Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
March 2016

Peace Airshed Zone Association
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April 30th, 2016

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

RE: Peace Airshed Zone Association (PAZA) – March 2016 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **March 2016**.

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

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

Company	Facility	LSD	EPEA Approval Number
	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	152645-01-00
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00
Devon Canada	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00
	North Normanville	03-36-079-23-W5	00047455-01-00
	West Culp	05-34-078-25-W6	00136284-00-00
	Cecil	08-15-084-08-W6	00010032-02-00
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	1464-02-03
Exshaw Oil Corporation	Spirit River	03-10-077-07-W6	344521-00-00
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	00238762-00-00
Long Run Exploration	Eaglesham	01-25-076-01-W6	00241532-00-00
	Kakut	14-12-075-03-W6	00248469-00-00
	Donnelly	06-01-077-21-W5	00000087-02-00
	Puskwaskau	03-26-074-01-W6	00017524-01-00
Longview Oil Corp.	Sunset House	06-22-070-20-W5	138884-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	00001746-02-00

Company	Facility	LSD	EPEA Approval Number
	Pouce Coupe	16-07-078-11-W6	00000614-01-00
Petrus Resources	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	00000263-01-00
	Gordondale	11-26-079-09-W6	00011495-01-01
	Pouce Coupe/Bonanza	3-23-080-13-W6	00070203-01-01
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00
TAQA North Ltd.	Valhalla	13-21-076-09-W6	00017620-01-00
Veresen Energy	Hythe Brainard	11-18-074-12-W6	00010910-02-00
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	00000113-02-00

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

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

During the month of **March** 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 March.

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 March.

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 March.

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 March.

Valleyview Station:

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

Rycroft-Portable Station:

- The measured ambient air quality was within the AAAQO for the Rycroft station.
- All analyzers and sensors at the Falher station had an operational uptime greater than 90% for the month of March.
- The station was restarted in March 2016.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of March: Fourth Creek, Webber Creek, Shaftesbury, Clouston Creek and Girouxville 3. The passive sample analyses were performed by MAXXAM Analytics Inc.

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

- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.7 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 4.7 ppb, with a mean of 0.8 ppb.
- Monthly average concentrations for O_3 passives ranged from 34.3 ppb to 72.2 ppb, with a mean of 48.8 ppb.
- Monthly average concentrations for H_2S passives were 0.3 ppb at all locations.

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

Mar-2016	Peace Airshed Zone Assocation						Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
Pollutant (units)	Objectives 1-hr	Objectives 24-hr	Station	Monthly Average	Exceedence 1-hr	Exceedence 24-hr	Conc	Day	Conc	Day	Operational Time (%)	Calibration Date
SO_2 (ppb)	172	48	Henry Pirker	0.1	0	0	3.2	Mar-02 07:00	0.6	Mar-02	100%	Mar-14
SO_2 (ppb)	172	48	Evergreen Park	0.2	0	0	2.3	Mar-29 09:00	0.4	Mar-29	100%	Mar-10
SO_2 (ppb)	172	48	Smoky Heights	0.4	0	0	9.4	Mar-19 13:00	0.8	Mar-13	100%	Mar-22
SO_2 (ppb)	172	48	Beaverlodge	0.4	0	0	2.4	Mar-02 18:00	1.1	Mar-02	100%	Mar-23
SO_2 (ppb)	172	48	Valleyview	0.4	0	0	9.8	Mar-08 14:00	1.5	Mar-29	100%	Mar-17
SO_2 (ppb)	172	48	Falher-Idle	-	0	0	-	-	-	-	-	-
SO_2 (ppb)	172	48	Rycroft-Portable	0.3	0	0	3.2	Mar-09 13:00	0.9	Mar-09	100%	Mar-02
NO (ppb)			Henry Pirker	2.8	0	0	76.0	Mar-01 02:00	18.0	Mar-01	100%	Mar-14
NO_2 (ppb)	159	106	Henry Pirker	9.1	0	0	46.4	Mar-10 21:00	20.8	Mar-01	100%	Mar-14
NO_X (ppb)			Henry Pirker	12.0	0	0	119.1	Mar-01 02:00	38.9	Mar-01	100%	Mar-14
NO (ppb)			Beaverlodge	0.6	0	0	11.4	Mar-05 09:00	1.7	Mar-04	100%	Mar-23
NO_2 (ppb)	159	106	Beaverlodge	3.2	0	0	18.2	Mar-04 20:00	7.0	Mar-04	100%	Mar-23
NO_X (ppb)			Beaverlodge	3.9	0	0	29.2	Mar-05 09:00	8.7	Mar-04	100%	Mar-23
NO (ppb)			Rycroft-Portable	0.3	0	0	11.0	Mar-08 10:00	2.3	Mar-08	100%	Mar-02
NO_2 (ppb)	159	106	Rycroft-Portable	1.8	0	0	10.9	Mar-10 02:00	5.7	Mar-08	100%	Mar-02
NO_X (ppb)			Rycroft-Portable	2.1	0	0	19.3	Mar-08 10:00	8.1	Mar-08	100%	Mar-02
O_3 (ppb)	82		Henry Pirker	26.8	0	-	47.3	Mar-13 16:00	36.3	Mar-28	100%	Mar-14
O_3 (ppb) - 8-hr			Henry Pirker		0				44.1	Mar-28		-
O_3 (ppb)	82		Beaverlodge	33.7	0	-	46.3	Mar-28 17:00	40.4	Mar-11	100%	Mar-23
O_3 (ppb) - 8-hr			Beaverlodge		0				44.9	Mar-13		-
O_3 (ppb)	82		Rycroft-Portable	33.9	0	-	49.3	Mar-28 16:00	40.9	Mar-28	100%	Mar-02
O_3 (ppb) - 8-hr			Rycroft-Portable		0				47.7	Mar-28		-
CO (ppm)	13		Henry Pirker	0.23	0	-	0.9	Mar-01 01:00	0.3	Mar-01	100%	Mar-15
CO (ppm) - 8-hr	5		Henry Pirker		0				0.8	Mar-01		-

PAZA Monthly Continuous Data Summary – continued

Mar-2016			Peace Airshed Zone Assocation				Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
THC (ppm)			Henry Pirker	2.0	-	-	2.5	Mar-01 02:00	2.2	Mar-01	100%	Mar-15
CH_4 (ppm)			Henry Pirker	2.0	-	-	2.5	Mar-01 02:00	2.2	Mar-01	100%	Mar-15
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Mar-01 14:00	0.0	Mar-01	100%	Mar-15
THC (ppm)			Rycroft-Portable	1.98	-	-	2.4	Mar-10 02:00	2.1	Mar-10	100%	Mar-09
TRS (ppb)			Henry Pirker	0.2	-	-	1.0	Mar-09 11:00	0.4	Mar-01	100%	Mar-15
TRS (ppb)			Evergreen Park	0.3	-	-	4.3	Mar-09 06:00	0.8	Mar-09	100%	Mar-10
TRS (ppb)			Smoky Heights	0.0	-	-	0.3	Mar-24 09:00	0.1	Mar-01	100%	Mar-22
TRS (ppb)			Rycroft-Portable	0.3	-	-	0.7	Mar-17 16:00	0.5	Mar-08	100%	Mar-03
H_2S (ppb)	10	3	Valleyview	0.2	0	0	4.1	Mar-14 02:00	0.5	Mar-16	100%	Mar-17
H_2S (ppb)	10	3	Falher-Idle	-	0	0	-	-	-	-	-	-
$PM_{2.5}$ (µg/m3)	80	30	Henry Pirker	4.3	0	0	30.6	Mar-27 01:00	7.6	Mar-27	100%	Feb-03
$PM_{2.5}$ (µg/m3)	80	30	Evergreen Park	2.4	0	0	24.5	Mar-11 23:00	4.5	Mar-10	100%	Feb-04
$PM_{2.5}$ (µg/m3)	80	30	Smoky Heights	3.3	0	0	51.8	Mar-22 00:00	7.2	Mar-10	100%	Feb-09
$PM_{2.5}$ (µg/m3)	80	30	Beaverlodge	3.3	0	0	20.5	Mar-03 22:00	7.6	Mar-04	100%	Feb-10
$PM_{2.5}$ (µg/m3)	80	30	Rycroft-Portable	1.3	0	0	7.6	Mar-08 02:00	3.9	Mar-08	100%	Mar-03
RH (%)			Henry Pirker	65.5	-	-	87.5	Mar-13 04:00	83.9	Mar-06	100%	-
RH (%)			Evergreen Park	71.1	-	-	98.4	Mar-08 02:00	95.4	Mar-06	100%	-
RH (%)			Beaverlodge	72.6	-	-	100.0	Mar-05 20:00	97.5	Mar-06	100%	-
RH (%)			Valleyview	61.9	-	-	96.8	Mar-24 00:00	90.5	Mar-06	100%	-
SR (W/m^2)			Henry Pirker	112.5	-	-	589.1	Mar-25 13:00	187.6	Mar-31	100%	-
Temp (°C)			Henry Pirker	0.5	-	-	16.8	Mar-31 17:00	8.2	Mar-31	100%	-
Temp (°C)			Evergreen Park	0.5	-	-	17.0	Mar-31 18:00	8.0	Mar-31	100%	-
Temp (°C)			Smoky Heights	-0.2	-	-	15.3	Mar-31 18:00	9.0	Mar-30	100%	-
Temp (°C)			Beaverlodge	0.3	-	-	16.6	Mar-31 18:00	8.7	Mar-31	100%	-
Temp (°C)			Valleyview	2.0	-	-	17.5	Mar-31 17:00	9.5	Mar-30	100%	-
Temp (°C)			Falher-Idle	-	-	-	-	-	-	-	-	-
Temp (°C)			Rycroft-Portable	-	-	-	-	-	-	-	-	-

PAZA Monthly Continuous Data Summary – continued

Mar-2016	Peace Airshed Zone Assocation						Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
WSPD s (km/hr)			Henry Pirker	5.2	-	-	20.0	Mar-11 10:00	10.6	Mar-11	100%	-
WSPD s (km/hr)			Evergreen Park	8.8	-	-	42.0	Mar-11 10:00	21.4	Mar-11	100%	-
WSPD s (km/hr)			Smoky Heights	10.6	-	-	51.0	Mar-26 19:00	25.6	Mar-26	100%	-
WSPD s (km/hr)			Beaverlodge	8.2	-	-	46.0	Mar-11 06:00	22.1	Mar-11	100%	-
WSPD s (km/hr)			Valleyview	4.6	-	-	17.0	Mar-16 15:00	9.6	Mar-16	100%	-
WSPD s (km/hr)			Falher-Idle	-	-	-	-	-	-	-	-	-
WSPD s (km/hr)			Rycroft-Portable	7.9	-	-	23.0	Mar-30 15:00	15.1	Mar-21	100%	-
WSPD v (km/hr)			Henry Pirker	1.5	-	-	20.0	Mar-11 10:00	7.7	Mar-11	100%	-
WSPD v (km/hr)			Evergreen Park	3.1	-	-	41.0	Mar-11 10:00	15.9	Mar-11	100%	-
WSPD v (km/hr)			Smoky Heights	3.4	-	-	51.0	Mar-26 19:00	16.6	Mar-26	100%	-
WSPD v (km/hr)			Beaverlodge	1.8	-	-	45.0	Mar-11 06:00	13.9	Mar-11	100%	-
WSPD v (km/hr)			Valleyview	1.7	-	-	17.0	Mar-16 15:00	7.9	Mar-16	100%	-
WSPD v (km/hr)			Falher-Idle	-	-	-	-	-	-	-	-	-
WSPD v (km/hr)			Rycroft-Portable	1.4	-	-	23.0	Mar-30 15:00	14.9	Mar-21	100%	-
WDIR			Henry Pirker	W	-	-	-	-	-	-	100%	-
WDIR			Evergreen Park	WNW	-	-	-	-	-	-	100%	-
WDIR			Smoky Heights	WNW	-	-	-	-	-	-	100%	-
WDIR			Beaverlodge	N	-	-	-	-	-	-	100%	-
WDIR			Valleyview	NNW	-	-	-	-	-	-	100%	-
WDIR			Falher-Idle	-	-	-	-	-	-	-	-	-
WDIR			Rycroft-Portable	NNW	-	-	-	-	-	-	100%	-

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
NOx/NO/NO_2	TEI	42i	No operational issues observed.
O_3	TEI	49i	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC/CH_4/NMHC	TEI	55I	No operational issues observed.
TRS	TEI	45C/43C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PAZA – Smoky Heights Station

General Station Issues

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Parameter	Make	Model	Notes
SO_2	TEI	43CTL	No operational issues observed.
NOx/NO/NO_2	TEI	42C	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
ET	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
H_2S	TEI	43A	Analyzer returned invalid readings for 1 hour.
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

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-Rycroft

General Station Issues

Power outage April 20th.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
NO_x	TEI	42i	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA
Henry Pirker Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppb on Mar 2 07:00 Maximum Daily Average: 0.6 ppb on Mar 2

Minimum Value: 0 ppb on Mar 1 05:00 Minimum Daily Average: 0.0 ppb on Mar 11
Maximum Diurnal Average: 0.2 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 3
Monthly Average: 0.12 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.4 P_{99} = 1.1

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
2-Mar	0	0	0	1	1	1	3	2	1	1	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0.6	3.2
3-Mar	0	0	0	0	0	0	0	0	0	0	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.7
4-Mar	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
5-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0.2	0.7
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0.3	1.4
7-Mar	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.8
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
9-Mar	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	0.4
10-Mar	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
11-Mar	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
12-Mar	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
13-Mar	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	0.2
14-Mar	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.3
15-Mar	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	0.3
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
17-Mar	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	A	0	0	0	0	0.2	1.3
18-Mar	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
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	0	1	1	0	0	0	0	0.3	1.0
21-Mar	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.8
22-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.6
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
24-Mar	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
25-Mar	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
26-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
28-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Mar	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	0.4
30-Mar	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	0.5
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6
	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	Diurnal Average	
	0.6	0.4	0.2	0.6	0.8	0.7	3.2	2.4	0.7	1.2	1.1	0.7	1.3	1.0	0.7	0.5	0.7	1.1	1.4	1.2	0.9	0.2	0.3	0.3	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - March 2016

Maximum Value: 5.8 ppb on Mar 14 12:00

Maximum Daily Average: 1.1 ppb on Mar 2

Minimum Value: 0 ppb on Mar 3 21:00

Minimum Daily Average: 0.0 ppb on Mar 11

Maximum Diurnal Average: 0.5 ppb at hour 12

Minimum Diurnal Average: 0.1 ppb at hour 3

Monthly Average: 0.28 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 0.7$ $P_{99} = 2.6$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	1	0	0	0	0	0	0	0	0.2	0.8
2-Mar	0	0	0	1	1	2	4	4	2	2	0	A	1	1	0	1	0	3	2	0	0	0	0	0	1.1	4.0
3-Mar	0	0	0	0	0	0	0	0	0	0	A	2	1	1	1	0	1	0	1	0	0	0	0	0	0.3	1.5
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
5-Mar	0	0	0	0	0	0	0	0	A	0	0	1	0	0	1	1	1	1	2	1	0	0	1	0	0.4	1.7
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	1	3	2	2	3	3	0	1	0	0.6	2.9
7-Mar	0	0	0	0	0	0	A	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0.3	1.8
8-Mar	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
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.1	1.3
10-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.3	0.6
11-Mar	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	0.2
12-Mar	0	A	0	0	0	0	0	0	0	1	2	1	1	0	1	1	0	0	0	1	1	0	1	0	0.4	1.8
13-Mar	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	0.4
14-Mar	0	0	0	0	0	0	0	0	C	C	C	6	0	0	0	0	0	0	0	0	0	0	A	0	0.3	5.8
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0.1	1.0
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0.1	0.7
17-Mar	0	0	0	0	0	0	0	0	0	0	2	1	4	0	0	0	0	0	1	A	0	0	0	0	0.5	3.8
18-Mar	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
19-Mar	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.6
20-Mar	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	A	0	1	2	0	0	0	0	0.5	1.6
21-Mar	2	1	0	0	0	0	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0.5	1.6
22-Mar	0	0	0	0	1	0	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0.4	0.8
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
24-Mar	0	0	0	0	1	1	1	2	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
25-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.5
26-Mar	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
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
28-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
29-Mar	0	0	0	0	0	0	0	A	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6
30-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0.2	0.9
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.3	1.1
	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	Diurnal Average	
	1.6	0.9	0.3	1.4	1.4	2.5	4.0	3.9	2.1	2.6	2.5	5.8	3.8	1.5	1.2	1.0	2.9	3.0	2.1	2.6	2.7	0.4	0.7	0.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2016

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

Maximum Value: 1.0 ppb on Mar 9 11:00 Maximum Daily Average: 0.4 ppb on Mar 1

Minimum Value: 0 ppb on Mar 8 23:00 Minimum Daily Average: 0.0 ppb on Mar 21

Maximum Diurnal Average: 0.3 ppb at hour 6 Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.23 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 0.6$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	1	1	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
2-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
3-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
5-Mar	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
6-Mar	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	0.3
7-Mar	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	0.5
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
10-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.3	0.6
11-Mar	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	0.3
12-Mar	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
13-Mar	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
14-Mar	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
15-Mar	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.4
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
19-Mar	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6
20-Mar	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
21-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.2
22-Mar	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
23-Mar	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
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0.3	0.5
25-Mar	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
26-Mar	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
27-Mar	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
28-Mar	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
29-Mar	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
30-Mar	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
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.9	1.0	0.8	0.5	0.4	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.5	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

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2016

Maximum Value: 1.5 ppb on Mar 9 11:00

Maximum Daily Average: 0.9 ppb on Mar 1

Minimum Value: 0 ppb on Mar 21 02:00

Minimum Daily Average: 0.5 ppb on Mar 21

Maximum Diurnal Average: 0.7 ppb at hour 6

Minimum Diurnal Average: 0.6 ppb at hour 18

Monthly Average: 0.69 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.1$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	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	1.2
2-Mar	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
3-Mar	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
4-Mar	1	1	1	1	1	1	1	0	1	A	0	1	1	0	1	1	1	0	1	1	1	1	1	1	0.6	1.0
5-Mar	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0.6	0.9
6-Mar	1	1	0	1	1	0	0	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.8
7-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.7	0.9
8-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.7	0.9
9-Mar	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	1.5
10-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
11-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.8
12-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
13-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.8
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	A	1	0.6	0.9
15-Mar	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0
16-Mar	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	A	1	1	1	0.6	0.8
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.9
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.1
19-Mar	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	0	0	0	0.8	1.0
20-Mar	1	1	0	1	1	1	0	1	0	0	1	0	1	1	0	1	A	1	0	0	0	1	0	0	0.5	0.9
21-Mar	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	A	0	1	1	1	0	1	1	1	0.5	0.8
22-Mar	1	0	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	0.9
23-Mar	1	1	0	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	0.7	1.1
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
25-Mar	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	1.3
26-Mar	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
27-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	1.1
28-Mar	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.7	1.0
29-Mar	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
30-Mar	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0.6	0.9
31-Mar	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.6	Diurnal Average	
	1.2	1.1	1.0	1.0	1.1	1.3	1.1	1.1	1.2	1.4	1.5	1.3	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.0	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2016

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.4 ppb on Mar 10 21:00
Maximum Daily Average: 20.8 ppb on Mar 1

Minimum Value: 1 ppb on Mar 26 16:00
Maximum Diurnal Average: 14.6 ppb at hour 8
Monthly Average: 9.13 ppb

Minimum Daily Average: 4.1 ppb on Mar 21
Minimum Diurnal Average: 4.6 ppb at hour 16
Percentiles: P_1 = 1.1 P_{10} = 2.7 Q_1 = 4.0 Median = 6.5 Q_3 = 11.8 P_{90} = 19.1 P_{99} = 36.1

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	44	43	36	31	33	31	31	34	29	23	16	13	A	17	19	8	9	12	15	8	8	8	5	5	20.8	43.6
2-Mar	4	4	4	4	3	4	6	8	7	4	3	A	4	4	4	5	4	5	7	6	7	10	8	4	5.2	10.1
3-Mar	3	3	4	4	8	9	11	10	16	12	A	3	2	2	2	2	3	3	10	9	10	11	11	10	6.9	15.6
4-Mar	9	9	8	7	6	5	5	8	7	A	4	5	7	7	7	9	10	13	21	25	31	24	14	15	11.2	30.8
5-Mar	14	16	18	23	25	28	29	24	A	17	20	6	5	4	3	4	4	6	9	6	6	6	4	5	12.2	29.1
6-Mar	5	5	4	4	3	3	3	A	3	4	3	3	3	4	4	4	4	4	4	4	3	4	8	11	4.2	11.0
7-Mar	4	12	17	16	24	33	A	32	15	8	7	7	7	4	5	6	8	14	19	13	7	9	11	15	12.7	32.6
8-Mar	14	11	7	6	7	A	14	21	16	15	14	11	11	7	8	9	11	14	21	29	21	15	14	13	13.4	29.3
9-Mar	30	32	32	25	A	23	26	23	20	15	13	9	13	9	24	17	13	14	15	17	15	13	8	5	17.9	32.1
10-Mar	7	7	7	A	5	6	7	10	12	10	8	7	5	7	7	11	13	10	18	25	46	46	42	25	14.9	46.4
11-Mar	24	16	A	3	2	3	4	5	5	4	3	3	3	4	3	2	5	13	14	13	11	6	5	6	6.8	23.8
12-Mar	6	A	5	6	4	5	14	15	12	6	7	6	4	3	7	3	5	6	11	19	13	4	4	5	7.4	18.5
13-Mar	A	10	13	10	6	5	10	9	8	7	6	3	3	2	2	1	1	3	5	6	6	6	9	A	5.9	13.4
14-Mar	16	8	8	9	12	5	7	11	C	C	C	C	C	2	1	2	2	2	3	4	9	11	A	12	6.9	15.6
15-Mar	11	9	17	25	26	24	23	19	17	13	11	10	5	3	2	2	5	5	6	14	14	A	6	6	11.9	25.6
16-Mar	5	3	3	3	4	7	13	15	11	7	4	2	2	2	6	6	4	5	7	9	A	7	5	6	5.8	15.5
17-Mar	8	9	5	5	3	4	5	5	4	3	2	1	1	1	2	2	3	2	4	A	19	7	7	7	4.6	19.1
18-Mar	8	17	12	15	27	25	27	24	17	15	12	12	7	10	12	6	5	9	A	17	13	10	9	7	13.7	26.7
19-Mar	11	11	10	11	11	14	20	18	20	15	8	7	9	12	8	5	5	A	10	13	10	10	13	11	11.4	20.1
20-Mar	14	8	13	13	12	18	27	19	14	6	6	4	4	3	4	4	A	4	4	5	4	3	4	3	8.5	26.9
21-Mar	3	3	3	3	3	4	5	6	5	4	4	4	3	3	4	A	4	5	5	6	6	6	3	3	4.1	6.4
22-Mar	2	3	2	6	6	5	9	9	8	4	3	3	2	2	A	2	2	3	6	11	24	21	9	5	6.4	23.8
23-Mar	5	5	4	5	5	7	13	16	7	3	3	3	4	A	4	4	4	4	4	4	4	3	3	3	5.1	16.2
24-Mar	2	2	2	3	3	4	6	10	10	6	4	4	A	5	7	6	7	9	11	11	26	28	24	18	9.1	27.8
25-Mar	19	15	9	13	15	17	11	14	9	8	7	A	5	4	3	3	5	6	5	4	8	9	6	4	8.6	19.1
26-Mar	5	4	4	4	5	7	8	10	11	7	A	3	1	1	1	1	1	2	1	5	14	24	34	36	8.2	36.4
27-Mar	36	35	26	17	16	14	19	18	15	A	9	7	5	4	4	2	2	3	8	10	10	7	6	4	12.0	36.1
28-Mar	4	4	5	5	4	3	6	7	A	6	6	3	2	1	2	1	1	2	4	11	10	5	4	2	4.2	11.0
29-Mar	2	2	2	2	4	6	12	A	8	7	5	5	4	6	6	4	6	7	6	6	6	5	3	3	5.2	12.3
30-Mar	3	2	2	3	6	11	A	16	15	21	16	13	10	10	5	3	2	4	5	7	9	6	7	4	7.8	20.8
31-Mar	7	6	6	7	3	A	7	9	6	6	9	8	10	6	5	3	3	3	7	18	26	19	21	19	9.2	26.3
	10.8	10.4	9.6	9.5	9.7	11.4	13.1	14.6	11.7	9.2	7.6	6.0	5.1	5.0	5.6	4.6	5.0	6.3	8.8	11.3	13.3	11.4	10.2	9.0	Diurnal Average	
	43.6	42.7	36.2	31.4	33.1	32.6	31.3	34.4	28.9	23.2	19.7	12.9	13.4	17.2	24.4	16.7	12.7	14.0	21.1	29.3	46.4	45.8	42.5	36.4	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

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - March 2016

Maximum Value: 80.9 ppb on Mar 3 10:00

Maximum Daily Average: 27.0 ppb on Mar 1

Minimum Value: 1 ppb on Mar 26 14:00

Minimum Daily Average: 6.6 ppb on Mar 21

Maximum Diurnal Average: 21.0 ppb at hour 8

Minimum Diurnal Average: 8.0 ppb at hour 14

Monthly Average: 13.53 ppb

Percentiles: P_1 = 2.0 P_{10} = 4.2 Q_1 = 6.3 Median = 10.3 Q_3 = 18.5 P_{90} = 27.3 P_{99} = 47.3

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	51	47	54	34	42	41	37	39	34	30	26	16	A	23	30	12	14	16	24	13	11	13	7	7	27.0	54.0
2-Mar	5	5	6	5	4	6	9	10	10	6	5	A	6	7	6	8	7	8	10	10	17	16	12	7	8.0	16.5
3-Mar	6	5	5	7	13	13	15	17	21	81	A	7	4	3	3	3	9	8	15	14	18	18	16	14	13.6	80.9
4-Mar	12	18	11	12	8	7	9	14	11	A	6	8	8	12	10	11	16	26	26	31	33	31	20	19	15.6	32.9
5-Mar	17	18	24	27	28	32	33	28	A	19	32	8	8	5	4	6	6	14	22	9	8	8	6	7	16.1	32.8
6-Mar	9	7	6	19	5	6	5	A	4	6	4	6	4	10	5	8	26	8	6	6	4	5	12	18	8.3	25.9
7-Mar	5	29	26	26	32	37	A	48	39	32	10	10	10	6	7	8	11	18	24	25	11	11	16	18	19.9	48.4
8-Mar	19	13	9	8	9	A	24	23	19	21	21	13	15	15	10	15	15	25	27	42	29	18	20	19	18.6	42.0
9-Mar	40	39	35	30	A	27	29	31	26	19	27	14	20	12	33	30	18	18	23	22	19	17	11	8	23.8	40.0
10-Mar	9	9	10	A	7	10	9	17	15	15	16	10	10	9	12	30	18	19	22	46	49	48	48	38	20.6	48.9
11-Mar	32	27	A	5	3	4	6	7	14	6	5	4	5	6	5	4	10	21	19	22	14	9	6	18	11.0	32.3
12-Mar	9	A	6	9	7	7	26	22	15	8	12	11	20	5	19	11	8	9	19	31	29	8	6	18	13.8	30.7
13-Mar	A	16	19	16	8	8	18	13	16	11	10	5	4	4	3	2	2	6	6	10	11	8	19	A	9.7	19.2
14-Mar	26	12	12	12	16	8	10	18	C	C	C	C	C	3	2	4	4	4	6	8	13	16	A	15	10.5	26.5
15-Mar	12	11	25	29	30	27	26	26	23	19	14	14	9	5	2	4	7	7	9	20	19	A	8	8	15.4	30.0
16-Mar	6	4	4	5	5	14	16	20	18	12	6	4	4	5	8	9	9	10	9	12	A	15	12	9	9.3	19.6
17-Mar	12	13	6	8	4	7	7	7	7	5	4	2	2	2	3	5	5	3	10	A	34	9	13	10	7.7	34.1
18-Mar	18	22	18	28	33	32	30	29	27	18	14	15	12	14	15	11	8	11	A	20	17	14	15	10	18.7	33.0
19-Mar	15	14	14	18	15	22	25	25	25	21	12	9	11	15	11	8	8	A	14	15	14	16	21	23	16.0	25.4
20-Mar	21	15	18	20	17	25	35	34	21	8	11	6	5	5	6	7	A	5	6	12	6	5	7	4	13.0	35.1
21-Mar	3	4	4	3	5	6	8	8	14	7	7	6	5	11	7	A	6	7	8	9	8	9	4	4	6.6	13.7
22-Mar	3	6	3	7	8	8	14	15	12	7	6	4	3	3	A	2	3	7	12	23	35	27	14	8	10.1	34.6
23-Mar	7	7	6	7	7	10	21	20	12	5	5	4	20	A	6	9	6	6	8	7	5	4	5	4	8.3	20.8
24-Mar	4	3	3	5	5	6	10	25	20	19	18	8	A	7	8	9	9	16	15	15	38	38	32	27	14.9	38.2
25-Mar	28	20	14	18	19	25	13	19	12	11	10	A	6	10	5	4	6	14	13	8	13	14	9	6	12.9	27.7
26-Mar	6	5	7	6	6	8	10	20	14	12	A	5	3	1	2	2	3	3	2	15	25	35	38	41	11.7	40.6
27-Mar	42	39	34	23	20	19	26	25	19	A	16	9	7	6	5	4	2	5	19	15	16	13	10	6	16.5	41.5
28-Mar	5	6	7	9	8	7	8	13	A	9	8	5	3	2	2	2	2	3	8	18	18	6	6	5	7.0	18.5
29-Mar	3	4	4	3	7	8	24	A	13	11	8	7	7	10	9	7	9	9	8	9	9	8	4	5	8.1	23.8
30-Mar	4	3	4	7	12	18	A	20	19	28	23	19	12	17	10	5	4	7	7	12	14	14	15	7	12.2	28.0
31-Mar	11	9	11	13	6	A	12	15	8	11	12	10	16	10	6	4	4	5	19	24	43	23	28	22	14.0	42.9
	14.7	14.3	13.5	13.9	13.0	15.5	17.8	21.0	17.5	16.3	12.5	8.6	8.4	8.0	8.5	8.1	8.4	10.7	13.9	17.4	19.3	15.9	14.6	13.4	Diurnal Average	
	50.6	47.3	54.0	34.1	41.9	40.6	36.7	48.4	39.3	80.9	32.4	19.2	20.1	23.4	32.6	30.3	25.9	26.3	27.4	45.7	48.9	48.2	47.6	40.6	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - March 2016

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2016

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

Maximum Value: 76.0 ppb on Mar 1 02:00

Maximum Daily Average: 18.0 ppb on Mar 1

Minimum Value: 0 ppb on Mar 26 04:00

Minimum Daily Average: 0.4 ppb on Mar 14

Maximum Diurnal Average: 6.3 ppb at hour 11

Minimum Diurnal Average: 0.4 ppb at hour 24

Monthly Average: 2.76 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.3$ Median = 0.7 $Q_3 = 2.3$ $P_{90} = 6.5$ $P_{99} = 33.7$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	61	76	34	17	41	27	14	23	24	24	18	12	A	14	16	3	3	2	2	1	1	1	0	0	18.0	76.0
2-Mar	0	0	0	0	0	1	1	1	2	2	2	A	2	2	1	2	1	1	1	0	1	1	0	0	1.0	2.2
3-Mar	0	0	0	0	0	0	0	0	3	4	A	1	1	1	1	1	1	1	1	1	1	1	0	1	0.9	4.2
4-Mar	0	1	1	1	1	1	1	1	2	A	3	4	5	5	4	5	6	6	4	5	30	8	1	1	4.1	30.2
5-Mar	1	1	2	6	17	39	46	17	A	11	25	2	3	2	2	2	1	1	1	1	0	1	0	1	7.9	46.1
6-Mar	1	0	0	1	1	0	1	A	1	2	2	2	1	2	1	2	1	1	0	0	0	0	0	0	0.9	2.0
7-Mar	0	1	2	1	2	12	A	35	8	5	6	7	7	3	4	7	7	6	3	1	0	0	0	1	5.0	35.0
8-Mar	1	0	0	0	0	A	2	10	14	22	26	21	18	9	8	6	7	3	2	2	0	0	0	0	6.6	26.3
9-Mar	4	3	5	1	A	1	3	4	12	15	16	11	14	8	24	12	4	4	2	1	0	0	0	0	6.4	23.9
10-Mar	0	0	0	A	0	0	0	1	2	3	4	4	3	5	4	5	4	1	1	1	5	20	14	1	3.4	19.9
11-Mar	0	0	A	0	0	0	0	0	1	2	2	2	2	2	2	1	1	2	1	1	0	0	0	0	0.9	2.2
12-Mar	0	A	0	0	0	0	0	1	4	3	4	4	2	2	3	1	1	1	1	0	0	0	0	0	1.2	4.3
13-Mar	A	0	0	0	0	0	0	0	1	2	2	2	1	1	1	0	0	1	0	1	1	1	0	A	0.7	2.3
14-Mar	0	0	0	0	0	0	1	1	C	C	C	C	C	1	1	1	1	0	0	0	0	0	A	0	0.4	1.2
15-Mar	0	0	0	3	5	5	5	6	14	13	10	10	4	2	1	1	2	1	0	0	0	A	0	0	3.7	14.0
16-Mar	0	0	0	0	0	0	0	1	3	3	2	1	1	1	2	1	1	1	0	0	A	0	0	0	0.8	2.9
17-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	A	1	0	0	0	0.5	1.1
18-Mar	0	0	0	0	4	4	8	7	10	14	12	13	6	8	9	3	2	2	A	1	1	0	0	0	4.6	14.2
19-Mar	0	0	0	0	0	0	0	3	11	11	6	5	7	8	3	2	1	A	1	0	0	0	0	0	2.6	10.9
20-Mar	0	0	0	0	0	1	2	3	3	2	2	2	3	2	1	1	A	1	1	1	0	0	0	0	1.1	2.6
21-Mar	0	0	0	0	1	1	1	2	2	1	2	2	2	2	2	A	1	1	1	0	0	0	0	0	1.0	2.1
22-Mar	0	0	0	0	0	0	0	1	2	1	1	1	1	1	A	1	1	1	1	0	2	0	0	0	0.6	2.1
23-Mar	0	0	0	0	0	1	2	3	2	2	2	2	3	A	1	1	1	1	1	1	1	1	1	1	1.1	3.1
24-Mar	0	0	0	1	1	1	1	2	3	3	3	3	A	4	5	4	3	3	1	0	2	3	1	0	1.9	5.4
25-Mar	0	0	0	0	0	1	0	3	5	7	6	A	4	3	1	1	1	1	1	0	0	0	0	0	1.5	6.9
26-Mar	0	0	0	0	0	0	0	1	4	4	A	2	1	0	0	0	0	0	0	0	0	1	12	4	1.4	12.2
27-Mar	6	13	3	1	1	0	1	7	11	A	6	5	3	2	2	1	0	0	1	0	0	0	0	0	2.7	12.6
28-Mar	0	0	0	0	0	0	0	1	A	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4
29-Mar	0	0	0	0	0	0	0	A	2	2	2	2	1	2	3	1	2	1	1	0	0	0	0	0	0.9	2.7
30-Mar	0	0	0	0	0	0	A	2	3	7	5	5	4	4	1	1	1	1	1	0	0	0	0	0	1.5	6.9
31-Mar	0	0	0	0	0	A	0	1	2	2	5	4	5	3	2	1	1	1	1	0	1	0	1	0	1.4	5.1
	2.6	3.3	1.7	1.1	2.5	3.3	3.1	4.8	5.3	6.0	6.3	4.7	3.7	3.3	3.6	2.3	1.9	1.5	1.0	0.6	1.7	1.3	1.1	0.4	Diurnal Average	
	61.2	76.0	34.2	16.8	40.7	39.2	46.1	35.0	24.1	24.0	26.3	21.5	18.0	13.7	23.9	12.0	6.7	5.7	4.5	4.8	30.2	19.9	13.7	4.0	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2016

Maximum Value: 107.6 ppb on Mar 1 02:00

Maximum Daily Average: 33.5 ppb on Mar 1

Minimum Value: 0 ppb on Mar 30 04:00

Minimum Daily Average: 1.5 ppb on Mar 17

Maximum Diurnal Average: 14.3 ppb at hour 10

Minimum Diurnal Average: 2.0 ppb at hour 24

Monthly Average: 6.63 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 1.0$ Median = 2.7 $Q_3 = 6.3$ $P_{90} = 15.8$ $P_{99} = 63.3$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	98	108	87	52	60	61	31	44	44	53	32	18	A	19	29	6	6	7	4	3	3	4	2	2	33.5	107.6
2-Mar	1	1	2	2	2	3	5	6	4	5	5	A	6	4	2	4	4	4	4	2	3	3	1	0	3.1	5.7
3-Mar	1	2	0	0	0	1	0	1	19	70	A	8	2	2	3	1	8	5	6	7	11	2	1	2	6.6	69.9
4-Mar	1	3	2	3	1	1	2	11	3	A	4	6	7	11	7	6	12	27	9	15	52	29	2	3	9.5	51.9
5-Mar	2	2	12	19	28	68	65	43	A	15	62	4	6	5	3	6	3	16	6	1	1	3	1	2	16.2	67.5
6-Mar	6	3	2	8	3	3	4	A	2	4	4	4	3	7	3	9	7	2	1	1	0	0	1	1	3.4	9.4
7-Mar	0	5	5	6	7	27	A	103	37	34	10	11	11	5	6	8	8	8	6	2	1	1	1	1	13.3	103.4
8-Mar	1	1	0	0	1	A	13	15	19	35	37	30	26	14	11	12	10	5	6	11	1	0	0	0	10.9	37.2
9-Mar	11	15	20	4	A	5	5	10	16	20	27	15	29	13	39	31	10	8	7	5	2	1	1	1	12.8	39.1
10-Mar	1	1	1	A	1	2	2	3	5	5	7	6	6	9	8	24	12	3	3	10	17	53	32	4	9.3	52.5
11-Mar	1	1	A	0	0	0	0	1	3	10	3	3	3	4	3	2	3	4	2	2	2	1	1	2	2.2	10.3
12-Mar	2	A	1	0	2	3	7	3	6	4	7	8	11	2	28	12	3	4	2	2	1	1	0	6	4.9	27.8
13-Mar	A	1	0	0	0	0	0	1	2	4	4	3	2	2	1	1	1	3	2	3	3	3	3	A	1.8	3.9
14-Mar	3	0	0	1	1	2	8	2	C	C	C	C	C	1	1	1	2	1	2	1	0	1	A	0	1.5	7.7
15-Mar	0	0	2	10	25	13	18	13	20	20	16	14	8	4	1	2	3	2	1	0	1	A	0	0	7.5	24.6
16-Mar	0	0	0	0	0	0	0	3	7	4	3	2	1	1	3	2	2	2	1	0	A	2	5	1	1.9	7.0
17-Mar	0	0	0	0	0	1	1	5	3	2	2	2	2	1	2	2	3	1	0	A	3	0	2	2	1.5	4.6
18-Mar	0	1	2	5	13	11	16	14	33	18	17	23	12	13	12	7	4	3	A	3	4	2	2	1	9.4	33.3
19-Mar	1	0	0	1	1	2	1	6	16	16	10	8	8	10	5	5	3	A	3	1	3	2	1	9	4.8	15.9
20-Mar	2	1	0	3	2	4	5	38	4	2	6	5	5	4	4	3	A	2	12	2	2	3	3	2	4.9	37.6
21-Mar	1	2	2	1	2	3	4	6	8	5	5	3	3	10	6	A	2	3	3	3	0	0	0	0	3.1	10.4
22-Mar	0	0	0	0	0	0	0	5	3	2	2	2	2	2	A	1	1	2	1	0	64	4	1	1	4.2	63.8
23-Mar	1	1	1	1	1	3	6	8	4	3	4	3	18	A	3	6	3	3	4	3	2	3	2	2	3.6	18.4
24-Mar	2	2	1	3	3	2	3	8	10	27	48	10	A	5	7	6	5	6	4	1	8	13	3	3	7.8	47.7
25-Mar	5	0	0	0	0	4	1	6	6	10	9	A	6	17	5	5	2	2	2	0	0	0	0	0	3.6	17.3
26-Mar	0	0	0	0	0	0	0	12	7	8	A	3	2	1	1	1	1	1	0	1	0	4	26	8	3.4	25.8
27-Mar	19	26	15	3	3	2	6	15	18	A	10	7	5	4	3	2	1	1	18	0	0	1	0	0	7.0	26.2
28-Mar	0	0	0	0	0	0	0	14	A	3	4	2	1	1	1	1	1	1	1	7	0	0	0	0	1.6	13.7
29-Mar	0	0	0	0	0	0	3	A	3	3	3	3	2	4	4	3	3	2	1	0	0	0	0	0	1.6	4.0
30-Mar	0	0	0	0	1	1	A	4	5	13	10	9	6	9	4	1	1	1	3	0	3	2	2	3	3.3	12.8
31-Mar	1	3	4	1	2	A	1	2	3	5	5	12	17	25	2	1	1	8	8	3	12	7	9	2	6.0	25.4
	5.4	6.0	5.5	4.2	5.3	7.7	7.2	13.8	11.1	14.3	12.7	7.9	7.4	7.0	6.9	5.7	4.2	4.5	4.0	3.0	6.6	4.9	3.4	2.0	Diurnal Average	
	97.6	107.6	87.3	51.6	60.3	67.5	64.8	103.4	43.9	69.9	62.3	30.4	28.5	25.4	39.1	31.0	11.8	26.8	17.8	14.9	63.8	52.5	31.9	9.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 119.1 ppb on Mar 1 02:00
Maximum Daily Average: 38.9 ppb on Mar 1

Minimum Value: 1 ppb on Mar 26 16:00
Maximum Diurnal Average: 19.5 ppb at hour 8
Monthly Average: 12.03 ppb

Minimum Daily Average: 4.9 ppb on Mar 28
Minimum Diurnal Average: 7.0 ppb at hour 16
Percentiles: P_1 = 1.7 P_{10} = 3.2 Q_1 = 4.9 Median = 7.9 Q_3 = 14.5 P_{90} = 26.4 P_{99} = 66.8

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	105	119	70	48	74	59	45	58	53	47	34	25	A	31	35	11	12	14	17	9	8	9	5	5	38.9	119.1
2-Mar	4	4	5	4	4	5	6	9	9	6	5	A	7	6	5	7	6	7	8	7	8	11	8	4	6.3	11.1
3-Mar	3	3	4	5	8	9	12	11	19	16	A	5	4	3	3	3	4	4	11	10	12	12	11	11	7.9	18.7
4-Mar	10	10	8	8	7	6	6	9	9	A	8	9	12	12	12	14	15	19	26	30	61	32	15	15	15.4	61.3
5-Mar	15	17	20	29	43	67	75	42	A	28	45	8	8	6	5	6	5	7	10	7	6	6	5	5	20.2	75.5
6-Mar	6	5	4	5	4	3	3	A	4	6	5	6	4	6	5	6	5	4	4	4	4	4	9	12	5.2	11.7
7-Mar	4	13	19	18	26	44	A	67	23	13	13	14	13	8	9	13	15	20	22	14	8	9	12	16	17.9	67.0
8-Mar	15	11	7	6	7	A	16	32	30	37	40	33	29	17	16	15	18	17	23	31	21	15	14	14	20.1	40.3
9-Mar	34	35	37	26	A	24	29	27	33	30	29	20	28	17	49	29	17	18	18	18	16	13	8	6	24.3	48.6
10-Mar	7	7	8	A	5	6	8	11	14	13	12	11	9	11	10	17	16	11	20	26	52	66	56	26	18.4	65.7
11-Mar	24	16	A	3	3	3	4	6	6	6	5	5	5	6	4	3	6	15	15	14	11	7	5	6	7.8	24.2
12-Mar	7	A	5	6	4	5	15	16	15	9	11	11	6	5	10	4	6	7	12	19	14	5	4	5	8.8	19.0
13-Mar	A	10	14	10	6	5	10	9	9	9	8	5	4	3	2	2	2	3	5	7	7	7	9	A	6.7	13.7
14-Mar	16	9	8	9	13	6	9	13	C	C	C	C	C	3	2	3	3	2	3	5	9	11	A	12	7.5	16.2
15-Mar	11	10	18	28	31	30	28	25	32	27	22	20	10	5	2	3	7	7	7	14	14	A	6	6	15.8	31.8
16-Mar	5	3	3	3	4	8	13	17	15	10	6	3	2	3	8	7	5	6	7	9	A	7	6	6	6.8	16.8
17-Mar	8	10	6	5	3	5	5	5	5	4	3	2	2	2	3	3	4	2	4	A	20	7	7	7	5.3	20.0
18-Mar	8	17	12	15	30	29	34	31	27	30	24	25	13	18	21	10	7	10	A	17	14	11	9	8	18.4	34.3
19-Mar	11	11	10	12	11	14	20	21	31	26	14	12	16	20	11	7	7	A	11	13	11	10	13	11	14.2	30.5
20-Mar	14	9	13	13	12	19	29	21	16	7	8	6	6	5	5	5	A	4	5	6	5	4	4	3	9.6	28.7
21-Mar	3	3	3	3	4	5	7	7	7	6	6	6	5	5	6	A	6	6	6	7	6	6	3	3	5.2	7.4
22-Mar	3	4	3	6	6	5	10	10	9	6	5	5	3	2	A	3	3	4	6	11	26	22	10	6	7.2	26.0
23-Mar	5	5	5	5	6	7	15	19	10	5	5	5	7	A	5	6	5	5	5	5	5	4	3	3	6.3	19.3
24-Mar	3	3	3	3	3	5	7	12	13	10	7	6	A	9	13	11	10	12	12	12	28	30	25	18	11.2	30.4
25-Mar	20	15	9	13	15	18	11	16	13	15	13	A	8	7	4	4	6	7	5	4	8	9	6	5	10.1	19.6
26-Mar	5	4	5	4	5	7	8	11	15	12	A	6	2	2	2	1	2	2	1	6	15	25	46	40	9.9	46.5
27-Mar	42	47	29	18	17	14	20	25	27	A	15	13	8	6	5	3	2	3	9	11	11	7	6	4	14.9	47.5
28-Mar	4	4	5	5	4	4	6	8	A	8	8	4	3	2	2	2	2	2	4	12	10	5	4	3	4.9	11.6
29-Mar	3	3	3	2	4	7	13	A	10	9	8	7	6	9	9	6	8	8	7	6	6	5	3	3	6.4	13.0
30-Mar	3	2	2	3	6	12	A	18	19	28	21	18	14	14	7	4	3	5	6	8	10	7	8	5	9.6	28.0
31-Mar	7	6	6	7	3	A	8	10	8	9	14	12	15	9	6	4	4	4	8	19	28	20	22	19	10.8	27.9
	13.5	13.8	11.4	10.8	12.3	14.9	16.4	19.5	17.2	15.4	14.1	10.8	8.9	8.4	9.3	7.0	7.1	7.9	10.0	12.0	15.1	12.9	11.4	9.6	Diurnal Average	
	105.1	119.1	70.5	48.2	74.0	67.3	75.5	67.0	53.2	47.4	45.0	32.9	29.1	30.9	48.6	28.8	18.1	19.9	25.7	30.8	61.3	65.7	56.1	40.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - March 2016

Maximum Value: 152.7 ppb on Mar 7 08:00

Maximum Daily Average: 58.4 ppb on Mar 1

Minimum Value: 2 ppb on Mar 26 19:00

Minimum Daily Average: 8.1 ppb on Mar 28

Maximum Diurnal Average: 34.0 ppb at hour 8

Minimum Diurnal Average: 12.3 ppb at hour 17

Monthly Average: 19.71 ppb

Percentiles: P_1 = 2.9 P_{10} = 5.5 Q_1 = 8.3 Median = 13.8 Q_3 = 23.6 P_{90} = 39.6 P_{99} = 95.1

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	144	151	129	86	94	102	68	83	77	65	58	34	A	42	58	18	20	22	28	15	14	17	8	9	58.4	151.1
2-Mar	6	6	8	7	6	9	14	14	13	11	9	A	10	11	8	12	9	13	13	12	19	19	12	7	10.8	19.3
3-Mar	6	6	6	7	13	14	15	17	35	140	A	10	6	5	6	4	17	13	20	20	27	20	17	16	19.2	140.1
4-Mar	13	21	14	14	9	8	11	25	13	A	10	14	15	23	18	17	27	52	36	46	83	60	21	22	25.0	82.9
5-Mar	19	20	35	45	54	98	96	71	A	32	89	11	14	10	8	12	8	30	28	10	9	12	6	8	31.6	97.7
6-Mar	15	10	9	27	8	9	7	A	6	10	8	10	7	17	7	18	33	10	7	7	4	5	13	20	11.7	32.8
7-Mar	6	34	30	32	39	64	A	153	66	65	20	21	21	11	12	16	18	24	27	27	11	12	17	19	32.4	152.7
8-Mar	21	13	9	8	10	A	37	38	39	56	55	44	41	23	21	27	25	30	33	52	30	18	20	19	29.1	55.8
9-Mar	50	50	55	33	A	32	33	40	40	39	53	29	49	25	72	60	28	25	29	24	20	18	12	9	35.9	71.9
10-Mar	11	10	11	A	8	12	12	19	20	19	22	16	16	18	20	53	25	21	24	55	65	94	79	42	29.3	94.2
11-Mar	34	27	A	5	4	5	7	8	17	15	8	7	8	10	8	6	13	25	20	23	15	10	7	19	13.0	33.6
12-Mar	10	A	7	10	7	11	27	25	21	11	19	19	31	7	37	23	10	13	21	32	30	9	6	24	17.8	37.2
13-Mar	A	17	19	16	8	9	18	13	18	15	13	8	6	6	4	3	3	9	8	13	14	10	23	A	11.4	22.8
14-Mar	28	12	13	13	17	9	18	20	C	C	C	C	C	4	4	5	5	5	7	8	13	16	A	15	11.9	28.4
15-Mar	13	12	26	39	53	39	44	38	43	39	30	28	17	9	4	5	10	9	9	21	20	A	9	9	22.8	52.9
16-Mar	6	4	4	5	6	14	16	23	25	17	8	6	5	6	11	11	11	12	10	12	A	16	16	10	11.2	24.9
17-Mar	12	13	7	8	5	8	8	12	8	6	6	4	3	4	5	6	7	4	10	A	37	9	15	12	9.1	36.7
18-Mar	18	23	20	33	46	43	45	42	57	35	31	33	24	26	26	19	12	14	A	21	20	15	16	11	27.3	56.9
19-Mar	15	14	14	19	15	23	26	29	40	36	22	17	19	25	16	12	10	A	16	16	15	17	21	32	20.3	39.7
20-Mar	22	16	19	21	17	29	39	72	25	11	17	11	10	8	8	10	A	7	17	14	7	8	9	6	17.5	71.9
21-Mar	4	6	6	5	7	8	12	13	22	12	12	9	8	22	12	A	8	9	9	10	8	9	4	4	9.5	22.1
22-Mar	3	6	4	7	9	8	15	20	16	10	9	7	5	5	A	3	5	9	13	23	89	30	15	9	13.9	88.8
23-Mar	8	8	7	8	8	12	27	26	16	8	8	6	39	A	9	15	9	9	11	10	7	6	7	5	11.7	38.6
24-Mar	6	5	4	7	7	7	11	34	30	47	66	17	A	11	15	14	14	21	19	15	46	51	34	30	22.3	66.4
25-Mar	33	20	14	18	19	26	14	24	17	20	20	A	12	24	9	9	8	16	15	8	13	15	9	6	16.1	33.1
26-Mar	6	5	7	6	6	8	10	32	21	21	A	9	5	2	3	3	4	4	2	16	26	39	63	48	15.1	63.2
27-Mar	53	63	50	24	23	21	33	40	38	A	26	15	12	9	8	6	3	5	21	15	17	15	10	6	22.3	62.7
28-Mar	6	6	7	9	8	7	9	14	A	12	12	7	4	3	3	3	3	4	8	24	19	6	6	5	8.1	24.1
29-Mar	3	4	4	4	7	9	27	A	17	14	12	10	10	14	13	10	12	11	10	9	9	9	4	5	9.8	27.4
30-Mar	4	3	4	7	13	19	A	24	24	41	33	28	17	27	14	6	6	8	9	12	16	15	17	10	15.6	41.0
31-Mar	12	12	14	14	8	A	13	16	12	16	17	15	28	24	8	6	6	14	27	24	55	31	35	23	18.8	54.6
	19.6	19.9	18.5	17.9	17.8	22.8	24.6	34.0	27.6	29.4	24.8	15.9	15.7	14.4	15.0	13.8	12.3	14.9	17.0	20.0	25.2	20.3	17.8	15.4	Diurnal Average	
	143.7	151.1	129.3	86.1	94.3	102.5	96.1	152.7	76.9	140.1	88.7	44.0	49.0	41.6	71.9	60.3	32.8	52.3	35.7	55.4	88.8	94.2	79.3	48.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - March 2016

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 47.3 ppb on Mar 13 16:00
Maximum Daily Average: 36.3 ppb on Mar 28

Minimum Value: 0 ppb on Mar 1 03:00
Maximum Diurnal Average: 35.7 ppb at hour 16
Monthly Average: 26.80 ppb

Minimum Daily Average: 15.6 ppb on Mar 7
Minimum Diurnal Average: 18.3 ppb at hour 8
Percentiles: P_1 = 0.0 P_{10} = 11.3 Q_1 = 21.9 Median = 29.0 Q_3 = 33.7 P_{90} = 37.4 P_{99} = 45.5

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	0	0	0	0	0	0	0	0	4	12	18	24	A	28	26	37	36	31	27	32	31	31	35	36	17.8	36.9
2-Mar	36	36	35	35	34	31	28	25	25	26	27	A	27	28	29	29	31	30	28	29	27	25	26	29	29.3	36.1
3-Mar	30	30	29	28	25	24	21	21	18	22	A	29	31	32	33	33	33	33	28	28	27	25	25	26	27.4	33.1
4-Mar	26	25	25	24	25	24	22	20	19	A	20	19	19	19	19	18	18	15	8	3	0	3	11	10	17.0	25.7
5-Mar	10	7	5	1	0	0	0	0	A	7	11	26	26	27	31	31	32	29	25	27	26	26	28	27	17.5	32.0
6-Mar	26	26	27	25	27	29	28	A	26	24	25	25	25	25	26	27	28	28	28	28	28	27	21	17	25.9	28.6
7-Mar	24	16	11	12	6	0	A	2	14	20	21	22	24	26	25	23	22	17	10	13	17	14	13	8	15.6	26.0
8-Mar	8	11	15	15	14	A	6	0	5	9	11	13	17	21	24	28	28	29	21	12	18	24	25	23	16.5	29.4
9-Mar	7	3	1	6	A	8	4	8	11	17	19	23	25	29	22	28	32	30	27	25	28	30	35	36	19.6	36.3
10-Mar	34	34	33	A	35	34	32	29	27	28	30	31	34	35	36	32	31	35	27	20	1	0	2	16	26.8	36.1
11-Mar	15	20	A	34	36	37	38	37	37	39	39	39	40	40	41	42	39	32	30	30	32	35	36	34	34.9	42.0
12-Mar	34	A	35	32	34	33	23	20	25	30	33	33	37	40	39	42	40	38	33	23	29	40	39	35	33.4	42.3
13-Mar	A	28	23	27	30	34	28	31	31	33	35	38	40	43	46	47	47	46	42	36	34	33	27	A	35.4	47.3
14-Mar	16	20	19	17	14	23	21	17	18	16	19	C	C	C	36	36	36	36	35	33	28	26	A	23	24.3	35.8
15-Mar	22	23	14	5	2	2	3	7	10	17	21	24	30	37	40	40	36	36	35	27	26	A	34	34	22.8	40.4
16-Mar	34	37	37	37	38	34	30	27	31	36	38	40	40	40	36	37	38	36	33	29	A	30	30	28	34.6	40.2
17-Mar	24	22	26	25	28	28	29	31	33	34	34	36	37	38	39	40	39	40	38	A	19	31	30	29	31.7	39.9
18-Mar	27	17	20	15	3	3	2	6	14	17	20	22	29	29	29	32	33	31	A	24	27	30	30	32	21.4	32.9
19-Mar	22	19	20	19	19	16	10	12	13	20	26	28	29	29	35	40	41	A	35	31	32	31	25	27	25.1	40.8
20-Mar	22	27	22	19	17	10	5	16	20	28	28	30	29	32	34	36	A	35	34	32	32	33	33	33	26.4	35.9
21-Mar	33	33	32	32	31	30	29	28	29	30	31	32	33	33	34	A	35	34	33	31	31	29	31	31	31.5	34.6
22-Mar	31	30	30	27	27	28	24	23	24	27	29	30	32	35	A	38	38	37	35	28	13	16	28	30	28.6	37.5
23-Mar	31	32	32	31	30	28	23	19	27	32	33	33	32	A	36	35	34	33	33	34	34	34	35	34	31.5	35.5
24-Mar	33	32	31	32	34	33	31	28	28	31	33	34	A	34	36	37	37	35	33	30	15	9	10	15	29.2	37.1
25-Mar	13	16	21	19	16	14	19	18	24	25	27	A	31	34	38	40	37	36	33	31	28	26	28	30	26.2	39.6
26-Mar	30	30	29	30	28	26	24	22	23	26	A	34	38	40	42	43	43	42	43	36	25	14	2	3	29.2	43.3
27-Mar	2	0	1	8	8	13	7	8	12	A	24	28	32	35	38	41	42	41	34	33	32	37	33	32	23.6	41.8
28-Mar	30	29	28	28	30	34	31	29	A	34	35	39	43	45	44	46	47	46	42	33	31	36	36	37	36.3	46.9
29-Mar	36	36	36	36	34	32	25	A	31	33	35	36	37	36	38	39	35	32	32	32	31	32	33	33	33.9	39.2
30-Mar	33	35	35	31	27	23	A	19	18	14	19	21	24	26	31	33	33	31	30	27	23	28	27	30	26.8	34.9
31-Mar	29	31	31	30	35	A	29	27	30	30	29	31	32	37	40	43	43	43	39	26	14	19	15	12	30.2	43.4
	23.9	23.4	23.5	22.7	22.9	21.7	19.8	18.3	21.6	24.7	26.5	29.2	31.1	32.8	34.1	35.7	35.5	34.0	31.0	27.4	24.6	25.7	26.1	26.4	Diurnal Average	
	36.4	37.0	36.8	36.8	37.7	36.6	37.8	36.8	37.4	38.6	39.1	39.9	43.1	45.4	45.7	47.3	47.1	46.2	42.6	36.3	34.0	39.9	39.2	36.9	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

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - March 2016

Maximum Value: 48.5 ppb on Mar 13 16:00

Maximum Daily Average: 38.7 ppb on Mar 28

Minimum Value: 0 ppb on Mar 1 04:00

Minimum Daily Average: 18.9 ppb on Mar 7

Maximum Diurnal Average: 37.6 ppb at hour 16

Minimum Diurnal Average: 21.9 ppb at hour 8

Monthly Average: 29.59 ppb

Percentiles: P_1 = 0.2 P_{10} = 15.6 Q_1 = 25.8 Median = 31.4 Q_3 = 35.8 P_{90} = 39.7 P_{99} = 46.9

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	2	1	0	0	0	2	1	1	8	16	20	27	A	31	35	39	39	34	31	34	33	33	37	37	20.1	39.4
2-Mar	37	37	36	36	35	33	30	27	26	27	28	A	28	29	30	31	32	32	31	31	30	28	28	30	30.9	36.7
3-Mar	31	31	30	31	28	27	23	24	22	27	A	31	32	33	33	34	34	34	33	30	31	29	28	28	29.8	34.4
4-Mar	28	27	27	27	27	27	25	22	22	A	21	20	20	20	20	19	21	20	12	9	0	9	13	13	19.4	28.1
5-Mar	11	8	9	2	0	0	0	1	A	9	24	28	28	29	34	32	34	33	29	28	29	29	29	29	19.8	33.6
6-Mar	28	27	28	28	28	30	29	A	27	26	26	26	26	26	27	28	29	29	29	29	29	28	27	23	27.5	30.0
7-Mar	24	24	18	19	10	2	A	9	19	22	23	24	27	27	26	24	24	20	15	16	18	16	16	11	18.9	27.4
8-Mar	11	15	16	17	15	A	11	2	8	11	14	15	21	25	27	31	30	34	27	20	24	29	29	28	20.0	33.5
9-Mar	22	6	5	12	A	11	6	16	17	19	20	25	30	33	28	35	35	32	31	29	30	35	37	38	24.1	37.7
10-Mar	36	35	35	A	36	36	33	33	31	30	32	33	36	37	40	40	36	39	31	28	7	0	9	24	30.3	39.7
11-Mar	26	29	A	36	37	38	39	39	39	40	40	40	41	41	43	43	43	38	34	35	34	36	37	37	37.6	43.1
12-Mar	38	A	36	36	36	35	32	27	29	32	37	37	39	42	41	44	42	40	37	30	36	42	41	39	36.8	43.7
13-Mar	A	31	30	29	33	38	33	35	34	36	38	40	42	45	47	49	48	48	46	39	37	35	31	A	38.3	48.5
14-Mar	20	23	22	20	24	24	23	23	20	19	21	C	C	C	37	37	37	37	36	35	32	29	A	26	27.3	37.2
15-Mar	25	26	22	8	8	6	7	14	13	21	23	29	34	41	41	41	39	37	38	33	35	A	36	36	26.7	41.4
16-Mar	36	38	38	38	39	39	31	30	33	38	40	41	41	41	38	40	40	40	35	32	A	33	33	31	36.8	41.3
17-Mar	28	24	27	28	30	30	32	34	34	35	36	37	38	39	40	41	40	41	41	A	31	34	32	31	34.0	41.4
18-Mar	32	21	27	19	7	12	9	10	20	20	22	25	32	31	31	35	34	33	A	30	30	32	32	33	25.1	34.6
19-Mar	26	21	23	22	24	24	13	15	16	27	28	29	29	35	37	42	42	A	37	34	34	34	29	30	28.4	42.4
20-Mar	26	30	25	24	22	16	14	20	27	29	30	32	30	34	37	38	A	35	35	34	33	34	34	34	29.3	37.7
21-Mar	34	34	33	33	32	31	30	30	31	32	32	33	34	34	35	A	36	35	34	34	33	31	32	32	32.8	35.6
22-Mar	32	31	31	29	29	29	27	25	27	29	30	31	34	36	A	38	38	38	39	38	24	23	32	32	31.5	38.5
23-Mar	33	33	33	33	31	30	27	23	31	32	34	34	34	A	37	37	35	35	35	35	35	35	35	35	33.1	37.1
24-Mar	34	33	31	34	35	34	33	31	31	34	35	36	A	35	38	38	39	38	37	33	26	18	17	21	32.2	39.0
25-Mar	17	19	24	22	20	21	21	24	25	26	28	A	33	38	40	40	39	39	36	35	31	29	30	31	29.0	40.5
26-Mar	31	31	31	31	30	27	26	24	27	29	A	36	40	41	43	44	44	44	44	43	31	28	9	8	32.2	43.9
27-Mar	8	1	4	13	13	17	14	11	14	A	28	30	34	37	41	42	43	42	42	37	37	40	36	34	26.8	42.7
28-Mar	31	30	30	30	33	35	33	34	A	37	37	42	46	46	46	47	48	48	45	40	38	38	38	38	38.7	47.9
29-Mar	38	37	37	36	36	35	32	A	33	36	37	37	38	38	41	41	38	35	33	34	32	35	35	34	36.1	41.5
30-Mar	35	36	36	33	29	27	A	23	23	24	23	25	26	30	34	34	35	34	32	30	29	30	29	31	29.9	36.2
31-Mar	32	34	33	34	37	A	32	30	32	32	30	33	36	39	43	44	45	45	44	36	28	26	24	15	33.9	44.6
	27.1	25.7	26.0	25.4	25.4	24.6	23.0	21.9	24.8	27.4	28.9	31.4	33.1	35.0	36.3	37.6	37.2	36.4	34.3	31.7	29.1	29.2	29.2	29.0	Diurnal Average	
	37.7	37.6	37.9	38.4	38.8	38.5	39.2	38.7	38.6	39.8	40.3	42.4	45.6	46.1	47.1	48.5	47.8	48.0	45.9	42.8	37.8	42.4	41.1	38.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - March 2016

Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - March 2016

Maximum Value: 44.1 ppb on Mar 28 19:00

Minimum Value: 0.0 ppb on Mar 1 05:00

Percentiles: P_1 = 1.5 P_{10} = 12.4 Q_1 = 22.2 Median = 28.9 Q_3 = 33.0 P_{90} = 35.6 P_{99} = 42.5

Hours in Service:	744
Hours of Data:	738
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-Mar	5	2	0	0	0	0	0	0	0	2	4	7	8	12	16	21	26	28	30	31	31	31	33	32	32.6
2-Mar	32	33	34	34	35	35	34	33	31	30	29	28	27	26	26	27	28	29	29	29	29	29	28	28	34.8
3-Mar	28	28	28	28	28	28	27	26	25	24	23	23	24	25	27	28	30	32	31	31	31	30	29	28	32.0
4-Mar	27	26	26	25	25	25	25	24	23	23	22	21	21	20	19	19	19	18	17	15	12	10	9	8	27.1
5-Mar	7	6	6	6	6	5	4	3	2	2	2	6	10	14	18	23	24	27	28	29	29	29	28	28	28.6
6-Mar	27	27	27	27	27	27	27	27	27	27	26	26	26	25	25	25	26	26	26	27	27	27	27	26	27.4
7-Mar	25	24	22	20	17	13	12	10	9	9	11	12	15	18	19	22	23	23	21	20	19	18	16	14	25.0
8-Mar	12	12	12	13	12	12	11	10	10	9	9	8	9	10	13	16	19	22	23	23	23	23	23	23	23.2
9-Mar	20	17	14	13	13	10	7	5	6	8	10	13	14	17	19	22	24	26	27	27	27	28	29	30	30.3
10-Mar	31	31	32	33	34	34	34	33	32	31	31	31	31	31	31	32	32	33	33	31	27	23	18	16	34.3
11-Mar	15	13	10	13	18	23	28	31	34	37	37	38	38	39	39	40	40	39	38	37	36	35	34	34	39.9
12-Mar	33	33	34	34	34	34	32	30	29	29	29	29	29	30	32	35	37	38	38	37	36	36	36	35	37.9
13-Mar	34	32	31	32	32	31	29	29	29	30	31	33	34	35	37	39	41	43	44	43	43	41	39	38	43.8
14-Mar	33	30	26	24	21	20	19	18	19	18	18	18	19	N	N	N	N	N	N	35	34	33	33	31	35.0
15-Mar	29	27	24	20	16	13	12	10	8	7	8	11	14	19	23	27	31	33	35	35	35	34	33	33	35.2
16-Mar	32	33	33	34	36	36	35	34	34	34	34	34	35	35	36	37	38	38	38	36	36	34	33	32	38.2
17-Mar	30	28	27	27	27	27	26	27	28	29	30	32	33	34	35	36	37	38	38	39	36	35	34	32	38.6
18-Mar	30	27	25	23	21	18	15	12	10	10	10	11	14	17	21	24	26	28	29	29	29	29	30	29	30.4
19-Mar	28	26	25	25	24	22	20	17	16	16	17	18	19	21	24	27	31	32	34	34	35	35	34	32	35.1
20-Mar	29	29	27	26	24	21	19	17	17	17	18	19	21	23	27	30	31	32	33	33	34	34	34	33	33.8
21-Mar	33	33	33	33	33	32	32	31	31	30	30	30	30	31	31	32	32	33	33	33	33	32	32	32	33.3
22-Mar	31	31	30	30	29	29	28	27	26	26	26	26	27	28	29	31	33	34	35	35	32	29	29	28	34.9
23-Mar	27	27	26	27	29	30	30	28	28	28	28	28	28	28	30	32	33	34	34	34	34	34	34	34	34.1
24-Mar	34	34	33	33	33	33	32	32	31	31	31	32	31	31	32	33	35	35	35	35	32	29	26	23	35.2
25-Mar	20	18	16	15	15	15	17	17	18	19	20	20	23	25	28	31	33	35	36	35	35	34	32	31	35.7
26-Mar	30	29	29	29	29	29	28	27	27	26	26	26	28	30	32	35	38	40	41	41	39	36	31	26	40.9
27-Mar	21	16	10	7	5	5	5	6	7	8	11	14	18	21	25	30	34	35	36	37	37	37	37	36	37.3
28-Mar	34	33	32	31	31	31	30	30	30	31	32	33	35	37	39	41	42	43	44	43	42	41	40	39	44.1
29-Mar	37	36	35	35	36	35	34	34	33	32	32	32	33	33	35	35	36	36	36	35	34	34	33	33	37.2
30-Mar	32	33	33	33	33	31	31	29	27	24	22	20	20	20	21	23	25	27	29	29	29	29	29	29	33.0
31-Mar	28	28	28	29	30	30	31	30	30	30	30	30	30	31	32	34	36	37	39	38	36	33	30	26	38.5
Diurnal Maximums	37.2	35.9	35.1	35.5	35.9	35.7	35.1	34.2	34.1	36.8	37.1	37.7	38.2	38.6	39.0	41.0	41.7	43.2	44.1	43.4	42.7	41.4	39.7	38.5	

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.91 ppm on Mar 1 01:00 Maximum Daily Average: 0.34 ppm on Mar 1

Minimum Value: 0.2 ppm on Mar 11 04:00 Minimum Daily Average: 0.18 ppm on Mar 28
Maximum Diurnal Average: 0.26 ppm at hour 8 Minimum Diurnal Average: 0.20 ppm at hour 17
Monthly Average: 0.226 ppm Percentiles: P_1 = 0.16 P_{10} = 0.17 Q_1 = 0.18 Median = 0.21 Q_3 = 0.24 P_{90} = 0.30 P_{99} = 0.48

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	0.9	0.9	0.5	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.3	A	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.34	0.91
2-Mar	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
3-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.26
4-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.26	0.48
5-Mar	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.3	A	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27	0.50
6-Mar	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	0.2	0.2	0.2	0.2	0.19	0.21
7-Mar	0.2	0.2	0.2	0.2	0.2	0.2	A	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.22	0.40
8-Mar	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.26	0.40
9-Mar	0.4	0.4	0.3	0.3	A	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.27	0.36
10-Mar	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.5	0.5	0.5	0.3	0.27	0.54
11-Mar	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.19	0.26
12-Mar	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.20	0.25
13-Mar	A	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	0.3	A	0.21	0.27
14-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.20	0.27
15-Mar	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	C	C	C	0.2	0.2	0.2	0.2	A	0.2	0.2	0.33	0.45
16-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.19	0.23
17-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.19	0.30
18-Mar	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.24	0.30
19-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.3	0.2	0.25	0.35
20-Mar	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.29
21-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.21
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.21	0.37
23-Mar	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.32
24-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.22	0.32
25-Mar	0.2	0.2	0.2	0.2	0.2	0.3	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	0.21	0.25
26-Mar	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	0.3	0.4	0.6	0.5	0.24	0.63
27-Mar	0.5	0.5	0.4	0.2	0.2	0.3	0.2	0.2	0.3	A	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	0.25	0.55
28-Mar	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	0.2	0.2	0.2	0.18	0.25
29-Mar	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	0.2	0.2	0.2	0.2	0.19	0.22
30-Mar	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.26
31-Mar	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.24	0.37
Diurnal Average	0.24	0.24	0.21	0.21	0.21	0.22	0.24	0.26	0.25	0.24	0.23	0.22	0.21	0.21	0.21	0.20	0.20	0.21	0.22	0.24	0.26	0.24	0.23	0.22		
Diurnal Maximum	0.91	0.89	0.46	0.45	0.41	0.50	0.45	0.46	0.44	0.41	0.43	0.42	0.41	0.40	0.35	0.31	0.27	0.32	0.34	0.40	0.48	0.54	0.63	0.54		

C - Calibration 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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2016

Maximum Value: 1.41 ppm on Mar 1 08:00

Maximum Daily Average: 0.54 ppm on Mar 1

Minimum Value: 0.2 ppm on Mar 11 06:00

Minimum Daily Average: 0.21 ppm on Mar 28

Maximum Diurnal Average: 0.41 ppm at hour 8

Minimum Diurnal Average: 0.25 ppm at hour 4

Monthly Average: 0.295 ppm

Percentiles: P_1 = 0.17 P_{10} = 0.19 Q_1 = 0.21 Median = 0.25 Q_3 = 0.32 P_{90} = 0.45 P_{99} = 0.91

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	1.4	1.0	0.9	0.3	0.4	0.7	0.4	1.4	0.9	0.7	0.3	0.4	A	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.54	1.41
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.24	0.41
3-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.9	0.3	0.3	0.2	0.2	0.2	0.26	0.89
4-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.4	0.5	0.6	0.4	0.3	0.3	0.33	0.65
5-Mar	0.3	0.3	0.3	0.4	0.4	0.7	0.6	0.4	A	0.4	0.6	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.34	0.72
6-Mar	0.2	0.2	0.3	0.2	0.2	0.2	0.3	A	0.2	0.2	0.4	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.24	0.37
7-Mar	0.2	0.3	0.3	0.2	0.2	0.4	A	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.28	0.62
8-Mar	0.2	0.2	0.2	0.2	0.2	A	0.3	0.5	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.4	0.3	0.3	0.3	0.33	0.64
9-Mar	0.6	0.8	0.4	0.3	A	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.5	0.3	0.4	0.8	0.3	0.3	0.3	0.6	0.3	0.3	0.2	0.3	0.39	0.81
10-Mar	0.2	0.2	0.2	A	0.2	0.3	0.4	0.7	0.3	0.3	0.3	0.2	0.3	0.3	0.6	0.5	0.4	0.2	0.4	0.5	0.5	0.6	0.7	0.4	0.39	0.66
11-Mar	0.3	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	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.23	0.38
12-Mar	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.8	0.2	0.3	0.3	0.2	0.2	0.4	0.5	0.4	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.30	0.76
13-Mar	A	0.5	0.3	0.3	0.2	0.3	0.4	0.3	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	1.0	A	0.30	0.98
14-Mar	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.3	0.25	0.42
15-Mar	0.3	0.3	0.5	0.7	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	C	C	C	0.2	0.2	0.3	0.3	A	0.2	0.2	0.40	0.74
16-Mar	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	0.3	0.3	0.3	0.3	0.2	0.3	A	0.2	0.3	0.3	0.23	0.32
17-Mar	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.6	0.2	0.3	0.4	0.24	0.57
18-Mar	0.2	0.2	0.2	0.3	0.5	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	A	0.3	0.3	0.3	0.3	0.2	0.31	0.55
19-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.2	A	0.3	0.3	0.3	0.3	0.4	0.3	0.31	0.44
20-Mar	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.5	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.3	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.28	0.49
21-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.23	0.39
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.4	0.4	0.6	0.5	0.3	0.2	0.26	0.59
23-Mar	0.2	0.2	0.2	0.2	0.5	0.5	0.4	0.6	0.3	0.2	0.3	0.2	0.2	A	0.3	0.2	0.2	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.29	0.60
24-Mar	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.2	0.3	0.4	0.6	A	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.3	0.30	0.56
25-Mar	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.26	0.34
26-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.9	0.7	0.29	0.85
27-Mar	0.7	0.6	0.5	0.3	0.3	1.3	0.4	0.3	0.4	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.35	1.25
28-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	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	0.2	0.2	0.21	0.35
29-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.3	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	0.23	0.31
30-Mar	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.25	0.38
31-Mar	0.3	0.3	0.2	0.2	0.2	A	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.5	0.5	0.5	0.4	0.5	0.4	0.32	0.55
	0.30	0.30	0.27	0.25	0.26	0.34	0.32	0.41	0.34	0.30	0.29	0.27	0.26	0.26	0.27	0.27	0.25	0.27	0.31	0.32	0.34	0.30	0.31	0.27	Diurnal Average	
	1.37	1.04	0.94	0.74	0.55	1.25	0.62	1.41	0.92	0.74	0.61	0.56	0.46	0.45	0.64	0.81	0.39	0.65	0.89	0.64	0.64	0.64	0.98	0.66	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2016

Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2016

Pollutant Classes (ppm)

Peace Airshed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2016

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.76 ppm on Mar 1 03:00

Minimum Value: 0.16 ppm on Mar 11 10:00

Percentiles: P_1 = 0.17 P_{10} = 0.18 Q_1 = 0.19 Median = 0.21 Q_3 = 0.24 P_{90} = 0.29 P_{99} = 0.51

Hours in Service:	744
Hours of Data:	737
Hours of Missing Data:	7
Hours of Calibration:	7
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-Mar	0.7	0.7	0.8	0.7	0.7	0.7	0.6	0.5	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	0.2	0.2	0.2	0.76
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
3-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
4-Mar	0.2	0.2	0.2	0.2	0.2	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	0.3	0.3	0.3	0.3	0.33
5-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.39
6-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
7-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
8-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29
9-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.30
10-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.35
11-Mar	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	0.2	0.2	0.37
12-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
13-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
14-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
15-Mar	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	N	N	N	N	N	N	N	0.2	0.41
16-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
17-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
18-Mar	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
19-Mar	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
20-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
21-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
23-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
24-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.26
25-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
26-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.33
27-Mar	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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	0.44
28-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
29-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
30-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
31-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.29
Diurnal Maximums	0.67	0.75	0.76	0.75	0.73	0.68	0.58	0.50	0.44	0.39	0.41	0.40	0.40	0.41	0.41	0.41	0.28	0.28	0.28	0.30	0.32	0.33	0.35	0.35	

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

Peace Airshed Zone Association

Span Responses

Carbon Monoxide (CO)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2016

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

Maximum Value: 2.50 ppm on Mar 1 02:00

Maximum Daily Average: 2.20 ppm on Mar 1

Minimum Value: 1.9 ppm on Mar 15 17:00

Minimum Daily Average: 1.93 ppm on Mar 16

Maximum Diurnal Average: 2.09 ppm at hour 8

Minimum Diurnal Average: 1.97 ppm at hour 18

Monthly Average: 2.024 ppm

Percentiles: P_1 = 1.91 P_{10} = 1.93 Q_1 = 1.95 Median = 1.99 Q_3 = 2.05 P_{90} = 2.18 P_{99} = 2.46

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	2.4	2.5	2.3	2.2	2.3	2.3	2.4	2.5	2.4	2.4	2.3	2.3	A	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.20	2.50
2-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.02
3-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.09
4-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.08	2.27
5-Mar	2.3	2.3	2.3	2.4	2.5	2.5	2.4	2.5	A	2.4	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.17	2.49
6-Mar	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	2.1	2.00	2.06
7-Mar	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.13
8-Mar	2.2	2.1	2.1	2.1	2.1	A	2.1	2.2	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	2.1	2.0	2.1	2.12	2.22
9-Mar	2.2	2.1	2.1	2.2	A	2.2	2.2	2.3	2.3	2.5	2.5	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.16	2.46
10-Mar	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	2.1	2.1	2.1	2.1	2.1	2.02	2.14
11-Mar	2.1	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.06
12-Mar	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.99	2.09
13-Mar	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	1.97	2.04
14-Mar	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.02	2.14
15-Mar	2.0	2.1	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.3	C	C	C	C	C	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.07	2.32
16-Mar	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	2.0	2.0	2.0	1.93	1.97
17-Mar	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	1.9	A	2.0	2.0	2.0	2.0	1.98	2.06
18-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.06	2.19
19-Mar	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.2	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	2.12	2.35
20-Mar	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.12
21-Mar	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	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.94	1.99
22-Mar	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	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.07
23-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.96	2.03
24-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.03
25-Mar	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.2	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.06	2.31
26-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.5	2.3	2.02	2.49
27-Mar	2.3	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.4	2.2	2.0	2.1	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.11	2.41
28-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	2.0	2.0	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	1.94	1.99
29-Mar	1.9	1.9	1.9	1.9	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.96
30-Mar	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.00
31-Mar	1.9	1.9	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	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	1.96	2.09
	2.03	2.05	2.04	2.05	2.05	2.06	2.07	2.09	2.07	2.07	2.06	2.03	2.01	2.00	1.99	1.97	1.97	1.97	1.98	1.99	2.00	2.01	2.02	2.01	Diurnal Average	
	2.44	2.50	2.35	2.38	2.45	2.49	2.41	2.50	2.40	2.46	2.46	2.40	2.27	2.18	2.15	2.15	2.10	2.10	2.09	2.11	2.13	2.32	2.49	2.33	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2016

Maximum Value: 3.74 ppm on Mar 1 14:00

Maximum Daily Average: 2.39 ppm on Mar 1

Minimum Value: 1.9 ppm on Mar 26 16:00

Minimum Daily Average: 1.95 ppm on Mar 16

Maximum Diurnal Average: 2.15 ppm at hour 11

Minimum Diurnal Average: 2.01 ppm at hour 18

Monthly Average: 2.087 ppm

Percentiles: P_1 = 1.92 P_{10} = 1.95 Q_1 = 1.99 Median = 2.04 Q_3 = 2.13 P_{90} = 2.26 P_{99} = 2.67

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	2.8	2.6	2.6	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.3	A	3.7	2.2	2.1	2.1	2.2	2.1	2.1	2.3	2.1	2.1	2.1	2.39	3.74
2-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.0	2.1	2.2	2.0	2.2	2.0	2.3	2.0	2.0	2.0	2.0	2.09	2.26
3-Mar	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.05	2.16
4-Mar	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.12	2.31
5-Mar	2.3	2.3	2.4	2.5	2.5	2.5	2.5	2.5	A	2.4	2.5	2.2	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.23	2.54
6-Mar	2.1	2.1	2.1	2.1	2.0	2.1	2.2	A	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.06	2.22
7-Mar	2.1	2.1	2.1	2.1	2.1	2.1	A	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.17
8-Mar	2.2	2.2	2.1	2.1	2.1	A	2.2	2.2	2.2	2.3	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.0	2.3	2.18	2.36
9-Mar	2.4	2.2	2.2	2.3	A	2.3	2.2	2.3	2.5	2.5	2.5	2.5	2.4	2.4	2.1	2.1	2.0	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.23	2.50
10-Mar	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.3	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.10	2.41
11-Mar	2.1	2.2	A	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.3	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.04	2.67
12-Mar	2.0	A	2.0	2.0	2.2	2.1	2.0	2.1	2.2	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.23
13-Mar	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.2	2.0	2.2	2.0	A	2.02	2.24
14-Mar	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.1	2.1	2.1	A	2.2	2.08	2.32
15-Mar	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	C	C	C	C	C	1.9	1.9	1.9	2.0	2.0	1.9	A	2.0	2.0	2.11	2.35
16-Mar	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	1.95	2.05
17-Mar	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.1	2.1	2.0	2.1	2.02	2.14
18-Mar	2.0	2.2	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.11	2.28
19-Mar	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.4	2.3	2.2	2.1	2.2	2.2	2.1	2.0	2.1	A	2.3	2.1	2.1	2.0	2.1	2.1	2.18	2.41
20-Mar	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.0	2.1	2.2	A	2.1	2.0	2.2	2.3	2.1	2.1	2.0	2.11	2.30
21-Mar	2.0	2.1	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.06
22-Mar	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	2.03	2.18
23-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.1	2.2	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.04	2.18
24-Mar	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.1	2.1	2.01	2.21
25-Mar	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	A	2.1	2.1	2.0	2.0	2.0	2.1	2.0	1.9	2.0	2.0	2.0	2.0	2.11	2.35
26-Mar	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	3.3	2.7	2.4	2.10	3.29
27-Mar	2.4	2.8	2.8	2.2	2.2	2.3	2.3	2.2	2.3	A	3.4	2.7	2.1	2.1	2.1	2.0	1.9	2.0	2.1	2.1	2.1	2.1	2.1	1.9	2.26	3.36
28-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.97	2.03
29-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	2.11
30-Mar	2.0	1.9	1.9	2.0	2.0	2.0	A	2.0	2.1	2.1	2.2	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.0	2.0	2.01	2.17
31-Mar	2.0	2.1	2.1	2.0	2.0	A	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.00	2.13
	2.09	2.12	2.12	2.09	2.11	2.12	2.13	2.13	2.13	2.13	2.15	2.09	2.07	2.09	2.05	2.03	2.02	2.01	2.03	2.06	2.06	2.11	2.07	2.07	Diurnal Average	
	2.80	2.79	2.82	2.47	2.51	2.54	2.51	2.54	2.48	2.49	3.36	2.71	2.36	3.74	2.67	2.32	2.23	2.19	2.28	2.26	2.30	3.29	2.67	2.39	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2016

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2016

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 - March 2016

Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - March 2016

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

Maximum Value: 2.50 ppm on Mar 1 02:00

Maximum Daily Average: 2.20 ppm on Mar 1

Minimum Value: 1.9 ppm on Mar 15 17:00

Minimum Daily Average: 1.93 ppm on Mar 16

Maximum Diurnal Average: 2.09 ppm at hour 8

Minimum Diurnal Average: 1.97 ppm at hour 18

Monthly Average: 2.024 ppm

Percentiles: P_1 = 1.91 P_{10} = 1.93 Q_1 = 1.95 Median = 1.99 Q_3 = 2.05 P_{90} = 2.18 P_{99} = 2.45

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	2.4	2.5	2.3	2.2	2.3	2.3	2.4	2.5	2.4	2.4	2.3	2.3	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.20	2.50
2-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.01
3-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.09
4-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.08	2.27
5-Mar	2.3	2.3	2.3	2.4	2.5	2.5	2.4	2.5	A	2.4	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.17	2.49
6-Mar	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	2.1	1.99	2.06
7-Mar	2.0	2.0	2.0	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.13
8-Mar	2.2	2.1	2.1	2.1	2.1	A	2.1	2.2	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	2.1	2.0	2.1	2.12	2.22
9-Mar	2.2	2.1	2.1	2.2	A	2.2	2.2	2.3	2.3	2.5	2.5	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.16	2.46
10-Mar	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	2.1	2.1	2.1	2.1	2.1	2.02	2.14
11-Mar	2.1	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.05
12-Mar	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.09
13-Mar	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	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	1.97	2.03
14-Mar	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.01	2.14
15-Mar	2.0	2.1	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.3	C	C	C	C	C	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.07	2.32
16-Mar	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	2.0	2.0	2.0	1.93	1.97
17-Mar	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	A	2.0	2.0	2.0	2.0	1.98	2.05
18-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.06	2.19
19-Mar	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.2	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	2.12	2.35
20-Mar	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.12
21-Mar	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	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.95	1.99
22-Mar	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	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.07
23-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.96	2.03
24-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.02
25-Mar	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.2	A	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.06	2.31
26-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.5	2.3	2.02	2.49
27-Mar	2.3	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.4	2.2	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.11	2.41
28-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	2.0	2.0	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	1.94	1.98
29-Mar	1.9	1.9	1.9	1.9	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.96
30-Mar	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.00
31-Mar	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	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	1.96	2.08
	2.03	2.05	2.04	2.05	2.05	2.06	2.07	2.09	2.07	2.07	2.06	2.03	2.01	2.00	1.99	1.97	1.97	1.97	1.98	1.99	2.00	2.01	2.02	2.01	Diurnal Average	
	2.43	2.50	2.34	2.38	2.45	2.49	2.41	2.49	2.39	2.46	2.45	2.40	2.27	2.15	2.14	2.14	2.10	2.10	2.09	2.11	2.13	2.32	2.49	2.33	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

Henry Pirker - March 2016

Maximum Value: 3.35 ppm on Mar 27 11:00

Maximum Daily Average: 2.32 ppm on Mar 1

Minimum Value: 1.9 ppm on Mar 26 16:00

Minimum Daily Average: 1.95 ppm on Mar 16

Maximum Diurnal Average: 2.15 ppm at hour 11

Minimum Diurnal Average: 2.01 ppm at hour 18

Monthly Average: 2.083 ppm

Percentiles: P_1 = 1.92 P_{10} = 1.95 Q_1 = 1.99 Median = 2.04 Q_3 = 2.13 P_{90} = 2.26 P_{99} = 2.64

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	2.8	2.6	2.6	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.3	A	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.3	2.1	2.1	2.1	2.32	2.80
2-Mar	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.0	2.1	2.2	2.0	2.2	2.0	2.3	2.0	2.0	2.0	2.0	2.09	2.26
3-Mar	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.0	A	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	2.05	2.15
4-Mar	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.11	2.31
5-Mar	2.3	2.3	2.4	2.5	2.5	2.5	2.5	2.5	A	2.4	2.5	2.2	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.23	2.54
6-Mar	2.1	2.1	2.1	2.1	2.0	2.1	2.2	A	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.05	2.22
7-Mar	2.1	2.1	2.1	2.1	2.1	2.1	A	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.17
8-Mar	2.2	2.2	2.1	2.1	2.1	A	2.2	2.2	2.2	2.3	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.0	2.3	2.17	2.36
9-Mar	2.4	2.2	2.2	2.3	A	2.3	2.2	2.3	2.5	2.5	2.5	2.5	2.4	2.4	2.1	2.1	2.0	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.23	2.50
10-Mar	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.3	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.09	2.41
11-Mar	2.1	2.2	A	1.9	1.9	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.3	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.04	2.67
12-Mar	2.0	A	2.0	2.0	2.2	2.1	2.0	2.0	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.24
13-Mar	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.2	2.0	A	2.02	2.24
14-Mar	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.1	2.1	2.1	A	2.2	2.08	2.32
15-Mar	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.3	C	C	C	C	C	1.9	1.9	1.9	2.0	2.0	1.9	A	2.0	2.0	2.11	2.35
16-Mar	2.0	1.9	1.9	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	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	1.95	2.05
17-Mar	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.1	2.1	2.0	2.1	2.02	2.14
18-Mar	2.0	2.2	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.11	2.27
19-Mar	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.4	2.3	2.2	2.1	2.2	2.2	2.1	2.0	2.0	A	2.3	2.1	2.0	2.0	2.0	2.1	2.18	2.41
20-Mar	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.0	2.1	2.2	A	2.1	2.0	2.2	2.3	2.1	2.1	2.0	2.11	2.29
21-Mar	2.0	2.1	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.06
22-Mar	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	2.03	2.18
23-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.1	2.2	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.03	2.18
24-Mar	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	1.9	2.0	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.1	2.0	2.01	2.20
25-Mar	2.0	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	A	2.1	2.1	2.0	2.0	2.0	2.1	2.0	1.9	2.0	2.0	2.0	2.0	2.10	2.35
26-Mar	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	3.3	2.7	2.4	2.10	3.28
27-Mar	2.4	2.8	2.8	2.2	2.2	2.3	2.3	2.2	2.3	A	3.4	2.7	2.1	2.1	2.1	2.0	1.9	2.0	2.1	2.0	2.1	2.1	2.1	1.9	2.26	3.35
28-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.97	2.03
29-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	2.12
30-Mar	2.0	1.9	1.9	2.0	2.0	2.0	A	2.0	2.1	2.1	2.2	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.0	2.0	2.00	2.16
31-Mar	2.0	2.1	2.1	2.0	2.0	A	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.00	2.13
	2.09	2.12	2.12	2.09	2.11	2.12	2.13	2.13	2.13	2.13	2.15	2.09	2.07	2.04	2.05	2.03	2.02	2.01	2.03	2.06	2.06	2.11	2.07	2.07	Diurnal Average	
	2.80	2.78	2.83	2.46	2.51	2.54	2.52	2.54	2.48	2.48	3.35	2.71	2.36	2.36	2.67	2.32	2.24	2.19	2.27	2.26	2.29	3.28	2.67	2.39	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

Henry Pirker - March 2016

Peace Airshed Zone Association

Pollutant Rose

Methane (CH_4) - ppm

Henry Pirker - March 2016

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 - March 2016

Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2016

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

Maximum Value: 0.04 ppm on Mar 1 14:00

Maximum Daily Average: 0.00 ppm on Mar 1

Minimum Value: 0.0 ppm on Mar 1 02:00

Minimum Daily Average: 0.00 ppm on Mar 2

Maximum Diurnal Average: 0.00 ppm at hour 14

Minimum Diurnal Average: 0.00 ppm at hour 22

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:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	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	0.04
2-Mar	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
3-Mar	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
4-Mar	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
5-Mar	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
6-Mar	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
7-Mar	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
8-Mar	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
9-Mar	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
10-Mar	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
11-Mar	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
12-Mar	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
13-Mar	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
14-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
15-Mar	0.0	0.0	0.0	0.0	0.0	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	0.0	A	0.0	0.0	0.00	0.00
16-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
17-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-Mar	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Mar	0.0	0.0	0.0	0.0	0.0	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
20-Mar	0.0	0.0	0.0	0.0	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
21-Mar	0.0	0.0	0.0	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
22-Mar	0.0	0.0	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
23-Mar	0.0	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
24-Mar	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
25-Mar	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
26-Mar	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
27-Mar	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
28-Mar	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
29-Mar	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
30-Mar	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
31-Mar	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
	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	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2016

Maximum Value: 1.53 ppm on Mar 1 14:00

Maximum Daily Average: 0.07 ppm on Mar 1

Minimum Value: 0.0 ppm on Mar 2 11:00

Minimum Daily Average: 0.00 ppm on Mar 7

Maximum Diurnal Average: 0.05 ppm at hour 14

Minimum Diurnal Average: 0.00 ppm at hour 19

Monthly Average: 0.003 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:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	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	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	1.53
2-Mar	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
3-Mar	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
4-Mar	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
5-Mar	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
6-Mar	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
7-Mar	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
8-Mar	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
9-Mar	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
10-Mar	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
11-Mar	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
12-Mar	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
13-Mar	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
14-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
15-Mar	0.0	0.0	0.0	0.0	0.0	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	0.0	A	0.0	0.0	0.00	0.00
16-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
17-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-Mar	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Mar	0.0	0.0	0.0	0.0	0.0	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
20-Mar	0.0	0.0	0.0	0.0	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
21-Mar	0.0	0.0	0.0	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
22-Mar	0.0	0.0	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
23-Mar	0.0	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
24-Mar	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
25-Mar	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
26-Mar	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
27-Mar	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
28-Mar	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
29-Mar	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
30-Mar	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
31-Mar	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
	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	0.05	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	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2016

Peace Airshed Zone Association

Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2016

Pollutant Classes (ppm)

- 0 - 0.05
- 0.06 - 0.1
- 0.11 - 0.30
- > 0.30

Peace Airshed Zone Association

Span Responses

Non Methane Hydrocarbon (NMHC)

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - March 2016

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

Maximum Value: 30.6 $\mu g/m^3$ on Mar 27 01:00

Maximum Daily Average: 7.6 $\mu g/m^3$ on Mar 27

Minimum Value: 1 $\mu g/m^3$ on Mar 17 14:00

Maximum Diurnal Average: 6.2 $\mu g/m^3$ at hour 1

Monthly Average: 4.34 $\mu g/m^3$

Minimum Daily Average: 1.7 $\mu g/m^3$ on Mar 11

Minimum Diurnal Average: 2.4 $\mu g/m^3$ at hour 16

Percentiles: $P_1 = 0.8$ $P_{10} = 1.3$ $Q_1 = 2.2$ Median = 3.2 $Q_3 = 5.0$ $P_{90} = 8.8$ $P_{99} = 19.4$

Hours in Service:	744
Hours of Data:	744
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-Mar	19	19	6	5	6	7	7	9	7	6	6	5	6	7	5	3	4	2	2	3	3	3	2	2	6.1	19.5
2-Mar	2	2	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	2	3	3	3	2	3	2	2.5	3.2
3-Mar	2	1	2	2	2	2	3	3	14	3	2	1	1	1	1	1	1	1	2	3	3	3	4	4	2.6	14.1
4-Mar	4	5	4	4	4	3	4	4	5	5	4	3	4	3	3	4	3	3	4	5	7	9	9	11	4.7	11.0
5-Mar	9	8	9	12	13	14	12	11	10	10	10	4	4	4	3	2	3	3	4	3	4	4	3	5	6.9	13.8
6-Mar	6	6	5	4	5	4	4	3	4	4	4	5	4	5	5	4	3	3	2	2	3	3	3	4	3.9	6.4
7-Mar	4	3	4	3	3	4	5	8	5	3	3	3	3	2	3	3	5	6	8	7	6	10	19	15	5.6	19.3
8-Mar	15	14	5	4	3	3	4	7	6	6	6	5	4	2	2	2	2	2	4	4	5	3	2	2	4.7	15.3
9-Mar	19	20	7	17	19	11	9	7	6	5	5	4	4	2	4	2	2	3	1	2	2	3	1	1	6.5	19.8
10-Mar	1	2	2	1	1	2	2	2	2	3	2	3	2	2	3	5	5	5	6	7	11	15	12	6	4.3	15.3
11-Mar	4	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	2	2	3	1.7	4.5
12-Mar	3	2	4	4	3	3	3	4	6	2	3	3	4	2	4	2	3	3	5	8	5	3	3	5	3.6	7.6
13-Mar	7	9	10	9	6	4	3	3	3	3	2	1	2	1	1	1	2	1	2	3	4	4	5	5	3.8	9.9
14-Mar	6	6	7	9	8	7	5	5	6	6	5	3	2	1	1	1	1	1	2	2	4	5	4	5	4.2	9.2
15-Mar	7	6	9	12	10	9	11	14	15	13	9	7	5	2	1	1	1	1	1	2	2	1	1	1	5.9	15.2
16-Mar	1	1	1	1	1	1	1	2	2	2	1	1	1	1	2	2	2	2	2	2	5	3	3	4	1.8	5.1
17-Mar	8	6	6	5	4	4	3	3	2	2	1	1	1	1	1	1	1	1	1	26	12	2	2	2	4.0	26.2
18-Mar	3	3	3	3	5	5	11	11	10	10	8	7	4	4	6	3	2	3	3	3	3	2	2	1	4.8	11.5
19-Mar	2	2	2	3	3	3	4	4	6	7	4	4	5	6	4	3	3	4	4	5	4	5	6	5	4.1	7.0
20-Mar	5	4	6	5	5	6	7	6	6	5	5	4	5	4	6	5	5	5	5	5	5	3	3	3	4.9	6.8
21-Mar	3	2	2	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	4	9	3	3	3	2.9	8.7
22-Mar	3	3	4	4	4	4	4	4	4	5	6	4	3	3	3	4	4	4	14	7	9	9	7	6	5.1	13.5
23-Mar	6	6	5	6	6	7	7	8	7	5	4	4	5	4	4	4	4	4	5	5	4	4	3	3	5.1	7.9
24-Mar	3	3	2	3	3	3	3	3	3	3	2	2	3	3	4	4	4	6	6	6	9	10	10	10	4.4	10.3
25-Mar	10	8	9	11	12	13	9	8	7	5	4	2	2	2	1	1	1	1	1	1	1	1	1	1	4.6	13.0
26-Mar	1	2	2	2	2	2	2	3	3	2	2	1	1	1	1	1	1	1	1	3	5	12	19	18	3.6	18.7
27-Mar	31	16	12	9	8	8	9	9	10	12	7	5	4	3	3	2	1	2	4	6	6	8	5	3	7.6	30.6
28-Mar	3	3	4	3	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	2	3	2	2	2	2.1	3.6
29-Mar	2	2	1	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	3	3	3	3	2	2	2.1	3.0
30-Mar	3	3	3	3	3	4	4	4	5	5	4	4	5	4	3	2	2	3	4	4	4	4	4	2	3.7	4.8
31-Mar	3	3	3	2	3	2	3	3	2	3	3	3	5	5	4	3	3	3	9	12	22	15	19	25	6.6	25.3
	6.2	5.6	4.6	5.0	5.0	4.7	4.9	5.1	5.4	4.6	3.9	3.2	3.1	2.8	2.8	2.4	2.5	2.7	3.7	4.9	5.4	5.1	5.3	5.2	Diurnal Average	
	30.6	19.8	11.9	16.7	18.7	13.8	11.9	13.6	15.2	13.0	10.3	7.3	6.5	6.9	6.2	5.4	5.2	5.9	13.5	26.2	22.2	15.5	19.3	25.3	Diurnal Maximum	

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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - March 2016

Maximum Value: 190.4 $\mu g/m^3$ on Mar 17 20:00

Maximum Daily Average: 14.5 $\mu g/m^3$ on Mar 9

Minimum Value: 1 $\mu g/m^3$ on Mar 26 00:00

Minimum Daily Average: 2.6 $\mu g/m^3$ on Mar 11

Maximum Diurnal Average: 14.2 $\mu g/m^3$ at hour 20

Minimum Diurnal Average: 3.4 $\mu g/m^3$ at hour 16

Monthly Average: 6.92 $\mu g/m^3$

Percentiles: P_1 = 1.0 P_{10} = 1.7 Q_1 = 2.8 Median = 4.4 Q_3 = 7.1 P_{90} = 12.0 P_{99} = 64.9

Hours in Service:	744
Hours of Data:	744
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-Mar	40	29	13	6	8	11	9	10	9	16	7	6	9	15	7	5	6	3	3	4	4	4	3	2	9.5	39.7
2-Mar	5	2	2	2	2	2	3	3	3	3	5	5	3	3	4	3	3	3	3	4	3	3	7	4	3.3	6.6
3-Mar	6	2	2	2	2	3	3	3	90	7	2	2	1	1	2	1	2	2	3	5	4	5	6	11	7.0	89.8
4-Mar	6	7	7	7	4	4	4	6	6	6	5	3	5	4	4	5	3	5	5	7	9	13	11	31	6.9	31.0
5-Mar	16	9	10	27	15	16	13	12	11	11	13	6	5	5	4	3	11	4	5	4	4	6	4	5	9.1	26.6
6-Mar	7	7	6	5	5	5	4	4	4	4	5	5	5	5	6	4	3	6	3	3	3	4	4	7	4.7	7.0
7-Mar	9	4	5	4	4	5	7	9	9	4	4	4	5	2	3	5	6	7	10	9	8	12	28	19	7.6	28.1
8-Mar	17	17	7	8	4	4	6	11	6	7	7	7	5	3	3	3	3	3	5	6	6	6	4	3	6.3	17.1
9-Mar	71	89	23	23	24	13	12	9	10	12	8	4	6	4	5	3	5	5	2	3	4	7	2	2	14.5	89.1
10-Mar	2	2	6	2	2	2	2	2	3	3	3	4	4	3	5	6	7	6	8	13	13	24	20	8	6.2	24.4
11-Mar	5	8	2	2	1	1	1	1	1	1	1	1	1	2	4	1	2	3	5	5	4	3	3	3	2.6	8.1
12-Mar	7	3	11	9	5	3	4	6	45	3	4	4	7	3	5	3	7	4	7	14	7	5	4	7	7.4	45.2
13-Mar	9	10	11	10	8	5	3	3	3	3	3	2	2	2	1	7	5	2	2	5	6	5	8	6	5.1	10.9
14-Mar	8	8	7	10	10	8	7	7	7	6	6	5	2	2	1	1	2	2	2	3	5	8	5	7	5.3	10.3
15-Mar	9	7	26	17	14	10	12	15	17	20	11	9	6	3	1	2	2	1	1	2	3	2	1	1	8.1	26.2
16-Mar	1	1	1	1	1	1	2	2	2	2	2	1	1	2	2	2	2	2	2	3	31	6	4	6	3.4	31.1
17-Mar	15	8	7	6	5	4	4	3	2	2	2	1	1	1	1	1	1	1	3	190	57	2	3	2	13.5	190.4
18-Mar	5	3	3	4	7	9	14	16	16	12	9	8	6	6	7	5	2	5	4	4	3	5	2	3	6.6	16.4
19-Mar	3	3	3	3	4	4	6	6	9	9	6	5	5	13	5	4	3	5	6	7	7	10	8	6	5.8	12.6
20-Mar	9	5	13	8	11	6	8	9	7	7	5	5	5	5	6	6	5	5	6	5	5	4	3	4	6.5	13.5
21-Mar	4	2	3	3	3	3	4	3	3	3	3	2	2	2	3	4	3	4	4	6	57	4	3	4	5.5	57.3
22-Mar	3	3	4	4	5	4	4	4	5	6	7	6	4	4	4	4	5	9	127	75	16	10	8	7	13.7	127.1
23-Mar	9	9	6	6	7	7	8	9	8	6	6	5	5	4	4	5	4	6	5	6	5	4	3	3	5.9	8.9
24-Mar	5	3	3	3	3	3	3	4	3	3	3	3	3	3	4	4	5	8	8	8	12	12	13	12	5.4	13.4
25-Mar	33	13	11	15	13	17	12	13	13	6	5	3	3	3	3	1	1	2	2	1	1	1	1	1	7.2	33.2
26-Mar	2	2	2	2	2	2	3	3	4	3	2	2	2	1	1	1	1	3	2	8	7	17	23	35	5.5	35.5
27-Mar	68	24	15	10	10	8	10	10	12	16	10	6	5	5	4	2	2	2	10	11	7	16	7	4	11.3	67.9
28-Mar	3	4	4	4	3	3	3	3	2	2	2	2	2	1	1	2	1	1	2	4	5	3	2	2	2.6	4.9
29-Mar	2	2	2	2	2	6	3	3	2	3	2	2	2	3	3	2	3	3	3	4	3	3	3	3	2.7	6.0
30-Mar	9	3	3	4	4	4	5	5	6	6	6	5	6	6	4	3	3	10	7	6	7	6	6	3	5.3	10.0
31-Mar	4	3	5	3	3	3	5	4	4	4	3	4	8	10	7	5	4	7	16	18	50	21	24	29	10.1	49.5
	12.7	9.5	7.1	6.7	6.1	5.8	5.9	6.4	10.4	6.3	5.0	4.0	4.1	4.0	3.7	3.4	3.6	4.1	8.8	14.2	11.5	7.5	7.2	7.8	Diurnal Average	
	71.0	89.1	26.2	26.6	24.4	17.2	13.9	16.4	89.8	20.2	13.3	8.6	8.8	14.7	7.5	7.5	10.5	10.0	127.1	190.4	57.3	24.4	28.1	35.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - March 2016

Peace Airshed Zone Association

Pollutant Rose

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

Henry Pirker - March 2016

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - March 2016

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

Maximum Value: 16.8 °C on Mar 31 17:00

Maximum Daily Average: 8.2 °C on Mar 31

Minimum Value: -14 °C on Mar 7 07:00

Minimum Daily Average: -6.7 °C on Mar 7

Maximum Diurnal Average: 5.8 °C at hour 16

Minimum Diurnal Average: -4.1 °C at hour 7

Monthly Average: 0.49 °C

Percentiles: P_1 = -12.3 P_{10} = -5.9 Q_1 = -3.4 Median = 0.1 Q_3 = 3.8 P_{90} = 7.7 P_{99} = 13.9

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	-8	-9	-11	-12	-12	-12	-13	-13	-11	-7	-3	0	4	4	4	5	4	2	0	-1	-2	-3	-3	-3	-4.2	4.7
2-Mar	-3	-3	-3	-3	-4	-4	-5	-6	-6	-6	-5	-5	-4	-4	-4	-4	-4	-4	-5	-5	-6	-6	-6	-6	-4.6	-2.8
3-Mar	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-3	-4	-4	-5	-5	-5	-5	-4.7	-1.8
4-Mar	-5	-5	-5	-5	-5	-5	-5	-5	-4	-3	-1	0	1	1	2	2	4	4	2	1	-1	-3	-4	-6	-1.9	3.9
5-Mar	-7	-8	-8	-8	-7	-7	-6	-7	-6	-4	0	2	1	2	3	3	1	0	0	-2	-2	-3	-3	-4	-2.9	3.4
6-Mar	-4	-4	-4	-4	-5	-5	-5	-6	-6	-5	-4	-3	-3	-3	-2	-2	-3	-4	-4	-4	-5	-5	-5	-7	-4.3	-1.6
7-Mar	-8	-9	-9	-9	-11	-13	-14	-14	-12	-11	-8	-5	-4	-4	-1	0	-2	-4	-4	-4	-4	-4	-4	-4	-6.7	-0.1
8-Mar	-5	-4	-5	-5	-6	-7	-8	-8	-7	-5	0	3	4	1	4	6	7	7	4	2	1	0	-1	-1	-0.9	7.2
9-Mar	-3	-4	-7	-9	-10	-11	-12	-13	-10	-6	-3	3	6	5	7	9	8	7	4	2	1	1	1	1	-1.4	9.3
10-Mar	0	0	-1	-1	-1	-1	0	0	0	1	3	4	7	7	6	6	5	3	2	2	1	-1	-1	-1	1.6	7.1
11-Mar	-1	-1	0	2	3	3	3	2	3	4	5	6	7	9	9	10	8	6	5	3	3	3	3	2	3.9	9.6
12-Mar	2	2	1	0	-1	-2	-3	-5	-3	0	3	5	4	8	7	6	6	5	4	3	3	2	1	0	1.9	7.6
13-Mar	0	0	0	0	-1	0	-1	0	0	1	3	6	8	9	9	9	7	7	4	2	1	0	-1	-3	2.4	9.3
14-Mar	-5	-6	-7	-7	-5	-3	-3	-3	-3	-2	0	2	2	2	2	3	2	2	1	0	0	0	0	0	-1.2	2.6
15-Mar	-1	-1	-3	-4	-5	-6	-8	-8	-5	-1	2	4	6	8	8	9	8	7	6	3	2	2	2	1	1.1	9.1
16-Mar	0	0	0	-1	-1	-1	-2	-3	0	2	2	3	3	0	1	2	2	2	1	1	0	0	-1	-2	0.3	3.0
17-Mar	-2	-2	-3	-3	-2	-2	-2	-2	-1	0	1	2	4	5	6	5	6	6	3	1	0	-1	-1	-1	0.6	5.8
18-Mar	-2	-2	-3	-4	-5	-7	-9	-9	-9	-6	-2	-1	0	2	3	6	6	4	4	2	2	2	1	1	-1.1	6.4
19-Mar	-3	-4	-5	-5	-5	-6	-6	-6	-2	2	5	6	8	8	10	9	9	7	5	4	4	3	3	2	1.7	9.6
20-Mar	2	1	1	0	0	-1	0	0	1	2	3	5	7	7	6	6	4	4	3	3	2	2	2	2	2.6	7.2
21-Mar	1	0	0	-1	-2	-2	-3	-3	-3	-3	-3	-2	-1	-1	-1	-1	-1	-2	-2	-3	-3	-4	-4	-4	-2.0	1.0
22-Mar	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-1	-1	0	1	1	1	2	0	-2	-1	-1	-1	-2	-1.6	1.9
23-Mar	-2	-2	-2	-2	-3	-3	-3	-3	-1	1	2	2	3	3	3	3	2	1	0	-1	-1	-2	-2	-2	-0.3	3.5
24-Mar	-2	-2	-2	-3	-4	-4	-4	-4	-4	-3	-2	0	2	4	6	4	3	1	0	-1	-2	-2	-2	-2	-1.0	5.8
25-Mar	-4	-4	-4	-4	-6	-7	-9	-10	-6	-1	2	6	9	9	9	9	8	7	6	5	4	3	3	3	1.3	9.3
26-Mar	3	3	2	2	2	1	0	0	3	6	8	9	9	11	12	11	12	10	9	6	4	2	1	1	5.3	11.7
27-Mar	0	-2	-3	-4	-5	-5	-5	-4	0	2	5	9	9	8	10	13	12	11	8	4	3	3	4	4	3.2	12.9
28-Mar	4	3	3	3	3	3	2	2	6	7	8	9	10	11	11	12	12	11	9	6	5	5	3	3	6.2	12.1
29-Mar	2	2	1	1	1	1	0	2	4	5	8	8	10	11	14	14	14	13	11	9	8	7	6	5	6.5	14.3
30-Mar	5	6	6	4	4	4	4	4	6	6	7	8	9	12	12	11	12	10	9	8	6	6	5	5	7.0	11.8
31-Mar	5	5	5	4	4	3	2	3	5	8	9	11	12	13	14	15	17	16	14	12	8	6	5	3	8.2	16.8
	-1.6	-2.0	-2.5	-2.8	-3.1	-3.5	-4.1	-4.1	-2.6	-0.7	1.2	2.9	4.1	4.6	5.4	5.8	5.4	4.5	3.0	1.6	0.8	0.3	-0.2	-0.7	Diurnal Average	
	5.2	5.7	5.7	4.1	4.4	4.0	3.8	4.0	5.6	8.0	9.5	10.5	11.9	13.3	14.3	15.0	16.8	16.2	14.1	11.9	7.8	6.7	5.8	5.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - March 2016

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

Maximum Value: 87.5 % on Mar 13 04:00

Maximum Daily Average: 83.9 % on Mar 6

Minimum Value: 27 % on Mar 19 16:00

Minimum Daily Average: 49.2 % on Mar 11

Maximum Diurnal Average: 75.4 % at hour 7

Minimum Diurnal Average: 50.9 % at hour 16

Monthly Average: 65.45 %

Percentiles: P_1 = 32.0 P_{10} = 44.4 Q_1 = 54.4 Median = 67.1 Q_3 = 79.1 P_{90} = 83.1 P_{99} = 86.0

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	81	82	80	79	79	78	77	78	76	66	55	51	47	48	50	51	53	56	60	62	67	68	68	67	65.8	81.6
2-Mar	67	66	67	66	67	68	70	71	70	71	73	72	71	72	74	77	74	74	77	79	80	81	82	82	73.0	82.1
3-Mar	82	82	81	81	81	81	82	82	82	79	77	74	75	74	70	65	66	71	74	75	76	76	78	79	76.8	82.1
4-Mar	79	80	80	80	80	81	82	83	83	80	73	71	69	68	69	68	66	69	76	79	82	83	83	83	77.0	83.1
5-Mar	84	83	82	83	83	83	84	83	83	82	77	74	76	71	68	66	71	79	85	85	84	83	81	83	79.6	85.0
6-Mar	86	86	86	86	85	85	84	84	84	84	84	84	83	83	82	82	83	84	85	85	84	84	82	81	83.9	85.7
7-Mar	79	79	80	79	79	79	78	78	78	77	72	65	61	62	58	56	62	70	76	81	84	85	86	85	74.5	85.7
8-Mar	85	85	85	85	84	83	82	82	83	83	81	63	52	60	55	50	49	53	61	66	69	75	81	84	72.3	85.3
9-Mar	84	84	83	81	80	79	78	78	79	76	66	50	46	49	45	39	41	45	51	55	51	50	48	49	62.0	84.3
10-Mar	51	49	52	55	58	58	58	59	59	58	56	52	41	42	45	47	53	59	62	66	70	75	78	74	57.4	77.8
11-Mar	78	77	67	61	60	59	57	57	52	46	44	41	38	32	30	27	30	36	42	46	49	48	49	55	49.2	78.1
12-Mar	55	52	57	63	66	67	71	74	64	59	51	48	53	41	43	45	49	51	54	61	63	73	83	86	59.4	85.8
13-Mar	86	87	87	87	87	78	78	73	71	65	59	50	45	42	38	38	40	40	55	65	69	73	77	81	65.4	87.5
14-Mar	82	82	82	82	83	84	84	83	83	80	73	63	57	54	53	53	54	55	57	58	60	61	62	64	68.7	84.2
15-Mar	65	67	72	77	80	81	81	81	72	60	56	53	49	43	41	39	39	42	45	53	55	53	53	55	58.8	81.4
16-Mar	60	63	63	63	58	60	61	60	50	46	49	51	54	81	85	77	70	75	78	79	77	73	77	79	66.3	84.7
17-Mar	81	82	81	80	78	77	75	72	67	64	62	57	52	47	47	46	44	42	47	54	61	67	71	75	63.8	81.5
18-Mar	77	79	80	82	83	83	81	80	80	79	72	67	65	61	57	44	43	46	44	48	44	41	43	43	63.5	83.3
19-Mar	59	66	69	69	70	70	72	70	60	52	43	41	36	36	31	27	28	37	42	46	47	51	56	59	51.5	71.8
20-Mar	62	66	65	69	71	72	70	62	60	55	53	49	46	46	49	52	55	57	61	62	64	63	64	65	60.0	72.3
21-Mar	69	71	74	84	83	84	85	84	83	82	80	77	73	70	70	71	73	75	76	79	80	82	83	82	78.0	84.8
22-Mar	82	82	82	82	81	80	80	79	76	73	71	68	68	66	62	61	59	57	63	69	70	70	71	74	71.9	82.3
23-Mar	73	72	72	73	75	79	80	79	73	68	66	65	64	64	65	65	68	74	79	84	85	86	86	86	74.3	86.3
24-Mar	86	86	84	84	85	85	85	85	84	83	79	69	61	55	49	54	58	63	69	72	79	82	83	84	75.2	86.2
25-Mar	84	83	82	82	83	83	81	80	80	69	57	48	43	46	44	44	47	47	49	55	58	60	61	61	63.7	83.7
26-Mar	62	63	64	64	64	65	66	65	56	49	44	43	41	37	35	35	33	36	38	46	53	61	68	65	52.1	67.6
27-Mar	69	74	78	78	79	78	80	78	67	61	53	43	42	46	41	31	33	34	48	59	65	65	63	64	59.5	79.7
28-Mar	67	68	68	68	69	68	71	68	57	53	51	48	44	40	38	35	32	33	37	46	50	50	56	56	53.0	71.0
29-Mar	57	59	60	61	61	61	65	60	56	53	48	48	46	44	37	38	40	44	47	51	55	57	60	63	52.9	64.6
30-Mar	64	62	62	69	68	69	68	68	64	63	60	60	57	51	51	52	50	52	55	58	62	62	65	64	60.6	68.6
31-Mar	64	64	66	67	70	72	74	73	65	58	55	53	50	47	47	42	38	37	44	49	63	68	72	76	58.9	75.7
	72.9	73.6	73.9	74.8	75.1	75.3	75.4	74.5	70.9	66.8	62.5	58.0	54.9	54.2	52.6	50.9	51.7	54.6	59.2	63.6	66.3	68.0	70.0	71.1	Diurnal Average	
	86.4	86.9	87.2	87.5	86.6	85.2	85.0	84.8	83.9	83.8	83.9	83.7	82.9	82.7	84.7	81.5	83.3	84.4	85.0	84.8	85.4	86.1	86.1	86.3	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - March 2016

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

Maximum Value: 589.1 W/m^2 on Mar 25 13:00

Maximum Daily Average: 187.6 W/m^2 on Mar 31

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

Minimum Daily Average: 24.4 W/m^2 on Mar 6

Maximum Diurnal Average: 384.0 W/m^2 at hour 13

Minimum Diurnal Average: 0.0 W/m^2 at hour 3

Monthly Average: 112.52 W/m^2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 4.0 Q_3 = 181.6 P_{90} = 412.9 P_{99} = 546.2

Hours in Service:	744
Hours of Data:	744
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-Mar	0	0	0	0	0	0	0	2	91	225	320	392	438	421	385	277	168	62	8	0	0	0	0	0	116.2	437.7
2-Mar	0	0	0	0	0	0	0	1	29	87	152	178	171	155	136	97	80	46	5	0	0	0	0	0	47.4	178.0
3-Mar	0	0	0	0	0	0	0	0	7	28	45	58	69	88	109	88	86	30	3	0	0	0	0	0	25.4	108.6
4-Mar	0	0	0	0	0	0	0	1	16	102	170	112	189	182	135	120	164	81	11	0	0	0	0	0	53.4	188.7
5-Mar	0	0	0	0	0	0	0	2	16	59	113	121	160	318	387	332	108	38	13	0	0	0	0	0	69.5	387.1
6-Mar	0	0	0	0	0	0	0	2	21	54	89	85	78	59	65	51	40	35	5	0	0	0	0	0	24.4	88.9
7-Mar	0	0	0	0	0	0	0	7	22	62	181	259	295	289	392	355	257	81	6	0	0	0	0	0	91.9	392.0
8-Mar	0	0	0	0	0	0	0	4	46	144	352	429	475	476	435	349	219	112	16	0	0	0	0	0	127.5	476.0
9-Mar	0	0	0	0	0	0	0	7	105	249	408	434	482	480	440	357	183	152	20	0	0	0	0	0	138.2	482.4
10-Mar	0	0	0	0	0	0	0	11	47	102	212	279	445	504	362	226	117	65	17	0	0	0	0	0	99.5	503.7
11-Mar	0	0	0	0	0	0	0	8	116	253	378	453	490	487	445	343	189	83	19	0	0	0	0	0	136.0	490.4
12-Mar	0	0	0	0	0	0	0	18	132	268	374	446	480	425	292	287	160	72	14	0	0	0	0	0	123.7	480.2
13-Mar	0	0	0	0	0	0	0	7	60	160	331	459	498	501	454	371	249	138	24	0	0	0	0	0	135.6	501.1
14-Mar	0	0	0	0	0	0	0	8	32	86	153	249	287	303	257	182	133	131	25	0	0	0	0	0	76.9	302.8
15-Mar	0	0	0	0	0	0	0	23	165	288	394	471	511	508	463	354	255	143	27	1	0	0	0	0	150.1	510.6
16-Mar	0	0	0	0	0	0	0	30	172	303	322	290	264	84	144	130	148	94	26	1	0	0	0	0	83.6	322.0
17-Mar	0	0	0	0	0	0	0	10	56	137	368	491	527	526	483	332	276	179	28	1	0	0	0	0	142.2	527.5
18-Mar	0	0	0	0	0	0	0	26	114	285	410	482	530	530	484	403	246	98	60	1	0	0	0	0	152.8	530.3
19-Mar	0	0	0	0	0	0	0	17	133	294	413	491	497	446	362	321	212	104	29	1	0	0	0	0	138.3	497.3
20-Mar	0	0	0	0	0	0	0	15	70	136	180	426	574	507	369	236	95	80	22	1	0	0	0	0	113.0	573.7
21-Mar	0	0	0	0	0	0	0	16	40	102	165	226	286	275	250	201	171	83	38	3	0	0	0	0	77.3	286.1
22-Mar	0	0	0	0	0	0	0	11	52	112	144	200	206	225	279	301	192	143	42	2	0	0	0	0	79.6	300.7
23-Mar	0	0	0	0	0	0	1	49	187	350	383	455	375	367	298	244	153	83	27	2	0	0	0	0	123.9	455.1
24-Mar	0	0	0	0	0	0	0	12	62	91	165	251	371	411	532	433	314	146	47	4	0	0	0	0	118.4	531.7
25-Mar	0	0	0	0	0	0	1	33	162	323	460	541	589	435	526	418	156	110	48	3	0	0	0	0	158.6	589.1
26-Mar	0	0	0	0	0	0	4	57	185	335	475	499	551	549	515	453	330	197	68	4	0	0	0	0	176.0	551.0
27-Mar	0	0	0	0	0	0	3	57	175	269	388	470	491	449	456	501	263	151	35	3	0	0	0	0	154.6	500.8
28-Mar	0	0	0	0	0	0	3	85	232	275	405	487	492	479	414	461	339	203	68	4	0	0	0	0	164.4	491.7
29-Mar	0	0	0	0	0	0	4	69	182	224	415	283	264	298	471	369	293	131	77	6	0	0	0	0	128.5	470.6
30-Mar	0	0	0	0	0	0	4	52	72	81	117	167	237	304	225	167	191	111	35	8	0	0	0	0	73.8	304.4
31-Mar	0	0	0	0	0	0	6	87	216	350	474	548	581	587	539	456	352	212	80	15	0	0	0	0	187.6	587.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.8	23.4	97.3	188.2	288.9	346.1	384.0	376.4	358.1	297.2	198.0	109.5	30.5	1.9	0.0	0.0	0.0	0.0	Diurnal Average	
	0.2	0.3	0.1	0.1	0.1	0.2	5.6	87.4	232.3	349.9	475.4	547.7	589.1	587.1	539.1	500.8	352.5	212.0	79.7	15.2	0.3	0.1	0.1	0.2	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2016

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	0	1	1	0	2	2	3	2	3	2	3	2	4	5	4	5	4	3	5	5	4	6	5	2.0	5.5
Dir	170	152	308	291	320	273	270	292	284	261	254	273	263	278	314	16	26	16	12	4	9	9	9	13	339.0	8.9
2 Spd	6	6	4	6	6	7	6	5	5	6	7	6	4	5	5	6	5	3	2	3	3	3	3	3	4.3	6.9
Dir	4	27	18	15	10	22	26	37	28	24	36	23	30	38	41	28	13	16	6	3	350	310	286	285	17.0	21.6
3 Spd	4	4	5	1	2	4	2	3	3	3	5	6	8	8	7	5	4	3	2	3	3	4	4	4	2.6	7.8
Dir	286	279	299	293	272	309	278	270	307	290	270	245	266	268	271	258	295	306	9	44	52	53	65	55	290.9	265.6
4 Spd	6	5	5	5	7	8	8	8	6	8	9	8	5	5	6	5	6	4	5	1	1	4	5	4	4.4	8.8
Dir	71	58	53	58	70	72	65	64	51	55	67	73	51	42	61	50	64	69	100	189	269	275	282	289	58.8	66.7
5 Spd	3	2	1	3	1	2	3	3	3	2	4	7	7	7	4	8	5	7	2	8	5	5	8	7	2.8	7.6
Dir	284	283	290	111	103	309	284	275	278	289	345	22	16	18	357	354	316	295	315	64	66	13	58	52	3.3	63.8
6 Spd	5	3	4	5	5	6	8	9	8	6	9	7	8	8	5	2	10	9	7	8	10	8	6	6	3.8	9.9
Dir	29	5	14	29	13	4	10	29	21	21	27	14	4	359	14	326	285	281	256	261	263	273	209	236	337.8	263.5
7 Spd	8	3	3	3	1	1	1	4	8	7	4	3	4	5	2	4	4	3	1	4	5	0	1	3	2.3	8.4
Dir	259	222	218	197	191	234	269	294	299	293	261	252	266	287	267	255	274	291	253	101	95	96	350	281	266.7	298.6
8 Spd	3	3	3	5	4	3	2	0	2	1	2	1	2	5	3	3	2	2	4	3	7	4	3	1	1.5	6.5
Dir	271	260	245	197	204	209	216	228	264	255	193	233	262	292	275	246	227	126	128	121	117	139	134	131	202.9	116.8
9 Spd	1	1	2	4	2	3	3	3	2	3	3	1	3	3	4	3	4	5	5	3	4	4	7	9	1.8	8.6
Dir	342	298	269	274	276	273	269	271	288	277	273	226	271	298	330	343	344	32	27	31	37	43	49	58	343.2	57.8
10 Spd	9	9	7	8	10	9	7	7	5	4	4	3	3	5	5	4	2	2	2	1	1	0	3	3	3.1	10.1
Dir	54	52	60	47	49	55	47	45	33	21	10	3	51	304	326	323	281	266	311	178	190	10	189	207	33.3	49.3
11 Spd	1	3	10	16	16	17	19	17	19	20	19	16	14	11	9	6	5	3	3	6	6	6	6	3	7.2	19.8
Dir	200	190	202	200	208	203	201	199	197	204	202	216	228	220	243	261	330	357	44	53	55	43	36	10	207.8	203.6
12 Spd	3	6	2	2	4	2	2	2	3	4	2	4	7	2	0	6	3	3	1	3	6	7	8	2	1.9	7.9
Dir	29	27	8	341	5	6	282	279	265	257	259	260	289	208	270	36	19	17	320	251	216	264	267	288	299.2	267.1
13 Spd	1	1	2	3	4	5	3	6	6	4	6	5	4	6	5	5	7	4	7	6	5	5	2	3	1.9	6.7
Dir	231	253	205	240	249	244	220	218	195	216	200	237	236	244	243	272	290	340	34	31	36	38	356	307	253.8	33.9
14 Spd	2	3	4	3	2	5	4	4	2	1	1	2	7	6	5	2	2	4	3	2	1	2	1	2	1.7	7.1
Dir	288	266	276	272	305	2	41	81	87	106	135	85	59	59	75	29	38	75	78	68	76	83	108	128	53.4	59.2
15 Spd	2	3	1	1	1	3	3	4	2	2	3	4	5	5	7	8	17	13	11	5	8	10	10	11	5.0	16.5
Dir	112	120	77	74	238	278	278	274	275	255	262	268	267	256	268	245	231	228	228	229	209	215	220	223	234.9	231.4
16 Spd	10	11	10	10	14	10	8	5	8	10	12	16	15	13	8	9	13	9	6	4	4	5	3	1	7.7	16.1
Dir	213	231	235	246	221	211	209	237	203	212	234	243	252	272	227	226	245	229	207	211	290	43	96	56	231.7	243.2
17 Spd	3	3	4	8	11	10	10	9	10	10	13	12	9	10	9	8	5	3	2	0	5	3	2	3	6.1	12.6
Dir	243	273	273	256	268	270	274	258	255	266	271	265	253	239	205	201	200	250	244	269	279	271	281	316	256.3	270.5
18 Spd	2	1	0	1	1	2	3	3	4	4	3	5	7	7	8	5	6	4	4	2	4	6	6	3	2.3	7.5
Dir	153	257	265	264	321	268	274	262	287	269	265	280	282	286	296	336	349	350	4	16	39	41	36	51	319.3	295.5
19 Spd	3	2	3	2	3	2	1	2	0	2	4	4	3	3	2	4	4	4	4	1	2	2	2	1	1.2	3.9
Dir	251	260	256	265	274	278	233	251	247	168	243	247	260	310	10	23	20	17	33	21	24	6	355	353	309.4	243.4
20 Spd	2	3	0	1	2	1	1	1	2	6	3	5	6	7	7	6	8	9	8	6	6	7	7	7	4.2	9.2
Dir	294	300	71	261	289	328	347	51	40	54	59	31	21	21	24	25	8	3	6	11	7	7	8	7	12.7	3.0
21 Spd	8	8	8	8	8	8	8	7	8	8	7	8	8	8	6	6	7	5	4	2	3	4	4	4	5.8	8.2
Dir	6	7	15	12	14	20	25	13	16	6	360	356	355	354	360	347	341	334	340	348	302	262	281	274	357.5	12.3
22 Spd	5	5	4	5	4	3	4	4	5	7	7	8	7	10	10	10	6	2	2	0	1	1	5	6	3.8	9.8
Dir	278	275	276	273	266	248	241	246	248	244	259	256	270	265	261	271	265	246	290	180	112	62	55	57	265.0	265.1

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2016

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	6	6	6	5	4	4	3	3	6	6	7	8	5	6	7	5	7	5	7	6	7	7	8	8	5.7	8.0
Dir	53	62	51	58	45	38	31	27	50	48	42	46	37	16	27	25	19	21	32	29	24	21	22	21	34.8	45.9
24 Spd	9	9	9	7	6	6	5	4	6	6	6	3	1	0	1	1	3	4	4	3	3	1	1	0	3.3	8.8
Dir	24	25	30	19	17	19	4	346	328	298	312	314	340	352	267	354	16	64	57	50	66	45	267	309	8.5	23.6
25 Spd	1	2	2	2	4	3	3	4	2	1	2	2	2	3	4	5	2	2	13	10	9	7	7	7	3.6	12.8
Dir	257	278	272	281	253	294	271	282	284	266	279	255	258	261	282	280	254	242	233	239	206	199	200	198	242.5	232.9
26 Spd	5	7	7	7	9	7	5	2	3	4	7	10	8	4	2	4	5	5	2	2	3	0	3	1	3.8	9.6
Dir	201	196	194	198	206	208	209	219	200	206	202	214	254	257	271	259	227	242	258	135	115	182	96	71	211.7	213.7
27 Spd	0	1	2	1	1	2	1	1	1	3	2	2	5	6	2	3	4	4	3	2	2	2	6	11	2.4	11.1
Dir	333	347	270	281	261	284	255	261	260	233	233	233	248	251	263	259	244	236	286	273	278	268	215	211	246.0	211.3
28 Spd	7	7	8	9	7	8	5	5	5	8	7	9	8	6	5	5	5	6	6	3	6	12	9	11	6.2	11.6
Dir	207	216	215	215	246	268	264	257	248	241	236	241	243	248	256	271	263	250	265	275	202	208	198	195	233.6	207.8
29 Spd	7	5	5	7	7	8	5	7	8	8	9	8	4	4	5	8	7	8	10	12	9	8	7	8	7.0	11.7
Dir	197	227	257	242	224	227	240	223	234	224	224	236	254	246	223	232	231	212	206	210	202	198	239	238	224.1	210.0
30 Spd	7	10	10	5	1	4	5	4	3	2	4	5	6	5	9	10	11	8	7	5	4	2	2	2	4.4	10.8
Dir	243	241	238	248	247	204	217	214	232	194	227	190	205	231	247	252	252	277	296	284	335	17	357	34	246.3	252.4
31 Spd	4	3	4	4	6	7	5	4	4	1	4	4	4	3	6	5	4	4	3	1	2	2	2	2	1.2	6.7
Dir	78	40	26	8	36	60	62	66	81	98	277	283	286	271	278	254	244	246	298	340	261	291	276	310	334.5	59.7
Spd	0.7	0.9	1.2	1.3	1.4	1.3	1.2	1.3	1.5	1.9	2.3	2.7	3.0	3.3	2.6	2.6	3.0	2.0	1.2	0.6	0.3	0.7	0.4	0.6	Diurnal Average	
Dir	294.0	293.4	274.0	260.6	266.5	280.2	272.8	271.4	272.4	256.4	258.3	263.3	279.7	285.4	286.8	290.4	289.7	296.6	301.7	339.9	346.2	315.1	312.4	286.0		
Spd	9.7	11.0	10.3	15.8	16.3	16.6	19.3	17.2	18.6	19.8	19.3	16.1	15.2	13.4	9.7	10.2	16.5	13.1	12.8	11.7	9.9	11.6	10.5	11.1	Diurnal Maximum	
Dir	213.3	230.7	234.6	199.9	208.1	203.0	201.5	199.5	197.3	203.6	201.9	243.2	251.9	271.6	261.2	252.0	231.4	227.8	232.9	210.0	263.5	207.8	220.5	211.3		

Maximum Speed Value: 20 km/h on Mar 11 10:00
Maximum Daily Speed Average: 7.7 km/h on Mar 11
Maximum Diurnal Speed Average: 3.3 km/h at hour 14

Minimum Speed Value: 0 km/h on Mar 26 22:00
Minimum Daily Speed Average: 1.2 km/h on Mar 19
Minimum Diurnal Speed Average: 0.3 km/h at hour 21

Monthly Average Velocity: 1.52 km/h 280.96 deg

Speed Percentiles: $P_1 = 0.3$ $P_{10} = 1.4$ $Q_1 = 2.6$ Median = 4.4 $Q_3 = 6.8$ $P_{90} = 8.8$ $P_{99} = 16.4$

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

Hours in Service:	744
Hours of Data:	744
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	60	56	0	0	0	0	116
NorthEast	51	74	0	0	0	0	125
East	28	5	0	0	0	0	33
SouthEast	13	1	0	0	0	0	14
South	16	20	3	2	0	0	41
SouthWest	54	67	16	1	0	0	138
West	171	52	4	0	0	0	227
NorthWest	39	11	0	0	0	0	50
Total	432	286	23	3	0	0	744

Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - March 2016

Wind Speed Classes (km/h)

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - March 2016

Maximum Speed: 20 km/h on Mar 11 10:00

Maximum Daily Speed Average: 10.6 km/h on Mar 11

Minimum Speed: 0 km/h on Mar 1 01:00

Minimum Daily Speed Average: 2.7 km/h on Mar 19

Maximum Diurnal Speed Average: 6.1 km/h at hour 12

Minimum Diurnal Speed Average: 4.2 km/h at hour 20

Monthly Average Speed: 5.17 km/h

Percentiles: $P_1 = 0.5$ $P_{10} = 1.9$ $Q_1 = 2.8$ Median = 4.6 $Q_3 = 7.0$ $P_{90} = 8.9$ $P_{99} = 16.4$

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	1	1	1	0	3	3	3	2	3	2	3	2	4	5	5	5	4	4	6	5	4	6	5	3.2	5.7
2-Mar	7	6	4	6	6	7	6	5	5	6	7	6	5	5	5	6	5	3	3	4	3	3	3	3	5.0	7.2
3-Mar	5	4	5	2	2	4	2	3	3	3	5	7	8	8	7	5	5	3	2	3	3	4	4	4	4.3	8.0
4-Mar	6	6	5	5	7	8	9	8	7	8	9	8	6	5	6	5	6	5	5	3	2	4	5	4	5.9	8.9
5-Mar	3	2	2	3	2	2	4	4	3	2	5	8	8	7	13	8	8	8	3	8	7	5	8	7	5.4	12.9
6-Mar	5	3	4	5	5	6	8	9	9	6	9	8	8	8	5	3	10	9	7	8	10	9	7	7	7.0	10.0
7-Mar	8	3	3	3	2	1	2	4	8	7	4	3	4	5	3	5	4	3	2	4	5	1	1	3	3.7	8.5
8-Mar	3	3	3	5	5	3	2	1	2	1	2	1	3	5	4	3	2	3	4	4	7	4	3	2	3.1	6.7
9-Mar	2	1	2	4	2	3	3	4	2	3	3	1	3	3	4	3	4	5	5	4	4	4	7	9	3.6	8.9
10-Mar	9	9	7	8	10	9	8	8	5	4	5	3	3	6	5	4	3	2	2	2	1	2	3	4	5.1	10.1
11-Mar	1	4	10	16	16	17	19	17	19	20	19	16	14	12	9	6	5	3	3	6	6	7	6	3	10.6	20.0
12-Mar	3	6	2	2	4	2	3	2	3	4	2	5	7	2	2	6	4	3	2	3	6	7	8	3	3.9	8.0
13-Mar	1	1	2	3	5	6	3	6	6	4	6	5	4	6	5	5	7	5	7	6	5	5	2	3	4.6	6.8
14-Mar	2	3	4	3	3	5	5	4	2	1	1	2	7	7	5	3	3	4	3	2	2	2	1	2	3.1	7.3
15-Mar	2	3	1	1	2	3	3	4	2	2	3	4	5	6	7	8	17	13	12	6	8	10	11	11	5.9	16.6
16-Mar	10	11	10	10	14	10	8	6	8	11	12	16	16	14	8	9	13	9	6	4	4	5	4	2	9.2	16.2
17-Mar	3	4	4	8	11	10	10	9	10	10	13	12	9	10	9	9	6	3	2	0	5	4	2	4	6.9	12.7
18-Mar	3	2	0	1	1	3	3	3	4	4	4	5	7	7	8	5	7	5	4	2	4	6	6	3	4.0	7.9
19-Mar	3	2	3	3	3	3	1	3	1	2	4	4	3	3	2	4	4	4	4	2	2	2	2	1	2.7	4.2
20-Mar	3	3	2	2	2	1	1	1	2	6	4	5	7	7	8	7	8	9	8	7	6	7	7	8	5.0	9.4
21-Mar	8	9	8	8	8	8	8	7	8	8	8	8	8	8	6	6	7	5	5	2	3	4	5	4	6.7	8.5
22-Mar	5	5	4	5	4	3	4	5	5	7	8	8	7	10	10	10	6	2	2	1	1	2	5	7	5.2	10.0
23-Mar	6	6	6	5	4	4	3	3	6	6	7	8	5	6	7	6	7	6	7	6	7	7	8	8	6.0	8.2
24-Mar	9	9	9	7	6	6	5	4	7	6	7	3	2	2	2	3	3	4	4	3	3	1	2	1	4.5	8.9
25-Mar	1	2	2	2	4	4	3	4	2	2	2	2	3	4	4	5	2	2	13	11	9	7	7	7	4.4	13.0
26-Mar	5	7	7	7	9	8	5	2	3	4	7	10	8	4	3	5	5	5	2	2	3	1	3	1	4.8	9.8
27-Mar	1	1	2	1	2	2	1	1	1	3	2	2	5	6	2	3	4	4	3	2	2	2	6	11	2.8	11.2
28-Mar	7	7	8	9	7	8	5	5	5	8	7	9	8	6	5	5	5	6	6	3	6	12	9	11	7.0	11.6
29-Mar	7	5	5	7	7	8	5	7	8	8	10	8	4	4	5	9	7	8	10	12	9	8	7	8	7.4	11.8
30-Mar	8	10	10	5	2	4	6	5	3	2	4	5	7	6	9	10	11	8	7	6	4	2	2	3	5.7	10.9
31-Mar	4	3	4	4	6	7	5	5	4	3	5	4	4	3	6	5	4	5	4	1	2	2	2	2	3.9	6.8
	4.5	4.5	4.5	4.8	5.2	5.4	4.9	4.9	5.1	5.4	6.0	6.1	6.1	6.1	5.8	5.7	6.0	5.2	4.9	4.2	4.7	4.7	4.9	4.8	Diurnal Average	
	9.8	11.1	10.4	15.9	16.4	16.7	19.4	17.3	18.7	20.0	19.5	16.2	15.7	14.1	12.9	10.3	16.6	13.2	13.0	11.8	10.0	11.6	10.6	11.2	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

Henry Pirker - March 2016

Maximum Value: 95.6 deg on Mar 19 09:00

Minimum Value: 5.0 deg on Mar 17 06:00

Percentiles: P_1 = 5.6 P_{10} = 8.2 Q_1 = 11.7 Median = 16.7 Q_3 = 25.7 P_{90} = 47.0 P_{99} = 87.4

Hours in Service:	744
Hours of Data:	744
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-Mar	82	88	67	68	58	90	48	21	34	26	17	12	15	9	31	17	15	17	14	17	13	12	13	17	90.5
2-Mar	14	21	14	17	19	19	14	11	16	14	15	17	23	14	17	14	18	19	24	19	28	11	18	14	28.4
3-Mar	13	11	19	36	55	10	20	12	13	25	18	6	13	12	8	12	16	13	38	12	14	12	13	13	54.5
4-Mar	11	10	11	13	10	10	13	11	11	10	11	27	23	15	33	24	10	47	19	65	81	12	14	19	80.8
5-Mar	15	32	74	27	62	45	45	49	31	67	40	18	14	28	74	19	48	29	45	16	47	18	12	10	74.2
6-Mar	18	21	16	12	17	18	17	13	13	16	13	14	16	16	24	59	13	11	13	10	8	10	23	31	58.6
7-Mar	13	35	24	17	38	40	47	20	8	10	22	30	23	12	61	24	20	18	74	40	19	92	73	21	91.6
8-Mar	24	20	31	26	21	23	29	65	21	19	24	29	24	11	31	23	31	26	13	22	13	21	14	58	64.6
9-Mar	53	48	27	19	23	14	14	17	17	8	17	46	52	23	12	34	29	23	11	10	8	7	9	17	53.0
10-Mar	5	6	9	10	6	8	11	8	14	27	24	28	42	18	20	21	47	27	18	93	54	90	21	23	92.7
11-Mar	84	53	8	6	6	8	6	6	6	7	7	11	8	12	12	21	19	27	17	10	15	14	10	52	84.1
12-Mar	12	13	23	25	17	88	47	44	18	20	19	15	15	27	84	19	21	22	52	33	22	14	11	23	87.5
13-Mar	66	51	37	52	30	28	37	12	11	17	13	17	17	7	10	19	12	35	12	10	14	15	47	12	65.8
14-Mar	20	25	11	21	27	12	27	19	36	58	42	64	14	22	20	37	40	27	24	23	22	24	37	13	63.7
15-Mar	11	16	34	43	60	15	18	16	23	19	19	17	15	14	12	11	5	7	5	17	8	6	7	8	59.5
16-Mar	8	7	8	9	8	9	8	30	8	11	8	7	15	20	13	14	14	17	13	29	21	14	33	75	75.5
17-Mar	17	17	9	9	9	5	6	8	6	9	7	10	15	11	17	12	21	26	10	66	12	12	34	16	66.1
18-Mar	78	60	78	72	49	30	19	16	11	16	16	10	9	13	19	22	16	16	16	16	12	8	6	63	78.1
19-Mar	28	27	11	27	19	31	58	45	96	45	22	14	17	37	32	21	16	12	10	21	14	27	26	63	95.6
20-Mar	45	41	93	40	23	50	30	51	31	12	23	23	19	15	17	16	21	14	14	15	15	15	15	15	92.7
21-Mar	16	20	17	14	13	13	14	15	15	18	19	17	20	19	17	23	15	20	22	29	22	12	13	12	29.4
22-Mar	8	10	8	7	12	8	8	6	7	9	12	14	11	10	13	9	18	37	18	50	74	62	12	12	74.3
23-Mar	11	10	8	10	12	12	16	17	11	15	19	12	16	17	13	18	15	17	10	14	9	12	11	11	19.3
24-Mar	10	11	9	15	16	14	18	23	13	12	11	36	54	84	57	79	32	16	11	55	27	34	88	74	88.5
25-Mar	39	21	21	19	12	16	23	24	21	14	13	22	24	24	21	17	18	19	11	20	9	7	6	7	39.3
26-Mar	10	7	7	8	7	10	26	44	21	20	10	13	15	34	65	29	25	30	18	51	6	84	10	35	84.2
27-Mar	53	23	41	26	64	34	21	25	44	15	30	26	13	15	19	19	9	12	23	9	14	20	16	6	63.8
28-Mar	10	11	8	6	16	6	8	8	7	9	10	8	11	12	17	27	23	14	15	35	26	7	7	5	35.1
29-Mar	13	18	29	9	12	7	9	12	9	12	13	13	12	15	20	15	16	15	6	8	7	7	12	19	28.5
30-Mar	12	7	9	8	34	25	11	17	21	30	19	11	13	20	5	6	7	13	16	9	30	25	24	21	34.1
31-Mar	15	14	12	12	15	10	11	10	14	74	19	37	31	35	16	20	20	9	30	44	33	27	16	13	74.4
	84.1	88.0	92.7	72.0	63.8	90.5	58.2	64.6	95.6	74.4	41.6	63.7	54.0	84.4	83.7	79.2	48.1	46.9	74.2	92.7	80.8	91.6	88.5	75.5	

PAZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.3 ppb on Mar 29 09:00 Maximum Daily Average: 0.4 ppb on Mar 29

Minimum Value: 0 ppb on Mar 1 01:00 Minimum Daily Average: 0.1 ppb on Mar 14
Maximum Diurnal Average: 0.3 ppb at hour 14 Minimum Diurnal Average: 0.1 ppb at hour 1
Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.1

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	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	0.5
2-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0.2	1.1
3-Mar	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0.3	0.7
4-Mar	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
5-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.5
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0.3	1.3
7-Mar	0	0	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	0.9
8-Mar	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	0.5
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.2	0.7
10-Mar	0	0	0	A	0	0	0	0	0	0	0	C	C	C	0	1	1	1	0	0	0	0	0	0	0.2	0.6
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Mar	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	0.5
13-Mar	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
14-Mar	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	0.1
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2
16-Mar	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
17-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0.3	1.0
18-Mar	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
19-Mar	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
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0.2	1.0
21-Mar	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0.2	1.1
22-Mar	0	0	0	0	1	1	0	0	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.7
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
24-Mar	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
25-Mar	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
26-Mar	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
27-Mar	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.1
28-Mar	0	1	1	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	1.0
29-Mar	0	0	0	0	1	1	2	A	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.4	2.3
30-Mar	0	0	0	0	0	0	A	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.2	0.7
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Diurnal Average	
	0.4	0.8	0.6	0.5	1.3	1.3	1.6	1.1	2.3	0.7	0.7	0.9	1.1	1.1	0.7	0.7	0.7	0.9	1.0	0.9	1.3	1.1	1.0	0.4	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - March 2016

Maximum Value: 28.0 ppb on Mar 21 08:00

Maximum Daily Average: 2.4 ppb on Mar 21

Minimum Value: 0 ppb on Mar 1 05:00

Minimum Daily Average: 0.6 ppb on Mar 14

Maximum Diurnal Average: 1.6 ppb at hour 8

Minimum Diurnal Average: 0.6 ppb at hour 3

Monthly Average: 0.80 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 1.1$ $P_{99} = 2.3$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	1	0	0	1	0	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
2-Mar	1	1	1	1	0	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	3	2	1	0.8	3.1
3-Mar	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
4-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
5-Mar	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	1.3
6-Mar	0	0	1	0	1	1	0	A	1	1	1	1	0	0	1	1	3	2	2	2	2	1	1	1	0.9	2.7
7-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
8-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
9-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.8	1.3
10-Mar	1	1	1	A	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	0	1	0.8	1.1
11-Mar	0	1	A	1	0	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	0.6	1.3
12-Mar	0	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.1
13-Mar	A	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9
14-Mar	1	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	1	A	1	0.6	0.8
15-Mar	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	0.6	0.9
16-Mar	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	0	0.6	1.4
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	0	0	1	1	0.9	2.2
18-Mar	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	1	0	0.6	0.9
19-Mar	1	1	1	1	0	1	0	1	1	1	1	0	0	1	1	1	0	A	1	1	0	1	1	0	0.6	0.8
20-Mar	1	1	0	1	1	0	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	0.7	1.6
21-Mar	1	1	0	1	1	1	1	28	13	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1	2.4	28.0
22-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.4
23-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0	0	0.6	0.8
24-Mar	1	1	0	0	0	1	0	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0	0	1	0.6	1.2
25-Mar	1	1	1	1	1	0	0	1	1	1	1	A	1	1	1	0	1	1	1	1	0	1	1	1	0.6	1.0
26-Mar	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	0.7	1.5
27-Mar	0	1	0	1	0	1	0	1	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0.8	1.9
28-Mar	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	3	1	0.9	2.8
29-Mar	1	0	1	1	2	2	2	A	3	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1.0	3.4
30-Mar	0	0	1	0	0	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0	0.8	2.0
31-Mar	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.8	1.2
	0.6	0.6	0.6	0.7	0.7	0.7	0.7	1.6	1.2	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	Diurnal Average	
	0.9	1.6	1.1	1.3	2.4	2.0	2.3	28.0	12.8	1.3	1.4	1.3	2.2	1.7	1.3	1.2	2.7	1.9	2.1	1.5	2.2	3.1	2.8	1.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - March 2016

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2016

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

Maximum Value: 4.3 ppb on Mar 9 06:00 Maximum Daily Average: 0.8 ppb on Mar 9

Minimum Value: 0 ppb on Mar 28 02:00 Minimum Daily Average: 0.1 ppb on Mar 28

Maximum Diurnal Average: 0.5 ppb at hour 6 Minimum Diurnal Average: 0.3 ppb at hour 17

Monthly Average: 0.34 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 1.0$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	0	0	0	0	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2
2-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
3-Mar	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
4-Mar	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	0.5
5-Mar	0	0	1	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
6-Mar	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	0.5
7-Mar	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0.4	0.6
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.4	0.6
9-Mar	0	0	0	0	A	4	2	1	1	1	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0.8	4.3
10-Mar	0	0	0	A	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	1	0	0	0	0.3	0.5
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.6
12-Mar	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
13-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.3
14-Mar	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.5
15-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
16-Mar	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
17-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.4	0.5
18-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0.5	0.7
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.4	0.5
20-Mar	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	0.9
21-Mar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	1.2
22-Mar	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.5
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
25-Mar	0	0	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2
26-Mar	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
27-Mar	1	0	0	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.3	0.7
28-Mar	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
29-Mar	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
30-Mar	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	0.3
31-Mar	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.6	0.9	1.0	0.8	0.8	4.3	1.6	1.2	1.2	1.1	1.6	0.8	0.5	0.7	0.7	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	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

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2016

Maximum Value: 14.4 ppb on Mar 9 06:00

Maximum Daily Average: 1.7 ppb on Mar 9

Minimum Value: 0 ppb on Mar 28 15:00

Minimum Daily Average: 0.5 ppb on Mar 28

Maximum Diurnal Average: 1.2 ppb at hour 6

Minimum Diurnal Average: 0.7 ppb at hour 17

Monthly Average: 0.76 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 1.0$ $P_{99} = 2.4$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	1	1	1	1	1	1	1	1	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	2.4
2-Mar	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
3-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
4-Mar	1	1	0	1	1	0	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
5-Mar	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	1.6
6-Mar	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
7-Mar	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
8-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.2
9-Mar	1	1	1	1	A	14	4	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.7	14.4
10-Mar	1	1	1	A	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
11-Mar	1	1	A	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	1.3
12-Mar	1	A	1	1	1	1	2	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	2.1
13-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	0.6	0.8
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	A	1	0.7	1.1
15-Mar	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	0.9
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.6	0.8
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.4
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.4
19-Mar	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
20-Mar	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.5
21-Mar	1	1	1	1	1	1	1	4	4	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	3.6
22-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	0.6	0.9
23-Mar	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	0.8
24-Mar	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	0.7	0.9
25-Mar	1	1	3	1	1	1	1	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.5
26-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
27-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	0	1	1	1	1	0	0.8	1.5
28-Mar	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.5	0.7
29-Mar	1	0	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
30-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
31-Mar	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
	0.7	0.7	0.8	0.7	0.7	1.2	0.9	1.0	1.0	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	Diurnal Average	
	1.1	1.5	2.5	1.3	1.3	14.4	3.6	3.6	3.5	1.6	2.4	1.3	1.0	1.1	1.1	0.9	1.0	1.1	0.8	0.9	1.4	1.5	1.2	1.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2016

Peace Airshed Zone Association

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - March 2016

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

Maximum Value: 24.5 $\mu g/m^3$ on Mar 11 23:00

Maximum Daily Average: 4.5 $\mu g/m^3$ on Mar 10

Minimum Value: 0 $\mu g/m^3$ on Mar 1 12:00

Maximum Diurnal Average: 3.6 $\mu g/m^3$ at hour 23

Monthly Average: 2.36 $\mu g/m^3$

Minimum Daily Average: 0.9 $\mu g/m^3$ on Mar 26

Minimum Diurnal Average: 1.6 $\mu g/m^3$ at hour 17

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.5$ Median = 1.6 $Q_3 = 3.4$ $P_{90} = 5.7$ $P_{99} = 11.3$

Hours in Service:	744
Hours of Data:	741
Hours of Missing Data:	3
Hours of Calibration:	2
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-Mar	6	4	6	6	6	6	6	6	9	10	6	0	1	4	0	0	0	0	0	0	0	1	2	1	3.4	10.3
2-Mar	1	2	2	1	2	1	2	2	1	2	2	2	2	2	2	1	1	1	0	0	0	0	0	0	1.3	2.3
3-Mar	0	1	0	0	1	0	1	0	0	1	2	4	2	6	5	3	3	1	2	2	1	1	1	1	1.5	6.3
4-Mar	0	0	1	1	1	0	0	1	1	0	1	1	0	0	0	2	1	1	0	0	1	3	6	5	1.1	5.8
5-Mar	5	4	5	6	5	6	6	6	8	9	9	4	0	1	2	2	6	4	4	1	1	2	3	3	4.2	8.9
6-Mar	2	2	3	3	1	1	0	1	1	1	2	3	3	4	4	4	3	1	2	2	2	2	3	2	2.2	4.1
7-Mar	2	1	2	0	0	1	1	3	5	4	0	2	3	4	4	5	4	6	3	2	2	4	4	9	2.9	9.3
8-Mar	7	1	2	1	0	1	1	2	2	5	4	3	6	2	3	2	2	1	2	1	2	2	6	1	2.5	7.2
9-Mar	2	6	4	3	4	3	3	2	4	7	5	7	3	8	6	1	0	0	0	0	0	0	0	0	2.8	8.4
10-Mar	0	0	0	0	0	0	0	0	0	0	0	2	C	C	9	8	7	8	10	14	11	11	10	8	4.5	14.0
11-Mar	9	4	0	1	1	1	1	1	2	2	1	1	0	2	0	0	0	0	0	0	0	24	24	2	3.2	24.5
12-Mar	0	0	0	0	0	2	2	4	2	0	0	0	1	1	1	1	1	1	3	7	6	3	3	0	1.6	7.0
13-Mar	2	2	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2	1	2	3	2	3	0.9	3.0
14-Mar	3	4	4	4	6	4	6	4	3	5	3	1	1	1	1	2	1	2	2	2	2	3	2	2	2.9	6.0
15-Mar	4	3	4	5	6	7	6	7	7	2	1	1	1	0	1	0	1	0	0	0	2	1	2	1	2.6	7.2
16-Mar	0	0	0	0	1	0	0	1	4	2	3	3	2	3	2	1	1	2	1	1	1	2	1	3	1.4	3.8
17-Mar	3	4	3	2	2	2	2	1	0	1	0	0	0	0	0	0	1	0	1	2	3	2	3	2	1.4	4.1
18-Mar	1	4	4	5	3	4	4	4	5	5	5	7	6	4	5	0	0	0	0	1	0	1	0	1	2.9	7.1
19-Mar	7	6	6	6	5	5	4	4	6	2	2	2	2	2	2	1	0	1	2	3	4	4	7	8	3.8	8.1
20-Mar	9	7	5	5	6	7	7	5	1	1	1	1	2	2	2	2	2	1	1	0	1	0	1	1	2.9	9.1
21-Mar	0	1	0	1	1	0	1	0	N	2	1	0	0	1	1	2	2	2	4	3	3	3	3	2	1.5	3.7
22-Mar	2	2	1	2	2	2	3	4	3	4	4	4	4	3	2	2	3	3	3	5	4	4	4	3	2.9	4.6
23-Mar	3	2	2	2	2	3	4	3	2	2	2	2	3	2	1	2	2	2	2	2	1	1	1	0	2.0	3.8
24-Mar	0	0	0	1	1	1	1	2	2	2	2	2	2	3	3	3	4	3	3	5	5	5	5	5	2.5	5.1
25-Mar	4	4	5	4	4	5	5	4	4	2	1	2	0	0	0	0	1	1	0	0	0	0	0	0	2.0	4.8
26-Mar	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	6	4	2	1	0.9	5.7
27-Mar	2	2	2	7	8	6	4	6	6	5	0	0	0	2	1	1	0	1	2	5	7	4	1	1	3.1	7.9
28-Mar	1	2	1	2	2	2	2	5	6	5	1	1	0	0	0	0	0	0	0	4	2	1	1	0	1.6	6.2
29-Mar	0	0	0	1	1	1	1	1	2	0	0	1	0	0	1	1	1	1	2	3	3	1	1	0	0.9	3.4
30-Mar	0	1	1	1	2	1	2	2	3	3	3	2	2	2	2	2	1	1	3	4	5	1	3	1	2.0	5.2
31-Mar	0	0	0	0	0	0	0	0	0	2	6	5	6	3	2	2	2	3	3	6	11	15	12	12	3.6	15.0
	2.4	2.2	2.1	2.3	2.4	2.3	2.4	2.7	3.1	2.7	2.3	2.1	1.7	2.0	2.0	1.6	1.6	1.6	1.9	2.5	2.9	3.5	3.6	2.6	Diurnal Average	
	9.1	6.7	6.4	7.2	7.9	6.9	6.6	7.2	8.6	10.3	8.9	7.1	6.5	8.4	9.3	7.6	6.6	8.3	10.1	14.0	11.4	24.0	24.5	11.5	Diurnal Maximum	

C - Calibration 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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - March 2016

Maximum Value: 44.3 $\mu g/m^3$ on Mar 11 23:00

Maximum Daily Average: 7.4 $\mu g/m^3$ on Mar 5

Minimum Value: 0 $\mu g/m^3$ on Mar 12 02:00

Maximum Diurnal Average: 7.0 $\mu g/m^3$ at hour 23

Monthly Average: 4.68 $\mu g/m^3$

Minimum Daily Average: 2.5 $\mu g/m^3$ on Mar 26

Minimum Diurnal Average: 3.8 $\mu g/m^3$ at hour 18

Percentiles: $P_1 = 0.0$ $P_{10} = 1.4$ $Q_1 = 2.6$ Median = 3.8 $Q_3 = 5.9$ $P_{90} = 8.7$ $P_{99} = 21.1$

Hours in Service:	744
Hours of Data:	741
Hours of Missing Data:	3
Hours of Calibration:	2
Percent Operational Time:	99.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	7	6	8	8	8	10	10	10	11	13	10	3	6	8	3	1	1	1	1	1	2	4	4	3	5.8	13.1
2-Mar	5	5	4	4	5	3	3	4	4	3	4	4	3	4	4	3	5	2	2	2	2	3	3	2	3.3	5.0
3-Mar	1	3	2	3	3	1	4	2	2	2	4	8	4	10	9	7	4	3	3	5	3	6	5	3	4.0	9.8
4-Mar	4	3	4	4	3	1	3	5	3	2	3	2	2	4	3	8	8	6	9	5	8	6	9	7	4.6	8.7
5-Mar	7	5	10	9	9	9	9	9	11	10	11	8	1	4	7	6	11	7	7	8	4	4	5	6	7.4	11.2
6-Mar	4	6	5	6	5	3	3	3	3	4	6	6	5	6	8	7	8	3	7	5	5	5	6	3	5.0	7.7
7-Mar	5	3	4	2	4	4	6	6	7	7	2	6	6	6	6	6	8	9	6	5	6	12	11	11	6.2	11.6
8-Mar	12	3	4	4	3	3	4	4	8	8	10	8	12	9	6	6	4	8	5	3	4	5	22	4	6.6	22.1
9-Mar	4	11	5	4	6	5	4	4	8	12	10	10	6	17	8	4	3	3	4	0	4	2	3	2	5.8	16.7
10-Mar	0	1	2	1	1	1	3	1	2	2	6	6	C	C	12	10	8	11	13	26	14	13	12	10	7.0	26.1
11-Mar	13	8	2	3	3	2	3	3	3	3	3	3	2	5	2	1	2	1	0	1	2	40	44	22	7.1	44.3
12-Mar	0	0	0	0	3	3	4	6	4	2	3	1	4	3	2	4	3	3	5	10	10	6	6	3	3.4	9.9
13-Mar	4	4	5	3	3	2	3	2	0	1	1	1	2	1	0	1	2	3	4	2	3	5	5	5	2.5	5.0
14-Mar	4	6	6	6	8	8	9	8	6	7	6	5	3	2	3	5	4	4	3	3	5	6	4	5	5.3	9.2
15-Mar	6	5	5	9	8	8	8	9	11	4	3	6	2	5	4	3	5	4	1	1	5	3	4	3	5.0	10.7
16-Mar	5	6	1	5	6	5	5	3	8	7	9	6	6	5	3	6	3	2	2	1	2	3	3	5	4.5	8.6
17-Mar	6	5	5	3	3	3	4	3	3	2	2	2	1	1	1	3	3	1	3	4	7	4	5	3	3.1	6.7
18-Mar	3	14	5	9	6	5	5	6	7	7	9	9	8	5	8	3	0	0	0	3	0	3	2	2	5.0	14.1
19-Mar	9	9	8	7	6	6	6	7	7	6	5	4	4	4	4	2	2	3	4	4	6	10	10	10	6.0	10.4
20-Mar	16	12	7	6	8	9	8	7	4	2	3	3	4	4	4	4	3	3	3	2	2	2	2	3	5.0	16.0
21-Mar	2	2	2	2	2	1	2	1	N	8	2	2	2	3	3	4	4	4	5	4	5	4	5	3	3.1	7.7
22-Mar	3	3	2	3	3	3	4	5	5	5	4	5	5	5	3	4	5	5	6	6	5	5	5	5	4.3	5.7
23-Mar	4	4	3	3	4	5	5	5	3	3	4	3	4	3	3	3	3	4	3	3	3	3	2	2	3.5	5.3
24-Mar	2	2	1	2	2	3	3	3	3	3	3	3	4	5	5	6	5	5	5	8	7	6	9	7	4.2	8.7
25-Mar	6	6	7	6	5	6	6	6	6	6	2	5	1	1	0	1	2	2	3	1	1	1	1	0	3.4	6.7
26-Mar	1	2	2	1	2	2	2	2	2	2	4	3	1	0	0	1	0	3	2	4	11	5	4	4	2.5	11.1
27-Mar	3	3	3	11	10	8	6	8	9	7	3	1	2	4	2	3	2	2	4	7	12	7	3	3	5.1	11.9
28-Mar	3	3	3	3	4	4	4	8	8	8	3	2	3	1	0	2	2	3	3	8	5	2	3	2	3.6	8.5
29-Mar	1	1	1	2	2	2	2	4	4	3	2	3	2	1	2	3	3	2	4	6	10	2	3	3	2.7	10.2
30-Mar	2	2	3	3	3	3	4	5	6	4	4	4	4	4	4	4	3	3	5	5	7	3	5	2	3.7	7.5
31-Mar	0	2	1	1	1	1	0	0	0	6	10	9	9	6	5	3	3	5	5	7	21	21	14	22	6.3	21.6
	4.6	4.6	3.8	4.3	4.4	4.2	4.6	4.8	5.3	5.1	4.9	4.5	3.9	4.4	4.0	4.0	3.8	3.8	4.0	4.9	5.8	6.5	7.0	5.3	Diurnal Average	
	16.0	14.1	10.1	11.1	9.7	9.7	9.7	10.2	11.1	13.1	11.2	10.4	12.4	16.7	11.7	10.2	10.9	10.7	12.8	26.1	20.9	39.9	44.3	22.1	Diurnal Maximum	

C - Calibration N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - March 2016

Peace Airshed Zone Association

Pollutant Rose

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

Evergreen Park - March 2016

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Evergreen Park - March 2016

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

Maximum Value: 17.0 °C on Mar 31 18:00

Maximum Daily Average: 8.0 °C on Mar 31

Minimum Value: -13 °C on Mar 7 07:00

Minimum Daily Average: -6.8 °C on Mar 7

Maximum Diurnal Average: 5.2 °C at hour 17

Minimum Diurnal Average: -3.6 °C at hour 8

Monthly Average: 0.45 °C

Percentiles: P_1 = -12.1 P_{10} = -5.2 Q_1 = -3.4 Median = -0.2 Q_3 = 4.0 P_{90} = 7.4 P_{99} = 14.1

Hours in Service:	744
Hours of Data:	744
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-Mar	-11	-11	-12	-13	-13	-13	-12	-12	-12	-7	-3	0	2	3	5	4	3	2	0	-3	-3	-4	-3	-3	-4.9	4.5
2-Mar	-3	-3	-4	-5	-5	-5	-5	-5	-6	-6	-5	-5	-5	-5	-5	-4	-4	-4	-5	-5	-5	-6	-6	-6	-4.8	-2.9
3-Mar	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5	-5	-4	-2	-3	-3	-3	-4	-4	-4	-5	-5	-5	-4.7	-2.4
4-Mar	-5	-5	-5	-5	-5	-4	-4	-4	-4	-3	-1	0	1	2	2	3	4	5	2	2	1	0	-2	-3	-1.2	4.7
5-Mar	-4	-4	-5	-7	-7	-7	-6	-6	-5	-4	-2	0	1	2	3	2	1	1	0	-1	-1	-2	-3	-3	-2.4	2.7
6-Mar	-4	-4	-4	-4	-4	-4	-5	-5	-6	-5	-5	-3	-3	-2	-2	-2	-2	-4	-4	-4	-4	-4	-5	-7	-4.0	-2.1
7-Mar	-8	-9	-9	-10	-11	-12	-13	-13	-11	-9	-8	-7	-5	-4	-3	-3	-3	-3	-4	-4	-4	-4	-4	-3	-6.8	-2.6
8-Mar	-3	-4	-4	-4	-5	-6	-6	-7	-6	-5	-2	0	3	4	4	7	8	7	3	0	1	-1	0	0	-0.7	7.9
9-Mar	-1	-3	-4	-5	-5	-6	-7	-9	-9	-6	-2	0	6	6	6	8	8	8	4	1	0	-3	-4	-3	-0.9	8.1
10-Mar	-4	-4	-4	-3	-3	-1	-1	-1	-1	0	2	3	4	6	6	5	5	4	3	2	0	-1	-3	-3	0.4	5.8
11-Mar	-4	-1	3	4	4	4	3	3	3	4	4	5	6	7	8	9	8	7	5	3	3	2	1	2	3.8	8.8
12-Mar	1	1	1	0	-2	-3	-4	-5	-3	-1	1	3	3	5	5	5	5	5	4	3	3	2	2	1	1.4	5.5
13-Mar	0	0	-1	-1	0	0	-1	-1	0	1	2	4	6	7	7	7	7	7	4	1	0	-2	-3	-4	1.7	7.5
14-Mar	-4	-4	-4	-4	-5	-4	-3	-3	-3	-2	0	1	2	2	2	2	2	2	1	0	-1	-1	-1	-1	-1.1	2.3
15-Mar	-1	-2	-4	-5	-5	-6	-6	-7	-5	-1	2	4	6	7	8	9	8	7	6	4	3	2	1	0	1.0	8.5
16-Mar	0	0	-1	0	0	0	0	-1	-1	1	2	3	2	1	0	1	2	2	1	1	1	0	-1	-2	0.4	3.0
17-Mar	-2	-2	-2	-1	-1	-1	-1	-1	-1	0	1	1	2	3	4	4	5	5	3	0	-2	-1	-2	-2	0.4	5.1
18-Mar	-3	-3	-3	-4	-6	-7	-8	-8	-6	-3	-1	0	1	3	4	5	6	5	4	1	-2	-3	-3	-3	-1.4	5.8
19-Mar	-4	-4	-4	-5	-5	-5	-5	-6	-4	0	3	4	7	7	8	8	8	7	5	4	2	0	0	0	1.0	8.4
20-Mar	0	0	0	0	-1	-1	-1	-1	1	2	3	5	6	6	6	5	4	4	3	3	2	2	2	2	2.2	6.0
21-Mar	2	1	0	-1	-1	-2	-2	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-2.1	1.7
22-Mar	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	0	1	1	0	-1	-2	-2	-2	-2	-1.7	1.2
23-Mar	-2	-2	-2	-2	-2	-3	-3	-3	-1	1	2	2	2	3	3	3	2	2	1	0	-1	-1	-2	-2	-0.3	3.1
24-Mar	-2	-2	-2	-2	-3	-3	-4	-4	-4	-3	-3	-2	-1	1	2	3	2	1	0	-1	-1	-2	-2	-2	-1.4	2.8
25-Mar	-3	-3	-3	-3	-4	-5	-7	-7	-6	-2	3	5	6	7	7	8	8	7	7	6	5	5	5	5	1.8	8.3
26-Mar	5	4	4	4	3	2	1	0	2	4	6	7	8	9	10	10	10	10	9	6	2	0	-1	-3	4.7	10.1
27-Mar	-3	-3	-4	-4	-4	-5	-5	-4	-1	2	5	7	9	9	10	12	11	11	10	7	5	5	6	5	3.3	11.6
28-Mar	5	5	5	4	4	4	3	3	4	6	7	8	9	10	11	12	12	11	10	7	6	6	5	4	6.7	11.8
29-Mar	4	4	3	3	3	2	1	2	4	6	8	9	11	12	14	14	15	13	13	11	10	9	9	8	7.8	14.6
30-Mar	7	7	7	6	6	5	5	5	6	6	7	8	9	11	12	12	13	13	11	9	6	5	4	4	7.8	13.1
31-Mar	5	4	3	3	3	3	2	2	5	7	10	12	12	14	15	15	17	17	16	11	8	5	3	2	8.0	17.0
	-1.6	-1.8	-2.1	-2.4	-2.7	-3.0	-3.4	-3.6	-2.7	-0.9	0.8	2.1	3.2	4.1	4.7	5.2	5.2	4.8	3.5	1.8	0.8	0.0	-0.5	-0.8	Diurnal Average	
	7.5	7.3	7.1	6.1	5.7	5.4	5.1	5.3	6.1	7.4	9.9	11.6	12.3	14.0	14.9	15.4	16.6	17.0	15.9	11.0	10.0	9.2	8.7	8.1	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - March 2016

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

Maximum Value: 98.4 % on Mar 8 02:00 Maximum Daily Average: 95.4 % on Mar 6

Minimum Value: 23 % on Mar 11 16:00 Minimum Daily Average: 46.3 % on Mar 11

Maximum Diurnal Average: 83.6 % at hour 7 Minimum Diurnal Average: 53.1 % at hour 17

Monthly Average: 71.12 % Percentiles: P_1 = 27.8 P_{10} = 42.6 Q_1 = 53.9 Median = 75.6 Q_3 = 89.9 P_{90} = 94.4 P_{99} = 98.2

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	90	89	88	88	87	88	88	87	88	81	71	57	52	52	49	53	53	56	65	74	74	79	76	76	73.3	89.8
2-Mar	76	74	80	81	81	79	77	77	77	76	80	81	83	82	84	87	87	86	88	90	92	93	93	92	83.1	92.9
3-Mar	92	92	92	91	91	92	93	93	92	91	88	89	91	87	78	74	74	79	85	88	90	91	90	92	88.1	92.9
4-Mar	92	92	92	92	92	92	93	94	93	87	78	78	76	74	76	81	79	83	95	91	95	93	93	94	87.7	95.3
5-Mar	95	95	94	94	94	93	94	94	93	93	93	92	92	83	75	74	79	85	93	95	94	94	93	95	90.7	94.8
6-Mar	97	98	98	98	98	97	97	95	95	95	94	94	94	94	94	95	96	96	97	96	96	94	92	90	95.4	98.2
7-Mar	90	90	91	90	90	89	87	89	89	85	81	76	73	72	71	72	74	87	91	92	94	95	98	98	85.9	98.4
8-Mar	98	98	98	98	97	96	96	95	95	94	89	80	67	62	58	52	49	49	69	83	79	88	91	91	82.2	98.4
9-Mar	95	97	98	97	96	96	93	91	90	86	76	62	46	48	48	41	37	38	51	62	65	81	81	73	72.8	97.5
10-Mar	80	80	77	68	67	59	63	65	67	61	56	52	48	39	42	49	48	54	60	69	77	84	89	91	64.4	91.0
11-Mar	92	83	59	55	54	53	49	49	46	41	39	39	37	31	25	23	24	31	37	43	43	51	54	54	46.3	91.6
12-Mar	60	59	57	59	73	80	84	86	80	66	58	52	51	45	42	45	45	49	52	58	60	78	89	94	63.4	93.5
13-Mar	96	97	98	98	91	81	89	81	76	70	61	53	45	40	39	38	37	35	52	68	77	85	90	93	70.4	98.3
14-Mar	93	95	94	94	93	95	95	95	93	90	80	62	55	53	51	54	54	53	57	62	71	75	75	77	75.7	95.3
15-Mar	79	79	85	89	91	92	93	94	89	72	61	52	47	45	41	37	36	38	42	49	51	55	57	60	64.1	93.6
16-Mar	61	65	68	63	60	56	54	56	52	48	48	48	58	80	93	82	79	81	86	83	82	84	87	92	69.4	93.2
17-Mar	93	93	89	86	83	82	79	75	69	64	62	57	54	52	49	46	44	39	43	57	67	69	77	80	67.1	93.5
18-Mar	85	87	88	91	92	94	93	92	90	75	65	62	62	55	51	46	43	42	42	55	64	72	74	76	70.6	93.6
19-Mar	81	79	80	82	83	85	87	88	81	56	44	44	35	33	32	28	26	33	38	44	50	59	62	68	58.2	88.3
20-Mar	69	72	74	77	79	80	81	79	68	58	56	49	48	47	48	52	56	59	61	64	65	66	66	67	64.2	81.2
21-Mar	68	74	77	90	93	95	95	94	93	90	88	84	84	82	81	83	86	84	88	92	91	92	92	91	87.0	95.0
22-Mar	91	91	90	90	90	89	90	90	87	83	79	78	76	74	69	66	62	60	64	76	81	85	83	82	80.2	90.8
23-Mar	83	82	81	81	82	86	90	90	81	70	68	68	67	66	66	66	72	74	82	93	97	98	98	98	80.8	98.1
24-Mar	98	98	97	97	97	97	96	96	94	92	87	81	76	67	62	63	67	75	84	93	96	97	97	97	87.6	98.0
25-Mar	96	96	95	94	95	95	94	93	89	78	62	59	55	54	49	42	44	45	44	48	51	51	51	50	68.0	96.2
26-Mar	51	53	54	55	58	64	68	70	62	53	46	44	39	36	34	34	34	34	35	46	57	66	74	82	52.0	82.0
27-Mar	84	86	89	91	91	93	94	93	81	65	51	43	37	37	36	30	29	31	37	48	58	57	58	62	61.7	93.7
28-Mar	64	63	63	65	68	69	72	71	61	54	50	47	42	39	35	30	27	27	28	39	44	45	45	47	49.7	72.2
29-Mar	49	51	53	54	56	58	62	59	54	50	45	43	40	39	34	34	35	39	40	44	46	49	50	52	47.3	62.3
30-Mar	55	56	57	61	64	65	66	65	63	62	60	57	53	50	48	46	42	42	48	53	64	67	74	72	57.8	74.3
31-Mar	66	72	76	77	76	77	80	81	66	57	50	47	47	41	38	35	32	31	34	50	62	72	78	81	59.5	81.3
	81.2	81.8	81.7	82.1	82.6	82.8	83.6	83.1	79.2	72.4	66.7	62.3	59.0	56.7	54.8	53.3	53.1	55.3	60.8	67.9	72.0	76.3	78.4	79.6	Diurnal Average	
	98.3	98.4	98.2	98.3	97.7	97.5	96.7	95.8	95.2	94.7	93.9	94.2	93.9	94.0	94.1	94.7	96.1	96.4	96.6	96.5	96.9	97.9	98.0	98.4	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2016

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	1	2	2	3	1	1	1	1	3	4	4	9	9	13	12	9	7	10	7	8	8	4	3.4	13.2
Dir	209	18	200	196	42	192	12	205	331	318	234	241	301	337	12	37	42	42	39	37	38	41	45	19	25.6	37.0
2 Spd	7	1	2	1	2	7	6	5	6	8	9	8	8	7	7	8	8	5	3	2	3	4	2	2	4.7	8.5
Dir	32	232	334	325	18	37	39	62	48	39	50	42	31	40	52	44	41	47	52	41	8	22	1	332	37.9	49.7
3 Spd	6	5	4	1	2	3	1	3	5	4	5	7	9	9	6	6	5	6	4	3	2	2	1	3	3.1	9.5
Dir	320	311	351	27	286	337	6	343	14	3	323	274	276	310	308	323	336	26	39	67	69	76	79	70	333.2	310.2
4 Spd	5	5	4	4	7	8	8	9	6	11	13	9	10	6	6	3	4	2	3	5	6	3	5	5	4.6	12.9
Dir	91	83	75	78	90	90	90	84	70	87	101	107	107	94	77	46	100	63	95	139	180	278	296	318	91.2	100.7
5 Spd	3	6	2	1	1	2	1	1	2	2	5	7	15	12	12	14	11	10	4	9	6	11	9	7	4.8	14.8
Dir	323	315	216	85	289	4	345	231	292	355	38	63	44	43	20	31	348	344	355	75	99	37	69	54	30.3	44.4
6 Spd	9	7	10	8	9	13	16	14	14	11	13	12	16	14	11	9	16	16	10	9	11	10	16	13	6.7	15.9
Dir	46	51	54	47	47	42	47	45	44	46	46	47	40	38	19	321	321	320	279	289	283	292	244	249	10.8	39.9
7 Spd	7	6	5	4	3	4	2	3	3	7	8	5	6	6	4	4	2	7	4	4	1	2	1	1	1.8	8.0
Dir	254	244	211	234	251	243	220	354	331	323	329	327	326	327	239	337	2	156	166	133	104	32	24	9	285.6	329.0
8 Spd	1	5	7	8	8	6	2	3	2	3	2	3	6	8	6	6	4	4	1	4	7	7	8	8	3.9	8.4
Dir	209	277	250	239	243	261	218	189	214	235	258	265	268	279	270	238	276	232	188	166	169	188	184	168	230.4	183.6
9 Spd	2	0	1	1	1	2	3	2	4	1	5	6	3	7	9	8	9	9	8	8	5	2	1	4	2.5	9.2
Dir	27	338	194	351	324	254	310	295	332	216	237	228	303	346	342	358	34	41	49	50	45	34	18	71	7.5	41.0
10 Spd	4	5	6	5	7	7	6	6	6	6	10	7	11	10	11	9	5	3	2	3	1	3	0	2	4.0	10.8
Dir	59	58	58	63	60	78	47	54	45	29	36	0	331	335	355	355	19	334	349	213	223	199	254	188	23.6	354.8
11 Spd	1	16	27	34	37	35	40	39	38	41	39	26	19	24	16	12	9	8	6	8	6	6	7	5	15.9	41.4
Dir	219	214	223	235	239	238	236	227	232	237	242	253	260	255	285	296	357	33	52	71	69	47	43	47	242.4	237.2
12 Spd	6	7	5	3	3	3	2	5	6	9	8	10	14	5	4	11	13	9	2	4	5	11	8	2	3.6	13.6
Dir	36	42	43	18	338	258	312	197	267	251	281	297	315	345	322	16	36	33	352	236	249	292	290	10	325.6	315.4
13 Spd	0	2	4	1	13	13	1	10	10	5	13	13	16	17	11	15	12	9	11	9	7	5	4	2	4.2	16.9
Dir	173	196	214	270	244	249	324	238	241	252	261	257	269	291	283	321	6	21	47	54	50	41	43	334	289.0	291.1
14 Spd	2	3	2	3	2	5	4	3	2	2	3	5	11	10	8	9	8	7	4	1	0	1	1	1	3.0	10.9
Dir	344	359	357	335	352	45	73	96	150	212	193	63	45	55	34	29	35	35	50	123	47	192	113	191	42.6	44.9
15 Spd	1	2	1	0	1	2	1	1	3	9	11	13	16	17	14	16	24	23	18	12	13	13	13	13	8.7	24.4
Dir	111	160	77	172	229	208	219	234	278	262	258	255	270	316	323	265	260	257	255	245	241	238	239	244	260.6	259.9
16 Spd	14	14	11	15	21	20	19	14	14	28	31	26	24	25	15	17	18	16	11	7	5	6	3	1	14.4	31.3
Dir	248	249	255	251	247	241	240	239	250	249	249	268	259	310	249	246	257	261	248	245	299	39	145	54	255.0	249.1
17 Spd	2	5	7	9	15	13	14	10	11	16	23	22	16	15	15	13	10	4	2	0	2	3	3	1	8.6	22.9
Dir	227	245	284	275	301	298	307	294	293	304	315	312	313	271	250	243	248	325	295	342	285	347	308	127	291.0	314.6
18 Spd	3	0	1	0	1	0	0	0	3	3	4	9	11	10	12	12	11	10	8	2	1	1	3	0	3.2	12.5
Dir	180	45	197	117	193	123	174	23	339	233	260	316	324	350	355	358	14	35	32	15	38	2	32	332	354.4	354.9
19 Spd	2	2	3	2	1	1	1	0	0	4	5	9	5	12	9	11	11	9	6	4	2	2	1	2	1.7	11.9
Dir	230	210	202	202	286	221	215	167	161	201	270	242	308	333	23	33	40	43	48	37	38	23	10	310	360.0	332.5
20 Spd	1	1	2	1	1	2	1	1	3	5	4	11	15	18	16	20	17	16	14	13	13	10	12	11	8.5	20.1
Dir	331	275	163	359	341	32	33	56	47	34	9	37	32	33	34	34	39	36	39	44	39	39	35	40	35.8	34.0
21 Spd	14	17	16	17	13	12	14	14	11	18	16	14	15	14	15	14	12	11	8	5	3	3	5	5	11.4	18.4
Dir	43	39	41	43	45	47	45	44	41	41	39	35	33	29	32	40	23	24	16	19	353	324	321	299	34.2	40.7
22 Spd	5	5	4	4	6	4	5	6	7	9	10	8	9	9	11	13	12	6	2	1	1	1	4	5	4.7	13.4
Dir	314	306	296	281	281	249	246	249	248	252	263	270	265	287	271	308	307	254	15	130	155	55	60	72	280.2	308.4

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2016

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	4	5	5	3	2	3	4	5	5	4	10	13	12	14	13	13	15	11	9	9	12	13	11	13	8.4	14.7
Dir	60	74	72	80	69	33	44	49	69	21	28	32	22	32	40	45	33	46	47	47	48	46	49	45	43.0	33.3
24 Spd	13	13	12	12	11	11	9	7	10	9	8	7	6	5	7	3	6	5	3	1	2	1	2	1	5.4	13.2
Dir	47	46	55	43	39	43	30	16	15	12	4	20	331	223	217	1	6	56	66	123	52	59	6	0	30.6	46.4
25 Spd	2	1	2	1	3	1	3	2	2	2	3	10	10	11	15	17	10	6	20	23	13	14	12	16	6.6	22.7
Dir	351	251	231	282	239	323	306	327	214	242	266	254	262	321	318	313	317	322	253	246	234	233	232	231	266.4	245.8
26 Spd	14	15	15	12	11	10	11	5	5	10	17	19	17	17	17	15	14	12	8	1	0	2	1	1	9.9	18.7
Dir	230	229	232	242	243	247	250	238	267	267	251	260	269	258	262	277	286	254	254	220	172	202	179	163	253.1	259.6
27 Spd	1	1	1	1	1	0	0	1	1	5	7	4	4	9	6	9	9	6	4	1	4	10	16	14	3.8	15.8
Dir	201	13	29	356	232	36	239	189	32	255	258	304	287	329	309	332	321	270	274	332	276	255	250	252	281.9	249.6
28 Spd	13	13	14	15	13	10	9	11	13	16	17	17	16	13	7	13	12	17	10	5	13	19	17	17	12.9	19.0
Dir	247	247	248	252	257	256	243	253	259	254	259	261	268	270	268	272	292	270	296	247	241	245	239	225	256.2	244.8
29 Spd	16	17	16	12	11	9	4	8	13	18	21	14	10	9	12	18	15	16	20	17	16	17	20	19	14.4	21.0
Dir	234	238	238	248	247	251	271	260	251	258	253	260	263	256	265	259	256	251	243	241	236	238	237	239	248.0	253.1
30 Spd	17	15	15	14	11	11	12	15	12	12	13	18	17	17	16	12	18	21	14	8	7	2	2	5	10.7	20.6
Dir	246	273	280	266	252	253	252	255	251	253	251	253	256	260	260	274	298	315	320	307	22	17	15	50	271.6	314.5
31 Spd	3	4	5	6	9	5	1	3	5	5	4	8	8	10	15	14	12	10	4	5	2	2	0	1	2.8	14.6
Dir	95	47	47	47	57	80	59	44	111	192	278	321	354	271	310	313	329	300	292	35	201	201	10	32	339.2	310.4
Spd	1.3	1.9	2.1	2.5	3.1	2.4	1.9	1.9	2.6	4.3	5.5	5.9	6.5	7.3	6.1	6.8	6.6	4.5	2.5	0.7	0.7	1.6	1.7	1.3	Diurnal Average	
Dir	282.6	273.9	256.2	267.4	269.2	266.6	279.2	260.0	277.1	271.2	277.9	289.0	307.2	317.5	319.0	328.3	336.2	333.6	324.8	339.0	289.7	296.3	270.9	261.0		
Spd	16.9	17.4	27.2	34.5	36.9	35.0	40.4	39.3	38.4	41.4	39.3	26.2	23.6	24.5	17.0	20.1	24.4	22.6	19.8	22.7	16.3	19.0	20.5	18.6	Diurnal Maximum	
Dir	246.2	38.5	222.9	234.9	239.4	237.5	236.0	226.5	232.4	237.2	241.6	268.4	259.3	309.9	262.4	34.0	259.9	256.8	252.8	245.8	235.5	244.8	237.4	238.9		

Maximum Speed Value: 41 km/h on Mar 11 10:00
Maximum Daily Speed Average: 15.9 km/h on Mar 11
Maximum Diurnal Speed Average: 7.3 km/h at hour 14

Minimum Speed Value: 0 km/h on Mar 18 08:00
Minimum Daily Speed Average: 1.7 km/h on Mar 14
Minimum Diurnal Speed Average: 0.7 km/h at hour 20

Monthly Average Velocity: 3.05 km/h 299.30 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 1.2$ $Q_1 = 3.0$ Median = 6.9 $Q_3 = 12.2$ $P_{90} = 16.0$ $P_{99} = 33.2$

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

Hours in Service:	744
Hours of Data:	744
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	52	26	6	0	0	0	84
NorthEast	52	78	59	1	0	0	190
East	26	15	2	0	0	0	43
SouthEast	12	1	0	0	0	0	13
South	36	6	0	0	0	0	42
SouthWest	41	18	35	7	3	5	109
West	32	51	68	8	2	0	161
NorthWest	38	35	25	4	0	0	102
Total	289	230	195	20	5	5	744

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - March 2016

Wind Speed Classes (km/h)

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - March 2016

Maximum Speed: 42 km/h on Mar 11 10:00

Maximum Daily Speed Average: 21.4 km/h on Mar 11

Minimum Speed: 0 km/h on Mar 18 08:00

Minimum Daily Speed Average: 4.7 km/h on Mar 9

Maximum Diurnal Speed Average: 13.0 km/h at hour 14

Minimum Diurnal Speed Average: 6.2 km/h at hour 21

Monthly Average Speed: 8.77 km/h

Percentiles: $P_1 = 0.7$ $P_{10} = 1.8$ $Q_1 = 3.7$ Median = 7.5 $Q_3 = 12.8$ $P_{90} = 16.6$ $P_{99} = 33.6$

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	2	1	1	2	3	4	2	1	3	2	3	5	7	9	10	14	12	9	7	10	7	8	8	5	5.7	13.7
2-Mar	8	2	2	2	3	7	6	6	6	9	9	9	8	8	7	8	8	6	3	2	3	4	2	2	5.5	9.2
3-Mar	6	6	5	2	3	3	1	3	5	4	6	8	11	10	7	7	6	6	4	3	2	2	1	4	4.8	10.8
4-Mar	5	5	4	4	7	9	9	9	7	12	13	10	10	7	7	3	4	3	5	5	6	5	6	5	6.7	13.5
5-Mar	4	6	4	2	3	3	4	5	3	4	5	9	15	13	14	15	14	11	5	10	8	11	10	7	7.7	15.0
6-Mar	9	7	10	9	9	13	16	15	15	12	14	13	16	14	11	9	16	16	11	10	12	11	16	14	12.5	16.4
7-Mar	7	7	5	4	4	5	3	4	4	7	8	6	7	7	5	5	3	8	5	5	3	2	2	1	4.8	8.4
8-Mar	2	6	7	8	8	6	3	4	2	3	3	4	7	9	8	6	6	4	2	4	8	7	9	9	5.6	9.5
9-Mar	3	1	1	1	1	2	3	3	4	2	5	6	4	8	9	8	9	10	8	8	5	2	2	5	4.7	9.6
10-Mar	4	5	6	5	8	7	7	6	6	7	11	8	11	11	12	10	6	5	2	3	2	4	1	3	6.2	11.6
11-Mar	3	16	27	35	37	35	41	40	39	42	40	26	19	24	19	13	11	8	6	8	7	7	7	6	21.4	41.7
12-Mar	6	8	5	3	4	4	3	5	8	9	10	11	15	6	6	12	13	9	2	5	6	11	9	2	7.2	14.7
13-Mar	1	3	5	3	13	13	4	10	10	6	13	13	17	18	13	16	13	10	12	9	7	5	4	2	9.1	18.1
14-Mar	3	3	2	4	3	5	4	3	2	3	5	8	12	12	9	10	9	7	4	1	1	1	1	1	4.7	12.0
15-Mar	1	2	1	2	1	2	1	1	4	9	11	14	17	18	15	17	25	23	18	12	13	13	13	13	10.3	24.8
16-Mar	15	14	11	16	21	20	19	14	15	28	32	27	25	27	16	18	19	17	11	7	7	6	5	3	16.3	31.6
17-Mar	2	6	7	9	15	13	14	11	12	17	24	23	18	18	15	14	10	7	2	0	3	4	4	5	10.5	23.5
18-Mar	4	1	1	1	1	1	0	0	3	3	6	10	12	11	14	13	11	10	8	2	1	2	3	1	5.0	13.6
19-Mar	3	3	3	2	2	2	1	2	1	4	6	9	6	12	10	11	11	9	7	4	2	2	1	2	4.8	12.2
20-Mar	1	3	2	1	2	2	2	2	4	6	6	12	15	19	16	20	18	16	14	13	13	10	12	12	9.2	20.4
21-Mar	14	18	16	18	14	12	14	15	11	19	16	15	16	14	16	14	13	12	8	6	3	3	5	5	12.4	18.8
22-Mar	5	6	5	4	6	4	6	6	7	10	10	10	10	11	12	15	13	7	3	1	1	2	4	5	6.7	14.9
23-Mar	4	5	5	3	2	3	4	5	6	6	10	13	12	14	14	14	15	11	10	9	12	13	12	13	9.0	15.0
24-Mar	13	14	12	13	12	12	10	8	11	9	9	8	6	7	7	7	7	5	4	3	3	1	4	4	7.8	13.5
25-Mar	2	2	3	1	3	3	3	2	3	3	4	10	11	12	15	18	10	6	20	23	13	14	12	16	8.7	22.8
26-Mar	14	15	16	13	11	10	11	5	5	11	17	19	18	19	18	17	15	12	8	1	0	2	1	1	10.8	19.2
27-Mar	1	1	1	1	1	1	0	1	1	5	7	6	6	11	8	10	10	7	5	2	4	10	16	14	5.4	15.9
28-Mar	13	13	14	15	13	10	9	11	14	16	17	18	18	15	9	15	14	17	11	6	13	19	17	17	13.9	19.2
29-Mar	16	17	16	12	12	10	4	8	13	18	21	15	10	10	13	19	16	16	20	17	16	17	21	19	14.8	21.3
30-Mar	17	15	15	14	11	11	12	15	12	12	13	18	18	18	17	13	18	21	14	8	8	3	3	5	13.0	21.0
31-Mar	4	4	5	6	10	5	2	3	5	7	5	9	9	12	16	14	13	11	8	5	2	2	1	1	6.6	15.9
	6.3	6.9	7.1	6.9	7.8	7.6	7.0	7.2	7.7	9.7	11.6	12.0	12.4	13.0	11.9	12.5	11.9	10.3	8.0	6.5	6.2	6.6	6.8	6.5	Diurnal Average	
	17.3	17.7	27.4	34.7	37.1	35.3	40.7	39.6	38.7	41.7	39.7	27.3	24.8	27.3	18.8	20.4	24.8	22.8	20.1	22.8	16.4	19.2	20.6	18.7	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 - March 2016

Maximum Value: 98.2 deg on Mar 10 23:00

Minimum Value: 4.5 deg on Mar 29 20:00

Percentiles: P_1 = 5.0 P_{10} = 9.1 Q_1 = 14.7 Median = 23.0 Q_3 = 41.4 P_{90} = 67.3 P_{99} = 91.6

Hours in Service:	744
Hours of Data:	744
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-Mar	75	43	88	66	68	71	78	92	64	51	40	45	52	20	30	17	15	13	10	5	5	6	19	30	92.3
2-Mar	43	64	22	70	21	13	16	24	25	22	23	29	27	35	27	22	24	33	31	30	45	18	30	47	70.4
3-Mar	25	19	34	71	35	30	64	33	15	25	23	28	31	19	36	35	46	21	19	26	27	34	37	25	71.2
4-Mar	22	32	25	28	18	18	22	20	23	24	19	41	34	44	41	25	32	44	51	38	33	49	38	41	50.6
5-Mar	48	27	57	83	90	92	88	89	56	53	30	35	11	19	38	22	44	28	48	29	44	15	20	28	91.6
6-Mar	19	22	17	16	18	17	14	16	19	17	16	21	20	15	24	21	13	10	22	24	16	30	9	19	30.3
7-Mar	18	36	17	16	41	36	66	46	84	15	21	30	27	24	30	46	82	34	48	49	81	44	48	59	83.6
8-Mar	62	33	20	19	21	20	45	25	19	18	64	40	35	31	39	25	48	23	90	33	23	14	11	46	89.7
9-Mar	54	85	73	64	62	41	20	25	11	56	41	22	47	23	21	24	20	17	10	7	12	37	55	41	85.0
10-Mar	19	12	10	15	12	21	11	13	14	24	22	34	16	28	22	22	31	53	23	71	88	76	98	77	98.2
11-Mar	95	8	7	6	6	7	7	7	7	7	8	10	15	11	29	24	32	14	11	13	22	14	9	51	94.5
12-Mar	7	8	11	19	42	45	64	41	39	13	36	29	28	54	65	24	13	14	75	41	53	19	26	64	75.1
13-Mar	82	83	52	80	19	13	72	11	9	52	17	16	21	22	32	27	23	24	14	10	13	7	14	31	83.5
14-Mar	43	18	25	43	46	12	30	41	58	48	58	71	25	40	39	30	31	33	33	43	84	80	66	65	84.0
15-Mar	30	43	72	81	76	85	84	76	45	16	16	17	22	17	27	25	11	9	8	6	7	5	5	6	85.0
16-Mar	8	8	10	10	6	7	7	8	8	8	8	16	17	28	18	10	12	14	9	12	40	27	52	92	92.2
17-Mar	23	20	22	20	15	12	11	22	18	19	13	17	26	36	18	16	15	65	49	63	71	58	30	80	79.8
18-Mar	77	94	79	66	54	93	92	62	44	30	50	27	23	23	23	23	20	13	9	25	68	63	14	77	93.9
19-Mar	81	76	35	73	63	70	62	92	84	30	39	12	39	16	25	17	12	13	11	13	49	44	40	54	91.9
20-Mar	54	79	57	60	67	24	78	53	35	40	44	20	23	15	15	11	11	13	16	12	12	16	10	14	78.9
21-Mar	13	12	12	16	16	17	14	16	22	15	13	15	14	20	24	13	17	16	16	16	27	24	15	21	27.4
22-Mar	18	22	19	19	22	26	16	15	10	17	18	34	31	34	24	28	27	42	26	88	83	33	20	21	88.3
23-Mar	18	17	19	19	25	14	18	21	28	47	27	20	18	18	17	21	14	20	17	16	14	15	18	13	47.1
24-Mar	13	14	17	16	20	17	16	18	17	20	28	30	32	60	30	72	33	22	38	78	59	61	75	83	82.6
25-Mar	64	72	27	45	23	61	34	38	53	50	39	16	24	24	13	19	16	19	16	6	6	5	6	6	72.5
26-Mar	5	6	6	9	7	12	7	14	19	15	11	14	22	25	18	27	23	15	14	71	29	51	53	30	71.3
27-Mar	93	25	42	65	81	90	96	80	81	16	24	56	52	39	41	31	34	36	45	65	29	23	6	6	95.6
28-Mar	8	7	9	10	19	15	12	13	11	13	12	16	22	29	40	30	31	18	24	23	16	7	5	8	39.7
29-Mar	7	5	5	11	9	8	20	18	11	12	9	15	17	19	19	13	11	12	6	5	5	6	6	5	19.8
30-Mar	15	16	18	12	9	12	8	9	9	9	9	6	8	10	12	20	15	11	19	14	26	56	72	12	71.9
31-Mar	41	9	7	8	13	21	30	15	34	39	63	37	32	41	23	20	22	33	64	8	61	68	78	55	77.7
	94.5	93.9	88.5	82.9	89.6	93.3	95.6	92.3	84.2	56.3	64.1	70.8	51.9	60.4	64.8	72.3	81.5	64.9	89.7	88.3	88.4	80.4	98.2	92.2	

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.4 ppb on Mar 19 13:00 Maximum Daily Average: 0.8 ppb on Mar 13

Minimum Value: 0 ppb on Mar 17 00:00 Minimum Daily Average: 0.1 ppb on Mar 14
Maximum Diurnal Average: 0.7 ppb at hour 13 Minimum Diurnal Average: 0.2 ppb at hour 22
Monthly Average: 0.36 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.4 P_{90} = 0.6 P_{99} = 2.5

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
2-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.6
3-Mar	1	1	1	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	1.4
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
5-Mar	0	0	0	0	0	0	1	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.3	1.3
7-Mar	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	1	1	2	2	1	1	0	0	0	0	0	0	0.5	2.4
9-Mar	0	0	1	0	A	0	0	0	0	0	0	0	1	0	4	3	1	0	0	0	0	0	0	0	0.5	4.1
10-Mar	0	0	0	A	0	0	0	0	1	1	1	1	0	1	1	1	0	2	3	2	1	0	0	1	0.7	3.0
11-Mar	1	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0.3	1.2
12-Mar	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	3	0	1	1	1	0.5	3.4
13-Mar	A	1	0	0	0	0	0	0	1	1	3	3	1	2	1	2	0	0	0	0	0	0	0	A	0.8	3.2
14-Mar	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.6
15-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	3	1	1	1	1	2	2	1	A	1	0	0.7	2.9
16-Mar	0	1	1	1	0	1	1	2	0	0	2	2	1	1	2	1	0	0	0	0	A	0	0	0	0.6	1.9
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0.3	0.6
18-Mar	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.6
19-Mar	0	0	0	0	0	0	0	0	0	0	0	2	9	1	1	0	0	A	0	0	0	0	0	0	0.8	9.4
20-Mar	0	0	1	1	1	1	1	0	1	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.6
21-Mar	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.6
22-Mar	0	1	0	0	0	0	0	0	0	1	1	C	C	C	A	0	0	0	0	0	0	0	0	0	0.3	1.1
23-Mar	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
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0.3	0.8
26-Mar	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
28-Mar	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
29-Mar	1	1	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.4	1.0
30-Mar	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	0.5
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.5	0.6	0.5	0.3	0.4	0.4	0.4	0.2	0.2	0.2	0.2	Diurnal Average	
	1.1	1.4	1.1	1.1	1.0	0.9	0.8	1.7	1.0	1.0	2.7	3.2	9.4	2.9	4.1	2.6	1.2	1.5	3.0	3.4	0.8	0.8	0.7	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

Smoky Heights - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - March 2016

Maximum Value: 30.6 ppb on Mar 19 13:00

Maximum Daily Average: 2.4 ppb on Mar 19

Minimum Value: 0 ppb on Mar 7 23:00

Minimum Daily Average: 0.6 ppb on Mar 23

Maximum Diurnal Average: 2.0 ppb at hour 13

Minimum Diurnal Average: 0.6 ppb at hour 22

Monthly Average: 0.95 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 1.5$ $P_{99} = 4.7$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	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	0.8
2-Mar	1	1	1	1	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	0.6	1.6
3-Mar	5	5	2	1	0	1	1	0	0	0	A	1	1	1	1	1	1	1	1	0	1	1	0	1	1.1	5.0
4-Mar	0	0	0	1	1	0	0	1	1	A	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0.6	1.5
5-Mar	1	0	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	2	2	0	1	1	1	1	0.8	2.1
6-Mar	0	0	1	1	1	1	1	A	1	1	1	0	1	0	1	0	1	4	3	2	1	1	1	0	0.9	3.9
7-Mar	0	1	2	2	1	2	A	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0.8	2.3
8-Mar	1	1	1	1	0	A	0	1	1	1	1	1	1	2	4	5	1	2	1	1	1	1	1	1	1.1	4.6
9-Mar	0	1	1	1	A	0	0	1	0	1	1	1	2	1	7	6	2	1	1	1	0	0	0	1	1.2	7.2
10-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	5	7	8	1	1	1	1	1.7	7.7
11-Mar	1	1	A	3	1	1	0	0	0	0	0	0	2	2	1	1	5	1	1	1	0	0	0	1	1.1	5.5
12-Mar	0	A	1	0	0	1	1	0	1	1	1	1	2	1	1	1	1	1	1	14	1	1	1	1	1.4	13.9
13-Mar	A	1	1	1	1	1	1	1	3	2	5	5	2	5	2	5	1	1	0	0	1	0	0	A	1.7	5.1
14-Mar	0	0	0	3	0	0	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	0	A	0	0.6	2.7
15-Mar	1	1	1	1	0	0	1	1	1	1	2	1	2	5	2	1	2	3	4	3	1	A	1	1	1.4	4.9
16-Mar	1	2	1	1	1	1	2	4	1	1	2	3	2	2	3	2	1	1	0	0	A	0	0	0	1.5	4.2
17-Mar	2	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.6
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	A	0	1	1	1	1	0.7	1.0
19-Mar	1	1	1	1	1	1	1	1	0	1	1	9	31	1	1	1	1	A	1	1	1	1	1	1	2.4	30.6
20-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.0
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.7	1.0
22-Mar	0	2	1	1	1	0	0	1	1	4	2	C	C	C	A	1	1	1	1	1	0	1	1	1	0.9	3.8
23-Mar	1	0	1	1	0	0	1	1	1	0	1	1	1	A	1	1	1	1	1	0	1	1	1	1	0.6	0.7
24-Mar	0	0	1	1	1	1	0	1	1	1	1	0	A	1	1	1	1	1	1	1	0	1	1	1	0.6	0.8
25-Mar	0	1	0	1	0	0	0	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	0.7	1.6
26-Mar	1	0	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
27-Mar	1	0	0	0	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8
28-Mar	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
29-Mar	1	1	1	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.8
30-Mar	1	1	1	1	1	1	A	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	0	0.6	0.9
31-Mar	0	0	1	1	1	A	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.6	0.9
	0.8	0.9	0.8	0.9	0.7	0.7	0.7	0.8	0.7	0.9	1.0	1.3	2.0	1.2	1.3	1.2	1.0	1.1	1.1	1.4	0.7	0.6	0.6	0.7	Diurnal Average	
	4.7	5.0	2.1	3.5	1.8	2.3	2.4	4.2	2.5	3.8	4.5	9.2	30.6	4.9	7.2	5.6	5.5	5.4	7.4	13.9	1.5	1.3	1.3	1.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - March 2016

Peace Airshed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Smoky Heights - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.3 ppb on Mar 24 09:00 Maximum Daily Average: 0.1 ppb on Mar 1

Minimum Value: 0 ppb on Mar 1 14:00 Minimum Daily Average: 0.0 ppb on Mar 22
Maximum Diurnal Average: 0.1 ppb at hour 15 Minimum Diurnal Average: 0.0 ppb at hour 22
Monthly Average: 0.03 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.1$ $P_{90} = 0.1$ $P_{99} = 0.2$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	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
2-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
3-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
5-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
7-Mar	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
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
10-Mar	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
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Mar	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
13-Mar	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
14-Mar	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	0.1
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
17-Mar	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
18-Mar	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	0.1
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.1
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.1
21-Mar	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
22-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0.0	0.0
23-Mar	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
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
25-Mar	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
26-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
28-Mar	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
29-Mar	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
30-Mar	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
31-Mar	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
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2016

Maximum Value: 1.4 ppb on Mar 23 19:00

Maximum Daily Average: 0.5 ppb on Mar 15

Minimum Value: 0 ppb on Mar 29 18:00

Minimum Daily Average: 0.3 ppb on Mar 29

Maximum Diurnal Average: 0.4 ppb at hour 19

Minimum Diurnal Average: 0.3 ppb at hour 20

Monthly Average: 0.39 ppb

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

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
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-Mar	1	1	0	1	0	0	1	1	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
2-Mar	0	0	0	0	0	0	0	1	0	0	0	A	0	0	1	0	0	0	0	0	0	1	0	0	0.4	0.6
3-Mar	1	1	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	1	0.4	0.7
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.5
5-Mar	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
6-Mar	0	0	0	0	0	0	0	A	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Mar	1	0	0	0	0	1	A	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0.5	0.7
8-Mar	1	1	1	0	1	A	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.4	0.5
10-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
12-Mar	0	A	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0.4	0.6
13-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.5
15-Mar	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	1	1	0	1	A	1	1	0.5	0.7
16-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	A	0	1	0	0.4	0.6
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	A	0	0	0	1	0.4	0.9
18-Mar	0	0	0	1	1	1	1	1	1	0	0	0	0	0	1	0	1	0	A	0	0	0	1	0	0.5	0.7
19-Mar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.6
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
21-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4
22-Mar	0	1	0	0	0	0	0	0	0	C	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0.3	0.6
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0.4	1.4
24-Mar	1	0	0	0	0	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0.5	1.2
25-Mar	0	0	0	0	1	1	0	0	0	0	0	A	0	0	1	1	0	0	1	0	0	0	0	0	0.5	0.7
26-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.5
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0.4	0.7
28-Mar	0	1	0	1	0	0	0	0	A	0	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0.5	0.7
29-Mar	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	0.5
30-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.5
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0.4	0.6
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	Diurnal Average	
	0.7	0.6	0.5	0.5	0.7	0.7	0.6	0.6	1.2	0.6	0.6	0.6	0.7	0.9	0.7	0.6	0.7	0.7	1.4	0.6	0.5	0.6	0.6	0.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2016

Peace Airshed Zone Association

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Smoky Heights - March 2016

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - March 2016

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

Maximum Value: 51.8 $\mu g/m^3$ on Mar 22 00:00

Maximum Daily Average: 7.2 $\mu g/m^3$ on Mar 10

Minimum Value: 0 $\mu g/m^3$ on Mar 8 17:00

Maximum Diurnal Average: 5.4 $\mu g/m^3$ at hour 24

Monthly Average: 3.29 $\mu g/m^3$

Minimum Daily Average: 0.1 $\mu g/m^3$ on Mar 30

Minimum Diurnal Average: 1.9 $\mu g/m^3$ at hour 15

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.6$ Median = 1.9 $Q_3 = 4.5$ $P_{90} = 7.2$ $P_{99} = 16.7$

Hours in Service:	744
Hours of Data:	744
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-Mar	7	4	3	3	2	3	2	3	4	2	2	5	4	2	2	7	1	2	14	18	10	11	5	5	5.0	18.4
2-Mar	2	1	1	3	1	1	1	2	3	3	3	6	2	1	1	1	2	3	2	2	43	34	3	1	5.2	42.6
3-Mar	1	1	1	1	1	1	1	5	5	2	2	1	1	1	2	4	9	1	4	2	1	1	1	25	3.0	24.6
4-Mar	1	1	0	1	1	1	1	1	1	2	2	2	2	3	2	3	4	6	2	2	2	6	8	2	2.3	8.3
5-Mar	2	1	2	4	5	4	3	6	7	5	3	4	8	9	5	7	5	3	13	4	3	4	2	6	4.8	13.2
6-Mar	3	6	8	2	2	2	2	3	3	5	4	4	4	3	2	2	8	5	3	3	2	1	2	2	3.4	8.3
7-Mar	13	3	6	3	8	9	2	2	3	5	5	4	3	2	2	3	3	5	5	5	5	5	6	4	4.7	12.8
8-Mar	5	4	3	9	12	5	4	2	2	2	3	4	3	2	1	0	0	0	0	3	1	2	4	4	3.1	11.8
9-Mar	5	7	5	5	2	3	5	3	5	4	4	2	2	2	3	2	1	1	1	0	0	0	0	0	2.7	6.8
10-Mar	0	0	0	0	0	7	5	5	9	9	21	17	16	14	8	5	9	8	7	5	6	6	8	7	7.2	21.3
11-Mar	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	3	1.0	6.5
12-Mar	0	0	0	1	3	6	6	2	7	1	0	1	0	0	2	0	0	1	2	1	1	4	5	2	1.9	6.8
13-Mar	1	2	3	3	3	8	6	3	3	2	1	0	0	1	1	1	2	21	35	14	13	12	18	9	6.8	35.0
14-Mar	5	2	5	5	3	4	3	6	3	7	6	5	2	2	2	2	4	2	6	6	1	2	3	3	3.6	7.1
15-Mar	2	2	2	2	2	3	3	3	3	4	4	3	1	1	0	0	0	0	0	0	0	0	0	0	1.6	4.5
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	2	1	1	1	1	8	2	2	1.1	7.5
17-Mar	1	1	2	1	1	1	1	2	3	2	0	1	1	0	0	0	0	0	0	2	1	1	1	1	1.1	3.4
18-Mar	1	5	5	2	1	2	3	3	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1.4	5.3
19-Mar	0	1	1	1	1	1	1	4	10	11	8	7	5	4	4	2	3	5	7	6	33	23	7	3	6.1	33.1
20-Mar	4	20	5	5	4	6	6	5	5	4	4	3	4	5	8	8	6	5	3	2	2	2	33	12	6.6	32.9
21-Mar	4	1	1	1	1	1	2	1	1	0	0	1	0	1	1	1	4	12	9	7	4	3	20	52	5.4	51.8
22-Mar	11	2	1	1	1	1	1	1	1	2	1	1	0	2	2	2	3	3	2	3	3	8	4	7	2.6	10.9
23-Mar	6	5	5	6	6	5	5	4	4	3	4	5	5	4	3	6	10	19	5	8	2	2	2	1	5.2	18.7
24-Mar	1	2	2	2	2	3	9	5	7	10	8	5	4	3	4	3	6	20	15	5	9	6	13	9	6.4	20.2
25-Mar	5	6	5	5	7	8	7	4	5	6	7	2	1	1	1	1	1	1	1	0	0	0	1	1	3.1	8.2
26-Mar	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	2	0.7	3.2
27-Mar	21	6	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	12	3	14	7	2	3.0	20.7
28-Mar	2	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0.6	3.0
29-Mar	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.5	0.7
30-Mar	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
31-Mar	0	0	0	0	0	0	1	1	1	0	0	0	0	1	2	2	4	3	3	2	8	4	6	3	1.7	7.7
	3.7	3.0	2.3	2.2	2.3	2.8	2.7	2.5	3.3	3.1	3.1	2.7	2.4	2.1	1.9	2.2	2.8	4.2	4.7	3.8	5.2	5.3	5.3	5.4	Diurnal Average	
	20.7	20.2	7.7	8.9	11.8	9.2	9.3	6.3	10.1	10.9	21.3	17.0	16.5	13.8	8.4	8.5	9.6	21.5	35.0	18.4	42.6	34.5	32.9	51.8	Diurnal Maximum	

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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - March 2016

Maximum Value: 224.5 $\mu g/m^3$ on Mar 4 00:00

Maximum Daily Average: 20.2 $\mu g/m^3$ on Mar 3

Minimum Value: 0 $\mu g/m^3$ on Mar 8 17:00

Minimum Daily Average: 0.9 $\mu g/m^3$ on Mar 29

Maximum Diurnal Average: 20.3 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 3.9 $\mu g/m^3$ at hour 14

Monthly Average: 9.63 $\mu g/m^3$

Percentiles: $P_1 = 0.0$ $P_{10} = 0.5$ $Q_1 = 1.2$ Median = 3.6 $Q_3 = 8.7$ $P_{90} = 21.7$ $P_{99} = 102.6$

Hours in Service:	744
Hours of Data:	744
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-Mar	8	6	4	3	3	3	3	3	21	3	4	6	6	3	7	14	8	13	51	51	16	36	30	8	12.9	51.0
2-Mar	6	2	2	10	2	1	1	9	14	8	8	12	5	4	1	4	4	4	4	4	146	164	18	4	18.2	163.9
3-Mar	3	2	1	1	1	2	2	67	42	7	3	2	2	2	3	21	43	3	22	11	12	4	2	225	20.2	224.5
4-Mar	5	5	1	6	5	1	1	1	2	2	2	2	2	5	4	6	12	22	2	2	2	22	21	13	6.2	22.5
5-Mar	2	2	5	6	5	4	5	8	11	6	3	6	17	16	9	12	7	4	49	18	8	19	2	20	10.2	48.6
6-Mar	14	18	17	4	3	3	3	3	4	5	5	4	4	4	3	3	37	18	7	12	3	2	2	2	7.4	37.3
7-Mar	92	8	20	5	86	88	2	3	5	6	5	5	4	3	2	3	4	7	7	6	6	6	7	5	16.0	91.8
8-Mar	7	4	4	27	15	7	6	2	2	2	4	5	4	3	2	1	0	0	1	10	2	3	20	5	5.6	27.3
9-Mar	7	8	6	8	4	6	8	5	7	5	5	4	3	3	22	10	3	1	1	1	0	0	0	0	4.9	22.2
10-Mar	0	0	1	1	1	27	69	10	27	15	35	27	23	22	11	6	11	9	16	7	17	9	9	7	15.0	68.6
11-Mar	7	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	31	0	0	1	10	4.3	41.0
12-Mar	5	2	0	5	8	13	22	11	26	5	1	2	2	1	23	4	1	4	6	1	1	31	41	4	9.2	41.2
13-Mar	2	2	4	6	4	11	10	4	3	3	2	1	1	1	3	2	3	61	87	33	40	31	60	49	17.6	86.5
14-Mar	30	3	16	6	4	4	3	18	9	14	31	12	3	3	4	4	11	11	31	47	5	6	4	3	11.8	47.4
15-Mar	3	3	2	3	3	3	3	5	4	4	5	4	2	1	2	0	1	1	1	0	0	0	0	1	2.2	4.9
16-Mar	0	0	0	0	0	0	0	3	0	0	1	2	4	3	15	15	5	4	1	1	6	45	6	2	4.8	44.7
17-Mar	1	2	2	2	1	1	4	4	20	5	1	3	8	0	0	0	0	0	1	9	2	4	3	2	3.2	20.3
18-Mar	2	45	12	4	2	3	4	4	5	6	1	1	1	1	0	0	0	0	0	3	0	0	0	1	4.0	45.2
19-Mar	1	1	1	1	1	1	3	11	14	14	9	8	8	7	10	8	17	21	77	14	153	62	17	18	19.8	152.7
20-Mar	17	59	24	12	8	11	22	15	9	5	5	3	6	7	13	13	10	8	4	3	3	5	60	50	15.5	59.6
21-Mar	15	2	2	1	2	2	2	2	1	1	1	2	1	1	1	1	12	20	16	14	7	7	62	118	12.2	118.2
22-Mar	40	9	4	1	2	1	1	1	2	8	2	2	1	2	3	3	4	4	3	12	7	31	6	12	6.6	39.6
23-Mar	8	8	6	11	12	11	6	5	5	14	8	7	11	6	7	12	45	40	12	23	5	3	9	2	11.5	44.9
24-Mar	1	2	2	2	3	22	22	8	12	21	15	7	8	5	5	4	16	76	60	9	56	18	62	49	20.2	75.7
25-Mar	9	11	7	6	8	10	9	6	9	9	10	3	2	2	1	2	1	6	1	1	0	1	1	1	4.8	11.2
26-Mar	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	5	0	11	1	18	3	2.1	18.1
27-Mar	215	135	0	0	0	0	0	1	2	0	0	1	1	1	1	2	1	2	1	36	12	34	26	7	20.0	215.4
28-Mar	2	1	1	0	1	1	0	2	7	0	0	0	0	0	0	2	1	1	1	1	9	10	2	1	1.9	9.7
29-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	0	1	0	1	0.9	2.9
30-Mar	1	1	1	0	0	1	0	0	11	4	3	3	1	3	0	1	2	0	1	0	1	0	0	0	1.5	11.2
31-Mar	0	0	0	0	0	1	1	2	2	0	0	0	0	10	15	6	29	15	41	9	32	5	11	6	7.8	40.5
	16.3	11.3	4.9	4.4	6.1	7.7	6.9	6.9	9.0	5.7	5.5	4.3	4.2	3.9	5.6	5.2	9.4	11.5	17.8	11.9	18.2	18.1	16.1	20.3	Diurnal Average	
	215.4	134.8	24.4	27.3	86.4	87.9	68.6	66.7	42.2	21.0	34.9	26.8	23.2	21.7	23.4	21.2	44.9	75.7	86.5	50.8	152.7	163.9	62.5	224.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - March 2016

Peace Airshed Zone Association

Pollutant Rose

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

Smoky Heights - March 2016

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) - °C

Smoky Heights - March 2016

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

Maximum Value: 15.3 °C on Mar 31 18:00

Maximum Daily Average: 9.0 °C on Mar 30

Minimum Value: -11 °C on Mar 1 07:00

Minimum Daily Average: -5.7 °C on Mar 2

Maximum Diurnal Average: 4.0 °C at hour 17

Minimum Diurnal Average: -3.5 °C at hour 8

Monthly Average: -0.15 °C

Percentiles: P_1 = -9.0 P_{10} = -5.7 Q_1 = -3.5 Median = -0.7 Q_3 = 2.7 P_{90} = 6.1 P_{99} = 12.7

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	-9	-9	-9	-10	-10	-10	-11	-11	-10	-8	-5	0	0	3	5	5	4	3	-1	-2	-2	-3	-3	-3	-4.0	5.4
2-Mar	-3	-3	-4	-5	-6	-7	-8	-8	-8	-8	-7	-6	-5	-5	-5	-5	-5	-5	-6	-6	-6	-6	-6	-6	-5.7	-3.4
3-Mar	-6	-6	-6	-6	-6	-6	-7	-7	-6	-6	-5	-5	-4	-4	-4	-3	-3	-4	-4	-5	-5	-6	-6	-6	-5.1	-3.1
4-Mar	-6	-6	-6	-6	-5	-5	-5	-5	-5	-4	-2	-1	0	2	3	3	2	3	3	2	1	1	0	-1	-1.5	3.3
5-Mar	-3	-2	-4	-4	-4	-3	-3	-4	-3	-1	0	0	0	0	0	0	-1	-2	-3	-4	-5	-5	-5	-5	-2.5	0.3
6-Mar	-5	-5	-6	-6	-6	-6	-6	-7	-6	-5	-4	-3	-2	-2	-3	-3	-2	-3	-3	-3	-4	-4	-4	-5	-4.4	-2.2
7-Mar	-5	-5	-6	-6	-6	-7	-7	-7	-7	-7	-5	-3	-2	-2	-2	-2	-3	-4	-4	-5	-5	-4	-4	-4	-4.7	-1.6
8-Mar	-3	-3	-3	-4	-5	-6	-7	-8	-8	-8	-6	-4	-3	-1	2	4	5	4	1	0	-1	-3	-4	-3	-2.7	4.8
9-Mar	-4	-5	-3	-4	-6	-7	-8	-9	-8	-6	-4	-1	2	3	4	7	8	9	5	1	2	4	3	3	-0.7	9.1
10-Mar	2	2	1	1	1	0	-1	-2	-1	0	1	2	3	4	6	5	4	3	2	2	1	0	-1	-2	1.4	5.7
11-Mar	-3	-4	-2	0	2	3	3	2	2	2	2	3	4	5	5	6	6	6	4	3	3	3	2	3	2.4	6.3
12-Mar	2	2	1	1	0	-1	-1	-2	0	2	1	3	5	5	5	6	6	6	3	2	2	2	1	1	2.1	6.2
13-Mar	0	0	0	-1	-1	-2	-2	-3	-2	-2	0	2	4	6	5	7	5	5	3	1	-1	-3	-3	-4	0.6	6.6
14-Mar	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	0	3	3	2	2	2	2	1	1	0	0	-1	-1	-1	-0.9	2.8
15-Mar	-2	-2	-2	-3	-5	-5	-6	-7	-5	-4	-2	1	5	4	8	8	8	7	6	3	3	0	-2	-2	0.2	8.1
16-Mar	-3	-3	-3	-3	-3	-3	-4	-4	-4	-2	0	1	2	2	2	2	1	0	0	-1	-2	-3	-3	-4	-1.4	2.2
17-Mar	-3	-2	-2	-1	0	-1	-1	-1	-1	-1	1	2	3	5	3	3	3	3	2	-1	-2	-1	-2	-4	0.0	4.9
18-Mar	-5	-5	-6	-6	-7	-7	-7	-8	-5	-2	0	1	2	4	5	5	5	5	4	2	2	2	2	1	-0.8	5.5
19-Mar	-1	-1	-2	-2	-3	-3	-3	-4	-3	-1	2	2	3	5	7	8	8	7	5	4	3	2	2	2	1.5	7.7
20-Mar	1	1	0	0	-1	-1	-1	-1	-1	0	2	3	4	4	4	3	3	3	2	2	2	2	2	1	1.5	4.0
21-Mar	0	0	-1	-2	-3	-3	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3.0	0.5
22-Mar	-3	-3	-3	-3	-3	-3	-4	-4	-3	-2	-1	-2	-1	-1	-1	1	0	-1	-2	-4	-5	-6	-6	-4	-2.7	0.6
23-Mar	-4	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	1	2	2	2	2	1	0	-1	-2	-2	-2	-2	-2	-1.4	2.2
24-Mar	-2	-3	-3	-4	-4	-4	-5	-5	-5	-4	-4	-3	-1	0	1	2	2	1	-2	-3	-3	-3	-3	-3	-2.4	2.3
25-Mar	-3	-2	-2	-3	-5	-7	-8	-7	-7	-5	-2	3	4	5	7	7	7	6	4	4	3	2	1	1	0.1	7.5
26-Mar	1	0	1	1	1	1	0	-1	0	2	3	4	5	5	6	7	7	7	7	5	1	0	-1	0	2.6	7.3
27-Mar	-2	-2	-1	-1	-3	-2	-3	-1	0	3	3	4	5	6	7	7	8	7	6	4	3	3	3	2	2.3	8.0
28-Mar	1	2	2	3	2	4	3	4	5	7	6	8	6	6	7	7	7	8	9	5	3	1	2	1	4.6	9.2
29-Mar	2	1	1	0	0	-2	-2	-1	1	3	4	5	5	7	7	8	8	9	8	7	6	4	4	4	3.7	8.6
30-Mar	4	3	3	9	10	9	10	10	10	9	10	11	8	12	13	13	13	13	12	9	8	6	5	5	9.0	13.4
31-Mar	4	3	3	3	2	2	2	2	4	6	8	10	11	11	12	12	14	15	15	12	7	5	5	7	7.2	15.3
	-1.9	-2.1	-2.2	-2.2	-2.6	-2.9	-3.3	-3.5	-2.9	-1.7	-0.3	1.1	2.0	2.9	3.5	4.0	4.0	3.5	2.4	0.9	0.1	-0.4	-0.8	-1.0	Diurnal Average	
	4.4	3.3	3.4	9.4	10.0	9.3	10.0	10.0	10.0	9.4	10.2	10.6	11.1	11.7	13.0	13.3	13.7	15.3	14.6	11.6	7.6	6.5	5.4	6.7	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2016

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	12	8	8	9	11	13	9	8	7	6	6	2	5	4	1	7	8	10	9	9	12	12	13	13	2.4	13.1
Dir	223	221	214	195	225	221	196	197	195	182	182	120	89	106	39	341	352	356	344	340	338	341	345	341	273.0	345.4
2 Spd	13	16	14	17	17	16	19	21	18	20	17	14	18	19	17	16	14	11	11	10	9	7	8	9	14.5	20.9
Dir	337	342	337	340	341	341	341	345	346	344	344	337	342	351	352	349	348	346	343	349	340	333	325	322	342.4	345.0
3 Spd	10	11	9	10	7	7	9	9	12	13	12	10	8	10	11	10	8	8	6	5	6	7	4	5	8.5	13.4
Dir	321	325	320	330	330	318	327	329	328	334	337	334	332	338	343	345	331	321	328	338	351	359	359	8	333.9	334.4
4 Spd	2	2	1	3	5	14	14	13	8	7	7	7	9	5	6	6	6	3	8	2	4	7	7	10	3.2	14.3
Dir	82	40	131	1	64	93	95	94	95	66	58	103	91	13	15	349	2	13	116	150	211	228	228	232	83.4	95.5
5 Spd	8	8	8	6	11	9	6	0	4	13	12	17	16	17	17	17	20	14	12	10	8	12	7	7	7.2	19.7
Dir	210	235	211	221	222	231	210	139	283	348	356	356	348	342	345	337	339	307	337	2	347	351	15	348	328.8	338.9
6 Spd	7	10	10	11	14	15	18	16	17	20	22	20	20	20	18	18	16	15	15	14	13	12	11	5	13.8	22.1
Dir	358	347	339	355	354	358	358	357	357	0	3	10	13	358	340	343	338	330	327	323	315	292	290	288	346.0	2.6
7 Spd	1	6	4	1	2	5	3	3	5	5	3	2	3	5	3	2	2	6	8	7	7	7	7	8	1.5	7.9
Dir	12	308	335	352	306	2	58	95	103	131	139	156	86	273	241	218	268	102	144	169	184	183	213	210	171.9	210.4
8 Spd	8	12	16	17	17	17	15	15	14	13	14	11	12	9	11	14	11	12	16	11	11	11	9	6	12.3	17.3
Dir	209	204	188	203	208	199	200	201	203	208	203	220	217	223	202	229	213	206	181	224	227	221	227	212	208.0	208.3
9 Spd	7	6	12	14	14	8	8	10	9	9	8	9	8	11	8	5	3	1	4	6	8	11	13	17	4.0	17.3
Dir	231	226	219	220	223	202	194	191	196	227	204	209	217	234	237	264	286	70	341	2	25	55	73	88	208.8	88.0
10 Spd	16	15	16	13	14	5	4	10	10	10	9	9	11	9	10	11	10	9	6	4	4	5	11	11	3.5	16.5
Dir	102	93	93	87	72	14	352	347	345	345	340	347	332	334	337	319	321	318	313	308	192	216	209	206	6.3	93.0
11 Spd	8	11	16	24	26	32	31	25	28	30	27	23	21	23	23	14	8	1	3	7	11	11	10	13	13.3	31.7
Dir	247	196	214	211	211	212	211	213	207	209	210	208	215	205	202	213	224	190	37	1	31	20	15	354	213.3	211.8
12 Spd	16	18	17	14	13	11	10	8	6	2	4	4	7	13	10	9	9	9	9	8	5	7	3	1	7.2	17.9
Dir	355	354	7	354	343	336	334	331	335	2	196	228	320	357	324	319	326	328	327	306	232	252	129	77	335.7	354.1
13 Spd	3	5	2	5	9	6	6	10	14	10	10	10	10	4	9	4	12	10	7	9	9	3	5	4	3.7	14.4
Dir	69	230	239	187	224	232	216	211	206	221	230	225	199	210	213	320	342	332	336	336	342	340	343	357	251.9	206.2
14 Spd	5	6	6	10	10	6	4	0	4	1	2	1	4	4	6	6	5	4	6	5	2	3	5	6	3.5	9.7
Dir	320	307	326	347	346	323	331	285	219	252	11	165	352	345	347	349	333	322	325	343	267	201	230	230	322.5	347.5
15 Spd	5	3	6	6	3	10	7	7	7	10	10	12	4	12	5	1	6	4	9	5	9	11	13	15	5.4	15.3
Dir	222	193	198	216	194	207	199	207	220	209	215	206	209	228	3	83	350	342	44	259	261	230	235	232	224.7	231.9
16 Spd	17	20	23	23	20	21	20	21	21	21	21	15	12	8	5	13	12	10	7	8	5	3	6	8	10.7	22.8
Dir	225	228	227	230	234	227	228	236	232	227	217	224	292	271	241	326	334	353	7	7	11	253	228	224	242.3	230.3
17 Spd	13	12	11	11	15	16	12	8	4	3	12	10	8	1	11	11	8	9	9	4	6	10	8	5	6.1	15.7
Dir	242	244	240	285	309	305	325	322	345	10	298	314	358	114	218	217	208	205	206	232	250	241	222	199	264.3	305.5
18 Spd	7	2	1	5	5	5	4	6	3	2	3	6	9	9	7	9	13	11	10	8	13	10	9	11	5.5	13.2
Dir	183	200	103	238	197	187	190	185	201	145	81	94	107	105	95	96	96	94	94	80	101	119	120	117	118.0	96.0
19 Spd	4	7	4	6	4	5	5	4	8	5	3	9	9	6	5	4	3	3	7	9	9	7	6	7	1.9	8.9
Dir	127	136	167	169	185	181	181	157	197	191	215	219	225	234	254	257	235	225	353	353	351	358	339	330	227.5	225.4
20 Spd	8	8	6	8	8	7	9	10	10	11	12	11	13	18	15	16	17	16	15	12	13	14	13	12	11.7	17.5
Dir	343	337	351	352	346	336	348	349	353	350	343	352	340	342	337	337	341	342	345	347	344	360	338	336	344.1	341.7
21 Spd	16	17	17	20	21	22	21	21	24	19	18	18	19	17	19	18	15	14	14	12	11	10	10	9	16.6	23.6
Dir	341	347	353	355	355	353	347	348	353	349	343	339	341	341	340	341	339	340	342	339	335	334	332	337	345.0	353.4
22 Spd	7	6	5	5	5	3	1	4	5	2	2	6	6	4	3	1	1	6	5	4	2	4	7	8	2.2	7.5
Dir	329	323	313	308	311	302	172	236	260	11	198	217	266	6	30	94	109	356	6	342	186	231	231	234	292.7	234.0

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2016

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	5	2	1	1	3	4	6	6	9	11	10	9	10	10	11	11	11	13	11	12	16	16	14	15	8.5	15.8
Dir	242	250	15	258	310	348	351	355	350	358	352	343	342	338	347	334	338	342	346	346	355	351	349	356	345.3	351.4
24 Spd	16	15	18	15	15	17	14	17	13	12	10	10	9	7	5	4	4	4	3	8	2	3	5	5	9.0	17.6
Dir	1	0	2	357	347	353	340	341	337	335	336	335	342	336	341	357	347	347	309	248	273	347	346	343	344.6	2.4
25 Spd	5	3	3	5	7	6	7	10	10	9	10	7	6	11	7	6	8	3	4	10	10	11	14	15	6.0	15.2
Dir	346	335	208	234	235	226	192	216	206	215	221	220	193	239	257	345	344	341	187	255	211	224	233	237	233.3	237.4
26 Spd	14	14	13	14	14	12	13	7	37	37	39	41	41	47	43	43	45	48	51	8	3	3	3	3	15.9	51.2
Dir	243	239	241	230	224	231	234	24	39	45	48	49	49	50	50	48	46	44	43	15	242	245	195	197	43.6	42.7
27 Spd	3	3	3	3	2	2	3	4	6	3	5	8	10	8	8	12	9	7	6	8	6	6	3	9	5.3	11.6
Dir	242	200	191	204	243	240	211	201	204	153	216	219	216	223	237	239	236	238	246	240	227	247	196	227	225.2	239.4
28 Spd	13	15	14	14	9	8	13	13	9	6	3	6	16	18	15	13	14	9	8	6	7	11	16	18	10.2	18.0
Dir	229	235	235	235	230	277	266	266	246	256	194	209	215	210	202	206	199	232	321	299	235	226	218	218	230.5	209.7
29 Spd	20	21	23	20	9	10	7	8	11	13	12	11	13	15	16	15	19	15	16	21	18	18	22	21	15.2	22.9
Dir	224	227	230	228	201	189	209	199	195	204	200	204	207	198	196	200	209	225	230	232	224	230	227	225	216.2	230.4
30 Spd	20	14	10	15	13	14	17	18	17	16	14	12	15	18	22	20	17	15	12	12	8	10	10	11	12.0	22.0
Dir	226	237	234	291	283	271	296	288	272	262	268	265	214	278	281	293	287	297	296	346	330	333	352	26	281.6	281.2
31 Spd	3	6	6	6	5	7	5	2	7	9	7	5	2	10	13	10	5	2	3	7	8	11	13	15	3.0	15.4
Dir	315	336	343	342	3	17	4	225	144	124	126	106	162	226	230	207	245	201	272	269	219	223	237	244	234.8	243.7
Spd	3.9	4.1	3.7	4.5	4.5	4.2	3.7	3.5	2.9	2.5	2.5	2.4	2.7	3.9	4.0	5.0	5.3	4.9	4.6	4.8	3.3	3.5	3.5	3.5	Diurnal Average	
Dir	264.5	271.4	260.7	267.0	273.6	270.3	274.5	278.0	278.9	299.5	295.4	295.5	312.2	310.7	307.6	319.8	330.8	336.9	349.1	318.5	304.7	286.9	269.7	266.2		
Spd	20.3	21.1	22.9	24.2	25.6	31.7	31.4	25.1	36.8	37.1	39.3	40.5	41.1	47.4	42.6	43.3	45.0	48.1	51.2	21.1	17.7	17.6	21.6	21.3	Diurnal Maximum	
Dir	223.5	226.9	230.4	211.2	211.5	211.8	210.8	213.1	39.1	44.6	48.4	48.9	48.7	49.9	49.7	47.6	46.1	44.4	42.7	231.8	223.7	229.7	227.4	225.5		

Maximum Speed Value: 51 km/h on Mar 26 19:00
Maximum Daily Speed Average: 16.6 km/h on Mar 26
Maximum Diurnal Speed Average: 5.3 km/h at hour 17

Minimum Speed Value: 0 km/h on Mar 14 08:00
Minimum Daily Speed Average: 1.5 km/h on Mar 22
Minimum Diurnal Speed Average: 2.4 km/h at hour 12

Monthly Average Velocity: 3.41 km/h 294.74 deg

Speed Percentiles: P_1 = 1.0 P_{10} = 3.2 Q_1 = 5.6 Median = 9.1 Q_3 = 13.5 P_{90} = 17.6 P_{99} = 39.6

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

Hours in Service:	744
Hours of Data:	744
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	35	80	80	17	0	0	212
NorthEast	5	9	0	0	2	9	25
East	14	12	13	0	0	0	39
SouthEast	13	8	1	0	0	0	22
South	27	33	11	1	0	0	72
SouthWest	29	96	68	26	3	0	222
West	16	14	15	1	0	0	46
NorthWest	12	63	30	1	0	0	106
Total	151	315	218	46	5	9	744

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - March 2016

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - March 2016

Maximum Speed: 51 km/h on Mar 26 19:00

Maximum Daily Speed Average: 25.6 km/h on Mar 26

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

Minimum Daily Speed Average: 4.6 km/h on Mar 22

Maximum Diurnal Speed Average: 12.4 km/h at hour 14

Minimum Diurnal Speed Average: 8.5 km/h at hour 21

Monthly Average Speed: 10.60 km/h

Percentiles: P_1 = 1.8 P_{10} = 4.0 Q_1 = 6.0 Median = 9.4 Q_3 = 13.7 P_{90} = 17.8 P_{99} = 39.7

Hours in Service: 744

Hours of Data: 744

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-Mar	12	8	8	10	11	13	9	8	8	7	7	3	5	4	2	7	8	10	9	9	12	12	13	13	8.6	13.1
2-Mar	13	16	15	17	17	16	19	21	18	20	17	14	18	19	17	16	14	11	11	10	9	7	8	9	14.7	20.9
3-Mar	10	11	9	10	7	7	9	9	12	13	12	10	9	10	11	10	9	8	6	5	6	7	4	6	8.8	13.4
4-Mar	4	3	3	3	6	14	15	13	8	7	7	7	9	7	6	7	6	4	8	3	5	7	7	10	6.9	14.6
5-Mar	8	9	9	7	11	9	7	6	6	13	12	17	16	17	17	17	20	15	12	11	9	12	7	7	11.5	19.8
6-Mar	8	10	10	11	14	15	18	16	17	20	22	20	20	21	18	18	16	15	15	14	13	12	11	5	15.0	22.2
7-Mar	2	7	4	2	4	5	3	4	5	5	3	3	3	5	3	2	6	7	8	7	7	7	7	8	4.8	7.9
8-Mar	8	12	16	17	17	17	15	15	14	13	14	12	12	9	11	14	11	12	16	12	12	11	10	7	12.8	17.4
9-Mar	7	6	12	14	14	9	8	10	9	10	8	9	8	11	8	6	3	1	4	6	8	11	14	17	8.9	17.5
10-Mar	16	15	17	14	14	6	6	10	10	10	9	10	11	9	10	11	10	9	6	4	5	6	12	11	10.1	16.6
11-Mar	9	11	16	24	26	32	31	25	28	30	27	23	22	23	23	14	8	2	4	8	11	11	11	14	18.0	31.8
12-Mar	16	18	17	14	13	11	10	8	6	3	4	4	8	13	10	9	9	9	9	8	7	9	5	2	9.3	18.0
13-Mar	4	5	5	5	10	6	6	10	14	11	10	10	10	5	9	6	12	10	7	9	9	3	5	5	7.8	14.4
14-Mar	5	6	6	10	10	6	5	2	4	2	2	1	4	4	6	7	6	5	6	5	3	3	5	6	5.1	9.9
15-Mar	5	3	6	6	3	10	7	8	7	11	10	12	4	12	5	3	6	4	11	5	9	11	13	15	7.8	15.4
16-Mar	17	20	23	23	21	21	20	21	21	21	21	16	14	10	7	13	12	10	7	8	5	3	7	8	14.5	22.8
17-Mar	13	12	11	12	15	16	12	8	4	3	12	10	8	3	11	12	8	9	9	5	6	11	8	5	9.3	15.7
18-Mar	7	4	1	5	6	5	4	6	3	3	3	6	9	9	8	9	13	11	10	8	13	10	9	11	7.3	13.3
19-Mar	5	7	4	6	5	5	5	4	8	5	3	9	9	6	5	4	3	3	7	9	9	7	6	7	5.9	9.0
20-Mar	8	8	6	8	8	7	9	10	10	11	12	11	13	18	15	16	17	16	16	12	13	15	13	12	11.8	17.6
21-Mar	16	17	18	20	21	22	21	21	24	19	18	18	19	17	19	18	15	14	14	12	11	11	10	9	16.8	23.7
22-Mar	7	6	5	5	5	3	2	4	5	2	2	6	7	5	4	3	4	6	5	4	2	4	7	8	4.6	7.6
23-Mar	5	2	1	2	4	4	6	6	9	11	10	9	10	10	11	11	11	13	11	12	16	16	14	15	9.2	15.9
24-Mar	16	15	18	16	15	17	14	17	13	12	10	10	9	7	5	4	4	4	5	8	2	3	5	5	9.7	17.8
25-Mar	5	4	3	6	8	7	7	10	10	9	10	7	7	11	8	6	9	4	5	11	11	11	14	15	8.2	15.2
26-Mar	14	14	13	14	14	13	13	21	37	37	39	41	41	47	43	43	45	48	51	12	3	3	4	4	25.6	51.2
27-Mar	3	3	3	3	2	2	3	4	6	4	6	8	10	8	8	12	9	7	6	8	6	6	5	9	5.8	11.6
28-Mar	13	15	15	15	10	8	13	13	10	8	5	8	16	18	15	13	14	12	8	6	8	11	16	18	11.9	18.1
29-Mar	20	21	23	20	9	11	8	8	11	13	12	11	14	15	16	15	19	15	17	21	18	18	22	21	15.7	22.9
30-Mar	20	14	10	15	14	14	18	18	17	16	14	12	15	19	22	21	17	15	12	12	8	10	10	11	14.8	22.2
31-Mar	4	6	6	6	5	7	5	3	8	9	8	5	5	10	13	10	6	2	5	7	8	11	14	15	7.4	15.4
	9.7	10.0	10.1	11.0	10.8	10.8	10.6	10.9	11.7	11.5	11.3	11.0	11.8	12.4	11.8	11.5	11.3	10.1	10.3	8.8	8.5	9.0	9.5	10.0	Diurnal Average	
	20.4	21.1	22.9	24.2	25.6	31.8	31.5	25.2	36.8	37.2	39.4	40.5	41.1	47.4	42.7	43.3	45.0	48.2	51.2	21.2	17.7	17.7	21.6	21.4	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 - March 2016

Maximum Value: 91.9 deg on Mar 5 08:00

Minimum Value: 1.1 deg on Mar 26 09:00

Percentiles: P_1 = 2.2 P_{10} = 4.4 Q_1 = 5.9 Median = 9.2 Q_3 = 17.2 P_{90} = 38.3 P_{99} = 83.6

Hours in Service:	744
Hours of Data:	744
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-Mar	7	10	16	12	10	7	9	11	27	15	31	41	9	15	66	13	7	13	5	4	4	5	4	5	65.8
2-Mar	5	4	7	5	4	5	4	4	5	4	7	5	7	6	7	6	8	7	4	7	6	8	8	8	8.4
3-Mar	9	7	11	8	8	9	9	6	6	6	6	8	9	8	5	5	10	8	9	14	8	10	13	23	22.9
4-Mar	72	65	76	27	21	11	12	7	13	11	14	10	17	38	17	19	18	41	9	44	37	16	13	14	75.7
5-Mar	15	41	37	33	10	9	49	92	47	10	12	10	9	8	9	7	5	21	14	22	26	8	18	10	91.9
6-Mar	12	5	6	9	7	6	6	7	7	9	6	6	6	10	4	6	5	5	5	6	7	8	9	30	29.8
7-Mar	73	18	30	76	67	12	26	25	23	13	24	48	23	43	33	50	89	23	13	13	19	15	6	6	89.3
8-Mar	5	5	7	9	5	7	4	6	4	4	5	6	6	10	9	5	11	8	9	19	14	8	21	19	20.7
9-Mar	18	19	7	5	8	11	6	20	15	6	14	9	15	7	9	14	54	26	16	26	16	8	16	8	54.3
10-Mar	5	6	5	13	22	24	53	13	10	9	5	12	6	7	9	6	10	8	20	57	83	27	19	17	83.2
11-Mar	21	12	6	3	3	4	3	4	4	3	3	3	9	9	6	10	13	58	42	15	10	11	13	13	58.0
12-Mar	7	6	4	9	3	7	5	6	11	58	30	18	36	10	10	9	8	7	9	7	55	47	79	66	78.6
13-Mar	61	34	77	28	20	22	16	16	7	9	8	9	11	59	8	63	16	7	7	6	4	19	10	23	77.2
14-Mar	9	6	10	11	10	9	18	86	23	78	39	56	38	29	10	14	19	35	14	25	40	28	6	8	86.2
15-Mar	11	24	12	4	23	4	13	10	7	15	5	7	24	37	22	67	20	21	87	30	14	7	5	3	86.7
16-Mar	7	4	3	3	5	4	3	4	2	3	5	29	36	37	51	6	9	7	14	7	14	47	4	8	51.3
17-Mar	5	6	3	23	5	5	7	9	24	49	36	19	13	62	6	10	8	8	10	31	24	12	12	26	62.2
18-Mar	12	72	86	23	16	6	8	10	12	51	8	12	4	6	17	11	5	4	3	10	8	7	7	4	85.9
19-Mar	50	12	30	17	15	11	7	12	13	20	12	9	6	12	15	14	10	17	29	6	8	10	12	6	50.5
20-Mar	5	7	17	10	9	5	9	6	8	7	5	6	5	4	6	5	5	4	4	5	10	8	6	6	16.5
21-Mar	6	5	6	11	6	5	5	5	5	8	4	5	5	5	5	4	5	5	4	5	5	8	5	6	10.8
22-Mar	8	8	8	8	10	12	40	14	43	27	48	15	36	28	30	56	71	12	12	23	25	17	4	5	70.5
23-Mar	12	60	74	78	17	9	9	17	11	9	10	10	7	6	6	6	5	5	5	5	5	5	5	7	77.7
24-Mar	8	8	8	8	5	6	8	5	6	6	6	10	9	10	16	13	17	19	63	14	41	24	8	9	63.2
25-Mar	10	29	28	21	12	14	13	11	12	10	8	28	22	8	20	20	9	65	34	24	30	12	6	4	64.9
26-Mar	3	4	6	4	5	5	5	81	1	3	3	1	2	1	1	1	1	2	3	53	37	29	38	37	80.8
27-Mar	41	18	13	14	11	56	20	15	10	36	29	6	7	7	4	4	5	7	10	10	14	20	54	12	55.7
28-Mar	8	4	5	7	15	10	7	8	17	44	73	84	3	4	5	7	3	44	10	12	17	9	4	5	83.9
29-Mar	5	4	2	6	9	6	32	6	11	6	9	7	6	3	4	3	4	7	9	5	4	6	3	4	32.0
30-Mar	5	6	18	4	7	9	6	7	7	3	6	11	14	8	9	8	9	8	11	11	7	6	11	10	17.9
31-Mar	40	18	6	5	15	14	7	69	29	9	19	14	60	9	13	11	13	34	84	24	16	6	8	3	84.2
	72.7	71.8	85.9	77.7	66.5	55.7	52.6	91.9	47.0	78.3	72.9	83.9	60.3	62.2	65.8	67.2	89.3	64.9	86.7	56.6	83.2	47.4	78.6	66.5	

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.4 ppb on Mar 2 18:00 Maximum Daily Average: 1.1 ppb on Mar 2

Minimum Value: 0 ppb on Mar 11 17:00 Minimum Daily Average: 0.1 ppb on Mar 18
Maximum Diurnal Average: 0.5 ppb at hour 18 Minimum Diurnal Average: 0.3 ppb at hour 4
Monthly Average: 0.38 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.2 Q_3 = 0.4 P_{90} = 0.8 P_{99} = 2.1

Hours in Service:	744
Hours of Data:	710
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-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.7
2-Mar	0	0	0	0	A	1	2	2	1	1	1	1	0	0	1	2	1	2	2	1	1	2	1	1	1.1	2.4
3-Mar	1	2	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	0	1	0	0.8	2.2
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.4	0.5
5-Mar	0	0	0	0	A	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0.4	0.8
6-Mar	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
7-Mar	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
10-Mar	0	0	0	0	A	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0.5	0.8
11-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0.5	1.0
13-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.5
14-Mar	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
15-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
16-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
17-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
18-Mar	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
19-Mar	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-Mar	0	0	1	1	A	1	1	0	0	0	0	0	1	1	1	1	2	2	1	0	0	0	0	0	0.7	2.3
21-Mar	0	0	0	0	A	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0.9	1.7
22-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.1
23-Mar	1	1	1	0	A	0	0	0	0	0	0	0	0	C	C	C	2	2	1	1	0	0	0	0	0.6	2.2
24-Mar	0	0	0	0	A	0	0	0	1	2	2	2	2	2	1	1	1	1	1	0	0	1	1	2	0.9	2.1
25-Mar	1	1	1	1	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
26-Mar	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
27-Mar	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
28-Mar	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
29-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0.3	1.3
31-Mar	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
	0.3	0.3	0.3	0.3	--	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.3	Diurnal Average	
	1.1	1.8	0.8	0.7	--	1.5	1.6	2.0	1.3	2.0	2.1	2.1	2.0	2.2	1.5	1.8	2.2	2.4	2.3	1.4	1.2	1.8	1.4	1.6	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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - March 2016

Maximum Value: 12.7 ppb on Mar 3 14:00

Maximum Daily Average: 1.5 ppb on Mar 3

Minimum Value: 0 ppb on Mar 11 17:00

Minimum Daily Average: 0.2 ppb on Mar 15

Maximum Diurnal Average: 1.0 ppb at hour 14

Minimum Diurnal Average: 0.4 ppb at hour 4

Monthly Average: 0.58 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.4 Q_3 = 0.6 P_{90} = 1.1 P_{99} = 3.0

Hours in Service:	744
Hours of Data:	710
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-Mar	0	0	0	0	A	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0.5	1.1
2-Mar	0	0	0	0	A	2	2	2	2	1	1	1	1	1	1	2	2	3	3	2	1	2	2	1	1.5	3.0
3-Mar	1	2	1	1	A	1	1	1	2	2	1	1	1	13	1	1	1	1	1	1	1	1	1	1	1.5	12.7
4-Mar	1	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	1	0	0.5	0.7
5-Mar	1	1	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.5	1.2
6-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0.3	0.6
7-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0.3	0.8
9-Mar	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
10-Mar	0	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	0.7	1.6
11-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0.3	0.8
12-Mar	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.3
13-Mar	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0.4	1.8
14-Mar	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
15-Mar	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
16-Mar	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-Mar	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	0.3
18-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.5
19-Mar	0	0	0	1	A	0	1	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0.4	0.8
20-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	3	3	2	1	1	1	0	0	1.0	2.8
21-Mar	0	0	0	0	A	0	0	1	1	1	1	2	2	2	2	1	2	1	1	1	1	1	1	1	1.1	1.9
22-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	1	0.7	1.2
23-Mar	2	2	1	0	A	0	0	1	1	0	1	1	0	C	C	C	7	7	1	1	1	0	0	0	1.3	7.0
24-Mar	0	0	0	0	A	0	0	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	2	1.1	2.4
25-Mar	2	1	1	1	A	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0.6	1.5
26-Mar	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
27-Mar	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.7
28-Mar	0	0	0	0	A	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
29-Mar	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.0
30-Mar	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	2	0	0	0	3	3	0	0.7	3.1
31-Mar	0	0	0	1	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	2	0	1	1	0	0.6	2.0
	0.5	0.5	0.4	0.4	--	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.6	1.0	0.6	0.6	0.8	0.9	0.6	0.5	0.5	0.6	0.6	0.5	Diurnal Average	
	2.1	2.4	1.3	0.9	--	2.3	1.9	2.3	2.3	2.3	2.4	2.3	2.1	12.7	1.9	2.3	6.9	7.0	3.0	2.0	1.4	3.1	3.1	1.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - March 2016

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - March 2016

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.2 ppb on Mar 4 20:00 Maximum Daily Average: 7.0 ppb on Mar 4

Minimum Value: 0 ppb on Mar 26 16:00 Minimum Daily Average: 1.5 ppb on Mar 16
Maximum Diurnal Average: 5.0 ppb at hour 8 Minimum Diurnal Average: 1.8 ppb at hour 15
Monthly Average: 3.22 ppb Percentiles: P_1 = 0.5 P_{10} = 0.9 Q_1 = 1.5 Median = 2.7 Q_3 = 4.0 P_{90} = 6.0 P_{99} = 13.6

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	1	1	4	5	A	5	4	3	4	4	5	5	5	3	2	1	1	2	2	2	3	3	3	1	3.1	5.2
2-Mar	1	2	2	2	A	4	2	2	2	3	2	2	2	2	2	1	2	2	3	4	2	4	4	2	2.4	4.3
3-Mar	2	2	2	2	A	4	3	3	4	3	2	2	1	N	1	1	1	2	5	3	3	4	7	4	2.8	7.1
4-Mar	4	5	4	4	A	5	3	3	4	4	5	4	4	5	6	7	7	9	14	18	10	11	10	15	7.0	18.2
5-Mar	6	5	10	13	A	12	9	10	18	13	4	4	3	2	2	2	3	4	5	6	5	5	5	2	6.3	17.8
6-Mar	2	2	4	3	A	3	2	2	1	1	2	1	1	1	2	2	2	2	2	4	5	5	4	3	2.5	5.1
7-Mar	3	3	4	6	A	5	4	7	4	2	3	5	3	2	2	2	2	3	4	5	8	8	8	8	4.3	8.5
8-Mar	7	7	6	7	A	7	6	7	5	3	4	4	3	3	4	1	1	1	6	5	6	3	3	3	4.5	7.3
9-Mar	3	3	2	2	A	4	2	4	6	7	4	4	4	2	1	2	1	1	3	2	2	2	3	3	2.8	6.5
10-Mar	3	4	4	4	A	6	5	6	9	13	7	3	3	2	2	3	5	4	7	7	5	5	4	4	4.9	12.5
11-Mar	3	2	1	0	A	4	4	1	1	1	1	1	1	1	1	1	1	1	3	2	2	3	1	1	1.5	4.3
12-Mar	1	1	1	3	A	3	5	6	7	5	4	4	2	3	4	4	4	2	5	5	3	3	3	2	3.4	6.7
13-Mar	5	4	4	3	A	4	6	2	2	4	3	2	1	1	1	1	1	1	2	2	2	1	1	2	2.4	5.6
14-Mar	2	2	2	3	A	5	4	8	6	4	4	3	2	1	1	1	1	2	4	4	3	6	5	5	3.4	7.6
15-Mar	4	4	3	4	A	5	11	7	7	8	4	3	1	2	0	1	1	1	2	4	1	2	4	2	3.5	10.6
16-Mar	1	2	2	1	A	2	2	1	2	1	1	1	1	1	1	1	1	1	2	2	3	2	3	3	1.5	2.5
17-Mar	3	3	2	2	A	4	3	3	3	3	1	1	1	1	1	1	1	2	1	1	1	1	1	3	1.9	3.6
18-Mar	1	3	4	4	A	5	3	4	3	3	3	3	2	3	3	3	4	2	4	2	1	3	8	7	3.5	8.1
19-Mar	7	14	12	9	A	11	14	14	7	8	7	5	4	3	2	1	1	2	1	1	2	4	4	3	5.9	14.4
20-Mar	4	4	5	5	A	6	5	11	6	9	5	4	4	3	3	3	3	6	4	3	2	2	2	2	4.3	10.8
21-Mar	2	2	1	1	A	4	3	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	3	1.8	3.6
22-Mar	3	3	4	3	A	8	14	12	7	5	3	2	1	2	1	1	1	2	3	4	4	3	3	3	4.0	14.0
23-Mar	3	4	5	4	A	7	7	11	C	C	C	C	C	5	4	3	3	3	2	2	1	1	1	2	3.8	11.1
24-Mar	2	1	1	1	A	4	3	2	4	3	1	2	3	2	2	2	2	3	3	4	4	5	5	6	2.8	5.8
25-Mar	4	3	4	5	A	5	3	3	3	3	3	2	2	1	1	1	2	1	1	1	1	1	1	1	2.1	4.8
26-Mar	1	1	1	1	A	3	4	4	6	4	4	3	1	0	0	0	0	0	1	3	2	3	2	2	2.1	6.2
27-Mar	2	3	3	3	A	7	6	4	8	5	4	3	2	2	2	4	3	3	4	3	2	2	1	1	3.3	8.2
28-Mar	1	1	1	1	A	4	5	2	3	3	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1.5	4.6
29-Mar	1	1	1	1	A	3	3	2	2	2	2	1	1	1	1	1	1	1	1	2	2	1	2	1	1.5	3.5
30-Mar	1	1	1	3	A	3	3	2	2	3	10	8	5	1	1	1	2	1	2	1	1	2	3	1	2.5	10.4
31-Mar	1	1	2	2	A	3	2	4	4	2	3	3	3	3	2	3	2	2	3	3	5	4	4	2	2.7	4.8
	2.7	3.0	3.3	3.4	--	4.9	4.8	5.0	4.7	4.3	3.4	2.8	2.3	2.0	1.8	1.8	2.0	2.2	3.3	3.5	3.1	3.2	3.5	3.1	Diurnal Average	
	7.3	14.4	11.6	13.0	--	11.6	14.2	13.7	17.8	12.5	10.4	8.1	5.2	4.9	6.1	7.3	7.4	8.6	13.7	18.2	10.1	10.6	10.5	14.9	Diurnal Maximum	

C - Calibration N - Not Valid 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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - March 2016

Maximum Value: 49.2 ppb on Mar 10 17:00

Maximum Daily Average: 11.3 ppb on Mar 10

Minimum Value: 1 ppb on Mar 26 16:00

Minimum Daily Average: 2.6 ppb on Mar 28

Maximum Diurnal Average: 10.3 ppb at hour 8

Minimum Diurnal Average: 2.6 ppb at hour 15

Monthly Average: 5.55 ppb

Percentiles: P_1 = 0.8 P_{10} = 1.7 Q_1 = 2.6 Median = 4.1 Q_3 = 6.5 P_{90} = 10.3 P_{99} = 29.7

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	2	2	11	7	A	12	7	6	10	6	6	6	7	11	3	3	4	3	3	4	5	4	4	2	5.6	12.5
2-Mar	1	4	4	4	A	5	4	4	3	4	3	3	3	3	3	2	4	4	6	8	4	5	8	3	3.9	7.7
3-Mar	3	4	3	3	A	5	4	4	10	8	3	3	2	N	2	2	3	2	8	6	5	6	10	8	4.9	10.3
4-Mar	6	6	5	5	A	6	3	5	6	5	6	5	6	6	7	11	9	12	27	30	12	14	16	25	10.1	30.1
5-Mar	10	10	17	16	A	14	15	26	30	20	8	6	5	4	3	2	4	6	9	13	8	6	9	3	10.7	29.9
6-Mar	5	3	10	4	A	10	3	4	2	2	3	2	2	3	2	4	3	3	3	9	7	6	5	4	4.3	9.9
7-Mar	3	5	5	13	A	7	8	23	6	3	4	10	5	2	2	2	3	4	5	7	10	10	11	9	6.8	22.7
8-Mar	8	8	7	9	A	12	9	13	7	3	5	5	5	6	7	2	2	3	12	14	9	3	4	3	6.7	13.8
9-Mar	3	3	3	2	A	5	4	6	7	8	5	7	5	5	4	5	2	3	4	3	2	4	5	4	4.3	8.3
10-Mar	4	7	5	5	A	7	9	9	21	43	11	5	5	3	3	3	49	5	13	17	11	15	5	5	11.3	49.2
11-Mar	4	3	2	1	A	8	7	2	2	1	1	1	1	1	2	2	2	3	4	4	4	7	2	1	3.0	8.4
12-Mar	1	1	1	9	A	4	17	15	11	7	4	5	3	4	5	14	16	6	8	8	4	5	7	4	6.9	16.6
13-Mar	6	5	7	6	A	9	18	4	4	7	4	4	3	2	3	2	4	3	7	3	4	3	3	4	5.0	17.8
14-Mar	4	5	4	5	A	7	8	22	12	5	5	3	2	2	2	2	2	3	7	5	4	9	6	8	5.7	21.7
15-Mar	7	6	4	4	A	7	23	30	19	16	5	5	3	8	1	2	2	2	8	10	2	5	10	4	8.0	29.8
16-Mar	2	5	5	3	A	5	2	2	4	2	1	2	2	2	2	2	3	2	2	5	5	4	3	3	2.9	4.9
17-Mar	3	3	2	3	A	6	5	4	4	7	4	3	1	1	1	1	2	5	5	3	3	2	7	8	3.6	7.6
18-Mar	2	5	5	10	A	8	8	5	4	4	4	4	3	3	3	4	6	4	6	5	3	11	12	9	5.6	12.5
19-Mar	12	26	22	13	A	28	32	31	11	11	10	5	5	4	4	2	2	3	2	1	2	7	12	6	10.9	32.3
20-Mar	8	5	8	6	A	8	9	18	9	13	10	4	4	6	4	6	4	9	9	5	2	2	2	2	6.8	17.9
21-Mar	5	3	2	1	A	6	4	4	3	2	2	4	2	2	2	2	2	1	2	3	3	3	3	4	2.8	5.7
22-Mar	5	4	5	5	A	15	21	27	12	9	5	3	2	2	2	2	4	5	8	10	5	5	4	5	7.1	26.9
23-Mar	5	6	6	5	A	8	8	22	C	C	C	C	C	8	4	8	4	4	4	3	2	2	2	3	5.7	21.7
24-Mar	3	2	2	3	A	6	6	4	8	7	2	3	3	3	2	3	4	5	4	6	7	7	7	8	4.5	8.4
25-Mar	5	4	4	6	A	6	4	4	3	5	3	5	3	3	1	2	3	1	1	4	3	2	1	1	3.3	6.5
26-Mar	1	2	1	4	A	6	4	5	8	5	4	4	2	1	1	1	1	1	3	6	4	5	4	2	3.2	7.6
27-Mar	3	4	3	5	A	8	7	5	13	8	4	3	3	3	3	6	4	6	5	4	3	2	1	2	4.6	13.2
28-Mar	2	2	2	2	A	5	7	3	4	4	4	1	1	1	3	2	1	1	7	4	2	2	1	1	2.6	6.5
29-Mar	1	1	1	1	A	5	4	4	3	4	3	1	2	1	1	4	1	2	3	4	4	2	7	3	2.7	7.1
30-Mar	2	1	2	7	A	5	5	3	6	5	14	9	7	3	1	2	3	1	3	2	1	4	5	1	4.0	13.5
31-Mar	2	2	2	3	A	5	4	6	5	3	3	4	4	5	3	4	2	4	4	9	16	7	6	3	4.6	15.8
	4.1	4.7	5.2	5.4	--	8.0	8.7	10.3	8.2	7.6	4.9	4.2	3.4	3.5	2.6	3.5	5.0	3.8	6.3	7.0	5.0	5.5	5.9	4.8	Diurnal Average	
	11.7	25.9	21.9	16.5	--	27.7	32.3	31.2	29.9	42.8	13.5	9.7	7.4	10.8	6.9	14.1	49.2	12.1	27.5	30.1	15.8	14.8	15.9	25.0	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - March 2016

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2016

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

Maximum Value: 11.4 ppb on Mar 5 09:00

Maximum Daily Average: 1.7 ppb on Mar 4

Minimum Value: 0 ppb on Mar 2 00:00

Minimum Daily Average: 0.1 ppb on Mar 11

Maximum Diurnal Average: 2.1 ppb at hour 10

Minimum Diurnal Average: 0.0 ppb at hour 2

Monthly Average: 0.62 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.6$ $P_{90} = 1.9$ $P_{99} = 5.9$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	0	0	0	0	A	0	0	0	0	2	4	4	5	3	1	1	0	0	0	0	0	0	0	0	0.9	4.7
2-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.1
3-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	N	1	1	0	0	0	0	0	0	0	0	0.3	1.0
4-Mar	0	0	0	0	A	0	0	0	1	2	3	3	3	4	4	6	7	4	2	1	0	0	0	1	1.7	6.8
5-Mar	0	0	0	0	A	0	0	3	11	6	1	2	1	1	1	1	1	1	1	0	0	0	0	0	1.3	11.4
6-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	0.8
7-Mar	0	0	0	0	A	0	0	1	1	1	3	7	4	2	2	2	1	1	0	0	0	0	0	0	1.1	7.1
8-Mar	0	0	0	0	A	0	0	0	2	3	6	5	3	3	3	1	1	0	0	0	0	0	0	0	1.2	6.5
9-Mar	0	0	0	0	A	0	0	0	2	4	3	5	4	2	1	1	1	0	0	0	0	0	0	0	1.0	4.6
10-Mar	0	0	0	0	A	0	0	0	2	5	3	2	2	1	1	1	1	1	0	0	0	0	0	0	0.9	5.1
11-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Mar	0	0	0	0	A	0	0	0	2	3	3	3	1	1	2	2	1	0	0	0	0	0	0	0	0.9	3.4
13-Mar	0	0	0	0	A	0	0	0	0	1	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0.4	1.8
14-Mar	0	0	0	0	A	0	0	1	1	1	2	2	1	0	0	1	0	0	0	0	0	0	0	0	0.5	2.2
15-Mar	0	0	0	0	A	0	0	2	4	6	4	3	1	2	0	0	0	0	0	0	0	0	0	0	1.0	6.4
16-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.5
17-Mar	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
18-Mar	0	0	0	0	A	0	0	0	1	2	3	3	3	2	2	1	2	1	0	0	0	0	0	0	0.9	3.3
19-Mar	0	0	0	0	A	0	2	2	2	6	7	4	3	2	1	0	0	0	0	0	0	0	0	0	1.4	6.8
20-Mar	0	0	0	0	A	0	0	1	1	6	2	2	2	1	1	1	1	1	0	0	0	0	0	0	0.9	5.5
21-Mar	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	0.8
22-Mar	0	0	0	0	A	0	0	1	2	2	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0.5	2.0
23-Mar	0	0	0	0	A	0	0	2	C	C	C	C	C	1	1	1	0	0	0	0	0	0	0	0	0.3	2.1
24-Mar	0	0	0	0	A	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0.3	1.2
25-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
26-Mar	0	0	0	0	A	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1
27-Mar	0	0	0	0	A	0	0	0	3	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	3.4
28-Mar	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
29-Mar	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
30-Mar	0	0	0	0	A	0	0	0	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0.5	3.6
31-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.3	1.1
	0.0	0.0	0.0	0.0	--	0.0	0.1	0.5	1.5	2.1	2.1	2.0	1.5	1.1	0.9	0.8	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	Diurnal Average	
	0.1	0.1	0.1	0.1	--	0.3	2.5	2.5	11.4	6.4	6.8	7.1	4.7	3.8	3.7	5.8	6.8	4.3	1.8	1.2	0.1	0.2	0.1	0.6	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2016

Maximum Value: 33.3 ppb on Mar 5 09:00

Maximum Daily Average: 4.4 ppb on Mar 5

Minimum Value: 0 ppb on Mar 9 03:00

Minimum Daily Average: 0.4 ppb on Mar 11

Maximum Diurnal Average: 4.5 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 1.45 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.4 $Q_3 = 1.4$ $P_{90} = 3.8$ $P_{99} = 13.9$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	0	0	0	0	A	0	0	0	1	4	5	6	7	13	1	1	2	1	0	1	0	0	0	0	1.9	12.8
2-Mar	0	0	0	0	A	0	0	1	1	1	1	1	3	2	1	1	2	1	0	1	0	0	0	0	0.8	2.5
3-Mar	0	0	0	0	A	0	0	0	3	7	1	2	1	N	1	1	1	1	1	0	0	0	0	0	1.0	6.9
4-Mar	0	0	0	0	A	0	0	1	2	3	3	3	6	5	4	11	9	6	4	6	0	2	1	3	3.0	10.7
5-Mar	0	0	1	0	A	0	1	26	33	18	3	3	2	4	2	1	1	1	2	1	0	0	0	0	4.4	33.3
6-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	2	1	2	1	1	0	0	0	0	0	0	0.6	1.7
7-Mar	0	0	0	0	A	0	1	18	3	4	6	13	6	2	2	2	2	5	1	0	0	0	0	0	2.9	17.8
8-Mar	0	0	0	0	A	0	0	1	6	5	10	8	7	5	7	2	1	1	1	0	0	0	0	0	2.4	10.0
9-Mar	0	0	0	0	A	0	0	0	3	5	5	7	6	5	8	3	1	1	0	0	0	0	0	0	2.0	8.2
10-Mar	0	1	0	0	A	0	0	0	5	12	5	5	4	2	2	1	5	1	1	0	0	0	0	0	2.0	12.4
11-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	1	2	1	1	0	1	0	0	0	0	0	0.4	2.3
12-Mar	0	0	0	0	A	0	0	2	3	4	4	4	2	2	3	12	8	2	1	0	0	0	0	0	2.1	12.4
13-Mar	0	0	0	0	A	0	0	0	1	3	3	3	2	1	3	1	1	1	0	0	0	0	0	0	0.9	3.4
14-Mar	0	0	0	0	A	0	1	5	4	2	3	2	2	1	1	1	1	1	1	0	0	0	0	0	1.0	4.6
15-Mar	0	0	0	0	A	0	0	19	15	15	5	5	2	7	1	1	1	1	0	0	0	0	0	0	3.2	18.6
16-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.3
17-Mar	0	0	0	0	A	0	0	1	1	3	3	2	1	0	0	0	1	1	1	0	0	0	0	0	0.7	3.2
18-Mar	0	0	0	0	A	0	0	1	2	3	5	5	4	3	2	2	2	1	1	0	0	0	0	0	1.4	5.0
19-Mar	0	0	0	0	A	4	20	11	4	8	10	5	5	2	2	0	1	1	0	0	0	0	0	0	3.3	20.4
20-Mar	0	0	0	0	A	1	0	2	2	10	7	3	3	4	2	2	1	2	1	0	0	0	0	0	1.7	9.7
21-Mar	0	0	0	0	A	0	0	1	1	1	1	3	2	1	1	1	1	0	0	0	0	0	0	0	0.6	2.8
22-Mar	0	0	0	0	A	0	1	3	6	5	2	2	1	1	1	1	1	1	1	0	0	0	0	0	1.2	6.0
23-Mar	0	0	0	0	A	0	0	7	C	C	C	C	C	2	1	3	1	1	0	0	0	0	0	0	0.9	6.6
24-Mar	0	0	0	0	A	0	0	0	3	3	0	2	2	1	1	1	1	1	1	2	0	0	0	0	0.8	2.8
25-Mar	0	0	0	0	A	0	0	1	1	4	2	3	2	2	0	0	1	0	0	0	0	0	0	0	0.9	4.2
26-Mar	0	0	0	0	A	0	0	1	3	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0.7	3.1
27-Mar	0	0	0	0	A	0	0	1	9	4	2	2	1	2	1	1	1	1	0	0	0	0	0	0	1.2	9.5
28-Mar	0	0	0	0	A	0	0	0	1	2	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0.5	1.6
29-Mar	0	0	0	0	A	0	0	0	1	2	1	0	0	0	0	1	0	1	2	0	0	0	0	0	0.5	1.8
30-Mar	0	0	0	0	A	0	0	0	1	1	6	4	3	1	0	0	1	0	0	0	0	0	0	0	0.9	5.8
31-Mar	0	0	0	0	A	0	0	1	1	1	1	2	2	2	1	2	0	1	0	0	1	0	0	0	0.7	2.3
	0.2	0.1	0.1	0.1	--	0.3	0.9	3.3	3.9	4.5	3.4	3.3	2.6	2.5	1.8	1.9	1.6	1.1	0.7	0.5	0.2	0.2	0.2	0.2	Diurnal Average	
	0.4	0.5	0.6	0.4	--	3.6	20.4	26.0	33.3	18.1	10.3	13.2	6.9	12.8	8.2	12.4	9.0	6.5	3.9	5.6	0.6	1.8	1.0	3.1	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 29.2 ppb on Mar 5 09:00
Maximum Daily Average: 8.7 ppb on Mar 4

Minimum Value: 0 ppb on Mar 26 16:00
Maximum Diurnal Average: 6.4 ppb at hour 10
Monthly Average: 3.86 ppb

Minimum Daily Average: 1.6 ppb on Mar 11
Minimum Diurnal Average: 2.6 ppb at hour 16
Percentiles: $P_1 = 0.5$ $P_{10} = 1.0$ $Q_1 = 1.9$ Median = 3.1 $Q_3 = 4.7$ $P_{90} = 7.5$ $P_{99} = 15.3$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	1	1	5	5	A	5	4	3	5	6	9	9	10	6	3	2	2	2	2	2	3	3	3	1	4.0	9.9
2-Mar	1	2	2	2	A	4	3	3	3	3	3	3	3	3	3	2	2	2	3	4	2	4	4	2	2.7	4.3
3-Mar	2	2	2	2	A	4	3	3	5	4	2	3	2	N	2	2	2	2	5	3	3	4	7	4	3.1	7.1
4-Mar	4	5	4	4	A	5	3	3	5	6	7	7	8	9	10	13	14	13	15	19	10	11	11	15	8.7	19.2
5-Mar	6	5	10	13	A	12	9	12	29	19	6	6	5	3	3	3	3	4	5	6	5	5	5	2	7.6	29.2
6-Mar	2	2	4	3	A	3	2	2	1	2	2	2	2	2	2	2	2	2	2	4	5	5	4	3	2.8	5.2
7-Mar	3	3	4	6	A	5	4	8	5	4	6	12	7	4	3	4	3	4	4	5	8	8	8	8	5.4	11.9
8-Mar	7	7	6	7	A	7	6	8	8	6	10	8	6	6	8	2	2	2	6	6	6	3	3	3	5.7	10.4
9-Mar	3	3	2	2	A	4	3	4	7	11	7	9	8	4	2	3	2	2	3	2	2	2	3	3	3.8	10.5
10-Mar	3	4	4	4	A	6	5	6	10	18	10	5	5	4	3	4	7	4	7	7	5	5	4	4	5.8	17.6
11-Mar	3	2	1	0	A	4	4	1	1	1	1	1	1	1	1	1	1	2	3	2	2	4	1	1	1.6	4.4
12-Mar	1	1	1	3	A	3	5	7	9	8	6	7	3	4	6	6	6	3	5	5	3	3	3	3	4.3	8.6
13-Mar	5	4	4	3	A	4	6	2	3	5	5	3	2	1	2	1	2	2	3	2	2	1	1	2	2.8	5.6
14-Mar	2	3	2	3	A	5	4	8	7	5	6	4	3	2	1	2	2	2	4	4	3	6	5	5	3.9	8.2
15-Mar	4	4	3	4	A	5	11	9	11	15	8	6	2	4	1	1	1	1	3	4	1	2	4	2	4.5	14.6
16-Mar	1	2	2	1	A	2	2	1	2	1	1	1	1	1	2	1	2	2	2	2	3	2	3	3	1.7	2.6
17-Mar	3	3	2	2	A	4	3	3	4	4	2	2	1	1	1	1	1	3	2	2	2	1	1	3	2.2	4.2
18-Mar	1	3	4	5	A	5	3	4	4	5	6	6	5	5	5	4	6	3	4	2	1	3	8	7	4.4	8.2
19-Mar	7	14	12	9	A	12	17	16	9	14	14	9	7	5	4	1	2	3	1	1	2	4	4	3	7.3	16.6
20-Mar	4	4	5	5	A	6	5	11	8	15	7	6	6	4	4	4	3	6	4	3	2	2	2	2	5.1	14.8
21-Mar	2	2	1	1	A	4	3	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	3	2.0	3.6
22-Mar	3	3	4	3	A	8	14	13	9	7	4	3	2	2	2	2	2	3	4	4	4	3	3	3	4.5	14.0
23-Mar	3	4	5	4	A	7	7	13	C	C	C	C	C	6	5	4	3	3	2	2	1	1	1	2	4.1	13.1
24-Mar	2	1	1	1	A	4	3	3	4	3	2	3	4	4	2	2	3	3	4	4	4	5	5	6	3.2	5.8
25-Mar	4	3	4	5	A	5	3	3	4	4	4	4	3	2	1	1	2	1	1	1	1	1	1	1	2.5	4.8
26-Mar	1	1	1	1	A	3	4	5	8	6	5	4	1	1	0	0	1	0	1	3	2	3	2	2	2.4	8.1
27-Mar	2	3	3	3	A	7	6	5	12	7	6	4	4	3	2	5	3	4	4	3	2	2	1	1	3.9	11.6
28-Mar	1	1	1	1	A	4	5	3	3	4	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1.7	4.7
29-Mar	1	1	1	1	A	3	4	3	3	3	3	1	1	1	1	2	1	1	2	2	2	1	2	1	1.7	3.5
30-Mar	1	1	1	3	A	3	3	2	3	3	14	11	7	2	1	1	2	1	2	1	1	2	3	1	3.0	13.9
31-Mar	1	1	2	2	A	3	2	4	4	3	4	4	4	5	3	3	2	3	3	3	5	4	4	2	3.1	4.9
	2.8	3.0	3.3	3.5	--	4.9	4.9	5.5	6.2	6.4	5.5	4.9	3.8	3.2	2.7	2.6	2.8	2.7	3.5	3.6	3.1	3.3	3.5	3.1	Diurnal Average	
	7.3	14.4	11.6	12.9	--	11.6	16.6	15.8	29.2	18.6	13.9	11.9	9.9	8.7	9.9	13.0	14.2	12.9	15.4	19.2	10.2	10.7	10.6	15.5	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - March 2016

Maximum Value: 60.7 ppb on Mar 5 09:00

Maximum Daily Average: 14.7 ppb on Mar 5

Minimum Value: 1 ppb on Mar 12 02:00

Minimum Daily Average: 3.0 ppb on Mar 28

Maximum Diurnal Average: 13.3 ppb at hour 8

Minimum Diurnal Average: 4.1 ppb at hour 1

Monthly Average: 6.86 ppb

Percentiles: P_1 = 1.0 P_{10} = 2.0 Q_1 = 3.2 Median = 4.9 Q_3 = 7.8 P_{90} = 12.5 P_{99} = 38.2

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	36
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-Mar	2	2	11	7	A	12	7	6	10	10	11	12	14	23	4	4	5	4	4	5	5	4	4	2	7.3	23.5
2-Mar	1	4	4	4	A	5	4	5	4	5	4	5	6	5	4	3	6	5	6	9	4	5	8	3	4.6	8.6
3-Mar	3	4	3	3	A	6	4	5	13	14	5	5	3	N	3	4	5	3	8	6	5	6	10	8	5.7	14.1
4-Mar	6	6	6	5	A	6	3	5	8	8	9	8	11	10	11	22	16	16	31	35	12	16	16	28	12.8	35.4
5-Mar	10	10	17	16	A	14	15	51	61	38	11	10	8	8	5	3	4	7	10	14	8	6	10	3	14.7	60.7
6-Mar	5	3	10	4	A	10	3	4	2	4	4	4	4	4	3	6	4	3	3	9	7	6	5	4	4.9	10.0
7-Mar	4	5	5	13	A	7	8	40	9	6	9	21	11	4	4	4	4	8	6	7	10	10	11	9	9.3	40.5
8-Mar	8	8	7	9	A	12	9	13	12	8	15	12	12	11	13	4	3	4	13	14	9	3	4	3	9.0	14.9
9-Mar	3	3	3	2	A	6	4	6	10	13	10	14	11	10	12	7	4	3	5	3	2	5	5	4	6.2	13.7
10-Mar	4	7	5	5	A	7	10	9	26	55	17	10	9	5	4	4	54	6	13	17	11	15	5	5	13.1	54.9
11-Mar	4	3	3	1	A	8	7	2	3	1	2	1	2	2	5	3	2	3	5	4	4	7	3	1	3.4	8.5
12-Mar	1	1	1	9	A	4	17	15	13	11	8	9	4	6	8	23	24	8	8	8	4	5	7	4	8.6	23.6
13-Mar	6	5	7	6	A	9	18	4	4	10	7	7	4	2	6	3	5	4	7	3	4	3	3	4	5.8	17.6
14-Mar	4	5	4	5	A	7	8	26	16	6	8	5	4	3	3	3	3	4	7	6	4	9	6	8	6.7	26.2
15-Mar	7	6	4	4	A	7	24	48	34	32	10	9	5	14	1	3	2	3	8	10	3	5	10	4	11.0	48.2
16-Mar	2	5	5	3	A	5	2	2	5	3	2	4	3	2	3	3	4	3	3	5	5	4	3	3	3.4	5.0
17-Mar	3	3	3	3	A	6	5	5	5	9	7	6	2	1	1	1	3	6	6	3	3	2	7	8	4.2	8.7
18-Mar	3	5	5	10	A	8	8	5	5	7	9	8	7	6	5	6	9	5	7	5	3	11	13	10	7.0	12.5
19-Mar	12	26	22	13	A	31	51	42	13	19	20	10	10	6	6	2	3	4	2	1	2	7	12	6	13.8	50.6
20-Mar	8	5	8	6	A	8	9	19	11	23	17	7	7	10	5	8	5	11	11	6	2	2	2	2	8.4	23.2
21-Mar	5	3	1	1	A	6	4	4	3	3	3	7	4	3	3	3	3	2	3	3	3	3	3	3	3.3	6.5
22-Mar	5	5	5	5	A	15	22	30	18	13	7	4	3	3	3	3	4	6	9	11	4	5	4	5	8.1	29.6
23-Mar	6	6	6	5	A	8	8	28	C	C	C	C	C	11	5	11	4	4	4	3	2	2	2	3	6.5	27.7
24-Mar	3	2	2	3	A	6	6	4	11	10	2	5	5	4	3	4	6	6	5	6	7	7	7	8	5.1	11.1
25-Mar	5	4	4	6	A	6	4	5	4	9	6	8	5	6	1	2	4	2	1	4	3	3	1	1	4.1	8.9
26-Mar	1	2	2	4	A	6	4	6	11	8	6	6	3	1	1	1	1	1	3	6	4	5	4	2	3.8	10.5
27-Mar	3	4	3	5	A	8	7	6	20	12	7	5	4	5	4	7	5	8	5	4	3	3	1	3	5.7	19.9
28-Mar	2	2	2	2	A	5	7	3	5	5	5	2	2	1	4	3	1	2	7	4	2	2	1	1	3.0	7.1
29-Mar	1	1	1	1	A	5	4	4	3	5	4	2	2	2	2	5	1	3	3	4	4	2	7	3	3.0	7.2
30-Mar	2	1	2	7	A	5	5	3	7	7	19	12	10	4	1	2	4	2	3	2	1	4	5	1	4.8	19.3
31-Mar	2	2	2	3	A	5	4	7	7	4	5	5	6	8	4	6	3	5	4	9	16	7	6	3	5.3	16.3
	4.1	4.7	5.2	5.4	--	8.1	9.4	13.3	11.7	11.9	8.3	7.4	6.0	6.0	4.4	5.2	6.5	4.8	6.8	7.3	5.1	5.5	6.0	4.9	Diurnal Average	
	11.8	25.8	21.9	16.4	--	30.6	50.6	51.2	60.7	54.9	19.8	20.8	14.3	23.5	13.4	23.4	54.4	16.4	31.0	35.4	16.3	15.7	16.1	28.0	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - March 2016

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.3 ppb on Mar 28 17:00
Maximum Daily Average: 40.4 ppb on Mar 11

Minimum Value: 10 ppb on Mar 5 04:00
Maximum Diurnal Average: 38.8 ppb at hour 16
Monthly Average: 33.70 ppb

Minimum Daily Average: 22.1 ppb on Mar 4
Minimum Diurnal Average: 29.2 ppb at hour 9
Percentiles: P_1 = 14.7 P_{10} = 25.2 Q_1 = 30.4 Median = 34.3 Q_3 = 38.2 P_{90} = 41.3 P_{99} = 45.6

Hours in Service:	744
Hours of Data:	710
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-Mar	39	39	36	34	A	34	35	36	32	32	29	31	34	39	41	42	41	41	41	41	38	38	38	41	37.0	41.8
2-Mar	41	40	39	39	A	35	33	32	31	30	31	32	32	32	33	34	34	34	32	31	32	31	29	32	33.4	40.8
3-Mar	32	32	32	31	A	31	31	30	29	30	31	32	32	29	34	34	35	36	32	34	34	33	30	32	32.1	35.8
4-Mar	31	29	28	28	A	26	27	26	23	23	22	23	23	22	23	22	22	21	16	12	18	17	16	12	22.1	31.0
5-Mar	23	28	18	10	A	14	20	21	12	18	36	32	31	34	35	33	31	26	22	23	21	25	24	30	24.6	35.5
6-Mar	30	32	29	30	A	33	34	33	33	31	29	29	30	30	31	30	30	30	30	27	24	24	24	26	29.5	33.6
7-Mar	27	26	25	23	A	25	25	22	25	25	27	26	27	26	27	27	27	26	25	23	21	19	17	16	24.1	27.0
8-Mar	16	15	16	15	A	15	15	13	14	16	17	24	31	34	34	40	40	39	34	34	33	35	35	35	26.0	39.8
9-Mar	34	33	32	30	A	29	30	30	29	27	28	29	33	37	40	41	42	42	41	42	42	42	40	40	35.3	42.5
10-Mar	39	37	37	38	A	35	34	33	31	28	34	37	38	41	43	44	42	42	38	37	39	38	37	35	37.3	43.6
11-Mar	34	33	33	37	A	37	38	41	41	41	41	42	42	43	43	44	44	43	41	43	42	40	42	42	40.4	44.1
12-Mar	42	42	42	38	A	38	34	32	30	32	33	34	40	40	40	42	42	43	40	39	41	40	38	38	38.2	43.3
13-Mar	31	33	33	31	A	37	31	37	36	35	35	37	41	45	46	46	46	46	46	44	40	39	36	36	38.6	46.0
14-Mar	34	34	32	31	A	29	29	22	22	25	26	29	32	37	38	38	39	38	35	34	35	32	32	30	31.9	38.6
15-Mar	31	33	34	33	A	31	25	28	29	26	28	30	35	38	40	40	40	41	39	37	40	39	36	37	34.4	40.8
16-Mar	37	37	37	40	A	40	41	41	40	41	41	41	41	39	39	39	37	38	37	36	34	34	32	32	38.1	41.2
17-Mar	29	28	29	29	A	31	32	34	33	33	36	37	39	40	41	41	41	39	38	37	38	39	39	36	35.6	41.2
18-Mar	37	32	30	31	A	30	32	31	29	27	25	26	30	34	41	41	39	39	41	41	42	38	31	32	33.9	41.9
19-Mar	31	23	26	26	A	26	20	21	28	24	26	29	33	38	42	44	45	43	44	45	43	39	38	38	33.7	44.7
20-Mar	35	36	32	32	A	34	33	23	28	22	31	33	37	38	39	40	36	34	36	37	37	37	37	36	34.0	39.9
21-Mar	35	34	34	34	A	32	32	31	32	33	34	34	36	38	38	38	38	37	36	35	33	33	33	32	34.4	38.1
22-Mar	31	31	29	30	A	26	18	21	26	30	33	34	36	36	38	38	38	38	36	35	34	34	34	33	32.1	37.9
23-Mar	31	30	30	32	A	30	28	23	26	30	32	C	C	C	36	38	39	37	37	35	36	35	35	35	32.8	38.6
24-Mar	35	34	33	32	A	34	34	35	35	36	37	37	38	40	42	42	41	40	38	37	35	33	31	29	36.0	42.5
25-Mar	30	29	28	25	A	28	28	25	25	26	28	30	33	37	39	39	39	36	35	32	32	32	32	33	31.4	39.1
26-Mar	33	33	32	31	A	30	28	26	25	26	29	31	38	41	43	43	43	43	41	39	40	37	40	41	35.3	43.2
27-Mar	40	40	39	38	A	29	28	31	23	27	29	30	33	35	39	40	43	40	40	39	36	35	36	35	34.9	42.7
28-Mar	34	31	30	34	A	35	33	36	35	36	41	44	45	46	45	46	46	44	42	42	42	40	40	39	39.5	46.3
29-Mar	37	37	37	37	A	36	35	36	35	36	37	40	41	41	39	38	38	36	35	35	34	35	34	34	36.6	40.8
30-Mar	35	35	36	35	A	35	33	34	33	32	23	26	31	36	37	36	35	37	36	36	36	33	32	37	33.8	37.2
31-Mar	37	34	35	35	A	38	37	34	34	34	34	34	36	36	41	43	43	41	41	40	37	38	36	37	37.2	43.5
	33.3	32.6	31.7	31.3	--	31.0	30.1	29.6	29.2	29.4	31.1	32.5	34.9	36.6	38.2	38.8	38.6	37.8	36.3	35.6	35.2	34.3	33.4	33.6	Diurnal Average	
	42.3	41.8	41.8	40.3	--	40.5	40.9	41.1	41.2	40.9	41.5	44.4	44.7	45.6	45.9	46.0	46.3	45.9	45.8	44.5	43.4	41.8	41.7	42.3	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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - March 2016

Maximum Value: 60.8 ppb on Mar 6 15:00

Maximum Daily Average: 41.8 ppb on Mar 11

Minimum Value: 15 ppb on Mar 8 09:00

Minimum Daily Average: 23.9 ppb on Mar 4

Maximum Diurnal Average: 40.5 ppb at hour 15

Minimum Diurnal Average: 32.0 ppb at hour 9

Monthly Average: 35.66 ppb

Percentiles: P_1 = 16.2 P_{10} = 27.6 Q_1 = 32.3 Median = 36.0 Q_3 = 40.3 P_{90} = 42.7 P_{99} = 46.9

Hours in Service:	744
Hours of Data:	710
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-Mar	39	40	39	37	A	37	38	37	34	34	32	33	36	43	43	43	42	42	42	42	40	38	38	41	38.7	42.5
2-Mar	42	41	40	40	A	37	34	33	31	31	32	33	33	32	34	34	35	35	33	33	33	32	32	33	34.5	41.6
3-Mar	33	33	33	32	A	32	31	31	32	32	32	33	33	34	34	35	36	37	36	36	36	35	32	33	33.6	37.1
4-Mar	32	31	29	30	A	28	27	27	24	23	23	23	23	24	24	24	24	23	19	18	19	18	18	20	23.9	32.1
5-Mar	31	34	25	17	A	19	25	28	24	26	41	41	34	35	36	36	32	31	24	27	22	29	28	31	29.4	41.4
6-Mar	32	33	32	32	A	34	35	35	35	32	31	30	31	30	61	31	31	31	31	30	25	25	26	27	32.2	60.8
7-Mar	28	27	26	26	A	26	27	38	27	26	28	28	28	27	27	27	28	27	26	24	23	20	19	17	26.1	38.2
8-Mar	16	16	16	16	A	16	16	15	15	19	21	28	34	36	38	41	41	40	38	38	36	36	36	36	28.0	41.0
9-Mar	35	33	33	31	A	29	31	31	30	28	29	32	35	39	43	44	43	43	43	43	43	43	42	42	36.6	43.5
10-Mar	40	39	38	39	A	36	36	36	35	35	37	38	40	42	44	44	44	43	41	41	41	41	39	37	39.4	44.3
11-Mar	36	34	36	39	A	41	41	42	42	42	42	43	43	43	44	46	45	44	44	44	44	41	43	43	41.8	45.5
12-Mar	43	42	43	42	A	40	38	37	32	34	35	37	41	41	42	44	44	44	42	42	44	42	40	40	40.4	44.3
13-Mar	39	37	37	33	A	38	36	39	38	40	37	38	44	46	47	47	47	47	48	46	42	40	38	37	40.9	47.6
14-Mar	37	35	33	33	A	33	31	30	26	26	28	32	35	38	39	39	40	39	38	35	36	34	33	34	34.1	39.5
15-Mar	34	34	34	34	A	32	33	34	35	28	30	33	38	41	41	41	41	42	41	40	41	41	40	40	36.8	41.8
16-Mar	39	40	40	42	A	41	42	42	41	42	42	42	42	41	41	40	38	39	39	37	35	35	33	33	39.4	42.2
17-Mar	30	29	30	30	A	33	35	35	34	35	37	38	40	41	41	42	42	41	43	39	40	41	40	40	37.2	42.7
18-Mar	39	35	32	32	A	31	32	32	31	28	26	27	35	35	44	42	41	41	43	42	43	42	40	34	36.0	43.9
19-Mar	33	34	31	30	A	30	31	32	33	31	29	31	36	41	45	45	46	44	45	46	45	43	42	42	37.6	45.6
20-Mar	41	39	35	35	A	35	35	32	34	34	35	36	40	40	41	42	40	36	38	38	37	38	38	37	37.3	41.5
21-Mar	36	35	34	34	A	33	33	32	33	34	34	35	38	39	39	39	38	38	37	36	34	34	34	33	35.3	38.9
22-Mar	32	33	31	32	A	29	23	27	29	31	34	35	36	37	38	39	38	39	39	36	35	35	35	34	33.9	38.6
23-Mar	32	31	31	33	A	32	29	29	30	33	33	C	C	C	38	40	40	39	38	36	36	36	36	36	34.3	39.6
24-Mar	36	35	34	33	A	35	35	36	37	37	38	38	39	41	43	44	43	42	39	39	37	35	32	32	37.3	43.6
25-Mar	30	30	29	26	A	30	29	27	26	28	29	33	34	38	39	40	40	37	36	34	34	33	33	34	32.5	40.3
26-Mar	34	33	33	32	A	31	29	27	26	28	30	35	41	43	44	44	45	44	43	41	42	41	41	41	36.9	44.8
27-Mar	41	40	39	39	A	34	31	32	33	30	30	31	34	38	41	43	45	44	42	40	37	37	37	36	37.1	45.2
28-Mar	35	33	31	36	A	36	36	37	38	39	44	46	46	46	46	49	49	46	44	44	43	42	41	40	41.1	49.1
29-Mar	38	38	38	38	A	37	36	36	37	38	40	41	42	42	40	39	39	38	37	37	36	36	36	36	38.0	41.8
30-Mar	37	37	37	37	A	35	35	35	35	33	31	28	33	38	38	38	37	38	37	37	37	34	36	38	35.7	38.2
31-Mar	38	35	36	36	A	38	38	37	35	35	35	35	37	41	43	45	45	44	44	42	41	42	39	39	39.2	44.9
	35.1	34.4	33.5	33.0	--	32.8	32.5	32.9	32.0	32.1	33.1	34.4	36.7	38.3	40.5	40.1	39.9	39.2	38.3	37.6	36.7	36.1	35.3	35.3	Diurnal Average	
	43.4	42.4	42.6	42.0	--	41.3	42.1	42.0	41.7	42.2	44.0	45.6	46.3	46.2	60.8	49.1	49.0	47.4	47.6	46.3	45.3	42.7	42.6	43.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - March 2016

Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - March 2016

Maximum Value: 44.9 ppb on Mar 13 20:00

Minimum Value: 14.6 ppb on Mar 8 09:00

Percentiles: P_1 = 16.1 P_{10} = 26.0 Q_1 = 30.7 Median = 34.5 Q_3 = 37.8 P_{90} = 40.3 P_{99} = 43.9

Hours in Service:	744
Hours of Data:	738
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-Mar	39	39	39	38	38	37	37	36	35	34	33	33	33	33	34	35	36	37	39	40	40	40	40	40	40.5
2-Mar	40	39	39	39	39	39	38	37	36	34	33	32	32	32	32	32	32	33	33	33	33	33	32	32	39.7
3-Mar	32	32	31	31	31	31	32	31	31	31	31	31	31	31	31	32	32	33	33	33	34	34	34	33	34.1
4-Mar	33	32	31	31	30	29	29	28	27	26	25	24	24	23	23	23	22	22	21	20	20	19	18	17	32.7
5-Mar	17	18	18	18	18	17	18	19	18	16	19	22	23	25	27	29	31	32	31	29	28	27	26	25	32.1
6-Mar	25	26	27	28	29	30	31	32	32	32	32	32	31	31	31	30	30	30	30	30	29	28	28	27	31.9
7-Mar	27	26	25	25	25	25	25	25	24	24	25	25	25	25	26	26	26	26	26	26	25	24	23	22	26.6
8-Mar	20	19	18	17	16	16	15	15	15	15	15	16	18	21	23	26	30	32	34	36	36	36	36	36	36.2
9-Mar	35	34	34	33	33	32	32	31	30	29	29	29	29	30	31	33	35	36	38	40	41	42	42	41	41.6
10-Mar	41	41	40	39	39	38	37	36	35	34	33	33	34	35	36	37	38	40	41	41	41	41	40	39	41.2
11-Mar	38	37	36	36	35	35	35	36	37	38	40	40	41	41	42	42	43	43	43	43	43	43	42	42	43.1
12-Mar	42	42	42	41	41	41	40	38	36	35	34	33	34	34	35	36	38	39	40	41	41	41	41	40	42.0
13-Mar	39	38	37	36	35	35	34	33	34	34	35	36	36	37	39	40	41	43	44	45	45	44	43	42	44.9
14-Mar	40	39	37	35	35	33	32	30	29	27	26	26	27	28	29	31	33	35	36	36	37	36	35	34	40.1
15-Mar	33	33	33	32	32	32	31	31	30	29	29	28	29	30	32	33	35	37	38	39	39	40	39	39	39.6
16-Mar	38	38	38	38	38	38	39	39	40	40	41	41	41	41	40	40	40	39	39	38	38	37	36	35	40.7
17-Mar	34	33	32	31	31	30	30	30	31	32	33	34	34	36	37	38	39	39	39	39	39	39	39	38	39.5
18-Mar	38	37	36	35	35	33	32	32	31	30	29	29	29	29	30	32	33	34	36	38	40	40	39	38	40.3
19-Mar	37	35	33	31	30	28	26	25	24	25	25	25	26	28	30	33	35	38	40	42	43	43	43	42	43.2
20-Mar	41	40	38	37	36	35	34	32	31	29	29	29	30	31	31	34	35	36	37	37	37	37	37	36	40.6
21-Mar	36	36	36	35	35	34	34	33	33	33	33	33	33	34	35	35	36	37	37	37	37	36	35	35	36.9
22-Mar	34	33	32	32	31	30	28	27	26	26	26	27	28	29	32	34	35	36	37	37	36	36	36	35	36.6
23-Mar	34	34	33	33	32	32	31	29	29	29	29	28	28	N	N	N	N	N	N	37	37	37	36	36	37.0
24-Mar	36	35	35	34	34	34	34	34	34	34	35	35	36	36	37	38	39	40	40	40	39	39	37	36	39.8
25-Mar	34	33	31	30	29	29	28	28	27	27	27	27	28	29	30	32	34	35	36	36	36	35	35	34	36.2
26-Mar	33	33	32	32	32	32	31	30	29	28	28	28	29	31	32	35	37	39	41	41	42	41	41	41	41.8
27-Mar	40	40	39	39	39	38	36	35	32	31	29	28	29	29	31	32	34	36	37	39	39	39	38	38	40.2
28-Mar	37	36	34	34	34	34	33	33	34	34	36	37	38	40	41	42	44	45	45	44	44	43	43	42	44.7
29-Mar	41	40	39	39	38	38	37	36	36	36	36	36	37	37	38	38	39	39	39	38	37	36	36	35	40.9
30-Mar	35	35	35	35	35	35	35	35	34	34	32	31	31	31	31	32	32	33	34	36	36	36	35	35	36.2
31-Mar	35	35	35	35	35	35	36	36	35	35	35	35	35	35	35	36	38	39	40	40	41	41	40	39	40.8
	42.0	41.8	41.9	41.3	41.2	40.9	39.8	39.3	39.6	40.0	40.6	40.6	40.7	41.2	41.9	42.3	43.7	44.7	44.7	44.9	44.7	44.0	42.9	42.2	
	Diurnal Maximums																								

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - March 2016

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

Maximum Value: 20.5 $\mu g/m^3$ on Mar 3 22:00

Maximum Daily Average: 7.6 $\mu g/m^3$ on Mar 4

Minimum Value: 0 $\mu g/m^3$ on Mar 11 04:00

Maximum Diurnal Average: 4.0 $\mu g/m^3$ at hour 22

Monthly Average: 3.27 $\mu g/m^3$

Minimum Daily Average: 0.6 $\mu g/m^3$ on Mar 16

Minimum Diurnal Average: 2.6 $\mu g/m^3$ at hour 14

Percentiles: $P_1 = 0.4$ $P_{10} = 0.8$ $Q_1 = 1.5$ Median = 2.5 $Q_3 = 4.3$ $P_{90} = 6.7$ $P_{99} = 12.2$

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	1	1	1	1	1	1	1	2	2	2	2	3	2	2	2	2	2	2	2	4	3	3	2	1	1.9	3.9
2-Mar	1	2	2	2	2	5	7	6	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3	3.7	6.9
3-Mar	4	5	4	4	4	4	5	5	5	5	4	3	3	7	3	3	4	6	7	9	17	20	15	9	6.4	20.5
4-Mar	7	6	7	6	5	5	11	16	8	8	7	5	6	6	7	6	7	6	9	13	9	9	6	7	7.6	16.4
5-Mar	3	3	9	18	13	9	4	4	8	8	2	3	2	2	3	4	4	7	9	6	10	9	8	6	6.4	18.2
6-Mar	4	4	4	3	2	2	2	3	2	2	2	3	4	3	4	4	4	3	4	3	4	4	2	2	3.0	4.5
7-Mar	1	2	1	1	1	1	1	2	1	2	2	3	2	1	1	2	2	2	3	3	4	6	6	3	2.2	6.2
8-Mar	2	2	1	1	1	1	1	2	2	1	2	1	1	1	1	0	1	0	1	1	1	1	1	0	1.0	1.9
9-Mar	1	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.6	1.4
10-Mar	1	1	2	2	1	1	1	1	2	4	2	2	2	1	1	1	2	2	4	4	4	4	2	1	2.0	4.2
11-Mar	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0.8	1.5
12-Mar	1	1	1	1	1	1	1	2	2	1	2	2	2	1	2	2	2	2	3	3	3	3	3	4	1.9	3.9
13-Mar	9	7	6	8	4	2	3	3	3	4	4	4	4	3	3	2	2	3	3	4	5	5	5	5	4.1	8.7
14-Mar	5	5	6	7	5	5	4	6	6	7	6	6	4	2	2	3	3	3	5	5	4	6	9	7	5.1	9.1
15-Mar	5	5	5	5	5	6	5	3	2	4	2	2	1	1	0	0	0	0	1	1	1	0	1	1	2.3	5.5
16-Mar	0	0	0	0	1	0	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	2	0.6	2.2
17-Mar	5	6	6	6	6	4	3	2	3	2	1	1	2	1	1	1	2	2	1	1	1	1	1	1	2.5	6.3
18-Mar	1	2	3	5	4	2	2	0	1	2	2	2	2	3	6	5	5	3	4	4	3	5	9	10	3.5	10.0
19-Mar	5	6	8	7	6	7	7	8	5	5	5	3	2	1	1	1	3	3	3	2	3	4	3	3	4.3	7.8
20-Mar	3	3	4	4	4	3	3	5	5	7	6	6	5	5	7	7	5	4	4	4	3	4	3	2	4.5	7.3
21-Mar	3	3	4	3	2	2	3	2	2	2	2	3	3	7	4	3	3	2	2	2	4	3	3	3	2.9	7.2
22-Mar	4	4	5	5	7	6	10	10	10	8	11	6	4	4	4	3	5	7	9	10	9	9	8	7	6.8	11.2
23-Mar	7	9	13	9	9	10	10	11	10	7	8	7	5	4	5	5	5	6	6	5	4	2	2	2	6.8	13.1
24-Mar	2	2	2	3	3	3	3	2	2	2	2	3	3	3	3	4	4	5	5	4	4	4	4	5	3.2	5.0
25-Mar	5	2	2	4	4	2	3	4	3	2	2	2	2	1	1	1	2	1	1	1	1	1	1	1	2.2	4.9
26-Mar	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	1.5	2.3
27-Mar	2	2	2	2	3	2	2	1	3	2	2	2	2	2	2	3	3	4	6	5	3	3	2	3	2.5	5.5
28-Mar	2	2	2	2	2	2	4	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2.2	3.5
29-Mar	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	3	3	3	3	4	2.2	3.6
30-Mar	4	4	4	4	4	3	3	4	4	5	9	8	4	2	1	2	2	2	2	2	2	1	1	1	3.2	8.7
31-Mar	1	1	1	2	2	1	1	2	3	2	2	2	3	4	3	2	4	4	5	8	9	7	7	5	3.4	8.9
	3.0	3.0	3.5	3.8	3.4	3.1	3.4	3.7	3.4	3.5	3.3	3.0	2.6	2.6	2.6	2.6	2.8	2.9	3.5	3.7	3.9	4.0	3.8	3.3	Diurnal Average	
	8.7	9.4	13.1	18.2	12.6	10.0	11.4	16.4	9.8	8.5	11.2	7.8	6.2	7.3	7.3	6.6	6.8	7.0	9.1	12.5	16.9	20.5	14.6	10.0	Diurnal Maximum	

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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - March 2016

Maximum Value: 43.1 $\mu g/m^3$ on Mar 3 14:00

Maximum Daily Average: 10.9 $\mu g/m^3$ on Mar 3

Minimum Value: 0 $\mu g/m^3$ on Mar 11 04:00

Minimum Daily Average: 0.9 $\mu g/m^3$ on Mar 16

Maximum Diurnal Average: 6.1 $\mu g/m^3$ at hour 8

Minimum Diurnal Average: 3.3 $\mu g/m^3$ at hour 16

Monthly Average: 4.68 $\mu g/m^3$

Percentiles: P_1 = 0.5 P_{10} = 1.2 Q_1 = 2.2 Median = 3.5 Q_3 = 5.9 P_{90} = 9.2 P_{99} = 24.8

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	3	1	1	1	2	3	3	3	2	3	3	5	4	5	3	3	5	3	3	6	4	3	2	2	3.0	5.7
2-Mar	2	5	3	2	3	8	8	6	6	6	6	5	4	5	5	5	5	3	4	4	4	3	4	3	4.5	7.8
3-Mar	5	7	7	4	5	5	5	5	7	8	5	5	4	43	3	4	6	11	9	19	20	31	30	15	10.9	43.1
4-Mar	11	7	7	6	6	6	25	25	10	11	10	6	7	8	9	9	10	9	12	19	10	10	8	13	10.6	25.2
5-Mar	5	6	21	21	19	11	6	14	14	10	5	6	3	3	3	4	4	14	16	10	13	11	11	9	10.0	21.3
6-Mar	5	4	6	4	3	2	4	4	2	2	2	4	4	3	4	4	5	3	5	4	6	6	4	2	3.9	6.1
7-Mar	2	3	2	2	1	1	1	4	2	3	4	4	4	1	2	2	2	3	3	3	6	8	8	4	3.2	7.6
8-Mar	3	2	2	1	1	2	3	4	3	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1.7	4.4
9-Mar	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	3	1	1	1	1	1	1.1	2.7
10-Mar	2	1	3	2	2	2	1	1	2	9	4	3	2	1	1	1	4	3	5	6	4	5	3	2	3.0	9.1
11-Mar	1	1	1	0	1	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.1	2.5
12-Mar	1	1	1	3	2	1	3	3	3	2	3	3	2	2	2	2	3	2	4	4	3	7	4	5	2.9	6.6
13-Mar	14	11	13	14	10	3	4	3	3	5	7	5	5	4	4	3	3	3	4	4	5	5	5	5	6.0	14.2
14-Mar	5	6	7	8	7	5	5	8	8	8	7	6	5	3	2	3	4	4	5	5	5	9	12	8	6.1	12.0
15-Mar	8	6	6	5	5	6	7	8	4	5	3	2	1	2	0	1	3	1	1	1	1	1	1	1	3.3	7.9
16-Mar	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	4	0.9	3.7
17-Mar	6	7	6	7	7	5	4	3	4	3	1	1	15	3	1	1	3	2	2	2	1	1	2	2	3.8	14.9
18-Mar	2	3	4	9	9	2	3	1	1	2	2	2	2	3	8	6	6	4	6	6	4	11	13	14	5.2	14.0
19-Mar	7	10	11	9	8	10	12	12	7	7	7	4	3	2	1	2	4	4	6	3	4	6	6	4	6.2	12.3
20-Mar	6	5	5	5	5	4	4	7	6	8	7	7	7	7	8	8	8	5	5	4	4	5	3	3	5.7	8.3
21-Mar	3	4	4	3	3	3	3	2	2	2	2	6	6	13	9	3	3	3	2	3	10	4	3	4	4.3	12.8
22-Mar	5	4	6	6	8	7	26	28	16	12	13	9	5	6	5	4	6	9	12	12	10	11	11	8	9.9	28.4
23-Mar	8	11	15	13	10	11	11	13	14	16	9	7	7	6	6	5	7	7	8	6	5	3	3	3	8.4	15.7
24-Mar	2	3	2	4	4	3	3	3	3	3	3	3	3	3	4	5	5	6	5	6	5	5	5	5	3.9	6.1
25-Mar	5	5	2	6	7	3	6	6	5	3	2	3	3	3	3	2	3	1	1	2	2	1	1	1	3.2	6.8
26-Mar	1	1	1	1	2	2	2	2	2	3	3	3	4	2	1	3	3	1	2	3	2	3	2	3	2.3	3.9
27-Mar	2	2	2	3	5	2	2	2	5	4	3	2	2	5	2	4	8	5	7	7	7	3	3	4	3.9	8.3
28-Mar	3	3	3	3	3	4	5	6	4	4	4	2	3	3	3	3	2	4	5	3	2	2	3	2	3.3	6.4
29-Mar	2	2	2	2	2	2	3	2	3	4	6	2	2	2	5	4	4	4	6	13	3	3	4	4	3.6	13.0
30-Mar	5	4	4	6	4	4	4	4	5	6	12	9	8	3	2	2	3	2	2	3	2	2	2	1	4.1	11.5
31-Mar	1	2	2	2	2	1	1	3	4	3	2	3	4	5	4	3	6	5	7	20	11	10	8	6	4.9	19.9
	4.1	4.1	4.9	5.0	4.8	3.9	5.4	6.1	5.0	5.1	4.5	4.0	4.0	4.9	3.5	3.3	4.2	4.1	5.0	5.8	5.1	5.7	5.4	4.4	Diurnal Average	
	13.7	10.8	21.3	21.3	19.1	11.3	26.2	28.4	16.4	15.7	12.5	9.1	14.9	43.1	9.3	9.1	9.5	14.0	15.5	19.9	19.8	31.1	29.9	14.7	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - March 2016

Peace Airshed Zone Association

Pollutant Rose

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

Beaverlodge - March 2016

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) - °C

Beaverlodge - March 2016

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

Maximum Value: 16.6 °C on Mar 31 18:00

Maximum Daily Average: 8.7 °C on Mar 31

Minimum Value: -12 °C on Mar 7 08:00

Minimum Daily Average: -7.8 °C on Mar 7

Maximum Diurnal Average: 3.8 °C at hour 16

Minimum Diurnal Average: -2.7 °C at hour 8

Monthly Average: 0.34 °C

Percentiles: P_1 = -9.3 P_{10} = -5.0 Q_1 = -2.9 Median = -0.3 Q_3 = 3.0 P_{90} = 6.3 P_{99} = 11.9

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	-3	-2	-2	-2	-3	-3	-4	-3	-6	-5	-3	-3	0	1	3	3	2	1	0	0	-1	-2	-2	-1	-1.4	3.5
2-Mar	0	-1	-2	-2	-3	-4	-5	-5	-5	-6	-5	-3	-4	-4	-4	-4	-5	-5	-5	-5	-6	-6	-6	-6	-4.1	-0.5
3-Mar	-6	-6	-7	-7	-7	-7	-7	-7	-7	-6	-6	-6	-5	-4	-4	-3	-4	-4	-4	-5	-5	-5	-5	-5	-5.5	-3.2
4-Mar	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-4	-3	-2	-1	-1	0	1	0	-2	-2	-2	-1	-3	-3.1	0.6
5-Mar	1	0	-4	-8	-5	-5	-2	-1	-3	-1	3	2	1	2	2	1	1	-1	-2	-3	-3	-2	-2	-2	-1.3	2.6
6-Mar	-3	-2	-3	-4	-4	-4	-4	-5	-5	-5	-4	-4	-4	-3	-5	-5	-4	-5	-5	-5	-6	-7	-8	-8	-4.6	-2.5
7-Mar	-8	-9	-10	-10	-11	-11	-11	-12	-10	-9	-9	-8	-7	-6	-5	-5	-7	-6	-6	-6	-6	-6	-5	-5	-7.8	-4.8
8-Mar	-5	-5	-6	-6	-7	-8	-9	-9	-8	-6	-5	-3	-1	2	4	6	6	6	5	4	1	1	-1	0	-1.8	5.8
9-Mar	-1	-2	-2	-2	-2	-3	-2	-3	-2	-1	1	2	3	3	5	6	6	5	4	3	2	2	1	2	1.2	6.4
10-Mar	1	-1	0	-1	0	0	0	-1	-1	-1	0	1	0	2	3	4	3	3	2	2	1	1	1	1	0.8	3.5
11-Mar	0	-1	0	3	3	2	2	1	1	2	2	3	4	5	6	7	7	6	5	4	3	2	3	3	3.0	6.8
12-Mar	3	2	2	1	0	-1	-3	-4	-4	-3	0	1	2	4	5	4	4	3	3	2	2	1	1	0	1.1	4.5
13-Mar	0	0	0	-1	-1	0	-1	-1	-1	-2	1	3	5	6	6	6	6	6	5	2	1	0	0	0	1.5	5.8
14-Mar	-1	-2	-2	-2	-1	-1	-1	-2	-2	-2	-1	-1	0	0	0	1	1	0	0	0	-1	0	-1	-1	-0.7	0.7
15-Mar	-1	-2	-3	-3	-3	-3	-4	-3	-2	-2	0	2	3	5	6	6	6	6	5	4	3	2	1	0	0.9	6.3
16-Mar	-1	0	-2	-1	-2	-2	-3	-2	-2	0	1	1	2	-1	0	1	0	2	1	1	0	0	0	0	-0.2	1.7
17-Mar	0	-1	-1	-2	-2	-1	-1	-2	-1	-1	0	0	1	2	3	3	3	3	2	1	1	0	0	-1	0.2	3.3
18-Mar	-1	-3	-3	-3	-4	-5	-6	-7	-5	-4	-3	-2	0	1	3	3	3	4	3	2	3	2	-1	-2	-1.0	4.2
19-Mar	-2	-3	-3	-4	-3	-3	-4	-3	-3	-1	1	3	4	7	6	6	7	6	6	6	5	4	4	4	1.7	6.9
20-Mar	3	3	2	1	1	2	2	1	1	2	2	5	6	5	5	5	4	3	3	2	2	3	2	2	2.8	6.3
21-Mar	1	0	-1	-1	-1	-2	-2	-3	-4	-4	-4	-4	-3	-3	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4	-2.8	0.7
22-Mar	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-1	0	0	0	-1	-1	-1	-1	-1	-2	-2.4	0.4
23-Mar	-2	-2	-2	-2	-3	-3	-3	-3	-3	-1	0	1	1	2	3	4	3	1	0	-1	-1	-1	-1	-2	-0.4	3.7
24-Mar	-2	-2	-2	-3	-3	-3	-3	-4	-4	-4	-3	0	1	2	0	0	-1	-1	-1	-1	-1	-1	-1	-2	-1.7	1.8
25-Mar	-2	-2	-2	-3	-4	-5	-5	-5	-3	-2	0	1	4	7	7	7	7	6	5	4	3	3	3	3	1.2	7.0
26-Mar	3	2	2	0	0	-1	-2	-2	-1	1	3	5	7	7	8	8	8	8	8	7	5	3	3	3	3.6	8.4
27-Mar	3	3	2	1	-1	-2	-1	0	-1	1	3	4	5	7	8	8	10	8	8	7	7	5	4	5	3.7	9.5
28-Mar	3	2	2	4	4	3	3	3	3	5	6	7	8	8	9	10	10	10	9	8	6	4	4	2	5.4	10.1
29-Mar	1	1	1	1	0	0	0	0	1	4	7	9	10	11	12	12	12	11	10	9	7	7	6	5	5.7	12.4
30-Mar	5	5	5	6	6	6	4	5	6	6	6	7	10	12	12	12	12	13	12	11	10	8	7	6	7.9	12.6
31-Mar	5	5	4	4	4	3	3	3	3	6	7	9	10	11	14	15	16	17	16	13	12	11	9	10	8.7	16.6
	-0.6	-1.0	-1.5	-1.7	-1.9	-2.2	-2.6	-2.7	-2.5	-1.5	-0.3	0.8	1.9	2.8	3.5	3.8	3.7	3.3	2.7	1.9	1.3	0.8	0.3	0.1	Diurnal Average	
	5.5	4.9	5.4	6.0	5.8	5.8	4.3	4.6	5.5	6.0	7.2	8.8	9.8	11.7	13.7	14.9	16.3	16.6	15.7	13.3	11.9	10.8	8.9	9.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - March 2016

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

Maximum Value: 100.0 % on Mar 5 20:00 Maximum Daily Average: 97.5 % on Mar 6

Minimum Value: 27 % on Mar 11 16:00 Minimum Daily Average: 51.4 % on Mar 19

Maximum Diurnal Average: 82.5 % at hour 7 Minimum Diurnal Average: 58.5 % at hour 16

Monthly Average: 72.55 % Percentiles: P_1 = 31.6 P_{10} = 45.4 Q_1 = 58.3 Median = 72.5 Q_3 = 90.4 P_{90} = 97.2 P_{99} = 100.0

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	72	68	70	71	72	73	77	76	83	79	67	70	62	56	52	53	56	60	61	61	65	67	65	61	66.5	82.6
2-Mar	61	62	64	65	69	76	79	79	81	85	85	79	87	85	86	89	87	88	90	94	95	95	96	95	82.1	96.2
3-Mar	94	93	94	93	93	94	94	95	94	92	91	91	89	84	81	74	80	82	83	85	87	88	90	90	88.9	94.6
4-Mar	90	92	93	93	94	96	98	99	98	97	94	91	90	87	85	80	76	79	83	88	89	90	88	91	90.0	98.6
5-Mar	82	81	90	96	98	98	98	88	91	88	86	89	93	85	85	86	87	98	100	100	100	100	100	100	92.5	100.0
6-Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100	97	96	95	95	95	96	93	92	91	90	97.5	100.0
7-Mar	91	93	94	94	92	93	90	91	90	94	91	83	80	80	80	84	93	96	97	98	96	97	99	99	91.5	99.0
8-Mar	99	98	98	97	97	96	95	95	96	97	98	99	97	96	70	54	51	51	56	59	69	73	82	86	83.7	99.3
9-Mar	91	93	92	90	91	91	88	85	79	71	63	57	54	53	43	41	44	45	44	45	47	48	49	47	64.6	93.5
10-Mar	48	54	53	54	55	57	56	60	63	65	66	63	79	72	65	61	65	65	70	71	71	72	75	81	64.2	80.6
11-Mar	84	86	77	64	62	62	61	62	60	57	54	48	45	39	32	27	28	32	38	38	47	50	45	45	51.7	85.6
12-Mar	49	51	48	53	55	64	70	74	78	74	65	62	55	53	52	53	53	56	59	65	81	96	100	100	65.2	100.0
13-Mar	100	100	100	100	98	82	89	83	84	79	71	63	53	51	50	46	44	44	45	60	69	73	81	83	72.8	100.0
14-Mar	87	91	94	96	94	91	89	90	95	93	88	82	74	70	67	65	65	66	69	73	72	73	73	74	80.5	95.8
15-Mar	80	83	84	82	82	85	87	84	77	74	69	66	62	51	43	44	43	43	45	46	51	53	56	59	64.5	87.3
16-Mar	64	63	67	60	64	64	63	62	63	56	54	57	59	93	89	85	96	77	77	83	86	84	85	84	72.4	95.9
17-Mar	86	90	90	90	90	86	82	77	76	74	69	65	61	56	52	50	50	54	65	70	69	77	80	81	72.4	90.4
18-Mar	82	91	95	98	100	99	98	97	98	98	93	85	76	67	58	54	51	42	40	41	38	40	60	65	73.4	99.7
19-Mar	64	67	68	71	66	67	75	72	69	65	55	50	46	35	35	35	31	34	31	31	37	42	44	43	51.4	74.9
20-Mar	54	50	57	63	60	54	59	69	68	71	60	53	45	47	46	49	61	60	59	61	64	60	64	67	58.4	71.2
21-Mar	80	91	93	94	96	95	95	96	95	92	91	90	88	87	86	86	85	85	93	94	94	93	95	94	91.1	96.4
22-Mar	94	94	94	93	93	92	94	92	89	86	84	81	78	75	69	68	65	67	73	77	78	78	80	83	82.5	94.3
23-Mar	83	83	83	84	85	86	87	88	85	76	76	69	74	70	67	67	77	92	97	99	100	98	97	95	84.0	99.7
24-Mar	95	96	97	99	99	97	98	97	95	92	87	73	65	62	70	74	77	81	89	92	96	97	99	100	88.6	100.0
25-Mar	100	100	100	100	100	100	100	100	100	100	94	82	63	50	47	46	47	48	52	60	64	65	66	65	77.0	100.0
26-Mar	65	67	72	74	74	76	79	77	75	67	61	59	48	43	40	40	39	39	40	44	48	56	58	56	58.3	79.4
27-Mar	55	56	59	61	74	76	74	68	72	65	58	59	53	49	44	45	40	46	45	49	53	62	65	64	58.1	75.9
28-Mar	70	79	81	69	67	69	68	67	67	59	52	45	44	48	43	35	27	31	34	36	45	53	52	58	54.0	81.3
29-Mar	62	61	64	64	66	68	69	67	67	59	52	48	45	42	41	41	41	47	49	51	59	59	61	65	56.2	69.1
30-Mar	65	65	63	61	61	60	66	65	63	62	65	62	53	47	45	46	45	44	45	46	48	57	61	63	56.6	66.1
31-Mar	66	70	71	70	71	76	82	81	77	68	63	58	57	55	45	40	37	35	39	44	48	50	55	52	58.6	81.8
	77.9	79.6	80.8	80.6	81.2	81.4	82.5	81.9	81.4	78.6	74.2	70.4	67.0	64.1	60.1	58.5	59.3	60.7	63.2	66.4	69.6	72.2	74.5	75.2	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	97.3	95.5	95.9	97.8	99.8	100.0	100.0	100.0	100.0	100.0	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2016

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	2	2	3	4	3	4	2	4	4	5	3	6	8	9	10	20	16	18	12	18	5.4	19.7
Dir	48	256	9	223	208	285	40	67	121	93	137	55	68	41	46	73	87	60	50	59	36	11	7	59	49	59
2 Spd	16	3	8	5	8	13	12	12	12	11	8	1	5	2	5	10	10	8	5	7	5	5	3	6	6.6	16.5
Dir	55	347	49	28	13	10	6	14	15	17	18	38	187	232	23	17	21	24	50	44	23	25	326	4	22	55
3 Spd	7	6	10	6	5	7	6	6	8	7	7	6	7	7	7	3	7	9	7	8	7	8	9	12	5.1	11.6
Dir	6	357	19	357	15	18	25	25	18	5	349	342	349	13	26	339	28	20	91	113	109	101	119	102	34	102
4 Spd	14	14	11	14	16	17	17	15	15	15	13	9	8	7	5	2	4	3	4	6	7	6	4	4	7.0	16.8
Dir	111	108	109	109	121	112	104	102	99	109	110	102	116	109	113	251	250	263	240	329	320	9	30	355	104	112
5 Spd	4	2	1	3	4	3	1	2	2	1	11	16	17	10	13	15	11	9	6	4	9	8	2	12	4.9	17.0
Dir	19	345	262	201	59	93	44	47	91	126	64	49	44	30	27	359	334	329	21	174	338	24	62	109	32	44
6 Spd	11	9	14	13	8	9	13	8	14	14	10	13	10	6	14	12	10	11	8	8	15	14	15	15	8.5	15.4
Dir	85	81	38	43	39	65	52	57	55	59	50	47	38	44	326	343	4	6	345	337	316	315	316	326	19	316
7 Spd	14	4	5	6	6	6	8	6	6	6	7	3	3	2	3	4	8	6	7	6	7	8	6	8	0.7	13.9
Dir	320	332	325	317	333	339	342	27	14	21	33	272	290	205	160	152	166	173	168	160	125	101	119	152	35	320
8 Spd	7	5	6	6	8	3	4	3	5	3	5	4	4	3	7	15	14	8	1	3	4	4	3	3	0.2	14.8
Dir	182	208	203	202	191	159	81	97	69	63	59	55	46	355	304	293	302	311	173	169	79	111	74	98	263	293
9 Spd	4	4	4	3	3	4	3	2	3	2	2	2	4	6	6	6	8	11	11	15	19	22	18	9	6.9	22.3
Dir	95	107	77	99	76	79	72	105	87	162	164	82	84	56	50	85	86	89	80	84	90	96	92	84	88	96
10 Spd	9	15	22	20	21	20	9	3	4	8	11	9	13	11	10	2	5	3	3	6	5	1	6	6	3.0	22.2
Dir	80	99	102	96	103	107	77	147	282	301	319	354	316	352	10	317	259	287	1	197	178	165	225	217	75	102
11 Spd	3	7	16	36	41	45	45	38	33	39	34	25	17	18	19	12	5	8	9	9	13	13	17	22	13.9	45.5
Dir	199	214	230	247	250	244	245	244	238	242	247	252	247	234	266	281	12	37	43	48	90	90	84	82	244	244
12 Spd	27	17	5	2	4	4	3	3	7	11	3	3	10	7	4	5	5	7	3	8	8	8	6	4	2.4	26.8
Dir	88	86	83	263	2	27	5	334	334	322	3	64	332	353	101	137	98	124	230	232	275	321	327	8	30	88
13 Spd	3	2	1	3	2	7	3	3	4	3	3	3	4	4	6	9	9	8	7	13	11	6	1	0	2.5	12.7
Dir	260	83	69	241	307	292	237	339	255	8	155	127	164	93	59	41	40	53	59	65	59	74	71	319	55	65
14 Spd	2	8	12	10	7	7	4	2	4	2	3	5	3	10	9	6	7	6	6	5	5	3	2	3	2.9	11.7
Dir	152	21	22	29	54	29	44	220	225	235	193	152	167	139	136	143	135	137	123	110	86	134	108	164	104	22
15 Spd	3	4	4	2	2	1	3	6	4	3	3	3	6	5	29	27	26	24	11	8	14	13	6	8	6.3	29.4
Dir	90	119	104	100	77	72	287	293	292	113	114	67	50	314	270	268	277	273	284	274	268	273	268	245	274	270
16 Spd	5	8	4	9	5	9	9	10	14	12	22	23	20	13	13	15	11	14	12	9	8	5	8	10	10.6	22.7
Dir	267	270	262	265	236	256	254	262	242	258	281	285	285	295	296	295	281	295	299	295	280	296	313	325	281	285
17 Spd	11	12	15	11	9	10	11	7	6	9	10	10	9	8	7	5	3	3	9	12	8	3	2	6	6.4	15.1
Dir	324	325	320	329	322	334	323	325	321	322	353	322	291	282	227	168	143	144	304	292	297	71	90	308	315	320
18 Spd	5	2	4	4	1	1	4	3	3	2	2	2	4	5	4	5	7	7	9	9	7	0	12	12	3.2	12.0
Dir	353	276	43	38	67	110	64	77	83	161	114	105	81	86	74	60	49	69	50	61	66	311	320	337	45	320
19 Spd	4	4	5	3	1	3	1	2	3	1	3	3	4	2	6	8	8	9	7	7	6	1	2	3	2.5	8.7
Dir	34	272	293	34	23	42	23	247	54	171	138	104	80	159	116	102	77	77	80	78	84	314	90	322	76	77
20 Spd	3	3	6	1	4	9	5	2	1	3	3	1	3	12	11	14	13	12	14	16	13	13	14	18	6.8	17.6
Dir	4	46	279	279	22	23	24	239	56	231	259	64	88	46	50	41	19	37	43	43	17	24	43	55	34	55
21 Spd	15	16	17	19	18	18	11	9	12	11	13	13	12	11	13	12	9	10	9	5	4	2	6	3	10.8	19.2
Dir	49	47	53	51	51	44	39	10	21	20	23	16	13	12	14	20	24	30	32	17	1	16	25	349	31	51
22 Spd	4	5	5	4	4	4	4	6	8	9	9	9	10	9	5	6	2	5	5	3	4	5	6	7	3.0	9.8
Dir	328	346	318	330	321	312	292	293	310	318	320	327	320	303	295	325	273	147	167	151	80	96	94	94	324	320

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2016

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	7	10	7	8	8	5	3	2	3	2	3	2	5	1	3	2	4	7	6	15	10	10	13	13	5.6	14.7
Dir	86	101	103	101	97	106	119	200	225	118	70	197	103	56	48	51	110	100	105	99	77	71	77	64	92	99
24 Spd	13	13	9	5	5	5	5	9	9	7	5	1	2	3	5	7	7	8	7	7	5	3	2	2	4.1	13.0
Dir	49	61	53	41	24	20	7	354	14	23	30	168	147	108	150	156	125	118	113	105	110	51	131	91	67	61
25 Spd	3	2	2	3	4	4	4	4	3	3	4	5	2	7	9	5	3	28	25	12	11	12	13	15	3.9	27.9
Dir	72	159	102	99	63	57	58	63	69	77	80	56	315	312	318	357	250	265	264	255	253	253	251	251	273	265
26 Spd	15	15	11	10	5	1	3	3	4	3	3	4	4	15	20	21	16	11	7	5	6	2	4	4	5.3	20.5
Dir	249	252	237	238	229	149	83	163	106	80	87	86	238	269	272	267	274	272	309	275	283	111	79	89	260	267
27 Spd	4	3	3	3	3	3	5	2	1	2	2	3	3	4	4	4	1	4	3	3	9	4	8	4	0.6	9.5
Dir	77	119	105	83	106	124	82	81	260	141	126	72	150	98	80	63	130	226	218	274	301	248	251	288	124	301
28 Spd	4	1	4	8	12	10	9	7	2	2	8	10	4	8	5	0	18	15	11	6	16	9	9	2	5.1	17.8
Dir	221	89	65	319	314	305	306	321	347	233	284	286	163	93	82	218	299	287	282	294	269	248	266	184	290	299
29 Spd	4	4	2	3	3	4	4	2	4	2	4	13	10	10	13	14	21	13	12	10	4	4	9	1	4.6	20.6
Dir	170	194	110	72	59	60	62	92	58	255	211	248	241	242	268	285	269	246	250	244	206	206	223	151	247	269
30 Spd	2	3	3	3	4	7	1	1	5	8	2	2	5	14	16	12	10	11	10	10	11	14	10	8	5.4	15.6
Dir	47	58	3	347	344	327	316	336	340	312	261	242	274	303	318	331	332	326	346	1	11	32	56	96	345	318
31 Spd	9	6	5	8	8	11	12	10	6	2	3	4	6	5	5	4	2	1	2	4	4	2	2	4	4.2	11.8
Dir	121	126	104	68	89	92	111	113	146	102	84	91	77	42	69	89	97	159	221	38	35	189	79	250	97	111
Spd	3.3	2.2	2.5	1.4	1.6	2.1	1.9	1.1	1.5	1.6	1.7	1.9	1.6	2.3	3.2	3.2	3.0	2.2	1.9	2.1	2.5	2.6	2.0	2.7	Diurnal Average	
Dir	62	70	50	30	37	27	18	345	358	334	344	347	342	344	328	331	332	333	356	46	11	36	37	53		
Spd	26.8	16.9	22.2	36.2	41.2	45.5	44.7	38.2	32.6	38.7	34.5	25.2	20.4	17.9	29.4	27.3	25.8	27.9	24.6	19.7	18.8	22.3	17.7	22.1	Diurnal Maximum	
Dir	88	86	102	247	250	244	245	244	238	242	247	252	285	234	270	268	277	265	264	59	90	96	92	82		

Maximum Speed Value: 45 km/h on Mar 11 06:00
Maximum Daily Speed Average: 13.9 km/h on Mar 11
Maximum Diurnal Speed Average: 3.3 km/h at hour 1

Minimum Speed Value: 0 km/h on Mar 28 16:00
Minimum Daily Speed Average: 0.2 km/h on Mar 27
Minimum Diurnal Speed Average: 1.1 km/h at hour 8

Monthly Average Velocity: 1.80 km/h 11.0 deg

Speed Percentiles: $P_1 = 0.7$ $P_{10} = 2.1$ $Q_1 = 3.4$ Median = 6.1 $Q_3 = 10.2$ $P_{90} = 14.5$ $P_{99} = 32.8$

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

Hours in Service:	744
Hours of Data:	744
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	26	43	21	0	0	0	90
NorthEast	54	56	33	2	0	0	145
East	87	48	26	7	0	0	168
SouthEast	31	25	1	0	0	0	57
South	30	10	0	0	0	0	40
SouthWest	29	12	6	0	3	4	54
West	33	21	23	13	1	1	92
NorthWest	17	54	27	0	0	0	98
Total	307	269	137	22	4	5	744

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - March 2016

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - March 2016

Maximum Speed: 46 km/h on Mar 11 06:00

Maximum Daily Speed Average: 22.1 km/h on Mar 11

Minimum Speed: 1 km/h on Mar 15 06:00

Minimum Daily Speed Average: 4.0 km/h on Mar 27

Maximum Diurnal Speed Average: 9.7 km/h at hour 18

Minimum Diurnal Speed Average: 6.8 km/h at hour 8

Monthly Average Speed: 8.17 km/h

Percentiles: P_1 = 1.9 P_{10} = 3.1 Q_1 = 4.1 Median = 6.6 Q_3 = 10.6 P_{90} = 14.6 P_{99} = 32.9

Hours in Service:	744
Hours of Data:	744
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-Mar	3	3	3	4	3	4	5	4	4	4	2	5	4	5	3	7	9	9	10	20	16	18	12	18	7.3	19.9
2-Mar	17	7	11	6	8	13	12	12	12	11	8	3	5	2	7	10	10	8	5	7	5	5	5	6	8.1	16.7
3-Mar	7	6	10	7	5	8	6	6	8	7	7	6	8	7	7	4	7	9	8	8	7	8	9	12	7.4	11.7
4-Mar	14	14	12	14	16	17	17	16	15	15	13	9	8	7	5	5	5	4	5	6	7	7	6	6	10.2	16.9
5-Mar	4	4	5	5	5	5	3	5	4	3	11	17	17	14	13	15	11	14	10	7	9	9	6	12	8.7	17.2
6-Mar	12	10	14	13	8	11	13	9	14	14	11	13	11	7	14	12	11	11	8	8	16	14	15	15	11.8	15.6
7-Mar	14	5	6	6	6	6	8	6	6	6	7	5	4	3	4	5	8	7	7	6	7	8	6	9	6.4	14.1
8-Mar	8	5	6	7	8	4	4	4	5	4	5	4	4	4	7	15	14	8	2	3	5	5	4	4	5.8	14.9
9-Mar	5	5	4	3	4	4	3	2	4	2	3	3	4	6	6	7	8	11	11	15	19	22	18	9	7.4	22.3
10-Mar	9	15	22	20	21	20	10	6	5	8	11	10	13	12	10	5	6	4	7	7	5	4	6	6	10.1	22.2
11-Mar	4	8	16	36	41	46	45	38	33	39	35	25	17	18	20	12	7	8	9	9	13	13	17	22	22.1	45.5
12-Mar	27	17	5	4	4	4	5	6	8	11	5	3	10	8	5	5	6	7	3	8	12	9	7	5	7.7	26.8
13-Mar	4	3	3	4	3	7	4	3	4	4	3	3	5	5	7	9	9	8	8	13	11	7	2	3	5.5	13.0
14-Mar	4	8	12	10	7	7	4	3	5	2	3	5	4	10	9	6	7	7	6	6	5	3	3	3	5.8	11.7
15-Mar	4	4	4	2	2	1	3	7	5	4	3	4	6	10	29	27	26	24	11	9	14	13	7	8	9.5	29.5
16-Mar	6	9	5	9	5	9	9	10	14	12	22	23	21	13	13	16	12	14	12	9	8	5	8	10	11.5	22.8
17-Mar	11	12	15	11	9	10	11	7	6	10	11	11	10	9	8	6	4	3	9	12	8	4	4	7	8.7	15.1
18-Mar	5	3	4	4	2	2	4	3	3	2	2	3	4	5	4	5	7	7	9	9	7	3	12	13	5.1	13.3
19-Mar	5	4	5	4	3	4	3	3	3	2	3	3	4	2	6	9	8	9	7	8	6	3	6	4	4.9	8.7
20-Mar	8	6	6	3	5	9	6	3	2	3	3	2	4	12	11	14	13	12	14	16	13	14	14	18	8.8	17.7
21-Mar	16	16	18	19	18	18	11	9	12	11	13	13	12	12	13	13	9	10	9	5	4	3	6	4	11.3	19.3
22-Mar	4	5	5	5	4	4	4	6	8	9	9	9	10	9	6	7	5	6	5	5	4	5	6	7	6.1	10.0
23-Mar	8	10	7	8	8	6	4	2	3	2	3	3	5	3	3	2	5	7	6	15	10	10	13	14	6.6	15.0
24-Mar	13	13	9	6	6	5	5	9	9	7	5	2	3	4	6	7	7	8	8	7	6	7	3	2	6.5	13.1
25-Mar	3	2	2	3	4	4	4	4	4	3	4	5	6	7	10	6	7	28	25	13	11	12	13	15	8.2	28.0
26-Mar	15	15	11	10	5	2	4	4	4	3	3	5	9	16	21	21	16	11	8	5	6	3	4	4	8.5	20.7
27-Mar	4	4	3	3	4	3	5	3	4	2	2	4	3	4	5	4	2	4	3	4	10	5	8	5	4.0	9.5
28-Mar	4	2	4	8	12	10	9	7	5	3	9	11	6	8	6	5	18	16	12	8	16	9	9	2	8.2	18.1
29-Mar	5	6	3	4	4	4	4	3	4	6	5	13	10	10	14	14	21	13	12	10	5	4	9	2	7.6	20.9
30-Mar	3	3	6	4	5	7	3	2	6	8	3	3	6	14	16	12	11	11	10	10	12	14	10	9	7.8	15.8
31-Mar	10	6	6	8	8	11	12	10	7	3	3	4	6	6	5	5	2	2	3	4	5	2	3	4	5.5	11.9
	8.2	7.4	7.8	8.0	7.9	8.5	7.7	6.8	7.2	7.1	7.4	7.3	7.6	8.1	9.5	9.3	9.4	9.7	8.5	8.8	9.1	8.1	8.2	8.3	Diurnal Average	
	26.8	17.0	22.2	36.3	41.2	45.5	44.8	38.3	32.7	38.7	34.5	25.3	20.9	18.1	29.5	27.4	26.0	28.0	24.7	19.9	18.8	22.3	17.7	22.2	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 - March 2016

Maximum Value: 92.4 deg on Mar 5 07:00

Minimum Value: 2.2 deg on Mar 25 23:00

Percentiles: P_1 = 2.8 P_{10} = 5.3 Q_1 = 8.7 Median = 15.8 Q_3 = 34.4 P_{90} = 60.1 P_{99} = 89.7

Hours in Service:	744
Hours of Data:	744
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-Mar	33	69	66	15	72	71	59	37	43	24	43	22	13	11	18	15	19	11	12	9	12	4	7	7	71.6
2-Mar	26	72	53	36	9	5	8	3	3	4	4	78	15	31	75	7	5	5	19	11	8	5	45	10	78.0
3-Mar	6	16	11	27	12	8	5	5	4	12	11	20	20	19	7	45	9	7	36	15	8	7	11	7	45.2
4-Mar	8	4	5	7	6	6	5	4	5	6	14	8	10	17	29	88	43	54	45	34	43	25	50	55	87.9
5-Mar	30	82	76	61	74	45	92	90	65	82	7	20	8	45	20	13	22	55	53	49	20	8	91	9	92.4
6-Mar	14	15	17	5	15	37	9	27	8	7	17	8	17	24	9	7	14	7	9	12	8	11	6	8	36.9
7-Mar	11	53	48	14	54	13	23	22	14	17	6	55	56	82	29	32	19	14	17	19	10	6	14	13	81.9
8-Mar	28	19	23	11	17	48	18	24	25	51	17	21	12	42	19	7	11	16	79	51	32	35	37	32	79.2
9-Mar	30	25	21	20	16	12	30	33	24	30	33	61	29	10	9	29	10	7	4	4	4	2	5	22	60.8
10-Mar	26	7	3	5	4	6	25	67	49	11	11	24	10	15	6	70	39	52	69	47	20	79	23	21	79.3
11-Mar	63	23	14	3	3	3	3	3	3	3	3	4	5	7	12	11	46	9	9	13	12	13	5	4	63.5
12-Mar	3	5	53	77	47	38	55	64	28	9	62	31	10	59	28	19	19	42	27	16	50	29	29	41	76.7
13-Mar	66	51	77	56	69	12	44	30	23	62	24	30	19	27	23	11	5	9	12	13	10	29	91	89	91.2
14-Mar	61	6	4	7	17	13	28	60	25	53	16	14	26	7	7	11	15	12	7	8	11	26	21	26	61.4
15-Mar	30	14	25	43	24	49	39	25	65	38	23	28	14	65	5	5	5	5	9	15	2	5	52	15	65.1
16-Mar	49	29	79	8	40	9	11	9	8	21	6	5	14	16	18	16	14	11	4	5	8	9	9	6	78.7
17-Mar	6	6	6	6	7	10	9	12	15	14	19	16	22	20	28	22	39	25	25	18	20	40	52	13	51.7
18-Mar	28	41	8	8	87	48	24	32	26	28	13	19	12	17	10	17	5	12	7	5	7	84	8	32	86.7
19-Mar	49	36	23	47	77	48	85	70	65	56	14	20	11	50	27	13	6	5	5	9	9	84	81	74	85.5
20-Mar	71	78	30	92	52	6	12	51	88	34	32	67	43	5	7	10	5	6	5	8	11	16	19	6	92.0
21-Mar	9	8	6	4	4	4	7	9	8	8	9	4	4	4	5	6	6	5	3	7	20	80	4	29	79.7
22-Mar	12	10	7	10	6	21	9	10	7	13	12	10	11	15	31	13	80	27	8	51	14	15	8	9	80.4
23-Mar	10	5	12	11	7	13	39	36	25	46	48	54	14	80	55	60	25	10	8	12	10	15	9	10	80.5
24-Mar	10	9	16	13	18	21	10	11	10	9	11	48	22	29	24	19	8	13	15	11	21	58	31	28	58.0
25-Mar	29	39	33	31	22	14	17	16	13	19	11	11	75	28	22	41	80	6	3	7	4	3	2	4	79.7
26-Mar	3	5	4	11	22	83	53	31	16	58	26	27	85	23	11	7	9	10	11	17	6	51	11	16	84.5
27-Mar	9	26	22	23	40	30	11	41	90	46	26	43	22	33	12	12	34	32	34	85	7	39	13	16	89.9
28-Mar	18	77	14	24	5	6	4	22	61	62	44	16	48	12	28	90	12	10	11	41	5	15	16	52	90.5
29-Mar	16	60	36	36	12	11	12	66	12	89	57	5	8	10	19	7	9	8	4	12	47	12	6	63	88.9
30-Mar	66	41	51	40	30	16	87	82	29	16	62	53	37	10	9	8	7	10	14	5	11	4	14	32	86.9
31-Mar	13	20	18	9	5	6	7	9	24	41	18	23	10	13	12	15	45	63	59	38	59	48	48	36	63.4
	71.4	81.6	78.7	92.0	86.7	83.2	92.4	90.1	89.9	88.9	62.1	78.0	84.5	81.9	74.8	90.5	80.4	63.4	79.2	84.8	59.3	84.2	91.3	88.9	

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - March 2016

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

Maximum Value: 9.8 ppb on Mar 8 14:00 Maximum Daily Average: 1.5 ppb on Mar 29

Minimum Value: 0 ppb on Mar 1 01:00 Minimum Daily Average: 0.0 ppb on Mar 2

Maximum Diurnal Average: 1.2 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.37 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 0.8$ $P_{99} = 4.4$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
2-Mar	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
3-Mar	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	0.4
4-Mar	0	0	0	0	0	0	0	0	0	A	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0.3	0.6
5-Mar	0	0	0	0	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
6-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0.3	3.9
7-Mar	2	3	1	1	0	3	A	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.2
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0	0	0.6	9.8
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
10-Mar	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0.5	1.4
11-Mar	0	0	A	0	0	0	0	0	0	1	7	5	1	3	1	0	0	0	0	0	0	0	0	0	0.8	7.3
12-Mar	0	A	0	0	0	0	0	0	0	1	1	1	4	4	1	1	0	1	0	0	0	0	1	0	0.7	3.8
13-Mar	A	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	A	0.5	5.2
14-Mar	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
15-Mar	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	0	1	0	0	0	0	A	0	0	0.4	3.8
16-Mar	1	4	2	1	2	4	4	5	2	1	0	0	0	0	0	1	0	0	0	0	A	0	0	0	1.2	4.7
17-Mar	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	1	3	0	0	A	0	0	0	0	0.3	2.6
18-Mar	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
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0.3	0.7
20-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0.2	1.2
21-Mar	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
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	2	2	A	3	2	0	0	0	0	0	0	0	0.4	3.2
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0.1	0.6
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	1	0	0	0	0	0	0.1	1.1
25-Mar	0	0	0	0	0	0	0	0	0	0	2	A	2	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
26-Mar	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
27-Mar	0	0	0	0	0	0	0	0	0	A	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0.3	1.6
28-Mar	0	0	0	0	4	0	1	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.0
29-Mar	0	0	0	0	0	0	0	A	0	3	7	4	1	3	6	7	1	0	0	0	0	1	1	1	1.5	6.9
30-Mar	1	1	0	0	0	0	A	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0.1	0.9
	0.2	0.3	0.2	0.1	0.2	0.3	0.3	0.4	0.2	0.5	1.2	0.6	0.6	1.0	0.5	0.6	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2	Diurnal Average	
	2.4	3.5	2.4	1.0	4.0	3.6	4.1	4.7	2.0	3.3	7.3	4.7	3.8	9.8	5.8	6.7	2.6	0.6	1.0	0.4	0.5	0.6	1.8	3.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - March 2016

Maximum Value: 37.4 ppb on Mar 29 15:00

Maximum Daily Average: 7.5 ppb on Mar 29

Minimum Value: 0 ppb on Mar 30 23:00

Minimum Daily Average: 0.4 ppb on Mar 2

Maximum Diurnal Average: 4.3 ppb at hour 11

Minimum Diurnal Average: 0.7 ppb at hour 22

Monthly Average: 1.67 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 1.0$ $P_{90} = 2.8$ $P_{99} = 19.4$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Mar	1	1	0	0	0	0	0	0	0	0	1	1	A	1	1	1	2	1	1	0	1	1	1	0	0.6	1.6
2-Mar	1	0	0	1	0	0	0	0	0	0	1	A	0	0	0	0	0	0	1	0	0	1	0	0	0.4	0.7
3-Mar	1	0	0	1	0	0	1	1	0	0	A	0	3	1	1	1	3	0	1	1	1	0	0	0	0.8	2.6
4-Mar	0	0	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.8	1.2
5-Mar	1	0	0	0	0	1	0	0	A	2	2	1	5	1	1	0	1	0	1	1	0	0	0	1	0.9	5.3
6-Mar	0	0	0	1	0	1	0	A	0	0	0	0	1	0	1	0	0	0	0	0	1	1	12	11	1.5	12.3
7-Mar	8	8	4	5	1	12	A	9	2	10	1	1	0	1	0	2	1	0	0	1	1	0	0	0	3.1	11.6
8-Mar	0	1	0	0	0	A	0	0	1	1	1	1	5	27	13	1	1	1	1	1	1	1	1	1	2.5	26.5
9-Mar	1	1	1	1	A	1	1	1	1	1	1	1	7	1	0	4	0	0	0	1	0	1	1	1	1.1	7.1
10-Mar	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	3	1	1	1	2	6	1	1	0	1.3	5.6
11-Mar	1	0	A	1	1	1	1	1	1	10	18	13	15	19	12	0	0	1	0	2	1	0	1	1	4.3	18.7
12-Mar	0	A	0	1	1	1	1	1	1	2	2	2	14	10	2	1	1	1	1	1	1	1	2	1	2.0	13.7
13-Mar	A	1	1	0	0	1	1	0	3	10	14	0	1	0	0	1	1	1	1	1	1	1	1	A	1.8	14.1
14-Mar	0	0	1	0	1	1	0	1	0	1	0	0	1	0	0	1	1	1	1	1	1	1	A	1	0.6	1.2
15-Mar	1	1	0	0	1	0	0	1	1	1	22	10	1	1	1	1	1	1	1	1	1	A	0	1	2.1	21.6
16-Mar	4	8	4	3	4	7	8	8	7	3	1	1	1	1	1	2	1	1	0	1	A	0	2	1	3.0	8.3
17-Mar	1	1	1	1	1	1	1	1	0	1	C	C	C	C	1	3	5	2	1	A	0	0	0	1	1.1	4.8
18-Mar	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	0	1	0.7	1.0
19-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.4
20-Mar	1	1	0	0	0	1	1	1	1	1	1	1	2	1	1	1	A	0	1	1	1	1	1	1	0.8	1.8
21-Mar	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	A	0	1	0	1	0	0	0	0	0.5	0.9
22-Mar	1	1	1	0	1	1	0	0	0	0	0	1	13	6	A	7	6	1	1	1	1	0	1	0	1.8	12.6
23-Mar	0	0	0	1	1	1	0	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.4
24-Mar	1	1	0	1	0	0	0	1	1	1	1	1	A	1	1	1	4	1	3	1	1	0	0	0	0.8	3.9
25-Mar	1	0	0	0	0	0	0	1	0	1	17	A	26	1	1	0	1	0	1	1	1	0	1	0	2.4	26.1
26-Mar	1	1	1	1	0	1	1	0	1	8	A	12	5	1	1	1	1	1	0	1	1	1	0	1	1.7	11.8
27-Mar	0	0	1	1	0	1	1	1	1	A	2	1	1	4	2	1	0	1	0	1	1	1	1	1	1.0	3.8
28-Mar	1	1	2	3	20	1	3	7	A	2	1	1	1	1	1	2	1	1	1	2	1	1	1	1	2.3	20.1
29-Mar	1	1	1	1	1	1	1	A	2	9	29	19	3	20	37	26	11	1	1	1	1	3	3	2	7.5	37.4
30-Mar	5	1	1	1	1	1	A	2	4	6	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1.4	5.7
31-Mar	1	1	0	0	0	A	0	0	1	0	1	1	0	10	5	1	1	1	1	1	2	1	1	1	1.2	9.9
	1.2	1.1	0.9	0.9	1.3	1.2	0.9	1.5	1.2	2.5	4.3	2.6	3.9	3.9	3.0	2.2	1.6	0.7	0.8	1.0	0.9	0.7	1.1	1.0	Diurnal Average	
	8.5	8.1	4.3	5.3	20.1	11.6	7.8	9.1	6.8	10.4	28.5	18.6	26.1	26.5	37.4	25.8	10.6	2.0	2.8	1.9	5.6	2.7	12.3	11.2	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - March 2016

Peace Airshed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - March 2016

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Valleyview - March 2016

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.1 ppb on Mar 14 02:00 Maximum Daily Average: 0.5 ppb on Mar 16

Minimum Value: 0 ppb on Mar 12 16:00 Minimum Daily Average: 0.0 ppb on Mar 18
Maximum Diurnal Average: 0.4 ppb at hour 2 Minimum Diurnal Average: 0.1 ppb at hour 18
Monthly Average: 0.21 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} = 1.5

Hours in Service:	744
Hours of Data:	708
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-Mar	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
2-Mar	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
3-Mar	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
4-Mar	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	0.1
5-Mar	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
6-Mar	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	0.5
7-Mar	1	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
8-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.6
9-Mar	0	0	0	0	A	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	1	0	0.3	1.5
10-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	1.1
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Mar	0	A	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	1.2
13-Mar	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.9
14-Mar	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	N	A	1	0.4	4.1
15-Mar	1	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	1.1
16-Mar	1	1	1	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0.5	1.8
17-Mar	1	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	A	1	1	0	0	0.2	0.6
18-Mar	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
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	0	0.2	1.1
20-Mar	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.8
21-Mar	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
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0.2	1.2
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
24-Mar	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
25-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	2	0	0	0	0	0.2	1.9
26-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	1.0
27-Mar	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	0.5
28-Mar	1	1	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	3	2	1	0	0.4	2.9
29-Mar	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	1.3
30-Mar	1	1	0	1	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
31-Mar	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0.2	1.5
	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	Diurnal Average	
	1.3	4.1	1.2	1.5	1.1	0.8	1.8	1.6	0.7	0.8	0.8	1.3	1.5	0.3	0.3	0.9	1.2	0.2	0.6	1.9	2.9	2.2	1.1	1.0	Diurnal Maximum	

C - Calibration N - Not Valid 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 - March 2016

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - March 2016

Maximum Value: 11.0 ppb on Mar 14 02:00

Maximum Daily Average: 1.4 ppb on Mar 28

Minimum Value: 0 ppb on Mar 30 16:00

Minimum Daily Average: 0.4 ppb on Mar 18

Maximum Diurnal Average: 1.2 ppb at hour 2

Minimum Diurnal Average: 0.5 ppb at hour 18

Monthly Average: 0.76 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.7$ $P_{90} = 1.4$ $P_{99} = 4.9$

Hours in Service:	744
Hours of Data:	708
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-Mar	1	0	1	1	0	1	1	1	1	1	1	3	A	1	1	1	1	1	1	0	1	1	1	1	0.7	2.5
2-Mar	1	1	1	1	1	1	1	0	0	0	0	A	1	0	0	0	1	1	1	1	0	1	1	0	0.5	0.9
3-Mar	1	0	0	1	1	1	0	1	1	0	A	1	0	1	0	1	1	1	0	0	1	1	0	0	0.5	0.7
4-Mar	0	0	0	0	0	0	1	1	1	A	1	0	0	1	0	1	1	1	0	0	1	0	1	0	0.5	0.6
5-Mar	0	1	1	1	1	1	1	1	A	1	1	3	2	1	1	0	1	0	0	1	1	1	0	1	0.8	2.6
6-Mar	1	1	0	0	1	0	0	A	0	1	0	0	0	1	1	1	0	1	1	1	0	0	1	2	0.6	2.0
7-Mar	2	1	1	1	1	1	A	1	0	1	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0.7	1.9
8-Mar	1	1	1	1	0	A	1	1	1	0	1	1	1	1	1	0	0	1	2	2	1	1	1	0	0.7	2.4
9-Mar	1	0	0	1	A	1	0	1	1	1	1	2	6	1	0	1	1	0	1	0	1	5	1	1	1.1	5.6
10-Mar	1	1	0	A	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	6	4	1	1	1	1.0	5.7
11-Mar	1	0	A	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0.5	1.1
12-Mar	2	A	3	4	2	2	2	1	1	1	1	1	0	0	1	0	0	0	0	0	0	1	2	1	1.1	4.3
13-Mar	A	1	1	1	3	2	0	0	1	1	1	0	0	0	1	0	1	1	1	0	1	0	1	A	0.8	3.1
14-Mar	2	11	2	1	1	0	0	1	0	1	1	1	1	0	0	1	0	1	1	0	1	N	A	4	1.4	11.0
15-Mar	3	1	0	1	0	0	1	0	1	0	1	1	0	1	0	0	1	1	0	1	1	A	1	1	0.7	2.9
16-Mar	2	2	2	4	3	1	3	3	1	1	1	0	0	0	0	0	0	0	0	1	A	1	2	1	1.4	4.1
17-Mar	2	1	1	1	0	0	0	1	0	0	C	C	C	0	0	1	0	1	0	A	2	1	1	1	0.7	1.7
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
19-Mar	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	A	1	1	2	2	2	1	0.7	2.0
20-Mar	1	2	1	1	1	1	1	0	1	0	0	1	0	0	0	0	A	1	0	0	1	0	0	0	0.6	1.7
21-Mar	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	1	0	0	0	0	1	1	0.5	0.7
22-Mar	0	0	0	0	0	1	0	0	0	0	0	1	1	1	A	2	2	1	1	1	1	1	1	1	0.7	1.9
23-Mar	0	1	1	1	1	1	1	1	0	0	0	1	0	A	1	0	0	0	0	1	0	0	0	0	0.5	0.7
24-Mar	0	0	0	1	0	0	1	0	0	0	0	1	A	0	1	0	1	0	0	0	0	1	1	1	0.5	0.7
25-Mar	1	1	1	1	1	1	1	1	1	0	1	A	1	1	0	0	0	0	2	6	3	1	1	1	1.0	5.7
26-Mar	1	1	1	2	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	1	3	2	2	0.8	2.5
27-Mar	1	1	1	1	0	0	1	1	0	A	1	0	0	1	0	0	0	0	0	1	0	1	1	1	0.6	1.3
28-Mar	2	3	0	0	1	1	1	0	A	2	1	0	0	0	0	1	0	0	1	1	8	5	2	2	1.4	7.9
29-Mar	2	1	1	0	1	0	0	A	1	1	1	1	1	1	1	1	1	0	1	1	1	2	2	1	0.9	2.1
30-Mar	2	1	1	1	1	1	A	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.7	1.6
31-Mar	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	1	0.7	2.2
	1.0	1.2	0.8	0.9	0.8	0.6	0.7	0.7	0.5	0.6	0.6	0.7	0.7	0.5	0.5	0.6	0.5	0.5	0.6	0.9	1.1	1.1	0.9	0.9	Diurnal Average	
	2.9	11.0	3.1	4.3	3.5	2.1	2.9	3.0	1.4	1.7	1.3	2.6	5.6	1.0	1.0	1.6	1.9	0.7	2.4	5.7	7.9	5.4	2.2	4.5	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - March 2016

Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Valleyview - March 2016

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Valleyview - March 2016

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

Maximum Value: 17.5 °C on Mar 31 17:00

Maximum Daily Average: 9.5 °C on Mar 30

Minimum Value: -11 °C on Mar 1 08:00

Minimum Daily Average: -4.3 °C on Mar 2

Maximum Diurnal Average: 5.8 °C at hour 16

Minimum Diurnal Average: -1.2 °C at hour 8

Monthly Average: 1.98 °C

Percentiles: P_1 = -7.7 P_{10} = -3.4 Q_1 = -1.4 Median = 1.2 Q_3 = 5.0 P_{90} = 8.6 P_{99} = 13.8

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	-7	-7	-7	-8	-8	-8	-9	-11	-9	-7	-5	-2	-1	3	4	5	5	4	3	1	-1	-2	-2	-3	-3.0	5.1
2-Mar	-4	-5	-5	-6	-6	-5	-5	-5	-5	-5	-4	-4	-3	-2	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4.3	-2.3
3-Mar	-4	-4	-4	-4	-5	-5	-5	-5	-5	-5	-5	-5	-4	-4	-3	-3	-2	-3	-3	-3	-3	-3	-4	-3	-3.8	-2.4
4-Mar	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	0	2	3	3	4	5	4	3	3	2	1	1	1	1	-0.1	4.9
5-Mar	1	0	-2	-3	-3	-3	-3	-3	-2	-1	0	2	3	4	4	4	4	4	2	2	0	-1	-1	-1	0.4	4.4
6-Mar	-1	-2	-2	-2	-2	-2	-2	-2	-1	0	0	2	4	5	5	4	3	1	1	1	1	1	0	-1	0.4	4.9
7-Mar	-1	-2	-2	-2	-2	-3	-4	-4	-4	-4	-4	-3	-2	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	-2.2	-1.0
8-Mar	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	1	3	5	7	8	8	7	6	6	4	2	1	3	3	2.0	7.8
9-Mar	1	1	0	-1	-1	-1	-1	-1	0	2	5	6	8	9	10	11	11	10	9	7	5	3	2	2	4.0	10.6
10-Mar	2	2	2	2	2	2	2	2	2	3	4	4	6	7	10	8	7	5	5	4	4	4	3	3	4.1	10.1
11-Mar	3	3	2	2	3	4	4	4	4	5	6	7	7	8	8	8	8	7	7	5	5	4	4	4	5.2	8.3
12-Mar	3	3	3	2	1	-1	-2	-2	-2	2	4	6	7	7	7	8	8	7	6	4	3	3	3	3	3.3	7.9
13-Mar	2	2	1	1	1	1	1	1	1	2	4	5	6	6	6	6	6	6	5	4	2	0	-1	-2	2.7	6.4
14-Mar	-2	-3	-4	-4	-5	-3	-2	-2	-2	-2	-1	0	0	1	1	1	1	1	1	0	0	0	0	0	-1.1	1.3
15-Mar	0	0	-1	-1	-1	-2	-2	-2	-1	1	3	4	5	6	6	6	7	7	6	5	4	3	1	0	2.3	7.0
16-Mar	1	2	1	1	0	0	0	0	1	2	3	3	3	3	3	1	1	0	-1	-2	-2	-2	-2	-2	0.5	3.1
17-Mar	-2	-2	-1	-1	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	2	3	4	3	3	1	-1	-2	-3	-4	-0.7	3.9
18-Mar	-5	-5	-5	-7	-7	-8	-8	-8	-5	-3	0	3	5	6	7	7	7	7	6	5	3	3	2	1	-0.1	6.9
19-Mar	0	0	0	0	-1	-1	-1	-1	-1	0	3	5	7	9	9	9	9	9	8	7	4	3	1	0	3.3	9.4
20-Mar	0	-1	0	0	0	-1	0	-1	0	1	3	4	5	6	7	7	7	6	6	5	5	4	4	4	2.9	6.7
21-Mar	3	3	3	1	0	-1	-1	-1	-2	-2	-1	-1	0	1	1	0	0	0	0	0	0	0	0	-1	0.1	3.2
22-Mar	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-1	0	0	0	0	0	0	0	0	-1	-1	-2	-3	-4	-1.3	-0.1
23-Mar	-4	-3	-3	-3	-3	-2	-2	-2	-2	-1	1	2	4	5	5	5	4	4	3	2	1	1	1	0	0.4	4.9
24-Mar	0	-1	-1	-1	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	0	1	1	2	2	1	1	1	0	0	-0.3	1.6
25-Mar	0	0	0	0	0	0	0	0	1	3	4	6	7	7	7	7	8	8	7	6	6	6	5	3	3.7	7.9
26-Mar	3	4	4	4	3	2	2	1	3	6	7	8	8	8	9	9	9	10	10	8	6	3	1	1	5.4	9.9
27-Mar	1	-1	-1	-2	-2	-2	-3	-2	1	3	4	7	10	11	11	12	11	10	9	8	8	7	6	4	4.6	11.9
28-Mar	4	5	4	4	5	5	5	5	5	6	8	9	10	10	11	11	10	11	10	9	8	6	5	4	7.0	10.9
29-Mar	4	2	1	1	1	1	0	2	4	7	8	9	10	12	13	13	13	13	13	12	11	10	10	10	7.5	13.1
30-Mar	9	9	9	9	9	9	8	8	8	9	9	10	11	12	12	13	13	13	12	11	9	7	6	4	9.5	13.2
31-Mar	3	3	3	3	3	3	3	2	3	6	8	11	13	15	16	17	18	17	16	14	13	10	7	5	8.8	17.5
	0.2	-0.1	-0.4	-0.7	-0.8	-1.1	-1.2	-1.2	-0.6	0.7	1.9	3.3	4.3	5.2	5.7	5.8	5.8	5.4	4.7	3.7	2.8	2.0	1.4	0.8	Diurnal Average	
	9.4	9.3	9.1	9.1	8.8	8.6	7.9	8.0	8.3	8.6	9.0	10.7	13.1	14.9	16.0	17.4	17.5	16.6	16.0	14.3	12.6	10.4	10.1	9.7	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - March 2016

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - March 2016

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

Maximum Value: 96.8 % on Mar 24 00:00 Maximum Daily Average: 90.5 % on Mar 6

Minimum Value: 14 % on Mar 19 17:00 Minimum Daily Average: 32.6 % on Mar 19

Maximum Diurnal Average: 76.2 % at hour 7 Minimum Diurnal Average: 45.8 % at hour 15

Monthly Average: 61.93 % Percentiles: P_1 = 17.4 P_{10} = 30.8 Q_1 = 40.3 Median = 62.3 Q_3 = 84.9 P_{90} = 91.3 P_{99} = 96.5

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	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-Mar	90	89	89	88	87	86	85	84	83	80	75	63	57	43	41	36	36	34	38	46	52	55	57	60	64.7	89.7
2-Mar	65	69	72	75	77	76	76	76	75	75	72	68	67	68	78	83	84	87	88	89	88	88	87	87	77.9	88.7
3-Mar	87	87	88	88	89	92	92	91	91	88	87	87	87	87	82	79	75	75	77	78	80	81	82	84	84.8	92.0
4-Mar	85	85	82	82	84	87	87	88	88	81	73	64	61	61	59	56	59	62	66	69	71	71	71	72	73.5	87.8
5-Mar	68	72	81	85	84	83	82	83	81	78	74	65	58	56	55	57	56	57	73	81	86	87	89	92	74.2	92.3
6-Mar	94	95	96	96	96	96	96	96	96	96	95	90	74	64	62	77	89	94	95	96	96	97	96	94	90.5	96.6
7-Mar	93	91	88	85	87	86	86	85	87	86	87	85	84	83	83	84	85	87	88	90	91	93	94	95	87.6	95.3
8-Mar	96	96	97	97	97	96	96	96	95	95	92	76	69	52	41	35	36	37	46	54	66	71	79	84	74.9	96.7
9-Mar	88	89	90	90	92	89	85	81	76	66	46	40	35	25	20	18	17	16	17	23	28	31	35	37	51.3	92.0
10-Mar	38	38	40	40	44	46	47	47	47	45	43	42	40	35	29	36	39	47	49	55	56	53	59	61	44.7	60.6
11-Mar	60	60	67	61	48	40	38	34	35	26	21	18	17	18	18	22	21	21	24	30	31	32	31	31	33.5	66.7
12-Mar	36	36	36	42	48	62	66	68	63	50	43	33	31	31	30	29	30	35	38	48	54	52	56	73	45.5	72.6
13-Mar	80	85	89	91	92	92	93	92	89	72	57	42	35	33	35	32	28	30	36	46	59	74	81	85	64.5	92.7
14-Mar	87	89	92	92	92	91	89	87	86	85	80	69	60	55	52	49	50	51	52	55	59	61	62	62	71.1	91.9
15-Mar	62	65	69	73	80	85	85	84	83	72	60	48	43	39	36	36	34	34	35	40	42	47	55	54	56.6	85.0
16-Mar	45	43	46	50	50	49	48	45	42	35	33	36	39	41	44	75	76	77	76	76	75	75	82	86	56.1	86.0
17-Mar	83	81	79	79	83	85	85	82	80	78	75	63	60	60	55	48	41	40	40	50	61	68	74	75	67.8	85.5
18-Mar	75	75	77	83	84	85	85	83	72	61	48	36	26	21	20	18	17	18	20	20	21	24	28	32	47.2	85.3
19-Mar	35	36	38	39	40	43	44	45	43	40	32	25	23	19	18	15	14	16	20	24	34	39	49	54	32.6	54.2
20-Mar	54	59	58	60	64	68	66	67	65	58	48	43	39	39	40	43	38	39	42	40	41	44	46	47	50.3	68.3
21-Mar	50	52	53	71	83	89	91	89	91	89	85	85	84	83	85	87	88	88	89	92	94	94	94	92	83.4	94.3
22-Mar	88	87	87	86	85	83	84	84	85	87	85	82	81	78	79	79	76	76	73	73	77	84	86	88	82.3	88.5
23-Mar	88	88	88	89	90	90	89	90	88	81	74	68	62	56	57	62	62	65	77	88	94	96	97	97	80.7	96.8
24-Mar	97	97	96	95	94	93	93	94	93	91	89	86	88	88	85	79	79	79	81	84	86	88	90	92	89.0	96.7
25-Mar	93	94	95	95	95	95	96	96	91	78	67	51	46	44	43	42	38	36	37	40	43	45	50	54	65.1	95.8
26-Mar	54	46	46	46	53	57	63	66	59	43	37	34	34	33	29	31	28	26	26	29	38	51	62	66	44.0	66.5
27-Mar	69	79	83	83	80	79	81	79	65	57	53	42	32	29	23	21	22	26	31	39	37	38	44	52	51.8	83.4
28-Mar	49	47	52	55	53	55	56	54	54	49	41	36	33	32	30	28	32	30	30	29	28	31	35	40	40.8	55.6
29-Mar	37	48	53	51	50	51	56	50	44	36	34	32	30	27	25	25	27	30	30	33	36	37	37	39	38.3	55.6
30-Mar	39	40	41	41	43	44	48	48	46	47	47	45	41	39	38	37	36	38	41	43	50	54	57	64	44.5	64.5
31-Mar	71	71	73	74	70	72	75	78	72	61	46	37	32	27	25	24	23	26	29	33	35	44	54	60	50.5	77.8
	69.5	70.7	72.3	73.5	74.6	75.7	76.2	75.5	73.0	67.2	61.2	54.6	50.6	47.2	45.8	46.5	46.4	47.6	50.5	54.6	58.3	61.6	65.2	68.1	Diurnal Average	
	96.7	96.7	96.6	96.6	96.7	96.4	96.1	96.1	96.2	96.4	94.6	90.5	87.6	87.6	85.4	87.1	88.6	93.8	95.5	96.0	96.4	96.6	96.6	96.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2016

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	2	3	3	3	2	1	0	1	1	1	1	4	2	2	3	4	5	4	5	5	5	5	4	1.0	5.4
Dir	197	187	179	181	186	191	199	95	212	193	297	206	351	353	347	54	51	34	28	24	359	332	331	354	5	24
2 Spd	4	5	3	0	1	1	3	4	5	5	7	7	9	8	8	7	7	9	6	5	4	4	2	2	4.8	9.3
Dir	349	347	343	255	346	5	24	10	18	14	360	339	342	353	352	2	352	339	347	3	2	359	2	15	355	339
3 Spd	2	3	3	4	4	5	4	4	5	6	7	8	5	7	5	4	5	5	5	2	1	1	1	0	3.6	8.1
Dir	15	352	7	18	358	355	342	338	353	9	357	340	306	312	301	310	293	295	320	317	310	34	60	109	336	340
4 Spd	0	1	3	5	6	7	6	6	7	8	10	9	10	9	9	12	11	11	11	11	10	7	5	3	7.3	11.7
Dir	177	152	148	155	160	149	149	160	161	165	165	167	165	166	168	167	170	168	170	170	173	173	176	180	166	167
5 Spd	2	1	0	1	1	0	0	2	0	1	1	1	8	5	7	10	9	11	15	2	4	4	2	1	3.1	14.9
Dir	173	244	278	325	172	313	354	0	23	357	332	8	4	12	340	344	349	353	343	3	27	24	153	27	354	343
6 Spd	2	4	6	5	3	6	6	7	2	5	4	3	5	8	9	7	3	2	1	4	3	3	5	6	2.1	9.1
Dir	26	20	30	28	48	28	29	46	82	63	73	78	102	123	135	139	167	127	26	168	161	174	266	267	83	135
7 Spd	5	2	5	4	3	5	4	4	4	5	4	2	2	2	1	2	2	1	3	4	1	1	0	1	1.7	5.4
Dir	280	291	286	296	305	277	299	286	285	324	346	5	49	69	49	22	74	112	6	50	20	343	172	100	323	277
8 Spd	3	4	4	3	3	2	2	2	2	2	3	2	2	2	5	7	8	5	1	1	1	2	5	1	1.2	8.2
Dir	163	170	173	177	181	191	172	176	183	184	181	178	225	268	305	336	329	326	307	176	170	232	207	178	224	329
9 Spd	1	2	2	1	1	2	2	2	0	1	2	1	1	3	1	1	3	3	2	2	1	1	3	3	1.1	2.9
Dir	186	178	159	330	189	177	179	189	181	149	156	292	18	259	210	160	161	131	99	83	128	154	159	138	162	131
10 Spd	5	7	5	6	6	3	4	4	5	7	11	11	10	6	0	9	9	8	2	3	1	2	1	1	2.6	11.5
Dir	132	144	148	126	145	167	158	170	161	164	170	169	169	172	294	341	2	0	1	295	254	193	187	201	157	169
11 Spd	2	2	1	2	3	9	8	13	13	15	16	12	11	8	7	7	6	4	3	3	4	3	4	4	3.6	16.0
Dir	229	204	194	207	214	239	236	243	247	255	264	281	297	292	321	10	31	42	69	75	60	60	29	7	276	264
12 Spd	5	3	2	3	1	1	0	0	1	2	4	4	2	6	9	8	11	10	7	4	6	4	4	8	3.1	10.6
Dir	342	339	19	351	319	163	248	222	168	178	174	168	306	327	334	354	358	1	356	333	356	333	277	302	339	358
13 Spd	4	4	0	0	1	1	1	1	1	5	6	8	11	14	15	14	11	7	6	4	4	4	3	3	4.3	14.6
Dir	315	323	210	165	286	189	186	201	229	275	269	314	327	328	342	337	332	357	35	35	29	31	356	350	335	342
14 Spd	1	1	1	1	4	5	5	4	4	3	2	5	8	9	7	6	6	6	4	1	2	2	2	1	3.2	8.6
Dir	295	323	337	4	14	3	348	8	4	349	325	354	337	351	12	34	23	21	21	306	294	283	268	260	357	351
15 Spd	1	1	1	1	1	1	1	1	1	2	4	6	10	12	15	15	11	8	7	5	3	1	1	1	3.6	15.3
Dir	283	240	182	160	173	160	174	176	156	160	239	302	320	330	324	331	321	326	328	324	297	257	193	194	316	324
16 Spd	6	9	9	5	7	8	7	10	9	12	16	14	16	16	17	13	11	10	8	9	8	4	3	1	7.9	16.5
Dir	267	276	278	278	270	271	277	274	285	284	292	307	327	327	320	312	330	20	8	8	12	309	301	234	308	320
17 Spd	1	2	4	3	3	6	3	5	6	7	6	5	3	3	2	1	1	2	1	1	0	1	1	1	2.2	7.0
Dir	279	277	309	343	3	345	21	3	3	8	6	19	23	6	347	71	6	45	39	315	167	193	185	171	1	8
18 Spd	1	1	1	0	0	0	0	1	3	4	3	5	7	7	6	7	7	7	6	4	4	5	3	3	3.5	7.4
Dir	187	195	191	205	199	240	208	187	167	159	159	163	167	161	154	153	152	153	151	143	148	168	168	168	160	152
19 Spd	3	2	1	1	2	2	4	5	6	5	4	3	2	2	3	2	4	5	4	2	4	2	1	2	0.7	5.8
Dir	163	170	145	147	170	176	176	170	169	157	165	159	139	162	6	30	335	347	16	16	357	10	350	17	138	169
20 Spd	2	1	0	0	1	1	1	2	1	2	3	4	8	8	11	10	11	10	7	6	5	6	5	4	4.3	11.1
Dir	359	344	329	14	303	343	44	344	331	2	334	330	343	342	354	354	10	22	21	31	28	24	19	11	4	10
21 Spd	5	5	5	8	9	8	7	7	7	8	7	7	5	7	8	8	7	6	6	6	3	1	3	4	5.5	9.0
Dir	9	25	30	33	29	37	32	29	25	27	27	23	23	17	22	22	23	18	12	14	13	182	184	165	26	29
22 Spd	3	3	1	2	2	4	2	4	4	4	3	2	4	4	3	5	7	5	4	2	0	1	0	0	1.4	7.0
Dir	160	173	174	164	169	168	171	170	170	165	164	173	259	269	254	282	277	310	328	310	278	208	261	173	224	277

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2016

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	0	0	1	1	0	0	0	1	2	2	3	4	2	3	6	7	7	7	5	5	5	5	5	6	3.1	7.3
Dir	176	157	17	22	145	167	60	34	25	47	44	345	338	342	1	13	24	26	26	10	11	17	11	16	15	24
24 Spd	6	7	8	8	8	8	8	8	8	5	8	10	11	6	3	2	1	1	0	1	0	1	0	0	4.6	10.7
Dir	20	20	20	16	22	19	16	23	26	26	350	343	335	350	38	41	35	252	101	126	179	333	123	130	11	335
25 Spd	0	0	2	1	1	0	1	1	1	2	5	8	9	10	9	6	7	9	5	4	3	3	0	1	3.0	9.9
Dir	332	74	358	30	193	152	187	201	176	201	246	276	305	315	332	317	310	312	286	275	281	292	103	194	299	315
26 Spd	1	3	4	1	1	0	1	1	1	3	5	5	6	6	5	7	5	4	2	1	1	1	0	0	1.5	7.2
Dir	199	230	254	259	183	162	161	185	183	237	316	319	321	342	355	356	26	33	44	5	324	328	171	194	328	356
27 Spd	0	0	0	1	1	1	0	0	0	1	3	2	2	7	6	8	8	6	5	5	3	2	0	1	2.2	8.2
Dir	258	185	175	207	196	198	202	54	40	348	344	343	19	330	330	333	341	333	347	333	324	302	277	160	333	341
28 Spd	2	3	2	1	2	2	1	1	6	7	8	7	9	10	8	7	7	6	7	4	4	4	5	4	4.0	9.9
Dir	250	255	193	150	218	247	153	239	274	280	321	321	316	321	315	298	332	346	343	301	281	274	249	253	301	321
29 Spd	7	2	2	2	2	1	1	1	2	8	7	6	7	7	6	5	5	2	1	1	1	9	12	12	3.7	12.4
Dir	267	164	169	171	163	163	150	163	175	280	273	281	278	271	262	274	299	325	159	214	176	270	275	275	266	275
30 Spd	13	11	9	12	6	6	4	5	8	6	4	8	11	12	15	13	15	8	6	11	11	8	7	4	7.8	14.6
Dir	276	278	292	284	292	288	322	292	286	287	291	279	303	306	307	311	331	322	318	351	3	4	8	344	309	331
31 Spd	1	0	2	1	2	0	0	0	2	5	7	6	4	3	3	2	11	12	8	4	3	1	1	1	0.8	12.0
Dir	222	309	352	8	35	69	249	179	155	165	158	163	163	171	231	254	308	327	327	338	296	185	162	171	269	327
Spd	1.1	0.8	0.7	0.5	0.2	0.6	0.3	0.6	0.7	1.0	1.7	2.4	3.6	4.0	4.4	4.3	4.7	4.2	3.2	1.9	1.6	1.0	0.9	0.8	Diurnal Average	
Dir	282	280	314	342	339	295	333	299	276	278	289	306	321	326	331	340	343	355	357	359	359	328	287	295		
Spd	13.2	11.4	9.3	12.3	9.0	9.3	7.6	12.9	12.9	14.9	16.0	13.7	15.8	16.2	16.5	14.7	14.6	12.0	14.9	10.8	11.3	8.9	12.4	11.5	Diurnal Maximum	
Dir	276	278	278	284	29	239	236	243	247	255	292	307	327	327	320	331	331	327	343	170	3	270	275	275		

Maximum Speed Value: 17 km/h on Mar 16 15:00
Maximum Daily Speed Average: 7.9 km/h on Mar 16
Maximum Diurnal Speed Average: 4.7 km/h at hour 17

Minimum Speed Value: 0 km/h on Mar 27 08:00
Minimum Daily Speed Average: 0.7 km/h on Mar 9
Minimum Diurnal Speed Average: 0.2 km/h at hour 5

Monthly Average Velocity: 1.72 km/h 329.1 deg

Speed Percentiles: $P_1 = 0.1$ $P_{10} = 0.6$ $Q_1 = 1.5$ Median = 3.6 $Q_3 = 6.5$ $P_{90} = 9.0$ $P_{99} = 14.5$

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

Hours in Service: 744
Hours of Data: 744
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	95	80	5	0	0	0	180
NorthEast	46	31	0	0	0	0	77
East	19	0	0	0	0	0	19
SouthEast	27	16	0	0	0	0	43
South	149	24	4	0	0	0	177
SouthWest	31	2	2	0	0	0	35
West	45	35	10	0	0	0	90
NorthWest	58	47	18	0	0	0	123
Total	470	235	39	0	0	0	744

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Valleyview - March 2016

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - March 2016

Maximum Speed: 17 km/h on Mar 16 15:00

Maximum Daily Speed Average: 9.6 km/h on Mar 16

Minimum Speed: 0 km/h on Mar 27 08:00

Minimum Daily Speed Average: 2.1 km/h on Mar 9

Maximum Diurnal Speed Average: 7.3 km/h at hour 16

Minimum Diurnal Speed Average: 2.9 km/h at hour 5

Monthly Average Speed: 4.61 km/h

Percentiles: $P_1 = 0.2$ $P_{10} = 0.9$ $Q_1 = 1.9$ Median = 3.9 $Q_3 = 6.7$ $P_{90} = 9.0$ $P_{99} = 15.0$

Hours in Service:	744
Hours of Data:	744
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-Mar	2	2	3	3	3	2	1	0	1	1	1	3	4	2	2	3	4	5	4	5	5	5	5	4	3.1	5.5
2-Mar	4	5	4	1	2	2	3	5	5	5	7	7	9	8	8	7	8	9	7	5	4	4	3	2	5.1	9.4
3-Mar	2	3	4	4	4	5	4	4	5	6	7	8	6	7	6	4	5	5	5	2	1	1	1	0	4.2	8.2
4-Mar	0	1	3	5	6	7	6	6	7	8	10	9	10	9	9	12	11	11	12	11	10	7	5	3	7.4	11.9
5-Mar	2	2	1	3	2	1	1	2	1	1	2	2	8	6	7	10	9	11	15	4	5	4	2	2	4.3	15.2
6-Mar	2	4	6	5	4	6	6	7	2	5	5	4	5	8	9	8	3	2	2	4	3	3	5	7	4.8	9.3
7-Mar	5	2	5	4	3	6	4	5	4	5	5	3	2	3	2	2	3	2	3	4	1	1	1	1	3.1	5.6
8-Mar	3	4	4	3	3	2	2	2	2	2	3	2	3	3	6	7	8	5	1	1	1	3	6	1	3.2	8.3
9-Mar	2	2	3	1	1	2	2	2	0	1	3	3	1	3	2	3	3	3	2	2	2	2	3	3	2.1	3.3
10-Mar	5	7	6	6	6	3	4	4	5	7	11	12	10	6	3	9	9	9	4	4	2	2	1	1	5.7	11.6
11-Mar	2	2	1	2	3	10	8	13	13	15	16	13	11	8	8	7	6	4	3	3	4	3	4	4	6.8	16.3
12-Mar	5	3	2	3	1	1	1	1	1	2	4	4	4	6	9	8	11	10	7	4	6	5	4	8	4.7	10.7
13-Mar	5	4	1	1	1	1	1	1	1	5	6	8	11	14	15	14	11	7	6	4	4	4	3	3	5.4	14.7
14-Mar	1	1	2	1	4	5	5	4	4	3	2	5	8	9	7	6	6	7	4	2	2	2	2	1	3.8	9.0
15-Mar	1	2	1	1	1	1	1	1	1	2	4	7	10	13	15	15	11	8	7	5	3	2	1	1	4.8	15.4
16-Mar	6	9	9	5	7	8	7	10	9	12	16	14	16	16	17	13	12	10	8	9	8	4	3	1	9.6	16.8
17-Mar	2	2	4	3	3	6	3	5	6	7	6	5	3	4	2	2	2	2	1	1	1	1	1	2	3.1	7.1
18-Mar	1	1	1	0	0	0	0	1	3	4	3	5	7	7	6	7	8	7	6	4	4	5	3	3	3.7	7.6
19-Mar	3	2	2	1	2	2	4	5	6	5	4	3	2	2	3	3	4	5	4	2	4	2	1	2	3.1	5.9
20-Mar	2	2	1	1	1	1	1	2	1	2	3	4	8	8	11	10	11	11	7	6	5	6	6	4	4.8	11.3
21-Mar	5	5	5	8	9	8	7	7	7	8	7	7	6	7	8	8	7	6	7	6	3	1	3	4	6.2	9.2
22-Mar	3	3	1	2	2	4	2	4	4	4	4	2	4	4	4	5	7	5	4	2	0	1	0	0	2.9	7.2
23-Mar	0	0	1	1	0	0	0	1	2	2	3	5	2	4	6	7	7	7	5	5	5	5	5	6	3.4	7.5
24-Mar	7	7	8	9	8	8	8	8	8	6	8	10	11	7	4	3	1	1	1	1	1	1	1	0	5.2	10.8
25-Mar	0	1	2	1	1	0	1	1	1	3	5	9	10	10	9	6	8	9	6	4	4	3	1	1	3.9	10.1
26-Mar	3	4	4	2	1	0	1	1	1	3	5	5	7	6	5	8	5	4	2	1	1	1	1	1	3.0	7.9
27-Mar	0	0	0	1	1	1	0	0	0	1	3	2	3	7	7	8	8	6	5	5	3	2	1	1	2.8	8.3
28-Mar	3	4	2	2	2	3	2	2	6	7	8	8	9	10	9	8	7	7	7	4	4	4	5	5	5.2	10.3
29-Mar	7	2	2	2	2	2	1	1	2	9	8	6	8	8	7	6	5	2	1	1	1	9	13	12	4.9	12.5
30-Mar	13	11	9	12	6	7	4	5	8	6	4	8	11	12	15	13	15	8	6	11	11	8	7	4	9.0	14.8
31-Mar	1	1	2	2	2	0	0	0	2	5	7	6	4	4	5	5	11	12	8	4	4	1	1	1	3.8	12.3
	3.2	3.2	3.1	3.0	2.9	3.3	3.0	3.5	3.8	5.0	5.8	6.1	6.9	7.2	7.3	7.3	7.3	6.4	5.2	4.1	3.6	3.3	3.2	2.9	Diurnal Average	
	13.3	11.5	9.4	12.4	9.2	9.5	7.9	13.0	13.1	15.2	16.3	14.0	16.0	16.4	16.8	14.8	14.8	12.3	15.2	11.4	11.3	9.1	12.5	11.6	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

Valleyview - March 2016

Maximum Value: 95.9 deg on Mar 27 23:00

Minimum Value: 4.2 deg on Mar 1 03:00

Percentiles: P_1 = 5.6 P_{10} = 8.3 Q_1 = 10.9 Median = 16.0 Q_3 = 32.1 P_{90} = 62.5 P_{99} = 86.8

Hours in Service:	744
Hours of Data:	744
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-Mar	7	7	4	5	9	5	54	77	41	69	55	79	15	33	35	33	27	24	10	6	13	7	8	13	79.2
2-Mar	10	10	37	65	74	45	32	13	12	11	10	11	8	9	10	11	11	8	6	10	13	11	19	18	74.0
3-Mar	14	10	15	11	11	10	12	12	14	12	12	10	17	19	17	19	16	15	10	13	54	20	40	61	61.3
4-Mar	77	17	16	14	14	13	13	12	10	9	8	9	10	9	9	8	9	7	6	6	6	7	7	7	77.2
5-Mar	11	56	65	76	56	83	93	63	93	85	85	71	12	23	14	9	8	11	12	69	18	28	33	82	92.6
6-Mar	48	19	9	8	19	11	14	12	33	16	22	30	29	12	13	12	20	23	78	15	19	12	19	16	78.3
7-Mar	19	34	15	21	13	16	12	13	15	19	9	40	22	38	52	25	45	53	58	14	51	58	72	73	72.9
8-Mar	14	9	10	11	13	13	15	12	20	13	12	22	34	47	21	14	11	14	44	38	25	71	35	30	71.0
9-Mar	18	32	17	76	18	8	8	31	83	33	18	70	32	43	74	89	38	16	28	19	72	81	16	15	89.1
10-Mar	10	14	16	7	12	23	19	11	11	9	7	6	9	11	85	7	14	13	70	41	79	14	19	21	84.6
11-Mar	14	19	11	8	19	15	18	9	9	13	12	16	14	21	23	20	13	28	21	20	10	17	21	32	31.7
12-Mar	12	10	24	25	69	54	58	37	16	15	14	23	63	9	8	10	8	5	6	25	17	36	46	13	68.7
13-Mar	16	39	64	69	26	30	16	14	31	20	21	10	11	7	5	6	6	19	8	7	12	16	19	28	68.8
14-Mar	57	52	34	73	8	15	8	22	15	16	17	25	12	19	22	15	15	14	13	30	16	12	13	49	72.5
15-Mar	41	51	37	14	14	12	18	14	18	35	18	21	13	9	7	7	9	6	6	7	10	36	13	15	50.7
16-Mar	17	7	8	9	8	7	8	6	9	11	11	12	8	9	10	11	17	12	10	10	13	23	17	48	48.4
17-Mar	36	41	15	23	15	15	19	13	11	11	13	21	30	36	58	75	79	26	25	58	50	28	28	47	79.1
18-Mar	30	17	51	37	93	61	19	18	11	12	13	10	14	14	20	16	13	14	10	7	11	7	11	10	93.1
19-Mar	10	11	38	21	12	9	9	7	7	12	14	36	60	55	33	32	8	13	8	8	12	47	27	18	60.1
20-Mar	25	21	66	80	82	89	74	12	29	22	11	11	12	14	9	12	11	9	8	10	12	9	73	44	89.5
21-Mar	8	9	8	11	12	10	9	9	11	9	11	10	12	10	10	10	12	11	9	9	27	92	13	12	92.3
22-Mar	9	9	13	23	17	8	17	9	10	10	10	21	26	32	34	18	13	11	16	16	53	16	93	78	93.1
23-Mar	76	80	77	58	51	59	72	32	27	47	25	21	19	54	22	12	12	10	14	11	7	11	10	12	79.6
24-Mar	12	11	9	10	9	12	12	9	9	14	12	9	6	20	24	34	54	59	65	18	56	58	88	81	87.7
25-Mar	65	85	44	85	26	58	22	28	12	40	23	24	22	11	15	20	16	10	11	16	29	34	81	19	85.4
26-Mar	73	13	23	83	16	63	26	29	11	29	17	33	30	34	20	24	18	16	21	43	79	81	74	56	83.5
27-Mar	46	69	50	28	15	10	87	72	72	44	13	35	58	19	11	10	8	9	10	14	22	80	96	35	95.9
28-Mar	42	36	20	51	52	50	61	41	22	19	13	17	13	15	17	23	17	8	7	17	13	11	8	31	61.0
29-Mar	15	16	14	5	14	38	30	13	28	21	18	20	25	27	27	25	21	47	29	36	26	31	7	7	46.9
30-Mar	7	7	12	8	16	18	34	17	11	13	18	12	12	11	9	12	7	12	8	23	6	8	9	21	34.1
31-Mar	39	68	40	21	11	63	58	48	14	10	15	12	22	55	55	67	16	13	9	20	25	23	18	19	68.0
	77.2	85.2	76.9	85.4	93.1	89.5	92.6	77.0	92.5	85.4	84.5	79.2	63.0	55.2	84.6	89.1	79.1	58.6	78.3	69.2	79.2	92.3	95.9	81.7	

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Rycroft - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppb on Mar 9 13:00 Maximum Daily Average: 0.9 ppb on Mar 9

Minimum Value: 0 ppb on Mar 5 16:00 Minimum Daily Average: 0.1 ppb on Mar 14
Maximum Diurnal Average: 0.5 ppb at hour 13 Minimum Diurnal Average: 0.2 ppb at hour 20
Monthly Average: 0.34 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.5$ $P_{90} = 0.7$ $P_{99} = 1.6$

Hours in Service:	710
Hours of Data:	676
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	1	1	1	1	1	1	1	1	1	1	--	0.7
3-Mar	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
4-Mar	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
5-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
6-Mar	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	0.5
7-Mar	0	0	0	0	0	0	A	0	1	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0.5	1.3
8-Mar	2	2	1	1	1	A	1	0	0	1	1	1	0	1	1	1	1	0	0	0	0	0	1	0	0.7	2.5
9-Mar	0	1	1	1	A	0	0	1	1	1	1	1	3	3	1	1	1	0	0	1	1	0	0	0	0.9	3.2
10-Mar	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	0.7
11-Mar	1	0	A	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.1
12-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.2	0.8
13-Mar	A	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0.3	0.9
14-Mar	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.6
15-Mar	0	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	1	A	1	1	0.4	1.6
16-Mar	1	1	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.8
17-Mar	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0.2	0.9
18-Mar	0	0	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0.3	1.1
19-Mar	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
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.5
21-Mar	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Mar	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
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Mar	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	1	0	0	0	0	0	0	1	2	0.4	1.7
26-Mar	2	1	2	2	2	1	1	1	1	2	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0.9	1.6
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.3	0.7
28-Mar	0	0	0	0	0	0	0	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.3	0.8
29-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0.8	1.3
30-Mar	0	0	0	0	0	0	A	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.1
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.5
	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.4	Diurnal Average	
	2.5	1.7	1.6	1.6	1.6	1.0	2.1	1.0	0.9	1.5	1.6	1.1	3.2	2.6	1.5	1.1	1.0	0.7	0.7	0.8	1.0	0.7	0.8	1.7	Diurnal Maximum	

C - Calibration NS - Not in service 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 Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Rycroft - March 2016

Maximum Value: 14.1 ppb on Mar 17 13:00

Maximum Daily Average: 1.9 ppb on Mar 9

Minimum Value: 0 ppb on Mar 6 03:00

Minimum Daily Average: 0.7 ppb on Mar 5

Maximum Diurnal Average: 2.1 ppb at hour 13

Minimum Diurnal Average: 0.8 ppb at hour 20

Monthly Average: 1.10 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 1.2$ $P_{90} = 1.6$ $P_{99} = 4.4$

Hours in Service:	710
Hours of Data:	676
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	1	1	1	1	1	1	1	1	1	1	--	1.5
3-Mar	2	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	1.5
4-Mar	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	0.9
5-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	1	1	0	0	1	1	0.7	1.3
6-Mar	1	0	0	1	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
7-Mar	1	1	2	3	1	1	A	1	1	1	1	7	2	1	1	1	1	1	1	1	2	1	1	2	1.6	7.0
8-Mar	3	3	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.2
9-Mar	1	2	2	2	A	1	1	1	2	2	2	3	5	4	4	1	2	1	1	2	1	1	1	1	1.9	4.6
10-Mar	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
11-Mar	2	1	A	1	1	1	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	12.3
12-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
13-Mar	A	1	1	1	1	1	1	1	1	2	1	1	2	3	1	1	1	1	1	1	1	1	1	A	1.0	3.1
14-Mar	0	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	4	0	1	1	0	0	A	0	0.8	3.7
15-Mar	1	0	1	0	0	0	1	1	1	2	2	2	2	1	1	1	1	1	1	1	2	A	1	1	1.0	2.4
16-Mar	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	0	A	1	0	3	1.0	2.5
17-Mar	3	1	1	1	1	1	2	1	1	1	1	1	14	1	1	1	1	1	1	A	1	1	1	1	1.4	14.1
18-Mar	1	1	1	1	1	1	1	2	1	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1.0	2.2
19-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.2
20-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.2
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.2
22-Mar	1	1	1	1	1	1	1	1	0	1	5	3	3	1	A	1	1	1	1	1	1	1	1	1	1.0	4.5
23-Mar	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	0.9
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
25-Mar	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	2	4	1.2	4.2
26-Mar	4	2	3	2	2	2	2	2	2	2	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1.6	4.2
27-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.6
28-Mar	1	1	1	1	1	1	1	2	A	2	1	1	2	1	1	1	8	1	1	1	2	1	1	2	1.4	7.5
29-Mar	2	2	1	2	1	2	1	A	1	2	2	2	2	2	2	2	5	1	1	2	1	1	1	1	1.6	4.9
30-Mar	1	1	1	1	1	1	A	1	1	1	3	1	9	13	2	1	1	1	1	1	1	1	1	1	1.8	12.6
31-Mar	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	1.1
	1.1	1.0	1.1	1.0	0.9	0.9	1.4	1.0	1.1	1.2	1.3	1.3	2.1	1.6	1.1	0.9	1.4	0.8	0.8	0.8	0.9	0.8	0.9	1.1	Diurnal Average	
	4.2	2.8	2.7	3.0	2.2	1.9	12.3	2.2	2.0	2.2	4.5	7.0	14.1	12.6	4.3	1.8	7.5	1.4	1.3	1.8	2.0	1.4	1.7	4.2	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Rycroft - March 2016

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable Rycroft - March 2016

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Rycroft - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Mar 17 16:00 Maximum Daily Average: 0.5 ppb on Mar 8

Minimum Value: 0 ppb on Mar 3 18:00 Minimum Daily Average: 0.1 ppb on Mar 18
Maximum Diurnal Average: 0.3 ppb at hour 19 Minimum Diurnal Average: 0.2 ppb at hour 7
Monthly Average: 0.28 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.4$ $P_{99} = 0.6$

Hours in Service:	682
Hours of Data:	650
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	0	0	0	0	0	0	0	--	0.0
4-Mar	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
5-Mar	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
6-Mar	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
7-Mar	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.4	0.5
8-Mar	1	1	1	1	0	A	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.6
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.4	0.5
10-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
13-Mar	A	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	0	0	A	0.4	0.6
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
15-Mar	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
16-Mar	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
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0.3	0.7
18-Mar	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
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	1	0	0	0.3	0.5
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
21-Mar	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
22-Mar	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
23-Mar	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
24-Mar	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
25-Mar	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
26-Mar	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
27-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
28-Mar	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
29-Mar	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	0.4
30-Mar	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
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.6
	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	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.5	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	Diurnal Maximum	

C - Calibration NS - Not in service 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 Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Rycroft - March 2016

Maximum Value: 17.7 ppb on Mar 17 16:00

Maximum Daily Average: 2.0 ppb on Mar 17

Minimum Value: 0 ppb on Mar 3 20:00

Minimum Daily Average: 0.6 ppb on Mar 18

Maximum Diurnal Average: 1.4 ppb at hour 16

Minimum Diurnal Average: 0.7 ppb at hour 4

Monthly Average: 0.82 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 0.9$ $P_{90} = 1.0$ $P_{99} = 1.4$

Hours in Service:	682
Hours of Data:	650
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	0	0	0	1	0	0	0	--	0.6
4-Mar	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
5-Mar	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
6-Mar	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	1.0
7-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
8-Mar	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	1.4
9-Mar	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	1.1
10-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
11-Mar	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	0.9
12-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0.8	1.8
13-Mar	A	1	1	1	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	3.9
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	0.8	1.8
15-Mar	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	1.1
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	10	1	1	A	1	1	1	1	2.0	17.7
18-Mar	1	1	1	0	1	0	0	1	0	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.0
19-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.3
20-Mar	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
21-Mar	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.8
22-Mar	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
23-Mar	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
24-Mar	1	1	1	1	0	1	1	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
25-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
26-Mar	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
27-Mar	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	0.9
28-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
29-Mar	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	1.0
30-Mar	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	1.2
31-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.7	0.8	0.8	0.8	1.4	1.1	0.8	0.9	0.8	0.8	0.8	0.8	0.8	Diurnal Average	
	1.0	1.2	1.0	1.2	1.1	1.2	1.0	1.1	1.0	1.3	3.9	0.9	1.1	1.2	1.2	17.7	10.5	1.0	1.8	1.4	1.0	1.5	1.1	1.3	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Rycroft - March 2016

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable Rycroft - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Rycroft - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.9 ppb on Mar 10 02:00
Maximum Daily Average: 5.7 ppb on Mar 8

Minimum Value: 0 ppb on Mar 2 17:00
Maximum Diurnal Average: 2.4 ppb at hour 10
Monthly Average: 1.81 ppb

Minimum Daily Average: 1.0 ppb on Mar 6
Minimum Diurnal Average: 1.3 ppb at hour 17
Percentiles: $P_1 = 0.4$ $P_{10} = 0.7$ $Q_1 = 1.0$ Median = 1.4 $Q_3 = 2.2$ $P_{90} = 3.2$ $P_{99} = 8.7$

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	1	0	0	0	0	0	0	0	1	--	0.8
3-Mar	1	1	1	1	1	1	1	1	1	2	A	3	2	2	2	2	2	2	3	2	1	2	2	1	1.4	2.5
4-Mar	3	2	1	2	2	2	1	1	1	A	2	1	1	1	1	1	1	2	3	3	5	5	4	4	2.2	5.0
5-Mar	3	4	4	4	3	3	3	3	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.8	3.6
6-Mar	1	1	1	0	0	0	1	A	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1.0	1.8
7-Mar	2	2	3	3	3	3	A	7	5	4	3	2	2	2	1	2	2	2	3	3	3	3	3	5	3.0	7.3
8-Mar	6	6	7	8	8	A	10	9	7	8	6	3	3	3	3	4	4	4	4	4	9	9	3	3	5.7	10.1
9-Mar	3	2	2	2	A	2	2	2	2	2	4	4	1	1	1	1	1	1	1	1	1	3	2	3	1.8	4.0
10-Mar	10	11	7	A	2	1	1	2	4	4	3	3	3	2	2	2	3	4	4	4	3	3	2	3	3.6	10.9
11-Mar	3	1	A	1	1	1	1	1	1	1	0	0	1	1	2	1	1	2	1	1	2	1	1	1	1.1	2.8
12-Mar	1	A	1	2	3	2	10	3	2	4	2	1	1	1	1	1	1	1	2	2	3	2	2	2	2.2	9.5
13-Mar	A	2	2	1	1	2	2	2	2	4	4	2	2	1	1	1	1	1	1	2	2	1	2	A	1.8	3.8
14-Mar	4	3	2	2	1	1	1	2	3	3	2	2	2	1	1	1	2	1	1	1	1	1	A	1	1.6	3.6
15-Mar	1	1	1	1	1	2	2	2	3	3	3	3	2	2	2	2	1	1	1	1	2	A	2	2	1.9	3.4
16-Mar	2	2	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1.2	2.1
17-Mar	3	2	1	1	1	1	2	1	1	1	1	0	1	0	0	1	0	1	1	A	2	1	1	2	1.1	3.1
18-Mar	1	1	2	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	A	2	2	2	5	6	1.7	5.6
19-Mar	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	A	3	3	3	3	3	3	2.0	3.5
20-Mar	3	2	3	2	2	2	2	3	3	2	2	2	2	2	2	2	A	3	2	2	1	1	1	1	2.0	2.9
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1.1	1.5
22-Mar	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	2	2	1	2	2	2	1.3	2.5
23-Mar	3	2	2	2	2	2	2	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.5	2.7
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	4	3	2	2	1.4	4.2
25-Mar	2	2	2	2	3	3	3	2	2	3	2	A	2	3	2	2	2	1	1	2	2	1	1	2	1.9	2.9
26-Mar	1	1	1	2	2	1	1	1	1	1	A	2	1	1	1	1	0	1	1	1	1	1	1	1	1.0	2.1
27-Mar	1	1	1	1	1	1	1	1	2	A	2	2	2	2	1	1	1	2	2	2	2	2	2	2	1.5	2.4
28-Mar	1	1	2	2	2	2	1	3	A	4	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1.6	4.3
29-Mar	1	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	2	6	1	2	2	1	1	1	1.5	6.0
30-Mar	1	3	3	1	2	3	A	4	3	6	2	2	2	1	0	1	1	1	1	1	1	1	1	1	1.7	6.3
31-Mar	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	5	3	3	3	2	2	1.4	5.1
	2.3	2.2	1.9	1.7	1.8	1.5	2.1	2.3	2.1	2.4	1.9	1.6	1.4	1.3	1.3	1.3	1.3	1.5	1.8	1.8	2.2	2.0	1.8	2.0	Diurnal Average	
	9.9	10.9	6.6	8.3	8.2	2.9	10.1	9.0	6.8	8.1	6.3	3.6	2.8	2.9	3.1	3.6	4.0	6.0	5.1	4.4	8.9	8.7	4.7	5.6	Diurnal Maximum	

C - Calibration NS - Not in service 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 Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Rycroft - March 2016

Maximum Value: 46.6 ppb on Mar 12 07:00

Maximum Daily Average: 10.3 ppb on Mar 8

Minimum Value: 0 ppb on Mar 2 18:00

Minimum Daily Average: 1.6 ppb on Mar 26

Maximum Diurnal Average: 4.8 ppb at hour 10

Minimum Diurnal Average: 2.0 ppb at hour 15

Monthly Average: 3.26 ppb

Percentiles: P_1 = 0.8 P_{10} = 1.2 Q_1 = 1.5 Median = 2.2 Q_3 = 3.4 P_{90} = 5.6 P_{99} = 20.4

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	4	0	0	1	2	1	1	2	1	--	4.0
3-Mar	1	1	3	2	2	1	2	3	2	3	A	3	3	3	2	4	2	5	6	3	2	2	3	2	2.6	6.0
4-Mar	5	2	2	2	2	2	2	2	2	A	2	3	2	2	2	3	2	4	4	10	7	6	6	5	3.4	10.1
5-Mar	4	4	6	6	5	3	4	3	A	5	3	2	2	2	1	1	1	2	1	1	1	1	1	1	2.7	5.7
6-Mar	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	2	2	3	3	4	4	2	2	3	1.7	4.4
7-Mar	4	3	10	6	5	5	A	16	9	6	5	3	2	2	2	3	3	4	3	3	3	4	4	6	4.8	16.0
8-Mar	7	7	7	23	14	A	12	25	17	13	15	4	4	4	3	5	9	6	5	19	16	12	4	6	10.3	25.0
9-Mar	3	3	2	2	A	3	2	2	2	3	26	10	1	3	1	6	1	2	1	1	1	11	4	8	4.4	25.8
10-Mar	21	16	12	A	3	2	2	3	6	5	4	5	4	3	2	3	4	5	7	5	3	4	3	4	5.4	20.9
11-Mar	4	2	A	2	1	1	2	2	4	1	1	1	1	2	9	2	1	9	3	2	2	2	1	2	2.4	9.0
12-Mar	2	A	2	14	7	3	47	8	4	5	3	1	1	1	1	1	2	1	6	3	6	2	5	3	5.7	46.6
13-Mar	A	3	2	2	2	2	2	2	3	18	6	3	3	2	2	1	1	2	2	8	3	2	4	A	3.5	17.6
14-Mar	4	3	2	2	2	1	1	5	4	4	3	2	2	2	2	2	3	4	2	2	1	1	A	2	2.4	4.6
15-Mar	1	1	1	1	2	2	2	3	4	6	4	4	3	3	2	2	2	2	4	3	4	A	3	3	2.7	5.7
16-Mar	3	3	2	1	1	1	1	2	2	3	2	2	1	2	1	1	1	1	1	1	A	2	2	6	1.9	5.5
17-Mar	5	3	2	1	2	2	11	4	2	2	1	1	2	1	1	1	1	5	4	A	4	2	2	2	2.7	10.9
18-Mar	2	2	3	1	2	2	2	2	3	1	1	2	2	2	1	1	1	1	A	3	3	4	35	11	3.8	34.8
19-Mar	8	3	2	2	2	2	3	2	1	1	2	3	2	2	2	3	3	A	4	4	4	3	4	4	2.8	7.7
20-Mar	4	3	4	3	3	3	3	3	3	3	2	2	2	2	3	3	A	4	3	2	2	1	1	1	2.6	4.3
21-Mar	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	A	2	2	3	2	2	4	1	1	1.8	4.2
22-Mar	2	1	1	1	2	2	2	3	1	2	1	1	1	1	A	2	1	2	3	2	4	5	3	3	2.1	4.7
23-Mar	3	2	2	3	3	2	3	2	3	1	1	1	1	A	2	1	1	1	1	2	2	1	1	1	1.9	3.3
24-Mar	1	1	1	1	3	2	2	2	3	3	2	1	A	2	1	2	2	2	2	5	7	6	2	2	2.5	7.5
25-Mar	2	3	2	2	4	5	3	2	2	8	3	A	3	4	2	2	2	2	2	3	2	1	2	2	2.8	7.8
26-Mar	1	1	1	3	2	2	2	2	1	1	A	3	2	1	1	1	1	2	1	4	1	1	3	1	1.6	3.7
27-Mar	2	1	2	1	1	1	1	1	7	A	3	2	2	4	3	2	2	3	15	3	2	2	2	4	2.8	14.6
28-Mar	2	2	3	3	2	4	2	10	A	11	2	1	1	1	2	1	2	1	5	2	4	4	2	2	3.0	11.4
29-Mar	2	2	2	1	1	1	2	A	3	2	10	2	1	4	1	1	7	25	3	5	4	1	2	2	3.6	25.0
30-Mar	2	9	10	2	3	9	A	14	9	19	3	4	4	2	1	1	2	1	3	1	3	1	1	2	4.6	18.5
31-Mar	1	1	1	1	2	A	2	1	1	1	1	1	1	1	1	1	1	5	18	5	5	5	2	2	2.7	17.9
	3.5	3.1	3.3	3.2	2.8	2.4	4.4	4.7	3.8	4.8	4.1	2.5	2.1	2.1	2.0	2.2	2.2	3.6	4.0	3.8	3.6	3.3	3.7	3.2	Diurnal Average	
	20.9	16.4	12.4	23.0	13.5	9.3	46.6	25.0	16.5	18.5	25.8	10.2	4.2	4.1	8.8	6.2	9.4	25.0	17.9	19.2	16.2	11.7	34.8	11.4	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Rycroft - March 2016

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable Rycroft - March 2016

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Rycroft - March 2016

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

Maximum Value: 11.0 ppb on Mar 8 10:00

Maximum Daily Average: 2.3 ppb on Mar 8

Minimum Value: 0 ppb on Mar 5 02:00

Minimum Daily Average: 0.1 ppb on Mar 31

Maximum Diurnal Average: 1.3 ppb at hour 10

Minimum Diurnal Average: 0.0 ppb at hour 6

Monthly Average: 0.33 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 0.8$ $P_{99} = 3.8$

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	0.3
3-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Mar	0	0	0	0	0	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.6
5-Mar	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
6-Mar	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	0.4
7-Mar	0	0	0	0	0	0	A	0	2	3	3	2	2	1	1	2	1	1	0	0	0	0	0	0	0.8	2.7
8-Mar	0	0	0	1	0	A	0	3	5	11	10	4	4	3	3	3	3	1	0	0	0	0	0	0	2.3	11.0
9-Mar	0	0	0	0	A	0	0	0	0	1	5	4	0	0	0	1	0	0	0	0	0	0	0	0	0.6	5.3
10-Mar	0	0	0	A	0	0	0	0	1	2	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0.6	1.6
11-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	1.2
12-Mar	0	A	0	0	0	0	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2
13-Mar	A	0	0	0	0	0	0	0	0	2	3	2	1	1	1	0	0	0	0	0	0	0	0	A	0.5	2.9
14-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.3	1.2
15-Mar	0	0	0	0	0	0	0	0	1	2	2	2	2	1	1	1	0	0	0	0	0	A	0	0	0.5	2.5
16-Mar	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	0.5
17-Mar	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
18-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	2	0	0.2	1.7
19-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0.3	0.9
20-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	A	0	0	0	0	0	0	0	0.3	1.0
21-Mar	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
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.4
24-Mar	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
25-Mar	0	0	0	0	0	0	0	0	1	2	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0.4	2.5
26-Mar	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
27-Mar	0	0	0	0	0	0	0	0	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.2
28-Mar	0	0	0	0	0	0	0	0	A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
29-Mar	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0.2	1.5
30-Mar	0	0	0	0	0	0	A	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.9
31-Mar	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	0.5
	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.6	1.3	1.3	0.9	0.7	0.6	0.5	0.4	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.0	Diurnal Average	
	0.2	0.2	0.3	0.9	0.1	0.1	1.7	2.5	5.4	11.0	10.3	4.0	3.8	3.4	3.3	3.0	2.6	1.5	0.5	0.3	0.3	0.2	1.7	0.1	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Rycroft - March 2016

Maximum Value: 55.1 ppb on Mar 9 11:00

Maximum Daily Average: 7.4 ppb on Mar 8

Minimum Value: 0 ppb on Mar 16 04:00

Minimum Daily Average: 0.3 ppb on Mar 23

Maximum Diurnal Average: 5.0 ppb at hour 11

Minimum Diurnal Average: 0.2 ppb at hour 6

Monthly Average: 1.14 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 2.0$ $P_{99} = 19.9$

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	0.5
3-Mar	0	0	0	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.0
4-Mar	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	2	1	1	0	4	0	0	0	0	0.7	4.2
5-Mar	0	0	0	0	0	0	0	0	A	2	3	1	1	1	1	0	0	1	0	0	0	1	0	0	0.6	3.1
6-Mar	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0.3	0.6
7-Mar	0	0	3	1	0	0	A	1	4	4	4	3	2	2	2	3	2	4	1	0	0	0	0	0	1.6	4.0
8-Mar	0	0	0	16	0	A	0	32	20	24	35	5	6	5	4	4	9	3	1	1	3	0	0	0	7.4	34.6
9-Mar	0	0	0	0	A	0	0	0	1	3	55	14	1	2	1	14	0	0	0	0	0	1	0	0	4.1	55.1
10-Mar	2	2	0	A	0	0	0	0	2	2	3	2	2	2	1	2	1	1	1	0	0	0	0	0	1.1	2.8
11-Mar	0	0	A	0	0	0	0	0	0	0	0	1	1	1	7	1	0	3	0	0	0	0	0	0	0.8	6.5
12-Mar	0	A	0	2	0	0	17	0	3	5	2	1	1	1	1	0	1	0	1	0	5	0	0	0	1.7	16.5
13-Mar	A	0	0	0	0	0	0	0	1	13	6	2	2	1	2	1	1	0	0	1	0	0	0	A	1.5	13.5
14-Mar	0	0	0	0	0	0	0	1	1	2	2	1	1	1	1	1	1	1	0	0	0	0	A	0	0.6	1.6
15-Mar	0	0	0	0	0	0	0	0	1	21	3	3	2	2	1	1	1	0	0	0	0	A	0	0	1.6	21.0
16-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0.3	1.2
17-Mar	0	0	0	0	0	0	2	0	0	1	1	0	1	0	1	1	0	1	1	A	0	0	0	0	0.5	2.3
18-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	A	0	0	0	32	1	1.8	32.2
19-Mar	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	1	A	0	0	0	0	0	0	0.6	1.9
20-Mar	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	1	A	0	0	0	0	0	0	0	0.5	1.7
21-Mar	0	0	0	0	0	0	0	3	0	1	1	1	1	1	1	A	0	1	0	0	0	0	0	0	0.5	3.2
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	0	1	0	0	1	0	0	0	0.3	0.9
23-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	0	0	0	0	0	0	0	0	0	0.3	0.7
24-Mar	0	0	0	0	0	0	1	0	1	2	1	1	A	1	0	1	1	0	0	0	0	0	0	0	0.5	2.0
25-Mar	0	0	0	0	0	0	0	0	1	11	2	A	2	3	1	1	0	0	0	0	0	0	0	0	1.2	11.4
26-Mar	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	1	1	0	1	0	0	0	0	0.4	1.4
27-Mar	0	0	0	0	0	0	0	0	5	A	2	1	1	2	1	1	1	0	3	0	0	0	0	0	0.8	4.9
28-Mar	0	0	0	0	0	0	0	3	A	8	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.7	8.2
29-Mar	0	0	0	0	0	0	0	A	0	1	9	0	0	1	0	0	2	9	1	0	0	0	0	0	1.1	9.2
30-Mar	0	1	1	0	0	1	A	2	3	8	1	2	2	1	0	0	1	0	0	0	0	0	0	0	1.0	8.0
31-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0.4	3.5
	0.3	0.3	0.3	0.8	0.2	0.2	0.9	1.8	1.8	4.2	5.0	1.8	1.3	1.2	1.1	1.3	1.0	1.1	0.6	0.4	0.5	0.3	1.3	0.2	Diurnal Average	
	1.7	2.1	2.7	15.9	0.4	0.8	16.5	32.2	20.1	23.5	55.1	13.7	6.0	4.6	6.5	13.9	9.2	8.7	3.5	4.2	5.1	0.9	32.2	0.8	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Rycroft - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 19.3 ppb on Mar 8 10:00
Maximum Daily Average: 8.1 ppb on Mar 8

Minimum Value: 0 ppb on Mar 2 18:00
Maximum Diurnal Average: 3.7 ppb at hour 10
Monthly Average: 2.10 ppb

Minimum Daily Average: 1.1 ppb on Mar 6
Minimum Diurnal Average: 1.5 ppb at hour 6
Percentiles: $P_1 = 0.0$ $P_{10} = 0.7$ $Q_1 = 1.0$ Median = 1.5 $Q_3 = 2.5$ $P_{90} = 3.7$ $P_{99} = 10.0$

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	1	0	0	0	0	0	0	0	0	--	1.0
3-Mar	0	0	1	0	0	0	0	0	0	1	A	3	3	2	2	2	2	2	3	2	1	2	2	1	1.2	2.9
4-Mar	3	2	1	2	2	2	1	1	1	A	2	2	2	2	2	2	2	2	3	4	5	5	4	4	2.4	5.1
5-Mar	3	4	4	4	3	3	3	3	A	4	3	2	2	2	1	1	1	1	1	1	1	1	1	1	2.0	4.2
6-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1.1	1.8
7-Mar	2	2	3	3	3	3	A	8	7	6	6	5	3	3	3	4	3	3	3	3	3	3	3	5	3.8	7.6
8-Mar	6	7	7	9	8	A	10	12	12	19	17	7	7	6	6	7	7	5	5	5	9	9	4	3	8.1	19.3
9-Mar	3	2	2	2	A	2	2	2	2	3	9	8	1	1	1	1	1	1	1	1	1	3	3	3	2.4	9.4
10-Mar	10	11	7	A	2	1	1	2	5	5	4	5	4	4	3	3	4	4	4	4	3	3	3	3	4.1	11.2
11-Mar	3	1	A	1	1	1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	2	1	1	1	1.2	2.9
12-Mar	1	A	1	3	3	2	11	3	3	6	2	2	1	1	1	1	1	1	2	2	3	2	2	2	2.5	11.3
13-Mar	A	2	2	2	1	2	2	2	2	5	7	3	3	2	2	1	1	1	2	2	2	1	2	A	2.3	6.7
14-Mar	4	3	2	2	1	1	1	2	3	4	3	3	2	2	2	2	2	1	1	1	1	1	A	1	1.9	4.0
15-Mar	1	1	1	1	1	2	2	2	4	6	6	5	4	3	2	2	1	1	1	1	3	A	2	2	2.4	5.9
16-Mar	2	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1.3	2.2
17-Mar	3	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	1	1	A	2	1	1	1	1.1	3.0
18-Mar	1	1	2	1	1	1	1	1	1	1	1	2	3	2	1	1	1	1	A	2	2	2	6	6	1.9	6.4
19-Mar	3	2	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	A	3	3	4	3	3	4	2.3	3.5
20-Mar	3	2	3	2	2	2	2	3	3	3	3	3	2	2	2	3	A	3	3	2	1	1	1	1	2.3	3.0
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1.1	1.8
22-Mar	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	2	1	1	2	2	1	2	2	2	1.4	2.4
23-Mar	3	2	2	2	2	2	2	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.5	2.6
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	2	2	2	2	4	3	2	2	1.5	4.4
25-Mar	2	2	2	2	3	3	3	2	3	5	3	A	3	4	3	2	2	2	1	2	2	1	1	2	2.3	5.2
26-Mar	1	1	1	2	2	1	1	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1.1	2.6
27-Mar	1	1	1	1	1	1	1	1	4	A	3	2	2	3	2	2	1	2	3	2	2	2	2	2	1.7	3.6
28-Mar	1	1	2	2	2	2	2	4	A	6	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1.7	6.4
29-Mar	1	1	1	1	1	1	1	A	2	2	3	2	1	1	1	1	2	8	1	1	1	1	1	1	1.7	7.6
30-Mar	1	3	3	1	2	3	A	4	4	8	2	2	2	1	0	1	1	1	1	0	1	1	1	1	1.9	8.3
31-Mar	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	6	3	3	3	2	2	1.4	5.6
	2.3	2.2	1.9	1.7	1.8	1.5	2.1	2.4	2.6	3.7	3.2	2.5	2.1	1.9	1.8	1.7	1.6	1.8	1.9	1.9	2.2	2.0	1.8	2.0	Diurnal Average	
	10.3	11.2	6.7	9.3	8.4	2.9	11.3	11.7	12.2	19.3	16.7	7.7	6.6	6.3	6.3	6.7	6.6	7.6	5.6	4.6	9.2	8.9	6.4	5.7	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Rycroft - March 2016

Maximum Value: 81.1 ppb on Mar 9 11:00

Maximum Daily Average: 17.5 ppb on Mar 8

Minimum Value: 0 ppb on Mar 2 18:00

Minimum Daily Average: 1.8 ppb on Mar 26

Maximum Diurnal Average: 8.9 ppb at hour 11

Minimum Diurnal Average: 2.4 ppb at hour 6

Monthly Average: 4.19 ppb

Percentiles: $P_1 = 0.7$ $P_{10} = 1.2$ $Q_1 = 1.6$ Median = 2.5 $Q_3 = 4.1$ $P_{90} = 7.4$ $P_{99} = 35.8$

Hours in Service:	710
Hours of Data:	675
Hours of Missing Data:	35
Hours of Calibration:	35
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	4	0	0	1	1	1	1	2	1	--	4.3
3-Mar	1	1	3	2	1	0	1	2	1	2	A	4	3	4	3	4	2	6	6	3	2	2	3	2	2.5	6.2
4-Mar	5	3	2	2	2	2	2	2	2	A	3	4	2	3	3	4	3	4	4	13	7	6	6	5	3.9	13.1
5-Mar	4	4	6	5	5	3	4	3	A	8	6	3	2	3	2	1	1	3	1	2	1	1	1	1	3.1	7.7
6-Mar	1	1	1	1	1	1	1	A	2	2	2	2	1	2	2	2	2	3	3	4	5	2	2	3	1.9	4.6
7-Mar	4	3	13	6	5	5	A	17	13	10	9	6	4	4	4	6	5	8	4	3	4	4	4	6	6.3	16.6
8-Mar	7	7	7	39	14	A	12	57	36	36	50	9	10	8	7	10	19	8	5	20	17	12	5	6	17.5	57.5
9-Mar	3	3	2	2	A	3	3	2	2	5	81	24	2	5	2	20	1	2	1	2	1	12	4	8	8.3	81.1
10-Mar	22	17	13	A	3	2	2	3	8	7	5	7	6	4	4	5	5	6	8	5	4	4	3	4	6.3	22.1
11-Mar	4	2	A	2	1	1	1	2	4	1	1	1	2	3	15	2	1	12	3	2	2	2	1	2	3.0	15.1
12-Mar	1	A	3	16	7	3	63	8	7	10	4	2	2	2	2	2	3	1	7	3	10	3	5	3	7.3	63.4
13-Mar	A	4	2	2	2	2	2	2	3	31	12	5	6	3	4	2	2	2	2	9	3	3	4	A	4.8	31.3
14-Mar	4	3	2	2	2	1	1	5	5	5	4	3	3	2	2	3	3	4	2	2	1	1	A	2	2.7	5.3
15-Mar	1	1	1	1	2	2	2	3	6	19	7	7	5	4	2	3	2	2	4	4	4	A	3	3	3.8	18.6
16-Mar	3	3	2	1	1	1	1	2	2	3	3	3	2	2	2	1	1	1	1	1	A	2	2	5	2.0	5.3
17-Mar	5	3	2	1	2	2	13	4	3	3	2	1	3	1	2	1	1	7	5	A	4	2	2	2	3.0	13.3
18-Mar	2	1	3	1	2	2	2	2	4	2	2	3	3	3	1	2	1	1	A	3	2	4	66	12	5.3	65.9
19-Mar	8	3	1	2	2	2	3	3	2	2	3	5	4	3	3	4	3	A	4	4	5	3	4	4	3.2	7.8
20-Mar	4	3	4	3	3	3	3	4	3	3	4	3	3	3	4	4	A	4	3	3	2	1	1	1	2.9	4.3
21-Mar	1	1	1	1	2	2	1	4	2	2	2	2	2	2	2	A	2	3	3	2	2	4	1	1	2.1	4.2
22-Mar	1	1	1	1	2	2	2	3	2	2	2	2	2	2	A	3	2	2	3	2	4	5	3	3	2.3	4.8
23-Mar	3	2	2	3	3	2	3	2	3	2	2	2	2	A	2	1	1	1	1	2	2	1	1	1	2.0	3.5
24-Mar	1	1	1	1	3	2	2	3	4	5	2	2	A	2	2	3	3	2	2	5	8	6	2	2	2.8	7.5
25-Mar	3	3	2	2	4	5	3	2	3	19	6	A	5	7	3	3	2	2	2	3	2	1	2	2	3.8	19.4
26-Mar	1	1	2	3	2	2	2	2	2	2	A	4	2	2	1	1	2	2	1	4	1	1	3	2	1.8	4.2
27-Mar	2	1	1	1	1	1	1	1	12	A	4	3	3	6	4	2	2	3	17	3	2	2	2	4	3.5	17.3
28-Mar	2	2	3	3	2	4	2	12	A	20	3	1	2	2	2	1	3	1	5	2	4	4	2	1	3.6	19.8
29-Mar	2	2	1	1	1	1	2	A	3	3	19	2	2	6	1	1	9	34	4	4	3	1	2	2	4.6	34.2
30-Mar	2	10	12	2	3	10	A	16	11	27	3	6	6	3	1	2	3	1	3	1	2	1	1	2	5.5	26.7
31-Mar	1	1	1	1	2	A	3	1	1	1	1	1	1	1	1	1	1	6	21	5	5	5	2	2	2.8	21.4
	3.5	3.1	3.4	3.8	2.8	2.4	5.1	6.2	5.4	8.6	8.9	4.1	3.2	3.2	2.9	3.4	3.0	4.6	4.5	4.0	3.9	3.3	4.8	3.2	Diurnal Average	
	22.1	17.3	12.9	39.2	14.2	10.1	63.4	57.5	36.0	36.4	81.1	24.0	10.1	8.2	15.1	20.0	18.7	34.2	21.4	20.3	17.3	12.0	65.9	12.4	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Rycroft - March 2016

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Rycroft - March 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 49.3 ppb on Mar 28 16:00 Maximum Daily Average: 40.9 ppb on Mar 28

Minimum Value: 11 ppb on Mar 8 07:00 Minimum Daily Average: 23.0 ppb on Mar 8
Maximum Diurnal Average: 38.9 ppb at hour 17 Minimum Diurnal Average: 29.9 ppb at hour 8
Monthly Average: 33.92 ppb Percentiles: P_1 = 18.0 P_{10} = 26.0 Q_1 = 30.7 Median = 34.2 Q_3 = 38.0 P_{90} = 40.6 P_{99} = 46.8

Hours in Service:	706
Hours of Data:	673
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	37	37	36	37	37	37	35	--	37.1
3-Mar	36	35	34	34	34	34	33	33	34	34	A	34	36	37	38	35	38	39	38	39	37	33	36	35	35.4	38.9
4-Mar	32	33	32	31	31	32	32	32	32	A	30	31	30	29	32	33	32	32	30	27	24	23	23	23	29.8	32.9
5-Mar	22	21	27	29	30	29	25	23	A	23	26	29	31	32	34	34	34	34	33	33	33	33	32	32	29.5	34.1
6-Mar	32	32	32	31	31	31	30	A	30	30	30	31	32	32	33	34	34	33	33	33	32	33	33	32	31.8	33.6
7-Mar	28	27	26	26	25	26	A	22	25	26	27	29	31	31	32	32	32	31	31	28	25	25	24	23	27.5	32.1
8-Mar	20	19	17	15	14	A	11	14	18	16	19	22	23	25	28	30	31	31	33	32	24	24	31	33	23.0	32.8
9-Mar	35	35	36	36	A	33	33	32	33	34	30	29	41	43	43	43	44	44	43	43	42	38	38	36	37.4	43.8
10-Mar	26	23	28	A	39	39	39	35	32	32	34	34	33	34	34	33	32	33	34	33	32	31	31	31	32.7	39.2
11-Mar	36	36	A	36	36	37	37	38	39	40	41	41	40	39	39	39	38	37	38	37	36	36	35	36	37.6	40.6
12-Mar	36	A	35	32	28	28	24	27	27	29	32	34	36	38	39	41	42	42	37	37	32	37	38	38	34.3	42.2
13-Mar	A	34	38	31	28	27	26	26	31	30	30	33	38	41	42	41	39	38	37	36	34	29	23	A	33.3	41.8
14-Mar	21	18	18	22	26	27	25	24	22	22	24	25	27	29	31	33	33	37	37	35	34	32	A	29	27.5	37.1
15-Mar	30	30	29	29	27	28	27	26	26	26	31	33	36	38	39	41	42	42	41	40	36	A	36	36	33.4	42.0
16-Mar	38	37	37	38	39	40	39	38	39	39	40	35	36	34	37	39	39	39	37	37	A	33	32	32	37.1	40.5
17-Mar	30	31	32	33	32	33	33	33	34	34	35	36	37	38	39	39	40	39	37	A	37	35	34	33	35.0	39.7
18-Mar	32	32	30	30	27	26	26	26	28	30	38	38	39	41	43	42	41	42	A	40	39	37	28	23	33.8	42.5
19-Mar	27	29	35	35	34	34	27	26	24	26	30	33	36	40	40	40	42	A	37	35	35	34	29	31	33.1	41.7
20-Mar	31	26	25	26	27	28	26	26	28	29	30	31	34	34	34	34	A	36	33	35	35	36	36	36	31.0	35.9
21-Mar	35	35	35	35	35	35	35	35	36	36	36	36	36	37	37	A	38	38	37	37	37	36	36	36	36.1	38.0
22-Mar	35	35	35	34	34	34	33	33	34	34	34	35	35	36	A	38	39	39	37	36	35	31	32	31	34.8	39.0
23-Mar	30	30	29	29	27	30	30	31	31	33	35	37	39	A	41	41	41	40	40	40	40	39	38	38	35.3	41.4
24-Mar	38	39	40	40	40	40	40	39	39	39	38	38	A	39	39	40	40	40	39	38	34	36	37	36	38.5	39.8
25-Mar	35	32	32	29	25	26	26	24	24	25	35	A	38	40	43	44	44	43	42	40	37	36	35	34	34.3	44.3
26-Mar	34	33	32	30	30	28	28	31	32	36	A	40	42	43	44	44	45	45	45	44	43	41	39	40	37.8	45.3
27-Mar	36	38	34	37	36	36	33	31	28	A	30	34	36	38	42	42	42	41	42	34	32	34	32	34	35.6	42.2
28-Mar	34	33	35	35	37	35	37	36	A	38	43	48	49	49	48	49	49	47	43	41	40	37	39	39	40.9	49.3
29-Mar	39	38	38	38	38	39	37	A	37	38	40	40	41	42	42	43	42	37	38	33	31	33	33	35	38.0	43.1
30-Mar	34	30	30	31	31	30	A	30	29	27	30	32	34	35	36	35	35	32	30	34	34	37	37	35	32.6	36.9
31-Mar	35	36	34	34	34	A	34	37	40	40	40	41	42	41	42	43	42	39	32	31	26	24	25	26	35.6	42.7
	32.0	31.4	31.6	31.6	31.2	32.0	30.6	29.9	30.8	31.2	32.9	34.2	36.1	37.0	38.2	38.6	38.9	38.2	37.0	35.9	34.3	33.4	33.1	33.0	Diurnal Average	
	38.8	39.2	39.6	39.7	39.6	39.8	39.8	39.5	39.9	40.1	43.1	47.6	49.0	48.8	47.6	49.3	48.9	46.9	44.9	44.4	43.1	40.5	39.5	40.2	Diurnal Maximum	

C - Calibration NS - Not in service 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 Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Rycroft - March 2016

Maximum Value: 50.6 ppb on Mar 28 17:00

Maximum Daily Average: 42.9 ppb on Mar 28

Minimum Value: 14 ppb on Mar 8 07:00

Minimum Daily Average: 25.6 ppb on Mar 8

Maximum Diurnal Average: 40.2 ppb at hour 17

Minimum Diurnal Average: 31.9 ppb at hour 8

Monthly Average: 35.64 ppb

Percentiles: P_1 = 21.3 P_{10} = 28.6 Q_1 = 32.6 Median = 35.9 Q_3 = 39.2 P_{90} = 42.3 P_{99} = 49.0

Hours in Service:	706
Hours of Data:	673
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	38	38	37	38	38	38	36	--	38.1
3-Mar	37	36	36	34	35	35	34	33	34	35	A	35	36	38	40	39	39	39	39	40	40	35	40	38	36.8	40.2
4-Mar	35	34	33	33	32	33	32	32	33	A	30	32	31	30	33	33	33	32	31	30	26	25	24	24	31.0	35.2
5-Mar	24	23	31	31	32	30	30	25	A	26	28	31	32	33	35	35	35	35	34	34	34	33	33	33	31.1	34.7
6-Mar	32	32	32	32	31	31	31	A	30	30	31	32	32	33	34	34	34	33	34	34	33	34	34	33	32.5	34.1
7-Mar	33	29	29	27	27	27	A	25	27	27	28	30	32	32	32	32	33	32	32	30	26	26	25	25	28.9	32.8
8-Mar	22	20	18	18	15	A	14	21	23	19	22	23	25	26	30	31	34	33	34	35	31	27	35	35	25.6	35.2
9-Mar	36	36	38	37	A	33	33	33	34	35	35	38	43	44	44	44	44	45	44	43	43	42	39	38	39.2	44.6
10-Mar	34	32	33	A	41	40	40	37	35	33	35	36	36	36	34	34	34	35	36	35	33	33	32	32	35.0	40.5
11-Mar	38	37	A	37	37	38	39	39	40	42	41	42	41	39	41	41	40	40	40	38	38	39	37	37	39.0	41.6
12-Mar	38	A	37	36	31	31	33	30	29	31	33	35	38	39	40	43	44	43	42	40	36	40	40	40	36.7	43.8
13-Mar	A	39	39	35	31	30	27	29	33	31	32	36	41	43	43	42	40	39	38	39	36	35	26	A	35.7	42.6
14-Mar	25	23	22	24	29	28	26	25	23	25	25	26	29	31	34	35	38	39	39	38	36	34	A	31	29.7	38.6
15-Mar	34	34	31	31	29	29	29	27	27	28	33	35	38	39	41	42	43	43	42	41	38	A	37	38	35.0	42.7
16-Mar	39	38	39	40	40	41	41	39	40	41	43	39	39	36	38	40	40	40	39	37	A	36	35	35	38.8	43.1
17-Mar	32	33	33	33	33	34	35	35	36	35	36	37	39	39	39	40	41	41	41	A	39	37	36	34	36.3	40.6
18-Mar	33	33	33	33	28	27	28	28	29	32	39	39	40	43	44	43	42	43	A	41	39	39	35	30	35.7	43.5
19-Mar	34	34	36	36	35	35	33	29	26	29	34	35	39	43	43	42	43	A	41	37	37	36	34	34	35.9	43.2
20-Mar	34	34	29	27	29	30	27	27	29	31	32	33	35	35	35	36	A	37	36	37	36	36	37	36	32.9	36.8
21-Mar	36	36	36	36	36	36	35	36	36	36	36	37	37	37	38	A	38	38	38	38	38	37	37	37	36.7	38.4
22-Mar	36	36	35	35	35	35	34	34	35	35	35	36	36	38	A	39	40	40	39	38	37	34	32	32	35.8	39.6
23-Mar	31	32	31	32	31	32	31	31	34	34	38	38	40	A	41	42	42	41	41	41	41	40	39	39	36.5	41.8
24-Mar	39	40	40	40	40	40	40	40	40	39	39	39	A	39	40	40	40	40	40	39	38	38	38	37	39.4	40.3
25-Mar	36	35	34	34	27	27	28	25	25	28	37	A	39	41	44	45	45	45	44	42	39	36	36	35	36.0	45.1
26-Mar	35	34	33	32	33	30	29	33	35	38	A	42	43	44	45	45	47	46	46	45	45	43	42	43	39.4	46.7
27-Mar	37	39	36	39	37	37	38	37	30	A	32	36	37	41	44	44	44	43	45	42	35	35	35	36	38.1	44.8
28-Mar	34	35	36	37	39	36	39	39	A	41	47	49	50	50	50	50	51	50	45	44	42	39	41	40	42.9	50.6
29-Mar	39	39	39	40	40	40	39	A	38	40	42	43	43	44	44	46	45	42	40	37	33	34	35	37	40.0	45.6
30-Mar	36	33	32	32	32	32	A	32	32	31	32	34	35	37	38	37	37	34	34	35	38	39	39	38	34.7	38.8
31-Mar	38	39	38	36	36	A	35	39	41	40	41	42	43	42	44	43	43	42	40	34	30	28	27	27	37.7	44.1
	34.2	33.7	33.6	33.5	32.8	33.2	32.6	31.9	32.3	33.0	34.6	36.0	37.5	38.2	39.4	39.8	40.2	39.5	39.0	38.0	36.3	35.4	35.0	34.7	Diurnal Average	
	39.4	40.1	40.2	40.3	40.5	40.7	40.7	40.3	40.7	41.6	46.9	49.2	50.4	50.4	49.9	50.4	50.6	50.3	45.7	45.2	44.9	43.2	42.4	42.6	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Rycroft - March 2016

Pollutant Rose

Ozone (O_3) - ppb

Portable Rycroft - March 2016

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable Rycroft - March 2016

Maximum Value: 47.7 ppb on Mar 28 18:00

Minimum Value: 15.0 ppb on Mar 8 10:00

Percentiles: P_1 = 18.4 P_{10} = 27.8 Q_1 = 31.1 Median = 34.2 Q_3 = 37.4 P_{90} = 39.5 P_{99} = 43.8

Hours in Service:	706
Hours of Data:	698
Hours of Missing Data:	8
Hours of Calibration:	1
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 Maximum
1-Mar	MS	MS	MS	MS	MS	MS	MS	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
2-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37	37	36.8
3-Mar	36	36	36	35	35	35	34	34	34	34	34	34	34	34	35	35	36	37	37	37	38	37	37	37	37.5
4-Mar	36	35	35	34	33	33	32	32	32	32	31	31	31	31	31	31	31	31	31	31	30	29	28	27	36.2
5-Mar	25	24	24	24	25	26	26	26	26	27	26	26	27	27	28	30	30	32	33	33	33	33	33	33	33.4
6-Mar	33	32	32	32	32	32	31	31	31	31	30	30	30	31	31	31	32	32	33	33	33	33	33	33	33.0
7-Mar	32	32	31	30	29	28	27	26	25	25	25	26	26	27	28	29	30	31	31	31	30	30	29	27	32.2
8-Mar	26	24	23	21	20	19	17	16	15	15	15	16	18	19	21	23	24	26	28	29	29	29	29	30	29.8
9-Mar	30	31	31	32	33	34	34	34	34	34	33	32	33	34	36	37	38	39	41	43	43	42	42	41	43.1
10-Mar	39	36	34	33	32	33	33	33	34	35	36	36	35	34	34	33	33	33	34	33	33	33	32	32	38.6
11-Mar	33	33	33	33	34	35	36	37	37	37	38	38	39	39	39	40	40	39	39	38	38	38	37	37	39.6
12-Mar	36	36	36	35	34	33	31	30	29	29	28	28	29	31	33	34	36	38	39	39	38	38	38	38	39.0
13-Mar	37	36	36	36	35	34	32	30	30	30	29	29	30	32	34	36	37	38	39	39	39	37	35	34	39.0
14-Mar	31	28	26	24	23	22	22	23	23	23	24	24	25	25	26	27	28	30	31	33	34	34	34	34	34.4
15-Mar	34	33	31	31	30	29	29	28	28	27	27	28	29	30	32	34	36	38	39	40	40	40	39	39	40.0
16-Mar	38	38	37	37	37	38	38	38	38	39	39	39	38	38	37	37	37	37	37	37	37	37	37	36	39.1
17-Mar	34	33	32	32	32	32	32	32	33	33	33	34	34	35	36	37	37	38	38	38	38	38	37	37	38.4
18-Mar	35	34	33	33	32	30	29	29	28	28	29	30	31	33	35	37	39	40	41	41	41	41	38	36	41.2
19-Mar	34	32	32	32	31	31	31	31	31	30	30	29	30	30	32	34	36	37	38	39	38	38	36	35	38.6
20-Mar	33	32	31	30	29	28	27	27	26	27	27	28	29	30	31	32	32	33	34	34	34	34	35	35	35.0
21-Mar	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	37	37	37	37	37	37	37	37	37.3
22-Mar	37	36	36	36	35	35	35	34	34	34	34	34	34	34	34	35	36	37	37	37	37	37	36	35	37.3
23-Mar	34	33	32	31	30	30	29	29	30	30	31	32	33	34	35	37	38	39	40	41	41	40	40	40	40.7
24-Mar	39	39	39	39	39	39	39	39	40	40	39	39	39	39	39	39	39	39	39	39	38	38	38	37	39.6
25-Mar	37	36	35	34	33	31	30	29	27	26	27	26	28	30	33	36	38	41	42	42	42	41	40	39	42.2
26-Mar	38	36	35	34	33	32	31	31	31	31	31	32	34	36	38	40	42	43	44	44	44	44	43	43	44.4
27-Mar	42	41	39	38	37	37	36	35	34	33	33	32	32	33	34	36	38	38	40	40	39	39	37	36	41.7
28-Mar	35	34	33	34	34	34	35	35	35	36	37	39	41	43	44	46	47	48	48	47	46	44	43	42	47.7
29-Mar	41	40	39	39	38	39	38	38	38	38	38	39	39	39	40	41	41	41	41	40	39	37	36	35	41.2
30-Mar	34	34	33	32	32	32	32	31	30	30	30	30	30	31	32	33	33	34	34	34	34	34	34	34	34.4
31-Mar	34	35	35	35	35	35	35	35	36	36	37	38	39	39	40	41	41	41	40	39	37	35	33	31	41.4
Diurnal Maximums	41.7	40.7	39.4	38.9	38.9	39.0	39.3	39.4	39.6	39.5	39.4	39.2	40.9	42.8	44.4	46.2	46.5	47.7	47.6	46.8	45.7	44.3	43.4	42.9	

N - Not Valid MS - Missing

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2016

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

Maximum Value: 2.35 ppm on Mar 10 02:00

Maximum Daily Average: 2.14 ppm on Mar 10

Minimum Value: 1.8 ppm on Mar 30 18:00

Minimum Daily Average: 1.87 ppm on Mar 30

Maximum Diurnal Average: 2.00 ppm at hour 10

Minimum Diurnal Average: 1.95 ppm at hour 18

Monthly Average: 1.980 ppm

Percentiles: P_1 = 1.83 P_{10} = 1.90 Q_1 = 1.95 Median = 1.97 Q_3 = 2.01 P_{90} = 2.08 P_{99} = 2.19

Hours in Service:	542
Hours of Data:	514
Hours of Missing Data:	28
Hours of Calibration:	28
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	--	2.17
10-Mar	2.2	2.3	2.3	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.35
11-Mar	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.11
12-Mar	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.10
13-Mar	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.01	2.10
14-Mar	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.02	2.09
15-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.00	2.09
16-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.96	1.99
17-Mar	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.96	2.05
18-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	1.97	2.02
19-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.01	2.08
20-Mar	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.09
21-Mar	2.0	2.0	2.0	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	1.97	1.98
22-Mar	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.01
23-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.03
24-Mar	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.03
25-Mar	2.0	2.0	2.1	2.0	2.1	2.2	2.1	2.1	2.2	2.2	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.04	2.24
26-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.96	2.02
27-Mar	2.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.96	2.01
28-Mar	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.93	1.99
29-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.98
30-Mar	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	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.87	1.91
31-Mar	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.87	1.94
	2.00	2.00	1.99	1.98	1.98	2.00	1.99	2.00	2.00	2.00	1.99	1.98	1.98	1.97	1.96	1.96	1.96	1.95	1.96	1.97	1.97	1.97	1.98	1.99	Diurnal Average	
	2.22	2.35	2.27	2.08	2.12	2.15	2.11	2.13	2.20	2.24	2.13	2.12	2.14	2.13	2.12	2.13	2.12	2.12	2.11	2.12	2.12	2.12	2.15	2.17	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2016

Maximum Value: 3.24 ppm on Mar 17 16:00

Maximum Daily Average: 2.17 ppm on Mar 10

Minimum Value: 1.8 ppm on Mar 30 18:00

Maximum Diurnal Average: 2.04 ppm at hour 16

Monthly Average: 2.006 ppm

Minimum Daily Average: 1.89 ppm on Mar 31

Minimum Diurnal Average: 1.97 ppm at hour 18

Percentiles: P_1 = 1.84 P_{10} = 1.93 Q_1 = 1.96 Median = 1.99 Q_3 = 2.03 P_{90} = 2.10 P_{99} = 2.29

Hours in Service:	542
Hours of Data:	514
Hours of Missing Data:	28
Hours of Calibration:	28
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	--	2.22
10-Mar	2.3	2.4	2.4	A	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.17	2.44
11-Mar	2.2	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	2.0	2.0	2.0	2.0	2.02	2.15
12-Mar	2.0	A	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.01	2.16
13-Mar	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.04	2.12
14-Mar	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.04	2.13
15-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.02	2.11
16-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.98	2.04
17-Mar	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	3.2	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.04	3.24
18-Mar	2.0	2.0	2.0	2.0	2.0	2.0	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	2.1	2.0	2.00	2.07
19-Mar	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	2.1	2.1	2.1	2.2	2.1	2.03	2.17
20-Mar	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.41
21-Mar	2.0	2.0	2.0	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	1.98	2.00
22-Mar	2.0	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	1.98	2.06
23-Mar	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.98	2.07
24-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.04
25-Mar	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.3	2.2	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.31
26-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	1.98	2.05
27-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.98	2.04
28-Mar	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	1.96	2.02
29-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	1.99
30-Mar	1.9	1.9	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.89	1.96
31-Mar	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.9	2.0	1.89	2.02
	2.04	2.02	2.02	2.00	2.01	2.02	2.02	2.02	2.02	2.02	2.02	2.00	1.99	1.99	1.98	2.04	1.98	1.97	1.98	1.99	2.00	2.00	2.01	2.01	Diurnal Average	
	2.41	2.44	2.40	2.10	2.13	2.21	2.15	2.17	2.22	2.31	2.19	2.13	2.17	2.16	2.15	3.24	2.14	2.17	2.14	2.15	2.12	2.16	2.21	2.19	Diurnal Maximum	

C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2016

Peace Airshed Zone Association

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2016

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)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

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

Portable Rycroft - March 2016

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

Maximum Value: 7.6 $\mu g/m^3$ on Mar 8 02:00

Maximum Daily Average: 3.9 $\mu g/m^3$ on Mar 8

Minimum Value: 0 $\mu g/m^3$ on Mar 1 16:00

Maximum Diurnal Average: 1.6 $\mu g/m^3$ at hour 10

Monthly Average: 1.25 $\mu g/m^3$

Minimum Daily Average: 0.0 $\mu g/m^3$ on Mar 26

Minimum Diurnal Average: 1.0 $\mu g/m^3$ at hour 15

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.9 $Q_3 = 1.9$ $P_{90} = 3.2$ $P_{99} = 5.4$

Hours in Service:	730
Hours of Data:	729
Hours of Missing Data:	1
Hours of Calibration:	1
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	0	2	0	0	1	1	3	3	4	--	3.5
2-Mar	3	3	3	3	3	3	2	2	2	1	0	1	1	0	1	1	0	0	0	0	0	0	0	0	1.2	3.2
3-Mar	0	0	0	0	0	1	0	0	0	1	2	2	2	2	1	1	0	1	0	1	0	0	0	0	0.5	1.8
4-Mar	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	1	2	2	3	2	0.7	3.1
5-Mar	1	1	3	0	0	0	1	0	3	4	3	2	1	1	2	2	3	3	1	1	0	0	2	1	1.4	3.6
6-Mar	1	2	2	0	0	1	0	1	2	2	1	1	2	1	2	2	2	1	2	3	1	2	2	1	1.3	2.6
7-Mar	1	1	2	2	2	1	1	2	1	1	2	1	2	0	2	2	2	2	5	3	2	2	2	2	1.8	4.6
8-Mar	5	8	7	7	6	6	5	6	2	5	4	3	5	4	3	3	3	2	3	1	3	4	1	0	3.9	7.6
9-Mar	0	0	0	0	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0.3	3.3
10-Mar	0	0	0	0	0	0	0	0	1	2	4	4	4	5	4	4	5	5	3	2	4	3	3	3	2.2	4.6
11-Mar	2	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
12-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	1	3	2	1	3	0.8	3.4
13-Mar	1	1	1	1	0	0	3	1	0	0	1	1	0	0	0	1	2	2	2	1	2	2	0	2	1.1	2.5
14-Mar	2	3	3	3	4	3	5	5	6	5	5	3	4	3	2	2	2	1	1	1	1	2	2	2	2.9	5.7
15-Mar	1	2	1	1	3	2	3	3	4	4	3	3	1	1	1	1	0	0	0	0	0	0	0	0	1.4	3.9
16-Mar	0	0	0	0	0	0	0	0	1	2	2	1	2	2	1	2	2	2	2	2	2	1	1	2	1.1	2.5
17-Mar	2	4	1	1	2	1	1	1	0	0	1	0	0	1	0	0	0	0	1	2	1	1	0	0	0.9	4.0
18-Mar	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	1	2	1	1	0	0	0.3	1.7
19-Mar	0	0	0	0	0	0	1	1	1	2	1	1	1	1	1	3	3	3	1	2	2	3	3	3	1.5	3.5
20-Mar	3	2	2	1	4	3	3	2	2	2	3	2	1	1	1	1	1	1	2	0	0	0	0	0	1.6	3.7
21-Mar	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	1	2	1	1	1	1	1	1	1	0.6	1.6
22-Mar	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1	2	2	2	2	2	2	2	3	4	1.6	4.4
23-Mar	5	4	3	5	5	4	3	2	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	1.7	4.7
24-Mar	0	0	0	1	0	1	1	2	2	2	2	2	3	2	3	3	3	3	4	4	5	5	4	4	2.4	5.3
25-Mar	4	4	3	2	3	5	4	5	6	5	4	3	3	3	2	2	1	0	1	2	0	0	0	0	2.5	6.4
26-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.0	0.7
27-Mar	0	0	0	0	0	0	0	1	1	1	2	1	1	1	1	2	1	1	1	3	2	2	1	2	1.0	2.8
28-Mar	2	2	1	1	1	1	0	2	2	2	0	0	0	1	0	1	0	1	0	1	0	0	0	1	0.8	2.3
29-Mar	1	0	0	0	1	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0.4	1.5
30-Mar	1	1	2	2	1	0	1	1	2	1	1	0	1	1	0	0	0	0	1	0	0	1	0	0	0.8	2.4
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	3	0	1	1	1	1	0.4	3.0
	1.2	1.3	1.3	1.1	1.2	1.1	1.1	1.3	1.4	1.6	1.5	1.3	1.3	1.2	1.0	1.3	1.3	1.1	1.3	1.2	1.2	1.3	1.1	1.3	Diurnal Average	
	5.4	7.6	7.4	6.5	6.5	6.1	4.7	5.6	6.4	5.0	5.0	3.6	4.7	4.5	3.6	4.3	4.6	4.5	4.6	4.0	5.3	4.7	3.7	4.4	Diurnal Maximum	

C - Calibration NS - Not in service

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 Rycroft - March 2016

Peace Airshed Zone Association

Hourly Maximums

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

Portable Rycroft - March 2016

Maximum Value: 11.8 $\mu g/m^3$ on Mar 8 08:00

Maximum Daily Average: 7.1 $\mu g/m^3$ on Mar 8

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

Minimum Daily Average: 1.2 $\mu g/m^3$ on Mar 26

Maximum Diurnal Average: 3.7 $\mu g/m^3$ at hour 10

Minimum Diurnal Average: 2.6 $\mu g/m^3$ at hour 4

Monthly Average: 3.16 $\mu g/m^3$

Percentiles: $P_1 = 0.0$ $P_{10} = 1.1$ $Q_1 = 1.7$ Median = 2.9 $Q_3 = 4.1$ $P_{90} = 5.7$ $P_{99} = 9.0$

Hours in Service:	730
Hours of Data:	729
Hours of Missing Data:	1
Hours of Calibration:	1
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	1	6	2	2	3	4	5	4	5	--	5.8
2-Mar	5	4	5	5	5	5	6	3	4	3	2	3	2	2	2	2	2	2	1	3	1	2	1	0	2.9	6.5
3-Mar	1	2	2	1	3	3	2	2	2	2	4	4	4	4	3	3	2	3	1	2	2	1	1	2	2.3	4.0
4-Mar	1	1	3	3	3	3	1	1	2	4	2	2	6	4	6	5	5	2	4	4	4	4	7	4	3.5	6.6
5-Mar	4	4	6	3	3	2	6	4	5	7	5	4	3	3	5	3	5	6	4	5	3	2	6	4	4.2	6.9
6-Mar	4	4	4	3	3	3	2	3	3	4	4	3	4	4	4	3	4	3	3	5	4	3	4	3	3.5	4.9
7-Mar	3	2	8	3	3	2	2	3	3	3	3	3	5	1	3	4	3	5	7	5	4	4	4	4	3.6	7.7
8-Mar	9	10	9	10	8	9	8	12	6	7	9	9	7	8	5	5	5	5	6	3	5	7	5	3	7.1	11.8
9-Mar	2	1	1	1	1	2	1	1	1	6	5	7	4	1	0	3	1	1	1	0	1	0	0	0	1.7	6.6
10-Mar	1	3	2	1	1	1	2	2	4	5	6	7	7	8	5	6	7	7	6	5	8	6	6	5	4.6	8.5
11-Mar	3	2	1	1	3	1	2	2	2	1	3	2	1	2	3	4	1	1	1	0	1	0	1	1	1.6	3.5
12-Mar	0	2	0	0	0	2	2	2	1	3	2	2	2	2	4	2	3	3	5	5	6	4	5	5	2.6	5.8
13-Mar	2	2	2	2	2	4	4	2	1	2	2	2	2	1	2	3	9	9	4	3	3	5	3	5	3.2	9.5
14-Mar	5	4	4	5	6	4	6	6	7	6	7	5	6	5	4	5	5	3	3	3	3	3	3	3	4.6	7.2
15-Mar	2	4	3	3	4	3	4	5	6	5	4	4	3	4	3	2	2	1	1	1	1	2	1	2	2.9	5.9
16-Mar	2	2	1	1	1	2	2	1	3	3	6	2	3	4	3	3	4	4	4	3	3	4	3	4	2.8	5.6
17-Mar	5	5	3	3	3	2	2	3	2	2	2	2	2	2	3	1	2	2	3	6	6	5	1	1	2.9	6.2
18-Mar	2	1	1	3	1	1	1	3	2	3	1	4	4	0	1	2	1	0	8	3	2	2	2	2	2.1	7.6
19-Mar	2	2	0	1	1	3	3	3	3	4	3	4	3	4	6	6	8	7	6	3	4	4	5	5	3.7	7.5
20-Mar	4	4	4	4	5	5	5	5	3	4	4	5	3	3	2	3	3	4	4	2	2	1	2	2	3.4	5.4
21-Mar	2	1	2	2	2	2	1	2	1	2	1	1	1	2	2	2	3	2	2	1	2	2	2	2	1.8	3.1
22-Mar	2	2	2	2	2	2	2	2	2	4	3	2	3	3	3	3	3	3	3	3	4	4	5	6	2.9	6.3
23-Mar	6	5	5	6	6	5	4	5	3	3	2	1	3	2	1	2	3	2	2	2	2	2	1	2	3.2	6.3
24-Mar	1	1	2	2	2	3	3	3	4	3	4	3	5	4	4	4	5	4	5	6	7	6	6	6	3.8	6.8
25-Mar	6	5	6	4	7	7	6	7	9	8	7	7	5	6	3	5	3	1	4	4	1	1	1	1	4.7	9.0
26-Mar	0	0	1	1	1	2	1	1	1	1	2	2	2	1	1	2	1	1	2	2	2	1	1	1	1.2	2.2
27-Mar	2	1	1	1	2	1	1	2	3	3	4	2	3	3	2	8	5	4	3	5	4	3	4	3	2.9	8.3
28-Mar	3	3	3	3	3	2	2	4	3	3	2	2	4	3	3	4	3	5	3	3	2	2	0	3	2.9	5.0
29-Mar	2	1	2	1	2	2	1	1	3	3	3	3	3	3	4	4	5	3	1	1	2	3	3	2	2.4	4.7
30-Mar	4	2	5	3	2	1	3	3	4	4	3	2	4	2	4	4	3	2	4	2	3	3	1	3	3.0	4.6
31-Mar	1	1	4	0	2	3	0	0	1	2	1	1	6	7	2	3	3	2	6	3	2	3	2	3	2.5	6.8
	2.8	2.8	3.1	2.6	3.0	2.9	2.8	3.0	3.1	3.7	3.6	3.3	3.6	3.2	3.1	3.5	3.6	3.3	3.5	3.1	3.1	3.1	3.0	3.0	Diurnal Average	
	9.3	9.8	8.8	10.3	8.4	8.7	7.8	11.8	9.0	8.4	9.4	8.7	7.0	7.6	6.1	8.3	9.5	9.1	7.6	6.2	8.5	7.3	6.6	6.3	Diurnal Maximum	

C - Calibration NS - Not in service

Peace Airshed Zone Association

Hourly Maximums

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

Portable Rycroft - March 2016

Peace Airshed Zone Association

Pollutant Rose

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

Portable Rycroft - March 2016

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Portable Rycroft - March 2016

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

Maximum Value: -- °C on Mar 1 00:00 Maximum Daily Average: -- °C on Feb 29

Minimum Value: -- °C on Mar 1 00:00 Minimum Daily Average: -- °C on Feb 29

Maximum Diurnal Average: -- °C at hour 0 Minimum Diurnal Average: -- °C at hour 0

Monthly Average: -- °C Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.0 P_{99} = 0.0

Hours in Service:	744
Hours of Data:	0
Hours of Missing Data:	744
Hours of Calibration:	0
Percent Operational Time:	0.0

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-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
2-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
3-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
4-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
5-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
6-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
7-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
8-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
9-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
10-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
11-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
12-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
13-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
14-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
15-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
16-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
17-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
18-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
19-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
20-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
21-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
22-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
23-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
24-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
25-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
26-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
27-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
28-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
29-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
30-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
31-Mar	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Average	
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Maximum	

U - UnFlagged

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Rycroft - March 2016

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Rycroft - March 2016

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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	9	9	7	8	7	4	5	7	8	--	9.3
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	7	10	47	51	20	352	282	258	255	--	6.6
2 Spd	4	4	5	5	3	5	4	9	6	7	12	17	14	16	15	13	13	9	8	6	5	5	5	6	6.8	17.0
Dir	216	245	295	328	326	357	3	19	56	37	37	22	12	11	15	19	13	6	8	345	333	320	307	304	4.3	21.6
3 Spd	8	7	7	9	9	4	6	10	10	13	11	10	8	9	10	9	8	6	7	2	3	4	2	3	5.8	12.5
Dir	323	315	324	340	1	334	317	322	315	324	341	6	356	349	348	339	353	346	8	108	160	174	162	147	339.4	323.8
4 Spd	2	3	5	5	7	9	8	11	10	12	13	12	11	16	16	15	10	9	3	4	4	4	3	5	6.6	16.2
Dir	58	37	61	58	55	48	45	42	38	37	34	24	39	41	39	41	44	35	17	244	207	206	202	168	42.3	39.0
5 Spd	7	9	9	7	5	6	2	9	3	7	13	11	16	17	16	14	15	10	9	10	8	7	5	8	5.4	17.0
Dir	170	179	202	180	221	189	358	42	319	18	37	26	28	28	17	6	357	353	32	24	29	49	69	63	28.4	28.5
6 Spd	9	9	9	7	12	14	15	11	10	15	15	14	16	18	16	13	12	12	15	13	12	18	12	12	9.8	18.4
Dir	34	29	18	23	32	26	34	40	40	24	25	21	41	42	30	15	352	341	356	343	290	280	282	265	9.4	42.1
7 Spd	20	15	15	11	9	9	9	7	11	11	11	8	5	3	3	4	4	8	9	5	5	4	3	3	5.1	20.4
Dir	262	274	262	254	251	242	254	240	259	265	265	268	275	292	295	280	337	45	57	67	130	122	116	176	263.6	262.3
8 Spd	3	3	4	5	4	4	4	6	4	7	7	6	5	4	3	6	7	6	7	2	3	4	8	9	1.5	9.0
Dir	223	156	165	161	235	212	224	179	200	252	267	277	284	288	344	11	14	30	72	119	257	156	169	163	212.8	162.6
9 Spd	10	9	10	9	6	6	9	9	9	6	4	4	6	10	10	6	5	4	4	6	2	4	6	4	5.2	10.2
Dir	169	155	152	159	149	147	158	152	156	171	163	162	186	185	185	194	158	123	128	141	99	322	20	7	158.9	152.0
10 Spd	5	9	6	8	14	12	3	6	2	1	4	8	6	10	9	7	7	6	6	3	3	2	4	5	2.5	13.6
Dir	277	268	285	21	54	56	53	285	3	122	75	267	341	290	300	319	295	268	264	285	180	169	145	183	311.0	53.8
11 Spd	10	9	10	11	15	20	9	9	7	8	11	8	15	9	9	6	6	6	6	10	9	10	9	9	3.7	19.7
Dir	196	207	210	209	220	234	227	224	227	213	209	215	244	283	248	296	6	23	49	50	64	49	36	36	230.7	234.3
12 Spd	14	3	7	2	4	3	3	2	4	7	5	4	6	5	6	3	3	4	5	2	5	5	8	5	2.5	14.3
Dir	33	44	9	270	246	224	247	218	231	257	282	294	279	292	328	21	291	239	293	181	206	219	250	223	276.0	32.9
13 Spd	1	2	2	3	3	6	6	5	5	7	9	7	11	10	11	9	10	6	1	1	1	2	2	4	3.6	11.3
Dir	19	218	227	154	181	186	180	176	224	231	245	251	250	251	262	291	317	340	249	235	244	217	206	202	244.4	261.9
14 Spd	4	2	1	3	4	2	3	4	2	3	2	3	4	2	2	4	3	4	2	1	3	4	3	4	1.3	4.3
Dir	234	158	161	76	75	169	201	224	191	276	348	294	315	290	286	273	227	242	253	125	177	172	165	171	220.2	242.0
15 Spd	4	3	3	5	6	6	6	6	6	5	2	3	3	2	1	3	8	18	16	10	6	7	7	7	4.0	18.0
Dir	144	154	168	166	170	164	175	176	181	189	261	277	291	8	325	353	299	264	256	230	206	201	205	212	218.8	263.9
16 Spd	12	1	3	6	6	5	5	7	3	3	9	7	8	8	8	6	5	5	5	8	3	5	4	7	0.1	12.1
Dir	232	6	110	162	163	201	149	169	204	298	279	21	4	352	344	12	35	57	53	70	127	175	191	221	119.0	232.1
17 Spd	7	11	16	19	16	13	13	5	12	16	10	8	9	13	12	9	6	8	4	7	6	6	6	6	8.8	18.7
Dir	219	246	265	263	264	266	266	306	274	271	289	276	261	277	286	276	262	259	204	239	254	190	186	183	261.2	263.4
18 Spd	5	6	3	5	4	6	5	6	5	2	5	6	7	9	13	8	7	5	7	8	8	4	4	5	4.2	12.5
Dir	177	166	187	168	180	171	175	181	166	158	136	139	140	128	159	156	120	110	60	66	71	76	255	270	144.3	159.2
19 Spd	3	4	9	7	6	4	2	3	0	2	4	6	9	9	10	12	9	10	9	8	9	3	3	3	3.4	11.7
Dir	229	190	157	151	160	140	37	28	210	310	351	352	4	26	57	58	62	66	56	49	49	60	310	5	56.2	58.0
20 Spd	1	2	4	2	5	6	6	7	10	12	8	12	13	12	10	12	9	8	5	7	14	15	16	13	8.2	15.5
Dir	40	61	44	49	23	56	40	36	45	40	51	16	34	27	2	3	359	359	310	360	31	23	16	30	23.7	16.4
21 Spd	12	18	18	20	21	21	20	17	19	18	17	17	19	17	14	13	12	13	9	9	11	10	6	8	14.9	21.4
Dir	23	22	25	24	26	24	26	24	29	22	14	9	9	5	6	13	23	20	10	15	22	21	360	348	18.2	24.3
22 Spd	8	7	7	7	6	8	6	7	6	5	6	9	10	11	14	12	11	10	6	4	5	6	5	5	5.8	13.5
Dir	343	334	322	321	310	321	311	296	302	305	269	269	264	263	264	267	261	266	264	238	187	191	177	185	277.3	264.0

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Rycroft - March 2016

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	4	3	2	2	1	4	3	7	12	14	13	13	16	16	15	14	15	14	12	13	12	13	15	17	9.4	17.2
Dir	187	171	165	275	354	17	43	33	33	52	48	46	27	29	29	35	43	43	36	25	23	29	23	24	34.4	23.7
24 Spd	17	18	17	13	12	13	12	11	10	10	9	8	7	7	10	9	11	10	4	4	3	4	3	1	8.9	18.0
Dir	39	42	40	32	27	21	22	20	13	6	355	3	4	4	27	14	25	26	56	52	54	17	39	123	25.1	41.9
25 Spd	1	1	2	5	5	4	6	7	6	3	3	2	5	5	4	4	3	5	5	5	8	8	7	5	3.5	7.7
Dir	252	128	356	178	233	195	177	184	191	242	343	298	272	272	201	209	206	194	189	207	167	175	186	216	202.8	174.7
26 Spd	7	7	5	2	4	5	5	7	6	6	4	4	4	1	3	7	5	6	6	5	2	2	5	6	1.9	7.3
Dir	183	181	205	231	168	162	163	164	164	177	223	278	284	308	4	9	20	61	67	74	98	142	145	165	157.6	180.9
27 Spd	8	9	8	5	3	2	3	2	1	2	4	6	8	9	9	7	5	2	2	5	5	6	7	6	0.7	9.0
Dir	177	170	157	166	135	114	84	206	288	67	337	354	358	5	4	349	316	286	152	194	186	174	189	200	175.2	5.4
28 Spd	6	6	9	13	16	10	8	15	12	10	6	5	3	5	4	4	11	13	8	6	8	7	11	10	6.9	15.5
Dir	177	196	262	258	259	249	223	248	256	244	227	219	269	314	286	293	273	271	254	227	179	173	171	177	239.9	258.8
29 Spd	9	8	6	6	7	6	6	5	5	6	5	4	4	8	7	4	8	8	10	10	8	9	8	5	6.1	10.4
Dir	178	174	170	172	175	167	173	175	186	187	190	185	190	193	192	201	248	241	233	227	180	173	175	178	191.8	227.3
30 Spd	1	11	14	15	16	16	16	16	14	14	14	18	21	20	23	12	12	9	9	9	12	7	3	1	9.6	23.0
Dir	322	264	255	257	254	246	248	244	245	245	234	240	252	259	275	296	294	291	306	26	40	42	66	119	263.4	274.9
31 Spd	5	7	8	5	5	9	7	3	8	4	4	5	0	10	7	6	4	9	11	8	6	8	9	8	0.9	11.1
Dir	53	56	45	69	65	62	71	117	136	110	93	91	126	2	335	320	311	255	249	248	212	186	187	168	98.0	249.0
Spd	1.1	0.9	1.1	1.1	0.9	0.4	0.3	0.5	0.9	1.9	2.5	3.4	4.0	4.7	4.5	5.0	4.7	3.4	2.3	1.6	1.0	0.7	1.1	1.4	Diurnal Average	
Dir	215.7	219.2	265.4	242.9	267.3	253.0	277.1	273.4	284.2	317.8	339.6	339.9	337.2	344.5	340.2	351.5	348.4	341.9	357.2	18.4	77.9	145.5	188.7	194.9		
Spd	20.4	18.3	17.9	20.0	21.1	21.4	19.9	16.6	19.0	18.3	17.4	17.6	20.7	19.9	23.0	15.1	14.8	18.0	15.6	12.8	13.8	17.6	15.5	17.2	Diurnal Maximum	
Dir	262.3	22.3	24.8	24.2	26.4	24.3	25.6	23.5	28.5	21.6	14.2	239.8	252.4	259.4	274.9	41.5	42.6	263.9	256.3	25.4	30.8	279.9	16.4	23.7		

Maximum Speed Value: 23 km/h on Mar 30 15:00
Maximum Daily Speed Average: 14.9 km/h on Mar 21
Maximum Diurnal Speed Average: 5.0 km/h at hour 16

Minimum Speed Value: 0 km/h on Mar 31 13:00
Minimum Daily Speed Average: 0.1 km/h on Mar 14
Minimum Diurnal Speed Average: 0.3 km/h at hour 7

Monthly Average Velocity: 1.44 km/h 333.85 deg

Speed Percentiles: $P_1 = 0.7$ $P_{10} = 2.7$ $Q_1 = 4.4$ Median = 6.7 $Q_3 = 9.6$ $P_{90} = 13.8$ $P_{99} = 19.8$

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

Hours in Service:	730
Hours of Data:	729
Hours of Missing Data:	1
Percent Operational Time:	100.0

C - Calibration NS - Not in service

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	23	60	31	0	0	0	114
NorthEast	24	60	56	5	0	0	145
East	14	6	0	0	0	0	20
SouthEast	28	17	0	0	0	0	45
South	51	90	1	0	0	0	142
SouthWest	42	32	10	1	0	0	85
West	29	53	34	4	0	0	120
NorthWest	21	34	3	0	0	0	58
Total	232	352	135	10	0	0	729

Wind Rose

Wind Speed (WS) (km/h)

Portable Rycroft - March 2016

Wind Speed Classes (km/h)

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Rycroft - March 2016

Peace Airshed Zone Association

Maximum Speed: 23 km/h on Mar 30 15:00

Maximum Daily Speed Average: 15.1 km/h on Mar 21

Minimum Speed: 1 km/h on Mar 23 05:00

Minimum Daily Speed Average: 3.2 km/h on Mar 14

Maximum Diurnal Speed Average: 9.9 km/h at hour 15

Minimum Diurnal Speed Average: 6.4 km/h at hour 21

Monthly Average Speed: 7.85 km/h

Percentiles: $P_1 = 1.9$ $P_{10} = 3.3$ $Q_1 = 4.7$ Median = 6.9 $Q_3 = 9.9$ $P_{90} = 13.9$ $P_{99} = 19.8$

Hours in Service:	730
Hours of Data:	729
Hours of Missing Data:	1
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	9	9	7	8	7	4	5	7	8	--	9.3
2-Mar	4	5	6	6	4	6	5	9	6	7	12	17	14	16	15	13	13	9	8	6	5	6	5	6	8.5	17.1
3-Mar	8	8	7	9	9	4	6	10	10	13	11	10	8	9	10	9	8	6	7	3	3	4	2	4	7.4	12.5
4-Mar	3	3	5	5	7	9	9	11	10	13	13	12	12	16	16	15	11	9	5	4	4	4	4	5	8.5	16.4
5-Mar	7	9	10	8	6	6	6	9	6	9	13	11	16	17	16	14	15	10	10	11	8	8	6	8	9.9	17.1
6-Mar	10	10	9	7	12	14	15	11	11	15	15	14	17	18	16	13	12	12	15	13	13	18	12	12	13.0	18.5
7-Mar	21	15	15	11	9	9	9	7	11	11	11	8	5	3	4	4	5	8	9	6	5	4	3	3	8.2	20.5
8-Mar	3	3	4	7	5	5	4	8	6	7	7	6	5	4	3	6	7	7	7	3	3	4	8	9	5.6	9.2
9-Mar	10	10	10	9	6	6	9	9	9	7	4	4	6	10	10	6	6	4	4	6	3	4	6	5	6.8	10.3
10-Mar	6	9	6	9	14	12	5	6	4	3	5	9	7	11	10	7	7	6	7	4	4	3	4	5	6.8	13.7
11-Mar	10	9	10	11	15	20	10	9	7	8	11	8	15	10	9	6	6	6	6	10	9	10	9	9	9.7	19.8
12-Mar	14	5	7	4	5	4	4	3	5	7	5	4	6	5	7	3	4	4	6	3	6	6	9	7	5.4	14.4
13-Mar	2	3	2	3	4	6	6	5	6	7	9	7	11	10	11	9	10	6	1	3	2	3	2	4	5.5	11.5
14-Mar	4	3	2	3	4	3	4	5	2	4	2	3	4	2	3	4	3	5	3	2	3	4	4	4	3.2	4.5
15-Mar	4	3	3	6	6	6	6	6	6	5	3	3	3	3	1	3	8	18	16	10	6	7	7	7	6.1	18.1
16-Mar	12	5	3	6	6	5	5	7	3	3	11	7	8	8	9	6	5	5	5	8	3	5	5	7	6.2	12.2
17-Mar	7	11	16	19	16	13	14	6	12	16	10	8	9	13	12	9	6	8	4	7	7	6	6	6	10.0	18.7
18-Mar	5	6	4	5	5	6	5	6	5	3	6	7	8	9	13	9	7	5	7	8	8	4	4	5	6.2	12.9
19-Mar	3	4	9	7	6	5	2	3	2	2	5	6	9	9	11	12	9	10	9	8	9	4	3	3	6.2	11.9
20-Mar	3	2	4	3	5	6	6	7	10	12	8	13	13	12	10	12	9	8	5	8	14	15	16	13	9.0	15.8
21-Mar	12	18	18	20	21	21	20	17	19	18	17	18	19	17	14	13	13	13	9	9	11	10	7	8	15.1	21.4
22-Mar	8	7	8	7	6	8	6	7	6	5	6	9	10	11	14	12	11	10	6	5	5	6	5	5	7.6	13.6
23-Mar	4	3	3	3	1	4	3	7	12	14	14	13	16	16	15	15	15	14	12	13	12	13	15	17	10.5	17.2
24-Mar	17	18	17	13	12	13	12	11	10	10	9	8	7	7	10	10	11	10	4	4	3	4	4	2	9.4	18.0
25-Mar	1	2	3	5	5	4	6	7	6	4	4	3	5	5	4	4	4	5	5	5	8	8	8	6	4.9	8.4
26-Mar	7	7	8	3	4	5	5	7	6	6	5	4	4	2	3	7	5	6	6	5	2	2	5	7	5.0	7.6
27-Mar	8	9	8	5	3	2	3	3	2	3	5	6	8	9	9	7	5	2	3	5	5	6	8	6	5.4	9.0
28-Mar	6	6	10	13	16	11	8	15	12	10	6	5	4	5	5	5	11	14	8	6	8	7	11	10	8.7	15.5
29-Mar	9	8	6	6	7	6	6	5	6	6	5	4	4	8	7	4	8	9	10	11	8	9	8	6	6.9	10.6
30-Mar	3	11	14	15	16	16	16	16	14	14	14	18	21	20	23	12	12	9	10	9	12	7	4	3	12.8	23.3
31-Mar	5	7	8	5	6	9	7	3	8	5	5	6	4	10	7	6	5	9	11	8	6	9	9	8	6.9	11.2
	7.2	7.3	7.8	7.8	7.9	8.1	7.4	7.8	7.8	8.2	8.3	8.4	9.3	9.8	9.9	8.5	8.5	8.2	7.3	6.8	6.4	6.6	6.6	6.7	Diurnal Average	
	20.5	18.3	18.0	20.1	21.2	21.4	19.9	16.7	19.1	18.3	17.5	17.7	20.7	19.9	23.3	15.5	14.9	18.1	15.6	12.9	13.9	17.6	15.8	17.2	Diurnal Maximum	

C - Calibration NS - Not in service

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable Rycroft - March 2016

Maximum Value: 97.8 deg on Mar 31 13:00

Minimum Value: 1.9 deg on Mar 30 05:00

Percentiles: P_1 = 2.6 P_{10} = 4.7 Q_1 = 7.2 Median = 11.7 Q_3 = 22.8 P_{90} = 41.9 P_{99} = 77.1

Hours in Service:	730
Hours of Data:	729
Hours of Missing Data:	1
Hours of Calibration:	1
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-Mar	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	3	3	24	14	18	20	18	9	9	24.0
2-Mar	18	38	24	49	37	38	39	12	16	15	7	7	8	8	9	6	7	11	7	12	8	23	9	9	49.5
3-Mar	5	16	7	10	9	13	13	3	7	3	12	8	9	8	11	18	14	7	4	47	19	9	21	20	46.7
4-Mar	52	56	15	13	13	7	7	4	6	8	8	9	18	8	8	15	23	8	59	21	17	17	35	20	58.7
5-Mar	8	8	26	36	31	27	75	18	56	39	6	11	6	6	10	6	11	20	15	22	22	13	30	12	74.7
6-Mar	8	10	5	5	5	5	5	7	13	5	8	7	11	6	7	9	10	7	4	16	6	5	10	4	15.7
7-Mar	6	14	7	9	7	10	17	17	15	6	6	10	14	30	24	16	22	26	10	30	10	16	13	33	33.0
8-Mar	10	36	23	50	23	15	14	43	51	18	24	11	14	11	35	13	14	29	11	67	46	40	10	10	67.1
9-Mar	7	8	9	10	25	19	6	4	6	24	58	31	10	5	4	8	28	20	17	20	37	23	22	31	57.6
10-Mar	17	14	19	31	5	6	75	15	71	77	63	42	35	26	14	10	14	18	22	76	51	60	44	23	77.4
11-Mar	7	9	5	4	5	4	14	13	11	4	4	6	13	12	12	13	19	11	17	10	8	9	12	17	19.0
12-Mar	9	77	7	52	28	21	45	71	28	8	10	16	10	12	40	21	63	18	25	56	21	52	29	53	76.7
13-Mar	68	45	62	36	35	15	11	22	20	9	7	6	10	9	11	10	11	12	68	78	66	70	42	18	77.7
14-Mar	29	51	64	39	40	40	30	34	51	36	27	24	17	28	17	21	31	22	54	66	14	6	14	15	66.3
15-Mar	6	17	11	8	12	7	4	5	4	8	31	12	19	31	71	12	20	4	5	9	5	4	7	6	71.0
16-Mar	10	75	48	23	24	13	22	13	26	34	43	15	15	17	11	17	15	16	24	13	40	11	19	7	74.7
17-Mar	6	8	3	2	4	4	9	35	9	4	11	13	13	8	8	12	6	6	17	26	43	20	8	10	42.7
18-Mar	7	10	17	9	33	7	6	6	11	79	32	21	20	17	13	27	15	16	25	4	4	29	19	18	78.6
19-Mar	19	24	7	9	9	28	38	16	89	37	15	8	8	26	14	11	11	12	9	6	14	77	36	19	89.4
20-Mar	72	73	29	79	36	11	11	5	8	10	17	10	9	11	8	5	4	8	15	23	5	5	12	7	79.1
21-Mar	5	4	6	4	4	3	3	4	4	3	6	5	5	5	5	7	5	5	7	11	7	6	15	7	14.6
22-Mar	7	7	11	7	10	6	9	7	13	25	11	9	6	5	5	4	6	7	10	30	6	6	6	7	29.8
23-Mar	11	13	34	44	72	9	21	13	8	9	14	17	6	8	5	7	6	5	7	4	4	8	2	2	71.8
24-Mar	5	4	6	7	6	5	4	4	6	4	9	10	12	11	9	9	4	3	20	23	20	16	31	70	69.7
25-Mar	61	74	58	15	11	20	7	6	4	24	56	44	25	19	13	19	19	8	5	10	12	4	32	34	74.5
26-Mar	4	6	52	57	32	13	8	10	9	10	24	11	20	62	39	10	8	25	6	9	23	34	30	29	61.8
27-Mar	4	4	10	17	21	21	34	41	66	52	20	8	6	4	5	27	11	42	45	19	6	14	19	11	66.2
28-Mar	5	17	16	2	2	30	11	9	4	11	12	13	41	17	19	18	15	9	8	13	6	7	7	4	40.8
29-Mar	4	3	14	14	8	11	8	8	14	9	14	15	12	7	7	14	20	10	5	13	9	5	8	22	22.0
30-Mar	77	20	5	2	2	4	3	4	4	4	5	5	3	3	10	5	6	6	32	6	9	22	42	83	83.1
31-Mar	27	10	11	25	11	9	12	22	22	25	36	44	98	10	24	20	33	23	6	10	11	10	6	6	97.8
	76.8	76.7	64.5	79.1	71.8	40.5	75.0	70.5	89.4	78.6	62.6	43.7	97.8	61.8	71.0	27.4	62.9	41.6	67.8	77.7	65.7	76.5	43.5	83.1	

C - Calibration NS - Not in service

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations

PAZA Passive Results for March 2015

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
3a	Fourth Creek	**0.3**	**50.3**	**0.4**		
3b	Fourth Creek	**0.4**	**49.5**	**0.4**		
11a	Webber Creek	**0.5**	**47.1**	**1.0**		
11b	Webber Creek	**0.4**	**50.1**	**0.8**		
20a	Shaftesbury	**0.2**	**45.9**	**0.5**		
20b	Shaftesbury	**0.2**	**42.7**	**0.8**		
39a	Clouston Creek	**0.2**	**56.6**	**0.6**		
39b	Clouston Creek	**0.1**	**44.1**	**0.6**		
63a	Girouxville 3				**0.4**	
63b	Girouxville 3				**0.2**	
1	Silver Valley	**0.5**	**56.5**	**0.5**		08-27-081-11 W6M
2	Bay Tree	**0.2**	**43.4**	**0.6**		13-16-078-13 W6M
3	Fourth Creek	**0.4**	**49.9**	**0.4**		04-13-082-07 W6M
4	Gordondale	**0.4**	**45.6**	**1.1**		04-34-078-10 W6M
5	Boone Creek	**0.5**	**52.3**	**0.5**		16-36-074-11 W6M
7	Steeprock Creek	**0.2**	**56.5**	**0.2**		09-35-072-13 W6M
9	Spirit River	**0.3**	**47.4**	**0.6**		08-12-079-07 W6M
10	Woking	**0.6**	**49.7**	**0.4**		01-13-076-07 W6M
11	Webber Creek	**0.4**	**48.6**	**0.9**		09-36-074-09 W6M
12	Hythe	**0.3**	**54.4**	**0.5**		14-36-072-11 W6M
14	Sylvester	**0.2**	**43.3**	**0.6**		08-06-069-12 W6M
16	Beaverlodge	**0.4**	**54.0**	**1.2**		15-36-071-10 W6M
17	Poplar	**0.4**	**46.2**	**1.0**		13-06-073-08 W6M
18	Saddle Hills	**0.5**	**50.0**	**0.3**		04-25-074-07 W6M
19	Wanham	**0.4**	**48.2**	**0.4**		16-22-077-03 W6M
20	Shaftesbury	**0.2**	**44.3**	**0.7**		04-03-082-23 W5M
21	Eaglesham	**0.2**	**57.8**	**0.2**		16-21-079-25 W5M
23	Bear Lake	**0.3**	**59.2**	**0.5**		15-31-072-06 W6M
24	Wembley	**0.2**	**52.7**	**1.2**		12-31-070-08 W6M
25	Pinto Creek	**0.1**	**55.3**	**0.5**		04-24-069-11 W6M
26	Flyingshot	**0.2**	**46.6**	**1.0**		15-36-070-07 W6M
27	Grande Prairie I	**0.3**	**39.1**	**4.7**		08-15-071-06 W6M

PAZA Passive Results for March 2015 (Continued)

28	Clairmont Lake	**0.7**	**57.1**	**0.6**		09-06-073-04 W6M
29	Smoky Heights	**0.7**	**56.1**	**0.7**		04-06-075-02 W6M
30	Fitzsimmons	**0.3**	**50.4**	**0.5**		15-36-072-03 W6M
32	Gold Creek	**0.2**	**34.3**	**2.1**		06-33-067-05 W6M
33	Wapiti	**0.3**	**53.5**	**0.6**		02-25-071-03 W6M
34	Puskwaskau	**0.1**	**42.9**	**0.3**		15-35-074-25 W5M
35	Jean Cote	**0.2**	**72.2**	**0.2**		12-35-079-21 W5M
36	Guy	**0.2**	**42.4**	**0.5**		03-04-076-22 W5M
37	Crooked Creek	**0.1**	**52.4**	**0.4**		16-01-071-26 W5M
38	Karr Creek	**0.1**	**37.5**	**0.6**		10-16-065-02 W6M
39	Clouston Creek	**0.2**	**50.4**	**0.6**		12-01-073-22 W5M
40	McLennan	**0.2**	**57.8**	**0.3**		03-29-077-19 W5M
41	Valleyview	**0.2**	**40.8**	**0.9**		09-30-069-22 W5M
42	Sunset House	**0.3**	**47.0**	**0.4**		05-32-070-19 W5M
43	High Prairie	**0.2**	**55.7**	**0.6**		16-13-074-17 W5M
44	Peavine	**0.1**	**47.6**	**0.2**		03-05-079-15 W5M
45	Gift Lake	**0.1**	**47.4**	**0.2**	**0.3**	10-07-079-12 W5M
46	Little Smoky	**0.4**	**45.7**	**1.0**		12-01-065-21 W5M
47	Kinuso	**0.2**	**36.7**	**0.7**		12-10-073-10 W5M
65	Deer Mountain 2	**0.3**	**42.3**	**0.4**		15-22-068-09 W5M
49	Grande Prairie HP	**0.2**	**40.5**	**4.4**		17-26-071-06 W6M
50	East Prairie	**0.1**	**37.4**	**0.4**		13-02-072-15 W5M
63	Girouxville 3				**0.3**	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 March 2015

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2	Hydrogen Sulphide H_2S
	ppb	ppb	ppb	ppb
	Passive Summary for March 2016 (PAZA Zone)			
Mean	**0.3**	**48.8**	**0.8**	**0.3**
Standard Deviation	**0.2**	**7.4**	**0.9**	**0.0**
Minimum	**0.1**	**34.3**	**0.2**	**0.3**
Minimum At	**Pinto Creek (#25)**	**Gold Creek (#32)**	**Peavine (#44)**	**Gift Lake (#45)**
Maximum	**0.7**	**72.2**	**4.7**	**0.3**
Maximum At	**Smoky Heights (#29)**	**Jean Cote (#35)**	**Grande Prairie I (#27)**	**Gift Lake (#45)**

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

	SO_2	O_3	NO_2
PAZA Beaverlodge station	**0.4**	**33.7**	**3.2**
PAZA Beaverlodge passive	**0.4**	**54.0**	**1.2**

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

	SO_2	O_3	NO_2
PAZA Henry Pirker station	**0.1**	**26.8**	**9.1**
PAZA Grande Prairie passive	**0.2**	**40.5**	**4.4**

PAZA Passive SO_2 Stations
Average Concentrations in ppb
March 2016
Hines Creek
Grimshaw
Peace River
Berwyn
Fairview
Nampa
DAWSON CREEK
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Wembley
Grande Prairie
Valleyview
Kinuso
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
March 2016
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 2
Grande Prairie HP
East Prairie

PAZA Passive O_3 Stations
Average Concentrations in ppb
March 2016
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
56
50
44
43
46
47
58
72
48
47
48
58
50
42
52
49
50
56
43
56
57
54
46
59
57
50
50
37
54
41
39
53
37
53
47
52
47
55
43
41
42
34
37
46
No AENV 30-Day Objective

Alberta Ambient Air Quality Objective - No Annual O_3 Objective
O_3 Concentration (ppb)
0
10
20
30
40
50
60
70
80
March 2016
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 2
Grande Prairie HP
East Prairie

PAZA Passive NO_2 Stations
Average Concentrations in ppb
March 2016
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
0.5
0.4
0.7
0.6
1.1
0.6
0.2
0.2
0.2
0.2
0.4
0.3
0.4
0.5
0.5
0.9
0.3
0.7
0.3
0.6
0.2
0.5
1.0
0.5
0.6
0.5
0.6
0.7
1.2
10.3
4.7
0.6
0.4
1.2
1.0
0.4
0.4
0.6
0.5
0.9
0.4
2.1
0.6
1.0
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
March 2016
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 2
Grande Prairie HP
East Prairie

PAZA Passive H_2S Stations
Average Concentrations in ppb
March 2016
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
0.4
0.44
High Prairie
Hythe
Sexsmith
Kinuso
Beaverlodge
Wembley
Grande Prairie
Valleyview
No AENV 30-Day Objective

Duplicate Summary Chart

March 2016 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 – Rycroft Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, THC, TRS, $PM_{2.5}$

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	8:50	End Time (MST)	11:20
Barometric Pressure	728.000 mm	Station Temperature	21.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Conc	49.7 ppm	Cal Gas Cert Date	October 5, 2018
		Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.996968	Calculated slope	0.992148
Calculated intercept	0.593426	Calculated intercept	1.154251
Analyzer make	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	1.56		1.56	
Coefficient	1.012		0.992	
Pressure	661.0	mm Hg	662.8	mm Hg
Flow	0.435	lpm	0.438	lpm
Lamp intensity	82	Hz	82	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.1	N/A
4995	39.93	394.2	396.8	0.9933
4995	19.97	197.9	197.5	1.0023
4995	9.97	99.0	97.5	1.0159
4995	0.00	0.0	0.1	As Found Zero
4995	39.93	394.2	403.5	As Found Span
			Average Correction Factor	1.0038

Calculated value of As Found Response: 402.7 ppb Percent Change of As Found: -2.2%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	283.9	ppb	290.8	ppb

Notes: Span adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:50	End Time (MST)	11:20
Analyzer make/model	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
394.2	396.8	0.9933	Correlation Coefficient	0.999950
197.9	197.5	1.0023		
99.0	97.5	1.0159	Slope	0.992148
			Intercept	1.154251

SO2 Calibration
493
393
293
193
93
-7
PPB
As found point
394.2 ppb SO2
197.9 ppb SO2
99.0 ppb SO2
After span
290.8 ppb
zero
Zero
Amb
March 14, 2016

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker

Reason: Routine Installation Removal Other:

Start Time (MST)	9:00		End Time (MST)	12:25	
Barometric Pressure	721.000	mm	Station Temperature	21.0	Deg C
Calibrator	Environics		Serial Number	906535067(AMU 197	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	October 5, 2018	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL103793	

DACS Information

DACS make	CR3000	DACS serial No.	5408

Parameter		NO2	NOx	NO
Before	Data Slope	1.001421	0.991096	0.984928
	Data Offset	-0.493833	0.801366	0.883017
After	Data Slope	0.998700	1.001078	0.995163
	Data Offset	-0.236233	0.467888	0.354025
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	6.1	mV	6.1	mV
NOx bkgnd	6.5	mV	6.5	mV
NO coefficient	0.956		0.956	
NOx coefficient	1.000		1.000	
NO2 conv temp	325.3	Deg C	323.1	Deg C
Cooler Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-844.3	mV	-844.3	mV
R Cell Press	165.5	in Hg	167.1	in Hg
Sample Flow	0.620	LPM	0.619	LPM

Notes: NO adjustment made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: March 14, 2016 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	0.0	0.3	0.0	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	405.2	405.6	0.0	1.0019	0.9950
2	4995	19.96	203.8	202.6	1.2	203.1	202.6	0.2	1.0032	1.0000
3	4995	9.93	101.6	101.0	0.6	100.4	100.7	0.1	1.0117	1.0028
AFZ	4995	0.00	0.0	0.0	0.0	0.0	0.3	0.0	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	405.2	405.6	0.0	1.0019	0.9950
							Average Correction Factor		1.0056	0.9993

As Found Concentrations: NO_X= 402.4 NO= 400.1 As Found Percent Change NO_X= -0.9% NO= -0.9%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.3	0.3	0.0	0.0	0.3	0.0	N/A	N/A	N/A	N/A
NO point	405.8	405.8	0.0	405.9	405.8	0.1	0.9997	1.0000	N/A	N/A
300	405.8	71.6	334.2	406.7	71.6	334.9	0.9978	1.0000	0.9979	100.2%
200	405.8	180.7	225.1	406.9	180.7	225.4	0.9973	1.0000	0.9987	100.1%
100	405.8	296.7	109.1	407.6	296.7	110.0	0.9956	1.0000	0.9925	100.8%
					Average Correction Factor		0.9969	1.0000	0.9964	100.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.2	ppb	0.0	0.0	0.3	ppb
Auto span	330.2	327.1	2.5	ppb	331.1	327.8	2.9	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	12:25
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		
334.2	334.9	0.9979	Correlation Coefficient	0.999995
225.1	225.4	0.9987		
109.1	110.0	0.9925	Slope	0.998700
			Intercept	-0.236233

NO_2 Calibration Curve

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	12:25
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		
405.9	405.2	1.0019	Correlation Coefficient	0.999994
203.8	203.1	1.0032		
101.6	100.4	1.0117	Slope	1.001078
			Intercept	0.467888

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:00	End Time (MST)	12:25
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
403.6	405.6	0.9950	Correlation Coefficient	0.999987
202.6	202.6	1.0000		
101.0	100.7	1.0028	Slope	0.995163
			Intercept	0.354025

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
2nd high
GPT
405.8 ppb NOX
334.2 ppb
NO2
As Left Span
331.1 ppb NOx
327.8ppb NO2
298.7 ppb
NO
225.1 ppb
NO2
203.8/202.6ppb
NOX/NO
180.7 ppb
NO
101.6/101.0
ppb
NOX/NO
109.1ppb
NO2
71.6
ppb NO
As found
Zero
AZ
AMB
NOx
NO
NO2
March 14, 2016

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	11:35	End Time (MST)	13:55:00 PM
Barometric Pressure	728.000 mm	Station Temperature	21.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.015310	Calculated slope	1.005366
Calculated intercept	0.819243	Calculated intercept	0.202650
Analyzer make	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	0.70	ppb	0.70	ppb
slope	1.004		1.004	
Lamp temp	53.6	mV	53.7	mV
Lamp Intensity A/B	80300/89488	mV	80125/90204	mV
Pressure	682.3	mm Hg	0.683.1	mm Hg
Flow A	0.724	ccm	0.725	ccm
Flow B	0.725	ccm	0.735	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	-0.2	N/A
5035	0.3	334.2	332.7	1.0044
5035	0.2	225.1	222.7	1.0107
5035	0.1	109.1	108.8	1.0030
5035	0.0	0.0	-0.2	As found zero
5035	0.3	334.2	332.7	As found span
			Average Correction Factor	1.0060

Calculated value of As Found Response: 338.8 ppm Percent Change of As Found: 1.4%

	before calibration		after calibration	
Auto zero	-0.6	ppb	-0.5	ppb
Auto span	356.8	ppb	366.6	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 14, 2016	Previous Calibration	February 2, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:35	End Time (MST)	13:55:00 PM
Analyzer make/model	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	NA		
334.2	332.7	1.0044	Correlation Coefficient	0.999977
225.1	222.7	1.0107		
109.1	108.8	1.0030	Slope	1.005366
			Intercept	0.202650

O3 Calibration

March 14, 2016

Calibration Report

Parameter **CO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	14:10:00 PM	End Time (MST)	17:10:00 PM
Barometric Pressure	726.0 mm/hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	6586
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	1.011758	Calculated slope	1.002629
Calculated intercept	-0.016951	Calculated intercept	-0.130650
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	4.601		5.112	
CO span setting	1.001		1.027	
Sample pressure	698	mm Hg	691.7	mm Hg
Sample Flow	0.452	LPM	0.449	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	0.00	N/A
4995	69.94	40.02	39.97	1.0012
4995	34.96	20.14	20.30	0.9923
4995	17.96	10.38	10.61	0.9785
4995	0.00	0.00	0.36	As Found Zero
4995	69.94	40.02	38.98	As Found Span
			Average Correction Factor	0.9907

Calculated value of As Found Response: 39.055 ppm Percent Change of As Found: 2.4%

	before calibration		after calibration	
Auto zero	0.00	ppm	0.00	ppm
Auto span	19.52	ppm	20.00	ppm

Notes: Zero&span adjustment made

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **CO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:10:00 PM	End Time (MST)	17:10:00 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	0.000	N/A		
40.017	39.970	1.0012	Correlation Coefficient	0.999949
20.142	20.298	0.9923		
10.383	10.611	0.9785	Slope	1.002629
			Intercept	-0.130650

CO Calibration
49
39
29
19
9
-1
PPM
As found span
40.02 ppm CO
Adjustment point
20.14 ppm CO
10.38 ppm CO
Analyzer Span
20.00 ppb CO
As found
Zero
corrected
zero
AZ
AMB
March 15, 2015

Calibration Report

Parameter **CH4 / NMHC / THC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:

Start Time (MST)	10:40	End Time (MST)	15:00:00 PM
Barometric Pressure	726.00 mm/hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6103	Serial Number	6586
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	28	PSI
Fuel pressure	42.1	PSI	42.5	PSI
Carrier pressure	30.3	PSI	30.5	PSI
CH4 cal factor	6.01		6.12	E^{-4}
NMHC cal factor	2.23		2.34	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
1998	68.96	12.88	12.90	0.9986
1996	40.96	7.76	7.72	1.0057
1991	15.99	3.08	3.04	1.0121
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	13.23	As Found Span
			Average Correction Factor	1.0055

Calculated value of As Found Response: 13.189 ppm Percent Change of As Found: -2.4%

	Before		After
Calculated slope	0.997760	Calculated slope	0.999546
Calculated intercept	0.011258	Calculated intercept	0.013508

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.23	ppm	8.85	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	18.91	1.0051
1996	40.96	11.45	11.64	0.9834
1991	15.99	4.54	4.66	0.9732
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	17.06	As Found Span
			Average Correction Factor	0.9873

Calculated value of As Found Response: 17.079 ppm Percent Change of As Found: 10.1%

	Before		After
Calculated slope	1.007849	Calculated slope	1.005495
Calculated intercept	-0.092056	Calculated intercept	-0.108437

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.78	ppm	12.47	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
1998	68.96	31.87	31.79	1.0027
1996	40.96	19.21	19.34	0.9931
1991	15.99	7.61	7.68	0.9906
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	30.26	As Found Span
			Average Correction Factor	0.9955

Calculated value of As Found Response: 30.287 ppm Percent Change of As Found: 5.0%

	Before		After
Calculated slope	1.004453	Calculated slope	1.003138
Calculated intercept	-0.074015	Calculated intercept	-0.084338

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	22.00	ppm	21.32	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **CH4**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	15:00:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.019	N/A		
12.878	12.897	0.9986	Correlation Coefficient	0.999963
7.762	7.718	1.0057		
3.075	3.038	1.0121	Slope	0.999546
			Intercept	0.013508

Calibration Summary

Parameter **NMHC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	15:00:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A		
19.010	18.913	1.0051	Correlation Coefficient	0.999798
11.447	11.639	0.9834		
4.535	4.660	0.9732	Slope	1.005495
			Intercept	-0.108437

Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	15:00:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.033	N/A		
31.870	31.786	1.0027	Correlation Coefficient	0.999967
19.209	19.341	0.9931		
7.611	7.683	0.9906	Slope	1.003138
			Intercept	-0.084338

THC/CH4/NMHC Calibration
PPM
40
35
30
25
20
15
10
5
0
31.9 ppm THC
19.01 ppm
NMHC
12.89 ppm
CH4
19.21 ppm
THC
11.45 ppm
NMHC
7.76 ppm
CH4
7.59 ppm
THC
4.52 ppm
NMHC
3.07 ppm
CH4
AS
THC 21.32
NMHC
12.47
CH4
8.85
Calibrator
Zero
AZ
AMB
CH4_Avg
NMHC_Avg
THC_Avg

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	8:40	End Time (MST)	12:00
Barometric Pressure	726.00 mm/Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6103	Serial Number	6586
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	1.013424	Calculated slope	1.013566
Calculated intercept	-0.130922	Calculated intercept	-0.013382
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.935		0.935	
Background	18.4		18.2	
Pressure	657.1	mm Hg	666.6	mm Hg
Flow	0.443	ccm	0.448	ccm
Lamp Voltage	904	V	904	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	0.84	N/A
4995	39.93	81.84	80.82	1.0127
4995	19.95	41.05	40.76	1.0073
6995	9.95	14.66	13.36	1.0974
4995	0.00	0.00	0.84	As Found Zero
4995	39.93	81.84	80.82	As Found Span
			Average Correction Factor	1.0391

Calculated value of As Found Response: 80.9 ppb Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	0.59	ppb	0.65	ppb
Auto span	32.76	ppb	32.82	ppb

Notes: No adjustment made
Scrubber material checked-still good.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 15, 2016	Previous Calibration	February 3, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:40	End Time (MST)	12:00
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	0.835	N/A		
81.844	80.817	1.0127	Correlation Coefficient	0.999473
41.054	40.758	1.0073		
14.659	13.358	1.0974	Slope	1.013566
			Intercept	-0.013382

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
AS
32.76 ppb
As Found
Zero
SOX scrubber check
AZ
AMB
March 15, 2016

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 10 2016	Previous Calibration	February 4 2016
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:35	End Time (MST)	14:00:00 PM
Barometric Pressure	0.920 ATM	Station Temperature	21.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Concentration	49.7 ppm	Cal Gas Expiry Date	05/10/2018
Correction factor	0.031167	Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	1.000603	Calculated slope	0.999564
Calculated intercept	0.540671	Calculated intercept	0.777819
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.9		11.9	
coefficient	1.257		1.257	
Lamp Voltage	831	volts	831	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	651.6	mm Hg	651.8	mm Hg
Sample Flow	0.441	ccm	0.442	ccm
Lamp Intensity	89	%	89	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.5	N/A
4995	39.93	394.2	394.5	0.9992
4995	19.97	197.9	195.7	1.0114
4995	9.95	98.8	97.4	1.0146
4995	0.0	0.0	0.5	As Found Zero
4995	39.93	394.9	394.5	As Found Span
			Average Correction Factor	1.0084

Calculated value of As Found Response: 394.737 ppm Percent Change of As Found: 0.0%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.5	ppm
Auto span	261.3	ppm	268.4	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 10 2016	Previous Calibration	February 4 2016
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:35	End Time (MST)	14:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
394.2	394.5	0.9992	Correlation Coefficient	0.999937
197.9	195.7	1.0114		
98.8	97.4	1.0146	Slope	0.999564
			Intercept	0.777819

SO2 Calibration
495
395
295
195
95
-5
PPB
As found span
394.2 ppb SO2
197.9 ppb SO2
98.8 ppb SO2
AS
268.4 ppb
Zero
Auto Zero
Ambient
March 10 2016

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 10 2016	Previous Calibration	Febuary 4 2016
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:

Start Time (MST)	9:40	End Time (MST)	12:25
Barometric Pressure	0.920 ATM	Station Temperature	21.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031167	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.999967	Calculated slope	1.002930
Calculated intercept	0.073161	Calculated intercept	-0.125233

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

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.4	ppb	15.4	ppb
coefficient	0.990		0.990	
Lamp Voltage	1003	volts	1003	volts
Chamber Temp	44.7	Deg C	44.7	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	627.5	mm Hg	625.6	mm Hg
Sample Flow	0.582	ccm	0.583	ccm
Lamp Intensity	37,032	mv	37,026	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.2	N/A
4995	39.93	81.84	81.7	1.0014
4995	19.97	41.10	41.2	0.9985
6995	9.97	14.69	14.6	1.0046
4995	9.97		0.8	Sox Test
4995	0.00	0.00	0.2	As Found Zero
4995	39.93	81.84	81.7	As Found Span
			Average Correction Factor	1.0015

Calculated value of As Found Response: 81.58 ppm Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.2	ppm
Auto span	79.9	ppm	79.4	ppm

Notes: No adjustment made
Sox scrubber check performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	March 10 2016	Previous Calibration	Febuary 4 2016
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	9:40	End Time (MST)	12:25
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	0.2	N/A		
81.8	81.7	1.0014	Correlation Coefficient	0.999991
41.1	41.2	0.9985		
14.7	14.6	1.0046	Slope	1.002930
			Intercept	-0.125233

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 22, 2016	Previous Calibration	February 9, 2016
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	11:30	End Time (MST)	14:05:00 PM
Barometric Pressure	0.927 ATM	Station Temperature	20.5 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Concentration	49.7 ppm	Cal Gas Cert Date	05/11/2018
Correction factor	0.031458	Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.991934	Calculated slope	0.996232
Calculated intercept	0.767158	Calculated intercept	0.743807

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	13		13	
coefficient	0.952		0.952	
Lamp Voltage	940	volts	939	volts
Chamber Temp	45.3	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	666.6	mm Hg	667.1	mm Hg
Sample Flow	0.444	lpm	0.445	lpm
Lamp Intensity	88	%	88	%

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	394.15	395.4	0.9968
4995	19.97	197.91	197.4	1.0025
4995	9.97	99.00	97.5	1.0152
4995	0.0	0.00	0.3	As Found Zero
4995	39.93	394.15	395.4	As Found Span
			Average Correction Factor	1.0048

Calculated value of As Found Response: 392.656 ppm Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.3	ppb
Auto span	208.4	ppb	209.7	ppb

Notes: No adjustment made
While submitting after zero from the calibrator put wrong gas concentration into the calibrator screen, which caused spiking on the after zero.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	March 22, 2016	Previous Calibration	February 9, 2016
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:30	End Time (MST)	14:05:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
394.2	395.4	0.9968	Correlation Coefficient	0.999966
197.9	197.4	1.0025		
99.0	97.5	1.0152	Slope	0.996232
			Intercept	0.743807

Smokey Heights SO_2 Calibration
490
440
390
340
290
240
190
140
90
40
-10
PPB
As Found Span
394.15 ppb SO2
198.91ppb SO2
99.00 ppb SO2
Analyzer Span
209.7 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
March 22, 2016

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 22, 2016	Previous Calibration	February 9, 2016
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:10	End Time (MST)	12:50
Barometric Pressure	0.927 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031511	Cal Gas Cylinder #	BLM00586
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.989763	Calculated slope	1.006685
Calculated intercept	0.821848	Calculated intercept	1.272145
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	14.7	ppb	14.7	ppb
coefficient	1.044		1.044	
Lamp Voltage	854	volts	855	volts
Chamber Temp	43.8	Deg C	43.7	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	600.7	mm Hg	602.2	mm Hg
Sample Flow	0.559	lpm	0.560	lpm
Lamp Intensity	34,664	mv	34,659	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)
4998	0.0	0.00	0.0	N/A
4998	39.96	81.86	80.8	1.0132
4998	19.97	41.07	38.2	1.0755
6998	9.97	14.68	12.7	1.1587
4998	9.97		0.0	Sox test
4998	0.0	0.00	0.0	As Found Zero
4998	39.96	81.86	80.8	As Found Span
			Average Correction Factor	1.0825

Calculated value of As Found Response: 80.79 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.1	ppm	-0.1	ppm
Auto span	35.3	ppm	33.8	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 22, 2016	Previous Calibration	February 9, 2016
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	9:10	End Time (MST)	12:50
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		
81.9	80.8	1.0132	Correlation Coefficient	0.998859
41.1	38.2	1.0755		
14.7	12.7	1.1587	Slope	1.006685
			Intercept	1.272145

Smokey Heights TRS Calibration

March 22, 2016

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:20:00 PM	End Time (MST)	15:20:00 PM
Barometric Pressure	0.928 atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	6586
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	0.978831	Calculated slope	0.974432
Calculated intercept	-0.178732	Calculated intercept	-0.286038
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.66		2.66	
Coefficient	1.018		1.018	
PMT	-768.5	V	-768.1	V
UV Lamp Voltage	1088	V	1109	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	659.8	mm Hg	664.3	mm Hg
Sample Flow	0.451	LPM	0.458	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	88.2	0.9713
4994	19.96	43.0	44.4	0.9685
4994	9.96	21.5	22.4	0.9582
4994	0.00	0.0	0.2	As found zero
4994	39.92	85.6	88.2	As found span
			Average Correction Factor	0.9660

Calculated value of As Found Response: 85.893 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.0	ppb	-0.1	ppb
Auto span	59.9	ppb	60.3	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:20:00 PM	End Time (MST)	15:20:00 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	88.2	0.9713	Correlation Coefficient	0.999998
43.0	44.4	0.9685		
21.5	22.4	0.9582	Slope	0.974432
			Intercept	-0.286038

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 60.3 ppb.
AF Zero
Afterr
Zero
Ambient
March 23, 2016

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge

Reason: Routine Installation Removal Other:

Start Time (MST)	8:40		End Time (MST)	12:55	
Barometric Pressure	0.928	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	6586	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	November 5, 2018	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL103793	

DACS Information

DACS make: CR3000 DACS serial No.: 5237

Parameter		NO2	NOx	NO
Before	Data Slope	0.999982	0.999995	0.999991
	Data Offset	0.994661	1.004897	1.006641
After	Data Slope	0.994661	1.004897	1.006641
	Data Offset	-0.308567	0.545632	0.537335
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	2.6	mV	2.6	mV
NOx bkgnd	3.1	mV	3.1	mV
NO coefficient	1.103		1.103	
NOx coefficient	1.005		1.005	
NO2 conv temp	323.6	Deg C	323.8	Deg C
PMT Temp	-2.9	Deg C	-3.0	Deg C
PMT Volt	-730.0	mV	-730.0	mV
R Cell Press	185.7	in Hg	185.9	in Hg
Sample Flow	0.723	LPM	0.722	LPM

Notes: No adjustment made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: March 23, 2016 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	0.0	-0.2	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	403.6	400.7	2.2	1.0057	1.0071
2	4995	19.96	203.8	202.6	1.2	202.0	200.1	1.0	1.0086	1.0122
3	4995	9.93	101.6	101.0	0.6	100.1	99.5	0.5	1.0148	1.0150
AFZ	4995	0.00	0.0	0.0	0.0	-0.1	0.0	-0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	403.6	400.7	2.2	1.0057	1.0071
							Average Correction Factor		1.0097	1.0114

As Found Concentrations: NO_X= 404.7 NO= 401.8 As Found Percent Change NO_X= -0.3% NO= -0.4%

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	0.0	0.0	0.0	-0.1	0.0	-0.2	N/A	N/A	N/A	N/A
NO point	400.3	400.3	0.0	402.5	400.3	1.4	0.9947	1.0000	N/A	N/A
300	400.3	68.4	331.9	402.8	68.4	333.5	0.9939	1.0000	0.9953	100.5%
200	400.3	177.4	222.9	403.2	177.4	224.9	0.9929	1.0000	0.9908	100.9%
100	400.3	292.7	107.6	402.3	292.7	109.0	0.9950	1.0000	0.9873	101.3%
					Average Correction Factor		0.9939	1.0000	0.9912	100.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.3	-0.3	0.0	ppb	-0.3	-0.3	0.0	ppb
Auto span	287.8	285.2	1.8	ppb	291.2	288.5	1.8	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:40	End Time (MST)	12:55
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		
331.9	333.5	0.9953	Correlation Coefficient	0.999982
222.9	224.9	0.9908		
107.6	109.0	0.9873	Slope	0.994661
			Intercept	-0.308567

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:40	End Time (MST)	12:55
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	403.6	1.0057	Correlation Coefficient	0.999995
203.8	202.0	1.0086		
101.6	100.1	1.0148	Slope	1.004897
			Intercept	0.545632

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:40	End Time (MST)	12:55
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	0.0	N/A		
403.6	400.7	1.0071	Correlation Coefficient	0.999991
202.6	200.1	1.0122		
101.0	99.5	1.0150	Slope	1.006641
			Intercept	0.537335

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
2nd higth
GPT
400.3 ppb NOX
331.9 ppb
NO2
292.7 ppb
NO
As Left Span
291.2 ppb NOx
288.5 ppb NO2
222.9 ppb
NO2
203.8 /202.6ppb
NOX/NO
177.4 ppb
NO
101.6/101.0
ppb
NOX/NO
107.6 ppb
NO2
68.4 ppb
NO
As found
Zero
AZ
AMB
NOx
NO
NO2
March 23, 2016

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:00	End Time (MST)	14:05:00 PM
Barometric Pressure	0.928 atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.000964	Calculated slope	1.010372
Calculated intercept	0.192885	Calculated intercept	0.024765
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	1.090		1.090	
Lamp temp	53.8	mV	53.8	mV
Lamp Intensity A/B	52375/57526	mV	50517/55755	mV
Pressure	681.4	mm Hg	677.5	mm Hg
Flow A	0.785	LPM	0.783	LPM
Flow B	0.744	LPM	0.740	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	0.5	N/A
5035	0.30	331.9	329.6	1.0070
5035	0.20	222.9	218.8	1.0186
5035	0.10	107.6	106.5	1.0099
5035	0.00	0.0	0.5	As found zero
5035	0.30	331.9	329.6	As found span
			Average Correction Factor	1.0118

Calculated value of As Found Response: 329.6 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	0.6	ppb	0.5	ppb
Auto span	276.3	ppb	265.9	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 23, 2016	Previous Calibration	February 10, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:00	End Time (MST)	14:05:00 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	0.5	NA		
331.9	329.6	1.0070	Correlation Coefficient	0.999923
222.9	218.8	1.0186		
107.6	106.5	1.0099	Slope	1.010372
			Intercept	0.024765

O3 Calibration

March 23, 2016

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 17 2016	Previous Calibration	February 18 2016
Station Number	6	Station Location	Valleyview
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	11:40	End Time (MST)	13:50:00 PM
Barometric Pressure	0.927 atm	Station Temperature	20.5 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentratior	49.7 ppm	Cal Gas Exp Date	November 5, 2018
Gas Cylinder Num.	LL103793		
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	1.004923	Calculated slope	1.002804
Calculated intercept	0.525134	Calculated intercept	0.777144
Analyzer make	TEI 43C	Analyzer serial #	609716239

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	15.6		16.1	
Coefficient	1.031		1.031	
UV Lamp Voltage	737	LPM	736	LPM
Chamber Temp	42.6	V	43	V
Perm Gas Temp	45	C	45	C
Pressure	682.5	in Hg	680.1	in Hg
Sample Flow	0.492	LPM	0.493	LPM
Lamp Intensity	47504	Hz	47463	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	0.4	N/A
4995	39.93	394.2	392.9	1.0032
4995	19.97	197.9	195.9	1.0103
4995	9.95	98.8	96.6	1.0224
4995	0.00	0.0	0.4	As found zero
4995	39.93	394.2	392.9	As found span
			Average Correction Factor	1.0120

Calculated value of As Found Response: 394.9 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.6	ppm
Auto span	294.6	ppm	278.5	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 17 2016	Previous Calibration	February 18 2016
Station Number	6	Station Location	Valleyview
Start Time (MST)	11:40	End Time (MST)	13:50:00 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	0.4	N/A		
394.2	392.9	1.0032	Correlation Coefficient	0.999958
197.9	195.9	1.0103		
98.8	96.6	1.0224	Slope	1.002804
			Intercept	0.777144

AZ

SO2 Calibration

Calibration Report

Parameter **H2S**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 17 2016	Previous Calibration	February 18 2016
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:00	End Time (MST)	12:40
Barometric Pressure	0.927 atm	Station Temperature	20.5 Deg C
Calibrator	Environics	Serial Number	6586
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	1.012962	Calculated slope	1.000403
Calculated intercept	-0.012774	Calculated intercept	-0.035624
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.9	ppb	8.2	ppb
Coefficient	0.871		0.871	
Lamp Voltage	792	V	793	V
Chamber Temp	45	c	45	c
Perm Oven Temp	45	c	45	c
Pressure	557.40	mm Hg	557.20	mm Hg
Sample Flow	0.391	ccm	0.390	lpm
Lamp Intensity	91	%	91	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.3	N/A
4997	39.91	81.8	81.9	0.9978
4997	19.94	41.0	40.7	1.0070
6995	9.97	14.7	14.6	1.0071
4997	9.97		2.8	Sox Test
4997	0.00	0.0	0.3	As found zero
4997	39.93	81.8	81.9	As found span
			Average Correction Factor	1.0040

Calculated value of As Found Response: 82.69 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.3	ppm
Auto span	69.5	ppm	65.6	ppm

Notes: No adjutments made
Sox scrubber check performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 17 2016	Previous Calibration	February 18 2016
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:00	End Time (MST)	12:40
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
81.8	81.9	0.9978	Correlation Coefficient	0.999946
41.0	40.7	1.0070		
14.7	14.6	1.0071	Slope	1.000403
			Intercept	-0.035624

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 found
Zero
SOx scrubber check
AZ
AS
65.6 ppb H2S
Ambient
March 17 2016

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Rycroft

Reason: Routine **Installation** Removal Other:

Start Time (MST)	10:35		End Time (MST)	15:15:00 PM	
Barometric Pressure	0.929	Atm	Station Temperature	18.0	Deg C
Calibrator	Environics		Serial Number	6586	
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	0.998682	1.003966	1.001985
	Data Offset	-0.394468	-0.784736	-0.806850
After	Data Slope	0.989916	1.000475	0.995194
	Data Offset	0.166113	0.137836	-0.394757
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	7.5	mV	7.5	mV
NOx bkgnd	7.7	mV	8.8	mV
NO coefficient	1.336		1.336	
NOx coefficient	0.999		0.999	
NO2 conv temp	323.4	Deg C	326.8	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-852.5	mV	-834.7	mV
R Cell Press	216.5	in Hg	217.4	in Hg
Sample Flow	0.675	LPM	0.679	LPM

Notes: PMT & zero adjustments made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: March 2, 2016 Station Location: Rycroft

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	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	405.7	405.8	-1.7	1.0007	0.9946
2	4995	19.96	203.8	202.6	1.2	203.5	204.1	-1.3	1.0013	0.9927
3	4995	9.93	101.6	101.0	0.6	101.3	102.2	-0.7	1.0030	0.9881
AFZ	4995	0.00	0.0	0.0	0.0	1.1	1.1	0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	478.7	476.3	0.5	0.8480	0.8473
							Average Correction Factor		1.0017	0.9918

As Found Concentrations: NO_X= 478.7 NO= 475.3 As Found Percent Change NO_X= 17.9% NO= 17.8%

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	1.1	1.1	0.0	0.0	0.1	0.0	N/A	N/A	N/A	N/A
NO point	406.2	406.2	0.0	406.2	406.2	-1.9	1.0000	1.0000	N/A	N/A
300	406.2	67.7	338.5	411.1	67.7	341.9	0.9880	1.0000	0.9898	101.0%
200	406.2	178.0	228.1	410.0	178.0	230.1	0.9906	1.0000	0.9916	100.9%
100	406.2	296.2	110.0	408.9	296.2	110.7	0.9932	1.0000	0.9932	100.7%
					Average Correction Factor		0.9906	1.0000	0.9915	100.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.3	0.1	0.4	ppb	-0.8	-0.8	0.2	ppb
Auto span	151.6	149.4	1.5	ppb	181.0	178.0	2.1	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:35	End Time (MST)	15:15:00 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		
338.5	341.9	0.9898	Correlation Coefficient	0.999997
228.1	230.1	0.9916		
110.0	110.7	0.9932	Slope	0.989916
			Intercept	0.166113

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:35	End Time (MST)	15:15:00 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	405.7	1.0007	Correlation Coefficient	1.000000
203.8	203.5	1.0013		
101.6	101.3	1.0030	Slope	1.000475
			Intercept	0.137836

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Rycroft
Start Time (MST)	10:35	End Time (MST)	15:15:00 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	405.8	0.9946	Correlation Coefficient	0.999997
202.6	204.1	0.9927		
101.0	102.2	0.9881	Slope	0.995194
			Intercept	-0.394757

NO Calibration Curve

NOx Calibration
490
390
290
190
90
-10
As found Span
405.9 /403.6
ppb NOX/NO
adjustment
point
203.8 /202.6 ppb
NOX/NO
101.6/101.0
ppb
NOX/NO
GPT
406.2 ppb NOX
338.5 ppb
NO2
67.7 ppb
NO
292.2 ppb
NO
228.1 ppb
NO2
178.0 ppb
NO
110.0 ppb
NO2
As Left Span
181.0 ppb NOx
178.0 ppb NO2
Zero
AZ
AMB
NOx
NO
NO2
March 2, 2016

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:45	End Time (MST)	13:55:00 PM
Barometric Pressure	0.929 Atm	Station Temperature	18.0 Deg C
Calibrator	Environics 6103	Serial Number	6586
Cal Gas Concentratior	49.8 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	1.007524	Calculated slope	0.992760
Calculated intercept	0.150831	Calculated intercept	-0.156702
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21.3		22.1	
Coefficient	1.018		1.057	
UV Lamp Voltage	886	V	886	V
Chamber Temp	44.4	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	675.2	mm Hg	675.2	mm Hg
Sample Flow	0.467	LPM	0.468	LPM
Lamp Intesity	30452	Hz	30418	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	0.6	N/A
4995	39.93	394.9	398.3	0.9917
4995	19.97	198.3	199.5	0.9941
4995	9.97	99.2	99.8	0.9939
4995	0.00	0.0	0.6	As found zero
4995	39.93	394.9	383.0	As found span
			Average Correction Factor	0.9932

Calculated value of As Found Response: 385.415 ppm Percent Change of As Found: 2.4%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	235.4	ppm	208.2	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	March 2, 2016	Previous Calibration	September 24, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	10:45	End Time (MST)	13:55:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
394.9	398.3	0.9917	Correlation Coefficient	0.999994
198.3	199.5	0.9941		
99.2	99.8	0.9939	Slope	0.992760
			Intercept	-0.156702

SO2 Calibration

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2 2016	Previous Calibration	September 24 2015
Station Number	10	Station Location	Rycroft
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	14:10:00 AM	End Time (MST)	16:50:00 PM
Barometric Pressure	0.929 atm	Station Temperature	18.0 Deg C
Calibrator	Environics 6103	Serial Number	6586
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	0.999831	Calculated slope	0.992928
Calculated intercept	0.286455	Calculated intercept	0.379398
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	0.980		0.998	
Cell A intensity	74788	Hz	74794	Hz
Cell B intensity	75223	Hz	75239	Hz
Pressure	672.00	in Hg	674.40	in Hg
CellA Flow	0.637	ccm	0.640	ccm
Cell B Flow	0.650	cmm	0.654	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	0.2	N/A
5035	0.30	338.5	341.8	0.9902
5035	0.20	228.1	227.3	1.0034
5035	0.10	110.0	110.5	0.9955
5035	0.00	0.0	0.2	As found zero
5035	0.30	338.5	334.7	As found span
			Average Correction Factor	0.9964

Calculated value of As Found Response: 334.7 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.0	ppb	0.1	ppb
Auto span	390.7	ppb	425.9	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 2 2016	Previous Calibration	September 24 2015
Station Number	10	Station Location	Rycroft
Start Time (MST)	14:10:00 AM	End Time (MST)	16:50:00 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	0.2	NA		
338.5	341.8	0.9902	Correlation Coefficient	0.999906
228.1	227.3	1.0034		
110.0	110.5	0.9955	Slope	0.992928
			Intercept	0.379398

O3 (PPB)
449
399
349
299
249
199
149
99
49
-1
As Found Zero
As Found Span
338.5 ppb O3
adjustment point
228.1 ppb O3
110.0 ppb O3
AZ
AS
425.9 ppb O3
AMB

March 2 2016

Calibration Report

Parameter **THC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 9, 2016	Previous Calibration	September 25, 2015
Station Number	10	Station Location	Rycroft Rover
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:00:00 PM	End Time (MST)	15:20:00 PM
Barometric Pressure	0.925 ATM	Station Temperature	21.0 Deg C
Calibrator	Environics 6103	Serial Number	6586
Cal Gas Concentratior	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	0.998033	Calculated slope	0.999296
Calculated intercept	0.146914	Calculated intercept	0.053279
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	2329	capture	2329	capture
THC span offset	2251	capture	2267	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	0.03	N/A
2996	69.89	21.81	21.81	0.9999
2996	29.96	9.47	9.35	1.0136
2996	9.97	3.17	3.08	1.0302
2996	0.00	0.00	0.03	As Found Zero
2996	69.93	21.82	21.66	As Found Span
			Average Correction Factor	1.0146

Calculated value of As Found Response: 21.735 ppm Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	0.02	ppm	-0.01	ppm
Auto span	22.18	ppm	22.39	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii/Grover Christiansen

Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 9, 2016	Previous Calibration	September 25, 2015
Station Number	10	Station Location	Rycroft Rover
Start Time (MST)	13:00:00 PM	End Time (MST)	15:20:00 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	0.029	N/A		
21.81	21.81	0.9999	Correlation Coefficient	0.999941
9.47	9.35	1.0136		
3.17	3.08	1.0302	Slope	0.999296
			Intercept	0.053279

THC Calibration
PPM
24
19
14
9
4
-1
As found span
21.81 ppm THC
9.47 ppm THC
3.17 ppm THC
After span
22.39 ppm
AMB
as found zero
after
zero

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 3, 2016	Previous Calibration	September 25, 2015
Station Name	PAZA Rover	Station Location	Rycroft
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	13:20:00 PM	End Time (MST)	16:40:00 PM
Barometric Pressure	0.925 Atm	Station Temperature	17.0 Deg C
Calibrator	Environics	Serial Number	6586
Cal Gas Concentratior	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	1.005077	Calculated slope	0.993700
Calculated intercept	-0.317008	Calculated intercept	0.244077
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	25.1	ppb	26.7	ppb
Coefficient	0.942		0.957	
Lamp Voltage	796	V	796	V
Chamber Temp	43.7	C	43.8	C
Perm gas Temp	45	C	45	C
Pressure	662.5	mmHg	664.1	mmHg
Sample Flow	0.447	lpm	0.447	lpm
Lamp Intensity	43493	Hz	43491	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.0	0.1	N/A
4995	39.93	81.8	82.1	0.9967
4995	19.97	41.1	41.3	0.9954
6995	9.97	14.7	14.1	1.0448
4995	9.97		0.3	Sox Test
4995	0.00	0.0	1.2	As found zero
4995	39.93	81.8	81.3	As found span
			Average Correction Factor	1.0123

Calculated value of As Found Response: 80.21 ppm Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	0.3	ppm	-0.1	ppm
Auto span	57.5	ppm	54.6	ppm

Notes: Zero &span adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	March 3, 2016	Previous Calibration	September 25, 2015
Station Number	PAZA Rover	Station Location	Rycroft
Start Time (MST)	13:20:00 PM	End Time (MST)	16:40:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
81.8	82.1	0.9967	Correlation Coefficient	0.999909
41.1	41.3	0.9954		
14.7	14.1	1.0448	Slope	0.993700
			Intercept	0.244077

TRS Calibration
99
89
79
69
59
49
39
29
19
9
-1
PPB
as found span
81.8 ppb TRS
Adjustment
point
41.1 ppb TRS
14.7 ppb TRS
Sox scrubber
check
AZ
AS
54.6 ppb TRS
AMB
As Found Zero
March 3, 2016

AB TEOM PM2.5 Calibration

WSP
AIR QUALITY MONITORING

STATION: **Rover-Rycroft**

LOCATION: PAZA - Grande Prairie

OPERATOR: Dmytro Dolotii,Grover Christi

DATE: 09-Mar-16

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	21551
Site Number	10
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	0.990
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	
Previous Calibration	16-Jun-15

PUMP CAPACITY CHECK *	PASS

* capacity test or pump on timed test utilized to verify pump integrity

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.032	0.030
PUMP OFF	0.000	0.000
NET	0.032	0.030
LIMITS	*<0.15*	*<0.60*

		Ambient Temp. (^{0} C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	12893	13.67	3.000
	INDICATED (I)	8.6	0.925		13.68	3.000
As Found Data	MEASURED (AF)	8.7	0.927		13.70	3.003
Adjusted Data	MEASURED (M)	8.7	0.927	13105	13.70	3.003
	DIFFERENCE (M-I)	0.1	0.002	1.6%	0.03	0.00
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.11251 *Serial #:* *CVK 3316*

COMMENTS: Pass

Full audit was performed.

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