Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
February 2015

Peace Airshed Zone Association
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March 31st, 2015

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

RE: Peace Airshed Zone Association (PAZA) – February 2015 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **February 2015**.

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

Company	Facility	LSD	EPEA Approval Number
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	262479-00-00
Alberta Power (2000) Ltd. (an ATCO company)	Sturgeon	SW-06-069-21-W5	10283-02-02
ATCO Power Canada	Poplar Hill	11-19-073-08-W6	67774-01-01
ATCO Power Canada	Valleyview	SW-06-069-21-W5	147709-01-01
AltaGas Ltd.	Pouce Coupe	03-03-081-13-W6	247673-00-00
	Ante Creek	02-26-068-25-W5	266694-00-00
	Gordondale	16-31-78-11-W6M	287474-00-00
Apache Canada Ltd.	House Mountain	01-08-070-10-W5	10137-02-02
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	252529-00-00
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	00000029-01-00
	Progress/Gordondale	01-01-077-10-W6	00010036-02-00
	Gold Creek	13-26-067-05-W6	00010446-02-00

Company	Facility	LSD	EPEA Approval Number
	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	152645-01-00
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00
Devon Canada	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00
	North Normanville	03-36-079-23-W5	00047455-01-00
	West Culp	05-34-078-25-W6	00136284-00-00
	Cecil	08-15-084-08-W6	00010032-02-00
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	1464-02-03
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-Clairmont.**

During the month of **February** 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 February with the exception of the wind head, which experienced icing.

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 February.

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 February.

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 February.

Valleyview Station:

- The measured ambient air quality was within the AAAQO for the Valleyview station with the exception of the H_2S analyzer, which recorded (1) 1-hour exceedence of the guideline of 10 ppb;
  - o February 2 1900h 14.1 ppb Alberta Environment Reference # 294517
- All analyzers and sensors at the Valleyview station had an operational uptime greater than 90% for the month of February.

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 February.

Clairmont Station:

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

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of February: Steeprock Creek, Eaglesham, Wapiti, Clouston Creek and Girouxville 4. 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 SO_2 passives ranged from 0.1 ppb to 0.8 ppb, with a mean of 0.4 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.3 ppb to 8.7 ppb, with a mean of 1.3 ppb.
- Monthly average concentrations for O_3 passives ranged from 15.5 ppb to 49.2 ppb, with a mean of 39.0 ppb.
- Monthly average concentrations for H_2S ranged from 0.1 ppb to 0.3 ppb, with a mean of 0.2 pbb.

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

On Behalf of the
Peace Airshed Zone Association

Patrick Andersen, B.Sc.
Program Manager

Location of PAZA Continuous Monitoring Stations

PAZA Monthly Continuous Data Summary

Feb-2014	Peace Airshed Zone Assocation						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	0.5	0	0	4.9	Feb-20 03:00	1.8	Feb-12	99%
SO_2 (ppb)	172	48	Evergreen Park	0.4	0	0	10.4	Feb-22 14:00	1.1	Feb-11	100%
SO_2 (ppb)	172	48	Smoky Heights	0.9	0	0	11.4	Feb-14 22:00	2.7	Feb-12	100%
SO_2 (ppb)	172	48	Beaverlodge	0.7	0	0	14.2	Feb-10 16:00	2.6	Feb-10	100%
SO_2 (ppb)	172	48	Valleyview	0.4	0	0	8.3	Feb-19 09:00	1.4	Feb-19	100%
SO_2 (ppb)	172	48	Falher	0.3	0	0	2.6	Feb-10 08:00	0.8	Feb-26	100%
SO_2 (ppb)	172	48	Clairmont	0.8	0	0	5.5	Feb-20 06:00	1.9	Feb-12	100%
NO (ppb)			Henry Pirker	9.8	0	0	168.6	Feb-04 15:00	70.5	Feb-12	99%
NO_2 (ppb)	159	106	Henry Pirker	14.1	0	0	71.7	Feb-04 15:00	36.7	Feb-04	99%
NO_X (ppb)			Henry Pirker	24.0	0	0	242.2	Feb-04 15:00	104.9	Feb-12	99%
NO (ppb)			Beaverlodge	0.9	0	0	25.1	Feb-13 13:00	3.9	Feb-13	100%
NO_2 (ppb)	159	106	Beaverlodge	4.5	0	0	34.9	Feb-04 20:00	11.9	Feb-17	100%
NO_X (ppb)			Beaverlodge	5.5	0	0	42.6	Feb-04 20:00	14.1	Feb-17	100%
NO (ppb)			Clairmont	5.4	0	0	129.7	Feb-04 14:00	28.1	Feb-12	100%
NO_2 (ppb)	159	106	Clairmont	9.3	0	0	53.7	Feb-04 14:00	26.1	Feb-12	100%
NO_X (ppb)			Clairmont	14.9	0	0	184.6	Feb-04 14:00	54.7	Feb-12	100%
O_3 (ppb)	82		Henry Pirker	22.0	0	-	44.2	Feb-28 16:00	35.7	Feb-24	99%
O_3 (ppb) - 8-hr			Henry Pirker		0				41.1	Feb-28	
O_3 (ppb)	82		Beaverlodge	29.0	0	-	46.3	Feb-28 20:00	40.1	Feb-24	100%
O_3 (ppb) - 8-hr			Beaverlodge		0				44.7	Feb-28	
O_3 (ppb)	82		Clairmont	25.0	0	-	43.3	Feb-24 13:00	37.4	Feb-05	100%
O_3 (ppb) - 8-hr			Clairmont		0				39.7	Feb-05	
CO (ppm)	13		Henry Pirker	0.29	0	-	1.5	Feb-12 22:00	0.8	Feb-12	99%
CO (ppm) - 8-hr	5		Henry Pirker		0				1.3	Feb-13	

PAZA Monthly Continuous Data Summary – continued

Feb-2014	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
THC (ppm)			Henry Pirker	2.1	-	-	3.1	Feb-27 17:00	2.4	Feb-18	99%
CH_4 (ppm)			Henry Pirker	2.1	-	-	3.1	Feb-27 17:00	2.5	Feb-18	99%
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Feb-26 01:00	0.0	Feb-25	99%
THC (ppm)			Clairmont	2.41	-	-	3.7	Feb-04 05:00	3.0	Feb-03	90%
TRS (ppb)			Henry Pirker	0.3	-	-	1.5	Feb-13 03:00	0.6	Feb-12	99%
TRS (ppb)			Evergreen Park	0.5	-	-	2.7	Feb-04 16:00	1.1	Feb-04	100%
TRS (ppb)			Smoky Heights	0.1	-	-	0.5	Feb-18 20:00	0.3	Feb-04	100%
TRS (ppb)			Clairmont	0.5	-	-	7.7	Feb-17 08:00	1.5	Feb-17	100%
H_2S (ppb)	10	3	Valleyview	0.3	1	0	14.0	Feb-02 19:00	2.1	Feb-02	100%
H_2S (ppb)	10	3	Falher	0.1	0	0	0.6	Feb-12 10:00	0.4	Feb-12	100%
$PM_{2.5}$ (µg/m3)	80	30	Henry Pirker	6.5	0	0	59.4	Feb-15 21:00	20.5	Feb-12	99%
$PM_{2.5}$ (µg/m3)	80	30	Evergreen Park	3.7	0	0	32.6	Feb-04 15:00	12.3	Feb-18	99%
$PM_{2.5}$ (µg/m3)	80	30	Smoky Heights	3.6	0	0	33.6	Feb-13 00:00	99.0	Feb-12	100%
$PM_{2.5}$ (µg/m3)	80	30	Beaverlodge	4.0	0	0	21.6	Feb-17 10:00	11.2	Feb-17	92%
$PM_{2.5}$ (µg/m3)	80	30	Clairmont	3.7	0	0	29.0	Feb-04 13:00	13.2	Feb-04	100%
RH (%)			Henry Pirker	68.0	-	-	88.3	Feb-14 03:00	86.5	Feb-13	99%
RH (%)			Evergreen Park	73.6	-	-	95.6	Feb-13 10:00	94.6	Feb-13	100%
RH (%)			Beaverlodge	78.4	-	-	98.3	Feb-13 21:00	94.5	Feb-12	100%
RH (%)			Valleyview	72.2	-	-	100.0	Feb-13 08:00	98.0	Feb-13	100%
SR (W/m^2)			Henry Pirker	50.8	-	-	441.5	Feb-28 14:00	116.0	Feb-28	99%
Temp (°C)			Henry Pirker	-8.2	-	-	11.3	Feb-23 15:00	6.1	Feb-23	99%
Temp (°C)			Evergreen Park	-7.7	-	-	12.3	Feb-23 16:00	7.6	Feb-23	100%
Temp (°C)			Smoky Heights	-9.3	-	-	5.3	Feb-15 16:00	3.5	Feb-23	100%
Temp (°C)			Beaverlodge	-7.2	-	-	10.5	Feb-23 18:00	5.4	Feb-23	100%
Temp (°C)			Valleyview	-7.4	-	-	11.0	Feb-23 16:00	6.6	Feb-23	100%
Temp (°C)			Falher	-10.3	-	-	6.4	Feb-23 16:00	3.1	Feb-23	100%
Temp (°C)			Clairmont	-9.2	-	-	7.7	Feb-23 14:00	3.8	Feb-23	100%

PAZA Monthly Continuous Data Summary – continued

Feb-2014	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
WSPD s (km/hr)			Henry Pirker	6.9	-	-	23.0	Feb-24 18:00	12.5	Feb-24	59%
WSPD s (km/hr)			Evergreen Park	8.8	-	-	45.0	Feb-19 02:00	22.8	Feb-19	100%
WSPD s (km/hr)			Smoky Heights	11.4	-	-	33.0	Feb-24 07:00	20.2	Feb-05	100%
WSPD s (km/hr)			Beaverlodge	8.6	-	-	30.0	Feb-19 01:00	17.8	Feb-19	100%
WSPD s (km/hr)			Valleyview	5.2	-	-	25.0	Feb-24 19:00	10.9	Feb-24	100%
WSPD s (km/hr)			Falher	14.2	-	-	44.0	Feb-24 17:00	28.8	Feb-06	100%
WSPD s (km/hr)			Clairmont	8.2	-	-	37.0	Feb-05 14:00	27.1	Feb-05	96%
WSPD v (km/hr)			Henry Pirker	2.4	-	-	23.0	Feb-24 18:00	11.9	Feb-19	59%
WSPD v (km/hr)			Evergreen Park	2.0	-	-	44.0	Feb-19 02:00	22.0	Feb-19	100%
WSPD v (km/hr)			Smoky Heights	3.1	-	-	33.0	Feb-24 07:00	19.9	Feb-05	100%
WSPD v (km/hr)			Beaverlodge	1.5	-	-	30.0	Feb-19 01:00	16.6	Feb-19	100%
WSPD v (km/hr)			Valleyview	1.8	-	-	24.0	Feb-24 19:00	8.9	Feb-24	100%
WSPD v (km/hr)			Falher	4.2	-	-	44.0	Feb-24 17:00	28.6	Feb-06	100%
WSPD v (km/hr)			Clairmont	3.8	-	-	37.0	Feb-05 14:00	26.9	Feb-05	96%
WDIR			Henry Pirker	WNW	-	-	-	-	-	-	59%
WDIR			Evergreen Park	NNW	-	-	-	-	-	-	100%
WDIR			Smoky Heights	NW	-	-	-	-	-	-	100%
WDIR			Beaverlodge	NNE	-	-	-	-	-	-	100%
WDIR			Valleyview	NNW	-	-	-	-	-	-	100%
WDIR			Falher	WNW	-	-	-	-	-	-	100%
WDIR			Clairmont	NNE	-	-	-	-	-	-	96%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on February 2nd (SO_2, THC, TRS), 3rd (NO_X, O_3) and 17th (CO). Power outage on February 3rd and 16th.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
NOx/NO/NO_2	TEI	42C/42i	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
CO	TEI	48C	Span gas ran out February 3rd, ordered replacement had not arrived. Manual span checks performed with calibrator on February 4th, 6th and 9th to verify good operation. Gas replaced February 11th.
THC/CH_4/NMHC	TEI	55I	Loose connections to the logger invalidated data on February 3rd, 4th and 19th. Hydrogen cylinder replaced February 27th.
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	Wind head suffered freezing conditions and was out of order until replaced on February 12th.

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on February 4th (SO_2, TRS).

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	Manifold cleaning during calibration. Irregular behaviour invalidated data on February 28th.
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 February 5th (SO_2, TRS).

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	Manifold cleaned during calibration period.
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 February 12th (SO_2, O_3, NO_X).

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	Unstable operation throughout month. Pump changed February 12th, analyzer unstable for a day afterward.
ET	n/a	n/a	Probe changed February 12th.
RH	n/a	n/a	Probe changed February 12th.
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station			
General Station Issues Routine monthly calibrations were performed on February 24th (SO_2 & H_2S).			
Parameter	**Make**	**Model**	**Notes**
SO_2	TEI	43i	No operational issues observed.
H_2S	TEI	43A	One (1) 1-hour exceedance recorded **AE Reference #294517**
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 – Falher Station			
General Station Issues Routine monthly calibrations were performed on February 19th (SO_2 & H_2S).			
Parameter	**Make**	**Model**	**Notes**
SO_2	TEI	43i	No operational issues observed.
H_2S	Thermo	450i	No operational issues observed.
ET	Gill	RM Young 5103	No operational issues observed.
WS / WD	Gill	RM Young 5103	No operational issues observed.

PAZA – Portable-Clairmont			
General Station Issues			
Routine monthly calibrations were performed on February 10th (SO_2, NO_X, O_3) and 11th (THC, TRS).			
Parameter	**Make**	**Model**	**Notes**
SO_2	TEI	43i	No operational issues observed.
NO_x	TEI	42i	Span outputs rewired February 11th.
O_3	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	Analyzer running on bottled zero air until new zero air supply can be installed. Bottled air depleted before replacement on February 6th, 13th, 20th and 27th.
$PM_{2.5}$	R&P	1400AB	Irregular readings February 9th.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	Wind head freezing February 13th-14th.

PAZA
Henry Pirker Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.9 ppb on Feb 20 03:00 Maximum Daily Average: 1.8 ppb on Feb 12

Minimum Value: 0 ppb on Feb 2 07:00 Minimum Daily Average: 0.1 ppb on Feb 21
Maximum Diurnal Average: 0.7 ppb at hour 18 Minimum Diurnal Average: 0.3 ppb at hour 7
Monthly Average: 0.51 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.6$ $P_{90} = 1.2$ $P_{99} = 3.2$

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	30
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	1	1	1	0	0	1	2	2	A	1	1	0	1	1	1	2	0	0.7	2.0
2-Feb	1	1	1	2	0	0	0	0	0	1	0	0	0	C	C	1	1	1	1	1	1	0	0	0	0.6	1.6
3-Feb	0	1	0	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	P	0	0	0	0	0.6	1.0
4-Feb	0	0	0	1	1	1	0	0	0	1	1	1	A	2	2	1	1	1	1	1	1	1	1	0	0.8	1.9
5-Feb	0	0	0	0	0	0	0	0	0	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0.3	1.4
6-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0.4	0.8
8-Feb	1	1	1	0	0	0	0	0	A	1	1	1	0	1	0	0	0	0	1	0	0	0	0	1	0.5	1.0
9-Feb	1	2	0	0	0	0	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.8
10-Feb	1	1	1	1	0	0	A	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.4
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	1	3	3	2	1	1	1	1	0.8	3.5
12-Feb	2	2	2	1	A	1	1	1	1	1	1	2	2	5	4	3	2	2	1	1	1	1	1	1	1.8	4.7
13-Feb	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	1	0.4	2.9
14-Feb	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
15-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	0.8
16-Feb	A	0	0	P	P	P	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.7
17-Feb	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	2	2	2	1	A	1	0.8	3.3
18-Feb	1	0	0	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	A	0	0	1.1	2.3
19-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
20-Feb	0	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.5	4.9
21-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2
24-Feb	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-Feb	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.7
26-Feb	0	0	0	1	1	2	1	1	1	1	1	1	1	A	1	2	3	2	1	1	1	1	1	1	1.1	2.8
27-Feb	1	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	0.7
28-Feb	0	0	0	0	0	0	0	1	1	1	1	A	2	0	0	0	0	0	0	1	2	1	1	1	0.5	2.0
	0.5	0.6	0.6	0.6	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.4	Diurnal Average	
	1.9	2.9	4.9	3.4	1.5	1.5	1.3	1.3	1.4	1.8	2.3	2.1	3.3	4.7	4.5	2.8	2.8	3.5	2.7	1.7	1.7	2.9	2.0	1.3	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - February 2015

Maximum Value: 13.1 ppb on Feb 20 13:00

Maximum Daily Average: 2.9 ppb on Feb 20

Minimum Value: 0 ppb on Feb 21 10:00

Minimum Daily Average: 0.3 ppb on Feb 21

Maximum Diurnal Average: 1.8 ppb at hour 13

Minimum Diurnal Average: 0.7 ppb at hour 7

Monthly Average: 1.04 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 1.2$ $P_{90} = 2.0$ $P_{99} = 7.3$

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	30
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	A	2	1	1	2	1	2	3	1	1.2	2.9
2-Feb	3	2	2	2	1	0	0	0	0	1	1	0	0	C	C	1	1	1	1	2	1	1	1	1	1.1	2.9
3-Feb	1	1	1	1	1	1	1	1	1	2	1	1	1	A	1	2	1	1	1	P	0	0	0	1	1.0	1.9
4-Feb	1	1	1	1	1	1	1	1	2	1	2	2	A	2	2	2	1	1	1	1	1	1	1	1	1.3	2.4
5-Feb	0	0	0	0	0	0	1	0	1	2	2	A	1	2	1	0	0	0	0	0	0	0	0	0	0.7	2.0
6-Feb	0	0	0	1	0	0	0	1	0	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	0.8
7-Feb	0	0	0	0	0	1	1	1	1	A	1	0	0	1	1	1	1	1	0	1	0	0	1	1	0.7	1.5
8-Feb	1	2	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
9-Feb	1	3	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.7
10-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1.0	2.1
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	8	8	3	2	2	2	2	1.7	7.9
12-Feb	3	3	2	2	A	1	1	1	2	1	1	2	4	6	6	3	2	2	2	2	2	2	2	2	2.3	6.1
13-Feb	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	2	2	0.9	3.9
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0.6	1.5
15-Feb	1	A	0	0	1	0	0	0	0	1	1	1	0	1	1	1	2	2	1	1	1	1	1	1	0.6	2.1
16-Feb	A	1	1	P	P	P	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	0.7	1.1
17-Feb	1	1	1	1	1	0	1	1	1	1	1	1	9	1	1	1	4	4	3	2	2	1	A	1	1.6	9.0
18-Feb	1	1	1	1	1	2	1	2	2	3	3	3	2	2	2	2	2	2	1	2	1	A	1	1	1.6	2.8
19-Feb	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	3	3	3	A	3	5	4	1.4	5.0
20-Feb	6	6	8	9	6	3	1	2	1	2	1	3	13	1	1	0	1	0	1	A	1	1	1	1	2.9	13.1
21-Feb	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0	0.3	0.5
22-Feb	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	A	1	0	1	1	1	0	0.5	0.7
23-Feb	1	0	1	0	1	0	1	0	1	1	1	0	1	1	1	0	A	1	1	0	0	0	0	0	0.5	0.6
24-Feb	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	A	1	0	1	1	0	0	0	1	0.4	0.7
25-Feb	1	1	1	1	1	1	0	1	0	0	0	0	0	1	A	1	1	1	1	0	1	1	1	1	0.7	1.3
26-Feb	1	1	1	2	2	2	2	2	1	1	1	1	2	A	2	3	3	3	1	1	1	1	1	1	1.6	3.2
27-Feb	2	1	1	1	0	0	1	0	1	0	1	1	A	1	1	1	1	0	0	1	1	0	0	0	0.6	1.7
28-Feb	0	0	1	0	0	0	1	1	1	2	2	A	4	1	1	1	0	0	0	2	2	2	1	1	0.9	3.7
	1.1	1.1	1.0	1.1	0.9	0.8	0.7	0.8	0.8	1.0	0.9	0.9	1.8	1.1	1.1	1.1	1.2	1.4	1.1	1.0	1.0	1.0	1.0	1.0	Diurnal Average	
	6.2	6.2	7.9	8.6	5.5	3.5	1.8	2.2	2.1	2.5	2.8	2.8	13.1	6.1	5.8	3.3	4.0	7.9	7.6	2.7	3.9	3.9	5.0	4.0	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - February 2015

Pollutant Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 1.5 ppb on Feb 13 03:00

Maximum Daily Average: 0.6 ppb on Feb 12

Minimum Value: 0 ppb on Feb 2 04:00

Minimum Daily Average: 0.1 ppb on Feb 19

Maximum Diurnal Average: 0.3 ppb at hour 2

Minimum Diurnal Average: 0.2 ppb at hour 13

Monthly Average: 0.27 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.5$ $P_{99} = 1.0$

Hours in Service:	672
Hours of Data:	635
Hours of Missing Data:	37
Hours of Calibration:	33
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.5
2-Feb	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	1	0	1	1	1	1	1	1	1	0.3	0.6
3-Feb	1	1	0	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0	1	P	0	0	0	0	0.5	0.7
4-Feb	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0.4	1.0
5-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Feb	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	0.4
8-Feb	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-Feb	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-Feb	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	0.2
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Feb	0	0	0	0	A	0	0	0	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	0.6	0.9
13-Feb	1	1	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	1.5
14-Feb	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
15-Feb	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-Feb	A	1	0	P	P	P	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
17-Feb	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1	0.3	0.6
18-Feb	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	A	0	0	0.4	0.6
19-Feb	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	0.2
20-Feb	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	0.3
21-Feb	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	0.3
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.4
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Feb	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
28-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	1.2	1.5	1.5	0.5	1.1	0.6	0.6	0.7	0.7	0.7	0.6	0.8	0.5	1.0	1.0	0.7	0.7	0.9	0.7	0.8	0.8	0.7	0.7	0.9	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

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2015

Maximum Value: 2.4 ppb on Feb 13 03:00

Maximum Daily Average: 1.2 ppb on Feb 13

Minimum Value: 0 ppb on Feb 2 04:00

Minimum Daily Average: 0.5 ppb on Feb 24

Maximum Diurnal Average: 0.8 ppb at hour 2

Minimum Diurnal Average: 0.7 ppb at hour 13

Monthly Average: 0.72 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 1.0$ $P_{99} = 1.3$

Hours in Service:	672
Hours of Data:	635
Hours of Missing Data:	37
Hours of Calibration:	33
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0.8	1.1
2-Feb	0	0	0	0	1	0	1	1	1	1	C	C	C	C	C	1	1	1	1	1	1	1	1	1	0.7	1.2
3-Feb	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	P	1	1	1	1	1.0	1.7
4-Feb	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	1.5
5-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
7-Feb	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	1.0
8-Feb	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-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
10-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
12-Feb	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-Feb	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.4
14-Feb	1	1	A	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
15-Feb	1	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
16-Feb	A	1	1	P	P	P	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	A	0.7	1.0
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	0.8	1.1
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.2
19-Feb	0	1	1	1	1	1	1	0	0	0	1	1	0	1	0	0	1	1	0	1	A	1	1	1	0.6	0.8
20-Feb	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.8
21-Feb	1	1	1	1	1	0	1	0	0	1	1	0	0	1	1	1	0	1	A	1	1	0	1	1	0.6	0.9
22-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.0
23-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	0	0	1	1	0.6	0.9
24-Feb	1	1	0	1	1	1	0	1	0	1	1	1	1	0	0	A	1	0	0	1	1	0	1	1	0.5	0.7
25-Feb	1	1	1	1	1	1	1	1	0	1	0	1	1	0	A	1	1	1	1	1	1	1	1	0	0.6	0.7
26-Feb	0	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.9
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
28-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	0	1	1	1	1	1	1	1	0.7	0.9
	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
	2.0	2.3	2.4	1.0	2.1	1.1	1.1	1.1	1.7	1.1	1.1	1.4	1.0	1.5	1.4	1.2	1.3	1.4	1.2	1.3	1.4	1.3	1.2	1.3	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2015

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 71.7 ppb on Feb 4 15:00

Maximum Daily Average: 36.7 ppb on Feb 4

Minimum Value: 1 ppb on Feb 24 05:00

Minimum Daily Average: 4.6 ppb on Feb 5

Maximum Diurnal Average: 18.7 ppb at hour 20

Minimum Diurnal Average: 9.4 ppb at hour 13

Monthly Average: 14.06 ppb

Percentiles: P_1 = 2.3 P_{10} = 4.1 Q_1 = 5.5 Median = 8.8 Q_3 = 19.9 P_{90} = 33.2 P_{99} = 44.7

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	23	20	20	17	16	21	22	26	26	30	17	13	13	11	11	A	14	8	7	7	7	6	7	5	15.1	30.1
2-Feb	5	7	6	5	8	10	9	13	8	8	14	12	10	14	A	14	17	37	43	44	41	34	28	33	18.2	43.8
3-Feb	28	29	24	29	37	38	40	49	C	C	C	C	C	C	C	C	34	41	46	P	36	32	31	30	--	48.5
4-Feb	34	37	39	44	42	32	28	32	32	38	45	54	A	65	72	59	21	21	26	35	35	38	10	6	36.7	71.7
5-Feb	4	3	3	2	3	3	4	7	6	7	5	A	5	4	5	5	6	6	6	4	5	4	3	4	4.6	7.2
6-Feb	4	5	4	4	4	5	8	10	8	8	A	7	6	5	6	6	6	7	7	7	8	7	7	7	6.3	9.7
7-Feb	6	6	6	6	7	8	10	14	15	A	11	8	6	6	5	6	10	9	9	9	8	7	6	5	7.8	14.6
8-Feb	5	5	5	4	5	5	6	6	A	6	6	5	5	5	5	5	6	6	7	6	7	6	5	6	5.5	6.6
9-Feb	8	6	6	5	7	6	5	A	8	7	5	5	5	6	5	8	7	13	11	10	11	10	12	10	7.6	12.8
10-Feb	17	16	19	21	20	23	A	12	9	9	6	4	5	5	7	8	6	8	9	7	7	7	6	7	10.4	23.4
11-Feb	5	8	6	6	6	A	10	15	19	10	7	7	16	22	16	12	11	20	17	24	18	18	17	21	13.5	24.5
12-Feb	24	25	27	28	A	28	29	32	37	23	19	27	33	33	27	35	40	53	42	45	45	42	39	38	33.6	53.1
13-Feb	36	34	34	A	24	19	20	20	15	10	9	8	8	7	8	9	13	17	21	23	18	16	19	20	17.7	35.7
14-Feb	18	21	A	11	7	10	13	14	12	6	6	6	6	4	5	6	8	11	9	5	6	6	5	5	8.7	21.4
15-Feb	5	A	3	3	3	5	6	5	5	9	6	6	7	10	4	4	5	9	15	30	30	23	16	23	10.1	30.1
16-Feb	A	16	15	P	P	P	21	26	34	19	4	3	3	2	3	2	4	6	13	17	11	12	13	A	11.8	33.6
17-Feb	16	22	24	19	21	18	21	33	34	23	26	22	8	7	14	13	13	14	21	23	29	38	A	40	21.7	40.4
18-Feb	37	26	22	20	24	22	25	30	36	38	45	45	41	33	23	35	46	44	38	34	33	A	11	3	30.9	45.7
19-Feb	3	2	2	4	5	10	10	8	8	7	7	5	7	9	7	9	13	25	19	12	A	8	7	9	8.5	25.2
20-Feb	6	5	4	4	5	4	7	7	7	6	5	6	7	3	3	6	5	10	16	A	10	10	17	15	7.3	17.3
21-Feb	9	8	3	3	3	3	4	4	4	4	6	6	5	8	8	6	9	13	A	13	22	20	32	32	9.7	31.7
22-Feb	27	30	30	30	30	27	18	24	18	14	17	12	8	5	6	7	6	A	12	4	5	6	5	3	15.0	30.4
23-Feb	4	4	2	2	4	7	9	9	16	10	12	11	10	12	7	11	A	31	23	9	11	9	5	4	9.6	30.7
24-Feb	3	2	3	2	1	3	6	8	13	26	17	12	6	7	10	A	3	2	3	4	3	3	2	2	6.2	25.6
25-Feb	2	3	3	3	3	3	4	9	9	6	4	4	4	4	A	6	5	7	9	8	7	6	5	5	5.2	9.2
26-Feb	4	4	5	7	10	11	14	19	24	17	10	9	8	A	7	8	9	13	14	19	16	9	6	8	10.9	23.6
27-Feb	5	4	8	7	7	9	9	15	14	20	10	5	A	4	4	4	13	21	29	42	36	27	29	16	14.8	41.7
28-Feb	17	16	24	18	15	19	31	19	9	8	5	A	4	5	7	5	9	12	18	44	36	48	38	16	18.4	48.1
	13.1	13.5	12.8	11.7	12.3	13.5	14.3	17.2	16.4	14.2	12.4	12.1	9.4	11.5	10.9	11.5	12.6	17.2	18.1	18.7	18.5	16.7	14.2	13.7	Diurnal Average	
	37.0	36.5	38.5	44.3	42.1	38.2	40.4	48.5	36.8	38.2	44.9	53.7	41.0	64.8	71.7	59.2	45.7	53.1	46.0	45.3	45.4	48.1	39.3	40.4	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - February 2015

Maximum Value: 83.4 ppb on Feb 4 15:00

Maximum Daily Average: 46.2 ppb on Feb 4

Minimum Value: 3 ppb on Feb 19 02:00

Minimum Daily Average: 7.9 ppb on Feb 5

Maximum Diurnal Average: 25.5 ppb at hour 19

Minimum Diurnal Average: 13.2 ppb at hour 13

Monthly Average: 19.31 ppb

Percentiles: P_1 = 3.8 P_{10} = 6.6 Q_1 = 9.1 Median = 14.3 Q_3 = 26.8 P_{90} = 39.3 P_{99} = 66.5

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	29	23	23	21	19	23	26	27	29	34	31	17	16	14	13	A	17	15	9	13	9	14	16	7	19.5	34.3
2-Feb	7	10	8	8	11	15	15	17	11	10	25	19	18	19	A	18	32	42	48	69	44	36	33	35	23.9	69.5
3-Feb	34	32	27	49	50	45	58	69	C	C	C	C	C	C	C	C	38	51	50	P	38	36	32	35	--	69.2
4-Feb	35	41	41	49	48	39	33	34	68	44	49	63	A	82	83	82	31	29	38	39	39	44	41	12	46.2	83.4
5-Feb	8	5	4	3	5	5	9	11	10	13	7	A	8	6	9	9	10	9	9	8	10	9	5	8	7.9	12.5
6-Feb	7	8	8	5	6	7	14	17	12	12	A	14	9	8	8	11	10	11	11	10	10	10	10	17	10.2	17.5
7-Feb	18	9	8	8	11	12	14	26	19	A	20	11	10	7	7	25	18	18	18	12	10	10	12	8	13.4	25.7
8-Feb	8	7	8	7	9	12	9	9	A	8	9	7	8	7	9	7	10	9	10	8	10	9	8	9	8.6	12.4
9-Feb	11	9	8	13	13	16	8	A	18	20	10	8	8	9	9	16	10	24	19	19	15	16	16	13	13.3	23.7
10-Feb	21	22	26	24	25	29	A	16	15	13	9	9	7	8	11	12	10	12	14	11	11	10	13	11	14.8	29.1
11-Feb	12	15	11	12	9	A	15	21	23	17	9	10	25	25	20	17	14	28	23	29	25	22	23	24	18.7	29.4
12-Feb	28	28	28	29	A	30	31	36	44	31	28	31	38	38	33	43	53	63	50	60	48	52	45	40	39.4	62.9
13-Feb	40	36	37	A	38	20	22	22	18	14	13	11	11	9	10	14	19	22	25	26	21	17	22	29	21.7	40.0
14-Feb	20	28	A	22	13	18	21	20	22	8	8	8	7	6	6	8	11	15	14	6	11	10	7	7	13.0	28.1
15-Feb	7	A	6	4	5	6	8	7	7	25	9	10	11	17	9	6	10	13	26	39	40	30	21	27	14.9	40.1
16-Feb	A	21	19	P	P	P	26	30	42	45	11	6	6	5	6	4	11	11	23	20	14	16	31	A	18.3	45.0
17-Feb	21	30	34	25	27	25	31	36	45	27	34	35	11	9	22	16	16	18	26	27	33	40	A	43	27.5	45.4
18-Feb	41	33	26	24	34	29	26	35	43	50	51	52	46	43	28	44	51	53	43	43	37	A	25	5	37.4	52.7
19-Feb	5	3	4	6	10	17	15	11	10	10	10	9	10	13	10	13	22	33	35	27	A	12	10	14	13.5	34.9
20-Feb	13	6	7	8	9	7	13	13	22	9	9	9	11	9	6	12	11	15	28	A	13	16	27	27	13.0	27.8
21-Feb	15	13	7	4	6	5	6	9	6	6	18	10	8	17	19	11	14	17	A	21	28	34	35	36	15.0	36.2
22-Feb	34	35	33	34	32	32	22	27	27	21	23	17	12	7	10	10	9	A	23	9	8	9	8	6	19.5	35.4
23-Feb	11	8	6	4	8	13	14	18	24	18	18	14	15	15	10	18	A	40	40	14	15	18	7	7	15.4	40.0
24-Feb	5	5	6	4	3	9	13	18	21	34	27	22	10	12	17	A	7	3	5	6	9	6	4	4	11.0	34.3
25-Feb	4	6	4	8	16	5	7	15	16	11	9	6	8	6	A	11	8	10	13	12	11	8	7	6	9.1	16.1
26-Feb	14	6	7	9	14	13	18	23	31	30	18	12	12	A	23	10	13	20	22	23	25	19	9	11	16.6	31.0
27-Feb	7	8	13	12	11	12	12	25	20	32	16	9	A	6	7	7	19	26	41	48	41	31	37	20	20.0	48.1
28-Feb	23	20	33	22	21	27	34	36	16	12	6	A	5	8	10	8	13	15	28	51	46	51	46	27	24.3	51.5
	17.7	17.3	16.5	15.9	17.4	18.2	19.3	23.4	23.8	21.3	18.3	16.8	13.2	15.6	15.8	17.2	18.0	23.0	25.5	25.1	23.1	21.7	20.5	18.0	Diurnal Average	
	41.1	40.6	41.4	48.8	50.0	45.5	58.4	69.2	67.7	50.1	50.7	63.3	45.7	81.8	83.4	81.5	52.9	62.9	49.7	69.5	48.2	51.7	45.9	43.3	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - February 2015

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - February 2015

Pollutant Classes (ppb)

- 0 - 25
- 26 - 50
- 51 - 110
- 111 - 159
- > 159

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 168.6 ppb on Feb 4 15:00

Maximum Daily Average: 70.5 ppb on Feb 12

Minimum Value: 0 ppb on Feb 14 21:00

Minimum Daily Average: 0.8 ppb on Feb 20

Maximum Diurnal Average: 16.6 ppb at hour 12

Minimum Diurnal Average: 4.5 ppb at hour 4

Monthly Average: 9.80 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.4$ Median = 1.6 $Q_3 = 5.2$ $P_{90} = 24.0$ $P_{99} = 136.9$

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	4	2	2	2	1	4	8	18	21	48	18	15	16	11	8	A	7	3	1	2	2	1	1	1	8.5	48.4
2-Feb	1	1	1	1	0	1	0	1	0	1	6	7	7	11	A	9	8	29	55	81	66	15	5	9	13.6	80.9
3-Feb	5	6	2	11	36	46	56	102	C	C	C	C	C	C	C	C	52	74	108	P	28	9	4	4	--	108.5
4-Feb	17	35	39	66	53	15	6	11	32	60	110	148	A	165	169	112	6	3	2	7	9	21	1	0	47.3	168.6
5-Feb	0	0	0	0	0	0	1	1	1	3	1	A	2	1	2	2	2	2	1	1	1	1	0	1	1.1	2.8
6-Feb	1	1	1	0	1	1	2	3	2	3	A	3	4	3	2	3	2	2	2	2	2	1	1	1	1.8	3.7
7-Feb	1	1	1	1	1	1	1	2	1	A	6	4	3	3	1	4	3	2	1	1	0	1	0	0	1.7	6.0
8-Feb	1	0	0	0	0	0	0	1	A	2	3	3	4	3	3	2	2	1	2	1	1	2	1	0	1.4	3.8
9-Feb	1	0	0	0	0	1	1	A	1	2	2	2	3	4	3	5	2	2	1	1	0	0	0	0	1.3	5.0
10-Feb	0	0	0	0	0	6	A	2	1	3	3	3	3	4	4	5	2	2	1	1	1	1	1	1	2.0	5.9
11-Feb	0	3	1	1	1	A	2	2	5	4	4	6	22	32	19	9	5	7	1	6	0	1	1	0	5.7	32.0
12-Feb	3	3	7	12	A	24	35	59	105	41	26	57	76	66	39	63	76	158	101	134	150	142	123	122	70.5	158.5
13-Feb	92	98	107	A	57	6	8	15	6	4	6	6	6	4	4	4	6	9	5	13	2	3	27	30	22.4	106.8
14-Feb	17	20	A	0	0	0	0	0	0	1	2	3	3	2	2	2	2	0	0	0	0	0	0	0	2.3	20.1
15-Feb	0	A	0	0	0	0	0	0	0	3	2	3	3	5	2	1	0	0	0	3	2	1	0	0	1.0	5.1
16-Feb	A	0	0	P	P	P	0	2	19	15	2	2	2	1	1	1	2	1	1	1	1	1	1	A	2.8	19.1
17-Feb	0	0	0	0	0	0	0	11	20	7	22	22	6	5	10	11	6	2	0	0	1	25	A	60	9.0	59.5
18-Feb	36	4	1	0	5	2	3	29	70	87	109	100	67	41	17	34	61	45	16	4	4	A	0	0	32.0	109.3
19-Feb	0	0	0	0	0	0	0	0	0	1	2	2	4	7	3	2	1	4	1	0	A	0	0	0	1.2	6.6
20-Feb	0	0	0	0	1	0	0	1	1	1	1	2	3	1	1	2	1	1	2	A	0	0	0	0	0.8	3.3
21-Feb	0	0	0	0	0	0	0	0	0	0	1	2	2	3	3	2	3	2	A	0	3	1	10	7	1.7	10.0
22-Feb	3	7	17	20	10	10	0	1	1	5	12	7	3	2	2	2	1	A	0	0	0	0	0	0	4.5	20.1
23-Feb	0	0	0	0	0	0	0	0	2	3	6	8	8	9	4	4	A	15	7	0	0	0	0	0	2.8	15.2
24-Feb	0	0	0	0	0	0	0	0	0	5	6	3	1	2	3	A	0	0	0	0	1	0	0	0	1.0	5.5
25-Feb	0	1	0	0	1	0	1	2	2	3	1	1	2	2	A	2	1	1	1	2	1	0	0	0	1.2	2.8
26-Feb	0	0	0	0	1	1	1	3	8	11	5	7	5	A	2	2	1	1	0	0	0	0	0	0	2.2	10.8
27-Feb	0	0	1	0	0	0	1	0	1	9	5	3	A	3	3	2	8	8	3	20	28	1	4	0	4.4	28.1
28-Feb	0	0	2	1	0	1	8	1	1	2	2	A	1	3	3	1	2	1	0	5	2	5	3	0	2.0	8.2
	6.7	6.7	6.8	4.5	6.5	4.6	4.9	9.9	11.6	12.4	13.9	16.6	10.2	15.1	12.4	11.5	9.7	13.9	11.6	11.0	11.2	8.5	6.8	8.8	Diurnal Average	
	91.5	97.6	106.8	65.7	57.1	46.3	55.6	102.4	104.7	87.3	109.6	148.2	76.3	165.5	168.6	111.6	75.6	158.5	108.5	133.9	149.9	142.0	123.1	121.6	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - February 2015

Maximum Value: 326.9 ppb on Feb 4 09:00

Maximum Daily Average: 97.0 ppb on Feb 12

Minimum Value: 0 ppb on Feb 24 05:00

Minimum Daily Average: 2.8 ppb on Feb 19

Maximum Diurnal Average: 33.1 ppb at hour 9

Minimum Diurnal Average: 9.5 ppb at hour 4

Monthly Average: 18.04 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.4 Q_1 = 2.6 Median = 5.3 Q_3 = 13.2 P_{90} = 50.6 P_{99} = 192.6

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	10	7	5	4	3	7	19	25	36	74	52	25	24	16	10	A	14	8	3	7	5	4	3	4	15.9	74.5
2-Feb	3	2	4	4	3	5	1	2	1	2	27	13	20	17	A	19	20	46	83	147	99	25	12	17	24.9	147.0
3-Feb	11	10	5	59	70	75	118	195	C	C	C	C	C	C	C	C	69	125	129	P	40	19	11	13	--	194.7
4-Feb	26	50	53	87	79	48	18	17	327	97	144	197	A	209	217	168	20	6	14	21	29	54	28	3	83.1	326.9
5-Feb	3	3	2	2	4	1	4	4	3	6	4	A	5	4	20	6	5	4	4	4	3	3	3	3	4.2	19.5
6-Feb	3	2	4	2	3	3	11	9	4	6	A	11	7	7	5	6	4	4	10	5	6	4	4	5	5.5	11.5
7-Feb	10	5	5	4	6	4	2	13	3	A	12	9	12	6	6	59	23	11	7	5	2	3	5	1	9.2	58.6
8-Feb	5	1	1	1	9	2	2	6	A	6	7	4	9	6	8	4	5	6	6	5	5	6	4	2	4.8	9.3
9-Feb	3	2	2	1	3	8	3	A	13	15	10	6	7	7	5	18	8	6	3	7	1	1	0	0	5.7	18.4
10-Feb	0	0	2	1	5	17	A	5	4	8	7	10	7	9	8	13	6	8	5	5	5	5	5	5	6.1	16.9
11-Feb	3	11	6	7	4	A	7	7	10	8	7	10	43	37	28	16	7	19	9	14	5	2	3	3	11.5	43.0
12-Feb	8	14	11	16	A	48	43	88	157	76	54	71	95	91	64	95	138	206	134	169	178	190	149	137	97.0	206.2
13-Feb	127	114	124	A	128	9	16	25	12	7	16	10	10	8	8	9	12	19	19	29	15	5	46	61	36.0	128.5
14-Feb	22	28	A	3	0	1	1	0	0	2	3	4	3	3	3	3	3	2	0	0	0	0	0	0	3.5	28.3
15-Feb	0	A	0	0	0	0	0	0	0	31	4	5	5	10	5	2	1	2	1	9	10	14	1	1	4.4	31.4
16-Feb	A	0	0	P	P	P	1	7	42	49	5	5	6	6	5	5	7	6	5	5	5	6	4	A	8.9	48.9
17-Feb	1	3	3	2	1	2	6	27	62	10	36	49	10	6	21	16	10	4	1	1	5	39	A	83	17.3	83.5
18-Feb	59	15	14	3	37	13	7	53	113	130	136	146	84	63	27	52	81	104	38	16	16	A	0	0	52.5	146.0
19-Feb	0	0	0	0	0	0	1	1	1	4	4	5	7	10	6	6	3	11	4	2	A	0	0	0	2.8	10.7
20-Feb	0	0	0	1	6	4	4	6	10	4	4	5	7	7	5	5	5	5	81	A	0	0	1	2	7.0	81.4
21-Feb	0	2	4	1	1	1	3	6	1	2	7	3	3	10	12	4	8	6	A	1	6	10	22	23	5.8	22.7
22-Feb	14	21	36	37	21	25	1	4	6	14	23	17	11	4	5	4	2	A	1	0	0	0	0	0	10.7	36.9
23-Feb	0	0	0	0	0	2	0	0	5	7	11	13	13	12	6	7	A	35	25	0	4	1	0	0	6.2	35.1
24-Feb	0	0	0	0	0	0	1	5	2	20	11	8	3	3	7	A	1	0	0	4	4	2	3	1	3.3	19.9
25-Feb	4	5	2	5	9	4	4	8	7	12	4	4	7	4	A	9	3	4	4	4	5	2	3	3	5.0	11.9
26-Feb	13	1	1	3	8	3	3	9	27	31	18	30	9	A	27	4	3	5	6	1	2	0	0	1	9.0	30.5
27-Feb	0	1	5	3	3	2	4	0	10	22	9	5	A	5	6	4	11	13	6	51	51	2	13	0	9.9	51.2
28-Feb	1	1	8	2	1	4	14	11	3	3	3	A	3	4	5	3	5	3	0	13	10	10	19	1	5.6	18.9
	12.1	11.1	11.0	9.5	15.6	11.0	10.7	19.7	33.1	24.8	23.7	26.6	16.3	21.7	20.7	21.5	17.6	24.8	22.3	20.2	19.0	15.0	12.5	13.8	Diurnal Average	
	126.8	114.0	123.6	87.2	128.5	75.4	118.1	194.7	326.9	129.6	144.0	197.3	94.9	209.0	217.4	168.1	137.7	206.2	134.2	169.0	177.6	190.2	148.6	137.1	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 242.2 ppb on Feb 4 15:00
Maximum Daily Average: 104.9 ppb on Feb 12

Minimum Value: 1 ppb on Feb 24 05:00
Maximum Diurnal Average: 31.4 ppb at hour 18
Monthly Average: 24.03 ppb

Minimum Daily Average: 5.8 ppb on Feb 5
Minimum Diurnal Average: 16.3 ppb at hour 4
Percentiles: P_1 = 2.1 P_{10} = 4.3 Q_1 = 6.8 Median = 10.8 Q_3 = 24.7 P_{90} = 54.0 P_{99} = 175.6

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	27	23	23	19	17	25	30	44	48	79	35	28	29	23	19	A	21	11	8	9	8	7	8	6	23.8	79.0
2-Feb	6	7	7	6	9	10	9	13	8	9	20	20	17	25	A	24	25	66	98	125	107	49	33	42	32.0	125.4
3-Feb	33	35	26	40	74	85	97	152	C	C	C	C	C	C	C	C	87	116	156	P	65	41	35	35	--	155.9
4-Feb	52	73	79	111	96	48	35	44	65	100	156	204	A	232	242	172	28	25	29	44	45	60	11	6	85.1	242.2
5-Feb	5	4	3	2	3	3	5	8	8	10	6	A	7	6	7	8	8	8	7	5	5	5	4	4	5.8	10.2
6-Feb	5	5	5	4	5	6	10	13	10	10	A	10	10	8	8	9	8	9	9	9	9	8	8	8	8.2	13.0
7-Feb	8	7	6	6	8	9	10	16	16	A	17	11	10	8	6	10	13	11	10	10	8	7	6	5	9.5	17.0
8-Feb	5	5	5	5	5	6	6	7	A	8	9	7	9	8	8	7	9	7	8	7	8	8	6	6	6.9	8.9
9-Feb	9	6	6	5	7	7	6	A	9	9	8	7	8	10	8	13	9	15	12	11	11	10	11	10	8.9	14.6
10-Feb	16	15	19	22	20	29	A	14	11	11	9	7	8	10	11	14	9	11	10	8	8	8	7	8	12.4	29.5
11-Feb	5	11	8	7	7	A	12	17	24	15	11	13	38	55	36	20	16	28	19	31	18	19	17	22	19.4	54.6
12-Feb	27	29	35	40	A	52	64	91	143	64	46	84	110	100	67	99	117	213	145	180	197	185	164	160	104.9	213.0
13-Feb	128	132	142	A	82	25	29	35	21	14	15	14	14	12	12	13	19	26	26	37	20	19	47	50	40.5	141.9
14-Feb	35	42	A	11	7	10	13	13	12	6	8	9	9	6	7	8	9	11	8	4	6	6	4	4	10.9	41.7
15-Feb	4	A	3	2	3	4	5	5	5	12	8	9	10	15	6	4	5	9	15	33	32	24	16	23	11.0	32.8
16-Feb	A	16	14	P	P	P	21	28	53	34	6	6	5	4	4	3	6	7	14	18	12	13	14	A	14.6	52.9
17-Feb	16	23	25	19	21	19	21	44	54	31	48	44	14	12	24	25	19	17	22	24	29	63	A	101	30.9	100.6
18-Feb	74	30	23	20	30	25	28	59	107	127	155	146	109	75	41	70	107	90	55	39	37	A	11	3	63.6	155.3
19-Feb	3	2	2	4	5	10	10	8	8	9	9	8	11	16	10	11	15	29	19	12	A	7	6	9	9.8	29.4
20-Feb	6	4	3	3	6	4	7	8	8	7	6	9	10	4	3	8	6	11	18	A	10	10	17	15	8.0	17.8
21-Feb	8	8	3	2	3	3	4	5	4	5	7	7	7	11	11	8	12	15	A	14	25	22	42	39	11.5	41.9
22-Feb	30	37	48	51	41	37	18	25	19	19	29	19	11	8	9	9	7	A	12	4	4	6	5	3	19.6	50.6
23-Feb	4	4	2	2	4	6	8	9	18	13	18	19	18	21	11	14	A	46	30	9	11	8	5	3	12.3	46.2
24-Feb	3	2	2	2	1	2	6	8	14	31	23	16	6	9	13	A	3	2	2	4	4	3	3	2	7.0	31.3
25-Feb	3	4	3	3	4	4	5	11	11	9	6	5	6	6	A	8	7	8	10	10	8	6	6	5	6.4	11.3
26-Feb	4	4	5	7	11	12	16	23	32	28	16	16	14	A	9	10	10	15	15	19	17	9	6	7	13.3	31.7
27-Feb	4	4	9	8	8	9	10	15	15	29	15	8	A	6	8	6	21	30	32	62	65	28	33	16	19.3	64.8
28-Feb	17	16	26	19	16	20	39	21	10	10	7	A	5	8	10	6	11	14	19	49	38	54	41	16	20.6	53.9
	19.9	20.4	19.7	16.3	18.9	18.2	19.4	27.3	28.2	26.9	26.6	29.0	19.8	26.9	23.6	23.2	22.6	31.4	29.9	29.8	29.9	25.4	21.0	22.5	Diurnal Average	
	128.1	132.1	141.9	111.2	96.1	85.2	96.8	152.0	142.6	126.6	156.0	203.7	110.5	232.3	242.2	172.4	116.5	213.0	155.9	180.5	196.8	185.2	163.5	160.4	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - February 2015

Maximum Value: 352.0 ppb on Feb 4 09:00

Maximum Daily Average: 136.0 ppb on Feb 12

Minimum Value: 3 ppb on Feb 24 05:00

Minimum Daily Average: 11.7 ppb on Feb 5

Maximum Diurnal Average: 54.6 ppb at hour 9

Minimum Diurnal Average: 25.0 ppb at hour 4

Monthly Average: 36.78 ppb

Percentiles: P_1 = 4.0 P_{10} = 8.4 Q_1 = 12.5 Median = 20.1 Q_3 = 38.4 P_{90} = 87.4 P_{99} = 258.6

Hours in Service:	672
Hours of Data:	632
Hours of Missing Data:	40
Hours of Calibration:	36
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	38	30	29	24	22	29	45	51	65	102	84	41	41	30	23	A	30	22	12	20	13	17	20	9	34.6	101.5
2-Feb	10	11	10	11	11	16	15	18	11	12	52	33	37	35	A	38	52	88	128	217	141	61	46	52	48.1	217.3
3-Feb	45	41	33	108	119	120	176	266	C	C	C	C	C	C	C	C	106	178	180	P	78	55	44	49	--	265.8
4-Feb	61	90	94	137	128	88	51	51	352	141	194	262	A	292	303	248	51	35	52	61	68	96	69	13	127.8	352.0
5-Feb	12	7	6	4	9	6	13	15	12	18	10	A	13	10	29	15	14	13	12	12	12	12	7	11	11.7	28.7
6-Feb	9	10	12	7	8	9	25	24	15	17	A	25	15	14	13	16	14	14	21	14	16	12	13	22	15.0	25.2
7-Feb	27	12	13	13	17	15	16	38	21	A	32	21	20	13	11	84	42	29	25	16	12	11	15	9	22.2	83.6
8-Feb	11	8	9	8	17	14	11	15	A	14	15	11	15	12	17	10	14	15	15	12	14	14	11	10	12.7	17.2
9-Feb	12	12	9	14	13	22	10	A	31	35	19	14	14	16	14	35	16	30	21	26	15	17	16	13	18.4	34.9
10-Feb	21	23	28	25	29	46	A	21	18	19	15	19	15	17	18	26	15	20	19	14	14	15	18	13	20.4	46.2
11-Feb	14	26	17	17	11	A	22	28	30	22	17	20	68	63	48	33	20	47	31	43	31	24	27	27	29.8	68.3
12-Feb	36	42	39	45	A	79	75	125	202	107	81	103	133	130	95	134	192	269	185	228	227	234	192	176	136.0	269.3
13-Feb	166	151	161	A	165	29	38	47	30	22	29	21	21	16	16	23	31	41	45	55	36	22	69	89	57.5	166.1
14-Feb	41	50	A	23	13	19	22	21	23	9	11	11	10	8	9	12	13	15	14	6	10	10	7	7	15.9	49.9
15-Feb	6	A	5	4	4	6	7	7	6	52	13	15	16	27	15	8	11	14	26	47	48	44	22	28	18.8	52.4
16-Feb	A	21	19	P	P	P	26	37	85	94	16	11	11	9	10	9	16	16	29	25	18	22	35	A	26.8	94.0
17-Feb	22	33	37	27	27	27	37	63	109	35	70	85	19	15	43	31	25	20	27	28	38	78	A	127	44.5	127.4
18-Feb	100	49	40	27	71	42	33	89	156	177	188	199	131	107	54	97	132	156	82	58	53	A	27	5	90.1	199.3
19-Feb	5	3	4	6	10	17	15	12	11	15	14	14	18	24	15	18	25	44	39	29	A	12	10	13	16.3	44.2
20-Feb	12	6	6	7	14	10	13	19	32	13	13	14	17	16	11	17	13	17	62	A	13	16	27	29	17.3	61.8
21-Feb	15	13	9	5	8	6	8	14	7	8	26	13	11	27	31	14	22	23	A	22	34	44	56	59	20.7	59.3
22-Feb	48	57	69	71	53	57	22	30	33	35	46	34	22	12	14	13	11	A	24	9	8	9	8	5	30.0	70.9
23-Feb	11	7	5	3	8	15	14	19	28	24	29	25	28	28	16	25	A	75	66	14	19	18	6	7	21.3	75.1
24-Feb	5	5	6	3	3	9	13	24	23	52	38	30	12	15	23	A	7	3	5	10	12	8	7	5	13.9	51.7
25-Feb	7	9	5	13	25	9	10	20	21	19	11	10	14	10	A	20	11	12	16	14	15	10	10	8	13.1	25.1
26-Feb	27	6	8	12	21	17	21	33	58	61	36	40	21	A	34	15	16	23	23	24	28	19	9	11	24.5	61.4
27-Feb	7	8	17	13	12	14	14	25	22	54	25	14	A	11	13	11	30	38	47	96	91	33	50	20	28.9	96.2
28-Feb	24	21	41	24	22	30	48	47	19	16	9	A	8	13	15	11	18	19	28	64	51	61	61	28	29.5	64.2
	29.4	27.7	27.1	25.0	32.3	28.9	29.6	42.9	54.6	45.1	42.0	43.5	29.2	37.3	35.7	38.4	35.1	47.3	45.7	44.8	41.3	36.1	32.7	31.3	Diurnal Average	
	166.1	150.7	161.1	137.1	164.5	120.3	175.8	265.8	352.0	177.1	194.1	261.8	132.5	291.9	303.2	248.1	191.9	269.3	185.0	228.3	226.7	234.4	191.5	176.1	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 44.2 ppb on Feb 28 16:00
Maximum Daily Average: 35.7 ppb on Feb 24

Minimum Value: 1 ppb on Feb 22 05:00
Maximum Diurnal Average: 27.8 ppb at hour 15
Monthly Average: 21.96 ppb

Minimum Daily Average: 5.4 ppb on Feb 12
Minimum Diurnal Average: 18.1 ppb at hour 8
Percentiles: P_1 = 1.8 P_{10} = 4.3 Q_1 = 12.2 Median = 24.5 Q_3 = 31.2 P_{90} = 34.6 P_{99} = 41.6

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	32
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	6	7	6	8	8	4	4	2	2	5	11	13	13	15	16	A	16	23	25	26	26	27	27	29	13.9	28.7
2-Feb	28	27	27	28	24	23	22	18	22	23	20	22	24	21	A	22	19	4	3	3	2	4	8	3	17.3	28.5
3-Feb	6	5	8	6	3	3	4	4	5	6	10	14	18	A	C	C	C	6	4	P	5	6	6	6	6.7	17.8
4-Feb	4	4	4	4	4	5	8	5	5	6	8	9	A	12	12	10	18	17	12	4	5	4	34	35	9.9	35.0
5-Feb	37	37	38	38	38	37	35	34	33	32	33	A	33	34	34	34	33	33	33	34	33	33	34	33	34.4	38.0
6-Feb	32	32	32	32	31	31	28	26	27	28	A	29	30	30	30	29	29	28	28	27	27	27	27	27	29.0	32.4
7-Feb	28	28	28	28	26	26	25	21	20	A	24	26	28	28	29	28	24	25	25	24	25	26	27	27	26.0	29.4
8-Feb	27	26	26	26	26	26	26	26	A	25	26	26	26	26	26	26	24	24	23	24	23	24	24	23	25.2	27.0
9-Feb	21	23	23	23	22	23	24	A	21	22	24	24	24	23	24	23	22	17	18	19	18	19	17	19	21.4	24.1
10-Feb	12	13	9	7	7	5	A	16	18	19	22	23	23	23	22	21	23	22	23	24	24	24	25	24	18.7	24.7
11-Feb	25	23	24	23	22	A	19	14	10	16	19	20	16	14	15	17	17	9	11	5	10	9	10	6	15.3	25.2
12-Feb	5	4	2	2	A	2	2	2	3	6	9	10	10	11	11	8	6	5	3	4	5	6	6	4	5.4	11.2
13-Feb	3	3	3	A	3	3	2	2	5	10	11	12	14	15	15	14	10	7	4	2	4	3	3	2	6.4	14.8
14-Feb	2	2	A	22	28	25	25	25	27	34	35	36	37	39	39	38	36	33	34	37	35	34	34	34	30.0	38.8
15-Feb	33	A	35	36	35	35	34	35	35	31	34	34	35	33	38	39	38	35	29	13	15	18	24	17	30.8	38.8
16-Feb	A	22	23	P	P	P	14	9	5	18	27	28	30	32	34	36	35	33	26	22	28	26	24	A	24.8	35.6
17-Feb	19	12	10	15	12	14	11	2	3	12	14	16	26	25	21	22	22	21	15	14	8	3	A	3	14.0	25.6
18-Feb	2	6	8	9	6	7	4	3	4	6	8	9	12	15	17	11	7	6	4	7	7	A	30	38	9.8	37.6
19-Feb	36	35	35	33	32	28	29	30	30	32	32	34	33	31	33	32	27	17	22	28	A	31	30	27	30.4	36.4
20-Feb	31	34	34	33	25	31	29	27	26	28	29	28	29	35	37	34	35	32	24	A	30	29	21	22	29.8	37.2
21-Feb	28	28	32	33	32	31	33	32	32	32	31	30	30	28	28	31	28	24	A	24	15	15	2	3	26.2	33.0
22-Feb	5	3	2	1	1	3	12	8	13	17	17	26	34	37	37	37	37	A	30	35	34	32	33	34	21.2	37.4
23-Feb	32	31	33	33	31	29	27	27	21	27	26	28	29	28	33	30	A	11	17	29	27	28	32	37	28.0	36.6
24-Feb	37	39	40	41	42	40	37	36	30	18	26	31	40	39	38	A	43	40	36	32	32	33	34	35	35.7	42.8
25-Feb	35	35	34	34	33	33	32	29	28	30	31	32	32	33	A	31	31	29	30	29	28	29	30	31	31.3	35.2
26-Feb	34	33	31	27	24	23	20	16	13	19	25	26	27	A	28	27	27	24	22	17	19	25	28	27	24.5	33.8
27-Feb	27	28	28	29	29	27	27	21	22	18	26	29	A	32	33	33	26	19	11	2	4	10	8	18	22.1	33.3
28-Feb	17	16	10	12	15	12	4	19	31	34	38	A	42	42	42	44	41	38	32	9	16	5	11	32	24.5	44.2
	21.2	20.6	21.7	22.5	21.6	20.2	19.9	18.1	18.2	20.5	22.8	23.7	26.7	27.0	27.8	27.0	25.9	21.5	20.1	18.9	18.6	19.7	21.9	22.1	Diurnal Average	
	37.4	38.7	40.1	41.4	41.8	40.4	36.9	35.8	34.5	34.3	38.0	35.7	42.5	42.3	42.1	44.2	42.8	40.4	36.1	36.9	35.0	33.9	34.4	37.6	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - February 2015

Maximum Value: 46.6 ppb on Feb 28 16:00

Maximum Daily Average: 38.9 ppb on Feb 24

Minimum Value: 2 ppb on Feb 22 04:00

Minimum Daily Average: 7.5 ppb on Feb 12

Maximum Diurnal Average: 29.9 ppb at hour 15

Minimum Diurnal Average: 21.6 ppb at hour 8

Monthly Average: 24.91 ppb

Percentiles: P_1 = 2.4 P_{10} = 7.7 Q_1 = 16.1 Median = 27.2 Q_3 = 33.8 P_{90} = 36.8 P_{99} = 44.2

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	32
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	10	10	9	10	11	6	8	3	3	6	14	15	15	18	18	A	17	29	27	28	27	30	30	31	16.3	30.6
2-Feb	30	30	29	30	27	27	26	21	27	25	25	25	27	26	A	26	23	9	14	7	3	13	13	7	21.2	30.1
3-Feb	12	10	13	10	4	5	7	6	13	9	11	15	20	A	C	C	C	9	5	P	5	12	8	10	9.7	20.0
4-Feb	5	5	4	4	4	8	12	6	6	8	9	10	A	12	14	11	21	20	16	7	11	9	40	37	12.1	39.9
5-Feb	39	39	39	39	39	38	37	35	35	34	34	A	35	35	35	35	36	34	34	35	35	35	35	34	35.9	39.1
6-Feb	34	34	33	33	32	32	30	30	29	30	A	31	32	32	31	30	30	30	29	29	29	29	29	29	30.8	33.8
7-Feb	30	29	29	29	28	27	26	25	23	A	27	28	30	36	31	32	27	27	26	26	27	28	28	29	28.2	35.8
8-Feb	28	28	28	28	28	28	28	27	A	28	27	27	27	27	27	27	26	26	25	25	25	25	25	25	26.8	28.2
9-Feb	23	25	25	25	25	25	25	A	23	25	25	26	25	25	25	25	25	21	22	21	21	21	21	21	23.6	25.6
10-Feb	17	15	14	10	9	11	A	20	22	23	23	24	24	24	24	23	24	24	24	26	26	26	26	26	21.1	26.5
11-Feb	28	27	25	25	24	A	22	17	12	18	21	22	22	15	17	19	18	15	14	11	13	12	12	9	18.1	27.6
12-Feb	8	5	3	2	A	2	2	2	3	9	10	12	12	21	13	9	10	6	4	6	11	8	8	6	7.5	20.6
13-Feb	4	4	4	A	4	4	3	3	8	12	12	13	15	16	16	16	14	12	8	3	5	5	4	3	8.2	16.2
14-Feb	3	3	A	31	31	32	31	31	36	36	37	37	38	40	40	40	37	35	38	38	38	36	36	35	32.9	39.8
15-Feb	35	A	36	37	36	36	36	36	37	36	37	36	38	37	41	40	41	38	37	24	22	25	30	21	34.4	41.1
16-Feb	A	26	26	P	P	P	18	16	11	28	29	29	32	33	36	37	37	36	31	26	30	29	30	A	28.4	37.1
17-Feb	26	18	19	18	20	22	15	8	9	15	17	26	27	26	25	24	25	24	21	25	13	6	A	6	18.8	27.1
18-Feb	3	10	14	12	13	11	6	5	5	8	10	11	13	20	21	16	8	7	6	13	13	A	39	39	13.2	38.9
19-Feb	37	36	35	34	34	31	32	31	32	34	35	36	35	34	36	36	32	23	30	36	A	38	34	32	33.6	38.1
20-Feb	37	35	36	35	28	34	33	31	29	34	31	31	35	39	39	37	39	37	31	A	33	35	28	28	33.6	38.9
21-Feb	31	32	34	34	34	33	35	33	34	34	33	33	32	31	32	32	30	29	A	27	25	22	5	9	29.2	34.5
22-Feb	9	5	2	2	2	13	17	12	18	20	21	34	37	39	40	39	38	A	35	36	35	34	35	34	24.1	39.5
23-Feb	34	33	35	35	34	32	31	30	28	30	32	33	33	32	35	35	A	20	29	32	29	31	36	38	32.0	38.2
24-Feb	39	40	42	42	43	42	41	41	37	29	29	38	44	44	44	A	44	43	39	35	35	34	36	36	38.9	44.5
25-Feb	36	36	35	35	34	34	34	33	32	32	33	33	33	34	A	33	32	31	33	32	30	31	32	34	33.1	36.2
26-Feb	35	35	33	29	27	24	23	20	16	25	28	27	28	A	30	30	29	28	27	20	24	29	31	28	27.2	35.1
27-Feb	29	32	31	32	32	29	29	29	27	25	30	32	A	35	35	35	31	23	22	5	12	14	18	22	26.3	35.0
28-Feb	22	23	18	18	19	15	10	30	34	37	39	A	45	46	45	47	44	40	37	24	25	12	21	39	29.9	46.6
	23.8	23.1	24.1	24.6	23.8	23.1	22.8	21.6	21.8	24.0	25.2	26.3	28.9	29.8	29.9	29.4	28.3	25.0	24.6	23.1	22.3	23.3	25.4	24.7	Diurnal Average	
	39.1	39.6	42.0	42.0	42.5	42.2	40.5	41.4	37.1	37.0	39.1	37.7	44.5	45.6	44.6	46.6	44.1	42.9	38.5	38.5	38.0	38.1	39.9	39.1	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - February 2015

Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - February 2015

Pollutant Classes (ppb)

- 0 - 20
- 21 - 50
- 51 - 82
- > 82

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - February 2015

Maximum Value: 41.1 ppb on Feb 28 18:00

Minimum Value: 2.2 ppb on Feb 12 09:00

Percentiles: P_1 = 2.8 P_{10} = 5.6 Q_1 = 12.3 Median = 24.6 Q_3 = 30.5 P_{90} = 33.9 P_{99} = 38.5

Hours in Service:	672
Hours of Data:	657
Hours of Missing Data:	15
Hours of Calibration:	12
Percent Operational Time:	99.6

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-Feb	4	3	4	4	5	5	6	6	5	5	5	6	7	8	10	11	13	15	17	19	21	23	24	25	24.9
2-Feb	26	27	27	27	27	27	26	25	24	23	22	22	22	22	21	22	22	19	17	14	11	8	8	6	27.4
3-Feb	4	4	5	5	6	5	5	5	5	5	5	6	8	9	9	N	N	N	N	N	N	N	N	6	9.4
4-Feb	5	5	5	5	5	5	5	5	5	5	6	6	7	8	8	9	11	12	13	12	11	10	13	16	16.0
5-Feb	18	21	24	29	33	37	37	37	36	36	35	34	34	33	33	33	33	33	33	33	33	33	33	33	36.9
6-Feb	33	33	33	33	32	32	31	31	30	29	29	29	28	28	29	29	29	29	29	29	28	28	28	28	33.0
7-Feb	27	27	28	28	28	27	27	26	25	25	24	24	24	25	25	26	27	27	27	26	26	26	26	25	27.6
8-Feb	26	26	26	26	27	26	26	26	26	26	26	26	26	26	26	26	26	25	25	25	24	24	24	24	26.5
9-Feb	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22	21	21	20	19	19	23.2
10-Feb	17	17	16	14	13	11	10	10	11	12	14	16	18	21	21	21	22	22	22	23	23	23	23	23	23.5
11-Feb	24	24	24	24	24	24	23	21	19	18	18	17	16	16	16	16	17	16	15	13	12	12	11	10	24.1
12-Feb	8	7	6	6	5	4	3	2	2	2	3	5	5	6	8	8	9	9	8	7	7	6	5	5	8.8
13-Feb	5	4	4	4	4	4	3	3	3	4	5	6	7	9	10	12	12	12	11	10	9	7	6	4	12.5
14-Feb	3	3	3	5	9	12	15	19	22	27	28	29	31	32	34	36	37	36	36	37	36	36	35	35	36.6
15-Feb	34	35	35	34	35	35	35	35	35	34	34	34	34	34	34	35	35	36	35	32	30	28	26	23	35.8
16-Feb	21	19	19	20	N	N	N	N	N	N	N	17	19	20	23	26	30	32	32	31	31	30	29	28	31.8
17-Feb	25	22	20	19	17	15	14	12	10	10	11	11	12	14	15	17	20	21	21	21	18	16	15	12	25.3
18-Feb	9	7	6	6	5	6	6	6	6	6	6	6	7	8	9	10	11	11	10	10	9	8	10	14	13.9
19-Feb	18	22	27	31	34	33	33	32	31	31	31	31	31	31	32	32	32	30	29	28	27	27	27	26	34.3
20-Feb	27	29	31	31	31	31	31	31	30	29	29	28	29	29	30	31	32	32	32	32	32	32	29	28	32.4
21-Feb	26	26	27	28	28	28	30	31	32	32	32	32	31	31	30	30	30	29	28	28	25	24	20	16	32.1
22-Feb	13	10	9	6	4	3	4	4	5	7	9	12	16	20	24	27	30	32	34	35	35	35	34	33	35.3
23-Feb	33	32	33	33	32	32	31	30	29	29	28	27	27	27	27	28	29	26	25	25	25	25	25	26	32.9
24-Feb	27	31	34	35	37	39	39	39	38	36	34	33	32	32	32	32	34	37	38	38	37	36	36	36	39.2
25-Feb	35	34	34	34	34	34	34	33	32	32	31	31	31	31	31	31	31	31	31	31	30	30	30	30	34.8
26-Feb	30	31	31	30	30	29	28	26	23	22	21	21	21	21	22	24	26	26	26	25	23	24	24	24	30.7
27-Feb	24	24	25	27	28	28	28	27	26	25	25	25	24	25	26	28	28	28	26	22	20	17	14	12	28.4
28-Feb	11	11	11	12	13	14	13	13	15	17	21	22	26	30	36	39	41	41	40	36	33	28	25	23	41.1
Diurnal Maximums	34.8	34.5	34.6	35.1	37.0	38.5	39.2	39.1	38.2	35.6	34.9	34.4	34.0	33.8	35.6	39.2	40.5	41.1	40.3	38.3	37.2	36.4	35.9	35.8	

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 1.46 ppm on Feb 12 22:00

Maximum Daily Average: 0.75 ppm on Feb 12

Minimum Value: 0.1 ppm on Feb 27 16:00

Minimum Daily Average: 0.19 ppm on Feb 5

Maximum Diurnal Average: 0.36 ppm at hour 9

Minimum Diurnal Average: 0.22 ppm at hour 4

Monthly Average: 0.286 ppm

Percentiles: P_1 = 0.16 P_{10} = 0.18 Q_1 = 0.20 Median = 0.22 Q_3 = 0.29 P_{90} = 0.45 P_{99} = 1.19

Hours in Service:	672
Hours of Data:	630
Hours of Missing Data:	42
Hours of Calibration:	33
Percent Operational Time:	98.7

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	Daily Average	Daily Maximum
1-Feb	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.42
2-Feb	0.2	0.2	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	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.26	0.52
3-Feb	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.8	1.2	0.6	0.5	0.5	0.4	A	0.4	0.4	0.5	0.6	0.7	P	0.3	0.3	0.3	0.3	0.45	1.15
4-Feb	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.5	0.7	1.1	1.2	A	1.3	1.2	M	M	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.52	1.25
5-Feb	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	0.24
6-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	A	0.2	0.2	0.2	M	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.28
7-Feb	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	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.25
8-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.29
9-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	M	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.27
10-Feb	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27	0.84
11-Feb	0.2	0.2	0.2	0.2	0.2	A	0.2	0.4	0.4	0.4	0.2	0.2	0.3	0.4	0.3	M	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.27	0.41
12-Feb	0.3	0.3	0.3	0.3	A	0.4	0.4	0.6	0.9	0.4	0.3	0.6	0.6	0.6	0.5	0.7	0.8	1.4	1.1	1.4	1.4	1.5	1.3	1.1	0.75	1.46
13-Feb	0.8	0.9	0.9	A	0.7	0.4	0.4	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.5	0.5	0.43	0.90
14-Feb	0.4	0.4	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	0.22	0.44
15-Feb	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	0.3	0.4	0.4	0.3	0.2	0.3	0.22	0.41
16-Feb	A	0.2	0.2	P	P	P	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	A	0.26	0.43
17-Feb	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.5	0.5	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	A	0.7	0.31	0.68
18-Feb	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.6	0.6	0.6	0.4	0.4	0.3	A	0.2	0.2	0.46	0.87
19-Feb	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	A	0.2	0.2	0.2	0.20	0.35
20-Feb	0.2	0.2	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	0.2	0.3	0.3	A	0.2	0.2	0.2	0.2	0.21	0.30
21-Feb	0.2	0.2	0.2	0.2	0.2	0.2	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	0.3	0.3	0.3	0.4	0.3	0.22	0.36
22-Feb	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	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	0.24	0.40
23-Feb	0.2	0.2	0.2	0.2	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	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.26	0.59
24-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24	0.44
25-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	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	0.20	0.26
26-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.39
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	A	0.2	0.1	0.1	0.1	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.21	0.40
28-Feb	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.5	0.3	0.28	0.65
	0.24	0.25	0.24	0.22	0.24	0.24	0.26	0.32	0.36	0.32	0.30	0.30	0.27	0.30	0.30	0.28	0.28	0.33	0.32	0.33	0.31	0.31	0.28	0.27	Diurnal Average	
	0.77	0.90	0.88	0.40	0.67	0.40	0.49	0.79	1.15	0.78	1.05	1.19	0.70	1.25	1.21	0.84	0.84	1.38	1.10	1.39	1.36	1.46	1.33	1.10	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Maximum Value: 13.12 ppm on Feb 3 09:00

Maximum Daily Average: 1.23 ppm on Feb 3

Minimum Value: 0.1 ppm on Feb 27 16:00

Minimum Daily Average: 0.23 ppm on Feb 19

Maximum Diurnal Average: 0.98 ppm at hour 9

Minimum Diurnal Average: 0.26 ppm at hour 4

Monthly Average: 0.438 ppm

Percentiles: P_1 = 0.17 P_{10} = 0.20 Q_1 = 0.23 Median = 0.30 Q_3 = 0.45 P_{90} = 0.80 P_{99} = 2.00

Hours in Service:	672
Hours of Data:	630
Hours of Missing Data:	42
Hours of Calibration:	33
Percent Operational Time:	98.7

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	Daily Average	Daily Maximum
1-Feb	0.3	0.2	0.3	0.2	0.2	0.4	0.4	0.4	0.6	0.7	0.5	0.4	0.4	0.3	0.3	A	0.3	0.3	0.5	0.2	0.3	0.3	0.2	0.2	0.35	0.65
2-Feb	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	A	0.4	0.3	0.6	0.7	0.7	0.6	0.5	0.5	0.3	0.35	0.74
3-Feb	0.2	0.3	0.3	0.4	0.6	0.5	0.9	2.5	13.1	0.9	0.7	0.5	0.5	A	0.5	0.7	0.6	1.0	1.3	P	0.5	0.5	0.3	0.3	1.23	13.12
4-Feb	0.3	0.5	0.4	0.5	0.4	0.5	0.5	0.6	0.6	0.9	1.2	1.3	A	1.4	1.4	M	M	0.4	0.4	0.5	0.5	0.6	0.6	0.2	0.65	1.39
5-Feb	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.3	A	0.4	0.3	0.2	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.2	0.2	0.28	0.43
6-Feb	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.7	0.6	0.6	A	0.2	0.4	0.2	M	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.32	0.68
7-Feb	0.2	0.2	0.2	0.2	0.3	0.6	0.3	0.3	0.3	A	0.3	0.5	0.2	0.2	0.2	0.3	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30	0.70
8-Feb	0.3	0.3	0.2	0.2	0.3	0.9	0.2	0.7	A	0.3	1.3	0.7	0.9	0.5	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.5	0.2	0.42	1.29
9-Feb	0.2	0.2	0.2	0.2	0.2	1.6	0.5	A	0.9	0.8	0.3	0.2	0.2	M	0.5	0.6	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.40	1.55
10-Feb	0.2	0.2	0.2	0.2	0.3	0.3	A	0.5	0.4	0.9	0.3	0.2	0.4	0.4	1.1	1.4	1.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.44	1.35
11-Feb	0.2	0.2	0.2	0.3	0.2	A	0.3	1.6	0.6	2.7	0.4	0.3	0.4	0.4	0.4	M	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.49	2.68
12-Feb	0.4	0.4	0.3	0.4	A	0.6	0.9	1.1	1.5	0.7	0.5	0.6	0.8	0.7	1.2	0.8	1.2	2.0	1.3	3.1	1.7	1.8	1.4	1.5	1.09	3.15
13-Feb	1.0	1.0	1.0	A	1.0	0.4	1.4	1.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.5	0.4	0.4	0.7	0.7	0.61	1.50
14-Feb	0.4	0.5	A	0.3	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	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.25	0.52
15-Feb	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.3	2.2	0.6	0.6	0.4	0.3	0.3	0.36	2.19
16-Feb	A	0.3	0.3	P	P	P	0.4	0.5	0.5	1.2	0.5	0.3	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.2	A	0.39	1.15
17-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.5	C	C	C	C	0.3	0.3	0.2	0.2	0.3	0.5	0.3	0.6	A	1.0	0.40	1.05
18-Feb	0.6	0.3	0.3	0.3	1.3	0.8	0.3	0.7	1.2	1.2	0.8	0.9	0.9	0.8	1.3	0.8	0.8	1.1	0.6	0.5	0.4	A	0.3	0.2	0.72	1.32
19-Feb	0.2	0.2	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	0.3	0.5	0.4	0.3	A	0.2	0.2	0.3	0.23	0.53
20-Feb	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.7	0.5	0.2	0.2	0.2	0.3	0.2	0.2	1.0	0.8	0.3	A	0.2	0.3	0.3	0.2	0.34	0.95
21-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.4	0.4	0.6	0.6	0.30	0.61
22-Feb	0.3	0.4	0.5	0.6	0.4	0.3	0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.2	2.1	A	0.3	0.2	0.2	0.2	0.2	0.2	0.38	2.07
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.2	0.2	0.3	0.3	0.2	0.2	A	0.7	0.8	0.4	0.4	0.5	0.4	0.3	0.33	0.85
24-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.4	0.4	0.3	0.4	0.3	0.3	A	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.37	2.42
25-Feb	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.4	1.2	0.4	0.2	0.3	0.3	A	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.31	1.17
26-Feb	0.4	0.2	0.2	0.2	0.2	0.9	0.3	0.8	0.9	0.3	0.3	0.3	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.34	0.91
27-Feb	0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	A	0.2	0.2	0.1	0.2	0.2	0.3	0.9	0.4	0.3	0.2	0.2	0.29	0.92
28-Feb	0.2	0.2	0.2	0.2	0.2	0.6	0.5	0.3	0.2	0.3	0.2	A	0.2	0.2	0.3	0.2	0.3	0.3	0.5	0.6	0.6	0.8	0.6	0.4	0.36	0.79
	0.29	0.29	0.27	0.26	0.32	0.46	0.41	0.60	0.98	0.72	0.43	0.38	0.38	0.37	0.45	0.39	0.48	0.48	0.52	0.50	0.39	0.39	0.36	0.36	Diurnal Average	
	0.97	0.95	1.00	0.56	1.32	1.55	1.42	2.51	13.12	2.68	1.29	1.31	0.93	1.36	1.39	1.35	2.07	1.98	2.19	3.15	1.73	1.76	1.44	1.48	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Pollutant Classes (ppm)

Peace Airshed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 1.25 ppm on Feb 13 00:00

Minimum Value: 0.16 ppm on Feb 27 18:00

Percentiles: P_1 = 0.17 P_{10} = 0.19 Q_1 = 0.20 Median = 0.23 Q_3 = 0.31 P_{90} = 0.43 P_{99} = 1.09

Hours in Service:	672
Hours of Data:	654
Hours of Missing Data:	18
Hours of Calibration:	15
Percent Operational Time:	99.6

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	Daily Maximum
1-Feb	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.45
2-Feb	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.4	0.4	0.4	0.4	0.38
3-Feb	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.62
4-Feb	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.9	1.0	N	N	N	N	0.6	0.5	0.3	0.3	0.97
5-Feb	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
6-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
7-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
8-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
9-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
10-Feb	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	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.37
11-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
12-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.25
13-Feb	1.2	1.2	1.1	1.1	1.0	0.9	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	1.24
14-Feb	0.4	0.4	0.4	0.4	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	0.2	0.2	0.2	0.2	0.2	0.2	0.41
15-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.3	0.29
16-Feb	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	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	0.34
17-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.3	0.37
18-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.66
19-Feb	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
20-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
21-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.28
22-Feb	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.4	0.4	0.4	0.41
24-Feb	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.40
25-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
26-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
28-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.4	0.4	0.40
Diurnal Maximums	1.24	1.18	1.15	1.11	1.01	0.86	0.73	0.66	0.60	0.54	0.58	0.60	0.64	0.77	0.89	0.97	0.62	0.70	0.80	0.90	0.99	1.09	1.19	1.25	

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

Peace Airshed Zone Association

Span Responses

Carbon Monoxide (CO)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 3.10 ppm on Feb 27 17:00

Maximum Daily Average: 2.40 ppm on Feb 18

Minimum Value: 1.9 ppm on Feb 24 00:00

Minimum Daily Average: 1.91 ppm on Feb 19

Maximum Diurnal Average: 2.12 ppm at hour 7

Minimum Diurnal Average: 2.01 ppm at hour 16

Monthly Average: 2.071 ppm

Percentiles: P_1 = 1.88 P_{10} = 1.92 Q_1 = 1.95 Median = 2.00 Q_3 = 2.12 P_{90} = 2.39 P_{99} = 2.62

Hours in Service:	672
Hours of Data:	631
Hours of Missing Data:	41
Hours of Calibration:	36
Percent Operational Time:	99.3

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	Daily Average	Daily Maximum
1-Feb	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.5	2.5	2.3	2.4	2.3	2.3	2.2	2.1	A	2.1	2.0	2.0	1.9	2.0	1.9	1.9	1.9	2.23	2.56
2-Feb	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	C	C	C	C	C	C	C	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	--	2.24
3-Feb	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.2	2.1	A	2.1	2.1	2.1	2.2	2.3	P	2.3	2.3	2.3	2.3	2.36	2.62
4-Feb	2.4	2.5	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.5	2.6	2.8	A	2.7	2.7	C	M	2.1	2.0	2.1	2.1	2.1	1.9	1.9	2.35	2.76
5-Feb	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	1.94
6-Feb	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.95	1.96
7-Feb	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	2.0	1.98	1.99
8-Feb	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	1.99	2.01
9-Feb	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	2.00	2.02
10-Feb	2.0	2.0	2.0	2.0	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.06
11-Feb	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.06	2.14
12-Feb	2.2	2.2	2.2	2.2	A	2.4	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.4	2.5	2.4	2.6	2.6	2.6	2.6	2.6	2.37	2.61
13-Feb	2.5	2.5	2.6	A	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.4	2.6	2.2	2.3	2.3	2.23	2.61
14-Feb	2.3	2.3	A	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	1.9	1.9	1.9	1.9	1.95	2.32
15-Feb	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.2	1.98	2.20
16-Feb	A	2.3	2.3	P	P	P	2.4	2.4	2.5	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	A	2.11	2.46
17-Feb	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2	A	2.3	2.10	2.32
18-Feb	2.3	2.2	2.3	2.3	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.5	2.4	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.3	A	2.0	1.9	2.40	2.73
19-Feb	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	A	1.9	2.0	2.0	1.91	1.99
20-Feb	2.0	2.0	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.1	1.96	2.06
21-Feb	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	A	2.0	2.0	2.0	2.2	2.3	2.01	2.27
22-Feb	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.1	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.08	2.35
23-Feb	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.93	2.01
24-Feb	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	2.01
25-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	1.98
26-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.05
27-Feb	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	3.1	2.1	2.0	2.1	2.1	2.2	2.2	2.2	2.07	3.10
28-Feb	2.2	2.3	2.3	2.4	2.5	2.5	2.5	2.2	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.0	2.1	2.1	2.0	2.13	2.52
	2.07	2.10	2.10	2.07	2.10	2.12	2.12	2.11	2.11	2.09	2.09	2.08	2.02	2.04	2.04	2.01	2.06	2.03	2.03	2.05	2.07	2.06	2.06	2.07	Diurnal Average	
	2.45	2.48	2.61	2.55	2.57	2.57	2.61	2.62	2.64	2.73	2.66	2.76	2.39	2.73	2.72	2.42	3.10	2.50	2.51	2.57	2.61	2.61	2.59	2.57	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2015

Maximum Value: 6.07 ppm on Feb 27 17:00

Maximum Daily Average: 2.53 ppm on Feb 18

Minimum Value: 1.9 ppm on Feb 19 01:00

Minimum Daily Average: 1.94 ppm on Feb 19

Maximum Diurnal Average: 2.23 ppm at hour 17

Minimum Diurnal Average: 2.05 ppm at hour 16

Monthly Average: 2.147 ppm

Percentiles: P_1 = 1.89 P_{10} = 1.94 Q_1 = 1.99 Median = 2.06 Q_3 = 2.20 P_{90} = 2.50 P_{99} = 2.94

Hours in Service:	672
Hours of Data:	631
Hours of Missing Data:	41
Hours of Calibration:	36
Percent Operational Time:	99.3

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	Daily Average	Daily Maximum
1-Feb	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.5	2.6	2.4	2.5	2.3	2.3	2.3	2.2	A	2.4	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.31	2.64
2-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	C	C	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.3	--	2.34
3-Feb	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.5	2.4	2.3	2.2	A	2.2	2.2	2.2	2.3	2.4	P	2.3	2.3	2.3	2.4	2.44	2.75
4-Feb	2.4	2.7	2.6	2.5	2.5	2.7	2.6	2.5	2.5	2.5	2.6	3.0	A	2.9	2.9	C	M	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.45	3.01
5-Feb	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.04
6-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.01	2.07
7-Feb	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.04	2.12
8-Feb	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	A	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	2.0	2.07	2.13
9-Feb	2.0	2.1	2.1	2.0	2.0	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.05	2.13
10-Feb	2.0	2.0	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.09	2.24
11-Feb	2.0	2.1	2.1	2.2	2.0	A	2.1	2.0	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.11	2.25
12-Feb	2.2	2.2	2.2	2.3	A	2.5	2.4	2.5	2.6	2.4	2.3	2.4	2.4	2.4	2.3	2.4	2.4	2.7	2.5	3.0	2.7	2.9	2.8	3.0	2.49	2.97
13-Feb	2.7	2.6	2.7	A	2.7	2.4	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.4	3.3	2.4	2.3	2.4	2.37	3.43
14-Feb	2.4	2.6	A	2.1	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	1.99	2.57
15-Feb	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.2	2.2	2.3	2.3	2.04	2.36
16-Feb	A	2.4	2.3	P	P	P	2.4	2.5	2.5	2.7	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.20	2.68
17-Feb	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	A	2.5	2.17	2.50
18-Feb	2.6	2.3	2.5	2.4	2.6	2.6	2.6	2.7	2.8	3.0	2.9	2.7	2.5	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.4	A	2.2	1.9	2.53	2.97
19-Feb	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	2.1	1.9	1.9	2.0	2.0	A	2.0	2.0	2.1	1.94	2.09
20-Feb	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.1	A	2.0	2.0	2.1	2.1	2.01	2.11
21-Feb	2.1	2.1	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	A	2.0	2.0	2.1	2.6	2.4	2.07	2.63
22-Feb	2.3	2.3	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.0	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	2.0	2.0	1.9	2.16	2.59
23-Feb	2.0	2.0	2.0	1.9	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.6	2.3	2.0	2.0	2.0	A	2.1	2.0	1.9	1.9	2.0	1.9	1.9	2.01	2.64
24-Feb	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.95	2.08
25-Feb	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	A	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.03	2.06
26-Feb	2.0	2.0	2.1	2.0	2.1	2.0	2.1	2.2	2.1	2.0	2.0	2.1	2.0	A	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.06	2.16
27-Feb	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	6.1	3.2	2.0	2.4	2.2	2.2	2.2	2.3	2.31	6.07
28-Feb	2.3	2.3	2.5	2.5	2.6	2.5	2.7	2.5	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.2	2.0	2.19	2.65
	2.15	2.18	2.18	2.15	2.17	2.18	2.19	2.18	2.18	2.16	2.14	2.16	2.08	2.08	2.08	2.05	2.23	2.13	2.09	2.18	2.15	2.13	2.15	2.15	Diurnal Average	
	2.66	2.67	2.67	2.61	2.70	2.69	2.69	2.75	2.84	2.97	2.94	3.01	2.46	2.88	2.88	2.49	6.07	3.16	2.63	3.43	3.25	2.89	2.80	2.97	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2015

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2015

Pollutant Classes (ppm)

- 1.5 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

Peace Airshed Zone Association

Span Responses

Total Hydrocarbons (THC)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 3.13 ppm on Feb 27 17:00

Maximum Daily Average: 2.45 ppm on Feb 18

Minimum Value: 1.8 ppm on Feb 19 13:00

Minimum Daily Average: 1.93 ppm on Feb 24

Maximum Diurnal Average: 2.13 ppm at hour 7

Minimum Diurnal Average: 2.03 ppm at hour 16

Monthly Average: 2.079 ppm

Percentiles: P_1 = 1.89 P_{10} = 1.94 Q_1 = 1.96 Median = 2.01 Q_3 = 2.10 P_{90} = 2.36 P_{99} = 2.64

Hours in Service:	672
Hours of Data:	600
Hours of Missing Data:	72
Hours of Calibration:	34
Percent Operational Time:	94.4

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	Daily Average	Daily Maximum
1-Feb	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.5	2.5	2.3	2.4	2.3	2.3	2.2	2.1	A	2.1	2.0	2.0	1.9	2.0	1.9	1.9	1.9	2.23	2.56
2-Feb	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	C	C	C	C	C	C	C	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.3	--	2.26
3-Feb	2.4	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.2	A	2.1	2.2	N	N	N	N	N	N	N	N	--	2.64
4-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	2.1	2.0	2.1	2.1	2.1	1.9	2.0	--	2.10
5-Feb	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	2.0	2.0	1.94	1.96
6-Feb	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	1.96	1.98
7-Feb	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	2.0	1.99	2.01
8-Feb	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	2.02
9-Feb	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	2.01	2.03
10-Feb	2.0	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.08
11-Feb	2.0	2.0	2.0	2.0	2.0	A	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	2.2	2.08	2.16
12-Feb	2.2	2.2	2.2	2.2	A	2.4	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.4	2.6	2.6	2.6	2.6	2.6	2.38	2.63
13-Feb	2.5	2.5	2.6	A	2.5	2.3	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	2.4	2.6	2.2	2.3	2.3	2.24	2.63
14-Feb	2.3	2.3	A	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	1.9	1.97	2.34
15-Feb	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.2	2.00	2.21
16-Feb	A	2.3	2.3	P	P	P	2.4	2.4	2.5	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	A	2.13	2.48
17-Feb	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	A	2.3	2.10	2.35
18-Feb	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.6	2.7	2.8	2.8	2.6	2.5	2.4	2.5	2.5	2.4	2.3	2.5	2.4	2.3	A	2.0	2.0	2.45	2.82
19-Feb	2.0	1.9	1.9	1.9	N	N	N	N	N	N	N	1.9	1.8	N	N	1.9	N	1.9	2.0	2.0	A	1.9	2.0	2.0	--	2.01
20-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	1.98	2.08
21-Feb	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	A	2.0	2.0	2.0	2.3	2.3	2.02	2.28
22-Feb	2.2	2.2	2.4	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.1	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	1.9	1.9	2.10	2.36
23-Feb	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.95	2.03
24-Feb	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.93	2.02
25-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.00
26-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.07
27-Feb	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	3.1	2.1	2.0	2.1	2.1	2.2	2.2	2.3	2.09	3.13
28-Feb	2.2	2.3	2.3	2.4	2.5	2.5	2.5	2.2	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.14	2.53
	2.08	2.11	2.11	2.08	2.11	2.13	2.13	2.13	2.13	2.10	2.09	2.07	2.04	2.03	2.03	2.03	2.08	2.04	2.04	2.07	2.08	2.06	2.07	2.08	Diurnal Average	
	2.47	2.49	2.63	2.57	2.59	2.59	2.63	2.64	2.71	2.82	2.77	2.62	2.48	2.38	2.46	2.46	3.13	2.52	2.48	2.59	2.63	2.63	2.61	2.59	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

Henry Pirker - February 2015

Maximum Value: 6.14 ppm on Feb 27 17:00

Maximum Daily Average: 2.62 ppm on Feb 18

Minimum Value: 1.9 ppm on Feb 19 13:00

Minimum Daily Average: 1.97 ppm on Feb 24

Maximum Diurnal Average: 2.26 ppm at hour 17

Minimum Diurnal Average: 2.07 ppm at hour 16

Monthly Average: 2.157 ppm

Percentiles: P_1 = 1.91 P_{10} = 1.97 Q_1 = 2.00 Median = 2.07 Q_3 = 2.19 P_{90} = 2.52 P_{99} = 3.04

Hours in Service:	672
Hours of Data:	600
Hours of Missing Data:	72
Hours of Calibration:	34
Percent Operational Time:	94.4

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	Daily Average	Daily Maximum
1-Feb	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.4	2.5	2.3	2.3	2.3	2.2	A	2.4	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.31	2.64
2-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	C	C	2.0	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.4	--	2.37
3-Feb	2.4	2.6	2.7	2.6	2.7	2.7	2.7	2.8	2.7	2.6	2.4	2.3	2.2	A	2.2	2.2	N	N	N	N	N	N	N	N	--	2.76
4-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	2.1	2.1	2.1	2.1	2.2	2.1	2.0	--	2.24
5-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.05
6-Feb	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.02	2.09
7-Feb	2.0	2.1	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	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.06	2.14
8-Feb	2.1	2.1	2.0	2.0	2.0	2.0	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	2.0	2.1	2.1	2.1	2.1	2.08	2.14
9-Feb	2.1	2.1	2.1	2.0	2.0	2.1	2.1	A	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.06	2.15
10-Feb	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	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.11	2.26
11-Feb	2.1	2.1	2.1	2.2	2.0	A	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.13	2.26
12-Feb	2.2	2.2	2.3	2.3	A	2.5	2.4	2.5	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.7	2.5	3.0	2.7	2.9	2.8	3.0	2.51	3.00
13-Feb	2.7	2.6	2.7	A	2.7	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	3.3	2.4	2.4	2.4	2.39	3.46
14-Feb	2.4	2.6	A	2.2	2.0	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	2.0	2.0	1.9	2.0	2.01	2.59
15-Feb	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.4	2.3	2.2	2.3	2.3	2.05	2.37
16-Feb	A	2.4	2.4	P	P	P	2.5	2.5	2.5	2.7	2.1	2.1	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.22	2.70
17-Feb	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	A	2.5	2.18	2.53
18-Feb	2.7	2.4	2.6	2.5	2.7	2.6	2.7	2.8	2.9	3.1	3.1	2.8	2.6	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.5	A	2.2	2.1	2.62	3.09
19-Feb	2.1	2.1	2.0	2.0	N	N	N	N	N	N	N	2.0	1.9	N	N	2.1	N	2.0	2.0	2.0	A	2.0	2.0	2.1	--	2.08
20-Feb	2.0	2.1	2.0	2.1	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	2.1	A	2.1	2.1	2.1	2.1	2.03	2.12
21-Feb	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.1	2.7	2.4	2.08	2.66
22-Feb	2.4	2.3	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.4	2.3	2.0	2.0	2.0	2.0	2.0	A	2.0	1.9	1.9	2.0	2.0	2.0	2.18	2.61
23-Feb	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.7	2.3	2.1	2.0	2.0	A	2.1	2.1	1.9	1.9	2.0	2.0	1.9	2.03	2.66
24-Feb	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.97	2.10
25-Feb	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.04	2.07
26-Feb	2.1	2.0	2.1	2.0	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	2.08	2.18
27-Feb	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	6.1	3.2	2.0	2.4	2.2	2.2	2.2	2.3	2.33	6.14
28-Feb	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.5	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.0	2.21	2.67
	2.16	2.18	2.18	2.16	2.18	2.19	2.20	2.19	2.20	2.18	2.15	2.15	2.10	2.08	2.08	2.07	2.26	2.14	2.10	2.19	2.17	2.14	2.16	2.17	Diurnal Average	
	2.68	2.61	2.69	2.63	2.73	2.67	2.72	2.81	2.95	3.09	3.06	2.78	2.57	2.52	2.57	2.60	6.14	3.18	2.62	3.46	3.28	2.91	2.82	3.00	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

Henry Pirker - February 2015

Pollutant Rose

Methane (CH_4) - ppm

Henry Pirker - February 2015

Pollutant Classes (ppm)

- 1.5 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

Peace Airshed Zone Association

Span Responses

Methane (CH_4)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 0.00 ppm on Feb 26 01:00

Maximum Daily Average: 0.00 ppm on Feb 25

Minimum Value: 0.0 ppm on Feb 1 01:00

Minimum Daily Average: 0.00 ppm on Feb 5

Maximum Diurnal Average: 0.00 ppm at hour 23

Minimum Diurnal Average: 0.00 ppm at hour 14

Monthly Average: 0.000 ppm

Percentiles: P_1 = 0.00 P_{10} = 0.00 Q_1 = 0.00 Median = 0.00 Q_3 = 0.00 P_{90} = 0.00 P_{99} = 0.00

Hours in Service:	672
Hours of Data:	610
Hours of Missing Data:	62
Hours of Calibration:	34
Percent Operational Time:	95.8

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	Daily Average	Daily Maximum
1-Feb	0.0	0.0	0.0	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
2-Feb	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	--	0.00
3-Feb	0.0	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	N	N	N	N	N	N	N	N	--	0.00
4-Feb	N	N	N	N	N	N	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	--	0.00
5-Feb	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-Feb	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-Feb	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
9-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	A	0.0	0.0	P	P	P	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
18-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
19-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	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-Feb	0.0	0.0	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-Feb	0.0	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-Feb	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-Feb	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
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2015

Maximum Value: 0.00 ppm on Feb 19 18:00

Maximum Daily Average: 0.00 ppm on Feb 7

Minimum Value: 0.0 ppm on Feb 1 17:00

Minimum Daily Average: 0.00 ppm on Feb 15

Maximum Diurnal Average: 0.00 ppm at hour 10

Minimum Diurnal Average: 0.00 ppm at hour 23

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 in Service:	672
Hours of Data:	610
Hours of Missing Data:	62
Hours of Calibration:	34
Percent Operational Time:	95.8

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	Daily Average	Daily Maximum
1-Feb	0.0	0.0	0.0	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
2-Feb	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	--	0.00
3-Feb	0.0	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	N	N	N	N	N	N	N	N	--	0.00
4-Feb	N	N	N	N	N	N	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	--	0.00
5-Feb	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-Feb	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-Feb	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
9-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	A	0.0	0.0	P	P	P	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
18-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
19-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	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-Feb	0.0	0.0	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-Feb	0.0	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-Feb	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-Feb	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
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2015

Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2015

Pollutant Classes (ppm)

Peace Airshed Zone Association

Span Responses

Non Methane Hydrocarbon (NMHC)

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - February 2015

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 59.4 $\mu g/m^3$ on Feb 15 21:00

Maximum Daily Average: 20.5 $\mu g/m^3$ on Feb 12

Minimum Value: 0 $\mu g/m^3$ on Feb 14 16:00

Maximum Diurnal Average: 10.1 $\mu g/m^3$ at hour 21

Monthly Average: 6.53 $\mu g/m^3$

Minimum Daily Average: 1.1 $\mu g/m^3$ on Feb 19

Minimum Diurnal Average: 5.3 $\mu g/m^3$ at hour 17

Percentiles: $P_1 = 0.4$ $P_{10} = 1.3$ $Q_1 = 2.4$ Median = 4.3 $Q_3 = 8.2$ $P_{90} = 13.5$ $P_{99} = 38.0$

Hours in Service:	672
Hours of Data:	668
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Feb	8	10	10	10	7	10	11	12	13	23	16	10	8	9	9	8	8	6	4	3	4	3	3	2	8.6	22.8
2-Feb	3	2	3	3	3	3	3	4	3	4	4	3	3	5	3	4	3	6	39	18	7	24	16	7	7.2	38.9
3-Feb	6	4	4	6	7	9	14	15	17	12	11	9	6	6	5	8	8	10	13	P	23	20	9	10	10.0	23.2
4-Feb	10	12	8	9	9	10	16	12	12	16	25	29	32	38	49	36	9	8	9	12	12	17	3	3	16.5	49.2
5-Feb	2	3	3	2	2	2	2	3	2	2	2	2	3	2	2	2	3	2	2	1	2	2	1	2	2.1	3.2
6-Feb	1	2	2	2	2	2	2	4	4	3	2	3	3	3	3	3	3	4	3	3	5	4	4	4	3.0	5.2
7-Feb	3	4	3	3	4	4	5	6	5	5	4	4	4	6	7	6	5	5	5	5	5	6	5	4	4.7	7.0
8-Feb	4	5	5	5	5	5	6	6	6	6	6	6	6	5	4	4	5	4	5	5	5	6	5	5	5.1	6.1
9-Feb	6	6	5	5	5	5	4	5	4	4	3	3	4	4	3	4	4	4	5	5	4	5	5	5	4.5	6.0
10-Feb	6	6	5	7	8	7	7	12	7	7	5	5	5	5	4	6	5	5	6	6	7	7	7	7	6.2	11.7
11-Feb	6	5	5	4	4	4	4	5	5	6	6	8	9	11	11	10	11	11	8	8	8	10	11	13	7.6	13.4
12-Feb	14	13	12	12	12	14	11	12	15	18	13	18	18	16	13	17	21	31	25	35	39	47	40	29	20.5	47.4
13-Feb	20	21	25	27	24	11	10	11	10	8	10	14	17	13	12	9	8	9	10	12	22	20	25	18	15.3	27.5
14-Feb	15	16	6	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2.0	15.7
15-Feb	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	1	2	3	5	13	59	5	3	2	4.6	59.4
16-Feb	1	1	2	P	P	P	2	3	5	4	3	3	3	3	3	2	3	3	4	5	4	4	4	4	3.3	5.5
17-Feb	4	5	7	6	4	4	5	6	3	4	5	4	3	2	3	4	4	4	6	31	11	11	13	15	6.8	31.3
18-Feb	11	13	22	13	13	12	12	13	17	20	28	24	22	16	14	18	21	20	16	13	12	11	2	1	15.1	28.2
19-Feb	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	2	2	2	2	2	2	2	1.1	1.8
20-Feb	2	3	3	6	3	3	3	4	5	4	4	4	3	2	2	2	2	2	3	4	3	4	4	5	3.3	6.2
21-Feb	6	6	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	3	3	7	8	13	7	3.8	13.1
22-Feb	11	16	13	13	12	14	10	8	7	7	6	4	1	1	1	0	0	0	0	0	0	0	0	0	5.3	15.7
23-Feb	0	0	0	0	1	1	1	1	2	1	2	2	2	2	2	2	5	10	4	2	2	2	1	1	2.0	9.6
24-Feb	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	2	1	2	3	4	4	4	1.9	3.8
25-Feb	5	6	7	5	4	4	3	5	4	4	3	3	3	2	2	2	2	3	3	4	3	3	3	3	3.5	6.8
26-Feb	3	2	3	4	6	8	10	11	13	10	8	8	7	8	7	6	7	8	7	8	8	7	6	5	7.1	13.0
27-Feb	5	5	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	3	3	8	12	8	9	15	4.7	15.0
28-Feb	10	8	9	7	7	7	7	4	3	4	5	4	4	4	4	3	3	4	8	12	13	13	12	6	6.8	13.5
	5.9	6.3	6.1	5.9	5.6	5.4	5.6	6.1	6.2	6.5	6.5	6.5	6.2	6.2	6.2	5.9	5.3	6.1	7.1	8.2	10.1	9.0	7.5	6.3	Diurnal Average	
	20.3	21.1	24.7	27.5	23.6	13.7	15.9	15.0	16.8	22.8	28.2	29.5	31.7	38.1	49.2	35.9	21.4	30.7	38.9	34.5	59.4	47.4	39.5	28.6	Diurnal Maximum	

P - Power Failure

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - February 2015

Maximum Value: 338.7 $\mu g/m^3$ on Feb 2 19:00

Maximum Daily Average: 36.6 $\mu g/m^3$ on Feb 2

Minimum Value: 0 $\mu g/m^3$ on Feb 14 14:00

Minimum Daily Average: 1.7 $\mu g/m^3$ on Feb 19

Maximum Diurnal Average: 24.7 $\mu g/m^3$ at hour 20

Minimum Diurnal Average: 6.9 $\mu g/m^3$ at hour 17

Monthly Average: 11.86 $\mu g/m^3$

Percentiles: $P_1 = 0.6$ $P_{10} = 1.6$ $Q_1 = 3.3$ Median = 6.0 $Q_3 = 11.9$ $P_{90} = 24.3$ $P_{99} = 94.6$

Hours in Service:	672
Hours of Data:	668
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Feb	10	11	14	15	8	14	13	14	18	25	23	12	10	10	10	9	9	8	4	4	7	5	6	3	10.8	25.5
2-Feb	41	6	7	5	3	3	6	5	4	6	7	5	5	7	6	6	4	9	339	92	10	172	120	9	36.6	338.7
3-Feb	12	8	6	8	8	13	26	33	50	17	13	12	8	12	7	36	10	15	15	P	44	128	11	29	22.6	127.9
4-Feb	13	19	9	10	10	15	19	14	19	22	28	32	35	48	88	49	14	10	13	25	15	57	10	4	24.0	88.3
5-Feb	4	6	5	2	2	3	2	4	4	2	2	4	6	4	5	4	4	2	3	2	2	2	3	2	3.4	6.4
6-Feb	2	2	2	3	3	2	3	7	7	3	3	4	5	6	4	5	4	9	3	6	9	6	5	4	4.5	9.3
7-Feb	9	6	4	3	7	4	13	11	7	5	5	4	5	33	17	12	6	6	8	8	6	10	7	5	8.3	32.8
8-Feb	8	5	5	5	7	7	7	7	7	6	6	8	6	6	6	5	6	5	5	7	7	7	10	8	6.5	9.5
9-Feb	41	10	7	6	6	8	5	9	5	6	4	4	4	4	4	6	5	5	6	8	6	7	6	10	7.5	41.2
10-Feb	34	23	7	7	11	11	8	25	11	10	6	6	5	6	5	8	5	7	9	7	8	9	8	7	10.1	34.2
11-Feb	7	6	6	5	5	4	4	6	7	6	7	11	10	12	13	13	12	12	9	11	11	11	26	41	10.5	40.8
12-Feb	34	15	13	15	14	14	11	16	26	59	15	20	22	19	17	23	30	33	30	71	62	67	56	40	30.1	70.7
13-Feb	32	34	31	30	33	15	11	17	13	10	11	17	20	14	13	13	11	14	14	16	26	26	29	29	20.0	34.3
14-Feb	24	19	12	4	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	3.1	24.4
15-Feb	10	1	1	1	1	1	1	1	2	2	2	2	2	3	2	2	2	12	12	98	295	17	9	7	20.3	294.7
16-Feb	5	2	9	P	P	P	3	5	17	7	4	4	4	3	3	4	3	5	6	9	7	7	6	7	5.7	17.0
17-Feb	5	25	22	14	6	8	6	7	8	5	5	6	4	3	5	4	4	5	8	210	19	13	16	24	18.0	210.2
18-Feb	24	70	73	23	15	16	13	15	23	33	63	31	25	23	16	20	24	27	20	16	14	15	5	2	25.2	73.0
19-Feb	7	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	3	3	2	2	2	1.7	7.0
20-Feb	2	6	6	7	11	3	4	10	11	6	5	4	5	4	2	3	2	2	3	8	4	13	9	9	5.7	12.6
21-Feb	25	8	5	4	4	3	2	3	3	3	2	3	2	3	4	3	2	3	4	5	11	11	57	18	7.8	57.4
22-Feb	52	42	16	19	13	16	12	9	8	8	9	6	2	2	1	1	1	1	1	1	1	1	1	1	9.2	52.4
23-Feb	3	1	1	1	1	3	2	2	2	2	2	3	3	3	2	7	13	37	8	3	2	3	2	1	4.4	37.4
24-Feb	1	1	1	1	1	2	2	2	3	3	3	4	4	2	2	2	2	3	2	4	5	6	5	4	2.6	5.5
25-Feb	14	12	13	7	4	4	4	12	7	7	4	3	4	3	3	5	3	4	4	6	4	3	3	3	5.6	13.9
26-Feb	13	3	4	5	7	9	10	16	18	13	10	10	9	9	8	7	7	10	8	9	11	8	9	5	9.1	17.8
27-Feb	10	7	7	3	4	3	5	4	4	4	4	4	3	2	2	3	3	4	5	25	22	9	15	43	8.1	43.3
28-Feb	16	16	9	11	10	8	9	9	6	5	21	5	4	5	5	4	4	6	16	14	21	19	18	9	10.4	21.3
	16.4	13.0	10.6	7.9	7.2	7.1	7.2	9.3	10.3	9.9	9.4	8.0	7.6	8.8	9.0	8.9	6.9	9.2	20.0	24.7	22.6	22.6	16.2	11.8	Diurnal Average	
	52.4	69.9	73.0	29.6	32.9	16.4	25.9	32.9	49.6	59.3	62.6	32.0	34.7	47.7	88.3	49.1	30.1	37.4	338.7	210.2	294.7	172.0	119.7	43.3	Diurnal Maximum	

P - Power Failure

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - February 2015

Peace Airshed Zone Association

Pollutant Rose

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

Henry Pirker - February 2015

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 11.3 ^{o}C on Feb 23 15:00

Maximum Daily Average: 6.1 ^{o}C on Feb 23

Minimum Value: -28 ^{o}C on Feb 3 04:00

Minimum Daily Average: -22.6 ^{o}C on Feb 3

Maximum Diurnal Average: -4.3 ^{o}C at hour 16

Minimum Diurnal Average: -10.8 ^{o}C at hour 6

Monthly Average: -8.17 ^{o}C

Percentiles: P_1 = -27.6 P_{10} = -18.3 Q_1 = -16.1 Median = -8.1 Q_3 = -0.9 P_{90} = 4.0 P_{99} = 8.2

Hours in Service:	672
Hours of Data:	668
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	-25	-25	-24	-24	-24	-23	-23	-22	-21	-19	-18	-16	-14	-12	-12	-13	-13	-14	-15	-15	-15	-16	-16	-16	-18.2	-12.1
2-Feb	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-15	-14	-13	-14	-15	-13	-13	-17	-19	-21	-24	-25	-25	-27	-17.2	-12.6
3-Feb	-28	-27	-28	-28	-28	-28	-27	-27	-27	-25	-20	-16	-15	-13	-13	-12	-14	-18	-23	P	-27	-26	-26	-27	-22.6	-11.6
4-Feb	-26	-25	-24	-22	-21	-20	-19	-18	-17	-15	-12	-10	-8	-6	-5	-5	-6	-7	-7	-7	-7	-7	-7	-9	-12.9	-4.6
5-Feb	-11	-12	-13	-14	-16	-17	-18	-18	-18	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-18	-17	-18	-18	-16.4	-10.8
6-Feb	-18	-18	-18	-18	-18	-19	-19	-19	-19	-19	-19	-18	-18	-18	-18	-19	-18	-19	-19	-19	-19	-19	-19	-19	-18.6	-17.7
7-Feb	-19	-18	-18	-18	-19	-18	-18	-18	-19	-18	-16	-15	-15	-15	-15	-15	-15	-16	-17	-17	-17	-17	-17	-17	-16.9	-14.6
8-Feb	-17	-17	-17	-17	-18	-18	-18	-18	-18	-18	-18	-17	-16	-16	-16	-15	-16	-17	-17	-17	-17	-17	-17	-17	-17.0	-15.3
9-Feb	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-14	-14	-14	-15	-15	-16	-16	-16	-15	-15	-15	-15.8	-13.9
10-Feb	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-14	-14	-14	-15	-16	-17	-17	-17	-18	-17	-17	-15.4	-13.9
11-Feb	-17	-17	-17	-17	-17	-17	-17	-17	-16	-15	-12	-11	-10	-10	-10	-11	-11	-11	-12	-12	-11	-11	-12	-11	-13.5	-10.0
12-Feb	-10	-9	-9	-8	-9	-9	-9	-9	-10	-9	-6	-1	0	2	3	3	2	1	0	0	0	-1	0	0	-3.7	2.9
13-Feb	0	0	0	0	1	0	-1	-1	-1	-2	-2	-1	-1	-2	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-1.0	0.5
14-Feb	-3	-2	-1	0	2	0	0	0	0	3	4	6	7	7	7	7	6	5	4	4	3	2	1	1	2.6	7.2
15-Feb	0	0	1	1	1	1	0	0	-2	0	2	4	5	5	7	6	4	2	-1	-3	-4	-6	-7	-6	0.5	6.9
16-Feb	-6	-5	-5	P	P	P	-8	-7	-7	-6	-5	-5	-5	-3	-2	-2	-3	-5	-7	-8	-8	-8	-8	-9	-5.8	-2.0
17-Feb	-10	-11	-10	-10	-10	-11	-12	-11	-10	-9	-7	-6	-4	-2	-1	-1	-1	-1	-3	-3	-2	-3	-4	-5	-6.2	-0.8
18-Feb	-6	-7	-8	-9	-8	-8	-8	-7	-6	-4	-2	0	3	3	2	3	3	2	0	-1	-2	-1	4	6	-2.2	5.6
19-Feb	5	5	5	4	2	2	2	3	3	4	5	6	8	9	7	7	5	5	5	4	3	3	3	2	4.4	8.7
20-Feb	2	1	1	1	-1	-1	-2	-2	-2	-2	-1	0	1	2	1	0	-1	-1	-3	-3	-5	-4	-4	-4	-1.2	1.5
21-Feb	-3	-3	-3	-4	-5	-6	-6	-7	-7	-7	-6	-6	-4	-3	-3	-2	-1	-2	-3	-3	-4	-6	-9	-10	-4.6	-0.7
22-Feb	-10	-9	-8	-8	-7	-7	-7	-6	-6	-4	-2	3	5	8	8	8	8	7	5	5	4	4	4	4	-0.1	8.3
23-Feb	4	4	4	3	3	3	3	3	4	6	6	8	9	10	11	11	9	8	7	8	7	6	5	7	6.1	11.3
24-Feb	6	6	6	6	5	4	4	3	3	3	4	5	5	5	5	5	4	2	2	-1	-5	-7	-8	-9	2.2	6.4
25-Feb	-10	-10	-11	-11	-11	-11	-11	-12	-12	-11	-11	-10	-9	-8	-7	-7	-7	-7	-8	-8	-7	-7	-7	-7	-9.2	-7.0
26-Feb	-8	-8	-8	-9	-10	-11	-12	-12	-11	-9	-8	-6	-7	-8	-8	-6	-6	-6	-7	-7	-7	-7	-8	-8	-8.2	-5.9
27-Feb	-8	-8	-9	-10	-10	-11	-12	-12	-11	-10	-9	-8	-7	-5	-6	-5	-4	-4	-7	-10	-14	-15	-16	-17	-9.5	-4.0
28-Feb	-18	-18	-19	-19	-19	-19	-18	-15	-12	-8	-6	-4	-1	1	2	2	1	0	-3	-4	-4	-6	-7	-6	-8.4	1.7
	-10.1	-10.1	-10.0	-10.3	-10.6	-10.8	-10.8	-10.6	-10.4	-9.2	-8.0	-6.5	-5.4	-4.6	-4.4	-4.3	-4.8	-5.8	-7.0	-7.1	-8.4	-8.8	-9.0	-9.2	Diurnal Average	
	6.0	5.9	6.0	6.4	5.4	4.4	3.7	3.4	3.9	5.7	6.0	8.0	9.0	10.0	11.3	10.5	8.9	8.1	7.1	7.6	6.5	5.5	5.0	6.8	Diurnal Maximum	

P - Power Failure

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 88.3 % on Feb 14 03:00 Maximum Daily Average: 86.5 % on Feb 13

Minimum Value: 37 % on Feb 22 15:00 Minimum Daily Average: 55.1 % on Feb 23

Maximum Diurnal Average: 72.2 % at hour 8 Minimum Diurnal Average: 58.9 % at hour 15

Monthly Average: 68.00 % Percentiles: P_1 = 40.9 P_{10} = 55.7 Q_1 = 63.4 Median = 69.3 Q_3 = 72.7 P_{90} = 80.0 P_{99} = 87.9

Hours in Service:	672
Hours of Data:	668
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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	Daily Average	Daily Maximum
1-Feb	68	68	69	68	68	69	69	70	71	72	72	72	70	66	65	67	69	70	71	72	72	71	70	70	69.6	72.2
2-Feb	71	71	71	71	72	72	72	73	73	72	70	66	63	64	67	59	59	69	74	73	70	69	69	67	69.0	73.6
3-Feb	66	66	66	66	66	65	66	66	67	67	67	63	54	46	46	46	53	61	68	P	68	69	68	67	62.4	68.8
4-Feb	68	68	68	69	70	70	71	72	73	72	69	65	62	58	59	64	70	72	74	75	75	75	61	62	68.4	75.4
5-Feb	67	67	70	71	71	72	71	71	72	72	71	71	72	72	72	73	73	73	73	73	73	73	72	72	71.5	73.0
6-Feb	72	72	72	72	72	72	72	72	71	71	71	70	70	70	70	70	70	70	71	71	71	71	71	71	71.0	72.0
7-Feb	71	71	71	71	71	71	70	71	71	68	63	61	59	59	61	61	65	68	71	72	72	71	71	70	67.9	72.1
8-Feb	67	67	69	66	64	64	65	66	68	67	64	64	63	65	65	65	67	70	69	69	69	70	69	70	66.7	69.7
9-Feb	71	70	70	70	70	70	69	70	69	69	66	64	64	61	62	61	65	67	68	67	67	67	67	69	67.2	70.5
10-Feb	68	68	68	69	71	73	73	73	72	70	68	67	65	62	62	64	65	66	66	66	68	68	68	69	67.8	72.9
11-Feb	70	70	69	69	69	70	70	71	72	70	66	64	60	61	60	64	65	67	68	70	69	71	70	70	67.8	71.9
12-Feb	69	69	69	69	71	73	73	75	76	69	66	60	64	65	65	65	70	76	79	80	81	83	83	83	72.2	82.9
13-Feb	83	85	86	87	88	88	88	88	88	88	87	87	85	85	85	85	85	84	85	87	88	88	88	88	86.5	88.2
14-Feb	88	88	88	86	73	75	73	72	68	60	55	51	47	46	46	47	48	51	56	57	62	65	66	69	64.0	88.3
15-Feb	70	68	65	63	64	63	63	63	65	56	52	46	45	48	48	53	55	59	70	75	75	75	74	72	62.0	75.4
16-Feb	70	71	72	P	P	P	76	76	76	73	70	65	65	62	60	61	61	65	69	71	68	67	69	71	68.6	76.3
17-Feb	74	75	74	74	75	75	77	77	75	72	68	65	62	61	57	60	61	65	70	71	71	75	78	80	70.5	80.1
18-Feb	80	79	81	81	82	80	79	78	78	73	66	63	55	58	62	61	66	66	76	76	77	74	54	51	70.7	81.9
19-Feb	54	57	61	65	71	71	70	66	65	59	60	55	51	49	52	56	60	62	60	64	69	69	71	74	62.2	74.0
20-Feb	80	84	85	85	86	83	81	81	82	81	77	73	68	62	62	67	68	74	79	81	83	82	81	82	77.8	86.2
21-Feb	82	81	78	75	75	76	71	75	77	76	74	72	69	67	69	67	66	70	73	77	79	81	81	81	74.7	82.2
22-Feb	80	81	82	81	81	80	80	80	79	75	69	55	47	40	37	39	41	43	52	53	57	59	60	61	63.0	81.6
23-Feb	64	63	62	63	63	62	60	61	56	50	51	46	44	42	39	42	47	50	56	56	60	64	66	57	55.1	65.5
24-Feb	58	56	50	45	48	53	55	57	60	61	58	62	63	61	61	57	64	79	70	71	72	69	68	68	61.1	78.9
25-Feb	67	70	73	71	73	74	74	75	74	72	71	69	67	63	63	63	65	66	71	72	71	71	70	70	69.8	74.7
26-Feb	69	68	69	69	70	71	71	71	70	63	59	56	59	62	63	63	65	68	73	76	79	80	80	80	68.9	80.0
27-Feb	79	79	78	78	78	79	77	76	76	73	69	66	61	53	53	52	50	50	59	68	71	74	75	75	68.8	79.3
28-Feb	75	74	74	73	73	73	74	76	71	59	56	53	48	43	40	39	41	42	47	52	52	58	60	56	58.8	75.7
	71.4	71.7	71.8	71.4	71.7	72.0	71.8	72.2	72.0	68.9	66.2	63.2	60.9	59.0	58.9	59.6	61.9	65.1	68.5	70.2	71.1	71.8	70.7	70.5	Diurnal Average	
	87.6	87.7	88.3	87.1	87.6	87.7	87.9	88.1	88.2	87.9	87.5	86.7	85.2	84.6	84.5	84.9	84.7	84.4	85.1	86.8	87.5	87.9	87.9	87.9	Diurnal Maximum	

P - Power Failure

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 441.5 W/m^2 on Feb 28 14:00

Maximum Daily Average: 116.0 W/m^2 on Feb 28

Minimum Value: 0 W/m^2 on Feb 1 01:00

Minimum Daily Average: 16.0 W/m^2 on Feb 2

Maximum Diurnal Average: 210.6 W/m^2 at hour 14

Minimum Diurnal Average: 0.0 W/m^2 at hour 1

Monthly Average: 50.79 W/m^2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 69.3 P_{90} = 182.5 P_{99} = 393.1

Hours in Service:	672
Hours of Data:	668
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	0	0	0	0	0	0	0	0	1	13	35	70	81	66	56	52	22	3	0	0	0	0	0	0	16.6	80.9
2-Feb	0	0	0	0	0	0	0	0	0	9	22	46	60	47	35	103	59	4	0	0	0	0	0	0	16.0	102.7
3-Feb	0	0	0	0	0	0	0	0	2	50	142	193	216	227	213	168	80	16	0	P	0	0	0	0	56.8	226.6
4-Feb	0	0	0	0	0	0	0	0	1	14	39	60	88	85	76	41	28	6	0	0	0	0	0	0	18.2	88.0
5-Feb	0	0	0	0	0	0	0	0	1	23	47	77	82	88	82	60	30	7	0	0	0	0	0	0	20.8	88.2
6-Feb	0	0	0	0	0	0	0	0	1	27	75	92	147	130	105	71	83	10	0	0	0	0	0	0	30.9	146.6
7-Feb	0	0	0	0	0	0	0	0	2	64	166	145	171	151	107	69	35	7	0	0	0	0	0	0	38.3	171.5
8-Feb	0	0	0	0	0	0	0	0	1	15	51	72	77	72	78	49	22	5	0	0	0	0	0	0	18.4	78.5
9-Feb	0	0	0	0	0	0	0	0	1	24	41	56	57	85	59	70	28	7	0	0	0	0	0	0	17.9	84.5
10-Feb	0	0	0	0	0	0	0	0	2	19	46	87	98	105	82	58	40	6	0	0	0	0	0	0	22.7	105.3
11-Feb	0	0	0	0	0	0	0	0	4	57	131	153	169	153	145	99	65	16	0	0	0	0	0	0	41.4	169.3
12-Feb	0	0	0	0	0	0	0	0	8	59	96	238	233	192	146	116	63	19	0	0	0	0	0	0	48.7	238.2
13-Feb	0	0	0	0	0	0	0	0	16	44	73	109	112	86	73	62	42	30	0	0	0	0	0	0	27.0	111.7
14-Feb	0	0	0	0	0	0	0	0	21	142	203	282	342	358	323	223	126	31	1	0	0	0	0	0	85.5	357.5
15-Feb	0	0	0	0	0	0	0	0	10	126	211	296	276	274	394	207	110	32	1	0	0	0	0	0	80.7	394.3
16-Feb	0	0	0	P	P	P	0	0	8	57	116	215	217	339	305	251	130	27	1	0	0	0	0	0	79.3	339.3
17-Feb	0	0	0	0	0	0	0	0	8	31	77	136	300	238	181	255	183	70	2	0	0	0	0	0	61.7	300.1
18-Feb	0	0	0	0	0	0	0	0	13	68	118	153	200	177	143	110	60	30	1	0	0	0	0	0	44.7	199.7
19-Feb	0	0	0	0	0	0	0	0	14	162	200	333	378	409	283	207	36	13	0	0	0	0	0	0	84.8	409.3
20-Feb	0	0	0	0	0	0	0	0	9	52	154	187	222	259	243	130	74	31	2	0	0	0	0	0	56.7	259.2
21-Feb	0	0	0	0	0	0	0	0	7	36	74	127	159	146	134	226	146	40	4	0	0	0	0	0	45.8	226.3
22-Feb	0	0	0	0	0	0	0	0	18	62	155	211	207	393	284	268	161	61	2	0	0	0	0	0	75.9	392.6
23-Feb	0	0	0	0	0	0	0	0	37	156	206	346	391	361	337	161	91	68	4	0	0	0	0	0	89.9	391.1
24-Feb	0	0	0	0	0	0	0	0	10	43	124	102	105	162	198	112	85	34	11	0	0	0	0	0	41.1	198.3
25-Feb	0	0	0	0	0	0	0	0	15	63	99	169	229	286	175	122	72	27	2	0	0	0	0	0	52.5	285.8
26-Feb	0	0	0	0	0	0	0	1	31	145	215	301	241	154	123	112	60	23	5	0	0	0	0	0	58.8	301.4
27-Feb	0	0	0	0	0	0	0	0	10	39	69	100	259	411	401	324	183	90	8	0	0	0	0	0	79.0	411.3
28-Feb	0	0	0	0	0	0	0	1	54	185	295	383	433	442	406	328	173	78	6	0	0	0	0	0	116.0	441.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	10.9	63.8	117.1	169.4	198.2	210.6	185.3	144.8	81.7	28.2	1.7	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	54.0	185.0	295.4	383.2	432.7	441.5	405.5	328.4	183.1	89.6	10.6	0.0	0.0	0.0	0.0	0.0	Diurnal Maximum	

P - Power Failure

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2015

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	Daily Average	Daily Maximum
1 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
2 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
3 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
4 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
5 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	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 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
7 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
8 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
10 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
11 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
12 Spd	N	N	N	N	N	N	N	N	N	N	N	N	4	3	2	2	1	2	1	0	1	1	0	1	--	4.3
Dir	N	N	N	N	N	N	N	N	N	N	N	N	147	118	108	177	167	44	85	91	91	121	215	359	--	146.9
13 Spd	1	1	1	2	2	4	2	4	5	6	4	4	6	5	5	6	1	2	0	5	3	3	2	3	2.3	6.0
Dir	303	36	187	144	90	88	114	88	95	98	98	107	105	92	102	127	115	36	104	181	160	198	175	298	111.3	126.8
14 Spd	1	3	5	8	11	8	9	9	7	19	17	14	14	18	18	17	15	13	16	19	12	12	11	13	11.9	18.6
Dir	348	278	255	283	265	277	273	250	252	252	257	260	261	260	262	272	268	265	264	263	255	249	249	247	261.0	252.5
15 Spd	14	15	18	14	14	13	9	11	7	3	5	3	4	4	9	9	8	7	5	3	4	4	4	3	6.6	17.6
Dir	248	251	251	251	249	248	266	297	288	323	340	322	292	285	299	313	311	316	328	336	344	329	309	339	280.3	251.4
16 Spd	3	4	4	P	P	P	4	2	0	5	9	7	8	8	7	7	5	6	4	3	4	3	3	3	3.6	8.9
Dir	325	320	300	P	P	P	321	1	265	65	88	76	69	77	75	92	82	79	78	70	68	55	55	55	64.3	87.7
17 Spd	1	2	2	2	2	3	0	2	2	2	0	3	6	4	2	5	5	4	3	2	1	3	1	1	0.7	6.4
Dir	56	341	327	335	337	302	244	206	164	160	283	68	103	117	271	317	298	314	299	317	153	177	326	351	322.3	103.1
18 Spd	3	3	3	2	3	2	1	1	2	1	2	2	1	4	2	3	0	1	4	3	3	4	13	21	2.7	20.8
Dir	314	326	312	314	347	321	283	41	200	329	324	342	47	271	324	322	280	343	323	338	291	264	257	253	286.6	252.8
19 Spd	20	20	18	13	9	7	10	18	18	18	18	11	9	11	14	12	10	8	9	10	11	8	6	5	11.7	20.4
Dir	255	257	257	259	286	272	267	256	257	274	276	290	293	276	257	272	259	255	264	291	291	313	312	324	270.4	256.7
20 Spd	6	7	9	7	8	7	4	5	7	5	4	4	3	2	3	4	6	3	2	5	6	5	4	4	1.8	9.0
Dir	295	299	297	323	68	76	80	77	79	100	133	130	115	78	72	58	39	46	344	306	312	314	271	323	18.4	297.1
21 Spd	6	4	6	8	7	10	9	7	8	7	6	5	4	3	5	7	8	7	6	8	6	3	2	3	5.1	9.9
Dir	328	57	88	93	93	99	96	102	95	90	99	129	118	106	111	111	118	125	131	125	114	113	281	335	102.7	99.0
22 Spd	2	1	1	2	1	3	3	2	3	2	4	6	7	7	9	12	12	9	12	16	15	15	13	12	6.5	15.7
Dir	328	80	9	301	339	306	309	339	320	288	316	273	274	268	264	253	245	255	278	263	279	277	279	287	275.6	262.8

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2015

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	Daily Average	Daily Maximum
23 Spd	10	7	9	9	6	8	7	9	8	5	8	6	7	6	5	4	3	3	10	14	8	6	10	17	7.3	17.2
Dir	287	264	275	297	305	284	304	286	285	291	282	284	280	289	289	295	312	300	256	245	244	305	303	262	280.0	262.2
24 Spd	13	16	20	22	22	18	12	10	6	3	3	4	1	1	5	10	22	23	18	11	13	12	10	10	7.0	23.1
Dir	275	280	271	263	275	281	306	330	320	329	320	8	77	84	231	274	312	316	334	44	63	81	82	80	306.5	316.1
25 Spd	9	8	7	8	8	8	7	7	7	10	10	9	11	11	10	11	11	10	7	7	9	9	8	8	8.8	11.2
Dir	75	71	71	83	84	82	71	79	82	91	87	90	85	81	76	83	82	79	64	72	80	84	88	87	80.9	82.2
26 Spd	9	9	8	9	7	6	5	4	2	3	3	3	7	7	7	5	3	3	1	2	4	4	4	4	2.2	9.5
Dir	87	94	87	82	79	79	82	70	54	32	48	24	305	303	291	308	299	24	32	292	305	303	308	339	33.1	94.0
27 Spd	4	3	3	3	4	4	3	1	2	3	5	8	9	8	11	6	4	3	2	2	4	3	4	4	2.2	10.9
Dir	346	22	60	53	80	87	77	126	189	226	253	285	284	282	272	305	290	258	206	301	326	323	315	318	298.7	272.3
28 Spd	3	4	4	5	4	4	4	8	7	7	11	11	11	7	5	6	8	5	3	4	4	3	4	6	3.2	11.4
Dir	318	320	332	322	322	311	298	291	312	315	310	310	293	293	275	242	245	224	163	126	122	128	117	114	293.3	310.4
Spd	3.5	3.2	3.8	3.1	2.2	1.9	2.0	2.2	1.4	1.2	2.0	1.9	1.4	2.1	3.0	2.9	3.2	2.5	2.9	2.5	1.6	1.5	2.4	3.0	Diurnal Average	
Dir	289.5	286.2	277.6	285.1	298.9	295.4	309.2	299.0	285.2	292.3	299.0	310.5	292.6	285.4	273.9	282.4	289.3	304.6	293.4	276.5	302.8	297.9	289.0	285.4		
Spd	20.2	20.4	20.1	21.7	22.4	18.4	11.6	17.6	18.0	18.6	17.8	14.3	14.1	18.2	17.9	17.1	22.3	23.1	18.1	18.5	15.3	15.0	13.2	20.8	Diurnal Maximum	
Dir	254.6	256.7	271.2	262.7	274.5	280.5	305.6	255.6	256.5	252.5	275.9	260.1	260.9	259.9	262.0	271.7	311.5	316.1	334.4	263.3	279.5	276.7	279.1	252.8		

Maximum Speed Value: 23 km/h on Feb 24 18:00
Maximum Daily Speed Average: 11.9 km/h on Feb 19
Maximum Diurnal Speed Average: 3.8 km/h at hour 3

Minimum Speed Value: 0 km/h on Feb 12 23:00
Minimum Daily Speed Average: 0.7 km/h on Feb 17
Minimum Diurnal Speed Average: 1.2 km/h at hour 10

Hours in Service: 672
Hours of Data: 393
Hours of Missing Data: 279

Monthly Average Velocity: 2.36 km/h 290.14 deg

Speed Percentiles: $P_1 = 0.4$ $P_{10} = 1.6$ $Q_1 = 3.1$ Median = 5.3 $Q_3 = 8.9$ $P_{90} = 13.2$ $P_{99} = 21.5$

Percent Operational Time: 58.5

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

P - Power Failure N - Not Valid

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	20	0	0	0	0	0	20
NorthEast	20	4	1	0	0	0	25
East	29	56	3	0	0	0	88
SouthEast	18	8	0	0	0	0	26
South	13	0	0	0	0	0	13
SouthWest	6	4	3	0	0	0	13
West	20	42	41	6	0	0	109
NorthWest	62	31	4	2	0	0	99
Total	188	145	52	8	0	0	393

Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - February 2015

Wind Speed Classes (km/h)

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - February 2015

Peace Airshed Zone Association

Maximum Speed: 23 km/h on Feb 24 18:00

Maximum Daily Speed Average: 12.5 km/h on Feb 24

Minimum Speed: 0 km/h on Feb 12 20:00

Minimum Daily Speed Average: 3.0 km/h on Feb 17

Maximum Diurnal Speed Average: 7.9 km/h at hour 4

Minimum Diurnal Speed Average: 5.9 km/h at hour 9

Monthly Average Speed: 6.89 km/h

Percentiles: $P_1 = 1.2$ $P_{10} = 2.3$ $Q_1 = 3.4$ Median = 5.5 $Q_3 = 9.0$ $P_{90} = 13.2$ $P_{99} = 21.7$

Hours in Service:	672
Hours of Data:	393
Hours of Missing Data:	279
Percent Operational Time:	58.5

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	Daily Average	Daily Maximum
1-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
2-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
3-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
4-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
5-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
7-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
8-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
10-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
11-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
12-Feb	N	N	N	N	N	N	N	N	N	N	N	N	4	3	3	2	3	2	1	0	2	2	1	2	--	4.4
13-Feb	2	2	2	2	2	4	3	4	5	6	5	4	6	5	5	6	3	3	3	5	3	3	2	3	3.7	6.4
14-Feb	1	3	5	8	11	8	10	9	7	19	17	14	14	18	18	17	15	13	16	19	12	12	12	13	12.2	18.7
15-Feb	14	15	18	15	14	13	9	11	7	4	5	3	4	4	9	9	9	7	5	3	4	4	4	4	8.0	17.7
16-Feb	4	4	4	P	P	P	4	4	2	5	9	8	8	8	8	8	5	6	4	3	4	3	4	3	5.1	9.0
17-Feb	2	2	3	3	2	4	1	2	3	3	2	4	7	4	3	6	5	4	4	3	2	3	2	2	3.0	6.8
18-Feb	4	3	3	3	3	3	1	3	2	1	2	2	1	5	3	3	2	3	4	3	3	5	13	21	4.1	21.0
19-Feb	20	21	19	13	9	7	11	18	18	18	18	12	9	11	14	12	10	8	9	11	11	8	6	5	12.4	20.6
20-Feb	6	7	9	9	8	7	5	5	7	5	4	4	3	3	4	4	6	3	3	6	6	5	4	4	5.3	9.1
21-Feb	6	5	6	8	7	10	9	7	8	7	6	5	5	3	5	7	8	7	7	8	6	3	3	3	6.3	10.1
22-Feb	2	1	2	2	2	4	4	2	3	2	4	6	7	7	9	13	12	9	12	16	15	15	13	12	7.3	15.8
23-Feb	10	7	9	9	6	8	8	9	9	6	8	6	7	7	5	4	3	3	10	14	9	6	10	18	7.9	17.5
24-Feb	14	17	20	22	23	19	13	11	6	3	3	5	2	4	6	11	22	23	19	13	13	12	10	10	12.5	23.1
25-Feb	10	9	7	8	8	8	7	7	7	10	10	9	11	11	11	11	11	10	7	7	9	9	8	8	9.0	11.3
26-Feb	9	10	8	9	7	6	5	4	3	4	4	4	7	7	7	5	4	3	2	2	4	4	4	4	5.3	9.6
27-Feb	4	4	3	4	4	4	3	2	2	4	5	8	9	8	11	7	4	3	2	3	4	3	4	4	4.4	11.4
28-Feb	3	4	4	5	4	4	4	9	7	7	11	11	11	7	6	6	8	5	3	4	4	3	4	6	5.8	11.4
Diurnal Average	6.9	6.9	7.6	7.9	7.3	7.1	6.1	6.7	5.9	6.4	7.1	6.7	6.8	6.9	7.4	7.7	7.7	6.8	6.5	7.0	6.6	5.9	6.1	7.1		
Diurnal Maximum	20.3	20.6	20.5	21.9	22.5	18.5	13.2	17.7	18.1	18.7	17.9	14.4	14.2	18.3	18.0	17.3	22.4	23.1	18.9	18.7	15.4	15.1	13.3	21.0		

P - Power Failure N - Not Valid

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - February 2015

Maximum Value: 93.5 deg on Feb 12 20:00

Minimum Value: 4.3 deg on Feb 28 13:00

Percentiles: P_1 = 5.0 P_{10} = 7.1 Q_1 = 10.1 Median = 15.8 Q_3 = 27.0 P_{90} = 50.0 P_{99} = 85.9

Hours in Service:	672
Hours of Data:	393
Hours of Missing Data:	279
Hours of Calibration:	0
Percent Operational Time:	58.5

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	Daily Maximum
1-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
2-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
3-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
4-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
5-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
7-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
8-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
9-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
10-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
11-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
12-Feb	N	N	N	N	N	N	N	N	N	N	N	N	16	31	42	38	77	67	51	94	76	53	60	87	93.5
13-Feb	83	63	55	36	30	18	73	40	19	16	20	15	17	15	16	29	83	50	90	17	38	36	50	49	90.5
14-Feb	70	25	16	15	7	11	17	10	10	6	8	7	8	6	6	7	7	6	7	7	14	10	6	7	70.1
15-Feb	6	7	6	7	7	8	18	9	9	35	14	21	14	21	10	8	5	8	18	16	10	22	28	26	34.9
16-Feb	28	20	27	P	P	P	17	61	81	26	9	19	13	13	15	14	20	14	12	19	15	25	19	27	81.3
17-Feb	38	23	21	32	28	23	64	36	43	31	91	44	21	31	50	18	21	21	17	32	52	17	74	77	91.2
18-Feb	42	18	22	20	42	32	53	82	27	56	24	24	70	57	58	22	77	80	21	22	20	40	11	7	82.1
19-Feb	6	7	5	9	9	16	22	6	6	11	6	18	8	12	10	16	7	11	13	15	7	28	11	16	27.5
20-Feb	9	9	7	40	12	12	20	15	12	20	19	25	37	42	31	33	19	26	63	18	13	14	24	12	63.2
21-Feb	22	35	12	10	15	12	11	15	12	11	20	17	18	54	26	15	10	9	9	7	6	8	73	26	73.0
22-Feb	25	41	55	44	47	49	24	30	28	48	23	23	22	18	14	9	12	16	9	8	8	5	5	8	55.4
23-Feb	8	7	9	8	15	13	16	15	19	18	12	7	13	7	6	8	17	32	19	6	15	15	16	11	31.9
24-Feb	13	11	11	7	6	6	29	17	14	18	9	42	55	82	24	20	6	4	17	35	13	13	13	14	81.6
25-Feb	17	14	16	11	10	11	12	11	12	10	9	13	12	13	12	11	9	16	13	13	9	9	9	9	16.9
26-Feb	9	8	11	8	12	10	10	13	35	27	37	49	27	14	9	14	24	33	44	28	12	13	17	12	49.2
27-Feb	17	65	14	19	11	10	17	50	18	27	22	17	15	15	16	25	9	26	23	51	17	20	7	8	64.9
28-Feb	10	6	15	6	12	13	18	10	25	34	6	8	4	7	23	14	7	22	10	11	6	13	10	6	34.2
	82.8	64.9	55.4	44.2	46.8	48.6	73.2	82.1	81.3	55.8	91.2	49.2	69.5	81.6	57.5	37.8	83.2	80.0	90.5	93.5	76.3	53.5	73.8	87.3	

P - Power Failure N - Not Valid

PAZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.4 ppb on Feb 22 14:00
Maximum Daily Average: 1.1 ppb on Feb 11

Minimum Value: 0 ppb on Feb 4 20:00
Maximum Diurnal Average: 0.8 ppb at hour 14
Monthly Average: 0.36 ppb

Minimum Daily Average: 0.1 ppb on Feb 5
Minimum Diurnal Average: 0.2 ppb at hour 5
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.4 P_{90} = 0.8 P_{99} = 4.0

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	0	0	0.4	1.5
2-Feb	0	0	0	0	0	1	1	2	2	0	0	0	1	1	A	1	0	0	0	0	0	0	0	0	0.5	2.0
3-Feb	0	0	0	0	0	0	1	1	2	1	0	0	0	A	1	1	1	0	0	0	1	1	1	1	0.6	1.5
4-Feb	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	0	0	0	0	0	0	0	0	0	0.5	1.0
5-Feb	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-Feb	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
7-Feb	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.6
8-Feb	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	0.2
9-Feb	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	0.5
10-Feb	1	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0.4	1.0
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	4	8	5	2	1	1	0	0	1.1	7.6
12-Feb	0	1	1	1	A	0	0	0	0	1	2	2	3	2	3	1	1	0	0	0	0	0	1	1	0.9	3.2
13-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
14-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	1.0
16-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2
17-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	2	2	1	1	A	0	0.5	1.9
18-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	0	1	1	A	1	0	0.5	1.3
19-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0.1	0.8
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0.1	1.4
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	10	3	0	2	A	5	0	0	0	0	0	1.0	10.4
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	4	0	0	0.4	4.0
24-Feb	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.5
25-Feb	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	0.5
26-Feb	0	0	0	0	0	1	0	0	0	1	1	1	1	A	1	2	2	2	1	1	1	1	1	1	0.7	2.3
27-Feb	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
28-Feb	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.8	0.6	0.4	0.7	0.6	0.6	0.3	0.3	0.4	0.2	0.2	Diurnal Average	
	0.7	0.7	0.7	0.8	0.8	0.8	1.0	2.0	1.5	0.9	1.7	1.8	2.7	10.4	3.3	1.6	4.0	7.6	5.4	2.3	1.2	4.0	0.8	0.8	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - February 2015

Maximum Value: 30.7 ppb on Feb 22 14:00

Maximum Daily Average: 3.6 ppb on Feb 22

Minimum Value: 0 ppb on Feb 17 06:00

Minimum Daily Average: 0.5 ppb on Feb 16

Maximum Diurnal Average: 2.2 ppb at hour 14

Minimum Diurnal Average: 0.7 ppb at hour 5

Monthly Average: 1.01 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.9$ $P_{90} = 1.3$ $P_{99} = 7.9$

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	2	1	1	1	1	0	1	1	1	1	1	2	3	A	1	1	1	1	1	1	1	1	1.0	2.5
2-Feb	1	1	1	1	1	2	2	3	3	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1.2	2.9
3-Feb	1	1	1	1	1	1	2	2	3	2	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1.1	2.7
4-Feb	1	1	1	1	1	1	2	1	1	2	2	C	C	C	1	1	1	1	1	0	0	0	1	1	1.0	1.6
5-Feb	1	0	0	0	0	1	1	0	0	0	0	A	1	1	0	1	1	1	1	0	0	1	1	1	0.6	0.9
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	0.6	0.8
7-Feb	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
8-Feb	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
9-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
10-Feb	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	1.4
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	3	6	9	8	4	2	1	1	1	2.0	9.1
12-Feb	1	1	1	1	A	1	1	1	1	2	2	3	3	3	6	2	2	1	1	1	1	1	1	1	1.6	5.7
13-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	0	1	1	1	0.7	1.2
15-Feb	1	A	1	1	0	1	1	1	0	1	1	1	1	1	1	1	2	2	1	0	1	1	1	1	0.8	2.4
16-Feb	A	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	A	0.5	0.8
17-Feb	0	0	0	0	0	0	1	0	0	0	0	1	2	1	1	2	2	2	3	3	2	1	A	1	1.0	3.3
18-Feb	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.8
19-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	A	1	1	1	0.7	2.3
20-Feb	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	0	0	0	A	0	1	1	1	0.6	0.9
21-Feb	1	1	0	0	0	1	0	0	0	0	0	0	0	1	1	1	5	1	A	0	0	1	0	0	0.7	4.5
22-Feb	1	0	0	0	0	1	1	1	1	1	1	1	5	31	11	1	13	A	11	1	1	1	1	1	3.6	30.7
23-Feb	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	9	13	1	0	1.6	13.4
24-Feb	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	0	0	0	1	1	0.6	1.0
25-Feb	1	1	1	1	1	1	0	0	0	0	0	1	1	1	A	1	1	1	1	0	0	0	0	0	0.6	1.1
26-Feb	0	0	0	1	1	1	1	1	1	1	1	1	1	A	2	3	3	3	2	1	1	1	1	1	1.3	3.1
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
28-Feb	1	1	1	1	0	1	1	1	1	1	2	A	2	1	1	1	1	1	1	1	0	1	1	1	0.8	2.0
	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	1.2	2.2	1.5	1.0	1.8	1.2	1.5	0.9	1.1	1.2	0.8	0.8	Diurnal Average	
	1.3	1.4	1.6	1.3	1.2	1.7	1.8	2.9	2.7	2.3	2.4	2.5	5.0	30.7	11.4	3.0	12.6	9.1	10.9	4.0	9.3	13.4	1.3	1.3	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.7 ppb on Feb 4 16:00 Maximum Daily Average: 1.1 ppb on Feb 4

Minimum Value: 0 ppb on Feb 23 21:00 Minimum Daily Average: 0.2 ppb on Feb 25

Maximum Diurnal Average: 0.5 ppb at hour 2 Minimum Diurnal Average: 0.3 ppb at hour 14

Monthly Average: 0.45 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.5$ $P_{90} = 0.9$ $P_{99} = 1.4$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0.6	1.2
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	1	1	1	0.5	1.1
3-Feb	1	1	1	1	1	1	1	1	2	1	1	1	0	A	1	1	1	0	0	1	1	1	1	1	0.9	1.7
4-Feb	1	1	1	1	1	1	1	1	1	C	C	C	C	C	1	3	1	1	1	1	1	1	1	1	1.1	2.7
5-Feb	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
6-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Feb	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
8-Feb	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-Feb	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-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0.5
12-Feb	0	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	2	1	2	1	1	1	2	1.0	2.2
13-Feb	2	2	2	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4
14-Feb	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
15-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	0.8
16-Feb	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.8
17-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	A	1	0.4	0.8
18-Feb	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	0	1.0	1.6
19-Feb	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	0.4
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.3	0.6
21-Feb	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	0.4
22-Feb	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	1.1
23-Feb	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.9
24-Feb	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.9
25-Feb	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-Feb	0	0	0	0	0	0	0	0	1	0	0	0	0	A	1	1	0	0	1	0	1	1	1	1	0.4	0.7
27-Feb	1	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	1	1	1	0.5	1.0
28-Feb	1	1	1	1	1	1	0	0	0	1	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0.5	0.9
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	Diurnal Average	
	2.4	2.0	2.4	1.2	1.3	1.3	1.2	1.4	1.7	1.1	1.6	1.3	1.1	0.8	1.4	2.7	1.5	1.6	1.2	1.6	1.4	1.1	1.4	2.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2015

Maximum Value: 7.7 ppb on Feb 4 16:00

Maximum Daily Average: 2.1 ppb on Feb 4

Minimum Value: 1 ppb on Feb 11 08:00

Minimum Daily Average: 1.0 ppb on Feb 25

Maximum Diurnal Average: 1.4 ppb at hour 2

Minimum Diurnal Average: 1.1 ppb at hour 14

Monthly Average: 1.26 ppb

Percentiles: $P_1 = 0.7$ $P_{10} = 0.9$ $Q_1 = 1.0$ Median = 1.1 $Q_3 = 1.4$ $P_{90} = 1.8$ $P_{99} = 3.2$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.5	2.4
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	2	1.2	1.9
3-Feb	2	2	2	2	2	2	2	2	3	2	1	2	1	A	1	1	1	1	1	1	2	2	2	2	1.7	2.8
4-Feb	2	2	2	2	2	2	2	2	3	C	C	C	C	C	2	8	2	2	1	2	1	1	2	2	2.1	7.7
5-Feb	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.9
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
7-Feb	1	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	1.5
8-Feb	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	1.4
9-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.1
10-Feb	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	1.5
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5
12-Feb	1	2	1	1	A	1	1	1	2	2	3	2	2	2	1	2	3	3	3	3	3	2	2	3	2.0	3.2
13-Feb	3	3	4	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	4.3
14-Feb	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7
15-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.5
16-Feb	A	2	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	1.8
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	A	2	1.2	2.0
18-Feb	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	A	2	1	1.8	2.3
19-Feb	1	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	1.3
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.1	1.3
21-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.4
22-Feb	1	1	1	1	1	1	2	2	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1.2	2.0
23-Feb	1	1	1	2	2	1	2	2	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	1.7
24-Feb	1	1	1	1	1	1	1	1	1	2	4	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	3.6
25-Feb	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
26-Feb	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1.2	1.6
27-Feb	1	1	1	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	1.3	2.3
28-Feb	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1.3	1.9
	1.3	1.4	1.3	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.1	1.2	1.4	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	Diurnal Average	
	3.3	3.4	4.3	1.9	2.3	2.1	2.4	2.3	2.8	2.2	3.6	2.2	1.9	1.5	2.3	7.7	3.2	2.6	2.8	2.9	2.6	2.3	2.3	3.2	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2015

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - February 2015

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 32.6 $\mu g/m^3$ on Feb 4 15:00

Maximum Daily Average: 12.3 $\mu g/m^3$ on Feb 18

Minimum Value: 0 $\mu g/m^3$ on Feb 3 13:00

Maximum Diurnal Average: 5.0 $\mu g/m^3$ at hour 17

Monthly Average: 3.73 $\mu g/m^3$

Minimum Daily Average: 0.4 $\mu g/m^3$ on Feb 21

Minimum Diurnal Average: 2.5 $\mu g/m^3$ at hour 5

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.5$ Median = 2.3 $Q_3 = 5.1$ $P_{90} = 9.6$ $P_{99} = 21.5$

Hours in Service:	672
Hours of Data:	665
Hours of Missing Data:	7
Hours of Calibration:	0
Percent Operational Time:	99.0

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	Daily Average	Daily Maximum
1-Feb	7	5	5	6	5	3	5	10	12	11	9	6	5	3	7	4	5	5	3	1	1	2	1	1	5.1	11.5
2-Feb	0	0	1	1	1	0	2	0	1	4	3	2	4	9	2	0	1	2	1	1	2	9	7	5	2.4	9.4
3-Feb	5	5	4	6	6	5	8	10	10	7	9	4	0	1	1	2	3	2	1	3	5	9	5	5	4.8	9.9
4-Feb	6	5	7	8	7	5	5	6	8	8	9	5	M	M	33	25	18	24	16	11	11	12	7	4	11.0	32.6
5-Feb	3	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0.4	2.8
6-Feb	0	0	0	0	0	0	1	1	0	1	1	0	1	0	0	1	1	1	0	1	1	1	1	1	0.5	1.4
7-Feb	2	1	2	1	2	3	2	4	5	6	4	4	5	6	7	5	5	5	5	4	5	4	3	3	3.9	6.6
8-Feb	4	4	6	3	3	4	4	4	3	4	4	3	3	3	2	4	4	3	2	2	2	2	3	2	3.2	5.5
9-Feb	3	4	2	2	1	2	2	2	2	2	2	2	2	2	2	3	3	3	9	6	3	3	4	3	2.9	9.5
10-Feb	4	4	4	5	3	4	9	4	3	4	5	4	5	5	9	4	3	4	2	4	3	3	5	3	4.4	9.0
11-Feb	2	4	2	3	1	2	1	1	1	2	7	9	12	7	9	8	9	8	7	7	5	6	6	5	5.2	11.9
12-Feb	6	9	8	7	6	7	6	6	7	13	13	12	11	8	8	12	11	9	8	11	12	9	13	14	9.4	14.1
13-Feb	14	13	15	12	10	8	5	4	4	4	5	5	14	6	10	25	24	13	4	16	21	19	18	18	12.0	24.7
14-Feb	16	16	10	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2.1	16.0
15-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	3	4	4	4	2	3	1.0	3.9
16-Feb	4	5	2	1	2	3	2	2	3	2	0	0	0	0	1	1	0	1	1	2	0	0	0	0	1.3	4.7
17-Feb	1	2	2	2	0	0	0	0	0	1	1	3	4	2	3	7	9	9	8	10	9	9	9	10	4.2	10.3
18-Feb	10	11	12	11	10	11	11	9	10	16	23	22	14	10	10	14	17	15	18	17	14	7	5	0	12.3	23.1
19-Feb	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	2	1	1	0	0	1	1	2	0.5	2.0
20-Feb	3	1	1	2	1	0	0	0	1	0	1	0	0	0	0	1	0	1	1	2	3	2	2	2	1.1	3.5
21-Feb	3	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.3
22-Feb	0	2	1	3	6	4	5	5	4	4	5	0	0	0	0	0	0	3	8	2	1	1	1	1	2.4	7.6
23-Feb	1	0	1	1	0	1	1	3	3	3	6	4	3	6	5	3	6	10	3	0	0	0	0	0	2.4	9.8
24-Feb	0	0	0	0	1	1	1	2	2	2	6	2	0	0	1	0	4	3	0	2	2	1	1	2	1.4	5.5
25-Feb	1	1	1	0	1	1	1	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0.7	1.5
26-Feb	0	0	0	1	3	3	4	4	6	5	4	4	5	5	7	5	6	7	5	5	4	5	3	2	3.9	7.0
27-Feb	3	3	2	2	0	1	0	0	1	1	6	2	2	0	0	0	2	3	5	3	3	3	4	2	2.1	5.5
28-Feb	0	N	N	N	N	N	17	10	6	12	2	5	4	3	3	2	3	4	4	4	3	4	2	2	4.6	17.0
	3.5	3.8	3.3	2.9	2.5	2.6	3.3	3.1	3.3	4.0	4.5	3.5	3.5	2.9	4.3	4.6	5.0	5.0	4.2	4.2	4.1	4.2	3.7	3.2	Diurnal Average	
	16.0	16.0	14.6	12.4	10.1	11.2	17.0	10.4	11.5	16.2	23.1	21.7	14.5	10.1	32.6	25.4	24.3	24.0	17.6	17.0	20.6	18.7	18.3	17.7	Diurnal Maximum	

M - Maintenance N - Not Valid

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - February 2015

Maximum Value: 45.4 $\mu g/m^3$ on Feb 13 16:00

Maximum Daily Average: 16.6 $\mu g/m^3$ on Feb 13

Minimum Value: 0 $\mu g/m^3$ on Feb 14 06:00

Minimum Daily Average: 1.2 $\mu g/m^3$ on Feb 21

Maximum Diurnal Average: 8.1 $\mu g/m^3$ at hour 18

Minimum Diurnal Average: 4.4 $\mu g/m^3$ at hour 5

Monthly Average: 6.20 $\mu g/m^3$

Percentiles: $P_1 = 0.0$ $P_{10} = 1.1$ $Q_1 = 2.3$ Median = 4.8 $Q_3 = 8.1$ $P_{90} = 13.1$ $P_{99} = 26.8$

Hours in Service:	672
Hours of Data:	665
Hours of Missing Data:	7
Hours of Calibration:	0
Percent Operational Time:	99.0

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	Daily Average	Daily Maximum
1-Feb	10	9	9	9	8	5	7	14	14	14	14	9	10	9	9	6	7	6	5	3	2	5	3	3	7.9	14.3
2-Feb	2	4	4	3	2	2	7	2	3	8	7	4	9	13	6	2	3	4	3	2	7	13	10	8	5.3	13.3
3-Feb	8	7	7	9	8	8	11	13	14	11	12	7	3	3	3	4	6	4	3	5	11	12	11	9	7.9	14.3
4-Feb	10	9	12	12	9	8	7	11	10	11	14	8	M	M	36	32	21	27	20	14	13	14	13	7	14.4	36.2
5-Feb	5	4	3	2	2	2	1	1	1	1	2	2	4	2	2	3	3	2	4	2	4	3	1	4	2.4	4.8
6-Feb	3	3	2	2	2	5	3	3	3	4	9	5	9	7	6	3	4	4	4	4	3	3	4	4	4.1	9.4
7-Feb	4	4	6	4	6	6	7	8	7	11	7	7	8	8	8	7	8	8	7	7	7	7	6	6	6.9	11.2
8-Feb	6	7	10	6	5	6	6	6	5	7	7	5	6	5	5	6	6	7	6	3	4	5	5	4	5.8	9.7
9-Feb	4	6	3	4	3	4	3	4	4	3	4	4	3	4	4	4	4	5	14	11	5	5	7	5	4.9	13.6
10-Feb	5	7	6	7	5	6	10	6	6	7	12	10	8	7	13	9	5	7	4	6	6	7	7	5	7.1	12.9
11-Feb	5	6	5	5	3	4	4	3	6	5	14	12	17	9	11	11	10	11	10	9	8	7	9	8	8.0	16.7
12-Feb	12	13	11	8	8	9	9	7	11	17	17	14	13	13	14	17	16	11	13	17	17	11	16	16	12.9	17.5
13-Feb	16	16	18	15	12	11	7	6	6	7	6	7	23	10	14	45	39	21	7	23	23	22	22	21	16.6	45.4
14-Feb	18	18	17	3	1	0	0	0	0	1	0	1	0	0	2	2	4	4	3	1	1	1	1	1	3.4	18.5
15-Feb	0	1	0	0	1	1	1	1	1	1	0	1	5	1	1	2	3	3	4	6	6	6	4	5	2.2	6.3
16-Feb	7	10	3	3	5	5	4	4	5	6	1	1	2	1	3	2	2	8	3	3	2	2	3	1	3.4	9.9
17-Feb	3	4	5	4	2	1	1	1	0	3	3	5	6	3	7	10	13	12	11	12	12	11	13	13	6.4	12.9
18-Feb	12	14	15	13	13	14	13	11	13	27	30	30	17	14	12	22	19	19	23	22	18	11	8	6	16.6	30.4
19-Feb	1	1	1	0	1	0	0	0	0	2	1	4	3	2	2	2	4	3	5	2	2	4	4	4	2.0	5.3
20-Feb	5	3	3	4	4	2	1	1	2	2	2	2	3	1	3	3	2	3	4	5	5	6	3	3	3.0	5.8
21-Feb	5	5	2	2	2	3	0	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0	1	1	1.2	4.8
22-Feb	3	3	3	6	9	7	6	6	6	6	11	4	0	2	3	1	1	9	12	3	2	2	3	2	4.6	12.4
23-Feb	3	1	2	2	1	3	5	5	5	7	8	7	5	12	8	6	9	16	11	2	0	1	0	0	5.1	16.2
24-Feb	0	0	0	1	2	2	3	6	4	5	7	5	2	4	3	3	7	9	3	6	4	3	2	4	3.6	9.2
25-Feb	3	3	2	2	2	3	2	1	2	2	1	2	1	1	2	2	3	2	3	3	2	2	1	1	2.0	3.3
26-Feb	1	1	1	3	4	5	6	6	8	9	6	5	7	8	9	7	8	9	7	9	6	7	4	3	5.7	9.4
27-Feb	4	4	4	3	2	2	1	2	3	3	9	3	3	1	3	3	4	5	7	5	6	6	6	5	3.9	9.0
28-Feb	2	N	N	N	N	N	23	17	8	17	5	6	5	6	4	4	4	6	6	6	5	6	4	3	7.1	22.9
	5.6	6.1	5.6	4.8	4.4	4.6	5.3	5.2	5.3	7.1	7.5	6.2	6.4	5.4	6.9	7.8	7.7	8.1	7.2	6.8	6.4	6.5	6.1	5.4	Diurnal Average	
	18.0	18.5	17.7	14.8	13.4	13.8	22.9	17.2	14.3	27.3	30.4	30.4	23.1	14.1	36.2	45.4	39.3	26.7	22.6	22.8	23.3	21.6	21.8	21.4	Diurnal Maximum	

M - Maintenance N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - February 2015

Peace Airshed Zone Association

Pollutant Rose

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

Evergreen Park - February 2015

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

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 80.0

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 12.3 ^{o}C on Feb 23 16:00

Maximum Daily Average: 7.6 ^{o}C on Feb 23

Minimum Value: -27 ^{o}C on Feb 3 06:00

Minimum Daily Average: -21.5 ^{o}C on Feb 3

Maximum Diurnal Average: -4.5 ^{o}C at hour 16

Minimum Diurnal Average: -9.9 ^{o}C at hour 8

Monthly Average: -7.68 ^{o}C

Percentiles: P_1 = -25.3 P_{10} = -18.3 Q_1 = -15.9 Median = -7.5 Q_3 = -0.5 P_{90} = 5.0 P_{99} = 9.8

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	-22	-23	-22	-22	-22	-22	-21	-21	-21	-19	-18	-17	-15	-14	-13	-13	-14	-14	-15	-15	-16	-16	-16	-16	-17.8	-13.1
2-Feb	-16	-16	-16	-16	-16	-16	-16	-16	-15	-15	-15	-14	-14	-14	-14	-14	-14	-16	-17	-19	-20	-22	-22	-23	-16.5	-13.7
3-Feb	-24	-25	-25	-25	-27	-27	-27	-26	-25	-24	-22	-20	-18	-15	-13	-12	-13	-16	-18	-20	-22	-23	-23	-24	-21.5	-12.2
4-Feb	-25	-25	-25	-23	-21	-20	-18	-17	-16	-15	-13	-11	-9	-6	-5	-4	-6	-6	-6	-6	-6	-6	-7	-9	-12.8	-4.5
5-Feb	-11	-12	-13	-14	-15	-17	-17	-18	-18	-18	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16.3	-10.6
6-Feb	-18	-18	-18	-18	-18	-18	-18	-19	-19	-19	-19	-19	-18	-18	-18	-18	-18	-19	-19	-19	-19	-19	-19	-19	-18.4	-17.5
7-Feb	-19	-18	-18	-19	-19	-19	-18	-18	-19	-18	-17	-17	-16	-16	-15	-15	-15	-16	-16	-16	-17	-16	-17	-17	-17.1	-15.2
8-Feb	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-18	-18	-18	-17	-16	-16	-16	-16	-17	-17	-17	-17	-17	-17	-17.1	-16.3
9-Feb	-17	-16	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-16	-15	-15	-15	-15	-15	-15	-16	-15	-15	-15	-16.0	-14.7
10-Feb	-15	-15	-15	-15	-15	-14	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-16	-17	-17	-17	-18	-18	-18	-15.6	-14.5
11-Feb	-18	-18	-18	-17	-17	-17	-17	-17	-17	-16	-14	-13	-12	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-13.8	-10.6
12-Feb	-10	-9	-9	-9	-9	-9	-9	-9	-9	-8	-6	-3	0	2	3	3	3	2	1	1	1	0	0	1	-3.4	3.4
13-Feb	1	1	1	1	1	0	0	0	-1	-2	-2	-2	-2	-3	-3	-2	-2	-2	-2	-2	-1	-2	-2	-2	-1.1	1.0
14-Feb	-2	-1	0	1	2	2	2	2	2	3	4	5	6	7	7	7	7	6	5	5	4	4	4	3	3.7	7.2
15-Feb	3	3	2	2	2	2	2	1	0	1	2	3	4	4	6	6	5	4	2	0	-2	-2	-3	-3	1.8	5.7
16-Feb	-3	-3	-3	-3	-3	-4	-5	-5	-5	-5	-5	-5	-5	-4	-3	-2	-3	-5	-6	-7	-8	-8	-8	-9	-4.9	-2.3
17-Feb	-9	-10	-9	-9	-9	-10	-10	-10	-10	-9	-8	-7	-5	-3	-1	0	0	0	-1	-1	-1	-2	-3	-4	-5.5	-0.2
18-Feb	-4	-5	-6	-7	-7	-7	-7	-7	-6	-5	-3	1	2	4	5	5	4	3	2	0	0	0	3	6	-1.1	6.2
19-Feb	7	7	6	5	5	4	4	4	4	4	5	6	7	8	7	7	6	6	5	5	5	4	4	3	5.3	7.6
20-Feb	3	2	2	2	0	-1	-1	-2	-2	-2	-1	-1	0	0	-1	-1	-1	-1	-2	-2	-3	-3	-3	-3	-1.0	2.9
21-Feb	-3	-3	-3	-4	-4	-5	-6	-6	-7	-6	-6	-5	-4	-3	-3	-2	0	-1	-2	-3	-3	-5	-7	-8	-4.0	-0.4
22-Feb	-8	-7	-7	-7	-6	-6	-5	-5	-5	-4	-1	3	5	7	8	8	8	9	7	7	6	6	6	6	1.0	8.8
23-Feb	6	5	6	5	5	4	4	4	3	5	6	7	8	10	12	12	12	11	10	10	10	9	9	9	7.6	12.3
24-Feb	8	8	8	7	7	6	6	5	5	5	5	5	5	5	5	5	5	2	2	-1	-5	-7	-8	-9	3.1	8.4
25-Feb	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-10	-9	-9	-8	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-8.9	-6.6
26-Feb	-7	-7	-7	-8	-9	-11	-12	-12	-12	-11	-10	-9	-8	-7	-8	-7	-6	-6	-6	-7	-7	-7	-7	-7	-8.2	-5.8
27-Feb	-7	-7	-8	-9	-9	-10	-11	-11	-11	-10	-10	-10	-9	-8	-7	-6	-5	-5	-6	-9	-10	-11	-12	-14	-9.0	-4.8
28-Feb	-15	-16	-16	-16	-15	-13	-12	-11	-10	-8	-6	-4	-3	-2	-1	0	0	0	-1	-3	-5	-7	-9	-9	-7.5	0.3
	-8.9	-9.1	-9.2	-9.2	-9.5	-9.7	-9.8	-9.9	-9.8	-9.2	-8.3	-7.2	-6.3	-5.4	-4.8	-4.5	-4.7	-5.2	-5.9	-6.7	-7.3	-7.7	-8.0	-8.2	Diurnal Average	
	8.4	8.0	7.9	7.2	6.6	6.1	5.8	4.6	4.7	5.1	6.3	7.1	8.2	9.9	11.9	12.3	11.8	10.7	10.2	10.3	9.5	9.1	9.0	9.1	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 95.6 % on Feb 13 10:00

Maximum Daily Average: 94.6 % on Feb 13

Minimum Value: 34 % on Feb 22 16:00

Minimum Daily Average: 50.6 % on Feb 23

Maximum Diurnal Average: 78.2 % at hour 9

Minimum Diurnal Average: 64.8 % at hour 16

Monthly Average: 73.61 %

Percentiles: P_1 = 38.1 P_{10} = 54.3 Q_1 = 68.9 Median = 77.1 Q_3 = 80.2 P_{90} = 87.5 P_{99} = 95.0

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	78	78	77	78	78	78	78	78	78	79	80	80	80	79	78	78	79	81	81	81	81	81	80	80	79.1	81.3
2-Feb	81	81	81	81	81	81	81	81	81	81	81	79	76	76	77	75	73	76	79	80	79	79	78	77	78.9	81.3
3-Feb	77	77	76	77	75	74	75	75	76	76	76	75	70	66	62	64	68	73	77	78	78	78	78	77	74.1	78.2
4-Feb	76	75	75	76	77	78	78	79	79	80	79	77	77	73	71	78	84	84	84	86	87	88	79	73	78.9	87.5
5-Feb	75	78	78	79	80	78	78	78	79	78	78	78	78	79	78	79	80	80	80	80	80	79	78	77	78.5	80.5
6-Feb	77	78	79	79	79	79	79	79	78	78	78	77	76	75	75	76	77	76	77	77	77	76	77	77	77.2	79.4
7-Feb	77	77	77	78	78	78	78	78	78	77	73	71	69	69	69	71	74	79	81	81	81	81	80	80	76.4	81.1
8-Feb	79	79	79	78	77	77	76	76	77	77	76	75	75	76	76	76	77	78	78	78	78	79	79	78	77.3	78.8
9-Feb	79	79	79	79	79	79	79	79	79	78	76	75	75	74	74	73	74	75	77	77	77	77	77	76	76.9	79.2
10-Feb	76	77	79	80	81	81	82	82	82	81	78	78	76	74	73	74	75	75	76	76	76	77	78	78	77.8	82.3
11-Feb	79	79	78	79	79	79	79	80	80	79	76	74	73	74	72	73	74	74	77	77	77	77	79	80	77.1	80.2
12-Feb	80	80	80	81	82	82	82	84	85	83	77	77	71	72	72	75	80	86	90	91	92	92	93	93	82.5	93.5
13-Feb	94	94	94	94	94	95	95	95	95	96	96	95	95	95	95	94	94	94	94	94	94	95	95	95	94.6	95.6
14-Feb	95	95	95	91	78	75	73	70	67	62	55	53	47	44	43	43	44	47	51	53	56	58	59	63	63.2	94.9
15-Feb	66	65	63	61	60	60	61	61	62	57	52	51	53	56	50	49	51	55	63	70	78	75	71	70	60.8	77.6
16-Feb	70	71	70	70	73	78	78	79	79	79	74	72	71	67	62	62	64	68	72	74	73	71	73	74	71.8	79.5
17-Feb	76	79	80	79	79	80	82	82	81	79	76	72	66	62	57	57	60	63	67	68	69	73	78	81	72.8	82.0
18-Feb	82	83	85	87	88	88	88	87	86	83	75	63	60	57	55	57	63	63	70	78	79	76	60	46	73.2	88.5
19-Feb	47	51	56	59	63	65	65	67	65	64	62	58	54	51	52	52	55	60	60	61	64	65	65	69	59.5	69.3
20-Feb	78	87	90	91	93	93	93	91	91	91	88	83	76	72	72	75	76	80	83	85	88	88	87	86	84.8	93.2
21-Feb	86	87	86	81	81	82	78	81	86	85	82	80	77	75	74	73	69	73	77	82	86	88	89	89	81.1	89.5
22-Feb	89	89	89	89	89	89	89	88	87	84	75	54	41	36	34	34	35	34	41	47	50	51	51	52	63.2	89.4
23-Feb	55	56	53	54	56	60	59	60	65	54	50	47	45	41	38	38	40	44	47	48	51	52	51	48	50.6	64.7
24-Feb	49	47	42	41	42	44	44	50	50	53	58	66	68	62	65	55	56	80	71	76	78	74	71	71	58.9	80.3
25-Feb	71	73	77	80	79	80	81	81	83	81	78	74	72	67	65	67	69	69	73	77	77	77	77	77	75.1	82.6
26-Feb	76	74	73	74	77	78	80	80	80	76	71	67	66	67	69	68	71	71	79	83	86	87	87	88	76.2	87.6
27-Feb	88	88	88	88	88	87	86	86	84	83	81	77	75	69	64	58	56	54	59	70	78	80	81	82	77.1	88.2
28-Feb	83	83	83	82	83	82	79	76	74	68	62	56	52	47	43	41	40	39	43	49	55	62	69	73	63.5	82.9
	76.3	77.1	77.2	77.4	77.5	77.9	77.6	78.0	78.2	76.5	73.6	70.8	68.4	66.3	64.9	64.8	66.3	68.9	71.6	74.3	75.8	76.2	75.7	75.5	Diurnal Average	
	94.9	94.9	94.8	94.2	94.3	94.6	94.8	95.0	95.4	95.6	95.6	95.4	95.3	94.9	94.7	94.5	94.2	94.0	93.8	94.0	94.3	94.6	94.8	95.1	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	3	2	2	3	3	3	1	4	3	3	12	8	5	3	5	6	8	8	8	12	10	9	5	5	2.3	12.2
Dir	254	330	321	310	296	312	267	323	293	281	261	271	264	4	26	66	70	76	55	55	55	47	76	68	19.0	54.6
2 Spd	3	4	3	5	6	4	2	1	0	3	0	2	3	3	5	4	2	2	0	1	1	0	1	1	1.4	5.6
Dir	73	66	52	48	41	44	50	56	147	307	285	118	250	253	36	49	353	41	13	55	234	264	254	354	38.7	41.1
3 Spd	1	1	3	3	0	0	2	3	5	8	8	9	12	6	2	3	4	4	2	1	1	3	2	3	2.3	11.6
Dir	242	288	319	278	64	255	256	219	229	233	242	269	280	289	306	348	43	56	42	349	341	323	322	218	277.4	279.8
4 Spd	1	1	1	2	1	1	3	1	0	1	0	2	2	2	1	3	5	4	2	0	1	1	10	15	1.6	14.8
Dir	53	63	39	220	278	12	279	247	232	120	23	42	23	357	8	92	92	85	170	275	64	342	51	60	59.8	59.8
5 Spd	17	17	18	17	15	18	19	16	18	18	18	21	17	22	20	18	16	17	15	16	15	17	17	15	17.2	21.8
Dir	59	61	65	61	61	60	57	58	57	56	56	54	51	54	59	62	55	57	61	68	71	72	70	79	60.7	53.9
6 Spd	14	14	13	11	12	12	12	12	11	11	14	12	12	14	17	15	15	14	8	9	9	8	9	8	11.8	16.9
Dir	75	73	76	72	72	60	61	61	64	65	64	62	60	56	55	56	57	60	63	60	66	64	67	64	63.8	55.4
7 Spd	9	9	8	7	5	5	4	2	3	4	7	7	6	8	8	7	7	6	6	5	6	4	5	7	5.6	9.1
Dir	66	66	63	63	61	64	71	20	30	34	43	359	359	33	39	25	44	45	57	51	48	76	76	62	48.1	66.2
8 Spd	7	4	5	6	6	5	7	7	7	9	10	11	10	9	8	9	10	8	11	11	11	6	8	4	7.6	10.9
Dir	72	100	82	88	82	80	58	59	66	69	55	57	53	55	54	53	65	78	64	65	56	60	67	75	64.6	56.0
9 Spd	1	1	3	4	6	4	5	6	7	8	9	4	6	10	7	5	4	4	4	6	4	1	3	1	4.1	10.2
Dir	68	80	93	89	87	79	74	87	66	66	56	70	44	352	22	18	71	125	74	63	60	65	72	106	60.7	351.7
10 Spd	1	1	3	2	3	2	3	5	5	9	9	12	13	12	10	11	11	11	10	9	9	9	8	8	6.5	13.0
Dir	150	159	188	184	130	168	118	100	99	107	89	56	57	52	48	63	70	60	71	68	76	76	64	73	74.7	56.8
11 Spd	7	9	9	7	7	7	6	4	2	2	2	4	6	7	7	12	8	6	2	3	4	4	2	2	1.5	11.5
Dir	75	66	71	70	72	73	63	72	28	42	39	286	259	265	264	335	317	258	324	279	299	229	255	213	5.5	334.9
12 Spd	1	1	1	1	3	2	1	1	3	1	3	4	2	2	2	1	2	1	1	0	0	0	0	1	0.4	3.8
Dir	216	141	110	145	202	218	68	26	210	303	240	55	332	175	32	194	177	124	58	211	115	128	275	197	175.2	54.6
13 Spd	1	2	1	1	1	3	2	3	6	6	8	6	8	8	9	5	3	2	2	3	1	1	1	4	2.4	8.7
Dir	226	58	226	92	56	62	75	77	60	49	52	52	67	55	63	100	2	18	210	203	245	138	186	230	63.3	62.5
14 Spd	0	1	4	5	18	19	14	22	17	27	28	27	30	32	28	27	24	20	20	25	23	27	26	26	20.3	32.3
Dir	59	242	244	261	253	254	260	252	254	256	260	257	264	263	267	268	270	265	262	262	259	251	252	254	259.2	262.5
15 Spd	21	22	26	27	25	22	21	17	14	12	9	10	13	12	14	15	13	14	7	1	1	3	3	2	12.1	26.7
Dir	251	259	260	257	263	264	264	261	271	282	307	278	276	276	308	329	323	338	346	270	255	287	295	295	276.6	256.6
16 Spd	2	3	5	4	4	4	4	1	0	10	12	13	14	12	9	10	10	10	8	6	7	6	5	4	5.1	14.0
Dir	292	309	304	317	276	277	308	0	101	64	76	59	56	58	58	45	42	59	64	66	72	56	67	70	49.7	55.6
17 Spd	0	0	0	1	0	1	1	0	1	0	2	8	3	6	3	6	7	6	3	1	1	0	0	1	1.2	7.7
Dir	64	271	353	54	168	28	96	61	142	278	34	51	25	335	317	329	265	329	284	359	146	238	6	223	338.3	50.5
18 Spd	1	1	2	2	1	1	2	1	0	1	2	1	4	5	2	4	3	0	1	2	5	8	4	35	2.4	35.0
Dir	261	202	258	236	158	12	209	70	313	36	232	23	359	338	3	10	25	321	315	312	248	242	268	253	269.7	253.4
19 Spd	42	44	36	31	22	24	26	23	26	28	28	24	22	20	24	26	18	14	15	14	14	8	7	6	22.0	44.2
Dir	258	259	258	250	257	264	262	259	260	263	263	265	274	274	273	266	266	265	261	267	279	296	295	347	264.3	258.8
20 Spd	7	6	8	12	13	10	8	7	8	7	3	3	4	5	8	9	7	4	2	4	6	7	10	8	3.4	12.6
Dir	325	293	308	331	54	52	60	73	59	87	150	144	55	19	7	47	52	61	20	290	297	288	268	285	13.0	54.2
21 Spd	4	4	6	9	6	8	9	8	6	6	5	7	7	4	4	8	8	7	4	4	3	1	0	0	4.2	9.5
Dir	307	60	69	62	81	70	79	89	78	89	118	115	145	184	152	137	143	133	122	119	105	55	266	27	102.8	78.9
22 Spd	1	2	1	1	1	1	2	2	2	1	2	6	18	20	15	18	17	10	13	29	28	22	22	19	9.9	28.8
Dir	16	52	32	261	54	292	227	11	210	284	255	261	251	252	273	268	256	246	269	270	272	278	277	286	268.1	269.6

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2015

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	Daily Average	Daily Maximum
23 Spd	14	13	19	15	8	5	6	4	2	3	8	11	16	13	10	7	3	8	15	31	21	12	30	38	12.6	38.3
Dir	295	280	273	276	308	254	294	280	184	263	277	265	267	272	278	280	274	267	257	257	247	258	263	258	267.0	258.0
24 Spd	32	26	32	29	32	30	24	12	6	3	4	8	5	2	8	15	31	39	31	21	22	18	18	16	10.2	39.0
Dir	255	262	263	268	272	277	284	337	314	312	324	31	44	121	291	277	328	336	340	46	69	75	70	74	309.8	335.8
25 Spd	14	11	10	9	9	10	11	10	8	7	7	8	13	15	16	15	12	9	11	10	8	6	6	5	9.9	16.2
Dir	63	64	65	67	70	63	69	61	61	73	86	70	54	48	50	58	61	58	62	61	67	75	71	70	62.5	50.2
26 Spd	6	8	6	5	7	7	6	5	3	5	11	9	9	7	9	8	7	1	3	1	2	2	4	3	3.6	10.6
Dir	68	86	76	57	54	54	47	48	31	14	355	18	33	9	302	315	289	336	39	75	316	259	288	301	17.7	354.6
27 Spd	0	2	3	6	6	5	3	2	1	5	9	16	14	15	12	9	11	7	1	1	1	2	1	1	3.1	15.7
Dir	344	52	97	56	78	80	57	131	210	223	236	284	292	277	286	303	269	270	226	205	312	325	290	249	282.8	284.3
28 Spd	1	1	3	1	5	9	12	11	6	8	18	13	12	11	9	12	13	6	2	1	1	1	1	5	5.5	18.1
Dir	229	249	232	270	339	308	284	297	292	276	324	295	271	267	276	270	270	252	155	136	195	74	52	49	287.2	324.2
Spd	1.8	1.4	2.1	1.8	1.3	1.8	1.8	1.3	1.0	1.1	2.1	2.7	3.3	3.8	4.1	3.9	3.5	3.0	2.3	1.5	1.3	1.1	1.4	1.9	Diurnal Average	
Dir	290.8	298.8	286.5	303.1	327.6	326.2	332.7	355.0	355.4	343.9	332.5	341.9	323.6	325.1	336.2	340.5	341.8	0.3	358.8	339.8	354.6	334.8	327.4	285.9		
Spd	42.0	44.2	36.4	30.5	32.0	30.0	25.8	23.4	25.9	27.7	28.1	26.8	30.0	32.3	27.9	26.6	30.9	39.0	31.1	30.6	27.5	27.2	29.9	38.3	Diurnal Maximum	
Dir	257.9	258.8	258.3	250.5	272.1	276.6	262.2	259.0	260.2	262.6	263.4	257.4	263.7	262.5	266.7	268.2	327.8	335.8	339.9	256.6	271.5	250.6	262.6	258.0		

Maximum Speed Value: 44 km/h on Feb 19 02:00
Maximum Daily Speed Average: 22.0 km/h on Feb 19
Maximum Diurnal Speed Average: 4.1 km/h at hour 15

Minimum Speed Value: 0 km/h on Feb 4 09:00
Minimum Daily Speed Average: 0.4 km/h on Feb 12
Minimum Diurnal Speed Average: 1.0 km/h at hour 9

Monthly Average Velocity: 2.00 km/h 331.13 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 1.0$ $Q_1 = 2.5$ Median = 6.1 $Q_3 = 11.5$ $P_{90} = 19.1$ $P_{99} = 31.7$

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

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Percent Operational Time:	100.0

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	27	14	1	0	1	0	43
NorthEast	62	94	43	5	0	0	204
East	38	46	16	1	0	0	101
SouthEast	24	6	0	0	0	0	30
South	17	0	0	0	0	0	17
SouthWest	35	6	0	1	0	0	42
West	49	28	36	40	14	3	170
NorthWest	34	20	9	0	1	1	65
Total	286	214	105	47	16	4	672

Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - February 2015

Maximum Speed: 45 km/h on Feb 19 02:00

Maximum Daily Speed Average: 22.8 km/h on Feb 19

Minimum Speed: 0 km/h on Feb 22 00:00

Minimum Daily Speed Average: 2.6 km/h on Feb 12

Maximum Diurnal Speed Average: 11.0 km/h at hour 14

Minimum Diurnal Speed Average: 6.6 km/h at hour 9

Monthly Average Speed: 8.82 km/h

Percentiles: P_1 = 0.6 P_{10} = 1.6 Q_1 = 3.2 Median = 6.6 Q_3 = 12.0 P_{90} = 19.3 P_{99} = 31.8

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	3	3	3	3	3	4	2	5	4	4	12	8	5	4	6	6	9	8	8	12	10	9	6	5	6.0	12.5
2-Feb	3	5	3	6	6	4	3	1	1	3	1	2	3	3	5	4	3	2	2	1	1	1	1	1	2.7	5.8
3-Feb	2	2	3	5	1	0	2	3	5	8	8	9	12	7	3	4	5	4	2	1	2	3	2	3	4.0	12.0
4-Feb	2	1	2	2	3	3	4	3	1	2	1	2	3	2	2	5	6	5	3	2	1	1	10	15	3.4	15.2
5-Feb	17	18	18	17	16	18	20	16	19	18	18	21	18	22	20	19	16	17	15	16	16	17	18	16	17.7	22.3
6-Feb	14	14	13	12	12	12	12	12	11	12	14	12	12	15	17	15	15	15	9	9	9	9	10	8	12.3	17.3
7-Feb	9	9	8	7	5	5	4	2	3	4	7	8	7	9	9	8	7	7	6	5	6	4	5	7	6.5	9.5
8-Feb	7	4	5	7	6	5	7	8	8	9	11	11	11	10	8	10	10	9	11	11	11	6	9	4	8.3	11.4
9-Feb	2	1	4	5	6	4	5	6	7	9	10	6	7	11	8	6	5	4	5	6	5	1	4	1	5.4	10.7
10-Feb	1	1	4	2	4	3	4	6	6	9	9	12	14	13	10	11	12	11	10	10	10	10	8	8	7.8	13.6
11-Feb	8	10	9	8	7	7	6	4	2	2	4	5	7	7	7	12	9	7	4	4	4	4	2	2	6.0	12.0
12-Feb	3	1	2	2	4	2	3	2	3	3	4	5	3	3	2	2	5	2	2	1	1	1	1	3	2.6	4.9
13-Feb	2	2	3	1	2	4	4	3	7	6	8	6	8	9	9	6	6	5	4	4	3	3	3	6	4.6	9.2
14-Feb	1	2	5	5	18	19	14	22	17	27	28	27	30	32	28	27	24	20	21	26	23	27	26	27	20.6	32.4
15-Feb	21	22	27	27	25	23	21	17	14	13	10	10	14	13	15	15	13	14	8	2	2	3	4	2	13.9	26.9
16-Feb	3	3	6	5	4	5	4	4	1	10	12	13	15	12	10	10	10	10	8	6	8	6	5	4	7.3	14.6
17-Feb	1	1	1	1	1	1	1	1	1	2	3	9	5	7	3	7	7	6	4	2	2	2	1	1	2.9	8.6
18-Feb	3	2	3	2	6	3	2	1	1	1	2	1	4	5	3	5	4	3	3	2	5	9	5	35	4.5	35.1
19-Feb	42	45	37	31	22	24	26	23	26	28	28	24	23	20	24	26	18	14	15	14	14	10	8	6	22.8	44.5
20-Feb	7	6	8	12	13	10	9	7	8	7	3	4	5	6	9	10	8	4	2	4	6	7	10	8	7.3	12.9
21-Feb	6	4	7	9	6	8	10	8	7	6	6	8	8	6	5	9	9	7	4	4	3	2	1	0	5.9	10.0
22-Feb	1	2	1	3	1	2	2	2	3	3	3	7	18	20	16	19	18	11	14	29	28	23	22	20	11.1	29.1
23-Feb	15	13	19	15	8	5	7	5	5	4	8	11	16	13	11	8	3	8	15	31	21	13	30	38	13.5	38.4
24-Feb	32	27	32	29	32	30	25	13	6	4	5	9	6	7	11	16	32	39	32	22	23	19	18	17	20.2	39.4
25-Feb	15	11	10	9	10	11	12	11	9	8	8	9	14	16	17	15	12	9	12	10	8	6	6	5	10.5	16.7
26-Feb	6	8	7	5	7	7	6	5	3	6	11	9	10	8	10	9	8	3	3	1	2	3	4	3	6.0	10.9
27-Feb	1	2	3	6	7	6	4	3	1	5	10	17	16	16	13	10	11	7	1	2	2	2	2	2	6.1	17.1
28-Feb	1	1	3	2	5	9	12	11	7	9	19	15	13	11	10	12	13	6	2	1	1	2	1	5	7.1	18.6
	8.1	7.9	8.7	8.5	8.6	8.3	8.2	7.3	6.6	7.9	9.4	10.0	11.0	11.0	10.4	10.9	10.7	9.3	8.0	8.5	8.1	7.2	7.9	9.1	Diurnal Average	
	42.2	44.5	36.7	30.7	32.3	30.3	25.9	23.5	26.0	27.9	28.2	26.9	30.2	32.4	28.1	26.8	31.7	39.4	31.8	30.8	27.8	27.3	30.0	38.4	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - February 2015

Maximum Value: 98.2 deg on Feb 27 01:00

Minimum Value: 4.3 deg on Feb 19 08:00

Percentiles: P_1 = 5.3 P_{10} = 9.2 Q_1 = 16.0 Median = 25.2 Q_3 = 45.1 P_{90} = 72.5 P_{99} = 93.3

Hours in Service:	672
Hours of Data:	672
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-Feb	37	58	47	25	30	36	59	49	36	45	16	18	22	42	41	30	24	18	18	12	16	11	25	25	59.2
2-Feb	29	25	33	13	19	19	24	35	65	30	94	63	35	26	31	40	37	16	76	80	71	60	57	52	94.2
3-Feb	63	58	50	52	83	81	43	20	17	8	12	14	16	27	44	46	33	13	27	57	34	24	32	37	82.6
4-Feb	82	79	81	61	80	83	51	74	89	62	93	39	42	51	70	67	38	36	68	90	52	71	45	14	92.7
5-Feb	13	14	14	16	15	14	13	17	11	14	14	16	14	13	15	14	18	14	15	15	14	14	14	17	17.6
6-Feb	16	17	15	19	16	14	13	15	17	24	16	16	19	17	20	13	15	14	18	17	18	16	15	16	23.6
7-Feb	16	22	15	13	14	21	28	53	21	32	28	22	39	29	23	29	35	31	20	26	19	50	29	22	52.5
8-Feb	24	33	28	28	30	36	24	18	24	22	21	24	22	27	32	20	20	30	17	22	16	28	26	31	35.9
9-Feb	51	57	27	40	27	32	35	30	28	25	26	61	32	22	38	41	57	38	32	22	27	64	35	63	63.9
10-Feb	38	56	27	33	14	32	36	21	26	21	29	20	18	19	21	19	22	21	19	19	27	24	21	23	55.7
11-Feb	20	20	20	24	28	25	20	40	45	60	65	44	21	29	18	25	30	41	73	37	33	45	59	63	72.6
12-Feb	89	50	55	79	62	70	80	82	79	64	53	45	70	74	58	83	63	73	78	83	82	63	93	88	93.3
13-Feb	82	66	89	66	63	48	70	47	23	19	14	19	24	27	25	38	80	64	79	51	79	65	93	70	92.9
14-Feb	79	78	62	11	5	5	9	5	18	6	6	5	7	5	7	7	8	6	8	6	6	6	7	6	78.5
15-Feb	6	6	5	6	7	6	8	7	11	21	26	17	18	12	22	16	14	10	19	48	62	34	37	53	61.8
16-Feb	42	35	22	40	36	36	23	78	95	16	19	16	20	23	25	26	15	13	13	11	17	17	17	22	95.0
17-Feb	67	78	84	93	82	68	35	83	60	95	47	33	71	30	30	35	21	26	31	84	51	94	78	70	95.5
18-Feb	77	84	55	46	81	85	60	69	69	81	30	78	21	18	47	45	42	97	75	46	26	17	32	7	96.6
19-Feb	6	7	7	6	7	6	5	4	5	5	6	8	9	9	10	7	7	11	9	13	16	40	22	15	40.2
20-Feb	16	19	14	28	13	12	20	19	24	25	53	52	66	39	21	21	17	24	46	36	28	17	14	21	66.1
21-Feb	51	21	23	17	30	22	20	24	25	28	30	25	28	63	50	26	26	17	14	13	20	40	83	61	83.0
22-Feb	66	35	43	83	46	67	43	60	88	71	77	57	8	7	13	10	15	40	19	7	8	9	9	13	88.4
23-Feb	16	14	11	13	14	20	30	31	67	77	25	16	8	10	14	20	50	13	6	7	6	34	6	5	77.0
24-Feb	6	9	6	8	7	9	15	27	20	23	50	24	38	78	42	16	16	9	15	18	17	18	13	19	78.4
25-Feb	20	23	25	19	23	17	21	17	16	27	45	41	14	19	15	18	17	22	16	15	15	23	19	17	45.2
26-Feb	24	19	23	37	11	11	9	9	16	29	14	28	26	32	26	28	37	80	26	53	43	41	26	13	80.3
27-Feb	98	39	35	20	22	31	31	32	54	17	22	23	26	16	18	26	15	13	55	84	82	31	45	71	98.2
28-Feb	46	36	51	83	16	13	12	17	19	23	14	26	22	18	26	15	11	30	33	29	47	77	24	7	82.6
	98.2	83.9	89.4	93.1	82.6	84.6	80.3	82.9	95.0	95.5	94.2	78.0	71.3	78.4	70.3	83.0	80.2	96.6	79.4	89.5	82.0	93.6	93.3	88.0	

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.4 ppb on Feb 14 22:00
Maximum Daily Average: 2.7 ppb on Feb 12

Minimum Value: 0 ppb on Feb 5 17:00
Maximum Diurnal Average: 1.3 ppb at hour 19
Monthly Average: 0.93 ppb

Minimum Daily Average: 0.0 ppb on Feb 21
Minimum Diurnal Average: 0.7 ppb at hour 17
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.4 Q_3 = 1.1 P_{90} = 2.6 P_{99} = 5.2

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0.3	0.5
2-Feb	0	0	0	0	0	0	1	5	2	0	0	0	0	0	A	0	0	3	8	3	1	0	0	0	1.1	8.5
3-Feb	0	1	2	1	1	1	1	0	0	1	1	0	1	A	1	1	1	1	3	1	1	1	1	0	0.9	2.8
4-Feb	0	0	0	2	3	2	2	2	2	2	2	2	A	1	1	1	1	1	1	2	3	1	0	0	1.4	3.1
5-Feb	0	0	0	0	0	0	0	0	0	0	0	A	C	C	C	C	0	0	0	0	0	0	0	0	0.1	0.2
6-Feb	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-Feb	0	0	0	0	0	0	0	0	0	A	3	1	0	0	0	0	0	1	0	0	0	0	0	0	0.4	2.6
8-Feb	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-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
10-Feb	0	0	0	1	3	1	A	0	0	1	1	2	2	3	2	1	1	1	1	1	1	0	0	0	1.0	2.8
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	2	1	2	3	2	2	4	1.1	3.6
12-Feb	4	4	4	4	A	3	3	4	2	2	3	2	2	2	2	2	3	2	2	4	4	2	2	2	2.7	4.5
13-Feb	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
14-Feb	1	1	A	1	1	1	1	0	0	1	1	2	3	3	2	2	0	1	1	1	3	11	6	5	2.1	11.4
15-Feb	3	A	2	1	1	2	3	4	4	1	1	2	3	6	3	0	0	0	0	1	0	0	0	0	1.7	5.7
16-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	2	2	2	2	A	1	0.7	4.2
18-Feb	2	2	2	3	3	2	2	1	1	1	1	1	1	1	1	1	3	3	4	5	3	A	2	2	2.0	4.9
19-Feb	5	3	5	0	6	4	3	0	0	0	1	1	1	3	5	1	0	1	0	0	A	0	0	0	1.8	6.4
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	1	0	0	0.2	1.1
21-Feb	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-Feb	0	0	0	0	1	0	0	0	0	0	1	1	1	0	1	0	0	A	4	5	3	6	9	3	1.6	9.3
23-Feb	2	2	2	1	1	1	5	8	4	5	8	1	1	1	1	1	A	0	0	1	1	1	1	1	2.0	8.2
24-Feb	3	3	3	1	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0.6	2.9
25-Feb	1	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-Feb	1	2	2	2	2	1	1	1	1	1	1	1	2	A	1	3	1	2	3	2	0	0	0	0	1.3	2.8
27-Feb	0	0	0	0	0	0	0	0	0	0	0	3	A	0	1	1	0	0	0	0	0	0	1	1	0.5	3.0
28-Feb	1	1	1	0	0	0	0	0	1	1	1	A	1	2	3	2	1	2	2	1	1	1	0	0	1.0	2.6
	1.0	0.8	1.0	0.8	0.9	0.8	0.9	1.1	0.8	0.7	1.0	0.9	0.8	1.0	1.0	0.8	0.7	0.8	1.3	1.2	1.1	1.2	1.1	0.9	Diurnal Average	
	4.9	3.7	4.7	3.8	6.4	4.2	5.0	7.7	4.1	4.6	8.2	3.0	3.1	5.7	5.4	2.8	4.2	3.5	8.5	4.9	3.6	11.4	9.3	5.0	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - February 2015

Maximum Value: 45.6 ppb on Feb 23 11:00

Maximum Daily Average: 5.7 ppb on Feb 23

Minimum Value: 0 ppb on Feb 5 18:00

Minimum Daily Average: 0.4 ppb on Feb 21

Maximum Diurnal Average: 3.1 ppb at hour 22

Minimum Diurnal Average: 1.4 ppb at hour 4

Monthly Average: 1.99 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.5 Q_1 = 0.6 Median = 0.8 Q_3 = 2.1 P_{90} = 4.6 P_{99} = 14.0

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.7	0.9
2-Feb	1	0	1	1	1	0	3	10	7	1	0	1	1	1	A	1	1	10	13	5	2	1	1	1	2.5	12.6
3-Feb	0	2	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	4	2	2	1	1	1	1.4	4.2
4-Feb	1	1	1	4	5	3	3	3	2	3	2	2	A	2	1	1	1	1	2	8	7	7	1	1	2.6	7.9
5-Feb	0	0	0	1	1	1	0	0	1	1	1	A	C	C	C	C	0	0	0	0	0	0	1	1	0.5	0.7
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
7-Feb	1	1	1	1	1	1	1	1	1	A	5	5	1	1	1	1	1	2	1	1	1	1	1	1	1.1	5.0
8-Feb	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	0.8
9-Feb	1	1	1	1	0	1	1	A	0	0	0	1	0	1	0	2	1	1	1	1	1	0	1	1	0.6	1.5
10-Feb	0	1	1	5	5	2	A	1	1	1	2	3	3	3	3	2	1	1	1	1	1	1	1	1	1.7	5.2
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	6	1	5	5	3	3	5	1.8	5.7
12-Feb	5	4	4	4	A	3	4	4	3	3	5	4	3	2	2	3	3	2	3	7	5	3	2	2	3.6	6.6
13-Feb	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0.7	1.7
14-Feb	1	2	A	1	1	1	2	1	1	3	3	3	4	6	5	5	2	3	2	2	10	37	12	11	5.1	37.0
15-Feb	6	A	2	2	2	3	4	5	6	2	2	5	10	10	6	1	1	1	1	1	1	1	1	1	3.1	9.7
16-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	A	0.6	0.9
17-Feb	1	0	1	1	1	1	1	0	0	1	1	0	1	1	1	4	10	3	3	2	4	2	A	2	1.6	9.6
18-Feb	2	3	3	3	3	2	2	2	1	1	1	2	2	1	1	2	4	5	6	7	5	A	3	14	3.4	14.2
19-Feb	14	10	11	1	11	9	11	1	1	1	1	3	3	5	11	2	1	5	1	1	A	1	1	1	4.6	14.3
20-Feb	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	2	2	A	1	1	1	1	0.7	2.4
21-Feb	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
22-Feb	0	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	A	11	13	8	15	14	5	3.6	15.2
23-Feb	5	3	4	2	1	3	9	15	12	16	46	1	1	1	1	2	A	1	1	1	1	1	3	3	5.7	45.6
24-Feb	5	8	4	2	1	2	2	1	0	0	0	1	0	0	0	A	0	0	0	0	0	1	1	1	1.4	7.8
25-Feb	1	1	1	1	1	1	0	1	0	1	1	1	1	1	A	0	0	1	1	1	0	0	1	1	0.6	0.8
26-Feb	2	2	3	3	2	2	2	1	1	1	1	1	5	A	2	4	3	6	7	9	1	1	1	1	2.6	9.1
27-Feb	1	1	1	0	0	1	0	0	0	1	1	8	A	2	3	1	1	1	1	1	1	1	2	2	1.2	8.1
28-Feb	1	1	1	1	1	1	1	1	1	1	1	A	2	4	3	3	1	3	8	1	1	1	1	1	1.8	7.8
	2.0	1.7	1.7	1.4	1.6	1.6	1.9	2.0	1.7	1.6	3.0	1.8	1.8	1.8	2.1	1.6	1.4	2.2	2.7	2.7	2.2	3.1	2.0	2.1	Diurnal Average	
	14.3	10.4	11.3	5.2	11.3	9.3	11.5	14.6	11.5	16.0	45.6	8.1	9.7	9.6	11.2	4.6	9.6	9.9	12.6	12.9	9.9	37.0	14.0	14.2	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.5 ppb on Feb 18 20:00 Maximum Daily Average: 0.3 ppb on Feb 4

Minimum Value: 0 ppb on Feb 2 05:00 Minimum Daily Average: 0.0 ppb on Feb 25
Maximum Diurnal Average: 0.1 ppb at hour 15 Minimum Diurnal Average: 0.1 ppb at hour 23
Monthly Average: 0.11 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.3$ $P_{99} = 0.3$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3
2-Feb	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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Feb	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.1	0.3
6-Feb	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	0.2
7-Feb	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-Feb	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-Feb	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	0.2
10-Feb	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-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
12-Feb	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
13-Feb	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-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Feb	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-Feb	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	0.3
17-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.2	0.5
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0.3	0.5
19-Feb	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	0.2
20-Feb	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-Feb	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	0.2
22-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2
24-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.0
26-Feb	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
27-Feb	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	0.2
28-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
	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	Diurnal Average	
	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.4	0.4	0.3	0.5	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2015

Maximum Value: 1.4 ppb on Feb 27 09:00

Maximum Daily Average: 0.8 ppb on Feb 12

Minimum Value: 0 ppb on Feb 22 23:00

Minimum Daily Average: 0.4 ppb on Feb 25

Maximum Diurnal Average: 0.6 ppb at hour 9

Minimum Diurnal Average: 0.5 ppb at hour 11

Monthly Average: 0.54 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.6$ $P_{90} = 0.7$ $P_{99} = 1.1$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	0	0	1	1	1	0.7	1.3
2-Feb	0	0	0	1	0	0	0	0	0	1	0	0	0	0	A	1	0	1	1	0	0	0	0	0	0.4	0.7
3-Feb	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	0.6	0.9
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
5-Feb	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.5	0.8
6-Feb	0	0	0	0	0	0	0	0	1	0	A	1	0	1	1	1	1	1	0	0	0	0	0	1	0.5	0.8
7-Feb	0	0	1	1	1	1	0	1	0	A	1	1	0	0	0	1	0	1	1	0	1	0	1	0	0.5	0.7
8-Feb	1	1	1	1	1	1	0	1	A	1	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0.6	0.7
9-Feb	1	1	0	0	0	0	0	A	1	0	0	1	1	1	1	0	1	0	0	1	1	0	0	0	0.5	0.8
10-Feb	1	0	0	0	0	0	A	1	1	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0.5	1.2
11-Feb	0	1	1	0	0	A	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	0.5	0.6
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
13-Feb	1	1	1	A	1	1	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	1	1	1	0.6	0.7
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0.6	0.7
15-Feb	1	A	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	0	0	0	0	0	1	0.5	0.6
16-Feb	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.4
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0
19-Feb	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	1	0	1	1	A	1	0	1	0.5	0.7
20-Feb	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	1	1	0.5	1.1
21-Feb	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	A	1	1	0	1	0	0.5	0.7
22-Feb	0	0	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0.5	0.7
23-Feb	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	A	1	1	0	0	1	0	1	0.4	0.7
24-Feb	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	1	1	0	1	0	0	0	0	0.4	0.7
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0.4	1.0
26-Feb	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0	1	0	1	0	1	0	0	1	0	0.4	0.6
27-Feb	0	0	0	1	0	0	0	1	1	0	0	1	A	1	1	0	0	0	1	1	1	1	1	1	0.6	1.4
28-Feb	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	Diurnal Average	
	1.3	0.7	1.0	0.7	0.8	0.9	0.8	0.7	1.4	1.4	0.9	1.0	0.9	0.8	0.9	0.9	1.0	0.8	0.9	1.0	1.3	0.9	1.1	1.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2015

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - February 2015

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 33.6 $\mu g/m^3$ on Feb 13 00:00

Maximum Daily Average: 9.9 $\mu g/m^3$ on Feb 12

Minimum Value: 0 $\mu g/m^3$ on Feb 2 02:00

Maximum Diurnal Average: 4.9 $\mu g/m^3$ at hour 12

Monthly Average: 3.59 $\mu g/m^3$

Minimum Daily Average: 0.6 $\mu g/m^3$ on Feb 15

Minimum Diurnal Average: 2.8 $\mu g/m^3$ at hour 4

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.8$ Median = 2.5 $Q_3 = 5.2$ $P_{90} = 8.6$ $P_{99} = 16.4$

Hours in Service:	672
Hours of Data:	670
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

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	Daily Average	Daily Maximum
1-Feb	4	5	5	8	9	14	11	10	11	9	10	10	10	6	4	1	1	0	3	2	6	19	16	2	7.3	18.7
2-Feb	1	0	0	0	0	0	1	5	4	7	6	6	2	0	3	3	0	0	0	0	1	2	3	0	1.8	6.5
3-Feb	3	3	3	3	5	5	5	5	5	10	11	9	8	6	5	3	1	0	4	2	5	7	7	4	5.0	10.7
4-Feb	0	4	17	12	8	7	7	5	5	7	7	9	10	6	5	6	12	12	2	2	3	2	1	2	6.3	16.5
5-Feb	1	0	0	0	0	0	0	0	1	0	0	0	2	M	M	20	13	9	7	5	4	5	4	2	3.3	20.4
6-Feb	2	1	2	2	1	3	2	2	2	2	1	2	1	1	3	1	3	1	1	3	1	3	1	3	1.8	3.3
7-Feb	4	5	3	1	2	3	2	5	5	5	5	12	17	7	5	7	5	9	5	8	5	3	3	11	5.7	16.6
8-Feb	4	4	4	3	4	4	4	5	5	22	3	2	3	2	3	3	2	3	3	2	3	1	2	6	4.0	21.5
9-Feb	6	4	5	4	3	3	2	2	6	5	9	9	4	4	5	4	4	3	4	5	4	6	6	9	4.8	9.2
10-Feb	11	10	6	3	2	5	2	3	3	3	3	6	6	5	8	4	5	12	11	6	5	2	8	2	5.6	12.3
11-Feb	1	3	2	5	1	2	2	0	4	10	6	10	7	4	6	7	7	6	6	8	8	7	8	6	5.3	10.3
12-Feb	7	8	8	9	8	8	9	8	8	12	10	9	12	9	11	14	11	9	9	8	5	6	7	34	9.9	33.6
13-Feb	25	16	2	4	5	6	4	6	10	11	12	10	8	9	6	2	3	3	4	0	1	2	3	6	6.6	25.1
14-Feb	10	8	3	1	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0	0	0	1	0	0	1.1	9.7
15-Feb	0	0	0	0	0	0	0	1	0	0	0	0	2	0	1	0	1	1	1	0	1	4	1	0	0.6	3.9
16-Feb	0	2	1	1	2	3	3	2	1	2	0	1	2	3	0	0	0	3	4	11	1	5	4	4	2.2	10.7
17-Feb	12	5	1	2	4	1	0	0	0	0	0	0	1	2	2	2	3	3	3	4	3	5	5	5	2.7	12.2
18-Feb	5	6	9	7	7	7	8	9	8	7	7	9	5	3	6	6	7	6	7	6	3	4	3	2	6.2	9.1
19-Feb	1	1	1	1	1	1	0	0	0	1	1	1	1	2	0	1	0	3	1	2	1	2	2	0	1.1	2.5
20-Feb	0	2	1	2	1	1	1	1	2	1	4	5	4	0	0	2	9	0	0	2	2	2	5	13	2.5	13.2
21-Feb	0	6	17	0	6	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1.3	17.4
22-Feb	0	0	0	2	2	3	2	2	2	1	2	0	0	0	0	1	0	1	1	1	1	1	2	1	1.1	2.6
23-Feb	2	1	1	1	1	1	0	1	0	1	0	1	2	1	0	2	1	1	1	2	1	1	0	0	0.9	2.3
24-Feb	0	0	0	0	0	1	5	1	1	0	0	0	0	0	1	0	1	2	3	2	2	2	2	3	1.1	5.1
25-Feb	2	2	1	0	1	1	1	1	2	1	11	13	8	3	0	1	3	0	1	2	3	2	1	0	2.5	13.2
26-Feb	1	2	2	3	4	3	3	4	6	4	4	6	5	5	4	6	5	4	4	3	3	3	12	5	4.1	12.5
27-Feb	5	2	0	0	2	7	1	2	1	1	2	2	2	0	2	2	2	2	1	2	3	3	2	3	2.0	6.8
28-Feb	1	3	2	2	2	2	4	6	8	2	4	5	4	3	3	2	4	4	3	3	6	4	3	4	3.5	7.9
	3.9	3.6	3.5	2.8	2.9	3.2	2.9	3.0	3.6	4.4	4.3	4.9	4.5	3.1	3.0	3.7	3.5	3.5	3.2	3.3	2.8	3.7	4.0	4.6	Diurnal Average	
	25.1	15.8	17.4	12.0	9.1	13.6	11.4	10.4	11.1	21.5	11.6	13.2	16.6	9.1	11.3	20.4	13.0	12.3	11.2	10.7	7.7	18.7	16.1	33.6	Diurnal Maximum	

M - Maintenance

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - February 2015

Maximum Value: 74.6 $\mu g/m^3$ on Feb 13 00:00

Maximum Daily Average: 14.1 $\mu g/m^3$ on Feb 12

Minimum Value: 0 $\mu g/m^3$ on Feb 21 18:00

Minimum Daily Average: 3.2 $\mu g/m^3$ on Feb 15

Maximum Diurnal Average: 11.9 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 5.9 $\mu g/m^3$ at hour 7

Monthly Average: 8.07 $\mu g/m^3$

Percentiles: $P_1 = 0.7$ $P_{10} = 2.0$ $Q_1 = 3.4$ Median = 6.1 $Q_3 = 10.3$ $P_{90} = 15.2$ $P_{99} = 45.4$

Hours in Service:	672
Hours of Data:	670
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	11	11	10	13	13	32	18	19	23	10	12	16	15	11	8	3	3	1	7	6	14	28	26	10	13.4	32.3
2-Feb	4	1	3	1	1	2	4	11	8	9	11	9	4	2	9	7	2	7	7	7	13	10	16	9	6.6	15.6
3-Feb	15	11	8	7	9	9	9	10	11	18	20	16	13	16	10	6	7	9	9	12	12	16	17	12	11.7	20.0
4-Feb	9	8	21	21	12	11	12	10	8	10	11	14	16	10	13	8	46	49	6	7	6	5	6	5	13.4	49.3
5-Feb	3	3	2	1	2	2	2	1	3	2	2	2	4	M	M	27	16	12	9	8	6	8	8	8	6.0	27.4
6-Feb	5	3	5	4	4	10	4	5	4	6	5	10	11	6	10	6	5	3	6	6	3	10	4	9	6.0	10.8
7-Feb	11	18	7	5	5	5	5	11	10	11	9	29	34	18	9	14	9	16	12	14	9	7	6	24	12.4	34.2
8-Feb	10	7	6	7	6	7	8	8	15	35	11	5	5	4	5	5	5	5	7	6	8	6	16	18	9.0	34.6
9-Feb	11	8	14	8	6	7	3	4	9	10	13	15	10	6	10	10	7	5	7	9	7	9	8	13	8.7	14.9
10-Feb	20	21	14	5	4	12	5	5	5	6	4	14	12	8	13	8	7	26	28	16	12	5	14	4	11.1	27.9
11-Feb	3	5	4	9	5	5	6	3	9	17	13	19	13	8	10	9	9	9	8	10	10	10	10	9	8.8	18.8
12-Feb	9	12	10	11	9	10	13	10	10	15	13	13	15	12	15	16	13	13	11	10	7	8	8	75	14.1	74.6
13-Feb	45	39	10	7	16	17	7	12	16	15	16	17	12	16	14	7	10	11	11	2	3	4	5	9	13.4	45.5
14-Feb	11	11	7	3	1	1	0	1	1	3	3	1	1	2	4	7	5	6	2	2	2	3	4	2	3.4	11.1
15-Feb	2	1	2	1	1	2	1	2	2	1	1	2	8	5	11	4	7	3	3	3	3	6	3	3	3.2	10.8
16-Feb	4	5	4	4	6	7	6	5	3	4	3	5	7	12	3	3	3	7	13	36	16	14	16	14	8.3	36.0
17-Feb	22	11	7	11	14	10	1	2	1	1	2	5	3	7	5	4	6	5	6	5	6	7	7	7	6.5	22.2
18-Feb	9	8	11	9	10	11	10	10	9	9	10	15	7	7	11	11	11	11	11	8	6	8	5	5	9.2	14.8
19-Feb	3	3	3	2	2	2	2	2	1	2	3	6	6	7	6	7	5	9	2	3	4	5	8	3	4.1	8.6
20-Feb	2	3	3	3	2	4	2	3	4	3	14	13	9	8	5	9	30	1	3	3	4	4	21	60	8.9	59.9
21-Feb	1	25	61	26	37	13	12	1	2	1	2	1	5	1	3	1	1	0	0	1	1	1	0	1	8.2	60.6
22-Feb	2	1	2	4	4	4	5	4	4	3	6	5	2	3	5	4	2	6	3	3	3	3	4	2	3.5	5.9
23-Feb	4	3	2	3	2	3	2	4	2	3	3	5	8	7	4	7	4	3	3	7	3	3	3	1	3.7	7.6
24-Feb	2	1	1	2	1	3	11	4	5	1	1	2	6	5	6	2	8	5	4	4	5	5	4	4	4.0	11.3
25-Feb	4	4	3	2	2	3	2	4	4	4	20	32	20	12	2	3	5	1	3	6	5	3	3	2	6.3	31.8
26-Feb	3	4	4	5	6	6	5	9	12	7	6	8	7	8	8	10	7	7	7	5	4	8	51	13	8.8	51.3
27-Feb	21	6	1	3	23	25	5	5	3	2	3	4	3	2	4	4	4	3	4	5	6	5	5	6	6.3	24.7
28-Feb	4	6	4	4	5	4	7	8	13	7	8	8	10	7	7	8	8	5	6	7	9	7	6	8	6.9	13.0
	8.9	8.5	8.2	6.5	7.5	8.1	5.9	6.1	7.1	7.8	8.1	10.4	9.6	7.8	7.8	7.6	8.8	8.5	7.1	7.5	6.7	7.4	10.1	11.9	Diurnal Average	
	45.5	39.3	60.6	25.7	37.1	32.3	17.6	19.3	22.7	34.6	20.4	31.8	34.2	17.9	15.0	27.4	45.9	49.3	27.9	36.0	15.7	27.9	51.3	74.6	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - February 2015

Peace Airshed Zone Association

Pollutant Rose

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

Smoky Heights - February 2015

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

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 80.0

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 5.3 ^{o}C on Feb 15 16:00 Maximum Daily Average: 3.5 ^{o}C on Feb 23

Minimum Value: -28 ^{o}C on Feb 3 09:00 Minimum Daily Average: -23.0 ^{o}C on Feb 3

Maximum Diurnal Average: -6.6 ^{o}C at hour 16 Minimum Diurnal Average: -11.1 ^{o}C at hour 8

Monthly Average: -9.31 ^{o}C Percentiles: P_1 = -26.0 P_{10} = -19.2 Q_1 = -17.2 Median = -9.1 Q_3 = -2.1 P_{90} = 2.9 P_{99} = 4.9

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	-22	-23	-24	-23	-23	-22	-23	-22	-21	-20	-19	-18	-17	-15	-15	-15	-16	-16	-17	-17	-17	-17	-17	-17	-19.0	-14.6
2-Feb	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-14	-14	-16	-19	-21	-24	-23	-25	-25	-24	-18.3	-13.9
3-Feb	-26	-25	-25	-26	-26	-27	-27	-27	-28	-28	-26	-22	-21	-19	-17	-17	-19	-21	-22	-22	-22	-20	-19	-20	-23.0	-16.8
4-Feb	-23	-24	-22	-21	-19	-18	-17	-17	-18	-17	-16	-14	-13	-11	-10	-10	-8	-7	-7	-7	-7	-8	-10	-11	-13.9	-6.6
5-Feb	-12	-14	-15	-17	-18	-18	-18	-18	-19	-19	-18	-18	-18	-17	-17	-17	-17	-17	-18	-18	-18	-18	-18	-18	-17.3	-12.2
6-Feb	-18	-19	-19	-19	-19	-19	-19	-19	-20	-20	-20	-19	-19	-19	-19	-19	-19	-19	-20	-20	-20	-19	-19	-19	-19.2	-18.5
7-Feb	-19	-19	-19	-18	-18	-18	-18	-19	-19	-19	-18	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-18	-18	-18	-18.0	-16.8
8-Feb	-18	-19	-19	-19	-19	-19	-19	-20	-20	-21	-20	-20	-19	-18	-18	-18	-18	-18	-19	-19	-19	-18	-19	-18	-19.0	-17.9
9-Feb	-18	-18	-18	-18	-19	-19	-19	-19	-19	-19	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-17.7	-16.4
10-Feb	-16	-16	-16	-16	-16	-16	-16	-16	-18	-18	-19	-18	-18	-17	-17	-18	-18	-19	-19	-19	-19	-19	-19	-19	-17.6	-15.7
11-Feb	-19	-19	-19	-19	-19	-18	-17	-17	-17	-16	-15	-13	-11	-9	-8	-8	-8	-9	-10	-11	-11	-11	-11	-10	-13.6	-7.6
12-Feb	-9	-9	-9	-8	-7	-8	-8	-7	-8	-7	-5	-3	-2	-2	-1	0	0	-1	-1	-1	-1	-2	-3	-2	-4.3	0.3
13-Feb	-2	-2	-2	-4	-5	-6	-6	-7	-7	-8	-8	-7	-6	-6	-5	-4	-3	-2	-2	-2	-2	-2	-2	-3	-4.3	-1.6
14-Feb	-2	-2	0	0	0	0	-1	-1	-1	-1	2	2	2	3	5	5	5	4	3	1	2	1	1	0	1.1	5.0
15-Feb	-1	0	1	1	1	1	1	0	-1	-2	-2	0	2	2	4	5	5	3	1	1	0	-2	-2	1	0.8	5.3
16-Feb	0	-2	-3	-3	-3	-4	-5	-7	-8	-8	-8	-7	-7	-6	-6	-6	-6	-7	-9	-10	-10	-10	-11	-12	-6.6	0.4
17-Feb	-11	-11	-11	-11	-12	-12	-13	-11	-10	-9	-8	-8	-5	-4	-3	-2	-2	-2	-2	-3	-2	-2	-3	-3	-6.8	-2.1
18-Feb	-3	-3	-3	-4	-4	-5	-5	-5	-5	-4	-3	-2	-1	1	1	2	2	1	1	0	0	-1	-1	1	-1.7	1.6
19-Feb	2	4	4	2	2	1	0	0	1	2	3	3	5	5	5	5	5	4	4	4	4	4	3	3	3.2	5.1
20-Feb	2	1	-1	-1	-2	-3	-3	-3	-4	-3	-2	-1	-1	-1	0	0	-1	-2	-4	-5	-5	-4	-3	-3	-2.0	2.2
21-Feb	-4	-5	-6	-6	-7	-8	-8	-8	-8	-8	-7	-6	-5	-5	-4	-4	-4	-5	-7	-8	-7	-7	-7	-8	-6.4	-3.8
22-Feb	-8	-7	-8	-7	-7	-6	-6	-5	-4	-2	0	1	2	3	3	4	5	5	4	4	4	4	4	3	-0.6	4.9
23-Feb	3	3	3	4	3	3	3	3	3	4	4	4	5	4	4	4	4	4	3	2	3	3	3	4	3.5	4.6
24-Feb	5	5	5	4	4	4	5	4	4	3	3	3	3	3	3	2	2	-1	-5	-7	-9	-10	-10	-11	0.3	5.2
25-Feb	-11	-12	-12	-12	-12	-13	-14	-14	-13	-13	-11	-10	-9	-8	-8	-8	-8	-8	-8	-9	-9	-9	-9	-9	-10.5	-8.1
26-Feb	-9	-9	-10	-10	-11	-10	-11	-11	-11	-10	-9	-8	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8.8	-6.7
27-Feb	-9	-9	-10	-11	-13	-13	-12	-12	-11	-12	-12	-10	-10	-10	-10	-9	-9	-10	-12	-14	-14	-13	-13	-14	-11.3	-9.1
28-Feb	-17	-15	-15	-16	-16	-16	-17	-16	-8	-6	-8	-7	-5	-4	-3	-2	-2	-4	-6	-9	-9	-10	-9	-9	-9.6	-1.7
	-10.1	-10.2	-10.4	-10.6	-10.8	-10.9	-11.1	-11.1	-10.9	-10.6	-9.9	-9.0	-8.1	-7.4	-6.8	-6.6	-6.8	-7.5	-8.5	-9.1	-9.1	-9.2	-9.4	-9.3	Diurnal Average	
	4.6	5.2	4.6	3.7	3.8	3.6	4.8	3.8	3.9	3.7	3.7	4.2	4.7	5.1	4.9	5.3	5.2	4.5	3.8	4.0	3.8	4.1	4.0	4.3	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	4	3	3	2	2	2	0	1	1	0	1	1	1	0	8	12	10	11	7	9	8	8	11	11	3.4	12.1
Dir	252	219	222	253	258	42	271	294	215	198	172	186	215	106	31	31	31	33	26	31	21	17	19	28	22.1	30.5
2 Spd	11	9	11	8	9	6	9	5	9	10	8	7	8	7	7	5	5	5	5	4	5	2	5	5	5.3	11.4
Dir	29	33	33	42	35	37	21	7	17	17	22	22	32	38	28	12	335	288	297	274	287	305	272	262	12.9	29.0
3 Spd	9	10	9	3	7	9	8	6	6	6	6	6	5	5	5	8	5	8	12	12	12	12	12	10	6.9	12.2
Dir	254	262	260	239	243	237	200	177	195	209	208	200	153	168	184	184	250	253	264	265	253	238	248	220	231.6	252.5
4 Spd	10	13	10	13	7	9	8	8	7	6	5	3	1	2	2	4	2	1	6	5	6	18	16	14	1.4	17.8
Dir	221	210	228	239	203	229	224	220	207	197	194	176	99	124	87	189	11	233	39	40	13	33	42	43	209.0	32.9
5 Spd	17	17	17	21	19	18	18	17	18	22	24	26	25	26	24	26	23	19	19	20	19	16	15	17	19.9	26.2
Dir	43	48	42	27	33	35	32	28	28	33	33	31	32	38	40	46	46	48	46	43	46	40	44	50	38.6	37.7
6 Spd	17	16	17	17	15	15	17	18	19	19	17	15	17	16	16	18	17	14	14	12	13	12	12	12	15.5	19.1
Dir	47	53	54	55	51	48	50	52	53	54	51	52	51	45	44	47	51	46	49	41	51	43	42	38	49.1	54.2
7 Spd	13	11	12	12	12	12	11	10	11	12	12	10	11	13	11	10	11	8	7	8	8	9	8	8	10.0	12.8
Dir	35	37	33	38	39	44	44	28	8	1	2	7	7	1	4	7	1	9	8	12	21	35	42	26	20.4	35.2
8 Spd	10	9	9	8	9	10	11	12	13	15	14	14	14	13	12	13	15	16	15	15	15	16	16	14	12.8	16.5
Dir	40	43	39	47	42	36	33	27	32	23	29	36	34	34	28	23	33	31	33	28	24	31	32	30	32.1	30.6
9 Spd	14	15	12	14	14	12	11	12	13	11	11	11	11	12	11	10	10	7	5	8	6	7	7	8	10.6	15.4
Dir	23	27	26	19	23	21	32	29	23	21	21	19	20	20	18	13	27	30	20	28	39	21	15	22	22.9	26.8
10 Spd	7	6	4	2	2	2	4	10	12	13	10	9	8	9	10	11	9	9	12	13	11	12	11	10	8.4	13.4
Dir	22	19	23	18	312	66	63	51	54	37	37	30	24	31	25	26	32	22	30	33	37	38	34	42	33.9	37.3
11 Spd	10	14	15	14	15	16	15	14	11	10	8	7	5	19	19	15	9	14	17	20	20	19	19	14	0.6	20.3
Dir	42	36	36	34	36	35	33	33	26	18	18	23	40	140	144	153	173	234	236	237	236	245	240	248	26.4	236.6
12 Spd	9	7	11	11	9	8	9	9	9	9	10	8	4	6	6	2	5	8	7	6	5	4	2	2	5.9	11.1
Dir	242	242	221	226	226	212	214	212	198	208	212	194	142	139	170	221	256	277	265	254	246	199	201	48	219.6	226.0
13 Spd	8	6	12	12	9	10	9	10	11	13	11	12	10	9	9	10	7	5	5	1	5	7	6	6	6.4	12.8
Dir	29	20	36	38	36	38	40	35	31	34	28	30	29	27	30	32	18	2	33	67	208	213	207	217	31.1	33.7
14 Spd	7	9	9	9	11	13	14	14	15	16	23	25	24	21	21	20	20	16	15	17	25	27	24	24	17.3	26.7
Dir	239	258	249	257	261	264	263	264	263	261	257	245	240	232	239	245	260	247	251	247	250	259	262	258	252.4	259.4
15 Spd	23	25	26	26	28	25	28	23	14	17	16	10	9	19	7	13	10	11	11	12	12	12	12	14	15.1	27.7
Dir	252	257	249	250	253	252	262	264	250	251	245	252	247	265	267	319	336	321	309	311	300	280	316	319	268.5	253.0
16 Spd	10	14	12	5	3	9	10	11	13	13	11	9	6	5	12	8	8	7	8	10	9	9	6	7	6.8	13.8
Dir	317	266	276	269	53	46	33	32	41	41	36	28	349	6	34	29	34	12	13	20	30	23	16	21	15.7	266.0
17 Spd	9	8	10	8	6	2	2	7	8	7	6	6	7	10	10	10	8	7	5	6	7	8	8	7	4.0	10.1
Dir	18	19	29	22	23	325	260	235	232	224	205	255	252	258	261	252	234	244	249	236	254	231	234	195	255.6	29.4
18 Spd	9	10	10	8	6	7	3	3	3	5	9	8	9	3	4	9	7	5	11	9	7	8	12	20	7.4	19.9
Dir	221	227	245	240	227	214	168	227	230	234	243	228	226	192	197	260	246	206	262	250	244	227	225	257	235.4	257.3
19 Spd	21	25	31	24	29	30	26	23	24	23	16	8	12	13	12	6	5	2	7	11	13	12	20	16	16.1	30.7
Dir	265	258	251	259	256	257	260	262	269	270	274	254	284	243	278	298	282	239	314	305	295	289	309	309	270.0	251.3
20 Spd	8	11	16	11	12	14	15	12	9	6	5	4	2	3	1	3	4	4	5	5	6	5	6	12	5.4	15.6
Dir	321	25	36	32	32	25	36	33	31	38	34	17	318	259	259	10	2	339	279	254	237	270	338	40	14.3	35.8
21 Spd	12	13	10	14	13	10	7	7	7	3	2	1	4	7	5	6	8	5	5	5	6	6	9	10	2.0	13.8
Dir	46	33	17	40	39	38	44	71	94	107	222	253	135	181	178	171	149	148	169	199	226	225	222	234	90.4	40.4
22 Spd	12	12	11	11	11	10	12	13	12	9	13	20	24	23	20	19	23	20	16	20	29	26	26	19	16.1	28.7
Dir	224	228	240	242	220	210	197	191	209	193	192	217	233	234	231	239	232	246	242	250	248	249	259	267	233.5	248.0

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2015

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	Daily Average	Daily Maximum
23 Spd	18	19	23	21	16	18	20	21	24	24	21	17	15	16	15	9	10	10	6	7	9	10	14	11	15.4	23.7
Dir	270	259	261	265	261	253	257	262	266	256	247	244	245	242	248	256	246	271	268	245	250	233	230	234	254.1	266.3
24 Spd	14	22	21	21	22	21	33	28	20	15	17	10	7	13	15	9	24	20	19	23	17	17	16	15	11.4	32.5
Dir	239	258	261	266	261	260	298	296	302	296	321	304	304	319	296	272	304	11	43	36	39	41	38	30	310.7	298.4
25 Spd	12	10	10	10	10	11	8	8	11	10	7	8	11	9	12	11	12	12	10	9	10	9	6	11	9.5	12.0
Dir	33	45	42	41	42	36	37	32	34	38	33	33	30	36	40	41	33	34	41	51	33	37	69	119	40.9	39.7
26 Spd	15	15	12	11	7	5	6	7	7	8	8	9	9	11	11	11	12	7	8	6	7	6	4	8	5.4	15.3
Dir	135	141	140	136	128	71	42	34	30	35	31	25	30	19	3	9	12	12	3	5	4	31	27	20	45.1	135.3
27 Spd	9	8	9	7	7	3	3	2	1	8	8	10	15	18	19	17	14	12	13	13	13	12	15	14	6.6	19.4
Dir	16	30	54	46	35	6	42	32	136	227	244	252	239	241	241	237	237	234	238	262	272	270	273	273	258.3	241.1
28 Spd	10	9	12	11	7	10	7	2	16	18	1	5	10	11	11	7	8	8	10	5	4	5	4	3	5.8	17.6
Dir	250	237	208	211	224	212	191	165	323	324	48	154	214	239	236	240	257	285	287	213	241	256	238	233	245.4	324.2
Spd	3.0	2.9	2.9	2.9	2.7	2.6	3.2	3.3	3.9	3.9	3.0	2.2	2.3	1.9	2.2	2.6	3.5	3.6	3.7	3.5	3.9	3.5	4.0	3.5	Diurnal Average	
Dir	324.7	308.4	311.2	319.8	326.7	320.4	332.8	335.8	341.0	335.6	330.7	327.4	322.0	301.5	324.0	336.5	332.5	331.0	329.1	322.6	303.1	308.5	307.6	322.8		
Spd	23.5	25.5	30.7	26.3	29.2	30.0	32.5	27.6	24.0	23.7	24.4	25.6	24.7	26.2	24.3	26.2	24.0	20.3	19.4	22.6	28.7	26.7	25.5	24.4	Diurnal Maximum	
Dir	251.8	256.5	251.3	250.1	256.1	257.4	298.4	296.3	268.8	255.9	33.3	31.3	31.6	37.7	40.4	46.0	304.0	10.8	43.4	35.6	248.0	259.4	259.1	258.1		

Maximum Speed Value: 33 km/h on Feb 24 07:00
Maximum Daily Speed Average: 19.9 km/h on Feb 5
Maximum Diurnal Speed Average: 4.0 km/h at hour 23

Minimum Speed Value: 0 km/h on Feb 1 14:00
Minimum Daily Speed Average: 0.6 km/h on Feb 1
Minimum Diurnal Speed Average: 1.9 km/h at hour 14

Hours in Service: 672
Hours of Data: 672
Hours of Missing Data: 0

Monthly Average Velocity: 3.06 km/h 323.46 deg

Speed Percentiles: $P_1 = 0.8$ $P_{10} = 4.5$ $Q_1 = 7.2$ Median = 10.3 $Q_3 = 14.3$ $P_{90} = 19.8$ $P_{99} = 27.6$

Percent Operational Time: 100.0

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

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	8	51	15	1	0	0	75
NorthEast	14	95	116	15	0	0	240
East	5	3	0	0	0	0	8
SouthEast	6	5	7	0	0	0	18
South	13	19	3	0	0	0	35
SouthWest	15	72	31	16	0	0	134
West	16	39	30	38	4	0	127
NorthWest	7	8	15	4	1	0	35
Total	84	292	217	74	5	0	672

Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - February 2015

Maximum Speed: 33 km/h on Feb 24 07:00

Maximum Daily Speed Average: 20.2 km/h on Feb 5

Minimum Speed: 0 km/h on Feb 1 14:00

Minimum Daily Speed Average: 4.9 km/h on Feb 1

Maximum Diurnal Speed Average: 13.1 km/h at hour 3

Minimum Diurnal Speed Average: 10.1 km/h at hour 18

Monthly Average Speed: 11.38 km/h

Percentiles: P_1 = 1.1 P_{10} = 4.9 Q_1 = 7.4 Median = 10.4 Q_3 = 14.4 P_{90} = 20.0 P_{99} = 27.7

Hours in Service: 672

Hours of Data: 672

Hours of Missing Data: 0

Percent Operational Time: 100.0

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	Daily Average	Daily Maximum
1-Feb	4	3	3	2	2	2	1	1	1	1	1	1	1	0	8	12	10	11	7	9	8	8	11	11	4.9	12.2
2-Feb	11	9	11	8	9	6	9	5	9	10	9	7	8	7	7	6	5	5	5	4	5	3	5	5	7.0	11.5
3-Feb	9	11	10	3	8	10	8	6	6	6	7	6	5	6	5	8	5	8	12	12	12	12	12	10	8.2	12.2
4-Feb	10	13	10	13	8	9	8	8	8	6	5	4	3	2	2	4	3	1	6	5	6	18	16	14	7.6	17.9
5-Feb	17	17	17	21	19	18	18	17	18	22	24	26	25	26	24	26	23	19	19	20	19	16	15	17	20.2	26.3
6-Feb	17	16	17	17	15	15	17	18	19	19	17	15	17	16	17	18	17	14	14	12	13	12	12	12	15.6	19.1
7-Feb	13	11	12	12	12	12	11	10	11	13	12	10	11	13	12	10	11	9	7	8	8	10	8	9	10.6	12.8
8-Feb	10	9	9	8	9	10	12	12	14	15	14	14	14	13	12	13	15	16	16	15	15	17	16	14	12.9	16.5
9-Feb	14	16	13	14	14	12	11	12	13	11	11	11	11	12	11	11	10	7	6	8	6	7	7	9	10.8	15.6
10-Feb	7	6	4	2	2	3	5	10	12	13	11	9	8	9	10	11	10	9	13	13	11	12	11	10	8.7	13.5
11-Feb	10	14	15	14	15	16	15	14	11	10	8	7	7	19	19	15	11	14	17	20	20	19	19	14	14.3	20.3
12-Feb	10	8	11	11	9	8	10	9	10	9	10	8	4	7	7	4	6	9	8	7	5	4	3	2	7.4	11.1
13-Feb	8	6	12	12	9	10	9	11	12	13	11	12	10	9	10	10	8	6	5	1	5	7	6	6	8.7	12.8
14-Feb	7	9	9	9	11	13	14	14	16	16	23	25	24	21	21	20	20	17	15	18	26	27	25	24	17.6	26.8
15-Feb	24	26	26	26	28	25	28	23	14	17	16	10	9	19	8	13	11	11	11	12	12	12	12	15	17.0	27.8
16-Feb	10	14	12	5	4	9	10	11	14	13	11	9	6	6	12	8	8	7	8	10	9	9	6	7	9.1	13.9
17-Feb	9	8	10	8	6	3	3	7	8	8	7	6	7	10	10	10	8	7	5	6	7	8	9	8	7.4	10.2
18-Feb	9	11	10	8	6	7	3	3	3	6	9	9	9	5	6	9	7	6	11	9	8	9	13	20	8.2	20.2
19-Feb	21	25	31	25	29	30	26	23	24	23	16	9	12	13	13	7	6	4	7	12	13	12	20	16	17.3	30.8
20-Feb	8	12	16	11	12	14	15	12	9	6	5	4	3	4	1	3	4	4	6	6	6	6	9	12	7.8	15.7
21-Feb	13	13	10	14	13	11	8	7	7	3	2	2	4	7	5	7	8	5	5	5	6	6	9	10	7.4	13.8
22-Feb	12	12	11	11	11	11	13	13	13	9	13	20	24	23	20	19	23	20	16	20	29	26	26	19	17.2	28.7
23-Feb	18	20	23	21	17	18	20	21	24	24	22	17	15	16	16	9	10	10	6	8	9	10	14	11	15.8	23.8
24-Feb	15	22	21	21	22	22	33	28	20	15	17	11	8	14	16	10	25	24	20	23	18	18	16	15	18.8	32.8
25-Feb	12	11	10	10	10	11	8	8	11	10	7	8	11	10	12	11	12	12	10	9	10	9	6	11	10.0	12.1
26-Feb	15	15	12	11	7	5	6	7	7	8	8	9	9	11	12	11	12	7	8	7	7	6	4	8	8.9	15.3
27-Feb	9	8	10	7	7	3	3	2	3	9	8	10	15	19	19	17	14	12	13	13	13	12	15	14	10.7	19.4
28-Feb	10	9	12	11	8	10	7	4	16	18	7	5	10	11	11	7	8	8	10	6	6	5	4	3	8.5	17.7
	11.9	12.6	13.1	12.0	11.5	11.5	11.7	11.3	11.8	11.9	11.1	10.2	10.4	11.6	11.6	11.1	11.0	10.1	10.2	10.6	11.2	11.5	11.7	11.7	Diurnal Average	
	23.5	25.5	30.8	26.4	29.3	30.1	32.8	27.7	24.0	23.8	24.4	25.7	24.7	26.3	24.4	26.3	25.3	24.4	19.5	22.7	28.7	26.8	25.6	24.4	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - February 2015

Maximum Value: 95.4 deg on Feb 4 13:00

Minimum Value: 2.0 deg on Feb 15 07:00

Percentiles: P_1 = 2.3 P_{10} = 4.1 Q_1 = 5.3 Median = 7.4 Q_3 = 13.5 P_{90} = 27.2 P_{99} = 74.5

Hours in Service:	672
Hours of Data:	672
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-Feb	43	15	27	18	18	47	60	35	75	80	63	78	71	19	23	6	5	4	5	6	7	6	5	6	80.2
2-Feb	6	6	4	6	4	5	6	13	6	6	6	8	5	6	6	22	17	7	8	13	13	56	12	17	55.7
3-Feb	14	17	12	55	21	30	17	8	7	5	12	11	13	16	16	6	14	4	3	8	6	5	7	12	55.1
4-Feb	13	8	18	15	32	14	8	5	16	7	10	53	95	40	41	72	62	75	13	27	15	6	5	6	95.4
5-Feb	7	6	7	6	5	5	5	5	5	4	4	4	4	4	5	5	5	6	7	6	7	6	7	5	7.5
6-Feb	5	6	5	5	5	5	5	4	5	5	5	6	6	7	6	6	5	6	5	7	6	6	5	5	6.7
7-Feb	5	5	4	5	5	5	6	10	9	11	10	11	11	11	12	14	12	13	18	14	13	14	10	15	17.6
8-Feb	9	9	7	7	10	6	7	7	8	4	6	7	5	5	7	5	5	6	5	5	6	5	11	7	10.9
9-Feb	6	8	9	6	7	7	9	10	5	6	5	6	6	7	9	11	7	9	20	8	12	9	14	7	20.3
10-Feb	7	9	17	30	22	42	8	10	8	5	7	6	8	8	6	6	10	9	8	4	5	5	4	6	42.3
11-Feb	5	3	3	3	3	4	3	3	7	8	14	11	53	7	6	6	38	5	5	4	3	6	4	6	53.3
12-Feb	18	11	5	5	11	14	11	18	13	12	15	16	25	20	24	80	36	17	11	11	19	23	54	73	80.3
13-Feb	5	9	5	7	7	6	6	6	5	5	5	6	5	6	6	6	29	29	26	33	58	5	11	6	58.2
14-Feb	7	4	6	5	3	3	2	4	5	5	6	3	3	7	7	12	4	13	5	8	5	3	3	3	13.1
15-Feb	4	3	3	2	2	4	2	4	9	8	3	8	31	4	31	10	10	6	6	7	9	7	8	5	31.2
16-Feb	19	7	11	29	72	6	6	4	6	4	7	13	17	27	8	6	6	10	11	5	7	5	7	12	72.2
17-Feb	5	6	8	9	9	46	44	13	6	7	20	21	13	10	4	7	9	14	24	20	13	10	10	25	46.0
18-Feb	9	12	17	19	13	14	52	42	24	13	11	13	5	59	42	8	8	36	14	14	19	12	12	10	58.9
19-Feb	3	5	4	5	3	2	2	3	3	5	9	17	21	5	15	29	35	67	15	6	7	12	7	7	67.4
20-Feb	9	30	7	6	9	5	5	6	6	7	15	24	43	18	43	30	19	15	26	18	16	49	50	9	50.5
21-Feb	6	12	9	6	7	6	11	8	12	54	43	55	45	14	15	13	15	18	6	22	14	9	12	5	55.1
22-Feb	6	8	3	6	7	12	17	6	14	8	10	11	3	3	4	12	5	9	5	5	2	4	4	4	16.7
23-Feb	5	4	4	2	10	5	4	5	5	6	10	5	11	5	11	5	15	8	18	32	21	20	8	10	31.6
24-Feb	16	4	5	6	4	4	9	4	5	9	8	14	34	18	14	26	20	32	7	6	8	9	7	5	34.1
25-Feb	5	11	7	7	6	5	5	6	6	6	8	9	8	14	9	8	8	5	7	10	4	4	23	13	23.4
26-Feb	5	8	8	6	12	27	8	8	4	6	5	5	6	8	13	10	17	13	10	11	10	7	6	6	26.7
27-Feb	6	5	10	7	6	12	19	20	71	8	7	11	10	5	3	4	5	4	6	4	3	9	5	10	71.1
28-Feb	4	16	5	14	18	6	6	57	5	4	82	26	20	6	4	14	13	7	4	38	49	7	36	23	82.1
	43.3	30.3	26.8	55.1	72.2	47.4	59.7	57.5	74.6	80.2	82.1	77.9	95.4	58.9	42.9	80.3	61.6	74.5	26.5	38.1	58.2	55.7	54.5	73.1	

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.2 ppb on Feb 10 16:00
Maximum Daily Average: 2.6 ppb on Feb 10

Minimum Value: 0 ppb on Feb 15 17:00
Maximum Diurnal Average: 1.3 ppb at hour 16
Monthly Average: 0.73 ppb

Minimum Daily Average: 0.1 ppb on Feb 15
Minimum Diurnal Average: 0.4 ppb at hour 9
Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.2 Median = 0.4 Q_3 = 0.8 P_{90} = 1.5 P_{99} = 5.6

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	2	2	1	1	1	1	0	0	0	0.6	2.1
2-Feb	0	0	0	0	A	0	0	0	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	0.9	2.3
3-Feb	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	1	2	2	7	6	6	4	3	3	1.7	6.9
4-Feb	4	5	2	1	A	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	3	5	1	2	1.4	4.6
5-Feb	2	1	1	0	A	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0.6	2.2
6-Feb	0	0	0	0	A	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Feb	0	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0	0	1	1.0	2.1
8-Feb	2	2	0	0	A	0	0	0	0	0	0	3	1	1	1	1	1	1	0	1	1	1	1	0	0.8	3.0
9-Feb	1	0	1	2	A	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.8	1.7
10-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	14	11	5	8	5	3	1	1	1	2.6	14.2
11-Feb	1	0	0	0	A	0	0	0	0	0	1	0	1	2	3	2	2	2	1	1	1	1	1	1	0.9	3.3
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	0.6	0.8
13-Feb	0	0	0	0	A	0	0	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0.7	1.7
14-Feb	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Feb	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-Feb	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
17-Feb	0	0	0	0	A	1	3	2	1	1	1	1	1	1	3	3	3	3	2	2	2	2	1	1	1.5	3.5
18-Feb	1	1	1	1	A	1	1	0	0	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	0.6	0.9
19-Feb	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-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	1	1	1	1	0.6	2.5
21-Feb	1	0	0	0	A	0	0	0	0	0	0	2	2	2	2	2	3	6	4	1	1	1	1	1	1.2	5.8
22-Feb	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
23-Feb	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
24-Feb	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.0
25-Feb	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.7
26-Feb	0	0	0	0	A	0	0	0	0	1	1	2	3	2	1	1	1	1	0	0	1	1	0	0	0.8	3.4
27-Feb	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
28-Feb	0	0	0	1	A	1	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0.6	1.5
	0.7	0.6	0.5	0.5	--	0.4	0.5	0.4	0.4	0.5	0.5	0.8	0.8	0.8	1.0	1.3	1.2	1.0	1.1	0.9	0.9	0.8	0.6	0.6	Diurnal Average	
	4.2	4.6	2.5	1.7	--	1.2	2.7	1.5	1.1	2.1	1.8	3.0	3.4	2.2	3.3	14.2	11.5	5.8	7.7	5.9	5.5	4.5	3.3	3.3	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - February 2015

Maximum Value: 51.3 ppb on Feb 10 17:00

Maximum Daily Average: 9.6 ppb on Feb 10

Minimum Value: 0 ppb on Feb 19 20:00

Minimum Daily Average: 0.3 ppb on Feb 14

Maximum Diurnal Average: 2.9 ppb at hour 17

Minimum Diurnal Average: 0.6 ppb at hour 6

Monthly Average: 1.28 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.2 Q_1 = 0.3 Median = 0.6 Q_3 = 1.1 P_{90} = 2.1 P_{99} = 9.1

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	2	2	2	2	1	2	1	1	1	0	0.9	2.4
2-Feb	0	0	0	0	A	0	0	0	1	1	1	2	2	2	3	2	1	2	2	2	2	1	1	1	1.2	3.0
3-Feb	1	1	1	1	A	0	1	0	0	0	1	1	1	0	1	1	2	2	14	8	6	5	5	4	2.5	14.2
4-Feb	5	6	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	7	2	5	2.2	7.7
5-Feb	4	1	1	1	A	0	0	1	0	1	0	3	3	3	2	1	0	0	0	0	0	0	0	0	1.0	4.2
6-Feb	0	0	0	1	A	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	0	0	0	1	0.6	1.0
7-Feb	1	1	1	1	A	1	1	1	2	2	2	2	1	2	1	2	2	1	1	1	1	1	1	1	1.2	2.3
8-Feb	3	3	1	0	A	1	1	0	0	0	1	8	2	1	1	1	1	1	1	1	1	1	1	0	1.3	7.8
9-Feb	1	1	1	2	A	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1.1	2.1
10-Feb	1	1	1	2	A	1	1	1	1	2	2	6	1	1	1	38	51	41	32	20	14	1	1	1	9.6	51.3
11-Feb	1	1	1	1	A	1	1	0	0	1	1	1	2	3	5	3	2	2	1	2	1	1	1	1	1.3	5.1
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	0.8	1.4
13-Feb	1	1	0	0	A	0	0	1	2	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1.0	2.3
14-Feb	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
15-Feb	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
16-Feb	1	1	1	0	A	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
17-Feb	0	0	0	0	A	2	4	2	1	1	1	1	1	1	6	5	4	3	3	3	2	3	2	1	2.0	6.0
18-Feb	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.8	1.3
19-Feb	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	0.5
20-Feb	0	0	0	0	A	0	0	0	0	0	1	0	0	1	3	2	1	1	0	1	1	1	1	1	0.8	3.4
21-Feb	1	0	1	1	A	0	0	0	0	0	1	3	2	2	2	2	4	8	7	2	1	1	1	1	1.7	7.9
22-Feb	1	1	1	1	A	1	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.7	3.3
23-Feb	0	0	0	0	A	1	0	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0.5	3.3
24-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0.5	1.4
25-Feb	0	1	1	1	A	1	0	1	0	1	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0.5	0.9
26-Feb	0	0	0	0	A	0	0	0	1	2	1	5	6	3	2	1	1	1	1	1	1	1	1	0	1.3	5.6
27-Feb	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
28-Feb	0	0	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0.8	1.7
	0.9	0.8	0.6	0.7	--	0.6	0.7	0.7	0.7	0.9	0.8	1.5	1.1	1.2	1.4	2.6	2.9	2.6	2.5	1.7	1.7	1.1	0.8	0.9	Diurnal Average	
	4.8	5.8	3.3	2.1	--	2.2	3.9	1.8	2.4	3.3	2.2	7.8	5.6	3.3	6.0	38.4	51.3	41.3	32.5	19.8	13.7	7.1	5.0	4.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 34.9 ppb on Feb 4 20:00 Maximum Daily Average: 11.9 ppb on Feb 17

Minimum Value: 0 ppb on Feb 24 04:00 Minimum Daily Average: 1.1 ppb on Feb 5
Maximum Diurnal Average: 6.2 ppb at hour 20 Minimum Diurnal Average: 2.7 ppb at hour 15
Monthly Average: 4.53 ppb Percentiles: P_1 = 0.5 P_{10} = 1.0 Q_1 = 1.7 Median = 3.3 Q_3 = 5.7 P_{90} = 10.1 P_{99} = 21.1

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	9	10	9	10	A	17	21	15	15	9	5	3	4	4	4	5	6	6	6	9	6	5	5	2	8.0	21.3
2-Feb	1	2	3	3	A	3	6	8	5	6	5	4	3	3	3	2	7	15	11	5	6	22	17	20	7.0	21.8
3-Feb	13	9	7	9	A	5	13	15	10	8	5	4	3	8	4	4	4	19	7	12	12	13	16	15	9.5	19.4
4-Feb	13	14	13	11	A	8	16	8	4	7	5	3	5	3	2	4	4	3	12	35	21	8	4	3	8.9	34.9
5-Feb	2	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8
6-Feb	1	1	1	1	A	2	2	10	2	1	1	1	1	1	1	1	2	2	3	2	2	2	2	2	1.9	10.3
7-Feb	2	2	2	2	A	3	2	4	4	3	3	2	2	2	2	4	5	6	6	5	5	5	5	5	3.6	5.9
8-Feb	5	3	3	4	A	5	4	2	2	2	2	1	2	3	2	2	3	2	2	2	2	2	3	3	2.8	5.2
9-Feb	3	2	4	4	A	4	4	2	3	4	4	4	4	4	3	4	5	5	6	8	10	8	7	7	4.8	9.6
10-Feb	7	6	4	7	A	6	5	4	4	4	7	7	6	3	4	3	2	2	3	4	3	2	2	3	4.2	7.5
11-Feb	2	2	2	2	A	4	4	4	5	7	8	8	5	5	5	5	6	5	6	6	7	10	15	16	6.1	16.0
12-Feb	21	14	13	12	A	7	8	7	12	C	C	C	C	C	C	3	4	8	3	3	2	2	3	4	--	20.7
13-Feb	3	2	1	2	A	4	4	5	11	12	11	12	16	10	9	7	6	9	14	15	15	14	7	7	8.4	16.2
14-Feb	8	4	1	1	A	1	1	3	2	1	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1.5	7.7
15-Feb	0	1	0	0	A	1	1	3	2	2	2	2	1	1	1	1	2	2	7	4	3	5	7	5	2.4	7.0
16-Feb	7	9	8	6	A	5	4	3	6	4	3	7	2	1	1	3	2	6	10	5	5	5	7	9	5.2	10.4
17-Feb	18	8	11	7	A	8	7	8	21	9	9	7	8	6	8	8	10	19	26	25	18	15	12	7	11.9	25.8
18-Feb	5	4	3	2	A	5	4	3	4	5	18	17	10	7	4	2	13	12	10	6	13	8	1	1	6.7	17.9
19-Feb	1	1	1	1	A	2	1	1	2	1	1	1	1	1	1	1	3	3	5	4	4	3	2	2	1.8	4.8
20-Feb	2	3	3	4	A	3	4	2	1	1	1	2	2	1	1	1	2	2	3	3	6	5	4	5	2.7	6.1
21-Feb	7	5	4	2	A	4	4	2	2	3	2	4	5	3	3	2	2	3	4	4	6	7	6	7	3.8	7.2
22-Feb	5	3	2	1	A	3	5	3	3	4	3	2	3	1	1	1	2	1	1	2	1	2	1	1	2.2	5.0
23-Feb	1	1	1	1	A	2	1	3	4	3	4	3	2	2	2	3	1	3	3	2	1	1	0	0	1.9	4.5
24-Feb	0	0	1	0	A	2	5	3	2	2	2	4	1	2	1	1	1	1	1	1	1	1	1	1	1.4	5.2
25-Feb	1	1	1	1	A	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	1.8	3.6
26-Feb	4	4	4	4	A	6	12	7	11	14	8	3	3	4	4	4	5	4	5	4	5	5	4	2	5.4	13.8
27-Feb	2	2	1	2	A	3	3	4	4	4	2	1	1	1	1	1	1	1	2	3	3	2	8	3	2.4	7.8
28-Feb	4	4	3	4	A	2	3	3	3	3	3	2	2	2	2	2	3	6	3	1	2	2	3	4	2.7	6.2
	5.2	4.3	3.7	3.7	--	4.3	5.2	4.8	5.2	4.5	4.4	4.0	3.6	3.0	2.7	2.8	3.7	5.4	5.8	6.2	5.8	5.6	5.3	4.9	Diurnal Average	
	20.7	14.3	12.8	11.5	--	17.4	21.3	14.9	20.7	13.8	17.9	17.3	16.2	10.3	8.9	8.5	12.9	19.4	25.8	34.9	21.2	21.8	17.3	19.9	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - February 2015

Maximum Value: 148.2 ppb on Feb 6 08:00

Maximum Daily Average: 17.3 ppb on Feb 17

Minimum Value: 0 ppb on Feb 24 04:00

Minimum Daily Average: 1.7 ppb on Feb 5

Maximum Diurnal Average: 13.5 ppb at hour 8

Minimum Diurnal Average: 4.1 ppb at hour 15

Monthly Average: 7.68 ppb

Percentiles: P_1 = 1.0 P_{10} = 1.7 Q_1 = 2.8 Median = 4.8 Q_3 = 8.7 P_{90} = 17.7 P_{99} = 39.9

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	13	14	10	14	A	25	28	21	18	13	7	4	4	4	5	6	7	8	8	11	9	6	10	3	10.8	27.6
2-Feb	3	4	7	8	A	7	32	12	8	7	6	6	4	4	4	3	14	24	22	11	8	40	40	41	13.7	40.8
3-Feb	20	11	9	13	A	7	41	41	24	11	6	5	9	17	5	5	12	27	10	14	14	21	35	21	16.4	41.0
4-Feb	13	15	15	11	A	9	37	34	7	10	9	4	8	7	3	7	9	5	40	42	35	10	7	7	14.9	41.6
5-Feb	3	2	1	1	A	3	2	3	3	2	2	2	1	2	1	2	2	2	1	1	1	1	1	1	1.7	3.4
6-Feb	1	1	1	1	A	3	3	148	4	2	3	4	1	2	2	3	2	3	3	2	2	2	2	2	8.7	148.2
7-Feb	2	3	2	2	A	3	3	9	4	5	4	3	3	3	3	5	6	6	7	6	6	6	6	5	4.4	8.7
8-Feb	6	5	4	5	A	6	7	3	3	5	4	3	4	5	4	3	4	3	2	3	3	2	4	4	4.0	6.9
9-Feb	4	4	6	5	A	8	40	3	4	6	5	4	5	5	5	6	6	7	7	11	11	9	9	9	7.8	40.2
10-Feb	8	6	5	12	A	7	8	4	5	5	10	11	9	5	6	3	7	3	5	4	4	3	3	3	6.0	12.2
11-Feb	3	3	2	3	A	7	5	6	8	9	14	11	8	6	8	6	7	6	7	7	8	20	26	25	8.8	26.2
12-Feb	24	19	25	14	A	11	8	8	24	C	C	C	C	C	C	6	10	15	11	24	4	3	4	11	--	25.3
13-Feb	4	3	2	3	A	6	7	6	22	18	15	15	25	15	16	11	7	11	15	16	18	19	11	29	12.7	29.0
14-Feb	15	6	3	4	A	3	3	6	3	2	5	1	2	2	2	1	3	5	1	2	2	2	4	4	3.6	14.7
15-Feb	2	2	1	1	A	2	2	6	4	5	4	4	3	2	1	3	3	5	19	8	6	11	11	8	5.0	19.3
16-Feb	14	14	24	11	A	6	5	5	11	7	5	8	3	1	2	5	4	24	19	22	12	7	10	25	10.6	25.4
17-Feb	30	14	16	8	A	10	8	12	26	18	14	8	11	7	9	9	15	21	36	30	37	23	26	9	17.3	37.1
18-Feb	5	5	3	3	A	6	4	4	7	33	34	24	15	11	10	4	18	14	14	7	19	17	2	2	11.4	33.5
19-Feb	1	1	2	2	A	3	2	3	5	4	2	1	1	2	2	4	5	9	10	9	17	5	4	4	4.2	17.0
20-Feb	2	4	6	4	A	5	5	4	3	4	3	3	3	2	2	2	5	4	6	5	14	8	11	12	5.1	13.7
21-Feb	12	7	6	2	A	5	6	3	3	5	4	5	7	4	3	3	3	4	4	5	7	9	7	9	5.4	12.2
22-Feb	5	4	2	2	A	6	7	4	6	7	6	4	4	2	1	2	4	4	3	3	4	3	2	1	3.8	7.1
23-Feb	2	2	3	1	A	3	2	6	8	5	5	6	3	3	3	7	2	9	8	6	1	1	1	1	3.8	8.7
24-Feb	1	1	1	0	A	3	20	6	5	2	7	13	2	9	3	2	2	2	2	2	1	1	2	1	3.8	19.5
25-Feb	2	2	1	2	A	3	1	1	2	3	3	3	5	3	2	2	2	3	3	3	3	2	3	4	2.5	4.7
26-Feb	4	4	4	4	A	10	27	11	20	22	16	4	5	5	5	5	5	6	5	5	6	5	5	3	8.1	27.2
27-Feb	3	2	2	4	A	5	6	5	5	7	4	1	3	2	2	2	2	2	3	5	7	4	27	4	4.7	27.4
28-Feb	7	7	4	5	A	4	4	4	3	4	3	2	2	2	2	3	4	10	9	2	3	3	4	4	4.1	10.1
	7.5	5.9	6.1	5.3	--	6.4	11.4	13.5	8.8	8.2	7.3	5.9	5.5	4.9	4.1	4.2	6.1	8.6	10.1	9.5	9.4	8.6	9.8	9.1	Diurnal Average	
	29.8	19.1	25.3	14.4	--	25.2	40.5	148.2	25.7	33.4	33.5	24.2	24.7	17.2	15.9	10.9	17.9	26.8	39.8	41.6	37.1	40.2	39.6	40.8	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - February 2015

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.1 ppb on Feb 13 13:00
Maximum Daily Average: 3.9 ppb on Feb 13

Minimum Value: 0 ppb on Feb 2 02:00
Maximum Diurnal Average: 3.1 ppb at hour 13
Monthly Average: 0.93 ppb

Minimum Daily Average: 0.1 ppb on Feb 14
Minimum Diurnal Average: 0.0 ppb at hour 2
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.9 P_{90} = 2.5 P_{99} = 10.4

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	A	2	6	1	1	2	2	2	2	2	2	2	2	1	0	0	0	0	0	0	1.2	6.0
2-Feb	0	0	0	0	A	0	3	0	0	1	2	2	2	2	2	1	3	2	0	0	0	5	2	3	1.3	5.3
3-Feb	0	0	0	0	A	0	6	7	0	2	3	4	4	11	4	3	1	3	0	0	0	0	2	0	2.3	10.9
4-Feb	0	0	0	0	A	0	7	2	0	1	1	1	3	1	1	1	1	0	2	8	1	0	0	0	1.3	7.7
5-Feb	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
6-Feb	0	0	0	0	A	0	0	7	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.5	6.5
7-Feb	0	0	0	0	A	0	0	0	0	1	1	1	2	2	1	1	1	0	0	0	0	0	0	0	0.5	1.6
8-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0.4	2.4
9-Feb	0	0	0	0	A	0	1	0	0	1	2	2	3	3	2	3	2	1	0	0	0	0	0	0	0.8	3.3
10-Feb	0	0	0	0	A	0	0	0	0	1	5	7	6	3	3	1	1	0	0	0	0	0	0	0	1.2	6.6
11-Feb	0	0	0	0	A	0	0	0	0	3	7	9	6	5	5	3	3	1	0	0	0	0	1	2	1.9	8.7
12-Feb	1	0	1	0	A	0	0	0	3	C	C	C	C	C	C	0	1	1	0	0	0	0	0	0	--	2.5
13-Feb	0	0	0	0	A	0	0	0	2	6	9	13	25	11	9	5	3	3	1	0	0	0	0	1	3.9	25.1
14-Feb	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
15-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.9
16-Feb	0	0	0	0	A	0	0	0	0	1	2	6	1	1	1	2	1	1	0	0	0	0	0	0	0.7	6.2
17-Feb	0	0	0	0	A	0	0	0	3	2	4	4	7	4	5	5	5	4	1	0	1	0	0	0	2.0	7.0
18-Feb	0	0	0	0	A	0	0	0	0	3	15	14	7	4	2	1	5	1	0	0	0	0	0	0	2.3	15.2
19-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.5
20-Feb	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.2
21-Feb	0	0	0	0	A	0	0	0	0	1	1	2	3	2	2	2	1	0	0	0	0	0	0	0	0.6	3.2
22-Feb	0	0	0	0	A	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
23-Feb	0	0	0	0	A	0	0	0	0	1	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0.5	2.4
24-Feb	0	0	0	0	A	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0.2	1.0
25-Feb	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.5
26-Feb	0	0	0	0	A	0	0	0	3	10	6	3	3	2	2	2	1	1	0	0	0	0	0	0	1.5	10.1
27-Feb	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.3
28-Feb	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.4
	0.1	0.0	0.1	0.0	--	0.1	0.8	0.6	0.5	1.4	2.6	3.0	3.1	2.4	1.8	1.4	1.3	0.8	0.2	0.3	0.1	0.2	0.2	0.2	Diurnal Average	
	0.7	0.1	0.7	0.1	--	2.2	7.4	7.4	2.7	10.1	15.2	13.8	25.1	11.4	9.5	5.0	5.4	4.4	2.3	7.7	1.2	5.3	2.5	2.5	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - February 2015

Maximum Value: 79.4 ppb on Feb 6 08:00

Maximum Daily Average: 9.2 ppb on Feb 13

Minimum Value: 0 ppb on Feb 12 21:00

Minimum Daily Average: 0.3 ppb on Feb 5

Maximum Diurnal Average: 6.7 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 2.62 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.4 $Q_3 = 1.8$ $P_{90} = 5.3$ $P_{99} = 38.2$

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	A	9	25	3	1	2	2	3	3	3	3	3	2	1	0	0	0	0	0	0	2.7	24.5
2-Feb	0	0	0	0	A	0	66	0	0	2	3	4	3	3	3	3	7	3	0	0	0	38	29	24	8.2	66.2
3-Feb	0	0	0	0	A	0	35	41	3	4	4	5	14	30	6	5	3	7	0	0	0	0	25	0	8.0	41.1
4-Feb	0	0	0	0	A	1	44	17	0	2	3	2	4	3	1	2	2	1	18	22	3	0	0	0	5.5	44.4
5-Feb	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0.3	0.7
6-Feb	0	0	0	0	A	0	0	79	1	0	1	2	1	1	1	1	1	0	0	0	0	0	0	0	4.0	79.4
7-Feb	0	0	0	0	A	0	0	0	0	1	2	2	2	2	2	2	2	1	1	0	0	0	0	0	0.8	2.1
8-Feb	0	0	0	0	A	0	0	0	0	2	2	1	3	4	3	2	1	1	0	0	0	0	0	0	0.9	3.8
9-Feb	0	0	0	0	A	1	13	0	0	1	2	3	4	4	4	5	3	2	0	0	0	0	0	0	1.9	13.5
10-Feb	0	0	0	0	A	0	0	0	1	1	10	13	9	5	5	2	3	0	1	0	0	0	0	0	2.2	12.8
11-Feb	0	0	0	0	A	0	0	0	2	5	13	12	8	6	8	5	4	1	0	0	0	2	6	9	3.6	13.3
12-Feb	2	0	8	0	A	1	0	1	13	C	C	C	C	C	C	1	2	2	1	8	0	0	0	1	--	13.4
13-Feb	0	0	0	0	A	0	0	0	14	19	18	20	49	22	26	12	5	6	3	1	2	3	0	9	9.2	49.3
14-Feb	0	0	0	0	A	0	0	0	0	0	2	1	1	1	1	0	1	1	0	0	0	0	0	0	0.5	2.3
15-Feb	0	0	0	0	A	0	0	0	0	2	1	3	2	1	1	1	1	1	1	0	0	0	0	0	0.6	3.0
16-Feb	0	0	0	0	A	0	0	0	1	2	4	8	3	1	2	4	2	5	1	0	0	0	0	0	1.5	7.9
17-Feb	2	0	0	0	A	0	0	0	9	6	5	5	13	5	7	6	6	6	6	1	32	0	1	0	4.8	32.1
18-Feb	0	0	0	0	A	0	0	0	0	39	46	24	12	8	6	1	9	2	1	0	0	0	0	0	6.5	46.0
19-Feb	0	0	0	0	A	0	0	0	1	1	1	1	1	2	2	1	1	1	0	0	1	0	0	0	0.6	1.7
20-Feb	0	0	0	0	A	0	0	1	0	0	1	2	2	1	1	0	1	1	3	0	0	0	0	0	0.6	2.6
21-Feb	0	0	0	0	A	0	0	0	0	1	2	3	4	3	3	2	2	1	0	0	0	0	0	0	1.0	4.5
22-Feb	0	0	0	0	A	0	0	0	0	1	2	1	3	1	1	1	1	1	0	0	0	0	0	0	0.6	3.2
23-Feb	0	0	0	0	A	0	0	0	1	1	3	4	3	1	1	3	1	1	1	0	0	0	0	0	1.0	4.5
24-Feb	0	0	0	0	A	0	0	0	0	0	3	4	1	5	1	1	1	0	0	0	0	0	0	0	0.7	4.9
25-Feb	0	0	0	0	A	0	0	0	0	1	2	2	2	2	1	1	1	1	0	0	0	0	0	0	0.6	1.9
26-Feb	0	0	0	0	A	0	1	0	16	21	14	3	4	3	3	2	2	1	0	0	0	0	0	0	3.1	20.9
27-Feb	0	0	0	0	A	0	0	0	1	3	2	1	3	2	2	1	2	1	0	0	0	0	1	0	0.9	2.9
28-Feb	0	1	0	0	A	0	0	0	1	2	2	2	1	2	1	1	1	2	1	0	0	0	0	0	0.7	1.8
	0.2	0.1	0.4	0.1	--	0.5	6.7	5.2	2.5	4.5	5.6	4.8	5.7	4.5	3.4	2.4	2.4	1.8	1.4	1.3	1.5	1.7	2.3	1.7	Diurnal Average	
	2.4	0.8	7.8	0.5	--	8.8	66.2	79.4	15.6	39.4	46.0	23.8	49.3	30.0	26.2	11.9	9.2	6.6	18.2	22.5	32.1	37.9	29.0	24.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.6 ppb on Feb 4 20:00
Maximum Daily Average: 14.1 ppb on Feb 17

Minimum Value: 0 ppb on Feb 15 04:00
Maximum Diurnal Average: 7.1 ppb at hour 11
Monthly Average: 5.51 ppb

Minimum Daily Average: 1.3 ppb on Feb 5
Minimum Diurnal Average: 3.7 ppb at hour 4
Percentiles: P_1 = 0.5 P_{10} = 1.2 Q_1 = 2.0 Median = 3.7 Q_3 = 6.8 P_{90} = 12.8 P_{99} = 26.9

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	9	10	9	10	A	19	27	16	16	11	7	5	6	6	6	7	8	7	6	9	6	5	5	2	9.2	27.3
2-Feb	1	2	3	3	A	3	8	8	5	7	8	6	4	5	5	4	10	16	12	5	6	27	20	22	8.3	27.0
3-Feb	13	9	7	9	A	5	19	22	10	10	8	7	8	19	8	8	6	23	7	12	12	13	19	15	11.7	22.7
4-Feb	13	14	13	11	A	8	23	10	4	7	6	4	8	4	3	5	5	3	14	43	22	8	4	3	10.2	42.6
5-Feb	2	1	1	1	A	1	1	2	1	1	1	2	2	2	2	1	1	2	1	1	1	1	1	1	1.3	1.8
6-Feb	1	1	1	1	A	2	2	16	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2.4	16.4
7-Feb	2	2	2	2	A	3	2	4	4	4	4	4	4	4	4	5	7	6	6	5	5	5	5	5	4.1	6.6
8-Feb	5	3	3	4	A	5	4	2	2	3	3	2	4	6	4	3	4	3	2	2	2	2	3	3	3.2	5.6
9-Feb	3	2	4	4	A	5	5	2	3	5	6	6	7	7	6	7	6	6	6	8	10	8	7	7	5.6	9.6
10-Feb	7	6	4	7	A	6	6	4	4	5	12	14	12	6	7	4	3	2	3	4	3	2	2	3	5.4	13.5
11-Feb	2	2	2	2	A	4	4	4	5	10	14	17	11	10	10	8	9	6	6	6	7	10	16	18	8.0	17.8
12-Feb	21	14	13	12	A	8	8	7	15	C	C	C	C	C	C	3	4	8	3	3	2	2	2	3	--	21.4
13-Feb	3	2	1	2	A	4	4	5	14	18	20	25	42	22	19	12	9	12	15	15	16	15	7	7	12.5	41.7
14-Feb	8	4	1	1	A	1	1	3	2	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1.6	7.9
15-Feb	0	1	0	0	A	1	1	4	2	2	3	3	2	2	1	2	2	2	7	4	3	5	7	6	2.6	7.2
16-Feb	8	9	9	6	A	5	4	4	6	5	5	13	3	2	2	5	3	7	11	5	5	5	7	9	6.0	13.2
17-Feb	18	8	11	7	A	8	8	9	24	11	13	10	15	11	13	14	15	23	28	26	19	15	13	7	14.1	27.7
18-Feb	5	4	3	2	A	5	4	3	4	7	33	31	17	11	6	3	19	14	10	6	13	8	1	1	9.1	33.4
19-Feb	1	1	1	1	A	2	1	1	2	2	1	1	1	1	1	2	3	3	5	4	4	3	2	2	2.0	4.9
20-Feb	2	3	4	4	A	4	4	2	1	1	1	4	3	2	1	1	2	3	4	3	6	6	4	5	3.0	6.2
21-Feb	7	5	4	2	A	4	4	2	2	3	3	6	8	6	5	4	3	3	4	4	6	7	6	7	4.5	8.0
22-Feb	5	3	2	1	A	3	5	3	4	5	5	3	4	2	1	1	2	2	1	2	1	2	1	1	2.5	5.0
23-Feb	1	1	1	1	A	2	1	3	5	5	6	6	4	3	3	4	2	3	4	2	1	1	1	0	2.5	6.3
24-Feb	0	0	1	0	A	2	5	3	2	2	2	5	1	2	2	2	2	1	1	1	1	1	1	1	1.7	5.4
25-Feb	1	1	1	1	A	2	1	1	2	3	4	4	4	3	3	2	2	2	3	2	2	2	3	4	2.3	4.0
26-Feb	4	4	4	4	A	6	12	7	14	24	14	6	6	7	6	6	6	5	5	5	5	5	4	2	6.9	24.2
27-Feb	2	2	2	2	A	4	3	4	4	6	3	1	3	2	3	2	2	1	2	3	4	2	8	3	2.9	8.1
28-Feb	4	4	3	4	A	2	3	3	3	4	4	4	3	3	3	3	4	7	3	1	2	2	3	4	3.3	7.4
	5.3	4.3	3.8	3.7	--	4.4	6.1	5.5	5.8	6.1	7.1	7.1	6.8	5.5	4.6	4.3	5.1	6.3	6.0	6.6	6.0	5.8	5.5	5.2	Diurnal Average	
	21.4	14.3	13.4	11.6	--	19.5	27.3	22.2	23.7	24.2	33.4	31.4	41.7	22.0	18.6	13.5	18.5	23.4	27.7	42.6	21.7	27.0	19.7	22.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - February 2015

Maximum Value: 183.7 ppb on Feb 6 08:00

Maximum Daily Average: 24.1 ppb on Feb 3

Minimum Value: 1 ppb on Feb 24 04:00

Minimum Daily Average: 2.0 ppb on Feb 5

Maximum Diurnal Average: 16.9 ppb at hour 8

Minimum Diurnal Average: 5.4 ppb at hour 4

Monthly Average: 10.07 ppb

Percentiles: P_1 = 1.1 P_{10} = 2.1 Q_1 = 3.3 Median = 5.9 Q_3 = 10.2 P_{90} = 22.4 P_{99} = 71.2

Hours in Service:	672
Hours of Data:	638
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	13	13	10	14	A	32	52	23	18	15	9	7	7	8	7	8	9	9	9	11	9	6	10	3	13.2	51.8
2-Feb	3	4	7	8	A	7	32	12	8	8	8	10	7	7	7	6	20	27	22	12	8	77	69	63	18.8	77.4
3-Feb	20	11	8	13	A	7	74	82	27	15	9	10	23	47	11	9	15	31	10	14	14	21	61	21	24.1	81.8
4-Feb	13	15	16	11	A	10	80	46	8	11	11	6	12	10	5	9	12	5	57	63	39	10	7	7	20.1	80.3
5-Feb	3	2	1	1	A	3	2	3	3	2	2	3	2	3	2	2	2	2	2	1	1	1	1	1	2.0	3.5
6-Feb	2	1	1	1	A	3	3	184	5	2	4	6	2	2	2	4	3	4	3	3	2	2	2	2	10.7	183.7
7-Feb	2	3	2	3	A	3	3	9	5	6	6	4	5	4	5	7	7	7	7	6	6	6	6	5	5.1	8.8
8-Feb	6	5	4	5	A	6	7	3	3	7	6	4	6	8	7	6	5	4	2	3	3	3	4	4	4.8	8.3
9-Feb	4	4	7	5	A	9	53	3	4	7	7	7	9	9	8	11	9	8	7	11	11	9	9	9	9.5	53.3
10-Feb	9	6	5	12	A	7	8	5	6	6	20	24	18	10	10	5	9	3	6	4	4	3	3	3	8.1	23.8
11-Feb	3	3	2	3	A	8	5	6	9	13	27	22	16	12	16	10	11	7	7	7	9	20	32	34	12.2	33.7
12-Feb	25	19	33	15	A	12	8	9	38	C	C	C	C	C	C	7	11	17	11	32	3	3	3	13	--	37.8
13-Feb	4	3	2	3	A	6	7	6	37	38	33	35	73	37	42	23	13	15	19	16	20	23	11	39	21.9	72.8
14-Feb	15	6	3	5	A	3	3	7	3	2	7	2	3	4	4	1	4	7	2	3	3	2	4	4	4.2	15.2
15-Feb	2	2	2	1	A	2	2	6	4	7	6	8	5	3	2	4	4	6	20	8	6	11	11	8	5.7	19.8
16-Feb	14	14	25	11	A	7	5	5	12	8	8	16	6	2	4	8	5	29	20	22	13	7	10	26	12.2	28.7
17-Feb	32	15	17	8	A	10	8	13	33	22	19	12	23	13	15	14	20	25	42	31	70	23	26	9	21.8	69.8
18-Feb	5	5	3	3	A	6	4	4	8	73	78	47	26	19	16	5	27	16	15	8	19	17	2	2	17.8	77.5
19-Feb	1	1	2	3	A	3	2	3	6	5	3	2	3	4	4	5	6	10	11	9	18	5	4	4	4.9	18.0
20-Feb	2	4	6	4	A	5	5	4	3	5	4	5	5	3	3	2	6	5	6	5	14	8	11	12	5.6	13.9
21-Feb	12	8	6	2	A	5	6	3	3	6	5	8	11	7	6	5	5	5	4	5	7	9	7	9	6.4	12.4
22-Feb	5	4	2	2	A	6	7	4	7	9	8	6	8	4	2	3	5	5	3	3	4	3	2	1	4.5	8.6
23-Feb	2	2	3	1	A	3	2	6	9	6	7	11	6	4	4	10	3	10	9	6	2	1	2	1	4.8	11.1
24-Feb	1	1	1	1	A	4	20	6	6	3	10	18	3	14	4	3	3	2	2	2	1	2	2	1	4.7	20.2
25-Feb	2	3	1	3	A	3	2	2	3	4	5	4	6	5	3	3	3	3	3	3	3	2	4	4	3.2	6.1
26-Feb	4	5	5	4	A	10	29	12	36	40	30	7	9	8	8	7	8	6	6	5	6	5	5	3	11.2	39.7
27-Feb	3	2	2	4	A	6	6	5	6	10	6	3	6	4	4	4	4	2	4	5	7	4	29	4	5.7	28.9
28-Feb	7	8	4	5	A	4	4	4	4	5	5	4	3	4	3	4	5	12	10	2	4	3	4	4	4.8	12.0
	7.7	6.1	6.5	5.4	--	6.8	15.7	16.9	11.2	12.4	12.7	10.8	11.2	9.4	7.6	6.6	8.4	10.1	11.4	10.8	10.9	10.2	12.2	10.7	Diurnal Average	
	32.3	19.3	33.0	14.6	--	32.0	80.3	183.7	37.8	73.3	77.5	46.6	72.8	46.8	42.5	23.0	27.5	31.3	57.5	63.1	69.8	77.4	68.6	62.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.3 ppb on Feb 28 20:00
Maximum Daily Average: 40.1 ppb on Feb 24

Minimum Value: 3 ppb on Feb 1 07:00
Maximum Diurnal Average: 32.0 ppb at hour 16
Monthly Average: 28.95 ppb

Minimum Daily Average: 16.8 ppb on Feb 13
Minimum Diurnal Average: 27.1 ppb at hour 9
Percentiles: P_1 = 7.2 P_{10} = 17.8 Q_1 = 23.4 Median = 30.1 Q_3 = 34.8 P_{90} = 38.8 P_{99} = 44.7

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	17	15	16	15	A	7	3	9	8	12	17	19	20	22	22	21	19	20	21	17	19	24	24	30	17.3	30.0
2-Feb	31	29	28	28	A	28	25	23	22	20	19	25	27	26	28	30	25	18	20	27	25	12	15	12	23.6	31.0
3-Feb	16	20	24	21	A	26	20	18	21	22	24	25	25	23	24	25	30	17	26	19	18	17	14	15	21.3	30.0
4-Feb	16	14	17	21	A	25	19	25	27	25	27	29	28	30	31	29	28	30	23	4	15	29	36	37	24.6	36.8
5-Feb	37	35	35	35	A	36	36	35	35	35	34	34	34	33	34	34	34	33	34	34	34	33	33	32	34.2	36.7
6-Feb	32	32	32	31	A	31	30	29	29	30	30	30	30	30	30	30	29	29	28	29	29	29	29	29	30.0	32.2
7-Feb	28	28	28	28	A	28	28	26	26	26	26	27	27	27	27	26	24	23	23	24	24	23	23	23	25.7	28.4
8-Feb	23	25	26	24	A	23	24	26	26	26	26	26	26	25	26	26	26	26	25	24	24	24	23	23	24.9	26.4
9-Feb	23	24	22	22	A	21	22	23	22	22	22	22	23	23	23	23	23	22	21	19	17	19	19	19	21.4	23.6
10-Feb	18	19	20	18	A	20	20	21	20	20	16	18	20	22	22	23	24	24	23	22	23	25	25	24	21.1	24.8
11-Feb	25	25	25	24	A	22	21	21	19	18	18	18	20	21	20	20	19	19	18	17	16	13	8	7	18.9	25.2
12-Feb	4	9	10	11	A	13	13	15	10	13	13	14	17	C	C	C	31	27	32	33	32	32	31	30	19.6	32.9
13-Feb	29	29	29	25	A	24	23	23	14	12	12	12	9	11	12	15	15	12	7	6	6	11	24	25	16.8	29.0
14-Feb	20	30	34	36	A	38	38	37	38	40	39	41	42	42	42	42	42	41	41	40	39	38	37	37	37.9	42.0
15-Feb	37	38	39	39	A	39	39	37	39	38	38	39	40	40	41	42	42	42	38	40	40	39	36	37	39.0	42.2
16-Feb	34	32	32	35	A	32	32	29	26	27	28	28	32	33	33	33	34	30	26	32	32	32	28	25	30.6	34.5
17-Feb	17	25	24	27	A	24	25	23	11	24	25	28	29	33	32	30	30	21	13	12	18	21	25	29	23.8	33.4
18-Feb	33	33	35	35	A	33	33	34	34	34	22	20	28	32	36	40	26	30	33	35	25	31	39	38	32.2	40.1
19-Feb	37	35	34	34	A	36	36	36	36	36	36	37	37	38	38	38	37	36	34	35	34	35	35	35	35.9	38.3
20-Feb	37	35	33	33	A	33	30	28	34	36	37	35	37	38	40	40	39	39	37	37	34	34	34	33	35.3	40.0
21-Feb	28	28	30	32	A	32	31	32	32	33	34	33	32	32	33	34	35	34	33	32	30	27	28	26	31.3	34.6
22-Feb	28	32	35	36	A	34	31	32	33	33	34	36	37	40	41	39	38	38	36	35	35	35	34	34	35.0	40.5
23-Feb	34	34	34	34	A	34	34	32	31	32	31	33	34	36	37	34	35	33	33	33	36	37	40	40	34.3	39.8
24-Feb	40	41	43	43	A	42	38	40	41	41	40	38	41	42	44	45	43	41	38	37	36	36	35	35	40.1	45.0
25-Feb	36	36	37	36	A	36	35	35	34	34	33	33	33	34	34	34	34	34	33	33	32	32	32	30	33.9	36.6
26-Feb	30	30	30	30	A	28	21	25	21	17	23	29	31	30	30	30	31	30	30	30	29	29	28	29	28.0	30.8
27-Feb	30	31	31	30	A	30	31	30	30	30	32	33	33	34	34	35	36	36	35	34	34	35	29	34	32.5	35.7
28-Feb	30	30	32	31	A	35	37	38	38	38	39	41	42	43	44	45	45	41	45	46	46	45	44	43	40.0	46.3
	27.5	28.3	29.1	29.1	--	29.0	27.7	27.9	27.1	27.6	27.7	28.7	29.8	31.1	31.8	32.0	31.2	29.5	28.9	28.1	28.0	28.4	28.8	29.0	Diurnal Average	
	40.4	41.4	43.1	43.5	--	41.8	39.2	39.9	41.2	40.9	39.6	41.2	41.8	42.9	44.1	45.0	44.5	41.9	45.2	46.3	45.6	45.2	44.2	42.6	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - February 2015

Maximum Value: 46.9 ppb on Feb 28 20:00

Maximum Daily Average: 41.6 ppb on Feb 24

Minimum Value: 7 ppb on Feb 12 01:00

Minimum Daily Average: 19.7 ppb on Feb 13

Maximum Diurnal Average: 33.4 ppb at hour 17

Minimum Diurnal Average: 29.4 ppb at hour 1

Monthly Average: 30.94 ppb

Percentiles: P_1 = 11.7 P_{10} = 20.1 Q_1 = 25.3 Median = 32.1 Q_3 = 36.5 P_{90} = 40.4 P_{99} = 45.3

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	19	17	18	17	A	13	11	13	12	16	19	20	21	23	23	22	21	23	23	19	22	26	28	32	19.8	32.3
2-Feb	32	30	29	29	A	29	28	26	24	21	21	29	29	27	29	33	33	22	27	28	28	28	20	19	27.0	33.4
3-Feb	19	22	27	28	A	29	29	26	24	25	26	26	27	25	25	26	33	27	30	22	20	19	20	17	24.9	33.1
4-Feb	17	16	20	23	A	28	31	31	29	28	29	30	31	32	31	31	31	31	30	12	31	33	38	38	28.2	38.5
5-Feb	38	37	36	36	A	37	37	36	35	35	35	35	34	34	34	34	34	34	34	34	34	34	33	33	34.9	38.3
6-Feb	33	33	32	32	A	31	31	30	30	30	31	31	31	31	31	31	30	30	29	30	30	30	29	29	30.6	32.7
7-Feb	29	29	29	28	A	28	28	28	27	26	27	27	28	28	28	27	25	25	25	25	24	24	23	24	26.6	28.8
8-Feb	23	27	27	25	A	24	26	27	27	27	27	27	27	27	27	27	27	26	26	25	25	25	24	23	25.9	27.3
9-Feb	24	24	24	22	A	22	24	23	23	22	22	23	23	23	24	24	24	23	22	21	20	20	20	19	22.5	24.4
10-Feb	19	20	21	21	A	21	22	21	21	21	21	21	22	23	23	24	25	25	24	23	24	25	25	25	22.4	25.4
11-Feb	25	25	26	25	A	23	22	22	21	19	19	19	21	21	21	21	20	20	19	18	17	16	14	12	20.3	25.9
12-Feb	7	12	14	13	A	15	14	16	16	15	15	16	24	C	C	C	38	30	33	35	34	33	32	31	22.2	37.7
13-Feb	31	30	30	30	A	25	26	25	25	16	13	13	13	12	14	17	16	14	10	8	11	17	27	32	19.7	31.6
14-Feb	25	33	35	37	A	39	39	39	41	41	40	42	43	43	43	43	43	42	42	41	40	39	38	38	39.4	42.8
15-Feb	38	39	39	39	A	40	40	40	40	40	40	42	41	41	43	43	43	44	44	42	42	42	42	40	41.0	44.0
16-Feb	36	37	38	40	A	33	33	30	29	30	30	31	33	33	34	34	35	35	33	38	36	33	32	31	33.7	39.6
17-Feb	30	31	31	28	A	28	25	25	18	27	27	30	33	37	37	32	32	26	19	20	23	28	31	33	28.3	36.9
18-Feb	33	35	36	36	A	35	35	35	37	39	31	25	35	36	40	42	39	32	36	37	34	39	42	40	36.0	41.9
19-Feb	39	37	36	37	A	38	38	38	39	39	38	38	39	39	39	40	39	39	37	37	37	37	38	38	38.1	39.6
20-Feb	38	36	35	34	A	34	32	34	35	40	40	36	39	40	41	41	40	40	39	39	37	35	36	36	37.2	41.0
21-Feb	32	30	32	33	A	33	33	33	34	34	34	34	33	33	34	35	38	36	34	33	32	29	29	27	32.8	37.6
22-Feb	31	33	36	36	A	35	33	34	35	35	36	38	41	42	41	40	39	39	38	37	36	36	35	35	36.6	41.6
23-Feb	35	34	35	34	A	35	34	33	33	32	32	34	36	37	38	36	36	36	36	36	37	38	41	40	35.7	41.0
24-Feb	41	43	44	44	A	43	42	42	43	42	40	41	42	44	46	46	45	43	40	39	37	37	37	36	41.6	46.0
25-Feb	36	37	37	37	A	37	36	36	35	34	34	34	34	35	35	35	35	35	34	33	33	33	32	31	34.6	37.1
26-Feb	30	30	31	31	A	31	30	28	27	24	28	31	32	31	31	31	32	32	31	31	30	30	29	31	30.1	32.4
27-Feb	31	31	32	31	A	31	33	31	31	32	33	34	34	35	35	36	37	37	36	36	36	36	36	35	33.9	36.6
28-Feb	32	31	33	33	A	37	39	39	39	39	40	42	43	44	45	45	45	44	47	47	47	46	45	44	41.2	46.9
	29.4	30.1	30.8	30.7	--	30.5	30.4	30.0	29.6	29.6	29.6	30.3	31.6	32.5	33.0	33.1	33.4	31.7	31.3	30.1	30.6	31.0	31.4	31.0	Diurnal Average	
	41.1	43.0	44.0	44.0	--	42.8	41.9	41.6	42.5	42.4	40.5	42.4	42.7	43.9	45.6	46.0	45.4	43.9	46.6	46.9	46.8	46.1	45.2	43.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - February 2015

Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - February 2015

Maximum Value: 44.7 ppb on Feb 28 23:00

Minimum Value: 9.0 ppb on Feb 12 05:00

Percentiles: P_1 = 10.4 P_{10} = 19.1 Q_1 = 23.5 Median = 30.0 Q_3 = 34.4 P_{90} = 38.3 P_{99} = 42.3

Hours in Service:	672
Hours of Data:	666
Hours of Missing Data:	6
Hours of Calibration:	6
Percent Operational Time:	100.0

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	Daily Maximum
1-Feb	20	19	19	18	17	15	13	12	10	10	10	11	12	14	16	18	19	20	21	20	20	20	21	22	21.7
2-Feb	23	24	25	26	28	28	28	27	26	25	24	23	24	23	24	25	25	25	25	25	25	23	21	19	28.3
3-Feb	18	18	19	18	17	19	20	21	21	22	22	22	23	22	23	24	25	24	24	24	23	22	21	19	24.8
4-Feb	18	17	16	17	16	17	18	20	21	23	24	25	26	26	28	28	28	29	29	25	24	24	24	25	29.0
5-Feb	26	27	29	32	35	36	36	36	35	35	35	35	35	34	34	34	34	34	34	34	34	34	33	33	35.9
6-Feb	33	33	33	32	32	32	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	29	29	29	33.1
7-Feb	29	29	29	29	28	28	28	28	27	27	27	26	27	26	26	26	26	26	26	25	25	24	24	23	28.8
8-Feb	23	23	24	24	24	24	24	24	25	25	25	25	25	26	26	26	26	26	26	26	25	25	25	24	26.0
9-Feb	24	24	23	23	23	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	20	20	24.1
10-Feb	19	19	19	19	19	19	19	19	20	20	19	19	19	20	20	20	21	21	22	22	23	23	23	24	23.6
11-Feb	24	24	24	24	25	24	24	23	22	21	20	20	20	19	19	19	19	19	19	19	19	18	16	15	24.5
12-Feb	13	12	11	10	9	9	10	11	12	12	13	13	14	14	14	N	N	N	N	N	N	31	31	31	31.2
13-Feb	31	31	31	30	29	28	27	26	24	21	19	17	16	15	13	12	12	12	12	11	11	10	12	13	31.0
14-Feb	14	16	19	23	26	29	32	33	36	37	38	39	39	40	40	41	41	41	42	41	41	41	40	39	41.5
15-Feb	39	38	38	38	38	38	38	38	39	39	38	38	39	39	39	40	40	40	40	41	41	40	40	39	40.6
16-Feb	38	37	36	36	35	34	33	32	31	30	30	29	29	29	30	30	31	31	31	32	32	32	31	30	38.1
17-Feb	28	27	27	26	26	24	24	24	23	23	23	23	24	25	26	27	29	29	27	25	24	22	21	21	28.9
18-Feb	22	23	26	29	30	32	33	34	34	34	32	30	30	30	30	31	30	29	31	32	32	32	32	32	34.1
19-Feb	33	34	34	34	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	36	36	35	35	37.3
20-Feb	35	35	35	35	35	34	34	33	32	32	33	33	34	34	36	37	38	38	38	38	38	37	37	36	38.4
21-Feb	34	33	32	31	31	31	31	30	31	32	32	32	32	32	32	33	33	33	33	33	33	32	32	31	34.3
22-Feb	30	30	30	30	30	31	32	33	33	33	33	33	34	35	36	37	37	38	38	38	38	37	36	36	38.2
23-Feb	35	35	34	34	34	34	34	33	33	33	32	32	32	33	33	33	34	34	34	34	35	35	35	36	35.9
24-Feb	37	38	39	40	41	41	41	41	41	41	41	40	40	40	41	41	42	42	42	42	41	40	39	38	41.8
25-Feb	37	36	36	36	36	36	36	36	36	35	35	34	34	34	34	34	34	34	34	34	34	33	33	32	36.9
26-Feb	32	31	31	31	31	30	28	28	26	25	24	24	24	25	26	26	28	29	30	30	30	30	30	30	31.9
27-Feb	30	30	30	30	30	30	30	31	31	30	30	31	31	32	32	33	33	34	35	35	35	35	34	34	35.0
28-Feb	33	33	32	32	32	32	33	33	35	36	37	38	39	40	40	41	42	42	43	44	44	45	45	44	44.7
Diurnal Maximums	38.8	38.4	38.8	40.1	40.7	41.4	41.1	41.1	41.2	41.2	40.7	39.9	40.0	40.0	40.8	41.5	42.0	42.5	43.2	43.9	44.4	44.6	44.7	44.4	

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - February 2015

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 21.6 $\mu g/m^3$ on Feb 17 10:00

Maximum Daily Average: 11.2 $\mu g/m^3$ on Feb 17

Minimum Value: 0 $\mu g/m^3$ on Feb 2 00:00

Maximum Diurnal Average: 5.0 $\mu g/m^3$ at hour 2

Monthly Average: 3.97 $\mu g/m^3$

Minimum Daily Average: 0.5 $\mu g/m^3$ on Feb 14

Minimum Diurnal Average: 2.6 $\mu g/m^3$ at hour 9

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 1.2$ Median = 3.4 $Q_3 = 5.8$ $P_{90} = 8.5$ $P_{99} = 16.7$

Hours in Service:	672
Hours of Data:	618
Hours of Missing Data:	54
Hours of Calibration:	0
Percent Operational Time:	92.0

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	Daily Average	Daily Maximum
1-Feb	9	10	9	4	6	12	10	17	10	6	6	5	8	11	11	7	7	7	8	5	7	5	4	0	7.6	17.5
2-Feb	N	2	5	11	4	3	3	6	2	2	5	6	2	7	3	5	4	5	5	4	2	5	6	4	4.4	10.8
3-Feb	3	8	10	8	6	6	5	5	7	5	2	4	3	1	0	2	4	2	5	2	3	2	6	3	4.3	9.6
4-Feb	6	7	3	4	3	1	2	0	0	0	0	0	2	0	0	1	0	3	2	10	9	7	4	4	2.8	10.2
5-Feb	3	4	0	5	2	0	1	2	0	0	0	1	2	1	2	0	1	0	N	N	N	0	0	2	1.3	4.8
6-Feb	5	0	0	7	0	0	4	0	0	1	2	0	0	0	3	2	1	3	1	0	0	0	2	1	1.4	7.4
7-Feb	5	4	0	4	4	6	2	2	4	5	2	1	3	0	0	6	0	0	3	N	11	8	12	8	4.0	11.6
8-Feb	6	4	0	1	1	3	6	9	5	N	6	7	6	0	6	2	3	11	2	0	5	11	6	5	4.6	11.1
9-Feb	1	4	1	0	2	4	3	4	4	5	6	5	6	7	4	3	1	0	4	4	7	11	9	4	4.2	10.5
10-Feb	7	7	6	5	8	7	7	2	2	4	4	7	8	4	1	2	1	7	3	5	8	6	6	4	4.9	7.8
11-Feb	3	10	10	6	3	2	2	1	0	0	5	5	5	7	6	4	3	4	6	6	1	11	9	8	4.9	10.5
12-Feb	6	9	10	10	5	7	7	4	5	4	3	14	4	0	6	4	M	N	N	N	N	N	N	N	--	13.7
13-Feb	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-Feb	N	N	0	5	0	0	0	0	0	0	3	1	N	0	N	N	0	0	0	1	0	0	0	N	0.5	5.5
15-Feb	1	0	3	N	0	0	0	3	1	0	0	0	0	1	5	5	4	N	1	4	1	0	0	0	1.4	5.3
16-Feb	1	1	1	1	0	1	2	2	2	0	0	0	4	1	2	2	0	3	4	2	0	2	4	4	1.7	4.3
17-Feb	4	3	3	2	5	6	4	6	10	22	7	7	15	14	20	15	19	19	19	15	16	14	12	13	11.2	21.6
18-Feb	6	7	7	5	8	3	4	7	0	0	3	10	6	4	3	8	7	9	9	9	8	7	6	4	5.8	10.1
19-Feb	1	5	5	2	6	2	3	4	2	0	N	0	0	1	1	0	1	4	2	4	3	0	0	5	2.2	5.5
20-Feb	5	6	3	5	5	4	9	6	N	1	1	0	0	2	0	0	3	1	0	0	2	4	3	6	2.9	9.4
21-Feb	8	7	5	4	4	3	3	2	3	3	5	4	3	6	3	2	3	4	5	3	1	2	6	4	3.9	8.4
22-Feb	2	3	2	6	4	1	7	1	0	4	6	7	N	1	0	N	1	1	N	0	0	0	0	5	2.4	7.1
23-Feb	4	2	1	4	2	3	11	1	0	1	4	9	2	4	0	8	4	9	6	0	0	1	0	5	3.3	10.7
24-Feb	6	10	2	4	1	0	0	8	2	4	3	1	2	2	2	6	8	2	0	2	0	0	0	1	2.8	10.4
25-Feb	4	5	N	2	3	1	1	4	3	5	5	1	8	2	1	2	3	2	1	2	5	2	4	6	3.0	8.0
26-Feb	4	3	7	3	5	8	9	3	5	1	N	9	11	11	10	7	8	6	7	8	7	9	3	7	6.7	11.2
27-Feb	4	3	0	1	3	3	2	1	2	0	0	3	1	3	3	1	N	1	2	5	4	5	3	6	2.4	5.8
28-Feb	2	6	7	16	11	0	5	10	0	0	5	5	4	3	3	4	7	8	5	3	3	3	7	14	5.5	16.0
	4.2	5.0	3.9	4.7	3.7	3.2	4.1	4.0	2.6	2.9	3.3	4.2	4.2	3.4	3.8	3.9	3.7	4.4	4.2	4.0	4.2	4.4	4.3	4.9	Diurnal Average	
	9.0	10.4	10.0	16.0	11.1	11.5	10.7	17.5	10.3	21.6	6.7	13.7	14.6	13.8	20.5	15.0	18.6	18.9	18.9	15.1	16.2	13.9	12.3	13.9	Diurnal Maximum	

M - Maintenance N - Not Valid

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - February 2015

Maximum Value: 23.9 $\mu g/m^3$ on Feb 17 15:00

Maximum Daily Average: 14.2 $\mu g/m^3$ on Feb 17

Minimum Value: 0 $\mu g/m^3$ on Feb 2 01:00

Maximum Diurnal Average: 6.6 $\mu g/m^3$ at hour 2

Monthly Average: 5.84 $\mu g/m^3$

Minimum Daily Average: 1.2 $\mu g/m^3$ on Feb 14

Minimum Diurnal Average: 4.8 $\mu g/m^3$ at hour 10

Percentiles: $P_1 = 0.0$ $P_{10} = 0.9$ $Q_1 = 3.0$ Median = 5.5 $Q_3 = 8.0$ $P_{90} = 10.7$ $P_{99} = 21.0$

Hours in Service:	672
Hours of Data:	646
Hours of Missing Data:	26
Hours of Calibration:	0
Percent Operational Time:	96.1

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	Daily Average	Daily Maximum
1-Feb	11	10	10	6	9	13	14	21	14	8	7	6	10	11	12	8	8	10	10	7	9	8	4	3	9.6	20.7
2-Feb	0	4	8	13	8	4	5	8	3	4	7	7	5	8	5	7	6	7	6	6	3	7	7	6	6.0	12.5
3-Feb	6	10	10	9	7	7	7	5	8	8	4	6	5	3	1	4	5	6	6	3	4	5	7	5	5.9	10.1
4-Feb	7	8	6	6	4	3	3	2	0	0	0	2	4	3	1	3	1	5	8	12	11	11	5	6	4.6	11.8
5-Feb	5	5	2	8	8	1	2	4	1	2	2	8	8	3	5	2	3	0	0	0	0	2	2	7	3.3	8.2
6-Feb	7	0	3	9	8	0	6	5	1	3	5	3	3	2	6	4	3	6	3	2	1	3	4	3	3.7	9.2
7-Feb	6	7	0	6	5	7	6	3	6	7	4	4	5	1	2	10	7	4	6	6	12	9	14	12	6.2	13.9
8-Feb	7	7	3	3	2	6	7	12	10	0	7	9	7	3	7	5	7	13	9	1	9	12	12	6	6.9	13.2
9-Feb	4	6	2	3	4	5	4	5	6	8	7	6	8	9	7	4	3	1	7	7	10	15	15	6	6.3	15.1
10-Feb	9	8	7	6	9	8	9	4	3	5	5	8	8	9	3	3	3	9	6	8	9	7	7	5	6.6	9.3
11-Feb	7	14	14	7	5	3	4	2	2	1	6	6	6	9	7	6	4	5	8	8	6	13	12	9	6.9	14.1
12-Feb	9	10	12	11	7	8	9	6	8	7	8	17	11	3	8	6	M	N	N	N	N	N	N	N	--	16.6
13-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	--	0.0
14-Feb	0	0	7	7	0	0	0	0	0	0	5	4	0	0	0	0	0	0	1	2	0	1	1	0	1.2	7.3
15-Feb	2	2	5	0	2	2	1	5	1	2	1	2	0	3	7	7	7	0	4	6	2	0	1	1	2.7	7.1
16-Feb	2	2	2	2	0	4	4	4	4	0	1	3	5	4	3	3	2	4	5	4	0	4	6	5	3.1	6.1
17-Feb	5	5	5	4	5	7	5	8	23	24	14	11	17	16	24	20	22	22	23	18	18	15	14	15	14.2	23.9
18-Feb	10	9	9	7	8	5	6	8	2	2	12	14	8	8	7	10	11	13	11	11	9	9	9	5	8.4	13.7
19-Feb	4	7	7	6	6	6	6	6	3	2	0	0	0	3	3	1	5	5	3	8	7	0	2	7	4.0	8.3
20-Feb	7	10	7	6	7	6	13	8	1	3	3	1	1	4	3	1	5	3	3	1	3	5	4	7	4.8	12.8
21-Feb	10	9	6	5	4	4	5	3	4	5	6	5	5	7	5	3	4	6	5	5	4	4	8	6	5.4	9.8
22-Feb	3	5	5	7	6	5	10	3	5	9	9	9	1	4	3	0	4	4	0	0	0	1	0	8	4.3	10.0
23-Feb	7	3	4	6	3	9	12	6	1	3	8	10	6	6	6	10	5	11	11	3	3	2	3	8	6.1	12.2
24-Feb	11	14	8	6	5	1	2	11	9	6	5	2	3	3	3	9	10	5	4	4	0	0	1	3	5.2	13.7
25-Feb	7	8	1	4	4	2	1	7	7	8	8	7	11	3	2	4	4	3	2	4	6	3	7	7	5.0	10.5
26-Feb	4	7	9	5	5	12	13	6	7	6	7	11	11	12	12	8	9	7	9	9	9	13	8	9	8.7	13.0
27-Feb	6	4	1	2	3	4	4	2	3	1	3	4	3	5	5	3	0	2	5	6	7	6	7	7	3.9	7.2
28-Feb	5	6	12	20	20	2	10	11	8	4	7	8	4	5	5	7	8	9	7	5	5	5	13	16	8.3	19.8
	6.0	6.6	6.1	6.5	5.8	5.1	6.2	6.2	5.3	4.8	5.6	6.3	5.8	5.5	5.6	5.5	5.6	6.2	6.1	5.4	5.4	6.0	6.4	6.4	Diurnal Average	
	10.8	13.7	14.1	19.6	19.8	13.5	14.0	20.7	23.2	23.6	14.4	16.6	17.1	16.2	23.9	20.3	21.6	22.3	22.8	17.6	17.8	15.2	14.8	15.6	Diurnal Maximum	

M - Maintenance N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - February 2015

Peace Airshed Zone Association

Pollutant Rose

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

Beaverlodge - February 2015

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

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 80.0

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 10.5 ^{o}C on Feb 23 18:00

Maximum Daily Average: 5.4 ^{o}C on Feb 23

Minimum Value: -23 ^{o}C on Feb 3 08:00

Minimum Daily Average: -19.5 ^{o}C on Feb 6

Maximum Diurnal Average: -4.7 ^{o}C at hour 17

Minimum Diurnal Average: -8.9 ^{o}C at hour 9

Monthly Average: -7.18 ^{o}C

Percentiles: P_1 = -20.8 P_{10} = -18.2 Q_1 = -15.4 Median = -7.4 Q_3 = 0.4 P_{90} = 4.3 P_{99} = 7.4

Hours in Service:	672
Hours of Data:	670
Hours of Missing Data:	2
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-Feb	-18	-19	-18	-20	-19	-20	-20	-20	-19	-17	-15	-15	-14	-14	-14	-14	-13	-14	-14	-14	-14	-15	-15	-15	-16.2	-13.4
2-Feb	-15	-16	-16	-16	-17	-16	-16	-16	-16	-16	-16	-15	-15	-15	-15	-11	-12	-16	-18	-18	-18	-19	-19	-20	-16.2	-11.4
3-Feb	-20	-21	-21	-21	-21	-21	-22	-23	-23	-23	-19	-18	-17	-13	-15	-15	-10	-14	-16	-16	-16	-18	-20	-20	-18.5	-10.0
4-Feb	-19	-19	-16	-14	-13	-11	-9	-7	-5	-5	-4	-3	-1	0	0	0	1	0	-3	-5	-6	-6	-7	-7	-6.5	0.5
5-Feb	-9	-11	-12	-13	-14	-15	-16	-17	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-19	-19	-16.5	-8.5
6-Feb	-19	-19	-19	-19	-19	-19	-19	-20	-20	-20	-20	-20	-19	-19	-20	-19	-19	-20	-20	-20	-20	-20	-20	-19	-19.5	-18.9
7-Feb	-19	-19	-19	-19	-19	-19	-19	-19	-19	-19	-19	-18	-17	-17	-17	-17	-16	-16	-16	-16	-17	-17	-17	-17	-17.9	-16.2
8-Feb	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-16	-16	-15	-15	-15	-16	-16	-16	-16	-16	-17	-16.3	-14.8
9-Feb	-17	-17	-17	-17	-17	-17	-17	-16	-16	-16	-15	-14	-14	-14	-14	-14	-15	-16	-15	-15	-15	-15	-15	-15	-15.5	-13.7
10-Feb	-15	-14	-14	-14	-15	-15	-15	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-15	-15	-16	-17	-17	-17	-17	-14.9	-13.6
11-Feb	-17	-17	-17	-17	-17	-18	-18	-18	-18	-17	-15	-15	-15	-14	-14	-13	-13	-13	-13	-12	-11	-11	-11	-10	-14.7	-10.1
12-Feb	-10	-8	-8	-6	-6	-7	-5	-4	-5	-2	-1	0	2	M	M	7	7	6	7	7	6	5	5	4	-0.2	7.3
13-Feb	4	4	4	3	2	3	2	2	0	0	0	0	1	1	0	0	0	0	-1	-1	-1	2	4	4	1.3	4.2
14-Feb	2	3	4	4	3	4	3	2	1	1	2	5	5	6	5	6	5	5	4	3	3	2	0	0	3.3	5.6
15-Feb	1	1	2	2	1	1	0	-1	0	-1	0	2	3	5	5	4	4	4	2	1	0	-1	0	-1	1.4	4.7
16-Feb	-1	-2	-2	-2	-3	-3	-4	-4	-6	-5	-5	-3	-4	-4	-3	-3	-2	-4	-6	-8	-7	-7	-8	-9	-4.4	-1.3
17-Feb	-9	-10	-9	-9	-10	-10	-10	-10	-10	-10	-8	-7	-5	-3	-2	-1	-1	-1	-2	-1	-1	-1	-1	0	-5.4	0.0
18-Feb	0	1	1	0	-1	-1	0	0	1	2	0	0	1	2	4	5	4	4	4	4	2	3	5	5	2.0	5.4
19-Feb	4	4	3	4	4	4	3	2	2	3	5	6	6	6	6	6	6	5	5	4	4	4	4	3	4.3	6.4
20-Feb	2	2	1	1	1	1	1	-1	-2	-2	-2	-2	-2	-1	-2	-2	-1	-3	-3	-4	-5	-4	-4	-4	-1.4	2.0
21-Feb	-3	-2	-2	-2	-3	-4	-5	-5	-6	-7	-6	-6	-6	-5	-4	-4	-4	-4	-4	-4	-4	-5	-5	-6	-4.4	-2.1
22-Feb	-5	-5	-4	-3	-3	-3	-2	-2	0	0	2	3	4	5	5	5	5	6	5	4	4	4	4	3	1.3	5.6
23-Feb	3	3	3	3	2	3	2	2	2	3	4	4	5	7	9	10	10	11	8	7	8	7	7	7	5.4	10.5
24-Feb	6	6	6	6	5	5	5	4	4	5	4	4	4	4	5	5	3	2	2	0	-1	-4	-5	-8	2.9	6.4
25-Feb	-9	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-10	-9	-9	-9	-9	-8	-8	-8	-8	-7	-7	-7	-7	-9.4	-7.3
26-Feb	-8	-8	-8	-9	-9	-10	-11	-12	-12	-12	-10	-9	-9	-8	-7	-6	-6	-6	-7	-7	-8	-8	-8	-9	-8.6	-5.6
27-Feb	-9	-9	-10	-10	-11	-12	-13	-12	-12	-11	-11	-10	-9	-8	-7	-8	-7	-7	-7	-7	-8	-8	-9	-10	-9.3	-6.9
28-Feb	-12	-12	-12	-12	-12	-11	-10	-9	-9	-8	-6	-5	-3	-2	-2	-1	-2	-3	-4	-4	-5	-5	-5	-5	-6.6	-1.1
	-8.1	-8.2	-8.1	-8.2	-8.4	-8.6	-8.7	-8.8	-8.9	-8.4	-7.6	-6.9	-6.3	-5.9	-5.6	-4.8	-4.7	-5.4	-6.0	-6.4	-6.7	-7.0	-7.1	-7.4	Diurnal Average	
	6.2	6.1	6.4	5.9	5.1	5.0	4.7	4.5	4.2	4.8	4.5	5.5	6.2	6.6	8.8	10.0	10.3	10.5	8.1	7.1	8.2	7.5	7.3	6.6	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 98.3 % on Feb 13 21:00

Maximum Daily Average: 94.5 % on Feb 13

Minimum Value: 43 % on Feb 24 04:00

Minimum Daily Average: 56.6 % on Feb 23

Maximum Diurnal Average: 82.0 % at hour 1

Minimum Diurnal Average: 72.4 % at hour 16

Monthly Average: 78.41 %

Percentiles: P_1 = 44.1 P_{10} = 55.1 Q_1 = 65.8 Median = 85.0 Q_3 = 90.4 P_{90} = 92.6 P_{99} = 97.6

Hours in Service:	672
Hours of Data:	670
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

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	Daily Average	Daily Maximum
1-Feb	92	90	91	89	90	89	89	90	90	92	93	93	93	93	93	93	94	94	94	94	93	93	93	93	92.0	93.9
2-Feb	92	92	92	92	92	92	92	92	92	92	92	92	91	91	90	89	90	92	91	91	91	90	90	90	91.3	92.4
3-Feb	89	89	89	88	88	89	87	86	86	86	84	84	84	87	85	87	88	88	92	93	92	90	90	90	88.0	92.7
4-Feb	91	90	92	94	94	94	95	95	93	94	91	90	87	84	81	79	78	80	86	90	87	78	82	75	87.6	95.1
5-Feb	77	86	89	91	91	88	86	86	90	91	90	90	89	90	89	89	90	90	90	90	90	90	90	89	88.8	91.0
6-Feb	88	88	88	88	87	87	87	86	86	86	85	85	83	83	83	85	85	85	85	85	86	87	87	87	86.0	88.4
7-Feb	87	87	87	88	88	88	88	88	88	86	85	85	83	82	81	83	86	88	88	91	91	91	91	91	87.1	91.2
8-Feb	91	91	91	91	91	91	91	91	91	91	90	90	90	90	90	91	92	92	92	92	92	92	92	92	91.1	92.2
9-Feb	92	92	92	91	91	91	92	92	92	92	92	92	91	91	91	91	91	92	93	92	93	93	93	93	91.8	92.8
10-Feb	93	93	93	93	93	93	93	93	93	93	92	91	91	90	90	90	88	87	88	87	86	87	90	92	90.8	93.3
11-Feb	90	90	89	89	90	90	90	90	91	89	87	88	87	86	89	86	87	88	89	88	88	89	90	89	88.8	90.8
12-Feb	89	90	90	89	92	90	92	94	96	95	94	88	86	M	M	67	68	72	70	72	76	80	81	83	84.3	96.0
13-Feb	86	92	93	96	97	98	97	98	98	98	98	97	96	97	97	97	97	95	97	98	98	93	78	77	94.5	98.3
14-Feb	83	71	67	65	63	59	60	63	64	61	58	48	47	47	49	49	50	53	55	59	63	66	70	70	59.9	82.7
15-Feb	67	65	60	60	61	60	60	61	57	58	56	54	58	52	50	50	48	49	52	53	55	58	57	59	56.8	67.4
16-Feb	62	68	65	64	67	72	77	82	84	82	78	68	72	72	70	68	63	73	78	80	79	80	82	86	73.8	85.6
17-Feb	86	86	83	82	83	86	84	84	85	85	81	75	72	64	68	66	66	66	72	73	65	66	65	62	75.2	86.3
18-Feb	63	62	61	64	66	66	64	63	59	57	64	65	64	62	52	44	59	53	50	47	59	57	52	56	58.8	66.4
19-Feb	59	65	68	65	64	65	65	68	68	66	62	57	55	54	56	54	55	55	57	60	60	63	63	72	61.4	71.8
20-Feb	86	89	93	93	92	91	93	95	93	87	82	84	83	82	86	87	83	85	87	87	93	92	92	93	88.7	94.6
21-Feb	90	90	89	88	89	88	88	91	93	92	90	90	90	89	86	84	84	84	84	86	88	91	95	97	89.1	96.9
22-Feb	94	82	75	69	70	70	66	64	60	58	54	52	50	45	45	48	51	51	56	60	61	62	64	66	61.3	93.7
23-Feb	66	68	67	68	66	62	62	64	60	57	51	53	52	48	44	44	43	44	55	59	56	58	54	56	56.6	68.4
24-Feb	54	51	43	43	46	45	44	44	44	45	60	65	69	63	51	48	67	77	70	70	72	70	78	84	58.5	84.0
25-Feb	84	82	81	81	78	77	81	81	81	80	78	78	76	73	73	74	75	75	75	75	76	77	78	80	77.9	84.2
26-Feb	80	79	80	81	83	86	87	84	86	83	77	72	73	74	72	72	76	82	84	84	86	86	86	85	80.7	87.0
27-Feb	85	85	85	85	85	87	86	85	84	83	80	74	68	64	61	64	61	61	61	63	66	66	70	73	74.3	87.2
28-Feb	80	81	81	80	81	79	70	67	67	63	58	56	50	49	46	44	45	49	50	49	52	54	55	56	60.9	81.3
	82.0	81.9	81.4	81.0	81.4	81.2	80.9	81.3	81.1	80.0	78.7	77.0	76.1	74.2	72.9	72.4	73.6	75.0	76.5	77.5	78.4	78.6	78.9	79.8	Diurnal Average	
	93.7	93.3	93.1	95.8	97.2	97.6	97.1	98.1	97.7	98.0	97.9	97.1	96.5	96.5	97.1	97.0	96.6	95.3	97.5	98.2	98.3	93.1	95.0	96.9	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	2	1	2	1	1	1	4	11	13	17	13	14	11	9	9	10	4	6	6	5	4	6	3	3	4.7	17.0
Dir	107	115	58	350	359	62	325	343	326	327	330	327	331	355	9	9	27	122	52	53	53	36	202	107	355	327
2 Spd	5	3	1	1	6	6	5	4	4	4	7	8	9	6	7	4	2	3	2	3	1	1	1	1	2.1	9.3
Dir	97	140	174	262	269	274	277	307	341	331	346	357	17	10	17	25	241	203	50	39	14	309	14	284	345	17
3 Spd	2	1	2	3	1	2	3	1	3	5	3	2	4	2	4	6	3	6	7	4	2	2	1	2	1.5	6.8
Dir	4	14	317	261	360	329	254	199	62	54	63	14	52	130	60	55	128	120	95	121	219	355	12	71	71	95
4 Spd	2	5	4	4	3	6	3	7	6	3	4	2	7	5	9	11	11	7	8	4	5	11	6	12	4.3	11.7
Dir	106	74	55	54	57	43	39	17	17	326	3	15	290	332	316	303	300	1	39	161	8	19	10	35	6	35
5 Spd	11	14	14	15	15	14	17	18	19	17	15	11	14	12	10	12	13	13	14	16	23	28	29	28	15.2	28.9
Dir	69	90	73	91	81	75	60	62	56	53	43	15	4	12	21	43	38	33	41	63	69	67	67	68	57	67
6 Spd	26	25	21	21	20	19	19	17	18	19	19	18	16	15	17	15	13	11	10	9	8	9	8	7	15.7	26.0
Dir	65	62	57	60	57	53	54	60	64	71	73	79	72	63	63	62	55	55	69	63	56	66	55	49	62	65
7 Spd	7	11	10	10	9	9	9	6	9	9	7	8	7	7	8	7	6	5	7	7	9	8	8	7	6.3	11.5
Dir	55	81	72	65	74	67	81	12	8	11	327	335	345	337	343	348	347	7	12	2	9	10	3	1	21	81
8 Spd	7	4	10	11	12	14	13	10	4	4	2	6	5	8	10	5	3	5	12	12	6	7	6	6	6.0	13.7
Dir	17	106	117	123	113	117	104	96	76	32	75	126	159	135	126	132	74	118	96	91	45	30	11	14	98	117
9 Spd	3	4	4	8	5	3	3	3	2	4	3	3	4	4	2	5	7	8	2	3	2	2	4	3	1.6	8.3
Dir	244	241	339	35	34	36	212	197	178	171	169	220	216	220	12	161	171	159	147	132	164	207	218	233	182	35
10 Spd	4	1	3	8	9	9	7	6	7	6	8	11	10	9	9	7	9	10	13	12	13	13	13	15	5.5	14.9
Dir	226	205	206	317	324	328	340	14	26	36	110	104	113	117	120	105	111	107	98	97	105	90	92	89	88	89
11 Spd	16	13	13	13	16	9	9	9	9	5	3	5	5	3	7	2	4	8	2	4	2	1	2	1	4.7	16.3
Dir	97	101	100	104	99	106	107	109	110	139	244	282	224	139	166	170	214	213	129	56	57	280	4	152	116	97
12 Spd	4	6	2	4	1	2	4	4	2	1	3	3	3	11	9	17	14	2	5	3	4	4	4	3	0.6	16.5
Dir	69	39	211	57	45	225	64	75	119	90	141	172	41	249	244	267	272	17	321	45	66	69	69	84	311	267
13 Spd	1	6	3	4	5	5	3	5	4	5	2	1	2	3	6	7	6	6	9	7	0	1	7	6	1.2	8.7
Dir	171	41	67	129	113	92	131	79	276	260	294	238	317	273	248	238	121	188	190	186	115	312	292	285	205	190
14 Spd	5	11	7	9	12	9	6	10	4	13	5	20	29	28	25	29	23	15	26	22	17	13	9	10	14.8	29.5
Dir	257	265	256	264	255	243	242	238	250	237	214	271	269	266	268	262	260	265	262	264	260	265	263	255	260	269
15 Spd	19	24	24	22	20	18	14	4	4	3	4	6	13	13	9	10	10	11	8	4	6	3	11	8	9.1	24.1
Dir	264	268	270	269	267	269	267	282	323	323	296	279	288	302	330	341	336	358	350	354	30	39	319	340	293	270
16 Spd	5	3	4	8	4	12	15	16	6	5	5	5	10	10	7	4	2	5	1	9	4	3	6	1	2.1	15.7
Dir	360	52	316	34	351	325	325	322	337	334	8	158	117	111	116	190	117	241	290	93	84	240	318	58	5	322
17 Spd	5	4	1	3	4	2	1	0	2	5	5	1	2	2	2	1	1	1	3	4	3	5	1	4	0.5	5.3
Dir	277	18	169	218	245	75	119	54	160	145	163	246	263	176	130	115	202	53	283	39	66	54	111	72	132	145
18 Spd	2	4	3	4	2	5	6	4	4	2	1	2	1	3	6	5	3	1	4	1	3	7	25	22	0.1	25.4
Dir	82	54	80	58	112	61	45	59	62	63	164	114	134	56	40	66	200	140	79	139	211	232	254	247	204	254
19 Spd	30	22	14	15	27	27	19	16	16	18	23	24	19	17	27	21	15	15	13	10	8	7	8	9	16.6	29.7
Dir	248	246	252	270	272	265	264	258	258	264	268	278	276	273	268	277	287	291	292	292	283	282	335	1	271	248
20 Spd	7	7	8	10	8	6	6	10	11	13	11	9	8	6	9	5	3	8	5	6	6	6	4	3	2.6	12.5
Dir	10	324	309	316	326	332	314	108	113	107	116	133	115	92	107	104	22	18	8	356	328	317	284	30	42	107
21 Spd	8	10	8	8	6	8	11	11	13	11	11	11	9	8	8	10	11	13	12	10	6	3	2	3	6.2	13.1
Dir	317	336	337	349	126	127	118	102	110	107	115	131	125	128	114	105	99	104	103	102	114	157	125	101	104	104
22 Spd	3	4	5	2	1	5	2	1	4	2	4	5	6	13	18	18	14	16	17	10	13	8	2	4	5.2	18.2
Dir	74	113	97	163	177	43	83	135	239	93	203	198	201	239	244	244	231	241	242	236	240	230	195	73	229	244

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2015

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	Daily Average	Daily Maximum
23 Spd	3	5	2	1	1	2	3	4	6	2	2	3	5	4	3	4	2	4	11	14	24	13	27	24	4.3	27.2
Dir	59	50	69	126	114	197	184	195	211	164	153	68	50	54	91	247	201	212	256	249	249	260	261	252	246	261
24 Spd	17	17	12	15	12	13	11	9	9	6	5	2	7	9	16	21	25	21	18	16	17	19	14	19	7.3	25.2
Dir	255	252	265	259	248	260	284	304	5	360	9	328	29	313	286	314	320	325	334	356	28	52	94	106	318	320
25 Spd	15	15	14	16	16	12	11	11	11	12	12	10	9	12	13	13	12	10	10	9	9	9	11	11	11.6	16.5
Dir	109	115	106	107	102	105	109	98	111	104	102	111	111	96	91	86	75	71	79	74	80	83	89	95	97	107
26 Spd	12	8	6	3	2	2	1	1	4	2	4	9	7	8	7	7	7	11	11	10	9	7	9	10	4.8	12.4
Dir	92	81	86	34	11	5	35	200	279	328	346	9	13	314	329	338	343	338	333	332	337	336	329	334	352	92
27 Spd	9	9	10	12	9	9	12	12	8	6	9	7	4	5	3	6	6	5	4	1	2	2	1	5	3.9	12.3
Dir	334	333	330	332	327	327	327	325	322	293	266	249	251	193	146	69	82	61	38	4	47	54	91	58	330	325
28 Spd	4	5	5	4	5	3	8	8	5	7	11	12	5	3	3	3	4	6	8	8	7	9	9	9	3.4	12.4
Dir	65	56	48	48	54	27	321	320	322	350	343	324	331	60	87	87	106	110	88	92	105	101	95	105	46	324
Spd	1.3	1.5	1.5	1.8	1.0	1.4	1.7	2.3	2.4	2.1	1.4	1.2	1.4	1.2	1.3	2.2	1.7	1.2	2.0	2.1	1.9	2.7	1.7	2.4	Diurnal Average	
Dir	38	47	39	24	22	8	9	28	34	32	28	333	335	310	322	317	326	14	14	48	33	39	355	50		
Spd	29.7	25.0	24.1	22.3	27.2	27.3	19.1	17.8	18.9	19.5	22.9	23.9	29.5	28.3	27.1	29.4	25.2	21.1	26.4	22.5	24.0	27.9	28.9	28.5	Diurnal Maximum	
Dir	248	62	270	269	272	265	264	62	56	71	268	278	269	266	268	262	320	325	262	264	249	67	67	68		

Maximum Speed Value: 30 km/h on Feb 19 01:00
Maximum Daily Speed Average: 16.6 km/h on Feb 19
Maximum Diurnal Speed Average: 2.7 km/h at hour 22

Minimum Speed Value: 0 km/h on Feb 13 21:00
Minimum Daily Speed Average: 0.1 km/h on Feb 17
Minimum Diurnal Speed Average: 1.0 km/h at hour 5

Monthly Average Velocity: 1.51 km/h 16.2 deg

Speed Percentiles: $P_1 = 0.7$ $P_{10} = 2.0$ $Q_1 = 3.6$ Median = 6.7 $Q_3 = 11.1$ $P_{90} = 16.4$ $P_{99} = 27.8$

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

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Percent Operational Time:	100.0

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	28	50	8	0	0	0	86
NorthEast	61	30	19	8	1	0	119
East	38	45	46	3	1	0	133
SouthEast	32	29	4	0	0	0	65
South	30	11	0	0	0	0	41
SouthWest	30	12	8	2	0	0	52
West	17	22	29	21	4	0	93
NorthWest	19	45	16	3	0	0	83
Total	255	244	130	37	6	0	672

Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - February 2015

Maximum Speed: 30 km/h on Feb 19 01:00

Maximum Daily Speed Average: 17.8 km/h on Feb 19

Minimum Speed: 1 km/h on Feb 27 20:00

Minimum Daily Speed Average: 3.2 km/h on Feb 17

Maximum Diurnal Speed Average: 9.8 km/h at hour 16

Minimum Diurnal Speed Average: 7.9 km/h at hour 11

Monthly Average Speed: 8.62 km/h

Percentiles: P_1 = 1.8 P_{10} = 2.9 Q_1 = 4.3 Median = 7.2 Q_3 = 11.4 P_{90} = 16.6 P_{99} = 27.8

Hours in Service: 672
Hours of Data: 672
Hours of Missing Data: 0

Percent Operational Time: 100.0

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	Daily Average	Daily Maximum
1-Feb	3	3	3	3	2	2	7	12	14	17	14	14	11	10	9	10	6	6	6	6	5	6	4	4	7.3	17.0
2-Feb	5	4	1	2	6	6	5	4	4	4	7	8	9	6	7	4	3	3	3	3	1	2	3	1	4.2	9.3
3-Feb	2	2	2	4	2	3	4	2	4	5	3	4	4	4	4	6	3	7	7	5	3	4	6	2	3.8	6.8
4-Feb	2	5	5	4	4	7	4	8	7	4	5	3	7	5	9	11	12	8	10	5	7	12	7	13	6.7	12.6
5-Feb	13	14	14	15	15	14	17	18	19	17	15	12	14	12	10	12	14	13	14	16	23	28	29	29	16.5	28.9
6-Feb	26	25	21	21	20	19	19	17	18	20	19	18	16	15	17	15	13	11	10	9	9	10	8	7	16.0	26.1
7-Feb	7	12	10	10	9	9	9	7	9	9	7	8	8	7	8	8	7	6	7	7	9	8	8	8	8.2	11.6
8-Feb	7	4	10	11	12	14	13	11	5	4	4	6	6	9	10	5	4	6	12	13	6	7	6	6	8.0	13.8
9-Feb	4	4	5	8	5	3	3	3	2	4	3	3	4	4	4	6	8	8	3	3	2	3	4	3	4.1	8.4
10-Feb	4	2	3	8	9	9	7	6	8	6	8	11	10	9	9	8	9	11	13	12	13	13	13	15	9.0	14.9
11-Feb	16	13	13	13	16	10	9	9	9	5	4	6	5	4	8	3	5	8	5	5	3	2	2	2	7.2	16.4
12-Feb	4	6	3	4	4	4	4	4	3	2	3	5	3	11	9	17	14	5	6	4	4	5	5	3	5.5	16.7
13-Feb	4	6	3	5	6	5	5	5	7	5	4	3	5	4	7	8	8	7	9	7	5	4	9	6	5.7	9.0
14-Feb	5	12	8	9	12	9	7	11	8	13	7	21	30	28	25	29	23	16	26	23	17	13	9	10	15.5	29.6
15-Feb	19	24	24	22	20	18	14	5	5	4	4	7	13	13	10	10	10	11	9	4	7	5	11	9	11.6	24.1
16-Feb	7	4	6	8	5	12	15	16	8	6	9	6	10	10	7	4	3	6	3	9	5	3	7	3	7.1	15.7
17-Feb	6	5	2	4	4	3	2	1	2	6	5	2	3	2	2	2	2	2	4	4	4	5	2	4	3.2	5.9
18-Feb	3	5	3	4	4	5	6	4	4	3	4	3	3	3	6	6	4	2	4	2	3	8	26	22	5.7	25.5
19-Feb	30	22	14	15	27	27	19	16	16	18	23	24	19	17	27	21	15	15	13	10	9	7	9	10	17.8	29.8
20-Feb	7	7	8	10	8	6	6	10	11	13	11	9	8	6	9	5	3	8	6	6	7	6	5	4	7.6	12.8
21-Feb	9	10	8	8	7	8	11	11	13	12	11	11	9	8	8	10	11	13	12	10	6	3	2	3	8.9	13.1
22-Feb	4	5	5	3	5	6	3	2	4	3	4	5	6	13	18	18	15	16	17	10	13	8	2	4	7.9	18.2
23-Feb	3	5	3	2	2	3	3	4	6	3	3	3	5	4	4	5	2	5	11	14	24	14	27	24	7.5	27.3
24-Feb	17	17	12	15	12	13	11	10	9	7	5	3	7	10	17	22	25	21	18	17	18	19	15	19	14.1	25.4
25-Feb	16	15	15	17	16	12	11	11	11	13	12	10	9	12	13	13	12	10	11	9	9	9	11	12	12.0	16.5
26-Feb	12	8	7	3	3	3	3	3	4	4	4	9	8	8	7	7	8	11	11	10	9	7	9	10	7.0	12.4
27-Feb	9	9	10	12	9	9	12	12	9	6	10	8	5	6	4	6	6	5	4	1	2	2	3	5	6.9	12.3
28-Feb	4	5	5	4	5	4	8	9	5	8	11	13	6	6	3	3	5	6	8	8	7	9	9	9	6.6	12.6
	8.9	9.0	8.0	8.8	8.9	8.6	8.4	8.2	8.0	7.9	7.9	8.3	8.7	8.8	9.7	9.8	8.9	8.7	9.3	8.3	8.2	7.9	8.9	8.8	Diurnal Average	
	29.8	25.1	24.1	22.4	27.3	27.3	19.1	17.8	19.0	19.5	23.0	24.0	29.6	28.4	27.1	29.5	25.4	21.3	26.4	22.5	24.1	27.9	28.9	28.5	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - February 2015

Maximum Value: 91.8 deg on Feb 17 18:00

Minimum Value: 2.0 deg on Feb 15 02:00

Percentiles: P_1 = 2.7 P_{10} = 4.6 Q_1 = 7.3 Median = 13.9 Q_3 = 35.5 P_{90} = 58.1 P_{99} = 85.9

Hours in Service:	672
Hours of Data:	672
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-Feb	57	76	80	70	73	69	57	32	24	5	11	8	10	15	7	5	55	23	19	29	26	32	26	25	80.3
2-Feb	12	51	50	75	11	7	9	15	16	14	9	9	5	9	6	14	51	41	43	10	37	76	81	64	81.4
3-Feb	44	65	50	42	65	67	52	62	29	10	31	51	41	49	6	8	33	18	8	20	33	64	86	28	86.2
4-Feb	41	30	28	16	25	11	58	35	19	29	23	48	8	24	7	12	15	18	52	20	79	9	40	25	78.8
5-Feb	28	11	7	10	8	6	5	4	4	5	11	20	8	11	7	14	8	6	7	9	5	3	3	3	27.7
6-Feb	4	4	5	4	4	5	5	4	4	3	5	5	7	7	5	6	10	13	13	13	14	12	17	19	18.5
7-Feb	16	8	7	8	8	12	11	31	11	9	17	17	23	22	16	20	22	29	12	11	10	10	22	16	31.0
8-Feb	21	40	9	9	7	7	6	8	34	34	75	19	14	8	6	18	57	47	10	12	26	22	25	14	74.9
9-Feb	36	14	41	8	11	22	27	25	17	12	38	28	13	18	90	44	8	9	36	12	52	26	14	14	89.9
10-Feb	9	50	31	13	7	8	12	21	11	17	9	5	12	12	7	18	6	4	5	7	6	7	5	4	49.6
11-Feb	5	4	4	4	5	13	7	10	7	13	48	45	21	41	17	59	31	11	68	25	55	74	30	62	74.4
12-Feb	27	14	63	36	88	71	13	19	50	58	46	55	51	38	9	9	25	91	36	26	17	32	36	41	90.5
13-Feb	81	15	30	43	32	14	55	15	73	16	80	65	69	67	43	31	41	19	15	20	85	78	44	30	84.6
14-Feb	43	6	73	42	7	16	23	17	86	4	55	29	5	5	7	3	3	10	3	5	3	4	35	25	85.7
15-Feb	2	2	2	2	3	4	3	59	26	36	33	72	4	7	14	12	9	9	44	45	23	69	6	50	72.3
16-Feb	48	45	58	12	36	6	3	3	63	42	62	14	10	4	6	28	33	29	66	13	62	29	29	83	83.0
17-Feb	37	42	78	18	16	60	66	86	21	26	22	74	51	43	38	56	65	92	39	50	34	11	67	19	91.8
18-Feb	41	11	19	7	55	11	14	16	8	47	65	28	79	35	6	22	42	64	20	73	35	68	6	4	78.9
19-Feb	4	3	7	8	3	3	3	3	5	4	4	3	4	8	3	5	6	8	5	9	35	20	20	18	34.9
20-Feb	26	10	8	6	7	11	26	28	7	12	14	8	16	9	4	18	20	4	14	23	33	32	50	42	50.1
21-Feb	10	4	5	23	22	14	8	8	6	5	8	7	12	7	10	6	6	4	3	11	8	13	31	24	31.2
22-Feb	41	29	19	47	79	32	49	64	25	61	12	10	8	10	4	4	7	6	3	5	3	10	34	16	78.9
23-Feb	13	11	57	53	57	57	48	39	5	55	43	9	11	14	39	36	33	20	44	7	5	12	4	3	57.5
24-Feb	8	5	11	6	7	7	13	7	13	15	23	47	16	50	15	9	8	7	6	14	12	6	24	8	50.3
25-Feb	10	5	7	5	4	6	6	6	8	6	5	6	11	8	6	7	6	11	9	10	9	7	6	4	10.8
26-Feb	4	6	14	31	37	76	90	75	39	54	39	15	31	12	7	12	10	16	6	6	7	11	8	7	90.3
27-Feb	6	6	6	5	5	9	4	3	7	23	20	22	36	13	41	13	10	9	15	66	86	21	85	10	86.0
28-Feb	25	13	40	9	10	43	8	7	20	32	9	12	65	66	12	16	26	10	5	6	12	4	5	9	66.0
	80.9	76.4	80.3	75.3	87.8	75.6	90.3	85.6	85.7	60.5	79.7	74.4	78.9	66.5	89.9	59.0	64.7	91.8	68.3	73.3	86.0	77.6	86.2	83.0	

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.3 ppb on Feb 19 09:00 Maximum Daily Average: 1.4 ppb on Feb 19

Minimum Value: 0 ppb on Feb 12 21:00 Minimum Daily Average: 0.0 ppb on Feb 13
Maximum Diurnal Average: 0.9 ppb at hour 15 Minimum Diurnal Average: 0.2 ppb at hour 8
Monthly Average: 0.43 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.4 P_{90} = 0.9 P_{99} = 4.1

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	1	1	1	0	0	0	0	0	0.3	0.7
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6
5-Feb	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
6-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	0.5	0.8
7-Feb	1	1	1	1	1	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0.5	2.1
8-Feb	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-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	1	3	1	1	0	0	0	0	0	0	0	0.4	2.6
10-Feb	0	0	0	0	0	0	A	0	0	0	1	1	1	2	2	2	2	1	1	1	1	0	0	0	0.7	1.7
11-Feb	0	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1.0	1.7
12-Feb	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
13-Feb	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
14-Feb	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	3	2	3	1	0	0.5	3.0
15-Feb	1	A	1	1	2	5	3	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.0
16-Feb	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	0.3
17-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.5
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.2
19-Feb	0	0	0	3	5	6	1	1	8	4	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1.4	8.3
20-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	1	1	0	A	0	0	0	0	0	0.5	4.0
22-Feb	0	0	0	0	1	0	0	0	0	0	0	0	4	8	8	3	1	A	0	0	1	1	1	1	1.4	7.8
23-Feb	2	2	1	1	0	0	2	1	1	1	1	2	6	0	0	1	A	1	1	1	0	0	0	0	1.0	5.9
24-Feb	0	0	0	0	0	0	1	0	0	0	0	0	C	C	0	A	0	0	0	0	0	0	0	0	0.1	0.6
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	2	0.3	2.1
26-Feb	2	1	1	1	1	1	0	0	0	0	0	0	0	A	2	1	1	0	0	0	0	0	0	0	0.7	2.0
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	2	0	0	0	0	0	0	0.3	2.1
28-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.5
	0.4	0.3	0.3	0.4	0.4	0.6	0.4	0.2	0.5	0.4	0.3	0.4	0.8	0.8	0.9	0.6	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	Diurnal Average	
	2.4	1.6	1.2	3.0	4.8	6.0	3.4	1.4	8.3	4.4	1.2	2.3	5.9	7.8	7.6	3.1	1.7	2.1	1.7	2.5	2.2	3.0	1.4	2.1	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - February 2015

Maximum Value: 32.9 ppb on Feb 22 15:00

Maximum Daily Average: 5.1 ppb on Feb 22

Minimum Value: 0 ppb on Feb 24 12:00

Minimum Daily Average: 0.4 ppb on Feb 13

Maximum Diurnal Average: 3.1 ppb at hour 15

Minimum Diurnal Average: 0.8 ppb at hour 2

Monthly Average: 1.39 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.5$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 1.0$ $P_{90} = 2.0$ $P_{99} = 16.3$

Hours in Service:	672
Hours of Data:	641
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	0.9	2.2
2-Feb	1	1	1	1	1	1	1	1	1	0	0	1	1	0	A	0	1	0	0	0	1	1	0	0	0.6	1.0
3-Feb	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	1.1
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	0.8	1.0
5-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.6
7-Feb	1	2	2	2	1	1	1	1	1	A	1	1	3	1	2	1	1	1	1	0	1	1	1	1	1.1	3.5
8-Feb	0	1	0	1	1	1	0	0	A	1	1	1	1	1	2	7	1	1	1	1	1	1	1	1	0.9	6.6
9-Feb	1	1	1	1	1	1	1	A	1	1	1	1	2	6	8	1	1	1	1	1	1	1	1	1	1.3	7.8
10-Feb	1	1	1	1	1	1	A	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1.2	2.2
11-Feb	1	1	1	1	1	A	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.5	2.2
12-Feb	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0.8	1.6
13-Feb	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6
14-Feb	1	0	A	0	1	0	0	0	0	0	0	2	1	1	1	1	1	1	2	8	15	12	1	1	2.3	14.9
15-Feb	1	A	2	1	11	16	8	2	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2.6	16.3
16-Feb	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.6	1.5
17-Feb	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	1.1
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0
19-Feb	1	1	1	13	16	14	4	3	19	11	2	1	1	1	1	1	1	1	1	1	A	1	1	1	4.0	19.0
20-Feb	1	0	1	1	1	1	1	1	0	0	1	1	0	0	1	0	1	1	0	A	1	1	1	0	0.5	0.6
21-Feb	1	1	1	1	1	1	1	1	1	1	1	2	2	17	4	2	2	1	A	1	1	1	1	1	1.7	16.5
22-Feb	1	1	1	2	2	1	1	1	1	1	0	0	15	16	33	16	10	A	0	0	5	3	4	4	5.1	32.9
23-Feb	6	3	2	2	1	1	5	3	2	5	4	10	27	1	1	1	A	1	1	1	1	1	1	1	3.6	26.9
24-Feb	1	0	1	0	1	1	2	1	1	0	1	0	C	C	11	A	3	1	0	0	0	0	0	0	1.2	10.6
25-Feb	0	0	1	0	1	0	0	1	1	1	1	1	1	1	A	1	1	1	0	0	1	1	2	3	0.8	3.1
26-Feb	3	2	1	1	1	1	1	1	1	1	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1.3	3.4
27-Feb	1	0	1	0	0	0	0	1	1	1	1	6	A	4	1	1	1	9	1	1	1	0	0	0	1.4	9.1
28-Feb	0	1	0	1	1	0	0	0	1	0	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.4
	1.0	0.8	0.9	1.3	1.7	1.7	1.2	0.9	1.5	1.3	0.9	1.4	2.7	2.5	3.1	1.8	1.4	1.2	0.9	1.0	1.4	1.3	0.9	1.0	Diurnal Average	
	6.0	3.2	2.4	13.4	16.3	16.3	8.0	3.3	19.0	10.5	3.8	10.4	26.9	16.5	32.9	16.2	10.1	9.1	2.1	8.5	14.9	12.4	3.9	3.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - February 2015

Number of Exceedences (AAAQO): 1-hr: 1 24-hr: 0
Maximum Value: 14.0 ppb on Feb 2 19:00 Maximum Daily Average: 2.1 ppb on Feb 2

Minimum Value: 0 ppb on Feb 5 09:00 Minimum Daily Average: 0.0 ppb on Feb 5
Maximum Diurnal Average: 0.9 ppb at hour 19 Minimum Diurnal Average: 0.2 ppb at hour 15
Monthly Average: 0.28 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.5 P_{99} = 1.6

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0.3	0.7
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	14	10	10	7	4	1	2.1	14.0
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0.3	0.6
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0.4	1.0
5-Feb	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	0.2
6-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Feb	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-Feb	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-Feb	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	0.2
10-Feb	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	0.2
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
12-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.3	1.0
13-Feb	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
14-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	1	0	0	0.3	1.5
15-Feb	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
16-Feb	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.5
17-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.3	1.3
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	A	0	0	0.3	0.9
19-Feb	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6
20-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	A	0	0	0	3	2	1	0.4	2.5
23-Feb	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0.4	1.0
24-Feb	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	0.3
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.1
26-Feb	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	0.2
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	1	1	1	1	0.3	0.8
28-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	2	1	0	0	0	0	0.3	1.9
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.9	0.6	0.6	0.5	0.4	0.2	Diurnal Average	
	0.8	0.5	0.8	0.9	0.8	0.6	0.9	0.6	0.8	1.0	1.0	1.3	0.7	0.7	0.5	0.9	0.7	1.0	14.0	9.6	10.5	6.9	3.6	1.0	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - February 2015

Maximum Value: 29.5 ppb on Feb 2 19:00

Maximum Daily Average: 4.5 ppb on Feb 2

Minimum Value: 0 ppb on Feb 5 10:00

Minimum Daily Average: 0.4 ppb on Feb 5

Maximum Diurnal Average: 1.9 ppb at hour 19

Minimum Diurnal Average: 0.6 ppb at hour 4

Monthly Average: 0.78 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.5 $Q_3 = 0.7$ $P_{90} = 1.1$ $P_{99} = 0.9$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	0	1	1	1	1	1	1	2	1	A	1	1	1	0	1	0	0	0	0.7	1.7
2-Feb	1	0	0	1	1	0	1	0	1	1	0	1	0	1	A	1	1	1	30	26	20	10	6	2	4.5	29.5
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	0.7	1.0
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	1	1	1	0	0.8	2.4
5-Feb	0	1	1	0	0	1	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.6
6-Feb	0	0	0	0	1	1	0	1	1	1	A	1	0	1	1	0	1	1	1	1	1	0	1	0	0.5	0.7
7-Feb	0	0	1	1	0	1	0	0	0	A	1	1	0	1	0	3	0	1	0	0	0	1	1	0	0.6	2.9
8-Feb	0	0	0	0	1	1	0	0	A	1	0	0	0	1	0	0	0	1	1	0	0	1	1	0	0.5	0.6
9-Feb	0	1	1	0	1	0	0	A	1	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	0.5	0.7
10-Feb	1	0	0	0	1	1	A	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0.5	0.6
11-Feb	1	0	1	1	1	A	1	0	1	0	1	1	0	1	0	1	1	1	1	0	1	0	0	0	0.5	0.6
12-Feb	1	0	1	1	A	1	0	1	0	1	1	1	0	0	1	1	1	2	2	1	0	1	1	1	0.7	2.3
13-Feb	1	1	1	A	1	1	1	0	0	1	0	1	0	1	0	1	1	0	0	0	0	1	0	0	0.5	0.8
14-Feb	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	3	1	1	1	1	1	0.8	3.0
15-Feb	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0.8	1.8
16-Feb	A	1	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.5	1.5
17-Feb	0	1	1	1	1	1	1	1	1	1	1	2	1	1	0	0	1	0	0	0	0	0	A	1	0.7	1.9
18-Feb	0	0	0	0	1	1	0	0	1	0	1	0	0	2	1	2	1	1	1	1	1	A	1	1	0.8	1.9
19-Feb	1	0	0	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0	1	0	A	0	0	1	0.6	1.1
20-Feb	0	0	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	A	1	1	1	1	0.5	0.8
21-Feb	1	0	0	0	0	0	1	0	0	1	0	1	1	1	1	0	0	0	A	0	0	0	0	1	0.5	0.7
22-Feb	0	0	1	0	0	1	0	0	0	1	0	1	2	2	1	1	2	A	0	1	1	3	3	2	1.0	3.5
23-Feb	2	1	1	1	0	0	2	1	1	2	1	1	1	1	0	0	A	0	1	1	1	1	1	1	1.0	2.5
24-Feb	1	1	0	0	0	1	1	0	0	0	C	C	C	C	1	A	1	1	0	0	0	0	0	1	0.5	1.2
25-Feb	0	0	0	0	0	0	0	0	0	0	1	0	1	0	A	0	0	0	1	0	1	0	0	0	0.4	0.5
26-Feb	0	0	0	0	0	1	1	0	1	1	0	1	0	A	1	1	1	1	1	1	0	1	1	0	0.5	0.7
27-Feb	0	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	2	1	1	1	0.8	2.4
28-Feb	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	0	0	1	3	3	1	1	1	1	0.9	3.1
	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	1.9	1.7	1.4	1.0	0.9	0.7	Diurnal Average	
	1.6	1.5	1.3	1.3	1.5	1.4	2.5	1.4	1.3	1.6	1.4	1.9	2.1	1.9	1.2	2.9	1.8	2.3	29.5	26.4	20.1	9.6	6.4	2.2	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - February 2015

Peace Airshed Zone Association

Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 11.0 ^{o}C on Feb 23 16:00

Maximum Daily Average: 6.6 ^{o}C on Feb 23

Minimum Value: -29 ^{o}C on Feb 3 07:00

Minimum Daily Average: -21.2 ^{o}C on Feb 3

Maximum Diurnal Average: -4.0 ^{o}C at hour 16

Minimum Diurnal Average: -9.6 ^{o}C at hour 5

Monthly Average: -7.42 ^{o}C

Percentiles: P_1 = -27.3 P_{10} = -17.3 Q_1 = -15.5 Median = -8.0 Q_3 = 0.6 P_{90} = 4.9 P_{99} = 8.3

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	-23	-23	-24	-24	-25	-25	-24	-24	-23	-21	-20	-18	-16	-15	-14	-14	-14	-14	-15	-16	-16	-16	-16	-16	-19.1	-13.6
2-Feb	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-15	-15	-15	-14	-15	-17	-18	-20	-22	-24	-25	-17.1	-14.4
3-Feb	-26	-27	-28	-28	-28	-27	-29	-28	-28	-27	-24	-20	-16	-14	-12	-12	-12	-13	-15	-17	-19	-20	-21	-19	-21.2	-11.5
4-Feb	-20	-19	-18	-17	-17	-16	-15	-15	-14	-13	-11	-9	-7	-5	-3	-3	-5	-5	-5	-5	-5	-5	-7	-9	-10.4	-3.1
5-Feb	-10	-12	-13	-14	-14	-15	-15	-15	-15	-16	-16	-15	-15	-15	-15	-16	-16	-16	-16	-16	-16	-16	-16	-16	-14.9	-10.4
6-Feb	-16	-17	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-17	-16	-16	-16	-16	-16	-16	-17	-17	-17	-17	-17	-16.9	-15.8
7-Feb	-17	-17	-16	-16	-17	-17	-16	-15	-15	-16	-15	-15	-14	-13	-13	-13	-14	-15	-16	-16	-16	-17	-17	-17	-15.6	-12.7
8-Feb	-17	-18	-18	-18	-18	-18	-18	-18	-18	-17	-17	-17	-16	-15	-15	-14	-14	-15	-15	-15	-15	-15	-15	-16	-16.3	-14.2
9-Feb	-16	-16	-16	-16	-17	-18	-18	-17	-17	-17	-16	-15	-15	-13	-13	-14	-14	-14	-15	-15	-15	-16	-15	-15	-15.7	-13.4
10-Feb	-15	-15	-15	-15	-16	-16	-15	-15	-16	-17	-17	-16	-16	-16	-16	-16	-15	-16	-17	-18	-18	-18	-18	-18	-16.3	-14.9
11-Feb	-17	-17	-17	-17	-16	-16	-15	-15	-12	-12	-10	-10	-9	-9	-9	-8	-8	-8	-8	-8	-8	-8	-8	-7	-11.5	-7.5
12-Feb	-7	-6	-6	-5	-5	-5	-4	-4	-3	-2	-1	1	3	6	8	7	6	4	3	2	2	2	1	1	-0.1	7.6
13-Feb	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	3	2	2	2	1	1.4	2.7
14-Feb	1	1	0	0	0	0	-1	0	-1	0	3	6	7	8	8	8	8	7	6	6	6	5	5	5	3.6	8.0
15-Feb	5	5	5	4	4	4	4	3	3	3	3	3	4	4	5	5	5	4	2	2	2	2	1	1	3.4	5.2
16-Feb	1	0	0	0	0	-1	-3	-4	-5	-5	-6	-6	-6	-5	-5	-4	-3	-4	-6	-8	-8	-8	-9	-9	-4.3	0.6
17-Feb	-9	-10	-11	-12	-11	-11	-11	-11	-10	-9	-8	-6	-3	-1	-1	0	0	0	0	0	0	0	0	0	-5.1	0.5
18-Feb	0	0	-1	-1	-2	-2	-2	-3	-3	-3	0	2	3	5	4	5	5	4	4	4	4	3	1	1	1.2	4.9
19-Feb	1	2	5	5	6	6	5	5	4	5	6	7	5	5	7	7	7	6	5	5	5	4	4	4	5.1	6.8
20-Feb	2	1	0	-1	-2	-2	-3	-3	-4	-4	-3	-3	-3	-2	-2	-2	-2	-2	-2	-3	-3	-2	-2	-3	-2.0	2.3
21-Feb	-4	-5	-6	-7	-7	-8	-8	-8	-8	-8	-7	-6	-6	-5	-4	-3	-2	-3	-3	-4	-4	-5	-5	-5	-5.5	-2.3
22-Feb	-5	-5	-5	-5	-5	-5	-6	-6	-6	-4	-1	1	6	7	8	9	8	8	7	5	5	6	6	6	1.1	8.5
23-Feb	5	5	5	5	5	5	5	5	6	6	7	9	10	10	11	11	11	10	8	6	4	4	4	2	6.6	11.0
24-Feb	2	1	0	0	1	3	7	6	5	4	3	3	3	3	3	2	2	0	-5	-8	-9	-10	-10	-10	-0.2	7.1
25-Feb	-11	-11	-11	-11	-12	-12	-12	-12	-12	-11	-10	-8	-7	-6	-6	-6	-7	-7	-7	-8	-9	-10	-11	-11	-9.5	-6.0
26-Feb	-12	-12	-13	-13	-12	-11	-11	-12	-13	-13	-11	-9	-7	-8	-7	-7	-6	-6	-7	-8	-8	-8	-9	-9	-9.6	-6.2
27-Feb	-9	-9	-10	-10	-11	-11	-13	-13	-12	-12	-11	-11	-9	-8	-7	-7	-6	-6	-7	-8	-11	-13	-12	-13	-10.0	-5.7
28-Feb	-13	-14	-15	-16	-16	-16	-17	-17	-15	-13	-8	-5	-4	-2	-2	-1	-1	-1	-2	-3	-5	-8	-9	-11	-8.9	-0.7
	-8.8	-9.1	-9.3	-9.4	-9.6	-9.5	-9.5	-9.6	-9.5	-9.1	-8.0	-6.8	-5.7	-4.9	-4.3	-4.0	-4.1	-4.6	-5.6	-6.4	-7.0	-7.4	-7.8	-8.1	Diurnal Average	
	5.1	4.9	5.3	5.4	6.0	5.7	7.1	6.0	5.5	6.0	7.2	8.6	9.7	10.3	10.5	11.0	11.0	10.3	8.3	5.7	5.5	5.9	5.9	5.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100.0 % on Feb 13 08:00 Maximum Daily Average: 98.0 % on Feb 13

Minimum Value: 31 % on Feb 22 16:00 Minimum Daily Average: 49.9 % on Feb 15
Maximum Diurnal Average: 76.9 % at hour 5 Minimum Diurnal Average: 63.3 % at hour 16
Monthly Average: 72.19 % Percentiles: P_1 = 35.9 P_{10} = 51.4 Q_1 = 65.6 Median = 75.4 Q_3 = 80.3 P_{90} = 86.1 P_{99} = 99.8

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	76	76	75	75	74	74	74	74	75	75	75	75	75	76	76	77	77	79	79	80	80	80	81	80	76.6	80.6
2-Feb	80	80	80	80	80	80	81	81	81	81	79	78	78	78	76	77	76	80	82	80	77	76	75	73	78.7	81.7
3-Feb	72	71	70	71	71	71	70	71	72	71	71	71	66	62	59	59	61	66	78	81	80	79	77	79	70.7	81.3
4-Feb	79	79	80	80	80	80	81	81	81	82	82	79	73	70	70	71	81	89	91	92	93	92	78	69	80.6	93.3
5-Feb	70	75	76	77	78	79	79	79	79	80	80	80	81	81	81	80	79	80	80	79	81	75	69	67	77.6	81.3
6-Feb	66	65	69	73	76	74	70	70	68	70	71	70	66	64	64	65	68	68	64	65	65	66	67	68	67.9	76.0
7-Feb	68	69	70	70	71	72	71	70	72	73	70	66	64	63	62	64	68	74	77	80	78	77	76	77	71.0	79.7
8-Feb	77	78	76	75	75	75	75	76	76	75	76	75	78	79	79	79	77	76	78	79	80	81	83	84	77.5	84.0
9-Feb	84	83	83	83	82	80	80	81	80	81	80	79	78	71	72	73	74	76	77	77	77	76	77	79	78.4	84.0
10-Feb	78	78	77	76	77	79	78	78	78	77	71	70	70	68	67	69	71	73	74	74	74	75	76	76	74.4	78.5
11-Feb	76	76	77	77	77	78	78	79	79	77	73	69	65	63	65	67	68	69	71	73	75	76	77	77	73.5	79.2
12-Feb	77	77	79	81	81	81	81	81	81	80	75	71	69	60	58	61	68	77	84	90	90	93	96	98	78.7	97.8
13-Feb	98	97	98	98	99	100	100	100	100	100	99	100	100	96	94	97	99	100	100	97	96	95	95	94	98.0	100.0
14-Feb	94	95	95	95	97	98	99	95	92	87	74	53	39	37	36	36	37	38	42	44	45	48	50	51	65.7	99.1
15-Feb	52	53	53	52	50	50	50	49	49	50	50	48	46	44	42	43	43	47	52	55	55	54	55	55	49.9	55.3
16-Feb	57	61	59	62	64	70	78	77	78	76	76	75	73	70	67	65	63	66	71	77	79	80	81	82	71.1	81.8
17-Feb	84	88	90	89	86	86	87	86	86	84	83	77	74	78	74	73	73	74	75	76	77	77	78	78	80.6	90.2
18-Feb	78	80	81	80	84	82	83	85	85	82	68	59	56	51	56	55	56	55	59	62	62	68	77	77	70.1	85.1
19-Feb	72	65	51	50	51	54	56	58	59	55	50	48	60	58	51	50	51	54	58	61	61	63	70	74	57.5	73.6
20-Feb	87	94	90	92	93	91	90	91	92	90	86	83	80	75	71	68	67	69	71	77	81	82	82	83	82.7	93.8
21-Feb	81	81	77	75	78	80	82	83	83	81	75	72	72	68	66	61	61	63	67	71	74	77	78	77	74.2	83.1
22-Feb	77	78	78	78	77	78	79	78	77	69	56	49	37	33	31	31	32	34	39	43	47	43	45	48	55.6	78.8
23-Feb	50	52	52	52	54	54	55	55	51	49	47	42	37	37	37	36	37	39	45	55	60	63	65	71	49.9	71.3
24-Feb	76	77	81	83	78	59	34	46	67	81	85	85	86	86	85	87	92	94	87	79	77	77	78	79	77.5	93.6
25-Feb	79	81	81	82	83	84	84	84	83	81	78	73	69	68	71	67	68	68	70	66	65	68	71	71	74.7	84.1
26-Feb	70	70	71	73	72	70	70	73	74	69	63	59	54	57	57	56	59	65	70	72	78	81	82	84	68.7	84.0
27-Feb	83	82	82	82	82	82	81	80	77	75	74	73	69	65	60	57	54	52	58	64	75	81	81	82	72.9	83.4
28-Feb	81	83	84	83	82	81	81	80	78	71	64	57	54	52	50	47	45	44	46	51	60	69	74	79	66.6	83.7
	75.9	76.6	76.2	76.5	76.9	76.5	75.9	76.4	76.9	75.7	72.5	69.2	66.8	64.7	63.4	63.3	64.5	66.8	69.4	71.4	72.9	74.0	74.7	75.4	Diurnal Average	
	97.9	97.4	97.7	98.2	99.3	99.9	100.0	100.0	100.0	99.6	99.1	100.0	100.0	96.5	93.9	97.1	99.2	99.8	100.0	96.8	96.0	94.9	96.1	97.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	1	0	0	0	0	1	0	1	0	0	1	0	1	3	4	6	8	8	8	8	8	8	4	3	2.7	8.2
Dir	149	315	172	357	187	158	183	161	79	360	321	146	43	1	13	347	9	348	360	8	4	8	21	4	4	348
2 Spd	5	5	3	5	3	3	2	1	4	5	5	3	5	4	5	2	1	2	1	0	0	1	0	0	2.5	5.3
Dir	3	15	7	16	5	341	359	351	1	11	20	5	14	28	28	27	331	276	358	324	121	166	181	195	9	20
3 Spd	1	1	1	0	1	1	1	2	2	1	0	1	2	1	2	2	2	1	0	0	0	0	0	1	0.8	2.4
Dir	180	176	189	212	203	212	188	215	215	36	175	165	173	126	153	150	154	162	183	205	289	173	188	194	176	215
4 Spd	1	2	3	2	1	1	1	1	1	0	2	2	2	2	1	2	4	2	1	1	2	1	13	11	0.6	12.8
Dir	231	199	205	200	226	241	196	172	182	157	168	169	178	184	172	12	348	322	250	43	31	268	3	8	342	3
5 Spd	12	12	12	9	11	10	11	11	12	12	10	10	10	12	14	13	12	9	7	8	6	9	7	7	8.9	14.4
Dir	11	8	8	15	13	10	11	31	26	31	33	41	43	40	44	42	48	56	63	55	64	125	124	119	37	44
6 Spd	6	6	5	5	5	4	3	3	4	5	6	4	7	7	6	5	6	5	5	5	5	4	4	4	4.6	6.7
Dir	119	122	119	119	120	113	93	88	106	66	65	77	120	125	123	120	125	133	142	142	143	143	147	151	118	125
7 Spd	2	2	2	1	2	1	1	1	1	4	5	7	7	7	8	10	12	11	10	8	10	10	9	7	5.0	11.6
Dir	150	141	136	92	104	50	112	131	326	336	341	345	347	348	345	353	1	1	7	8	11	10	8	6	2	1
8 Spd	5	6	5	4	4	2	3	3	5	6	5	5	5	6	8	8	9	7	6	5	6	5	3	3	5.0	8.6
Dir	19	19	19	9	10	13	2	28	20	28	13	6	352	343	349	352	3	5	18	10	9	358	12	10	7	3
9 Spd	6	3	3	2	1	1	1	2	1	1	0	1	3	1	5	6	6	6	4	6	5	6	3	3	2.7	6.1
Dir	352	23	5	345	332	169	159	161	157	15	350	325	347	357	345	348	4	0	4	4	4	352	6	12	359	0
10 Spd	3	2	3	5	3	3	2	2	5	2	4	4	7	5	8	7	6	7	5	6	5	5	4	3	4.3	7.8
Dir	22	39	7	13	14	33	12	37	30	9	1	6	13	358	346	358	6	357	10	24	17	22	20	15	11	346
11 Spd	2	2	3	2	1	2	1	1	6	9	13	16	16	14	14	15	14	12	10	10	8	8	7	6	7.0	15.8
Dir	30	8	17	39	39	21	3	130	152	159	164	167	165	164	163	165	167	169	168	167	169	172	174	175	163	167
12 Spd	4	3	4	3	3	3	3	3	2	2	1	2	3	2	1	1	1	1	1	2	2	1	0	1	1.8	4.4
Dir	178	181	180	176	174	180	180	176	185	185	185	184	170	190	191	212	242	354	213	191	168	155	210	10	182	178
13 Spd	0	0	0	1	1	1	1	1	1	2	3	4	4	5	5	3	1	2	3	10	8	8	6	6	0.4	9.8
Dir	88	332	59	22	3	359	343	343	359	2	2	16	352	346	16	334	346	341	172	170	171	171	169	165	135	170
14 Spd	6	5	5	4	3	2	3	2	4	4	3	5	14	17	15	14	13	9	7	8	14	15	14	12	6.1	17.4
Dir	176	171	173	175	179	178	174	185	153	141	139	266	284	281	286	282	278	279	270	261	274	275	280	277	264	281
15 Spd	15	13	14	14	13	10	9	7	8	9	11	9	9	9	9	9	7	5	3	6	7	6	5	6	8.6	14.6
Dir	274	273	277	278	274	273	275	282	275	286	290	292	290	297	305	317	302	310	303	300	309	308	307	291	288	274
16 Spd	5	2	6	4	2	6	8	7	7	8	7	5	8	5	5	5	5	6	5	5	4	3	2	1	4.5	8.3
Dir	289	297	291	320	27	15	5	9	6	9	350	348	14	356	23	21	12	356	358	349	358	338	331	22	356	9
17 Spd	2	1	3	1	0	0	1	0	0	0	1	0	1	5	5	6	4	3	3	2	1	2	1	1	1.1	6.5
Dir	335	1	326	310	194	172	275	131	344	5	336	92	106	169	168	169	166	167	173	175	163	165	177	166	172	169
18 Spd	1	0	1	0	1	1	1	1	1	1	2	2	1	1	3	1	1	1	0	2	1	1	1	2	0.6	3.0
Dir	148	192	178	212	194	210	195	220	203	189	176	190	171	165	337	293	357	39	157	253	348	239	176	171	204	337
19 Spd	2	1	1	7	12	12	14	13	10	10	15	16	19	14	13	8	7	5	5	4	5	6	5	4	7.8	18.7
Dir	166	115	325	254	260	270	276	274	264	273	282	297	320	322	327	323	320	312	304	309	292	293	297	305	293	320
20 Spd	10	8	11	10	10	10	12	11	10	7	7	8	6	5	5	5	4	1	1	1	1	2	6	14	6.5	14.3
Dir	6	5	4	354	4	2	355	356	358	352	358	347	19	21	25	11	339	302	301	236	233	299	321	6	358	6
21 Spd	17	14	12	11	10	7	7	9	6	3	2	2	4	4	3	1	2	4	2	2	3	4	4	6	3.4	17.5
Dir	3	5	353	8	10	0	354	344	358	12	70	320	328	348	41	116	140	155	157	170	175	170	175	172	5	3
22 Spd	6	5	4	4	4	3	3	4	4	4	4	5	5	7	5	6	3	3	2	2	1	10	14	15	3.3	15.4
Dir	170	169	170	173	176	181	180	177	179	171	170	181	263	266	253	269	227	181	189	179	158	277	279	282	227	282

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - February 2015

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	Daily Average	Daily Maximum
23 Spd	13	13	13	12	9	4	3	2	7	8	1	1	5	4	3	2	2	1	0	0	2	1	1	1	3.9	13.5
Dir	282	285	283	283	287	296	263	263	280	270	233	32	271	329	3	17	25	158	210	191	190	184	207	199	283	285
24 Spd	1	1	2	2	2	3	11	18	15	11	11	11	9	10	8	11	8	10	24	21	18	17	14	13	8.4	24.3
Dir	209	201	194	146	164	251	280	309	302	294	313	323	299	291	316	308	293	355	7	360	8	7	356	345	330	7
25 Spd	12	7	8	5	5	4	3	2	2	2	3	4	3	4	7	8	8	5	4	7	7	7	5	6	2.4	11.7
Dir	351	359	5	12	18	8	6	1	35	14	51	63	91	135	127	126	130	132	136	147	150	153	152	152	90	351
26 Spd	7	5	4	3	2	5	5	3	3	7	5	4	1	6	6	4	5	9	8	8	8	10	10	9	1.3	9.9
Dir	155	144	158	151	145	168	163	162	166	166	168	167	359	340	344	318	340	2	358	7	1	350	348	349	9	350
27 Spd	9	8	9	9	7	7	6	7	7	5	4	5	3	5	6	6	4	3	1	1	1	1	1	1	4.1	9.3
Dir	344	345	335	352	1	7	4	0	354	338	319	319	327	313	310	309	318	271	220	198	174	197	208	214	337	352
28 Spd	0	0	1	2	2	1	2	1	1	1	2	7	8	7	7	8	6	5	3	1	1	1	1	1	2.1	7.9
Dir	229	214	195	190	185	193	172	152	137	157	275	303	291	291	302	293	292	290	272	237	172	198	182	190	278	291
Spd	2.0	1.7	1.9	1.8	1.4	1.4	1.7	1.8	1.8	1.5	1.5	1.9	2.6	2.7	2.8	2.6	2.1	2.0	1.8	1.2	1.4	1.3	1.8	1.6	Diurnal Average	
Dir	340	346	332	337	337	333	323	331	336	339	337	328	327	323	344	336	344	349	3	6	0	326	327	332		
Spd	17.5	13.7	13.9	13.5	12.7	12.3	14.0	17.8	15.2	11.8	15.1	16.1	18.7	17.4	15.3	14.6	14.1	12.4	24.3	20.8	18.3	17.3	14.1	15.4	Diurnal Maximum	
Dir	3	5	277	278	274	270	276	309	302	31	282	297	320	281	286	165	167	169	7	360	8	7	356	282		

Maximum Speed Value: 24 km/h on Feb 24 19:00
Maximum Daily Speed Average: 8.9 km/h on Feb 24
Maximum Diurnal Speed Average: 2.8 km/h at hour 15

Minimum Speed Value: 0 km/h on Feb 3 20:00
Minimum Daily Speed Average: 0.4 km/h on Feb 3
Minimum Diurnal Speed Average: 1.2 km/h at hour 20

Hours in Service: 672
Hours of Data: 672
Hours of Missing Data: 0

Monthly Average Velocity: 1.81 km/h 337.4 deg

Speed Percentiles: $P_1 = 0.1$ $P_{10} = 0.8$ $Q_1 = 1.6$ Median = 4.3 $Q_3 = 7.3$ $P_{90} = 11.1$ $P_{99} = 17.4$

Percent Operational Time: 100.0

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

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	99	97	20	2	0	0	218
NorthEast	26	14	6	0	0	0	46
East	13	0	0	0	0	0	13
SouthEast	41	26	0	0	0	0	67
South	123	22	8	0	0	0	153
SouthWest	32	0	0	0	0	0	32
West	16	30	25	0	0	0	71
NorthWest	39	24	9	0	0	0	72
Total	389	213	68	2	0	0	672

Wind Rose

Wind Speed (WS) (km/h)

Valleyview - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - February 2015

Maximum Speed: 25 km/h on Feb 24 19:00

Maximum Daily Speed Average: 10.9 km/h on Feb 24

Minimum Speed: 0 km/h on Feb 3 20:00

Minimum Daily Speed Average: 1.1 km/h on Feb 3

Maximum Diurnal Speed Average: 6.6 km/h at hour 15

Minimum Diurnal Speed Average: 4.0 km/h at hour 6

Monthly Average Speed: 5.23 km/h

Percentiles: $P_1 = 0.2$ $P_{10} = 1.0$ $Q_1 = 1.9$ Median = 4.5 $Q_3 = 7.5$ $P_{90} = 11.4$ $P_{99} = 17.6$

Hours in Service: 672

Hours of Data: 672

Hours of Missing Data: 0

Percent Operational Time: 100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	0	1	1	0	1	0	0	1	1	2	3	5	6	8	8	8	8	8	8	4	3	3.2	8.2
2-Feb	5	5	3	5	3	3	2	1	4	5	5	3	6	4	5	2	1	2	1	1	0	1	0	0	2.9	5.6
3-Feb	1	1	1	0	1	1	2	2	3	2	1	1	2	2	2	2	2	1	0	0	0	0	0	1	1.1	2.7
4-Feb	1	3	3	2	1	2	1	1	1	1	2	2	2	2	1	3	4	3	1	1	2	2	13	12	2.6	12.9
5-Feb	12	12	12	9	11	10	11	11	12	12	10	10	10	12	14	14	12	9	7	8	6	9	7	7	10.3	14.5
6-Feb	6	6	5	5	6	4	3	4	4	5	6	4	7	7	6	6	6	5	5	6	5	5	4	4	5.2	6.8
7-Feb	2	2	2	1	2	1	1	1	2	4	5	7	7	8	9	10	12	11	10	8	10	10	9	7	5.9	11.7
8-Feb	5	6	5	4	4	2	3	3	5	6	6	5	5	6	8	8	9	7	7	5	6	6	4	3	5.3	8.8
9-Feb	6	3	3	2	1	1	1	2	1	1	1	2	3	2	5	6	6	6	4	6	5	6	3	3	3.3	6.3
10-Feb	3	2	3	6	4	3	3	2	5	3	4	4	7	5	8	7	6	8	6	6	5	5	4	3	4.6	7.9
11-Feb	2	2	3	3	1	3	1	2	6	9	13	16	16	14	14	15	14	12	10	10	8	8	7	6	8.1	15.9
12-Feb	4	3	4	3	3	3	3	3	2	2	1	2	3	2	1	1	1	1	1	2	2	1	1	1	2.1	4.5
13-Feb	1	1	1	1	1	1	2	1	2	2	3	4	5	5	5	3	1	2	4	10	8	8	6	6	3.5	9.9
14-Feb	6	5	5	4	3	2	3	2	4	4	3	7	14	18	15	14	13	9	7	8	14	15	14	12	8.4	17.6
15-Feb	15	13	14	14	13	10	9	8	8	9	11	9	9	9	10	10	7	5	4	6	7	6	5	6	9.0	14.6
16-Feb	5	2	6	4	2	6	8	7	7	8	7	5	8	5	5	5	6	6	5	5	4	3	3	1	5.2	8.4
17-Feb	2	1	3	1	0	0	1	0	0	1	1	1	1	5	5	7	5	4	3	2	1	2	2	1	2.1	6.5
18-Feb	1	1	1	1	1	1	1	2	1	1	2	2	1	1	3	2	1	1	1	4	2	1	1	2	1.5	4.5
19-Feb	2	1	2	7	12	12	14	13	10	10	15	16	19	14	13	9	7	5	5	4	5	6	5	4	8.8	18.9
20-Feb	10	8	11	11	10	10	12	11	11	7	7	8	6	5	5	5	4	1	1	1	1	2	6	15	7.0	14.5
21-Feb	18	14	12	11	10	7	7	9	7	3	2	3	4	4	3	2	2	4	2	2	3	4	4	6	6.0	17.6
22-Feb	6	5	5	4	4	3	3	4	4	4	4	5	6	8	5	6	3	3	2	2	2	10	14	15	5.2	15.5
23-Feb	13	14	13	12	9	4	3	2	7	8	2	2	6	4	3	2	2	1	0	0	2	2	2	1	4.8	13.6
24-Feb	1	1	2	2	3	4	11	18	15	11	11	11	10	10	8	11	9	13	25	21	19	17	14	13	10.9	24.5
25-Feb	12	7	8	5	5	4	3	3	2	2	3	4	4	5	8	8	8	5	5	7	8	7	6	6	5.6	11.9
26-Feb	7	5	4	3	2	5	6	3	3	7	5	4	3	6	6	5	5	9	8	8	8	10	10	9	5.9	10.0
27-Feb	9	8	9	9	7	8	6	7	8	5	4	5	4	5	6	6	4	4	1	1	1	1	1	1	5.0	9.4
28-Feb	0	0	1	2	2	1	2	2	1	1	3	7	8	8	7	8	6	5	3	1	1	1	1	1	3.0	8.0
Diurnal Average	5.6	4.7	5.1	4.8	4.4	4.0	4.3	4.4	4.8	4.7	5.1	5.5	6.3	6.3	6.6	6.4	5.9	5.4	4.8	5.1	5.1	5.6	5.2	5.3		
Diurnal Maximum	17.6	13.9	14.1	13.6	12.8	12.4	14.1	18.1	15.5	11.9	15.3	16.5	18.9	17.6	15.4	14.8	14.2	12.7	24.5	21.0	18.5	17.4	14.3	15.5		

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - February 2015

Maximum Value: 93.2 deg on Feb 13 03:00

Minimum Value: 5.3 deg on Feb 21 08:00

Percentiles: P_1 = 6.0 P_{10} = 7.7 Q_1 = 9.7 Median = 14.3 Q_3 = 26.5 P_{90} = 54.2 P_{99} = 88.6

Hours in Service:	672
Hours of Data:	672
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-Feb	46	77	76	55	67	26	76	23	67	79	53	79	89	24	18	14	12	7	8	16	7	8	15	33	88.6
2-Feb	18	11	14	12	18	16	21	24	12	13	14	24	22	15	13	16	33	47	68	62	81	31	41	44	80.5
3-Feb	20	22	44	13	22	36	23	33	29	77	91	30	20	71	20	17	18	14	48	58	76	69	56	43	91.5
4-Feb	44	11	8	10	23	51	39	35	55	61	21	17	18	12	29	83	13	31	44	65	69	51	34	7	82.7
5-Feb	8	8	9	10	8	8	7	10	9	8	10	7	8	8	6	8	8	8	18	10	20	17	11	10	20.3
6-Feb	10	10	13	10	10	16	22	21	17	25	12	23	10	13	15	18	20	13	12	12	13	14	15	14	24.8
7-Feb	17	20	27	37	13	27	42	41	54	13	9	6	10	20	16	11	9	10	10	11	9	13	11	13	53.8
8-Feb	20	13	27	26	17	26	21	19	19	17	15	16	16	9	15	12	12	12	17	15	17	20	30	22	29.6
9-Feb	7	18	12	9	79	8	15	21	54	46	72	69	18	26	9	17	15	10	11	10	11	10	32	28	78.7
10-Feb	35	36	16	13	22	15	19	28	11	25	25	21	14	19	11	15	11	10	17	15	11	14	14	15	35.6
11-Feb	22	19	16	13	17	23	44	72	12	12	9	7	8	8	7	8	7	7	8	10	9	8	7	8	72.2
12-Feb	8	10	18	14	8	10	10	37	11	11	30	12	18	21	43	29	60	74	46	20	18	32	69	83	83.2
13-Feb	66	86	93	50	53	71	74	59	89	35	23	16	15	12	11	19	53	49	46	7	8	8	17	10	93.2
14-Feb	12	9	9	6	11	29	18	10	9	10	10	66	11	9	8	11	7	8	10	8	6	8	7	8	66.4
15-Feb	7	7	7	7	7	11	10	15	12	12	8	13	10	11	14	9	13	23	27	10	7	8	13	10	26.6
16-Feb	10	45	18	28	42	11	13	10	11	11	12	26	11	19	12	14	11	10	7	12	13	11	22	34	44.8
17-Feb	33	33	8	63	62	67	42	48	39	89	35	87	54	26	12	9	8	16	16	14	41	16	63	31	88.8
18-Feb	31	88	61	41	29	49	23	53	20	16	11	11	33	69	50	57	91	43	57	81	89	47	31	24	91.2
19-Feb	12	58	68	18	7	8	7	7	9	10	9	12	9	9	9	9	8	18	16	12	11	11	13	15	68.4
20-Feb	10	7	8	9	7	8	7	8	11	9	17	13	13	19	16	15	14	16	21	33	73	19	16	10	73.1
21-Feb	6	9	8	10	9	8	9	5	15	22	42	54	16	24	17	70	41	12	9	7	6	6	7	7	70.0
22-Feb	7	6	8	8	9	10	15	6	7	10	13	9	53	20	27	24	25	8	15	11	60	10	6	6	60.2
23-Feb	6	7	7	6	7	14	21	30	12	16	59	71	24	19	19	23	37	19	26	31	13	20	18	71	70.8
24-Feb	33	47	17	54	29	41	12	10	10	10	9	8	13	10	10	10	26	41	8	8	8	8	10	8	54.4
25-Feb	10	9	9	12	12	14	13	16	14	16	28	28	47	18	10	11	9	9	10	11	10	11	10	11	47.1
26-Feb	11	13	11	13	18	16	11	9	9	9	9	10	86	17	7	27	10	8	9	10	9	7	6	6	85.5
27-Feb	6	6	6	8	11	9	6	12	14	19	19	28	39	24	20	15	22	20	18	10	18	6	7	11	38.7
28-Feb	72	19	10	8	13	23	14	41	56	48	69	11	10	11	12	12	12	12	13	37	24	35	20	30	72.4
	72.4	88.4	93.2	63.5	78.7	71.3	75.9	72.2	89.2	88.8	91.5	86.9	88.6	71.0	49.7	82.7	91.2	73.6	68.2	80.7	88.8	69.0	69.0	83.2	

PAZA
Falher Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Falher - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.6 ppb on Feb 10 08:00 Maximum Daily Average: 0.8 ppb on Feb 26

Minimum Value: 0 ppb on Feb 13 06:00 Minimum Daily Average: 0.0 ppb on Feb 13
Maximum Diurnal Average: 0.4 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 7
Monthly Average: 0.27 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.7 P_{99} = 1.4

Hours in Service:	672
Hours of Data:	640
Hours of Missing Data:	32
Hours of Calibration:	32
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0.3	0.6
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Feb	0	0	0	0	0	0	1	1	0	0	0	1	1	A	1	1	1	0	1	0	0	0	1	0	0.4	0.8
4-Feb	0	0	0	1	0	0	0	1	2	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0.7	1.5
5-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.1	0.6
6-Feb	1	1	1	1	2	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5
7-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	1	1	1	1	0	0.3	1.0
8-Feb	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	0.2
9-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.4	1.1
10-Feb	1	1	1	2	1	1	A	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.6
11-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.4
12-Feb	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	1.1
13-Feb	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-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Feb	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-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2
17-Feb	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	0.2
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4
19-Feb	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	A	0	0	0	0.1	0.2
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
21-Feb	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-Feb	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.7
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Feb	0	0	0	1	1	2	2	2	2	2	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0.8	2.0
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
Diurnal Average	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2		
Diurnal Maximum	1.1	1.1	1.3	1.7	1.5	1.5	1.7	2.6	1.9	1.5	1.4	1.0	0.7	0.9	1.2	1.4	1.2	1.2	1.1	1.1	1.1	1.1	1.3	1.3		

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Falher - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Falher - February 2015

Maximum Value: 3.5 ppb on Feb 10 08:00

Maximum Daily Average: 1.4 ppb on Feb 26

Minimum Value: 0 ppb on Feb 19 12:00

Minimum Daily Average: 0.4 ppb on Feb 13

Maximum Diurnal Average: 0.8 ppb at hour 16

Minimum Diurnal Average: 0.7 ppb at hour 2

Monthly Average: 0.73 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.6 $Q_3 = 0.8$ $P_{90} = 1.3$ $P_{99} = 2.2$

Hours in Service:	672
Hours of Data:	640
Hours of Missing Data:	32
Hours of Calibration:	32
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	0	1	1	1	0.7	1.4
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	0	1	0	1	0.6	1.3
3-Feb	0	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.4
4-Feb	1	1	1	1	1	1	1	2	2	2	2	2	A	1	1	1	1	2	1	1	1	1	1	0	1.2	2.0
5-Feb	1	0	1	0	0	0	0	1	1	0	0	A	1	0	0	0	0	0	0	1	1	1	1	1	0.6	1.2
6-Feb	1	1	1	2	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.0
7-Feb	1	1	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	0.9	1.9
8-Feb	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0	0.6	0.8
9-Feb	1	0	1	1	1	1	1	A	0	0	1	0	1	1	1	2	1	1	1	1	1	2	2	2	1.0	1.8
10-Feb	2	2	2	2	2	3	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.5
11-Feb	1	0	0	0	0	A	1	1	1	0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	1.1	2.1
12-Feb	2	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
13-Feb	1	1	0	A	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0.4	0.6
14-Feb	0	0	A	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	1	1	1	1	0.5	0.7
15-Feb	1	A	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0.6	0.8
16-Feb	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	A	0.5	0.6
17-Feb	1	1	1	0	1	1	1	1	0	0	0	1	1	1	1	0	0	1	1	0	0	1	A	0	0.5	1.0
18-Feb	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	A	0	1	0.6	1.2
19-Feb	1	0	1	1	1	0	0	0	0	0	0	0	C	C	C	1	1	1	0	0	A	0	0	0	0.4	0.6
20-Feb	0	0	1	1	0	0	0	0	1	1	1	0	0	1	1	0	1	0	0	A	0	0	1	0	0.5	0.7
21-Feb	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	A	1	0	0	0	1	0.5	1.0
22-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	0.7	1.3
23-Feb	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	0.7	0.9
24-Feb	1	1	1	1	1	1	0	1	0	0	0	1	0	0	0	A	1	1	0	0	1	1	1	1	0.6	0.8
25-Feb	0	1	1	0	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	0.8
26-Feb	1	1	1	1	2	2	2	2	2	2	2	1	2	A	1	2	2	1	1	1	1	1	1	1	1.4	2.4
27-Feb	0	0	0	0	0	0	0	1	0	1	0	0	A	1	1	1	0	0	1	1	1	1	0	1	0.5	0.8
28-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	1	0.6	1.0
	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
	1.7	1.6	1.8	2.3	2.3	2.9	2.3	3.5	2.4	2.2	2.0	1.8	1.5	1.5	1.7	2.1	1.9	1.8	1.7	1.6	1.6	1.8	1.9	1.8	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Falher - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Falher - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Falher - February 2015

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Falher - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 0.6 ppb on Feb 12 10:00

Maximum Daily Average: 0.4 ppb on Feb 12

Minimum Value: 0 ppb on Feb 1 01:00

Minimum Daily Average: 0.0 ppb on Feb 25

Maximum Diurnal Average: 0.2 ppb at hour 11

Minimum Diurnal Average: 0.1 ppb at hour 5

Monthly Average: 0.14 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.4

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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
7-Feb	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
8-Feb	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
9-Feb	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	0.2
10-Feb	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	0.2
11-Feb	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-Feb	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
13-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
14-Feb	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-Feb	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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
19-Feb	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	A	0	0	0	0.1	0.3
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3
21-Feb	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	0.2
22-Feb	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	0.2
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.0
26-Feb	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
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Feb	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
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.5	0.5	0.6	0.5	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Falher - February 2015

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Falher - February 2015

Maximum Value: 1.3 ppb on Feb 28 02:00

Maximum Daily Average: 0.9 ppb on Feb 12

Minimum Value: 0 ppb on Feb 25 14:00

Minimum Daily Average: 0.5 ppb on Feb 26

Maximum Diurnal Average: 0.8 ppb at hour 17

Minimum Diurnal Average: 0.7 ppb at hour 23

Monthly Average: 0.74 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.9$ $P_{90} = 1.0$ $P_{99} = 1.2$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.0
2-Feb	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-Feb	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-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0.8	1.1
5-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
6-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
7-Feb	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	1.0
8-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
9-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
10-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	0.9
11-Feb	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
13-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0.7	1.0
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
15-Feb	1	A	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	0.6	1.0
16-Feb	A	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	0.6	0.9
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.1
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.2
19-Feb	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	A	1	1	1	0.7	1.0
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	0.7	0.8
21-Feb	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.2
22-Feb	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9
23-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2
24-Feb	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	1	0	1	0	1	1	0.6	1.0
25-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0	1	0	0	0	1	0.5	1.0
26-Feb	0	1	0	0	0	1	1	0	0	1	0	0	1	A	0	1	1	1	1	1	1	0	0	1	0.5	0.7
27-Feb	1	0	1	0	0	1	0	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
28-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	0	0.7	1.3
	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.7	Diurnal Average	
	1.0	1.3	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.0	1.2	1.1	1.2	1.2	1.1	1.0	1.1	1.0	1.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Falher - February 2015

Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Falher - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Falher - February 2015

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Falher - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 6.4 ^{o}C on Feb 23 16:00 Maximum Daily Average: 3.1 ^{o}C on Feb 23

Minimum Value: -28 ^{o}C on Feb 3 02:00 Minimum Daily Average: -23.1 ^{o}C on Feb 3

Maximum Diurnal Average: -7.5 ^{o}C at hour 16 Minimum Diurnal Average: -12.2 ^{o}C at hour 8

Monthly Average: -10.34 ^{o}C Percentiles: P_1 = -26.3 P_{10} = -19.5 Q_1 = -17.6 Median = -10.7 Q_3 = -4.0 P_{90} = 1.8 P_{99} = 4.1

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	-23	-22	-22	-23	-24	-23	-22	-20	-21	-22	-21	-19	-19	-19	-18	-17	-17	-18	-18	-17	-17	-17	-17	-17	-19.7	-16.7
2-Feb	-17	-17	-17	-16	-17	-17	-18	-19	-19	-18	-18	-17	-15	-16	-16	-14	-17	-19	-22	-23	-25	-25	-26	-27	-19.0	-14.0
3-Feb	-27	-28	-27	-26	-26	-27	-25	-26	-27	-25	-23	-23	-19	-18	-18	-19	-19	-21	-22	-22	-22	-21	-22	-22	-23.1	-18.0
4-Feb	-19	-18	-16	-16	-15	-15	-15	-16	-17	-16	-11	-14	-12	-11	-10	-10	-12	-14	-12	-12	-11	-12	-13	-14	-13.8	-9.6
5-Feb	-15	-16	-17	-18	-18	-18	-17	-17	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-18	-18	-19	-17.3	-15.5
6-Feb	-19	-19	-19	-19	-19	-19	-20	-20	-20	-20	-20	-20	-20	-19	-19	-19	-19	-20	-19	-19	-19	-19	-18	-18	-19.3	-18.2
7-Feb	-18	-18	-18	-18	-18	-18	-18	-18	-18	-17	-17	-17	-18	-18	-18	-17	-18	-18	-19	-19	-19	-20	-20	-20	-18.2	-16.9
8-Feb	-20	-20	-20	-21	-22	-23	-23	-22	-22	-21	-20	-19	-18	-17	-18	-19	-19	-19	-18	-18	-18	-18	-16	-15	-19.6	-15.4
9-Feb	-15	-18	-19	-19	-19	-19	-18	-19	-18	-18	-19	-18	-18	-18	-18	-19	-18	-18	-18	-18	-18	-18	-18	-18	-18.1	-14.9
10-Feb	-18	-19	-19	-19	-20	-20	-21	-22	-22	-22	-22	-21	-21	-20	-20	-19	-19	-19	-19	-19	-19	-19	-19	-18	-19.8	-18.1
11-Feb	-18	-17	-17	-17	-17	-17	-17	-17	-16	-16	-16	-15	-14	-13	-11	-10	-9	-9	-9	-9	-8	-8	-8	-8	-13.2	-7.6
12-Feb	-8	-9	-9	-11	-11	-12	-12	-11	-10	-8	-6	-3	-1	1	2	0	-1	-3	-4	-4	-4	-6	-7	-8	-6.1	1.8
13-Feb	-9	-9	-8	-7	-7	-7	-6	-5	-5	-3	-4	-3	-3	-4	-4	-4	-4	-3	-3	-3	-3	-3	-4	-4	-4.8	-3.0
14-Feb	-4	-4	-5	-5	-6	-8	-9	-11	-10	-9	-6	-4	-1	1	4	4	3	2	0	-1	0	1	1	1	-2.7	4.1
15-Feb	1	1	2	2	1	1	0	-1	-1	0	0	1	2	3	2	4	3	2	0	-2	-2	-3	-3	-5	0.3	3.9
16-Feb	-6	-7	-7	-8	-8	-9	-9	-10	-10	-10	-11	-11	-10	-10	-9	-9	-8	-9	-11	-11	-10	-10	-11	-11	-9.4	-6.3
17-Feb	-11	-11	-12	-12	-13	-13	-12	-12	-11	-11	-10	-9	-8	-7	-7	-6	-6	-6	-6	-6	-6	-6	-6	-6	-8.8	-5.5
18-Feb	-5	-5	-5	-5	-5	-5	-5	-4	-4	-4	-3	-2	-1	0	1	1	1	1	0	0	0	-1	-2	-2	-2.3	1.5
19-Feb	-2	-3	0	2	3	3	3	3	3	3	2	2	2	2	3	4	3	3	3	2	2	1	0	-1	1.8	3.6
20-Feb	-2	-3	-3	-3	-4	-4	-4	-5	-5	-5	-5	-4	-4	-3	-2	-2	-2	-3	-3	-3	-4	-4	-5	-7	-3.7	-1.6
21-Feb	-8	-8	-9	-10	-10	-11	-11	-12	-13	-12	-11	-9	-9	-7	-7	-7	-6	-6	-6	-6	-8	-9	-10	-7	-8.7	-5.6
22-Feb	-7	-6	-6	-6	-6	-6	-7	-8	-8	-7	-6	-3	0	2	3	4	4	4	4	3	3	2	3	3	-1.8	3.8
23-Feb	2	2	1	2	2	2	2	3	3	3	4	4	5	6	6	6	5	4	3	2	2	2	2	2	3.1	6.4
24-Feb	3	3	3	2	4	4	3	3	2	2	2	3	2	2	2	0	-6	-9	-10	-11	-11	-12	-12	-12	-1.7	4.1
25-Feb	-13	-13	-14	-14	-13	-13	-12	-13	-13	-13	-13	-12	-12	-11	-10	-9	-8	-8	-9	-10	-11	-11	-12	-12	-11.6	-8.0
26-Feb	-12	-13	-13	-14	-15	-15	-15	-14	-14	-13	-12	-11	-10	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-10	-11.3	-7.6
27-Feb	-11	-11	-11	-12	-12	-12	-12	-12	-12	-11	-11	-10	-9	-8	-6	-6	-9	-10	-11	-11	-12	-12	-13	-13	-10.7	-5.8
28-Feb	-12	-12	-14	-14	-15	-15	-14	-16	-14	-11	-8	-7	-6	-4	-3	-2	-2	-5	-5	-7	-10	-12	-12	-13	-9.8	-1.9
	-11.1	-11.5	-11.5	-11.6	-11.8	-12.0	-12.0	-12.2	-12.2	-11.5	-10.8	-10.0	-9.1	-8.3	-7.8	-7.5	-8.1	-8.8	-9.3	-9.7	-9.8	-10.2	-10.5	-10.7	Diurnal Average	
	3.2	3.4	2.6	2.0	3.6	4.1	3.4	3.3	3.2	3.0	3.6	3.8	4.5	5.7	6.0	6.4	4.5	3.7	3.6	3.0	3.2	2.2	2.8	2.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Falher - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	9	8	4	4	5	6	3	2	3	3	1	1	3	6	6	9	11	9	11	13	13	15	10	7	3.5	14.8
Dir	46	59	31	316	319	14	0	43	108	156	172	308	258	214	196	246	248	225	247	265	273	274	261	251	265	274
2 Spd	8	9	9	6	6	6	9	10	7	8	7	8	10	11	9	6	7	7	1	4	4	3	4	3	4.5	10.8
Dir	265	278	293	295	280	254	253	260	239	239	231	203	216	231	247	210	183	204	187	43	68	37	63	28	245	231
3 Spd	4	5	3	4	6	6	5	5	2	2	2	4	5	4	5	11	9	11	17	15	15	18	16	19	6.8	18.6
Dir	51	68	70	70	74	81	109	105	82	110	134	77	89	103	57	36	23	358	4	24	32	26	7	17	38	17
4 Spd	20	23	26	23	13	5	10	13	15	10	4	6	3	3	3	0	4	2	3	11	11	19	21	25	2.6	26.2
Dir	50	62	78	85	92	82	134	155	133	148	187	128	110	84	110	186	344	96	152	298	294	284	278	268	88	78
5 Spd	22	18	20	22	21	19	20	21	19	20	24	29	31	30	32	29	29	33	38	35	33	30	33	33	25.3	38.5
Dir	266	266	262	269	276	287	304	310	327	315	319	310	303	310	313	319	316	312	311	314	323	328	327	325	308	311
6 Spd	31	33	33	32	32	33	33	33	32	30	27	28	30	26	26	24	27	25	26	26	24	24	27	28	28.6	33.0
Dir	331	337	337	337	336	335	333	331	331	333	340	346	345	342	341	335	334	336	335	336	341	348	352	353	338	335
7 Spd	26	26	25	22	22	21	21	20	14	10	9	14	17	15	15	12	15	16	18	17	14	17	17	15	10.0	26.5
Dir	350	353	348	348	348	348	354	350	344	337	279	262	250	246	248	247	214	223	243	233	235	235	239	236	295	350
8 Spd	13	13	14	12	10	7	9	10	12	14	12	11	11	10	13	17	16	12	11	11	15	14	11	11	11.6	17.1
Dir	244	233	242	242	232	237	237	256	249	264	273	265	278	270	264	255	255	254	265	274	263	269	282	297	259	255
9 Spd	11	17	16	18	19	14	14	17	11	13	15	12	12	12	14	15	11	11	14	10	6	10	12	14	12.2	19.4
Dir	299	254	254	242	251	261	244	254	247	244	254	239	221	217	208	209	202	197	212	219	232	203	212	216	234	251
10 Spd	14	13	10	13	14	17	17	17	16	16	13	10	12	13	13	13	15	13	12	14	12	9	13	11	12.7	17.3
Dir	233	237	223	215	219	225	233	234	240	241	239	249	248	245	247	245	247	246	241	257	268	276	278	289	243	225
11 Spd	11	15	17	18	22	26	27	31	37	35	35	36	34	29	28	28	21	23	26	24	26	23	16	11	19.2	37.1
Dir	319	357	353	350	354	2	7	8	4	11	14	20	23	39	47	56	71	84	82	90	107	111	115	110	35	4
12 Spd	12	9	4	2	3	7	7	7	9	7	6	4	5	11	3	4	2	2	2	2	5	9	14	10	1.8	14.1
Dir	130	148	155	110	67	51	50	76	77	84	104	131	148	180	357	42	164	251	10	356	330	329	316	307	75	316
13 Spd	13	14	10	9	11	9	7	6	8	13	19	17	19	18	21	19	17	15	11	9	8	8	7	6	6.9	21.1
Dir	289	297	301	290	301	324	331	262	313	56	56	67	55	57	59	69	74	76	86	91	81	88	95	87	45	59
14 Spd	5	5	4	4	4	3	2	3	2	2	1	0	1	1	10	18	13	14	8	1	10	12	10	14	3.3	17.6
Dir	77	81	89	81	86	82	133	100	86	93	138	193	106	250	259	248	236	248	254	294	229	235	239	236	232	248
15 Spd	12	12	17	19	14	13	12	11	10	14	13	16	10	9	11	11	13	17	15	8	5	7	10	11	11.0	18.6
Dir	219	219	237	238	227	219	232	239	216	214	225	236	235	254	238	242	245	243	245	291	307	305	308	309	242	238
16 Spd	10	10	12	14	13	14	12	18	16	17	17	16	14	14	13	8	9	10	9	8	4	3	3	2	10.9	17.7
Dir	299	304	296	298	296	299	278	283	284	284	285	291	283	295	291	288	293	296	296	323	338	336	279	279	293	283
17 Spd	3	8	7	14	12	14	18	23	24	25	28	28	26	25	24	23	21	14	10	10	13	11	10	7	15.8	28.4
Dir	3	15	24	29	38	38	41	38	44	44	51	60	64	68	67	73	77	76	77	81	73	73	75	100	57	51
18 Spd	6	8	4	7	3	3	4	7	6	3	8	5	6	6	8	6	6	5	7	5	6	8	11	12	5.9	11.9
Dir	103	91	138	83	110	125	110	102	115	91	122	40	67	120	96	96	116	136	97	96	83	86	90	114	101	114
19 Spd	12	7	12	17	21	22	24	21	21	24	23	22	20	19	23	22	18	19	18	12	15	18	20	20	15.3	24.2
Dir	141	176	189	208	216	226	237	236	245	247	244	254	246	244	245	234	245	261	272	261	268	330	323	316	247	247
20 Spd	20	14	19	19	20	19	14	15	12	10	12	10	9	8	7	3	2	3	3	8	12	20	21	20	12.1	20.5
Dir	321	315	307	310	316	315	308	302	298	305	315	321	323	309	289	270	268	234	252	333	328	312	314	297	310	314
21 Spd	17	10	12	14	15	14	15	13	10	5	3	2	9	5	9	11	13	12	14	17	16	14	17	20	1.0	19.7
Dir	283	272	290	288	275	269	275	271	305	332	343	112	98	182	170	118	103	96	86	98	95	82	71	87	70	87
22 Spd	21	18	18	17	17	15	11	13	13	12	10	7	6	8	13	18	16	16	22	15	20	22	19	17	8.3	22.2
Dir	86	85	102	107	121	121	102	105	124	119	136	149	138	164	194	196	187	209	213	216	235	243	249	242	164	213

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - February 2015

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	Daily Average	Daily Maximum
23 Spd	17	14	11	11	10	12	11	14	11	11	12	14	20	15	6	3	3	6	11	13	12	9	12	15	8.2	19.5
Dir	236	236	233	232	229	213	220	224	227	218	230	226	220	225	240	241	136	63	93	107	131	145	152	184	207	220
24 Spd	18	17	15	19	27	31	34	23	20	21	24	24	23	24	28	26	44	42	37	30	26	25	24	23	23.7	43.8
Dir	194	203	208	213	237	252	269	260	251	251	242	250	241	236	239	277	299	277	270	264	268	274	274	272	257	299
25 Spd	19	15	14	13	10	10	14	16	14	15	20	19	23	20	21	20	23	20	20	21	26	24	25	24	13.8	26.2
Dir	273	275	287	301	315	341	22	19	16	16	30	46	48	59	64	63	68	64	54	49	41	40	39	37	33	41
26 Spd	26	25	23	22	20	21	21	20	19	16	12	9	5	2	9	10	11	12	12	14	15	15	14	11	8.7	25.6
Dir	37	36	33	23	14	16	20	24	25	34	44	51	60	291	279	276	263	251	250	275	285	282	275	266	358	37
27 Spd	15	20	20	18	17	14	11	8	8	8	8	9	14	12	7	3	9	8	9	10	10	8	6	6	5.9	20.2
Dir	273	276	282	282	279	276	269	255	234	206	196	193	210	212	217	173	96	98	143	160	151	142	136	138	231	276
28 Spd	8	8	6	7	5	9	10	6	8	11	15	17	18	18	17	14	12	10	10	7	3	10	11	10	6.5	18.0
Dir	147	160	128	111	143	164	176	179	194	223	224	222	221	225	227	231	232	208	205	193	88	65	56	40	197	221
Spd	4.5	4.2	4.8	5.0	5.9	5.8	5.7	5.5	4.5	4.0	3.8	3.5	3.1	3.4	3.9	3.2	3.1	3.8	3.8	3.2	3.5	4.7	5.5	5.2	Diurnal Average	
Dir	303	306	300	298	292	300	301	303	310	305	303	301	288	264	270	272	274	266	274	298	309	315	314	304		
Spd	31.4	33.0	32.6	31.7	31.9	33.0	34.0	32.9	37.1	35.5	35.4	36.3	34.0	29.8	32.3	28.8	43.8	41.6	38.5	34.7	33.2	30.0	32.8	33.3	Diurnal Maximum	
Dir	331	337	337	337	336	335	269	331	4	11	14	20	23	310	313	319	299	277	311	314	323	328	327	325		

Maximum Speed Value: 44 km/h on Feb 24 17:00
Maximum Daily Speed Average: 28.6 km/h on Feb 6
Maximum Diurnal Speed Average: 5.9 km/h at hour 5

Minimum Speed Value: 0 km/h on Feb 4 16:00
Minimum Daily Speed Average: 1.0 km/h on Feb 12
Minimum Diurnal Speed Average: 3.1 km/h at hour 17

Monthly Average Velocity: 4.18 km/h 296.3 deg

Speed Percentiles: $P_1 = 1.1$ $P_{10} = 4.1$ $Q_1 = 8.4$ Median = 12.7 $Q_3 = 18.6$ $P_{90} = 25.3$ $P_{99} = 35.3$

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

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Percent Operational Time:	100.0

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	8	4	11	21	7	0	51
NorthEast	11	13	15	28	5	0	72
East	30	33	23	14	0	0	100
SouthEast	10	23	12	0	0	0	45
South	7	17	7	0	0	0	31
SouthWest	2	34	89	19	0	0	144
West	9	27	70	20	4	1	131
NorthWest	6	29	22	17	22	2	98
Total	83	180	249	119	38	3	672

Wind Rose

Wind Speed (WS) (km/h)

Falher - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - February 2015

Maximum Speed: 44 km/h on Feb 24 17:00

Maximum Daily Speed Average: 28.8 km/h on Feb 6

Minimum Speed: 1 km/h on Feb 14 12:00

Minimum Daily Speed Average: 6.4 km/h on Feb 14

Maximum Diurnal Speed Average: 14.9 km/h at hour 23

Minimum Diurnal Speed Average: 13.4 km/h at hour 20

Monthly Average Speed: 14.16 km/h

Percentiles: P_1 = 1.8 P_{10} = 4.5 Q_1 = 8.5 Median = 12.8 Q_3 = 18.7 P_{90} = 25.4 P_{99} = 35.3

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	10	8	4	4	6	6	3	3	4	4	2	2	3	6	6	10	11	9	11	13	13	15	10	7	7.1	14.8
2-Feb	8	9	9	6	6	6	9	10	7	8	7	8	10	11	9	7	7	7	2	4	4	3	4	3	6.9	10.9
3-Feb	4	5	3	4	7	7	5	5	2	2	2	4	5	5	5	11	9	11	17	15	15	18	16	19	8.1	18.9
4-Feb	21	23	26	23	13	6	11	13	15	10	4	6	5	3	3	2	4	10	4	11	11	19	21	25	12.0	26.2
5-Feb	22	18	20	22	21	19	20	22	19	20	24	29	31	30	32	29	29	33	39	35	33	30	33	33	26.8	38.5
6-Feb	31	33	33	32	32	33	33	33	32	30	27	28	31	27	26	24	27	25	26	26	24	24	27	28	28.8	33.1
7-Feb	27	26	25	22	22	21	21	20	14	10	10	14	17	15	15	12	15	16	18	18	15	17	17	16	17.6	26.5
8-Feb	13	13	14	13	10	7	10	10	12	14	12	11	11	10	13	17	16	12	11	11	15	14	11	12	12.1	17.1
9-Feb	11	17	16	19	19	14	14	17	11	14	15	12	12	12	14	15	11	12	14	10	6	10	12	14	13.4	19.4
10-Feb	14	13	10	13	15	17	17	17	16	16	13	10	12	13	13	13	15	13	12	14	12	9	13	11	13.4	17.5
11-Feb	11	15	17	18	22	26	27	31	37	36	35	36	34	29	28	29	21	23	26	24	26	23	16	11	25.1	37.1
12-Feb	12	9	4	2	3	7	8	8	9	7	6	5	6	11	5	4	3	3	4	2	5	9	14	10	6.6	14.2
13-Feb	14	14	10	9	11	10	8	6	9	14	19	17	19	19	21	19	17	15	12	9	8	8	7	6	12.5	21.2
14-Feb	5	5	4	4	4	3	2	3	2	2	1	1	2	2	10	18	13	14	8	4	10	13	10	14	6.4	17.6
15-Feb	12	12	18	19	14	13	13	11	11	14	13	16	10	9	11	11	13	17	16	9	5	8	10	11	12.3	18.7
16-Feb	10	10	12	14	13	15	12	18	16	17	17	16	14	14	13	9	9	10	9	8	5	4	3	2	11.2	17.8
17-Feb	4	8	7	14	12	15	18	23	24	25	28	28	26	25	24	23	21	14	11	10	13	12	10	7	16.7	28.4
18-Feb	7	9	5	7	4	4	4	7	7	5	9	5	7	7	8	7	6	5	7	5	6	9	11	12	6.8	12.2
19-Feb	12	7	12	17	21	22	24	21	21	24	23	22	20	19	24	22	18	19	18	12	17	18	20	20	18.9	24.2
20-Feb	20	14	19	19	20	19	15	15	12	10	12	10	9	8	7	3	2	3	3	8	12	20	21	21	12.6	20.9
21-Feb	17	11	12	14	15	14	15	13	10	5	4	2	10	7	9	12	13	12	14	17	16	14	17	20	12.2	19.8
22-Feb	21	18	18	17	17	15	12	14	13	12	10	7	6	8	13	18	16	16	22	15	20	22	19	17	15.3	22.2
23-Feb	17	14	12	11	10	12	12	14	11	11	12	14	20	15	7	5	4	6	11	13	12	9	12	15	11.6	19.6
24-Feb	18	17	15	19	27	31	34	23	20	22	24	24	23	24	28	33	44	42	37	30	26	25	24	23	26.4	44.3
25-Feb	19	15	14	13	10	11	14	16	14	15	21	19	23	20	21	20	23	21	20	21	26	24	25	24	18.7	26.2
26-Feb	26	25	23	22	20	21	21	20	19	16	12	10	5	3	9	10	12	12	12	14	15	15	14	11	15.3	25.6
27-Feb	15	20	20	18	17	14	11	8	8	8	8	10	14	12	8	6	9	8	9	10	10	8	6	6	11.0	20.3
28-Feb	8	8	6	8	5	9	10	6	9	11	15	18	18	18	17	14	12	10	10	7	4	10	11	10	10.6	18.0
	14.6	14.2	13.9	14.4	14.2	14.1	14.3	14.4	13.7	13.6	13.8	13.7	14.4	13.6	14.3	14.3	14.3	14.2	14.3	13.4	13.8	14.6	14.9	14.6	Diurnal Average	
	31.5	33.0	32.7	31.8	31.9	33.1	34.1	33.0	37.1	35.5	35.4	36.4	34.1	29.9	32.4	33.1	44.3	42.2	38.5	34.8	33.2	30.0	32.9	33.4	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Falher - February 2015

Maximum Value: 89.9 deg on Feb 12 19:00

Minimum Value: 1.5 deg on Feb 24 02:00

Percentiles: P_1 = 1.9 P_{10} = 3.0 Q_1 = 4.1 Median = 6.4 Q_3 = 11.1 P_{90} = 21.7 P_{99} = 73.3

Hours in Service:	672
Hours of Data:	672
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-Feb	24	3	25	34	19	11	32	54	8	31	45	87	23	13	15	21	8	7	8	6	4	2	8	8	86.5
2-Feb	10	12	4	12	8	13	4	6	9	5	7	9	8	8	4	15	10	6	67	14	7	20	6	11	67.2
3-Feb	8	4	10	8	6	14	6	8	36	24	28	15	11	15	25	3	10	6	3	6	4	4	5	9	36.4
4-Feb	11	7	2	7	9	31	24	6	3	6	32	10	53	33	8	87	32	83	51	18	17	8	5	4	86.9
5-Feb	4	4	3	3	4	4	4	5	5	4	4	6	3	4	4	4	3	2	3	4	4	4	3	2	6.3
6-Feb	3	3	3	2	3	2	4	3	3	3	5	6	4	5	4	3	3	3	3	2	3	3	2	3	6.1
7-Feb	3	3	4	5	4	4	3	4	4	11	16	8	5	7	5	8	8	9	10	7	9	8	5	5	16.3
8-Feb	7	7	7	6	5	6	14	6	8	6	5	7	6	6	8	5	6	5	6	7	4	5	8	8	14.2
9-Feb	15	5	5	5	3	5	6	5	9	4	8	10	11	7	4	5	6	7	7	9	15	7	7	7	15.4
10-Feb	8	8	9	10	8	8	4	4	4	4	5	8	6	8	6	5	4	4	6	6	7	9	3	7	9.7
11-Feb	12	6	4	4	2	4	3	3	3	3	2	2	4	5	4	4	8	2	3	6	3	2	4	5	11.8
12-Feb	5	5	9	36	23	16	16	26	8	10	9	54	43	8	56	38	74	55	90	62	19	10	5	11	89.9
13-Feb	6	4	8	12	9	13	16	21	31	15	5	5	4	7	5	5	4	4	9	5	4	4	5	4	31.1
14-Feb	5	9	7	9	6	11	13	12	17	17	34	81	61	78	24	3	3	5	6	71	8	15	8	3	80.8
15-Feb	5	6	7	6	6	3	10	12	15	4	4	7	7	12	5	6	4	3	7	21	15	17	5	4	20.6
16-Feb	12	7	4	4	5	6	9	5	4	4	4	5	5	6	6	9	12	4	7	7	9	20	14	27	26.9
17-Feb	36	6	3	3	2	4	3	2	3	2	3	3	6	3	3	4	3	5	7	7	6	7	6	11	36.2
18-Feb	28	27	24	16	57	59	26	17	30	48	20	21	23	8	19	18	9	13	18	24	10	15	7	14	59.4
19-Feb	10	20	5	4	4	7	2	2	5	3	4	3	5	8	12	4	9	5	11	14	22	5	5	6	21.9
20-Feb	3	7	4	4	9	7	9	5	6	8	6	7	9	21	20	19	20	15	22	11	7	4	5	13	22.2
21-Feb	3	9	10	9	6	3	3	6	19	31	34	64	22	36	19	22	5	3	4	6	6	10	9	5	63.8
22-Feb	7	3	5	4	4	8	17	17	8	13	13	10	13	16	5	7	4	12	2	6	8	5	4	7	17.0
23-Feb	3	6	11	3	8	5	7	4	14	10	7	7	4	8	52	62	34	17	13	8	15	7	10	8	62.3
24-Feb	4	1	7	4	7	3	5	6	3	10	4	6	4	2	2	37	9	9	3	3	4	4	4	3	36.5
25-Feb	4	5	3	9	5	19	3	3	3	6	5	5	5	8	4	4	4	5	5	12	3	2	2	3	19.5
26-Feb	2	2	2	4	2	2	3	2	3	3	4	6	20	70	13	7	9	4	4	9	3	6	3	9	70.3
27-Feb	8	6	4	6	6	6	9	8	13	6	13	15	6	6	14	59	4	12	9	7	7	13	15	10	58.6
28-Feb	18	4	20	6	16	4	3	7	12	7	3	3	3	2	4	3	4	13	16	8	63	6	10	6	62.6
	36.2	27.3	25.3	35.8	56.7	59.4	31.8	53.8	36.4	48.1	44.6	86.5	61.2	77.8	56.5	86.9	74.2	83.1	89.9	71.1	62.6	20.4	15.3	26.9	

PAZA
Portable – Clairmont Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.5 ppb on Feb 20 06:00 Maximum Daily Average: 1.9 ppb on Feb 12

Minimum Value: 0 ppb on Feb 22 01:00 Minimum Daily Average: 0.2 ppb on Feb 21
Maximum Diurnal Average: 1.1 ppb at hour 15 Minimum Diurnal Average: 0.6 ppb at hour 22
Monthly Average: 0.77 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.5 Q_3 = 1.0 P_{90} = 1.8 P_{99} = 3.4

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	A	3	2	1	1	0	0	0	0	0.7	2.9
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0.3	1.0
3-Feb	0	0	1	0	0	0	0	1	0	1	0	1	1	A	1	1	1	1	1	1	1	0	0	0	0.5	0.8
4-Feb	0	0	0	1	0	0	0	0	1	1	1	1	A	2	1	1	1	1	1	1	0	1	1	1	0.8	1.8
5-Feb	0	0	1	0	1	0	0	1	1	0	0	A	0	0	0	0	1	2	2	1	0	0	0	0	0.6	1.9
6-Feb	0	0	1	1	1	2	1	1	2	1	A	0	0	1	1	1	2	1	1	1	2	1	2	2	1.2	2.5
7-Feb	3	2	2	2	2	3	1	1	1	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1.0	3.0
8-Feb	0	0	1	1	1	0	0	2	A	4	5	3	3	3	2	2	3	1	1	0	2	1	1	2	1.7	5.4
9-Feb	1	1	3	1	2	1	3	A	2	1	2	1	0	1	1	1	1	1	0	0	0	1	2	1	1.1	3.2
10-Feb	1	1	1	1	1	1	A	1	1	C	C	C	C	1	2	3	3	2	2	2	1	1	0	0	1.3	2.8
11-Feb	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	1	2	3	2	2	2	2	0.9	2.7
12-Feb	3	2	2	2	A	2	2	2	2	1	1	1	2	3	3	3	2	2	2	2	2	1	1	1	1.9	3.3
13-Feb	1	1	1	A	1	1	1	1	1	0	1	3	1	1	1	0	0	0	1	0	0	1	1	0	0.7	2.8
14-Feb	0	0	A	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
15-Feb	0	A	0	0	0	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	1.2
16-Feb	A	0	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	A	0.6	1.6
17-Feb	0	0	0	0	0	0	1	0	0	0	0	1	1	3	3	2	2	1	1	2	1	1	A	1	1.0	3.4
18-Feb	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	2	1	1	1	A	1	0	1.3	2.8
19-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	A	0	0	0	0.4	0.7
20-Feb	0	0	0	1	3	5	1	5	3	1	1	0	0	0	0	0	0	0	0	A	0	0	1	1	1.1	5.5
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0.2	0.6
22-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0.3	0.8
23-Feb	1	1	1	1	1	0	0	0	0	0	0	1	1	1	0	0	A	1	0	0	0	0	0	0	0.5	0.9
24-Feb	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	A	0	0	0	0	0	1	1	1	0.4	1.3
25-Feb	2	3	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0.6	2.9
26-Feb	0	0	1	2	2	2	2	1	1	1	1	1	1	A	1	2	2	1	1	1	1	1	1	1	1.2	2.0
27-Feb	1	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
28-Feb	0	0	0	0	0	0	1	1	1	1	1	A	1	1	2	1	0	0	0	0	0	0	0	1	0.6	2.2
	0.6	0.6	0.8	0.6	0.8	0.9	0.7	0.8	0.8	0.7	0.8	0.9	0.8	0.9	1.1	0.9	1.0	0.8	0.8	0.7	0.7	0.6	0.7	0.6	Diurnal Average	
	2.6	2.9	3.2	1.9	2.7	5.5	2.5	5.1	3.1	4.1	5.4	3.3	3.4	3.2	3.4	2.8	2.9	2.2	2.4	2.7	2.3	1.6	2.4	2.5	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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - February 2015

Maximum Value: 9.9 ppb on Feb 20 06:00

Maximum Daily Average: 3.1 ppb on Feb 8

Minimum Value: 0 ppb on Feb 14 15:00

Minimum Daily Average: 0.8 ppb on Feb 21

Maximum Diurnal Average: 1.9 ppb at hour 15

Minimum Diurnal Average: 1.3 ppb at hour 24

Monthly Average: 1.60 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 0.7$ $Q_1 = 0.9$ Median = 1.2 $Q_3 = 1.9$ $P_{90} = 3.0$ $P_{99} = 6.1$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	A	6	3	2	2	1	1	1	1	1.4	6.1
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	0.8	1.6
3-Feb	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	1.5
4-Feb	1	0	1	1	1	1	1	1	1	1	2	2	A	2	2	2	2	2	2	1	1	1	2	1	1.5	2.5
5-Feb	1	1	3	1	2	1	1	3	2	1	1	A	1	1	1	1	2	3	3	3	1	1	1	1	1.6	3.5
6-Feb	1	1	1	1	3	3	2	2	3	1	A	1	1	3	3	2	3	2	1	3	4	3	4	4	2.3	3.9
7-Feb	5	3	3	3	3	4	3	5	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.1	5.5
8-Feb	1	1	2	1	1	1	1	4	A	6	9	6	5	5	4	2	4	2	2	1	4	3	1	2	3.1	9.5
9-Feb	2	1	5	3	5	3	4	A	3	2	3	3	1	1	1	2	3	2	1	1	1	2	2	2	2.3	5.3
10-Feb	2	2	2	2	2	2	A	1	1	C	C	C	C	2	3	5	4	4	4	3	1	1	1	1	2.2	4.5
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	4	4	3	3	3	3	1.6	3.9
12-Feb	3	3	3	2	A	2	3	3	3	2	2	2	2	4	4	4	3	3	3	2	2	2	2	2	2.7	4.3
13-Feb	2	2	1	A	1	1	2	2	2	1	2	5	4	1	2	1	1	1	2	1	1	2	2	1	1.7	5.5
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.9	1.2
15-Feb	2	A	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1.2	1.9
16-Feb	A	1	2	2	1	1	2	1	1	1	3	1	1	1	1	1	1	1	1	2	2	2	10	A	1.6	9.7
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	5	5	3	2	2	2	2	2	2	A	2	1.7	4.9
18-Feb	1	2	2	1	2	2	2	2	2	2	2	2	3	3	3	4	3	3	2	1	1	A	1	1	2.1	3.8
19-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.3
20-Feb	1	1	1	2	6	10	5	9	6	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2.4	9.9
21-Feb	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	1.3
22-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	0.9	1.7
23-Feb	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	A	2	1	1	1	1	1	1	1.2	3.6
24-Feb	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	2	1	2	1	2	1.1	2.4
25-Feb	3	5	4	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1.5	5.3
26-Feb	1	1	2	2	3	2	2	2	2	2	2	2	2	A	2	2	3	2	2	2	2	1	2	1	1.8	2.6
27-Feb	1	1	1	1	1	1	1	1	1	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	0.9	2.1
28-Feb	1	1	1	1	1	1	1	1	2	2	2	A	2	1	4	3	1	1	1	1	1	1	1	1	1.3	3.7
	1.4	1.4	1.6	1.4	1.7	1.8	1.5	1.8	1.6	1.4	1.7	1.7	1.6	1.7	1.9	1.8	1.8	1.7	1.6	1.5	1.4	1.4	1.6	1.3	Diurnal Average	
	4.6	5.3	5.3	3.1	6.3	9.9	4.7	8.8	6.3	5.6	9.5	6.4	5.3	4.8	4.9	4.5	6.1	4.1	4.4	3.9	3.9	3.1	9.7	3.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - February 2015

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 7.7 ppb on Feb 17 08:00

Maximum Daily Average: 1.5 ppb on Feb 17

Minimum Value: 0 ppb on Feb 27 06:00

Minimum Daily Average: 0.2 ppb on Feb 25

Maximum Diurnal Average: 0.7 ppb at hour 8

Minimum Diurnal Average: 0.4 ppb at hour 4

Monthly Average: 0.47 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 0.7$ $P_{99} = 3.0$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	1	0	0	1	0	0	0	0	0	1	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.4	0.6
2-Feb	0	0	0	0	0	0	1	0	0	1	0	0	0	0	A	1	0	4	3	1	1	1	1	1	0.7	3.6
3-Feb	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	0.8
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0.7	1.2
5-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
6-Feb	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	0.3
7-Feb	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	0.4
8-Feb	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-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
10-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
11-Feb	0	0	0	0	0	A	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Feb	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0.8	1.8
13-Feb	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	1.1
14-Feb	1	1	A	1	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0.5	0.8
15-Feb	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
16-Feb	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.6	1.3
17-Feb	3	1	0	1	2	5	3	8	4	2	0	1	0	0	0	0	1	1	0	0	1	0	A	1	1.5	7.7
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	0	0.8	1.2
19-Feb	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	A	0	1	0	0.4	0.9
20-Feb	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.4	0.7
21-Feb	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	0.4
22-Feb	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.4	0.8
23-Feb	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	A	1	1	1	0	0	1	0	0.5	1.3
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0.2	0.5
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Feb	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
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0.3	0.6
28-Feb	1	0	1	0	0	0	0	0	0	0	0	A	1	0	1	1	1	0	1	0	1	1	0	0	0.5	0.7
	0.5	0.4	0.4	0.4	0.4	0.6	0.5	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	3.1	1.1	0.9	0.8	1.5	4.7	3.0	7.7	4.4	1.7	1.0	1.1	0.8	1.2	1.1	1.1	1.8	3.6	2.5	0.9	0.8	0.7	1.3	0.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - February 2015

Maximum Value: 14.7 ppb on Feb 17 08:00

Maximum Daily Average: 3.0 ppb on Feb 17

Minimum Value: 0 ppb on Feb 27 04:00

Minimum Daily Average: 0.7 ppb on Feb 25

Maximum Diurnal Average: 1.5 ppb at hour 8

Minimum Diurnal Average: 0.9 ppb at hour 4

Monthly Average: 1.07 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 0.7$ $Q_1 = 0.8$ Median = 0.9 $Q_3 = 1.1$ $P_{90} = 1.4$ $P_{99} = 3.5$

Hours in Service:	672
Hours of Data:	639
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	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	1.1
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	8	5	1	1	1	1	1	1.5	8.1
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.2	1.4
4-Feb	1	1	1	1	1	1	1	1	1	1	2	2	A	2	2	2	1	1	1	1	1	1	1	1	1.2	1.9
5-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
6-Feb	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-Feb	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	1.0
8-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
9-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
10-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
11-Feb	1	1	1	1	1	A	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
12-Feb	1	1	1	1	A	1	1	1	2	2	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1.4	2.8
13-Feb	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	2.0
14-Feb	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1.2	1.6
15-Feb	1	A	1	1	1	1	1	1	3	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.2	2.6
16-Feb	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	A	1.1	3.1
17-Feb	6	1	1	2	5	7	5	15	10	4	1	1	1	1	1	1	1	1	1	1	1	1	A	1	3.0	14.7
18-Feb	3	3	1	1	1	1	1	2	2	2	1	2	1	1	1	1	1	2	1	1	1	A	1	1	1.5	2.9
19-Feb	1	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	1.5
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.5
21-Feb	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	1.2
22-Feb	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1.0	2.1
23-Feb	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	2	A	3	2	2	1	1	1	1	1.3	2.7
24-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	A	1	1	1	1	1	1	1	1	0.9	3.5
25-Feb	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	1.0
26-Feb	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	1.0
27-Feb	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
28-Feb	1	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	1.3
	1.2	1.0	1.0	0.9	1.0	1.2	1.1	1.5	1.4	1.1	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.3	1.1	1.0	0.9	0.9	1.1	1.0	Diurnal Average	
	6.3	2.6	2.0	1.8	4.8	7.4	4.5	14.7	9.6	3.8	1.9	1.7	1.4	3.5	1.7	2.5	2.8	8.1	4.7	1.7	1.5	1.4	3.1	1.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - February 2015

Pollutant Classes (ppb)

- 0 - 1
- 1 - 2
- 2 - 3
- 4 - 10
- > 10

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 53.7 ppb on Feb 4 14:00

Maximum Daily Average: 26.1 ppb on Feb 12

Minimum Value: 0 ppb on Feb 5 20:00

Minimum Daily Average: 0.7 ppb on Feb 5

Maximum Diurnal Average: 13.0 ppb at hour 19

Minimum Diurnal Average: 5.5 ppb at hour 13

Monthly Average: 9.34 ppb

Percentiles: P_1 = 0.6 P_{10} = 1.1 Q_1 = 1.9 Median = 5.3 Q_3 = 14.0 P_{90} = 24.6 P_{99} = 41.0

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	27	14	17	17	13	15	15	16	15	13	11	16	10	11	12	A	5	3	3	3	2	1	1	1	10.6	27.3
2-Feb	1	1	1	2	3	4	7	10	10	9	3	1	1	2	A	4	6	20	26	13	30	31	19	22	9.9	31.3
3-Feb	16	17	19	15	17	17	28	31	23	32	20	30	21	A	11	23	31	36	35	34	42	31	22	32	25.4	41.7
4-Feb	26	25	28	33	18	26	24	27	33	35	44	47	A	54	43	27	25	16	12	6	4	3	2	2	24.3	53.7
5-Feb	1	1	1	0	0	0	1	1	1	0	1	A	1	1	1	1	0	1	1	0	1	1	1	1	0.7	1.3
6-Feb	1	1	1	1	1	1	1	1	3	1	A	2	1	1	1	1	2	1	1	1	1	1	1	1	1.3	2.9
7-Feb	1	1	2	2	2	2	2	2	3	A	3	2	4	2	3	3	2	4	4	2	3	2	2	2	2.3	4.5
8-Feb	2	2	2	2	1	2	1	1	A	1	5	2	3	1	2	2	3	2	2	2	2	2	2	2	2.0	4.5
9-Feb	1	2	2	1	1	2	2	A	3	3	2	2	2	1	2	2	2	4	5	5	3	2	2	2	2.3	4.9
10-Feb	3	8	11	13	9	8	A	6	7	C	C	C	C	C	C	3	2	2	2	2	2	2	2	2	--	12.7
11-Feb	2	2	2	2	2	A	3	4	4	2	2	3	2	M	9	13	11	16	20	22	18	16	15	15	8.4	22.1
12-Feb	17	26	29	30	A	19	23	29	37	19	15	14	25	21	18	38	42	38	29	26	24	24	29	29	26.1	41.9
13-Feb	29	29	20	A	17	11	9	10	7	4	3	3	2	2	3	3	3	3	5	13	26	24	24	23	12.0	29.0
14-Feb	22	20	A	16	14	14	20	34	33	14	6	5	3	5	3	5	5	5	5	4	2	8	8	7	11.2	34.3
15-Feb	12	A	9	14	8	6	8	8	7	8	8	5	5	4	8	7	5	15	24	26	14	14	8	8	10.0	25.5
16-Feb	A	9	9	9	12	13	20	21	4	2	1	1	1	1	1	1	1	1	2	2	3	2	2	A	5.3	20.9
17-Feb	2	2	1	1	1	2	3	5	6	7	11	7	3	5	5	10	10	12	15	17	20	32	A	32	9.1	32.3
18-Feb	24	18	23	22	21	23	26	29	26	35	23	16	16	19	24	31	22	35	32	30	22	A	10	2	23.0	34.9
19-Feb	2	2	2	3	5	7	7	12	17	12	6	4	5	4	6	7	10	11	16	11	A	11	9	6	7.6	17.3
20-Feb	4	5	5	2	1	1	1	1	2	1	1	3	4	2	1	4	2	2	16	A	9	7	6	7	3.8	16.1
21-Feb	7	2	1	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	A	2	2	2	4	7	2.0	6.9
22-Feb	10	6	7	16	17	20	16	11	13	12	7	7	6	6	6	4	3	A	6	3	3	4	6	4	8.4	19.7
23-Feb	3	3	4	3	6	11	14	14	16	13	8	6	4	6	6	11	A	46	38	10	7	7	8	1	10.8	46.3
24-Feb	2	2	5	8	8	4	5	8	14	20	14	8	2	10	13	A	5	3	2	1	1	1	1	1	5.9	19.8
25-Feb	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	2	1	1	3	1	1	1	2	2	1.3	2.9
26-Feb	2	2	3	5	6	6	7	7	6	5	4	4	6	A	6	7	9	9	12	19	17	20	11	9	7.9	19.8
27-Feb	13	2	1	1	2	2	7	10	19	21	13	3	A	3	3	4	7	16	21	32	32	32	25	18	12.5	32.5
28-Feb	24	20	12	9	11	11	11	10	7	6	5	A	5	4	5	8	13	12	14	13	21	16	10	5	10.9	23.7
	9.5	8.2	8.1	8.5	7.4	8.5	9.7	11.5	11.8	10.7	8.4	7.8	5.5	7.0	7.8	8.4	8.5	11.7	13.0	11.2	11.6	11.0	8.6	9.0	Diurnal Average	
	28.8	29.0	28.6	33.1	21.3	26.3	27.6	34.3	36.7	34.9	43.9	47.2	25.2	53.7	42.9	37.9	41.9	46.3	38.2	34.1	41.7	32.5	29.3	32.4	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - February 2015

Maximum Value: 135.7 ppb on Feb 23 16:00

Maximum Daily Average: 35.8 ppb on Feb 3

Minimum Value: 1 ppb on Feb 5 05:00

Minimum Daily Average: 5.9 ppb on Feb 5

Maximum Diurnal Average: 27.0 ppb at hour 8

Minimum Diurnal Average: 11.6 ppb at hour 5

Monthly Average: 17.71 ppb

Percentiles: P_1 = 1.1 P_{10} = 2.4 Q_1 = 6.0 Median = 14.3 Q_3 = 25.1 P_{90} = 37.2 P_{99} = 55.6

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	34	21	24	29	20	19	21	22	20	18	25	21	15	14	24	A	14	5	4	5	8	3	2	2	16.0	34.4
2-Feb	2	2	2	2	8	7	13	15	17	29	9	5	4	12	A	13	25	35	32	18	40	42	29	27	16.8	42.3
3-Feb	26	23	25	21	23	25	38	36	27	50	29	41	43	A	17	49	48	55	40	47	53	38	30	42	35.8	54.5
4-Feb	42	31	36	48	23	33	33	34	44	39	53	53	A	61	67	52	36	41	21	9	13	16	7	8	34.8	67.1
5-Feb	2	1	1	1	1	1	6	11	10	2	4	A	9	2	25	9	7	5	13	4	4	13	4	1	5.9	25.2
6-Feb	1	1	2	1	2	1	9	12	35	15	A	14	22	24	14	21	27	16	7	10	2	3	9	2	10.9	34.8
7-Feb	2	2	2	2	2	2	19	6	6	A	21	18	20	6	6	12	5	24	23	4	38	3	3	16	10.4	37.7
8-Feb	3	6	6	3	3	2	2	2	A	2	31	22	23	3	13	10	31	4	7	2	3	4	2	2	8.0	31.1
9-Feb	2	2	2	2	2	8	28	A	22	32	14	14	13	7	6	7	13	16	21	21	15	3	3	3	11.1	32.0
10-Feb	4	15	12	21	11	10	A	16	28	C	C	C	C	C	C	18	17	12	7	10	9	5	4	2	--	28.3
11-Feb	2	2	3	2	3	A	3	24	21	3	3	12	5	M	52	15	14	23	23	25	27	21	19	19	14.6	52.4
12-Feb	20	32	29	31	A	24	31	39	81	27	20	26	47	30	28	55	48	48	37	31	31	37	37	32	35.8	80.6
13-Feb	30	32	27	A	20	13	16	53	12	16	7	6	4	4	7	25	9	9	19	25	28	28	30	26	19.4	52.9
14-Feb	25	21	A	21	22	20	30	46	42	26	14	9	5	10	5	33	10	8	10	9	5	11	15	23	18.3	46.2
15-Feb	19	A	15	23	14	10	15	29	12	23	33	10	11	8	26	18	9	24	43	41	23	20	14	13	19.6	43.0
16-Feb	A	14	16	11	14	26	37	54	15	3	2	3	6	4	4	6	15	2	5	17	7	7	5	A	12.4	54.0
17-Feb	3	3	2	1	2	10	11	43	23	20	18	27	8	69	15	13	13	16	20	24	26	45	A	35	19.4	69.2
18-Feb	34	23	30	27	34	32	32	55	51	47	35	21	28	35	35	41	31	41	40	36	30	A	22	5	33.3	55.5
19-Feb	4	3	9	5	12	18	12	17	30	24	9	7	31	14	13	13	17	21	38	23	A	27	14	13	16.2	37.7
20-Feb	7	11	7	6	1	46	3	7	20	5	3	12	14	4	11	17	13	12	29	A	13	11	10	10	11.9	45.9
21-Feb	13	4	1	1	2	1	6	9	4	4	2	24	11	8	4	9	18	15	A	3	4	6	19	21	8.2	23.6
22-Feb	14	13	16	25	25	27	23	19	18	23	9	29	10	23	9	12	7	A	17	6	6	7	11	17	15.9	28.8
23-Feb	6	6	7	6	14	28	21	22	27	21	14	10	9	23	18	136	A	117	42	37	16	13	12	5	26.5	135.7
24-Feb	5	4	29	15	14	10	8	25	21	33	24	21	15	17	26	A	8	5	5	6	1	13	2	2	13.3	32.7
25-Feb	2	1	1	11	1	1	4	43	10	13	19	4	5	2	A	9	7	9	18	10	5	6	25	3	9.0	42.9
26-Feb	3	3	5	6	7	6	28	35	28	26	4	9	13	A	7	8	13	16	21	24	22	36	19	12	15.2	36.3
27-Feb	18	22	4	2	22	6	39	35	29	31	23	5	A	5	6	9	11	47	39	42	39	36	37	23	22.9	46.9
28-Feb	27	26	22	14	15	14	13	19	12	19	8	A	9	6	8	43	58	16	20	21	53	27	18	7	20.7	58.1
	13.0	11.9	12.4	12.5	11.6	14.8	18.6	27.0	24.6	21.1	16.6	16.9	15.2	16.2	17.9	25.0	19.4	23.8	22.2	18.9	19.3	17.7	14.8	13.7	Diurnal Average	
	42.5	32.4	36.4	47.6	34.4	45.9	38.9	55.5	80.6	50.1	52.7	52.6	46.6	69.2	67.1	135.7	58.1	117.2	43.0	46.6	53.1	44.9	37.2	41.9	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - February 2015

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - February 2015

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 129.7 ppb on Feb 4 14:00

Maximum Daily Average: 28.1 ppb on Feb 12

Minimum Value: 0 ppb on Feb 5 01:00

Minimum Daily Average: 0.4 ppb on Feb 5

Maximum Diurnal Average: 11.5 ppb at hour 12

Minimum Diurnal Average: 1.1 ppb at hour 5

Monthly Average: 5.40 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.4$ Median = 1.5 $Q_3 = 3.9$ $P_{90} = 12.8$ $P_{99} = 84.3$

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	14	4	2	6	3	3	5	5	3	7	9	25	14	14	13	A	2	0	0	0	0	0	0	0	5.6	25.4
2-Feb	0	0	0	0	0	0	1	2	2	3	1	1	2	1	A	3	3	4	4	1	29	14	5	3	3.4	28.6
3-Feb	4	3	4	2	1	2	14	35	13	50	28	63	40	A	12	28	37	21	13	15	56	14	5	12	20.5	62.5
4-Feb	9	2	4	31	2	6	8	11	33	50	103	114	A	130	81	33	14	4	1	0	1	1	0	0	27.7	129.7
5-Feb	0	0	0	0	0	0	0	0	2	0	0	A	0	0	1	1	1	1	0	1	0	0	0	0	0.4	1.6
6-Feb	0	0	0	0	0	0	1	1	3	1	A	2	2	1	1	2	2	1	1	1	0	0	0	0	0.9	3.0
7-Feb	0	0	0	0	0	0	0	0	1	A	5	3	4	2	2	4	1	2	4	0	0	0	0	1	1.3	4.8
8-Feb	0	0	0	0	0	0	0	0	A	0	7	4	4	1	1	1	1	0	0	0	0	0	0	0	0.9	6.5
9-Feb	0	0	0	0	0	1	1	A	3	1	1	1	1	1	1	2	2	1	1	1	1	0	0	0	0.9	3.2
10-Feb	0	0	0	0	0	0	A	2	2	C	C	C	C	C	C	2	1	1	0	0	0	0	0	0	--	2.4
11-Feb	0	0	0	0	0	A	0	1	2	1	1	2	2	M	10	11	7	5	3	4	4	3	3	2	2.8	10.8
12-Feb	1	13	18	29	A	7	19	38	92	22	18	18	52	33	23	84	74	51	8	5	5	11	15	12	28.1	91.7
13-Feb	16	38	1	A	0	0	2	4	2	3	1	3	2	1	2	2	2	1	2	4	27	22	25	15	7.5	37.7
14-Feb	13	5	A	5	4	2	6	15	20	5	3	3	2	3	2	4	2	1	1	1	1	1	0	1	4.2	20.1
15-Feb	1	A	2	1	1	1	2	3	2	3	5	3	3	2	5	3	2	3	3	4	2	3	1	2	2.5	5.0
16-Feb	A	2	2	1	2	3	5	4	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	A	1.3	5.0
17-Feb	0	0	0	0	0	0	0	3	4	3	6	6	3	3	4	8	5	2	1	1	2	22	A	9	3.6	22.0
18-Feb	7	3	3	3	5	7	10	30	23	72	31	13	14	15	17	24	9	13	7	4	3	A	1	1	13.6	71.5
19-Feb	0	0	1	1	1	2	1	2	5	5	3	2	4	3	2	2	2	2	3	1	A	2	1	1	2.0	4.9
20-Feb	0	1	1	0	0	0	0	0	3	1	0	2	3	1	3	4	3	1	2	A	2	1	1	2	1.3	3.6
21-Feb	1	0	0	0	0	0	0	1	0	0	0	1	2	2	1	2	1	1	A	0	0	1	2	1	0.7	2.0
22-Feb	0	0	0	1	1	4	2	1	3	6	4	5	4	4	3	2	1	A	1	1	1	1	1	1	2.0	5.5
23-Feb	1	1	2	1	2	1	2	2	5	6	5	5	3	4	3	11	A	84	11	2	1	1	1	0	6.6	84.4
24-Feb	1	1	1	0	1	1	0	1	2	7	5	4	1	4	6	A	1	1	0	0	0	0	0	0	1.7	6.7
25-Feb	0	0	0	0	0	0	0	1	2	0	1	1	1	0	A	1	1	1	1	1	0	0	1	0	0.6	2.1
26-Feb	0	0	0	0	0	0	0	2	4	3	2	4	4	A	3	3	3	2	0	1	1	1	1	1	1.5	4.1
27-Feb	0	0	0	0	0	0	2	2	5	13	9	2	A	2	2	3	4	6	4	10	12	8	6	3	4.1	12.9
28-Feb	3	4	3	3	4	3	3	2	2	3	3	A	3	2	3	17	5	2	1	1	4	1	1	0	3.2	16.6
	2.7	2.8	1.7	3.2	1.1	1.7	3.1	6.2	8.8	10.1	9.7	11.5	6.8	9.7	8.0	9.9	6.8	7.8	2.8	2.3	5.6	3.9	2.6	2.5	Diurnal Average	
	15.8	37.7	17.6	31.3	4.9	6.9	19.2	38.3	91.7	71.5	103.2	114.0	51.6	129.7	81.1	84.5	73.5	84.4	12.8	15.3	55.6	22.3	24.6	14.5	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Clairmont - February 2015

Maximum Value: 393.2 ppb on Feb 23 16:00

Maximum Daily Average: 69.1 ppb on Feb 12

Minimum Value: 0 ppb on Feb 11 02:00

Minimum Daily Average: 6.6 ppb on Feb 5

Maximum Diurnal Average: 52.5 ppb at hour 16

Minimum Diurnal Average: 4.4 ppb at hour 5

Monthly Average: 19.84 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.9$ $Q_1 = 3.6$ Median = 8.7 $Q_3 = 23.3$ $P_{90} = 47.7$ $P_{99} = 154.6$

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	51	9	7	56	7	12	13	15	9	15	46	40	23	30	24	A	6	1	0	11	2	13	1	24	18.1	56.4
2-Feb	0	0	0	1	6	2	8	8	5	24	13	11	29	16	A	14	23	23	22	24	61	51	9	8	15.6	61.1
3-Feb	8	13	11	6	5	17	45	59	23	83	49	89	93	A	21	46	79	40	82	58	99	26	8	59	44.3	98.9
4-Feb	57	5	18	74	5	20	29	49	88	71	142	152	A	165	136	95	34	31	15	11	11	30	4	1	54.1	164.7
5-Feb	0	0	0	7	0	0	8	6	23	10	3	A	3	4	10	9	19	7	5	20	3	7	6	0	6.6	22.8
6-Feb	0	28	7	0	0	0	25	24	26	14	A	24	24	21	15	37	20	18	35	11	2	22	7	4	15.9	37.3
7-Feb	0	1	0	0	2	0	4	14	12	A	41	38	42	9	11	58	8	39	49	3	13	17	0	20	16.5	58.2
8-Feb	1	9	2	1	3	12	1	3	A	1	33	63	27	5	6	10	15	5	10	1	5	6	8	0	9.9	63.5
9-Feb	2	0	0	0	0	7	15	A	39	7	6	14	5	14	21	31	19	13	31	13	13	12	1	1	11.6	39.2
10-Feb	1	1	0	2	1	6	A	29	13	C	C	C	C	C	C	21	25	8	2	17	12	0	2	15	--	29.3
11-Feb	0	0	0	0	1	A	10	13	33	5	3	9	10	M	23	14	11	13	6	8	32	9	6	6	9.6	33.3
12-Feb	13	31	21	43	A	20	58	98	157	36	34	33	111	57	46	159	90	148	32	46	44	191	100	22	69.1	190.5
13-Feb	25	56	14	A	1	1	13	46	8	48	3	11	12	3	9	6	13	7	48	20	42	51	50	30	22.4	56.3
14-Feb	44	7	A	55	18	8	27	32	51	18	10	6	3	7	3	62	4	1	3	3	1	4	2	4	16.2	61.5
15-Feb	6	A	5	6	7	11	4	31	5	18	56	5	6	4	24	15	3	10	9	24	7	5	4	5	11.8	55.5
16-Feb	A	5	6	4	6	7	78	58	2	2	11	5	5	7	2	24	14	5	4	22	2	3	5	A	12.7	78.2
17-Feb	0	1	0	0	0	7	10	49	27	26	20	60	22	29	31	14	7	5	4	7	16	69	A	21	18.6	68.8
18-Feb	49	11	9	11	15	35	33	156	105	156	64	22	65	48	37	39	37	24	16	10	7	A	4	2	41.4	155.9
19-Feb	1	1	9	3	3	9	4	5	19	30	5	6	41	10	6	4	4	7	49	3	A	7	4	5	10.1	48.9
20-Feb	2	6	2	12	1	13	1	7	34	8	6	13	12	6	43	38	28	10	11	A	4	3	4	3	11.5	42.5
21-Feb	4	0	2	0	0	3	3	21	1	1	3	20	21	14	6	16	8	6	A	4	4	22	33	14	9.0	32.6
22-Feb	1	1	2	5	4	9	5	4	13	17	5	34	6	29	6	9	6	A	21	4	2	2	3	15	8.8	34.3
23-Feb	3	3	4	3	7	10	6	7	21	12	12	8	6	25	17	393	A	351	25	17	2	4	3	1	40.9	393.2
24-Feb	2	2	24	1	3	4	1	3	4	18	9	37	16	9	23	A	3	3	1	2	1	2	2	11	7.8	36.6
25-Feb	2	0	0	3	0	0	10	12	35	3	7	8	6	3	A	10	3	12	10	21	2	9	52	1	9.2	51.8
26-Feb	0	0	0	1	0	0	7	41	47	23	4	14	18	A	5	4	14	22	1	14	7	18	3	6	10.9	46.9
27-Feb	1	5	21	0	14	0	73	27	15	30	19	4	A	4	5	7	6	36	33	43	33	23	25	8	18.8	72.9
28-Feb	10	17	7	7	7	6	6	4	4	23	5	A	8	4	5	229	41	10	4	29	37	25	7	1	21.6	228.9
	10.5	7.9	6.4	11.2	4.4	8.1	18.4	30.3	30.4	26.9	23.4	29.1	24.6	21.8	21.4	52.5	20.0	31.7	19.6	16.6	17.2	23.3	13.0	10.5	Diurnal Average	
	56.9	56.3	23.8	74.3	18.0	34.5	78.2	155.9	156.9	155.5	142.1	152.0	111.3	164.7	135.9	393.2	89.9	351.5	82.1	58.3	98.9	190.5	99.9	58.7	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 184.6 ppb on Feb 4 14:00 Maximum Daily Average: 54.7 ppb on Feb 12

Minimum Value: 0 ppb on Feb 5 05:00 Minimum Daily Average: 1.1 ppb on Feb 5
Maximum Diurnal Average: 21.0 ppb at hour 10 Minimum Diurnal Average: 8.6 ppb at hour 5
Monthly Average: 14.88 ppb Percentiles: P_1 = 0.8 P_{10} = 1.4 Q_1 = 2.4 Median = 7.4 Q_3 = 18.2 P_{90} = 38.7 P_{99} = 120.7

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	42	18	20	23	17	18	21	21	18	20	20	42	24	26	25	A	7	4	3	3	2	1	1	2	16.4	42.0
2-Feb	1	1	1	2	3	4	8	13	13	11	4	2	3	3	A	6	9	25	30	14	59	46	24	25	13.4	59.4
3-Feb	21	20	23	17	19	20	42	66	36	82	49	93	61	A	24	50	69	57	49	50	98	46	27	45	46.3	98.0
4-Feb	35	27	33	65	21	32	33	38	67	85	148	162	A	185	125	60	39	20	13	7	4	4	3	2	52.5	184.6
5-Feb	1	1	1	1	0	1	1	1	2	1	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1.1	2.3
6-Feb	1	1	1	1	1	1	2	2	6	2	A	3	3	3	2	4	4	2	2	2	1	1	2	1	2.1	5.9
7-Feb	1	1	2	2	2	2	2	2	3	A	8	5	8	4	5	7	3	6	8	3	3	2	2	3	3.7	8.5
8-Feb	2	3	2	2	2	2	1	1	A	2	11	6	8	2	3	3	4	2	3	2	2	2	2	2	2.9	11.1
9-Feb	2	2	2	1	2	3	3	A	6	3	3	4	3	3	3	4	4	5	6	6	4	2	2	2	3.3	6.4
10-Feb	3	8	11	13	9	8	A	8	9	C	C	C	C	C	C	6	4	3	2	2	2	2	2	2	--	13.2
11-Feb	2	2	2	2	2	A	3	5	6	2	3	4	5	M	20	24	18	21	23	27	23	20	18	17	11.4	27.2
12-Feb	18	39	47	59	A	26	43	68	129	41	34	32	77	55	41	123	116	89	38	31	30	35	45	42	54.7	129.3
13-Feb	45	67	22	A	18	12	11	14	8	6	4	7	4	4	4	5	5	4	7	17	53	47	49	38	19.6	67.1
14-Feb	35	25	A	21	19	17	26	50	53	19	9	8	6	7	5	8	7	6	6	5	3	8	8	8	15.6	53.5
15-Feb	13	A	11	15	9	7	9	11	9	11	14	8	9	7	13	10	7	18	28	30	16	17	9	10	12.7	30.3
16-Feb	A	11	11	10	14	16	25	25	5	2	2	2	2	1	1	2	2	1	2	3	3	2	2	A	6.7	25.5
17-Feb	2	2	1	1	1	2	4	8	10	11	17	13	6	8	9	18	15	14	17	18	22	55	A	41	12.9	54.9
18-Feb	32	21	26	26	27	30	36	60	50	107	54	30	30	34	41	55	32	48	40	34	25	A	11	2	37.1	107.1
19-Feb	2	2	3	3	7	9	8	14	22	17	9	6	9	7	8	8	12	13	20	12	A	13	11	7	9.7	22.5
20-Feb	4	6	6	3	1	2	1	2	5	2	2	5	6	3	4	7	5	3	18	A	11	8	8	9	5.2	17.9
21-Feb	8	2	1	1	1	1	1	1	1	2	1	2	4	4	2	4	3	3	A	3	3	3	6	8	2.7	7.9
22-Feb	10	6	7	17	18	24	18	12	16	18	10	12	10	11	8	6	5	A	7	4	4	4	7	5	10.5	23.8
23-Feb	5	4	6	4	8	12	16	16	21	20	13	11	7	11	10	18	A	132	50	12	8	8	9	1	17.5	131.7
24-Feb	3	2	6	9	9	5	5	10	16	27	19	12	4	15	20	A	6	3	3	1	1	1	1	1	7.7	26.8
25-Feb	1	1	1	1	1	1	1	3	4	2	2	1	2	1	A	3	2	2	4	2	1	1	3	2	1.9	4.4
26-Feb	2	2	3	5	6	6	7	9	10	8	6	8	10	A	9	9	11	11	13	21	19	21	12	10	9.6	21.4
27-Feb	13	2	2	1	2	2	10	12	25	34	22	5	A	5	5	6	11	23	25	43	44	41	32	22	16.9	44.5
28-Feb	27	24	16	13	14	14	13	13	10	9	9	A	8	6	8	22	18	14	15	15	26	17	11	6	14.2	27.2
	12.3	11.1	9.8	11.8	8.6	10.3	12.9	17.9	20.8	21.0	18.2	19.4	12.4	16.8	15.9	18.2	15.5	19.7	16.0	13.7	17.4	15.2	11.3	11.6	Diurnal Average	
	45.1	67.1	46.8	64.8	26.7	32.4	42.6	68.3	129.3	107.1	148.0	162.2	77.3	184.6	124.7	123.2	116.3	131.7	49.9	49.9	98.0	54.9	49.1	44.6	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - February 2015

Maximum Value: 455.1 ppb on Feb 23 18:00

Maximum Daily Average: 99.3 ppb on Feb 12

Minimum Value: 1 ppb on Feb 5 05:00

Minimum Daily Average: 8.9 ppb on Feb 5

Maximum Diurnal Average: 57.7 ppb at hour 16

Minimum Diurnal Average: 15.2 ppb at hour 5

Monthly Average: 34.14 ppb

Percentiles: P_1 = 1.1 P_{10} = 3.2 Q_1 = 9.6 Median = 21.2 Q_3 = 43.3 P_{90} = 75.4 P_{99} = 204.4

Hours in Service:	672
Hours of Data:	636
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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	Daily Average	Daily Maximum
1-Feb	85	27	28	81	23	28	34	37	27	33	72	61	38	42	48	A	16	5	5	8	10	8	3	8	31.7	85.1
2-Feb	2	2	2	2	14	9	21	21	21	51	14	16	16	28	A	22	45	55	51	41	101	93	37	31	30.3	100.8
3-Feb	29	36	31	24	28	42	82	92	51	134	77	131	134	A	38	94	127	95	83	105	151	64	36	101	77.7	151.1
4-Feb	100	36	55	122	28	54	57	71	120	105	194	205	A	227	202	148	70	64	32	17	21	32	11	9	86.2	226.9
5-Feb	2	1	1	2	1	1	14	14	17	5	5	A	10	5	36	16	9	7	19	10	5	20	4	1	8.9	35.8
6-Feb	1	13	7	2	2	1	11	16	58	18	A	37	29	29	17	29	40	22	13	18	3	10	15	3	17.1	58.4
7-Feb	2	2	2	2	3	2	24	10	17	A	55	44	56	15	16	65	10	63	61	7	49	16	3	33	24.2	65.2
8-Feb	3	12	8	3	5	10	3	2	A	2	54	80	36	7	17	17	37	4	8	3	4	4	4	2	14.2	80.0
9-Feb	3	2	3	2	2	14	43	A	32	39	20	20	16	19	26	23	18	29	24	30	28	8	3	3	17.7	42.9
10-Feb	4	16	13	22	11	12	A	26	42	C	C	C	C	C	C	25	29	16	10	15	17	6	4	9	--	41.7
11-Feb	3	2	3	3	3	A	8	29	36	7	5	16	10	M	74	29	24	36	29	32	58	31	25	24	22.2	74.5
12-Feb	30	64	51	74	A	44	88	138	205	61	53	60	159	87	74	216	135	188	65	67	62	226	83	55	99.3	226.0
13-Feb	56	88	39	A	21	14	24	73	19	61	10	15	10	7	16	31	19	16	57	45	70	72	77	54	38.9	88.3
14-Feb	69	28	A	76	36	25	58	74	93	45	25	15	8	17	7	95	13	10	11	11	5	15	18	28	34.0	95.0
15-Feb	22	A	20	28	21	18	20	60	16	39	89	15	16	12	51	32	12	31	52	65	31	25	18	17	30.8	88.9
16-Feb	A	20	21	14	20	31	113	112	18	4	6	7	9	6	5	24	29	5	7	40	9	10	10	A	23.7	112.7
17-Feb	4	3	2	1	2	17	21	93	31	36	33	61	17	97	30	27	20	20	24	31	42	113	A	56	33.9	112.8
18-Feb	81	33	39	35	45	66	65	204	149	200	100	43	75	82	70	79	61	65	56	47	35	A	27	7	72.4	204.3
19-Feb	5	3	18	7	15	27	15	21	44	54	14	13	72	25	19	17	21	29	79	26	A	34	19	18	25.8	78.9
20-Feb	8	17	9	6	2	60	3	12	34	8	6	23	22	6	27	53	40	20	36	A	16	13	13	13	19.4	60.2
21-Feb	16	4	1	1	2	2	8	30	5	5	4	31	16	14	10	24	26	18	A	5	7	11	44	33	13.8	44.1
22-Feb	15	14	19	31	29	34	28	23	31	40	14	63	16	52	14	21	9	A	36	9	7	7	13	32	24.2	63.5
23-Feb	9	9	11	8	18	34	25	30	47	31	26	19	15	49	35	202	A	455	66	55	17	16	14	5	52.1	455.1
24-Feb	6	5	54	15	15	12	9	29	26	52	33	33	27	25	49	A	10	6	5	8	1	15	2	10	19.5	53.8
25-Feb	3	1	2	14	1	1	6	55	46	16	26	6	8	4	A	17	10	21	26	31	7	15	35	3	15.4	55.0
26-Feb	3	3	5	6	7	7	31	72	75	47	8	19	31	A	12	13	23	34	22	36	29	48	20	16	24.6	74.8
27-Feb	19	27	21	2	36	6	89	61	41	61	42	10	A	9	11	16	17	83	72	84	71	60	62	29	40.3	89.2
28-Feb	37	43	27	21	20	19	19	23	15	43	13	A	17	9	14	168	92	23	22	44	71	53	25	8	35.9	167.5
	22.8	19.0	18.1	22.3	15.2	21.9	34.1	52.9	48.7	46.0	38.4	41.8	34.6	36.3	36.7	57.7	35.6	52.6	36.0	33.0	34.4	38.0	23.1	22.5	Diurnal Average	
	99.9	88.3	55.3	121.9	44.6	65.8	112.7	204.3	205.4	200.2	194.3	204.9	158.9	226.9	202.0	216.1	135.0	455.1	83.0	105.3	151.1	226.0	82.9	101.0	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 43.3 ppb on Feb 24 13:00
Maximum Daily Average: 37.4 ppb on Feb 5

Minimum Value: 1 ppb on Feb 14 00:00
Maximum Diurnal Average: 29.6 ppb at hour 14
Monthly Average: 24.95 ppb

Minimum Daily Average: 5.7 ppb on Feb 12
Minimum Diurnal Average: 21.4 ppb at hour 9
Percentiles: P_1 = 1.1 P_{10} = 6.8 Q_1 = 17.7 Median = 28.1 Q_3 = 33.2 P_{90} = 36.1 P_{99} = 39.2

Hours in Service:	672
Hours of Data:	640
Hours of Missing Data:	32
Hours of Calibration:	32
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	2	11	6	7	10	7	8	7	8	10	13	10	14	14	14	A	23	27	28	27	29	32	33	32	16.2	33.0
2-Feb	32	31	31	29	27	26	22	23	23	21	29	32	33	33	A	31	28	15	8	18	6	4	14	8	22.8	33.1
3-Feb	14	14	13	13	9	9	4	2	7	7	13	12	19	A	24	17	9	4	2	4	1	7	13	3	9.5	23.7
4-Feb	10	7	6	6	14	8	9	7	3	6	6	7	A	8	8	15	11	19	23	35	40	42	40	39	16.2	42.0
5-Feb	39	39	39	40	40	39	38	38	37	37	36	A	37	37	37	37	37	37	37	37	36	36	35	35	37.4	39.9
6-Feb	35	35	34	34	34	33	33	33	32	33	A	33	33	33	33	32	32	32	32	32	32	32	32	32	32.9	35.1
7-Feb	32	31	31	31	31	31	31	31	30	A	29	30	30	31	30	29	30	29	29	30	30	30	30	29	30.3	31.8
8-Feb	29	29	28	29	29	29	29	29	A	29	28	28	28	29	28	28	27	27	27	27	27	27	27	27	28.1	29.5
9-Feb	27	27	27	27	27	26	26	A	26	26	26	27	27	27	27	27	26	24	23	23	25	26	26	25	26.0	27.1
10-Feb	25	20	17	14	18	19	A	20	21	23	25	25	26	C	C	C	26	28	28	28	28	27	28	28	23.7	28.1
11-Feb	27	27	27	26	26	A	25	23	23	24	23	23	23	22	18	16	17	12	8	6	10	10	11	10	19.1	27.4
12-Feb	9	3	1	1	A	5	3	2	2	7	10	14	11	12	14	6	4	3	4	6	6	6	1	1	5.7	14.0
13-Feb	1	2	5	A	6	8	10	11	13	16	17	18	19	19	19	19	18	18	16	9	1	1	1	1	10.7	19.1
14-Feb	1	2	A	5	9	13	11	3	6	26	34	35	37	37	39	38	37	37	37	37	38	33	29	32	25.1	38.9
15-Feb	26	A	28	24	31	33	32	32	33	30	32	34	35	36	34	37	38	29	21	19	28	28	33	33	30.8	38.0
16-Feb	A	30	30	29	25	25	16	15	27	29	29	30	34	36	37	38	37	36	36	35	34	34	33	A	30.8	37.9
17-Feb	32	32	32	31	31	29	28	27	25	25	22	27	29	29	28	24	24	23	20	18	14	5	A	2	24.2	32.5
18-Feb	7	11	6	5	8	5	2	2	5	5	10	17	22	22	19	13	20	10	9	9	16	A	29	38	12.6	38.2
19-Feb	37	36	34	33	30	29	30	26	21	27	33	35	36	36	35	34	30	29	24	27	A	26	28	34	30.9	37.2
20-Feb	35	33	32	29	27	31	32	31	30	32	32	31	31	32	33	32	35	37	23	A	30	32	33	30	31.5	36.7
21-Feb	28	33	33	34	33	34	35	35	34	34	35	35	34	34	34	34	34	34	A	33	33	33	31	25	33.0	35.1
22-Feb	20	23	21	14	11	9	13	19	17	19	24	25	29	33	36	38	38	A	34	35	34	33	31	32	25.6	38.5
23-Feb	32	31	30	31	28	23	21	21	18	21	27	30	33	33	34	31	A	6	4	26	29	29	27	39	26.4	39.4
24-Feb	38	39	37	33	34	38	38	35	29	23	29	35	43	36	34	A	42	39	36	34	34	35	35	36	35.3	43.3
25-Feb	36	36	35	35	35	35	35	35	34	34	34	34	34	34	A	35	35	36	36	35	35	36	34	34	34.9	36.1
26-Feb	35	35	32	28	26	26	26	26	26	27	28	29	28	A	28	28	26	26	23	16	16	14	23	25	26.0	35.1
27-Feb	18	34	34	35	34	33	29	26	17	17	24	30	A	33	33	33	30	22	16	5	5	4	9	16	23.3	34.7
28-Feb	6	12	19	23	23	24	25	28	31	34	36	A	40	43	42	39	37	37	33	30	23	28	33	39	29.8	42.5
	23.4	24.6	24.8	24.0	24.3	23.2	22.7	21.7	21.4	23.0	25.4	26.4	29.4	29.6	28.7	28.4	27.9	25.1	22.8	23.7	23.8	24.1	26.0	25.4	Diurnal Average	
	39.0	39.4	39.0	39.7	39.9	38.9	38.2	38.1	37.3	36.9	36.1	35.3	43.3	42.5	42.3	39.2	41.8	39.0	36.9	37.0	40.3	42.0	40.1	39.4	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Maximum Value: 48.0 ppb on Feb 14 22:00

Maximum Daily Average: 38.8 ppb on Feb 24

Minimum Value: 1 ppb on Feb 13 21:00

Minimum Daily Average: 8.6 ppb on Feb 12

Maximum Diurnal Average: 31.4 ppb at hour 14

Minimum Diurnal Average: 24.9 ppb at hour 8

Monthly Average: 27.64 ppb

Percentiles: P_1 = 2.4 P_{10} = 11.8 Q_1 = 22.3 Median = 30.1 Q_3 = 34.8 P_{90} = 38.0 P_{99} = 42.8

Hours in Service:	672
Hours of Data:	640
Hours of Missing Data:	32
Hours of Calibration:	32
Percent Operational Time:	100.0

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	Daily Average	Daily Maximum
1-Feb	7	14	12	12	12	9	12	11	15	12	15	14	16	15	16	A	26	29	29	28	32	33	34	33	19.0	33.6
2-Feb	33	33	32	31	28	28	26	32	34	25	32	33	34	34	A	33	31	28	18	24	16	9	17	15	27.2	34.0
3-Feb	17	18	19	18	14	12	8	4	12	10	20	14	24	A	26	21	13	7	4	7	2	16	16	6	13.3	26.4
4-Feb	17	11	11	14	16	13	15	13	6	7	7	9	A	9	10	20	22	22	31	39	42	43	43	39	20.0	43.3
5-Feb	40	39	40	41	41	40	39	38	38	37	37	A	37	38	38	38	38	38	37	37	37	36	36	36	38.0	40.7
6-Feb	35	35	34	34	34	34	33	34	33	33	A	34	34	34	33	33	33	33	33	33	33	33	33	33	33.4	35.5
7-Feb	33	32	32	31	31	32	32	32	31	A	30	31	32	33	31	31	31	30	30	30	31	31	31	30	31.1	33.0
8-Feb	29	29	29	30	30	30	30	30	A	29	29	29	29	29	29	29	28	28	28	27	27	28	28	28	28.7	30.1
9-Feb	28	27	27	27	27	27	27	A	26	27	27	27	27	28	27	27	27	27	25	25	26	26	26	27	26.8	27.6
10-Feb	26	25	20	17	20	21	A	22	23	25	25	26	27	C	C	C	27	28	28	28	29	28	28	28	25.0	28.8
11-Feb	28	28	28	27	26	A	25	24	24	24	24	23	23	24	23	18	24	17	11	11	15	14	14	13	21.3	27.8
12-Feb	10	8	2	2	A	8	6	4	3	9	13	16	16	15	17	10	5	5	9	11	9	10	4	3	8.6	16.8
13-Feb	2	3	9	A	8	9	11	13	15	17	18	19	20	19	19	19	19	18	18	16	1	2	24	2	13.2	23.8
14-Feb	3	5	A	10	14	20	24	9	24	37	38	37	39	40	41	41	40	39	39	39	39	48	34	36	30.3	48.0
15-Feb	30	A	33	29	36	35	35	36	35	34	35	36	37	39	39	39	41	36	29	29	35	34	35	35	34.8	40.8
16-Feb	A	32	33	31	27	28	24	30	29	30	29	32	35	37	38	40	38	37	36	37	35	35	34	A	33.1	39.8
17-Feb	33	33	32	32	31	30	29	29	27	28	27	29	30	30	29	27	26	25	23	21	17	16	A	4	26.4	33.2
18-Feb	11	13	12	10	13	11	5	3	15	8	17	20	26	28	25	20	24	21	15	13	21	A	39	39	17.8	39.4
19-Feb	38	37	35	34	33	33	32	30	29	32	34	37	39	37	37	37	34	33	31	32	A	29	34	39	34.3	39.3
20-Feb	37	35	34	33	29	32	32	32	31	32	33	32	32	34	35	35	37	38	38	A	32	36	36	33	33.9	38.4
21-Feb	30	33	34	34	34	35	35	35	35	35	36	35	35	34	35	35	35	35	A	34	34	33	34	29	34.2	35.7
22-Feb	27	26	24	20	19	14	18	22	20	23	26	28	32	36	39	40	40	A	36	36	36	35	33	34	28.9	40.2
23-Feb	33	33	32	33	31	30	26	24	27	26	31	33	35	36	37	36	A	29	6	33	33	33	33	41	30.9	41.3
24-Feb	40	41	40	38	38	40	41	40	33	31	34	43	46	44	39	A	44	42	40	36	35	35	36	36	38.8	45.6
25-Feb	37	36	36	36	36	35	36	35	35	35	34	34	34	35	A	36	36	37	37	35	36	36	35	34	35.5	37.0
26-Feb	36	36	34	30	27	26	27	27	27	28	29	29	30	A	30	29	29	27	26	19	18	22	26	28	27.9	36.0
27-Feb	30	35	35	35	35	34	32	32	28	21	30	31	A	34	34	35	33	29	27	12	10	10	16	22	27.8	35.3
28-Feb	14	18	22	25	25	25	28	31	34	36	38	A	42	44	43	43	42	41	36	34	35	33	37	41	33.3	43.8
	26.1	26.5	27.1	26.5	26.4	25.6	25.5	24.9	25.6	25.7	27.7	28.2	31.2	31.4	30.9	30.9	30.4	28.9	26.7	27.0	26.6	27.6	29.5	27.5	Diurnal Average	
	39.8	41.3	40.3	40.7	40.6	40.2	41.3	40.2	38.0	37.4	38.4	43.1	45.6	44.2	43.3	43.0	43.9	41.5	39.8	39.3	42.3	48.0	43.0	41.3	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Pollutant Rose

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Pollutant Classes (ppb)

- 0 - 20
- 21 - 50
- 51 - 82
- > 82

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable Clairmont - February 2015

Maximum Value: 39.7 ppb on Feb 5 04:00

Minimum Value: 1.8 ppb on Feb 14 04:00

Percentiles: P_1 = 3.3 P_{10} = 7.9 Q_1 = 18.0 Median = 27.7 Q_3 = 32.4 P_{90} = 35.2 P_{99} = 38.9

Hours in Service:	672
Hours of Data:	666
Hours of Missing Data:	6
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-Feb	4	4	5	5	6	6	7	7	8	8	9	9	10	11	11	12	14	17	19	21	23	26	28	29	28.9
2-Feb	30	31	31	31	31	30	29	28	27	25	25	25	26	27	28	29	30	29	26	24	20	16	16	13	31.2
3-Feb	11	11	11	11	11	12	11	10	9	8	8	8	9	9	12	14	14	14	12	11	9	8	7	5	14.3
4-Feb	5	6	6	7	8	8	8	8	8	7	7	8	7	7	7	8	9	11	13	17	20	24	28	31	31.3
5-Feb	35	37	39	40	40	39	39	39	39	38	38	38	37	37	37	37	37	37	37	37	37	37	37	36	39.7
6-Feb	36	36	35	35	35	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	36.1
7-Feb	32	32	32	32	32	31	31	31	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	32.2
8-Feb	29	29	29	29	29	29	29	29	29	29	29	29	29	29	28	28	28	28	28	28	27	27	27	27	29.4
9-Feb	27	27	27	27	27	27	27	27	27	26	26	26	26	26	26	26	27	26	26	26	25	25	25	25	27.1
10-Feb	25	24	23	22	21	21	20	19	18	19	20	22	23	23	23	N	N	N	N	N	N	27	27	27	27.4
11-Feb	28	28	28	27	27	27	27	26	25	25	24	24	23	23	22	22	21	19	18	15	14	12	11	11	27.7
12-Feb	10	8	7	7	6	6	5	3	2	3	4	6	7	8	9	10	10	9	9	7	7	6	4	4	9.8
13-Feb	3	3	3	3	3	3	5	6	8	10	11	12	14	15	16	17	18	18	18	17	15	12	10	8	18.3
14-Feb	6	4	2	2	3	5	6	6	7	11	14	17	21	24	27	32	36	37	37	37	38	37	36	35	37.5
15-Feb	34	33	32	30	29	29	29	29	30	30	31	32	33	33	33	34	35	34	33	31	30	29	29	29	34.5
16-Feb	28	28	29	30	30	30	27	24	25	25	25	25	26	27	30	32	34	35	35	36	36	36	36	35	36.2
17-Feb	34	34	33	33	32	32	31	30	29	28	27	27	26	26	26	26	26	26	25	24	22	19	18	15	34.5
18-Feb	13	11	9	7	6	6	6	6	5	5	5	7	8	11	13	14	16	17	16	15	15	14	15	19	18.8
19-Feb	21	25	29	32	34	33	33	32	30	29	29	29	30	30	31	32	33	33	32	31	31	29	28	28	34.0
20-Feb	29	30	31	31	31	31	32	31	31	31	31	31	31	31	31	32	32	33	32	32	32	32	32	31	32.9
21-Feb	30	30	31	32	32	32	32	33	34	34	34	34	34	34	34	34	34	34	34	34	34	34	33	32	34.4
22-Feb	30	28	28	25	22	19	17	16	16	15	16	17	19	22	25	28	30	32	33	35	36	36	35	34	35.6
23-Feb	33	33	32	32	31	30	29	27	26	24	24	24	24	25	27	28	30	28	24	24	23	23	22	23	33.0
24-Feb	25	29	33	34	35	36	37	36	35	33	32	33	34	34	33	33	35	37	38	38	36	36	37	36	37.9
25-Feb	36	35	35	35	35	35	35	35	35	35	35	35	34	34	34	34	34	35	35	35	35	35	35	35	35.7
26-Feb	35	35	34	34	32	31	30	29	28	27	27	27	27	27	27	28	28	28	27	25	23	22	21	21	35.0
27-Feb	20	21	23	25	27	30	30	30	30	28	27	26	25	25	26	27	28	29	28	24	22	18	16	13	30.3
28-Feb	10	9	9	12	14	16	18	20	23	26	28	29	31	34	36	38	39	39	39	38	36	34	33	33	39.2
Diurnal Maximums	36.1	37.2	39.1	39.7	39.7	39.3	39.1	38.9	38.7	38.5	38.1	37.9	37.4	37.2	37.0	38.0	38.9	39.2	38.9	37.8	37.5	37.0	36.6	36.4	

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.69 ppm on Feb 4 05:00 Maximum Daily Average: 3.01 ppm on Feb 3

Minimum Value: 2.0 ppm on Feb 19 03:00 Minimum Daily Average: 2.13 ppm on Feb 19
Maximum Diurnal Average: 2.56 ppm at hour 8 Minimum Diurnal Average: 2.30 ppm at hour 17
Monthly Average: 2.412 ppm Percentiles: P_1 = 2.07 P_{10} = 2.14 Q_1 = 2.17 Median = 2.25 Q_3 = 2.57 P_{90} = 2.99 P_{99} = 3.52

Hours in Service:	672
Hours of Data:	578
Hours of Missing Data:	94
Hours of Calibration:	29
Percent Operational Time:	90.3

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	Daily Average	Daily Maximum
1-Feb	3.0	3.0	2.9	3.2	3.0	3.5	3.0	3.2	3.1	3.1	3.1	2.9	2.8	2.8	2.7	A	2.4	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.76	3.50
2-Feb	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.4	2.3	2.2	2.2	2.2	A	2.2	2.2	2.8	2.7	2.4	2.8	3.3	2.8	3.0	2.44	3.29
3-Feb	3.1	2.9	3.0	3.1	3.3	3.4	3.5	3.5	3.2	3.5	3.2	3.2	2.9	A	2.6	2.7	2.6	2.6	2.6	2.6	3.2	2.9	2.7	3.3	3.01	3.55
4-Feb	3.1	3.1	2.9	3.4	3.7	3.5	3.0	3.3	3.2	3.2	3.2	3.2	A	3.3	3.4	2.9	2.7	2.5	2.4	2.2	2.1	2.1	2.2	2.2	2.90	3.69
5-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	N	N	2.15	2.17
6-Feb	N	N	N	N	N	N	N	N	N	N	N	N	M	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	--	2.20
7-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.20	2.24
8-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.24	2.26
9-Feb	2.2	2.2	2.2	2.2	2.3	2.2	2.3	A	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.25	2.28
10-Feb	2.3	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.29	2.34
11-Feb	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	C	C	C	2.3	2.3	2.4	2.3	2.4	2.4	2.6	2.5	2.6	2.5	2.35	2.62
12-Feb	2.5	2.5	2.5	2.6	A	3.0	3.7	3.3	3.0	3.2	2.7	2.7	2.8	2.6	2.6	2.9	3.1	3.0	2.7	2.6	2.6	2.7	2.8	2.7	2.82	3.68
13-Feb	2.8	2.9	2.6	A	N	N	N	N	N	N	N	N	N	M	2.3	2.3	2.3	2.3	2.3	2.4	2.5	2.6	2.9	3.1	--	3.06
14-Feb	2.9	2.6	A	2.9	2.8	2.6	2.9	2.7	2.6	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.4	2.3	2.4	2.38	2.91
15-Feb	2.6	A	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.4	2.4	2.5	2.4	2.6	2.34	2.57
16-Feb	A	2.6	2.5	2.5	2.8	2.7	2.9	2.9	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	A	2.34	2.85
17-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.7	2.5	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.6	A	2.8	2.33	2.84
18-Feb	3.3	3.2	3.1	3.1	3.0	3.0	3.2	3.5	3.5	3.5	3.5	3.4	2.9	2.6	2.7	2.9	2.6	2.8	3.2	3.0	2.7	A	2.4	2.0	3.00	3.52
19-Feb	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.4	2.3	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	N	N	N	N	N	2.13	2.40
20-Feb	N	N	N	N	N	N	N	N	N	N	M	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	A	2.3	2.3	2.3	2.4	--	2.37
21-Feb	2.4	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.19	2.42
22-Feb	2.3	2.3	2.4	2.5	2.6	3.1	3.0	2.6	2.5	2.5	2.7	2.7	2.7	2.4	2.3	2.1	2.1	A	2.1	2.1	2.1	2.1	2.2	2.2	2.42	3.06
23-Feb	2.2	2.2	2.2	2.2	2.2	2.4	2.5	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.3	2.2	A	2.5	3.1	2.2	2.2	2.2	2.4	2.0	2.29	3.08
24-Feb	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.13	2.23
25-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.16	2.18
26-Feb	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.22
27-Feb	N	N	N	N	N	N	N	N	N	N	M	2.2	A	2.2	2.2	2.2	2.2	2.3	2.4	2.6	2.9	2.8	2.8	2.9	--	2.88
28-Feb	2.9	3.1	3.0	2.9	2.7	2.8	2.6	2.6	2.5	2.3	2.3	A	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.48	3.15
	2.46	2.45	2.41	2.47	2.47	2.55	2.56	2.56	2.51	2.50	2.44	2.43	2.33	2.30	2.33	2.31	2.30	2.33	2.36	2.32	2.37	2.38	2.38	2.43	Diurnal Average	
	3.26	3.20	3.08	3.37	3.69	3.54	3.68	3.52	3.52	3.55	3.48	3.44	2.88	3.30	3.37	2.89	3.14	2.99	3.21	3.00	3.22	3.29	2.90	3.26	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Clairmont - February 2015

Maximum Value: 8.16 ppm on Feb 13 23:00

Maximum Daily Average: 3.37 ppm on Feb 18

Minimum Value: 2.0 ppm on Feb 19 03:00

Minimum Daily Average: 2.17 ppm on Feb 5

Maximum Diurnal Average: 2.94 ppm at hour 23

Minimum Diurnal Average: 2.42 ppm at hour 14

Monthly Average: 2.609 ppm

Percentiles: P_1 = 2.12 P_{10} = 2.18 Q_1 = 2.25 Median = 2.33 Q_3 = 2.82 P_{90} = 3.39 P_{99} = 4.44

Hours in Service:	672
Hours of Data:	578
Hours of Missing Data:	94
Hours of Calibration:	29
Percent Operational Time:	90.3

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	Daily Average	Daily Maximum
1-Feb	3.3	3.4	3.2	3.4	3.3	4.0	3.1	3.4	3.4	3.2	3.4	3.1	3.0	2.9	2.8	A	2.5	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.93	4.01
2-Feb	2.2	2.3	2.2	2.3	2.3	2.4	2.4	2.6	2.6	2.5	2.4	2.3	2.2	2.2	A	2.8	2.5	3.6	3.0	2.7	3.2	3.8	2.9	3.2	2.63	3.83
3-Feb	3.7	3.1	3.2	3.2	3.4	3.4	3.8	3.7	3.4	3.8	3.4	3.4	3.1	A	3.1	3.1	2.9	2.6	2.7	2.8	3.6	3.2	3.1	3.6	3.27	3.81
4-Feb	3.3	3.3	3.0	4.1	4.5	4.4	3.1	4.1	3.5	3.5	3.4	3.3	A	3.4	3.8	4.3	3.1	2.6	2.5	2.3	2.2	2.2	2.2	2.2	3.23	4.54
5-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	N	N	2.17	2.35
6-Feb	N	N	N	N	N	N	N	N	N	N	N	N	M	2.2	2.2	2.2	2.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2	--	2.62
7-Feb	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.2	2.3	2.3	2.25	2.43
8-Feb	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.29	2.33
9-Feb	2.3	2.3	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.4	2.6	2.3	2.3	2.3	2.3	2.4	2.3	2.31	2.65
10-Feb	2.3	2.3	2.4	2.4	2.3	2.4	A	2.4	2.6	2.5	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.5	2.3	2.3	2.4	2.3	2.3	2.3	2.35	2.60
11-Feb	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	C	C	C	2.3	2.5	2.5	2.4	2.4	2.5	3.3	3.4	4.2	2.7	2.55	4.22
12-Feb	2.6	2.6	2.6	2.7	A	3.5	4.7	3.9	3.2	3.4	3.0	2.8	3.7	2.9	2.7	3.2	3.3	3.4	3.1	2.8	3.0	3.2	4.5	2.8	3.21	4.73
13-Feb	2.9	3.2	2.8	A	N	N	N	N	N	N	N	N	N	M	2.4	2.4	2.3	2.3	2.4	2.5	2.6	2.8	8.2	3.8	--	8.16
14-Feb	3.9	3.3	A	3.5	3.3	3.2	3.7	3.1	3.3	2.3	2.2	2.3	2.6	2.3	2.3	2.3	2.2	2.2	2.2	2.5	2.1	3.8	3.7	3.9	2.87	3.93
15-Feb	3.6	A	2.5	3.2	2.8	2.7	2.4	2.4	2.3	2.9	2.6	2.3	2.4	2.2	2.3	2.6	2.3	2.6	2.4	2.6	2.5	2.7	2.6	2.6	2.59	3.65
16-Feb	A	2.6	2.7	2.6	2.9	2.8	3.0	3.4	2.5	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	A	2.44	3.42
17-Feb	2.2	2.2	2.2	2.2	2.3	2.3	2.5	3.3	2.9	2.3	2.3	2.3	2.3	2.2	2.3	2.5	2.5	2.6	2.4	2.5	2.5	2.8	A	3.4	2.47	3.35
18-Feb	4.7	3.6	3.3	3.2	3.2	3.1	3.5	3.7	3.7	3.9	3.8	4.1	3.2	2.7	2.8	3.2	2.8	3.2	3.4	4.0	3.2	A	3.0	2.1	3.37	4.75
19-Feb	2.1	2.1	2.0	2.2	2.3	2.5	2.1	2.3	2.7	2.5	2.4	2.1	2.3	2.1	2.2	2.1	2.3	2.2	2.3	N	N	N	N	N	2.25	2.73
20-Feb	N	N	N	N	N	N	N	N	N	N	M	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.5	A	2.6	2.3	2.3	2.4	--	2.55
21-Feb	2.5	2.3	2.4	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.6	2.3	2.3	2.4	2.3	A	2.2	2.2	2.6	2.3	2.6	2.35	2.63
22-Feb	2.4	2.8	2.6	2.7	3.2	3.9	4.2	3.0	2.7	2.7	2.9	2.9	2.8	2.6	2.9	2.4	2.3	A	2.2	2.1	2.2	2.1	2.2	2.4	2.71	4.18
23-Feb	2.3	2.2	2.3	2.2	2.3	2.6	2.7	2.4	2.8	2.5	3.0	2.3	2.2	2.4	2.4	2.4	A	2.7	4.1	2.8	2.4	2.5	2.9	2.3	2.55	4.12
24-Feb	2.4	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.4	2.2	2.4	2.2	2.1	2.6	2.2	A	2.3	3.2	2.2	2.1	2.2	2.2	2.2	2.3	2.29	3.17
25-Feb	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.20	2.29
26-Feb	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.30
27-Feb	N	N	N	N	N	N	N	N	N	N	M	2.3	A	2.4	2.3	2.3	2.2	2.3	3.0	2.9	3.9	3.1	3.9	3.7	--	3.95
28-Feb	3.2	3.5	3.3	3.2	2.8	3.2	2.7	2.9	2.8	2.4	2.3	A	2.4	2.3	2.5	2.3	2.2	2.4	2.3	3.1	3.3	2.6	2.3	2.3	2.70	3.46
	2.71	2.61	2.52	2.64	2.65	2.79	2.78	2.80	2.73	2.64	2.59	2.55	2.47	2.42	2.46	2.52	2.44	2.52	2.52	2.50	2.59	2.62	2.94	2.66	Diurnal Average	
	4.75	3.61	3.32	4.13	4.54	4.45	4.73	4.11	3.68	3.94	3.81	4.14	3.67	3.41	3.78	4.30	3.34	3.56	4.12	4.00	3.95	3.83	8.16	3.93	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Clairmont - February 2015

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Portable Clairmont - February 2015

Peace Airshed Zone Association

Span Responses

Total Hydrocarbons (THC)

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - February 2015

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 29.0 $\mu g/m^3$ on Feb 4 13:00

Maximum Daily Average: 13.2 $\mu g/m^3$ on Feb 4

Minimum Value: 0 $\mu g/m^3$ on Feb 1 22:00

Maximum Diurnal Average: 4.9 $\mu g/m^3$ at hour 10

Monthly Average: 3.66 $\mu g/m^3$

Minimum Daily Average: 0.1 $\mu g/m^3$ on Feb 5

Minimum Diurnal Average: 2.5 $\mu g/m^3$ at hour 5

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.6$ Median = 2.4 $Q_3 = 4.7$ $P_{90} = 9.0$ $P_{99} = 23.1$

Hours in Service:	672
Hours of Data:	669
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

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	Daily Average	Daily Maximum
1-Feb	6	3	0	4	3	3	3	5	8	8	11	12	8	6	8	6	3	0	2	2	1	0	0	1	4.3	11.9
2-Feb	0	0	0	1	2	1	3	8	5	3	1	0	0	0	0	0	2	4	1	0	9	5	3	1	2.1	9.4
3-Feb	1	4	7	6	1	3	6	9	7	20	10	15	8	0	0	3	9	4	3	3	8	14	15	16	7.2	19.6
4-Feb	23	14	16	13	13	19	24	16	15	20	28	26	29	26	15	10	3	2	1	0	0	0	0	0	13.2	29.0
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.1	1.3
6-Feb	0	0	0	0	0	0	0	1	0	1	1	0	M	24	13	9	8	5	4	4	3	3	3	3	3.6	23.5
7-Feb	3	2	3	2	2	3	3	4	5	5	5	4	5	6	6	7	5	4	5	4	4	4	4	4	4.2	6.7
8-Feb	4	4	5	4	4	4	4	5	4	4	6	5	5	3	3	3	3	3	3	2	2	2	3	2	3.6	6.2
9-Feb	2	3	3	2	2	2	2	2	2	N	N	3	2	2	2	3	3	2	3	3	3	3	3	4	2.6	3.8
10-Feb	4	4	4	4	4	4	4	3	4	4	1	3	3	3	4	4	4	4	3	7	6	4	4	3	3.9	7.4
11-Feb	2	3	2	2	1	2	1	1	1	3	3	4	6	7	6	10	12	9	9	9	15	7	7	9	5.5	15.2
12-Feb	13	10	13	13	12	12	12	12	13	14	11	12	16	10	6	11	16	13	5	5	6	6	9	12	10.9	16.1
13-Feb	14	20	7	3	5	3	3	4	4	5	3	5	5	4	4	3	2	1	2	4	12	16	17	16	6.8	19.8
14-Feb	10	9	8	8	2	2	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	5	0	0	2.2	9.7
15-Feb	0	3	0	2	0	0	0	0	0	1	2	1	1	1	1	1	1	2	8	7	1	2	2	2	1.5	7.6
16-Feb	1	1	2	1	1	1	1	4	1	1	1	1	0	0	0	0	0	0	0	0	0	1	2	0	0.8	3.8
17-Feb	0	0	0	0	0	0	0	1	0	1	1	3	1	1	3	5	5	5	5	7	7	7	12	7	3.0	12.5
18-Feb	8	6	7	8	9	7	8	8	9	16	12	9	10	7	10	10	5	10	13	3	4	5	1	0	7.8	16.3
19-Feb	0	1	0	0	0	0	0	0	0	1	1	2	3	1	0	0	2	3	4	4	2	2	3	1	1.3	4.0
20-Feb	0	1	2	0	0	0	0	0	2	1	1	2	2	1	2	2	1	2	3	1	1	2	4	4	1.5	4.1
21-Feb	3	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0.4	3.4
22-Feb	3	1	2	3	2	3	3	1	3	2	2	1	1	1	1	0	0	0	2	2	1	2	1	1	1.7	3.4
23-Feb	1	1	1	0	0	0	1	1	2	1	2	1	2	3	2	2	2	9	9	1	0	0	0	0	1.7	9.0
24-Feb	0	0	0	0	1	1	1	2	2	2	2	3	0	1	1	2	4	0	6	0	1	0	1	2	1.3	6.2
25-Feb	1	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	1	1	2	1	1	3	2	1	0.9	2.8
26-Feb	0	1	1	2	3	3	4	4	5	6	4	5	5	5	6	6	5	5	5	6	5	5	4	2	4.0	6.1
27-Feb	4	0	0	0	0	0	1	2	3	3	4	2	2	2	2	2	2	4	3	5	4	6	5	3	2.6	6.1
28-Feb	3	3	2	3	2	2	2	2	4	6	3	6	5	4	5	6	5	4	4	4	4	4	4	4	3.8	6.1
	3.9	3.4	3.1	3.0	2.5	2.8	3.1	3.4	3.7	4.9	4.4	4.5	4.5	4.3	3.6	3.8	3.7	3.5	3.8	3.0	3.7	3.9	4.1	3.5	Diurnal Average	
	23.2	19.8	16.4	13.0	12.8	19.0	23.8	16.5	15.4	20.1	28.4	26.4	29.0	26.4	14.6	10.5	16.1	13.0	13.1	9.0	15.2	16.3	16.5	16.2	Diurnal Maximum	

M - Maintenance N - Not Valid

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - February 2015

Maximum Value: 37.3 $\mu g/m^3$ on Feb 4 01:00

Maximum Daily Average: 18.7 $\mu g/m^3$ on Feb 4

Minimum Value: 0 $\mu g/m^3$ on Feb 5 04:00

Minimum Daily Average: 1.8 $\mu g/m^3$ on Feb 5

Maximum Diurnal Average: 8.1 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 5.0 $\mu g/m^3$ at hour 5

Monthly Average: 6.57 $\mu g/m^3$

Percentiles: P_1 = 0.0 P_{10} = 1.5 Q_1 = 2.6 Median = 4.9 Q_3 = 8.0 P_{90} = 14.5 P_{99} = 31.3

Hours in Service:	672
Hours of Data:	669
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	19	15	3	8	6	7	7	7	22	11	13	15	13	10	10	9	5	2	4	4	3	2	2	2	8.3	22.0
2-Feb	2	2	3	3	4	3	5	16	12	9	5	2	1	2	2	1	8	19	5	3	22	11	6	4	6.3	21.7
3-Feb	4	11	12	16	5	6	13	12	9	25	23	27	24	4	5	8	14	9	6	12	12	31	24	19	13.9	31.4
4-Feb	37	24	19	18	19	22	32	20	21	23	33	31	37	34	23	25	6	4	4	2	4	2	5	4	18.7	37.3
5-Feb	2	0	1	0	0	0	0	0	0	0	4	3	3	2	2	4	4	1	3	0	3	3	1	3	1.8	4.3
6-Feb	2	2	1	2	3	7	3	2	4	4	7	6	M	37	19	12	12	9	7	8	6	6	6	6	7.3	36.8
7-Feb	6	6	6	5	5	6	6	7	8	9	9	8	8	12	12	20	8	8	9	8	7	8	7	8	8.2	19.5
8-Feb	6	9	8	6	6	7	7	7	6	6	8	8	7	5	6	6	6	6	5	4	6	5	6	6	6.3	8.5
9-Feb	4	4	5	4	4	3	4	4	4	N	N	4	3	4	4	4	4	4	5	5	5	8	6	6	4.4	7.5
10-Feb	6	6	6	7	6	6	6	6	7	7	3	5	6	6	8	6	7	6	6	10	7	7	7	5	6.3	10.0
11-Feb	5	4	4	4	3	4	4	4	2	6	7	8	8	13	9	14	17	14	12	12	22	10	9	14	8.7	22.5
12-Feb	16	13	14	14	18	15	14	14	18	17	14	17	24	14	9	20	18	19	7	6	8	10	11	14	14.4	23.7
13-Feb	19	24	13	5	7	4	5	7	6	6	5	8	7	6	5	8	8	3	4	8	16	21	19	18	9.7	24.4
14-Feb	15	14	11	19	5	3	6	5	7	6	2	2	1	0	2	1	2	1	1	1	1	23	3	5	5.6	23.2
15-Feb	2	6	2	11	5	1	0	0	0	5	5	3	2	3	2	3	3	4	13	16	3	4	4	4	4.2	15.6
16-Feb	3	4	4	2	4	3	3	8	3	2	2	2	1	2	1	2	1	2	0	1	1	3	10	1	2.7	10.1
17-Feb	1	2	1	1	2	2	3	3	3	3	3	5	4	3	5	7	8	7	7	9	9	13	15	11	5.2	14.9
18-Feb	13	9	9	9	14	12	10	10	12	23	17	11	14	14	14	13	7	15	18	5	8	7	5	1	11.3	23.4
19-Feb	1	2	2	1	2	2	0	1	3	3	2	4	5	4	1	2	3	4	5	5	3	4	6	2	2.8	5.8
20-Feb	2	2	4	3	2	1	3	2	4	7	6	3	4	2	3	3	2	9	6	5	3	3	8	7	3.9	8.5
21-Feb	4	3	2	2	3	2	1	2	1	2	2	1	1	1	1	1	0	1	0	1	0	6	11	3	2.0	10.5
22-Feb	6	4	3	5	5	6	5	2	5	5	4	3	4	4	3	3	2	1	4	4	3	3	2	2	3.6	5.8
23-Feb	2	2	2	1	1	4	4	3	5	3	4	2	4	6	5	6	4	15	13	7	0	2	1	1	4.0	15.4
24-Feb	0	1	1	2	2	2	2	3	3	6	5	7	2	4	4	5	9	6	19	5	3	3	3	4	4.1	18.6
25-Feb	3	2	2	2	3	2	1	1	2	3	2	3	2	2	2	2	4	3	3	2	3	4	4	2	2.5	4.1
26-Feb	2	2	2	3	4	5	5	5	6	8	6	6	7	7	9	8	7	8	7	8	8	8	5	4	5.8	8.5
27-Feb	6	2	2	2	1	1	4	3	5	6	7	3	4	5	4	5	3	5	10	10	8	16	18	6	5.6	17.6
28-Feb	5	5	4	5	4	4	4	4	5	8	7	8	7	6	6	9	9	6	5	6	8	7	6	6	5.9	8.7
	7.0	6.5	5.2	5.7	5.0	5.1	5.5	5.7	6.6	8.0	7.7	7.3	7.5	7.5	6.3	7.4	6.5	6.8	6.7	6.0	6.5	8.1	7.5	6.0	Diurnal Average	
	37.3	24.5	18.7	19.1	18.6	22.0	32.2	20.1	22.0	25.2	32.5	30.7	37.3	36.8	22.8	25.4	18.1	19.1	18.6	15.6	22.5	31.4	24.4	19.3	Diurnal Maximum	

M - Maintenance N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - February 2015

Pollutant Rose

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - February 2015

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Clairmont - February 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 7.7 ^{o}C on Feb 23 14:00

Maximum Daily Average: 3.8 ^{o}C on Feb 23

Minimum Value: -30 ^{o}C on Feb 3 05:00

Maximum Diurnal Average: -5.7 ^{o}C at hour 16

Monthly Average: -9.23 ^{o}C

Minimum Daily Average: -24.3 ^{o}C on Feb 3

Minimum Diurnal Average: -11.5 ^{o}C at hour 8

Percentiles: P_1 = -27.3 P_{10} = -18.9 Q_1 = -16.7 Median = -8.8 Q_3 = -2.5 P_{90} = 2.3 P_{99} = 6.4

Hours in Service:	672
Hours of Data:	672
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1-Feb	-24	-24	-25	-24	-24	-24	-23	-22	-21	-19	-17	-15	-14	-14	-13	-13	-14	-15	-16	-16	-16	-16	-16	-16	-18.4	-13.1
2-Feb	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-15	-15	-15	-14	-15	-14	-18	-20	-23	-23	-24	-25	-27	-17.8	-14.3
3-Feb	-27	-27	-28	-29	-30	-30	-29	-28	-27	-27	-24	-22	-20	-18	-17	-18	-18	-20	-22	-23	-24	-25	-26	-27	-24.3	-17.0
4-Feb	-27	-27	-26	-23	-22	-21	-19	-18	-16	-15	-13	-11	-7	-6	-6	-7	-7	-7	-7	-6	-6	-6	-8	-10	-13.4	-5.8
5-Feb	-12	-12	-14	-15	-16	-17	-18	-18	-18	-18	-18	-18	-17	-17	-18	-17	-17	-17	-18	-18	-18	-18	-18	-18	-16.9	-11.7
6-Feb	-19	-19	-19	-19	-19	-19	-19	-19	-20	-20	-20	-20	-19	-19	-19	-19	-19	-19	-20	-20	-20	-20	-19	-19	-19.3	-18.5
7-Feb	-19	-19	-19	-19	-19	-19	-18	-19	-19	-18	-17	-16	-16	-15	-15	-16	-16	-17	-17	-17	-17	-17	-17	-17	-17.5	-14.6
8-Feb	-17	-17	-18	-18	-18	-18	-18	-18	-18	-19	-19	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17.6	-16.7
9-Feb	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-15	-15	-15	-16	-16	-16	-16	-16	-16	-15	-16.2	-14.7
10-Feb	-15	-15	-15	-14	-15	-15	-15	-15	-15	-15	-16	-17	-17	-17	-16	-16	-17	-17	-18	-18	-18	-19	-19	-19	-16.3	-14.4
11-Feb	-19	-19	-19	-18	-18	-18	-18	-18	-17	-16	-15	-13	-12	-11	-9	-11	-11	-11	-12	-12	-12	-12	-12	-11	-14.3	-9.3
12-Feb	-10	-10	-9	-8	-9	-9	-9	-10	-10	-9	-6	-4	-1	1	3	3	0	-1	0	-1	-1	-1	-1	0	-4.3	2.8
13-Feb	0	1	1	0	0	0	-2	-2	-3	-4	-4	-4	-4	-4	-3	-2	-2	-2	-2	-2	-2	-2	-3	-3	-2.0	0.7
14-Feb	-3	-3	-4	-4	-4	-4	-6	-6	-7	-3	1	2	4	6	5	6	6	4	2	1	2	-1	-4	-3	-0.6	6.1
15-Feb	-4	-4	-3	-3	-2	-1	-1	-2	-4	-4	0	0	2	3	4	4	4	2	-1	-3	-4	-5	-6	-5	-1.5	4.1
16-Feb	-5	-5	-4	-4	-5	-5	-7	-8	-7	-7	-7	-7	-7	-6	-5	-5	-5	-7	-8	-9	-10	-10	-10	-11	-6.8	-3.8
17-Feb	-11	-11	-11	-11	-11	-11	-11	-11	-11	-9	-9	-8	-7	-5	-3	-1	-2	-2	-3	-3	-3	-4	-5	-6	-7.0	-1.2
18-Feb	-6	-7	-8	-8	-8	-8	-8	-7	-7	-4	-3	-2	1	3	3	2	2	2	0	-1	-1	-2	2	4	-2.6	4.3
19-Feb	4	4	3	2	0	0	0	-2	-3	-1	1	4	5	6	6	5	4	4	3	3	3	2	2	2	2.4	6.5
20-Feb	1	1	1	0	-1	-2	-2	-2	-3	-3	-1	-1	0	0	0	-1	-1	-2	-3	-4	-5	-5	-5	-4	-1.7	1.5
21-Feb	-4	-3	-4	-5	-6	-7	-7	-8	-8	-8	-7	-6	-5	-5	-4	-4	-3	-5	-7	-7	-7	-7	-8	-10	-6.0	-3.4
22-Feb	-9	-9	-8	-6	-7	-7	-7	-7	-5	-4	-3	0	2	4	6	7	6	5	4	4	3	3	2	3	-0.9	6.6
23-Feb	3	3	2	2	1	0	0	1	1	2	4	6	6	8	7	7	7	6	3	4	4	4	3	6	3.8	7.7
24-Feb	5	5	3	1	1	1	2	2	2	2	4	4	5	5	5	5	3	2	1	-2	-6	-8	-9	-10	0.9	5.5
25-Feb	-10	-11	-11	-12	-12	-12	-12	-13	-13	-12	-12	-11	-10	-9	-9	-8	-8	-9	-9	-9	-8	-9	-9	-9	-10.2	-8.1
26-Feb	-8	-9	-9	-10	-10	-11	-12	-12	-12	-11	-10	-8	-7	-8	-7	-7	-6	-7	-7	-7	-7	-7	-8	-8	-8.7	-6.3
27-Feb	-8	-9	-10	-10	-12	-14	-13	-12	-12	-11	-9	-9	-9	-8	-7	-7	-6	-7	-12	-14	-15	-16	-16	-17	-11.0	-6.1
28-Feb	-18	-19	-19	-18	-17	-17	-16	-15	-13	-11	-9	-7	-5	-3	-1	0	0	-2	-7	-10	-11	-11	-11	-9	-10.3	0.1
	-10.5	-10.7	-10.8	-10.9	-11.3	-11.4	-11.5	-11.5	-11.4	-10.6	-9.3	-8.3	-7.1	-6.2	-5.7	-5.7	-6.0	-6.9	-8.1	-8.8	-9.1	-9.5	-9.9	-9.9	Diurnal Average	
	4.7	4.8	3.2	2.2	1.2	1.5	1.9	1.7	1.5	2.1	4.0	5.9	5.9	7.7	6.9	6.8	6.5	6.1	4.2	3.7	4.4	4.2	3.0	6.1	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Clairmont - February 2015

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - February 2015

Day	Hourly Period Ending At (MST)																								Daily	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	Average	Maximum
1 Spd	0	4	0	2	1	0	2	1	1	1	2	2	1	2	2	3	8	8	5	5	6	6	6	3	1.6	8.4
Dir	248	259	318	264	255	278	262	251	282	242	228	204	273	68	103	46	41	49	66	36	22	30	42	58	32.8	48.5
2 Spd	2	2	3	5	4	3	3	4	4	3	5	5	3	3	2	2	2	2	0	0	1	2	3	1	1.6	4.7
Dir	32	38	46	25	4	355	350	284	294	358	19	34	70	39	51	89	94	339	322	60	261	257	256	252	6.4	24.7
3 Spd	4	2	2	2	0	0	2	3	4	0	1	1	1	2	1	2	3	5	5	1	1	4	3	1	0.7	5.2
Dir	257	248	251	246	131	228	257	244	243	321	251	112	281	245	266	52	36	52	70	67	258	254	253	312	269.0	69.7
4 Spd	1	1	1	3	3	2	2	2	1	1	1	1	1	1	0	6	6	4	4	7	4	7	13	17	2.3	16.6
Dir	221	95	89	258	260	247	262	278	198	95	143	39	141	284	184	52	103	56	35	7	12	13	36	42	33.5	42.0
5 Spd	19	23	24	26	20	21	22	21	23	27	32	34	32	37	34	32	25	26	30	31	28	28	28	25	26.9	36.6
Dir	35	32	35	35	43	42	36	34	28	25	21	30	28	26	27	28	33	35	34	35	37	34	36	38	32.2	25.9
6 Spd	26	24	23	22	22	23	24	24	24	23	22	22	21	23	23	23	22	22	23	21	19	19	18	18	22.1	25.6
Dir	36	38	40	39	38	34	34	33	36	37	38	38	37	35	38	37	34	36	38	36	37	39	39	43	37.0	35.9
7 Spd	17	16	16	16	13	13	12	10	7	5	6	6	6	1	3	7	10	9	7	7	7	9	6	7	8.7	16.5
Dir	41	39	37	37	38	37	44	32	20	18	23	38	37	341	282	37	38	38	36	40	29	33	45	37	35.3	41.4
8 Spd	9	6	7	9	9	9	10	12	14	15	13	15	13	12	10	9	10	14	14	18	16	17	13	12	11.8	17.7
Dir	27	40	65	53	60	56	43	42	40	44	46	43	35	45	46	45	46	48	49	42	39	40	45	42	44.4	42.3
9 Spd	11	9	8	7	6	5	6	6	8	8	6	7	7	5	3	4	5	8	4	4	3	3	3	1	5.3	10.7
Dir	31	43	44	35	56	55	46	54	52	62	50	70	84	31	48	34	78	112	106	81	53	24	70	93	56.9	30.9
10 Spd	2	1	2	3	4	4	6	7	7	8	14	13	15	12	10	11	14	14	15	17	17	16	16	15	9.2	17.3
Dir	81	180	128	134	106	107	107	108	107	62	43	41	35	33	38	42	41	38	45	41	42	41	40	43	49.4	40.8
11 Spd	16	17	16	17	18	17	15	13	12	12	11	10	8	5	3	7	6	4	4	4	4	5	5	3	6.1	17.9
Dir	46	39	42	43	48	46	44	47	42	41	38	40	45	38	190	262	260	220	239	239	276	241	252	229	37.1	47.7
12 Spd	1	2	1	1	2	3	2	1	3	4	1	2	1	2	1	1	3	3	4	2	2	3	1	0	0.1	3.9
Dir	10	150	358	204	274	256	274	236	236	262	232	89	117	77	141	170	298	41	89	77	69	108	33	26	105.7	261.6
13 Spd	1	1	5	4	5	8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	7.7
Dir	173	354	63	58	58	49	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	48.6
14 Spd	N	N	N	N	N	N	N	N	N	N	N	7	8	6	9	9	8	9	9	9	13	4	3	4	--	12.7
Dir	N	N	N	N	N	N	N	N	N	N	N	257	253	233	245	235	232	229	238	244	228	249	320	238	--	228.2
15 Spd	4	3	5	3	4	5	6	9	9	1	4	5	6	6	5	5	6	4	5	4	8	7	9	8	5.3	9.0
Dir	268	259	270	289	257	243	256	255	263	224	239	249	241	252	292	280	255	281	272	260	258	263	258	258	260.3	263.5
16 Spd	8	7	7	9	8	8	4	3	9	16	14	14	14	13	11	11	9	7	7	6	7	6	10	11	5.1	15.9
Dir	256	271	260	255	253	259	258	27	54	48	60	64	58	41	43	41	45	56	58	67	45	45	39	37	38.4	48.4
17 Spd	10	8	5	7	7	3	5	4	2	2	4	9	10	6	2	3	6	5	4	2	3	4	4	2	2.4	10.5
Dir	41	54	40	36	41	48	59	49	79	101	40	39	44	40	23	272	248	249	241	267	135	172	274	258	38.3	44.0
18 Spd	5	5	1	3	3	2	1	1	0	1	3	3	2	1	2	2	4	1	5	5	5	5	11	13	2.7	13.0
Dir	263	254	264	265	272	248	303	127	83	257	259	278	38	179	265	341	101	243	264	257	251	248	224	236	250.3	235.9
19 Spd	16	13	16	8	7	7	9	7	6	6	7	8	8	8	7	7	6	6	4	7	7	5	5	5	7.4	16.0
Dir	231	234	228	254	251	249	245	254	266	261	264	276	256	246	246	236	282	243	255	262	274	258	262	279	250.9	227.7
20 Spd	7	7	5	7	13	10	8	8	8	5	5	5	5	4	3	4	5	2	2	4	7	7	8	7	1.4	12.7
Dir	249	252	260	18	41	38	48	44	52	88	115	123	114	73	39	34	24	35	308	256	251	247	254	263	19.0	41.0
21 Spd	3	9	10	9	11	12	10	8	8	9	7	6	7	5	6	7	7	6	8	9	9	8	5	1	7.2	11.8
Dir	286	49	57	59	60	67	68	63	69	71	59	69	96	68	86	74	85	60	47	47	49	55	58	70	62.8	66.7
22 Spd	1	2	1	3	1	4	3	3	3	3	6	5	4	5	5	11	14	10	14	14	10	8	6	10	5.4	14.2
Dir	79	95	67	153	222	259	245	245	246	239	257	259	251	246	246	221	217	234	226	222	235	232	250	273	235.1	226.2

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - February 2015

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	Daily Average	Daily Maximum
23 Spd	10	10	8	9	8	3	5	6	4	3	4	4	6	3	3	3	1	1	2	9	7	6	5	15	5.0	15.5
Dir	259	255	265	258	259	259	254	245	265	261	271	225	238	236	29	27	19	266	254	236	253	259	252	241	253.9	240.9
24 Spd	9	13	8	5	6	12	12	9	5	5	4	1	1	2	7	6	19	20	22	22	21	20	17	13	5.0	22.4
Dir	255	245	262	296	286	278	296	276	245	240	235	73	142	208	194	251	292	299	327	14	39	49	51	54	317.5	14.1
25 Spd	15	14	11	12	12	13	14	13	13	14	12	12	15	14	14	14	15	15	16	14	15	15	13	12	13.6	15.8
Dir	46	48	56	47	42	42	40	40	41	46	46	45	43	44	41	47	42	41	40	39	36	39	44	45	43.1	40.3
26 Spd	11	11	13	13	11	13	10	9	8	6	8	3	3	6	7	6	2	2	1	0	1	2	3	3	4.0	12.8
Dir	48	47	45	46	44	37	43	43	43	27	33	50	345	262	238	263	308	33	207	239	235	167	250	272	32.7	37.0
27 Spd	3	6	4	7	7	4	2	1	2	4	6	10	11	9	5	5	4	2	1	2	5	1	3	4	1.6	11.3
Dir	80	70	61	40	34	60	112	139	261	206	229	271	275	267	251	238	234	230	358	244	260	260	253	256	268.3	275.4
28 Spd	1	2	7	8	8	9	10	10	11	9	11	12	10	9	7	6	7	5	3	3	3	4	5	9	4.5	12.4
Dir	253	252	259	256	256	255	254	253	248	246	246	259	262	252	227	208	193	195	59	77	75	73	63	50	247.1	259.5
Spd	3.3	3.4	3.6	4.5	4.4	4.1	4.0	3.6	3.8	4.3	4.3	4.4	4.0	3.6	2.7	3.0	3.1	3.6	3.9	4.1	3.8	4.0	3.8	3.2	Diurnal Average	
Dir	19.0	25.6	29.6	28.1	30.9	28.9	26.2	25.1	27.6	35.8	28.7	30.9	29.5	21.0	24.1	23.3	24.0	27.3	24.9	24.3	21.0	28.1	24.5	19.2		
Spd	25.6	24.1	24.3	25.5	21.8	23.1	24.5	23.8	24.2	26.8	31.9	34.4	31.8	36.6	34.4	31.8	25.0	26.3	30.1	30.9	28.5	27.9	27.9	25.3	Diurnal Maximum	
Dir	35.9	38.1	35.1	35.4	37.9	34.0	34.0	33.3	35.7	24.6	21.2	29.8	27.7	25.9	26.5	28.0	33.0	35.4	33.7	34.9	36.9	33.8	35.7	38.4		

Maximum Speed Value: 37 km/h on Feb 5 14:00
Maximum Daily Speed Average: 26.9 km/h on Feb 5
Maximum Diurnal Speed Average: 4.5 km/h at hour 4

Minimum Speed Value: 0 km/h on Feb 4 15:00
Minimum Daily Speed Average: 0.1 km/h on Feb 12
Minimum Diurnal Speed Average: 2.7 km/h at hour 15

Monthly Average Velocity: 3.76 km/h 26.44 deg

Speed Percentiles: $P_1 = 0.4$ $P_{10} = 1.4$ $Q_1 = 3.1$ Median = 6.2 $Q_3 = 10.6$ $P_{90} = 16.4$ $P_{99} = 31.8$

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

Hours in Service:	672
Hours of Data:	643
Hours of Missing Data:	29
Percent Operational Time:	95.7

N - Not Valid

Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	15	6	0	1	1	0	23
NorthEast	47	91	89	38	8	0	273
East	38	18	0	0	0	0	56
SouthEast	15	1	0	0	0	0	16
South	10	2	0	0	0	0	12
SouthWest	42	29	13	0	0	0	84
West	85	75	4	1	0	0	165
NorthWest	11	0	1	2	0	0	14
Total	263	222	107	42	9	0	643

Wind Rose

Wind Speed (WS) (km/h)

Portable Clairmont - February 2015

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Clairmont - February 2015

Maximum Speed: 37 km/h on Feb 5 14:00

Maximum Daily Speed Average: 27.1 km/h on Feb 5

Minimum Speed: 0 km/h on Feb 18 09:00

Minimum Daily Speed Average: 2.3 km/h on Feb 3

Maximum Diurnal Speed Average: 8.7 km/h at hour 21

Minimum Diurnal Speed Average: 7.3 km/h at hour 15

Monthly Average Speed: 8.17 km/h

Percentiles: $P_1 = 0.6$ $P_{10} = 2.0$ $Q_1 = 3.5$ Median = 6.3 $Q_3 = 10.7$ $P_{90} = 16.5$ $P_{99} = 31.8$

Hours in Service:	672
Hours of Data:	643
Hours of Missing Data:	29
Percent Operational Time:	95.7

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	Daily Average	Daily Maximum
1-Feb	1	4	0	2	2	1	2	2	2	1	2	2	2	2	2	4	8	8	5	5	6	6	6	4	3.3	8.4
2-Feb	2	2	3	5	4	3	4	4	4	4	5	5	3	3	2	3	3	2	1	1	1	2	3	1	2.9	4.8
3-Feb	4	2	2	3	0	1	2	3	4	1	1	1	1	2	2	3	4	5	5	1	1	4	3	1	2.3	5.3
4-Feb	2	2	1	3	4	2	2	2	1	1	1	1	1	1	2	6	6	4	4	7	4	7	13	17	4.0	16.7
5-Feb	19	23	24	26	21	21	22	21	24	27	32	34	32	37	34	32	25	26	30	31	29	28	28	25	27.1	36.7
6-Feb	26	24	23	23	22	23	25	24	24	23	22	22	21	23	23	23	22	22	23	21	19	19	18	18	22.2	25.7
7-Feb	17	16	16	16	13	13	12	10	7	6	6	6	6	3	4	7	11	9	7	7	8	9	6	8	9.2	16.6
8-Feb	9	6	7	9	10	9	10	12	14	15	13	15	13	12	10	9	10	14	14	18	17	17	14	12	12.0	17.8
9-Feb	11	9	8	7	6	5	6	6	8	8	6	7	7	6	3	4	5	8	5	4	3	3	4	2	5.9	10.7
10-Feb	2	2	2	3	4	4	6	7	7	8	14	13	15	12	10	11	14	14	15	17	17	16	16	15	10.2	17.3
11-Feb	16	17	16	17	18	17	15	13	13	12	11	10	8	5	4	7	6	5	5	4	4	5	5	3	9.8	18.0
12-Feb	2	2	1	1	2	3	2	1	3	4	2	3	2	3	2	3	3	3	4	3	2	3	2	1	2.5	4.4
13-Feb	2	2	5	4	5	8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	7.8
14-Feb	N	N	N	N	N	N	N	N	N	N	N	7	8	6	9	9	8	9	10	10	13	4	3	4	--	12.8
15-Feb	4	3	5	4	4	5	6	9	9	2	5	5	6	6	5	5	6	4	5	4	8	7	9	8	5.6	9.1
16-Feb	8	7	8	9	8	8	4	4	9	16	14	14	14	13	11	11	9	7	8	7	7	6	10	11	9.3	15.9
17-Feb	10	8	5	7	7	4	5	4	2	3	4	9	11	6	2	4	6	5	4	2	3	4	4	3	5.0	10.5
18-Feb	5	5	2	3	3	4	2	2	0	1	3	4	3	3	3	3	4	3	5	5	5	5	11	13	4.1	13.4
19-Feb	16	13	16	9	7	7	9	7	6	6	7	8	8	8	7	8	6	6	4	7	8	5	5	6	7.9	16.1
20-Feb	7	7	6	10	13	10	8	8	8	6	5	6	5	4	3	4	5	2	3	5	7	7	9	7	6.4	12.8
21-Feb	5	9	10	10	11	12	11	8	8	9	7	6	7	5	6	8	7	7	8	9	9	8	6	1	7.8	12.0
22-Feb	1	2	2	3	2	4	4	4	3	4	6	5	4	5	5	11	14	10	14	14	10	8	6	10	6.3	14.3
23-Feb	10	10	8	9	8	4	5	6	5	3	5	4	6	3	3	3	1	1	3	9	7	6	5	16	5.8	15.6
24-Feb	10	13	9	5	7	12	12	10	6	5	4	4	3	4	7	8	20	21	23	24	21	20	18	13	11.5	24.1
25-Feb	15	14	11	12	12	13	14	13	13	14	12	12	15	14	14	14	15	15	16	14	15	15	13	12	13.7	15.8
26-Feb	11	11	13	13	11	13	10	9	8	6	8	4	3	6	7	6	3	2	1	2	2	2	3	3	6.5	12.9
27-Feb	3	7	4	7	7	4	3	2	2	4	7	10	11	9	6	6	4	2	2	2	5	1	3	4	4.8	11.5
28-Feb	1	2	7	8	8	9	10	10	11	9	12	12	10	9	7	6	7	6	3	3	3	4	6	9	7.2	12.5
	8.0	8.2	7.9	8.4	8.1	8.1	8.0	7.8	7.7	7.6	8.3	8.5	8.3	7.8	7.3	8.0	8.6	8.2	8.4	8.7	8.7	8.3	8.5	8.3	Diurnal Average	
	25.7	24.1	24.4	25.6	21.8	23.1	24.5	23.9	24.3	26.8	32.0	34.5	31.9	36.7	34.4	31.9	25.1	26.3	30.2	31.0	28.5	28.0	28.0	25.3	Diurnal Maximum	

N - Not Valid

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable Clairmont - February 2015

Maximum Value: 97.5 deg on Feb 4 15:00

Minimum Value: 3.2 deg on Feb 6 10:00

Percentiles: P_1 = 3.6 P_{10} = 4.5 Q_1 = 6.7 Median = 12.3 Q_3 = 25.1 P_{90} = 53.6 P_{99} = 87.1

Hours in Service:	672
Hours of Data:	643
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	95.7

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-Feb	87	16	84	29	50	79	46	63	78	41	40	19	75	22	25	24	8	8	19	7	9	7	13	16	86.7
2-Feb	22	30	21	10	8	16	20	11	13	22	11	10	29	25	29	29	57	18	84	50	55	20	13	31	84.3
3-Feb	17	23	14	31	56	76	32	23	11	84	53	50	42	21	70	21	18	8	12	69	34	5	60	96	95.9
4-Feb	65	43	57	66	22	31	31	39	74	54	73	48	41	51	98	14	21	21	12	8	12	8	15	6	97.5
5-Feb	4	4	4	5	7	5	4	4	4	4	4	4	4	4	4	4	6	4	4	4	4	4	3	4	7.0
6-Feb	4	4	4	4	4	3	4	4	4	3	4	6	5	4	4	4	5	4	6	9	5	5	5	5	8.6
7-Feb	6	4	4	4	4	6	9	10	11	21	12	11	13	97	49	19	8	9	8	6	12	7	15	16	96.6
8-Feb	10	13	13	8	11	12	7	6	5	5	6	6	5	6	7	6	7	7	6	5	6	5	7	6	13.0
9-Feb	6	9	8	10	18	18	10	12	11	15	12	17	9	17	29	25	27	6	25	15	33	25	36	42	42.2
10-Feb	34	61	20	16	13	17	13	8	13	15	5	5	5	6	5	6	4	4	5	4	5	4	4	4	60.6
11-Feb	5	4	5	6	5	4	5	5	4	4	4	5	7	23	55	14	17	27	20	20	15	17	10	22	55.5
12-Feb	85	51	76	80	42	26	32	67	34	33	77	47	72	49	72	69	38	36	22	32	39	28	64	73	84.6
13-Feb	91	74	20	24	15	10	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	91.1
14-Feb	N	N	N	N	N	N	N	N	N	N	N	9	9	18	9	6	9	10	8	9	8	28	35	18	34.9
15-Feb	13	42	12	26	8	10	7	5	5	52	27	17	10	18	17	12	16	15	11	10	6	11	7	9	51.9
16-Feb	8	9	13	10	7	5	54	53	14	5	12	7	9	4	4	4	4	8	8	20	32	17	6	5	54.0
17-Feb	4	8	14	5	9	14	8	22	38	40	22	9	7	11	20	42	20	17	24	41	31	37	19	40	42.4
18-Feb	32	11	88	33	31	88	66	73	61	41	23	48	33	82	47	30	40	64	12	13	15	14	12	15	87.9
19-Feb	7	7	7	20	9	6	9	9	11	7	13	11	13	7	20	12	21	9	24	23	13	11	12	14	23.9
20-Feb	8	7	11	56	6	7	10	12	16	11	15	21	21	26	16	15	9	41	79	27	8	7	10	11	78.6
21-Feb	66	12	12	9	8	9	9	10	15	14	10	10	13	24	13	16	10	11	4	4	5	5	11	29	66.4
22-Feb	42	25	48	23	74	26	21	21	23	28	15	20	20	14	17	10	9	8	7	7	9	7	8	7	74.3
23-Feb	5	7	7	6	7	40	13	17	32	45	34	15	9	35	19	17	18	65	64	15	25	15	17	8	64.9
24-Feb	15	9	24	12	16	8	7	8	9	12	18	78	78	84	12	41	8	8	18	22	9	7	11	14	83.9
25-Feb	11	5	10	8	5	5	5	5	5	5	6	5	5	6	9	10	10	5	4	5	4	5	4	4	11.1
26-Feb	5	4	5	6	8	5	5	4	5	11	9	43	42	22	12	14	47	37	57	89	54	30	18	30	88.8
27-Feb	25	15	17	6	7	17	22	62	56	34	25	13	10	11	16	30	13	41	73	27	22	63	33	25	73.4
28-Feb	64	29	11	5	4	5	6	6	6	7	7	6	8	12	16	11	11	58	18	14	18	11	12	5	64.4
	91.1	74.3	87.5	80.4	74.3	87.9	65.8	73.4	77.6	84.3	76.8	78.2	77.5	96.6	97.5	68.8	57.2	64.9	84.3	88.8	55.2	63.1	64.3	95.9	

N - Not Valid

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations

PAZA Passive Results for February 2015

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
7a	Steeprock Creek	**0.4**	**37.7**	**0.4**		
7b	Steeprock Creek	**0.5**	**39.0**	**0.5**		
21a	Eaglesham	**0.3**	**39.0**	**0.5**		
21b	Eaglesham	**0.3**	**41.6**	**0.6**		
33a	Wapiti	**0.4**	**40.9**	**1.6**		
33b	Wapiti	**0.3**	**43.8**	**1.5**		
39a	Clouston Creek	**0.3**	**45.0**	**0.8**		
39b	Clouston Creek	**0.4**	**42.5**	**1.0**		
64a	Girouxville 4				**0.3**	
64b	Girouxville 4				**0.3**	
1	Silver Valley	**0.2**	**44.2**	**1.2**		08-27-081-11 W6M
2	Bay Tree	**0.4**	**35.0**	**1.3**		13-16-078-13 W6M
3	Fourth Creek	**0.4**	**39.2**	**0.7**		04-13-082-07 W6M
4	Gordondale	**0.5**	**47.0**	**1.3**		04-34-078-10 W6M
5	Boone Creek	**0.6**	**36.9**	**0.8**		16-36-074-11 W6M
7	Steeprock Creek	**0.4**	**38.3**	**0.4**		09-35-072-13 W6M
9	Spirit River	**0.3**	**38.1**	**1.3**		08-12-079-07 W6M
10	Woking	**0.5**	**45.5**	**0.8**		01-13-076-07 W6M
11	Webber Creek	**0.7**	**41.8**	**1.1**		09-36-074-09 W6M
12	Hythe	**0.6**	**40.6**	**1.3**		14-36-072-11 W6M
14	Sylvester	**0.2**	**34.8**	**0.5**		08-06-069-12 W6M
16	Beaverlodge	**0.6**	**40.2**	**1.8**		15-36-071-10 W6M
17	Poplar	**0.7**	**38.4**	**1.2**		13-06-073-08 W6M
18	Saddle Hills	**0.5**	**44.6**	**0.7**		04-25-074-07 W6M
19	Wanham	**0.5**	**41.4**	**0.6**		16-22-077-03 W6M
20	Shaftesbury	**0.3**	**46.4**	**1.4**		04-03-082-23 W5M
21	Eaglesham	**0.3**	**40.3**	**0.6**		16-21-079-25 W5M
23	Bear Lake	**0.7**	**40.8**	**1.4**		15-31-072-06 W6M
24	Wembley	**0.6**	**40.8**	**1.4**		12-31-070-08 W6M
25	Pinto Creek	**0.3**	**38.4**	**0.6**		04-24-069-11 W6M
26	Flyingshot	**0.4**	**36.4**	**2.3**		15-36-070-07 W6M
27	Grande Prairie I	**0.3**	**27.9**	**8.7**		08-15-071-06 W6M

PAZA Passive Results for February 2015 (Continued)

28	Clairmont Lake	**0.7**	**49.2**	**1.6**		09-06-073-04 W6M
29	Smoky Heights	**0.8**	**40.7**	**1.7**		04-06-075-02 W6M
30	Fitzsimmons	**0.3**	**36.4**	**1.4**		15-36-072-03 W6M
32	Gold Creek	**0.2**	**28.9**	**3.1**		06-33-067-05 W6M
33	Wapiti	**0.3**	**42.3**	**1.5**		02-25-071-03 W6M
34	Puskwaskau	**0.3**	**35.0**	**0.8**		15-35-074-25 W5M
35	Jean Cote	**0.3**	**47.6**	**0.7**		12-35-079-21 W5M
36	Guy	**0.3**	**42.1**	**0.8**		03-04-076-22 W5M
37	Crooked Creek	**0.3**	**41.4**	**1.6**		16-01-071-26 W5M
38	Karr Creek	**0.2**	**38.1**	**0.9**		10-16-065-02 W6M
39	Clouston Creek	**0.3**	**43.7**	**0.9**		12-01-073-22 W5M
40	McLennan	**0.3**	**44.7**	**0.7**		03-29-077-19 W5M
41	Valleyview	**0.3**	**40.3**	**1.2**		09-30-069-22 W5M
42	Sunset House	**0.4**	**41.3**	**0.6**		05-32-070-19 W5M
43	High Prairie	**0.2**	**42.7**	**1.0**		16-13-074-17 W5M
44	Peavine	**0.2**	**35.8**	**0.4**		03-05-079-15 W5M
45	Gift Lake	**0.1**	**15.5**	**0.3**	**0.1**	10-07-079-12 W5M
46	Little Smoky	**0.3**	**35.3**	**3.0**		12-01-065-21 W5M
47	Kinuso	**0.3**	**36.8**	**0.7**		12-10-073-10 W5M
48	Deer Mountain	**0.3**	**36.2**	**0.5**		15-22-068-09 W5M
49	Grande Prairie HP	**0.4**	**27.8**	**N/S**		17-26-071-06 W6M
50	East Prairie	**0.2**	**37.3**	**0.5**		13-02-072-15 W5M
63	Girouxville 3				**0.2**	14-02-077-23 W5M
64	Girouxville 4				**0.3**	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Passive Summary for February 2015

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2	Hydrogen Sulphide H_2S
	ppb	ppb	ppb	ppb
	Passive Summary for February 2015 (PAZA Zone)			
Mean	**0.4**	**39.0**	**1.3**	**0.2**
Standard Deviation	**0.2**	**6.0**	**1.3**	**0.1**
Minimum	**0.1**	**15.5**	**0.3**	**0.1**
Minimum At	**Gift Lake (#45)**	**Gift Lake (#45)**	**Gift Lake (#45)**	**Gift Lake (#45)**
Maximum	**0.8**	**49.2**	**8.7**	**0.3**
Maximum At	**Smoky Heights (#29)**	**Clairmont Lake (#28)**	**Grande Prairie I (#27)**	**Girouxville 4 (#64)**

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

	SO_2	O_3	NO_2
PAZA Beaverlodge station	**0.7**	**29.0**	**4.5**
PAZA Beaverlodge passive	**0.6**	**40.2**	**1.8**

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

	SO_2	O_3	NO_2
PAZA Henry Pirker station	**0.5**	**22.0**	**14.1**
PAZA Grande Prairie passive	**0.4**	**27.8**	**N/S**

PAZA Passive SO_2 Stations
Average Concentrations in ppb
February 2015
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Peace River
Berwyn
Fairview
Nampa
DAWSON CREEK
POUCE COUPE
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Wembley
Grande Prairie
Valleyview
Kinuso
0.2
0.4
0.3
0.5
0.6
0.7
0.8
0.1
AENV
30 - Day
Objective
11 ppb

Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb
SO_2 Concentration (ppb)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
February 2015
2010
2011
2012
2013
2014
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie HP
East Prairie

PAZA Passive O_3 Stations
Average Concentrations in ppb
February 2015
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Peace River
Fairview
Nampa
44
39
46
35
47
38
40
48
36
15
41
45
45
37
42
45
41
35
42
43
38
41
38
41
49
36
44
37
37
40
28
28
42
41
36
41
41
35
38
40
36
29
38
35
No AENV 30-Day Objective

Alberta Ambient Air Quality Objective - No Annual O_3
February 2015
2010
2011
O_3 Concentration (ppb)
0
10
20
30
40
50
60
70
80
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie...
East Prairie

PAZA Passive NO_2 Stations
Average Concentrations in ppb
February 2015
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Berwyn
Peace River
Fairview
Nampa
DAWSON CREEK
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Valleyview
1.2
0.7
1.4
1.3
1.3
1.3
1.3
0.6
0.7
0.4
0.3
0.6
0.7
0.8
0.8
0.8
1.1
0.7
1.7
0.8
1.0
0.4
1.3
1.2
1.4
1.6
1.4
0.9
0.7
1.8
8.7
1.5
0.5
1.4
2.3
1.6
0.6
0.5
0.6
1.2
0.5
3.1
0.9
3.0
AENV
Annual
Objective
24 ppb

Alberta Ambient Air Quality Objective - Annual NO_2 Objective is 24 ppb
NO_2 Concentration (ppb)
0
1
2
3
4
5
6
7
8
9
10
February 2015
2010
2011
2012
2013
2014
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie HP
East Prairie

PAZA Passive H_2S Stations
Average Concentrations in ppb
February 2015
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Crimshaw
Peace River
Berwyn
Fairview
Nampa
DAWSON CREEK
POUCE COUPE
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Wembley
Grande Prairie
Valleyview
Kinuso
SWAN HILLS
0.1
0.23
No AENV 30-Day Objective

PAZA

ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCES INCIDENCE REPORT

February 2015

Air Monitoring Directive Exceedence Report

Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	294517	Reported To (AESRD Contact):	Taryn
Date & Time Incident Reported to AESRD:	Feb 2 2015, 21:10 Feb 3 2015, 09:18	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Valleyview		
Start Date & Time of Incident:	Feb 2 2015 1800	End Date & Time of Incident:	Feb 2 2015 2100

Reason or Nature of Incident:

On February 2nd, 2015 the H_2S analyzer twice exceeded the 1-hour AAAQ Guideline of 10.5 ppb details as follows:

19:00 HRS MST	H_2S= 14.1 ppb	WS=1.1 km/hr	WD=358.0 degrees
21:00 HRS MST	H_2S= 10.6 ppb	WS=0.1 km/hr	WD=121.3 degrees

Immediate Actions Taken:

Grover Christiansen phoned Barrick Energy at the process at about 7 pm to let them know

Investigation Details:

N/A

Actions Taken to Prevent Reoccurrence (if any):

N/A

Additional Actions Required (if any):

N/A

Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Feb 03, 2015
7-Day Letter Due Date:	Feb 09, 2015		

February 2015 Calibration Reports

PAZA - Henry Pirker Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, CO, THC, TRS

PAZA – Evergreen Park Station with the following calibrations:
SO_2, TRS

PAZA – Smoky Heights Station with the following calibrations:
SO_2, TRS

PAZA – Beaverlodge Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3

PAZA – Valleyview Station with the following calibrations:
SO_2 & H_2S

PAZA – Falher Station with the following calibrations:
SO_2 & H_2S

PAZA – Clairmont Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, THC, TRS

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	12:30	End Time (MST)	15:05:00 PM
Barometric Pressure	705.000 mm	Station Temperature	20.5 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Conc	50.2 ppm	Cal Gas Cert Date	March 10, 2017
		Cal Gas Cylinder #	LL119493
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.000526	Calculated slope	1.002242
Calculated intercept	1.657738	Calculated intercept	2.391601
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.9		9.9	
Coefficient	0.764		0.764	
Pressure	649.3	mm Hg	649.0	mm Hg
Flow	0.478	lpm	0.478	lpm
Lamp intensity	44554	Hz	44234	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	398.1	396.3	1.0046
4995	19.97	199.9	194.9	1.0256
4995	9.97	100.0	95.7	1.0452
4995	0.00	0.0	0.0	As Found Zero
4995	39.93	398.1	396.3	As Found Span
			Average Correction Factor	1.0251

Calculated value of As Found Response: 398.2 ppb Percent Change of As Found: 0.0%

	before calibration		after calibration	
Auto zero	0.0	ppb	0.0	ppb
Auto span	325.8	ppb	328.2	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:30	End Time (MST)	15:05:00 PM
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		
398.1	396.3	1.0046	Correlation Coefficient	0.999821
199.9	194.9	1.0256		
100.0	95.7	1.0452	Slope	1.002242
			Intercept	2.391601

SO2 Calibration
493
393
293
193
93
-7
PPB
As Found
398.1 ppb SO2
199.9 ppb SO2
100.0 ppb SO2
After span
328.2 ppb
As found
zero
Zero
Amb
February 2, 2015

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Installation | Removal | Other: Maintanance

Start Time (MST)	9:20		End Time (MST)	15:25:00 PM	
Barometric Pressure	705.000	mm	Station Temperature	20.5	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	March 10, 2017	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL119493	

DACS Information

DACS make: CR3000 DACS serial No.: 5408

Parameter		NO2	NOx	NO
Before	Data Slope	1.005207	0.999489	0.993078
	Data Offset	0.283849	1.501944	1.447673
After	Data Slope	1.005159	1.003448	0.998916
	Data Offset	0.046627	1.674521	1.713360
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model: 42i Analyzer serial #: 906535087

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.4	mV	5.2	mV
NOx bkgnd	4.8	mV	5.7	mV
NO coefficient	1.004		0.968	
NOx coefficient	1.000		1.000	
NO2 conv temp	327.0	Deg C	327.0	Deg C
Cooler Temp	-2.8	Deg C	-2.8	Deg C
PMT Volt	-844.0	mV	-844.0	mV
R Cell Press	170.4	in Hg	170.1	in Hg
Sample Flow	0.728	LPM	0.729	LPM

Notes: Zero/span adjustment made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: February 3, 2015 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4995	0.00	0.0	0.0	0.0	-0.1	0.1	0.0	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	403.7	403.4	0.1	1.0055	1.0005
2	4995	19.96	203.8	202.6	1.2	200.5	199.7	0.4	1.0165	1.0146
3	4995	9.93	101.6	101.0	0.6	98.1	97.9	0.2	1.0359	1.0315
AFZ	4995	0.00	0.0	0.0	0.0	1.2	1.2	0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	421.2	420.5	0.3	0.9639	0.9597
							Average Correction Factor		1.0193	1.0156

As Found Concentrations: NO_X= 421.2 NO= 417.9 As Found Percent Change NO_X= 3.8% NO= 3.5%

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	1.2	1.2	0.0	-0.1	0.1	0.0	N/A	N/A	N/A	N/A
NO point	402.9	402.9	0.0	403.3	402.9	0.2	0.9989	1.0000	N/A	N/A
300	402.9	90.1	312.7	401.9	90.1	311.3	1.0026	1.0000	1.0048	99.5%
200	402.9	190.7	212.2	402.7	190.7	210.8	1.0004	1.0000	1.0066	99.3%
100	402.9	292.2	110.7	403.4	292.2	110.1	0.9988	1.0000	1.0051	99.5%
					Average Correction Factor		1.0006	1.0000	1.0055	99.5%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.0	0.2	ppb	-0.1	0.1	0.1	ppb
Auto span	370.5	367.5	2.5	ppb	366.6	364.4	1.7	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	15:25:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
312.7	311.3	1.0048	Correlation Coefficient	0.999998
212.2	210.8	1.0066		
110.7	110.1	1.0051	Slope	1.005159
			Intercept	0.046627

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	15:25:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
405.9	403.7	1.0055	Correlation Coefficient	0.999928
203.8	200.5	1.0165		
101.6	98.1	1.0359	Slope	1.003448
			Intercept	1.674521

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	15:25:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
403.6	403.4	1.0005	Correlation Coefficient	0.999902
202.6	199.7	1.0146		
101.0	97.9	1.0315	Slope	0.998916
			Intercept	1.713360

NO Calibration Curve

NOx Calibration
490
440
390
340
290
240
190
140
90
40
-10
As found Span
405.9 /403.6
ppb NOX/NO
adjustment point
203.8/202.6ppb
NOX/NO
101.6/101.0
ppb
NOX/NO
312.7 ppb
NO2
90.1
ppb NO
212.7 ppb
NO2
190.7 ppb
NO
GPT
406.0 ppb NOX
292.2 ppb
NO
110.7 ppb
NO2
AZ
As Left Span
366.6 ppb NOx
364.4 ppb NO2
AMB
As found
Zero
NOx
NO
NO2
February 3, 2015

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:45:00 PM	End Time (MST)	16:25:00 PM
Barometric Pressure	705.000 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	0.998424	Calculated slope	0.991950
Calculated intercept	0.212338	Calculated intercept	0.908557
Analyzer make	Teco 49C	Analyzer serial #	607415761

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.008		1.008	
Lamp temp	57	mV	57	mV
Lamp Intensity A/B	98420/92290	mV	98447/92337	mV
Pressure	684.9	mm Hg	686.6	mm Hg
Flow A	0.731	ccm	0.731	ccm
Flow B	0.729	ccm	0.729	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	-0.3	N/A
5035	0.3	312.7	315.4	0.9916
5035	0.2	212.7	212.1	1.0027
5035	0.1	110.7	110.4	1.0027
5035	0.0	0.0	-0.3	As found zero
5035	0.3	312.7	315.4	As found span
			Average Correction Factor	0.9990

Calculated value of As Found Response: 315.3 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.9	ppb
Auto span	419.5	ppb	445.7	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 14, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:45:00 PM	End Time (MST)	16:25:00 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	-0.3	NA		
312.7	315.4	0.9916	Correlation Coefficient	0.999937
212.7	212.1	1.0027		
110.7	110.4	1.0027	Slope	0.991950
			Intercept	0.908557

O3 Calibration

February 3, 2015

Calibration Report

Parameter **CO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 17, 2015	Previous Calibration	January 27, 2015
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:15	End Time (MST)	13:20:00 PM
Barometric Pressure	716.0 mm/hg	Station Temperature	22.0 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 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.996991	Calculated slope	0.999476
Calculated intercept	0.103766	Calculated intercept	-0.003832
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	-0.162		0.108	
CO span setting	1.001		1.001	
Sample pressure	700.7	mm Hg	711.8	mm Hg
Sample Flow	0.459	LPM	0.465	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	40.05	0.9991
4995	34.96	20.14	20.13	1.0005
4995	17.96	10.38	10.40	0.9979
4995	0.00	0.00	0.31	As Found Zero
4995	69.94	40.02	40.80	As Found Span
			Average Correction Factor	0.9992

Calculated value of As Found Response: 40.474 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.03	ppm	-0.02	ppm
Auto span	20.23	ppm	19.89	ppm

Notes: Zero adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **CO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 17, 2015	Previous Calibration	January 27, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:15	End Time (MST)	13:20:00 PM
Analyzer make/model	Model 48I-TLE	Analyzer serial #	1408761378

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.007	N/A		
40.017	40.052	0.9991	Correlation Coefficient	0.999999
20.142	20.132	1.0005		
10.383	10.404	0.9979	Slope	0.999476
			Intercept	-0.003832

CO Calibration
49
39
29
19
9
-1
PPM
As found span
40.02 ppm CO
20.14 ppm CO
10.38 ppm CO
Analyzer Span
19.89 ppb CO
As found
Zero
corrected
zero
AZ
AMB
February 17, 2015

Calibration Report

Parameter **CH4 / NMHC / THC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 9, 2015
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:

Start Time (MST)	9:00	End Time (MST)	11:25
Barometric Pressure	705.00 mm/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	27.7	PSI
Fuel pressure	42.1	PSI	42.2	PSI
Carrier pressure	30.4	PSI	30.4	PSI
CH4 cal factor	5.78		5.78	E^{-4}
NMHC cal factor	1.93		1.93	E^{-4}
Rt	12.74	Sec	12.74	Sec
Pk Index	23.22		23.22	

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	12.74	1.0115
1996	40.96	7.76	7.62	1.0182
1996	15.99	3.07	2.98	1.0309
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	12.74	As Found Span
			Average Correction Factor	1.0202

Calculated value of As Found Response: 12.692 ppm Percent Change of As Found: 1.5%

	Before		After
Calculated slope	0.996423	Calculated slope	1.011966
Calculated intercept	0.013818	Calculated intercept	0.019301

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.39	ppm	0.03	ppm
Auto span	8.97	ppm	8.76	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	19.07	0.9970
1996	40.96	11.45	11.63	0.9843
1996	15.99	4.52	4.56	0.9930
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	19.07	As Found Span
			Average Correction Factor	0.9914

Calculated value of As Found Response: 18.851 ppm Percent Change of As Found: 0.8%

	Before		After
Calculated slope	0.992819	Calculated slope	0.996244
Calculated intercept	-0.058984	Calculated intercept	-0.039710

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.42	ppm	12.25	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	31.79	1.0036
1996	40.96	19.21	19.24	0.9985
1996	15.99	7.59	7.52	1.0095
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	31.79	As Found Span
			Average Correction Factor	1.0039

Calculated value of As Found Response: 31.550 ppm Percent Change of As Found: 1.1%

	Before		After
Calculated slope	0.994832	Calculated slope	1.003139
Calculated intercept	-0.038535	Calculated intercept	-0.015124

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.37	ppm	0.02	ppm
Auto span	21.38	ppm	21.01	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **CH4**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 9, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	11:25
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	0.020	N/A		
12.891	12.744	1.0115	Correlation Coefficient	0.999954
7.762	7.623	1.0182		
3.068	2.976	1.0309	Slope	1.011966
			Intercept	0.019301

Calibration Summary

Parameter **NMHC**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 9, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	11:25
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	0.020	N/A		
19.010	19.067	0.9970	Correlation Coefficient	0.999933
11.447	11.630	0.9843		
4.524	4.556	0.9930	Slope	0.996244
			Intercept	-0.039710

Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 9, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	11:25
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	0.033	N/A		
31.901	31.786	1.0036	Correlation Coefficient	0.999981
19.209	19.238	0.9985		
7.592	7.520	1.0095	Slope	1.003139
			Intercept	-0.015124

THC/CH4/NMHC Calibration
PPM
35
30
25
20
15
10
5
0
Calibrator as found span
31.9 ppm THC
19.01 ppm
NMHC
19.21 ppm
THC
12.89 ppm
CH4
11.45 ppm
NMHC
7.76 ppm
CH4
7.59 ppm
THC
4.52 ppm
NMHC
3.07 ppm
CH4
Calibrator
Zero
AZ
AS
THC 21.01
NMHC
12.25
CH4
8.76
AMB
CH4_Avg
NMHC_Avg
THC_Avg

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 12, 2015
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:10	End Time (MST)	14:50:00 PM
Barometric Pressure	705.00 mm/Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Conc	10.32 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	1.022733	Calculated slope	1.007799
Calculated intercept	-0.300726	Calculated intercept	0.195060
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.950		0.950	
Background	16.8		16.9	
Pressure	670.3	mm Hg	662.0	mm Hg
Flow	0.455	ccm	0.452	ccm
Lamp Voltage	886	V	886	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	0.02	N/A
4995	39.93	81.84	81.08	1.0094
4995	19.95	41.05	40.50	1.0138
6995	9.95	14.66	14.12	1.0380
4995	0.00	0.00	0.02	As Found Zero
4995	39.93	81.84	81.08	As Found Span
			Average Correction Factor	1.0204

Calculated value of As Found Response: 82.6 ppb Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.41	ppb	0.07	ppb
Auto span	35.62	ppb	34.88	ppb

Notes: No adjustment made
After span was interupted by daily zero/span check

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 2, 2015	Previous Calibration	January 12, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:10	End Time (MST)	14:50:00 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	0.021	N/A		
81.844	81.081	1.0094	Correlation Coefficient	0.999972
41.054	40.495	1.0138		
14.659	14.122	1.0380	Slope	1.007799
			Intercept	0.195060

TRS Calibration
PPB
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
81.84 ppb TRS
41.05 ppb TRS
14.66 ppb TRS
scrubber check
AZ
AS
34.88 ppb
AMB
As Found
Zero
February 2, 2015

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 4 2015	Previous Calibration	January 20 2015
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:15	End Time (MST)	13:45:00 PM
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	25/02/2025
Correction factor	0.031307	Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.989522	Calculated slope	0.990750
Calculated intercept	2.011337	Calculated intercept	1.113316
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.7		11.7	
coefficient	1.24		1.24	
Lamp Voltage	832	volts	832	volts
Chamber Temp	45.3	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	665.6	mm Hg	662.2	mm Hg
Sample Flow	0.45	ccm	0.45	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	0.3	N/A
4995	39.93	394.9	398.2	0.9919
4995	19.97	198.3	198.5	0.9992
4995	9.97	99.2	97.5	1.0175
4995	0.0	0.0	0.3	As Found Zero
4995	39.93	394.9	398.2	As Found Span
			Average Correction Factor	1.0029

Calculated value of As Found Response: 395.702 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.4	ppm
Auto span	256.6	ppm	259.4	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 4 2015	Previous Calibration	January 20 2015
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:15	End Time (MST)	13:45:00 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	0.3	N/A		
394.9	398.2	0.9919	Correlation Coefficient	0.999942
198.3	198.5	0.9992		
99.2	97.5	1.0175	Slope	0.990750
			Intercept	1.113316

SO2 Calibration
495
395
295
195
95
-5
PPB
As found span
394.9 ppb SO2
198.3 ppb SO2
99.2 ppb SO2
AS
259.4 ppb
Zero
Auto Zero
Ambient
February 4 2015

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 4 2015	Previous Calibration	January 20 2015
Station Number	2	Station Location	Evergreen Park
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	9:10	End Time (MST)	12:30
Barometric Pressure	0.921 ATM	Station Temperature	22.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031095	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.998336	Calculated slope	1.007550
Calculated intercept	0.378679	Calculated intercept	0.322352
Analyzer make	TEI Model 43C	Analyzer serial #	3.199E+13

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	41	ppb	41	ppb
coefficient	0.989		0.988	
Lamp Voltage	1061	volts	1060	volts
Chamber Temp	44.3	Deg C	44.4	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	638.7	mm Hg	633.3	mm Hg
Sample Flow	0.606	ccm	0.619	ccm
Lamp Intensity	31,081	mv	31,422	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	81.84	80.9	1.0112
4995	19.97	41.10	40.4	1.0163
6995	9.97	14.69	14.2	1.0335
4995	9.97		0.4	Sox Test
4995	0.00	0.00	-0.3	As Found Zero
4995	39.93	81.84	80.9	As Found Span
			Average Correction Factor	1.0203

Calculated value of As Found Response: 81.44 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	0.2	ppm	-0.1	ppm
Auto span	71.5	ppm	73.1	ppm

Notes: No adjustment made

Calibration Performed By: Dmyrtro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 4 2015	Previous Calibration	January 20 2015
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	9:10	End Time (MST)	12:30
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		
81.8	80.9	1.0112	Correlation Coefficient	0.999998
41.1	40.4	1.0163		
14.7	14.2	1.0335	Slope	1.007550
			Intercept	0.322352

TRS Calibration

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 5, 2015	Previous Calibration	January 21, 2015
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:15:00 PM	End Time (MST)	15:35:00 PM
Barometric Pressure	0.922 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Cert Date	20/01/2016
Correction factor	0.031341	Cal Gas Cylinder #	LL1105159
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.992124	Calculated slope	1.001319
Calculated intercept	0.978130	Calculated intercept	0.715738
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.2		12.3	
coefficient	0.952		0.952	
Lamp Voltage	937	volts	936	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	666	mm Hg	666.6	mm Hg
Sample Flow	0.444	lpm	0.445	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	0.6	N/A
4995	39.93	394.94	394.4	1.0015
4995	19.97	198.31	196.6	1.0086
4995	9.97	99.20	97.1	1.0212
4995	0.0	0.00	0.6	As Found Zero
4995	39.93	394.94	394.4	As Found Span
			Average Correction Factor	1.0104

Calculated value of As Found Response: 391.681 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.5	ppb
Auto span	257.7	ppb	254.4	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 5, 2015	Previous Calibration	January 21, 2015
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	13:15:00 PM	End Time (MST)	15:35:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
394.9	394.4	1.0015	Correlation Coefficient	0.999953
198.3	196.6	1.0086		
99.2	97.1	1.0212	Slope	1.001319
			Intercept	0.715738

Smokey Heights SO_2 Calibration
490
440
390
340
290
240
190
140
90
40
-10
PPB
As Found Span
394.94 ppb SO2
198.31ppb SO2
99.20 ppb SO2
Analyzer Span
254.4 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
February 5, 2015

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 5, 2015	Previous Calibration	January 21, 2015
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:32	End Time (MST)	14:35:00 PM
Barometric Pressure	0.922 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	2844
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031341	Cal Gas Cylinder #	BLM00586
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.007379	Calculated slope	0.997872
Calculated intercept	-0.117940	Calculated intercept	0.485333
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	19	ppb	19.9	ppb
coefficient	0.983		0.983	
Lamp Voltage	849	volts	849	volts
Chamber Temp	43.8	Deg C	43.9	Deg C
Perm Gas Temp	45.01	Deg C	45	Deg C
Pressure	606.8	mm Hg	606.4	mm Hg
Sample Flow	0.621	lpm	0.622	lpm
Lamp Intensity	35,118	mv	34,586	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	0.0	N/A
4995	39.93	81.84	81.8	1.0004
4995	19.97	41.10	40.2	1.0210
6995	9.97	14.69	13.9	1.0589
4995	9.97		0.5	Sox test
4995	0.0	0.00	0.6	As Found Zero
4995	39.93	81.84	81.8	As Found Span
			Average Correction Factor	1.0268

Calculated value of As Found Response: 81.65 ppm Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.6	ppm	0.4	ppm
Auto span	33.3	ppm	32.1	ppm

Notes: Zero adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 5, 2015	Previous Calibration	January 21, 2015
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	10:32	End Time (MST)	14:35:00 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	0.0	N/A		
81.8	81.8	1.0004	Correlation Coefficient	0.999823
41.1	40.2	1.0210		
14.7	13.9	1.0589	Slope	0.997872
			Intercept	0.485333

Smokey Heights TRS Calibration

February 5, 2015

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 12, 2015	Previous Calibration	January 8, 2015
Station Number	4	Station Location	Beaverlodge
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	14:50:00 PM	End Time (MST)	17:00:00 PM
Barometric Pressure	0.908 atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
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	0.988028	Calculated slope	0.993525
Calculated intercept	-0.219057	Calculated intercept	-0.047928
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.77		2.72	
Coefficient	1.053		1.053	
PMT	-767.8	V	-767.8	V
UV Lamp Voltage	1088	V	1090	V
Chamber Temp	45	Deg C	45.5	Deg C
Pressure	656.8	mm Hg	660.1	mm Hg
Sample Flow	0.522	LPM	0.53	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	0.2	N/A
4994	39.92	85.6	86.3	0.9924
4994	19.96	43.0	43.3	0.9926
4994	9.96	21.5	21.5	0.9993
4994	0.00	0.0	0.2	As found zero
4994	39.92	85.6	86.3	As found span
			Average Correction Factor	0.9948

Calculated value of As Found Response: 84.867 ppm Percent Change of As Found: 0.9%

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

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 12, 2015	Previous Calibration	January 8, 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	14:50:00 PM	End Time (MST)	17:00:00 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	0.2	N/A		
85.6	86.3	0.9924	Correlation Coefficient	0.999988
43.0	43.3	0.9926		
21.5	21.5	0.9993	Slope	0.993525
			Intercept	-0.047928

SO2 Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As found Span
85.6 ppb SO2
43.0 ppb SO2
21.5 ppb SO2
Analyzer
Span 60.1 ppb.
AF Zero
Analyzer
Zero
Ambient
February 12, 2015

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February12 2015	Previous Calibration	January 7-8 2015
Station Number	4	Station Location	Beaverlodge

Reason: Routine Installation Removal Other:

Start Time (MST)	9:40		End Time (MST)	14:15:00 PM	
Barometric Pressure	0.917	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	March 10, 2017	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL119493	

DACS Information

DACS make	CR3000	DACS serial No.	5237

Parameter		NO2	NOx	NO
Before	Data Slope	0.997090	0.997181	0.995895
	Data Offset	-1.011182	1.486543	1.809305
After	Data Slope	0.995533	1.013513	1.012008
	Data Offset	0.270888	1.220201	1.427505
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	906535068

Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	3.2	mV	3.2	mV
NOx bkgnd	3.5	mV	3.5	mV
NO coefficient	1.082		1.082	
NOx coefficient	1.004		1.004	
NO2 conv temp	325.5	Deg C	325.7	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-747.8	mV	-747.8	mV
R Cell Press	236.7	in Hg	234.6	in Hg
Sample Flow	0.552	LPM	0.579	LPM

Notes: No adjustment made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: 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	-0.2	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	399.9	398.2	1.0	1.0151	1.0134
2	4995	19.96	203.8	202.6	1.2	199.2	197.5	0.9	1.0229	1.0257
3	4995	9.93	101.6	101.0	0.6	98.0	97.4	0.4	1.0368	1.0365
AFZ	4995	0.00	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	399.9	398.2	1.0	1.0151	1.0134
							Average Correction Factor		1.0249	1.0252

As Found Concentrations: NO_X= 400.4 NO= 398.5 As Found Percent Change NO_X= -1.4% NO= -1.3%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-0.1	-0.1	0.0	-0.1	-0.1	-0.2	N/A	N/A	N/A	N/A
NO point	397.7	397.7	0.0	399.5	397.7	1.1	0.9954	1.0000	N/A	N/A
300	397.7	88.4	309.3	399.2	88.4	310.4	0.9961	1.0000	0.9965	100.4%
200	397.7	187.7	210.0	399.2	187.7	210.8	0.9961	1.0000	0.9960	100.4%
100	397.7	288.4	109.3	398.2	288.4	109.2	0.9988	1.0000	1.0004	100.0%
					Average Correction Factor		0.9970	1.0000	0.9976	100.2%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	-0.1	-0.1	ppb	-0.2	-0.2	-0.1	ppb
Auto span	182.6	181.4	0.8	ppb	189.7	188.3	0.9	ppb

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February12 2015	Previous Calibration	January 7-8 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:40	End Time (MST)	14:15:00 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	-0.2	N/A		
309.3	310.4	0.9965	Correlation Coefficient	0.999998
210.0	210.8	0.9960		
109.3	109.2	1.0004	Slope	0.995533
			Intercept	0.270888

NO_2 Calibration Curve

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February12 2015	Previous Calibration	January 7-8 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:40	End Time (MST)	14:15:00 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		
405.9	399.9	1.0151	Correlation Coefficient	0.999965
203.8	199.2	1.0229		
101.6	98.0	1.0368	Slope	1.013513
			Intercept	1.220201

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February12 2015	Previous Calibration	January 7-8 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:40	End Time (MST)	14:15:00 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		
403.6	398.2	1.0134	Correlation Coefficient	0.999942
202.6	197.5	1.0257		
101.0	97.4	1.0365	Slope	1.012008
			Intercept	1.427505

NO Calibration Curve

NOx Calibration
490
440
390
340
290
240
190
140
90
40
-10
As found Span
405.9 /403.6
ppb NOX/NO
203.8 /202.6ppb
NOX/NO
101.6/101.0
ppb
NOX/NO
GPT
397.7 ppb NOX
309.3 ppb
NO2
88.4 ppb
NO
210.0 ppb
NO2
187.7 ppb
NO
288.4 ppb
NO
109.3 ppb
NO2
As Left Span
189.7 ppb NOx
188.3 ppb NO2
As found
Zero
AZ
AMB
NOx
NO
NO2
February12 2015

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 12, 2014	Previous Calibration	January 8, 2014
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:05:00 PM	End Time (MST)	16:10:00 PM
Barometric Pressure	0.907 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	1.037726	Calculated slope	1.003904
Calculated intercept	-0.549253	Calculated intercept	0.596706
Analyzer make	Teco 49i	Analyzer serial #	1136451236,AMU 1879

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.30	ppb	-0.30	ppb
slope	1.053		1.086	
Lamp temp	53.8	mV	53.9	mV
Lamp Intensity A/B	66424/70216	mV	66401/70191	mV
Pressure	649.7	mm Hg	684.8	mm Hg
Flow A	0.741	LPM	0.772	LPM
Flow B	0.716	LPM	0.743	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	0.2	N/A
5035	0.30	309.3	308.6	1.0022
5035	0.20	210.0	207.2	1.0135
5035	0.10	109.3	107.7	1.0149
5035	0.00	0.0	0.2	As found zero
5035	0.30	309.3	302.1	As found span
			Average Correction Factor	1.0102

Calculated value of As Found Response: 312.7 ppm Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.4	ppb
Auto span	271.4	ppb	282.1	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii,Grover Chrisitiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 12, 2014	Previous Calibration	January 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:05:00 PM	End Time (MST)	16:10:00 PM
Analyzer make/model	Teco 49i	Analyzer serial #	1136451236,AMU 1879

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
309.3	308.6	1.0022	Correlation Coefficient	0.999919
210.0	207.2	1.0135		
109.3	107.7	1.0149	Slope	1.003904
			Intercept	0.596706

O3 Calibration

February 12, 2014

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 24 2015	Previous Calibration	January 22 2015
Station Number	6	Station Location	Valleyview
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	12:00	End Time (MST)	14:20:00 PM
Barometric Pressure	712.00 mmHg	Station Temperature	23.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentratior	50.2 ppm	Cal Gas Exp Date	March 10, 2017
Gas Cylinder Num.	LL119493		
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	0.991245	Calculated slope	0.987794
Calculated intercept	1.967692	Calculated intercept	2.402662
Analyzer make	TEI 43C	Analyzer serial #	609716239

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	15.6		15.6	
Coefficient	1.017		1.017	
UV Lamp Voltage	740	LPM	742	LPM
Chamber Temp	43.3	V	43.3	V
Perm Gas Temp	45	C	45	C
Pressure	672.1	in Hg	674.5	in Hg
Sample Flow	0.485	LPM	0.487	LPM
Lamp Intensity	47427	Hz	47600	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	39.93	398.1	401.9	0.9905
4995	19.97	199.9	198.4	1.0076
4995	9.95	99.8	96.2	1.0369
4995	0.00	0.0	0.1	As found zero
4995	39.93	398.1	401.9	As found span
			Average Correction Factor	1.0117

Calculated value of As Found Response: 400.2 ppm Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	-0.1	ppm	-0.1	ppm
Auto span	280.8	ppm	284.8	ppm

Notes: No adjustments made.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 24 2015	Previous Calibration	January 22 2015
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:00	End Time (MST)	14:20:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716239

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
398.1	401.9	0.9905	Correlation Coefficient	0.999816
199.9	198.4	1.0076		
99.8	96.2	1.0369	Slope	0.987794
			Intercept	2.402662

AZ

SO2 Calibration

Calibration Report

Parameter **H2S**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 24 2015	Previous Calibration	January 22 2015
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:20	End Time (MST)	13:20:00 PM
Barometric Pressure	712.00 mm	Station Temperature	23.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentratior	10.32 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
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.998626	Calculated slope	1.006570
Calculated intercept	-0.040128	Calculated intercept	0.236967
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.4	ppb	7.4	ppb
Coefficient	0.888		0.888	
Lamp Voltage	789	V	789	V
Chamber Temp	44.9	c	45	c
Perm Oven Temp	45	c	45	c
Pressure	569.20	mm Hg	570.10	mm Hg
Sample Flow	0.389	ccm	0.388	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	0.4	N/A
4997	39.91	81.8	81.3	1.0060
4997	19.94	41.0	40.1	1.0226
6995	9.97	14.7	13.9	1.0591
4997	9.97		2.8	Sox Test
4997	0.00	0.0	0.4	As found zero
4997	39.93	81.8	81.3	As found span
			Average Correction Factor	1.0292

Calculated value of As Found Response: 80.78 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.6	ppm
Auto span	66.4	ppm	66.2	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 24 2015	Previous Calibration	January 22 2015
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:20	End Time (MST)	13:20:00 PM
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
81.8	81.3	1.0060	Correlation Coefficient	0.999776
41.0	40.1	1.0226		
14.7	13.9	1.0591	Slope	1.006570
			Intercept	0.236967

H2S Calibration
99
79
59
39
19
-1
PPB
As found span
81.8 ppb H2S
41.0 ppb H2S
14.7 ppb H2S
AS
66.2 ppb H2S
As found
Zero
SOx test
AZ
Ambient
February 24 2015

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 19, 2015	Previous Calibration	January 13, 2015
Station Number	1	Station Location	Falher
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:40	End Time (MST)	15:00:00 PM
Barometric Pressure	0.918 mm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Concentration	50.2 ppm	Cal Gas Expiry Date	10/03/2017
Correction factor	0.031205	Cal Gas Cylinder #	LL119493
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.989437	Calculated slope	0.994206
Calculated intercept	0.341571	Calculated intercept	0.843732
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.5		6.5	
coefficient	0.902		0.902	
Lamp Voltage	863	volts	866	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	675.8	mm Hg	681.9	mm Hg
Sample Flow	0.406	ccm	0.417	ccm
Lamp Intensity	96	%	96	%

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	0.8	N/A
4995	39.93	398.1	400.2	0.9947
4995	19.96	199.8	199.8	1.0003
4995	9.97	100.0	97.8	1.0224
4995	0.0	0.0	0.8	As Found Zero
4995	39.93	398.1	400.2	As Found Span
			Average Correction Factor	1.0058

Calculated value of As Found Response: 395.567 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	0.9	ppm	0.8	ppm
Auto span	357.1	ppm	356.1	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 19, 2015	Previous Calibration	January 13, 2015
Station Number	1	Station Location	Falher
Start Time (MST)	12:40	End Time (MST)	15:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	N/A		
398.1	400.2	0.9947	Correlation Coefficient	0.999921
199.8	199.8	1.0003		
100.0	97.8	1.0224	Slope	0.994206
			Intercept	0.843732

SO2 Calibration
495
395
295
195
95
-5
PPB
398.1 ppb SO2
199.8 ppb SO2
100.0 ppb SO2
Analyzer Span
356.1 ppb SO2
Zero
Zero
Ambient
February 19, 2015

Calibration Report

Parameter **H2S**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 19, 2015	Previous Calibration	January 13, 2015
Station Number	1	Station Location	Falher
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	10:55	End Time (MST)	13:55:00 PM
Barometric Pressure	0.918 mm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031205	Cal Gas Cylinder #	LL110781
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.001286	Calculated slope	0.993195
Calculated intercept	-0.228996	Calculated intercept	0.156319

Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	14.4	ppb	14.3	ppb
coefficient	1.117		1.117	
Lamp Voltage	808	volts	808	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	44.99	Deg C
Pressure	537.1	mm Hg	535	mm Hg
Sample Flow	0.933	lpm	0.931	lpm
Lamp Intensity	91	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	0.1	N/A
4995	39.93	81.84	82.3	0.9939
4995	19.96	41.07	41.1	0.9999
6994	9.97	14.69	14.4	1.0200
4995	0.00	0.00	0.1	As Found Zero
4995	39.93	81.84	82.3	As Found Span
			Average Correction Factor	1.0046

Calculated value of As Found Response: 82.13 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.3	ppm
Auto span	51.1	ppm	52.3	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 19, 2015	Previous Calibration	January 13, 2015
Station Number	1	Station Location	Falher
Start Time (MST)	10:55	End Time (MST)	13:55:00 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	0.1	N/A		
81.8	82.3	0.9939	Correlation Coefficient	0.999964
41.1	41.1	0.9999		
14.7	14.4	1.0200	Slope	0.993195
			Intercept	0.156319

H2S Calibration

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:30	End Time (MST)	12:45
Barometric Pressure	0.925 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	50.2 ppm	Cal Gas Expiry Date	10/03/2017
Gas Cert Reference	LL119493		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.006933	Calculated slope	1.007238
Calculated intercept	1.916025	Calculated intercept	1.308983
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21		21	
Coefficient	1.042		1.042	
UV Lamp Voltage	886	V	886	V
Chamber Temp	44.4	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	681.3	mm Hg	681.8	mm Hg
Sample Flow	0.469	LPM	0.469	LPM
Lamp Intesity	30418	Hz	30508	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	39.93	398.1	394.7	1.0087
4995	19.97	199.9	196.3	1.0181
4995	9.97	100.0	96.7	1.0343
4995	0.00	0.0	0.1	As found zero
4995	39.93	398.1	394.7	As found span
			Average Correction Factor	1.0204

Calculated value of As Found Response: 399.239 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	241.6	ppm	234.5	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:30	End Time (MST)	12:45
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	0.1	N/A		
398.1	394.7	1.0087	Correlation Coefficient	0.999943
199.9	196.3	1.0181		
100.0	96.7	1.0343	Slope	1.007238
			Intercept	1.308983

SO2 Calibration

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont

Reason: Routine Installation Removal Other:

Start Time (MST)	9:35		End Time (MST)	14:40:00 PM	
Barometric Pressure	0.925	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	March 10, 2017	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL119493	

DACS Information

DACS make	CR3000	DACS serial No.	5407

Parameter		NO2	NOx	NO
Before	Data Slope	0.998076	0.998820	0.995687
	Data Offset	-0.364700	0.912916	1.133729
After	Data Slope	0.995337	1.001231	0.998899
	Data Offset	-0.563424	0.907039	0.608158
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	0701120011

Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	6.9	mV	7.2	mV
NOx bkgnd	7.0	mV	7.3	mV
NO coefficient	1.239		1.295	
NOx coefficient	0.999		0.999	
NO2 conv temp	326.0	Deg C	325.3	Deg C
PMT Temp	-2.8	Deg C	-2.8	Deg C
PMT Volt	-845.8	mV	-845.5	mV
R Cell Press	226.8	in Hg	226.4	in Hg
Sample Flow	0.648	LPM	0.652	LPM

Notes: Span adjustment made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: February 10, 2015 Station Location: Clairmont

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	0.0	0.1	0.0	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	404.9	403.7	-0.5	1.0025	0.9996
2	4995	19.96	203.8	202.6	1.2	202.3	201.9	-0.3	1.0071	1.0033
3	4995	9.93	101.6	101.0	0.6	99.5	99.7	0.0	1.0205	1.0127
AFZ	4995	0.00	0.0	0.0	0.0	0.0	0.1	0.0	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	387.2	386.7	-1.1	1.0484	1.0436
							Average Correction Factor		1.0100	1.0052

As Found Concentrations: NO_X= 387.7 NO= 386.1 As Found Percent Change NO_X= -4.5% NO= -4.3%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NOX high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.1	0.1	0.0	0.0	0.1	0.0	N/A	N/A	N/A	N/A
NO point	399.9	399.9	0.0	400.9	399.9	-0.9	0.9974	1.0000	N/A	N/A
300	399.9	89.2	310.7	403.1	89.2	312.3	0.9922	1.0000	0.9948	100.5%
200	399.9	190.6	209.4	403.7	190.6	211.1	0.9906	1.0000	0.9916	100.8%
100	399.9	292.3	107.6	403.6	292.3	109.4	0.9908	1.0000	0.9836	101.7%
					Average Correction Factor		0.9912	1.0000	0.9900	101.0%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.2	0.0	0.3	ppb	0.0	0.0	0.2	ppb
Auto span	171.9	169.9	1.2	ppb	161.9	160.3	1.1	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:35	End Time (MST)	14:40:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
310.7	312.3	0.9948	Correlation Coefficient	0.999981
209.4	211.1	0.9916		
107.6	109.4	0.9836	Slope	0.995337
			Intercept	-0.563424

NO_2 Calibration Curve

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:35	End Time (MST)	14:40:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
405.9	404.9	1.0025	Correlation Coefficient	0.999977
203.8	202.3	1.0071		
101.6	99.5	1.0205	Slope	1.001231
			Intercept	0.907039

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10, 2015	Previous Calibration	January 15, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:35	End Time (MST)	14:40:00 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		
403.6	403.7	0.9996	Correlation Coefficient	0.999986
202.6	201.9	1.0033		
101.0	99.7	1.0127	Slope	0.998899
			Intercept	0.608158

NO Calibration Curve

NOx Calibration
490
440
390
340
290
240
190
140
90
40
-10
As found Span
405.9 /403.6
ppb NOX/NO
adjustment
point
GPT
403.6 ppb NOX
310.7 ppb
NO2
292.3 ppb
NO
203.8 /202.6 ppb
NOX/NO
209.4 ppb
NO2
190.6 ppb
NO
As Left Span
161.9 ppb NOx
160.3ppb NO2
101.6/101.0
ppb
NOX/NO
107.6 ppb
NO2
89.2 ppb
NO
AMB
As found
Zero
AZ
NOx
NO
NO2
February 10, 2015

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10 2015	Previous Calibration	January 15 2015
Station Number	10	Station Location	Clairmont
Reason:	Routine / Install	Removal / remove	Other:
Start Time (MST)	13:00:00 PM	End Time (MST)	15:40:00 PM
Barometric Pressure	0.925 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	0.992334	Calculated slope	1.000953
Calculated intercept	-0.110331	Calculated intercept	-0.286176
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	1.007		0.980	
Cell A intensity	82608	Hz	82618	Hz
Cell B intensity	80160	Hz	80147	Hz
Pressure	674.00	in Hg	679.10	in Hg
CellA Flow	0.708	ccm	0.712	ccm
Cell B Flow	0.697	cmm	0.701	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	0.0	N/A
5035	0.30	310.7	310.9	0.9995
5035	0.20	209.4	208.8	1.0028
5035	0.10	107.6	108.6	0.9910
5035	0.00	0.0	0.0	As found zero
5035	0.30	310.7	319.1	As found span
			Average Correction Factor	0.9978

Calculated value of As Found Response: 316.5 ppm Percent Change of As Found: 1.9%

	before calibration		after calibration	
Auto zero	0.0	ppb	0.0	ppb
Auto span	435.4	ppb	398.2	ppb

Notes: Span adjustments made

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 10 2015	Previous Calibration	January 15 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	13:00:00 PM	End Time (MST)	15:40:00 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	0.0	NA		
310.7	310.9	0.9995	Correlation Coefficient	0.999978
209.4	208.8	1.0028		
107.6	108.6	0.9910	Slope	1.000953
			Intercept	-0.286176

February 10 2015

Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 11, 2015	Previous Calibration	January 16, 2015
Station Number	10	Station Location	Clairmont
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	10:10	End Time (MST)	13:35:00 PM
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	404 ppm CH4/ 201 ppm C3H8	Cal Gas Expiry Date	28/03/2014
Cal Gas CH4 equiv	956.75 ppm	Cal Gas Cylinder #	LL34989
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 1 volt	DACS channel #	12
	Before		After
Calculated slope	0.998530	Calculated slope	0.978566
Calculated intercept	0.091042	Calculated intercept	0.031370
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.50	psi	6.50	psi
THC zero counts	1510	capture	1510	capture
THC span counts	11040	capture	11040	capture
THC zero offset	2309	capture	2309	capture
THC span offset	2343	capture	2343	capture

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)
2996	0.00	0.00	0.04	N/A
2996	69.89	21.81	22.29	0.9783
2996	29.96	9.47	9.57	0.9901
2996	9.97	3.17	3.19	0.9963
2996	0.00	0.00	0.04	As Found Zero
2996	69.93	21.82	22.29	As Found Span
			Average Correction Factor	0.9882

Calculated value of As Found Response: 22.316 ppm Percent Change of As Found: -2.3%

	before calibration		after calibration	
Auto zero	0.11	ppm	0.04	ppm
Auto span	22.19	ppm	22.74	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	February 11, 2015	Previous Calibration	January 16, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	10:10	End Time (MST)	13:35:00 PM
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.036	N/A		
21.81	22.29	0.9783	Correlation Coefficient	0.999955
9.47	9.57	0.9901		
3.17	3.19	0.9963	Slope	0.978566
			Intercept	0.031370

THC Calibration

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	February 11, 2015	Previous Calibration	January 16, 2015
Station Name	PAZA Rover	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:05 AM	End Time (MST)	12:10
Barometric Pressure	0.935 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	10.32 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	1.015822	Calculated slope	1.025294
Calculated intercept	-0.255687	Calculated intercept	-0.497865
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	25.2	ppb	25.2	ppb
Coefficient	0.957		0.957	
Lamp Voltage	796	V	796	V
Chamber Temp	43.7	C	43.9	C
Perm gas Temp	45	C	45	C
Pressure	668.1	mmHg	670.1	mmHg
Sample Flow	0.435	lpm	0.436	lpm
Lamp Intensity	43275	Hz	43613	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	0.4	N/A
4995	39.93	81.8	80.2	1.0205
4995	19.97	41.1	40.8	1.0073
6995	9.97	14.7	14.8	0.9951
4995	9.97		0.8	Sox Test
4995	0.00	0.0	0.4	As found zero
4995	39.93	81.8	80.2	As found span
			Average Correction Factor	1.0076

Calculated value of As Found Response: 80.80 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.5	ppm
Auto span	63.3	ppm	60.2	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	February 11, 2015	Previous Calibration	January 16, 2015
Station Number	PAZA Rover	Station Location	Clairmont
Start Time (MST)	9:05	End Time (MST)	12:10
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	0.4	N/A		
81.8	80.2	1.0205	Correlation Coefficient	0.999981
41.1	40.8	1.0073		
14.7	14.8	0.9951	Slope	1.025294
			Intercept	-0.497865

TRS Calibration
99
89
79
69
59
49
39
29
19
9
-1
PPB
81.8 ppb TRS
41.1 ppb TRS
14.7 ppb TRS
AS
60.2 ppb TRS
As Found Zero
Sox scrubber
check
AZ
AMB
February 11, 2015