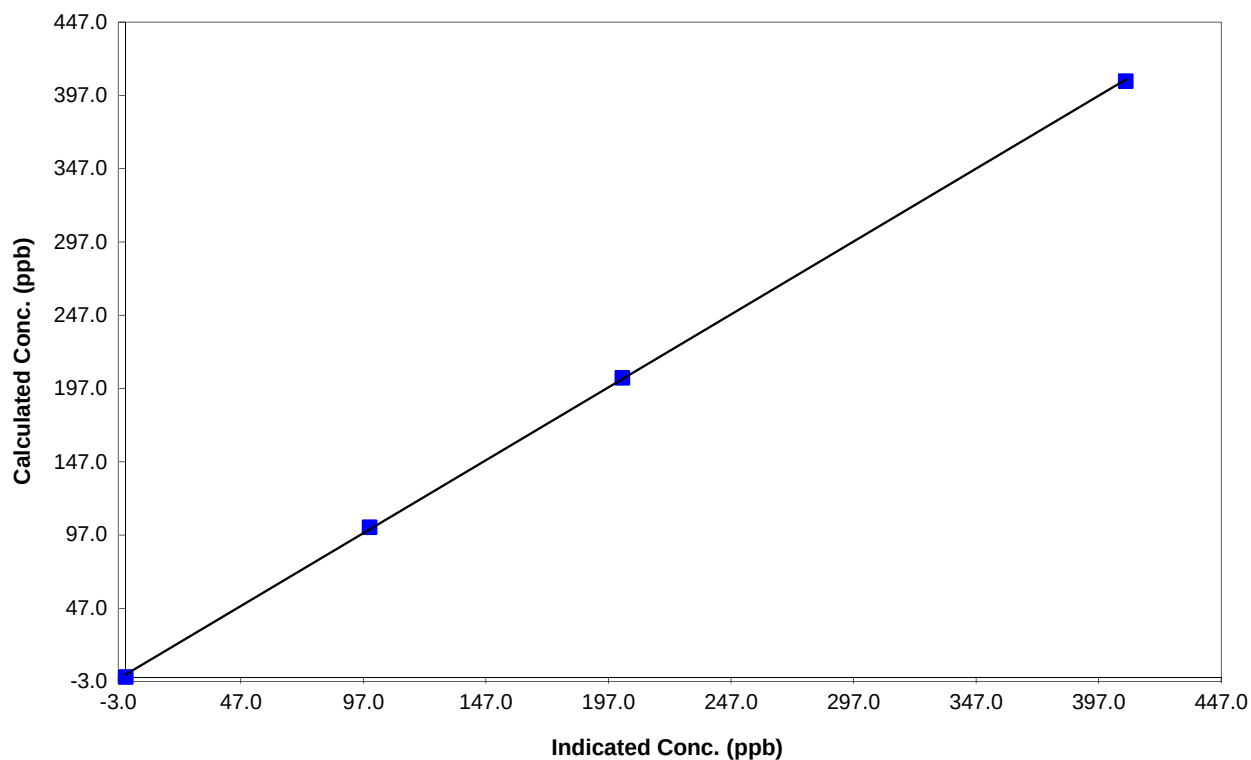
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:29	End Time (MST)	13:00:00 PM
Analyzer make	TEI 42C	Analyzer serial #	508011073

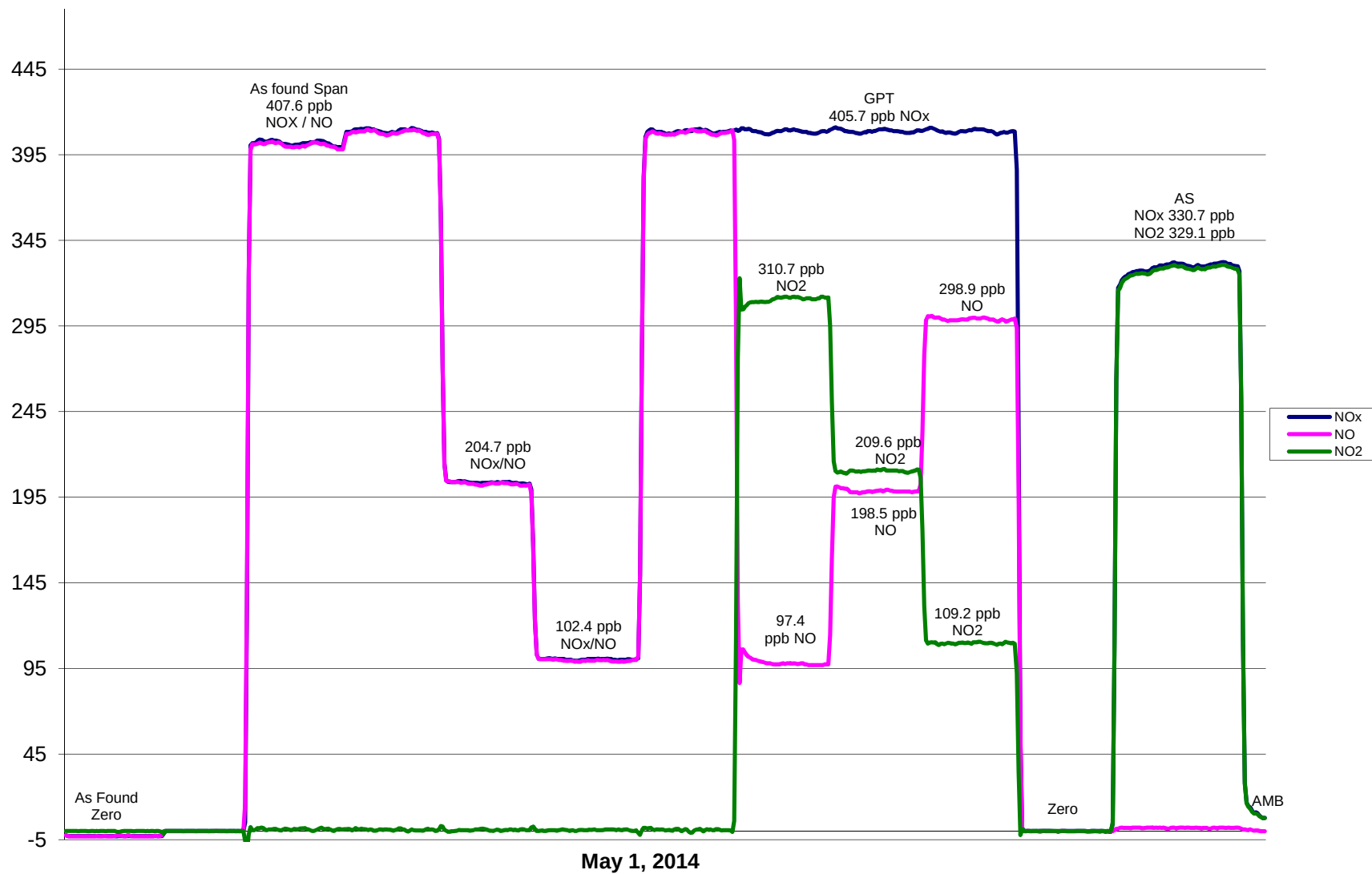
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999926
406.8	408.0	0.9972		
204.3	202.6	1.0081		
102.2	99.4	1.0277	Slope	0.995102
			Intercept	1.698860

NO Calibration Curve



PAZA NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 17, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	12:01	End Time (MST)	15:20:00 PM
Barometric Pressure	mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
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		Calculated slope	0.998603
Calculated intercept		Calculated intercept	0.234986

Analyzer make	Teco 49C	Analyzer serial #	607415761
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	0.999		1.031	
Lamp temp	56.7	mV	56.7	mV
Lamp Intensity A/B	61677/77996	mV	61861/78230	mV
Pressure	694.9	mm Hg	702.7	mm Hg
Flow A	0.853	ccm	0.858	ccm
Flow B	0.842	ccm	0.849	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)
5035	0.0	0.0	0.4	N/A
5035	0.3	310.7	311.5	0.9974
5035	0.2	209.6	209.1	1.0023
5035	0.1	109.2	108.4	1.0076
5035	0.0	0.0	0.4	As found zero
5035	0.3	310.7	301.5	As found span
Average Correction Factor				1.0024

Calculated value of As Found Response: NA ppm Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	1.0	ppb	0.5	ppb
Auto span	355.0	ppb	280.0	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



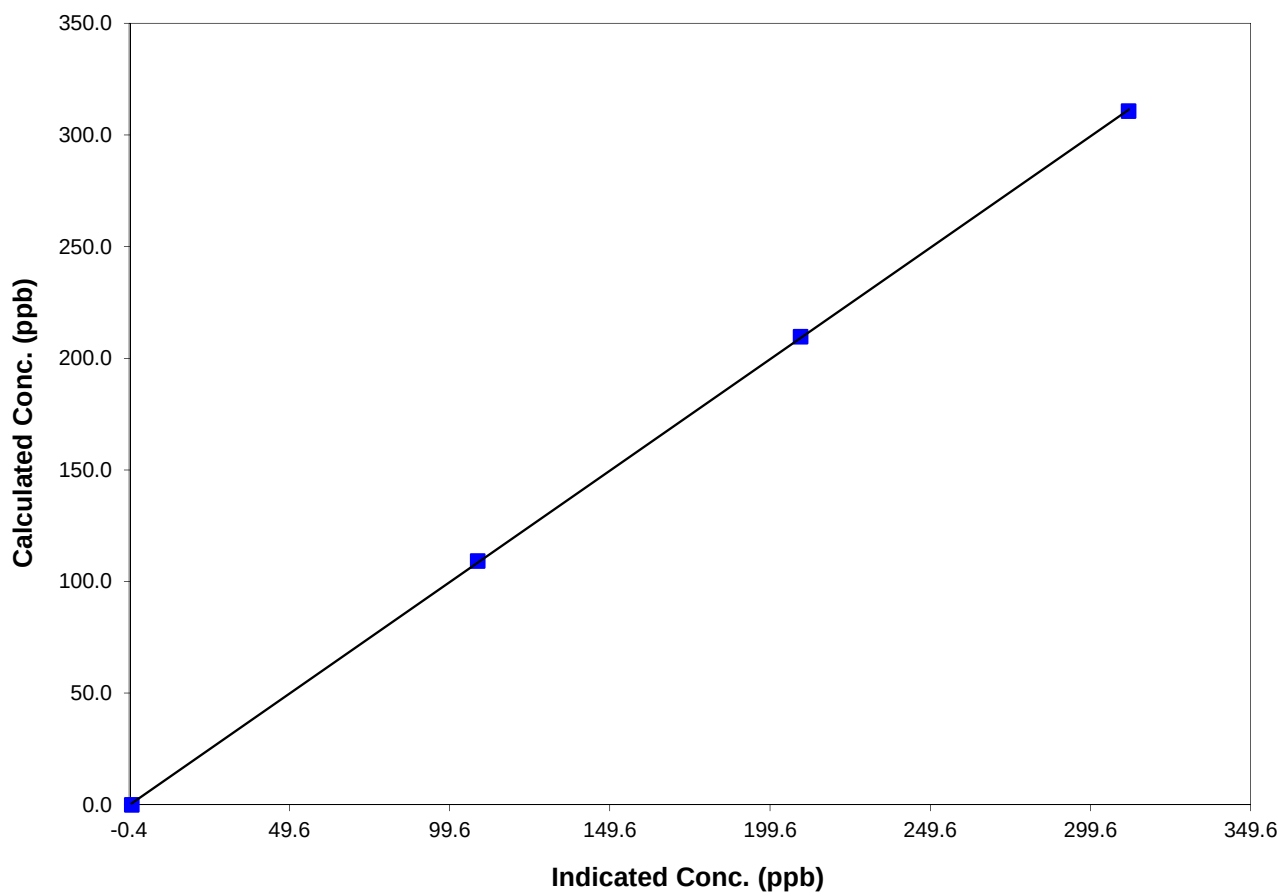
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 17, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:01	End Time (MST)	15:20:00 PM
Analyzer make/model	Teco 49C	Analyzer serial #	607415761

Calibration Data

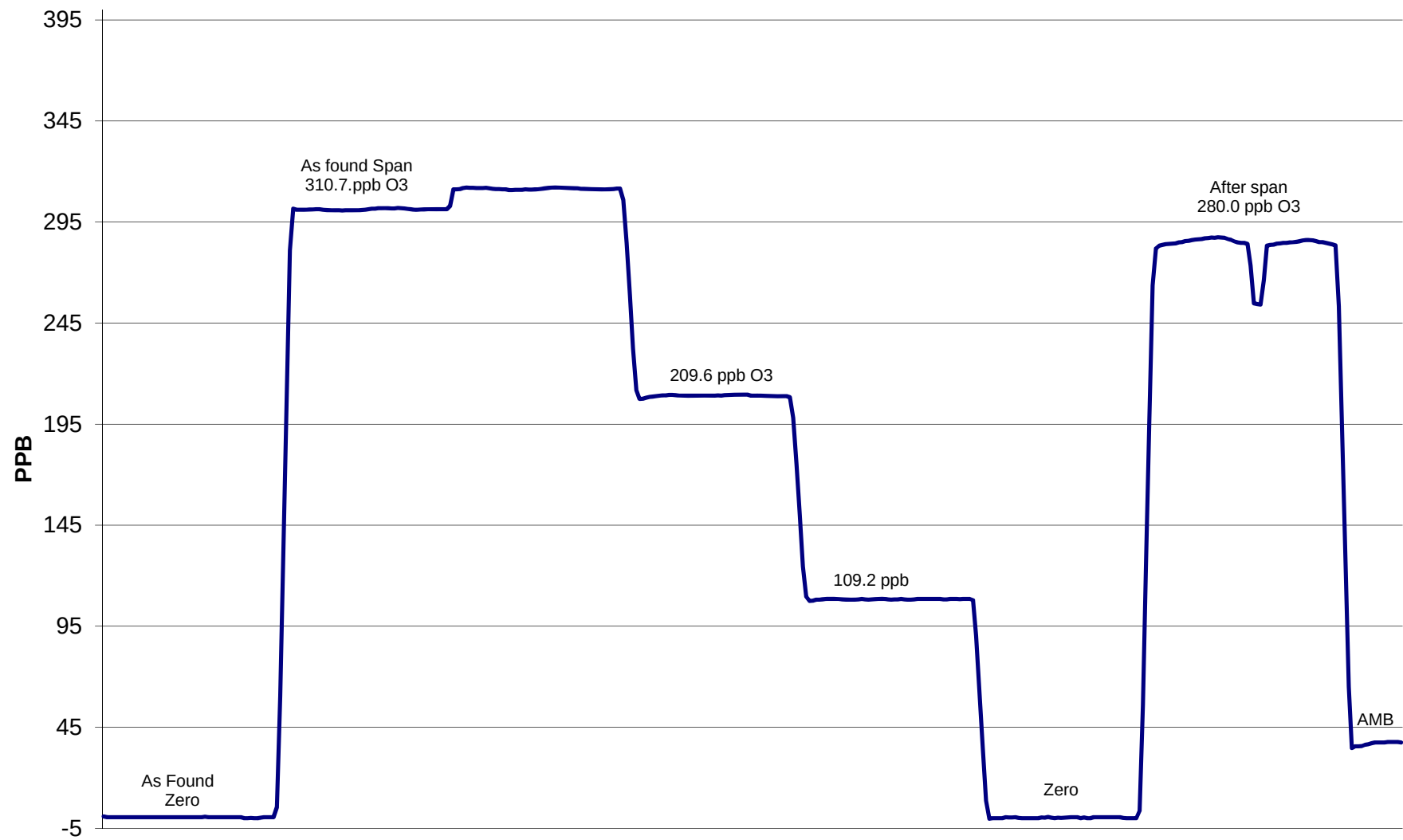
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA	Correlation Coefficient	0.999969
310.7	311.5	0.9974		
209.6	209.1	1.0023		
109.2	108.4	1.0076	Slope	0.998603
			Intercept	0.234986

O3 Calibration Curve



As Found
Zero

O3 Calibration



May 1, 2014

Calibration Report

Parameter CO

Air Monitoring Network PAZA



Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	7:15	End Time (MST)	10:25
Barometric Pressure	704.0 mm/hg	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Conc	2898 ppm	Cal Gas Expiry Date	04/02/2013
		Cal Gas Cylinder #	LL83909
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.999386	Calculated slope	1.001376
Calculated intercept	0.151392	Calculated intercept	0.144770
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	0.841		0.841	
CO zero setting	1.014		1.112	
Sample pressure	695.7	mm Hg	686.7	mm Hg
Sample Flow	1.125	LPM	1.123	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)
4995	0.00	0.00	0.01	N/A
4995	69.94	40.02	39.91	1.0028
4995	34.96	20.14	19.86	1.0143
4995	17.96	10.38	10.09	1.0287
4995	0.00	0.00	0.27	As Found Zero
4995	69.94	40.02	39.91	As Found Span
Average Correction Factor				1.0153

Calculated value of As Found Response: 39.767 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.81	ppm	20.17	ppm

Notes: Adjust zero from 0.286 to 0.002

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CO

Air Monitoring Network PAZA



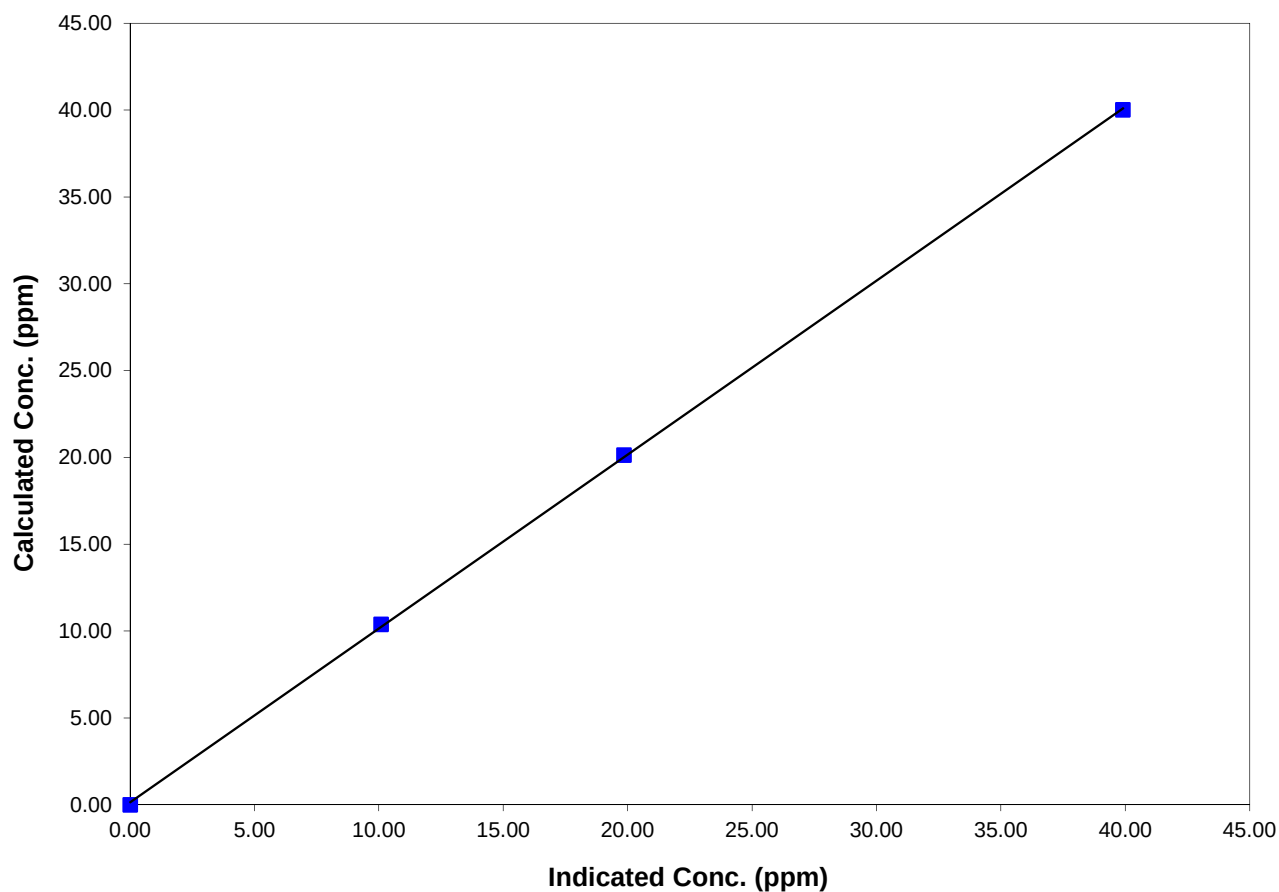
Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	10:25
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

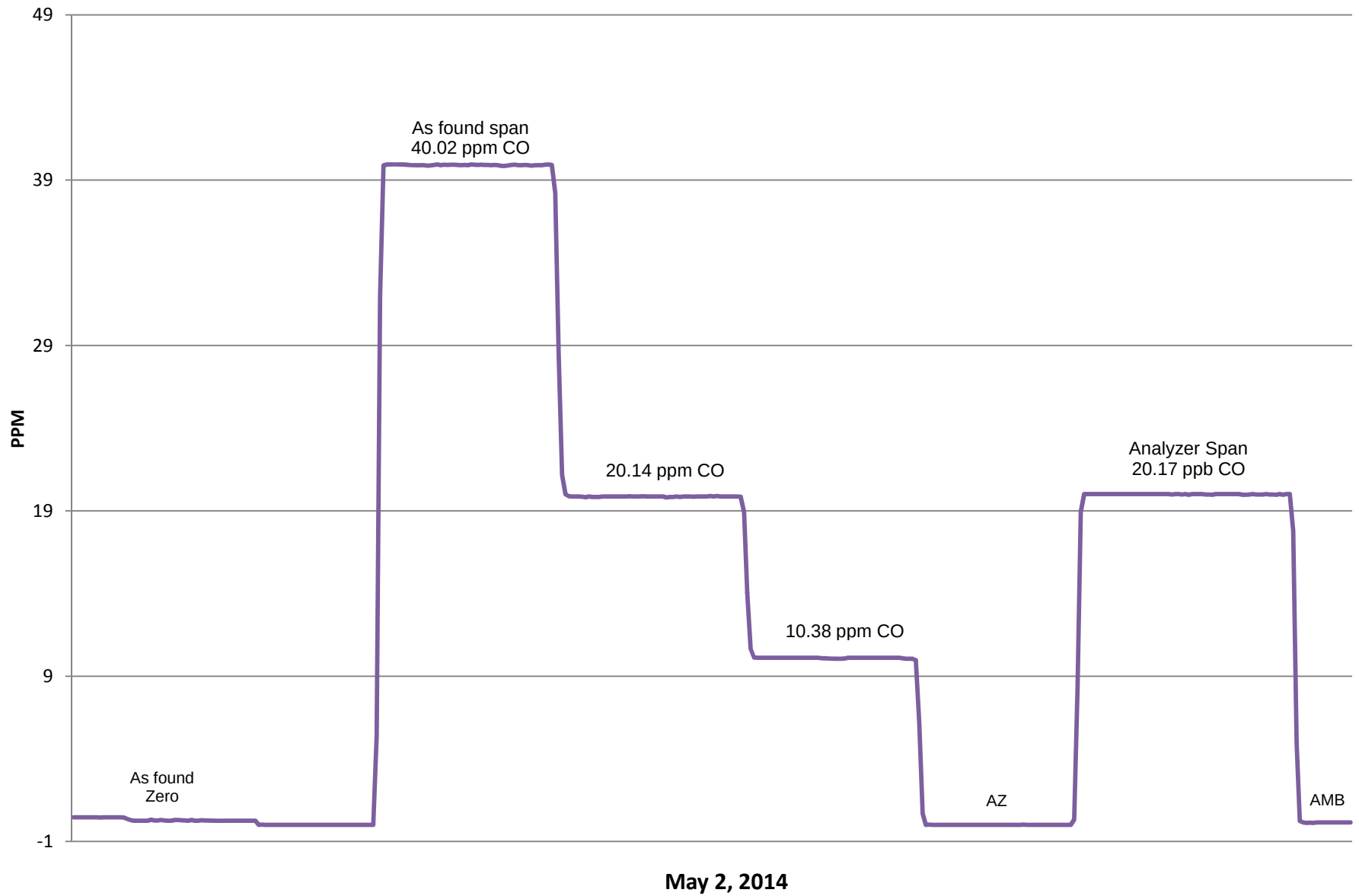
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.010	N/A	Correlation Coefficient	0.999929
40.017	39.907	1.0028		
20.142	19.858	1.0143		
10.383	10.093	1.0287	Slope	1.001376
			Intercept	0.144770

CO Calibration Curve



CO Calibration



Calibration Report

Parameter CH4 / NMHC / THC

Air Monitoring Network

PAZA



Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	☐ Routine	☐ Install	☐ Removal
			☐ Other:

Start Time (MST)	7:15	End Time (MST)	
Barometric Pressure	NA inches Hg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	28/03/2014
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 55I	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	5.68		5.68	E ⁻⁴
NMHC cal factor	1.64		1.64	E ⁻⁴
Rt	12.60	Sec	12.60	Sec
Pk Index	23.00		23.00	

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)
1996	0.00	0.00	0.02	N/A
1996	68.96	12.89	12.92	0.9977
1996	40.96	7.76	7.74	1.0031
1996	15.99	3.07	3.02	1.0175
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	13.20	As Found Span
Average Correction Factor				1.0061

Calculated value of As Found Response: 13.303 ppm Percent Change of As Found: -3.2%

	Before		After
Calculated slope	1.009007	Calculated slope	0.997837
Calculated intercept	-0.000554	Calculated intercept	0.019727

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.11	ppm	8.83	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)
1996	0.00	0.00	0.02	N/A
1996	68.96	19.01	19.02	0.9995
1996	40.96	11.45	11.52	0.9937
1996	15.99	4.52	4.53	0.9987
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	19.43	As Found Span
Average Correction Factor				0.9973

Calculated value of As Found Response: 19.700 ppm Percent Change of As Found: -3.7%

	Before		After
Calculated slope	1.016453	Calculated slope	0.999452
Calculated intercept	-0.033644	Calculated intercept	-0.021668

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.55	ppm	12.09	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)
1996	0.00	0.00	0.03	N/A
1996	68.96	31.90	31.92	0.9994
1996	40.96	19.21	19.24	0.9985
1996	15.99	7.59	7.53	1.0084
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	32.62	As Found Span
Average Correction Factor				1.0021

Calculated value of As Found Response: 33.018 ppm Percent Change of As Found: -3.5%

	Before		After
Calculated slope	1.014004	Calculated slope	0.999184
Calculated intercept	-0.027186	Calculated intercept	0.007799

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.66	ppm	20.92	ppm

Notes: Span adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4

Air Monitoring Network PAZA



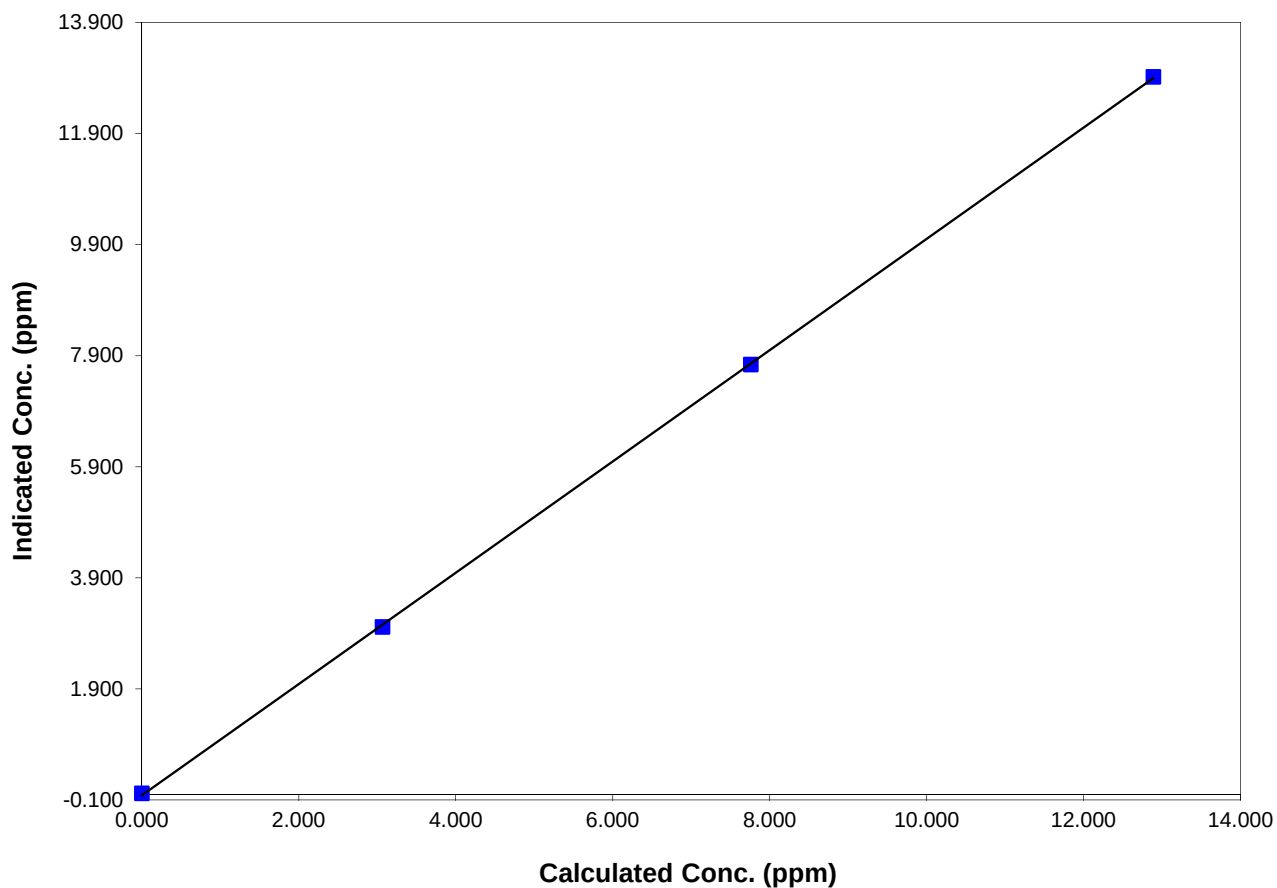
Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	0:00
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	0.019	N/A	Correlation Coefficient	0.999959
12.891	12.920	0.9977		
7.762	7.738	1.0031		
3.068	3.015	1.0175	Slope	0.997837
			Intercept	0.019727

CH4 Calibration Data



Calibration Summary

Parameter NMHC

Air Monitoring Network PAZA



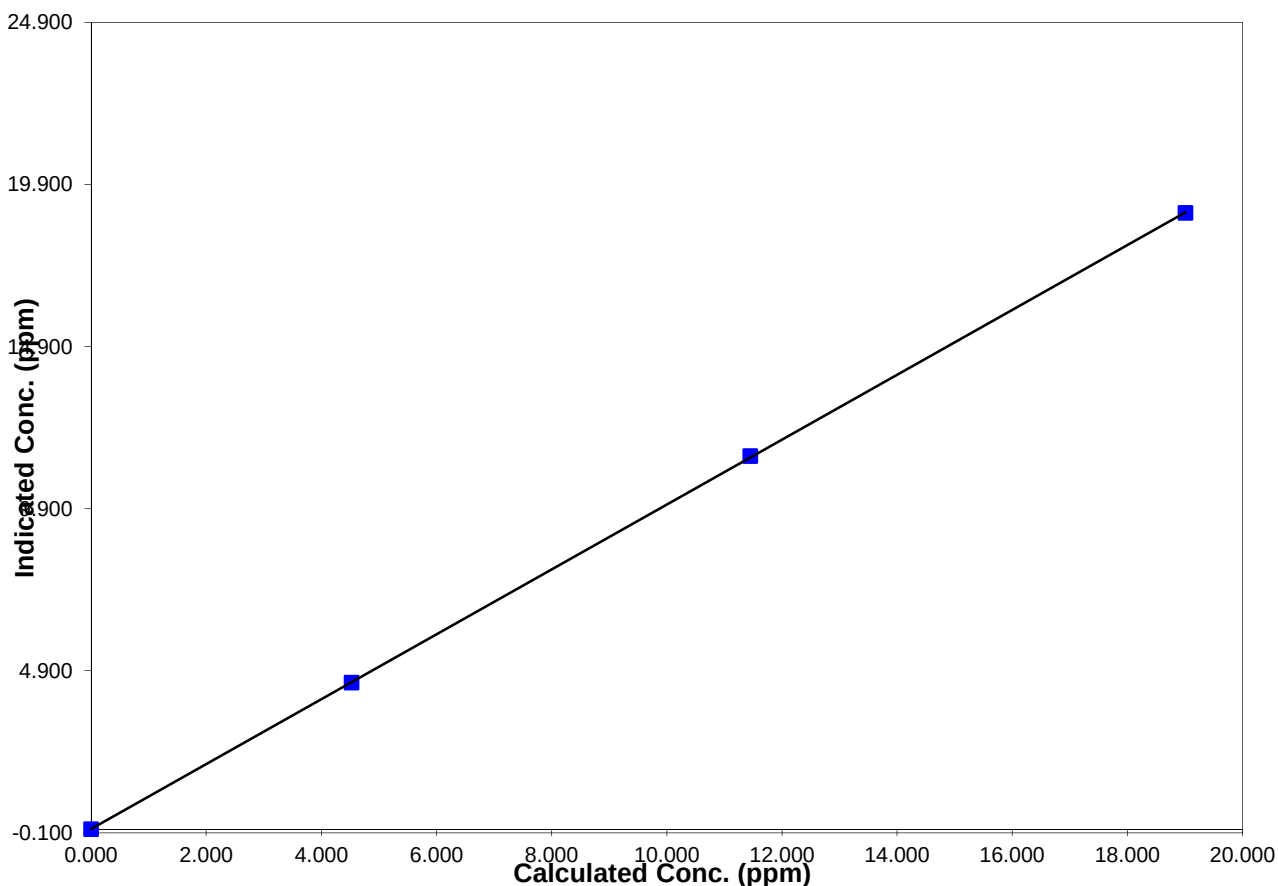
Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	0:00
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	0.018	N/A	Correlation Coefficient	0.999986
19.010	19.020	0.9995		
11.447	11.519	0.9937		
4.524	4.530	0.9987	Slope	0.999452
			Intercept	-0.021668

NMHC Calibration Data



Calibration Summary

Parameter THC

Air Monitoring Network PAZA



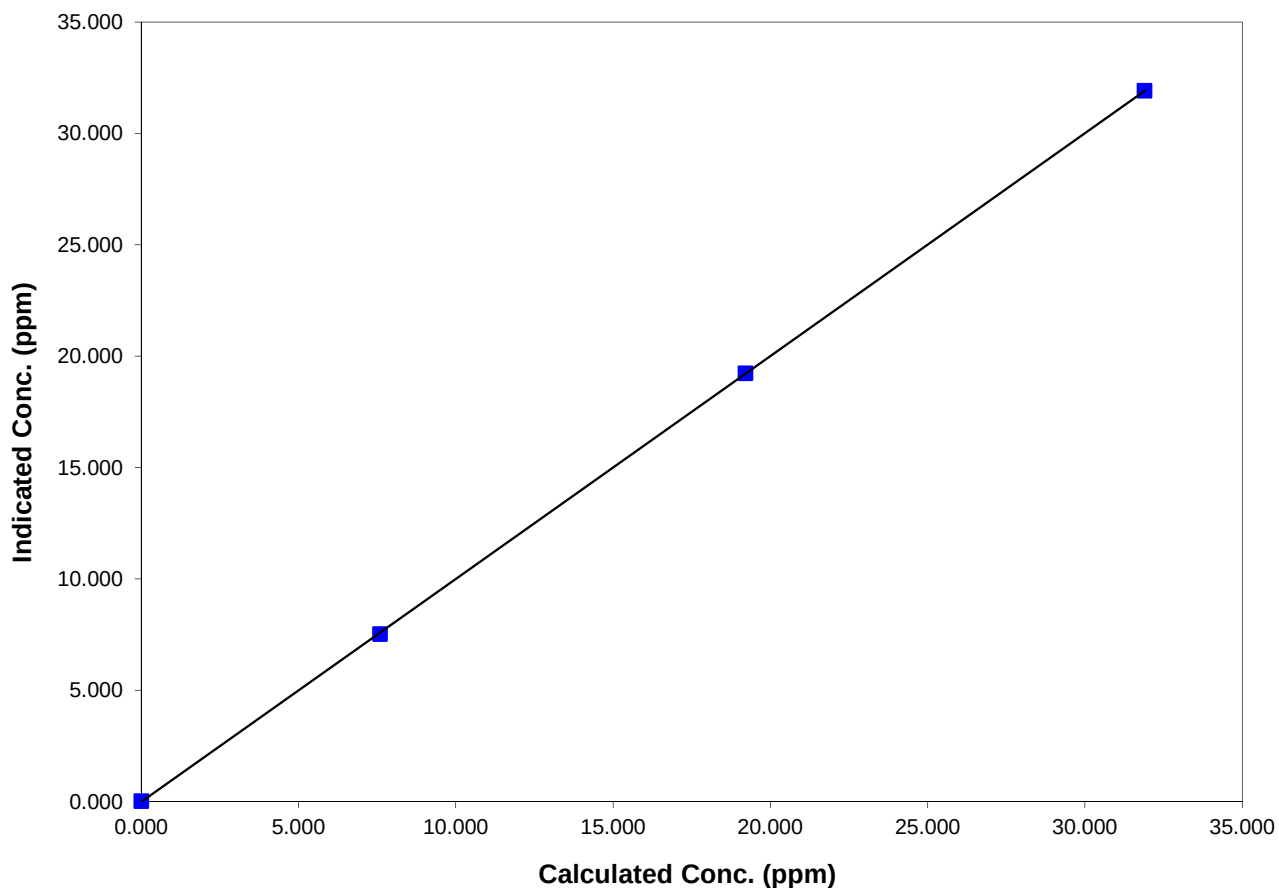
Station Information

Calibration Date	May 2, 2014	Previous Calibration	April 10, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	0:00
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

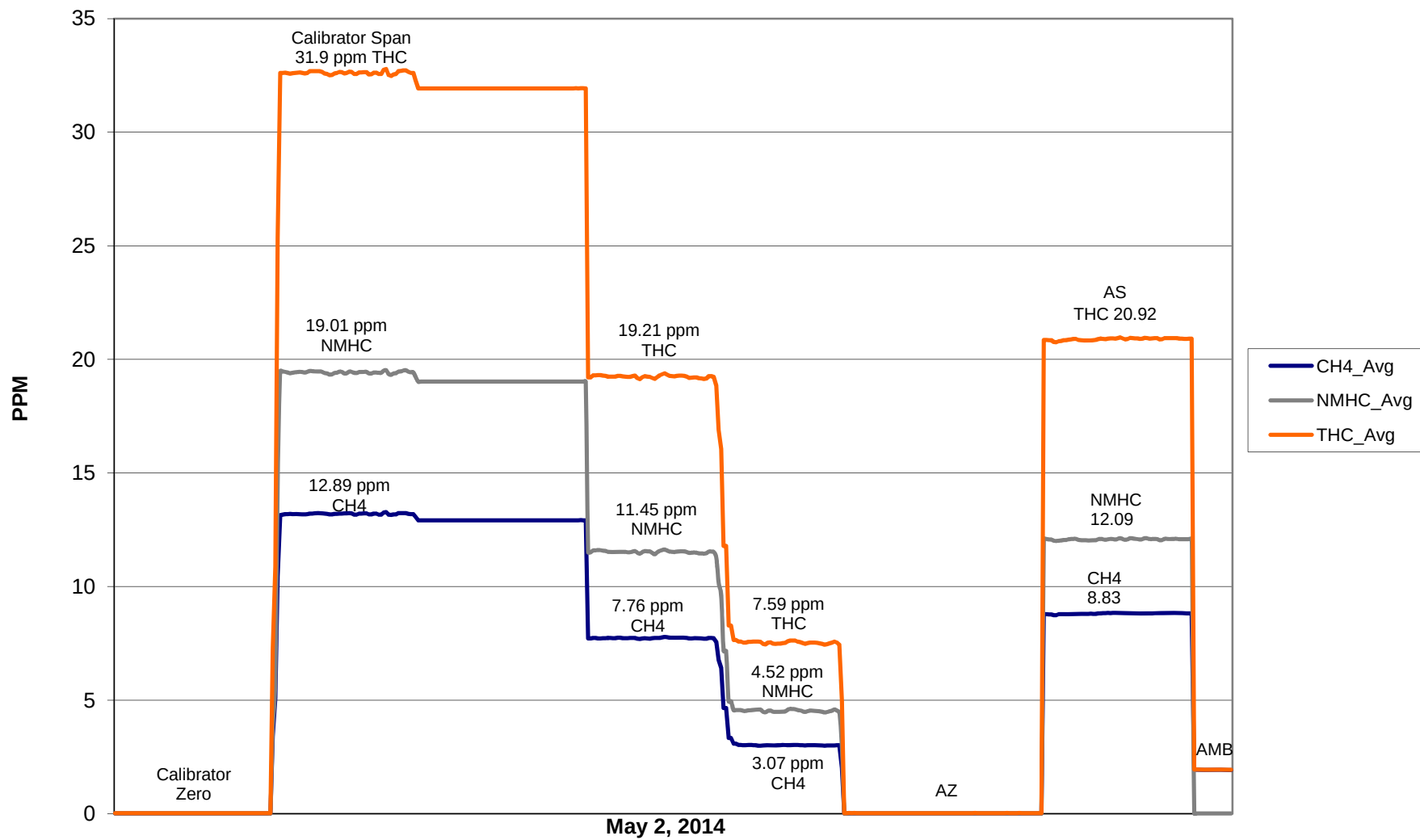
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.031	N/A	Correlation Coefficient	0.999990
31.901	31.921	0.9994		
19.209	19.238	0.9985		
7.592	7.529	1.0084	Slope	0.999184
			Intercept	0.007799

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report

Parameter TR5

Air Monitoring Network PAZA



Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	14:05:00 PM	End Time (MST)	17:25:00 PM
Barometric Pressure	704.00 mm/Hg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	10.4 ppb	Cal Gas Expiry Date	08/07/2016
		Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.017520	Calculated slope	1.024703
Calculated intercept	0.469799	Calculated intercept	0.371170
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.988		0.988	
Background	17.5		17.5	
Pressure	666.6	mm Hg	663.1	mm Hg
Flow	0.456	ccm	0.453	ccm
Lamp Voltage	882	V	881	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)
4995	0.00	0.00	-0.09	N/A
4995	39.93	82.48	80.28	1.0274
4995	19.95	41.37	39.75	1.0409
8995	8.95	10.34	9.57	1.0801
4995	0.00	0.00	-0.09	As Found Zero
4995	39.93	82.48	80.28	As Found Span
Average Correction Factor				1.0495

Calculated value of As Found Response: 82.2 ppb Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	-0.92	ppb	0.21	ppb
Auto span	33.06	ppb	38.91	ppb

Notes: No adjustments made.
Sox scrubber check performed.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



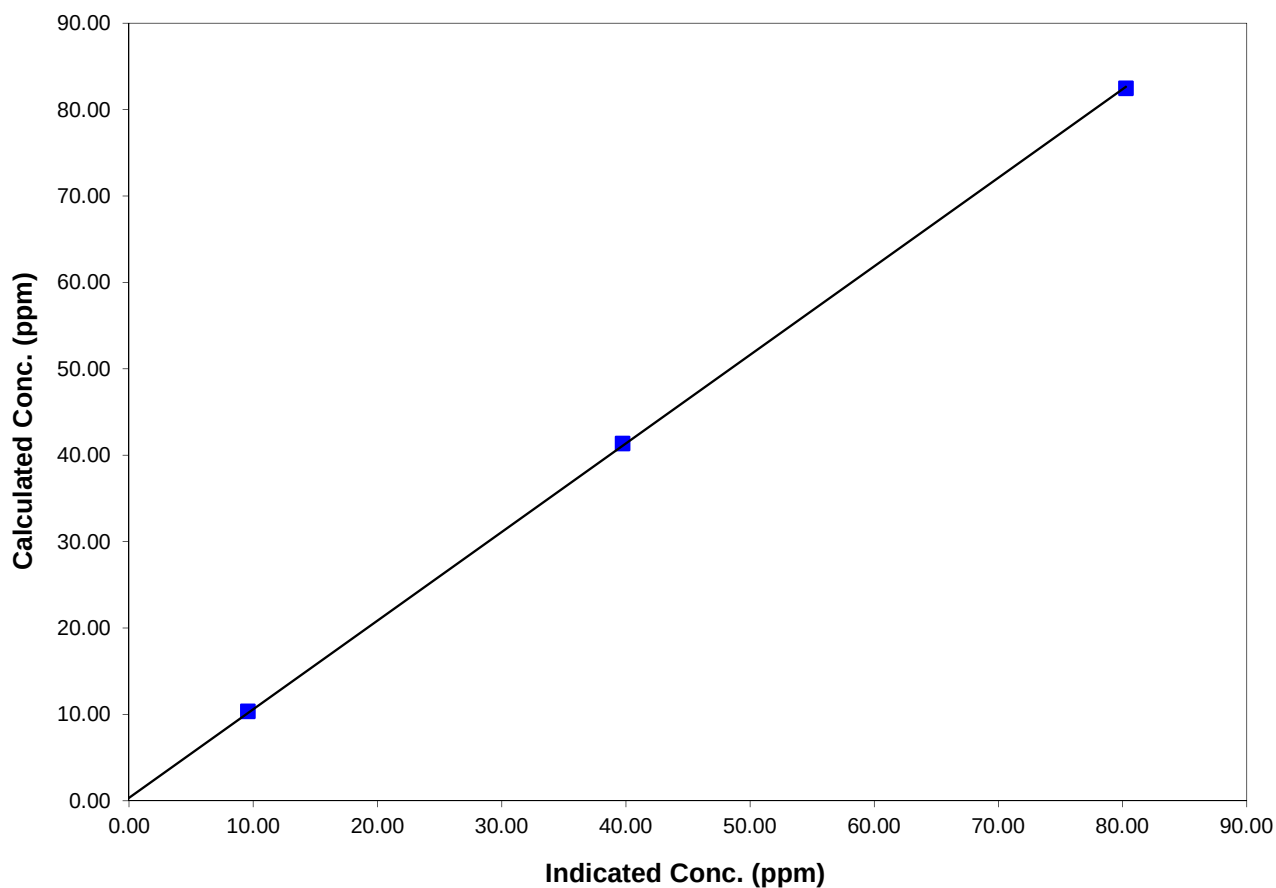
Station Information

Calibration Date	May 1, 2014	Previous Calibration	April 9, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:05:00 PM	End Time (MST)	17:25:00 PM
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

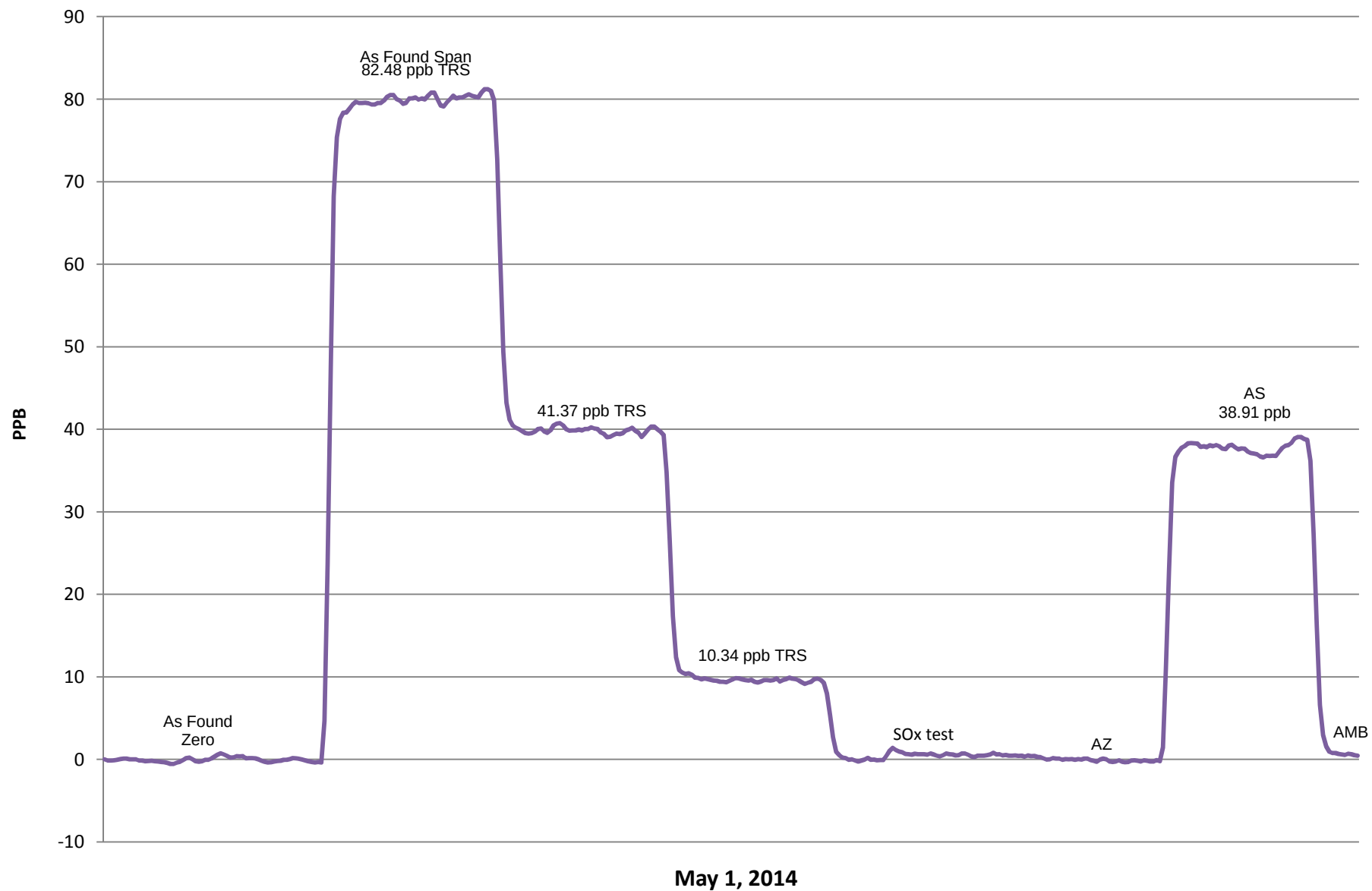
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.091	N/A	Correlation Coefficient	0.999951
82.478	80.279	1.0274		
41.372	39.745	1.0409		
10.338	9.571	1.0801	Slope	1.024703
			Intercept	0.371170

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	May 5 2014	Previous Calibration	April 1 2014
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:10	End Time (MST)	15:00:00 PM
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	51.5 ppm	Cal Gas Expiry Date	25/02/2025
Correction factor	0.031409	Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	1.003737	Calculated slope	0.998149
Calculated intercept	1.132895	Calculated intercept	1.437503
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.5		11.5	
coefficient	1.22		1.22	
Lamp Voltage	833	volts	829	volts
Chamber Temp	45	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	663.1	mm Hg	666.2	mm Hg
Sample Flow	0.449	ccm	0.451	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)
4995	0.0	0.00	0.5	N/A
4995	39.93	408.4	408.7	0.9993
4995	19.97	205.1	203.0	1.0104
4995	9.97	102.6	99.5	1.0313
4995	0.0	0.0	0.5	As Found Zero
4995	39.93	408.4	408.7	As Found Span
Average Correction Factor				1.0137

Calculated value of As Found Response: 410.870 ppm Percent Change of As Found: -0.6%

	before calibration		after calibration	
Auto zero	1.8	ppm	0.5	ppm
Auto span	290.1	ppm	281.3	ppm

Notes: No adjustments

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



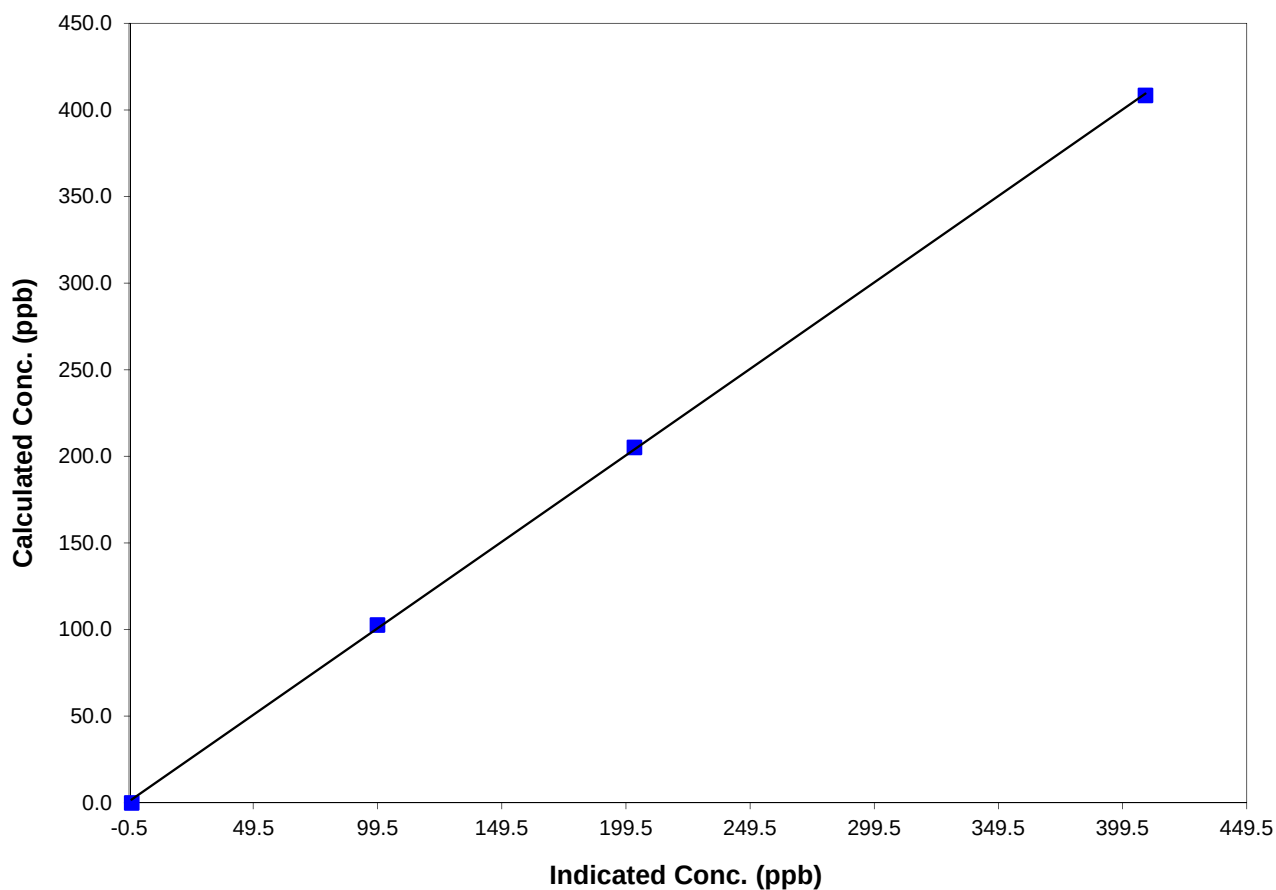
Station Information

Calibration Date	May 5 2014	Previous Calibration	April 1 2014
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:10	End Time (MST)	15:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

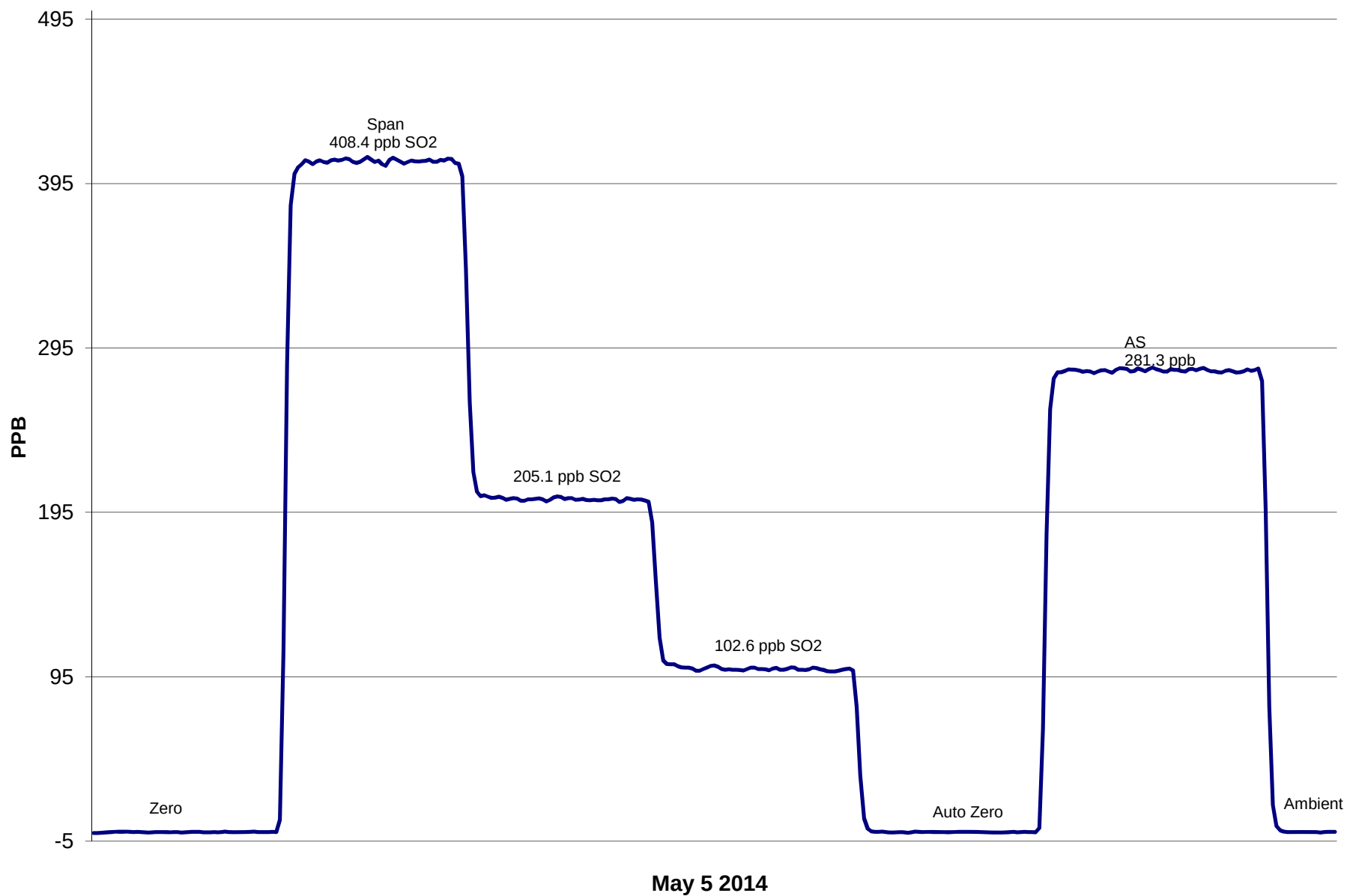
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999898
408.4	408.7	0.9993		
205.1	203.0	1.0104		
102.6	99.5	1.0313	Slope	0.998149
			Intercept	1.437503

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	May 5 2014	Previous Calibration	April 1 2014
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	8:39	End Time (MST)	13:10:00 PM
Barometric Pressure	0.907 ATM	Station Temperature	22.0 Deg C
Calibrator	Envionics	Serial Number	3016
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.030622	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.008260	Calculated slope	0.983698
Calculated intercept	0.015043	Calculated intercept	-0.082037

Analyzer make TEI Model 43C Analyzer serial # 3.199E+13

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	39.3	ppb	39.2	ppb
coefficient	1.043		1.043	
Lamp Voltage	1036	volts	1036	volts
Chamber Temp	44.5	Deg C	44.4	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	632.7	mm Hg	635.2	mm Hg
Sample Flow	0.642	ccm	0.644	ccm
Lamp Intensity	31,604	mv	31,325	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)
4995	0.00	0.00	0.3	N/A
4995	39.93	82.48	84.0	0.9815
4995	19.97	41.41	42.0	0.9854
8995	8.97	10.36	10.4	0.9956
4995	9.97	102.79	1.4	Sox Test
4995	0.00	0.00	0.3	As Found Zero
4995	39.93	82.48	84.0	As Found Span
Average Correction Factor				0.9875

Calculated value of As Found Response: 84.39 ppm Percent Change of As Found: **-2.3%**

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.1	ppm
Auto span	82.2	ppm	74.4	ppm

Notes: No adjustments made.
Sox scrubber check was performed.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



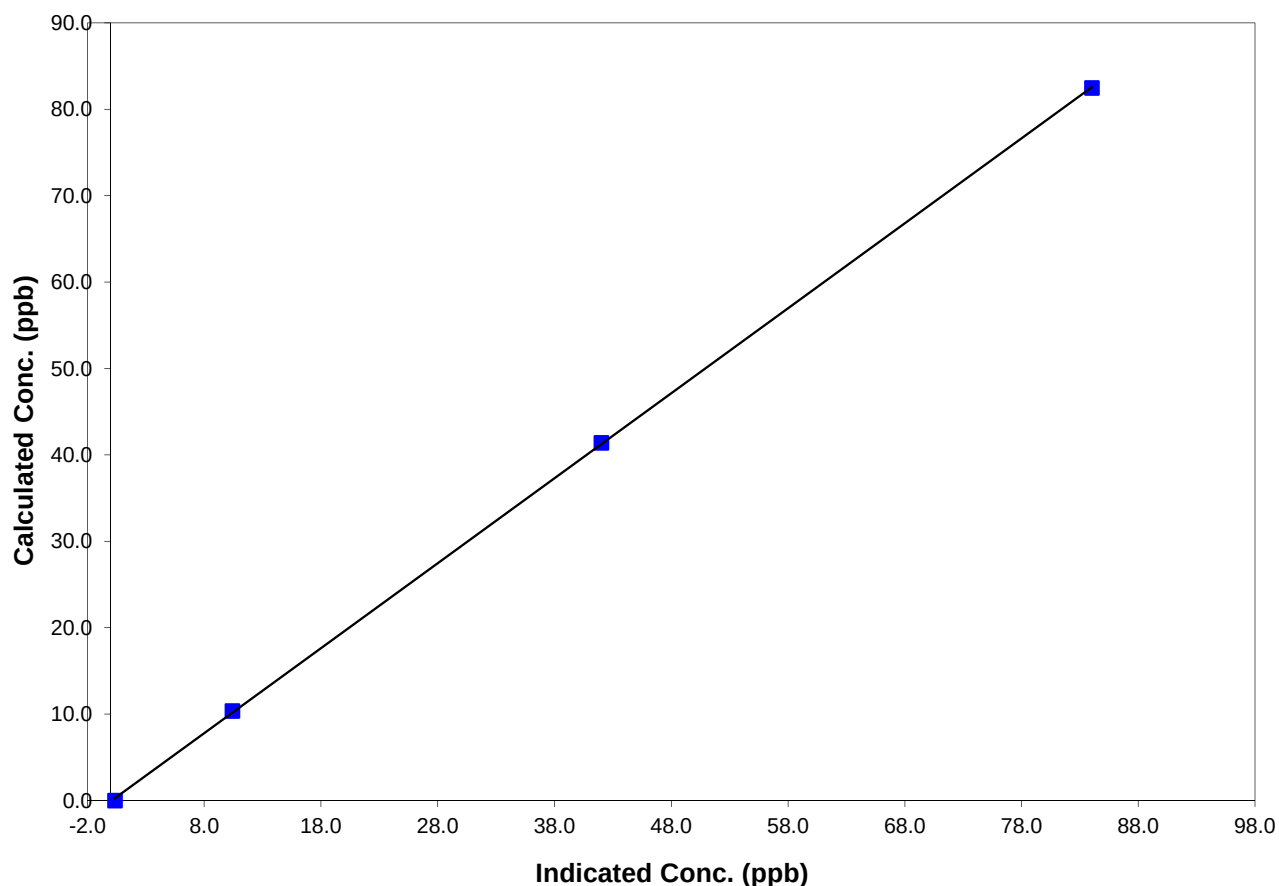
Station Information

Calibration Date	May 5 2014	Previous Calibration	April 1 2014
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:39	End Time (MST)	13:10:00 PM
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

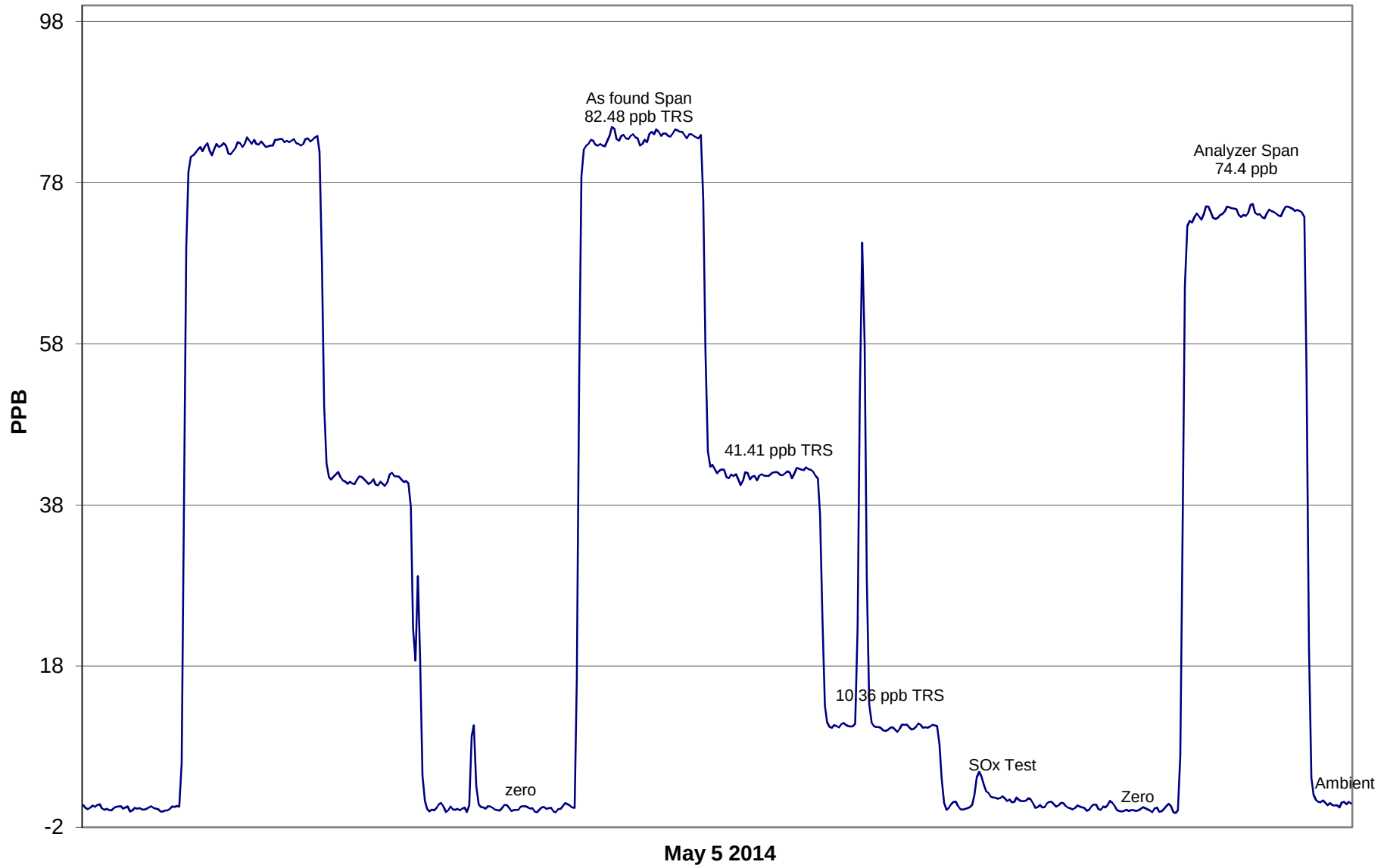
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999966
82.5	84.0	0.9815		
41.4	42.0	0.9854		
10.4	10.4	0.9956	Slope	0.983698
			Intercept	-0.082037

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	April 2, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	11:27	End Time (MST)	15:05:00 PM
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
Cal Gas Concentration	51.5 ppm	Cal Gas Cert Date	20/01/2016
Correction factor	0.031783	Cal Gas Cylinder #	LL1105159
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.996397	Calculated slope	1.004281
Calculated intercept	1.060784	Calculated intercept	-1.999742
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.3		10.7	
coefficient	0.975		0.920	
Lamp Voltage	927	volts	930	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	44.9	Deg C
Pressure	672.3	mm Hg	669.6	mm Hg
Sample Flow	0.449	lpm	0.448	lpm
Lamp Intensity	88	%	88	%

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)
4995	0.0	0.00	0.7	N/A
4995	39.93	408.43	408.5	0.9999
4995	19.97	205.08	205.5	0.9981
4995	9.97	102.59	106.3	0.9647
4995	0.0	0.00	0.7	As Found Zero
4995	39.93	408.43	430.8	As Found Span
Average Correction Factor				0.9876

Calculated value of As Found Response: 429.603 ppm Percent Change of As Found: -5.2%

	before calibration		after calibration	
Auto zero	1.6	ppb	0.8	ppb
Auto span	248.2	ppb	242.3	ppb

Notes: Span adjustment made.

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



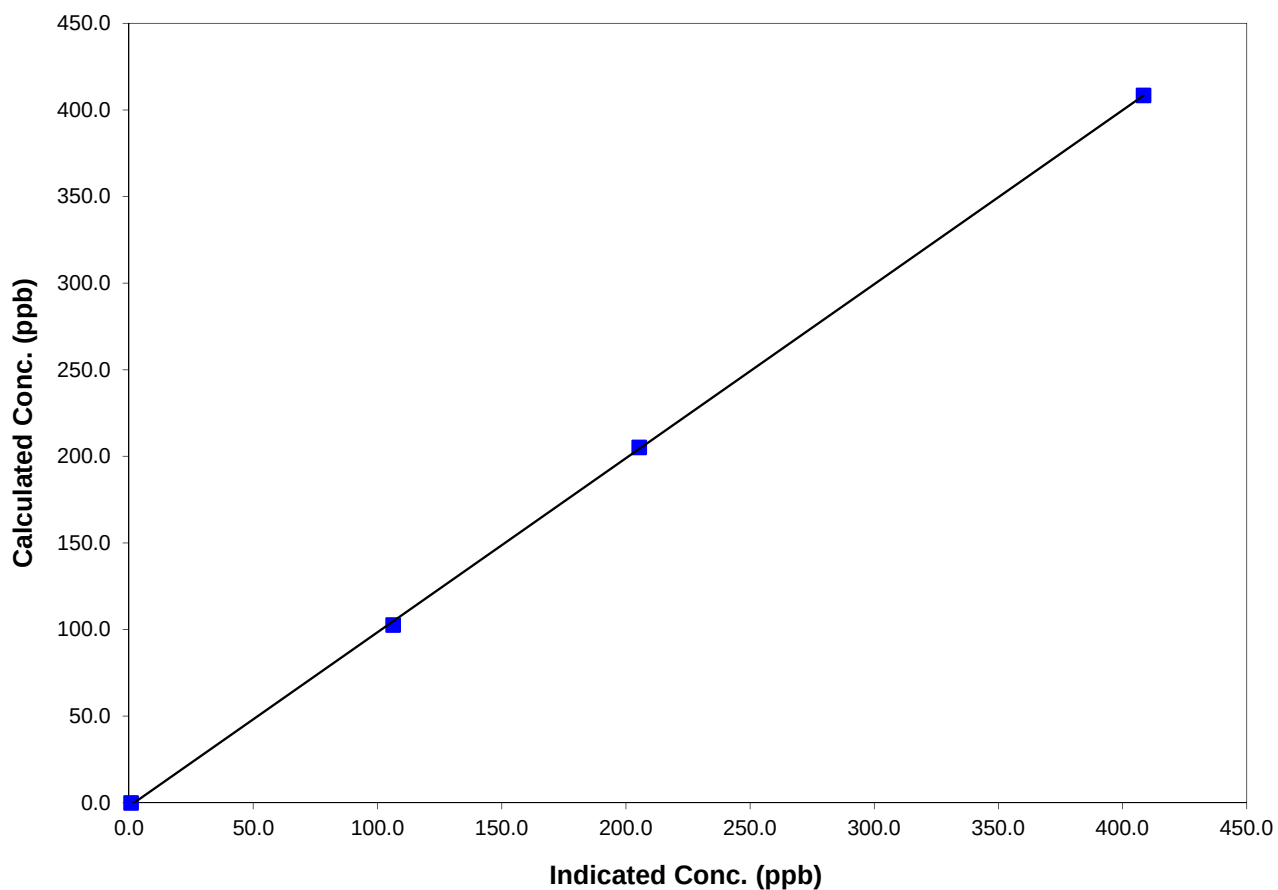
Station Information

Calibration Date	April 2, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:27	End Time (MST)	15:05:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

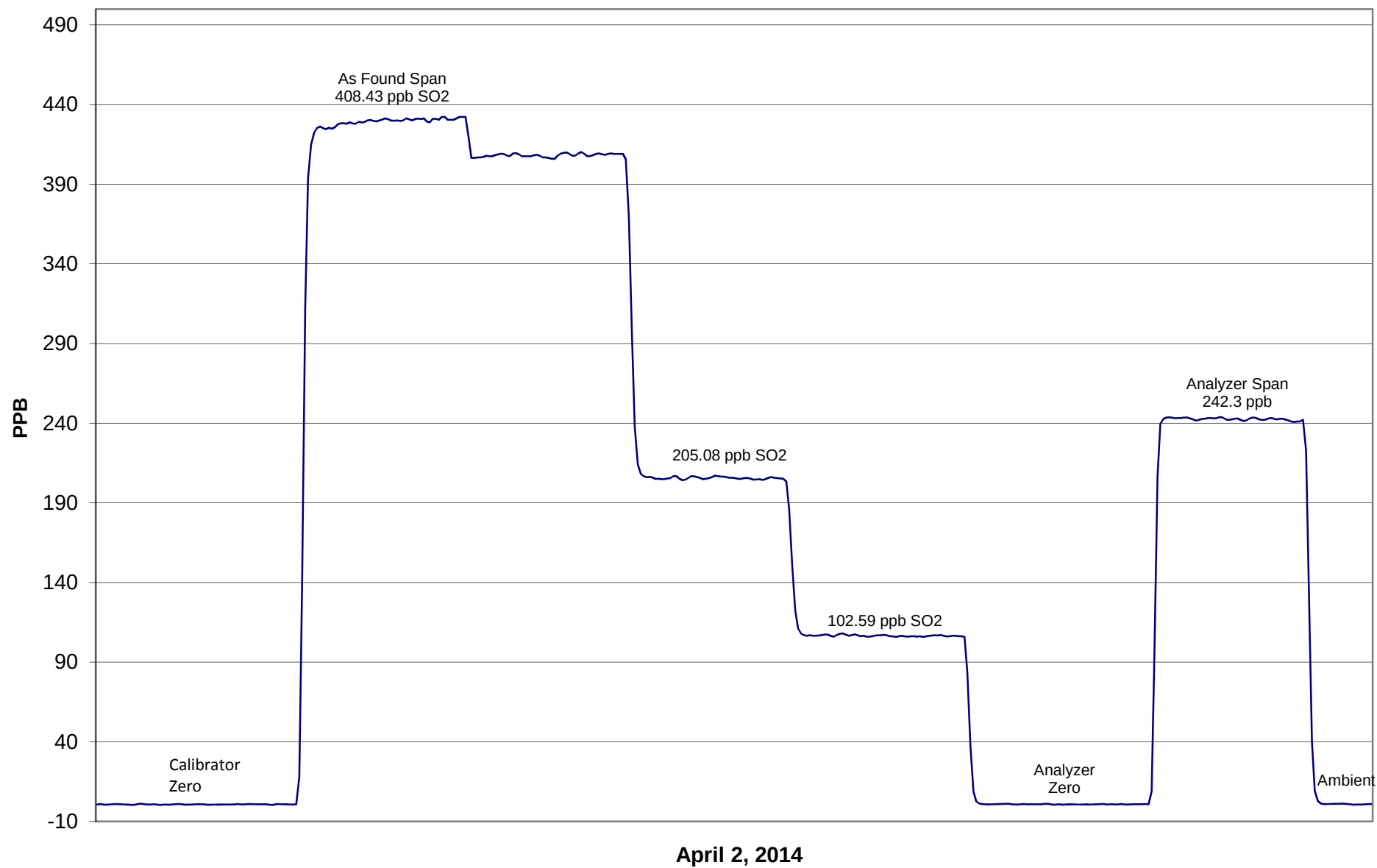
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A	Correlation Coefficient	0.999922
408.4	408.5	0.9999		
205.1	205.5	0.9981		
102.6	106.3	0.9647	Slope	1.004281
			Intercept	-1.999742

SO2 Calibration Curve



Smokey Heights SO₂ Calibration



Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	May 16, 2014	Previous Calibration	April 2, 2014
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	8:55	End Time (MST)	13:20:00 PM
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031783	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.985833	Calculated slope	0.992241
Calculated intercept	0.024062	Calculated intercept	-0.093572

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
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	before		after	
Concentration range	100	ppb	100	ppb
Background	18.5	ppb	18.7	ppb
coefficient	0.988		0.944	
Lamp Voltage	833	volts	833	volts
Chamber Temp	43.9	Deg C	43.9	Deg C
Perm Gas Temp	44.99	Deg C	44.99	Deg C
Pressure	611.2	mm Hg	582.5	mm Hg
Sample Flow	0.642	lpm	0.624	lpm
Lamp Intensity	35,124	mv	35,026	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)
4995	0.0	0.00	-0.1	N/A
4995	39.91	82.44	83.2	0.9907
4995	19.93	41.33	41.6	0.9934
8995	8.97	10.36	10.8	0.9587
4995	9.97	102	0.7	Sox test
4995	0.0	0.00	0.4	As Found Zero
4995	39.91	82.44	87.0	As Found Span
Average Correction Factor				0.9809

Calculated value of As Found Response: 85.36 ppm Percent Change of As Found: -3.6%

	before calibration		after calibration	
Auto zero	0.5	ppm	-0.1	ppm
Auto span	29.5	ppm	31.2	ppm

Notes: Slight zero and span adjustments made

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



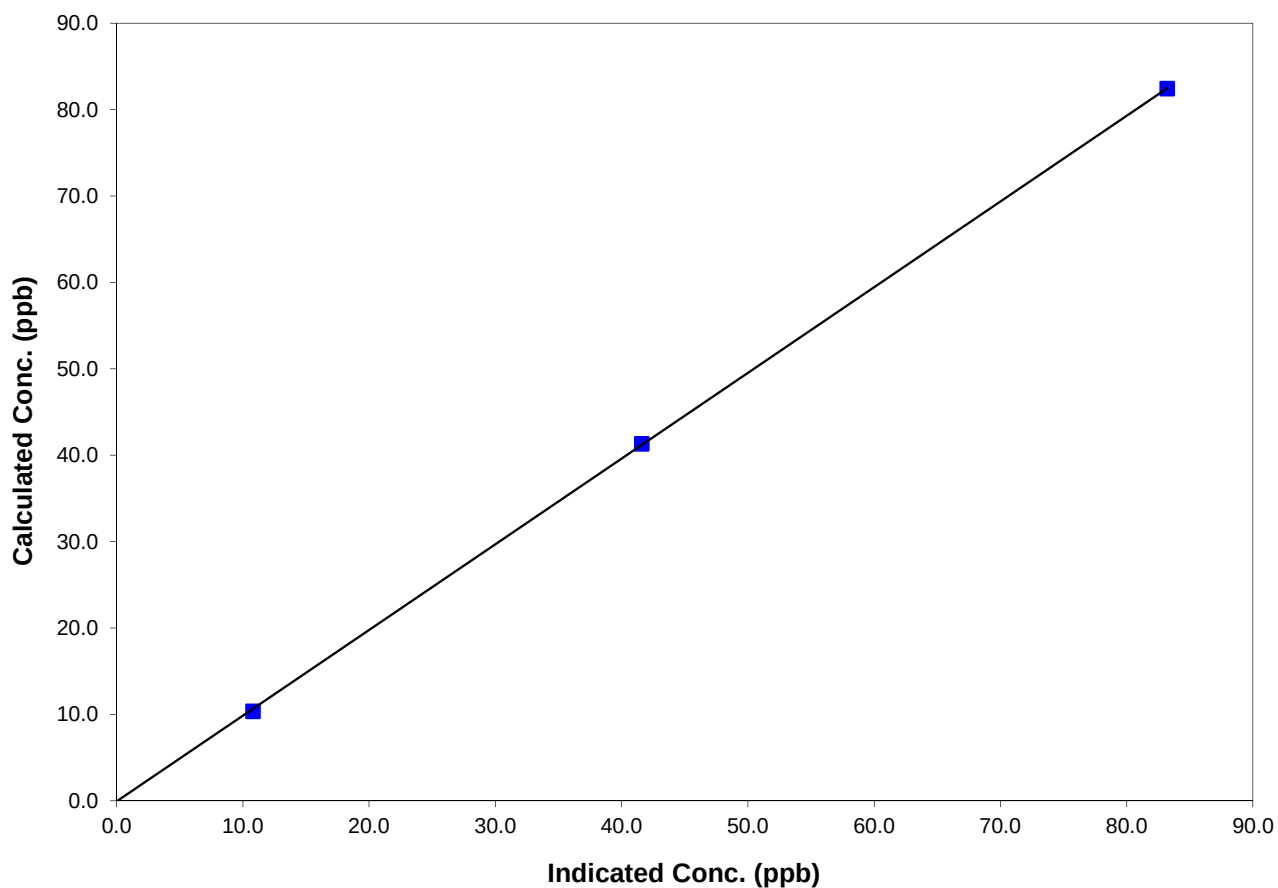
Station Information

Calibration Date	May 16, 2014	Previous Calibration	April 2, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	8:55	End Time (MST)	13:20:00 PM
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

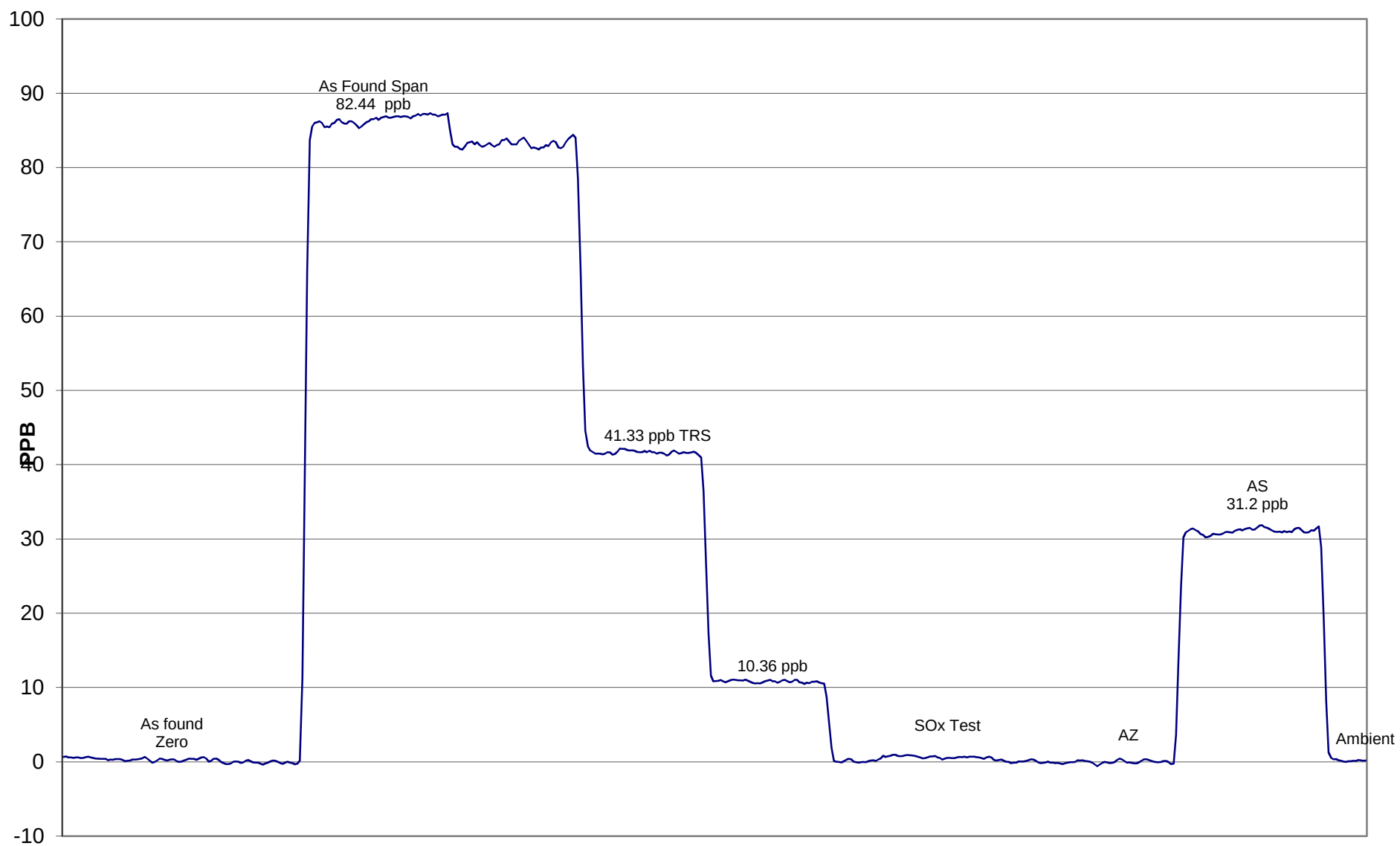
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999971
82.4	83.2	0.9907		
41.3	41.6	0.9934		
10.4	10.8	0.9587	Slope	0.992241
			Intercept	-0.093572

TRS Calibration Curve



Smokey Heights TRS Calibration



May 16, 2014

AB TEOM PM2.5 Calibration



STATION: Smokey Heights
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 16-May-14

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	24634
Site Number	3
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	0.995
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5
(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)	

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	31-Jan-14
Previous Calibration	26-Feb-14

PUMP CAPACITY CHECK *	PASS
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* capacity test or pump on timed test utilized to verify pump integrity
 "FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.020	-0.020
PUMP OFF	0.010	-0.060
NET	0.010	0.040
LIMITS	<0.15	<0.60

	Ambient Temp. (^o C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	12122	13.68	3.000
INDICATED (I)	9.8	0.933	12122	13.67	3.000
MEASURED (AF)	8.4	0.933	12122	13.66	3.090
MEASURED (M)	8.4	0.933	12233	13.66	3.090
DIFFERENCE (M-I)	-1.4	0.000	0.9%	-0.15	0.09
LIMITS	± 2^o C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

As Found Data
 Adjusted Data

Ko Audit Filter data Weight: 0.11477 Serial #: CVK 3532

COMMENTS: PASS
 Flows & leak checks were performed.
 Head was cleaned
 Changed filter

Sample Head Inspection/Cleaning: Large In Line Filter Inspection & Or Replacement:

Calibration Report

Parameter SO2
Air Monitoring Network PAZA



Station Information

Calibration Date	May 12, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	13:35:00 PM	End Time (MST)	15:28:00 PM
Barometric Pressure	0.908 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
Cal Gas Concentration	10.8 ppm	Cal Gas Expiry Date	28/09/2012
Gas Cert Reference	FF14871		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.014408	Calculated slope	1.009327
Calculated intercept	0.139634	Calculated intercept	-0.308235
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.68		2.68	
Coefficient	1.042		1.042	
PMT	-767.8	V	-767.4	V
UV Lamp Voltage	1071	V	1067	V
Chamber Temp	45.1	Deg C	45	Deg C
Pressure	673.4	mm Hg	673.7	mm Hg
Sample Flow	0.488	LPM	0.488	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)
4994	0.00	0.0	0.0	N/A
4994	39.92	85.6	85.1	1.0065
4994	19.96	43.0	42.8	1.0044
4994	9.96	21.5	22.0	0.9754
4994	0.00	0.0	0.0	As found zero
4994	39.92	85.6	85.1	As found span
Average Correction Factor				0.9954

Calculated value of As Found Response: 86.430 ppm Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.2	ppb	-0.3	ppb
Auto span	59.9	ppb	58.1	ppb

Notes: No adjustments made.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



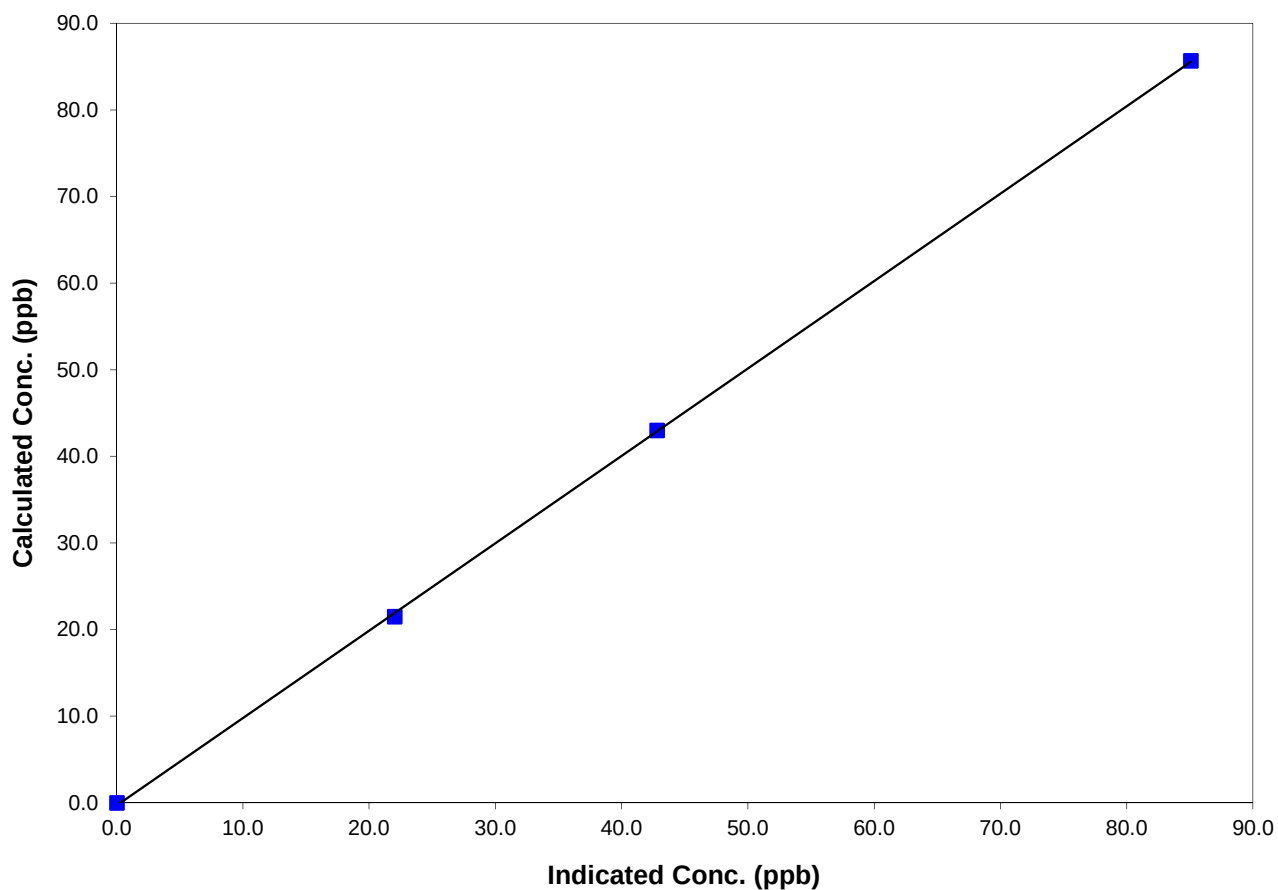
Station Information

Calibration Date	May 12, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:35:00 PM	End Time (MST)	15:28:00 PM
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

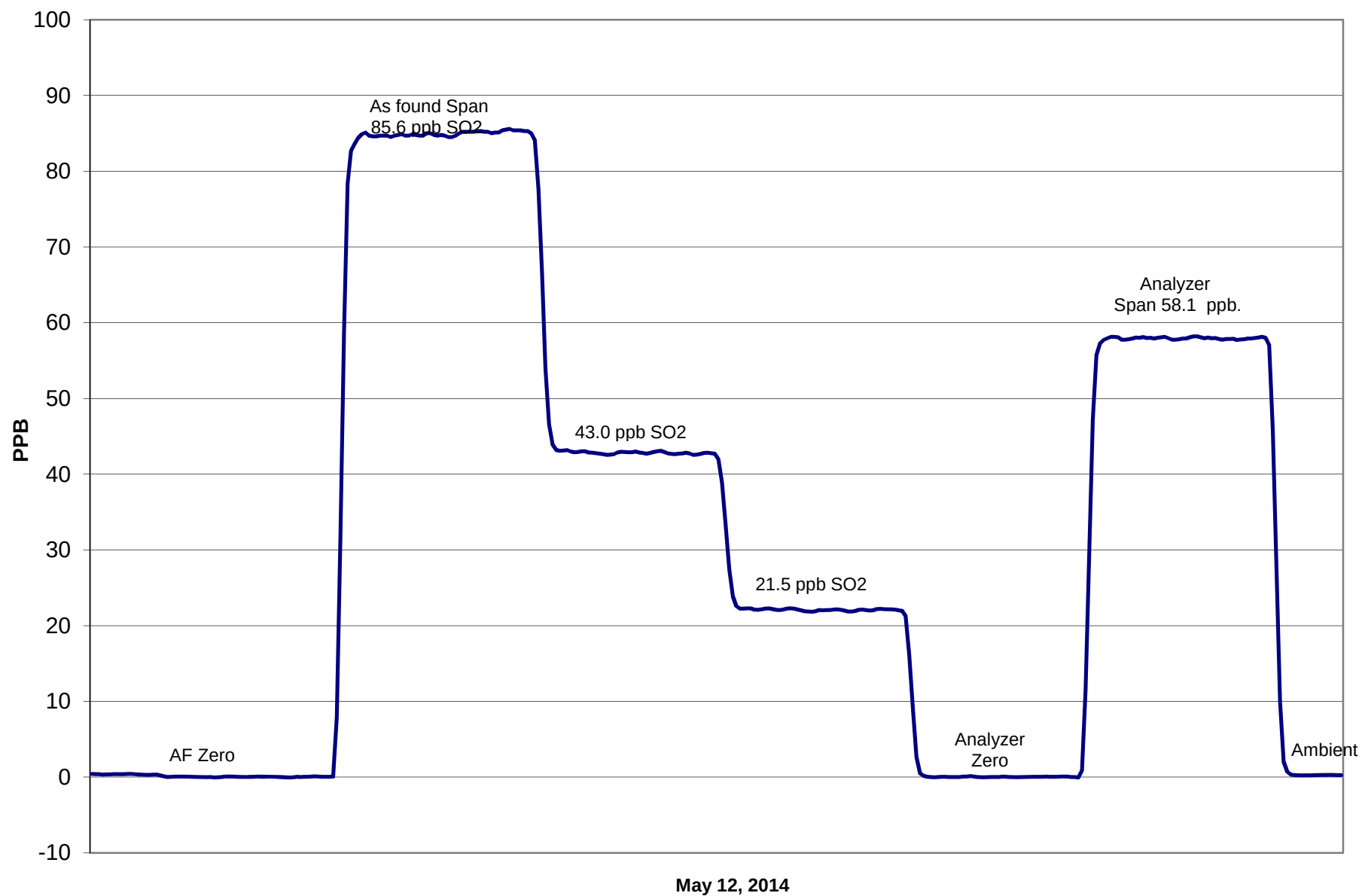
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999929
85.6	85.1	1.0065		
43.0	42.8	1.0044		
21.5	22.0	0.9754	Slope	1.009327
			Intercept	-0.308235

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Installation	Removal
Other:			
Start Time (MST)	7:26	End Time (MST)	14:58:00 PM
Barometric Pressure	0.904	Atm	Station Temperature
Calibrator	EnviroNics	Serial Number	2844
NO Cal Gas Conc	51.3	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	51.4	ppm	Cal Gas Serial #
			February 25, 2021
			LL105159

DACS Information

DACS make	CR3000	DACS serial No.	5237
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Parameter		NO2	NOx	NO
Before	Data Slope	1.004406	0.998230	0.998327
	Data Offset	-1.391095	2.355347	2.636329
After	Data Slope	1.002286	1.001610	1.000563
	Data Offset	-0.184543	-1.983296	-1.675587
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
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Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	3.0	mV	2.9	mV
NOx bkgnd	3.2	mV	3.2	mV
NO coefficient	0.989		1.002	
NOx coefficient	1.000		1.000	
NO2 conv temp	322.1	Deg C	326.3	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-750.4	mV	-740.4	mV
R Cell Press	208.8	in Hg	209.7	in Hg
Sample Flow	0.708	LPM	0.707	LPM

Notes: PMT and span adjustments made. Adjustments were also made on calibrator O3 output before beginning GPT.

Calibration Report

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



Station Information

Calibration Date: May 13, 2014 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	4995	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	N/A	N/A
1	4995	39.92	407.5	406.7	0.8	408.3	407.8	-0.3	0.9980	0.9974
2	4995	19.96	204.6	204.2	0.4	205.9	205.0	-0.1	0.9938	0.9959
3	4995	9.93	102.0	101.8	0.2	106.5	106.2	0.1	0.9573	0.9580
AFZ	4995	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	0.0000	0.0000
AFS	4995	39.92	407.5	406.7	0.8	445.2	443.8	0.6	0.9153	0.9165
Average Correction Factor									0.9830	0.9838

As Found Concentrations: NO_x= 447.4 NO= 446.5 As Found Percent Change NO_x= 9.8% NO= 9.8%

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	0.1	-0.1	0.1	N/A	N/A	N/A	N/A
NO point	406.1	406.1	0.0	406.8	406.1	-0.1	0.9982	1.0000	N/A	N/A
300	406.1	98.4	307.6	406.3	98.4	307.2	0.9994	1.0000	1.0013	99.9%
200	406.1	197.0	209.0	406.4	197.0	208.5	0.9993	1.0000	1.0028	99.7%
100	406.1	297.4	108.6	406.8	297.4	108.9	0.9981	1.0000	0.9980	100.2%
Average Correction Factor							0.9989	1.0000	1.0007	99.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	-0.1	-0.1	ppb	-0.1	0.0	-0.1	ppb
Auto span	168.3	166.9	1.1	ppb	181.3	180.2	0.8	ppb

Calibration Performed By: Grover Christiansen ,Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



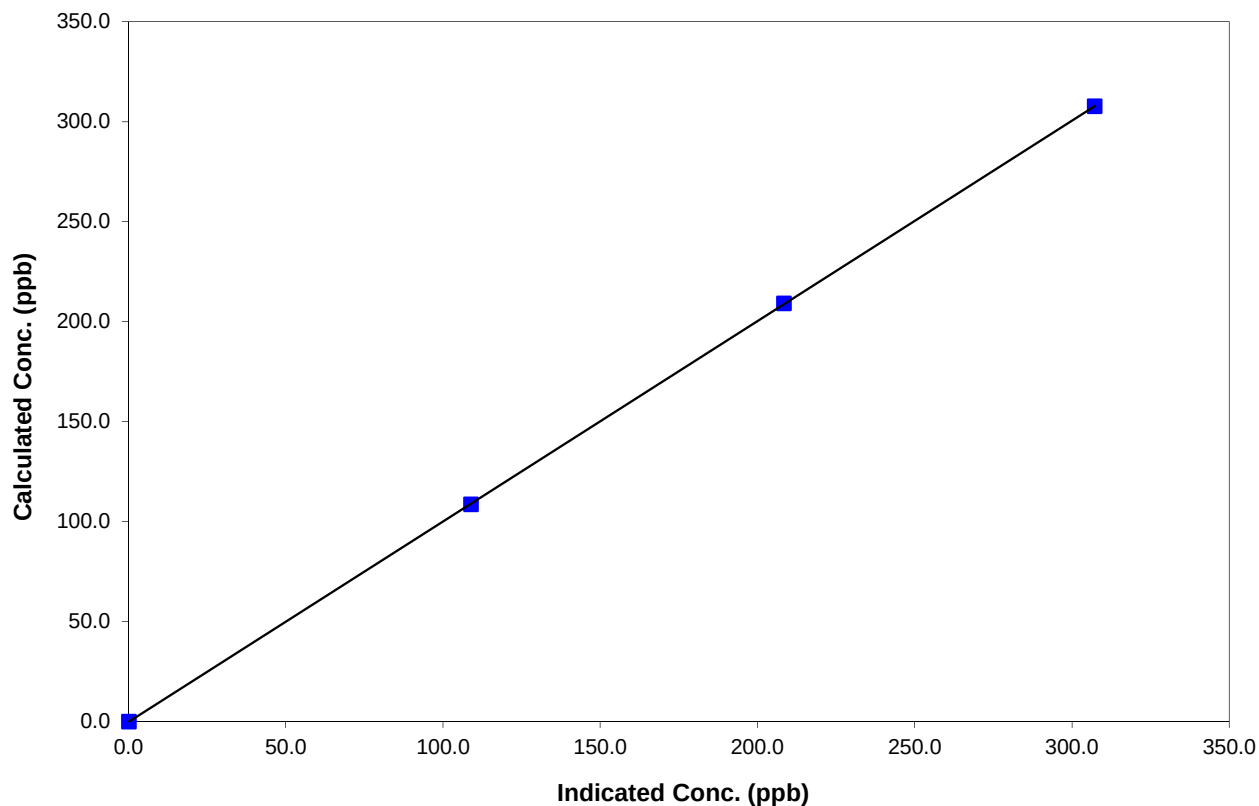
Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:26	End Time (MST)	14:58:00 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	0.999996
307.6	307.2	1.0013		
209.0	208.5	1.0028		
108.6	108.9	0.9980	Slope	1.002286
			Intercept	-0.184543

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



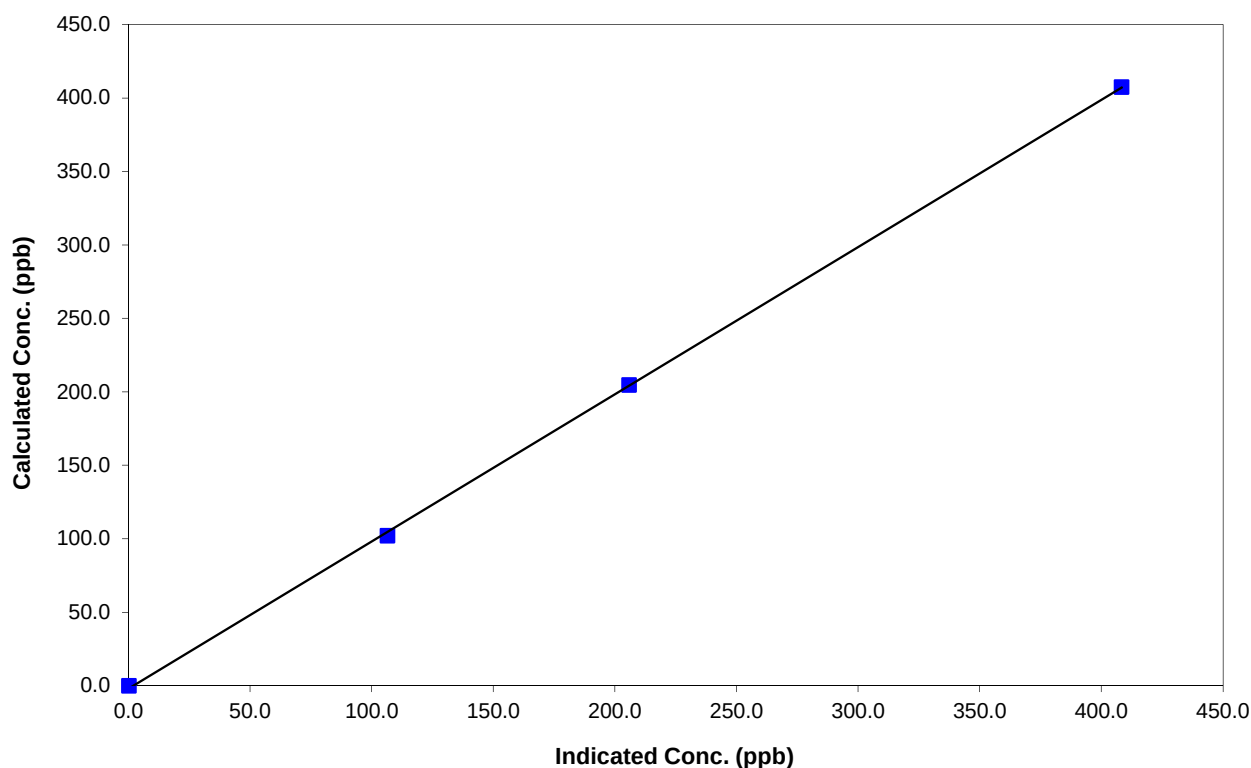
Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:26	End Time (MST)	14:58:00 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	0.999875
407.5	408.3	0.9980		
204.6	205.9	0.9938		
102.0	106.5	0.9573	Slope	1.001610
			Intercept	-1.983296

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



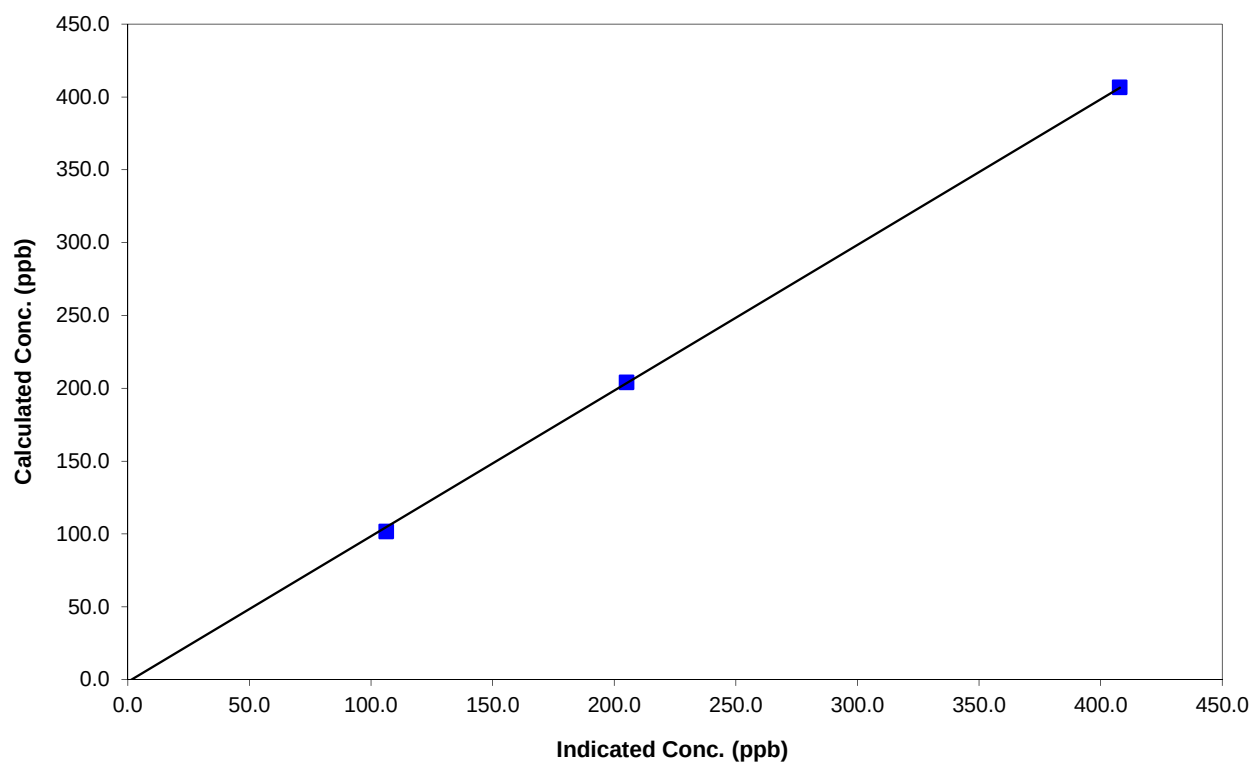
Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:26	End Time (MST)	14:58:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

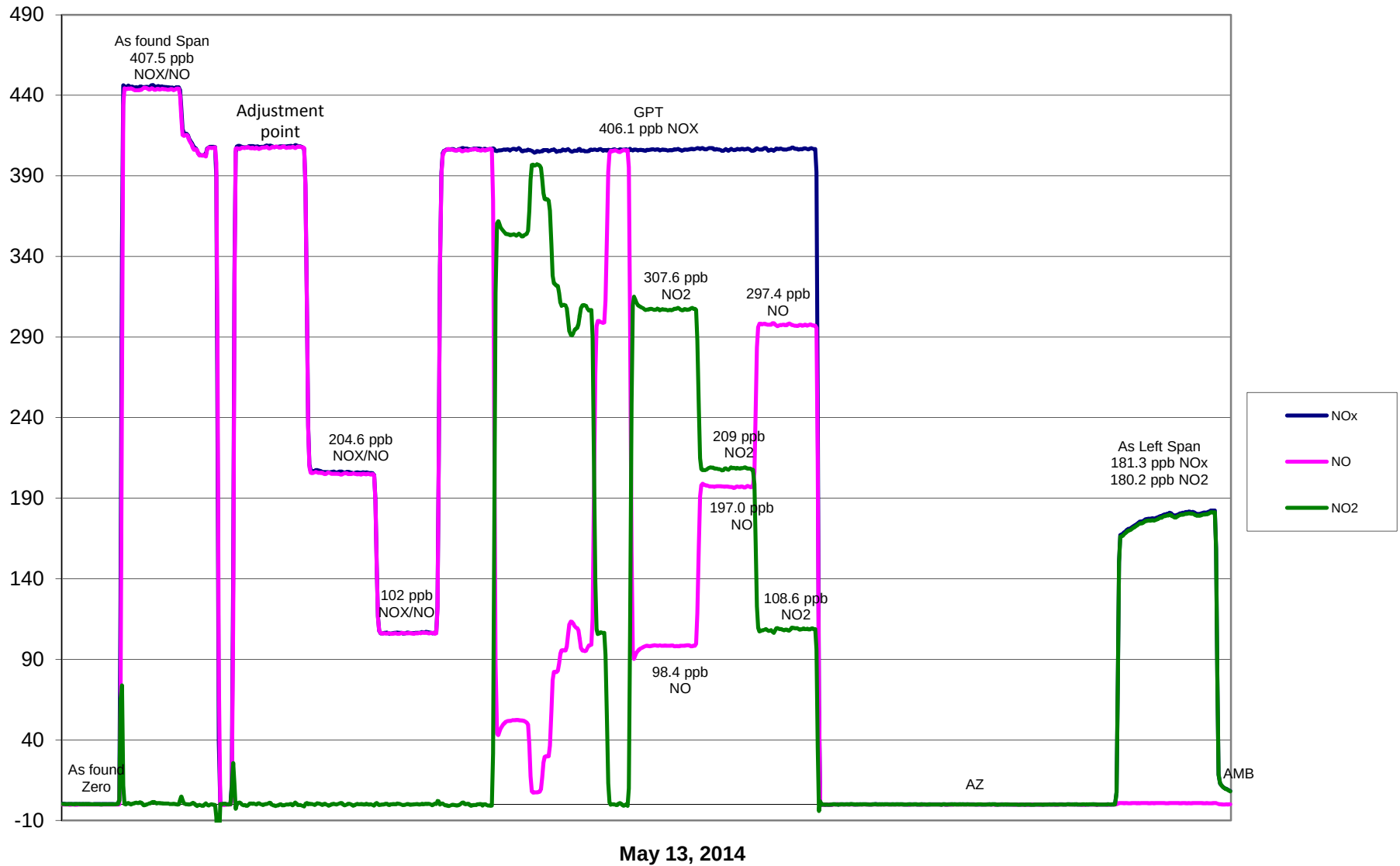
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999869
406.7	407.8	0.9974		
204.2	205.0	0.9959		
101.8	106.2	0.9580	Slope	1.000563
			Intercept	-1.675587

NO Calibration Curve



PAZA Beaverlodge NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	12:10	End Time (MST)	15:00:00 PM
Barometric Pressure	0.904 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
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	1.005897	Calculated slope	1.004788
Calculated intercept	-0.779930	Calculated intercept	-0.024794

Analyzer make	Teco 49i	Analyzer serial #	1136451236
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	0.00	ppb	0.00	ppb
slope	1.061		1.028	
Lamp temp	53.8	mV	53.9	mV
Lamp Intensity A/B	84813/86414	mV	84804/86375	mV
Pressure	685.4	mm Hg	676.9	mm Hg
Flow A	0.763	LPM	0.768	LPM
Flow B	0.746	LPM	0.751	LPM

Calibration Data

Dilution air flow rate (cc/min)	Calibrator Setting	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.00	0.0	0.1	N/A
5035	0.30	307.6	306.4	1.0040
5035	0.20	209.0	207.7	1.0062
5035	0.10	108.6	108.1	1.0046
5035	0.00	0.0	0.1	As found zero
5035	0.30	307.6	318.0	As found span
Average Correction Factor				1.0049

Calculated value of As Found Response: 318.9 ppm Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	-1.2	ppb	0.4	ppb
Auto span	277.9	ppb	266.6	ppb

Notes: Span adjustment, run adjustment point.

Calibration Performed By: Grover Christiansen, Dmytro Dolotii

Calibration Summary

Parameter O3

Air Monitoring Network PAZA



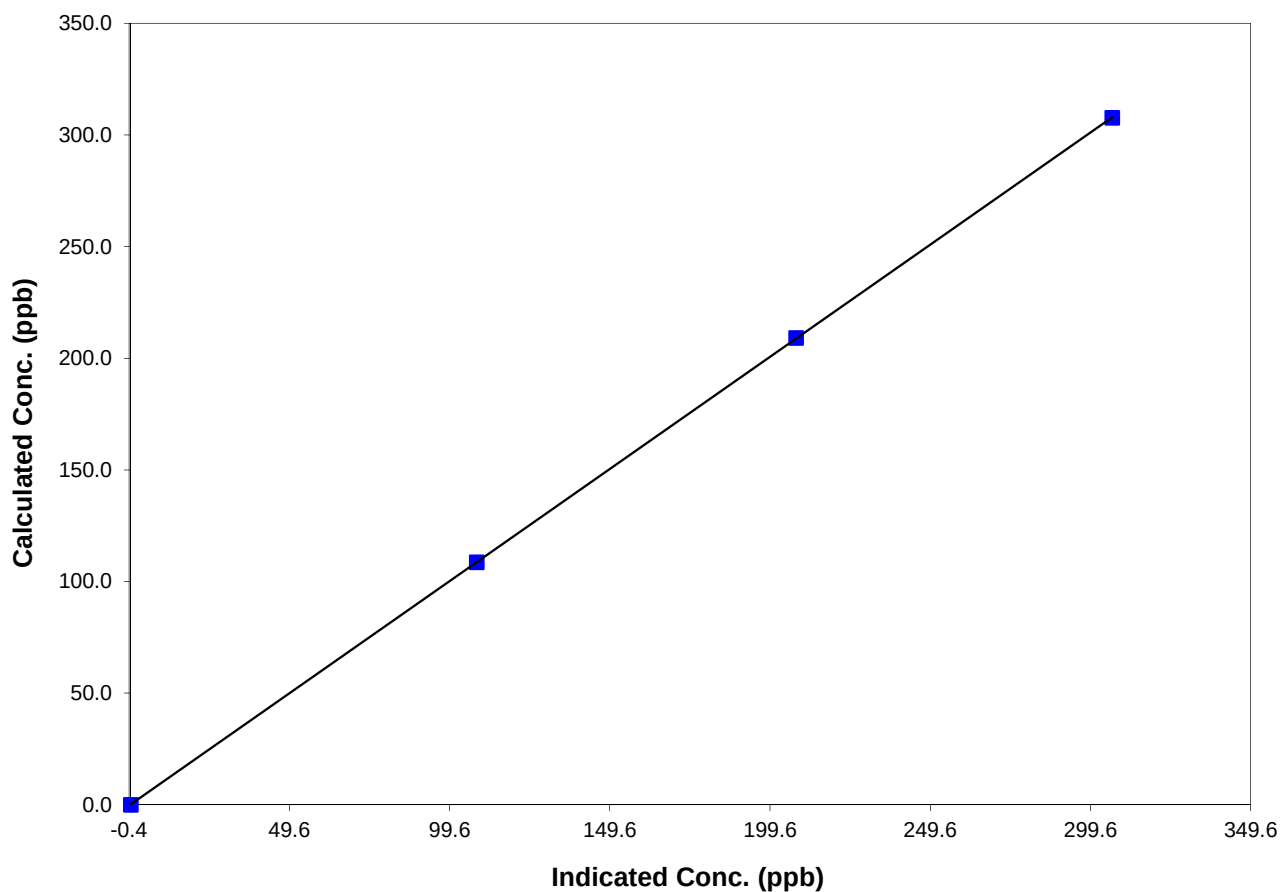
Station Information

Calibration Date	May 13, 2014	Previous Calibration	April 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:10	End Time (MST)	15:00:00 PM
Analyzer make/model	Teco 49i	Analyzer serial #	1136451236

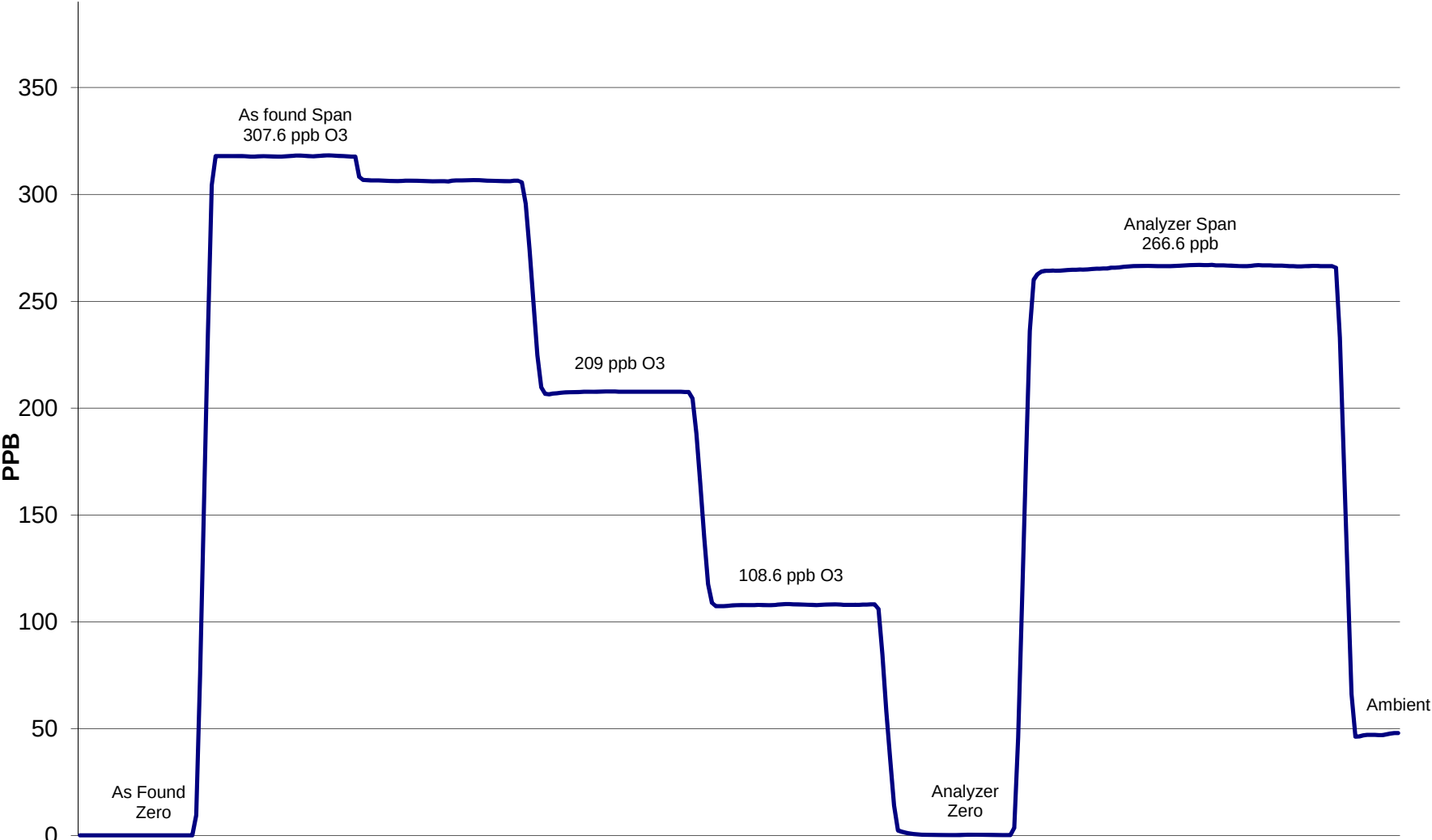
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA	Correlation Coefficient	0.999997
307.6	306.4	1.0040		
209.0	207.7	1.0062		
108.6	108.1	1.0046	Slope	1.004788
			Intercept	-0.024794

O3 Calibration Curve



O3 Calibration



May 13, 2014

Calibration Report

Parameter SO2
Air Monitoring Network PAZA



Station Information

Calibration Date	May 15 2014	Previous Calibration	April 14 2014
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	12:00	End Time (MST)	15:25:00 PM
Barometric Pressure	702.00 mmHg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
Cal Gas Concentration	51.5 ppm	Cal Gas Exp Date	February 25, 2021
Gas Cylinder Num.	LL105159		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.997170	Calculated slope	1.002425
Calculated intercept	1.713589	Calculated intercept	-1.950266
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	61.7		61.7	
Coefficient	1.038		0.966	
UV Lamp Voltage	833	LPM	832	LPM
Chamber Temp	44.6	V	44.5	V
Perm Gas Temp	37	C	37	C
Pressure	614.8	in Hg	616.6	in Hg
Sample Flow	0.540	LPM	0.540	LPM
Lamp Intensity	41770	Hz	42101	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)
4995	0.00	0.0	0.1	N/A
4995	39.91	408.2	408.7	0.9988
4995	19.97	205.1	205.9	0.9958
4995	9.95	102.4	107.0	0.9569
4995	0.00	0.0	0.1	As found zero
4995	39.91	408.2	424.7	As found span
Average Correction Factor				0.9838

Calculated value of As Found Response: 425.1 ppm Percent Change of As Found: -4.1%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	150.2	ppm	143.1	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii.

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



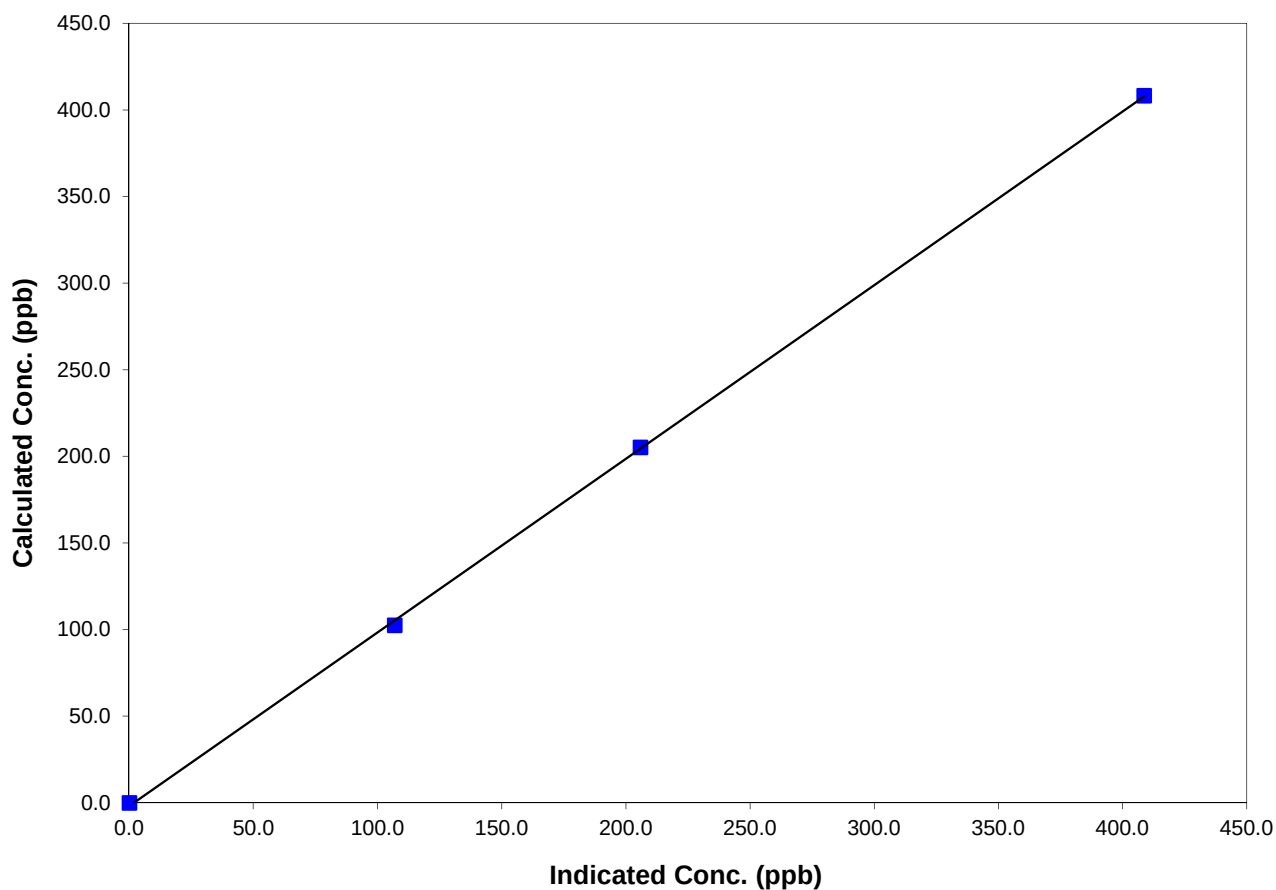
Station Information

Calibration Date	May 15 2014	Previous Calibration	April 14 2014
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:00	End Time (MST)	15:25:00 PM
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

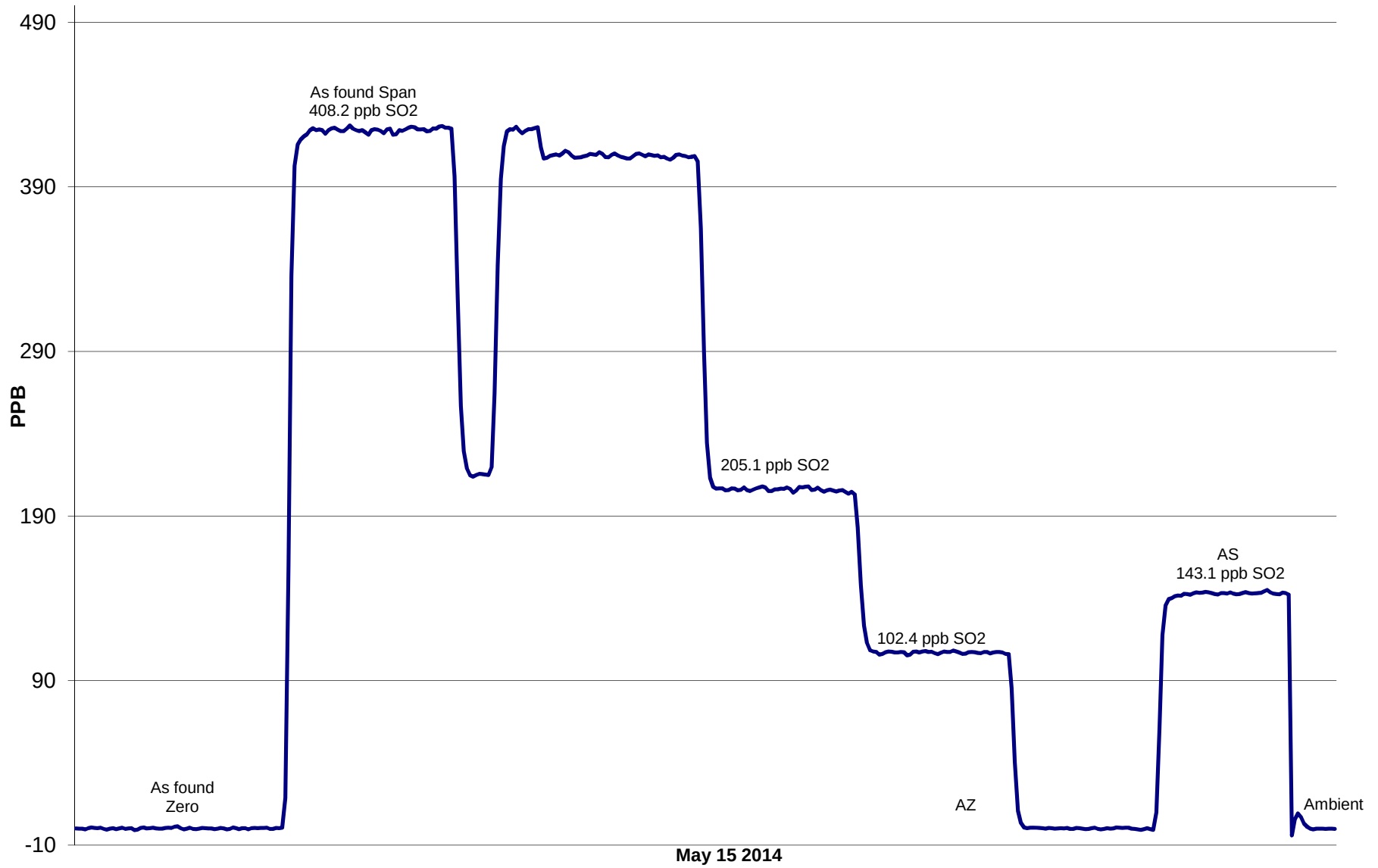
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999862
408.2	408.7	0.9988		
205.1	205.9	0.9958		
102.4	107.0	0.9569	Slope	1.002425
			Intercept	-1.950266

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter H2S
Air Monitoring Network PAZA



Station Information

Calibration Date	May 15 2014	Previous Calibration	April 14 2014
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	9:35	End Time (MST)	13:10:00 AM
Barometric Pressure	702.00 mm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.4 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	0.991507	Calculated slope	0.963324
Calculated intercept	0.594315	Calculated intercept	0.103512
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.7	ppb	7.6	ppb
Coefficient	0.915		0.915	
Lamp Voltage	786	v	789	v
Chamber Temp	45.1	c	45.2	c
Perm Oven Temp	45	c	45	c
Pressure	593.00	mm Hg	594.50	mm Hg
Sample Flow	0.404	ccm	0.405	lpm
Lamp Intensity	91	%	91	%

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)
4995	0.00	0.0	-0.3	N/A
4997	39.91	82.4	85.4	0.9650
4997	19.94	41.3	42.8	0.9647
8996	8.96	10.3	10.8	0.9569
4997	9.97	102.5	2.8	Sox Test
4997	0.00	0.0	-0.3	As found zero
4997	39.93	82.4	85.4	As found span
Average Correction Factor				0.9622

Calculated value of As Found Response: 85.54 ppm Percent Change of As Found: -3.8%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.1	ppm
Auto span	67.3	ppm	62.9	ppm

Notes: No adjustments made
Spike on the after span-new orifices will be ordered

Calibration Performed By: Dmytro Dolotii.

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



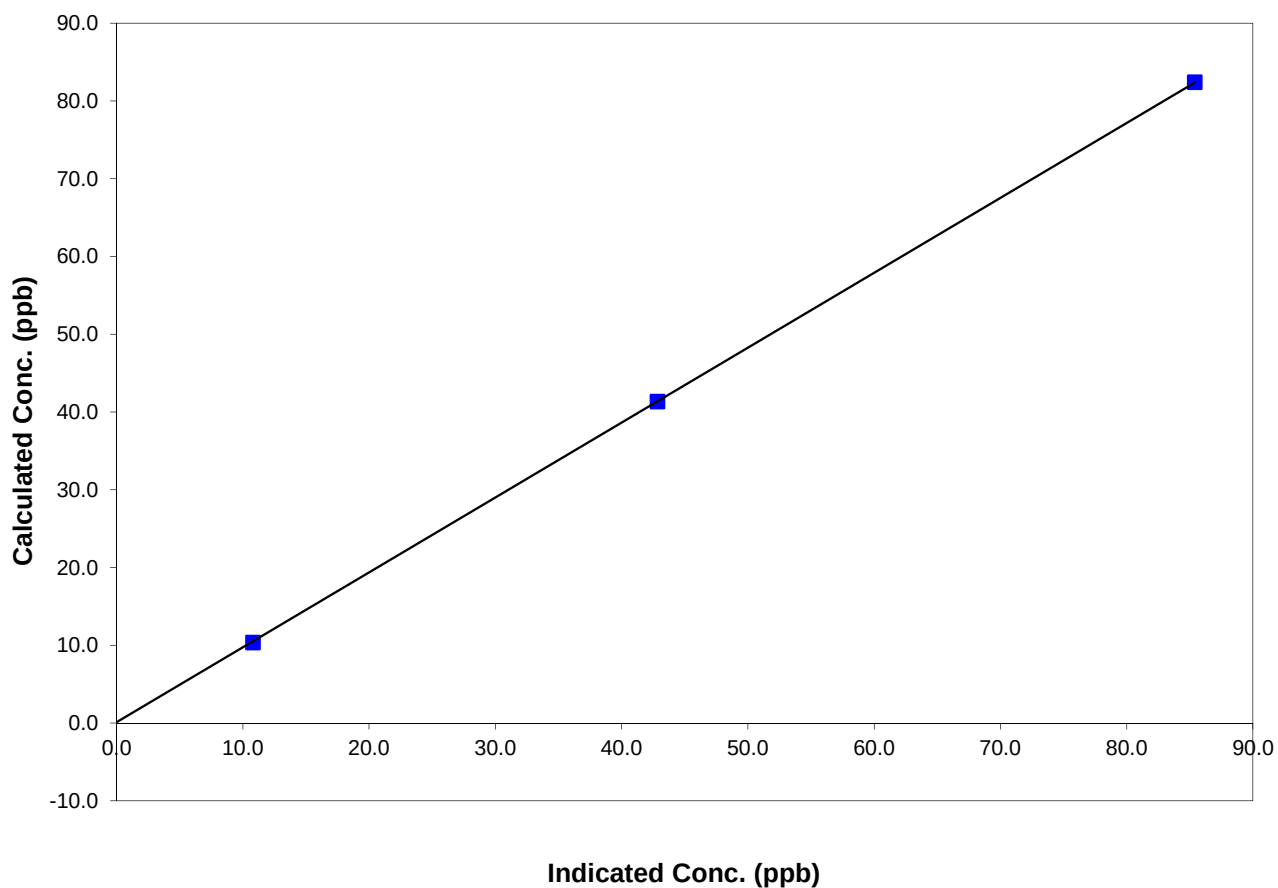
Station Information

Calibration Date	May 15 2014	Previous Calibration	April 14 2014
Station Number	6	Station Location	Valleyview
Start Time (MST)	9:35	End Time (MST)	13:10:00 AM
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

Calibration Data

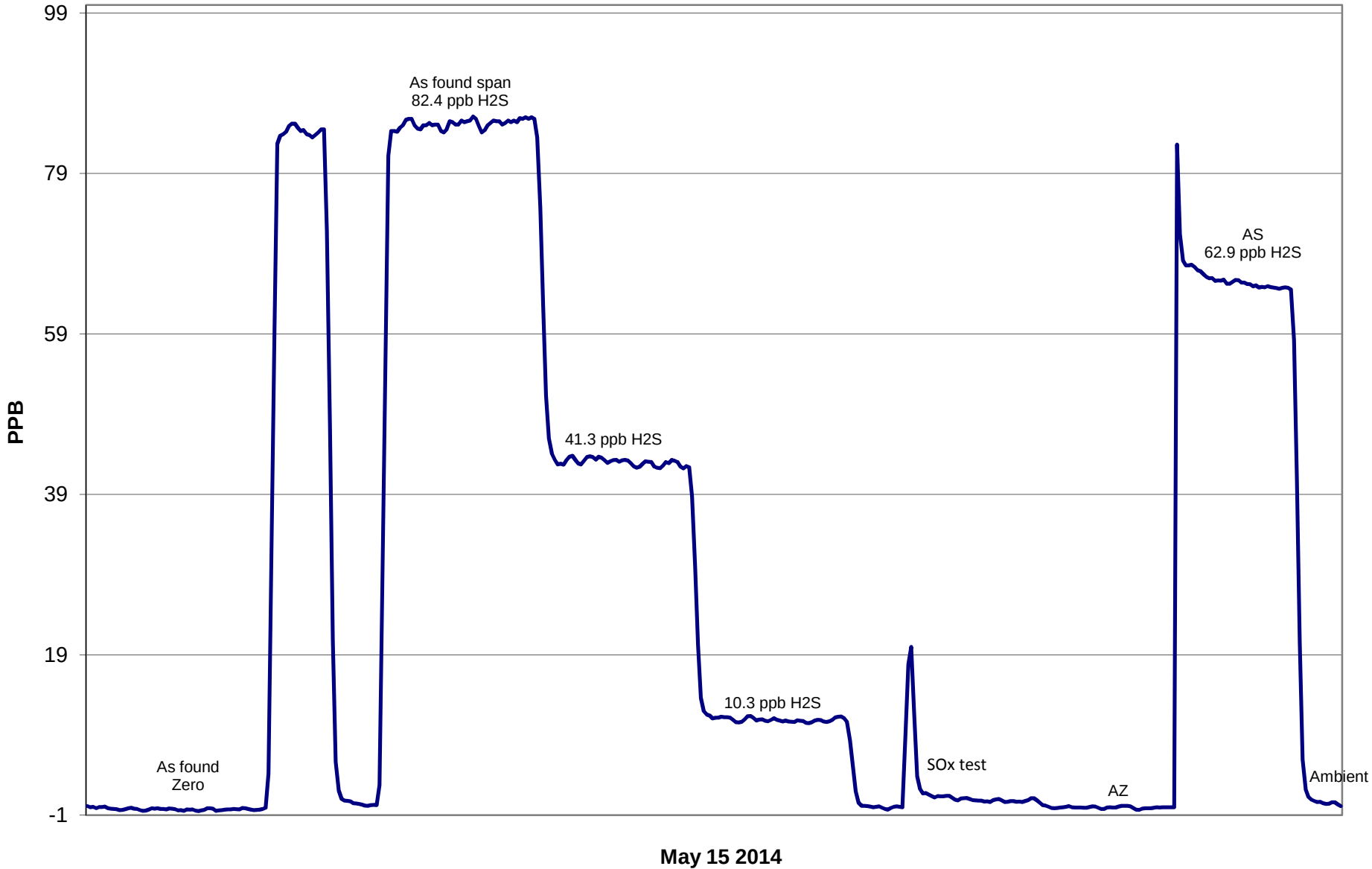
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A	Correlation Coefficient	0.999985
82.4	85.4	0.9650		
41.3	42.8	0.9647		
10.3	10.8	0.9569	Slope	0.963324
			Intercept	0.103512

H2S Calibration Curve



10.4 ppb H2S

H2S Calibration



Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	May 22, 2014	Previous Calibration	April 23, 2014
Station Number	10	Station Location	Reno
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	8:35	End Time (MST)	11:35
Barometric Pressure	0.921 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	01/03/2017
Gas Cert Reference	LL105159		
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	1.001764	Calculated slope	0.999064
Calculated intercept	1.341068	Calculated intercept	2.333932
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	20.6		21.2	
Coefficient	1.059		1.059	
UV Lamp Voltage	866	V	866	V
Chamber Temp	44.9	C	44.9	C
Perm Gas Temp	45	C	45	C
Pressure	664.3	mm Hg	672.3	mm Hg
Sample Flow	0.462	LPM	0.465	LPM
Lamp Intesity	30587	Hz	30614	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)
4995	0.00	0.0	0.0	N/A
4995	39.93	394.9	394.2	1.0018
4995	19.97	198.3	194.6	1.0189
4995	9.97	99.2	94.9	1.0450
4995	0.00	0.0	0.0	As found zero
4995	39.93	394.9	378.7	As found span
Average Correction Factor				1.0219

Calculated value of As Found Response: 380.714 ppm Percent Change of As Found: 3.6%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	259.1	ppm	241.2	ppm

Notes: Slight zero adjustment made

Calibration Performed By: Grover Christiansen,Dmytro Dolotii.

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



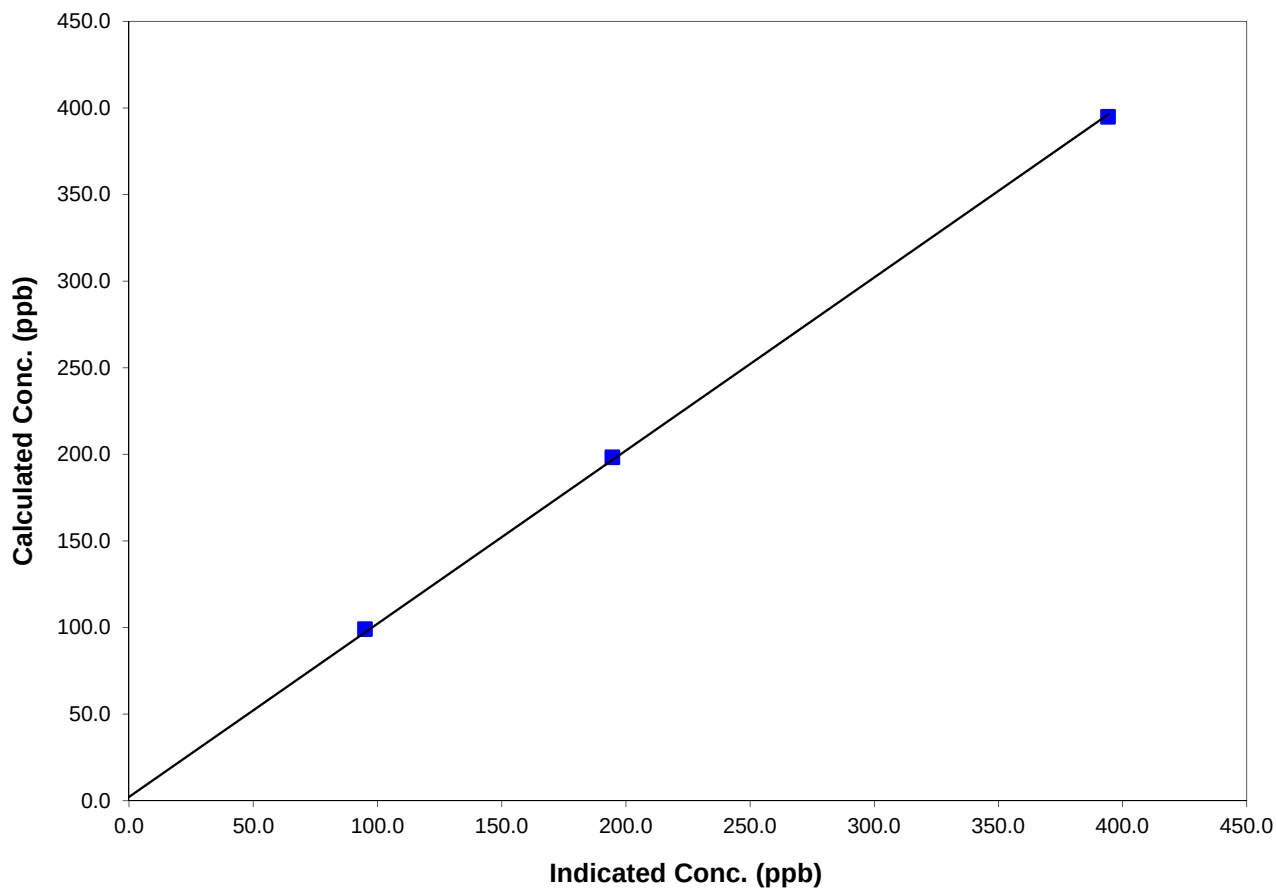
Station Information

Calibration Date	May 22, 2014	Previous Calibration	April 23, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	8:35	End Time (MST)	11:35
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

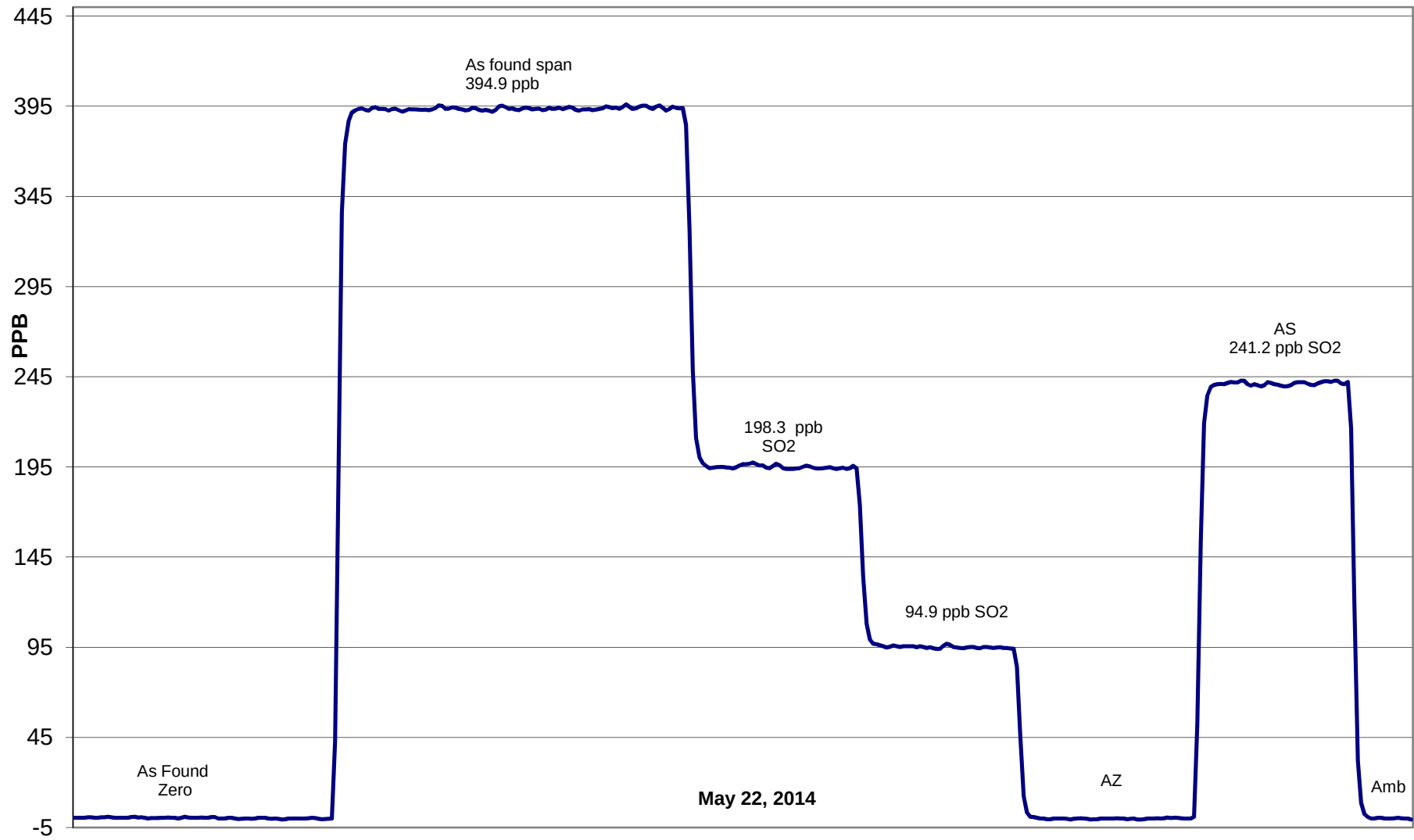
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999843
394.9	394.2	1.0018		
198.3	194.6	1.0189		
99.2	94.9	1.0450	Slope	0.999064
			Intercept	2.333932

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	May 22, 2014		Previous Calibration	April 23, 2014	
Station Number	10		Station Location	Reno	
Reason:	Routine	Install	Removal	Other:	
Start Time (MST)	8:26		End Time (MST)	14:00:00 PM	
Barometric Pressure	0.921	Atm	Station Temperature	20.0	Deg C
Calibrator	Envionics		Serial Number	3016	
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 12, 2014	
NOx Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make	CR3000		DACS serial No.	5407	
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Parameter		NO2	NOx	NO
Before	Data Slope	1.002900	0.994999	0.999479
	Data Offset	0.137784	1.242109	0.935344
After	Data Slope	1.002160	0.997785	0.998063
	Data Offset	0.218324	1.315684	1.004530
Channel #		5	3	4
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i		Analyzer serial #	0701120011	
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	6.0	mV	6.1	mV
NOx bkgnd	6.1	mV	6.3	mV
NO coefficient	1.053		1.077	
NOx coefficient	0.999		0.999	
NO2 conv temp	325.3	Deg C	323.7	Deg C
Cooler Temp	-2.8	Deg C	-2.9	Deg C
PMT Volt	845.8	mV	845.8	mV
R Cell Press	201.1	in Hg	200.4	in Hg
Sample Flow	0.710	ccm	0.710	ccm

NOTES:

Span adjustment made.

Using new cal gas tank, which caused a bit of separation (around 2ppb) between NOx and NO

Calibration Report

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



Station Information

Calibration Date: May 22, 2014 Station Location: Reno

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	4995	0.00	0.0	0.0	0.0	0.1	0.2	0.1	N/A	N/A
1	4995	39.93	415.6	413.2	2.4	415.8	413.5	0.6	0.9995	0.9993
2	4995	19.97	208.7	207.5	1.2	207.4	206.5	0.1	1.0063	1.0046
3	4995	9.97	104.4	103.8	0.6	101.7	101.7	0.2	1.0261	1.0209
AFZ	4995	0.00	0.0	0.0	0.0	0.1	0.2	0.1	0.0000	0.0000
AFS	4995	39.93	415.6	413.2	2.4	406.4	404.0	0.7	1.0225	1.0226
Average Correction Factor									1.0106	1.0083

As Found Concentrations: NO_x= 407.6 NO= 404.8 As Found Percent Change NO_x= -1.9% NO= -2.0%

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	0.2	0.2	0.0	0.1	0.2	0.1	N/A	N/A	N/A	N/A
NO point	415.0	415.0	0.0	416.5	415.0	-0.3	0.9965	1.0000	N/A	N/A
300	415.0	108.1	307.0	416.3	108.1	306.3	0.9969	1.0000	1.0021	99.8%
200	415.0	208.4	206.7	416.4	208.4	205.8	0.9968	1.0000	1.0040	99.6%
100	415.0	307.0	108.0	416.3	307.0	107.2	0.9971	1.0000	1.0074	99.3%
Average Correction Factor							0.9969	1.0000	1.0045	99.6%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.8	0.9	0.0	ppb	0.2	0.1	0.3	ppb
Auto span	166.3	164.3	1.4	ppb	169.2	167.2	1.3	ppb

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



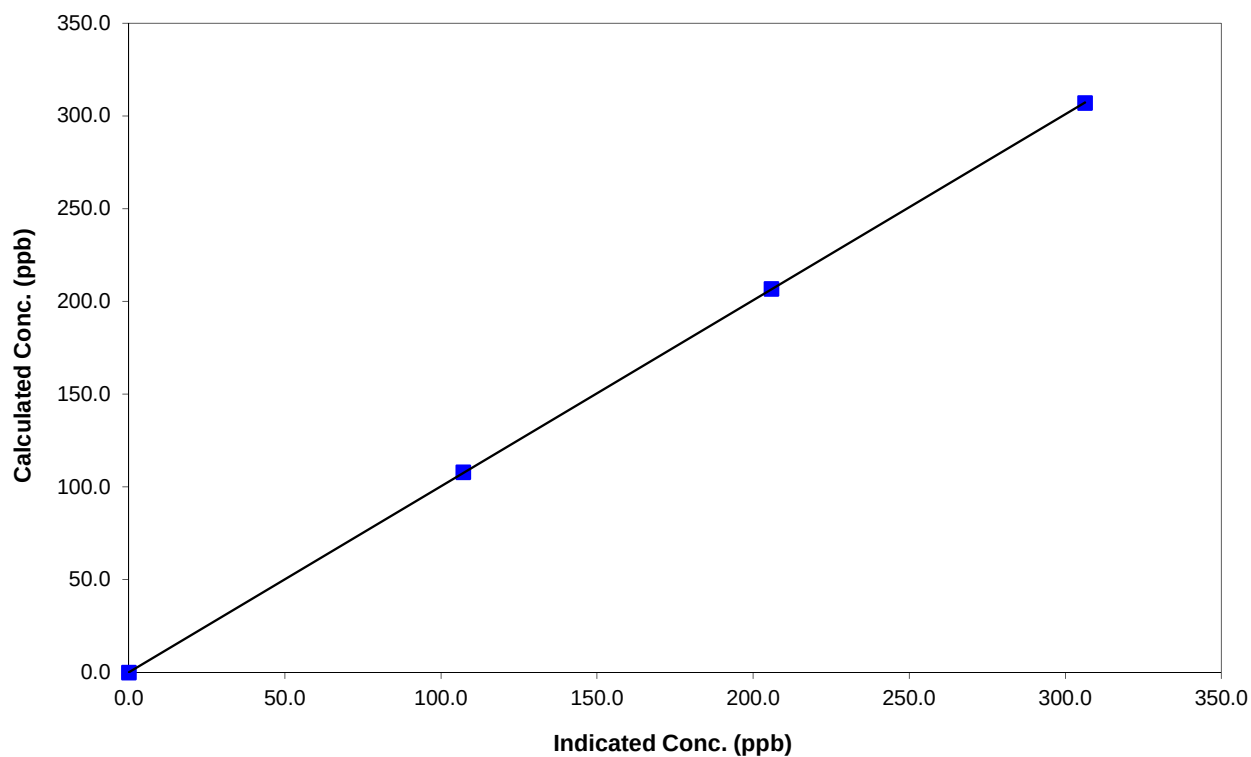
Station Information

Calibration Date	May 22, 2014	Previous Calibration	April 23, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	8:26	End Time (MST)	14:00:00 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	0.1	N/A	Correlation Coefficient	0.999995
307.0	306.3	1.0021		
206.7	205.8	1.0040		
108.0	107.2	1.0074	Slope	1.002160
			Intercept	0.218324

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



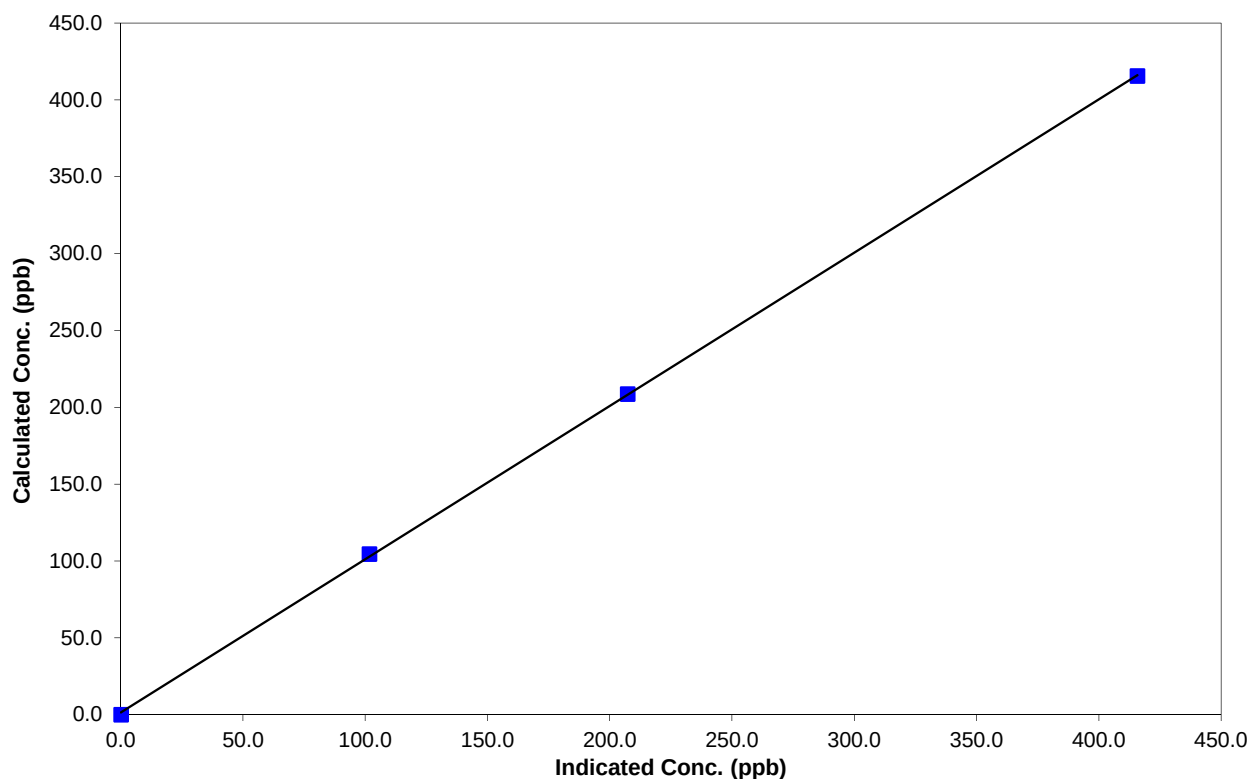
Station Information

Calibration Date	May 22, 2014	Previous Calibration	April 23, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	8:26	End Time (MST)	14:00:00 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	0.1	N/A	Correlation Coefficient	0.999947
415.6	415.8	0.9995		
208.7	207.4	1.0063		
104.4	101.7	1.0261	Slope	0.997785
			Intercept	1.315684

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



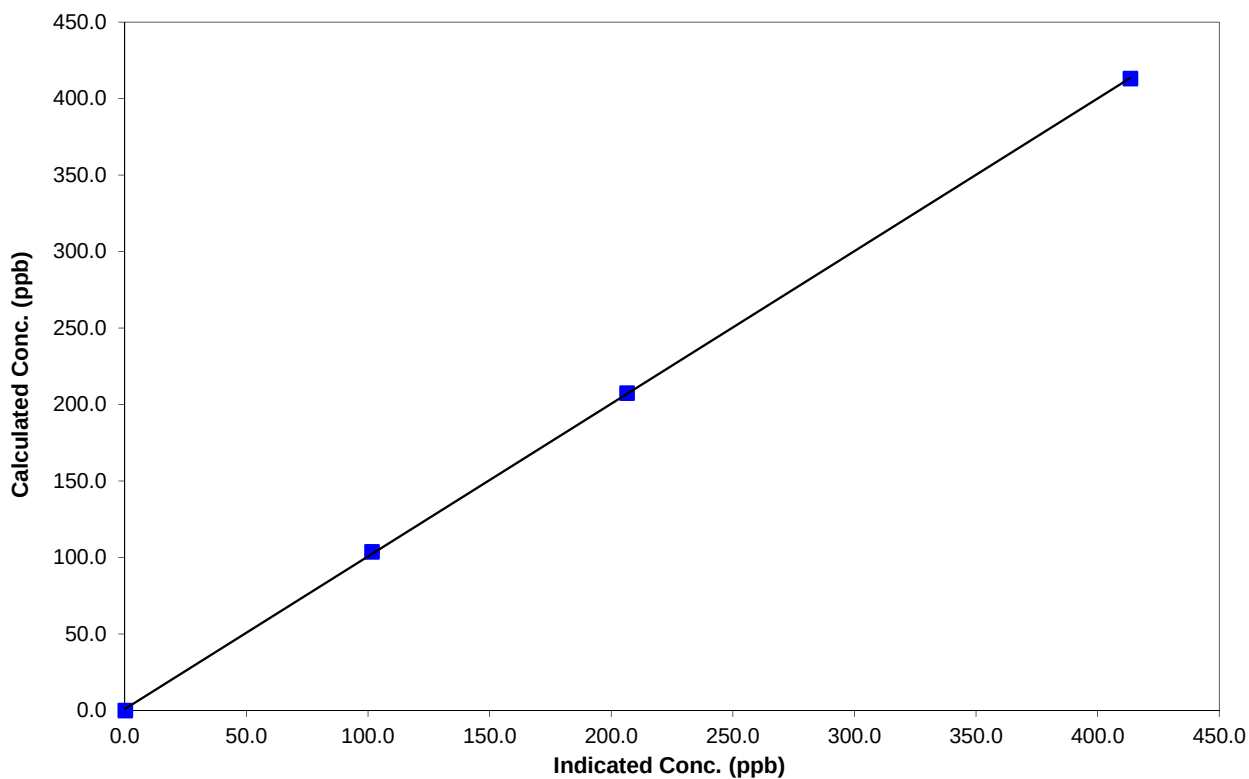
Station Information

Calibration Date	May 22, 2014	Previous Calibration	April 23, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	8:26	End Time (MST)	14:00:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

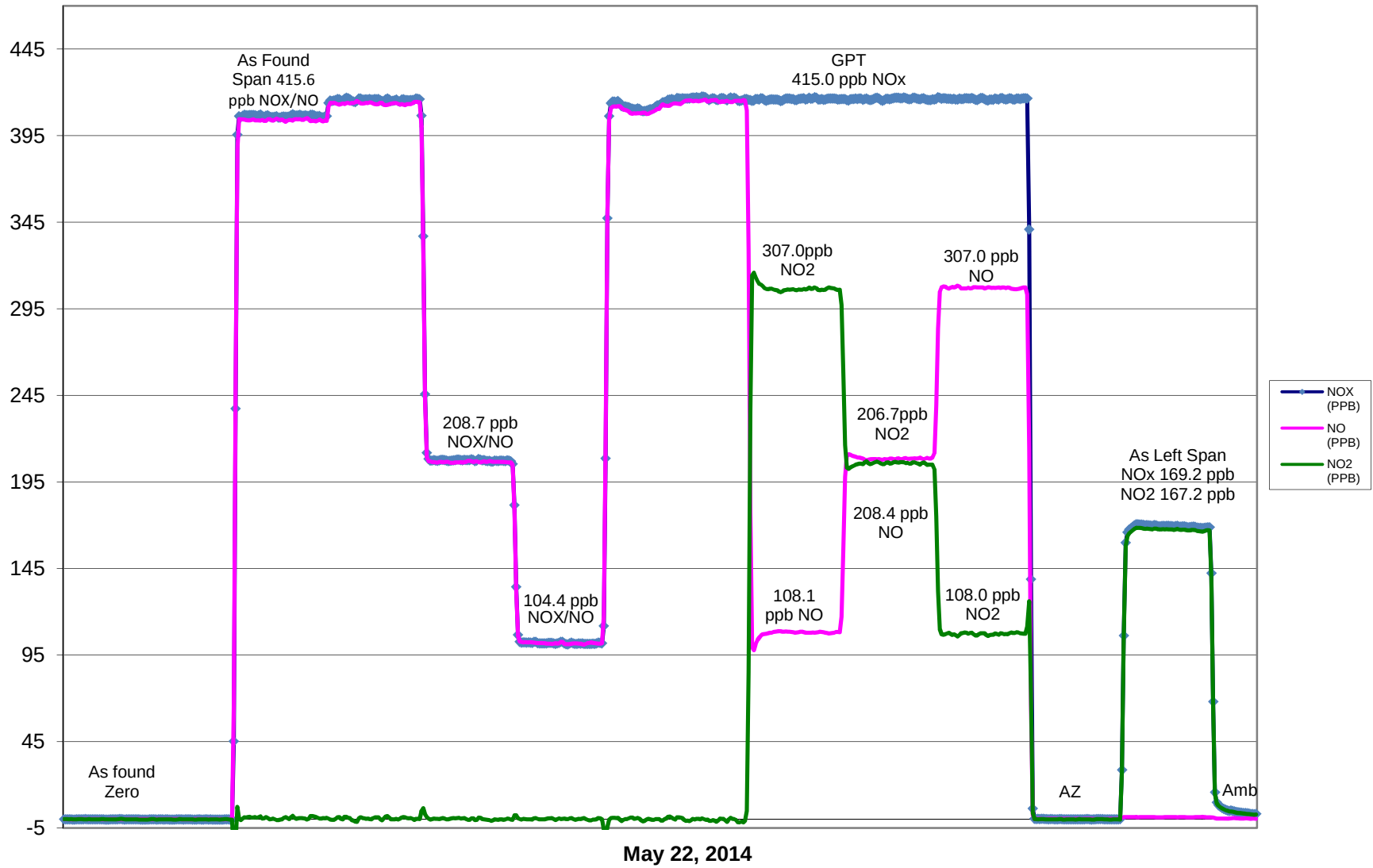
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999963
413.2	413.5	0.9993		
207.5	206.5	1.0046		
103.8	101.7	1.0209	Slope	0.998063
			Intercept	1.004530

NO Calibration Curve



PAZA Reno NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	May 22 2014	Previous Calibration	April 22 2014
Station Number	10	Station Location	Reno
Reason:	Routine	☐ Install	☐ Removal remove
		☐ Other:	
Start Time (MST)	12:50	End Time (MST)	16:15:00 PM
Barometric Pressure	0.921 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	0.996852	Calculated slope	1.008064
Calculated intercept	0.745468	Calculated intercept	1.121873
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	0.988		1.007	
Cell A intensity	104857	Hz	104820	Hz
Cell B intensity	101360	Hz	101322	Hz
Pressure	662.0	in Hg	667.40	in Hg
CellA Flow	0.697	ccm	0.702	ccm
Cell B Flow	0.692	cmm	0.696	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)
5035	0.00	0.0	0.1	N/A
5035	0.30	307.0	305.0	1.0066
5035	0.20	206.7	202.0	1.0231
5035	0.10	108.0	105.2	1.0266
5035	0.00	0.0	0.1	As found zero
5035	0.30	307.0	300.5	As found span
Average Correction Factor				1.0188

Calculated value of As Found Response: 300.2 ppm Percent Change of As Found: -2.2%

	before calibration		after calibration	
Auto zero	-0.1	ppb	1.2	ppb
Auto span	403.2	ppb	430.9	ppb

Notes: Span adjustment made.

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



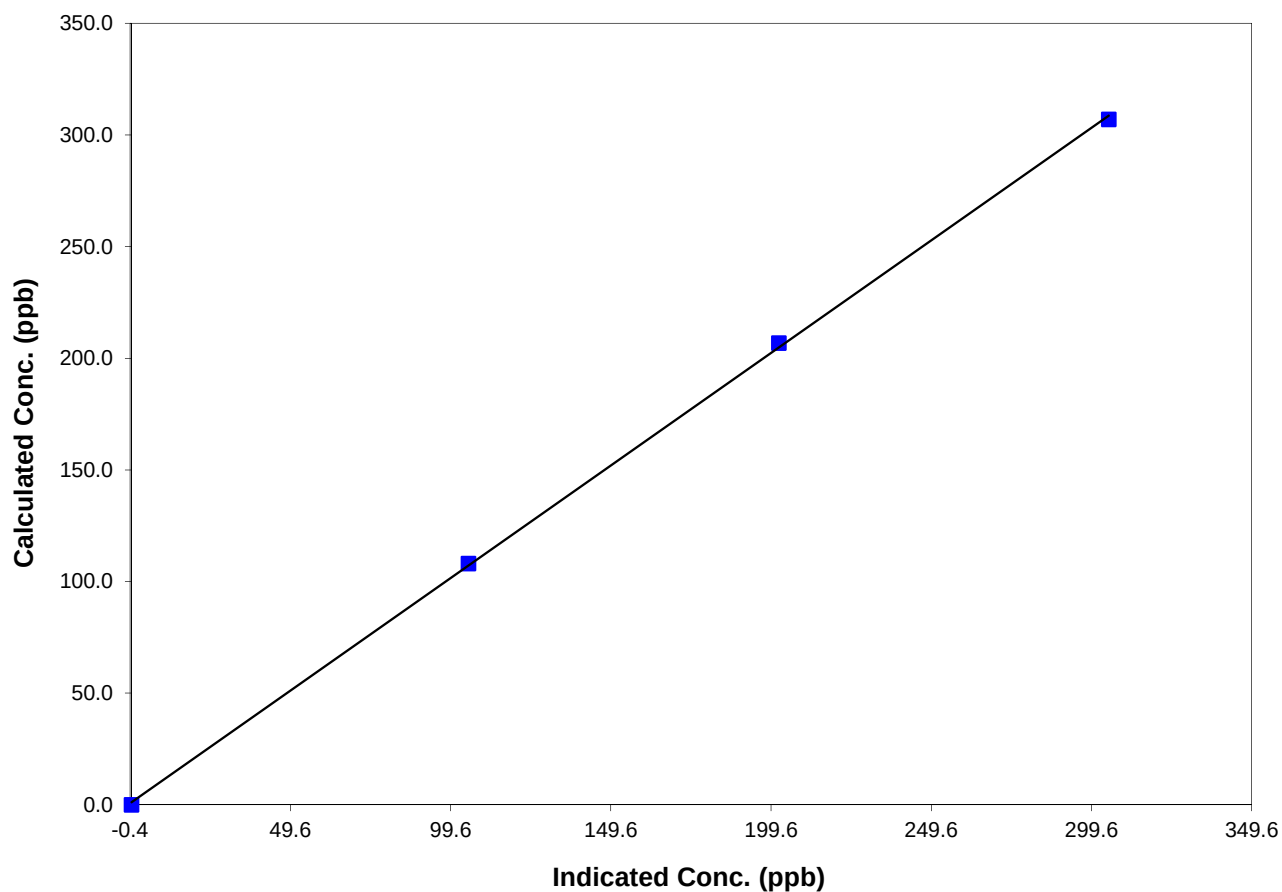
Station Information

Calibration Date	May 22 2014	Previous Calibration	April 22 2014
Station Number	10	Station Location	Reno
Start Time (MST)	12:50	End Time (MST)	16:15:00 PM
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

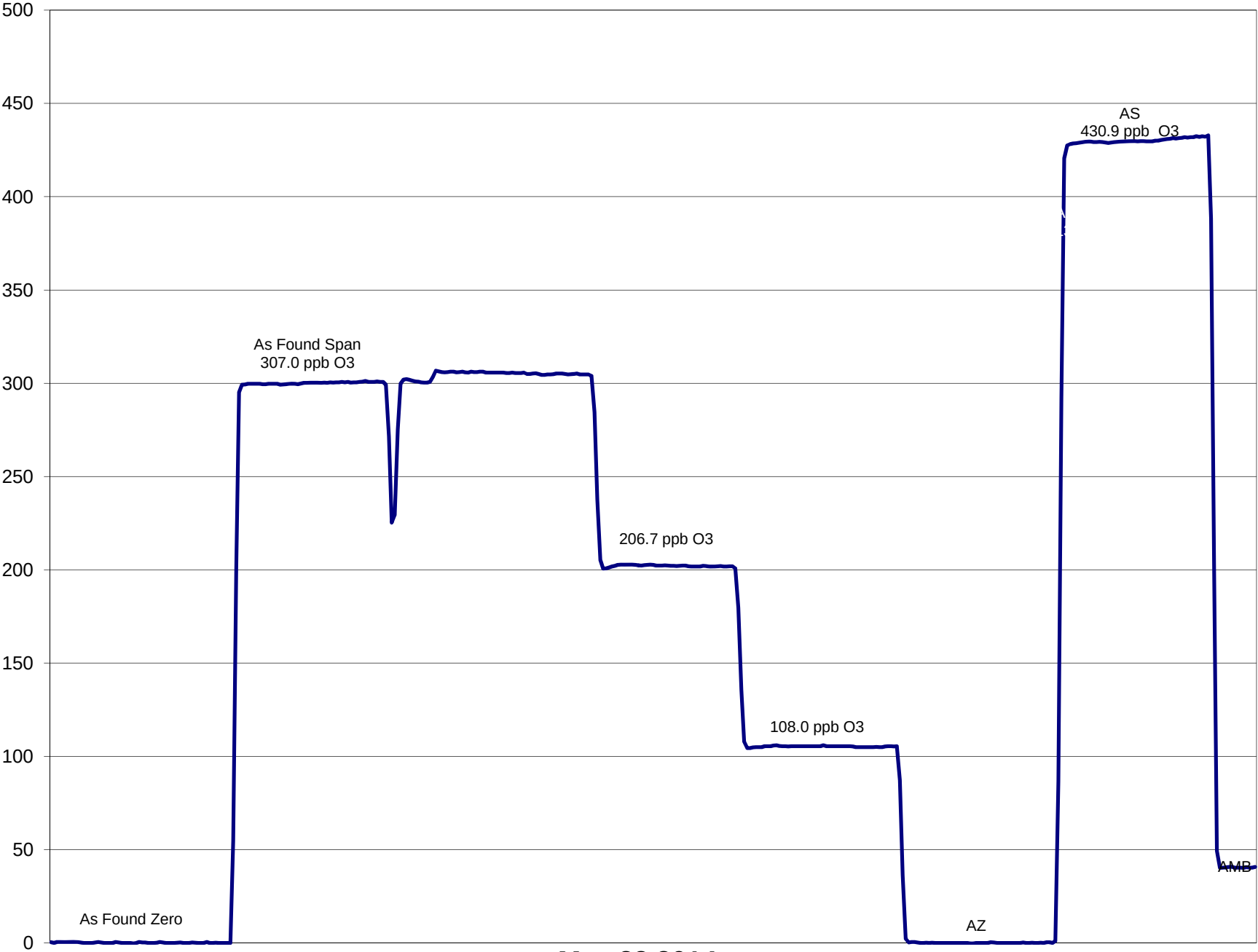
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA	Correlation Coefficient	0.999841
307.0	305.0	1.0066		
206.7	202.0	1.0231		
108.0	105.2	1.0266	Slope	1.008064
			Intercept	1.121873

O3 Calibration Curve



O3 (PPB)



Calibration Report

Parameter TR5

Air Monitoring Network PAZA



Station Information

Calibration Date	May 22 2014	Previous Calibration	April 22 2014
Station Name	PAZA Rover	Station Location	Reno
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	14:45:00 PM	End Time (MST)	16:30:00 PM
Barometric Pressure	0.923 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.44 ppm	Cal Gas Expiry Date	July/08/2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	1
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.004377	Calculated slope	0.983216
Calculated intercept	-0.015737	Calculated intercept	-0.170628

Analyzer make	TEI 43C	Analyzer serial #	609716238
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	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	16.5	ppb	15.9	ppb
Coefficient	1.015		0.935	
Lamp Voltage	800	V	804	V
Chamber Temp	43.8	C	43.9	C
Perm gas Temp	45	C	45	C
Pressure	653.7	mmHg	655.1	mmHg
Sample Flow	0.442	lpm	0.442	lpm
Lamp Intensity	39272	Hz	42151	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)
4995	0.0	0.0	0.1	N/A
4995	39.93	82.8	84.5	0.9801
4995	19.97	41.6	42.2	0.9844
8995	8.97	10.4	10.9	0.9523
4995	9.97			Sox Test
4995	0.00	0.0	0.1	As found zero
4995	39.93	82.8	89.5	As found span
Average Correction Factor				0.9723

Calculated value of As Found Response: 89.76 ppm Percent Change of As Found: -8.4%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.2	ppm
Auto span	65.4	ppm	64.3	ppm

Notes: Intensity is moving around from 39737 HZ to 44051 HZ,so as lamp voltage from +/-5V.
 New lamp and socket will be ordered.
 Span adjustment made.
 Scrubber check was performed on the previous calibration.Due to the lamp and socket issues wasn't done this time. Will do it after the new parts instalation.

Calibration Performed By: Grover Christiansen,Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



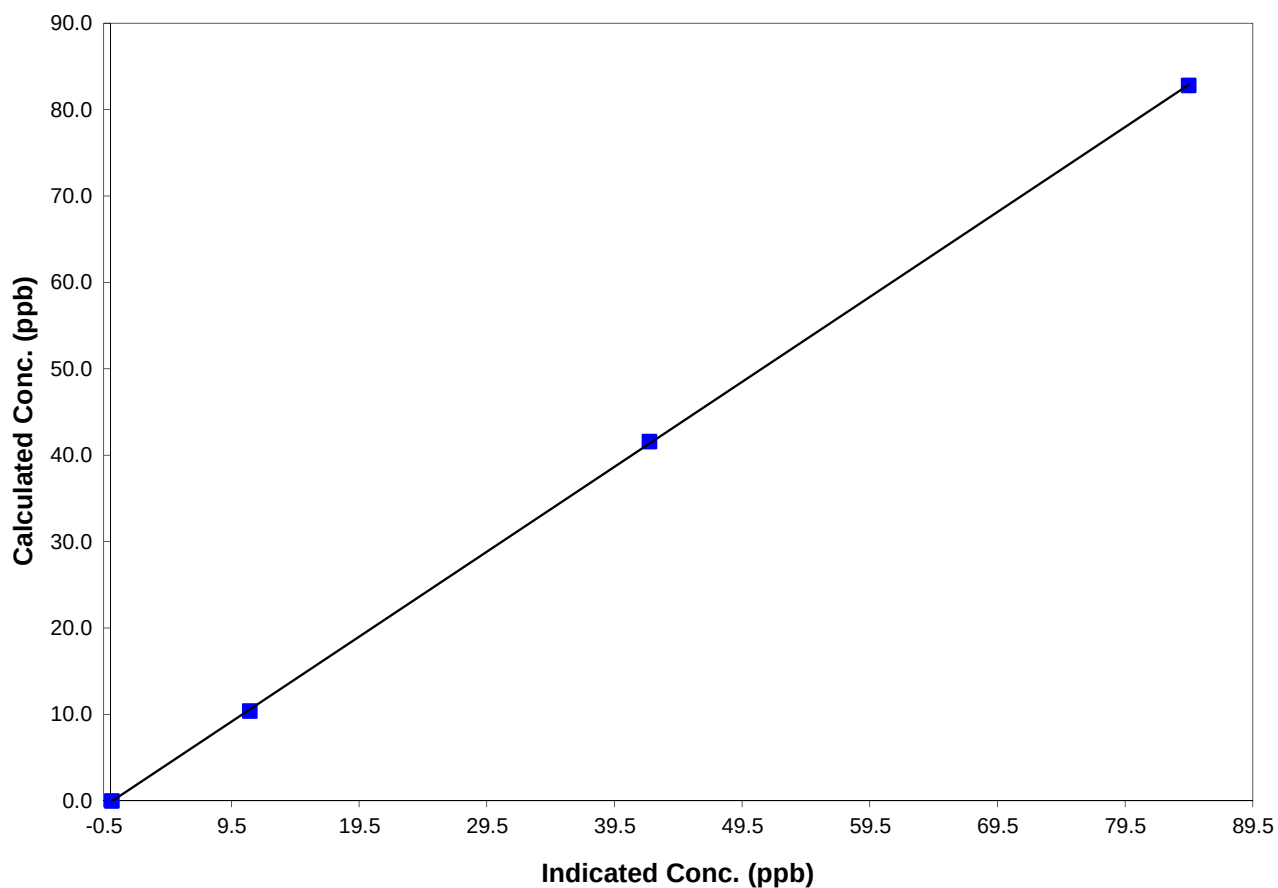
Station Information

Calibration Date	May 22 2014	Previous Calibration	April 22 2014
Station Number	PAZA Rover	Station Location	Reno
Start Time (MST)	14:45:00 PM	End Time (MST)	16:30:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

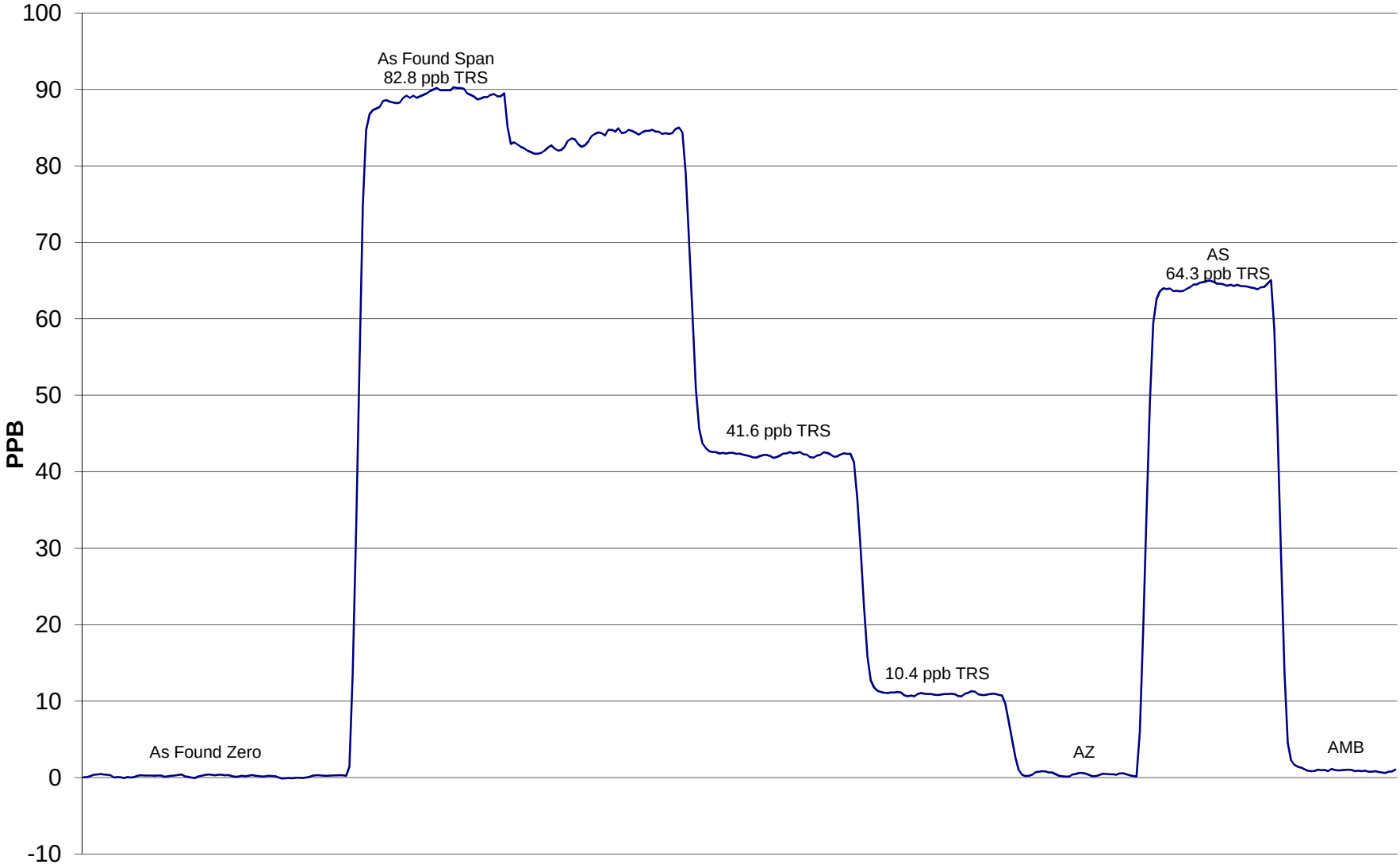
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999979
82.8	84.5	0.9801		
41.6	42.2	0.9844		
10.4	10.9	0.9523	Slope	0.983216
			Intercept	-0.170628

TRS Calibration Curve



TRS Calibration



May 22 2014

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	May 21, 2014	Previous Calibration	April 22, 2014
Station Number	1	Station Location	Falher
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	13:05:00 PM	End Time (MST)	
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	01/02/2017
Correction factor	0.031647	Cal Gas Cylinder #	LL105159
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	1.004921	Calculated slope	0.953558
Calculated intercept	1.366471	Calculated intercept	2.155036
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.1		7.1	
coefficient	0.892		0.890	
Lamp Voltage	852	volts	853	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	676.1	mm Hg	675.5	mm Hg
Sample Flow	0.413	ccm	0.409	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)
4995	0.0	0.00	0.2	N/A
4995	39.93	394.9	413.1	0.9560
4995	19.96	198.2	204.3	0.9702
4995	9.97	99.2	99.4	0.9978
4995	0.0	0.0	0.2	As Found Zero
4995	39.93	394.9	394.3	As Found Span
Average Correction Factor				0.9747

Calculated value of As Found Response: 397.368 ppm Percent Change of As Found: -0.6%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.5	ppm
Auto span	359.4	ppm	366.8	ppm

Notes: PMT adjustment ,made
In the calibration the wrong Cal Gas Concentration=52.1 ppm instead of 49.8 ppm was used.
Analyzer adjustment will be done in the next month

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



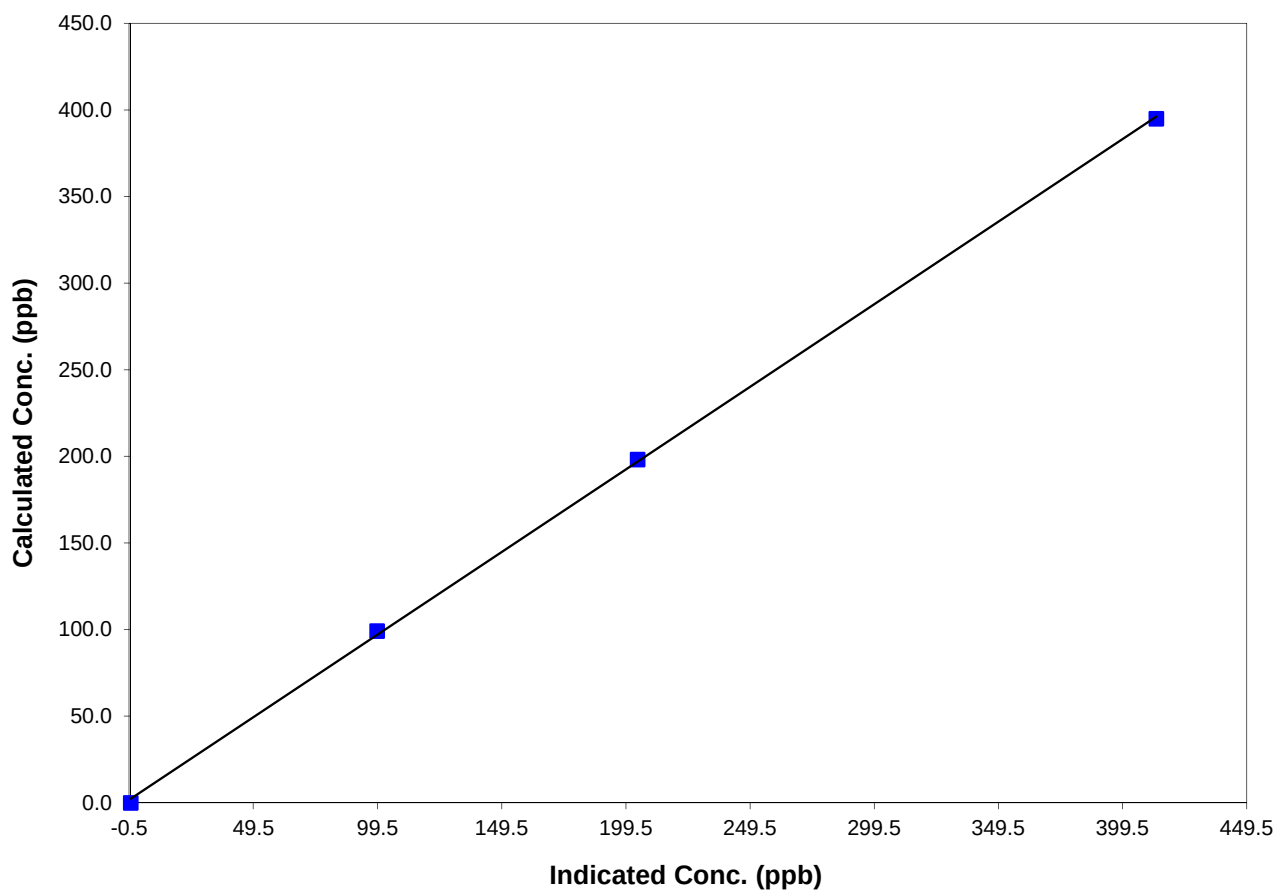
Station Information

Calibration Date	May 21, 2014	Previous Calibration	April 22, 2014
Station Number	1	Station Location	Falher
Start Time (MST)	13:05:00 PM	End Time (MST)	0:00
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

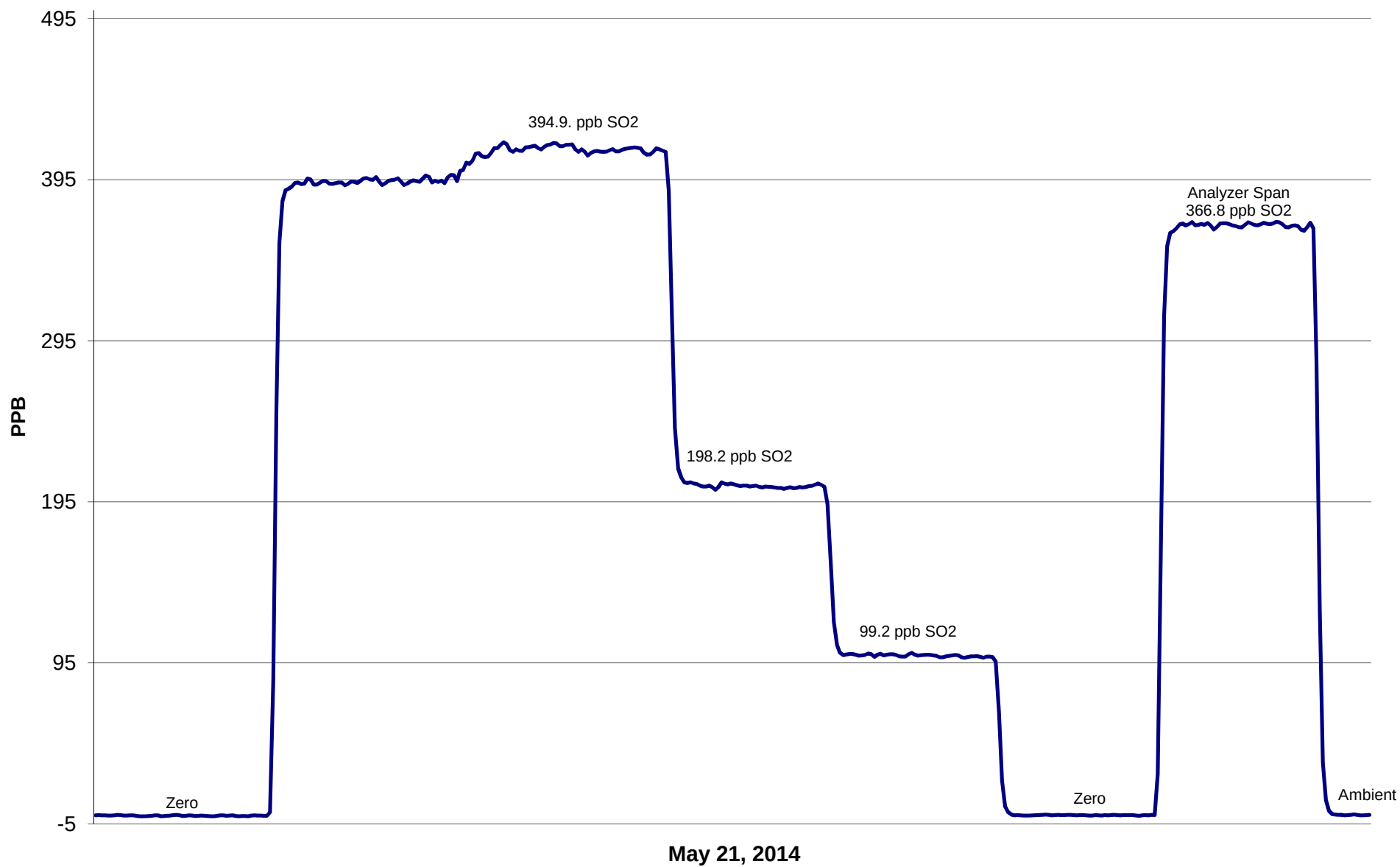
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999843
394.9	413.1	0.9560		
198.2	204.3	0.9702		
99.2	99.4	0.9978	Slope	0.953558
			Intercept	2.155036

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PAZA

Station Information

Calibration Date	May 21, 2014	Previous Calibration	April 22, 2014
Station Number	1	Station Location	Falher
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	10:15	End Time (MST)	14:07:00 PM
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031647	Cal Gas Cylinder #	LL110781
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.972893	Calculated slope	1.004667
Calculated intercept	-0.629605	Calculated intercept	-0.296249
Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	13.5	ppb	12.9	ppb
coefficient	1.169		1.112	
Lamp Voltage	802	volts	804	volts
Chamber Temp	44.9	Deg C	45	Deg C
Perm Gas Temp	45.01	Deg C	45.1	Deg C
Pressure	566.1	mm Hg	567	mm Hg
Sample Flow	0.901	lpm	0.894	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)
4995	0.00	0.00	0.8	N/A
4995	39.93	82.48	82.7	0.9972
4995	19.96	41.39	40.9	1.0123
8994	8.97	10.36	10.4	0.9979
4995	0.00	0.00	0.8	As Found Zero
4995	39.93	82.48	85.8	As Found Span
Average Correction Factor				1.0025

Calculated value of As Found Response: 82.10 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.5	ppm
Auto span	51.2	ppm	53.7	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



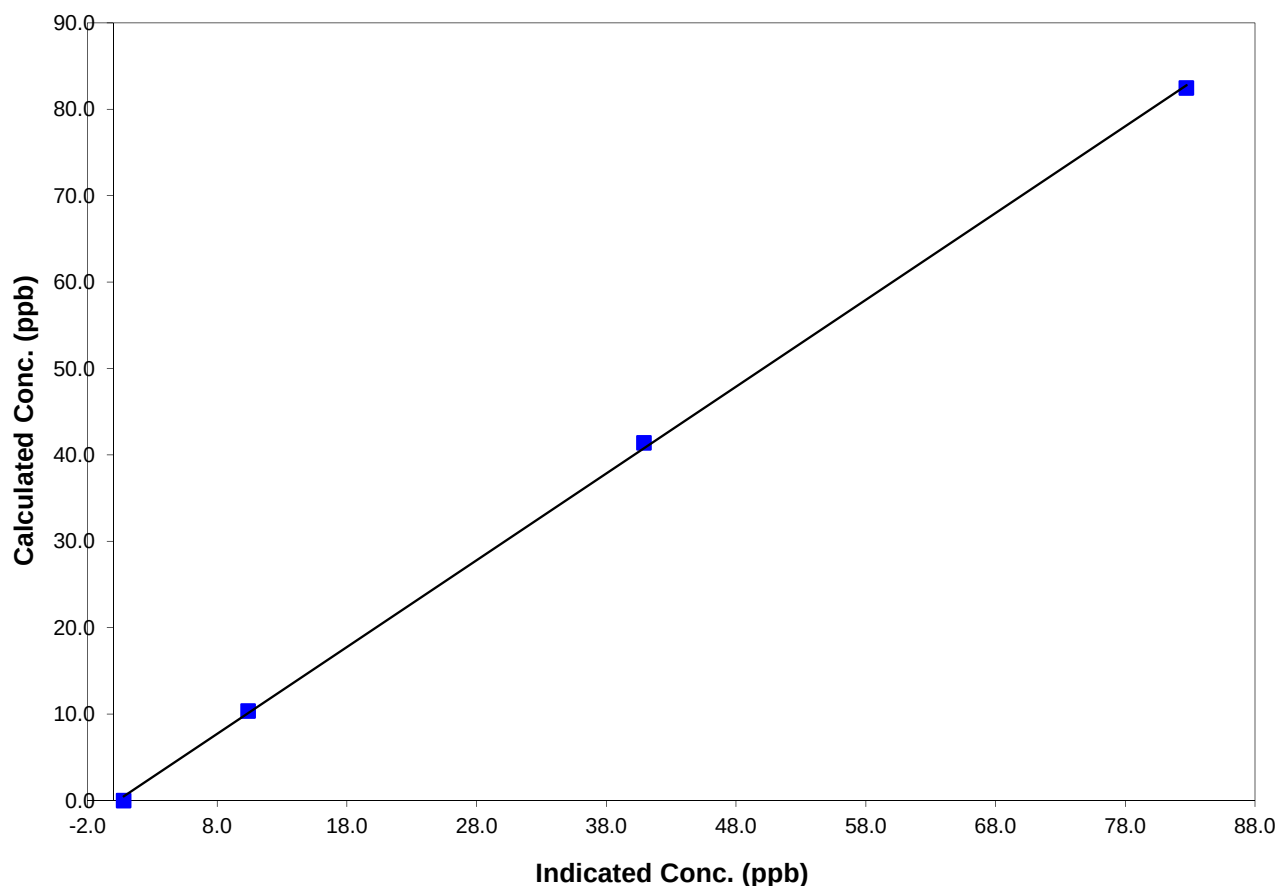
Station Information

Calibration Date	May 21, 2014	Previous Calibration	April 22, 2014
Station Number	1	Station Location	Falher
Start Time (MST)	10:15	End Time (MST)	14:07:00 PM
Analyzer make/model	Thermo 450i	Analyzer serial #	1207452006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	N/A	Correlation Coefficient	0.999809
82.5	82.7	0.9972		
41.4	40.9	1.0123		
10.4	10.4	0.9979	Slope	1.004667
			Intercept	-0.296249

TRS Calibration Curve



H2S Calibration

