Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
June 2012

Operations and Reporting

Peace Airshed Zone Association
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June 22nd, 2012

Alberta Environment
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RE: Peace Airshed Zone Association (PAZA) – June 2012 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **June 2012**.

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	AENV Approval Number
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	262479-00-00
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
Barrick Energy Inc.	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	252529-00-00
Bonavista Energy Corporation	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	29-01-01
	Progress/Gordondale	01-01-077-10-W6	10036-02-00
	Gold Creek	13-26-067-05-W6	10446-02-00
	Teepee Creek	SE-2-074-04-W6	1635-02-02

Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	212-01-00
Devon Canada	Tangent	16-20-080-24-W5	11346-02-00
	NW Belloy (Dunvegan)	16-36-079-03-W6	9810-02-00
	Eaglesham (South)	02-14-077-25-W5	47669-01-00
	Puskwaskau	03-26-074-01-W6	17524-01-00
	North Normanville	03-36-079-23-W5	47455-01-00
	West Culp	05-34-078-25-W6	136284-00-00
	Cecil	08-15-084-08-W6	10032-02-00
EnCana Corporation	Sexsmith	04-08-075-07-W6	10002-01-00
Galleon Energy Inc.	Eaglesham	01-25-076-01-W6	241532-00-00
	Kakut	14-12-075-03-W6	248469-00-01
	Donnelly	06-01-077-21-W5	87-02-00
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	238762-00-02
Longview Oil Corp.	Sunset House	06-22-70-20-W5	138884-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	1746-02-01
	Pouce Coupe	16-07-078-11-W6	614-01-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	263-01-00
Suncor Energy Inc.	Progress	07-22-078-09-W6	11428-02-00
Taqa North Ltd.	Valhalla	13-21-076-09-W6	17620-01-01
Veresen Energy Infrastructure Inc.	Hythe Brainard	11-18-074-12-W6	10910-02-02
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	113-02-00

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 Portable-Sunset House.**

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

Henry Pirker Station:

- The measured ambient air quality was within the Alberta Ambient Air Quality Objectives (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 June.

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 June.

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 June.

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 June.

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 June.

Sunset House Station:

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

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of June: Boone Creek, Wanham, Clairmont Lake, Deer Mountain, 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 0.3 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.1 ppb to 1.4 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for O_3 passives ranged from 19.1 ppb to 39.5 ppb, with a mean of 28.1 ppb.
- Monthly average concentrations for H_2S passives ranged from 0.0 to 0.2 ppb, with a mean of 0.1 ppb.

If you have any questions or concerns, please contact Shelly Pruden, PAZA Program Manager at 780.833.4343 or 780.882.4071.

On Behalf of the
Peace Airshed Zone Association

Shelly Pruden
Executive Director

Patrick Andersen, B.Sc.
FOCUS AQM Data Specialist

Jeff Cooper, C.Tech.
AQM Operations Manager

Location of PAZA Continuous Monitoring Stations

PAZA Monthly Continuous Data Summary

Jun-2012	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 (%)
SO_2 (ppb)	172	48	Henry Pirker	0.1	0	0	1.6	Jun-19 17:00	0.3	Jun-19	100%
SO_2 (ppb)	172	48	Evergreen Park	0.1	0	0	1.1	Jun-19 17:00	0.2	Jun-19	100%
SO_2 (ppb)	172	48	Smoky Heights	0.3	0	0	10.8	Jun-28 03:00	1.6	Jun-28	100%
SO_2 (ppb)	172	48	Beaverlodge	0.1	0	0	1.3	Jun-16 13:00	0.5	Jun-23	100%
SO_2 (ppb)	172	48	Valleyview	0.6	0	0	12.0	Jun-03 01:00	3.2	Jun-18	100%
SO_2 (ppb)	172	48	Sunset House	0.0	0	0	3.1	Jun-22 08:00	0.4	Jun-22	100%
NO (ppb)			Henry Pirker	0.7	0	0	9.7	Jun-20 08:00	1.6	Jun-20	100%
NO_2 (ppb)	159	106	Henry Pirker	3.1	0	0	18.3	Jun-04 08:00	6.6	Jun-04	100%
NO_X (ppb)			Henry Pirker	3.8	0	0	26.5	Jun-04 08:00	8.0	Jun-04	100%
NO (ppb)			Beaverlodge	0.2	0	0	5.3	Jun-14 10:00	0.7	Jun-21	100%
NO_2 (ppb)	159	106	Beaverlodge	1.6	0	0	9.7	Jun-04 06:00	2.9	Jun-22	100%
NO_X (ppb)			Beaverlodge	1.8	0	0	14.4	Jun-22 07:00	3.4	Jun-21	100%
NO (ppb)			Sunset House	0.1	0	0	1.0	Jun-15 18:00	0.2	Jun-07	100%
NO_2 (ppb)	159	106	Sunset House	0.8	0	0	4.1	Jun-22 08:00	1.3	Jun-22	100%
NO_X (ppb)			Sunset House	0.9	0	0	5.0	Jun-22 08:00	1.3	Jun-22	100%
O_3 (ppb)	82		Henry Pirker	25.7	0	-	51.2	Jun-01 15:00	39.3	Jun-03	100%
O_3 (ppb) - 8-hr			Henry Pirker		0				49.2	Jun-04	
O_3 (ppb)	82		Beaverlodge	31.0	0	-	55.7	Jun-22 14:00	42.8	Jun-01	100%
O_3 (ppb) - 8-hr			Beaverlodge		0				51.6	Jun-22	
O_3 (ppb)	82		Sunset House	30.4	0	-	54.9	Jun-04 20:00	42.5	Jun-04	100%
O_3 (ppb) - 8-hr			Sunset House		0				12.7	Jun-04	
CO (ppm)	13		Henry Pirker	0.17	0	-	0.4	Jun-30 04:00	0.2	Jun-05	100%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.3	Jun-05	
THC (ppm)			Henry Pirker	2.08	-	-	3.5	Jun-30 05:00	2.3	Jun-30	100%
TRS (ppb)			Henry Pirker	0.3	-	-	1.1	Jun-21 06:00	0.4	Jun-30	100%
TRS (ppb)			Evergreen Park	0.5	-	-	1.0	Jun-16 09:00	0.7	Jun-07	100%
TRS (ppb)			Smoky Heights	0.3	-	-	1.3	Jun-05 09:00	0.3	Jun-20	100%
TRS (ppb)			Sunset House	0.3	-	-	0.9	Jun-16 11:00	0.7	Jun-16	100%
H_2S (ppb)	10	3	Valleyview	0.0	0	0	7.9	Jun-13 05:00	0.7	Jun-13	100%
PM2.5 (µg/m3)	80	30	Henry Pirker	3.5	0	0	9.8	Jun-07 05:00	6.2	Jun-04	100%
PM2.5 (µg/m3)	80	30	Evergreen Park	4.6	0	0	61.6	Jun-27 13:00	19.7	Jun-27	100%
PM2.5 (µg/m3)	80	30	Smoky Heights	3.2	0	0	36.5	Jun-28 19:00	9.1	Jun-28	100%
PM2.5 (µg/m3)	80	30	Beaverlodge	6.9	0	0	21.2	Jun-26 23:00	12.2	Jun-05	100%
PM2.5 (µg/m3)	80	30	Sunset House	2.4	0	0	18.0	Jun-05 06:00	8.5	Jun-05	96%

PAZA Monthly Continuous Data Summary – continued

Jun-2012	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
RH (%)			Henry Pirker	58.4	-	-	91.3	Jun-06 20:00	90.1	Jun-06	100%
RH (%)			Evergreen Park	60.1	-	-	99.9	Jun-06 21:00	98.9	Jun-06	100%
RH (%)			Beaverlodge	64.9	-	-	100.0	Jun-06 01:00	99.2	Jun-06	100%
RH (%)			Valleyview	65.2	-	-	100.0	Jun-05 23:00	94.1	Jun-06	100%
SR (W/m^2)			Henry Pirker	217.0	-	-	851.1	Jun-29 13:00	310.4	Jun-21	100%
Temp (°C)			Henry Pirker	15.3	-	-	25.7	Jun-22 14:00	19.3	Jun-22	100%
Temp (°C)			Evergreen Park	14.8	-	-	24.1	Jun-22 14:00	18.1	Jun-24	100%
Temp (°C)			Smoky Heights	14.7	-	-	25.2	Jun-22 15:00	19.1	Jun-22	100%
Temp (°C)			Beaverlodge	14.3	-	-	24.1	Jun-22 15:00	18.4	Jun-22	100%
Temp (°C)			Valleyview	15.3	-	-	24.6	Jun-21 15:00	18.7	Jun-23	100%
Temp (°C)			Sunset House	14.0	-	-	24.2	Jun-22 16:00	18.9	Jun-23	100%
WSPD s (km/hr)			Henry Pirker	12.0	-	-	37.0	Jun-27 14:00	26.8	Jun-27	100%
WSPD s (km/hr)			Evergreen Park	15.2	-	-	50.0	Jun-27 12:00	36.7	Jun-27	100%
WSPD s (km/hr)			Smoky Heights	14.1	-	-	42.0	Jun-27 13:00	32.6	Jun-27	100%
WSPD s (km/hr)			Beaverlodge	14.3	-	-	38.0	Jun-27 16:00	26.1	Jun-27	100%
WSPD s (km/hr)			Valleyview	5.4	-	-	20.0	Jun-27 12:00	13.2	Jun-27	100%
WSPD s (km/hr)			Sunset House	10.5	-	-	27.0	Jun-06 10:00	19.9	Jun-06	100%
WSPD v (km/hr)			Henry Pirker	5.3	-	-	37.0	Jun-27 14:00	26.2	Jun-27	100%
WSPD v (km/hr)			Evergreen Park	7.8	-	-	50.0	Jun-27 12:00	35.6	Jun-27	100%
WSPD v (km/hr)			Smoky Heights	6.5	-	-	41.0	Jun-27 13:00	32.3	Jun-27	100%
WSPD v (km/hr)			Beaverlodge	4.5	-	-	38.0	Jun-27 14:00	25.6	Jun-05	100%
WSPD v (km/hr)			Valleyview	2.5	-	-	20.0	Jun-27 12:00	12.7	Jun-27	100%
WSPD v (km/hr)			Sunset House	1.8	-	-	27.0	Jun-06 10:00	19.1	Jun-06	100%
WDIR			Henry Pirker	W	-	-	-	-	-	-	100%
WDIR			Evergreen Park	W	-	-	-	-	-	-	100%
WDIR			Smoky Heights	W	-	-	-	-	-	-	100%
WDIR			Beaverlodge	W	-	-	-	-	-	-	100%
WDIR			Valleyview	WNW	-	-	-	-	-	-	100%
WDIR			Sunset House	SSW	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on June 3rd (THC) and June 13th (SO_2, NO_X , O_3, TRS & CO).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
NOx/NO/NO_2	TEI	42C	Zero/Span trouble call June 21st.
O_3	TEI	49C	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	Trouble call and calibration performed June 3rd.
TRS	TEI	45C/43C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on June 21st (SO_2, TRS).

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	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

Routine monthly calibrations were performed on June 22nd (SO_2 and TRS).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	Two (2) hours flagged invalid due to negative readings.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations performed on June 20th (SO_2, NO_X, O_3).

Parameter	Make	Model	Notes
SO_2	TEI	43CTL	No operational issues observed.
NOx/NO/NO_2	TEI	42C	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	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

Routine monthly calibrations were performed on June 29th (SO_2 & H_2S).

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
H_2S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Portable-Sunset House Station			
General Station Issues Routine monthly calibrations were performed on June 30th (SO_2, O_3, NO_x,TRS).			
Parameter	**Make**	**Model**	**Notes**
SO_2	TEI	43i	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	Twenty Four (24) hours flagged invalid due to negative readings.
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 - June 2012

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

Maximum Value: 1.6 ppb on Jun 19 17:00

Maximum Daily Average: 0.3 ppb on Jun 19

Minimum Value: 0 ppb on Jun 2 00:00

Minimum Daily Average: 0.0 ppb on Jun 12

Maximum Diurnal Average: 0.2 ppb at hour 12

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.11 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.2$ $P_{99} = 0.7$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
2-Jun	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
3-Jun	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
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
5-Jun	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
6-Jun	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
7-Jun	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	0.4
8-Jun	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
9-Jun	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.7
10-Jun	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
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.2
12-Jun	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
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	A	C	C	C	C	0	0	0	0	0	0	0	0.2	0.5
14-Jun	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
15-Jun	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
16-Jun	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
17-Jun	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	0.1
18-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
19-Jun	0	0	0	0	1	1	A	1	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0.3	1.6
20-Jun	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
21-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
22-Jun	0	0	0	A	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.8
23-Jun	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.1
24-Jun	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.7
25-Jun	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
26-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
28-Jun	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
29-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
30-Jun	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
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.3	0.2	0.3	0.6	0.7	0.5	0.6	0.6	0.7	0.7	1.1	1.1	1.0	0.3	0.2	1.6	0.4	0.4	0.2	0.4	0.4	0.3	0.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2012

Maximum Value: 6.1 ppb on Jun 19 17:00

Maximum Daily Average: 0.8 ppb on Jun 19

Minimum Value: 0 ppb on Jun 23 06:00

Minimum Daily Average: 0.1 ppb on Jun 12

Maximum Diurnal Average: 0.5 ppb at hour 17

Minimum Diurnal Average: 0.3 ppb at hour 2

Monthly Average: 0.36 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.7$ $P_{99} = 1.5$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0.3	0.6
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4
4-Jun	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	A	0	0	0.5	0.8
5-Jun	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	0.4
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.2	0.5
7-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	2	1	1	0.3	1.6
8-Jun	1	0	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	A	0	1	0	0	0	0	0.4	0.7
9-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	A	0	0	1	0	1	0	0	0.5	1.1
10-Jun	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7
11-Jun	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Jun	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.6
13-Jun	0	0	0	0	0	0	0	0	1	1	1	1	A	C	C	C	C	0	0	0	0	1	0	0	0.3	0.7
14-Jun	0	0	0	0	0	1	0	0	1	1	1	A	0	0	0	1	0	1	0	1	1	0	1	0	0.4	0.7
15-Jun	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Jun	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
17-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.6
18-Jun	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.7
19-Jun	0	0	1	1	1	1	A	1	1	1	1	1	0	0	0	1	6	1	2	0	0	0	0	0	0.8	6.1
20-Jun	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0.3	0.7
21-Jun	1	0	0	0	A	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7
22-Jun	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	1	0	0.7	1.2
23-Jun	0	0	A	0	0	0	0	0	0	0	0	2	1	1	1	1	1	1	1	1	1	1	1	1	0.6	2.0
24-Jun	1	A	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0.5	1.2
25-Jun	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
26-Jun	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.7
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0.2	0.6
28-Jun	0	1	1	1	0	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0.4	0.6
29-Jun	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	A	0	0	0	0	0.4	0.8
30-Jun	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	2	0.4	2.5
	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3	Diurnal Average	
	0.7	0.6	0.8	0.8	0.9	1.2	1.1	1.2	1.2	1.1	1.2	2.0	1.5	1.5	1.0	0.7	6.1	0.7	1.7	1.1	1.0	1.6	0.6	2.5	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2012

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2012

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

Maximum Value: 1.1 ppb on Jun 21 06:00

Maximum Daily Average: 0.4 ppb on Jun 30

Minimum Value: 0 ppb on Jun 24 15:00

Minimum Daily Average: 0.2 ppb on Jun 25

Maximum Diurnal Average: 0.4 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 15

Monthly Average: 0.28 ppb

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

Hours in Service:	720
Hours of Data:	684
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-Jun	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	0.5
2-Jun	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
3-Jun	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
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
5-Jun	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
6-Jun	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
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3
9-Jun	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	0.4
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.4
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Jun	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
13-Jun	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.2	0.3
14-Jun	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
15-Jun	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
16-Jun	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
17-Jun	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
18-Jun	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
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
20-Jun	0	0	1	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
21-Jun	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
22-Jun	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
23-Jun	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
24-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
25-Jun	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
26-Jun	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.6
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
28-Jun	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
29-Jun	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	0.3
30-Jun	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.8
	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	Diurnal Average	
	0.5	0.5	0.6	0.8	0.8	1.1	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	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 - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2012

Maximum Value: 1.5 ppb on Jun 21 04:00

Maximum Daily Average: 0.8 ppb on Jun 30

Minimum Value: 0 ppb on Jun 19 14:00

Maximum Diurnal Average: 0.8 ppb at hour 6

Monthly Average: 0.68 ppb

Minimum Daily Average: 0.6 ppb on Jun 25

Minimum Diurnal Average: 0.6 ppb at hour 17

Percentiles: $P_1 = 0.5$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.2$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	A	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	0.7	1.0
2-Jun	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	A	0.6	1.0
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0
5-Jun	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	0.8
6-Jun	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
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	0.6	0.8
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	0.6	0.9
9-Jun	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
10-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	0.9
11-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
12-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.8
13-Jun	1	1	1	1	1	1	1	0	1	1	C	C	C	C	C	1	1	1	1	1	1	1	1	1	0.6	0.8
14-Jun	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	1.2
15-Jun	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
16-Jun	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0.7	1.2
17-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
18-Jun	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
19-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0.6	0.9
20-Jun	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	1.2
21-Jun	1	1	1	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
22-Jun	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	1.2
23-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
24-Jun	1	A	1	1	1	1	1	1	0	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	0.6	0.7
25-Jun	A	1	1	1	1	1	1	1	0	1	0	0	0	1	1	0	1	1	1	0	1	1	1	A	0.6	0.8
26-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.4
27-Jun	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	0.6	0.9
28-Jun	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0	0	1	1	1	1	A	1	1	1	0.6	0.9
29-Jun	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	0.8
30-Jun	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	1.4
	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
	0.9	1.1	1.2	1.5	1.4	1.5	1.2	1.2	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	0.9	1.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2012

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2012

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

Maximum Value: 18.3 ppb on Jun 4 08:00

Maximum Daily Average: 6.6 ppb on Jun 4

Minimum Value: 0 ppb on Jun 19 11:00

Minimum Daily Average: 0.6 ppb on Jun 20

Maximum Diurnal Average: 6.0 ppb at hour 7

Minimum Diurnal Average: 1.7 ppb at hour 14

Monthly Average: 3.12 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 1.0$ $Q_1 = 1.7$ Median = 2.4 $Q_3 = 3.7$ $P_{90} = 5.8$ $P_{99} = 14.4$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	7	A	8	7	9	16	16	10	5	3	3	2	2	2	2	4	3	2	2	2	8	17	6	2	5.8	16.8
2-Jun	A	3	3	3	3	4	5	3	2	2	2	2	2	2	1	1	1	1	1	1	3	4	4	A	2.5	5.1
3-Jun	5	5	4	3	4	6	4	3	2	1	1	1	1	1	1	1	1	1	1	1	6	11	A	9	3.0	11.3
4-Jun	10	5	8	11	14	14	14	18	15	7	4	2	2	2	3	2	2	3	3	2	3	A	3	3	6.6	18.3
5-Jun	2	2	1	2	2	4	6	5	4	3	4	4	4	4	4	4	4	3	3	3	A	4	3	2	3.3	5.8
6-Jun	2	2	2	2	2	3	4	4	3	4	3	3	3	4	4	4	5	4	4	A	4	3	2	2	3.2	5.1
7-Jun	2	2	2	4	4	4	4	4	4	4	3	2	2	2	1	1	1	1	A	3	4	4	3	2	2.8	4.2
8-Jun	3	3	4	4	4	6	11	9	3	2	2	1	1	1	1	1	1	A	3	2	4	5	2	2	3.3	10.7
9-Jun	2	2	2	2	2	2	3	3	3	2	2	2	2	1	2	3	A	3	2	2	2	2	2	4	2.3	4.0
10-Jun	4	2	2	2	2	2	3	4	3	2	1	1	2	1	1	A	2	1	2	2	3	6	5	6	2.5	5.8
11-Jun	7	7	3	2	3	4	6	4	3	2	3	3	3	2	A	3	2	2	1	2	2	2	2	2	3.0	7.4
12-Jun	1	1	1	1	2	4	3	3	2	1	1	1	1	A	3	2	2	2	2	2	3	4	3	3	2.3	4.4
13-Jun	3	2	2	2	3	5	5	4	3	2	2	1	A	C	C	C	C	C	2	2	4	3	3	3	3.0	5.5
14-Jun	2	3	3	3	5	4	6	4	2	2	2	A	2	2	2	2	2	2	3	3	4	5	4	4	3.2	5.7
15-Jun	4	4	4	4	3	3	4	3	2	2	A	2	2	1	1	1	1	1	1	1	6	12	6	4	3.2	11.6
16-Jun	4	2	3	3	3	4	6	7	4	A	4	2	3	3	2	2	2	2	2	3	3	3	2	1	3.0	6.8
17-Jun	2	2	2	2	2	2	1	1	A	2	1	2	3	2	1	2	1	1	1	2	2	4	3	2	1.8	3.7
18-Jun	1	2	2	2	3	4	6	A	5	4	4	2	3	2	2	2	2	1	1	1	1	2	2	1	2.4	6.3
19-Jun	1	1	1	1	2	3	A	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.0
20-Jun	1	1	1	0	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0.6	2.2
21-Jun	1	2	1	1	A	8	8	6	M	M	6	3	3	2	2	3	2	2	2	3	3	4	5	4	3.4	7.8
22-Jun	4	5	6	A	14	12	8	5	4	3	3	3	3	3	3	2	3	1	1	1	1	2	1	1	3.8	14.3
23-Jun	1	1	A	2	3	5	1	1	1	0	1	0	0	0	1	2	3	4	5	5	7	4	5	3	2.3	7.3
24-Jun	3	A	4	3	2	3	3	3	2	2	2	2	2	2	2	3	3	3	1	2	3	3	4	3	2.7	4.5
25-Jun	A	8	5	4	4	5	6	7	3	2	2	2	2	1	2	2	2	2	2	2	3	5	7	A	3.5	8.1
26-Jun	10	12	15	5	6	12	11	6	4	3	2	2	2	2	2	2	1	2	1	2	2	2	A	4	4.8	14.6
27-Jun	2	2	2	2	2	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	4	3	2.1	4.1
28-Jun	3	3	3	2	3	6	9	6	4	2	1	1	2	1	2	1	1	1	2	4	A	9	6	3	3.2	8.9
29-Jun	3	4	4	4	5	11	9	8	4	2	2	2	2	2	2	2	2	2	2	A	6	6	6	7	4.1	10.9
30-Jun	5	7	11	14	12	8	6	6	6	4	2	1	1	1	2	1	1	1	A	4	3	5	6	8	5.0	13.7
	3.4	3.4	3.8	3.4	4.3	5.7	6.0	5.0	3.5	2.5	2.2	1.9	1.9	1.7	1.8	2.0	1.9	1.8	1.9	2.2	3.3	4.6	3.6	3.2	Diurnal Average	
	10.4	11.9	14.6	13.7	14.5	15.9	15.9	18.3	14.9	7.3	6.0	3.6	3.8	4.0	4.2	3.8	5.1	4.0	5.2	4.7	7.7	16.8	7.2	9.0	Diurnal Maximum	

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

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

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2012

Maximum Value: 52.6 ppb on Jun 19 10:00

Maximum Daily Average: 9.6 ppb on Jun 1

Minimum Value: 0 ppb on Jun 19 16:00

Minimum Daily Average: 2.2 ppb on Jun 20

Maximum Diurnal Average: 8.8 ppb at hour 6

Minimum Diurnal Average: 3.3 ppb at hour 18

Monthly Average: 5.62 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 2.0$ $Q_1 = 3.0$ Median = 4.2 $Q_3 = 6.4$ $P_{90} = 10.5$ $P_{99} = 22.9$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	9	A	10	10	12	21	23	16	8	5	4	4	3	2	3	7	4	3	2	3	17	31	20	2	9.6	30.6
2-Jun	A	4	4	3	4	5	9	5	4	3	3	3	3	3	2	3	2	2	3	2	9	6	5	A	4.2	9.0
3-Jun	7	6	5	4	6	7	6	4	4	2	1	2	2	1	2	2	1	3	2	3	19	22	A	10	5.2	22.3
4-Jun	12	6	12	15	18	16	16	26	21	10	9	3	3	4	4	4	4	4	4	4	4	A	5	4	9.2	26.5
5-Jun	3	2	2	8	4	5	10	9	6	6	6	6	5	6	7	6	6	4	4	4	A	4	6	3	5.4	10.3
6-Jun	4	4	3	3	4	5	5	6	5	5	4	4	5	5	5	5	7	6	7	A	6	4	3	3	4.8	6.9
7-Jun	3	3	5	6	10	6	5	6	6	5	5	5	5	5	2	2	2	3	A	5	7	7	7	7	5.2	10.5
8-Jun	4	5	6	5	5	9	17	19	6	3	4	2	2	2	3	2	2	A	5	3	8	11	9	3	6.0	19.0
9-Jun	4	5	3	2	2	3	4	6	3	3	5	2	3	2	3	9	A	5	4	4	3	3	3	7	4.1	9.0
10-Jun	6	2	2	3	4	2	6	6	4	3	3	2	4	2	1	A	3	2	4	3	5	11	8	10	4.4	11.5
11-Jun	13	12	5	3	4	7	11	6	4	4	12	5	21	3	A	5	4	3	3	3	3	4	3	3	6.0	20.6
12-Jun	2	2	2	2	5	6	5	4	4	2	5	3	3	A	4	4	3	3	3	3	6	6	4	5	3.7	6.5
13-Jun	4	3	3	3	5	7	7	6	5	5	4	3	A	C	C	C	C	C	3	5	6	5	5	5	4.8	7.5
14-Jun	4	4	4	4	7	7	7	7	7	23	7	A	6	5	6	6	4	5	8	7	9	8	6	7	6.9	23.1
15-Jun	5	5	4	5	7	5	7	5	3	4	A	4	4	2	2	3	3	3	3	2	15	22	9	5	5.7	22.2
16-Jun	10	4	4	6	12	15	8	10	6	A	6	3	6	6	6	3	3	3	3	4	6	5	3	2	5.9	15.3
17-Jun	2	3	3	3	3	3	2	1	A	5	3	6	9	4	2	4	3	2	2	3	3	5	6	4	3.4	8.8
18-Jun	2	3	3	3	4	7	7	A	9	6	8	8	6	3	3	5	5	2	2	2	2	3	2	1	4.3	9.5
19-Jun	1	1	1	2	3	4	A	11	4	53	2	10	1	1	0	0	0	0	1	3	1	1	3	1	4.6	52.6
20-Jun	2	3	2	2	3	A	2	3	2	2	1	1	1	1	1	1	1	1	1	1	2	3	10	5	2.2	10.0
21-Jun	3	8	6	3	A	12	10	8	M	M	11	5	4	3	3	4	3	4	3	5	4	8	8	9	5.9	11.7
22-Jun	5	7	8	A	20	17	12	11	7	6	4	4	6	4	4	3	4	3	3	4	6	7	3	4	6.6	19.6
23-Jun	2	7	A	8	8	7	5	4	3	1	3	4	3	3	2	5	4	6	7	7	20	6	11	4	5.7	19.7
24-Jun	5	A	7	4	4	4	4	4	5	5	3	3	3	4	3	5	6	7	3	5	5	5	5	5	4.3	7.1
25-Jun	A	12	8	7	8	9	12	11	5	3	3	9	17	3	3	3	3	3	4	3	5	7	9	A	6.7	17.4
26-Jun	14	30	27	7	9	16	17	9	6	7	6	9	5	5	4	6	2	3	2	3	3	2	A	7	8.7	30.4
27-Jun	3	2	2	3	4	6	4	4	3	6	14	3	3	3	3	3	3	3	3	3	2	A	7	4	4.0	13.6
28-Jun	3	4	4	2	5	11	13	10	6	4	8	2	2	3	4	3	2	2	4	11	A	14	8	5	5.6	13.9
29-Jun	5	6	5	6	12	16	12	12	6	3	3	5	4	4	3	4	4	4	4	A	8	8	8	15	6.7	16.1
30-Jun	6	10	22	24	23	15	7	9	7	7	2	2	3	2	4	3	1	4	A	9	5	8	11	22	9.0	23.9
	5.1	5.8	6.0	5.5	7.4	8.8	8.8	8.2	5.8	6.9	5.1	4.3	4.9	3.3	3.3	3.9	3.3	3.3	3.4	4.1	6.7	8.2	6.7	5.9	Diurnal Average	
	14.5	30.4	26.6	23.9	23.1	21.2	23.0	26.5	21.0	52.6	13.6	10.4	20.6	6.0	6.8	9.0	6.9	6.6	7.8	10.7	19.7	30.6	20.0	21.9	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2012

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

Maximum Value: 9.7 ppb on Jun 20 08:00

Maximum Daily Average: 1.6 ppb on Jun 20

Minimum Value: 0 ppb on Jun 13 23:00

Minimum Daily Average: 0.3 ppb on Jun 24

Maximum Diurnal Average: 2.1 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 23

Monthly Average: 0.68 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.3$ Median = 0.5 $Q_3 = 0.8$ $P_{90} = 1.4$ $P_{99} = 4.6$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	0	A	0	0	0	2	5	3	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0.8	4.7
2-Jun	A	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.5	0.8
3-Jun	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.9
4-Jun	0	0	0	0	1	2	5	8	6	2	1	1	0	0	1	0	1	0	1	1	0	A	0	0	1.4	8.2
5-Jun	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	0	1	1	0.8	2.0
6-Jun	0	1	0	0	0	1	1	1	1	1	2	1	1	1	2	1	2	1	1	A	1	1	1	0	1.0	1.8
7-Jun	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	1	1	0	0	0	0.6	1.3
8-Jun	0	0	0	0	0	0	1	2	1	1	1	0	0	0	1	0	0	A	0	0	0	0	0	0	0.5	2.5
9-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	A	0	0	0	0	0	0	0	0.4	0.9
10-Jun	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0	A	0	0	0	0	0	0	0	1	0.4	0.9
11-Jun	2	2	0	0	0	1	2	2	1	1	2	1	2	1	A	1	1	1	0	0	0	0	0	0	1.0	2.4
12-Jun	0	0	0	0	0	1	2	2	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0.7	1.6
13-Jun	0	0	0	0	0	1	1	2	2	1	1	1	A	C	C	C	C	C	0	0	0	0	0	0	0.6	1.7
14-Jun	0	0	0	0	0	1	2	2	1	1	1	A	0	0	0	1	1	1	1	0	0	0	0	0	0.5	1.7
15-Jun	0	0	0	0	0	1	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
16-Jun	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0.5	1.1
17-Jun	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.3
18-Jun	0	0	0	0	0	1	2	A	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0.7	2.1
19-Jun	0	0	0	0	0	1	A	2	2	3	3	1	1	1	1	1	0	0	1	0	1	0	0	0	0.8	3.3
20-Jun	0	0	0	0	1	A	7	10	6	3	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1.6	9.7
21-Jun	0	0	1	0	A	2	4	4	M	M	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.8	4.3
22-Jun	0	0	0	A	1	2	2	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	1	1	0.7	2.2
23-Jun	0	0	A	0	0	1	1	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0.4	0.8
24-Jun	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.7
25-Jun	A	0	0	0	0	1	1	2	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0	A	0.5	2.1
26-Jun	0	2	3	0	0	3	5	3	2	1	1	2	1	1	1	1	0	1	0	0	0	0	A	0	1.2	5.3
27-Jun	0	0	0	0	0	1	1	2	1	2	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0.6	1.9
28-Jun	0	0	0	0	0	1	4	3	2	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.6	3.5
29-Jun	0	0	0	0	0	1	1	2	1	1	0	1	0	1	0	1	1	0	1	A	0	0	0	0	0.5	2.2
30-Jun	0	0	1	5	3	1	1	2	3	1	1	0	0	0	0	0	0	0	A	0	0	0	0	1	1.0	4.7
	0.2	0.3	0.3	0.3	0.4	0.9	1.9	2.1	1.5	1.1	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.2	0.2	Diurnal Average	
	2.3	2.2	2.8	4.7	2.8	3.1	7.4	9.7	5.7	3.3	3.0	1.6	2.1	1.3	2.0	1.2	1.5	1.1	1.1	0.7	0.6	0.8	0.6	0.9	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2012

Maximum Value: 96.5 ppb on Jun 19 10:00

Maximum Daily Average: 8.3 ppb on Jun 19

Minimum Value: 0 ppb on Jun 14 00:00

Minimum Daily Average: 0.8 ppb on Jun 24

Maximum Diurnal Average: 6.2 ppb at hour 10

Minimum Diurnal Average: 1.0 ppb at hour 20

Monthly Average: 2.40 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 1.0 $Q_3 = 2.3$ $P_{90} = 4.5$ $P_{99} = 21.9$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	0	A	0	0	0	6	9	13	2	2	1	2	0	0	0	1	1	1	0	0	1	7	0	0	2.1	12.8
2-Jun	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	A	0.8	1.4
3-Jun	0	0	0	0	0	1	1	1	1	1	0	1	0	0	1	0	0	1	0	0	1	4	A	0	0.8	4.4
4-Jun	1	0	0	1	6	4	6	19	13	4	8	1	1	3	2	1	1	1	1	1	0	A	1	1	3.4	19.2
5-Jun	1	0	1	1	2	3	5	4	3	4	4	4	2	3	4	2	2	2	1	1	A	1	1	2	2.4	4.8
6-Jun	1	2	2	2	2	3	4	5	4	3	4	2	3	2	5	3	5	3	5	A	2	3	1	1	2.9	4.9
7-Jun	0	1	1	1	1	1	2	1	1	1	1	2	1	2	1	1	1	1	A	3	4	1	3	11	2.0	11.2
8-Jun	0	0	2	1	1	1	4	8	2	1	1	1	1	1	5	0	0	A	1	0	1	1	2	0	1.6	8.4
9-Jun	0	0	0	0	0	0	1	2	2	1	2	1	2	1	1	2	A	3	2	0	0	0	0	0	1.0	2.8
10-Jun	0	0	0	0	0	0	1	1	1	1	2	1	3	1	0	A	0	0	0	0	0	1	1	2	1.0	2.8
11-Jun	11	7	0	0	0	11	5	3	2	1	18	8	18	2	A	2	1	1	1	1	1	0	0	0	4.2	18.1
12-Jun	0	0	0	0	0	2	3	2	2	5	2	2	2	A	2	2	2	1	1	1	1	0	0	0	1.5	4.8
13-Jun	0	0	0	0	0	1	2	2	3	2	2	1	A	C	C	C	C	C	1	0	0	0	0	0	1.1	3.0
14-Jun	0	0	0	0	0	2	3	3	2	11	3	A	2	2	2	2	2	3	6	2	1	1	0	0	2.0	11.0
15-Jun	0	0	0	0	1	2	3	2	2	2	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1.0	3.0
16-Jun	1	1	1	1	1	2	1	2	2	A	2	1	2	2	2	1	1	1	1	1	2	1	0	0	1.1	2.4
17-Jun	0	0	0	0	0	1	1	1	A	1	1	3	6	3	1	3	2	1	0	0	0	1	1	1	1.3	6.4
18-Jun	1	1	1	0	1	2	3	A	10	3	5	4	3	2	2	1	1	1	1	1	1	1	1	1	2.0	10.0
19-Jun	0	0	0	0	0	1	A	5	2	97	42	19	7	4	3	1	0	1	3	1	1	0	0	1	8.3	96.5
20-Jun	0	1	0	0	1	A	13	16	8	5	2	2	1	4	1	1	1	1	6	0	4	3	4	1	3.5	16.1
21-Jun	3	2	3	1	A	7	8	6	M	M	2	1	2	2	2	1	1	1	1	1	0	0	0	9	2.6	9.2
22-Jun	0	0	0	A	8	4	7	5	2	2	1	2	2	2	1	1	1	1	1	2	0	5	6	8	2.8	7.8
23-Jun	4	1	A	1	4	2	4	1	2	1	1	1	0	1	0	2	2	3	2	0	3	2	1	0	1.8	4.1
24-Jun	0	A	0	0	0	0	1	1	2	2	1	1	1	1	0	0	1	1	1	0	1	1	0	0	0.8	2.0
25-Jun	A	0	0	0	0	1	21	5	3	1	1	32	19	1	1	1	1	1	1	1	0	0	0	A	4.3	31.8
26-Jun	1	26	22	0	1	6	12	6	4	4	3	23	2	2	2	2	1	1	1	1	1	0	A	0	5.2	26.4
27-Jun	0	0	0	0	1	2	1	30	2	11	4	2	1	2	2	2	1	2	1	1	0	A	0	0	2.9	29.8
28-Jun	0	0	1	0	1	4	7	7	3	2	4	1	0	0	1	1	1	0	0	1	A	0	0	0	1.6	7.4
29-Jun	0	0	0	0	0	2	3	3	2	1	1	2	1	1	1	1	1	1	1	A	1	1	0	1	1.1	3.0
30-Jun	0	1	14	22	13	4	2	4	4	3	1	1	3	1	1	1	0	1	A	3	1	1	3	19	4.5	22.1
	1.1	1.8	1.9	1.3	1.7	2.7	4.6	5.5	3.1	6.2	4.2	4.2	3.1	1.7	1.6	1.4	1.3	1.4	1.6	1.0	1.1	1.4	1.2	2.3	Diurnal Average	
	11.1	26.4	21.5	22.1	12.9	10.5	21.1	29.8	12.9	96.5	41.7	31.8	19.5	4.2	4.9	3.0	4.9	3.3	6.0	3.1	4.4	6.5	6.1	18.8	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2012

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

Maximum Value: 26.5 ppb on Jun 4 08:00

Maximum Daily Average: 8.0 ppb on Jun 4

Minimum Value: 0 ppb on Jun 20 00:00

Minimum Daily Average: 1.7 ppb on Jun 19

Maximum Diurnal Average: 7.9 ppb at hour 7

Minimum Diurnal Average: 2.2 ppb at hour 18

Monthly Average: 3.79 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 1.4$ $Q_1 = 2.1$ Median = 2.9 $Q_3 = 4.4$ $P_{90} = 6.7$ $P_{99} = 17.5$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	7	A	8	7	9	19	21	13	6	4	4	2	2	2	2	4	3	2	2	2	8	18	6	2	6.8	20.7
2-Jun	A	4	3	3	3	4	6	4	2	3	3	3	2	2	2	2	2	2	2	1	3	4	4	A	3.0	6.0
3-Jun	6	5	4	3	4	6	5	4	3	1	1	1	1	1	1	1	1	1	1	1	6	12	A	9	3.4	11.7
4-Jun	10	5	8	12	15	17	19	27	21	9	5	3	2	2	3	3	3	3	3	3	3	A	4	3	8.0	26.5
5-Jun	2	2	2	2	3	4	7	7	5	4	5	5	5	5	6	5	6	4	4	4	A	4	4	3	4.1	6.7
6-Jun	2	2	2	2	3	3	5	5	5	5	4	4	4	5	6	5	7	5	5	A	5	3	2	2	4.0	6.6
7-Jun	2	2	2	5	4	5	5	5	5	4	4	3	3	3	2	1	2	2	A	4	4	4	4	3	3.3	5.3
8-Jun	3	3	4	4	4	6	12	11	4	3	3	2	2	1	2	1	2	A	4	3	4	5	2	2	3.8	12.2
9-Jun	3	2	2	2	2	2	4	4	4	3	3	2	2	2	2	4	A	3	3	3	2	3	2	4	2.7	4.2
10-Jun	4	2	2	2	3	2	4	4	3	2	2	2	2	1	1	A	2	2	3	2	3	6	5	7	2.9	6.7
11-Jun	10	9	3	2	3	5	9	6	4	3	4	5	5	3	A	4	3	2	2	2	3	3	2	2	4.0	9.7
12-Jun	1	2	2	2	3	5	5	4	4	2	3	2	2	A	4	3	3	3	2	3	4	5	4	3	3.0	5.2
13-Jun	3	2	3	3	3	6	7	6	5	4	3	2	A	C	C	C	C	C	3	3	5	3	4	3	3.7	6.9
14-Jun	3	3	3	3	5	5	8	6	4	3	3	A	3	2	3	3	2	3	4	3	4	5	5	5	3.8	7.5
15-Jun	4	4	4	4	3	4	6	4	3	3	A	3	2	2	1	2	2	2	1	2	6	12	6	4	3.6	12.1
16-Jun	5	3	3	4	4	4	6	8	5	A	5	3	4	3	3	2	2	2	2	3	3	3	2	1	3.5	7.6
17-Jun	2	2	2	2	2	2	2	1	A	3	2	3	4	3	2	3	2	1	1	2	2	4	3	2	2.3	4.0
18-Jun	1	2	3	3	3	5	8	A	7	5	6	3	4	3	3	3	3	2	2	2	2	2	2	2	3.2	8.1
19-Jun	1	1	1	2	3	3	A	7	4	4	3	1	1	1	1	0	0	0	1	1	1	1	1	0	1.7	6.8
20-Jun	1	1	1	1	1	A	9	10	6	4	1	1	1	1	1	1	1	1	1	0	1	1	3	2	2.1	10.3
21-Jun	1	2	2	1	A	10	12	10	M	M	7	4	3	3	3	3	3	3	3	3	3	4	5	4	4.2	12.1
22-Jun	4	5	6	A	15	14	10	7	4	4	3	3	3	3	3	3	3	1	1	1	1	2	1	1	4.4	15.4
23-Jun	1	1	A	2	3	5	2	1	1	1	1	1	1	1	1	2	3	4	6	5	8	4	5	3	2.6	7.6
24-Jun	3	A	5	3	3	3	3	3	3	2	2	2	2	2	3	4	4	3	2	2	3	3	4	3	2.9	4.6
25-Jun	A	8	5	4	4	6	8	9	4	2	2	3	2	1	2	2	2	2	3	2	3	5	7	A	4.0	8.7
26-Jun	10	14	17	5	6	15	17	9	6	4	3	4	2	2	3	2	1	2	1	2	2	2	A	4	5.9	17.3
27-Jun	2	2	2	2	2	4	4	4	2	3	3	3	2	2	2	2	2	2	2	2	2	A	4	3	2.5	4.4
28-Jun	3	3	3	2	3	7	12	9	5	3	2	1	2	1	2	1	1	1	2	4	A	9	6	3	3.7	12.3
29-Jun	3	4	4	4	5	12	10	10	5	2	2	3	2	3	2	2	3	2	3	A	6	6	6	7	4.6	11.7
30-Jun	5	7	12	18	15	9	7	8	9	5	2	2	2	1	2	1	1	2	A	5	3	5	7	9	5.9	18.3
	3.6	3.7	4.1	3.7	4.7	6.6	7.9	7.1	4.9	3.5	3.1	2.6	2.6	2.2	2.3	2.5	2.4	2.2	2.4	2.5	3.7	4.9	3.8	3.4	Diurnal Average	
	10.5	14.1	17.3	18.3	15.4	18.5	20.7	26.5	20.6	9.4	6.7	4.6	4.8	5.1	6.1	4.9	6.6	5.0	5.5	4.8	8.2	17.7	7.2	9.2	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2012

Maximum Value: 114.6 ppb on Jun 19 10:00

Maximum Daily Average: 13.7 ppb on Jun 26

Minimum Value: 1 ppb on Jun 19 17:00

Minimum Daily Average: 4.6 ppb on Jun 17

Maximum Diurnal Average: 13.0 ppb at hour 7

Minimum Diurnal Average: 4.3 ppb at hour 17

Monthly Average: 7.64 ppb

Percentiles: P_1 = 1.5 P_{10} = 2.8 Q_1 = 3.8 Median = 5.4 Q_3 = 8.2 P_{90} = 14.4 P_{99} = 39.1

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	9	A	11	9	12	27	32	30	10	7	5	5	3	3	3	8	5	4	3	4	17	37	20	3	11.7	36.5
2-Jun	A	4	4	4	4	6	10	7	5	4	5	4	4	4	3	3	3	3	3	2	10	6	6	A	4.9	10.5
3-Jun	7	6	5	4	6	8	6	5	5	3	2	3	2	2	2	2	2	3	2	3	19	24	A	11	5.8	23.8
4-Jun	13	6	13	16	22	21	22	46	30	14	17	4	3	7	5	5	5	5	5	6	4	A	5	4	12.2	45.5
5-Jun	3	2	3	10	6	8	15	13	9	10	10	9	7	9	11	7	8	6	5	5	A	5	7	5	7.6	15.1
6-Jun	5	5	4	4	5	8	8	11	9	8	7	6	7	7	9	7	10	9	12	A	8	7	4	3	7.1	11.7
7-Jun	3	3	6	8	12	6	7	7	8	6	6	6	6	7	3	3	3	4	A	8	11	8	10	16	6.9	15.9
8-Jun	4	5	8	7	6	10	20	27	8	4	5	3	3	3	8	2	3	A	5	4	8	12	11	3	7.5	27.4
9-Jun	4	5	3	2	2	4	5	8	5	4	7	4	5	3	4	11	A	8	5	4	4	4	3	8	5.0	11.5
10-Jun	7	3	3	4	4	3	7	7	5	3	5	3	7	4	2	A	3	2	4	4	5	12	10	13	5.2	12.9
11-Jun	24	18	5	3	4	17	16	9	6	5	30	11	38	5	A	6	5	4	4	3	4	4	3	3	9.9	37.8
12-Jun	2	2	2	2	5	8	8	6	5	5	7	5	5	A	6	6	5	4	4	3	7	7	5	5	5.0	8.0
13-Jun	4	3	3	3	5	8	9	8	8	7	7	4	A	C	C	C	C	C	5	6	7	6	6	6	6.0	9.5
14-Jun	4	4	5	4	8	8	10	9	10	34	11	A	8	7	8	8	5	7	11	8	9	9	6	8	8.6	34.1
15-Jun	6	6	5	6	8	7	10	7	5	6	A	5	5	4	3	5	4	5	3	3	16	24	9	5	6.7	24.3
16-Jun	11	4	4	6	13	17	9	11	8	A	7	4	7	8	9	4	4	3	4	4	7	5	3	2	6.9	17.4
17-Jun	2	3	3	3	3	3	3	2	A	5	4	10	15	7	3	7	4	3	3	4	4	5	6	5	4.6	15.2
18-Jun	2	3	3	4	4	9	11	A	16	9	12	11	10	5	5	6	6	3	3	3	3	5	3	3	6.0	15.7
19-Jun	2	2	2	2	4	5	A	15	6	115	34	30	7	5	3	1	1	1	3	4	1	1	3	1	10.8	114.6
20-Jun	1	4	3	3	4	A	14	17	9	5	3	3	2	3	1	1	2	2	6	1	4	4	11	7	4.7	17.3
21-Jun	4	8	8	3	A	18	17	13	M	M	11	6	6	5	5	5	4	6	4	6	5	8	8	19	8.0	18.5
22-Jun	6	7	9	A	22	20	17	16	9	8	5	6	7	6	5	4	5	3	3	4	6	7	7	10	8.4	21.9
23-Jun	5	7	A	8	8	9	8	5	4	2	3	4	3	4	3	5	6	8	9	7	22	8	11	4	6.7	22.2
24-Jun	5	A	7	4	4	4	4	5	6	6	3	4	3	4	4	5	7	8	4	5	6	5	5	5	4.9	8.0
25-Jun	A	12	8	7	8	10	33	15	8	4	4	39	37	3	4	3	4	3	4	4	5	7	9	A	10.5	39.4
26-Jun	15	57	48	8	10	22	28	14	10	10	9	30	7	7	6	8	3	4	3	4	4	3	A	7	13.7	57.0
27-Jun	3	2	2	3	4	8	6	22	4	17	17	5	4	5	5	5	4	4	4	3	3	A	7	4	6.1	21.5
28-Jun	3	4	5	3	6	15	19	16	8	6	12	3	3	4	5	3	2	2	4	12	A	14	8	5	7.0	19.5
29-Jun	5	6	5	6	12	18	14	14	7	4	4	6	5	5	3	4	5	4	5	A	9	9	8	16	7.5	18.2
30-Jun	6	11	32	44	35	19	8	12	10	10	3	3	6	3	5	5	2	5	A	12	5	8	14	41	12.9	43.9
	6.0	7.2	7.5	6.5	8.5	11.2	13.0	13.0	8.3	11.6	8.8	8.2	7.9	4.8	4.8	5.1	4.3	4.4	4.7	4.8	7.6	9.1	7.5	7.9	Diurnal Average	
	24.4	57.0	48.0	43.9	34.6	27.2	32.7	45.5	30.1	114.6	34.1	39.4	37.8	8.6	11.1	11.5	10.3	8.8	11.7	12.4	22.2	36.5	20.3	40.6	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - June 2012

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

Maximum Value: 51.2 ppb on Jun 1 15:00 Maximum Daily Average: 39.3 ppb on Jun 3

Minimum Value: 4 ppb on Jun 20 07:00 Minimum Daily Average: 13.1 ppb on Jun 18

Maximum Diurnal Average: 32.0 ppb at hour 14 Minimum Diurnal Average: 18.6 ppb at hour 6

Monthly Average: 25.73 ppb Percentiles: P_1 = 6.2 P_{10} = 14.2 Q_1 = 19.2 Median = 25.0 Q_3 = 31.1 P_{90} = 38.8 P_{99} = 49.4

Hours in Service:	720
Hours of Data:	684
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-Jun	32	A	28	29	26	17	21	28	34	42	45	47	49	51	51	47	46	49	49	48	40	28	37	38	38.4	51.2
2-Jun	A	32	27	23	23	27	29	34	38	39	39	40	43	46	47	47	46	45	46	44	39	36	35	A	37.5	46.6
3-Jun	32	33	32	32	32	30	32	36	39	42	45	49	49	48	47	47	47	47	46	46	38	29	A	25	39.3	49.1
4-Jun	20	31	22	17	12	13	14	12	15	26	35	47	49	51	50	50	51	48	47	47	44	A	39	39	33.9	51.1
5-Jun	38	37	38	37	34	30	27	29	31	31	29	26	24	22	20	21	20	21	20	19	A	19	17	17	26.3	37.8
6-Jun	18	18	18	18	19	20	18	16	16	16	17	16	16	14	14	15	15	16	16	A	17	20	21	23	17.2	22.9
7-Jun	26	27	16	11	22	19	14	22	26	32	34	32	35	41	44	46	46	47	A	45	41	37	36	37	32.0	46.6
8-Jun	32	26	21	19	22	20	16	19	28	30	32	38	39	40	41	44	46	A	37	34	38	39	44	42	32.4	45.8
9-Jun	32	29	26	26	25	23	20	20	22	26	26	28	31	32	33	34	A	43	45	38	39	33	32	29	30.1	45.3
10-Jun	26	25	27	28	26	24	23	23	22	22	27	29	31	35	36	A	37	37	33	37	30	20	16	11	27.2	37.5
11-Jun	8	7	14	19	17	19	20	26	33	33	31	29	29	29	A	28	27	27	27	25	24	23	23	22	23.5	33.5
12-Jun	24	22	21	22	20	16	16	16	17	20	20	23	24	A	21	21	22	28	27	26	23	20	21	21	21.4	28.4
13-Jun	20	21	19	18	18	17	16	19	21	26	29	31	A	34	34	35	C	C	C	C	35	32	30	32	25.7	35.3
14-Jun	31	30	27	25	22	22	21	23	25	27	29	A	31	31	31	31	31	31	30	29	28	23	20	19	26.8	31.5
15-Jun	19	18	18	19	20	20	19	22	26	27	A	31	30	30	30	29	31	34	35	33	29	22	23	24	25.7	35.1
16-Jun	22	23	22	21	25	30	27	25	24	A	22	21	21	22	22	20	19	18	17	16	17	27	41	39	23.6	40.6
17-Jun	34	33	31	27	23	22	21	20	A	19	19	19	17	19	20	17	16	15	19	18	16	12	11	12	20.0	34.3
18-Jun	12	10	9	10	9	8	7	A	13	15	16	17	17	20	20	20	18	15	13	12	13	11	8	8	13.1	20.5
19-Jun	9	10	12	12	10	10	A	10	15	17	19	22	23	24	24	24	26	25	21	19	16	14	14	14	16.9	25.7
20-Jun	9	5	6	6	5	A	4	6	10	14	23	26	27	31	32	33	29	25	23	24	24	18	12	17	17.9	32.8
21-Jun	20	17	9	10	A	9	9	11	18	22	27	27	26	26	27	28	30	30	29	28	27	26	25	23	21.9	30.0
22-Jun	23	20	14	A	7	10	18	26	31	30	33	38	42	42	37	37	36	39	37	34	30	23	26	23	28.4	42.4
23-Jun	25	23	A	19	16	18	24	29	29	28	29	34	34	36	35	31	28	31	31	30	25	34	35	31	28.6	36.1
24-Jun	32	A	28	25	25	26	25	25	25	24	27	31	31	32	32	31	27	23	24	25	23	31	31	29	27.4	32.4
25-Jun	A	17	20	24	22	21	20	17	26	30	32	32	32	33	32	32	30	31	29	28	28	24	18	A	26.3	32.8
26-Jun	15	11	10	13	12	9	12	17	23	29	31	31	31	32	32	29	25	26	28	27	26	25	A	24	22.5	32.4
27-Jun	23	23	23	21	21	19	20	20	21	20	21	22	25	26	26	26	27	27	26	26	24	A	23	21	23.1	26.8
28-Jun	20	19	18	20	19	16	14	17	22	23	25	26	28	28	28	29	30	31	29	25	A	22	23	26	23.4	30.7
29-Jun	23	21	19	20	20	16	21	20	26	31	32	30	31	30	30	30	29	28	26	A	21	18	17	15	24.2	31.7
30-Jun	16	12	7	6	6	8	12	11	13	17	21	22	23	22	26	24	27	23	A	23	26	24	22	18	17.8	27.0
	23.0	21.4	20.1	20.0	19.3	18.6	18.7	20.7	23.7	26.2	28.1	29.8	30.7	32.0	31.8	31.2	30.8	30.6	30.0	29.9	27.8	24.7	24.9	24.3	Diurnal Average	
	37.8	37.0	37.8	37.0	33.6	30.2	32.3	35.6	39.3	42.4	45.3	49.1	49.5	50.7	51.2	49.8	51.1	49.0	49.2	47.7	43.9	38.8	44.2	41.7	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 - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - June 2012

Maximum Value: 52.9 ppb on Jun 4 15:00

Maximum Daily Average: 42.1 ppb on Jun 1

Minimum Value: 5 ppb on Jun 20 07:00

Minimum Daily Average: 14.9 ppb on Jun 18

Maximum Diurnal Average: 34.0 ppb at hour 15

Minimum Diurnal Average: 21.0 ppb at hour 6

Monthly Average: 28.15 ppb

Percentiles: P_1 = 9.1 P_{10} = 16.7 Q_1 = 21.3 Median = 27.1 Q_3 = 33.5 P_{90} = 42.2 P_{99} = 51.5

Hours in Service:	720
Hours of Data:	684
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-Jun	36	A	31	34	30	24	28	32	38	48	47	49	51	52	53	52	48	51	50	49	48	35	42	42	42.1	52.7
2-Jun	A	34	29	25	25	35	34	36	41	41	41	42	48	48	48	50	48	50	48	48	43	38	37	A	40.5	50.2
3-Jun	33	34	34	34	34	33	35	39	41	45	48	51	50	49	49	49	48	49	49	48	43	35	A	32	41.8	50.7
4-Jun	28	34	26	20	17	15	17	16	22	32	44	51	52	53	53	51	53	51	48	49	47	A	40	40	37.4	52.9
5-Jun	39	38	39	38	36	31	32	31	32	33	31	29	25	24	22	23	22	23	21	20	A	20	18	18	28.1	39.0
6-Jun	19	18	19	19	20	21	21	18	17	17	19	17	18	16	16	17	17	17	17	A	19	21	22	25	18.7	24.9
7-Jun	27	28	25	25	25	22	19	27	31	37	37	36	42	45	47	47	48	49	A	47	45	39	39	39	35.9	48.7
8-Jun	36	29	26	23	25	23	20	27	30	31	36	41	41	42	43	47	48	A	42	35	47	44	46	46	36.0	47.6
9-Jun	37	31	27	28	27	24	22	22	24	27	28	30	33	35	39	41	A	49	50	43	42	36	34	33	33.2	49.7
10-Jun	27	26	28	29	28	26	25	25	24	24	29	32	34	37	38	A	39	39	37	39	36	23	20	13	29.6	39.1
11-Jun	12	11	19	20	18	20	23	30	35	35	33	31	31	30	A	30	28	28	28	27	25	25	24	24	25.7	35.0
12-Jun	25	24	22	23	22	19	17	18	19	21	21	30	28	A	22	23	23	31	30	29	25	24	23	22	23.5	30.9
13-Jun	21	22	20	19	19	19	18	21	26	28	32	34	A	36	37	38	C	C	C	C	38	34	32	34	27.8	37.9
14-Jun	32	31	29	26	24	24	23	25	27	29	31	A	33	33	33	33	34	32	32	32	30	28	22	21	28.6	33.5
15-Jun	20	20	20	21	22	23	21	25	27	29	A	32	32	31	32	30	34	35	36	35	33	27	25	25	27.5	36.5
16-Jun	24	24	23	23	30	33	32	28	26	A	24	23	22	25	24	22	20	19	18	18	21	33	46	43	26.0	46.5
17-Jun	37	34	33	29	26	23	22	22	A	20	21	20	19	20	22	20	17	16	20	20	17	15	13	13	21.7	37.0
18-Jun	13	14	11	11	10	9	9	A	15	17	18	18	19	22	22	23	21	17	15	13	16	13	9	9	14.9	22.6
19-Jun	10	12	13	13	11	11	A	14	17	19	21	25	25	27	27	25	27	27	26	23	18	16	16	16	19.0	27.2
20-Jun	13	7	9	7	7	A	5	10	12	19	26	28	29	34	34	36	34	27	26	27	27	21	18	20	20.7	36.4
21-Jun	21	21	12	12	A	11	10	15	25	25	28	28	28	27	29	30	33	32	30	30	28	29	26	25	24.1	33.2
22-Jun	24	24	17	A	8	14	21	32	33	31	36	42	44	44	40	39	38	41	39	36	34	26	29	26	31.2	44.2
23-Jun	26	24	A	21	18	20	30	31	31	30	32	37	36	38	38	35	31	34	34	34	31	37	38	35	31.3	38.2
24-Jun	33	A	30	28	27	27	26	27	26	26	30	33	33	36	34	33	32	25	26	27	29	33	32	30	29.6	35.7
25-Jun	A	19	26	26	24	23	22	21	30	33	33	33	34	34	34	34	32	33	31	30	30	27	22	A	28.6	34.2
26-Jun	18	17	14	16	14	11	16	21	28	32	32	32	33	34	33	32	26	27	29	28	27	26	A	25	24.8	33.7
27-Jun	24	24	23	23	22	20	21	21	21	22	22	23	26	28	27	28	27	28	28	27	26	A	24	23	24.2	27.7
28-Jun	22	20	19	21	21	19	16	20	26	25	26	27	30	30	30	31	32	32	32	27	A	26	27	28	25.4	32.0
29-Jun	25	24	21	22	23	19	24	25	31	32	33	32	33	32	32	32	32	30	29	A	24	21	19	17	26.4	33.3
30-Jun	17	16	9	10	12	11	14	14	16	19	22	24	25	24	31	26	29	26	A	25	29	26	24	23	20.5	30.8
	25.0	23.6	22.5	22.3	21.7	21.0	21.6	23.9	26.6	28.5	30.4	32.0	32.8	33.9	34.0	33.6	32.8	32.7	32.2	32.0	31.2	27.7	27.4	26.6	Diurnal Average	
	39.0	38.0	38.5	38.4	36.5	34.6	34.9	38.7	41.4	47.8	47.7	51.2	51.5	52.7	52.9	51.6	52.8	50.9	50.2	49.5	47.6	43.5	46.5	46.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - June 2012

Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - June 2012

Maximum Value: 49.2 ppb on Jun 4 19:00

Minimum Value: 6.1 ppb on Jun 20 08:00

Percentiles: P_1 = 9.3 P_{10} = 15.4 Q_1 = 19.9 Median = 25.0 Q_3 = 30.4 P_{90} = 38.3 P_{99} = 48.0

Hours in Service:	720
Hours of Data:	712
Hours of Missing Data:	8
Hours of Calibration:	8
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-Jun	44	43	39	36	33	30	27	26	26	28	30	33	35	40	43	46	47	48	49	49	48	45	43	42	48.7
2-Jun	41	39	36	32	30	30	28	28	29	30	32	34	36	39	41	42	43	44	45	46	45	44	42	42	45.5
3-Jun	40	38	36	34	33	32	32	32	33	34	36	38	40	43	44	46	47	47	47	47	46	43	43	40	47.5
4-Jun	36	34	30	26	22	20	19	17	17	16	18	22	27	31	36	41	45	48	49	49	48	48	47	45	49.2
5-Jun	43	42	40	39	37	36	35	34	33	32	31	30	28	27	26	25	24	23	22	21	20	20	19	19	43.2
6-Jun	19	18	18	18	18	18	18	18	18	18	17	17	17	16	16	15	15	15	15	15	15	16	17	18	18.6
7-Jun	20	21	21	20	21	20	20	19	19	20	22	25	27	30	33	36	39	41	42	43	44	44	42	41	44.2
8-Jun	39	36	34	31	29	27	24	22	21	22	23	26	28	30	33	36	39	40	41	40	40	40	40	40	40.7
9-Jun	38	37	35	35	33	31	28	25	24	23	24	24	24	26	27	29	30	33	35	37	38	38	38	37	38.0
10-Jun	36	33	31	30	28	27	26	25	25	24	24	24	25	26	28	29	31	33	34	35	35	33	30	28	35.6
11-Jun	24	20	18	16	14	14	14	16	19	23	25	26	28	29	30	30	30	29	28	27	27	26	25	25	30.5
12-Jun	24	24	23	23	22	21	20	20	19	19	18	19	19	20	20	21	22	23	24	24	24	23	24	24	24.2
13-Jun	23	22	21	20	20	19	19	19	19	19	21	22	23	25	28	30	32	N	N	N	N	N	N	N	31.7
14-Jun	N	32	31	30	28	27	26	25	24	24	24	24	25	27	28	29	30	31	31	31	30	29	28	26	31.5
15-Jun	25	23	22	21	20	19	19	20	20	22	22	24	25	26	28	29	30	31	31	32	31	30	30	29	31.6
16-Jun	28	26	25	23	23	24	24	24	25	25	25	25	25	23	23	22	21	21	20	19	19	19	22	24	27.8
17-Jun	26	28	30	31	32	31	29	26	25	23	22	21	20	19	19	19	18	18	18	18	17	17	15	15	31.9
18-Jun	14	14	12	11	11	10	10	9	10	10	11	12	13	15	17	17	18	18	18	17	16	15	14	12	17.9
19-Jun	11	11	10	10	10	10	10	10	11	12	13	15	17	19	19	21	22	23	24	23	22	21	20	19	23.6
20-Jun	17	14	12	11	9	8	7	6	6	7	10	13	16	18	21	24	27	28	28	28	28	26	24	22	28.3
21-Jun	20	20	18	16	15	14	13	12	12	13	15	17	19	21	23	25	27	28	28	28	28	28	28	27	28.2
22-Jun	26	25	23	23	20	17	16	17	18	19	22	24	28	32	35	36	37	38	38	38	36	34	33	31	38.4
23-Jun	29	27	26	24	22	21	21	22	23	23	24	26	28	31	32	32	32	32	33	32	31	31	31	31	32.5
24-Jun	31	31	31	30	30	29	27	26	25	25	25	26	27	28	29	29	30	29	29	28	27	27	27	27	31.1
25-Jun	27	26	25	25	25	23	22	20	21	23	24	25	26	28	29	31	31	32	31	31	30	29	28	27	31.7
26-Jun	25	22	19	17	15	13	12	12	13	16	18	20	23	26	28	30	30	29	29	29	28	27	27	26	29.9
27-Jun	26	25	24	24	23	22	22	21	21	21	20	21	21	22	23	23	24	25	26	26	26	26	26	25	26.0
28-Jun	24	23	22	21	20	19	18	18	18	19	20	20	21	23	25	26	27	28	29	29	29	28	27	27	28.7
29-Jun	26	24	23	22	22	21	21	20	21	22	23	25	26	28	29	30	30	30	29	29	28	26	24	22	30.5
30-Jun	20	18	15	14	12	11	10	10	9	10	12	14	16	18	19	21	23	24	24	24	24	25	24	23	24.6
Diurnal Maximums	44.3	43.0	40.3	38.8	37.4	36.5	35.0	33.7	33.2	34.3	36.0	38.2	40.3	42.5	44.4	45.8	47.3	48.1	49.2	49.2	48.5	48.2	46.6	45.1	

N - Not Valid

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2012

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

Maximum Value: 0.39 ppm on Jun 30 04:00

Maximum Daily Average: 0.24 ppm on Jun 5

Minimum Value: 0.1 ppm on Jun 27 18:00

Minimum Daily Average: 0.10 ppm on Jun 27

Maximum Diurnal Average: 0.19 ppm at hour 22

Minimum Diurnal Average: 0.16 ppm at hour 18

Monthly Average: 0.169 ppm

Percentiles: $P_1 = 0.10$ $P_{10} = 0.11$ $Q_1 = 0.14$ Median = 0.16 $Q_3 = 0.19$ $P_{90} = 0.23$ $P_{99} = 0.29$

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 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-Jun	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.19	0.37
2-Jun	A	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	A	0.15	0.18
3-Jun	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.2	0.14	0.19
4-Jun	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.17	0.25
5-Jun	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	A	0.2	0.2	0.2	0.24	0.29
6-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	A	0.2	0.2	0.2	0.2	0.23	0.28
7-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.2	0.17	0.23
8-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.16	0.22
9-Jun	0.2	0.2	0.2	0.2	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	0.18	0.21
10-Jun	0.2	0.2	0.2	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	0.3	0.3	0.3	0.20	0.30
11-Jun	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	0.33
12-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.15	0.16
13-Jun	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	C	C	C	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.13	0.15
14-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.14
15-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.12	0.21
16-Jun	0.1	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.16	0.19
17-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.15
18-Jun	0.1	0.1	0.1	0.1	0.1	0.1	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	0.17	0.19
19-Jun	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	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.22
20-Jun	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	0.3	0.2	0.19	0.28
21-Jun	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.27
22-Jun	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	0.2	0.3	0.3	0.2	0.21	0.32
23-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.22	0.26
24-Jun	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.25
25-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.15	0.19
26-Jun	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.13	0.29
27-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.10	0.12
28-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.2	0.2	0.1	0.13	0.18
29-Jun	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.15	0.19
30-Jun	0.2	0.2	0.3	0.4	0.4	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	0.2	0.2	0.21	0.39
	0.17	0.17	0.17	0.16	0.16	0.17	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.19	0.18	0.18	Diurnal Average	
	0.33	0.30	0.29	0.39	0.35	0.25	0.29	0.29	0.27	0.27	0.25	0.25	0.33	0.25	0.28	0.26	0.26	0.25	0.26	0.25	0.26	0.37	0.29	0.30	Diurnal Maximum	

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 - June 2012

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2012

Maximum Value: 6.73 ppm on Jun 30 13:00

Maximum Daily Average: 0.61 ppm on Jun 30

Minimum Value: 0.1 ppm on Jun 25 18:00

Minimum Daily Average: 0.14 ppm on Jun 27

Maximum Diurnal Average: 0.51 ppm at hour 13

Minimum Diurnal Average: 0.20 ppm at hour 18

Monthly Average: 0.239 ppm

Percentiles: P_1 = 0.12 P_{10} = 0.14 Q_1 = 0.17 Median = 0.20 Q_3 = 0.26 P_{90} = 0.33 P_{99} = 0.79

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 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-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.2	0.24	0.54
2-Jun	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	A	0.18	0.25
3-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	A	0.2	0.19	0.48
4-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.24	0.53
5-Jun	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.8	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.32	0.81
6-Jun	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.5	A	0.6	0.3	0.3	0.3	0.31	0.62
7-Jun	0.4	0.3	0.3	0.3	0.3	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	A	0.3	0.2	0.2	0.2	0.5	0.23	0.54
8-Jun	0.3	0.2	0.4	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	A	0.2	0.2	0.3	0.3	0.2	0.2	0.22	0.40
9-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	A	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.21	0.36
10-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	A	0.2	0.2	0.3	0.2	0.3	0.4	0.4	0.4	0.25	0.43
11-Jun	0.6	0.5	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.24	0.58
12-Jun	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.1	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	0.17	0.38
13-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	C	C	C	A	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.17	0.20
14-Jun	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.16	0.26
15-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.3	0.2	0.2	0.16	0.35
16-Jun	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	0.2	0.2	0.20	0.24
17-Jun	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	A	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.20
18-Jun	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	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	0.20	0.25
19-Jun	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.22	0.32
20-Jun	0.3	0.3	0.2	0.2	0.2	A	0.2	0.3	0.6	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.26	0.60
21-Jun	0.2	0.4	0.8	0.4	A	0.4	0.3	0.3	0.8	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	0.3	0.2	0.33	0.82
22-Jun	0.2	0.2	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.3	0.3	0.28	0.48
23-Jun	0.3	0.2	A	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.2	1.9	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.34	1.89
24-Jun	0.3	A	0.3	0.3	0.3	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	0.4	0.3	0.3	0.3	0.28	0.38
25-Jun	A	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.6	0.2	0.4	0.5	0.6	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	A	0.25	0.59
26-Jun	0.3	0.9	0.7	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.20	0.85
27-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.14	0.62
28-Jun	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.3	A	0.3	0.2	0.2	0.18	0.32
29-Jun	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.19	0.34
30-Jun	0.2	0.3	0.7	0.8	0.7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	6.7	0.8	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.4	0.61	6.73
	0.22	0.23	0.26	0.21	0.20	0.22	0.25	0.23	0.25	0.23	0.22	0.22	0.51	0.23	0.21	0.22	0.20	0.20	0.21	0.21	0.26	0.26	0.24	0.24	Diurnal Average	
	0.58	0.85	0.78	0.83	0.65	0.45	0.53	0.43	0.82	0.62	0.44	0.52	6.73	0.80	0.40	0.81	0.34	0.31	0.49	0.33	0.62	0.54	0.42	0.54	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2012

Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2012

Pollutant Classes (ppm)

- 0 - 0.1
- 0.1 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 10
- > 10

Peace Airshed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2012

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.26 ppm on Jun 5 13:00

Minimum Value: 0.10 ppm on Jun 27 06:00

Percentiles: P_1 = 0.10 P_{10} = 0.12 Q_1 = 0.14 Median = 0.16 Q_3 = 0.20 P_{90} = 0.23 P_{99} = 0.25

Hours in Service:	720
Hours of Data:	713
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-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
2-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.22
3-Jun	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
4-Jun	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
5-Jun	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	0.2	0.2	0.26
6-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	0.2	0.25
7-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.24
8-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.18
9-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
10-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
11-Jun	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.26
12-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
13-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	N	N	N	N	N	N	N	0.1	0.1	0.1	0.1	0.1	0.1	0.15
14-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14
15-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14
16-Jun	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
17-Jun	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
18-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
19-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
20-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
21-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
22-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
23-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
24-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
25-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.23
26-Jun	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
27-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12
28-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
29-Jun	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16
30-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
Diurnal Maximums	0.24	0.26	0.26	0.25	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.24	

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

Peace Airshed Zone Association

Span Responses

Carbon Monoxide (CO)

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.48 ppm on Jun 30 05:00
Maximum Daily Average: 2.25 ppm on Jun 30

Minimum Value: 1.9 ppm on Jun 17 18:00
Maximum Diurnal Average: 2.19 ppm at hour 5
Monthly Average: 2.084 ppm

Minimum Daily Average: 1.98 ppm on Jun 17
Minimum Diurnal Average: 2.03 ppm at hour 17
Percentiles: P_1 = 1.96 P_{10} = 2.00 Q_1 = 2.02 Median = 2.05 Q_3 = 2.11 P_{90} = 2.20 P_{99} = 2.49

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	39
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-Jun	2.3	A	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.19	2.37
2-Jun	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	2.1	2.2	A	2.12	2.19
3-Jun	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	C	C	C	C	C	C	C	2.1	2.1	2.1	2.1	2.2	A	2.3	--	2.32
4-Jun	2.4	2.2	2.2	2.3	2.4	2.3	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	A	2.0	2.0	2.17	2.43
5-Jun	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	2.0	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.05	2.10
6-Jun	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	2.1	2.0	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.04	2.07
7-Jun	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.04	2.09
8-Jun	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	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	2.1	2.0	2.0	2.07	2.21
9-Jun	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.04	2.08
10-Jun	2.1	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.2	2.4	2.5	2.2	2.09	2.47
11-Jun	2.3	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.50
12-Jun	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.01	2.06
13-Jun	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.05	2.15
14-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.07	2.14
15-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.13
16-Jun	2.1	2.1	2.1	2.1	2.2	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	2.03	2.20
17-Jun	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	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.02
18-Jun	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	2.1	2.0	2.00	2.05
19-Jun	2.0	2.1	2.0	2.1	2.1	2.1	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.07	2.16
20-Jun	2.3	2.5	2.4	2.3	2.3	A	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.15	2.47
21-Jun	2.2	2.4	2.5	2.4	A	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.14	2.54
22-Jun	2.1	2.2	2.4	A	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.13	2.40
23-Jun	2.2	2.2	A	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.12	2.23
24-Jun	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	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.07	2.11
25-Jun	A	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	A	2.08	2.38
26-Jun	2.3	2.3	2.2	2.6	2.6	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.14	2.61
27-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.02	2.07
28-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	A	2.2	2.2	2.0	2.06	2.20
29-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.3	2.07	2.30
30-Jun	2.3	2.2	2.5	2.5	3.5	3.2	2.3	2.5	2.2	2.1	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	2.3	2.25	3.48
	2.12	2.14	2.16	2.16	2.19	2.17	2.12	2.11	2.08	2.06	2.05	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.05	2.09	2.10	2.09	Diurnal Average	
	2.35	2.50	2.54	2.61	3.48	3.23	2.36	2.49	2.31	2.27	2.18	2.14	2.17	2.12	2.12	2.13	2.12	2.11	2.12	2.12	2.17	2.40	2.47	2.32	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2012

Maximum Value: 5.29 ppm on Jun 30 05:00

Maximum Daily Average: 2.67 ppm on Jun 30

Minimum Value: 2.0 ppm on Jun 17 19:00

Minimum Daily Average: 2.01 ppm on Jun 17

Maximum Diurnal Average: 2.38 ppm at hour 3

Minimum Diurnal Average: 2.08 ppm at hour 16

Monthly Average: 2.186 ppm

Percentiles: P_1 = 1.98 P_{10} = 2.03 Q_1 = 2.06 Median = 2.10 Q_3 = 2.19 P_{90} = 2.42 P_{99} = 3.43

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	39
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-Jun	2.6	A	3.4	2.7	2.4	2.5	2.5	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.7	2.1	2.36	3.43
2-Jun	A	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	A	2.16	2.22
3-Jun	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.1	C	C	C	C	C	C	C	2.1	2.1	2.1	2.6	2.5	A	2.7	--	2.73
4-Jun	3.0	2.2	2.3	2.4	2.8	2.4	2.5	2.4	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.26	2.97
5-Jun	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.15	2.29
6-Jun	2.3	2.1	2.5	2.3	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.3	2.0	2.2	2.3	2.4	2.4	2.3	2.4	A	2.1	2.1	2.2	2.0	2.23	2.46
7-Jun	2.0	2.2	2.4	2.4	2.1	2.1	2.1	2.3	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.3	2.2	A	2.0	2.1	2.1	2.2	2.1	2.16	2.40
8-Jun	2.1	2.1	2.4	2.2	2.4	2.4	2.4	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	A	2.0	2.1	2.1	2.4	2.1	2.0	2.15	2.45
9-Jun	2.1	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.08	2.36
10-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.4	2.1	2.1	A	2.1	2.1	2.4	2.2	2.6	2.7	2.9	2.6	2.22	2.90
11-Jun	2.7	3.0	2.8	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.17	3.02
12-Jun	2.0	2.1	2.1	2.0	2.2	2.2	2.1	2.0	2.0	2.0	2.1	2.0	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.06	2.21
13-Jun	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.3	2.0	2.1	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.26
14-Jun	2.3	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.11	2.25
15-Jun	2.1	2.1	2.2	2.1	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	2.2	2.1	2.8	2.4	2.1	2.1	2.16	2.79
16-Jun	2.1	2.1	2.1	2.4	2.3	2.2	2.0	2.0	2.0	A	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.11	2.42
17-Jun	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.01	2.07
18-Jun	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	2.1	2.1	2.03	2.12
19-Jun	2.1	2.1	2.1	2.1	2.1	2.2	A	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.3	2.6	2.2	2.13	2.55
20-Jun	2.7	3.4	2.9	2.5	2.6	A	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.29	3.43
21-Jun	2.7	2.8	3.7	3.9	A	2.3	2.8	2.2	2.3	2.1	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.36	3.86
22-Jun	2.2	2.6	2.7	A	2.4	2.6	2.4	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.2	2.2	2.4	2.23	2.70
23-Jun	2.7	2.6	A	2.5	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.22	2.72
24-Jun	2.2	A	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.4	2.12	2.35
25-Jun	A	3.2	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.4	A	2.18	3.16
26-Jun	2.8	2.6	2.3	2.9	2.9	2.9	2.3	2.3	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	2.1	A	2.1	2.26	2.92
27-Jun	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.04	2.11
28-Jun	2.1	2.1	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.0	2.1	2.3	2.2	2.1	A	2.6	2.9	2.1	2.16	2.88
29-Jun	2.1	2.3	2.2	2.2	2.3	2.2	2.2	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.2	2.2	2.8	2.15	2.79
30-Jun	2.9	2.4	2.9	2.8	5.3	4.6	2.5	2.9	2.5	2.2	2.1	2.1	2.6	2.5	2.0	2.0	2.1	2.0	A	2.0	2.1	2.1	4.2	2.5	2.67	5.29
	2.30	2.33	2.38	2.32	2.37	2.29	2.22	2.18	2.15	2.11	2.11	2.09	2.13	2.10	2.08	2.08	2.08	2.09	2.10	2.08	2.16	2.19	2.30	2.20	Diurnal Average	
	2.97	3.43	3.73	3.86	5.29	4.65	2.85	2.86	2.52	2.34	2.33	2.35	2.62	2.48	2.32	2.41	2.41	2.32	2.39	2.31	2.79	2.74	4.23	2.79	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2012

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2012

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 - June 2012

Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - June 2012

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

Maximum Value: 9.8 $\mu g/m^3$ on Jun 7 05:00

Maximum Daily Average: 6.2 $\mu g/m^3$ on Jun 4

Minimum Value: 1 $\mu g/m^3$ on Jun 2 01:00

Maximum Diurnal Average: 5.2 $\mu g/m^3$ at hour 5

Monthly Average: 3.54 $\mu g/m^3$

Minimum Daily Average: 1.7 $\mu g/m^3$ on Jun 18

Minimum Diurnal Average: 2.7 $\mu g/m^3$ at hour 17

Percentiles: P_1 = 1.3 P_{10} = 1.7 Q_1 = 2.0 Median = 2.9 Q_3 = 4.6 P_{90} = 6.4 P_{99} = 9.2

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	6	7	7	7	7	7	8	7	6	4	4	4	4	4	4	4	4	3	3	3	4	7	6	2	5.0	7.6
2-Jun	1	1	2	3	4	4	5	4	3	3	3	3	2	2	2	2	2	2	2	2	2	3	3	4	2.6	4.5
3-Jun	4	4	5	5	5	5	4	4	3	2	2	2	2	2	2	2	2	2	2	2	3	4	5	6	3.2	5.9
4-Jun	8	8	8	8	9	9	9	9	9	8	7	5	5	4	4	4	3	4	4	4	4	5	5	5	6.2	9.2
5-Jun	5	6	6	7	6	3	5	5	8	8	7	5	4	4	4	2	4	3	3	3	3	5	4	4	4.7	8.3
6-Jun	5	4	4	4	3	3	3	2	2	2	2	2	2	2	2	3	3	2	3	2	2	2	2	3	2.6	5.3
7-Jun	3	4	6	7	10	9	8	8	7	7	6	5	4	3	3	2	2	2	2	2	3	3	3	3	4.7	9.8
8-Jun	3	2	2	2	2	3	3	2	2	2	3	2	2	2	2	2	2	3	3	2	2	2	1	2	2.2	3.3
9-Jun	2	2	2	3	3	4	5	2	2	2	2	2	2	2	2	4	3	4	5	5	2	2	2	3	2.7	5.0
10-Jun	2	2	3	6	3	5	5	4	3	3	7	8	5	5	7	8	6	5	7	5	6	6	3	4	5.0	8.4
11-Jun	6	6	6	7	8	9	9	8	7	6	2	1	1	2	2	2	2	2	2	2	2	2	2	2	4.1	9.0
12-Jun	2	2	1	2	3	4	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2.1	3.7
13-Jun	3	3	3	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	5	4	4	2.8	5.0
14-Jun	4	5	5	5	5	5	5	4	3	3	2	2	2	2	2	2	2	2	2	3	3	4	4	4	3.3	5.4
15-Jun	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2	2	3	4	5	5	2.9	4.7
16-Jun	5	6	6	6	6	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	3	2	2.5	6.0
17-Jun	2	2	3	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	4.0
18-Jun	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	1.7	2.5
19-Jun	2	2	2	3	2	3	3	2	2	3	2	2	4	4	4	3	2	3	3	2	2	2	2	4	2.7	4.3
20-Jun	6	6	4	5	7	7	3	2	2	2	2	3	3	4	4	5	4	3	2	2	2	5	4	3	3.7	7.0
21-Jun	3	5	4	4	6	5	2	3	4	2	2	2	4	2	2	3	4	5	4	4	3	2	2	3	3.3	5.9
22-Jun	3	4	3	2	6	5	5	5	6	3	2	3	5	7	7	5	2	3	5	7	6	4	4	9	4.5	9.3
23-Jun	7	7	8	9	7	9	8	5	5	4	3	4	6	5	6	7	5	3	5	7	7	5	8	7	6.1	9.4
24-Jun	6	6	6	10	7	8	8	5	5	3	2	4	6	5	5	5	3	3	3	5	6	5	7	5	5.4	9.6
25-Jun	3	4	4	4	7	7	6	5	3	3	4	5	5	5	4	4	4	4	4	4	4	5	6	6	4.5	7.1
26-Jun	6	5	6	6	5	5	5	4	3	3	3	2	2	2	2	2	2	2	2	3	3	3	2	2	3.3	6.0
27-Jun	4	4	4	4	4	4	4	3	2	2	2	3	3	3	2	3	2	2	2	2	2	2	3	2	2.9	4.5
28-Jun	4	4	5	5	4	4	4	3	2	2	2	2	2	2	3	3	2	3	4	3	2	2	3	2	3.0	4.6
29-Jun	1	2	2	3	5	4	4	3	2	2	3	3	2	2	3	3	3	3	3	2	2	2	3	4	2.8	4.9
30-Jun	3	4	6	5	7	7	4	4	3	2	3	3	2	2	3	2	2	2	1	1	2	5	5	10	3.6	9.6
	3.8	4.1	4.3	4.8	5.2	5.0	4.5	3.8	3.5	3.1	3.0	2.9	3.0	2.9	3.0	3.0	2.7	2.7	3.0	2.9	3.0	3.4	3.6	3.9	Diurnal Average	
	7.9	7.9	7.9	9.6	9.8	9.4	9.0	9.2	8.5	8.3	7.3	7.5	6.2	6.6	7.1	8.4	6.1	5.3	7.0	7.2	6.8	7.1	7.9	9.6	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 - June 2012

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - June 2012

Maximum Value: 60.5 $\mu g/m^3$ on Jul 1 00:00

Maximum Daily Average: 7.4 $\mu g/m^3$ on Jun 23

Minimum Value: 1 $\mu g/m^3$ on Jun 2 01:00

Maximum Diurnal Average: 6.4 $\mu g/m^3$ at hour 24

Monthly Average: 4.31 $\mu g/m^3$

Minimum Daily Average: 2.0 $\mu g/m^3$ on Jun 18

Minimum Diurnal Average: 3.1 $\mu g/m^3$ at hour 18

Percentiles: P_1 = 1.4 P_{10} = 1.9 Q_1 = 2.5 Median = 3.7 Q_3 = 5.4 P_{90} = 7.7 P_{99} = 12.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	7	7	8	8	8	8	9	7	7	5	4	4	5	4	4	4	4	4	3	3	5	9	8	3	5.7	9.0
2-Jun	1	2	3	3	4	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2	2	3	3	4	2.8	4.8
3-Jun	4	5	5	5	5	6	5	6	3	3	2	2	2	2	2	2	2	2	2	2	4	5	6	7	3.6	7.0
4-Jun	9	12	10	9	10	10	9	10	9	9	8	6	5	4	4	4	4	4	4	4	5	5	5	6	6.9	11.5
5-Jun	6	6	7	7	7	4	6	6	10	9	8	7	4	4	4	3	4	4	5	4	4	6	5	4	5.6	9.7
6-Jun	6	5	4	4	4	4	4	2	3	2	3	2	2	3	3	4	4	2	3	3	2	2	2	4	3.2	5.9
7-Jun	4	6	7	9	11	10	9	8	8	8	8	6	4	3	3	3	2	2	3	3	3	4	4	4	5.5	10.9
8-Jun	3	3	2	2	3	4	3	2	2	3	3	3	2	2	2	2	3	3	3	2	3	2	2	2	2.6	3.7
9-Jun	6	2	3	3	3	5	5	4	2	2	3	2	2	2	3	5	3	4	6	6	3	2	3	3	3.4	6.0
10-Jun	3	3	6	6	4	6	6	5	3	5	8	8	7	6	12	15	10	6	8	6	8	8	4	5	6.6	15.0
11-Jun	10	7	7	8	9	9	9	9	8	7	4	1	2	3	4	2	2	2	2	3	2	3	2	2	5.0	9.7
12-Jun	3	3	2	3	4	4	3	2	2	2	2	2	2	3	2	2	3	2	2	3	3	3	2	2	2.6	4.1
13-Jun	5	3	3	2	2	3	3	2	2	2	2	3	4	3	3	3	3	4	3	3	4	6	5	4	3.3	6.0
14-Jun	5	5	5	5	6	6	5	4	4	3	2	2	2	2	2	2	2	2	3	3	4	4	4	4	3.6	5.8
15-Jun	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2	2	3	5	5	5	3.1	5.1
16-Jun	7	6	6	7	7	4	2	2	2	1	1	1	1	1	1	2	2	1	2	2	2	3	3	3	2.9	6.9
17-Jun	2	3	4	4	4	2	2	2	2	3	3	2	2	2	2	2	2	2	2	3	2	2	2	2	2.3	4.2
18-Jun	4	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	4.4
19-Jun	4	2	3	4	3	4	4	2	3	4	4	3	4	5	5	5	2	3	4	2	2	2	3	7	3.5	6.6
20-Jun	9	7	5	6	8	8	5	2	2	3	2	3	4	4	5	5	4	4	2	2	4	6	8	4	4.6	9.2
21-Jun	4	5	5	5	7	7	3	4	5	4	2	3	4	4	3	4	5	5	5	4	5	2	2	3	4.2	6.9
22-Jun	3	5	4	3	13	6	6	6	6	4	2	4	6	7	8	7	2	4	6	8	7	5	5	13	5.8	12.6
23-Jun	13	7	9	10	8	10	10	6	5	5	4	5	7	6	7	8	6	4	8	8	8	7	9	9	7.4	13.3
24-Jun	8	6	8	11	8	9	9	7	5	4	2	5	7	6	6	6	4	4	4	5	8	7	9	7	6.4	10.9
25-Jun	11	6	6	6	8	8	6	7	3	4	5	9	8	5	4	4	4	4	4	4	4	6	6	9	5.8	10.7
26-Jun	7	6	6	6	6	6	6	5	4	3	3	2	2	2	2	2	2	3	3	3	3	3	3	3	3.8	7.0
27-Jun	4	5	5	4	4	4	4	4	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3.3	4.8
28-Jun	4	5	5	5	5	5	5	4	2	3	2	2	2	2	3	3	2	3	5	5	2	3	4	3	3.5	4.9
29-Jun	3	2	2	4	5	5	5	5	2	3	4	4	3	3	3	3	3	3	3	2	2	2	3	5	3.3	5.3
30-Jun	6	6	6	6	8	8	5	4	4	3	3	3	5	2	3	3	2	2	2	2	5	6	16	61	7.0	60.5
	5.6	4.8	5.0	5.5	6.1	5.8	5.2	4.5	3.9	3.8	3.4	3.5	3.6	3.3	3.6	3.7	3.1	3.1	3.5	3.4	3.8	4.2	4.6	6.4	Diurnal Average	
	13.3	11.5	9.6	10.9	12.5	10.5	9.6	9.9	9.7	9.5	8.2	8.6	8.5	6.9	12.3	15.0	10.0	5.8	8.4	8.2	8.5	9.0	15.6	60.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Pollutant Rose

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

Henry Pirker - June 2012

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

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - June 2012

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

Maximum Value: 25.7 ^{o}C on Jun 22 14:00

Maximum Daily Average: 19.3 ^{o}C on Jun 22

Minimum Value: 5 ^{o}C on Jun 3 06:00

Maximum Diurnal Average: 19.3 ^{o}C at hour 16

Monthly Average: 15.29 ^{o}C

Minimum Daily Average: 12.0 ^{o}C on Jun 18

Minimum Diurnal Average: 10.4 ^{o}C at hour 5

Percentiles: P_1 = 7.3 P_{10} = 10.3 Q_1 = 11.9 Median = 14.9 Q_3 = 18.7 P_{90} = 21.0 P_{99} = 24.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	9	9	7	7	6	7	10	13	14	18	18	19	19	20	20	18	17	18	19	18	16	14	13	11	14.2	20.1
2-Jun	10	10	9	9	8	8	9	11	12	12	12	13	15	16	17	18	18	17	17	16	15	13	11	10	12.7	17.7
3-Jun	8	7	6	6	6	5	8	11	13	15	17	17	18	19	20	20	19	19	19	18	16	14	13	11	13.6	19.6
4-Jun	10	12	10	9	8	9	10	11	12	13	16	19	20	20	21	21	21	21	21	20	19	18	17	17	15.7	21.5
5-Jun	16	16	16	15	14	13	12	11	11	11	11	12	12	12	12	13	13	14	14	14	13	13	13	12	13.1	16.3
6-Jun	12	12	12	12	12	11	11	11	11	12	12	12	13	13	13	12	12	13	13	13	13	14	14	14	12.4	14.3
7-Jun	14	13	12	10	10	9	9	8	8	8	10	12	14	16	17	19	19	18	18	17	16	15	13	12	13.3	19.2
8-Jun	12	11	11	10	11	11	11	11	13	13	14	16	17	18	18	20	19	18	17	16	13	11	11	11	13.8	19.6
9-Jun	11	11	11	11	10	10	11	12	14	15	16	17	19	19	19	15	17	16	16	15	14	13	12	12	14.0	19.2
10-Jun	12	12	12	12	12	12	12	11	12	13	14	16	17	18	19	19	20	19	18	18	17	15	14	14	14.8	19.5
11-Jun	13	12	12	13	12	12	14	16	18	20	21	21	22	23	23	23	22	22	21	20	18	17	16	15	17.6	23.1
12-Jun	15	14	14	14	14	14	15	16	16	18	19	19	19	20	19	19	20	20	20	19	18	16	16	15	16.9	19.9
13-Jun	14	14	13	12	12	13	13	14	15	17	18	19	19	19	20	20	20	20	19	18	16	14	12	12	16.0	20.2
14-Jun	12	11	9	8	8	8	11	12	13	15	15	15	17	16	16	16	17	15	15	14	14	13	11	11	13.1	17.4
15-Jun	11	10	9	8	8	7	10	12	13	15	16	16	16	17	18	18	18	19	18	17	16	15	14	13	13.9	18.9
16-Jun	12	12	11	11	11	10	10	11	12	13	15	15	16	18	19	19	19	19	19	19	18	16	15	13	14.7	19.3
17-Jun	12	12	11	11	11	12	13	14	14	15	16	16	16	14	17	18	18	17	15	14	13	13	13	12	14.0	18.2
18-Jun	11	11	11	10	10	10	10	11	11	12	13	13	12	14	14	15	12	14	14	13	12	11	11	11	12.0	14.6
19-Jun	10	10	10	10	10	10	11	12	14	16	17	17	19	19	19	18	19	19	13	12	13	12	11	11	13.8	19.5
20-Jun	9	9	9	9	8	8	10	13	16	18	20	20	22	21	22	23	22	19	19	20	19	17	15	14	15.9	22.9
21-Jun	14	13	11	11	10	11	13	16	18	19	21	22	23	24	25	24	25	25	24	22	18	17	15	15	18.2	24.8
22-Jun	15	14	12	11	11	12	16	18	19	19	23	24	25	26	23	24	23	25	24	24	20	20	18	17	19.3	25.7
23-Jun	16	16	15	14	13	15	18	19	19	20	22	22	21	22	22	21	21	21	21	20	20	20	19	19	18.9	22.5
24-Jun	18	17	17	16	16	15	15	18	19	21	23	23	22	22	21	21	21	21	21	20	19	17	15	14	18.7	22.9
25-Jun	13	12	13	12	12	13	15	15	17	19	20	21	22	22	22	23	22	22	21	21	19	17	14	12	17.4	22.6
26-Jun	11	10	10	8	8	9	12	15	17	18	19	20	21	21	21	21	18	16	16	16	15	14	13	12	14.9	21.3
27-Jun	12	12	12	12	11	11	13	14	14	15	15	16	17	17	18	18	17	17	16	16	15	14	13	12	14.4	18.0
28-Jun	11	10	8	9	9	9	12	14	16	18	20	21	22	23	22	23	23	21	21	20	20	18	17	15	16.8	22.9
29-Jun	15	14	14	13	13	13	14	16	18	19	20	21	22	21	22	22	22	22	21	20	19	17	15	14	17.8	22.4
30-Jun	14	12	11	11	11	11	14	14	17	18	20	21	23	22	20	22	23	20	19	18	18	17	16	15	16.9	22.7
	12.4	11.8	11.2	10.8	10.4	10.5	12.1	13.3	14.6	15.8	17.1	17.9	18.6	19.1	19.3	19.3	19.3	18.9	18.3	17.6	16.3	15.2	14.0	13.2	Diurnal Average	
	17.5	16.6	16.7	15.9	15.5	15.2	17.8	18.8	19.4	21.2	22.9	24.3	25.1	25.7	24.8	24.0	24.8	25.0	24.3	23.6	20.5	19.6	18.9	18.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2012

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

Maximum Value: 91.3 % on Jun 6 20:00 Maximum Daily Average: 90.1 % on Jun 6

Minimum Value: 20 % on Jun 3 18:00 Minimum Daily Average: 35.7 % on Jun 3

Maximum Diurnal Average: 73.6 % at hour 5 Minimum Diurnal Average: 44.8 % at hour 15

Monthly Average: 58.37 % Percentiles: P_1 = 20.6 P_{10} = 34.1 Q_1 = 44.5 Median = 56.7 Q_3 = 72.0 P_{90} = 85.1 P_{99} = 90.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	55	57	62	65	67	66	54	49	44	33	33	34	35	31	30	41	48	44	42	42	49	56	62	75	49.0	75.5
2-Jun	84	85	85	83	81	74	66	58	49	46	46	43	35	28	27	27	27	26	27	28	34	37	42	45	49.2	85.3
3-Jun	49	50	53	56	56	57	49	43	37	33	27	22	21	21	20	20	20	20	20	21	30	35	41	54	35.7	56.7
4-Jun	54	48	52	58	62	61	58	52	54	51	42	34	32	31	29	28	26	28	31	33	36	39	44	46	42.9	61.9
5-Jun	50	50	51	55	65	72	80	86	88	88	87	88	90	90	89	87	87	86	85	85	87	89	90	91	79.9	90.5
6-Jun	91	91	91	91	91	91	91	90	91	91	88	89	88	88	89	90	90	90	91	91	91	90	89	90	90.1	91.3
7-Jun	90	89	90	89	84	80	82	76	73	72	65	62	56	44	38	35	34	35	37	39	47	55	59	60	62.1	89.5
8-Jun	65	70	75	77	74	75	77	77	72	70	69	60	56	51	49	43	43	47	56	60	72	85	83	84	66.3	85.2
9-Jun	84	82	82	79	77	78	78	77	73	69	65	61	55	57	56	69	57	59	54	66	67	73	78	80	69.8	84.0
10-Jun	82	82	82	83	85	86	85	87	88	85	78	70	64	55	53	54	52	55	61	56	63	74	79	80	72.5	88.3
11-Jun	84	85	78	68	71	67	59	53	47	45	44	45	44	43	41	42	42	44	46	48	52	57	60	63	55.4	85.4
12-Jun	64	69	69	66	67	67	62	61	60	54	50	47	45	48	50	47	44	40	41	43	48	54	56	59	54.6	68.7
13-Jun	63	62	65	68	68	67	67	63	59	49	46	43	41	36	35	31	30	30	31	33	37	45	49	45	48.4	68.2
14-Jun	47	50	56	61	62	59	51	46	44	38	34	32	30	31	32	32	31	40	40	41	45	48	53	54	44.0	62.1
15-Jun	56	58	61	61	62	62	55	49	44	39	34	34	34	32	30	30	29	28	29	31	36	40	46	48	42.8	62.3
16-Jun	51	54	55	56	67	79	84	81	79	74	69	68	64	59	54	55	56	55	54	53	56	59	62	70	63.1	83.9
17-Jun	72	73	77	76	74	71	62	59	58	56	54	52	56	72	61	51	54	52	63	65	66	70	72	78	64.3	78.1
18-Jun	80	81	82	81	81	84	85	85	85	83	80	81	83	75	76	75	82	73	73	79	79	85	88	88	80.9	87.9
19-Jun	88	88	88	88	87	86	85	81	71	67	59	49	45	42	40	51	42	45	75	84	85	87	87	86	71.1	88.2
20-Jun	88	90	90	90	90	90	85	75	69	63	54	50	45	44	40	38	39	54	54	49	54	61	65	67	64.3	90.4
21-Jun	66	71	81	82	84	84	77	70	62	57	51	45	43	41	36	36	33	34	34	39	55	58	62	65	57.0	84.2
22-Jun	65	68	79	82	83	78	64	58	55	55	47	40	34	31	38	39	42	35	37	39	51	55	59	65	54.0	82.7
23-Jun	65	67	68	71	73	66	59	57	57	58	55	52	56	51	48	59	60	54	54	54	61	53	56	57	58.7	73.1
24-Jun	63	68	67	71	69	69	69	63	64	59	55	51	55	53	56	58	61	61	59	61	68	66	71	75	63.0	75.2
25-Jun	80	86	80	78	79	73	64	65	54	50	45	41	38	34	33	30	30	28	32	31	34	41	51	59	51.5	85.9
26-Jun	60	64	63	72	75	72	56	52	43	34	33	32	30	29	30	35	43	47	46	45	47	50	53	55	48.6	74.8
27-Jun	55	56	57	59	61	61	55	54	54	52	49	45	41	40	39	39	40	40	42	45	48	50	52	56	49.4	60.9
28-Jun	59	64	67	66	66	68	59	54	49	46	43	40	38	36	38	36	35	38	39	43	46	51	58	66	50.1	68.3
29-Jun	67	69	70	70	70	69	63	61	54	49	45	44	39	41	39	39	38	39	41	43	49	55	59	63	53.2	70.2
30-Jun	64	70	77	76	77	75	68	70	63	59	52	48	45	41	50	48	41	55	56	56	52	57	59	66	59.3	77.4
	68.0	69.9	71.7	72.5	73.6	72.8	68.3	65.1	61.4	57.4	53.3	50.0	47.9	45.8	44.8	45.6	45.2	46.0	48.2	50.2	54.9	59.1	62.8	66.3	Diurnal Average	
	90.5	90.9	90.9	90.9	90.9	90.8	90.9	89.7	90.6	90.7	87.9	89.4	90.1	90.3	89.4	89.7	90.3	90.3	90.9	91.3	91.2	89.7	90.2	90.5	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2012

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

Maximum Value: 851.1 W/m^2 on Jun 29 13:00

Maximum Daily Average: 310.4 W/m^2 on Jun 21

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

Maximum Diurnal Average: 558.8 W/m^2 at hour 14

Monthly Average: 216.99 W/m^2

Minimum Daily Average: 26.2 W/m^2 on Jun 6

Minimum Diurnal Average: 0.0 W/m^2 at hour 24

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 107.6 Q_3 = 399.4 P_{90} = 611.7 P_{99} = 809.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	0	0	0	0	6	58	203	275	428	578	563	530	438	466	385	168	205	327	291	109	14	2	0	0	210.2	577.7
2-Jun	0	0	0	0	5	35	100	200	390	332	374	426	650	717	726	634	564	429	292	162	23	4	0	0	252.6	725.6
3-Jun	0	0	0	0	6	54	208	299	478	616	718	788	823	790	585	544	357	345	314	136	34	6	0	0	295.8	823.4
4-Jun	0	0	0	0	7	45	98	121	144	238	544	774	554	493	607	415	439	245	274	137	28	2	0	0	215.2	773.6
5-Jun	0	0	0	0	2	12	11	12	28	41	57	78	61	50	214	137	114	95	58	37	9	1	0	0	42.3	214.2
6-Jun	0	0	0	0	0	1	8	15	47	58	133	58	106	41	41	27	32	40	10	7	5	0	0	0	26.2	133.3
7-Jun	0	0	0	0	9	30	26	60	83	114	257	528	635	578	728	713	591	398	310	164	49	6	0	0	219.9	727.5
8-Jun	0	0	0	0	4	21	30	123	337	343	309	613	561	806	754	667	440	236	102	35	1	0	0	0	224.2	806.2
9-Jun	0	0	0	0	12	32	90	132	228	258	310	303	652	429	178	239	202	131	123	49	13	3	0	0	141.0	652.3
10-Jun	0	0	0	0	2	4	14	26	58	102	215	423	333	689	468	400	408	127	112	129	31	5	0	0	147.8	689.1
11-Jun	0	0	0	0	6	32	207	315	449	605	661	544	781	804	729	634	520	380	225	148	27	4	0	0	294.7	804.4
12-Jun	0	0	0	0	6	47	179	278	322	525	662	695	597	578	359	335	359	342	255	138	39	4	0	0	238.4	695.0
13-Jun	0	0	0	0	5	24	77	191	292	523	546	602	368	579	424	499	472	430	211	120	21	5	0	0	224.5	601.7
14-Jun	0	0	0	0	7	69	208	340	451	606	573	333	619	458	307	287	546	171	59	47	19	5	0	0	212.7	618.8
15-Jun	0	0	0	0	6	54	216	316	432	609	691	636	444	584	513	543	492	454	248	126	36	5	0	0	266.9	690.6
16-Jun	0	0	0	0	2	15	54	86	235	330	413	300	296	522	396	318	201	220	107	55	25	5	0	0	149.2	522.4
17-Jun	0	0	0	0	4	66	204	317	241	253	384	239	181	402	661	524	446	357	134	57	26	4	0	0	187.6	661.3
18-Jun	0	0	0	0	5	8	33	66	147	194	331	193	195	422	370	376	117	293	160	84	29	4	0	0	126.1	422.2
19-Jun	0	0	0	0	6	22	46	170	444	588	574	629	732	679	674	504	592	339	30	33	36	8	0	0	254.4	731.7
20-Jun	0	0	0	0	6	48	126	328	420	595	689	621	846	675	638	618	454	247	232	192	27	6	0	0	282.0	846.1
21-Jun	0	0	0	0	7	48	199	326	421	593	696	769	804	810	775	487	601	462	319	99	27	7	0	0	310.4	810.0
22-Jun	0	0	0	0	8	39	179	314	418	328	715	779	807	811	301	572	402	469	191	170	22	9	0	0	272.3	810.8
23-Jun	0	0	0	0	11	79	241	260	295	416	448	332	231	398	384	131	182	82	37	27	12	3	0	0	148.8	448.3
24-Jun	0	0	0	0	4	32	108	311	414	589	550	493	378	254	146	141	114	242	355	52	23	6	0	0	175.5	588.7
25-Jun	0	0	0	0	7	63	162	257	430	596	666	761	816	660	586	674	581	451	244	215	37	5	0	0	300.5	816.5
26-Jun	0	0	0	0	6	44	206	331	424	605	704	774	813	806	763	680	396	172	150	122	47	15	0	0	294.1	812.9
27-Jun	0	0	0	0	6	45	166	308	353	445	486	639	836	691	725	578	413	352	239	176	45	7	0	0	271.1	835.5
28-Jun	0	0	0	0	6	44	213	329	391	478	682	756	754	628	335	638	434	191	119	78	37	3	0	0	254.8	755.8
29-Jun	0	0	0	0	3	30	125	226	450	581	592	649	851	465	682	504	438	357	176	178	28	7	0	0	264.2	851.1
30-Jun	0	0	0	0	10	51	103	140	328	282	533	586	560	480	323	589	440	252	123	95	42	10	0	0	206.1	589.4
	0.0	0.0	0.0	0.1	5.9	38.4	128.0	215.7	319.2	414.0	502.5	528.3	557.5	558.8	492.5	452.6	385.1	287.9	183.3	105.9	27.0	5.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.2	12.5	79.5	240.7	339.7	478.1	615.8	717.6	787.5	851.1	810.8	774.9	712.7	600.6	469.4	355.5	215.5	49.0	15.2	0.1	0.0	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - June 2012

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	5	2	5	4	2	4	6	7	4	4	4	5	4	3	12	12	4	3	3	2	4	12	19	4.1	18.5
Dir	224	269	281	247	271	279	254	250	208	235	192	170	182	163	166	228	222	198	163	180	116	86	253	266	228.8	266.1
2 Spd	11	11	11	10	8	9	13	16	16	18	18	19	17	19	18	20	20	23	22	17	12	12	12	13	14.8	23.0
Dir	270	263	250	268	287	304	279	281	285	262	261	258	251	256	254	253	265	262	270	279	281	254	243	245	264.7	262.3
3 Spd	11	11	10	10	8	8	11	13	16	15	14	15	13	12	9	7	6	6	9	6	4	5	5	3	8.8	16.1
Dir	241	251	275	276	267	255	255	253	262	278	296	295	284	298	288	303	299	312	296	318	314	296	332	305	280.3	262.4
4 Spd	4	8	7	1	3	7	8	1	7	8	7	15	17	16	17	16	19	19	18	19	14	16	15	15	8.9	19.4
Dir	222	265	347	245	289	323	341	15	130	114	85	97	103	109	94	102	98	89	90	91	88	85	85	84	90.7	97.8
5 Spd	16	16	16	14	14	13	13	14	16	16	16	15	14	13	12	13	11	11	11	11	11	9	8	9	12.9	16.5
Dir	84	86	86	81	71	74	94	80	73	82	88	89	93	89	90	90	97	104	102	100	97	100	90	83	87.5	86.0
6 Spd	9	8	7	7	9	9	11	13	12	11	13	12	12	9	11	10	8	8	9	9	9	11	12	13	9.4	13.4
Dir	86	80	68	44	42	70	42	89	89	83	79	84	93	73	68	82	71	51	40	14	31	76	86	94	70.6	78.9
7 Spd	14	12	7	5	10	11	15	18	15	13	11	10	11	13	11	3	3	7	10	11	8	9	8	8	3.6	17.7
Dir	96	113	198	128	125	126	234	239	224	234	236	171	199	226	226	219	135	106	84	83	53	35	35	18	171.0	238.8
8 Spd	5	4	2	5	7	3	3	8	14	15	13	14	13	12	13	10	11	12	16	14	3	13	19	13	9.2	19.3
Dir	358	32	321	320	341	214	323	287	292	302	305	297	294	300	322	280	290	307	311	305	156	324	306	283	304.2	305.6
9 Spd	8	6	11	12	14	11	10	10	14	11	13	13	15	18	16	12	13	17	11	17	15	15	9	8	11.9	18.3
Dir	269	263	269	290	293	291	298	291	298	291	292	306	304	301	302	323	318	341	335	318	317	303	286	272	301.8	300.6
10 Spd	8	13	11	16	13	11	11	11	10	10	10	10	7	7	9	8	7	6	6	9	7	6	6	7	6.4	15.7
Dir	284	307	308	315	313	304	299	301	316	322	337	326	358	349	297	320	289	294	198	241	205	173	167	156	301.3	315.4
11 Spd	6	5	6	13	9	10	13	15	19	21	21	22	24	27	26	26	26	25	26	23	19	16	12	10	16.7	27.3
Dir	158	156	236	253	264	262	253	251	257	262	265	252	246	249	257	259	262	266	273	272	272	278	280	281	259.9	249.3
12 Spd	10	9	12	13	12	12	16	18	19	20	18	21	24	19	18	18	16	18	18	17	13	8	10	9	15.0	23.5
Dir	301	266	255	261	249	241	250	262	263	261	261	260	268	260	261	255	241	263	250	261	251	247	260	265	258.7	267.5
13 Spd	8	9	8	8	10	12	14	15	15	17	14	14	16	18	17	20	22	26	23	22	17	12	10	13	14.6	26.0
Dir	289	258	254	243	262	264	260	267	279	294	293	299	285	284	282	284	276	270	267	268	268	285	285	270	275.4	269.5
14 Spd	15	13	10	10	10	9	10	15	15	14	14	12	11	11	9	11	12	12	10	6	5	8	9	8	9.6	15.0
Dir	266	267	249	248	250	289	261	263	273	296	284	279	283	295	294	292	303	356	358	338	269	274	284	264	282.5	266.3
15 Spd	10	9	7	8	10	10	11	16	15	14	12	10	11	10	7	11	11	12	8	6	1	7	9	9	7.5	15.7
Dir	264	275	276	267	268	295	282	275	278	263	257	240	244	237	253	263	268	259	255	275	328	115	118	119	261.0	274.8
16 Spd	9	9	8	6	11	12	10	11	14	14	12	10	8	6	8	10	9	9	9	15	18	15	18	18	7.3	17.9
Dir	114	112	118	150	214	173	138	144	135	141	160	164	161	173	202	238	235	226	229	255	259	259	241	233	194.9	232.8
17 Spd	13	12	9	12	13	15	21	23	24	23	23	22	18	17	16	18	18	22	19	14	10	9	11	12	14.7	23.6
Dir	240	242	238	248	250	251	251	254	257	265	275	268	282	310	317	296	317	318	318	310	300	270	274	269	276.9	257.2
18 Spd	15	11	11	13	14	9	10	12	14	15	17	16	16	22	13	12	14	17	16	14	12	8	8	9	12.0	21.5
Dir	273	273	253	255	259	264	259	282	285	288	298	301	294	297	313	286	311	318	324	338	345	326	320	319	295.5	296.7
19 Spd	9	8	10	10	8	8	8	11	14	16	13	12	12	17	10	19	15	5	5	4	6	5	3	5	8.4	19.3
Dir	324	324	322	320	321	315	312	306	307	309	319	340	333	352	341	313	310	286	317	325	167	179	185	269	317.2	313.0
20 Spd	2	1	4	4	3	2	5	5	5	5	4	3	3	5	2	1	10	15	10	5	5	4	5	4	2.5	14.6
Dir	254	228	248	287	296	253	262	263	256	254	281	298	220	120	199	71	291	316	331	320	51	50	49	50	298.8	316.0
21 Spd	5	2	2	3	4	4	5	4	5	8	11	12	11	12	11	14	13	13	12	4	12	8	9	10	5.3	13.7
Dir	68	136	143	107	93	118	124	93	105	104	101	103	90	94	83	90	97	96	88	94	324	269	324	357	85.9	90.2
22 Spd	9	1	1	2	4	3	6	11	11	9	13	14	13	13	14	14	13	12	10	9	7	5	6	5	7.5	14.0
Dir	7	129	156	338	348	44	74	97	110	82	100	92	85	75	98	114	94	84	77	88	155	83	77	62	87.3	98.3

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - June 2012

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	3	3	7	10	11	10	13	11	11	10	12	13	10	11	10	7	9	7	11	10	11	8.0	13.2
Dir	60	55	57	86	67	66	87	92	101	100	102	140	173	125	106	49	62	77	68	101	72	81	87	112	91.9	105.8
24 Spd	8	10	13	11	12	11	9	10	10	6	4	6	7	6	5	6	10	13	14	9	11	11	8	4	6.3	13.8
Dir	105	79	96	99	107	113	124	145	166	237	289	314	324	325	121	139	114	109	115	106	106	114	117	100	112.0	115.3
25 Spd	5	1	8	6	5	9	8	9	12	12	13	11	12	13	13	16	20	22	17	17	14	8	5	1	10.1	21.9
Dir	319	275	236	197	236	252	231	289	267	260	261	250	220	249	233	242	270	246	273	258	269	250	268	281	254.1	245.8
26 Spd	2	4	4	5	2	5	7	8	13	19	15	13	16	15	19	23	25	26	30	26	23	21	19	14	13.1	29.6
Dir	237	174	163	172	229	220	226	209	247	252	255	254	231	237	263	292	304	293	287	273	266	254	256	260	262.3	286.9
27 Spd	16	16	18	17	17	21	26	32	31	30	29	32	37	37	36	36	33	32	30	30	27	21	18	14	26.2	36.7
Dir	260	261	263	277	277	277	276	279	279	279	275	274	275	275	278	274	272	268	264	258	259	258	259	252	270.8	275.3
28 Spd	13	10	3	11	7	7	9	8	11	10	6	6	4	5	5	6	5	7	5	8	5	4	7	11	4.7	13.3
Dir	255	260	348	267	289	283	260	262	267	292	291	292	262	248	215	167	185	175	142	118	122	182	250	273	251.7	254.7
29 Spd	6	4	6	7	6	7	9	9	10	10	15	14	16	18	19	17	18	20	20	18	12	8	6	4	11.2	20.4
Dir	303	246	254	252	250	228	250	246	238	229	254	268	254	262	272	259	261	255	266	271	275	271	270	202	258.6	255.5
30 Spd	5	0	2	4	3	1	1	6	3	6	5	7	6	9	9	7	5	14	11	10	7	7	7	4	4.3	13.7
Dir	227	346	201	166	157	179	206	177	191	243	234	223	239	269	266	323	298	316	286	277	261	234	234	216	254.8	315.6
Spd	3.0	2.8	3.3	4.2	4.2	3.7	5.6	6.6	7.3	7.6	6.7	6.1	6.5	6.7	5.9	6.9	7.0	6.7	6.2	6.0	4.4	3.3	3.6	3.4	Diurnal Average	
Dir	271.4	260.9	259.5	264.5	273.4	267.3	262.1	260.9	263.1	270.2	273.9	270.0	261.8	274.3	275.2	274.4	281.5	287.0	288.7	283.0	277.1	269.5	271.2	263.9		
Spd	16.3	16.1	18.4	17.4	16.6	20.7	25.9	32.4	30.9	30.2	28.6	31.9	36.6	36.7	36.1	35.9	33.4	32.0	29.8	30.1	26.6	21.1	19.3	18.5	Diurnal Maximum	
Dir	260.0	86.2	263.0	276.7	276.8	277.2	275.7	278.8	279.0	278.5	274.6	274.4	275.4	275.3	277.5	274.3	272.3	267.7	263.7	258.1	259.1	254.2	305.6	266.1		

Maximum Speed Value: 37 km/h on Jun 27 14:00
Maximum Daily Speed Average: 26.2 km/h on Jun 27
Maximum Diurnal Speed Average: 7.6 km/h at hour 10

Minimum Speed Value: 0 km/h on Jun 30 02:00
Minimum Daily Speed Average: 2.5 km/h on Jun 20
Minimum Diurnal Speed Average: 2.8 km/h at hour 2

Monthly Average Velocity: 5.27 km/h 271.83 deg

Speed Percentiles: P_1 = 1.2 P_{10} = 4.3 Q_1 = 7.1 Median = 10.8 Q_3 = 14.4 P_{90} = 18.7 P_{99} = 31.7

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

Hours in Service:	720
Hours of Data:	720
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	6	12	6	0	0	0	24
NorthEast	6	15	2	0	0	0	23
East	9	39	67	1	0	0	116
SouthEast	14	23	8	0	0	0	45
South	19	20	2	0	0	0	41
SouthWest	17	31	25	2	0	0	75
West	17	87	117	44	14	0	279
NorthWest	11	44	55	7	0	0	117
Total	99	271	282	54	14	0	720

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - June 2012

Wind Speed Classes (km/h)

FOCUS AIR QUALITY MONITORING

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - June 2012

Maximum Speed: 37 km/h on Jun 27 14:00

Maximum Daily Speed Average: 26.8 km/h on Jun 27

Minimum Speed: 2 km/h on Jun 20 02:00

Minimum Daily Speed Average: 5.7 km/h on Jun 20

Maximum Diurnal Speed Average: 15.4 km/h at hour 18

Minimum Diurnal Speed Average: 8.2 km/h at hour 3

Monthly Average Speed: 11.97 km/h

Percentiles: $P_1 = 2.9$ $P_{10} = 5.2$ $Q_1 = 8.0$ Median = 11.2 $Q_3 = 14.6$ $P_{90} = 19.1$ $P_{99} = 32.2$

Hours in Service:	720
Hours of Data:	720
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-Jun	4	5	4	5	5	3	5	6	7	5	6	6	6	5	6	13	12	5	5	4	3	5	16	19	6.7	18.8
2-Jun	12	11	11	10	8	9	14	16	16	18	18	19	18	20	19	21	21	24	23	18	12	12	12	13	15.6	24.1
3-Jun	11	12	10	11	8	8	11	14	17	16	14	17	15	13	10	9	9	8	10	6	4	5	5	4	10.2	16.5
4-Jun	6	9	7	5	5	7	8	5	8	9	8	15	17	17	18	17	20	19	19	19	15	16	15	15	12.3	19.8
5-Jun	16	16	17	14	14	13	13	14	16	16	16	15	14	13	13	13	11	12	12	11	11	9	8	9	13.3	16.6
6-Jun	9	8	7	8	9	10	13	13	12	11	14	12	12	10	12	10	9	8	9	9	9	11	12	13	10.4	13.7
7-Jun	14	13	8	6	10	12	15	18	15	13	12	11	12	14	12	6	7	9	11	11	8	9	8	8	10.8	17.9
8-Jun	5	5	3	6	7	5	4	9	14	15	13	14	13	13	14	11	12	12	16	14	10	14	20	13	11.0	20.1
9-Jun	8	8	12	12	15	11	10	10	14	11	13	14	16	19	17	12	13	18	11	17	15	15	9	8	12.8	18.6
10-Jun	8	13	11	16	13	11	11	11	10	10	10	11	8	9	9	9	7	6	7	10	8	6	6	7	9.4	15.8
11-Jun	6	5	7	13	10	10	13	15	19	21	22	22	25	28	27	26	26	26	26	23	19	16	12	10	17.8	27.8
12-Jun	10	10	12	13	13	12	16	19	19	20	19	22	24	19	19	18	16	18	19	17	13	9	10	9	15.6	24.2
13-Jun	8	9	8	8	10	12	14	15	15	18	14	15	16	19	17	21	22	26	23	22	17	12	10	13	15.2	26.4
14-Jun	15	13	10	10	11	10	10	15	16	14	14	13	13	12	11	12	13	12	11	6	6	8	9	8	11.3	15.5
15-Jun	10	9	7	8	10	10	11	16	16	15	13	11	13	12	8	12	12	13	9	7	2	7	9	9	10.4	16.0
16-Jun	9	9	8	7	11	12	10	11	14	15	13	10	9	7	9	11	10	10	10	15	18	15	18	18	11.6	18.2
17-Jun	14	12	9	12	13	16	21	23	24	24	23	23	19	18	17	19	19	22	19	14	10	10	11	12	16.7	23.9
18-Jun	15	12	11	13	14	10	10	12	14	15	17	16	17	22	14	12	15	17	16	14	12	9	8	9	13.4	21.8
19-Jun	9	8	10	10	8	8	8	11	14	16	14	13	14	18	12	20	16	10	13	9	7	6	4	5	10.9	19.8
20-Jun	2	2	4	5	4	2	6	5	6	6	6	5	6	7	6	5	11	15	10	6	6	4	5	4	5.7	15.1
21-Jun	5	4	3	4	4	4	5	4	6	8	11	12	12	12	12	14	14	14	12	12	13	11	9	10	8.9	14.1
22-Jun	9	6	3	2	4	4	7	11	11	9	13	14	14	14	14	14	13	12	10	10	7	6	6	6	9.2	14.5
23-Jun	6	6	6	4	4	7	11	11	10	13	12	11	11	12	14	10	12	10	7	10	8	11	10	12	9.5	13.9
24-Jun	8	10	13	11	12	11	9	10	10	7	5	7	7	7	7	7	10	13	14	10	11	11	8	5	9.4	14.1
25-Jun	6	3	8	6	7	9	8	10	13	13	14	13	13	14	13	17	21	22	18	17	14	8	6	4	11.5	22.4
26-Jun	4	4	4	5	3	5	8	8	13	20	16	14	17	16	20	25	25	26	30	27	23	21	19	14	15.4	29.9
27-Jun	16	16	18	18	17	21	26	33	31	31	29	32	37	37	37	36	34	32	30	30	27	21	18	14	26.8	37.3
28-Jun	13	10	4	11	8	7	9	9	12	11	7	7	7	7	7	8	7	7	6	8	5	5	10	11	8.1	13.5
29-Jun	6	5	6	7	6	7	9	9	10	10	16	15	17	19	19	18	19	21	20	18	12	8	6	4	12.1	21.0
30-Jun	5	3	3	4	3	4	2	6	4	6	6	8	8	10	10	8	8	14	12	10	8	7	7	5	6.8	14.0
	8.9	8.6	8.2	8.8	8.8	9.1	10.6	12.3	13.6	13.9	13.6	13.9	14.3	14.7	14.0	14.5	14.8	15.4	14.5	13.4	11.0	10.2	10.2	9.7	Diurnal Average	
	16.4	16.2	18.5	17.8	16.7	20.8	26.2	32.6	31.2	30.6	28.9	32.4	37.2	37.3	36.7	36.4	33.8	32.4	30.3	30.3	26.8	21.3	20.1	18.8	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 - June 2012

Maximum Value: 92.8 deg on Jun 20 16:00

Minimum Value: 5.8 deg on Jun 27 22:00

Percentiles: P_1 = 6.3 P_{10} = 8.0 Q_1 = 9.9 Median = 13.9 Q_3 = 22.2 P_{90} = 43.6 P_{99} = 81.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	74	23	56	20	39	63	20	26	22	50	58	58	39	46	73	38	20	45	78	32	61	26	69	9	77.9
2-Jun	15	11	11	10	19	12	11	8	10	10	13	11	16	17	17	14	18	17	12	13	13	12	8	7	19.0
3-Jun	8	10	16	31	19	15	9	10	13	14	15	25	25	29	34	56	55	41	16	22	10	21	16	44	56.2
4-Jun	62	31	18	70	66	17	10	78	35	13	19	13	14	12	13	11	12	10	9	9	9	9	7	8	78.4
5-Jun	7	8	8	9	9	10	11	9	10	10	8	10	8	9	13	10	9	10	11	9	8	12	11	9	13.2
6-Jun	9	11	15	14	14	20	31	14	8	9	12	10	11	17	14	13	12	15	17	12	18	16	9	7	30.9
7-Jun	7	23	36	22	13	28	12	9	11	19	19	26	28	18	26	67	76	42	21	13	18	14	15	18	76.3
8-Jun	28	49	53	38	34	67	59	15	9	9	9	15	14	21	16	23	16	11	8	34	80	47	17	14	79.7
9-Jun	15	45	19	7	6	8	9	9	7	9	11	13	13	9	16	12	14	10	19	10	8	7	12	9	45.2
10-Jun	16	8	7	7	8	8	7	8	7	12	15	18	42	48	23	23	25	16	34	19	13	8	10	10	48.4
11-Jun	10	15	17	8	9	10	8	8	8	12	13	10	11	12	12	11	11	12	8	9	9	8	10	12	17.3
12-Jun	12	18	10	8	11	9	9	10	9	11	13	16	14	12	12	14	16	12	11	9	10	12	10	14	18.4
13-Jun	18	10	12	12	13	8	7	9	11	11	13	16	12	13	13	17	12	10	12	7	7	7	11	7	18.0
14-Jun	7	8	10	9	10	28	14	12	18	18	18	19	26	24	29	26	30	14	14	15	21	24	8	16	29.9
15-Jun	13	12	15	19	9	16	11	12	13	17	26	30	27	31	48	27	25	28	27	24	79	10	7	6	78.8
16-Jun	6	7	8	26	12	17	12	11	10	14	17	20	18	28	32	22	26	18	20	13	8	9	12	9	32.2
17-Jun	11	12	13	10	9	9	8	10	9	10	9	12	20	13	12	12	12	8	9	8	8	15	8	7	19.9
18-Jun	7	15	10	8	8	16	11	10	11	8	10	8	9	10	13	20	15	9	15	10	13	9	7	7	20.5
19-Jun	6	9	6	7	7	8	10	9	10	11	15	24	31	18	33	13	9	76	79	93	18	17	57	23	92.5
20-Jun	28	58	18	30	26	57	26	28	22	38	64	72	69	63	83	93	27	16	14	26	20	13	8	14	92.8
21-Jun	9	54	54	36	14	14	25	33	39	22	16	16	19	20	23	14	18	11	11	82	17	41	16	12	81.7
22-Jun	9	82	83	66	15	30	16	11	13	19	14	16	19	18	16	13	14	16	13	27	21	12	14	13	83.0
23-Jun	11	12	12	45	36	14	14	12	16	11	19	22	19	16	22	14	12	14	12	22	21	14	12	24	45.5
24-Jun	14	14	9	9	8	7	12	15	20	26	55	40	28	25	65	18	13	9	13	16	11	9	10	35	64.7
25-Jun	53	57	19	20	46	19	26	12	14	16	21	25	23	23	16	23	12	12	12	11	9	14	34	77	76.7
26-Jun	64	20	13	7	51	31	16	16	20	16	19	24	18	22	18	22	6	6	8	10	9	9	7	8	64.3
27-Jun	8	7	7	12	8	6	8	7	7	10	9	10	10	11	10	9	9	9	10	8	7	6	8	8	12.2
28-Jun	10	14	47	13	31	14	13	18	16	18	48	39	69	55	61	43	49	15	30	13	14	32	67	12	68.7
29-Jun	18	31	20	12	24	11	10	12	16	21	22	18	21	16	18	17	16	14	9	9	10	15	16	23	30.7
30-Jun	30	93	52	19	33	83	73	19	54	23	34	33	47	25	30	35	59	13	24	12	25	10	11	30	92.8
	73.6	92.8	83.0	70.1	65.7	82.8	72.7	78.4	53.5	50.1	64.1	72.5	68.8	63.0	83.1	92.8	76.3	75.6	79.0	92.5	79.7	46.8	68.9	76.7	

PAZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.1 ppb on Jun 19 17:00 Maximum Daily Average: 0.2 ppb on Jun 19

Minimum Value: 0 ppb on Jun 2 05:00 Minimum Daily Average: 0.0 ppb on Jun 5
Maximum Diurnal Average: 0.1 ppb at hour 12 Minimum Diurnal Average: 0.0 ppb at hour 2
Monthly Average: 0.08 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.1$ $P_{90} = 0.2$ $P_{99} = 0.5$

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
Percent Operational Time:	100.0

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

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2012

Maximum Value: 13.9 ppb on Jun 18 03:00

Maximum Daily Average: 1.0 ppb on Jun 18

Minimum Value: 0 ppb on Jun 5 19:00

Minimum Daily Average: 0.4 ppb on Jun 5

Maximum Diurnal Average: 0.9 ppb at hour 3

Minimum Diurnal Average: 0.5 ppb at hour 23

Monthly Average: 0.57 ppb

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

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 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-Jun	1	A	0	0	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	0.7
2-Jun	A	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	A	0.5	1.1
3-Jun	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	A	0	0.5	0.6
4-Jun	0	1	0	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	A	0	0	0.6	1.0
5-Jun	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	A	0	0	0	0.4	0.6
6-Jun	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	A	0	0	0	0	0.4	0.6
7-Jun	0	0	0	0	1	1	1	0	0	1	1	1	1	0	1	0	1	1	A	0	1	1	1	1	0.5	0.9
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	A	1	0	1	1	0	0	0.5	0.7
9-Jun	0	1	0	0	0	0	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0.6	1.3
10-Jun	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.8
11-Jun	1	0	0	1	1	1	1	0	1	1	0	0	1	1	A	0	1	2	0	0	1	0	0	1	0.6	1.8
12-Jun	0	0	1	0	0	0	0	0	1	1	1	0	0	A	1	1	1	1	1	0	1	0	0	0	0.5	0.8
13-Jun	1	0	0	0	0	0	0	1	1	1	1	1	A	1	0	0	0	0	0	0	1	0	0	0	0.5	0.9
14-Jun	1	0	0	1	1	0	0	1	0	0	0	A	1	0	0	0	1	1	1	1	0	1	0	0	0.5	1.1
15-Jun	0	1	0	0	1	0	1	1	1	0	A	1	1	0	0	0	0	1	0	0	0	0	0	0	0.5	1.0
16-Jun	0	0	0	1	0	0	0	1	1	A	1	0	0	1	1	0	0	1	1	1	0	0	1	1	0.5	0.8
17-Jun	0	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0	0.6	1.0
18-Jun	0	0	14	0	0	1	0	A	0	0	1	0	0	0	0	1	0	0	1	0	0	1	0	1	1.0	13.9
19-Jun	0	0	0	1	1	1	A	1	1	1	1	1	1	1	0	1	5	2	1	1	0	1	1	1	0.9	5.2
20-Jun	1	0	1	1	1	A	1	1	0	1	1	1	1	1	1	1	0	1	0	1	0	1	0	0	0.6	0.8
21-Jun	1	0	1	0	A	0	0	0	1	1	0	0	0	C	C	C	1	1	1	0	1	1	1	1	0.5	0.8
22-Jun	1	1	0	A	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	0.6	1.2
23-Jun	1	0	A	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
24-Jun	1	A	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	1.1
25-Jun	A	0	0	0	0	1	1	1	0	1	0	0	1	0	0	1	0	1	1	0	1	1	0	A	0.6	1.3
26-Jun	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.4
27-Jun	0	1	0	1	1	1	1	1	0	1	0	0	1	1	1	1	0	1	1	1	1	A	0	0	0.6	0.9
28-Jun	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	1	1	0	A	1	1	0	0.5	0.9
29-Jun	0	1	1	0	0	0	1	1	0	1	1	1	0	1	1	0	1	1	1	A	1	1	0	1	0.6	1.0
30-Jun	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	A	0	1	1	0	0	0.5	0.7
	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	Diurnal Average	
	1.1	0.8	13.9	0.7	0.8	0.9	0.9	1.1	1.1	1.0	1.0	1.2	1.3	1.3	1.0	1.1	5.2	1.8	1.0	1.4	1.3	0.8	0.7	0.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2012

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Evergreen Park - June 2012

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2012

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

Maximum Value: 1.0 ppb on Jun 16 09:00

Maximum Daily Average: 0.7 ppb on Jun 7

Minimum Value: 0 ppb on Jun 19 04:00

Minimum Daily Average: 0.3 ppb on Jun 19

Maximum Diurnal Average: 0.5 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 17

Monthly Average: 0.50 ppb

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

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
2-Jun	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
3-Jun	0	1	1	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	1	1	1	0	A	1	0.5	0.7
4-Jun	1	1	0	0	1	1	1	1	0	1	0	0	1	0	1	0	0	0	0	0	0	A	0	0	0.5	0.7
5-Jun	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	A	1	0	0	0.5	0.5
6-Jun	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.7
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.7
8-Jun	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	A	1	0	1	1	1	1	0.6	0.7
9-Jun	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	1	0	0	1	0	0	0.5	0.6
10-Jun	1	0	1	1	1	1	1	0	0	0	0	1	1	1	0	A	1	0	0	0	0	0	0	0	0.5	0.6
11-Jun	0	0	0	0	0	0	0	0	1	0	1	1	1	0	A	1	1	1	0	1	1	1	1	0	0.5	0.6
12-Jun	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.5	0.7
13-Jun	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0.5	0.5
14-Jun	1	1	1	1	1	1	0	0	0	0	1	A	1	0	0	0	0	1	0	0	0	0	1	0	0.5	0.6
15-Jun	1	1	1	1	1	1	1	1	0	0	A	1	1	1	0	1	1	1	1	1	1	1	1	0	0.5	0.7
16-Jun	1	0	1	1	1	1	1	1	1	A	1	0	0	1	1	0	1	1	1	1	1	1	1	1	0.6	1.0
17-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
18-Jun	1	1	1	1	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
20-Jun	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
21-Jun	0	0	0	0	A	0	0	1	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0.4	0.6
22-Jun	1	1	1	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0.4	0.5
24-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	1	1	0	0	0.5	0.8
25-Jun	A	1	1	1	1	0	0	1	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	A	0.5	1.0
26-Jun	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.5	0.7
27-Jun	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	0	1	1	0	1	A	0	0	0.5	0.8
28-Jun	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	1	0	A	1	0	1	0.5	0.7
29-Jun	1	1	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	0	1	A	1	1	1	1	0.5	0.6
30-Jun	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	0.8
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	Diurnal Average	
	0.7	1.0	0.8	0.7	0.7	0.7	0.8	0.9	1.0	0.7	0.7	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.6	0.8	0.7	0.7	0.7	0.7	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 - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2012

Maximum Value: 2.3 ppb on Jun 20 08:00

Maximum Daily Average: 1.1 ppb on Jun 30

Minimum Value: 1 ppb on Jun 19 04:00

Maximum Diurnal Average: 1.0 ppb at hour 8

Monthly Average: 0.96 ppb

Minimum Daily Average: 0.8 ppb on Jun 19

Minimum Diurnal Average: 0.9 ppb at hour 22

Percentiles: $P_1 = 0.6$ $P_{10} = 0.8$ $Q_1 = 0.9$ Median = 0.9 $Q_3 = 1.0$ $P_{90} = 1.1$ $P_{99} = 1.4$

Hours in Service:	720
Hours of Data:	684
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-Jun	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	1.0
2-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.0
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.4
4-Jun	1	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	1.4
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.2
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.4
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.1	1.3
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.1	1.4
9-Jun	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	1.1
10-Jun	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
11-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.3
12-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	1.2
13-Jun	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
14-Jun	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
15-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
16-Jun	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
17-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
18-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
19-Jun	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
20-Jun	1	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.3
21-Jun	1	1	1	1	A	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	0.9	1.3
22-Jun	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	1.2
23-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
24-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
25-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.5
26-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.2
27-Jun	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.5
28-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.4
29-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.3
30-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.1	1.3
	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	1.0	0.9	0.9	1.0	0.9	0.9	1.0	Diurnal Average	
	1.2	1.5	1.2	1.2	1.3	1.3	1.5	2.3	1.6	1.3	1.3	1.1	1.1	1.2	1.3	1.2	1.2	1.3	1.2	1.3	1.4	1.2	1.2	1.2	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2012

Pollutant Classes (ppb)

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Evergreen Park - June 2012

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - June 2012

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

Maximum Value: 61.6 $\mu g/m^3$ on Jun 27 13:00

Maximum Daily Average: 19.7 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 1 19:00

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

Monthly Average: 4.61 $\mu g/m^3$

Minimum Daily Average: 0.8 $\mu g/m^3$ on Jun 2

Minimum Diurnal Average: 2.7 $\mu g/m^3$ at hour 2

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 1.1$ Median = 3.1 $Q_3 = 6.0$ $P_{90} = 10.2$ $P_{99} = 30.1$

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	5	4	3	4	3	5	7	10	4	2	1	6	3	2	5	12	4	0	0	1	5	3	7	2	4.1	12.3
2-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	0	1	3	3	2	2	0.8	3.2
3-Jun	3	3	3	3	4	3	2	3	1	0	0	0	0	1	2	1	2	2	2	3	5	8	8	8	2.8	8.2
4-Jun	9	4	4	5	5	5	6	6	8	10	4	0	3	1	2	2	2	3	4	5	6	6	7	5	4.7	9.8
5-Jun	6	4	6	9	10	14	17	14	14	12	10	7	6	5	9	2	4	2	3	2	2	2	3	4	7.0	16.7
6-Jun	4	2	3	0	0	0	0	0	0	0	1	0	1	1	1	2	1	2	2	0	1	6	4	4	1.5	6.0
7-Jun	4	2	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	1	1	4	4	1	2	0.9	4.4
8-Jun	2	2	3	2	1	2	3	1	2	1	2	0	1	0	0	0	0	3	4	7	5	4	0	0	1.9	7.0
9-Jun	1	8	6	1	1	1	1	3	3	2	4	2	0	5	5	2	0	1	0	4	0	4	3	3	2.5	7.8
10-Jun	2	4	4	6	6	4	4	5	5	4	4	4	4	0	2	4	5	9	9	3	9	6	5	6	4.8	9.3
11-Jun	5	2	5	3	2	0	1	2	8	3	2	2	3	3	2	3	3	2	0	0	0	0	0	0	2.1	8.1
12-Jun	0	0	0	0	0	0	0	1	1	0	2	0	3	3	3	2	2	0	0	1	1	3	1	0	1.0	3.1
13-Jun	0	0	0	1	0	2	5	8	3	2	2	1	1	3	3	16	13	40	18	14	11	8	12	13	7.4	40.4
14-Jun	5	3	15	8	6	7	6	11	15	12	9	5	3	3	4	6	5	7	8	4	9	4	12	4	7.2	15.5
15-Jun	4	3	10	2	1	2	16	23	12	3	3	5	8	5	4	7	6	6	3	4	15	11	3	2	6.5	22.9
16-Jun	0	1	2	4	11	3	2	2	1	0	2	1	2	6	4	0	1	2	1	0	0	0	1	0	1.9	11.1
17-Jun	0	0	0	0	0	0	0	0	0	0	2	0	5	12	5	0	5	1	4	1	2	3	2	3	1.8	12.1
18-Jun	0	0	0	0	0	1	1	2	4	4	4	1	1	1	0	1	2	0	0	0	1	1	1	0	1.2	4.4
19-Jun	0	0	1	1	1	4	2	2	5	9	8	0	3	2	2	14	0	6	12	6	6	2	1	0	3.5	13.8
20-Jun	0	0	0	0	2	9	12	4	4	8	0	0	2	1	1	3	0	8	2	1	7	4	2	10	3.3	11.9
21-Jun	5	2	2	2	0	6	12	2	0	0	0	0	1	0	0	M	M	13	10	9	8	10	6	8	4.4	13.0
22-Jun	7	5	6	7	7	7	6	5	6	7	6	4	3	4	5	5	4	5	5	8	11	11	10	9	6.3	11.1
23-Jun	8	7	7	5	6	6	7	7	7	8	7	11	16	10	5	10	8	7	8	4	7	8	7	6	7.5	16.2
24-Jun	7	5	4	3	5	4	5	10	8	6	4	3	4	6	10	5	4	3	4	5	4	1	1	0	4.6	10.3
25-Jun	3	2	2	2	1	2	2	11	2	1	2	2	3	0	1	4	6	3	4	0	0	2	4	28	3.7	27.5
26-Jun	2	3	3	2	2	3	2	0	3	9	14	9	22	15	19	9	2	2	4	5	4	3	0	0	5.7	22.4
27-Jun	0	1	53	7	3	18	28	25	22	17	29	46	62	31	33	21	9	19	10	2	2	1	0	36	19.7	61.6
28-Jun	16	6	7	5	3	4	12	16	12	13	8	7	5	4	3	3	6	7	6	7	8	15	11	4	7.9	16.4
29-Jun	2	2	1	2	3	3	5	9	8	5	3	3	3	10	19	3	4	8	18	7	0	3	3	17	5.8	18.9
30-Jun	9	6	10	21	17	13	6	1	4	10	5	1	3	1	8	1	3	1	2	1	0	4	4	5	5.7	21.5
	3.7	2.7	5.4	3.5	3.3	4.4	5.6	6.1	5.4	4.9	4.5	4.2	5.7	4.5	5.2	4.8	3.5	5.5	4.8	3.6	4.5	4.7	4.1	6.0	Diurnal Average	
	15.6	7.8	52.7	21.5	16.9	17.7	28.4	24.5	21.8	17.3	28.9	46.3	61.6	31.1	32.6	20.8	13.4	40.4	18.0	14.4	15.0	15.2	12.3	35.9	Diurnal Maximum	

M - Maintenance

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

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - June 2012

Maximum Value: 151.2 $\mu g/m^3$ on Jun 27 03:00

Maximum Daily Average: 40.3 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 6 05:00

Minimum Daily Average: 3.6 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 15.6 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 5.6 $\mu g/m^3$ at hour 2

Monthly Average: 10.86 $\mu g/m^3$

Percentiles: $P_1 = 0.0$ $P_{10} = 2.8$ $Q_1 = 4.8$ Median = 7.5 $Q_3 = 11.4$ $P_{90} = 22.2$ $P_{99} = 33.9$

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	9	5	5	6	6	9	14	18	14	6	8	11	6	7	10	24	9	4	2	5	8	8	18	9	9.2	23.6
2-Jun	3	3	3	3	1	3	4	3	1	2	3	7	1	4	2	4	5	8	3	4	5	6	4	4	3.6	8.0
3-Jun	5	5	5	6	6	6	5	6	3	2	3	4	4	4	5	5	6	8	5	8	9	13	16	17	6.5	17.0
4-Jun	16	10	11	10	7	8	9	13	12	13	11	5	6	5	7	5	5	6	8	8	8	8	12	8	8.9	16.2
5-Jun	9	7	10	11	12	17	19	16	17	17	12	11	8	7	30	9	12	10	8	6	5	5	5	7	11.2	29.7
6-Jun	6	5	7	2	0	5	10	9	4	4	6	3	8	5	5	6	5	4	7	3	7	9	6	7	5.6	10.4
7-Jun	8	6	3	2	5	5	0	3	1	2	4	7	5	1	2	11	6	7	6	7	9	9	7	6	5.2	11.2
8-Jun	10	5	6	6	8	6	6	3	5	5	7	2	6	3	8	4	4	6	9	21	14	10	0	4	6.6	20.7
9-Jun	3	18	15	6	4	3	3	5	7	5	6	6	5	13	21	24	7	16	6	9	6	7	4	5	8.6	24.0
10-Jun	4	5	7	8	8	6	6	7	7	8	12	11	10	7	8	8	12	19	14	12	12	8	7	7	8.9	19.4
11-Jun	7	4	8	6	6	3	6	8	27	6	6	7	6	8	8	8	8	6	2	3	2	2	0	0	6.2	27.3
12-Jun	3	1	2	0	0	0	1	4	7	5	5	5	9	7	13	7	7	5	2	6	5	8	9	2	4.7	12.6
13-Jun	1	2	2	2	3	5	7	13	5	6	8	10	9	9	10	38	18	79	42	25	20	12	37	38	16.7	79.0
14-Jun	14	4	28	12	8	10	10	14	23	35	34	12	7	7	11	12	11	19	12	8	22	11	35	6	15.2	34.8
15-Jun	6	5	31	5	3	6	33	39	52	8	7	27	28	22	11	15	13	21	6	18	25	22	10	8	17.5	51.6
16-Jun	6	6	9	8	21	11	4	9	6	4	8	7	8	34	20	3	4	13	7	8	3	4	4	1	8.7	33.8
17-Jun	0	0	0	0	0	2	0	3	2	4	6	3	13	39	21	13	15	5	19	6	8	6	4	6	7.4	39.4
18-Jun	3	2	0	0	0	4	3	5	9	10	13	6	6	8	7	11	9	4	5	3	3	4	3	2	5.0	13.4
19-Jun	1	2	2	3	4	6	4	3	25	24	36	7	11	10	19	30	10	29	26	11	10	9	4	2	11.9	36.3
20-Jun	3	3	4	4	7	16	19	18	8	21	8	10	10	10	11	22	7	26	14	10	15	10	7	14	11.5	25.9
21-Jun	8	5	7	7	4	18	27	7	8	7	11	5	11	12	9	M	M	16	11	13	13	18	8	10	10.7	27.5
22-Jun	8	7	9	10	9	9	8	6	8	10	9	6	5	6	8	11	6	13	7	13	15	14	11	10	9.1	14.8
23-Jun	10	10	9	7	7	8	10	9	10	13	9	25	25	15	8	28	11	10	10	11	13	10	11	10	12.1	27.9
24-Jun	14	10	6	6	7	6	7	14	10	10	7	10	7	10	22	9	7	6	6	8	10	2	3	4	8.4	21.6
25-Jun	9	4	7	4	3	5	14	32	6	3	6	7	11	12	5	10	10	7	8	5	3	4	7	141	13.5	141.0
26-Jun	4	4	5	4	4	4	7	1	7	17	27	13	47	34	37	24	7	8	8	8	7	6	2	3	12.1	47.5
27-Jun	1	4	151	22	4	48	44	52	48	25	50	85	101	41	50	46	15	39	29	10	4	5	1	91	40.3	151.2
28-Jun	43	11	10	7	4	8	22	23	41	34	21	10	8	7	6	6	8	10	10	10	18	35	20	12	15.9	42.9
29-Jun	4	4	3	3	5	7	7	22	21	11	8	8	6	23	36	17	7	28	31	25	3	6	6	27	13.2	36.0
30-Jun	11	8	17	26	21	18	14	2	15	25	18	3	10	8	24	5	16	6	7	5	4	6	8	7	11.8	25.5
	7.6	5.6	12.7	6.5	5.9	8.7	10.8	12.2	13.6	11.3	12.3	11.1	13.3	12.6	14.5	14.3	9.1	14.7	11.1	9.6	9.5	9.2	9.0	15.6	Diurnal Average	
	42.9	18.2	151.2	25.5	21.1	47.5	43.6	52.1	51.6	34.8	50.4	84.8	100.9	40.9	50.4	46.5	18.0	79.0	42.3	25.1	24.8	35.1	36.5	141.0	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - June 2012

Peace Airshed Zone Association

Pollutant Rose

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

Evergreen Park - June 2012

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

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

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - June 2012

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

Maximum Value: 24.1 ^{o}C on Jun 22 14:00

Maximum Daily Average: 18.1 ^{o}C on Jun 24

Minimum Value: 5 ^{o}C on Jun 1 05:00

Minimum Daily Average: 11.7 ^{o}C on Jun 18

Maximum Diurnal Average: 18.6 ^{o}C at hour 17

Minimum Diurnal Average: 10.2 ^{o}C at hour 5

Monthly Average: 14.77 ^{o}C

Percentiles: P_1 = 6.5 P_{10} = 10.0 Q_1 = 11.7 Median = 14.6 Q_3 = 17.7 P_{90} = 20.3 P_{99} = 23.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	8	7	6	6	5	6	9	11	13	15	16	17	18	19	19	17	16	18	19	19	16	13	12	11	13.1	19.4
2-Jun	10	10	9	9	8	8	9	10	11	11	11	12	14	15	16	16	16	17	16	16	15	13	12	11	12.3	16.5
3-Jun	10	8	7	6	5	5	7	9	11	13	15	16	16	17	17	18	18	19	19	18	17	15	13	10	12.9	18.7
4-Jun	10	11	11	9	8	8	9	10	11	12	15	18	19	19	20	20	21	21	21	20	19	18	17	17	15.2	21.3
5-Jun	16	16	16	15	15	14	12	11	11	11	11	12	12	12	12	13	13	14	14	14	13	13	13	12	13.1	16.4
6-Jun	12	12	12	12	12	11	11	11	11	12	12	12	13	13	12	12	12	12	13	13	13	14	14	14	12.3	13.9
7-Jun	14	13	12	10	10	9	8	8	8	8	9	12	13	15	16	17	18	18	18	17	17	15	13	12	12.9	17.8
8-Jun	12	11	10	11	11	11	11	11	12	13	13	14	15	16	17	17	18	18	17	15	12	11	11	11	13.2	18.0
9-Jun	11	11	11	11	10	10	11	12	13	14	15	16	17	18	18	16	17	17	16	16	15	14	13	12	13.8	18.3
10-Jun	12	12	13	12	12	12	12	12	12	12	13	14	15	16	17	17	18	18	17	18	17	15	14	14	14.4	18.1
11-Jun	13	11	11	12	12	12	13	15	17	19	20	20	21	22	22	22	22	21	21	20	19	18	17	16	17.3	22.2
12-Jun	15	15	14	14	14	14	15	15	16	17	18	18	19	18	18	19	19	19	19	19	18	17	16	15	16.8	19.2
13-Jun	15	14	13	13	13	13	13	14	15	16	17	18	18	18	19	19	20	19	19	18	17	15	13	12	15.9	19.7
14-Jun	11	10	9	9	8	8	9	11	12	13	14	14	15	15	15	16	16	16	15	14	14	13	12	12	12.6	16.0
15-Jun	11	10	9	8	8	7	9	10	12	13	14	14	15	15	16	17	17	18	18	17	16	15	13	13	13.2	17.9
16-Jun	12	12	11	11	11	10	10	10	11	13	14	15	16	17	18	18	18	18	19	18	18	17	15	13	14.4	18.8
17-Jun	13	12	11	12	12	12	13	13	14	15	16	16	16	15	15	17	17	16	15	14	14	14	13	12	14.0	17.1
18-Jun	11	11	11	11	10	10	10	10	11	11	12	13	12	13	13	14	13	13	14	13	13	12	11	11	11.7	13.7
19-Jun	11	11	10	10	10	10	10	11	13	14	15	16	17	18	18	16	17	18	14	12	12	12	11	10	13.2	18.0
20-Jun	9	8	9	9	8	9	10	11	13	15	17	18	19	20	20	20	21	19	20	20	19	16	14	12	14.9	21.4
21-Jun	11	10	9	8	8	9	12	14	16	19	20	21	22	23	23	23	24	24	24	22	18	18	16	15	17.0	24.0
22-Jun	14	13	12	10	9	10	13	16	18	18	21	23	24	24	22	23	23	24	23	22	21	19	17	15	18.1	24.1
23-Jun	14	13	13	12	11	13	16	17	18	20	21	21	20	21	21	20	20	20	19	20	19	19	18	18	17.8	21.5
24-Jun	17	15	16	16	16	15	15	17	18	19	20	21	21	21	21	21	20	20	21	20	19	17	15	14	18.1	21.1
25-Jun	13	12	13	12	12	13	14	15	16	18	19	19	20	21	21	22	22	22	21	21	20	18	16	12	17.1	21.7
26-Jun	10	9	7	7	6	8	11	13	16	17	18	18	19	20	20	20	18	16	16	16	15	15	13	13	14.2	20.2
27-Jun	12	12	12	12	11	12	13	14	14	14	15	16	17	17	17	17	17	17	16	16	15	14	13	13	14.4	17.4
28-Jun	11	11	11	10	9	10	12	13	15	16	17	19	19	21	20	21	22	22	21	20	20	19	18	16	16.4	21.6
29-Jun	15	15	15	13	13	12	13	15	16	18	18	19	20	20	21	21	21	21	21	20	20	18	15	13	17.3	21.5
30-Jun	12	10	9	9	9	10	12	13	15	17	18	20	20	20	17	20	21	20	19	18	18	16	15	14	15.6	20.8
	12.2	11.5	11.0	10.6	10.2	10.4	11.4	12.5	13.6	14.8	15.9	16.7	17.4	17.9	18.2	18.4	18.6	18.4	18.1	17.6	16.6	15.3	14.1	13.1	Diurnal Average	
	16.6	16.2	16.2	16.0	15.5	15.1	16.2	17.0	18.0	19.8	21.2	22.9	23.7	24.1	23.2	23.2	24.0	23.9	24.0	22.4	20.8	18.8	18.3	18.4	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - June 2012

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2012

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

Maximum Value: 99.9 % on Jun 6 21:00

Maximum Daily Average: 98.9 % on Jun 6

Minimum Value: 19 % on Jun 3 19:00

Minimum Daily Average: 34.9 % on Jun 3

Maximum Diurnal Average: 76.7 % at hour 5

Minimum Diurnal Average: 45.2 % at hour 17

Monthly Average: 60.13 %

Percentiles: P_1 = 20.7 P_{10} = 33.0 Q_1 = 43.7 Median = 57.8 Q_3 = 77.5 P_{90} = 91.3 P_{99} = 99.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	64	65	66	69	77	71	63	53	48	37	35	36	33	30	30	42	47	44	39	39	51	66	70	80	52.4	79.7
2-Jun	88	90	89	87	85	81	77	70	57	50	49	44	35	26	24	23	25	25	24	24	28	33	35	36	50.2	90.1
3-Jun	41	46	50	52	58	61	50	44	38	32	26	22	21	20	21	20	20	20	19	20	25	31	44	56	34.9	60.8
4-Jun	53	46	49	57	62	64	62	61	59	50	43	34	33	30	29	28	26	28	29	32	35	38	42	45	43.1	64.2
5-Jun	47	48	48	52	58	68	85	94	96	96	96	95	97	97	97	95	94	92	92	93	94	96	98	98	84.5	98.4
6-Jun	99	99	99	99	99	99	99	99	99	99	98	98	97	97	98	98	99	99	99	100	100	99	99	100	98.9	99.9
7-Jun	100	99	98	97	96	92	87	84	82	76	72	69	56	43	38	36	33	33	35	39	45	56	62	65	66.3	99.9
8-Jun	69	75	82	82	79	78	81	77	71	70	69	61	59	53	48	45	43	45	50	64	87	86	86	85	68.6	87.0
9-Jun	87	86	86	85	83	84	80	78	76	72	69	65	58	57	61	63	56	55	53	59	62	67	74	81	70.7	87.0
10-Jun	82	83	82	84	89	87	88	93	94	92	86	75	71	62	55	56	55	60	67	59	69	77	82	85	76.3	94.3
11-Jun	89	93	94	80	72	67	61	52	46	45	44	44	42	42	40	39	41	42	42	45	50	54	55	57	55.6	93.9
12-Jun	60	66	69	66	63	63	61	60	59	55	51	46	46	49	50	48	43	40	40	41	46	52	58	58	53.7	68.7
13-Jun	58	60	63	66	66	65	63	61	59	52	46	43	39	35	33	28	28	28	28	29	32	39	46	44	46.3	66.4
14-Jun	47	51	54	57	57	58	57	47	42	39	34	31	31	30	30	28	28	33	41	41	44	45	47	50	42.5	58.0
15-Jun	51	54	56	59	59	61	57	52	44	38	34	33	33	30	30	29	28	27	27	28	33	41	46	48	41.7	60.9
16-Jun	49	53	56	54	67	85	89	88	86	79	73	70	68	64	57	55	56	56	56	59	56	58	59	69	65.2	89.3
17-Jun	68	73	73	70	69	69	62	59	58	54	51	49	50	64	62	53	51	53	58	62	62	68	74	83	62.3	83.2
18-Jun	88	85	82	81	82	86	89	90	91	91	90	87	88	83	80	80	83	79	75	80	82	87	92	91	85.1	91.9
19-Jun	91	92	91	91	89	89	90	86	76	69	63	53	46	44	41	60	46	43	74	88	92	93	94	94	74.8	93.7
20-Jun	96	96	96	95	96	95	91	85	78	69	57	51	47	44	42	40	35	49	48	45	54	67	79	88	68.4	95.9
21-Jun	91	92	93	94	95	92	83	78	65	52	46	43	41	38	35	35	33	34	33	39	51	55	59	65	60.1	94.8
22-Jun	74	77	84	90	92	90	76	64	56	58	50	40	33	30	39	37	38	34	37	44	52	64	70	78	58.6	91.9
23-Jun	79	84	82	83	85	76	67	67	65	58	54	55	60	53	50	56	62	63	64	52	54	61	61	58	64.6	84.5
24-Jun	72	81	70	69	70	71	70	66	66	64	59	53	53	56	57	60	62	63	59	61	69	68	73	82	65.6	81.6
25-Jun	84	88	82	86	82	74	65	60	53	50	44	41	36	34	31	27	28	25	29	30	31	35	41	57	50.6	87.8
26-Jun	65	73	77	84	87	78	63	54	41	32	29	28	28	27	28	30	40	44	42	42	44	46	49	49	49.2	87.1
27-Jun	50	54	54	54	58	58	53	52	51	48	44	41	38	37	37	37	37	38	39	42	44	46	47	50	46.3	58.3
28-Jun	55	57	57	61	64	64	59	53	49	46	43	41	39	37	37	34	35	36	39	45	45	51	52	63	48.6	64.4
29-Jun	64	65	66	72	76	76	67	60	54	49	46	42	42	41	38	37	37	38	38	41	44	51	61	69	53.1	76.2
30-Jun	75	82	84	87	87	83	79	72	64	61	54	50	48	44	65	53	48	56	52	56	56	67	69	81	65.6	87.1
	71.3	73.7	74.6	75.6	76.7	76.3	72.6	68.6	64.2	59.6	55.1	51.4	48.8	46.7	46.1	45.8	45.2	46.0	47.6	50.0	54.7	59.9	64.1	68.8	Diurnal Average	
	99.9	99.2	99.3	99.5	99.4	99.3	99.5	98.7	98.6	99.0	98.1	97.7	97.5	97.4	97.9	98.1	98.8	99.2	99.4	99.8	99.9	99.4	99.4	99.8	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - June 2012

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	3	3	1	0	2	6	11	9	5	8	6	8	1	6	24	18	7	8	1	3	2	19	24	6.0	24.4
Dir	99	202	192	249	225	282	266	253	235	270	229	174	169	199	213	225	233	234	235	81	73	55	268	268	238.3	267.6
2 Spd	12	11	15	12	10	12	16	15	17	21	20	27	29	30	30	33	31	34	28	22	16	17	19	21	20.5	33.7
Dir	277	256	247	282	292	261	259	266	280	271	264	260	256	258	249	257	267	258	265	274	270	252	250	253	261.9	257.9
3 Spd	17	14	14	11	6	4	19	20	24	22	20	20	17	22	16	8	9	7	9	10	8	6	1	0	11.3	24.3
Dir	256	259	257	274	293	331	265	276	274	272	286	312	304	327	313	285	336	5	271	318	287	304	244	27	288.8	273.6
4 Spd	6	4	2	4	2	3	2	6	5	5	9	17	20	20	22	23	21	25	19	18	14	15	16	16	10.3	24.8
Dir	204	234	214	191	308	332	344	195	147	142	65	97	94	114	99	98	96	92	92	93	83	79	81	84	97.4	91.7
5 Spd	17	18	17	16	17	14	13	15	18	17	17	16	13	12	12	12	9	10	10	10	9	8	6	6	13.0	17.8
Dir	81	83	84	78	76	75	87	76	73	81	86	88	87	83	81	89	93	103	93	93	90	90	73	74	83.3	72.8
6 Spd	7	6	7	10	9	9	13	12	10	11	14	10	10	9	14	9	7	9	9	7	8	11	8	7	9.1	13.7
Dir	76	64	61	47	46	68	48	92	86	78	73	75	83	59	64	72	58	57	41	23	41	69	68	89	65.0	73.3
7 Spd	10	6	6	1	3	8	21	21	20	23	12	11	15	23	12	4	6	7	10	10	8	7	8	4	5.0	23.5
Dir	92	149	236	210	137	214	236	233	229	244	226	153	225	223	245	236	134	114	79	68	59	38	41	341	212.0	244.3
8 Spd	2	0	2	5	3	5	4	10	15	18	18	17	19	16	15	12	12	15	16	4	5	24	23	15	10.7	23.7
Dir	290	210	229	290	286	199	314	295	304	324	327	306	325	320	324	301	310	316	317	20	288	342	317	286	314.0	341.6
9 Spd	12	15	19	14	18	14	12	13	15	15	16	16	19	19	15	14	15	19	8	18	16	15	10	11	13.6	19.4
Dir	249	245	262	281	288	295	300	293	285	304	309	309	319	298	293	316	312	352	311	332	323	308	282	281	299.3	261.7
10 Spd	12	12	16	17	15	14	10	9	11	12	12	16	8	9	14	13	6	6	10	12	8	5	5	5	7.6	16.7
Dir	277	301	306	301	300	316	307	298	320	334	338	335	22	352	337	317	302	245	210	230	209	180	182	174	303.5	301.1
11 Spd	5	1	2	3	9	12	10	17	27	31	34	30	35	39	37	39	38	34	34	29	19	16	17	21	21.9	39.5
Dir	190	83	72	242	236	250	269	259	258	260	267	260	268	262	262	260	264	268	276	265	267	276	278	264	263.7	260.5
12 Spd	15	11	16	16	20	23	28	25	22	27	24	32	31	25	23	22	24	28	27	16	15	8	6	8	20.2	31.7
Dir	266	266	266	264	259	248	257	262	271	263	265	268	265	282	278	272	259	258	251	268	253	253	233	260	263.1	267.9
13 Spd	12	7	9	11	12	12	16	21	21	20	18	18	19	24	25	34	34	40	37	32	23	13	9	14	19.3	39.5
Dir	256	263	227	225	254	264	262	272	279	276	289	301	296	288	280	262	265	261	263	267	271	280	272	275	270.1	261.2
14 Spd	17	13	12	15	10	13	11	22	20	20	17	15	14	16	10	21	18	15	9	5	4	9	11	10	12.6	22.0
Dir	272	274	263	253	259	257	305	274	279	277	286	286	314	297	303	280	307	323	18	348	265	266	286	273	284.8	274.0
15 Spd	11	12	11	7	11	7	17	24	27	24	18	18	18	20	15	13	13	11	10	7	3	4	4	7	11.2	27.4
Dir	274	274	284	293	279	324	278	266	261	265	270	257	262	253	278	276	277	296	275	311	133	113	121	122	270.4	261.3
16 Spd	7	6	3	12	19	12	10	10	12	14	14	10	8	8	9	15	15	11	16	12	19	20	36	28	9.7	35.9
Dir	116	116	118	194	218	186	165	163	142	149	162	173	151	149	218	264	259	243	241	255	258	245	249	241	215.4	249.4
17 Spd	20	15	16	25	26	20	33	36	36	32	32	34	29	29	23	18	26	27	28	17	11	13	13	10	20.0	36.0
Dir	251	230	235	252	256	247	253	259	260	268	272	267	275	331	330	305	326	339	333	315	302	260	270	284	279.1	259.0
18 Spd	12	14	17	19	21	19	16	20	19	18	16	15	16	22	19	14	14	17	19	20	14	10	13	14	14.3	21.6
Dir	282	263	256	257	258	264	261	266	271	275	275	302	304	288	317	301	312	313	318	347	347	344	334	335	292.7	287.6
19 Spd	16	11	15	15	12	8	9	11	17	21	21	15	16	19	10	19	13	8	4	4	6	5	2	2	9.8	21.2
Dir	338	343	339	335	329	314	305	299	316	321	328	342	343	347	32	354	327	315	278	200	189	187	245	236	329.8	327.9
20 Spd	4	4	4	2	3	7	7	9	10	7	6	3	2	3	4	1	8	22	16	8	5	3	2	1	3.6	22.4
Dir	219	214	220	215	219	250	266	279	254	266	282	271	256	346	212	16	267	329	348	336	65	48	58	35	291.9	328.9
21 Spd	1	1	2	2	1	0	3	5	6	8	11	13	12	12	13	15	15	12	11	3	12	13	8	4	4.4	15.5
Dir	258	226	63	61	47	234	61	38	126	135	121	114	107	107	77	101	96	97	82	342	328	260	339	22	89.8	96.0
22 Spd	1	4	1	1	4	2	6	8	9	5	10	18	17	16	17	16	16	14	10	7	2	4	5	4	7.4	17.7
Dir	130	191	80	4	49	12	71	89	100	63	86	73	64	77	104	103	73	74	63	159	93	64	71	58	81.6	73.2

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - June 2012

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	3	5	4	1	4	7	8	8	6	12	12	11	10	13	15	9	13	9	7	11	10	10	9	10	7.1	14.8
Dir	73	67	78	96	63	70	85	84	75	120	132	168	203	134	113	75	70	73	60	89	81	73	82	114	97.8	113.1
24 Spd	5	7	11	9	10	8	8	11	11	8	5	8	8	6	5	4	9	14	17	8	10	9	5	3	5.5	16.6
Dir	92	75	97	97	96	100	130	157	179	213	310	328	345	49	112	112	115	105	120	129	104	110	128	43	109.6	120.1
25 Spd	4	4	9	8	10	1	10	18	19	14	20	20	22	19	23	30	27	33	20	20	17	12	8	2	14.4	33.5
Dir	319	216	223	192	220	111	230	265	264	291	268	264	260	278	257	255	265	254	266	276	276	261	251	73	260.3	254.5
26 Spd	0	0	2	3	0	2	7	21	27	32	33	31	27	27	28	28	33	26	32	29	28	33	30	29	19.3	33.1
Dir	196	171	204	206	294	16	218	221	242	259	252	249	257	262	275	281	324	302	288	273	263	263	257	261	265.8	323.9
27 Spd	24	28	29	30	26	27	39	41	37	36	43	50	48	45	41	44	39	34	36	37	36	36	33	25	35.6	49.5
Dir	252	254	256	262	265	265	273	272	278	278	272	271	272	278	274	276	283	278	281	278	267	262	259	252	270.4	271.4
28 Spd	16	20	24	8	7	3	6	16	15	16	10	8	8	4	3	7	6	4	6	4	2	4	11	11	7.1	24.2
Dir	240	246	252	280	274	264	262	265	272	280	301	280	307	205	207	208	186	131	114	84	152	273	216	282	256.0	252.4
29 Spd	6	7	6	3	4	6	9	13	13	11	19	23	18	24	27	27	24	24	27	22	10	5	2	2	13.3	27.2
Dir	272	262	236	202	207	224	239	259	254	251	262	262	272	273	276	266	275	263	273	263	275	268	171	182	263.2	275.6
30 Spd	1	1	1	1	2	2	4	6	4	8	10	7	10	15	13	3	2	12	15	9	7	9	7	3	4.4	15.1
Dir	125	83	181	192	213	222	135	196	213	213	256	298	293	307	236	341	267	319	279	273	244	213	199	183	257.1	307.0
Spd	5.0	4.8	5.8	5.5	5.9	5.2	7.9	10.9	11.5	11.5	10.7	9.9	9.9	10.0	8.7	10.1	9.5	8.8	8.8	7.4	5.7	5.4	6.0	5.9	Diurnal Average	
Dir	261.7	254.0	255.6	263.0	266.2	262.9	263.6	261.1	265.1	270.8	275.8	275.4	281.0	286.1	281.5	274.4	287.5	291.4	286.2	287.4	279.3	275.4	268.1	265.9		
Spd	24.4	28.3	29.0	29.7	26.0	27.0	39.0	41.3	36.6	36.2	43.4	49.5	48.1	45.1	41.2	44.1	39.3	39.5	36.6	37.1	35.6	36.5	35.9	29.3	Diurnal Maximum	
Dir	251.6	254.2	256.2	261.9	256.3	264.9	272.9	272.3	277.5	277.6	272.3	271.4	271.8	278.3	273.9	276.1	283.2	261.2	262.9	278.0	266.9	262.1	249.4	260.6		

Maximum Speed Value: 50 km/h on Jun 27 12:00
Maximum Daily Speed Average: 35.6 km/h on Jun 27
Maximum Diurnal Speed Average: 11.5 km/h at hour 10

Minimum Speed Value: 0 km/h on Jun 26 01:00
Minimum Daily Speed Average: 3.6 km/h on Jun 20
Minimum Diurnal Speed Average: 4.8 km/h at hour 2

Monthly Average Velocity: 7.82 km/h 273.70 deg

Speed Percentiles: $P_1 = 0.5$ $P_{10} = 3.5$ $Q_1 = 7.2$ Median = 12.2 $Q_3 = 18.8$ $P_{90} = 27.5$ $P_{99} = 41.1$

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

Hours in Service:	720
Hours of Data:	720
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	12	7	11	3	0	0	33
NorthEast	15	21	3	0	0	0	39
East	17	41	41	6	0	0	105
SouthEast	11	19	9	1	0	0	40
South	20	13	4	0	0	0	37
SouthWest	28	30	14	11	1	0	84
West	13	43	82	73	52	13	276
NorthWest	6	26	58	14	2	0	106
Total	122	200	222	108	55	13	720

Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - June 2012

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - June 2012

Maximum Speed: 50 km/h on Jun 27 12:00

Maximum Daily Speed Average: 36.7 km/h on Jun 27

Minimum Speed: 1 km/h on Jun 22 03:00

Minimum Daily Speed Average: 7.9 km/h on Jun 20

Maximum Diurnal Speed Average: 20.3 km/h at hour 14

Minimum Diurnal Speed Average: 9.5 km/h at hour 2

Monthly Average Speed: 15.21 km/h

Percentiles: $P_1 = 1.9$ $P_{10} = 4.8$ $Q_1 = 8.6$ Median = 13.4 $Q_3 = 20.1$ $P_{90} = 28.5$ $P_{99} = 42.1$

Hours in Service:	720
Hours of Data:	720
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-Jun	3	4	5	3	3	6	7	11	10	8	11	8	12	9	10	24	18	10	10	3	3	3	19	25	9.4	24.8
2-Jun	14	11	15	12	10	12	16	15	18	23	21	28	30	31	32	34	32	35	29	23	16	17	19	22	21.5	34.5
3-Jun	17	14	14	12	7	5	20	21	25	23	23	22	21	23	19	14	12	9	11	11	9	7	2	2	14.4	25.3
4-Jun	9	7	7	7	7	6	5	7	6	8	11	19	21	22	24	24	23	26	21	19	15	16	17	17	14.3	26.2
5-Jun	18	18	18	17	18	15	14	16	19	18	18	16	14	13	13	13	10	11	11	10	9	8	6	7	13.7	18.6
6-Jun	7	6	7	10	10	10	15	13	11	12	15	11	11	10	14	10	8	9	10	8	8	11	9	7	10.1	15.1
7-Jun	10	9	7	6	6	12	22	21	20	24	12	13	17	24	14	9	10	10	11	11	8	7	8	5	12.4	24.3
8-Jun	6	4	4	6	8	6	5	11	17	19	19	19	21	18	17	15	14	16	17	19	16	25	24	15	14.2	24.7
9-Jun	12	16	20	15	19	14	12	14	15	15	17	17	21	20	17	19	17	20	9	19	16	16	11	11	15.9	20.5
10-Jun	12	13	16	17	15	14	11	9	12	12	13	17	11	11	15	14	8	10	11	12	9	5	5	5	11.5	17.1
11-Jun	5	2	3	4	9	12	10	17	28	31	35	31	36	40	38	40	39	35	34	29	19	17	17	21	23.0	40.3
12-Jun	15	11	16	16	21	24	28	25	22	28	25	33	32	26	24	23	25	29	27	17	15	8	6	9	21.1	32.8
13-Jun	12	8	9	11	12	12	16	21	22	21	20	20	21	26	27	34	34	40	37	32	23	13	9	15	20.7	40.3
14-Jun	17	13	13	15	11	14	13	23	21	22	20	17	17	20	15	23	21	18	9	7	5	9	11	11	15.2	23.1
15-Jun	11	12	11	8	13	8	17	24	28	25	21	20	20	21	16	17	15	13	12	7	3	4	5	7	14.1	27.8
16-Jun	7	6	4	13	19	13	10	10	12	15	16	11	9	10	10	16	16	12	17	13	19	20	36	29	14.3	36.2
17-Jun	20	15	17	25	26	21	34	37	36	33	33	34	30	31	25	20	28	28	29	18	12	13	14	10	24.5	36.6
18-Jun	13	14	17	19	21	19	17	20	19	19	17	16	16	23	20	15	17	18	20	21	15	11	13	14	17.2	22.6
19-Jun	16	12	15	15	12	8	9	11	19	22	22	19	19	20	12	22	17	16	17	7	7	5	3	3	13.7	22.2
20-Jun	4	4	4	2	4	7	8	11	10	9	8	8	10	9	9	7	11	24	17	9	5	4	2	1	7.9	24.3
21-Jun	2	2	3	3	2	2	4	6	7	9	13	15	14	15	16	17	17	13	12	13	14	14	9	5	9.5	17.1
22-Jun	2	6	1	2	4	2	7	9	10	8	13	19	19	18	17	18	17	15	11	9	4	4	5	4	9.4	19.0
23-Jun	4	5	5	3	5	7	8	9	8	14	14	13	10	14	16	10	13	9	7	12	11	10	9	11	9.4	16.1
24-Jun	6	7	12	10	10	9	8	11	13	10	9	10	10	7	5	5	10	14	17	9	10	9	5	4	9.2	17.4
25-Jun	6	5	10	8	11	4	10	19	20	15	23	22	24	21	25	31	29	34	21	20	18	12	8	3	16.6	34.3
26-Jun	3	2	3	3	2	2	8	21	27	33	34	32	29	29	29	31	34	28	33	30	29	33	30	30	22.3	34.4
27-Jun	25	29	29	30	26	27	40	42	37	37	44	50	49	46	42	45	40	35	37	38	36	37	33	25	36.7	50.4
28-Jun	16	20	24	10	8	5	8	17	17	17	13	11	12	11	8	9	9	5	7	4	3	6	12	11	11.0	24.3
29-Jun	6	7	6	4	4	6	9	14	14	13	21	24	20	25	28	28	26	25	28	22	11	6	5	3	14.7	28.3
30-Jun	3	3	3	3	3	4	5	6	5	9	12	11	13	17	17	9	10	16	16	10	8	9	8	4	8.4	16.7
	10.1	9.5	10.6	10.4	10.9	10.2	13.2	16.4	17.7	18.3	19.0	19.6	19.6	20.3	19.1	19.8	19.3	19.5	18.2	15.4	12.6	12.0	12.0	11.2	Diurnal Average	
	24.5	28.5	29.2	29.9	26.3	27.3	39.6	42.2	37.3	36.8	44.3	50.4	49.3	46.2	42.2	45.2	40.2	40.3	37.2	38.0	36.2	36.8	36.2	29.6	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

Evergreen Park - June 2012

Maximum Value: 100.6 deg on Jun 1 14:00

Minimum Value: 5.3 deg on Jun 3 00:00

Percentiles: P_1 = 6.7 P_{10} = 10.6 Q_1 = 14.8 Median = 21.0 Q_3 = 35.5 P_{90} = 63.3 P_{99} = 91.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily 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-Jun	89	24	71	85	90	78	43	16	34	55	47	64	54	101	62	11	13	58	43	86	46	78	51	10	100.6
2-Jun	27	16	9	19	14	13	11	14	16	19	20	13	17	18	17	12	15	13	15	18	12	6	6	5	27.3
3-Jun	8	9	7	36	42	35	15	16	17	22	31	29	37	27	36	78	55	54	41	19	21	34	88	92	91.8
4-Jun	54	54	85	70	86	67	76	35	65	55	33	26	25	29	22	18	24	20	24	18	20	17	17	18	86.5
5-Jun	17	19	19	20	17	21	17	18	19	20	18	20	21	21	22	21	23	30	21	21	19	23	24	25	29.8
6-Jun	30	27	23	17	25	29	28	23	19	20	24	24	24	22	20	22	22	23	27	16	21	24	19	24	29.8
7-Jun	18	50	47	92	77	57	10	12	11	14	22	38	27	18	38	82	72	52	28	23	29	14	21	45	92.0
8-Jun	72	93	73	48	75	44	49	23	22	20	18	26	29	29	33	44	39	22	17	78	85	19	15	16	92.8
9-Jun	14	22	9	18	12	13	15	17	16	19	18	20	20	22	21	45	32	20	31	33	16	17	16	15	44.9
10-Jun	17	16	12	13	17	14	15	19	16	14	18	24	51	36	27	28	63	70	17	15	15	14	19	18	70.1
11-Jun	24	80	56	41	13	10	18	11	12	11	11	11	13	10	12	12	14	14	13	11	12	16	13	10	80.4
12-Jun	18	22	13	13	10	9	9	9	16	12	15	15	15	19	18	18	12	15	10	12	7	20	16	16	21.9
13-Jun	9	25	12	6	13	10	8	12	14	15	23	29	25	24	21	12	13	12	11	10	11	15	17	13	29.3
14-Jun	11	12	14	8	13	15	31	18	19	21	28	32	36	36	49	28	26	39	20	47	38	19	15	11	49.2
15-Jun	11	14	16	30	29	24	19	10	10	16	29	29	29	20	24	44	36	43	27	21	39	16	22	17	43.7
16-Jun	13	18	36	20	8	25	17	19	20	18	31	25	34	37	44	22	17	19	16	19	10	10	8	10	44.3
17-Jun	8	8	10	7	7	9	8	10	10	12	16	14	14	20	20	27	23	15	13	20	23	12	24	19	26.8
18-Jun	15	14	8	7	8	16	10	10	13	14	24	23	17	17	15	23	33	25	17	19	20	22	11	9	33.0
19-Jun	10	17	8	9	10	14	15	17	26	17	19	37	37	20	33	37	60	84	94	69	30	53	65	65	94.3
20-Jun	17	12	35	62	31	19	29	37	22	35	60	80	93	81	83	90	62	24	20	36	21	17	42	77	93.0
21-Jun	67	82	86	81	87	90	60	34	51	42	34	35	39	44	36	33	27	30	26	78	32	28	36	23	89.6
22-Jun	94	59	78	68	15	35	17	28	38	55	39	25	29	30	20	27	24	26	23	45	54	15	11	10	93.8
23-Jun	25	17	31	84	26	16	26	24	56	45	28	30	34	29	24	22	22	20	15	21	21	17	18	23	83.9
24-Jun	37	19	21	17	16	16	21	21	32	50	74	46	44	38	22	50	25	18	22	41	21	21	21	40	74.3
25-Jun	54	71	26	13	16	80	23	20	16	27	27	23	27	25	21	15	17	13	21	18	19	11	22	64	79.7
26-Jun	91	91	54	42	89	38	59	7	14	14	15	18	20	23	18	25	16	19	15	12	11	9	8	9	90.9
27-Jun	7	7	7	8	7	8	10	11	11	11	12	11	13	13	13	13	12	11	12	12	11	8	8	9	13.4
28-Jun	8	7	6	32	20	68	74	16	21	22	47	51	63	84	83	53	51	60	29	27	33	54	30	22	84.2
29-Jun	16	14	14	47	48	20	18	12	20	37	24	20	23	21	16	16	18	18	13	12	22	23	80	80	79.8
30-Jun	85	89	80	75	59	70	39	23	44	26	41	54	51	27	56	80	88	55	20	33	21	8	21	61	89.1
	93.8	92.8	86.0	92.0	90.3	89.6	76.0	37.3	65.3	55.0	74.3	79.7	93.0	100.6	83.3	89.7	87.7	83.7	94.3	85.8	85.2	78.3	87.8	91.8	

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.8 ppb on Jun 28 03:00 Maximum Daily Average: 1.6 ppb on Jun 28

Minimum Value: 0 ppb on Jun 22 07:00 Minimum Daily Average: 0.0 ppb on Jun 6
Maximum Diurnal Average: 0.9 ppb at hour 4 Minimum Diurnal Average: 0.0 ppb at hour 14
Monthly Average: 0.28 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.8 P_{99} = 3.3

Hours in Service:	720
Hours of Data:	684
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-Jun	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	0.2
2-Jun	A	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.7
3-Jun	6	2	2	1	1	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.8	5.6
4-Jun	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.7
5-Jun	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
6-Jun	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
7-Jun	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
8-Jun	0	0	0	0	2	1	1	1	3	2	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0.5	2.6
9-Jun	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
10-Jun	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	1.2
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	2	0	0.2	2.4
12-Jun	3	1	1	2	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0.4	3.1
13-Jun	1	1	1	0	0	0	1	0	2	2	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	1.9
14-Jun	0	0	0	0	2	3	2	2	2	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.7
15-Jun	0	0	1	3	4	4	3	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	3.9
16-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	1.0
17-Jun	0	0	0	0	0	2	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2.2
18-Jun	0	2	3	2	2	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.6	2.8
19-Jun	1	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4
20-Jun	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
21-Jun	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
22-Jun	0	0	0	A	0	0	0	0	0	0	C	C	C	C	1	1	1	1	1	1	1	0	0	0	0.4	1.1
23-Jun	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
24-Jun	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
25-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
26-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0.1	0.6
27-Jun	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	2.4
28-Jun	0	3	11	10	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1.6	10.8
29-Jun	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0.1	0.8
30-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0.1	1.0
	0.5	0.4	0.8	0.9	0.8	0.6	0.5	0.4	0.4	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Diurnal Average	
	5.6	2.7	10.8	10.3	6.3	3.9	2.9	2.1	2.6	1.9	0.8	0.9	0.1	0.1	1.1	1.0	0.9	0.8	0.7	0.6	0.7	1.0	2.4	0.7	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 - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2012

Maximum Value: 16.0 ppb on Jun 3 01:00

Maximum Daily Average: 2.9 ppb on Jun 28

Minimum Value: 0 ppb on Jun 22 10:00

Minimum Daily Average: 0.1 ppb on Jun 6

Maximum Diurnal Average: 1.7 ppb at hour 5

Minimum Diurnal Average: 0.2 ppb at hour 14

Monthly Average: 0.75 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.6$ $P_{90} = 2.1$ $P_{99} = 7.6$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
2-Jun	A	2	0	6	3	1	2	2	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1.1	6.1
3-Jun	16	2	3	2	1	4	5	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	A	1	1.9	16.0
4-Jun	4	3	2	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.7	3.8
5-Jun	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
6-Jun	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
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
8-Jun	0	0	0	1	4	2	2	3	4	3	1	1	1	1	1	1	1	A	0	0	0	0	0	1	1.2	4.5
9-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.7
10-Jun	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	2.9
11-Jun	0	0	0	0	0	0	0	1	0	1	0	0	0	1	A	0	0	1	1	0	4	2	5	3	0.9	5.3
12-Jun	7	3	3	5	8	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	3	1.4	7.9
13-Jun	3	4	7	0	0	0	2	1	3	3	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1.2	7.1
14-Jun	1	1	1	1	4	4	3	3	2	1	0	A	0	0	1	1	0	1	1	1	0	0	0	0	1.1	4.4
15-Jun	0	1	4	6	6	6	4	4	3	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	5.9
16-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	4	1	0.4	4.5
17-Jun	0	0	0	0	0	9	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.6	8.6
18-Jun	1	3	5	4	3	1	1	A	1	0	0	0	0	0	0	0	0	1	2	0	2	1	2	1	1.3	4.6
19-Jun	2	2	0	0	2	5	A	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0.8	4.7
20-Jun	0	0	1	1	0	A	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0.4	1.0
21-Jun	2	1	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.8
22-Jun	1	0	1	A	1	0	0	0	0	0	C	C	C	C	1	1	1	1	1	1	1	1	0	0	0.6	1.3
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
24-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	A	0.3	1.8
26-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	A	1	0.3	1.6
27-Jun	0	0	3	3	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	1	A	0	0	0.7	3.3
28-Jun	0	11	16	14	9	4	4	2	1	0	1	1	1	0	0	0	0	0	0	0	A	0	0	1	2.9	15.5
29-Jun	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	A	4	1	2	1	0.7	4.0
30-Jun	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	1	1	2	0	0	0.4	2.4
	1.5	1.2	1.6	1.6	1.7	1.4	1.1	0.9	1.0	0.7	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.4	0.6	0.6	Diurnal Average	
	16.0	10.7	15.5	14.3	9.0	8.6	4.5	3.7	4.5	3.3	1.5	1.4	0.6	0.7	1.3	1.1	1.1	1.3	1.8	1.8	4.0	2.4	5.3	2.7	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2012

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2012

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Smoky Heights - June 2012

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2012

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

Maximum Value: 1.3 ppb on Jun 5 09:00 Maximum Daily Average: 0.3 ppb on Jun 20

Minimum Value: 0 ppb on Jun 1 14:00 Minimum Daily Average: 0.1 ppb on Jun 2

Maximum Diurnal Average: 0.4 ppb at hour 2 Minimum Diurnal Average: 0.2 ppb at hour 15

Monthly Average: 0.26 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 0.6$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.3
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4
4-Jun	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	0.5
5-Jun	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	1.3
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	1	0	0.3	0.8
8-Jun	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	0.4
9-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
10-Jun	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
11-Jun	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
12-Jun	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
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
14-Jun	1	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
15-Jun	0	1	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Jun	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
17-Jun	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	0.5
18-Jun	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
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.6
20-Jun	1	0	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.8
21-Jun	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.8
22-Jun	0	0	0	A	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
24-Jun	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
25-Jun	A	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.6
26-Jun	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.6
27-Jun	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
28-Jun	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	0.4
29-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
30-Jun	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.7
	0.3	0.4	0.3	0.3	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	0.2	0.2	0.2	0.2	0.3	0.3	0.3	Diurnal Average	
	0.8	0.7	0.8	0.6	0.7	0.6	0.6	0.5	1.3	0.6	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.8	0.6	0.6	0.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2012

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2012

Maximum Value: 5.2 ppb on Jun 21 22:00

Maximum Daily Average: 0.9 ppb on Jun 5

Minimum Value: 0 ppb on Jun 12 18:00

Maximum Diurnal Average: 0.9 ppb at hour 22

Monthly Average: 0.71 ppb

Minimum Daily Average: 0.5 ppb on Jun 2

Minimum Diurnal Average: 0.6 ppb at hour 17

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.6$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	A	1	1	1	1	1	0	1	1	0	0	1	0	1	0	0	0	1	0	0	1	0	1	0.6	1.4
2-Jun	A	1	1	1	1	1	1	1	0	1	0	1	1	0	1	1	0	0	0	0	1	1	0	A	0.5	0.8
3-Jun	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	0.7	1.1
5-Jun	1	1	1	1	1	0	1	1	5	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	5.0
6-Jun	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.9
7-Jun	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	2	1	0.8	2.0
8-Jun	1	1	1	1	1	2	1	1	1	1	1	0	1	0	1	1	1	A	1	0	1	1	1	1	0.7	1.6
9-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8
10-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	0.9
11-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0
12-Jun	1	1	1	1	1	1	1	0	1	1	0	0	0	A	0	0	0	0	1	0	1	0	1	1	0.6	0.8
13-Jun	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
14-Jun	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	1.0
15-Jun	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
16-Jun	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0.6	0.8
17-Jun	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	1.2
18-Jun	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
19-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
20-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	2	0.8	1.6
21-Jun	1	2	1	1	A	1	1	0	0	1	0	1	1	1	0	0	0	1	1	1	1	5	1	1	0.9	5.2
22-Jun	1	1	1	A	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
23-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	0.9	2.9
24-Jun	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	0.9
25-Jun	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	A	0.7	1.1
26-Jun	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
27-Jun	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0
28-Jun	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	0	1	1	A	1	1	1	0.7	0.9
29-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	0.7	0.9
30-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	0.8	1.0
	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.9	0.7	0.8	Diurnal Average	
	1.5	1.5	1.4	1.3	1.2	1.6	1.1	0.9	5.0	1.9	1.6	0.9	0.8	1.0	0.8	0.9	0.8	0.8	0.9	0.8	2.9	5.2	1.7	1.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2012

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2012

Pollutant Classes (ppb)

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

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Smoky Heights - June 2012

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - June 2012

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

Maximum Value: 36.5 $\mu g/m^3$ on Jun 28 19:00

Maximum Daily Average: 9.1 $\mu g/m^3$ on Jun 28

Minimum Value: 0 $\mu g/m^3$ on Jun 1 10:00

Maximum Diurnal Average: 5.1 $\mu g/m^3$ at hour 21

Monthly Average: 3.21 $\mu g/m^3$

Minimum Daily Average: 0.7 $\mu g/m^3$ on Jun 17

Minimum Diurnal Average: 1.9 $\mu g/m^3$ at hour 4

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.6$ Median = 2.3 $Q_3 = 4.2$ $P_{90} = 7.0$ $P_{99} = 22.7$

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	5	4	4	3	4	4	4	6	6	0	0	2	4	1	4	3	7	5	11	9	10	13	22	10	5.9	22.3
2-Jun	0	1	1	0	1	0	2	0	0	N	0	0	2	1	0	0	2	2	2	1	4	6	3	2	1.3	6.2
3-Jun	2	2	2	2	2	3	3	3	3	3	3	0	0	3	3	2	4	3	5	3	28	8	7	10	4.3	27.7
4-Jun	3	8	3	4	5	9	6	5	5	6	6	5	0	1	2	4	3	3	17	6	6	6	5	9	5.4	17.4
5-Jun	7	8	9	11	11	13	18	15	11	9	5	3	3	4	3	3	4	4	3	2	3	4	3	3	6.7	18.0
6-Jun	3	0	0	0	0	1	N	0	0	0	1	2	2	1	2	4	3	3	2	3	4	6	4	1	1.9	5.6
7-Jun	5	2	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	2	3	2	0	0	2	0.8	5.0
8-Jun	0	1	1	1	3	4	2	2	5	5	3	2	0	2	1	0	1	1	6	4	8	0	0	0	2.1	7.6
9-Jun	3	0	0	1	2	2	2	3	4	4	3	4	2	4	1	2	1	0	0	3	2	3	2	4	2.1	3.9
10-Jun	4	3	5	6	6	6	7	5	3	1	2	0	1	1	0	0	0	0	4	2	3	5	8	7	3.2	7.7
11-Jun	6	6	4	2	0	2	1	2	0	1	2	2	2	1	5	3	1	0	0	1	0	1	0	0	1.8	6.4
12-Jun	0	0	0	0	0	0	0	0	0	0	0	0	3	2	4	5	0	0	1	2	3	3	3	1	1.1	4.7
13-Jun	0	0	1	1	1	2	3	2	2	2	11	2	7	8	9	10	6	3	4	6	7	23	0	4	4.9	23.4
14-Jun	2	2	4	2	1	2	4	3	3	7	7	7	3	0	6	0	3	3	2	5	5	5	3	2	3.4	7.5
15-Jun	3	2	2	1	1	1	2	4	3	2	1	2	2	3	2	2	2	3	16	7	11	12	3	6	3.8	15.5
16-Jun	0	0	2	2	4	5	5	3	3	1	0	0	2	1	0	4	0	0	0	1	0	0	0	0	1.3	5.2
17-Jun	0	0	0	0	0	0	1	0	0	0	0	3	4	1	0	0	3	0	0	2	0	0	0	2	0.7	3.8
18-Jun	1	0	0	0	1	1	2	2	0	1	1	0	2	1	1	1	1	2	2	0	2	0	0	0	0.9	2.2
19-Jun	0	1	1	1	1	3	2	2	2	2	3	0	0	2	1	6	0	4	0	5	3	2	3	3	2.0	6.0
20-Jun	2	1	0	0	1	4	6	6	2	3	1	0	0	1	2	0	6	0	1	9	3	0	0	0	2.1	8.8
21-Jun	1	0	3	0	0	5	5	2	2	5	3	0	0	0	0	3	2	1	1	4	3	4	3	4	2.1	5.4
22-Jun	2	3	4	3	3	5	5	3	8	8	0	3	0	M	11	9	6	5	4	5	8	8	8	6	5.2	11.2
23-Jun	5	5	5	6	5	6	7	6	7	7	13	21	8	10	7	5	7	6	5	6	5	7	6	6	7.2	21.4
24-Jun	7	6	5	5	6	5	6	5	3	4	4	4	4	9	11	5	10	2	3	2	0	0	0	0	4.5	10.9
25-Jun	0	1	0	1	2	5	5	2	0	0	0	0	0	0	1	0	0	0	0	1	0	1	10	2	1.4	9.8
26-Jun	2	1	1	0	2	2	2	2	2	0	1	0	1	1	2	4	6	9	3	2	2	1	0	1	2.0	9.2
27-Jun	0	0	0	2	2	4	3	4	5	4	3	5	4	4	3	3	3	2	2	3	2	2	3	36	4.0	35.5
28-Jun	4	3	6	2	2	2	3	5	6	8	26	5	6	7	6	7	3	11	36	8	26	10	10	16	9.1	36.5
29-Jun	3	3	2	1	1	0	4	2	0	1	1	1	1	3	2	2	4	4	2	3	2	2	23	3	2.9	22.9
30-Jun	3	3	2	1	2	3	4	4	5	3	1	3	2	1	2	7	0	2	0	1	0	0	2	2	2.2	7.3
	2.5	2.3	2.3	1.9	2.3	3.4	3.9	3.3	3.0	2.9	3.4	2.6	2.3	2.5	3.0	3.2	2.9	2.6	4.5	3.6	5.1	4.5	4.4	4.7	Diurnal Average	
	7.0	7.9	9.4	10.7	11.5	13.1	18.0	15.1	11.5	8.6	25.6	21.4	8.2	9.9	11.2	10.3	9.7	10.8	36.5	9.2	27.7	23.4	22.9	35.5	Diurnal Maximum	

M - Maintenance N - Not Valid

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

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - June 2012

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - June 2012

Maximum Value: 192.4 $\mu g/m^3$ on Jun 28 00:00

Maximum Daily Average: 21.6 $\mu g/m^3$ on Jun 28

Minimum Value: 0 $\mu g/m^3$ on Jun 6 04:00

Minimum Daily Average: 4.3 $\mu g/m^3$ on Jun 18

Maximum Diurnal Average: 14.5 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 4.6 $\mu g/m^3$ at hour 4

Monthly Average: 9.00 $\mu g/m^3$

Percentiles: P_1 = 0.4 P_{10} = 2.4 Q_1 = 4.2 Median = 6.7 Q_3 = 9.8 P_{90} = 15.5 P_{99} = 60.9

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	0
Percent Operational Time:	99.9

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-Jun	12	6	6	4	8	6	8	8	9	8	7	8	9	8	8	10	16	13	39	28	33	36	53	22	15.2	52.8
2-Jun	4	4	7	3	2	2	5	3	2	2	2	3	5	7	2	4	8	6	4	4	13	24	8	5	5.4	24.2
3-Jun	4	4	3	4	4	4	5	6	6	6	5	6	6	13	9	9	8	9	11	8	87	34	29	29	12.9	87.2
4-Jun	11	16	17	13	17	16	10	12	9	11	11	11	11	10	9	9	9	7	51	10	9	7	8	15	12.8	51.1
5-Jun	9	10	11	13	13	16	20	17	14	10	9	5	5	7	5	4	6	5	5	4	4	6	5	6	8.8	19.8
6-Jun	4	3	2	0	0	14	9	7	0	2	4	4	4	3	5	7	4	6	4	5	7	8	8	4	4.8	14.4
7-Jun	8	6	0	4	4	1	1	8	5	4	2	5	6	6	4	6	5	2	8	11	6	4	3	5	4.8	11.3
8-Jun	2	4	4	3	7	7	4	5	9	10	8	8	4	10	7	8	4	5	18	11	17	4	2	8	7.1	18.1
9-Jun	9	3	1	2	3	5	4	4	6	6	8	9	8	10	18	12	8	4	7	6	7	5	4	6	6.5	18.1
10-Jun	7	5	7	8	8	9	9	8	8	6	8	6	6	7	7	5	6	12	13	9	12	7	11	9	7.9	12.5
11-Jun	8	8	5	4	3	5	5	9	6	5	7	8	7	15	21	20	10	6	5	5	3	3	1	0	7.0	21.3
12-Jun	0	1	2	3	1	4	2	2	2	4	4	9	13	12	20	11	6	4	5	7	6	6	5	3	5.6	19.8
13-Jun	1	2	3	2	2	5	7	4	5	7	29	7	24	17	28	24	12	8	14	14	12	58	6	8	12.4	57.6
14-Jun	5	4	13	13	4	5	7	7	6	17	18	20	10	13	20	8	12	11	6	11	21	20	9	6	11.1	21.5
15-Jun	8	6	5	3	2	3	4	8	8	6	4	9	7	7	8	6	9	11	54	27	30	26	8	16	11.5	54.5
16-Jun	5	2	5	3	6	9	10	6	6	7	5	4	8	5	5	15	7	6	4	10	2	1	2	2	5.7	15.4
17-Jun	3	0	0	1	1	1	2	2	4	3	6	10	8	9	6	3	11	8	6	7	7	1	4	4	4.4	11.0
18-Jun	3	1	2	1	3	2	4	4	4	4	8	4	9	9	6	6	7	7	6	3	4	2	1	1	4.3	9.3
19-Jun	2	3	2	2	4	5	4	6	8	9	10	6	13	10	11	20	13	13	11	15	7	5	5	7	7.9	19.5
20-Jun	5	3	2	3	4	6	14	8	8	9	8	18	5	14	14	10	22	3	12	24	14	13	9	7	9.8	23.7
21-Jun	5	3	4	6	9	17	13	7	9	9	21	6	8	10	10	15	13	8	7	12	8	9	9	10	9.5	21.3
22-Jun	7	7	7	8	8	10	13	10	14	14	11	15	12	M	15	14	8	7	6	7	12	11	13	8	10.2	15.2
23-Jun	7	7	7	8	7	8	9	8	9	8	75	75	13	16	12	8	11	10	10	10	9	10	8	7	14.6	75.3
24-Jun	10	9	8	7	7	7	8	8	6	6	6	6	8	20	32	14	21	5	5	7	5	2	2	1	8.7	32.0
25-Jun	2	4	2	3	4	8	23	4	5	8	1	3	1	1	5	3	2	2	2	5	4	4	26	5	5.3	25.9
26-Jun	4	3	3	3	3	4	4	5	4	3	4	3	3	3	8	7	18	31	8	3	4	3	2	2	5.6	31.0
27-Jun	3	3	2	3	4	11	7	8	8	5	6	10	8	7	9	8	7	4	3	4	4	5	6	192	13.7	192.4
28-Jun	22	10	25	5	3	3	7	9	13	20	50	11	14	19	14	12	6	28	82	16	67	33	17	36	21.6	81.5
29-Jun	8	11	3	2	2	2	10	7	2	4	3	3	3	8	5	5	13	9	5	5	4	4	84	6	8.7	84.1
30-Jun	11	8	3	4	5	6	6	7	7	7	6	7	6	5	6	14	7	11	6	4	2	3	5	5	6.2	14.0
	6.3	5.1	5.4	4.6	5.0	6.7	7.8	6.9	6.7	7.4	11.6	9.9	8.1	9.6	11.0	9.9	9.6	8.7	13.9	9.7	14.0	11.8	11.8	14.5	Diurnal Average	
	22.0	15.6	25.2	13.1	17.4	16.6	23.0	17.3	14.4	20.1	75.1	75.3	24.0	19.9	32.0	23.9	21.8	31.0	81.5	27.7	87.2	57.6	84.1	192.4	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - June 2012

Pollutant Rose

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

Smoky Heights - June 2012

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - June 2012

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

Maximum Value: 25.2 ^{o}C on Jun 22 15:00

Maximum Daily Average: 19.1 ^{o}C on Jun 22

Minimum Value: 4 ^{o}C on Jun 3 05:00

Minimum Daily Average: 11.8 ^{o}C on Jun 14

Maximum Diurnal Average: 18.7 ^{o}C at hour 16

Minimum Diurnal Average: 9.8 ^{o}C at hour 5

Monthly Average: 14.73 ^{o}C

Percentiles: P_1 = 5.4 P_{10} = 9.6 Q_1 = 11.6 Median = 14.2 Q_3 = 18.0 P_{90} = 20.4 P_{99} = 24.2

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	7	6	5	5	5	5	8	11	12	15	17	18	19	18	18	19	18	18	17	17	15	11	9	10	12.7	19.0
2-Jun	11	10	10	9	9	9	10	10	10	12	13	13	13	14	16	17	18	17	17	16	14	10	8	7	12.2	17.7
3-Jun	8	6	6	6	4	5	7	10	12	14	15	16	17	18	18	19	19	19	19	19	18	12	9	7	12.7	19.4
4-Jun	8	7	8	6	5	6	10	10	11	13	15	18	19	20	20	20	21	20	20	20	19	18	17	17	14.5	20.5
5-Jun	16	16	15	14	13	13	12	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	12	12	12.5	16.2
6-Jun	12	12	12	12	12	11	11	12	12	12	12	12	13	12	12	13	13	13	13	13	14	14	14	14	12.5	14.4
7-Jun	13	13	12	11	10	10	10	9	9	10	10	11	13	15	15	17	17	18	18	18	17	13	12	12	13.0	18.1
8-Jun	12	11	10	10	9	9	9	11	13	14	14	16	18	19	19	20	20	19	17	13	11	11	12	12	13.8	20.5
9-Jun	11	12	12	12	12	13	13	13	14	15	16	18	19	19	19	18	17	16	17	16	16	14	14	14	15.0	18.9
10-Jun	13	13	13	13	13	13	12	12	13	14	15	16	15	16	18	18	20	19	18	18	17	15	15	14	15.1	19.5
11-Jun	13	13	13	12	12	12	13	13	16	19	20	22	22	22	21	21	22	22	21	20	18	16	15	14	17.2	22.5
12-Jun	13	14	13	13	13	13	14	16	17	17	18	19	19	19	20	19	19	19	19	19	17	15	13	13	16.4	20.1
13-Jun	13	13	12	11	11	12	12	13	14	16	18	18	19	19	19	20	19	19	19	18	16	15	13	11	15.4	19.7
14-Jun	9	8	7	6	7	8	9	11	13	14	14	12	12	16	14	16	16	16	15	14	13	11	11	11	11.8	16.2
15-Jun	10	9	9	9	9	8	8	11	13	14	15	16	16	16	16	17	17	17	18	17	16	12	11	11	13.1	17.6
16-Jun	12	12	11	11	11	11	11	11	11	13	15	16	16	16	18	17	18	19	19	18	17	17	15	14	14.4	19.0
17-Jun	13	12	12	11	11	11	11	13	15	15	16	14	13	14	14	17	16	15	16	16	15	13	12	12	13.5	17.1
18-Jun	11	11	11	10	10	10	11	11	12	12	13	14	14	13	12	13	14	13	13	12	11	11	11	11	11.9	14.2
19-Jun	11	11	10	10	10	10	12	13	14	15	16	17	17	19	19	18	17	17	15	15	14	12	12	11	13.9	19.1
20-Jun	11	11	9	8	8	8	9	12	14	16	18	20	20	21	22	22	20	22	21	19	19	16	12	11	15.4	21.8
21-Jun	11	10	10	9	8	11	14	15	17	19	21	22	23	24	24	25	25	24	24	23	21	19	17	14	17.8	24.7
22-Jun	12	12	12	11	13	15	16	18	19	21	23	24	24	25	25	24	23	24	25	24	22	18	16	15	19.1	25.2
23-Jun	14	14	13	13	13	14	15	17	18	21	22	24	22	21	16	19	21	22	21	20	19	19	19	18	18.1	23.5
24-Jun	18	17	16	15	15	15	16	18	19	20	20	21	22	21	21	20	20	19	18	17	16	15	14	11	17.6	21.6
25-Jun	10	10	9	9	9	11	13	14	16	18	19	20	20	21	21	22	22	21	21	20	19	16	13	10	16.1	21.8
26-Jun	10	8	7	7	8	10	12	14	16	17	18	19	20	20	20	20	19	17	16	15	15	14	13	11	14.4	20.4
27-Jun	11	11	11	10	10	11	13	14	15	15	15	16	16	17	17	18	18	17	17	16	14	14	12	10	14.0	17.9
28-Jun	10	10	9	8	8	9	11	13	15	17	18	20	21	21	21	22	22	22	21	20	19	17	15	15	16.0	22.0
29-Jun	14	13	12	12	12	12	13	15	16	18	19	20	20	21	21	21	21	21	21	20	19	16	13	12	16.7	21.3
30-Jun	11	9	8	8	7	10	12	13	15	18	19	20	20	21	21	17	19	19	19	18	17	15	12	11	15.0	20.9
	11.6	11.1	10.6	10.0	9.8	10.4	11.6	12.8	14.0	15.4	16.5	17.4	17.8	18.4	18.4	18.7	18.6	18.6	18.2	17.5	16.4	14.4	13.0	12.2	Diurnal Average	
	17.7	16.7	15.8	15.5	14.6	14.9	16.2	17.5	19.3	21.2	22.9	23.8	24.2	24.7	25.2	24.7	24.7	24.5	24.7	24.0	21.9	18.9	18.7	18.3	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - June 2012

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	14	14	14	7	9	8	9	8	8	10	7	11	9	9	3	16	17	11	6	4	2	4	15	7.6	17.2
Dir	267	260	263	262	236	242	198	180	167	178	236	199	179	180	184	165	208	224	252	188	185	302	339	254	224.1	223.9
2 Spd	24	20	16	19	18	15	16	19	23	32	31	27	24	20	19	23	22	25	27	26	18	15	15	15	21.0	32.3
Dir	257	265	255	252	253	258	253	248	249	249	252	250	239	245	237	232	255	247	252	261	259	262	257	248	251.0	249.2
3 Spd	17	18	18	18	17	15	15	10	13	14	11	8	15	15	18	18	15	13	11	4	5	6	6	3	11.5	18.3
Dir	257	252	249	254	261	259	252	234	228	237	242	266	251	257	248	247	239	236	217	337	342	313	322	343	252.2	247.0
4 Spd	3	3	4	5	2	6	5	8	9	5	6	11	13	17	22	20	19	19	20	21	20	16	16	22	10.4	21.9
Dir	15	265	285	358	156	296	343	67	39	47	34	29	53	85	80	81	81	79	73	73	71	65	63	75	65.2	79.8
5 Spd	19	16	17	17	17	18	15	13	17	20	20	19	18	14	13	11	11	11	11	9	9	8	9	8	13.9	20.3
Dir	70	59	37	42	41	44	46	41	45	49	53	62	62	54	54	48	54	57	58	51	30	37	41	39	49.9	53.0
6 Spd	7	12	11	11	16	13	18	16	11	8	13	11	12	12	14	11	9	10	12	13	15	15	12	7	11.8	17.9
Dir	40	52	52	36	35	50	27	66	63	49	61	62	45	46	50	56	37	29	28	25	29	39	53	43	44.4	27.4
7 Spd	6	9	8	8	10	14	17	18	22	24	24	22	17	18	14	8	10	5	5	8	8	8	11	10	5.8	24.2
Dir	16	72	85	96	119	113	122	145	202	220	217	217	181	188	180	162	184	205	81	31	19	20	30	30	161.8	217.1
8 Spd	9	7	6	7	4	3	8	11	4	6	6	3	7	6	6	4	7	11	4	13	8	31	17	9	4.7	31.4
Dir	14	7	8	9	359	144	245	285	36	46	84	288	266	298	20	343	340	311	265	161	333	287	286	286	312.8	286.7
9 Spd	6	8	17	22	19	16	16	19	17	10	10	11	15	17	12	23	22	20	15	21	24	25	19	12	15.6	25.0
Dir	181	289	314	320	324	331	330	324	325	339	329	319	303	297	281	309	315	295	295	289	302	315	322	322	311.8	315.0
10 Spd	15	18	18	20	15	15	11	10	10	12	12	12	12	11	8	8	7	4	2	5	6	7	8	6	6.9	20.1
Dir	292	313	308	306	319	323	323	339	358	14	21	1	360	360	357	324	7	341	286	182	177	165	164	169	330.3	306.1
11 Spd	5	6	10	12	10	7	9	11	14	24	22	21	28	24	14	18	23	29	30	22	21	17	17	14	15.7	29.7
Dir	136	176	194	207	231	209	203	210	222	250	257	257	246	257	279	253	251	257	248	246	248	256	256	277	245.5	247.6
12 Spd	12	12	10	12	11	13	16	24	28	27	28	24	23	18	27	27	25	21	18	16	15	11	11	15	18.1	28.1
Dir	266	236	239	242	226	232	237	247	255	257	252	250	253	264	233	233	229	232	239	236	239	244	255	261	244.4	255.3
13 Spd	15	16	9	9	7	9	8	11	12	9	8	12	15	14	20	21	12	16	13	13	10	7	10	10	10.3	20.6
Dir	255	257	221	224	220	226	228	244	233	221	283	295	298	299	277	273	313	311	310	286	314	278	281	251	271.3	273.2
14 Spd	9	11	11	14	16	20	18	15	14	12	9	6	13	8	18	12	14	11	8	3	1	7	9	9	8.0	19.8
Dir	273	246	255	253	244	242	244	249	242	283	317	22	326	323	330	350	328	354	350	16	226	232	256	264	281.1	242.1
15 Spd	11	12	14	15	16	17	18	20	17	13	14	15	15	17	14	17	15	15	12	6	4	4	6	2	11.7	19.7
Dir	263	263	254	254	252	257	252	253	243	235	229	240	228	223	225	237	225	231	249	232	127	135	128	174	239.7	253.4
16 Spd	7	9	10	12	12	12	14	11	10	14	19	17	14	12	9	10	13	15	15	11	13	26	22	21	10.9	25.7
Dir	153	143	151	170	189	224	214	183	170	152	139	164	172	181	177	216	225	223	232	221	226	251	250	244	201.1	251.5
17 Spd	17	14	18	17	18	19	18	23	27	25	22	27	19	24	15	28	19	20	17	11	6	10	9	11	16.7	27.7
Dir	236	229	236	243	253	251	244	249	259	260	242	262	256	259	278	266	312	306	306	302	289	283	272	265	262.3	266.3
18 Spd	12	15	16	17	16	12	10	11	11	15	15	17	15	12	10	11	11	8	9	11	9	14	14	13	10.4	17.1
Dir	249	247	252	254	258	255	256	250	280	286	283	276	282	316	305	263	307	345	326	342	341	342	341	346	287.4	254.0
19 Spd	13	12	13	12	12	7	10	14	11	9	11	14	13	12	13	18	11	11	3	11	11	9	14	12	8.7	18.1
Dir	339	338	333	334	340	327	311	309	327	332	342	338	348	352	345	326	35	27	59	221	244	257	264	258	324.7	326.2
20 Spd	10	7	6	8	7	7	6	6	6	7	5	4	2	4	4	3	6	2	4	1	3	5	3	4	1.6	9.7
Dir	256	227	218	206	203	196	177	175	165	142	160	132	110	25	64	180	345	10	53	42	284	330	354	29	190.6	256.5
21 Spd	4	3	5	4	2	6	4	3	4	5	8	11	13	13	13	12	12	12	15	10	9	7	5	7	5.8	14.6
Dir	23	18	25	16	295	21	45	101	106	120	85	103	122	131	127	65	75	69	73	70	65	43	64	257	80.0	72.8
22 Spd	5	7	6	6	8	7	8	9	9	11	14	18	19	19	17	17	12	5	15	12	9	3	4	5	7.9	19.4
Dir	322	24	29	12	9	15	25	22	26	30	40	59	62	67	73	140	146	118	76	67	74	19	8	6	55.0	67.2

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - June 2012

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	7	4	8	7	9	9	11	12	14	13	15	14	6	5	10	5	8	7	7	8	7	9	7	7.9	14.8
Dir	18	18	2	10	18	13	24	23	33	32	36	43	59	146	315	32	25	45	54	60	68	51	70	55	37.2	42.9
24 Spd	7	9	10	10	8	7	8	11	20	14	10	10	5	7	7	4	4	8	10	11	9	10	4	3	6.0	20.3
Dir	84	58	47	50	50	67	58	122	155	172	177	153	169	112	145	181	139	73	104	125	150	147	118	258	119.5	155.1
25 Spd	5	6	4	7	8	9	9	17	20	25	23	22	20	19	19	19	23	24	24	19	12	10	8	8	14.4	24.8
Dir	270	279	183	198	201	214	194	228	230	236	238	238	238	246	247	245	244	249	250	259	258	259	252	248	240.6	235.8
26 Spd	9	8	6	13	17	16	21	28	27	30	30	31	28	29	28	26	30	34	32	25	18	23	22	19	22.2	33.9
Dir	245	252	232	207	223	219	219	227	234	242	240	227	240	247	248	262	270	269	262	255	242	248	254	246	244.2	268.7
27 Spd	22	26	28	26	26	29	33	35	37	40	40	40	41	38	37	36	37	35	39	34	32	27	21	18	32.3	41.5
Dir	244	250	250	250	251	256	258	262	258	256	257	260	259	256	257	258	251	251	249	250	248	248	244	255	253.9	259.2
28 Spd	20	24	21	20	22	19	18	22	25	23	14	9	10	13	16	15	10	9	7	2	2	5	5	14	13.7	24.7
Dir	251	258	258	255	253	246	242	237	251	258	255	250	226	224	229	231	242	234	255	186	239	313	326	241	247.6	251.2
29 Spd	17	7	6	10	12	11	11	12	15	19	22	26	28	27	24	27	20	21	22	24	16	9	9	7	16.1	27.6
Dir	270	242	217	208	226	250	239	239	236	247	245	239	250	257	262	266	265	260	255	262	257	245	240	288	251.4	249.7
30 Spd	6	7	10	7	8	5	8	10	8	7	9	9	9	7	3	9	4	3	9	8	8	6	5	6	5.3	10.0
Dir	270	271	260	256	207	195	177	175	182	228	229	252	250	278	245	159	73	216	286	260	253	241	230	260	234.6	260.4
Spd	6.1	5.9	6.0	6.5	6.3	6.1	6.3	7.4	8.0	8.7	7.7	7.3	7.4	7.1	6.4	8.0	7.0	7.5	6.6	5.2	4.4	6.0	5.0	5.7	Diurnal Average	
Dir	268.7	268.5	265.6	263.2	258.8	257.7	249.7	244.6	244.8	251.7	253.0	254.7	253.2	257.0	257.2	258.4	266.3	268.6	267.5	260.6	270.5	279.5	282.2	272.9		
Spd	24.2	26.4	27.9	26.5	26.5	29.4	33.2	35.5	36.6	40.1	39.6	40.0	41.5	38.1	36.8	36.3	37.2	34.8	39.0	33.6	32.0	31.4	22.2	21.6	Diurnal Maximum	
Dir	256.8	249.6	250.4	250.0	250.9	256.4	258.2	262.5	258.2	256.3	256.6	259.7	259.2	256.4	256.5	257.8	251.2	251.3	248.9	250.2	248.0	286.7	253.6	74.7		

Maximum Speed Value: 41 km/h on Jun 27 13:00
Maximum Daily Speed Average: 32.3 km/h on Jun 27
Maximum Diurnal Speed Average: 8.7 km/h at hour 10

Minimum Speed Value: 1 km/h on Jun 14 21:00
Minimum Daily Speed Average: 1.6 km/h on Jun 20
Minimum Diurnal Speed Average: 4.4 km/h at hour 21

Monthly Average Velocity: 6.51 km/h 260.48 deg

Speed Percentiles: $P_1 = 2.2$ $P_{10} = 5.2$ $Q_1 = 8.0$ Median = 11.9 $Q_3 = 17.6$ $P_{90} = 23.9$ $P_{99} = 36.6$

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

Hours in Service:	720
Hours of Data:	720
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	15	35	16	0	0	0	66
NorthEast	11	46	45	3	0	0	105
East	4	14	7	9	0	0	34
SouthEast	8	14	11	1	0	0	34
South	8	35	11	1	0	0	55
SouthWest	5	44	62	35	6	0	152
West	8	41	75	56	20	6	206
NorthWest	6	21	30	11	0	0	68
Total	65	250	257	116	26	6	720

Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - June 2012

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - June 2012

Maximum Speed: 42 km/h on Jun 27 13:00

Maximum Daily Speed Average: 32.6 km/h on Jun 27

Minimum Speed: 2 km/h on Jun 14 21:00

Minimum Daily Speed Average: 6.0 km/h on Jun 20

Maximum Diurnal Speed Average: 17.0 km/h at hour 13

Minimum Diurnal Speed Average: 10.9 km/h at hour 24

Monthly Average Speed: 14.05 km/h

Percentiles: $P_1 = 3.4$ $P_{10} = 6.1$ $Q_1 = 8.7$ Median = 12.4 $Q_3 = 18.1$ $P_{90} = 24.1$ $P_{99} = 37.1$

Hours in Service: 720

Hours of Data: 720

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-Jun	12	14	14	14	8	10	8	9	8	9	11	10	12	10	9	5	17	17	11	7	5	4	5	16	10.2	17.4
2-Jun	24	20	19	19	18	15	16	19	23	32	31	28	24	20	20	24	23	26	27	26	18	15	15	15	21.5	32.5
3-Jun	17	18	18	18	17	15	15	10	13	14	13	11	16	16	19	19	16	13	12	7	5	6	6	5	13.3	19.4
4-Jun	4	4	5	7	4	7	7	9	10	6	7	11	13	17	22	21	20	19	20	21	20	16	16	22	12.8	22.2
5-Jun	19	16	17	17	17	18	15	13	17	20	20	19	18	14	13	11	11	11	11	9	9	9	9	8	14.2	20.5
6-Jun	7	12	11	11	16	14	18	16	11	9	14	11	12	12	14	11	9	10	12	14	15	15	12	7	12.2	18.3
7-Jun	6	9	9	10	10	15	17	20	23	24	25	22	18	18	15	10	11	7	7	8	8	9	11	10	13.3	24.7
8-Jun	9	7	6	7	5	4	9	11	6	6	6	6	8	9	8	7	8	11	10	16	12	32	17	10	9.7	32.4
9-Jun	9	10	18	22	19	16	16	19	17	11	11	12	16	17	12	23	23	21	16	21	24	25	20	12	17.1	25.2
10-Jun	15	18	19	20	15	15	11	10	11	12	12	12	12	12	9	9	8	7	4	6	6	7	8	6	11.1	20.2
11-Jun	5	6	10	12	10	7	10	11	15	24	23	22	29	25	16	19	24	29	30	22	21	17	17	14	17.4	29.9
12-Jun	12	12	10	12	11	13	16	25	28	27	28	24	23	19	28	27	25	21	18	16	15	11	11	15	18.6	28.2
13-Jun	15	16	9	9	7	9	8	11	12	9	9	12	15	14	20	22	13	16	15	13	11	8	10	11	12.3	21.5
14-Jun	10	11	11	14	16	20	18	15	14	13	10	11	13	10	19	13	15	11	9	3	2	7	9	9	11.7	19.9
15-Jun	11	12	14	15	16	17	18	20	17	13	14	16	16	18	16	17	16	16	13	7	4	4	6	3	13.3	19.8
16-Jun	7	9	10	12	12	13	15	11	10	14	19	17	15	12	10	11	13	16	15	11	14	26	22	22	14.0	25.8
17-Jun	17	14	18	17	18	19	18	23	27	25	22	27	19	24	16	28	19	21	17	11	6	10	9	11	18.2	27.9
18-Jun	12	15	16	17	16	12	10	11	12	15	15	17	16	16	11	12	13	8	9	11	9	14	14	13	13.1	17.1
19-Jun	13	12	13	12	12	7	10	14	12	10	12	15	14	13	13	19	13	12	9	12	11	9	14	12	12.2	18.9
20-Jun	10	7	6	8	7	7	7	6	6	8	7	6	5	6	8	7	6	4	4	2	3	5	4	5	6.0	9.7
21-Jun	4	3	5	4	4	6	4	4	4	6	8	13	14	14	14	12	13	13	15	11	9	7	7	8	8.5	14.8
22-Jun	6	7	6	6	8	8	8	9	10	11	14	18	19	20	18	18	12	7	15	13	10	4	5	6	10.7	20.0
23-Jun	7	7	4	8	8	9	9	12	12	15	13	15	15	17	10	10	6	8	8	8	8	7	10	8	9.7	16.9
24-Jun	9	10	10	10	8	8	8	12	21	14	10	10	6	7	7	4	5	9	11	11	9	10	4	4	9.0	20.7
25-Jun	5	8	5	7	8	9	10	17	20	25	23	23	21	20	19	20	24	25	24	19	12	10	9	9	15.5	25.1
26-Jun	10	8	7	13	17	16	22	28	27	31	31	31	29	29	29	26	31	34	32	26	19	23	22	19	23.3	34.3
27-Jun	22	27	28	27	27	29	33	36	37	40	40	40	42	39	37	37	38	35	39	34	32	27	21	18	32.6	41.7
28-Jun	20	24	21	20	22	19	18	22	25	23	14	10	11	14	16	16	11	10	7	3	3	5	5	17	14.9	25.0
29-Jun	17	8	6	10	12	11	11	12	15	19	22	26	28	27	24	27	20	21	22	24	16	9	9	8	16.9	27.9
30-Jun	6	7	11	8	9	7	8	10	8	8	10	10	10	9	5	13	6	5	10	9	8	6	5	6	8.0	12.6
	11.4	11.7	11.9	12.8	12.6	12.5	13.1	14.9	15.6	16.5	16.5	16.9	17.0	16.6	15.9	16.6	15.5	15.4	15.0	13.3	11.5	11.9	11.0	10.9	Diurnal Average	
	24.3	26.5	27.9	26.5	26.6	29.4	33.3	35.6	36.8	40.2	39.9	40.3	41.7	38.5	37.3	36.7	37.7	35.1	39.1	33.7	32.1	32.4	22.3	21.9	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 - June 2012

Maximum Value: 91.8 deg on Jun 1 22:00

Minimum Value: 1.9 deg on Jun 13 00:00

Percentiles: P_1 = 3.2 P_{10} = 5.1 Q_1 = 7.9 Median = 11.9 Q_3 = 20.2 P_{90} = 35.0 P_{99} = 72.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily 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-Jun	6	4	4	6	27	17	19	14	15	44	31	41	26	31	23	62	12	10	11	16	25	92	34	41	91.8
2-Jun	4	9	33	5	5	5	7	5	6	6	8	8	10	10	15	17	13	10	9	5	4	4	7	3	32.6
3-Jun	4	4	3	3	4	5	8	12	13	20	43	54	22	24	22	21	18	16	15	59	14	8	11	60	60.3
4-Jun	56	45	50	45	71	42	40	22	14	32	27	13	14	27	11	12	12	8	9	7	9	6	7	9	70.5
5-Jun	8	9	10	8	7	7	7	7	7	6	7	9	7	7	7	7	7	6	7	9	9	9	9	9	9.7
6-Jun	8	8	9	10	9	20	12	11	9	9	10	17	8	7	8	12	12	8	8	8	8	11	7	13	20.0
7-Jun	13	23	14	33	15	15	10	20	10	9	12	15	18	16	15	42	35	57	42	14	8	9	8	10	57.5
8-Jun	13	13	14	10	26	70	32	18	54	18	25	72	38	51	46	64	31	14	67	48	51	14	9	45	71.8
9-Jun	50	50	19	6	6	8	8	7	9	13	16	20	16	8	16	16	13	11	15	17	9	7	8	16	50.1
10-Jun	19	7	8	5	7	7	10	9	13	12	17	19	15	18	34	30	32	55	84	36	8	8	6	17	83.8
11-Jun	15	13	6	10	5	11	17	9	19	9	11	14	11	9	22	16	10	8	7	5	4	6	7	8	22.1
12-Jun	16	7	9	12	5	5	6	7	7	9	10	11	12	15	9	9	8	9	14	8	6	4	8	2	16.2
13-Jun	5	3	17	4	15	9	11	9	12	16	30	15	14	19	14	19	18	15	27	15	13	23	5	15	29.6
14-Jun	26	6	8	4	4	4	4	9	16	28	29	63	25	40	19	18	17	22	21	27	63	5	11	6	63.2
15-Jun	8	5	8	5	5	4	5	6	9	13	20	22	23	16	26	19	21	20	18	20	28	30	6	43	43.2
16-Jun	8	9	9	7	15	8	13	11	15	15	8	15	13	12	25	28	9	15	10	7	23	5	4	6	27.5
17-Jun	5	6	5	4	5	5	4	5	8	7	9	6	7	7	9	8	12	9	14	18	25	16	20	19	24.7
18-Jun	5	3	3	3	5	5	9	8	18	9	9	12	16	44	17	10	33	23	21	11	9	9	8	9	43.6
19-Jun	9	8	9	9	9	14	11	10	23	22	22	24	21	25	20	18	35	30	68	14	8	10	6	7	67.6
20-Jun	5	19	21	10	21	10	12	15	21	27	41	57	83	67	75	70	46	66	17	70	10	17	31	18	82.8
21-Jun	20	22	14	22	73	8	19	34	33	33	32	29	24	24	18	18	24	15	10	9	6	15	58	60	73.1
22-Jun	32	9	13	24	9	14	9	13	12	10	15	12	15	14	18	20	17	50	9	12	35	44	52	12	52.0
23-Jun	7	8	14	11	11	12	16	11	10	11	12	12	12	70	67	14	20	13	21	15	11	14	16	14	70.0
24-Jun	32	20	9	9	11	11	9	35	11	18	19	15	33	22	16	17	33	27	10	12	16	10	26	32	34.9
25-Jun	31	74	31	13	16	13	16	8	8	9	13	14	14	13	14	16	11	10	8	5	5	4	17	10	74.4
26-Jun	6	9	21	12	4	5	5	6	6	6	9	9	15	9	10	11	8	9	5	7	10	5	4	7	20.7
27-Jun	4	5	3	3	5	3	4	5	6	5	7	6	7	9	8	9	9	8	5	4	5	6	5	4	8.9
28-Jun	6	3	3	3	4	6	7	5	9	7	19	29	28	20	18	22	29	22	16	49	56	20	14	45	56.3
29-Jun	5	29	8	12	8	9	6	8	10	10	11	12	9	13	10	9	9	11	7	5	5	8	16	17	29.3
30-Jun	20	22	26	29	25	45	8	10	17	37	30	37	28	63	79	45	70	57	46	17	6	14	21	16	79.4
	56.1	74.4	50.2	44.8	73.1	70.4	40.2	34.9	54.5	44.5	43.2	71.8	82.8	70.0	79.4	70.1	70.2	65.6	83.8	70.0	62.6	91.8	57.9	60.3	

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.3 ppb on Jun 16 13:00 Maximum Daily Average: 0.5 ppb on Jun 23

Minimum Value: 0 ppb on Jun 1 01:00 Minimum Daily Average: 0.0 ppb on Jun 27
Maximum Diurnal Average: 0.2 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 21
Monthly Average: 0.11 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.3 P_{99} = 0.8

Hours in Service:	720
Hours of Data:	687
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-Jun	0	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
2-Jun	0	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
3-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
5-Jun	0	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
6-Jun	0	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
7-Jun	0	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
8-Jun	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
9-Jun	0	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
10-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
11-Jun	0	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
12-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
13-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
14-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
15-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
16-Jun	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.3
17-Jun	0	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
18-Jun	0	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
19-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
20-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.1	0.5
21-Jun	0	0	0	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
22-Jun	0	0	0	0	A	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.8
23-Jun	0	0	0	1	A	0	0	1	1	0	0	1	1	1	1	0	0	0	0	1	0	0	1	0	0.5	1.0
24-Jun	1	0	0	0	A	0	0	0	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0.5	1.0
25-Jun	0	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
26-Jun	0	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
27-Jun	0	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
28-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
29-Jun	0	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
30-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	0.1	0.1	0.1	0.1	--	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.5	0.7	0.4	0.6	--	0.5	0.4	0.7	1.0	0.9	0.7	1.2	1.3	1.0	0.8	0.8	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2012

Maximum Value: 2.5 ppb on Jun 16 13:00

Maximum Daily Average: 0.7 ppb on Jun 23

Minimum Value: 0 ppb on Jun 16 22:00

Minimum Daily Average: 0.1 ppb on Jun 27

Maximum Diurnal Average: 0.4 ppb at hour 9

Minimum Diurnal Average: 0.2 ppb at hour 21

Monthly Average: 0.23 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.5 P_{99} = 1.3

Hours in Service:	720
Hours of Data:	687
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-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
2-Jun	0	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
3-Jun	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.7
4-Jun	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
5-Jun	0	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
6-Jun	0	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-Jun	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
8-Jun	1	1	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
9-Jun	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.1
10-Jun	0	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
11-Jun	0	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
12-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
13-Jun	0	0	0	0	A	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
14-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Jun	0	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-Jun	0	0	0	0	A	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0.4	2.5
17-Jun	0	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
18-Jun	0	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-Jun	0	0	0	0	A	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
20-Jun	0	0	0	0	A	0	0	0	0	1	0	0	0	C	C	C	0	0	0	0	0	1	1	0	0.2	0.7
21-Jun	0	0	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
22-Jun	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.2
23-Jun	0	0	1	1	A	1	1	2	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.7	1.5
24-Jun	1	1	1	0	A	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0.6	1.4
25-Jun	0	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
26-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Jun	0	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
28-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
29-Jun	0	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-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
	0.2	0.2	0.2	0.2	--	0.2	0.3	0.4	0.4	0.3	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	Diurnal Average	
	0.8	1.3	0.6	0.9	--	0.7	0.7	1.5	1.4	1.2	0.8	2.4	2.5	1.8	1.1	1.1	0.9	0.9	1.1	0.7	0.6	0.6	0.7	0.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.7 ppb on Jun 4 06:00 Maximum Daily Average: 2.9 ppb on Jun 22

Minimum Value: 0 ppb on Jun 14 10:00 Minimum Daily Average: 0.9 ppb on Jun 27
Maximum Diurnal Average: 4.8 ppb at hour 6 Minimum Diurnal Average: 0.7 ppb at hour 18
Monthly Average: 1.56 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.5$ $Q_1 = 0.7$ Median = 1.2 $Q_3 = 2.0$ $P_{90} = 3.1$ $P_{99} = 6.8$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	1	1	2	A	5	6	4	2	1	1	1	1	1	1	1	1	1	0	1	2	2	1	1	1.6	5.8
2-Jun	2	2	2	1	A	5	2	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1.1	4.8
3-Jun	2	2	2	2	A	4	3	2	1	1	0	0	0	0	0	0	1	0	0	1	2	2	2	2	1.3	3.7
4-Jun	2	3	3	2	A	10	7	5	5	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2.5	9.7
5-Jun	1	1	1	1	A	3	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	3	2	2	1.8	3.4
6-Jun	1	1	1	1	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.2	2.6
7-Jun	2	2	1	1	A	3	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1.0	2.6
8-Jun	2	3	7	3	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.7	6.6
9-Jun	1	1	2	2	A	3	2	2	2	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1.4	3.1
10-Jun	1	1	1	1	A	3	2	2	1	2	2	1	1	1	1	1	1	1	1	1	2	4	4	4	1.6	4.3
11-Jun	3	4	4	3	A	4	3	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	1.4	4.4
12-Jun	0	1	2	2	A	4	2	1	1	0	0	0	1	0	1	0	0	0	0	0	1	1	1	1	1.0	4.4
13-Jun	2	2	1	2	A	6	5	2	2	1	1	0	0	0	0	1	1	1	0	0	1	1	0	1	1.3	6.3
14-Jun	1	2	1	3	A	3	2	1	7	0	3	0	0	1	0	0	0	0	0	1	1	1	1	1	1.3	6.8
15-Jun	1	2	1	2	A	4	2	1	1	1	1	0	0	0	0	0	0	0	0	1	3	4	2	3	1.3	4.2
16-Jun	2	2	3	4	A	5	2	2	1	1	1	1	2	1	1	1	1	1	0	1	1	1	1	1	1.6	4.6
17-Jun	2	2	2	1	A	4	2	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	2	1	1.2	3.8
18-Jun	1	1	1	1	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.2	3.3
19-Jun	1	3	2	3	A	5	3	2	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	2	1.5	5.0
20-Jun	2	2	2	2	A	5	3	C	C	C	C	C	C	3	1	1	1	1	1	1	2	2	2	1	--	5.2
21-Jun	1	4	3	2	A	8	5	6	5	3	3	2	1	1	1	1	1	1	1	2	2	2	2	2	2.6	8.0
22-Jun	3	3	4	4	A	7	9	5	2	3	2	2	1	1	1	1	1	1	1	1	5	3	2	2	2.9	9.1
23-Jun	2	1	2	2	A	4	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2.0	4.3
24-Jun	2	2	2	2	A	5	3	3	2	2	1	1	1	1	1	2	2	2	2	2	2	2	3	3	2.1	4.6
25-Jun	1	2	3	2	A	6	4	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	3	2	1.5	6.4
26-Jun	2	1	1	1	A	7	5	5	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	1.3	6.8
27-Jun	1	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0.9	3.3
28-Jun	1	1	1	1	A	5	3	2	2	1	0	0	0	1	1	1	1	1	1	2	3	2	2	2	1.4	5.0
29-Jun	2	1	2	1	A	5	4	2	2	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1.2	5.4
30-Jun	1	1	2	3	A	7	6	5	2	1	1	0	0	0	0	1	1	1	1	1	2	4	4	4	2.1	7.1
	1.5	1.8	2.0	2.0	--	4.8	3.3	2.3	1.9	1.2	1.1	0.9	0.8	0.9	0.8	0.8	0.8	0.7	0.8	1.1	1.5	1.8	1.6	1.6	Diurnal Average	
	3.0	4.2	6.6	4.4	--	9.7	9.1	5.8	6.8	4.2	2.9	2.1	2.1	2.7	1.8	2.1	1.9	2.0	1.9	2.4	5.1	4.3	3.6	4.0	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2012

Maximum Value: 204.8 ppb on Jun 14 09:00

Maximum Daily Average: 16.4 ppb on Jun 14

Minimum Value: 0 ppb on Jun 7 17:00

Minimum Daily Average: 1.6 ppb on Jun 7

Maximum Diurnal Average: 14.1 ppb at hour 9

Minimum Diurnal Average: 1.3 ppb at hour 18

Monthly Average: 3.41 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 0.9$ $Q_1 = 1.3$ Median = 2.0 $Q_3 = 3.2$ $P_{90} = 5.7$ $P_{99} = 28.6$

Hours in Service:	720
Hours of Data:	684
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-Jun	2	2	2	2	A	7	8	6	4	2	1	1	1	1	1	2	1	1	1	3	4	8	1	1	2.7	8.0
2-Jun	3	3	3	2	A	8	5	2	2	2	2	1	1	1	1	1	1	2	1	2	1	2	2	3	2.2	7.6
3-Jun	3	3	2	3	A	5	5	3	2	1	1	1	1	1	1	1	3	1	1	4	4	9	5	3	2.6	9.4
4-Jun	5	5	4	3	A	13	11	6	7	6	7	2	8	2	1	2	1	1	2	1	1	2	2	2	4.1	12.7
5-Jun	1	1	1	2	A	5	3	3	2	1	1	2	2	2	2	2	2	3	2	2	3	4	6	3	2.4	6.0
6-Jun	2	1	3	2	A	3	3	3	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.8	3.5
7-Jun	3	3	2	2	A	3	2	2	2	2	1	1	1	1	1	1	0	1	1	1	1	2	1	2	1.6	3.4
8-Jun	3	8	12	4	A	5	4	2	2	1	1	1	1	1	5	1	1	1	1	2	2	4	2	2	2.8	11.7
9-Jun	1	1	2	4	A	5	2	2	2	1	2	1	1	1	1	1	1	2	2	4	4	1	2	1	2.1	4.7
10-Jun	1	2	2	2	A	4	4	2	2	2	2	2	1	1	1	1	2	1	1	2	5	7	4	5	2.4	6.8
11-Jun	5	5	5	3	A	7	5	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	2.3	7.1
12-Jun	1	2	3	4	A	7	4	1	1	1	1	1	1	1	1	2	1	1	1	1	3	3	1	2	1.8	6.5
13-Jun	4	3	2	4	A	7	7	3	49	29	4	1	1	1	1	1	1	2	1	1	1	2	2	2	5.6	48.7
14-Jun	1	5	2	6	A	6	2	3	205	9	113	1	4	5	1	1	1	1	2	1	2	3	2	2	16.4	204.8
15-Jun	5	4	2	3	A	8	3	1	73	30	63	1	1	1	0	1	1	1	1	2	5	7	2	4	9.5	72.8
16-Jun	3	3	5	5	A	8	3	3	2	2	2	2	2	2	1	1	2	2	1	1	1	2	2	2	2.4	8.3
17-Jun	3	2	2	2	A	6	4	1	1	1	1	1	1	2	1	1	1	2	2	2	3	2	3	3	2.0	5.6
18-Jun	2	2	2	2	A	5	3	2	2	2	2	1	3	2	2	2	1	1	1	2	2	2	2	3	2.1	4.9
19-Jun	1	5	4	6	A	7	4	3	2	1	1	10	3	1	1	1	1	1	1	2	2	2	8	3	3.0	9.9
20-Jun	3	3	2	3	A	8	4	C	C	C	C	C	C	5	2	1	2	1	1	1	4	3	4	2	--	7.8
21-Jun	2	12	5	3	A	12	8	8	7	8	4	3	2	1	1	2	1	1	2	2	3	3	3	4	4.3	12.0
22-Jun	4	4	5	5	A	8	13	8	3	3	3	2	2	2	2	2	2	1	1	3	8	5	3	2	4.0	12.5
23-Jun	3	2	2	2	A	8	3	3	2	3	3	3	3	2	3	3	3	2	2	2	2	2	2	3	2.7	7.8
24-Jun	2	2	2	2	A	7	4	3	2	2	2	1	1	1	3	4	2	2	2	4	3	3	5	5	2.8	6.7
25-Jun	2	6	5	4	A	8	7	3	2	1	1	1	1	1	1	1	1	2	1	1	2	2	7	3	2.7	7.7
26-Jun	3	2	2	2	A	9	7	8	2	1	1	1	1	1	2	2	1	1	1	1	1	1	3	1	2.4	8.8
27-Jun	1	2	2	2	A	6	2	2	2	1	1	1	2	3	2	3	2	1	2	1	1	1	1	2	1.9	6.2
28-Jun	1	1	2	3	A	7	4	3	9	5	1	3	1	3	1	2	1	1	2	6	6	4	2	3	3.1	8.8
29-Jun	3	3	4	2	A	8	7	4	12	2	1	1	1	1	2	1	1	1	1	1	2	2	2	2	2.7	11.8
30-Jun	2	2	3	4	A	9	7	6	5	1	1	1	1	1	1	2	1	1	1	2	5	6	5	6	3.1	8.8
	2.6	3.1	3.1	3.0	--	7.0	4.9	3.4	14.1	4.2	7.7	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3	2.0	2.8	3.2	3.0	2.6	Diurnal Average	
	5.3	12.0	11.7	6.5	--	12.7	12.5	8.3	204.8	30.0	112.7	9.9	7.9	5.0	5.0	3.6	3.2	2.6	2.5	5.6	8.1	9.4	7.9	6.3	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.3 ppb on Jun 14 10:00 Maximum Daily Average: 0.7 ppb on Jun 21

Minimum Value: 0 ppb on Jun 1 01:00 Minimum Daily Average: 0.1 ppb on Jun 7
Maximum Diurnal Average: 0.7 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 4
Monthly Average: 0.18 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.3$ $P_{99} = 2.0$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
2-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
3-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
4-Jun	0	0	0	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
5-Jun	0	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
6-Jun	0	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
7-Jun	0	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
8-Jun	0	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
9-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
10-Jun	0	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
11-Jun	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
12-Jun	0	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
13-Jun	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4
14-Jun	0	0	0	0	A	0	0	0	2	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	5.3
15-Jun	0	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
16-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
17-Jun	0	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
18-Jun	0	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-Jun	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
20-Jun	0	0	0	0	A	1	2	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	--	2.0
21-Jun	0	0	0	0	A	2	2	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	5.2
22-Jun	0	0	0	0	A	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	5.2
23-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
24-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
25-Jun	0	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
26-Jun	0	0	0	0	A	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
27-Jun	0	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
28-Jun	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
29-Jun	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.3
30-Jun	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
	0.0	0.0	0.0	0.0	--	0.3	0.7	0.6	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	Diurnal Average	
	0.1	0.1	0.1	0.0	--	2.3	5.2	5.2	3.3	5.3	0.8	0.4	0.6	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2012

Maximum Value: 168.5 ppb on Jun 14 10:00

Maximum Daily Average: 12.3 ppb on Jun 14

Minimum Value: 0 ppb on Jun 5 01:00

Minimum Daily Average: 0.2 ppb on Jun 23

Maximum Diurnal Average: 7.9 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 1.27 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.5$ $P_{90} = 0.8$ $P_{99} = 25.4$

Hours in Service:	720
Hours of Data:	684
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-Jun	0	0	0	0	A	1	2	8	37	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2	36.7
2-Jun	0	0	0	0	A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
3-Jun	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	1.1
4-Jun	0	0	0	0	A	1	2	2	2	2	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0.8	3.4
5-Jun	0	0	0	0	A	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0	0	0	1	0	0.4	1.1
6-Jun	0	0	1	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
7-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
8-Jun	0	0	0	0	A	0	0	0	0	7	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0.6	6.7
9-Jun	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
10-Jun	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
11-Jun	0	0	0	0	A	1	2	1	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0.5	1.6
12-Jun	0	0	0	0	A	1	1	0	1	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0.5	1.1
13-Jun	0	0	0	0	A	2	2	1	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	11.8
14-Jun	0	0	0	0	A	0	1	1	71	168	10	0	27	1	0	0	0	0	0	0	0	0	0	0	12.3	168.5
15-Jun	0	0	0	0	A	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.5
16-Jun	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0.4	1.0
17-Jun	0	0	0	0	A	1	1	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0.4	0.8
18-Jun	0	0	0	0	A	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
19-Jun	0	0	0	0	A	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
20-Jun	1	0	0	0	A	2	5	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	--	4.6
21-Jun	0	1	0	0	A	5	6	114	5	26	1	1	0	0	0	1	0	0	0	0	0	0	0	0	7.1	114.0
22-Jun	0	0	0	1	A	4	11	5	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1.1	10.9
23-Jun	0	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
24-Jun	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	0.7
25-Jun	0	0	0	0	A	0	1	1	1	0	1	0	0	0	0	20	0	1	0	0	0	0	0	0	1.2	19.6
26-Jun	0	0	0	0	A	1	2	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	3.6
27-Jun	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.2
28-Jun	0	0	0	0	A	1	1	4	21	5	5	1	9	8	0	0	0	0	0	0	1	0	0	0	2.5	20.9
29-Jun	0	0	0	0	A	0	1	1	28	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1.6	27.6
30-Jun	0	0	0	0	A	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.9
	0.2	0.2	0.2	0.1	--	0.9	1.5	5.1	6.6	7.9	1.0	0.4	1.7	0.6	0.4	1.0	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	Diurnal Average	
	0.6	1.3	0.7	0.5	--	5.0	10.9	114.0	71.1	168.5	10.1	1.1	27.5	7.8	1.0	19.6	1.0	2.4	0.8	0.5	0.8	0.5	1.1	1.3	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.4 ppb on Jun 22 07:00
Maximum Daily Average: 3.4 ppb on Jun 21

Minimum Value: 0 ppb on Jun 15 15:00
Maximum Diurnal Average: 5.1 ppb at hour 6
Monthly Average: 1.76 ppb

Minimum Daily Average: 1.1 ppb on Jun 27
Minimum Diurnal Average: 0.9 ppb at hour 19
Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.8$ Median = 1.3 $Q_3 = 2.2$ $P_{90} = 3.3$ $P_{99} = 7.8$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	1	1	2	A	6	7	5	3	2	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1.8	6.9
2-Jun	2	2	3	1	A	5	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	5.1
3-Jun	2	2	2	2	A	4	4	3	1	1	0	0	0	0	0	0	1	0	0	1	2	2	2	2	1.4	3.9
4-Jun	2	3	3	2	A	10	8	6	6	5	4	2	2	1	1	1	1	1	1	1	1	1	1	1	2.8	10.4
5-Jun	1	1	1	1	A	3	3	2	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	2	1.9	3.5
6-Jun	2	1	1	1	A	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.3	2.7
7-Jun	2	2	1	1	A	3	2	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1.1	2.7
8-Jun	2	3	7	3	A	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.8	6.7
9-Jun	1	1	2	2	A	3	3	2	2	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1.5	3.2
10-Jun	1	1	1	1	A	3	2	2	2	2	2	1	1	1	1	1	1	1	1	2	2	4	4	4	1.8	4.4
11-Jun	3	4	4	3	A	5	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	4.8
12-Jun	0	1	2	2	A	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.1	4.8
13-Jun	2	2	1	2	A	7	7	2	2	2	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1.5	6.9
14-Jun	1	2	1	3	A	3	2	2	8	1	3	0	1	1	0	0	0	0	1	1	1	1	2	1	1.6	8.3
15-Jun	1	2	1	2	A	4	3	1	2	1	1	0	0	0	0	0	0	0	1	1	3	4	2	3	1.5	4.3
16-Jun	2	2	3	4	A	5	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.8	4.7
17-Jun	2	2	2	1	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1	1.3	4.0
18-Jun	1	1	1	1	A	3	2	2	2	1	1	1	1	1	1	2	1	1	1	1	1	2	2	2	1.4	3.4
19-Jun	1	4	2	3	A	5	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.8	5.3
20-Jun	2	2	2	2	A	6	5	C	C	C	C	C	C	3	1	1	1	1	1	1	2	2	2	1	--	6.2
21-Jun	1	4	3	2	A	10	7	11	9	5	3	3	2	1	1	1	1	1	1	2	2	2	2	2	3.4	10.6
22-Jun	3	3	4	4	A	7	14	7	3	3	2	2	2	1	1	1	1	1	1	1	5	4	2	2	3.3	14.4
23-Jun	2	1	2	2	A	4	2	2	2	3	3	2	2	2	2	2	2	1	1	2	2	2	2	2	2.1	4.4
24-Jun	2	2	2	2	A	5	3	3	3	2	1	1	1	1	2	2	2	2	2	3	2	3	4	3	2.3	4.7
25-Jun	1	2	3	2	A	7	4	3	2	1	1	1	0	0	1	1	1	1	1	1	1	1	3	2	1.6	6.6
26-Jun	2	1	1	2	A	8	6	6	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1.6	7.5
27-Jun	1	1	1	1	A	3	2	1	1	1	1	1	1	1	1	2	1	1	1	0	0	1	1	1	1.1	3.4
28-Jun	1	1	1	1	A	5	4	2	3	1	1	1	1	1	1	1	1	1	1	3	3	2	2	2	1.6	5.4
29-Jun	2	1	2	1	A	6	4	3	3	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1.4	5.6
30-Jun	1	1	2	3	A	7	6	6	3	1	1	1	1	0	1	1	1	1	1	1	2	4	4	4	2.3	7.4
	1.5	1.9	2.0	2.0	--	5.1	4.0	3.0	2.4	1.6	1.3	1.0	1.0	1.0	0.9	1.0	0.9	0.9	0.9	1.2	1.6	1.9	1.7	1.7	Diurnal Average	
	3.1	4.3	6.7	4.4	--	10.4	14.4	10.6	8.5	5.1	3.7	2.5	2.3	2.8	2.1	2.3	2.2	2.4	2.1	2.5	5.3	4.4	3.7	4.1	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2012

Maximum Value: 210.4 ppb on Jun 14 09:00

Maximum Daily Average: 16.9 ppb on Jun 14

Minimum Value: 1 ppb on Jun 15 17:00

Minimum Daily Average: 1.8 ppb on Jun 7

Maximum Diurnal Average: 16.2 ppb at hour 9

Minimum Diurnal Average: 1.6 ppb at hour 19

Monthly Average: 3.91 ppb

Percentiles: P_1 = 0.7 P_{10} = 1.1 Q_1 = 1.5 Median = 2.2 Q_3 = 3.5 P_{90} = 6.6 P_{99} = 26.6

Hours in Service:	720
Hours of Data:	684
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-Jun	2	2	2	2	A	7	9	14	5	3	2	1	1	1	1	2	1	1	1	3	4	8	1	1	3.3	14.5
2-Jun	3	3	4	2	A	8	5	2	2	2	2	1	1	2	1	1	1	2	2	2	2	2	2	2	2.5	8.2
3-Jun	3	3	2	3	A	5	6	3	3	1	1	1	1	1	1	1	3	1	1	4	4	10	5	3	2.8	9.7
4-Jun	5	5	4	3	A	14	13	7	8	7	10	3	10	2	1	2	1	1	2	1	1	2	2	2	4.7	13.7
5-Jun	1	1	1	1	A	5	3	3	2	2	1	3	2	2	3	3	3	3	2	3	3	4	7	3	2.7	7.1
6-Jun	2	2	3	2	A	4	3	3	4	2	2	2	1	2	2	1	2	2	1	1	2	2	2	2	2.0	3.7
7-Jun	3	3	2	2	A	4	3	3	3	2	2	1	1	1	1	1	1	1	1	2	1	2	1	2	1.8	3.5
8-Jun	3	8	12	4	A	5	4	2	2	4	1	1	1	1	5	1	1	2	1	2	2	4	3	2	3.1	11.7
9-Jun	1	1	2	3	A	5	3	3	3	2	2	2	1	2	1	1	1	2	3	5	4	1	2	1	2.3	4.7
10-Jun	1	2	2	2	A	4	4	3	2	3	2	2	2	2	1	1	2	1	1	3	5	7	4	5	2.6	7.1
11-Jun	5	5	5	3	A	7	7	4	2	1	2	2	2	2	2	2	2	2	1	1	1	1	2	1	2.6	7.5
12-Jun	1	2	3	4	A	7	5	2	2	1	1	1	1	2	1	2	2	2	2	1	3	3	1	2	2.3	6.8
13-Jun	4	3	3	4	A	8	9	4	50	29	4	1	2	1	1	2	2	2	2	1	1	2	2	2	6.0	50.2
14-Jun	1	5	2	6	A	6	3	3	210	9	115	1	6	6	1	1	1	1	2	2	2	3	2	2	16.9	210.4
15-Jun	5	4	2	3	A	8	4	2	76	30	63	1	1	1	1	1	1	1	1	3	5	7	2	4	9.8	76.0
16-Jun	3	3	5	6	A	8	4	3	2	2	2	2	2	2	2	2	3	2	1	1	1	2	2	2	2.8	8.4
17-Jun	4	2	2	2	A	6	4	2	1	1	1	1	2	2	1	1	1	2	3	3	4	2	3	3	2.3	5.6
18-Jun	2	2	3	2	A	5	3	3	3	2	2	2	3	2	2	3	2	2	1	2	2	2	2	3	2.4	4.9
19-Jun	1	5	4	6	A	7	5	4	2	2	2	11	3	2	1	2	1	2	1	2	2	2	8	4	3.3	10.6
20-Jun	3	3	2	3	A	10	9	C	C	C	C	C	C	5	2	2	2	1	1	1	4	4	5	2	--	10.0
21-Jun	2	13	5	3	A	14	15	40	11	11	5	4	2	2	2	3	2	2	2	3	3	4	3	4	6.7	40.0
22-Jun	4	4	5	5	A	11	22	13	3	4	3	2	2	3	2	2	2	1	2	3	9	5	3	3	5.0	22.5
23-Jun	3	2	2	2	A	8	3	3	3	3	3	3	3	2	3	3	4	2	2	3	2	2	2	3	2.9	8.0
24-Jun	2	2	2	2	A	7	4	4	3	3	2	1	1	1	3	4	3	2	3	4	3	3	5	5	3.0	6.7
25-Jun	3	6	5	4	A	8	7	4	3	1	2	1	1	1	1	2	2	3	1	2	2	2	7	3	3.1	8.1
26-Jun	3	2	2	2	A	10	9	12	3	1	1	1	1	1	3	2	2	2	1	2	1	1	3	1	2.9	11.9
27-Jun	1	2	2	2	A	6	3	2	2	2	1	1	2	4	2	3	2	1	2	2	1	1	1	2	2.2	6.2
28-Jun	1	1	2	3	A	7	5	4	30	6	1	3	7	11	2	2	1	1	2	6	7	4	3	3	4.9	29.8
29-Jun	4	3	4	2	A	9	7	5	24	2	1	1	1	2	2	1	2	1	1	2	2	2	2	2	3.5	23.6
30-Jun	3	2	3	4	A	9	7	8	7	2	1	1	1	1	1	2	1	2	2	2	5	6	5	8	3.5	9.1
	2.7	3.3	3.2	3.1	--	7.5	6.2	5.6	16.2	4.8	8.2	2.1	2.3	2.2	1.8	1.8	1.7	1.6	1.6	2.3	3.0	3.4	3.2	2.7	Diurnal Average	
	5.4	13.4	11.7	6.5	--	14.0	22.5	40.0	210.4	30.0	114.5	10.6	9.5	11.4	5.1	4.1	3.5	3.0	2.7	6.1	8.6	9.7	7.9	7.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - June 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 55.7 ppb on Jun 22 14:00 Maximum Daily Average: 42.8 ppb on Jun 1

Minimum Value: 7 ppb on Jun 7 02:00 Minimum Daily Average: 17.1 ppb on Jun 6
Maximum Diurnal Average: 36.7 ppb at hour 15 Minimum Diurnal Average: 21.9 ppb at hour 6
Monthly Average: 31.02 ppb Percentiles: P_1 = 11.2 P_{10} = 17.3 Q_1 = 24.4 Median = 30.9 Q_3 = 38.0 P_{90} = 44.1 P_{99} = 51.1

Hours in Service:	720
Hours of Data:	687
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-Jun	45	43	39	33	A	28	28	32	35	43	49	50	50	51	51	47	50	51	49	47	43	42	41	38	42.8	51.1
2-Jun	32	26	22	28	A	28	31	35	37	39	40	44	47	47	46	47	47	45	45	44	43	40	40	38	38.7	47.2
3-Jun	34	32	32	30	A	30	29	34	41	46	49	48	48	47	47	48	46	47	46	44	39	36	38	39	40.4	48.8
4-Jun	33	29	29	36	A	16	26	32	29	31	41	51	52	50	51	51	51	51	49	48	46	43	41	40	40.2	52.2
5-Jun	40	37	37	37	A	33	31	32	34	36	34	32	28	26	25	24	25	26	25	25	21	17	15	15	28.5	40.0
6-Jun	15	15	14	15	A	18	17	15	17	18	18	18	18	17	17	18	18	17	17	18	16	15	22	21	17.1	21.9
7-Jun	12	7	9	12	A	15	19	24	22	30	36	38	41	43	44	45	46	45	46	44	42	42	41	37	32.1	45.8
8-Jun	36	33	26	30	A	27	28	31	34	37	40	42	42	41	41	40	40	39	36	34	33	30	34	32	35.0	42.2
9-Jun	28	26	23	21	A	19	18	21	25	29	30	32	32	32	34	35	38	38	37	30	34	38	35	33	29.9	38.2
10-Jun	29	27	30	28	A	26	24	23	22	20	20	25	34	37	41	44	42	39	39	28	21	14	14	11	27.7	43.6
11-Jun	13	15	16	19	A	19	21	29	34	32	31	30	30	29	29	27	27	26	26	24	25	24	24	26	25.0	33.9
12-Jun	26	23	20	19	A	14	17	17	18	19	20	24	23	21	26	29	29	28	28	28	25	24	25	24	22.9	28.9
13-Jun	19	20	22	19	A	13	12	22	26	27	30	33	35	36	36	41	44	45	47	47	46	43	41	39	32.4	46.7
14-Jun	37	35	31	26	A	27	29	29	31	34	35	37	37	38	39	39	38	38	36	34	31	28	28	29	33.3	39.1
15-Jun	30	27	29	27	A	21	24	27	31	34	37	36	35	34	35	37	40	40	40	37	33	28	29	27	32.1	40.4
16-Jun	28	28	26	21	A	27	34	35	33	30	30	29	29	28	25	23	21	21	24	24	38	38	42	34	29.0	42.1
17-Jun	31	33	34	30	A	23	24	24	23	22	24	22	20	24	23	22	22	21	21	18	15	15	11	12	22.3	34.0
18-Jun	13	13	15	15	A	16	16	17	17	22	21	22	24	25	29	26	24	21	20	16	16	14	11	12	18.5	28.5
19-Jun	16	11	13	13	A	13	14	17	21	23	24	27	30	31	30	33	32	29	29	25	24	24	21	17	22.3	32.6
20-Jun	17	17	16	14	A	10	10	14	17	21	33	37	C	C	C	32	30	29	29	31	32	29	28	32	23.8	36.6
21-Jun	34	25	24	26	A	13	15	15	17	32	38	40	41	39	38	38	39	40	39	39	37	34	34	36	31.9	40.8
22-Jun	28	29	23	22	A	18	12	27	41	44	45	49	53	56	56	48	50	51	49	45	35	37	37	35	38.7	55.7
23-Jun	40	41	35	37	A	33	37	35	38	41	44	40	39	44	45	42	39	39	45	46	45	45	49	46	41.1	49.2
24-Jun	43	42	39	35	A	31	30	30	32	37	43	45	47	48	44	42	43	44	43	38	31	28	23	32	37.7	47.6
25-Jun	43	37	34	35	A	23	25	29	36	40	39	35	36	36	38	37	38	37	37	36	34	33	31	31	34.8	43.3
26-Jun	32	31	29	28	A	24	23	27	37	40	42	42	41	39	37	33	33	34	34	33	31	30	27	27	32.7	41.9
27-Jun	26	26	26	26	A	26	26	26	26	27	27	29	30	31	31	32	32	32	31	30	31	30	28	27	28.5	32.3
28-Jun	26	27	27	26	A	21	23	25	28	31	33	34	34	35	36	35	37	37	35	32	32	34	33	30	30.8	37.5
29-Jun	28	34	39	39	A	31	25	27	33	38	40	41	40	39	38	38	36	35	32	31	29	29	28	28	33.8	40.8
30-Jun	28	25	21	21	A	15	16	16	21	26	28	28	27	29	34	29	30	29	32	31	27	23	24	20	25.4	34.2
	28.7	27.1	25.9	25.5	--	21.9	22.7	25.5	28.6	31.7	34.0	35.3	35.9	36.4	36.7	36.0	36.2	35.8	35.5	33.6	31.8	30.2	29.9	29.0	Diurnal Average	
	45.0	42.8	39.4	39.5	--	33.0	36.6	35.1	41.4	46.4	49.3	50.7	53.2	55.7	55.7	51.4	51.1	51.1	49.5	48.2	45.8	45.4	49.2	45.9	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

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - June 2012

Maximum Value: 60.6 ppb on Jun 22 15:00

Maximum Daily Average: 45.8 ppb on Jun 1

Minimum Value: 8 ppb on Jun 7 02:00

Minimum Daily Average: 18.6 ppb on Jun 6

Maximum Diurnal Average: 38.9 ppb at hour 15

Minimum Diurnal Average: 25.4 ppb at hour 6

Monthly Average: 33.72 ppb

Percentiles: P_1 = 13.4 P_{10} = 19.3 Q_1 = 26.7 Median = 33.6 Q_3 = 41.1 P_{90} = 47.2 P_{99} = 52.6

Hours in Service:	720
Hours of Data:	687
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-Jun	48	46	42	36	A	32	32	36	39	48	52	51	52	52	52	49	52	53	50	50	49	49	43	40	45.8	53.0
2-Jun	39	28	24	31	A	31	36	37	39	42	43	47	48	49	49	50	49	47	47	46	45	42	42	41	41.4	50.2
3-Jun	38	35	38	33	A	33	33	36	46	49	50	50	49	49	49	50	49	48	47	47	41	42	41	43	43.2	50.1
4-Jun	47	36	36	39	A	22	33	36	35	40	47	54	55	53	53	55	53	53	51	50	48	45	42	42	44.5	54.8
5-Jun	42	39	38	37	A	34	33	34	38	37	36	34	31	28	27	26	27	27	28	27	23	19	17	17	30.4	41.8
6-Jun	17	17	15	18	A	21	20	16	19	19	19	19	18	18	18	19	19	18	19	19	18	16	23	24	18.6	23.9
7-Jun	16	8	10	14	A	16	24	28	25	38	38	41	45	45	46	47	47	47	48	47	44	44	44	44	35.1	47.6
8-Jun	41	38	30	33	A	30	31	33	37	41	42	43	43	42	42	42	41	43	40	35	34	33	39	38	37.9	43.5
9-Jun	32	27	25	23	A	20	19	22	28	32	33	33	33	35	35	37	53	43	40	37	38	40	38	34	33.0	53.0
10-Jun	31	29	30	31	A	27	26	24	23	22	21	30	38	42	45	46	44	42	42	39	23	17	15	13	30.5	46.1
11-Jun	16	17	18	22	A	23	26	35	35	34	33	32	31	31	30	29	29	27	27	26	26	25	25	27	27.1	35.4
12-Jun	28	25	21	20	A	16	18	19	19	20	22	26	26	25	29	31	30	30	29	30	28	26	27	26	24.8	31.3
13-Jun	24	22	24	23	A	15	19	25	28	29	33	38	38	39	39	44	46	47	49	48	49	45	43	41	35.1	48.7
14-Jun	39	37	33	31	A	32	31	32	33	36	38	41	39	40	41	41	40	40	38	36	34	30	29	30	35.6	41.1
15-Jun	32	30	30	30	A	23	26	30	33	37	39	38	36	36	36	41	42	42	43	42	36	35	31	30	34.7	42.9
16-Jun	30	30	28	25	A	33	35	36	36	32	32	31	30	30	28	24	23	24	26	30	41	40	48	37	31.7	47.9
17-Jun	33	35	38	33	A	25	26	25	24	24	26	24	22	27	25	24	23	23	22	20	17	17	13	15	24.3	37.5
18-Jun	13	15	16	17	A	17	18	18	20	24	23	25	26	29	31	28	26	23	21	19	17	15	12	17	20.5	31.0
19-Jun	17	15	15	15	A	14	16	20	23	24	28	31	33	33	32	35	34	32	31	28	26	25	24	21	24.9	35.4
20-Jun	20	19	17	15	A	15	15	17	20	26	40	39	C	C	C	35	31	32	32	34	34	34	30	36	27.0	39.9
21-Jun	36	35	29	30	A	24	19	17	21	44	41	42	42	41	40	40	41	42	42	41	39	38	38	39	35.7	43.7
22-Jun	32	32	26	24	A	26	22	42	43	46	47	52	56	60	61	53	53	53	52	48	42	39	40	37	42.9	60.6
23-Jun	42	43	39	39	A	37	39	39	41	45	48	44	42	49	48	47	43	44	49	51	47	50	52	50	44.6	51.7
24-Jun	46	45	43	37	A	33	32	33	35	41	45	46	49	49	49	46	46	46	45	40	38	30	27	45	41.2	49.4
25-Jun	46	44	43	40	A	26	30	33	40	41	41	37	39	40	40	39	40	39	39	39	37	35	33	34	37.9	46.2
26-Jun	33	33	30	32	A	30	26	33	39	42	43	43	42	41	39	35	35	36	35	34	32	31	28	28	34.9	43.4
27-Jun	27	28	27	28	A	27	28	27	28	28	29	30	31	32	32	33	34	34	32	31	32	31	29	28	29.7	33.6
28-Jun	27	28	28	29	A	26	25	27	30	32	34	35	36	37	38	37	37	39	38	37	37	37	35	32	33.0	39.1
29-Jun	30	38	41	41	A	37	33	30	37	41	42	43	42	41	40	39	38	37	34	32	31	30	29	29	36.3	42.8
30-Jun	30	27	26	22	A	19	18	19	25	28	30	30	29	35	37	32	32	33	36	34	34	26	27	27	28.5	37.2
	31.6	30.0	28.7	28.2	--	25.4	26.3	28.6	31.3	34.8	36.6	37.7	38.0	38.9	38.9	38.4	38.6	38.1	37.6	36.6	34.6	32.8	32.1	32.2	Diurnal Average	
	47.6	46.0	43.5	40.7	--	37.1	39.1	42.0	45.5	49.2	51.7	54.3	56.0	60.4	60.6	54.5	53.1	53.0	52.3	50.8	48.6	49.8	51.7	49.5	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - June 2012

Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - June 2012

Maximum Value: 51.6 ppb on Jun 22 19:00

Minimum Value: 12.5 ppb on Jun 19 06:00

Percentiles: P_1 = 13.6 P_{10} = 18.2 Q_1 = 25.1 Median = 31.1 Q_3 = 36.8 P_{90} = 43.0 P_{99} = 49.6

Hours in Service:	720
Hours of Data:	714
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-Jun	47	46	45	42	42	39	37	35	34	34	35	38	39	42	45	47	49	50	50	49	49	48	46	45	49.7
2-Jun	43	40	36	34	33	31	29	29	30	31	34	36	38	40	42	43	45	45	46	46	45	44	44	43	45.9
3-Jun	41	39	38	36	35	34	32	32	33	35	37	40	41	43	45	47	47	47	47	47	45	44	43	42	47.5
4-Jun	40	38	36	35	34	31	30	29	28	28	30	32	35	39	42	45	47	50	51	50	50	49	47	46	50.8
5-Jun	45	43	42	40	39	38	36	35	34	34	34	33	32	32	31	30	29	27	26	26	25	23	22	21	44.7
6-Jun	20	18	17	16	15	16	16	16	16	16	17	17	17	17	17	18	18	18	17	17	17	17	18	18	19.7
7-Jun	17	16	15	14	14	14	13	14	15	19	22	26	28	31	35	37	40	42	44	44	44	44	44	43	44.5
8-Jun	42	40	38	36	35	33	31	30	30	31	33	34	35	37	39	40	40	41	40	39	38	37	36	35	41.7
9-Jun	33	32	30	28	28	26	24	22	22	22	23	25	26	27	29	31	33	34	35	34	35	35	36	35	35.6
10-Jun	34	33	32	32	31	30	28	27	26	25	23	23	24	26	28	30	33	35	38	38	36	34	30	26	38.0
11-Jun	22	19	16	15	15	15	16	19	22	24	26	28	28	29	30	30	29	29	28	27	27	26	25	25	30.4
12-Jun	25	25	24	23	23	21	20	19	18	18	18	18	19	20	21	23	24	25	26	27	27	27	27	26	27.1
13-Jun	25	24	23	22	22	20	18	18	19	20	21	23	25	28	31	33	35	38	40	41	43	44	44	44	44.1
14-Jun	43	42	40	37	36	34	32	31	30	30	30	32	32	34	35	36	37	38	38	37	37	35	34	33	43.1
15-Jun	32	30	30	29	28	27	27	26	27	28	29	30	31	32	34	35	36	37	37	37	37	36	36	34	37.4
16-Jun	33	31	30	27	27	27	27	28	29	29	30	31	31	31	30	28	27	26	25	24	26	27	29	30	32.9
17-Jun	32	33	34	35	35	32	30	28	27	26	24	23	23	23	23	23	22	22	22	21	21	20	18	17	34.9
18-Jun	16	15	14	14	13	14	14	15	16	17	18	19	19	21	22	23	24	24	24	23	22	21	19	17	24.1
19-Jun	16	14	13	13	13	13	13	14	14	16	18	20	21	23	25	27	29	29	30	30	29	28	27	25	29.9
20-Jun	23	22	20	19	18	16	14	14	14	15	17	20	20	22	N	N	N	N	N	N	30	30	30	30	30.4
21-Jun	31	30	29	29	28	26	24	22	19	20	22	24	26	30	33	35	38	39	39	39	39	38	38	37	39.3
22-Jun	36	34	32	30	29	27	24	23	25	27	30	34	36	41	46	49	50	51	52	51	49	46	44	43	51.6
23-Jun	41	40	38	37	37	37	37	37	37	37	38	38	38	40	41	42	42	42	42	42	43	43	44	44	44.3
24-Jun	45	45	44	43	43	41	38	36	34	33	34	35	37	39	40	42	43	44	44	43	42	39	37	35	45.2
25-Jun	35	35	33	33	33	33	33	32	31	32	32	32	33	34	36	37	37	37	37	37	37	36	35	35	37.2
26-Jun	34	33	32	31	31	29	28	28	28	29	31	33	34	36	38	39	38	38	37	35	34	33	32	31	38.7
27-Jun	30	29	28	27	27	26	26	26	26	26	26	27	27	28	28	29	30	30	31	31	31	31	31	30	31.2
28-Jun	29	29	28	27	27	26	25	25	25	26	27	28	29	30	32	33	34	35	35	35	35	35	34	34	35.4
29-Jun	33	32	33	34	34	33	32	32	33	33	33	33	34	35	37	38	39	38	37	36	35	33	32	31	38.8
30-Jun	30	29	27	26	26	24	22	20	19	20	21	22	22	24	26	28	29	29	30	30	30	30	28	27	30.4
	47.5	46.2	44.5	43.0	42.8	40.7	37.9	36.7	36.5	36.5	37.8	39.7	40.7	42.8	46.2	48.9	50.1	51.0	51.6	51.1	49.6	48.8	47.5	46.1	
	Diurnal Maximums																								

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - June 2012

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

Maximum Value: 21.2 $\mu g/m^3$ on Jun 26 23:00

Maximum Daily Average: 12.2 $\mu g/m^3$ on Jun 5

Minimum Value: 1 $\mu g/m^3$ on Jun 20 17:00

Maximum Diurnal Average: 8.4 $\mu g/m^3$ at hour 23

Monthly Average: 6.85 $\mu g/m^3$

Minimum Daily Average: 3.8 $\mu g/m^3$ on Jun 17

Minimum Diurnal Average: 6.1 $\mu g/m^3$ at hour 5

Percentiles: P_1 = 1.8 P_{10} = 3.7 Q_1 = 4.8 Median = 6.1 Q_3 = 8.5 P_{90} = 10.7 P_{99} = 14.9

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	0
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-Jun	9	8	7	7	7	6	6	6	9	7	8	6	6	7	7	7	7	6	6	5	6	8	5	4	6.7	9.1
2-Jun	3	5	5	6	4	3	5	4	3	2	3	3	3	4	3	4	6	5	5	6	6	4	5	6	4.3	6.3
3-Jun	5	6	6	5	4	6	5	8	7	6	5	6	6	6	5	6	5	5	5	4	7	8	10	10	6.1	10.5
4-Jun	8	8	9	6	6	9	7	7	7	10	10	12	10	7	10	9	9	11	15	11	9	12	16	13	9.6	16.2
5-Jun	13	12	12	11	11	15	18	21	17	15	14	13	10	7	7	6	10	12	12	13	12	13	10	10	12.2	20.7
6-Jun	9	10	8	6	4	4	6	7	6	5	4	2	5	6	7	5	3	4	5	12	8	6	7	11	6.2	11.7
7-Jun	9	4	2	3	3	4	3	3	3	2	2	2	3	3	2	1	4	6	6	5	4	7	6	5	3.9	9.5
8-Jun	7	7	4	6	5	5	6	6	5	5	5	4	6	5	5	6	4	7	6	6	6	5	7	6	5.6	7.3
9-Jun	6	6	7	6	6	5	7	7	7	8	7	7	6	10	10	10	8	8	6	8	7	7	7	7	7.1	10.0
10-Jun	9	8	9	9	8	8	8	8	7	9	9	11	12	13	12	10	11	10	11	12	11	9	11	10	9.8	13.0
11-Jun	9	8	8	10	9	7	7	6	7	6	5	5	4	4	5	5	5	5	6	5	4	5	5	4	6.0	9.6
12-Jun	2	3	4	3	3	4	4	2	4	5	2	4	4	4	3	4	6	7	5	3	4	5	5	4	3.9	6.6
13-Jun	4	4	3	3	3	5	5	6	6	5	5	3	3	6	6	5	5	6	4	2	4	5	5	5	4.6	5.9
14-Jun	5	4	4	5	6	3	5	6	3	3	4	4	4	5	4	5	4	4	5	5	6	6	5	5	4.7	6.4
15-Jun	5	5	5	6	7	5	5	7	7	6	5	5	6	6	5	4	4	7	6	6	7	9	13	8	6.2	13.1
16-Jun	9	8	9	8	8	6	6	4	4	5	5	10	6	7	6	4	5	4	4	4	2	5	5	4	5.8	9.7
17-Jun	4	5	4	4	5	4	3	2	3	4	5	4	3	4	5	4	3	3	4	3	5	4	5	4	3.8	4.9
18-Jun	4	4	3	2	3	3	4	3	3	5	5	4	3	4	5	6	5	5	4	5	3	4	5	4	3.9	5.6
19-Jun	3	4	4	4	5	5	5	7	6	6	6	8	5	7	8	6	5	7	8	5	6	5	6	7	5.7	8.2
20-Jun	6	6	6	6	6	6	6	8	7	9	6	7	7	6	6	M	1	5	6	8	7	7	8	7	6.4	9.3
21-Jun	7	9	9	8	7	8	9	10	9	9	10	10	8	8	7	8	8	8	7	7	5	6	7	6	8.0	9.9
22-Jun	7	7	6	8	8	6	6	8	9	11	11	11	9	10	8	9	10	8	10	10	11	9	11	10	8.9	11.2
23-Jun	10	10	9	10	11	10	9	11	12	13	14	13	12	12	14	13	12	14	13	11	12	15	14	9	11.7	14.6
24-Jun	9	11	11	10	13	10	12	12	12	13	13	10	10	11	10	11	13	13	15	16	15	14	15	11	12.1	16.1
25-Jun	7	7	6	7	5	6	8	9	9	5	4	5	6	7	5	8	9	9	8	8	12	11	12	13	7.7	13.2
26-Jun	11	7	8	7	6	7	8	8	7	6	10	6	4	5	6	11	11	10	9	6	8	11	21	5	8.2	21.2
27-Jun	6	6	9	9	5	10	12	6	5	4	5	6	8	7	5	3	2	5	4	3	4	6	5	5	5.8	11.7
28-Jun	5	6	5	8	5	7	7	7	9	11	10	8	8	8	8	14	10	8	9	12	10	10	8	6	8.2	14.5
29-Jun	7	6	6	6	5	4	5	6	8	9	9	4	4	7	6	5	4	5	7	6	6	5	5	6	5.9	9.0
30-Jun	6	8	7	8	7	7	7	8	6	6	9	6	5	5	6	7	11	6	4	4	5	6	5	5	6.4	10.7
	6.9	6.6	6.5	6.6	6.1	6.3	6.8	7.1	6.9	7.0	7.0	6.6	6.1	6.7	6.4	6.8	6.6	7.1	7.2	7.0	7.0	7.5	8.4	7.1	Diurnal Average	
	13.0	11.7	12.3	10.6	12.9	14.9	18.0	20.7	17.5	15.1	14.4	13.1	12.4	13.0	13.6	14.5	12.6	13.6	15.1	16.1	15.4	14.6	21.2	13.2	Diurnal Maximum	

M - Maintenance

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

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - June 2012

Maximum Value: 26.0 $\mu g/m^3$ on Jun 26 23:00

Maximum Daily Average: 13.4 $\mu g/m^3$ on Jun 24

Minimum Value: 2 $\mu g/m^3$ on Jun 17 08:00

Maximum Diurnal Average: 9.5 $\mu g/m^3$ at hour 23

Monthly Average: 7.91 $\mu g/m^3$

Minimum Daily Average: 4.7 $\mu g/m^3$ on Jun 17

Minimum Diurnal Average: 7.1 $\mu g/m^3$ at hour 5

Percentiles: P_1 = 2.8 P_{10} = 4.6 Q_1 = 5.6 Median = 7.2 Q_3 = 9.6 P_{90} = 12.4 P_{99} = 18.8

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	0
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-Jun	10	9	8	8	8	7	7	8	10	8	8	7	6	8	7	8	8	7	7	7	7	8	8	5	7.6	10.0
2-Jun	4	6	6	6	6	4	5	5	3	3	4	4	4	4	4	5	7	6	6	6	6	6	6	7	5.1	7.0
3-Jun	6	7	6	6	5	6	7	8	8	6	6	7	6	6	6	7	6	7	6	5	8	9	11	11	6.9	11.1
4-Jun	9	9	10	8	7	10	9	8	8	10	11	12	11	8	11	10	9	13	17	15	10	16	17	14	11.0	17.2
5-Jun	13	12	13	12	12	16	20	22	20	16	15	15	11	8	8	8	12	12	13	13	13	13	12	11	13.4	21.6
6-Jun	11	11	9	7	6	6	8	8	7	5	6	3	6	6	9	9	5	5	6	13	11	8	10	12	7.8	13.1
7-Jun	12	7	3	3	4	5	4	4	3	3	3	3	3	4	3	3	6	7	7	6	5	8	7	6	4.9	11.6
8-Jun	7	8	7	9	8	6	7	7	6	6	6	6	6	6	5	7	6	8	8	7	6	6	8	7	6.7	9.3
9-Jun	6	6	7	7	7	6	7	7	7	8	8	8	7	10	11	10	10	8	8	9	8	8	8	8	7.9	10.7
10-Jun	9	9	10	9	9	8	8	9	8	9	9	11	14	14	12	11	12	11	12	12	12	10	11	10	10.5	14.3
11-Jun	10	9	9	10	10	7	8	7	8	7	5	5	4	5	6	6	6	6	7	5	5	6	6	5	6.8	10.4
12-Jun	3	4	5	4	4	5	5	4	5	6	4	5	4	5	4	5	7	8	7	4	4	6	6	4	4.8	7.5
13-Jun	5	5	4	4	3	5	6	6	7	6	6	4	5	6	8	8	8	7	5	3	5	5	6	6	5.6	8.0
14-Jun	5	5	5	6	7	4	6	6	5	5	5	5	4	5	5	6	5	5	6	5	7	7	5	6	5.5	7.0
15-Jun	6	6	5	7	7	6	6	8	8	6	6	6	6	7	6	4	6	8	7	7	8	14	16	9	7.2	16.3
16-Jun	10	9	9	9	9	7	7	6	5	5	6	12	11	10	10	5	6	5	5	5	3	7	7	5	7.2	11.9
17-Jun	5	5	4	5	6	6	3	2	4	5	6	4	4	6	6	5	4	4	5	4	5	5	6	5	4.7	6.0
18-Jun	5	5	5	3	4	4	4	4	5	5	5	5	4	5	5	6	5	5	5	6	4	4	5	5	4.7	6.2
19-Jun	4	4	4	5	6	5	6	7	7	6	7	8	7	8	9	8	6	8	9	7	6	6	7	8	6.6	9.2
20-Jun	7	7	7	6	7	7	6	9	8	10	8	7	8	7	7	M	4	6	8	9	7	8	8	8	7.3	10.4
21-Jun	8	9	9	9	7	10	10	10	10	10	10	10	10	9	8	9	8	9	8	8	6	8	8	7	8.8	10.2
22-Jun	7	7	8	8	8	7	8	8	11	11	11	12	10	11	9	9	10	9	11	11	11	10	12	11	9.7	11.6
23-Jun	10	10	10	11	11	10	10	12	13	14	14	14	12	13	15	14	13	14	13	12	14	16	15	15	12.8	15.8
24-Jun	12	12	11	11	14	12	12	13	14	14	14	11	11	13	11	13	13	14	19	19	16	16	16	12	13.4	19.2
25-Jun	10	8	7	7	6	7	8	10	10	7	5	6	8	8	7	9	9	10	8	11	13	13	13	14	9.0	14.3
26-Jun	15	8	8	9	7	8	9	9	8	7	11	10	5	6	7	13	12	12	9	7	9	24	26	7	10.3	26.0
27-Jun	7	6	13	13	6	13	15	9	6	5	6	7	10	10	6	5	3	6	5	4	5	6	6	5	7.3	14.6
28-Jun	5	6	7	9	7	8	8	8	9	12	11	11	9	9	11	16	13	8	12	13	11	10	9	7	9.5	16.2
29-Jun	7	7	6	6	6	5	6	7	8	12	12	5	5	8	8	6	5	7	8	6	7	6	5	7	6.9	11.9
30-Jun	7	8	8	8	8	8	8	8	8	7	9	9	6	6	6	9	12	9	5	5	5	6	6	7	7.4	11.9
	7.9	7.4	7.5	7.5	7.1	7.3	7.8	8.0	7.9	7.9	7.9	7.7	7.2	7.8	7.7	8.1	7.8	8.2	8.3	8.2	8.0	9.1	9.5	8.1	Diurnal Average	
	14.6	12.4	13.1	13.4	13.6	16.4	20.2	21.6	19.7	16.0	15.0	15.1	13.8	14.3	14.8	16.2	13.3	14.1	19.0	19.2	16.3	24.3	26.0	14.5	Diurnal Maximum	

M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - June 2012

Pollutant Rose

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

Beaverlodge - June 2012

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

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - June 2012

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

Maximum Value: 24.1 °C on Jun 22 15:00

Maximum Daily Average: 18.4 °C on Jun 22

Minimum Value: 2 °C on Jun 3 05:00

Minimum Daily Average: 11.1 °C on Jun 18

Maximum Diurnal Average: 18.0 °C at hour 17

Minimum Diurnal Average: 9.5 °C at hour 5

Monthly Average: 14.28 °C

Percentiles: P_1 = 4.6 P_{10} = 9.4 Q_1 = 11.4 Median = 14.1 Q_3 = 17.4 P_{90} = 19.8 P_{99} = 23.4

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	0
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-Jun	10	9	7	5	4	5	7	9	12	15	16	17	17	18	18	16	16	18	18	18	16	14	11	9	12.8	18.4
2-Jun	9	8	7	8	8	7	8	9	9	10	11	13	14	15	16	16	16	16	16	15	14	11	9	7	11.4	16.4
3-Jun	6	5	4	3	2	4	6	9	12	14	15	16	17	17	18	18	18	18	18	17	15	13	12	12	12.0	18.2
4-Jun	11	10	9	10	9	7	10	12	13	15	17	18	19	19	20	20	21	21	20	20	18	18	17	16	15.4	20.6
5-Jun	16	15	15	15	13	12	12	11	11	11	11	12	12	12	13	13	14	14	14	14	13	13	13	13	13.0	16.0
6-Jun	12	12	12	12	11	11	11	11	11	12	12	12	12	12	13	12	12	12	12	12	12	12	14	14	12.1	13.9
7-Jun	12	10	9	9	9	9	7	7	8	8	9	11	13	14	15	16	17	17	17	16	14	14	13	13	11.9	17.4
8-Jun	12	12	11	11	10	10	10	10	10	11	13	14	15	16	16	17	18	17	16	15	15	14	11	10	13.0	17.6
9-Jun	10	10	10	9	9	9	9	11	13	15	15	16	16	18	19	18	18	16	14	13	14	12	11	12	13.2	18.7
10-Jun	12	12	12	11	11	11	11	11	11	12	12	14	16	16	18	19	18	18	19	17	16	15	14	13	14.2	18.6
11-Jun	13	12	11	11	10	10	12	15	18	20	20	20	21	22	22	22	21	20	20	18	17	16	15	15	16.6	21.7
12-Jun	14	13	13	12	12	12	14	14	15	16	17	18	18	18	18	19	19	19	19	18	17	15	14	14	15.7	18.9
13-Jun	12	12	12	11	11	11	12	14	15	16	17	17	17	19	19	19	19	19	18	17	16	14	12	11	14.9	19.3
14-Jun	10	9	7	6	6	7	9	11	12	14	13	15	14	15	15	15	15	15	15	14	13	12	11	10	11.7	15.4
15-Jun	9	8	8	7	5	5	8	10	12	13	14	14	14	15	16	17	17	18	17	16	15	14	13	12	12.4	17.5
16-Jun	11	12	11	10	9	9	10	10	11	13	14	15	15	17	17	17	18	19	19	18	16	14	12	12	13.7	19.0
17-Jun	11	10	10	10	10	10	12	13	13	14	15	15	15	14	15	17	17	15	13	13	13	12	11	11	12.9	16.9
18-Jun	11	10	10	10	9	9	10	10	11	11	12	12	N	13	12	12	13	13	13	12	12	11	11	10	11.1	13.0
19-Jun	10	10	10	9	9	9	10	11	12	13	15	16	17	17	14	15	16	16	13	14	14	13	12	11	12.7	16.8
20-Jun	10	10	10	9	8	8	10	12	14	16	17	19	20	21	21	19	19	19	20	22	20	17	15	15	15.4	21.7
21-Jun	14	12	12	11	10	10	12	14	17	19	20	21	22	23	23	23	23	24	20	16	16	15	15	15	17.0	23.8
22-Jun	14	13	11	11	11	12	13	17	19	20	20	22	23	24	24	23	24	24	23	22	20	19	17	16	18.4	24.1
23-Jun	16	16	15	15	15	16	17	17	19	20	20	19	19	21	21	19	19	19	19	19	20	19	19	18	18.3	21.0
24-Jun	17	16	16	16	15	14	15	16	17	19	20	21	21	21	21	20	20	21	21	20	19	17	15	15	18.0	21.4
25-Jun	14	13	13	13	10	11	12	14	16	17	17	18	19	20	20	20	20	20	20	19	18	15	14	13	16.1	20.5
26-Jun	12	11	10	9	9	10	10	12	15	17	17	18	19	19	18	17	15	14	14	15	14	12	10	9	13.6	18.8
27-Jun	9	9	10	9	10	11	12	12	13	13	14	15	16	16	16	16	16	16	15	14	14	12	10	10	13.0	16.5
28-Jun	9	9	9	8	7	8	10	12	15	17	18	20	20	21	21	21	22	22	21	20	19	18	14	14	15.6	21.6
29-Jun	14	13	13	12	12	12	12	13	15	18	19	20	20	20	21	21	21	21	19	19	18	16	15	14	16.5	21.0
30-Jun	14	12	10	11	11	11	12	14	16	18	19	19	20	20	20	17	18	18	18	18	17	15	14	12	15.6	20.3
	11.9	11.1	10.6	10.0	9.5	9.7	10.8	12.0	13.5	14.8	15.7	16.5	17.3	17.7	18.0	17.7	18.0	17.9	17.4	16.7	15.8	14.4	13.2	12.6	Diurnal Average	
	16.7	16.2	16.4	15.7	15.0	16.2	17.2	17.1	18.7	20.3	20.3	22.3	23.3	23.8	24.1	23.4	23.7	23.9	23.5	21.8	20.1	19.2	18.7	17.6	Diurnal Maximum	

N - Not Valid

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2012

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

Maximum Value: 100.0 % on Jun 6 01:00 Maximum Daily Average: 99.2 % on Jun 6

Minimum Value: 22 % on Jun 3 16:00 Minimum Daily Average: 40.0 % on Jun 3

Maximum Diurnal Average: 82.1 % at hour 6 Minimum Diurnal Average: 50.1 % at hour 15

Monthly Average: 64.85 % Percentiles: P_1 = 25.5 P_{10} = 36.1 Q_1 = 49.5 Median = 64.4 Q_3 = 80.7 P_{90} = 93.8 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	0
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-Jun	51	56	64	73	76	74	68	59	52	38	32	31	34	33	34	52	51	44	42	43	51	59	77	91	53.5	91.3
2-Jun	95	97	97	90	85	83	77	68	60	55	51	40	32	30	30	28	28	29	30	31	35	44	48	52	54.8	97.5
3-Jun	58	62	63	67	71	65	62	53	39	30	26	26	25	24	23	22	23	22	23	26	33	39	40	38	40.0	71.1
4-Jun	46	51	54	47	52	68	53	44	46	43	35	34	33	33	31	31	29	30	31	33	38	41	46	50	41.7	68.4
5-Jun	53	58	59	62	78	81	86	95	96	95	96	96	97	98	97	95	92	91	90	92	94	97	99	99	87.3	99.1
6-Jun	100	100	100	100	100	100	100	100	100	100	99	98	98	97	97	98	99	98	99	100	100	100	100	99	99.2	100.0
7-Jun	100	100	100	98	96	94	93	92	91	88	78	71	62	53	49	42	40	40	44	51	56	57	58	63	71.5	100.0
8-Jun	64	67	74	76	80	85	86	87	85	82	75	69	64	58	56	51	49	51	61	62	62	70	94	98	71.2	98.4
9-Jun	91	91	91	91	89	88	88	85	77	73	68	66	68	63	57	57	56	65	78	86	77	85	91	89	77.9	91.3
10-Jun	90	93	92	93	94	93	93	97	99	100	97	91	76	68	61	55	57	60	57	70	78	86	87	90	82.4	99.7
11-Jun	85	80	81	78	78	77	71	61	54	51	50	50	49	47	47	46	47	49	52	56	60	63	67	66	61.1	85.5
12-Jun	68	74	78	80	82	84	74	75	69	63	59	54	52	51	46	45	45	46	47	48	55	62	62	64	61.8	83.8
13-Jun	73	74	70	76	79	82	82	70	60	54	48	48	44	36	34	31	30	31	31	32	34	39	46	52	52.4	82.0
14-Jun	56	58	67	73	65	66	58	54	46	40	38	34	34	33	31	33	33	33	36	38	45	53	55	56	47.4	73.3
15-Jun	57	61	63	68	78	78	66	60	51	43	36	36	37	35	33	31	30	30	32	36	42	49	53	58	48.5	77.9
16-Jun	60	59	61	72	86	95	92	92	88	84	76	73	72	68	65	62	62	58	55	58	65	77	82	82	72.7	94.7
17-Jun	84	86	86	85	85	84	75	70	66	65	60	60	60	72	66	56	58	66	72	76	83	90	92	93	74.6	92.8
18-Jun	90	89	90	89	89	92	94	95	94	94	94	93	N	89	89	93	89	85	85	94	94	95	96	98	91.7	98.1
19-Jun	99	100	99	97	97	97	94	89	83	80	75	67	58	57	72	68	61	66	82	79	76	77	82	91	81.2	99.6
20-Jun	92	94	94	97	99	98	92	86	79	73	60	53	46	45	44	54	52	54	53	46	49	60	69	67	69.0	98.6
21-Jun	69	78	81	83	87	89	83	80	74	62	56	50	47	45	44	41	40	38	49	65	64	70	71	67	63.8	88.6
22-Jun	79	78	88	88	89	88	84	70	60	58	57	50	43	39	36	42	40	34	36	43	57	62	67	70	60.8	89.3
23-Jun	68	67	71	70	71	67	64	66	64	61	61	65	66	61	57	68	66	64	61	59	58	58	58	63	63.9	71.0
24-Jun	68	74	72	76	79	81	82	80	77	71	63	59	55	52	56	64	63	59	60	63	70	78	88	78	69.5	88.4
25-Jun	73	81	80	74	89	87	81	72	61	55	50	50	42	38	34	33	32	32	32	34	39	45	48	52	54.7	89.0
26-Jun	56	60	66	68	66	66	68	59	43	37	34	34	34	38	39	46	52	57	54	52	54	59	69	69	53.3	69.0
27-Jun	69	70	70	73	70	67	64	64	62	56	53	48	46	45	45	45	45	45	48	51	52	57	65	66	57.3	73.1
28-Jun	70	69	70	74	78	76	72	66	58	50	45	42	43	42	42	43	40	37	45	52	54	52	75	76	57.2	77.7
29-Jun	76	72	69	71	75	78	81	77	66	55	48	44	43	43	41	40	41	41	46	48	53	57	61	64	58.1	81.3
30-Jun	65	74	80	79	80	83	81	78	71	62	53	51	52	48	46	67	67	68	61	63	66	74	77	85	68.1	84.7
	73.6	75.8	77.7	78.9	81.4	82.1	78.8	74.8	69.2	63.9	59.1	56.1	52.1	51.4	50.1	51.4	50.6	50.9	53.1	56.2	59.8	65.1	70.8	72.8	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.6	97.9	97.8	97.7	97.5	98.0	98.7	98.3	99.1	99.9	100.0	100.0	99.8	99.1	Diurnal Maximum	

N - Not Valid

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - June 2012

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	2	3	2	4	3	4	4	5	4	7	9	7	5	9	25	12	8	8	3	2	9	25	15	5.0	25.1
Dir	315	313	82	122	63	96	184	204	207	193	211	182	162	188	193	234	214	173	222	235	28	281	259	276	225	234
2 Spd	8	7	2	6	11	13	10	13	19	19	22	23	25	24	24	28	26	27	21	20	19	12	11	4	16.2	28.0
Dir	247	243	226	287	273	261	276	278	265	256	248	240	252	254	257	263	259	260	267	274	262	253	252	250	259	263
3 Spd	2	3	3	3	3	3	2	5	13	19	18	15	9	12	14	15	12	13	13	7	7	3	4	5	6.3	19.2
Dir	95	65	80	144	67	122	100	223	276	280	270	255	283	289	257	264	264	282	280	284	271	344	38	330	275	280
4 Spd	3	5	5	13	6	7	10	6	3	7	16	24	24	26	29	31	32	31	35	34	28	32	30	32	16.3	35.0
Dir	321	221	11	337	329	277	349	19	93	115	111	101	102	102	97	89	86	90	83	79	75	78	77	77	82	83
5 Spd	35	38	35	34	37	36	35	31	36	36	37	37	34	29	26	19	18	15	14	12	9	8	6	6	25.5	38.1
Dir	78	73	73	74	70	73	86	84	74	82	84	91	92	94	96	98	88	83	60	83	73	104	63	33	81	73
6 Spd	8	9	8	11	14	12	15	12	13	14	19	27	22	16	15	22	15	10	10	11	13	8	27	16	12.3	27.1
Dir	51	59	31	33	39	34	19	70	82	82	91	89	92	85	64	82	77	60	45	27	354	327	90	117	67	90
7 Spd	9	11	9	10	12	10	24	20	14	17	14	13	12	19	9	19	5	5	15	12	10	10	9	4	6.8	23.7
Dir	169	164	185	199	227	245	224	235	217	221	213	216	218	230	239	223	176	92	94	74	43	51	43	341	208	224
8 Spd	8	11	9	11	9	11	14	15	13	14	13	10	11	10	9	11	14	14	12	14	14	5	10	11	10.1	15.4
Dir	321	322	312	313	303	297	302	311	312	312	316	319	308	307	327	302	290	297	339	316	330	16	119	263	312	311
9 Spd	11	8	6	7	8	10	14	17	18	16	14	18	22	19	18	16	13	7	8	5	13	14	11	12	12.2	22.2
Dir	289	295	304	279	299	315	316	319	333	339	333	321	310	311	317	331	336	353	2	316	330	302	300	295	318	310
10 Spd	15	13	13	12	11	9	8	11	12	13	13	12	14	12	10	9	16	13	9	13	7	4	5	4	8.4	15.9
Dir	306	310	311	305	304	295	290	301	308	308	304	312	308	328	328	298	269	261	229	215	192	138	146	178	292	269
11 Spd	10	9	2	3	2	2	4	9	19	29	27	31	33	34	31	34	32	32	29	26	21	17	14	20	18.5	33.9
Dir	220	217	153	173	137	118	161	210	248	268	261	259	256	250	249	256	269	265	248	252	245	259	256	247	252	250
12 Spd	20	11	9	7	7	7	15	13	17	18	21	26	29	29	30	28	25	26	28	23	16	11	8	5	17.7	29.9
Dir	247	230	225	234	218	226	244	249	251	256	238	242	245	242	240	247	239	238	241	239	241	258	264	251	243	240
13 Spd	1	1	4	0	1	2	3	11	16	16	20	16	17	24	23	30	30	31	28	28	22	19	17	12	14.8	30.6
Dir	83	124	268	188	85	145	207	261	284	297	276	274	270	272	268	263	259	258	265	268	267	270	263	266	267	258
14 Spd	11	6	6	3	5	4	8	12	16	14	10	10	13	14	12	12	15	15	13	17	12	10	7	4	9.8	16.7
Dir	264	255	248	42	243	325	302	261	287	291	310	285	295	279	264	296	277	278	280	270	265	267	272	273	279	270
15 Spd	6	4	7	2	3	1	1	5	13	12	11	13	16	18	15	13	17	16	15	10	6	3	7	10	7.3	17.6
Dir	256	234	274	256	123	32	221	237	234	242	226	233	243	231	230	235	246	261	254	254	241	75	77	97	239	231
16 Spd	12	13	7	5	4	10	15	17	18	15	10	8	6	7	18	17	14	18	27	30	25	17	18	11	8.0	29.7
Dir	99	106	117	197	159	98	116	126	132	124	138	152	149	181	223	230	218	241	253	252	243	234	223	232	196	252
17 Spd	7	9	4	5	5	13	16	22	25	27	26	24	24	12	13	17	16	18	14	8	8	7	4	7	11.3	27.1
Dir	202	221	241	237	225	225	240	243	252	261	266	263	261	347	311	296	324	333	328	314	272	279	290	273	272	261
18 Spd	8	7	8	8	9	11	12	11	12	13	14	17	18	9	12	14	17	17	16	13	10	8	8	9	10.8	18.0
Dir	261	260	258	259	282	292	291	284	285	294	288	292	296	311	343	302	309	305	307	316	340	335	328	330	300	296
19 Spd	8	8	9	10	10	8	9	11	17	18	15	12	13	17	12	3	15	22	13	10	8	5	1	2	9.8	21.6
Dir	326	317	316	325	316	312	308	309	308	309	310	311	324	312	6	47	258	279	335	302	298	307	284	59	311	279
20 Spd	1	4	7	3	1	1	1	4	3	4	2	5	2	5	11	23	14	5	4	2	3	6	7	8	1.3	22.8
Dir	22	291	295	333	27	238	208	242	221	205	304	78	130	125	220	247	277	347	26	124	64	50	50	55	275	247
21 Spd	4	3	1	4	1	0	1	2	2	7	13	16	19	18	20	23	24	19	9	17	11	1	6	9	5.7	24.5
Dir	70	201	283	49	244	117	221	195	129	111	103	99	92	89	76	87	82	86	280	268	309	129	44	11	82	82
22 Spd	13	11	5	4	4	2	4	7	15	17	15	23	28	28	29	18	22	27	22	12	9	7	11	12	12.9	28.8
Dir	17	28	54	55	31	21	318	105	102	95	92	86	80	72	80	109	94	87	84	74	132	45	38	44	78	80

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - June 2012

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	12	11	12	11	8	10	16	17	17	20	21	18	15	15	20	23	22	22	22	22	20	24	27	24	16.6	27.0
Dir	60	62	62	71	64	79	86	88	101	96	121	136	120	96	117	62	66	74	74	72	75	76	83	108	86	83
24 Spd	25	22	23	21	16	15	11	10	6	3	8	5	6	4	9	14	10	13	9	8	8	11	11	12	8.7	25.0
Dir	98	91	95	107	100	103	117	161	207	244	329	338	41	85	141	130	107	91	105	109	95	97	108	258	105	98
25 Spd	11	3	3	8	10	6	9	7	11	21	23	16	20	22	28	26	28	28	30	21	19	12	7	9	15.1	29.8
Dir	293	268	223	245	208	220	244	234	253	233	257	259	241	259	246	251	247	243	250	253	263	274	301	283	251	250
26 Spd	7	6	8	5	7	6	6	12	20	30	32	28	26	25	27	26	28	25	22	23	26	25	11	11	17.4	32.2
Dir	264	240	248	211	247	231	211	212	236	245	247	229	231	262	273	292	280	263	252	257	259	255	246	240	252	247
27 Spd	12	11	11	10	11	22	30	31	31	36	32	37	36	38	37	38	34	35	33	33	30	16	9	9	25.6	38.1
Dir	238	231	236	242	255	263	264	264	262	267	266	264	254	244	248	240	256	254	257	254	252	248	237	248	254	244
28 Spd	9	7	9	7	2	2	4	6	6	10	7	6	5	4	7	9	3	3	1	5	3	10	11	7	3.6	10.7
Dir	246	250	226	222	163	91	216	206	244	274	285	239	145	163	151	156	104	217	8	129	273	293	285	293	235	285
29 Spd	8	9	6	8	7	7	6	8	12	23	29	31	28	28	29	29	28	30	26	24	16	13	14	9	17.4	31.2
Dir	264	276	270	232	239	236	229	220	233	234	240	237	254	257	263	266	258	262	257	254	257	263	271	264	253	237
30 Spd	7	1	2	2	1	2	3	2	7	11	14	15	12	11	15	12	6	13	15	7	5	5	6	2	6.2	14.9
Dir	245	184	114	95	141	134	192	190	225	225	233	254	256	261	223	266	320	229	243	221	219	197	237	141	236	254
Spd	1.6	0.4	0.6	0.6	0.8	1.2	2.8	4.4	6.2	7.5	7.5	6.7	6.6	6.4	6.7	8.5	7.6	7.5	7.1	7.0	5.9	3.3	0.8	1.9	Diurnal Average	
Dir	282	265	309	309	305	283	261	248	258	261	255	245	251	258	249	254	265	264	269	266	273	283	292	281		
Spd	35.4	38.1	34.8	34.0	36.5	36.4	35.2	30.6	35.5	35.8	37.2	36.7	36.4	38.1	37.4	38.1	33.9	34.9	35.0	34.2	29.5	31.7	29.9	32.3	Diurnal Maximum	
Dir	78	73	73	74	70	73	86	264	74	267	84	91	254	244	248	240	256	254	83	79	252	78	77	77		

Maximum Speed Value: 38 km/h on Jun 27 14:00
Maximum Daily Speed Average: 25.6 km/h on Jun 5
Maximum Diurnal Speed Average: 8.5 km/h at hour 16

Minimum Speed Value: 0 km/h on Jun 13 04:00
Minimum Daily Speed Average: 1.3 km/h on Jun 20
Minimum Diurnal Speed Average: 0.4 km/h at hour 2

Monthly Average Velocity: 4.47 km/h 261.4 deg

Speed Percentiles: P_1 = 1.0 P_{10} = 3.6 Q_1 = 7.1 Median = 12.0 Q_3 = 18.6 P_{90} = 27.8 P_{99} = 36.5

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

Hours in Service:	720
Hours of Data:	720
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	7	8	8	0	0	0	23
NorthEast	15	20	10	2	0	0	47
East	15	15	30	31	25	1	117
SouthEast	21	13	8	2	0	0	44
South	15	15	0	0	0	0	30
SouthWest	22	53	37	27	8	2	149
West	10	42	67	47	32	0	198
NorthWest	8	42	60	2	0	0	112
Total	113	208	220	111	65	3	720

Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - June 2012

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - June 2012

Maximum Speed: 38 km/h on Jun 27 16:00

Maximum Daily Speed Average: 26.1 km/h on Jun 27

Minimum Speed: 1 km/h on Jun 15 07:00

Minimum Daily Speed Average: 6.2 km/h on Jun 20

Maximum Diurnal Speed Average: 21.1 km/h at hour 16

Minimum Diurnal Speed Average: 8.2 km/h at hour 5

Monthly Average Speed: 14.33 km/h

Percentiles: $P_1 = 2.2$ $P_{10} = 4.4$ $Q_1 = 7.6$ Median = 12.4 $Q_3 = 19.3$ $P_{90} = 28.2$ $P_{99} = 36.9$

Hours in Service:	720
Hours of Data:	720
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-Jun	4	3	3	4	4	4	4	5	6	5	8	10	8	7	11	25	12	9	9	4	4	13	25	16	8.4	25.4
2-Jun	9	7	4	6	11	13	11	13	19	19	23	24	26	25	25	29	26	28	22	20	20	12	11	5	16.9	28.6
3-Jun	3	4	4	4	4	3	4	5	13	20	19	17	11	14	16	17	13	14	13	7	7	6	5	6	9.6	19.9
4-Jun	7	7	6	14	9	8	10	7	8	10	17	24	25	26	30	32	32	31	35	34	28	32	30	32	20.6	35.2
5-Jun	35	38	35	34	37	36	35	31	36	36	37	37	34	29	26	19	18	15	14	13	10	8	6	6	26.1	38.1
6-Jun	8	9	8	11	14	12	16	13	13	17	20	27	22	17	15	23	15	10	10	12	14	8	28	18	15.0	27.5
7-Jun	9	11	9	10	12	13	24	20	15	18	15	13	13	20	11	20	7	8	15	12	11	10	9	7	13.0	24.0
8-Jun	9	11	9	11	10	12	14	16	13	14	14	10	12	11	11	12	14	14	13	14	14	11	11	11	12.0	15.5
9-Jun	12	8	6	8	8	10	14	17	18	16	14	18	22	20	18	17	14	12	9	7	13	14	12	13	13.3	22.5
10-Jun	15	13	13	12	11	10	8	12	12	13	13	12	15	12	11	11	16	13	9	13	7	4	5	5	11.1	16.3
11-Jun	10	9	3	4	3	3	4	9	20	29	27	32	34	34	32	34	33	32	29	26	21	17	14	20	20.0	34.4
12-Jun	20	11	9	7	7	8	15	13	17	19	22	26	30	29	30	28	26	26	28	23	16	11	8	5	18.1	30.2
13-Jun	3	2	4	2	2	2	3	12	17	17	20	17	18	25	23	30	31	31	28	28	22	19	17	12	16.0	31.2
14-Jun	11	7	6	4	5	5	8	13	17	15	11	11	13	15	13	13	15	15	13	17	12	10	8	4	10.9	16.9
15-Jun	6	4	7	4	3	2	1	5	13	13	12	14	16	18	16	14	17	17	15	10	6	5	7	10	9.9	18.0
16-Jun	12	13	7	6	5	11	15	17	18	15	11	8	6	8	19	17	15	18	28	30	25	17	18	11	14.6	29.9
17-Jun	7	9	5	5	6	13	16	22	25	27	27	24	24	12	13	18	16	18	14	8	8	7	5	7	14.1	27.2
18-Jun	8	7	8	8	9	11	12	11	12	13	14	17	18	9	13	14	17	18	16	13	10	8	8	9	11.8	18.3
19-Jun	8	8	9	10	10	8	9	11	17	18	15	13	14	18	18	12	16	22	13	10	9	5	3	3	11.6	22.5
20-Jun	2	5	7	4	2	3	2	4	4	5	5	6	4	7	13	23	15	7	5	2	3	6	7	8	6.2	23.0
21-Jun	4	4	4	4	3	3	2	3	3	8	14	17	19	19	21	24	25	20	17	18	12	8	6	9	11.1	24.8
22-Jun	13	13	6	4	4	4	5	7	15	17	15	24	29	29	29	20	23	27	23	12	9	7	11	12	14.9	29.3
23-Jun	12	12	12	11	8	10	16	17	18	20	21	18	16	16	21	23	22	22	22	22	20	24	27	24	18.0	27.2
24-Jun	25	22	23	21	16	15	11	10	6	5	9	6	7	7	9	14	10	13	9	8	8	11	11	16	12.2	25.3
25-Jun	12	5	5	8	11	6	9	7	12	21	24	18	21	23	28	27	29	28	30	21	19	12	7	9	16.3	30.0
26-Jun	8	6	9	6	7	6	7	12	21	31	33	28	27	26	28	26	28	25	22	24	27	25	11	11	18.8	32.7
27-Jun	12	11	11	10	11	22	30	31	31	36	33	37	37	38	38	38	34	35	33	34	30	16	9	10	26.1	38.4
28-Jun	9	7	10	8	4	3	5	6	7	11	8	8	7	6	9	9	4	4	4	6	6	11	11	7	7.1	11.1
29-Jun	8	9	6	8	7	7	7	8	12	23	30	32	29	28	30	29	28	30	27	24	16	13	14	9	18.1	31.6
30-Jun	7	2	4	2	3	3	3	2	8	11	14	16	13	12	16	16	7	14	15	7	5	5	6	3	8.2	16.0
	10.3	9.2	8.4	8.3	8.2	8.8	10.6	12.0	14.8	17.4	18.1	18.8	19.0	18.6	19.9	21.1	19.3	19.3	18.0	15.9	13.7	11.8	11.7	10.6	Diurnal Average	
	35.5	38.1	34.9	34.1	36.6	36.5	35.5	30.8	35.6	36.0	37.3	36.9	36.9	38.4	38.0	38.4	34.4	35.3	35.2	34.3	29.6	31.8	30.0	32.4	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

Beaverlodge - June 2012

Maximum Value: 89.8 deg on Jun 21 05:00

Minimum Value: 2.8 deg on Jun 13 23:00

Percentiles: P_1 = 3.1 P_{10} = 5.1 Q_1 = 7.8 Median = 12.7 Q_3 = 23.5 P_{90} = 49.8 P_{99} = 83.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	25	81	45	52	16	46	41	20	26	48	38	34	40	44	47	8	19	28	33	49	72	56	7	13	81.0
2-Jun	26	10	76	30	4	3	13	11	9	9	11	13	14	18	17	12	13	9	13	9	6	3	5	63	76.1
3-Jun	52	29	47	38	59	31	60	23	24	15	16	30	51	29	24	29	25	23	18	23	24	63	41	34	63.0
4-Jun	89	66	46	27	87	34	19	15	80	75	15	12	15	14	11	7	7	10	6	5	3	3	3	3	88.9
5-Jun	3	3	3	3	3	3	6	5	5	4	5	4	4	4	5	5	6	14	9	8	6	16	9	21	21.1
6-Jun	15	9	9	5	8	13	19	21	7	54	17	5	6	7	12	10	9	9	18	18	13	20	14	32	53.7
7-Jun	25	19	15	11	18	36	9	11	11	19	20	14	27	20	35	15	56	55	12	12	11	13	9	54	55.5
8-Jun	18	10	15	10	19	11	10	7	9	10	16	19	16	27	31	25	16	18	18	8	11	53	28	16	53.2
9-Jun	8	5	9	14	10	10	7	6	8	8	10	11	10	14	10	22	29	51	35	41	10	10	11	5	50.8
10-Jun	5	6	5	5	5	6	5	6	6	6	8	16	13	17	30	27	15	11	14	8	12	23	13	13	29.6
11-Jun	8	9	50	36	43	29	17	28	13	9	10	6	7	10	14	8	8	8	8	7	5	9	8	5	49.8
12-Jun	4	8	6	8	14	10	6	8	8	13	9	9	10	7	8	8	8	8	6	4	5	8	5	18	18.2
13-Jun	72	49	28	89	72	22	37	19	13	13	13	30	31	14	16	10	13	9	12	5	5	7	3	3	88.6
14-Jun	4	16	12	54	52	46	14	15	16	17	19	31	19	18	31	20	16	14	18	9	5	4	15	17	54.1
15-Jun	17	33	13	85	36	87	57	17	14	19	29	23	15	12	18	27	17	19	12	11	6	58	7	7	86.9
16-Jun	3	4	23	18	24	14	6	6	6	11	15	22	27	34	12	9	9	18	7	7	4	6	4	9	34.3
17-Jun	8	7	48	20	29	7	8	7	6	6	7	9	15	16	17	13	11	9	9	16	11	10	26	13	48.5
18-Jun	12	5	6	11	11	4	4	5	5	7	7	6	9	19	18	15	8	7	10	11	9	6	9	13	18.6
19-Jun	9	5	7	4	6	6	7	8	6	8	12	14	19	13	50	82	13	17	11	9	11	12	69	17	81.5
20-Jun	73	40	8	48	54	76	63	25	51	31	79	45	72	52	50	7	21	47	54	43	15	9	5	4	78.8
21-Jun	13	42	81	44	90	82	79	46	50	29	15	15	17	15	15	10	10	11	81	25	16	75	21	13	89.8
22-Jun	5	38	22	11	14	84	71	54	10	9	15	11	14	12	11	32	12	8	9	5	12	19	9	3	83.6
23-Jun	4	3	9	7	36	13	9	6	11	9	11	8	17	17	18	6	4	5	3	4	6	7	6	11	36.1
24-Jun	9	5	9	3	3	4	9	14	23	62	31	40	40	66	13	9	14	10	12	11	6	11	9	62	66.1
25-Jun	37	55	65	24	18	23	11	21	22	11	13	22	15	17	12	10	9	8	7	7	5	14	10	6	64.9
26-Jun	13	13	21	34	18	24	15	6	9	13	11	10	10	14	19	8	7	7	5	7	8	8	4	12	34.4
27-Jun	4	4	4	9	8	3	4	5	5	6	7	8	9	7	10	7	10	8	7	5	5	7	4	9	10.3
28-Jun	6	10	9	51	60	53	35	21	25	20	26	46	45	60	41	25	69	50	82	29	64	17	15	7	81.6
29-Jun	9	11	11	6	18	17	11	7	12	9	8	9	13	10	11	10	10	9	12	6	5	10	7	16	18.0
30-Jun	29	89	51	36	62	60	37	42	23	13	18	20	17	41	29	38	38	24	8	14	20	14	23	67	89.4
	88.9	89.4	80.7	88.6	89.8	86.9	79.0	54.0	79.7	74.5	78.8	46.2	71.6	66.1	50.3	81.5	69.1	55.2	81.6	48.8	72.2	74.9	69.3	66.5	

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2012

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

Maximum Value: 12.0 ppb on Jun 3 01:00

Maximum Daily Average: 3.2 ppb on Jun 18

Minimum Value: 0 ppb on Jun 1 05:00

Minimum Daily Average: 0.0 ppb on Jun 6

Maximum Diurnal Average: 1.3 ppb at hour 11

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 0.64 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.5 P_{90} = 1.6 P_{99} = 8.3

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	0	0	0	0	0	0.4	3.8
2-Jun	A	1	3	4	1	3	1	0	0	0	0	3	2	2	1	1	0	0	0	0	0	1	1	A	1.1	4.1
3-Jun	12	10	5	6	0	2	2	1	1	1	4	2	0	0	0	0	0	0	0	0	0	0	A	0	2.1	12.0
4-Jun	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	0.3
5-Jun	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
6-Jun	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
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
8-Jun	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	A	2	0	0	2	2	1	0.5	1.9
9-Jun	1	0	0	0	0	0	0	0	0	0	2	1	0	0	1	1	A	7	0	0	0	4	1	0	0.9	7.0
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.4
11-Jun	0	0	0	0	0	0	0	2	5	3	6	1	2	1	A	2	1	1	0	0	0	0	0	0	1.1	5.6
12-Jun	0	0	0	0	0	0	0	1	0	0	1	2	2	A	3	4	1	0	2	0	0	0	0	0	0.8	3.7
13-Jun	0	0	0	0	0	0	0	2	1	1	3	6	A	0	1	1	0	1	0	0	0	0	0	0	0.9	6.5
14-Jun	0	0	0	0	0	0	0	3	0	2	1	A	3	1	2	0	0	0	0	0	0	0	0	0	0.6	3.0
15-Jun	0	0	0	1	1	1	1	0	0	0	A	2	1	3	1	2	1	0	1	0	0	0	0	0	0.6	2.9
16-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	2	1	5	1	0	0	1	0	0.5	5.0
17-Jun	0	0	0	0	0	0	7	8	A	3	2	2	2	2	1	0	0	0	0	0	0	0	0	1	1.3	8.1
18-Jun	1	0	1	1	8	8	1	A	10	9	9	6	5	4	3	1	0	2	4	1	0	0	0	0	3.2	9.7
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	5	0	0	0	0	0.4	5.5
20-Jun	0	0	0	0	0	A	0	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
21-Jun	0	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
22-Jun	0	0	0	A	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.3
24-Jun	0	A	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0.3	0.9
25-Jun	A	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	1	0	2	1	0	0	0	A	0.5	1.8
26-Jun	0	0	0	0	0	0	0	0	4	1	2	1	1	1	1	2	1	0	0	0	0	1	A	0	0.7	4.0
27-Jun	0	3	9	3	1	1	1	0	0	0	1	0	0	0	0	2	1	0	0	0	0	A	1	2	1.2	9.4
28-Jun	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	A	0	0	0	0.3	1.4
29-Jun	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	1	1	0	0	A	0	0	0	0	0.2	1.4
30-Jun	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
	0.6	0.6	0.7	0.6	0.5	0.5	0.6	0.8	1.0	0.9	1.3	1.1	0.8	0.7	0.7	0.7	0.4	0.6	0.8	0.4	0.1	0.4	0.2	0.2	Diurnal Average	
	12.0	10.0	9.4	6.4	8.4	7.6	6.9	8.1	9.7	8.6	9.2	6.5	4.9	3.6	3.3	3.7	1.5	7.0	5.0	5.5	0.4	4.3	1.8	2.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2012

Maximum Value: 54.3 ppb on Jun 14 13:00

Maximum Daily Average: 10.1 ppb on Jun 18

Minimum Value: 0 ppb on Jun 30 22:00

Minimum Daily Average: 0.7 ppb on Jun 6

Maximum Diurnal Average: 6.6 ppb at hour 13

Minimum Diurnal Average: 0.9 ppb at hour 21

Monthly Average: 3.20 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.9 $Q_3 = 2.0$ $P_{90} = 9.8$ $P_{99} = 25.5$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	16	21	1	1	1	1	1	2.5	21.3
2-Jun	A	5	15	11	3	14	10	1	1	1	8	24	17	14	7	8	12	1	0	0	0	2	3	A	7.1	24.1
3-Jun	29	21	26	15	3	7	7	7	12	9	15	18	4	1	1	1	1	1	1	1	1	1	A	1	7.9	29.2
4-Jun	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.2
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.1
6-Jun	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	0.7	0.9
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	A	1	1	1	1	1	0.9	2.9
8-Jun	1	1	1	1	1	1	1	1	1	10	1	1	1	1	1	1	1	A	6	1	1	6	4	3	1.9	9.5
9-Jun	2	1	1	1	1	1	1	1	1	1	16	4	1	1	9	8	A	24	1	1	2	20	2	1	4.4	24.2
10-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	0	1	0.8	1.1
11-Jun	1	1	1	1	1	1	1	10	18	11	27	15	10	12	A	8	15	15	1	1	2	2	1	1	6.6	26.7
12-Jun	1	0	1	1	1	1	1	6	2	6	5	12	10	A	21	30	7	1	10	1	1	1	1	1	5.1	29.5
13-Jun	1	1	1	1	1	0	1	6	5	4	21	26	A	2	6	8	1	12	1	1	1	1	1	1	4.5	26.5
14-Jun	1	1	1	1	0	1	1	12	2	10	6	A	54	10	15	1	1	1	1	1	1	1	1	1	5.2	54.3
15-Jun	1	1	1	1	2	2	2	1	1	1	A	13	4	18	3	9	5	2	6	1	1	1	1	1	3.3	18.0
16-Jun	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	14	3	17	8	1	1	8	1	2.9	17.5
17-Jun	1	1	1	0	1	1	15	19	A	13	16	13	19	18	5	1	1	1	1	2	1	1	1	5	5.9	19.3
18-Jun	5	1	2	3	20	17	3	A	17	19	21	18	23	21	15	2	1	8	28	6	1	1	1	1	10.1	28.1
19-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	3	1	1	1	5	6	15	1	1	1	0	1.9	15.4
20-Jun	1	1	1	1	1	A	1	10	7	6	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1.9	9.8
21-Jun	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	1.2
22-Jun	1	1	0	A	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.6
23-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1.0	2.1
24-Jun	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1.1	3.1
25-Jun	A	1	1	1	1	1	1	1	1	1	2	13	8	6	2	6	6	1	17	7	1	1	1	A	3.5	16.5
26-Jun	1	1	0	0	1	1	1	1	16	7	14	7	12	9	5	10	12	1	1	1	1	3	A	1	4.6	16.5
27-Jun	1	11	15	11	2	1	4	1	1	2	6	1	1	1	4	7	4	1	1	1	1	A	3	6	3.8	15.3
28-Jun	1	1	1	1	1	1	1	7	10	1	5	1	4	3	7	3	2	1	1	1	A	1	1	1	2.3	10.1
29-Jun	4	1	1	2	1	1	1	1	1	1	1	C	C	C	C	15	9	2	2	A	1	1	1	0	2.3	15.1
30-Jun	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	1	0.7	0.9
	2.1	2.0	2.7	2.1	1.6	2.1	2.1	3.3	3.7	3.9	6.1	6.4	6.6	4.7	4.1	4.5	3.6	3.5	4.6	2.0	0.9	1.8	1.3	1.2	Diurnal Average	
	29.2	21.4	25.8	14.7	20.1	16.6	15.5	18.5	17.8	19.3	26.7	26.5	54.3	20.6	20.8	29.5	14.9	24.2	28.1	15.4	1.6	19.8	7.6	5.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2012

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2012

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 - June 2012

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2012

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

Maximum Value: 7.9 ppb on Jun 13 05:00

Maximum Daily Average: 0.7 ppb on Jun 13

Minimum Value: 0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 5

Maximum Diurnal Average: 0.3 ppb at hour 5

Minimum Diurnal Average: 0.0 ppb at hour 11

Monthly Average: 0.04 ppb

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} = 0.6

Hours in Service:	720
Hours of Data:	684
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-Jun	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	0.2
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0.0	0.6
3-Jun	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	0.5
4-Jun	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	1.1
5-Jun	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
6-Jun	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
7-Jun	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
8-Jun	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
9-Jun	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
10-Jun	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
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0.0	0.6
12-Jun	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
13-Jun	0	6	0	1	8	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.7	7.9
14-Jun	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	0.4
15-Jun	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
16-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
17-Jun	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
18-Jun	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
19-Jun	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
20-Jun	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
21-Jun	0	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
22-Jun	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
23-Jun	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
24-Jun	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
25-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.0
26-Jun	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
27-Jun	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	0.2
28-Jun	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
29-Jun	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	A	0	0	0	0	0.0	0.0
30-Jun	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	0.2	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	Diurnal Average	
	0.3	6.4	0.5	0.8	7.9	1.1	0.6	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	0.6	0.4	0.3	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2012

Maximum Value: 42.1 ppb on Jun 13 05:00

Maximum Daily Average: 4.9 ppb on Jun 13

Minimum Value: 0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 25

Maximum Diurnal Average: 1.6 ppb at hour 2

Minimum Diurnal Average: 0.0 ppb at hour 13

Monthly Average: 0.34 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.5 P_{99} = 3.1

Hours in Service:	720
Hours of Data:	684
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-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0.1	1.4
2-Jun	A	1	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	A	0.4	3.1
3-Jun	1	1	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	0.4	1.6
4-Jun	2	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	1.9
5-Jun	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.5
6-Jun	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
7-Jun	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	0.3
8-Jun	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	1	0	1	0	1	1	0.2	0.8
9-Jun	0	1	0	0	0	0	0	0	2	0	1	0	0	0	0	0	A	0	0	0	1	1	1	1	0.4	1.8
10-Jun	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.5
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	3	0	0	0.2	3.3
12-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	2	0	0.1	1.9
13-Jun	0	39	0	24	42	2	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	2	0	0	4.9	42.1
14-Jun	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	2	1	0.2	1.7
15-Jun	0	0	1	2	1	1	1	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	2.2
16-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.1	1.5
17-Jun	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0.4	4.1
18-Jun	0	1	2	0	0	1	0	A	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	2.3
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0	0.7
20-Jun	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
21-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
22-Jun	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.2	0.8
23-Jun	0	1	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
24-Jun	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
25-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.0
26-Jun	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	0.3
27-Jun	0	0	0	0	0	0	0	2	9	11	1	0	0	0	0	0	0	0	0	0	0	A	1	0	1.0	11.0
28-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.3
29-Jun	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	A	3	0	0	0	0.2	2.8
30-Jun	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
	0.2	1.6	0.2	1.0	1.6	0.3	0.2	0.1	0.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.6	0.4	0.2	Diurnal Average	
	1.9	39.4	2.3	23.7	42.1	2.5	1.4	1.8	8.8	11.0	0.9	0.2	0.1	0.3	0.6	0.3	0.5	0.4	0.8	0.5	2.8	4.1	3.0	1.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Valleyview - June 2012

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - June 2012

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

Maximum Value: 24.6 ^{o}C on Jun 21 15:00

Maximum Daily Average: 18.7 ^{o}C on Jun 23

Minimum Value: 5 ^{o}C on Jun 1 05:00

Maximum Diurnal Average: 19.2 ^{o}C at hour 16

Monthly Average: 15.29 ^{o}C

Minimum Daily Average: 12.2 ^{o}C on Jun 18

Minimum Diurnal Average: 10.5 ^{o}C at hour 5

Percentiles: P_1 = 7.1 P_{10} = 10.1 Q_1 = 12.2 Median = 14.8 Q_3 = 18.5 P_{90} = 21.4 P_{99} = 24.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	9	8	7	6	5	6	9	12	15	17	18	18	19	20	20	20	18	18	18	19	17	14	11	10	14.0	20.2
2-Jun	10	11	11	11	11	11	11	12	12	12	13	14	15	16	16	17	17	18	18	17	16	14	12	11	13.5	17.8
3-Jun	11	10	9	8	6	7	9	10	12	14	15	16	16	17	18	18	19	19	19	19	18	13	11	9	13.5	19.0
4-Jun	8	8	8	8	6	7	9	11	14	15	17	20	20	21	21	21	21	21	21	20	20	19	19	17	15.4	21.0
5-Jun	17	17	16	16	15	14	12	12	12	11	12	12	13	13	14	13	13	13	13	13	13	13	13	13	13.6	17.3
6-Jun	13	12	12	12	12	12	12	13	13	14	14	14	14	14	14	15	14	14	15	16	16	16	15	15	13.7	15.5
7-Jun	14	13	11	10	9	8	9	9	10	11	13	14	15	16	16	18	19	20	20	20	18	15	13	12	13.8	19.7
8-Jun	11	10	10	9	9	9	10	12	13	14	16	17	18	19	19	18	14	13	13	12	12	12	12	12	13.0	19.1
9-Jun	11	11	11	11	11	11	11	11	12	12	13	14	14	15	17	17	16	18	17	16	15	15	14	13	13.6	18.0
10-Jun	13	12	12	12	13	13	12	12	13	13	13	13	13	13	14	15	16	17	18	18	16	15	14	13	13.9	17.7
11-Jun	13	13	13	12	12	13	13	15	17	19	20	21	22	23	22	23	23	21	20	21	21	18	16	14	17.8	23.2
12-Jun	13	13	13	13	13	13	14	16	17	18	18	19	20	20	20	20	17	19	19	19	19	17	14	13	16.5	20.3
13-Jun	13	13	13	13	13	13	14	14	14	15	15	16	18	19	19	18	18	20	19	19	17	16	14	12	15.6	19.7
14-Jun	10	9	8	9	7	7	10	11	12	13	15	15	16	17	17	17	16	16	15	15	15	13	12	9	12.6	16.8
15-Jun	8	8	9	10	9	9	10	11	13	14	15	16	17	17	17	17	18	18	19	18	16	14	11	10	13.5	18.5
16-Jun	10	10	9	9	9	10	11	12	12	13	15	17	18	19	19	20	20	20	20	20	19	17	16	15	14.9	20.3
17-Jun	14	13	12	12	10	11	13	14	15	16	16	16	17	15	13	16	17	18	16	15	15	14	13	12	14.3	17.6
18-Jun	12	11	11	11	11	11	11	11	11	11	12	13	13	14	14	13	13	14	14	14	13	12	12	11	12.2	14.2
19-Jun	12	11	11	11	11	11	11	12	13	12	14	13	15	13	12	15	17	18	16	16	14	12	11	11	13.0	17.9
20-Jun	11	10	9	9	9	9	11	13	15	17	19	18	18	18	20	21	22	22	22	22	20	17	14	12	15.7	22.3
21-Jun	11	10	10	9	8	9	12	14	16	19	21	22	22	23	25	24	24	25	24	23	22	19	17	15	17.8	24.6
22-Jun	14	12	11	11	11	12	15	17	19	23	24	23	22	22	21	23	24	21	19	19	19	18	16	15	17.9	24.0
23-Jun	13	12	11	11	10	11	13	15	19	22	24	24	24	22	23	24	24	23	22	21	20	20	20	20	18.7	24.3
24-Jun	19	19	18	18	18	18	18	19	20	20	21	21	21	21	21	22	17	15	15	16	16	15	14	13	18.1	21.6
25-Jun	12	11	11	11	10	11	13	14	17	19	21	21	22	23	23	23	23	23	24	23	20	18	16	15	17.7	23.5
26-Jun	14	13	12	11	10	11	13	16	18	19	19	20	21	22	22	23	22	22	20	18	16	15	15	15	16.9	22.8
27-Jun	14	13	13	13	13	13	13	14	15	15	16	17	17	17	18	19	19	19	19	17	16	15	14	13	15.5	19.3
28-Jun	11	10	10	9	8	9	12	14	16	17	18	20	21	22	22	22	23	23	22	21	20	19	18	17	16.9	23.1
29-Jun	18	17	16	15	14	14	14	16	17	18	19	21	21	21	21	21	22	22	21	22	20	18	15	14	18.2	21.8
30-Jun	12	12	11	11	10	11	12	15	18	21	22	23	23	24	23	22	21	18	16	16	17	15	14	14	16.7	23.5
	12.4	11.8	11.4	10.9	10.5	10.8	11.9	13.2	14.6	15.9	17.0	17.7	18.2	18.4	18.8	19.2	18.9	18.9	18.4	18.2	17.2	15.6	14.2	13.2	Diurnal Average	
	18.9	18.7	18.5	18.1	17.9	17.6	18.1	18.9	19.6	22.6	23.6	24.3	23.9	23.5	24.6	24.3	24.0	24.5	24.2	23.4	22.5	20.4	20.0	19.9	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - June 2012

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2012

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

Maximum Value: 100.0 % on Jun 5 23:00 Maximum Daily Average: 94.1 % on Jun 6

Minimum Value: 21 % on Jun 3 19:00 Minimum Daily Average: 38.6 % on Jun 3

Maximum Diurnal Average: 84.5 % at hour 5 Minimum Diurnal Average: 48.0 % at hour 16

Monthly Average: 65.24 % Percentiles: P_1 = 23.6 P_{10} = 33.7 Q_1 = 45.5 Median = 65.1 Q_3 = 85.1 P_{90} = 94.5 P_{99} = 99.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 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-Jun	69	72	82	89	92	87	72	59	51	39	33	32	31	31	32	32	40	46	48	47	54	73	85	90	57.7	92.5
2-Jun	82	79	80	81	77	74	69	61	59	52	44	39	39	40	39	35	33	26	24	23	29	33	38	40	49.9	81.8
3-Jun	42	41	43	49	62	56	46	42	39	35	32	28	25	24	22	23	21	21	21	21	33	56	70	75	38.6	74.7
4-Jun	82	82	79	81	86	82	73	67	57	53	41	30	29	27	27	30	34	32	33	34	37	38	40	45	50.9	86.3
5-Jun	45	46	50	56	59	72	88	93	95	97	97	96	95	94	92	94	97	98	99	99	99	99	100	100	85.8	100.0
6-Jun	99	98	98	98	98	100	99	95	93	92	92	93	94	93	89	89	92	94	94	92	95	94	90	89	94.1	99.7
7-Jun	81	79	85	83	80	78	73	75	79	72	56	50	47	49	47	40	36	34	31	32	40	58	72	74	60.4	85.0
8-Jun	78	81	79	84	86	87	80	73	63	61	57	55	54	47	45	56	79	86	81	86	87	88	85	86	73.4	88.2
9-Jun	91	86	86	88	88	90	94	93	88	85	82	80	83	76	71	58	65	57	60	69	72	72	80	79	79.0	93.8
10-Jun	81	84	85	84	84	84	86	91	90	83	80	79	78	79	76	70	64	60	58	59	72	80	85	88	78.3	91.5
11-Jun	88	90	91	92	91	87	80	67	52	41	41	40	38	38	42	40	41	48	59	59	53	59	75	84	62.3	91.9
12-Jun	84	84	84	83	88	87	78	69	57	54	50	47	46	45	49	49	70	61	56	57	62	72	86	92	67.1	92.4
13-Jun	89	91	87	88	88	86	80	76	72	68	66	60	51	45	43	45	49	38	36	37	45	47	57	65	62.9	90.7
14-Jun	78	84	75	68	82	76	66	54	48	43	37	34	30	30	29	31	36	41	48	49	53	55	62	83	53.8	84.1
15-Jun	89	91	74	61	61	59	58	52	45	40	37	33	31	33	32	31	29	28	28	31	44	60	74	83	50.2	90.6
16-Jun	78	69	75	78	81	75	68	67	77	83	71	61	59	58	57	50	51	52	50	53	60	73	72	69	66.1	82.8
17-Jun	70	79	83	85	89	84	69	62	56	53	53	53	53	64	83	70	59	55	68	72	69	70	87	88	69.7	88.9
18-Jun	85	90	93	90	86	84	86	87	90	90	86	82	83	78	76	86	80	76	77	80	84	90	94	96	85.4	95.6
19-Jun	96	97	96	97	97	95	94	91	85	87	77	77	67	80	88	71	59	57	65	65	75	85	90	95	82.7	97.0
20-Jun	96	97	97	98	98	97	93	83	77	66	57	55	60	59	48	39	37	34	36	39	53	75	87	95	69.8	97.9
21-Jun	96	97	97	97	98	97	86	77	71	59	49	44	41	38	32	34	34	32	32	37	44	56	59	75	61.7	97.7
22-Jun	82	88	93	90	88	82	75	65	61	47	40	42	48	45	51	46	43	56	74	80	81	87	96	97	69.0	97.5
23-Jun	98	98	98	99	99	99	95	84	71	58	38	37	39	47	44	42	41	43	47	55	59	53	55	52	64.7	99.4
24-Jun	59	60	59	60	61	63	63	61	61	61	60	61	62	61	63	62	83	95	97	91	91	96	98	99	72.0	98.5
25-Jun	99	99	100	100	100	100	98	87	74	65	51	34	33	31	29	30	29	31	29	33	42	48	62	76	61.6	100.0
26-Jun	76	79	83	91	96	92	77	64	43	36	34	33	30	28	26	25	29	30	40	45	50	56	55	51	52.8	95.7
27-Jun	51	54	52	52	52	54	56	54	52	52	48	45	43	42	42	37	36	37	37	39	45	52	58	57	47.8	57.5
28-Jun	67	72	72	80	81	76	69	54	48	44	39	38	36	34	32	33	34	33	40	48	55	59	57	63	52.6	80.7
29-Jun	58	60	71	78	86	91	89	81	72	63	54	44	43	45	44	44	43	44	44	46	53	72	85	93	62.6	92.7
30-Jun	94	95	97	97	97	93	85	73	61	49	43	42	39	40	45	51	57	71	86	91	88	95	97	98	74.3	98.2
	79.5	80.7	81.4	82.6	84.5	83.0	78.1	71.9	66.2	60.9	54.8	51.5	50.2	50.0	49.7	48.0	50.0	50.5	53.3	55.6	60.8	68.5	75.0	79.3	Diurnal Average	
	99.3	99.1	99.7	100.0	100.0	100.0	99.0	94.9	95.4	96.8	96.7	95.6	94.7	93.7	91.6	93.8	96.9	97.8	99.1	99.3	99.2	99.3	100.0	100.0	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - June 2012

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	1	2	1	1	1	1	3	3	2	1	2	2	3	2	2	2	5	9	2	2	1	0	1	1	0.9	9.2
Dir	165	166	165	169	170	164	159	158	163	100	172	155	353	144	65	18	254	253	277	125	135	249	337	204	190	253
2 Spd	7	8	5	7	7	6	8	10	9	8	8	8	9	10	8	8	7	8	12	10	7	6	7	9	7.7	11.9
Dir	282	281	266	265	281	275	294	291	307	303	309	272	280	285	295	284	291	294	299	308	295	263	256	261	287	299
3 Spd	10	11	9	4	3	3	9	16	15	13	13	10	10	8	5	4	5	5	6	4	0	0	1	0	5.9	15.9
Dir	259	273	276	250	205	220	273	280	276	281	277	284	299	330	297	302	330	346	343	18	154	162	178	348	286	280
4 Spd	0	0	1	0	1	0	0	0	1	2	3	6	6	6	6	10	7	6	8	7	6	6	6	5	3.4	9.7
Dir	164	221	331	150	329	276	79	323	142	33	39	115	109	115	111	84	104	114	128	133	133	132	123	63	109	84
5 Spd	5	5	4	4	4	3	3	4	4	6	5	5	3	3	3	2	2	3	5	4	3	3	5	6	3.2	6.2
Dir	101	108	82	67	68	68	38	54	46	51	64	61	72	119	127	132	77	11	7	13	23	9	14	10	55	51
6 Spd	7	7	7	8	3	8	4	3	3	4	2	4	6	7	4	6	9	9	9	8	4	4	4	3	4.9	9.4
Dir	6	16	14	12	23	2	43	41	39	31	28	4	17	20	61	46	23	15	14	29	53	114	99	106	27	23
7 Spd	5	2	3	2	4	4	5	5	3	4	6	9	6	0	3	1	5	3	4	3	2	1	1	1	2.3	8.8
Dir	137	104	137	143	139	148	159	164	173	231	237	240	256	75	141	141	144	145	137	133	90	11	59	152	168	240
8 Spd	1	1	1	1	1	1	1	2	4	5	9	10	11	9	9	6	4	8	4	3	4	2	3	3	2.4	10.6
Dir	190	176	200	196	52	343	8	160	226	300	350	340	323	348	347	338	199	250	242	169	227	238	279	288	306	323
9 Spd	1	4	5	4	6	2	1	1	4	5	9	3	4	8	5	13	9	11	7	8	8	8	6	5	4.7	12.7
Dir	216	323	321	309	326	150	205	230	303	294	279	226	170	245	237	312	273	281	316	328	291	272	292	287	288	312
10 Spd	8	9	7	8	9	8	9	7	8	11	13	14	11	9	9	10	7	5	3	2	1	1	1	2	5.9	14.1
Dir	285	288	296	305	298	297	305	308	320	353	358	351	333	350	357	357	1	4	36	33	157	157	154	155	331	351
11 Spd	2	2	2	2	2	2	2	0	7	12	11	10	9	11	11	12	12	4	5	5	5	2	1	1	4.5	12.4
Dir	162	163	164	166	166	164	133	71	264	279	273	291	286	285	285	279	280	248	234	250	257	255	196	171	268	279
12 Spd	2	1	1	1	1	1	2	5	12	11	10	11	9	10	9	7	5	3	5	5	2	1	1	1	4.2	11.6
Dir	178	185	178	174	153	176	211	270	283	287	275	272	278	274	267	287	244	240	265	246	239	249	158	168	266	283
13 Spd	2	2	2	1	2	1	1	3	5	8	7	7	6	11	10	13	7	9	8	10	6	4	2	3	4.4	12.9
Dir	163	163	160	162	162	159	219	268	291	285	251	275	278	285	285	261	248	288	301	314	316	302	3	323	279	261
14 Spd	1	1	2	2	2	2	2	6	8	11	12	9	10	9	10	11	11	9	7	5	2	3	1	1	4.2	11.7
Dir	153	202	171	236	179	162	174	275	286	279	277	288	290	294	290	324	329	355	11	10	336	305	264	138	300	277
15 Spd	1	2	4	9	7	10	5	14	11	12	9	6	4	7	7	4	6	2	4	2	1	0	0	0	5.0	14.2
Dir	159	149	264	281	286	281	275	287	292	292	284	274	274	270	265	269	270	273	280	3	116	141	349	196	279	287
16 Spd	1	2	1	1	0	2	3	4	4	4	6	8	6	4	3	4	4	5	5	3	1	1	4	9	2.6	8.8
Dir	169	169	241	207	188	183	162	164	166	163	160	163	163	164	161	163	250	263	261	252	287	228	239	241	196	241
17 Spd	9	3	2	1	2	1	6	9	13	14	14	14	11	13	6	8	12	10	11	3	6	3	2	4	5.8	14.1
Dir	246	171	164	167	169	167	262	267	273	279	283	287	282	290	286	319	322	309	7	345	319	286	321	250	288	287
18 Spd	6	7	3	6	8	8	6	9	8	9	10	11	10	10	13	9	10	9	9	7	7	5	4	4	7.6	12.6
Dir	260	282	244	252	264	268	251	264	266	268	265	279	270	281	278	310	290	282	275	283	293	297	290	296	276	278
19 Spd	5	7	7	7	9	10	8	7	7	8	10	10	6	2	2	4	1	1	8	6	3	3	1	2	3.9	10.2
Dir	335	348	346	353	345	1	357	337	320	299	309	306	331	300	211	128	198	216	278	257	59	240	180	158	324	1
20 Spd	1	1	1	1	1	1	2	1	2	2	1	5	5	5	5	3	1	2	2	2	1	0	0	1	0.8	5.5
Dir	181	185	150	160	166	147	150	185	231	259	353	326	3	345	2	345	322	347	340	8	22	168	167	177	339	3
21 Spd	0	0	0	0	0	0	1	1	1	0	3	3	2	3	2	5	4	4	5	3	1	2	1	1	1.4	4.9
Dir	167	262	161	311	189	316	115	139	332	142	149	162	150	95	87	78	113	98	129	144	136	165	152	56	122	78
22 Spd	0	1	1	2	1	1	2	2	4	5	4	3	2	5	2	7	8	6	1	1	1	0	0	0	0.8	8.4
Dir	307	292	326	336	340	334	336	352	18	83	95	114	179	151	161	353	10	165	239	71	65	260	40	280	50	10

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - June 2012

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	0	1	0	1	2	3	3	0	8	7	9	6	4	2	4	5	2	1	1	2	2	3	2.0	8.6
Dir	206	42	10	344	17	4	14	10	24	35	142	151	156	166	156	143	154	148	158	111	87	92	124	111	137	156
24 Spd	4	4	3	3	5	4	5	9	9	8	5	6	5	3	1	2	5	1	4	1	2	1	1	0	3.4	9.3
Dir	121	130	130	128	137	144	154	164	166	165	164	161	160	167	224	263	150	116	132	134	211	261	78	245	155	164
25 Spd	1	0	1	2	2	2	2	3	4	4	4	11	10	7	3	5	4	4	5	5	5	2	1	1	2.3	11.1
Dir	172	294	240	178	170	164	146	161	161	160	232	261	260	292	253	268	263	251	260	296	331	334	141	179	251	261
26 Spd	1	1	1	1	1	2	2	2	11	13	11	10	11	9	9	10	11	13	17	15	6	1	3	8	5.5	17.0
Dir	176	166	177	173	173	173	165	196	263	251	255	256	290	265	261	277	330	321	320	325	330	241	290	283	284	320
27 Spd	11	7	9	11	12	13	12	15	17	16	19	20	19	17	14	17	19	17	14	14	7	4	2	4	12.7	19.8
Dir	290	272	268	278	281	283	277	285	282	288	285	297	294	295	297	281	282	292	288	287	286	309	238	250	286	297
28 Spd	2	2	1	1	2	1	2	6	9	10	8	5	5	4	4	3	2	4	3	3	1	1	3	2	1.9	10.5
Dir	222	212	182	164	162	172	160	248	276	300	275	274	251	237	268	319	85	19	23	18	48	59	342	7	281	300
29 Spd	6	9	8	2	1	1	1	2	2	3	3	4	5	5	6	6	5	6	5	3	2	1	2	1	2.5	8.6
Dir	283	292	291	221	129	167	161	163	164	160	208	205	249	246	258	294	317	303	287	294	263	189	164	182	265	292
30 Spd	1	1	1	1	1	1	2	2	2	1	2	2	1	5	7	10	13	8	2	2	0	1	1	1	1.2	12.8
Dir	170	163	162	164	165	175	155	152	156	159	171	102	257	343	353	332	331	313	16	359	61	161	179	244	333	331
Spd	1.5	1.4	1.3	1.3	1.1	1.1	1.2	2.8	4.2	4.6	4.5	4.4	4.3	4.0	3.4	4.1	3.6	3.6	3.2	2.4	1.4	1.0	0.5	1.0	Diurnal Average	
Dir	256	272	274	278	279	275	262	269	277	285	278	280	284	289	288	308	302	299	309	314	308	267	265	264		
Spd	10.5	10.7	9.3	10.6	12.4	12.7	11.8	15.9	16.8	16.1	19.2	19.8	19.1	16.8	14.0	16.7	18.6	16.7	17.0	14.6	7.7	7.8	6.7	8.8	Diurnal Maximum	
Dir	290	273	268	278	281	283	277	280	282	288	285	297	294	295	297	281	282	292	320	325	291	272	256	261		

Maximum Speed Value: 20 km/h on Jun 27 12:00
Maximum Daily Speed Average: 12.7 km/h on Jun 27
Maximum Diurnal Speed Average: 4.6 km/h at hour 10

Minimum Speed Value: 0 km/h on Jun 23 01:00
Minimum Daily Speed Average: 0.8 km/h on Jun 21
Minimum Diurnal Speed Average: 0.5 km/h at hour 23

Monthly Average Velocity: 2.50 km/h 286.5 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 0.9$ $Q_1 = 1.7$ Median = 4.0 $Q_3 = 7.7$ $P_{90} = 10.5$ $P_{99} = 16.8$

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

Hours in Service:	720
Hours of Data:	720
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	39	38	3	0	0	0	80
NorthEast	34	4	0	0	0	0	38
East	28	5	0	0	0	0	33
SouthEast	69	15	0	0	0	0	84
South	126	12	0	0	0	0	138
SouthWest	45	8	0	0	0	0	53
West	42	117	37	1	0	0	197
NorthWest	34	50	11	2	0	0	97
Total	417	249	51	3	0	0	720

Wind Rose

Wind Speed (WS) (km/h)

Valleyview - June 2012

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - June 2012

Maximum Speed: 20 km/h on Jun 27 12:00

Maximum Daily Speed Average: 13.2 km/h on Jun 27

Minimum Speed: 1 km/h on Jun 21 03:00

Minimum Daily Speed Average: 2.4 km/h on Jun 21

Maximum Diurnal Speed Average: 8.5 km/h at hour 12

Minimum Diurnal Speed Average: 2.7 km/h at hour 23

Monthly Average Speed: 5.42 km/h

Percentiles: $P_1 = 0.7$ $P_{10} = 1.2$ $Q_1 = 2.0$ Median = 4.6 $Q_3 = 8.0$ $P_{90} = 10.9$ $P_{99} = 17.3$

Hours in Service:	720
Hours of Data:	720
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-Jun	1	2	1	1	1	1	3	3	2	3	3	3	4	3	2	3	6	9	3	2	1	1	1	1	2.6	9.5
2-Jun	8	9	6	7	7	6	8	10	10	9	9	9	10	11	9	9	8	9	12	10	7	6	7	9	8.5	12.2
3-Jun	10	11	9	5	3	3	9	16	15	13	14	11	11	9	7	7	7	6	7	4	1	1	1	1	7.5	16.0
4-Jun	1	1	2	1	2	1	1	2	1	2	5	7	7	7	7	10	7	7	9	7	6	6	6	5	4.6	10.3
5-Jun	6	5	4	4	4	3	4	4	4	6	5	5	4	3	3	3	2	3	5	4	3	3	5	6	4.2	6.5
6-Jun	7	7	7	8	4	8	5	3	3	4	3	4	6	7	4	6	10	9	9	8	4	4	4	4	5.7	9.6
7-Jun	5	2	4	2	4	5	5	6	3	5	7	10	6	3	4	3	5	3	4	3	2	2	2	2	4.0	9.6
8-Jun	1	1	1	1	1	3	3	2	5	6	10	11	11	10	10	6	7	9	5	4	5	3	4	3	5.1	11.3
9-Jun	1	4	5	4	6	2	1	2	4	5	10	6	4	8	6	13	9	12	7	9	8	8	7	6	6.2	13.2
10-Jun	8	9	7	8	9	8	9	7	8	11	13	14	12	10	10	10	7	6	3	2	1	1	1	2	7.3	14.4
11-Jun	2	2	2	2	2	2	2	1	7	13	11	11	10	11	12	13	12	6	6	6	5	2	1	2	5.9	13.1
12-Jun	2	1	1	1	1	1	2	5	12	11	11	12	10	11	9	8	6	3	6	5	2	1	1	2	5.2	12.0
13-Jun	2	2	2	1	2	1	2	4	6	9	7	7	7	11	10	13	8	10	8	10	6	5	3	3	5.9	13.3
14-Jun	2	1	2	3	2	2	2	6	9	11	12	10	10	10	12	11	11	10	8	5	2	3	2	1	6.1	12.3
15-Jun	1	2	5	9	7	10	6	14	12	13	10	8	6	8	8	6	7	4	5	2	1	1	1	1	6.2	14.4
16-Jun	1	2	1	1	1	2	3	4	4	4	6	8	6	4	3	4	5	5	5	4	2	1	5	9	3.8	9.4
17-Jun	10	3	2	2	2	2	6	9	13	14	14	15	12	14	6	9	12	10	12	3	6	3	3	4	7.6	14.6
18-Jun	6	7	4	6	8	8	6	9	8	9	10	11	11	10	13	10	10	10	9	7	7	5	4	4	8.1	13.0
19-Jun	5	7	7	7	9	10	9	7	7	9	10	10	6	6	3	4	2	2	8	7	6	4	1	2	6.2	10.4
20-Jun	1	1	1	1	1	2	2	2	3	3	2	6	7	6	5	5	3	3	2	2	1	1	1	1	2.6	6.7
21-Jun	1	1	1	1	1	1	1	2	2	2	4	3	3	4	4	6	5	5	5	3	1	2	2	1	2.4	6.0
22-Jun	1	1	2	2	1	1	2	3	4	5	6	5	2	5	3	7	10	6	2	2	1	1	1	1	3.1	9.9
23-Jun	1	1	1	2	1	2	2	3	3	3	9	7	9	6	5	3	5	5	2	1	2	2	3	3	3.2	9.0
24-Jun	4	4	3	4	5	4	5	9	9	8	5	6	5	3	2	2	6	2	5	2	2	2	1	1	4.2	9.4
25-Jun	1	1	2	2	2	2	2	3	4	4	5	12	10	7	5	5	4	4	5	5	5	3	2	1	4.1	11.7
26-Jun	1	1	1	1	1	2	2	3	12	13	12	11	11	10	9	11	13	14	17	15	6	2	3	8	7.5	17.3
27-Jun	11	8	9	11	13	13	12	15	17	17	20	20	20	17	15	17	19	17	15	15	7	4	2	4	13.2	20.1
28-Jun	3	2	2	2	2	1	2	6	10	11	9	6	7	5	5	5	3	4	3	3	2	2	3	4	4.2	10.8
29-Jun	7	9	9	3	1	1	1	2	2	3	5	5	6	6	6	7	6	6	5	3	2	1	2	1	4.1	8.8
30-Jun	1	1	1	1	1	1	2	2	2	2	2	3	4	6	7	11	13	9	3	3	2	1	1	1	3.3	13.0
	3.7	3.6	3.5	3.4	3.5	3.6	4.0	5.5	6.7	7.5	8.3	8.5	7.9	7.8	6.8	7.6	7.7	7.0	6.5	5.1	3.6	2.7	2.7	3.1	Diurnal Average	
	10.7	10.9	9.4	10.7	12.6	12.9	12.0	16.0	17.1	16.5	19.6	20.1	19.7	17.3	15.0	17.3	19.0	17.1	17.3	14.8	7.9	8.0	6.9	9.4	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

Valleyview - June 2012

Maximum Value: 96.3 deg on Jun 21 10:00

Minimum Value: 6.8 deg on Jun 19 02:00

Percentiles: P_1 = 8.3 P_{10} = 11.7 Q_1 = 15.7 Median = 25.1 Q_3 = 46.1 P_{90} = 68.2 P_{99} = 90.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	15	9	17	44	22	13	8	17	41	86	51	75	66	49	45	43	56	15	77	38	18	86	87	63	86.7
2-Jun	60	24	28	13	14	17	18	12	14	17	27	24	27	30	31	28	37	32	15	11	11	14	17	9	60.4
3-Jun	9	9	9	51	31	43	25	8	11	14	19	26	30	43	69	76	59	35	28	21	83	93	49	85	92.7
4-Jun	70	87	53	87	70	81	89	90	75	54	56	33	27	32	29	22	25	20	15	11	11	10	29	33	90.3
5-Jun	25	26	30	33	23	26	20	25	19	24	30	27	31	32	30	31	48	16	12	15	28	18	12	15	47.8
6-Jun	8	12	13	12	50	15	41	33	32	25	32	17	13	16	31	26	10	10	11	16	26	24	20	21	49.9
7-Jun	11	33	28	13	11	12	14	14	27	41	38	30	33	89	29	63	28	45	24	28	18	77	73	35	89.3
8-Jun	48	19	28	35	75	75	96	41	39	39	26	20	22	22	20	24	62	28	52	16	42	49	60	62	96.1
9-Jun	42	15	16	18	15	46	62	50	27	18	18	68	18	19	37	15	20	18	29	22	14	14	18	21	68.4
10-Jun	11	12	12	12	11	11	9	10	11	17	12	12	11	16	15	18	25	32	45	55	55	25	16	18	55.3
11-Jun	11	9	15	18	24	20	28	84	19	15	18	22	26	20	20	19	14	46	35	15	17	36	41	39	84.4
12-Jun	21	25	29	35	75	25	33	31	14	12	15	19	24	23	23	27	43	47	20	26	27	56	81	13	81.3
13-Jun	8	13	9	25	14	17	48	40	26	19	14	16	38	17	16	14	33	18	15	16	17	24	56	40	55.7
14-Jun	85	28	22	39	19	13	29	23	18	19	18	33	27	28	28	22	16	25	16	18	20	12	60	33	84.9
15-Jun	15	24	52	9	15	11	40	10	18	16	25	43	62	32	39	60	52	66	61	59	25	70	92	59	92.1
16-Jun	40	21	24	49	79	46	17	11	11	12	14	11	16	14	18	18	41	21	30	34	67	75	25	27	79.2
17-Jun	27	18	10	13	13	19	33	17	16	15	15	16	20	19	21	31	15	18	22	43	16	18	80	28	79.8
18-Jun	15	13	21	8	12	18	14	11	13	13	12	19	20	20	16	19	16	19	13	14	14	16	13	14	20.7
19-Jun	16	7	8	9	9	10	10	12	18	18	16	17	31	88	47	24	49	53	15	35	64	48	45	13	88.5
20-Jun	29	18	30	29	27	32	28	61	56	61	89	58	67	24	43	57	87	83	80	25	90	91	77	46	91.4
21-Jun	74	71	76	72	89	49	60	47	66	96	43	35	57	53	64	38	24	30	15	17	26	19	54	33	96.3
22-Jun	80	71	81	61	69	49	19	30	30	35	39	46	30	26	58	18	37	19	57	55	38	90	84	60	90.4
23-Jun	91	86	88	78	87	73	25	22	31	78	12	17	16	9	19	53	24	14	24	52	61	19	15	19	91.1
24-Jun	21	22	14	20	8	12	14	11	10	11	12	12	16	12	53	57	52	63	26	70	38	83	87	82	87.0
25-Jun	22	75	55	19	16	17	32	19	13	16	50	18	25	39	64	28	37	32	24	27	15	64	54	68	75.1
26-Jun	36	11	29	60	10	17	11	36	13	13	20	19	21	29	28	25	39	15	10	9	52	55	51	13	59.6
27-Jun	11	16	11	11	11	11	12	12	10	13	12	11	14	13	21	16	13	13	12	8	11	25	47	11	47.2
28-Jun	32	31	30	34	15	20	32	19	20	15	26	54	46	56	69	79	55	23	18	15	55	68	24	70	78.7
29-Jun	62	13	14	54	21	41	10	14	15	27	52	47	36	28	26	30	30	21	14	31	34	57	12	40	62.2
30-Jun	44	54	60	59	53	64	21	32	24	60	54	42	89	53	19	10	11	55	96	50	87	29	27	66	96.3
	91.1	86.7	87.6	86.7	88.8	81.4	96.1	90.3	74.5	96.3	88.5	75.4	89.5	89.3	69.2	78.7	86.8	82.6	96.3	70.3	90.4	92.7	92.1	85.4	

PAZA
Portable – Sunset House Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Sunset House - June 2012

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

Maximum Value: 3.1 ppb on Jun 22 08:00

Maximum Daily Average: 0.4 ppb on Jun 22

Minimum Value: 0 ppb on Jun 1 05:00

Minimum Daily Average: 0.0 ppb on Jun 6

Maximum Diurnal Average: 0.2 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 17

Monthly Average: 0.03 ppb

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

Hours in Service:	720
Hours of Data:	684
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-Jun	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	0.2
2-Jun	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
3-Jun	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
4-Jun	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	0.4
5-Jun	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
6-Jun	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
7-Jun	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	0.2
8-Jun	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
9-Jun	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
10-Jun	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
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Jun	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
13-Jun	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
14-Jun	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
15-Jun	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
16-Jun	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
17-Jun	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
18-Jun	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
19-Jun	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
20-Jun	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
21-Jun	0	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
22-Jun	0	0	0	A	1	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.1
23-Jun	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	0.4
24-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
25-Jun	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
26-Jun	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
27-Jun	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
28-Jun	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
29-Jun	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	0.2
30-Jun	0	0	0	0	0	0	0	C	C	C	C	1	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.6
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.1	0.2	0.3	0.1	0.5	0.7	0.9	3.1	1.3	0.4	0.3	0.6	0.4	0.3	0.4	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Sunset House - June 2012

Maximum Value: 4.8 ppb on Jun 22 08:00

Maximum Daily Average: 1.0 ppb on Jun 22

Minimum Value: 0 ppb on Jun 20 14:00

Minimum Daily Average: 0.0 ppb on Jun 21

Maximum Diurnal Average: 0.5 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.31 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.2$ Median = 0.2 $Q_3 = 0.4$ $P_{90} = 0.6$ $P_{99} = 1.0$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	A	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0.4	0.7
2-Jun	A	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.6
3-Jun	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	A	0	0.3	0.7
4-Jun	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.2
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.1
7-Jun	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.3	0.7
8-Jun	1	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	0	A	1	1	0	0	1	1	0.5	0.7
9-Jun	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0.3	0.7
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.5
11-Jun	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	1	1	0	0.4	0.9
12-Jun	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	1	0	0.4	0.8
13-Jun	1	0	1	0	1	0	0	0	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0.5	0.8
14-Jun	0	0	1	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
15-Jun	0	0	0	0	0	0	1	0	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
16-Jun	0	0	0	1	1	1	1	1	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0.4	0.7
17-Jun	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
18-Jun	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
19-Jun	1	0	1	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7
20-Jun	0	0	1	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
21-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	0.5
22-Jun	0	0	1	A	2	2	3	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.0	4.8
23-Jun	0	0	A	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	1.0
24-Jun	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	0.6
25-Jun	A	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.3	0.7
26-Jun	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0.2	0.6
27-Jun	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
28-Jun	0	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
29-Jun	1	1	0	1	1	0	0	0	1	1	1	0	0	0	0	1	0	0	0	A	1	0	0	0	0.4	0.7
30-Jun	0	0	0	0	0	0	0	C	C	C	C	1	1	1	1	0	0	0	A	0	0	0	0	1	0.3	0.9
	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Diurnal Average	
	0.7	0.7	0.8	0.7	2.1	2.1	2.7	4.8	2.1	1.1	0.8	0.9	0.8	0.7	1.0	0.7	0.6	0.9	0.7	0.7	0.7	0.8	0.8	0.7	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Sunset House - June 2012

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Sunset House - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Sunset House - June 2012

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

Maximum Value: 0.9 ppb on Jun 16 11:00

Maximum Daily Average: 0.7 ppb on Jun 16

Minimum Value: 0 ppb on Jun 3 11:00

Minimum Daily Average: 0.1 ppb on Jun 30

Maximum Diurnal Average: 0.3 ppb at hour 5

Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.26 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 0.7$

Hours in Service:	720
Hours of Data:	684
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-Jun	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	0.3
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
5-Jun	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
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.4
9-Jun	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	0.4
10-Jun	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	0.3
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Jun	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	0.3
13-Jun	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
14-Jun	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
15-Jun	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	0.7
16-Jun	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.7	0.9
17-Jun	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
18-Jun	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
19-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
20-Jun	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
21-Jun	0	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
22-Jun	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	0.3
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
24-Jun	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	0.3
25-Jun	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	0.4
26-Jun	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
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
28-Jun	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
29-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4
30-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	A	0	0	0	0	0	0.1	0.4
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.7	0.7	0.7	0.7	0.8	0.7	0.6	0.7	0.9	0.4	0.9	0.8	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	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

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Sunset House - June 2012

Maximum Value: 1.3 ppb on Jun 16 13:00

Maximum Daily Average: 1.1 ppb on Jun 16

Minimum Value: 0 ppb on Jun 30 12:00

Maximum Diurnal Average: 0.7 ppb at hour 23

Monthly Average: 0.65 ppb

Minimum Daily Average: 0.4 ppb on Jun 30

Minimum Diurnal Average: 0.6 ppb at hour 10

Percentiles: $P_1 = 0.3$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 0.8$ $P_{99} = 1.2$

Hours in Service:	720
Hours of Data:	684
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-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
2-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0.7	1.2
3-Jun	1	1	0	1	1	1	1	0	1	0	0	1	1	0	1	0	0	1	0	0	0	1	A	1	0.5	0.9
4-Jun	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8
5-Jun	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	1.0
6-Jun	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	1.0
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.1
8-Jun	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
9-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.9
10-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.6	0.8
11-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	0.7	1.0
12-Jun	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
13-Jun	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	0	1	1	0	1	0	1	1	0	0.6	0.8
14-Jun	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.9
15-Jun	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	1.1
16-Jun	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
17-Jun	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.0
18-Jun	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	0	0	0	1	1	1	0.6	0.9
19-Jun	1	1	1	1	1	1	A	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.9
20-Jun	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
21-Jun	1	1	1	1	A	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	1	1	1	1	0.6	1.0
22-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
23-Jun	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.6	0.7
24-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	0.9
25-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	0.7	0.9
26-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	0.6	0.8
27-Jun	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	A	1	1	0.6	0.8
28-Jun	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.6	0.9
29-Jun	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	1	1	A	1	1	0	0	0.6	1.0
30-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	1	A	1	1	0	0	1	0.4	1.1
	0.6	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
	1.1	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.2	0.8	1.2	1.1	1.3	1.1	1.2	1.0	0.9	1.1	1.1	1.3	1.2	0.9	1.1	1.1	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Sunset House - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Sunset House - June 2012

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

Maximum Value: 4.1 ppb on Jun 22 08:00

Maximum Daily Average: 1.3 ppb on Jun 22

Minimum Value: 0 ppb on Jun 30 06:00

Minimum Daily Average: 0.5 ppb on Jun 21

Maximum Diurnal Average: 1.0 ppb at hour 5

Minimum Diurnal Average: 0.6 ppb at hour 18

Monthly Average: 0.81 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 1.0$ $P_{90} = 1.3$ $P_{99} = 2.3$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	1	A	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0.8	1.7
2-Jun	A	2	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	2	A	0.8	2.2
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	0	A	1	0.7	1.1
4-Jun	1	0	1	1	1	0	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	A	1	1	0.6	1.1
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.3
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	0.7	1.4
7-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	1	1	1	1	1	0.8	1.3
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	2	1.0	2.0
9-Jun	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.1	2.0
10-Jun	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0	1	1	1	0	0.8	1.9
11-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	1	1	1	1	1	1	3	2	2	0.9	2.5
12-Jun	2	1	1	1	1	1	1	1	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	0.7	1.6
13-Jun	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	1.4
14-Jun	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	0.8	2.0
15-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	0	1	0	0	0	0.7	1.3
16-Jun	0	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	0	0	1	1	1	1	0.8	1.6
17-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0.8	1.4
18-Jun	1	1	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1	0	1	1	1	1	2	2	1.1	2.3
19-Jun	1	1	1	1	1	0	A	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0.5	1.4
20-Jun	0	1	1	1	1	A	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.0
21-Jun	0	0	0	0	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.7
22-Jun	1	1	1	A	3	2	2	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	4.1
23-Jun	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0.8	2.0
24-Jun	0	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1.2	1.9
25-Jun	A	3	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	A	0.9	2.5
26-Jun	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A	2	0.6	1.9
27-Jun	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0.6	1.4
28-Jun	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	2	1	1	0.6	1.6
29-Jun	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	1	1	1	1.0	2.8
30-Jun	1	1	0	0	0	0	0	C	C	C	C	C	C	C	C	C	1	1	A	2	1	1	1	1	--	2.3
	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.9	1.0	Diurnal Average	
	1.7	2.5	2.0	2.0	2.7	1.7	2.3	4.1	2.3	1.6	1.6	1.3	1.3	1.4	1.3	1.2	1.5	1.5	1.9	2.3	2.8	2.5	2.1	2.0	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

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Sunset House - June 2012

Maximum Value: 14.7 ppb on Jun 15 19:00

Maximum Daily Average: 2.3 ppb on Jun 15

Minimum Value: 0 ppb on Jun 30 05:00

Minimum Daily Average: 0.8 ppb on Jun 21

Maximum Diurnal Average: 1.6 ppb at hour 19

Minimum Diurnal Average: 0.8 ppb at hour 15

Monthly Average: 1.26 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 1.0 $Q_3 = 1.4$ $P_{90} = 2.1$ $P_{99} = 5.1$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	1	A	2	2	2	2	2	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1.1	2.1
2-Jun	A	4	2	2	3	1	1	3	1	1	1	1	1	1	1	1	1	1	0	1	1	1	5	A	1.5	5.1
3-Jun	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	4	1	A	1	1.5	9.8
4-Jun	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	0.8	1.6
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1.0	1.6
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	0.9	1.8
7-Jun	1	1	1	1	1	1	2	1	2	1	1	1	1	0	0	0	1	1	A	2	1	1	1	1	1.0	1.7
8-Jun	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	A	2	2	1	1	1	3	1.3	3.3
9-Jun	3	3	3	2	1	1	1	1	2	2	1	1	1	1	1	1	A	2	2	1	1	1	2	2	1.6	3.3
10-Jun	2	3	2	1	2	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1.1	3.3
11-Jun	1	1	1	1	1	1	1	1	1	1	10	1	1	1	A	1	1	1	1	1	1	5	2	4	1.7	10.0
12-Jun	4	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1.2	4.1
13-Jun	1	1	1	1	1	1	1	1	1	2	2	1	A	2	1	1	1	1	8	1	1	1	1	1	1.5	7.8
14-Jun	1	1	1	3	2	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1.2	3.4
15-Jun	1	1	1	2	1	1	1	1	2	1	A	3	1	1	1	1	5	13	15	1	1	1	1	1	2.3	14.7
16-Jun	1	1	1	1	1	1	2	2	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.8
17-Jun	1	1	1	1	1	1	1	1	A	3	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1.2	2.6
18-Jun	1	1	1	1	1	1	1	A	4	2	2	2	2	1	1	3	1	1	1	2	2	2	3	3	1.8	3.9
19-Jun	1	1	1	1	1	1	A	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.8	2.0
20-Jun	1	1	1	1	1	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	3.2
21-Jun	1	1	1	1	A	3	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0.8	2.9
22-Jun	1	1	2	A	4	3	4	6	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.8	6.1
23-Jun	1	1	A	3	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.0	3.2
24-Jun	1	A	3	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	1	1	2	2	2	1.5	2.8
25-Jun	A	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.9
26-Jun	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	1.0	2.9
27-Jun	1	1	2	2	2	1	1	3	1	1	1	1	1	1	1	1	0	1	1	2	1	A	2	3	1.3	3.5
28-Jun	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	A	3	1	1	0.8	2.6
29-Jun	4	2	1	2	2	2	1	1	1	1	1	3	2	1	1	1	1	1	1	A	5	2	1	1	1.6	4.8
30-Jun	1	1	1	0	0	0	0	C	C	C	C	C	C	C	C	C	3	1	A	3	2	2	1	1	--	3.3
	1.4	1.4	1.4	1.4	1.4	1.2	1.3	1.5	1.3	1.2	1.3	1.0	0.9	0.9	0.8	1.0	1.1	1.3	1.6	1.4	1.3	1.3	1.4	1.5	Diurnal Average	
	4.1	3.9	3.3	3.4	4.1	3.2	3.9	6.1	3.9	2.5	10.0	2.6	2.2	2.1	1.9	3.3	4.6	12.8	14.7	9.8	4.8	5.3	5.1	3.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Sunset House - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Sunset House - June 2012

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

Maximum Value: 1.0 ppb on Jun 15 18:00

Maximum Daily Average: 0.2 ppb on Jun 7

Minimum Value: 0 ppb on Jun 1 11:00

Minimum Daily Average: 0.0 ppb on Jun 23

Maximum Diurnal Average: 0.2 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.08 ppb

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

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	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	0.2
2-Jun	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
3-Jun	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	0.2
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
5-Jun	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
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.1
7-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.7
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.4
9-Jun	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
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.1
11-Jun	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
12-Jun	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
13-Jun	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
14-Jun	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
15-Jun	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	1.0
16-Jun	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
17-Jun	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
18-Jun	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
19-Jun	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
20-Jun	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
21-Jun	0	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
22-Jun	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
23-Jun	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
24-Jun	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	0.2
25-Jun	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
26-Jun	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
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
28-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
29-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3
30-Jun	0	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	0	0	A	0	0	0	0	0	--	0.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	Diurnal Average	
	0.1	0.1	0.2	0.2	0.2	0.3	0.6	0.9	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.6	1.0	0.3	0.1	0.1	0.1	0.2	0.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Sunset House - June 2012

Maximum Value: 30.2 ppb on Jun 15 18:00

Maximum Daily Average: 2.3 ppb on Jun 15

Minimum Value: 0 ppb on Jun 1 16:00

Minimum Daily Average: 0.1 ppb on Jun 21

Maximum Diurnal Average: 1.4 ppb at hour 18

Minimum Diurnal Average: 0.2 ppb at hour 22

Monthly Average: 0.37 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 3.4$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	A	0	0.5	6.4
4-Jun	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	0.3
5-Jun	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	0.2
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0.2	0.7
7-Jun	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.9
8-Jun	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	1.0
9-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0.4	1.4
10-Jun	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0.3	0.8
11-Jun	0	0	0	0	0	0	0	0	0	0	5	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	5.1
12-Jun	0	0	0	0	0	0	0	0	1	0	0	1	1	A	0	1	2	0	1	1	0	0	0	0	0.5	1.8
13-Jun	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	16	0	0	0	0	0	1.0	16.2
14-Jun	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	1	0	0	0	0	0	0.3	1.2
15-Jun	0	0	0	1	0	0	0	0	1	0	A	0	0	0	0	0	13	30	4	0	0	0	0	0	2.3	30.2
16-Jun	0	0	0	0	0	0	0	0	0	A	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
17-Jun	0	0	0	0	0	0	0	1	A	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1
18-Jun	0	0	0	0	0	0	0	A	0	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0.4	0.8
19-Jun	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
20-Jun	0	0	0	0	0	A	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7
21-Jun	0	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
22-Jun	0	0	0	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
23-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
24-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
25-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
26-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0.2	1.0
27-Jun	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	A	0	0	0.4	2.8
28-Jun	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
29-Jun	0	0	0	0	0	0	0	0	0	0	0	2	1	0	5	0	0	0	0	A	0	0	0	0	0.5	5.1
30-Jun	0	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	3	4	A	0	0	0	0	0	--	3.8
	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.4	0.4	0.2	0.2	0.3	0.3	0.8	1.4	0.9	0.5	0.3	0.2	0.2	0.2	Diurnal Average	
	0.3	0.3	0.4	0.5	0.6	0.5	0.8	2.5	0.8	1.0	5.1	2.1	0.8	0.7	5.1	1.5	13.3	30.2	16.2	6.4	2.6	0.4	1.4	0.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Sunset House - June 2012

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

Maximum Value: 5.1 ppb on Jun 22 08:00

Maximum Daily Average: 1.3 ppb on Jun 22

Minimum Value: 0 ppb on Jun 30 04:00

Minimum Daily Average: 0.4 ppb on Jun 21

Maximum Diurnal Average: 1.3 ppb at hour 8

Minimum Diurnal Average: 0.6 ppb at hour 14

Monthly Average: 0.87 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.8 $Q_3 = 1.1$ $P_{90} = 1.5$ $P_{99} = 2.5$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	1	A	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0.8	1.8
2-Jun	A	2	1	1	1	1	1	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	2	A	0.8	2.2
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0	A	1	0.7	1.3
4-Jun	1	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	1	1	1	1	A	1	1	0.6	1.1
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.3
6-Jun	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
7-Jun	1	1	1	1	1	2	2	2	2	1	1	1	0	0	0	0	0	0	A	1	1	1	1	1	1.0	1.9
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	2	1.1	2.1
9-Jun	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	2.1
10-Jun	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.9	2.0
11-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	3	2	2	1.0	2.6
12-Jun	2	1	1	1	1	1	1	1	1	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	0.8	1.7
13-Jun	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
14-Jun	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.2
15-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	2	1	0	1	1	0	0	0.9	1.8
16-Jun	1	1	1	1	1	1	1	2	1	A	2	1	1	1	1	1	1	1	0	0	1	1	1	1	0.9	1.7
17-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.8	1.5
18-Jun	1	1	1	1	1	1	1	A	3	2	2	2	1	1	1	1	1	0	1	1	1	1	2	2	1.2	2.5
19-Jun	1	1	1	1	1	0	A	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	1	1	0.6	1.5
20-Jun	0	1	1	1	1	A	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.7	2.3
21-Jun	0	0	0	0	A	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	1.7
22-Jun	1	1	1	A	3	2	2	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	5.1
23-Jun	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0.7	2.0
24-Jun	0	A	2	2	1	1	1	2	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1.2	2.0
25-Jun	A	3	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	A	0.9	2.6
26-Jun	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A	2	0.7	1.9
27-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	1	0.7	1.5
28-Jun	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	2	1	1	0.7	1.6
29-Jun	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	1	1	1	1.1	2.8
30-Jun	1	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	1	1	A	2	1	2	1	1	--	2.4
	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.3	1.2	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.0	Diurnal Average	
	1.8	2.6	2.1	2.2	2.8	1.9	2.5	5.1	2.5	2.0	1.7	1.6	1.3	1.5	1.3	1.4	1.5	1.8	2.0	2.4	2.8	2.6	2.2	2.1	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Sunset House - June 2012

Maximum Value: 42.9 ppb on Jun 15 18:00

Maximum Daily Average: 4.1 ppb on Jun 15

Minimum Value: 0 ppb on Jun 30 04:00

Minimum Daily Average: 0.7 ppb on Jun 21

Maximum Diurnal Average: 2.4 ppb at hour 18

Minimum Diurnal Average: 0.9 ppb at hour 14

Monthly Average: 1.47 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.5$ $Q_1 = 0.8$ Median = 1.1 $Q_3 = 1.5$ $P_{90} = 2.3$ $P_{99} = 11.1$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	41
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-Jun	1	A	2	2	2	2	2	2	2	1	1	0	1	0	0	0	1	1	1	1	1	1	2	1	1.1	2.1
2-Jun	A	4	2	2	3	1	1	3	1	1	1	1	1	1	1	1	0	0	0	0	1	1	5	A	1.5	5.2
3-Jun	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	0	0	12	7	1	A	2	1.7	12.1
4-Jun	1	1	1	1	1	1	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	2	1	0.8	1.8
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1.0	1.6
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	1	1	1.0	1.8
7-Jun	1	1	1	1	2	2	2	2	2	1	1	1	1	1	0	0	0	0	A	2	1	1	1	1	1.2	2.2
8-Jun	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	A	2	2	1	1	1	3	1.4	3.2
9-Jun	3	3	3	2	1	2	1	1	3	2	2	1	1	1	1	1	A	2	2	2	1	1	3	2	1.9	3.4
10-Jun	2	3	2	1	3	1	1	1	1	1	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1.3	3.3
11-Jun	1	1	1	1	1	1	2	1	1	1	13	1	1	1	A	2	1	1	1	1	1	5	2	4	2.0	13.4
12-Jun	4	1	1	1	1	1	1	1	1	1	1	2	1	A	2	4	2	1	2	2	1	1	2	2	1.5	4.2
13-Jun	1	1	1	1	1	1	1	1	2	2	2	1	A	2	1	1	1	1	24	1	1	1	1	1	2.3	23.9
14-Jun	1	1	2	3	2	1	1	2	2	2	1	A	2	1	1	2	1	1	1	1	1	1	1	1	1.3	3.5
15-Jun	1	1	1	2	1	1	1	1	2	1	A	3	1	1	1	1	11	43	17	1	1	1	1	1	4.1	42.9
16-Jun	1	1	1	1	1	1	2	2	1	A	3	3	1	1	1	1	1	1	1	1	2	1	1	1	1.2	3.0
17-Jun	1	1	1	1	1	1	1	2	A	3	2	5	1	1	1	1	1	1	1	1	2	1	1	1	1.3	4.6
18-Jun	2	2	1	1	1	1	1	A	4	2	3	2	2	2	1	4	2	1	1	2	2	2	3	3	2.0	4.1
19-Jun	1	1	1	1	1	1	A	2	1	1	1	1	0	1	1	2	1	1	1	1	1	1	1	1	0.8	2.2
20-Jun	1	1	1	1	1	A	3	2	2	1	2	1	1	1	0	1	0	1	0	0	1	1	1	2	1.0	3.4
21-Jun	1	1	1	1	A	3	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0.7	3.0
22-Jun	1	2	2	A	4	3	5	8	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.9	7.8
23-Jun	1	1	A	3	2	1	1	1	1	1	1	1	1	1	2	1	1	0	1	1	1	1	1	1	1.0	3.2
24-Jun	1	A	3	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	1	2	2	2	1.5	2.8
25-Jun	A	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.9
26-Jun	3	2	1	1	1	1	1	1	1	1	0	1	1	0	0	0	1	2	1	1	1	1	A	3	1.0	2.8
27-Jun	1	1	2	2	2	1	1	6	1	1	1	1	1	1	1	0	0	1	1	5	0	A	2	4	1.5	5.6
28-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	A	3	1	1	0.9	2.5
29-Jun	4	2	1	2	2	2	1	1	1	1	1	4	2	1	12	1	1	1	1	A	5	2	1	1	2.2	12.0
30-Jun	1	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	4	2	A	3	2	2	2	2	--	4.1
	1.4	1.4	1.4	1.4	1.5	1.3	1.5	1.8	1.5	1.3	1.6	1.3	0.9	0.9	1.2	1.1	1.4	2.4	2.3	1.6	1.4	1.3	1.5	1.6	Diurnal Average	
	4.2	4.0	3.4	3.5	4.1	3.2	4.6	7.8	4.0	3.0	13.4	4.6	2.3	2.1	12.0	4.1	11.3	42.9	23.9	12.1	6.9	5.5	5.2	4.0	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Sunset House - June 2012

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

Maximum Value: 54.9 ppb on Jun 4 20:00 Maximum Daily Average: 42.5 ppb on Jun 4

Minimum Value: 9 ppb on Jun 12 23:00 Minimum Daily Average: 18.9 ppb on Jun 18

Maximum Diurnal Average: 36.1 ppb at hour 15 Minimum Diurnal Average: 25.8 ppb at hour 23

Monthly Average: 30.37 ppb Percentiles: P_1 = 12.2 P_{10} = 18.8 Q_1 = 23.0 Median = 29.9 Q_3 = 37.1 P_{90} = 43.5 P_{99} = 51.3

Hours in Service:	720
Hours of Data:	683
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-Jun	46	A	42	38	35	34	38	39	39	44	46	46	47	49	51	50	51	49	46	44	31	37	33	37	42.2	51.3
2-Jun	A	32	31	33	32	32	29	28	34	43	43	45	47	48	48	48	50	49	50	51	48	39	32	A	40.6	51.4
3-Jun	39	39	39	39	38	38	36	35	37	38	40	42	46	46	47	49	51	51	51	44	29	28	A	31	40.6	51.3
4-Jun	31	31	40	31	34	34	30	42	47	47	45	46	47	49	48	47	47	48	53	55	49	A	40	38	42.5	54.9
5-Jun	38	41	42	42	40	38	34	31	29	25	24	23	27	32	31	28	24	24	23	22	A	22	22	21	29.7	42.5
6-Jun	20	22	23	22	20	19	19	19	19	18	19	18	18	20	20	18	18	20	22	A	25	26	28	32	21.1	31.9
7-Jun	31	29	25	25	23	22	22	22	19	18	23	30	37	41	39	38	40	43	A	41	31	27	28	30	29.8	42.7
8-Jun	35	36	36	28	25	24	21	28	27	30	35	36	38	38	36	37	38	A	39	39	39	35	33	31	33.2	38.9
9-Jun	27	25	20	26	23	21	21	19	19	20	21	21	19	19	23	30	A	32	29	40	42	32	29	29	25.5	42.2
10-Jun	23	19	20	21	20	20	23	24	23	23	24	23	22	22	23	A	29	33	30	30	19	16	21	25	23.1	32.5
11-Jun	25	24	21	18	16	15	16	17	21	26	36	37	37	37	A	30	28	27	26	24	24	20	20	22	24.7	37.3
12-Jun	20	21	21	21	22	21	20	19	20	22	23	25	25	A	22	23	24	23	22	21	17	11	9	12	20.2	24.9
13-Jun	16	15	13	13	13	15	15	15	16	18	22	25	A	31	34	33	32	31	34	34	37	36	31	31	24.3	36.5
14-Jun	30	31	33	28	28	30	30	30	32	33	36	A	38	38	39	39	40	39	38	37	34	22	17	18	32.2	39.7
15-Jun	21	25	25	26	22	22	22	22	26	31	A	34	36	38	37	38	37	37	37	36	23	18	27	35	29.4	37.7
16-Jun	32	31	32	32	33	33	31	31	35	A	37	37	37	34	32	31	29	27	25	23	24	20	16	24	29.9	37.2
17-Jun	48	50	46	44	41	37	33	30	A	28	28	26	26	28	26	24	25	27	29	27	24	34	30	26	32.0	49.8
18-Jun	22	17	14	13	12	11	12	A	13	14	18	19	20	25	26	24	24	27	25	23	21	19	17	17	18.9	27.2
19-Jun	17	13	12	12	12	14	A	17	19	21	23	27	30	29	31	29	30	30	30	29	27	23	25	25	22.8	30.7
20-Jun	24	22	19	15	16	A	15	16	17	19	28	31	30	32	35	37	37	38	37	35	21	14	16	20	24.9	37.9
21-Jun	17	18	20	23	A	24	25	24	25	31	36	36	35	36	37	36	38	39	39	38	36	34	35	29	30.9	39.2
22-Jun	21	29	46	A	43	43	40	36	38	39	41	44	47	49	51	52	51	50	43	42	35	23	27	23	39.8	51.9
23-Jun	26	32	A	48	47	41	44	42	42	39	36	34	36	38	49	36	34	35	35	37	37	37	36	35	38.1	48.7
24-Jun	33	A	34	35	38	39	41	41	42	43	44	44	43	42	41	37	44	44	38	36	38	31	30	29	38.6	44.3
25-Jun	A	26	25	23	19	20	25	28	30	35	37	41	46	45	45	46	45	43	44	41	33	34	25	A	34.4	45.7
26-Jun	19	20	20	23	20	23	26	24	31	34	36	36	37	37	38	38	39	39	39	34	32	32	A	30	30.8	39.4
27-Jun	29	28	28	28	27	27	26	26	26	27	28	28	29	30	32	34	34	34	34	32	31	A	28	27	29.4	34.0
28-Jun	27	25	25	25	26	26	26	26	29	30	31	33	33	33	34	35	36	36	32	25	A	29	30	26	29.5	36.1
29-Jun	24	27	30	23	15	14	21	25	27	31	33	36	37	37	37	37	38	38	36	A	22	17	21	19	28.1	38.2
30-Jun	19	20	20	21	20	25	25	26	27	30	31	C	C	C	C	C	27	29	A	29	24	17	13	9	22.9	31.1
	27.2	26.8	27.7	26.8	26.3	26.2	26.4	27.0	27.8	29.7	31.8	33.0	34.7	35.8	36.1	35.8	35.9	35.9	35.2	34.7	30.5	26.2	25.8	26.1	Diurnal Average	
	48.0	49.8	46.2	48.2	47.4	43.1	44.0	42.0	46.7	47.3	45.8	46.2	47.5	49.5	50.7	51.9	51.4	51.3	52.6	54.9	49.5	39.2	40.0	38.0	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

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Sunset House - June 2012

Maximum Value: 57.9 ppb on Jun 4 19:00

Maximum Daily Average: 46.5 ppb on Jun 4

Minimum Value: 11 ppb on Jun 12 23:00

Minimum Daily Average: 21.2 ppb on Jun 18

Maximum Diurnal Average: 38.4 ppb at hour 15

Minimum Diurnal Average: 28.4 ppb at hour 5

Monthly Average: 33.07 ppb

Percentiles: P_1 = 13.1 P_{10} = 21.4 Q_1 = 25.9 Median = 32.5 Q_3 = 39.6 P_{90} = 46.3 P_{99} = 53.3

Hours in Service:	720
Hours of Data:	683
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-Jun	47	A	44	41	41	40	40	41	41	47	47	47	49	51	53	52	54	50	47	49	41	42	43	44	45.8	53.8
2-Jun	A	39	32	34	33	33	31	33	38	45	46	47	49	51	49	53	53	51	52	53	51	44	38	A	43.5	53.1
3-Jun	40	40	41	40	39	39	38	36	39	39	41	44	48	47	48	51	53	53	53	51	43	33	A	33	43.1	53.3
4-Jun	35	42	44	39	41	43	36	45	49	49	48	49	50	51	50	48	48	52	58	56	55	A	41	39	46.5	57.9
5-Jun	39	43	43	42	42	40	36	33	30	27	24	24	31	33	32	30	25	25	23	23	A	22	22	22	31.1	43.4
6-Jun	22	24	24	22	22	19	20	19	19	19	19	19	19	21	21	21	20	21	23	A	26	27	31	34	22.4	34.0
7-Jun	33	31	28	27	25	22	23	22	21	19	29	32	41	42	41	40	43	46	A	46	36	29	33	34	32.3	46.4
8-Jun	37	37	38	36	31	33	33	31	30	34	37	37	40	40	38	40	40	A	40	40	41	37	35	34	36.5	41.4
9-Jun	31	30	26	28	25	25	24	23	23	24	23	23	22	21	26	37	A	36	34	46	47	36	31	31	29.4	47.4
10-Jun	28	22	23	22	22	22	24	25	23	24	25	24	23	24	25	A	32	34	33	31	29	20	25	26	25.7	34.0
11-Jun	25	26	23	20	16	16	16	18	23	35	37	38	39	38	A	31	30	29	28	25	25	24	23	23	26.6	38.8
12-Jun	22	22	22	22	23	22	20	20	21	23	24	27	27	A	23	26	26	25	23	23	21	16	11	17	22.1	27.5
13-Jun	18	16	15	13	15	15	15	15	17	21	24	27	A	34	37	36	36	34	36	35	39	38	36	41	26.8	41.4
14-Jun	41	37	36	30	31	31	31	32	33	35	38	A	40	40	40	41	41	40	40	39	38	29	21	22	35.2	41.4
15-Jun	25	30	31	28	24	23	23	24	29	32	A	36	38	39	40	39	39	40	39	38	33	22	35	36	32.4	39.9
16-Jun	33	32	32	33	34	34	32	32	36	A	38	39	38	36	33	32	31	28	26	24	25	23	22	34	31.8	38.8
17-Jun	53	52	48	46	42	40	35	31	A	29	29	27	28	32	32	27	27	32	31	29	29	36	35	30	34.9	53.4
18-Jun	26	20	16	14	13	12	13	A	13	19	19	20	22	31	31	27	27	29	28	26	22	20	18	18	21.2	30.9
19-Jun	18	15	12	12	14	15	A	18	21	23	26	31	31	31	34	30	31	31	31	32	29	29	30	27	25.1	34.1
20-Jun	26	24	22	20	19	A	16	17	18	22	31	32	32	36	37	38	38	40	39	38	33	19	19	32	28.3	40.0
21-Jun	20	23	27	26	A	28	31	30	29	36	38	39	37	37	39	38	40	40	41	39	38	37	41	34	34.4	40.8
22-Jun	29	48	48	A	44	46	42	39	40	41	43	46	49	51	52	53	53	51	44	44	42	32	38	27	43.5	53.0
23-Jun	31	43	A	50	49	45	45	43	44	41	39	36	38	50	54	44	36	36	37	38	39	38	36	36	41.4	53.9
24-Jun	34	A	36	38	39	41	42	42	44	45	45	45	44	44	45	39	49	47	40	39	40	36	34	30	40.9	48.9
25-Jun	A	28	27	26	20	24	31	31	32	38	40	46	47	46	47	47	48	45	46	44	39	39	36	A	37.7	47.9
26-Jun	27	25	25	26	23	28	27	27	33	36	37	38	39	38	39	39	39	40	41	35	34	33	A	30	33.2	41.3
27-Jun	30	29	29	29	28	28	27	26	27	28	28	29	30	31	34	35	35	34	35	33	31	A	29	28	30.4	35.3
28-Jun	28	26	26	26	26	27	27	27	30	31	31	34	34	34	36	36	37	37	36	29	A	32	31	28	31.1	37.4
29-Jun	29	30	30	30	18	17	29	29	30	33	36	39	39	39	40	40	40	40	38	A	31	23	26	23	31.8	40.0
30-Jun	22	23	25	27	23	27	26	27	29	32	32	C	C	C	C	C	31	30	A	35	28	26	16	16	26.3	34.7
	30.4	30.6	30.3	29.4	28.4	28.9	28.9	28.9	29.9	32.1	33.8	34.9	36.7	38.3	38.4	38.4	38.0	38.0	37.3	37.3	35.3	30.2	30.0	29.7	Diurnal Average	
	53.4	52.4	47.9	49.9	49.0	45.7	45.5	45.2	49.0	48.8	48.0	48.7	50.4	51.4	53.9	53.0	53.8	52.7	57.9	56.4	54.9	44.3	42.9	44.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Sunset House - June 2012

Pollutant Rose

Ozone (O_3) - ppb

Sunset House - June 2012

Pollutant Classes (ppb)

Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Sunset House - June 2012

Maximum Value: 49.5 ppb on Jun 4 22:00

Minimum Value: 12.7 ppb on Jun 18 10:00

Percentiles: P_1 = 13.8 P_{10} = 20.5 Q_1 = 23.7 Median = 30.3 Q_3 = 36.9 P_{90} = 42.0 P_{99} = 48.5

Hours in Service:	720
Hours of Data:	711
Hours of Missing Data:	9
Hours of Calibration:	9
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-Jun	49	48	47	44	42	41	40	39	38	39	39	40	42	44	45	46	48	49	49	48	46	45	43	41	48.9
2-Jun	40	37	35	33	34	33	32	31	31	33	34	36	38	40	42	44	46	47	48	49	49	48	46	46	48.9
3-Jun	44	43	41	39	38	38	38	38	38	38	38	38	39	40	41	43	45	46	48	48	46	44	44	41	48.2
4-Jun	38	35	33	32	32	33	33	34	36	38	39	40	42	44	46	47	47	47	48	49	50	50	48	47	49.5
5-Jun	46	45	44	42	40	40	39	38	37	35	33	31	29	28	28	27	27	26	26	26	26	25	23	23	46.0
6-Jun	22	22	22	22	22	21	21	21	21	20	19	19	19	19	19	19	19	19	19	19	20	21	22	24	24.2
7-Jun	26	27	28	28	27	27	26	25	23	22	22	22	24	26	29	31	33	36	38	40	39	37	36	34	39.9
8-Jun	34	33	33	32	31	30	29	29	28	27	27	28	30	31	33	35	36	37	37	38	38	38	37	36	38.0
9-Jun	35	33	31	30	28	26	24	23	22	21	21	21	20	20	20	22	22	23	25	27	31	33	33	33	34.6
10-Jun	32	30	29	27	24	23	22	21	21	22	22	22	23	23	23	23	24	25	26	27	27	26	25	25	31.9
11-Jun	25	24	23	21	21	21	20	19	18	19	21	23	26	28	30	32	33	33	32	30	28	26	25	24	33.3
12-Jun	23	22	22	21	21	21	21	21	21	21	21	21	22	22	22	23	23	23	23	23	22	20	19	17	23.5
13-Jun	16	16	14	13	13	13	14	14	14	15	16	17	18	20	23	26	28	30	32	33	33	34	33	33	33.8
14-Jun	33	33	33	32	31	30	30	30	30	30	31	31	33	34	35	36	38	38	39	39	38	36	33	31	38.7
15-Jun	28	27	25	24	22	22	23	23	24	25	25	26	28	30	32	34	36	37	37	37	35	33	32	31	36.9
16-Jun	31	30	29	29	30	32	33	32	32	32	33	34	34	35	35	35	34	33	31	30	28	26	24	24	34.7
17-Jun	26	29	31	34	36	38	40	41	40	37	34	32	30	29	28	27	26	26	26	27	26	27	27	28	41.0
18-Jun	27	26	24	23	21	18	16	15	13	13	13	14	15	17	19	20	21	23	24	24	24	24	22	22	27.4
19-Jun	21	19	17	16	15	14	14	14	14	15	17	19	22	24	25	26	27	28	29	30	29	29	28	27	29.6
20-Jun	27	26	24	23	21	21	19	18	17	17	18	20	22	23	26	29	31	33	35	35	34	32	29	27	35.1
21-Jun	25	22	20	19	18	20	21	22	23	24	27	29	29	31	32	34	35	36	37	37	37	37	37	36	37.3
22-Jun	34	33	34	33	34	35	36	37	39	41	40	41	41	42	43	45	47	48	48	48	47	43	41	37	48.5
23-Jun	34	31	30	31	32	35	37	40	42	43	42	41	39	39	40	39	38	37	37	38	38	37	36	36	43.3
24-Jun	36	36	35	35	35	36	36	37	39	39	40	42	42	43	43	42	42	42	42	41	40	39	37	36	42.6
25-Jun	35	33	31	29	26	25	24	24	25	26	27	30	33	36	38	41	42	43	44	44	42	41	39	38	44.1
26-Jun	34	31	27	25	23	21	22	22	23	25	27	29	31	33	34	36	37	38	38	38	37	36	36	35	37.9
27-Jun	34	32	31	30	29	28	28	28	27	27	27	27	27	28	28	29	30	31	32	32	32	33	32	31	33.7
28-Jun	30	29	28	27	26	26	26	26	26	27	27	28	29	30	31	32	33	34	34	33	33	32	32	31	34.0
29-Jun	29	28	27	27	26	24	23	22	23	23	24	25	28	31	33	34	36	37	37	37	35	32	30	27	37.2
30-Jun	25	22	20	20	20	21	21	22	23	24	26	26	27	N	N	N	N	N	N	N	N	N	23	21	27.4
	48.9	48.4	46.6	44.5	42.2	40.7	40.3	41.0	42.3	43.3	42.4	41.6	42.2	44.2	46.5	47.1	48.0	48.6	48.7	49.3	49.5	49.5	48.4	47.1	
	Diurnal Maximums																								

N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

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

Sunset House - June 2012

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

Maximum Value: 18.0 $\mu g/m^3$ on Jun 5 06:00

Maximum Daily Average: 8.5 $\mu g/m^3$ on Jun 5

Minimum Value: 0 $\mu g/m^3$ on Jun 1 10:00

Maximum Diurnal Average: 4.3 $\mu g/m^3$ at hour 21

Monthly Average: 2.41 $\mu g/m^3$

Minimum Daily Average: 0.6 $\mu g/m^3$ on Jun 30

Minimum Diurnal Average: 1.5 $\mu g/m^3$ at hour 2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 1.0 Q_3 = 4.0 P_{90} = 6.0 P_{99} = 14.0

Hours in Service:	720
Hours of Data:	692
Hours of Missing Data:	28
Hours of Calibration:	0
Percent Operational Time:	96.1

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	1	2	3	3	3	3	3	2	3	0	0	0	1	0	0	0	2	5	6	5	6	0	2	1	2.1	6.0
2-Jun	1	8	4	2	1	2	2	1	0	N	0	0	0	0	0	0	0	0	0	0	2	3	1	1	1.2	8.0
3-Jun	1	1	1	2	2	3	4	4	4	3	4	3	1	2	1	1	0	1	1	6	8	1	2	2	2.4	8.0
4-Jun	2	3	2	4	3	5	5	1	4	2	4	1	1	3	5	5	4	4	9	7	9	7	6	6	4.3	9.0
5-Jun	6	8	15	15	16	18	17	14	12	10	7	6	5	3	6	7	6	7	6	7	6	4	1	2	8.5	18.0
6-Jun	1	1	0	0	2	N	1	0	0	0	1	3	2	2	6	6	6	7	7	8	9	5	3	0	3.0	9.0
7-Jun	0	N	N	N	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	4	4	0	0	0.7	4.0
8-Jun	0	0	0	1	0	2	2	2	4	2	4	5	2	6	6	7	3	4	2	1	0	2	0	0	2.3	7.0
9-Jun	0	1	0	2	2	4	5	4	4	2	6	5	7	9	7	1	2	4	6	0	3	4	4	0	3.4	9.0
10-Jun	0	0	5	4	4	4	5	5	2	0	0	2	2	1	1	0	0	0	0	0	5	0	0	0	1.7	5.0
11-Jun	3	6	5	3	3	3	2	4	4	3	0	1	1	2	5	3	6	2	3	0	0	0	0	0	2.5	6.0
12-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	4	0	2	3	0	0	3	0.7	4.0
13-Jun	2	1	1	1	0	0	0	0	1	0	1	0	0	0	0	3	2	3	0	0	0	6	2	1	1.0	6.0
14-Jun	0	0	0	0	0	1	1	0	0	2	2	0	0	6	0	0	4	0	4	1	3	3	1	0	1.2	6.0
15-Jun	1	0	2	2	2	2	2	3	0	0	1	0	0	0	0	0	1	1	0	1	8	0	N	0	1.1	8.0
16-Jun	3	0	0	0	0	2	3	3	4	6	2	0	1	2	1	1	0	2	0	0	3	1	0	0	1.4	6.0
17-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	N	2	0	0	5	N	0	0	0.7	5.0
18-Jun	2	1	0	2	0	0	0	0	1	3	2	3	2	0	1	1	3	0	2	1	0	3	4	5	1.5	5.0
19-Jun	1	0	0	5	0	0	1	1	2	3	1	0	1	1	3	3	1	1	1	4	1	4	0	0	1.4	5.0
20-Jun	1	0	0	0	3	4	4	6	6	7	0	0	4	N	0	0	1	1	4	4	11	1	0	1	2.5	11.0
21-Jun	1	0	1	3	2	4	5	8	4	N	0	1	0	0	0	2	1	0	1	2	4	3	3	8	2.3	8.0
22-Jun	7	0	3	3	5	7	8	7	9	7	4	1	1	4	5	6	2	4	14	8	13	8	0	4	5.4	14.0
23-Jun	2	2	3	5	4	6	8	8	8	8	7	5	3	4	5	6	5	5	6	4	6	6	8	7	5.5	8.0
24-Jun	7	5	9	6	6	5	4	8	7	6	4	6	7	9	7	10	7	3	2	0	0	2	5	5	5.4	10.0
25-Jun	2	1	1	1	1	2	1	2	2	N	0	N	N	0	N	0	1	0	0	3	9	N	4	1	1.6	9.0
26-Jun	0	0	0	0	0	0	0	5	0	N	0	0	0	0	0	0	1	0	5	2	1	0	1	0	0.7	5.0
27-Jun	0	0	0	0	1	1	2	3	4	4	3	1	0	0	0	0	1	1	1	1	0	0	1	0	1.0	4.0
28-Jun	0	0	0	0	0	1	2	3	3	2	0	0	2	0	0	3	3	3	11	13	3	0	2	5	2.3	13.0
29-Jun	11	3	6	10	6	5	1	5	0	0	0	0	0	0	1	5	N	N	N	N	N	N	N	N	--	11.0
30-Jun	0	0	0	0	0	N	0	0	1	0	0	0	0	0	M	M	0	2	3	2	3	N	0	0	0.6	3.0
	1.8	1.5	2.1	2.6	2.2	3.0	3.0	3.3	3.0	2.8	1.8	1.5	1.5	2.0	2.4	2.4	2.2	2.3	3.2	2.9	4.3	2.6	1.8	1.8	Diurnal Average	
	11.0	8.0	15.0	15.0	16.0	18.0	17.0	14.0	12.0	10.0	7.0	6.0	7.0	9.0	7.0	10.0	7.0	7.0	14.0	13.0	13.0	8.0	8.0	8.0	Diurnal Maximum	

M - Maintenance N - Not Valid

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

Peace Airshed Zone Association

Hourly Averages

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

Sunset House - June 2012

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Maximums

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

Sunset House - June 2012

Maximum Value: 50.5 $\mu g/m^3$ on Jun 25 21:00

Maximum Daily Average: 13.8 $\mu g/m^3$ on Jun 23

Minimum Value: 0 $\mu g/m^3$ on Jun 7 04:00

Minimum Daily Average: 1.9 $\mu g/m^3$ on Jun 30

Maximum Diurnal Average: 11.7 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 4.7 $\mu g/m^3$ at hour 2

Monthly Average: 7.65 $\mu g/m^3$

Percentiles: P_1 = 0.0 P_{10} = 1.7 Q_1 = 3.6 Median = 6.4 Q_3 = 10.2 P_{90} = 14.9 P_{99} = 28.7

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	2	4	4	4	5	6	4	5	6	7	4	4	7	4	4	5	7	12	12	17	12	4	6	3	6.3	16.6
2-Jun	5	12	6	4	3	3	4	4	3	0	8	3	4	5	5	4	4	4	0	2	4	5	3	4	4.2	12.5
3-Jun	3	2	4	4	4	5	6	6	7	7	11	7	10	6	5	3	5	4	6	26	24	6	5	4	7.0	26.1
4-Jun	7	10	10	12	11	11	11	5	8	6	12	11	5	9	12	8	9	9	27	13	16	10	8	8	10.3	26.8
5-Jun	9	11	16	17	18	21	20	17	15	14	10	9	8	6	8	9	8	9	9	9	8	7	3	4	11.1	21.0
6-Jun	3	3	2	3	16	2	22	6	7	7	5	7	6	5	8	8	9	9	12	12	12	7	5	2	7.5	21.8
7-Jun	4	2	0	0	0	1	1	2	3	4	3	4	7	5	9	4	2	2	6	23	14	6	4	5	4.6	22.7
8-Jun	1	2	1	7	6	10	15	11	8	6	8	12	9	13	11	20	10	8	8	5	2	4	2	2	7.4	19.8
9-Jun	2	3	3	5	5	6	9	10	7	7	12	11	9	13	14	15	10	20	13	0	7	6	8	3	8.3	20.2
10-Jun	1	3	8	6	6	7	7	7	5	1	3	6	6	3	6	5	4	3	3	3	11	3	6	3	4.9	11.3
11-Jun	5	8	7	5	4	5	4	5	11	12	7	7	12	12	15	21	16	17	9	3	3	1	0	0	7.9	21.1
12-Jun	1	1	1	1	1	4	3	7	4	3	3	7	12	6	10	8	5	11	5	6	10	5	0	8	5.1	12.1
13-Jun	5	3	4	2	1	1	2	3	5	4	8	2	8	9	6	13	7	10	5	11	4	10	6	7	5.7	13.0
14-Jun	4	2	4	1	2	4	4	4	4	6	6	3	7	19	7	5	13	5	9	4	8	8	3	3	5.7	19.3
15-Jun	3	5	6	4	4	4	5	6	5	2	4	4	4	9	4	7	9	7	3	13	27	4	0	3	5.8	26.5
16-Jun	5	4	2	2	2	5	5	4	8	9	7	3	7	7	8	8	5	7	2	6	6	6	7	3	5.3	9.4
17-Jun	1	1	2	1	1	1	1	3	3	2	6	7	5	25	11	5	2	10	3	3	16	1	2	4	4.8	25.0
18-Jun	4	3	16	14	2	1	0	2	3	6	6	13	7	7	15	12	9	7	7	4	4	6	6	9	6.8	16.0
19-Jun	2	2	0	38	2	1	5	5	4	8	9	9	13	8	12	12	8	7	9	13	4	8	5	2	7.8	38.3
20-Jun	3	2	2	4	11	10	7	10	10	13	9	8	15	11	9	9	9	9	11	11	28	7	1	4	8.8	27.5
21-Jun	5	2	8	6	5	10	20	18	21	6	6	22	16	7	8	21	11	7	8	5	7	13	13	12	10.8	21.6
22-Jun	12	6	5	5	7	10	11	11	13	13	14	9	12	15	12	14	9	24	32	18	24	18	7	9	12.9	32.4
23-Jun	5	7	7	7	7	14	12	11	15	19	27	30	12	32	15	22	13	9	14	11	11	9	9	10	13.8	31.6
24-Jun	11	12	12	11	8	8	7	13	14	15	12	14	16	17	22	27	29	6	4	2	4	7	7	8	11.9	29.3
25-Jun	5	4	8	6	4	6	7	8	9	6	4	7	10	11	10	5	17	22	4	16	50	9	22	15	11.1	50.5
26-Jun	16	6	2	1	3	5	5	10	11	1	5	8	6	11	4	6	12	9	24	19	5	5	4	3	7.5	23.7
27-Jun	3	1	2	2	4	3	4	7	7	7	8	8	6	9	8	3	5	4	2	4	2	3	3	2	4.4	8.8
28-Jun	2	2	3	2	1	4	4	7	10	9	9	5	14	11	9	12	13	13	27	34	21	17	7	15	10.4	34.3
29-Jun	20	16	11	20	11	8	6	13	8	10	11	8	11	15	16	25	0	0	0	0	0	0	0	0	8.7	25.4
30-Jun	0	0	0	0	0	N	1	1	3	1	0	1	1	0	M	M	3	5	6	9	5	N	0	2	1.9	9.0
	5.0	4.7	5.2	6.4	5.1	6.1	7.1	7.4	7.9	7.1	7.9	8.2	8.8	10.3	9.8	11.0	8.7	8.9	9.3	10.0	11.7	6.7	5.1	5.2	Diurnal Average	
	20.4	15.6	16.5	38.3	18.2	21.0	21.8	18.2	21.5	18.7	27.4	30.3	16.3	31.6	21.6	26.8	29.3	23.9	32.4	34.3	50.5	17.7	21.8	14.9	Diurnal Maximum	

M - Maintenance N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

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

Sunset House - June 2012

Peace Airshed Zone Association

Pollutant Rose

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

Sunset House - June 2012

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

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Sunset House - June 2012

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

Maximum Value: 24.2 ^{o}C on Jun 22 16:00

Maximum Daily Average: 18.9 ^{o}C on Jun 23

Minimum Value: 5 ^{o}C on Jun 4 01:00

Minimum Daily Average: 10.6 ^{o}C on Jun 18

Maximum Diurnal Average: 18.0 ^{o}C at hour 16

Minimum Diurnal Average: 9.9 ^{o}C at hour 5

Monthly Average: 14.00 ^{o}C

Percentiles: P_1 = 5.6 P_{10} = 8.8 Q_1 = 10.9 Median = 13.3 Q_3 = 17.2 P_{90} = 20.2 P_{99} = 23.5

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	9	8	8	7	6	8	10	11	13	16	17	18	19	19	20	19	19	17	17	16	13	11	8	9	13.3	19.7
2-Jun	11	10	9	8	8	8	9	10	12	13	13	13	14	15	16	16	16	16	16	15	14	9	6	7	11.9	16.4
3-Jun	7	7	6	6	5	6	7	9	12	13	15	16	17	17	18	18	18	18	18	16	11	7	5	5	11.5	18.4
4-Jun	5	6	9	7	7	9	11	13	16	17	18	17	18	19	19	18	19	19	19	18	16	15	15	15	14.4	19.4
5-Jun	14	15	15	14	14	13	11	11	10	11	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12.3	14.9
6-Jun	12	11	11	11	11	11	11	11	11	12	12	12	13	12	13	13	13	14	14	15	15	14	14	13	12.4	14.6
7-Jun	12	11	8	8	7	7	8	9	9	9	10	12	14	15	16	16	17	18	18	18	15	13	12	11	12.1	18.1
8-Jun	12	12	11	8	7	8	9	11	13	14	16	17	18	19	17	15	15	14	12	11	10	10	10	9	12.4	18.6
9-Jun	8	8	8	9	8	9	9	9	9	10	11	11	11	13	16	16	12	12	13	13	13	13	12	11	11.0	16.3
10-Jun	10	9	9	10	10	10	11	11	11	11	11	11	11	12	13	14	15	15	15	15	13	11	12	12	11.8	15.4
11-Jun	12	12	12	12	12	12	12	12	14	17	19	20	21	22	21	21	18	19	18	18	18	15	13	14	16.0	21.9
12-Jun	12	13	13	13	13	12	13	14	16	17	18	19	19	19	19	19	19	18	19	18	15	11	9	10	15.3	19.3
13-Jun	12	12	11	11	11	11	11	12	12	14	14	16	17	18	19	17	17	17	17	17	15	12	10	9	13.8	18.7
14-Jun	8	7	8	7	6	7	8	10	11	13	14	14	15	13	15	15	15	14	13	14	13	7	5	5	10.7	15.3
15-Jun	5	7	7	8	7	8	8	10	12	14	15	16	16	16	16	17	16	16	16	17	12	7	7	11	11.9	16.9
16-Jun	12	12	12	12	12	12	12	12	13	13	13	15	16	16	17	18	18	18	18	17	16	13	12	13	14.2	18.1
17-Jun	12	11	10	10	9	10	11	13	14	15	15	15	16	14	13	16	17	15	13	14	13	11	11	10	12.9	16.5
18-Jun	10	10	9	9	9	9	9	9	9	10	11	11	12	13	11	11	13	13	12	11	11	11	10	10	10.6	13.4
19-Jun	10	10	10	10	10	9	10	11	11	13	14	15	14	15	12	13	16	16	15	12	10	11	10	10	11.9	16.4
20-Jun	10	10	8	7	8	9	10	12	13	15	18	19	18	17	20	21	21	21	21	21	17	11	9	9	14.3	21.2
21-Jun	8	8	8	10	9	12	15	18	20	20	21	22	22	23	23	23	23	22	22	21	20	17	14	12	17.2	23.4
22-Jun	11	11	15	15	15	16	17	18	20	21	22	23	24	23	24	24	24	24	22	22	19	14	12	11	18.5	24.2
23-Jun	10	11	15	16	16	15	17	18	20	22	22	22	21	22	23	24	22	21	21	20	19	19	19	18	18.9	23.5
24-Jun	18	17	17	16	16	16	17	18	19	20	20	20	20	20	20	20	15	14	14	14	14	13	13	13	16.8	20.2
25-Jun	13	12	12	12	11	11	13	14	16	18	19	20	21	22	22	23	23	21	22	22	20	17	13	11	17.0	22.7
26-Jun	10	11	10	9	8	11	13	15	17	18	19	20	20	21	21	22	22	21	20	18	15	12	12	12	15.7	21.9
27-Jun	12	11	11	11	11	11	11	12	14	15	16	16	17	17	18	16	18	17	17	16	14	13	12	10	14.0	17.8
28-Jun	10	9	9	9	9	9	10	12	15	17	18	19	20	21	22	22	22	22	21	19	17	16	16	15	15.7	22.0
29-Jun	14	14	14	13	12	12	12	14	15	16	17	18	19	19	20	20	20	20	20	19	16	13	12	10	15.9	20.4
30-Jun	10	10	10	9	9	13	14	16	17	19	21	21	23	24	23	21	22	19	16	14	14	13	11	12	15.9	24.0
	10.6	10.4	10.6	10.2	9.9	10.5	11.4	12.5	13.9	15.0	16.0	16.6	17.2	17.7	17.9	18.0	17.8	17.5	17.0	16.4	14.6	12.4	11.2	10.9	Diurnal Average	
	17.5	17.0	16.6	16.0	16.2	16.3	17.3	18.3	19.9	21.6	22.2	22.8	23.5	24.0	23.7	24.2	23.9	23.6	22.2	22.1	19.7	19.4	18.9	18.4	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Sunset House - June 2012

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - June 2012

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	8	9	9	7	8	9	11	11	9	5	5	3	3	6	5	7	6	6	9	5	6	6	6	8	6.0	10.5
Dir	185	183	190	197	186	179	183	194	200	221	166	164	210	214	209	179	222	238	221	192	131	132	123	129	185.6	193.9
2 Spd	7	8	8	7	7	7	6	7	8	16	15	9	12	12	12	14	14	12	12	13	7	3	7	8	7.5	15.7
Dir	154	239	210	228	228	231	229	290	288	302	295	271	288	285	299	298	303	294	290	291	282	208	188	191	273.0	302.2
3 Spd	8	8	8	10	11	10	10	9	8	8	10	10	10	10	9	10	9	9	6	3	3	5	4	3	5.0	10.9
Dir	199	201	204	203	199	204	203	220	264	273	283	274	281	298	313	299	280	298	297	320	107	126	110	127	248.5	199.4
4 Spd	3	5	4	2	2	2	2	12	13	9	2	9	13	15	20	20	19	18	13	14	11	14	16	19	9.4	20.3
Dir	106	102	104	129	101	140	213	167	161	147	37	60	73	93	75	87	92	93	110	119	84	82	86	79	97.4	86.5
5 Spd	20	23	26	23	21	19	17	17	18	15	15	16	18	25	20	12	11	15	15	15	11	11	11	10	16.6	26.5
Dir	87	91	93	90	89	92	88	79	75	66	77	86	96	98	107	109	99	94	91	93	96	86	75	58	89.1	93.0
6 Spd	11	18	23	22	21	25	25	21	23	27	26	15	20	23	15	10	17	19	22	21	19	17	17	15	19.1	26.7
Dir	53	67	66	72	82	67	93	92	90	90	96	97	88	86	84	56	57	65	66	70	87	90	97	98	80.5	90.2
7 Spd	13	10	10	17	14	22	21	19	16	11	13	12	11	8	9	10	11	9	8	6	11	12	12	10	9.3	21.9
Dir	118	112	123	134	139	130	154	166	195	218	209	217	230	225	193	170	172	194	138	123	80	85	104	137	154.9	129.7
8 Spd	11	11	11	6	6	5	2	6	5	5	9	9	12	15	13	5	9	10	13	15	11	9	6	4	3.0	15.3
Dir	153	151	168	154	150	159	94	67	232	295	342	342	329	333	318	345	231	226	204	198	201	204	212	206	219.8	198.2
9 Spd	5	4	3	2	5	6	3	2	5	7	5	15	12	12	11	10	5	3	3	12	10	8	6	4	3.9	15.4
Dir	183	182	160	38	43	181	194	152	298	287	273	184	209	217	215	256	208	206	235	319	305	283	268	288	238.0	183.5
10 Spd	3	3	3	4	5	6	9	12	14	16	16	16	15	16	13	12	9	8	7	6	4	6	8	11	6.0	16.1
Dir	205	189	278	290	289	298	307	335	342	348	349	351	348	351	340	329	304	324	332	304	150	154	176	180	328.3	350.6
11 Spd	10	12	14	15	15	15	14	13	7	7	12	11	13	13	13	11	9	3	9	12	5	4	4	4	6.8	15.3
Dir	179	180	182	182	186	195	200	199	222	242	288	286	292	286	288	297	10	228	191	197	243	206	217	235	224.2	182.4
12 Spd	7	8	8	11	8	7	8	7	11	15	12	11	9	11	8	7	8	8	6	3	5	5	7	8	5.9	15.2
Dir	197	203	202	198	220	203	225	248	280	288	281	278	275	289	278	278	271	235	253	252	194	147	129	150	243.6	287.8
13 Spd	11	8	11	12	12	11	9	7	7	5	7	7	8	8	12	12	6	7	9	8	7	11	6	6	3.9	12.5
Dir	189	190	185	190	194	204	210	222	233	240	219	241	251	271	298	347	301	327	314	331	312	12	89	1	248.9	189.6
14 Spd	4	9	8	6	9	9	9	8	9	9	10	9	12	19	13	13	18	15	9	9	7	2	4	4	3.7	18.7
Dir	132	187	203	214	197	194	213	240	270	271	282	288	299	350	342	330	1	2	356	11	10	118	126	130	305.4	349.9
15 Spd	6	4	6	8	8	8	8	8	7	9	10	11	8	7	6	7	7	8	5	3	3	5	9	13	4.0	12.9
Dir	142	188	199	204	201	201	203	221	251	259	287	302	287	276	269	268	237	225	198	218	107	111	110	115	223.9	115.1
16 Spd	18	22	19	19	18	16	18	14	17	18	19	18	16	14	12	12	11	9	9	6	6	1	6	9	12.3	21.5
Dir	145	154	155	162	171	178	187	186	193	201	189	190	195	199	199	200	202	221	230	244	263	281	188	223	186.9	154.3
17 Spd	13	10	14	11	14	10	10	10	11	15	14	15	13	18	9	17	18	18	8	6	7	9	2	6	8.2	18.0
Dir	232	210	203	206	195	208	226	252	271	286	285	288	274	296	289	291	297	353	344	321	277	316	252	202	269.2	352.6
18 Spd	7	5	7	6	7	7	7	7	7	7	9	9	9	10	5	7	7	9	6	3	5	6	6	9	5.4	10.0
Dir	223	212	212	224	215	224	239	249	244	260	267	268	278	284	291	255	277	294	302	264	329	339	335	345	267.4	283.9
19 Spd	6	11	11	10	14	15	14	13	12	12	11	15	17	9	5	5	6	7	6	6	8	2	6	8	6.5	17.4
Dir	330	0	11	10	14	17	10	5	352	348	334	356	15	356	353	252	284	312	14	224	188	146	219	204	352.9	15.4
20 Spd	7	7	8	8	8	8	8	9	7	5	5	5	8	8	4	3	4	4	5	3	2	2	3	4	1.8	9.1
Dir	206	203	193	182	181	181	197	207	223	221	283	342	336	351	32	330	308	327	20	21	82	117	122	133	217.9	207.3
21 Spd	2	2	4	7	5	9	4	3	3	3	7	8	9	8	5	7	13	13	10	10	10	10	8	6	5.2	13.0
Dir	127	138	146	166	151	175	175	44	279	189	124	78	46	61	68	66	96	106	102	98	97	112	162	150	111.2	105.7
22 Spd	2	7	15	15	15	14	14	12	10	12	15	15	16	16	17	17	19	14	7	4	3	3	5	2	9.1	19.1
Dir	106	108	119	121	121	119	119	106	82	64	61	60	60	61	64	63	57	66	214	220	167	115	131	125	87.8	57.2

FOCUS AIR QUALITY MONITORING

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - June 2012

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	3	7	11	12	12	11	12	12	12	12	13	12	12	7	3	8	12	11	8	9	9	11	11	12	9.7	12.8
Dir	107	105	108	108	107	95	105	97	87	73	70	64	77	101	197	90	95	102	108	113	105	101	96	91	95.4	70.2
24 Spd	12	12	10	12	14	17	22	23	22	21	21	19	16	10	7	3	18	8	7	6	11	6	6	10	10.3	23.1
Dir	88	91	100	99	107	131	141	161	171	179	192	193	186	199	212	244	176	183	112	90	170	212	196	196	160.0	161.4
25 Spd	11	12	10	13	14	12	10	10	11	10	8	10	10	8	6	6	4	5	5	3	1	4	2	5	6.3	13.9
Dir	192	181	179	188	198	196	202	196	204	220	231	240	247	274	286	239	284	241	244	262	262	333	346	126	215.1	197.7
26 Spd	5	6	7	7	8	8	10	10	10	12	13	11	10	9	11	11	12	15	14	16	9	6	6	7	6.2	15.8
Dir	133	144	145	151	169	181	191	207	239	263	268	278	265	269	278	285	304	307	310	309	301	268	246	266	262.4	308.7
27 Spd	12	9	10	10	9	10	13	15	16	18	20	18	20	24	23	22	23	18	14	15	12	16	11	7	14.9	23.5
Dir	276	273	272	263	262	280	281	285	287	282	287	279	281	287	290	294	293	289	283	291	288	292	283	236	283.6	286.5
28 Spd	7	11	11	12	11	12	11	9	9	11	11	9	8	9	9	9	7	2	6	6	6	8	10	7	4.0	12.0
Dir	211	198	202	198	201	196	208	224	261	291	286	270	255	263	260	288	306	217	28	64	86	98	90	53	232.4	196.3
29 Spd	2	5	4	1	6	6	6	7	7	8	9	6	5	7	5	6	7	7	7	3	4	4	5	7	3.3	8.8
Dir	75	278	267	139	133	141	168	202	210	217	212	228	268	301	250	259	267	282	282	242	165	142	150	138	221.7	212.5
30 Spd	8	8	7	7	8	11	12	11	11	10	7	8	6	5	7	6	12	11	11	3	4	3	3	2	3.3	12.5
Dir	142	149	170	151	166	178	185	193	196	186	184	168	193	180	23	40	6	334	310	116	69	143	130	176	170.3	6.1
Spd	4.6	5.1	5.8	6.0	6.2	6.2	6.1	4.6	3.8	3.7	3.5	3.0	3.2	3.5	3.1	3.3	2.3	2.1	1.1	0.4	1.2	2.3	3.5	3.6	Diurnal Average	
Dir	159.3	157.9	158.5	159.7	161.0	164.4	176.2	187.5	221.1	255.7	268.2	271.2	285.9	304.1	304.2	305.4	313.1	318.9	301.4	296.4	121.7	105.4	129.4	139.1		
Spd	20.5	23.2	26.5	22.9	20.8	24.6	24.5	23.1	22.9	26.7	26.0	18.5	20.3	25.3	22.8	21.6	22.7	19.2	22.3	20.9	18.6	17.2	17.5	18.9	Diurnal Maximum	
Dir	87.2	91.4	93.0	89.7	89.5	66.7	93.0	161.4	89.8	90.2	95.8	193.0	88.3	98.4	290.1	294.4	293.0	65.0	66.3	70.2	86.5	89.6	97.5	79.4		

Maximum Speed Value: 27 km/h on Jun 6 10:00
Maximum Daily Speed Average: 19.1 km/h on Jun 6
Maximum Diurnal Speed Average: 6.2 km/h at hour 6

Minimum Speed Value: 1 km/h on Jun 25 21:00
Minimum Daily Speed Average: 1.8 km/h on Jun 29
Minimum Diurnal Speed Average: 0.4 km/h at hour 20

Monthly Average Velocity: 1.80 km/h 191.46 deg

Speed Percentiles: $P_1 = 1.7$ $P_{10} = 4.0$ $Q_1 = 6.3$ Median = 9.1 $Q_3 = 12.4$ $P_{90} = 17.0$ $P_{99} = 22.8$

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

Hours in Service:	720
Hours of Data:	720
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	3	18	24	0	0	0	45
NorthEast	4	14	12	5	0	0	35
East	14	25	50	21	0	0	110
SouthEast	26	33	14	4	0	0	77
South	16	74	44	5	0	0	139
SouthWest	21	88	11	0	0	0	120
West	18	74	34	4	0	0	130
NorthWest	7	29	26	2	0	0	64
Total	109	355	215	41	0	0	720

Wind Rose

Wind Speed (WS) (km/h)

Sunset House - June 2012

Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Sunset House - June 2012

Maximum Speed: 27 km/h on Jun 6 10:00

Maximum Daily Speed Average: 19.9 km/h on Jun 6

Minimum Speed: 2 km/h on Jun 21 01:00

Minimum Daily Speed Average: 6.2 km/h on Jun 29

Maximum Diurnal Speed Average: 13.1 km/h at hour 14

Minimum Diurnal Speed Average: 7.4 km/h at hour 23

Monthly Average Speed: 10.45 km/h

Percentiles: $P_1 = 2.3$ $P_{10} = 5.1$ $Q_1 = 7.0$ Median = 9.8 $Q_3 = 12.7$ $P_{90} = 17.3$ $P_{99} = 23.3$

Hours in Service:	720
Hours of Data:	720
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-Jun	8	9	9	7	8	9	11	11	9	6	7	7	6	8	7	8	7	7	9	6	6	6	6	8	7.7	10.8
2-Jun	7	9	8	8	7	7	7	7	9	16	15	10	13	13	13	14	14	13	13	14	7	5	7	8	10.1	16.1
3-Jun	8	8	8	10	11	10	10	9	9	9	11	11	12	11	10	11	10	10	7	4	4	5	5	3	8.7	11.9
4-Jun	3	5	7	4	5	5	5	12	14	10	8	10	13	16	21	21	20	19	13	14	12	14	16	19	11.9	21.0
5-Jun	21	23	27	23	21	20	17	17	18	15	15	16	19	26	20	12	11	15	15	15	11	11	11	10	17.1	26.7
6-Jun	11	18	23	23	21	26	25	21	23	27	26	16	20	24	15	10	17	19	22	21	19	17	18	15	19.9	26.9
7-Jun	14	10	11	17	14	22	22	19	17	12	14	12	13	10	10	12	12	9	9	7	11	12	12	10	12.9	22.3
8-Jun	11	11	11	6	7	5	5	7	6	7	10	10	13	16	13	8	10	10	13	15	11	9	6	4	9.4	16.1
9-Jun	5	4	3	3	5	7	5	5	6	8	6	16	13	12	12	13	5	6	4	13	10	8	7	4	7.5	15.7
10-Jun	3	3	4	4	5	6	9	13	14	16	16	16	15	16	13	13	10	9	7	6	4	6	8	11	9.5	16.3
11-Jun	10	12	14	15	15	15	14	13	7	9	12	12	13	13	13	13	10	7	10	12	6	4	5	5	10.9	15.4
12-Jun	7	8	8	11	9	7	8	8	12	16	12	12	10	12	9	8	8	8	8	4	5	5	7	8	8.7	15.7
13-Jun	11	8	11	12	12	11	9	7	7	6	7	8	9	10	12	13	7	7	9	8	7	12	7	8	9.1	12.6
14-Jun	6	9	8	6	9	9	10	9	10	10	11	10	13	20	14	14	18	16	9	9	7	2	4	4	9.9	19.8
15-Jun	6	5	6	8	8	8	8	8	8	10	11	12	9	8	7	8	8	9	5	4	3	5	9	13	7.7	13.0
16-Jun	19	22	19	19	18	16	18	15	18	18	19	18	16	14	12	13	11	9	9	6	6	4	6	9	14.0	21.6
17-Jun	14	11	14	11	14	10	10	11	11	15	14	15	14	18	10	17	18	19	9	6	9	9	3	6	12.0	19.3
18-Jun	7	5	7	6	7	7	7	7	7	7	10	9	10	11	5	7	8	9	7	5	6	6	7	9	7.4	10.5
19-Jun	6	13	11	10	14	15	14	13	12	12	12	15	18	10	10	7	7	8	9	8	8	5	6	8	10.5	17.8
20-Jun	7	7	8	8	8	8	8	9	7	6	6	7	9	9	6	6	6	5	5	4	2	2	3	4	6.4	9.4
21-Jun	2	2	5	8	6	9	4	4	4	6	9	9	11	11	10	9	15	13	11	10	10	10	10	7	8.1	15.3
22-Jun	2	8	15	15	15	14	14	12	10	12	15	16	17	17	18	18	19	16	8	5	5	4	5	2	11.7	19.4
23-Jun	3	7	11	12	12	12	12	12	12	12	13	12	12	11	7	9	13	11	9	9	9	11	11	13	10.7	13.3
24-Jun	12	12	11	12	14	18	23	23	22	21	21	19	16	10	7	4	18	8	8	6	11	6	7	10	13.3	23.4
25-Jun	11	12	10	13	14	12	11	10	11	11	8	11	12	10	7	8	6	6	5	4	4	4	3	5	8.7	14.0
26-Jun	5	6	7	7	8	8	10	10	11	12	14	12	12	11	12	12	13	15	15	16	10	7	6	8	10.2	16.1
27-Jun	12	10	10	10	9	11	13	16	17	18	20	19	20	24	23	22	23	18	14	16	13	16	11	7	15.5	24.0
28-Jun	8	11	11	12	11	12	11	10	9	12	12	11	9	10	10	10	8	5	7	6	7	9	10	8	9.6	12.1
29-Jun	6	6	5	2	6	6	6	7	7	8	9	7	6	8	5	6	8	8	7	4	4	4	5	7	6.2	9.5
30-Jun	8	8	7	8	8	11	12	11	11	10	8	9	8	7	9	7	13	12	12	6	5	4	3	3	8.3	12.8
	8.4	9.4	10.3	10.4	10.7	11.3	11.2	11.2	11.2	12.0	12.4	12.2	12.6	13.1	11.4	11.1	11.7	10.9	9.7	8.8	7.7	7.5	7.4	7.9	Diurnal Average	
	20.7	23.3	26.7	23.1	21.3	25.5	24.9	23.4	23.1	26.9	26.2	18.9	20.5	25.5	23.2	21.9	23.1	19.3	22.4	21.1	18.8	17.3	17.6	19.0	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

Sunset House - June 2012

Maximum Value: 99.5 deg on Jun 29 01:00

Minimum Value: 2.9 deg on Jun 22 04:00

Percentiles: P_1 = 4.5 P_{10} = 7.0 Q_1 = 10.4 Median = 16.3 Q_3 = 27.4 P_{90} = 42.0 P_{99} = 83.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	10	5	10	23	12	7	8	13	16	42	59	83	83	51	63	34	39	33	14	30	12	8	12	7	82.9
2-Jun	22	30	9	15	14	15	20	21	24	14	15	21	26	23	24	20	16	15	19	11	16	49	9	10	48.9
3-Jun	8	9	11	12	8	11	9	17	31	28	24	25	35	29	33	42	38	26	38	60	27	15	33	13	60.5
4-Jun	27	16	59	58	81	73	84	8	13	24	95	19	13	17	12	15	13	13	15	11	15	7	7	6	95.1
5-Jun	7	7	7	7	7	6	7	8	9	9	12	9	9	7	9	11	13	7	7	6	10	12	8	17	17.2
6-Jun	10	7	6	7	16	17	11	9	8	7	7	14	8	8	11	16	10	6	7	8	8	7	6	6	16.7
7-Jun	15	12	17	6	12	11	8	10	11	16	19	16	28	40	31	30	25	21	31	27	11	7	11	17	39.5
8-Jun	10	4	8	23	10	21	65	34	56	42	25	27	17	20	14	50	29	19	13	7	11	7	11	26	65.3
9-Jun	19	17	34	64	23	32	56	90	45	32	33	13	9	14	18	37	26	68	67	21	12	15	27	39	89.8
10-Jun	28	18	42	20	18	17	12	11	11	9	11	10	11	13	19	19	16	21	20	15	56	8	6	4	56.4
11-Jun	8	8	5	7	6	7	7	8	18	35	19	21	14	17	16	34	33	68	16	14	30	22	32	24	67.6
12-Jun	10	9	9	8	18	12	13	26	15	15	23	19	26	18	23	29	28	23	36	38	9	16	5	19	37.9
13-Jun	8	19	10	4	8	6	10	12	15	28	14	30	23	32	16	16	36	22	20	12	20	23	17	67	66.8
14-Jun	46	8	19	17	11	9	16	24	20	24	24	30	22	22	25	17	20	18	9	17	12	31	12	12	46.4
15-Jun	6	37	13	15	12	9	8	17	24	27	23	15	30	29	33	35	37	27	31	47	25	14	5	6	47.5
16-Jun	8	6	5	5	6	9	10	10	13	14	10	15	12	12	12	13	13	13	16	25	25	80	22	15	80.3
17-Jun	14	12	5	7	6	8	17	21	18	11	19	14	19	16	23	13	13	22	38	23	43	14	49	10	48.6
18-Jun	29	22	14	14	13	17	21	27	26	20	29	21	22	19	22	25	29	16	24	44	43	12	12	11	44.1
19-Jun	16	33	7	12	7	7	8	9	11	14	23	16	13	34	76	49	46	25	48	52	18	65	13	9	75.5
20-Jun	10	8	8	8	9	5	14	14	21	32	54	49	40	29	62	71	59	52	35	36	40	12	17	17	70.6
21-Jun	25	31	35	15	23	8	38	61	50	61	36	34	59	49	65	37	34	13	12	9	5	11	36	28	65.5
22-Jun	35	28	6	3	3	4	5	10	13	15	17	19	16	17	18	14	11	39	31	41	47	37	29	19	47.4
23-Jun	20	6	5	5	7	19	8	6	9	14	15	15	19	57	85	25	10	7	9	7	9	5	5	8	84.5
24-Jun	6	9	14	10	8	14	8	10	11	13	10	10	13	14	34	31	13	13	22	19	16	17	15	9	34.3
25-Jun	9	6	8	5	5	10	15	14	14	19	28	21	35	39	43	42	49	25	33	34	84	50	45	11	84.2
26-Jun	45	11	11	5	11	10	10	11	22	23	23	28	29	32	27	25	20	12	15	13	29	28	22	21	44.7
27-Jun	16	23	22	20	24	19	18	14	12	12	12	17	11	11	10	9	11	12	14	11	11	8	18	15	24.0
28-Jun	16	7	9	8	8	6	14	16	27	16	19	30	30	26	28	26	31	78	27	15	22	21	20	47	77.7
29-Jun	100	44	41	84	8	8	13	13	19	23	23	33	40	19	33	27	25	20	23	42	28	24	14	6	99.5
30-Jun	4	9	11	23	8	5	6	10	12	17	29	28	49	49	60	20	13	21	17	79	28	42	43	47	79.3
	99.5	43.8	58.9	84.5	81.5	72.7	83.5	89.8	56.3	61.0	95.1	82.9	82.7	56.9	84.5	70.6	58.6	77.7	66.6	79.3	84.2	80.3	48.6	66.8	

FOCUS AIR QUALITY MONITORING

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations

PAZA Passive Results for June 2012

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
11a	Webber Creek	**0.3**	**31.2**	**0.6**		
11b	Webber Creek	**0.4**	**28.5**	**0.5**		
20a	Shaftesbury	**0.1**	**27.1**	**0.4**		
20b	Shaftesbury	**N/S**	**N/S**	**N/S**		
28a	Clairmont Lake	**0.1**	**33.7**	**0.5**		
28b	Clairmont Lake	**BDL**	**35.4**	**1.2**		
62a	East Prairie	**BDL**	**23.7**	**0.1**		
62b	East Prairie	**BDL**	**25.3**	**0.2**		
64a	Girouxville 4				**0.2**	
64b	Girouxville 4				**0.2**	
1	Silver Valley	**0.2**	**30.0**	**0.8**		08-27-081-11 W6M
2	Bay Tree	**0.1**	**33.9**	**0.5**		13-16-078-13 W6M
3	Fourth Creek	**0.1**	**33.9**	**BDL**		04-13-082-07 W6M
4	Gordondale	**0.1**	**27.7**	**0.4**		04-34-078-10 W6M
5	Boone Creek	**0.1**	**27.1**	**1.0**		16-36-074-11 W6M
7	Steeprock Creek	**0.1**	**27.2**	**0.3**		09-35-072-13 W6M
9	Spirit River	**0.1**	**30.6**	**0.4**		08-12-079-07 W6M
10	Woking	**0.2**	**27.8**	**0.5**		01-13-076-07 W6M
11	Webber Creek	**0.3**	**29.9**	**0.6**		09-36-074-09 W6M
12	Hythe	**0.1**	**27.1**	**0.9**		14-36-072-11 W6M
14	Sylvester	**BDL**	**23.7**	**0.2**		08-06-069-12 W6M
16	Beaverlodge	**0.1**	**32.2**	**0.6**		15-36-071-10 W6M
17	Poplar	**0.2**	**24.5**	**0.8**		13-06-073-08 W6M
18	Saddle Hills	**0.2**	**27.4**	**0.4**		04-25-074-07 W6M
19	Wanham	**0.1**	**28.0**	**0.7**		16-22-077-03 W6M
20	Shaftesbury	**0.1**	**27.1**	**0.4**		04-03-082-23 W5M
21	Eaglesham	**0.2**	**31.1**	**1.1**		16-21-079-25 W5M
23	Bear Lake	**0.2**	**32.3**	**0.6**		15-31-072-06 W6M

PAZA Passive Results for June 2012 (Continued)

24	Wembley	**BDL**	**24.7**	**0.9**		12-31-070-08 W6M
25	Pinto Creek	**0.1**	**27.9**	**0.5**		04-24-069-11 W6M
26	Flyingshot	**0.2**	**31.1**	**0.5**		15-36-070-07 W6M
27	Grande Prairie I	**BDL**	**29.3**	**1.1**		08-15-071-06 W6M
28	Clairmont Lake	**0.1**	**34.6**	**0.8**		09-06-073-04 W6M
29	Smoky Heights	**0.3**	**31.7**	**0.3**		04-06-075-02 W6M
30	Fitzsimmons	**BDL**	**23.3**	**0.9**		15-36-072-03 W6M
32	Gold Creek	**0.1**	**25.2**	**0.3**		06-33-067-05 W6M
33	Wapiti	**BDL**	**27.5**	**0.4**		02-25-071-03 W6M
34	Puskwaskau	**BDL**	**20.9**	**0.1**		15-35-074-25 W5M
35	Jean Cote	**0.2**	**28.4**	**1.4**		12-35-079-21 W5M
36	Guy	**BDL**	**27.9**	**1.1**		03-04-076-22 W5M
37	Crooked Creek	**BDL**	**31.6**	**0.3**		16-01-071-26 W5M
38	Karr Creek	**0.1**	**24.0**	**0.2**		10-16-065-02 W6M
39	Clouston Creek	**0.2**	**29.0**	**0.3**		12-01-073-22 W5M
40	McLennan	**0.2**	**26.0**	**1.1**		03-29-077-19 W5M
41	Valleyview	**BDL**	**26.9**	**0.3**		09-30-069-22 W5M
42	Sunset House	**0.1**	**34.8**	**0.2**		05-32-070-19 W5M
43	High Prairie	**0.1**	**27.3**	**1.0**		16-13-074-17 W5M
44	Peavine	**0.1**	**24.9**	**0.1**		03-05-079-15 W5M
45	Gift Lake	**BDL**	**23.8**	**0.3**	**0.0**	10-07-079-12 W5M
46	Little Smoky	**BDL**	**23.1**	**0.4**		12-01-065-21 W5M
47	Kinuso	**BDL**	**19.1**	**0.2**		12-10-073-10 W5M
48	Deer Mountain	**BDL**	**26.4**	**0.2**		15-22-068-09 W5M
49	Grande Prairie HP	**BDL**	**39.5**	**1.0**		17-26-071-06 W6M
62	East Prairie	**BDL**	**24.5**	**0.2**		13-02-072-15 W5M
63	Girouxville 3				**0.2**	14-02-077-23 W5M
64	Girouxville 4				**0.2**	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Duplicate Summary Chart

Passive Summary for June 2012

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2	Hydrogen Sulphide H_2S
	ppb	ppb	ppb	ppb
	Passive Summary for June 2012 (PAZA Zone)			
Mean	**0.2**	**28.1**	**0.6**	**0.1**
Standard Deviation	**0.1**	**4.0**	**0.3**	**0.1**
Minimum	**0.1**	**19.1**	**0.1**	**0.0**
Minimum At	**Fourth Creek (#3)**	**Kinuso (#47)**	**Peavine (#44)**	**Gift Lake (#45)**
Maximum	**0.3**	**39.5**	**1.4**	**0.2**
Maximum At	**Webber Creek (#11)**	**Grande Prairie HP**	**Jean Cote (#35)**	**Girouxville 4**

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

	SO_2	O_3	NO_2
PAZA Beaverlodge station	**0.1**	**31.0**	**1.6**
PAZA Beaverlodge passive	**0.1**	**32.2**	**0.6**

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**	**25.7**	**3.1**
PAZA Grande Prairie passive	**BDL**	**39.5**	**1.0**

SO_2 Bubble Chart

SO_2 Summary Chart

O_3 Bubble Chart

O_3 Summary Chart

NO_2 Bubble Chart

NO_2 Summary Chart

H_2S Bubble Chart

June 2012 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 – Sunset House Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, TRS

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	13:10	End Time (MST)	16:33
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Conc	49.8 ppm	Cal Gas Cert Date	3/28/2013
		Cal Gas Cylinder #	LL85275
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.993066	Calculated slope	0.984496
Calculated intercept	0.622982	Calculated intercept	1.017340
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.2		9.2	
Coefficient	0.797		0.797	
Pressure	633.6	mm Hg	633.6	mm Hg
Flow	0.504	lpm	0.504	lpm
Lamp Voltage	44161	Hz	44612	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)
4989	0.00	0.0	-0.2	N/A
4989	39.84	394.5	400.1	0.9861
4989	19.91	198.0	199.7	0.9912
4989	9.94	99.0	98.7	1.0036
4989	0.00	0.0	-0.2	As Found Zero
4989	39.84	394.5	400.1	As Found Span
			Average Correction Factor	0.9936

Calculated value of As Found Response: 398.1 ppb Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	235.4	ppb	242.9	ppb

Notes: No adjustments made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:10	End Time (MST)	16:33
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
394.5	400.1	0.9861	Correlation Coefficient	0.999980
198.0	199.7	0.9912		
99.0	98.7	1.0036	Slope	0.984496
			Intercept	1.017340

SO2 Calibration
495
395
295
195
95
-5
PPB
As Found
394.5 ppb SO2
198.0 ppb SO2
99.0 ppb SO2
Zero
As Left Span
242.90 ppb SO2
Ambient
As found
zero
June 13, 2012

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker

Reason: Routine Installation Removal Other:

Start Time (MST)	13:00		End Time (MST)	18:00	
Barometric Pressure	0.918	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3474	
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date	March 28, 2013	
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #	LL85275	

DACS Information

DACS make	CR3000	DACS serial No.	5408

Parameter		NO2	NOx	NO
Before	Data Slope	0.998277	0.997978	0.998129
	Data Offset	-0.136077	0.056580	0.256944
After	Data Slope	1.000554	1.006255	1.006241
	Data Offset	-0.335761	0.390723	0.170030
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42C	Analyzer serial #	508011073

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	10.4	mV	10.5	mV
NOx bkgnd	10.7	mV	11.7	mV
NO coefficient	0.762		0.762	
NOx coefficient	0.999		0.999	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.5	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	175.2	in Hg	174.3	in Hg

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Calibration Date: June 13, 2012 Station Location: Henry Pirker

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.2	0.0	0.0	N/A	N/A
1	4989	39.82	415.7	415.7	0.0	413.0	413.0	0.0	1.0066	1.0065
2	4989	19.93	208.9	208.9	0.0	207.0	207.5	-0.5	1.0089	1.0069
3	4989	9.94	104.4	104.4	0.0	102.7	103.3	-0.6	1.0164	1.0102
AFZ	4989	0.00	0.0	0.0	0.0	0.2	0.0	0.0	0.0000	0.0000
AFS	4989	39.83	415.8	415.8	0.0	413.0	413.0	0.0	1.0069	1.0068
							Average Correction Factor		1.0106	1.0079

As Found Concentrations: NO_X= 412.9 NO= 413.3 As Found Percent Change NO_X= -0.7% NO= -0.6%

Dilution Flow 4989 ccm Source Gas Flow 39.85 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	0.0	0.0	0.0	0.2	0.0	0.0	N/A	N/A	N/A	N/A
NO point	413.4	413.4	0.0	413.1	413.4	-0.2	1.0006	1.0000	N/A	N/A
300	413.4	86.9	326.5	413.2	86.9	326.5	1.0004	1.0000	0.9999	100.0%
200	413.4	221.7	191.6	413.6	221.7	192.0	0.9995	1.0000	0.9982	100.2%
100	413.4	353.9	59.4	413.9	353.9	60.1	0.9986	1.0000	0.9899	101.0%
					Average Correction Factor		0.9995	1.0000	0.9960	100.4%

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	-0.6	-0.9	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	170.1	169.0	1.0	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:00	End Time (MST)	18:00
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
326.5	326.5	0.9999	Correlation Coefficient	0.999997
191.6	192.0	0.9982		
59.4	60.1	0.9899	Slope	1.000554
			Intercept	-0.335761

NO_2 Calibration Curve

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:00	End Time (MST)	18:00
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
415.7	413.0	1.0066	Correlation Coefficient	0.999991
208.9	207.0	1.0089		
104.4	102.7	1.0164	Slope	1.006255
			Intercept	0.390723

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:00	End Time (MST)	18:00
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
415.7	413.0	1.0065	Correlation Coefficient	0.999999
208.9	207.5	1.0069		
104.4	103.3	1.0102	Slope	1.006241
			Intercept	0.170030

NO Calibration Curve

PASZA
NO_X Calibration

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	16:40	End Time (MST)	20:00
Barometric Pressure	0.918 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.011613	Calculated slope	0.998291
Calculated intercept	-0.301683	Calculated intercept	-0.131228
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.7	ppb	-0.7	ppb
slope	1.125		1.146	
O3 Lamp temp	71.1	Deg C	71.1	Deg C
Intensities	78077/68832	mV	78085/68662	mV
Pressure	683.5	inches Hg	692.5	inches Hg
Flow A	0.717	ccm	0.723	ccm
Flow B	0.735	ccm	0.740	ccm

Calibration Data

Dilution air flow rate (cc/min)	Referenced concentration (ppb)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5026	0	0.0	0.3	N/A
5026	300	326.5	327.8	0.9960
5026	200	191.6	190.9	1.0038
5026	100	59.4	60.0	0.9893
5026	0	0.0	0.3	As found zero
5026	300	326.5	319.0	As found span
			Average Correction Factor	0.9964

Calculated value of As Found Response: 322.1 ppm Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	161.8	ppb	163.2	ppb

Notes: Slight adjust 80% point.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 21, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	16:40	End Time (MST)	20:00
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	NA		
326.5	327.8	0.9960	Correlation Coefficient	0.999969
191.6	190.9	1.0038		
59.4	60.0	0.9893	Slope	0.998291
			Intercept	-0.131228

O3 Calibration

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **CO**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	8:50	End Time (MST)	11:20
Barometric Pressure	0.918 ATM	Station Temperature	21.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.002783	Calculated slope	1.031149
Calculated intercept	-0.426075	Calculated intercept	-0.441568
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.088		1.088	
CO zero setting	3.037		3.057	
Sample pressure	680.3	mm Hg	673.4	mm Hg
Sample Flow	1.142	LPM	1.135	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)
4989	0.00	0.00	0.46	N/A
4989	39.87	23.78	23.50	1.0121
4989	19.92	11.93	12.01	0.9935
4989	9.93	5.96	6.16	0.9674
4989	0.00	0.00	0.46	As Found Zero
4989	39.85	23.77	23.50	As Found Span
			Average Correction Factor	0.9910

Calculated value of As Found Response: 22.680 ppm Percent Change of As Found: 4.6%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.56	ppm	20.47	ppm

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **CO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:50	End Time (MST)	11:20
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.458	N/A		
23.785	23.501	1.0121	Correlation Coefficient	0.999989
11.931	12.009	0.9935		
5.959	6.160	0.9674	Slope	1.031149
			Intercept	-0.441568

CO Calibration
29
19
9
-1
PPM
As found span
23.77 ppm CO
Analyzer Span
20.47 ppm
11.92 ppm CO
5.96 ppm CO
As found
Zero
Zero
Ambient
June 13, 2012

Calibration Report

Parameter **THC**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 3, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other: Maintenance
Start Time (MST)	13:50	End Time (MST)	17:00
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	2/4/2010
Cal Gas CH4 equiv	1523.25 ppm	Cal Gas Cylinder #	ALM 004476
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	NA	Calculated slope	0.993240
Calculated intercept	NA	Calculated intercept	0.086730
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 span counts	9616	capture	9616	capture
THC zero counts	447	capture	447	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)
4989	0.00	0.00	0.04	N/A
4989	69.79	21.01	21.12	0.9949
4989	29.87	9.07	8.94	1.0137
4989	9.92	3.02	2.87	1.0517
				As Found Zero
				As Found Span
			Average Correction Factor	1.0201

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

	before calibration		after calibration	
Auto zero	0.10	ppm	0.00	ppm
Auto span	21.83	ppm	24.23	ppm

Notes: Re-calibrated analyzer after sample pump rebuild

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 3, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:50	End Time (MST)	17:00
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	0.039	N/A		
21.014	21.122	0.9949	Correlation Coefficient	0.999867
9.066	8.943	1.0137		
3.023	2.874	1.0517	Slope	0.993240
			Intercept	0.086730

THC Calibration

June 3, 2012

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	10:30	End Time (MST)	14:34
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.77 ppb	Cal Gas Expiry Date	9/3/2011
		Cal Gas Cylinder #	BLM001434
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.992400	Calculated slope	1.001734
Calculated intercept	-0.039274	Calculated intercept	0.160773
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.125		1.125	
Background	11.4		11.5	
Pressure	657.8	mm Hg	653.2	mm Hg
Flow	0.456	ccm	0.454	ccm
Lamp Voltage	819	V	819	V

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)		Correction factor (Cc/Ic)
4989	0.00	0.00	-0.22	N/A
4989	69.76	79.57	79.21	1.0045
4989	34.88	40.06	39.94	1.0030
4989	8.94	10.32	10.15	1.0168
4989	0.00	0.00	-0.22	As Found Zero
4989	69.76	79.57	79.21	As Found Span
			Average Correction Factor	1.0081

Calculated value of As Found Response: 78.8 ppb Percent Change of As Found: 1.0%

	before calibration		after calibration	
Auto zero	-0.29	ppb	0.05	ppb
Auto span	33.10	ppb	34.60	ppb

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 13, 2012	Previous Calibration	May 17, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	14:34
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	-0.222	N/A		
79.568	79.213	1.0045	Correlation Coefficient	0.999995
40.060	39.940	1.0030		
10.321	10.151	1.0168	Slope	1.001734
			Intercept	0.160773

TRS Calibration
90
80
70
60
50
40
30
20
10
0
-10
PPB
As Found Span
79.59 ppb TRS
40.06 ppb TRS
10.34 ppb TRS
AS
34.60 ppb
As Found
Zero
AZ
AMB
June 13, 2012

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 21, 2012	Previous Calibration	May 9, 2012
Station Number	2	Station Location	Evergreen Park

Reason: Routine | Install | Removal | Other:

Start Time (MST)	13:00	End Time (MST)	16:20
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Concentratior	49.8 ppm	Cal Gas Expiry Date	3/28/2013
Correction factor	0.031443	Cal Gas Cylinder #	SGAL3245
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.997621	Calculated slope	1.004752
Calculated intercept	-0.429162	Calculated intercept	0.040927

Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11		11.1	
coefficient	1.171		1.171	
Lamp Voltage	826	volts	824	volts
Chamber Temp	45	Deg C	45.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	669.5	mm Hg	671	mm Hg
Sample Flow	0.448	ccm	0.449	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)
4989	0.0	0.00	0.3	N/A
4989	39.84	394.5	392.8	1.0043
4989	19.93	198.1	196.8	1.0067
4989	9.84	98.0	97.4	1.0069
4989	0.0	0.0	0.3	As Found Zero
4989	39.84	394.5	392.8	As Found Span
			Average Correction Factor	1.0060

Calculated value of As Found Response: 391.216 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.6	ppm	0.2	ppm
Auto span	279.9	ppm	281.7	ppm

Notes: No adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 21, 2012	Previous Calibration	May 9, 2012
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	13:00	End Time (MST)	16:20
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
394.5	392.8	1.0043	Correlation Coefficient	0.999997
198.1	196.8	1.0067		
98.0	97.4	1.0069	Slope	1.004752
			Intercept	0.040927

SO2 Calibration
495
395
295
195
95
-5
PPB
394.5 ppb SO2
200.3 ppb SO2
100.6 ppb SO2
Analyzer Span
281.7 ppb SO2
Zero
Zero
Ambient
June 21, 2012

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 21, 2012	Previous Calibration	May 9, 2012
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:

Start Time (MST)	10:40	End Time (MST)	14:45
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Conc	5.77 ppm	Cal Gas Expiry Date	9/3/2011
Correction factor	0.031443	Cal Gas Cylinder #	BLM1715
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.987638	Calculated slope	0.986540
Calculated intercept	0.444179	Calculated intercept	0.365981

Analyzer make	TEI Model 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	23.8	ppb	25.1	ppb
coefficient	1.003		1.059	
Lamp Voltage	938	volts	940	volts
Chamber Temp	44.3	Deg C	44.1	Deg C
Perm Gas Temp	45.01	Deg C	44.97	Deg C
Pressure	647.6	mm Hg	647.8	mm Hg
Sample Flow	0.477	ccm	0.476	ccm
Lamp Intensity	37,073	mv	36,883	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.00	-0.2	N/A
4989	69.81	79.62	80.4	0.9909
4989	34.88	40.06	40.2	0.9954
4989	8.96	10.34	9.9	1.0401
4989	0.00	0.00	-0.2	As Found Zero
4989	69.81	79.62	74.1	As Found Span
			Average Correction Factor	1.0088

Calculated value of As Found Response: 73.84 ppm Percent Change of As Found: 7.3%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.1	ppm
Auto span	71.9	ppm	71.6	ppm

Notes: Slight span adjust

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 21, 2012	Previous Calibration	May 9, 2012
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:40	End Time (MST)	14:45
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
79.6	80.4	0.9909	Correlation Coefficient	0.999987
40.1	40.2	0.9954		
10.3	9.9	1.0401	Slope	0.986540
			Intercept	0.365981

TRS Calibration

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 22, 2012	Previous Calibration	May 4, 2012
Station Number	3	Station Location	Smokey Heights
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	11:04	End Time (MST)	13:52
Barometric Pressure	0.917 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Cert Date	3/28/2011
Correction factor	0.031171	Cal Gas Cylinder #	LL85275
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.998549	Calculated slope	1.003396
Calculated intercept	-1.976878	Calculated intercept	0.179366

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	10.6		10.6	
coefficient	0.955		0.955	
Lamp Voltage	919	volts	919	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	666.3	mm Hg	666.3	mm Hg
Sample Flow	0.445	ccm	0.445	ccm
Lamp Intensity	88	%	88	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	0.2	N/A
4989	39.84	394.53	393.0	1.0038
4989	19.91	197.95	197.4	1.0025
4989	9.94	99.02	97.8	1.0127
4989	0.0	0.00	0.2	As Found Zero
4989	39.84	394.53	393.0	As Found Span
			Average Correction Factor	1.0063

Calculated value of As Found Response: 390.243 ppm Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.2	ppb
Auto span	304.5	ppb	266.7	ppb

Notes: No adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 22, 2012	Previous Calibration	May 4, 2012
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:04	End Time (MST)	13:52
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	0.2	N/A		
394.5	393.0	1.0038	Correlation Coefficient	0.999991
198.0	197.4	1.0025		
99.0	97.8	1.0127	Slope	1.003396
			Intercept	0.179366

Smokey Heights SO_2 Calibration
550
450
350
250
150
50
-50
PPB
As Found Span
394.53 ppb SO2
197.95 ppb SO2
99.02 ppb SO2
Analyzer Span
266.7 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
June 22, 2012

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 22, 2012	Previous Calibration	May 4, 2012
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other: Maintenance

Start Time (MST)	8:50	End Time (MST)	13:00
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.77 ppm	Cal Gas Expiry Date	9/3/2011
Correction factor	0.031443	Cal Gas Cylinder #	BLM001434
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.006072	Calculated slope	0.999402
Calculated intercept	-0.180831	Calculated intercept	0.013917

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	18.1	ppb	19	ppb
coefficient	0.946		0.989	
Lamp Voltage	805	volts	802	volts
Chamber Temp	44.99	Deg C	43.5	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	553.4	mm Hg	542.3	mm Hg
Sample Flow	0.589	ccm	0.579	ccm
Lamp Intensity	35,161	mv	35,463	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)
4989	0.0	0.00	0.0	N/A
4989	69.80	79.61	79.7	0.9993
4989	34.88	40.06	40.0	1.0014
4989	8.96	10.34	10.4	0.9955
4989	0.0	0.00	0.0	As Found Zero
4989	69.80	79.61	74.8	As Found Span
			Average Correction Factor	0.9987

Calculated value of As Found Response: 75.15 ppm Percent Change of As Found: 5.6%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.1	ppm
Auto span	52.9	ppm	54.6	ppm

Notes: Slight adjust 80% point.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 22, 2012	Previous Calibration	May 4, 2012
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	8:50	End Time (MST)	13:00
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		
79.6	79.7	0.9993	Correlation Coefficient	0.999998
40.1	40.0	1.0014		
10.3	10.4	0.9955	Slope	0.999402
			Intercept	0.013917

Smoky Heights TRS Calibration

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:15	End Time (MST)	16:20
Barometric Pressure	0.918 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	10.1 ppm	Cal Gas Expiry Date	1/25/2010
Gas Cert Reference	SAGL 671		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.000606	Calculated slope	0.987672
Calculated intercept	-0.210995	Calculated intercept	-0.186830
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.4		2.4	
Coefficient	1.071		1.071	
PMT	-767.6	V	-767.6	V
UV Lamp Voltage	1046	V	1052	V
Chamber Temp	45.2	Deg C	45.2	Deg C
Pressure	665.7	mm Hg	666.3	mm Hg
Sample Flow	0.49	LPM	0.49	LPM
Lamp Intesity	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)
4989	0.00	0.0	0.2	N/A
4989	39.84	80.0	81.2	0.9856
4989	19.93	40.2	40.9	0.9820
4989	9.93	20.1	20.5	0.9795
4989	0.00	0.0	0.2	As found zero
4989	39.84	80.0	81.2	As found span
			Average Correction Factor	0.9824

Calculated value of As Found Response: 80.842 ppm Percent Change of As Found: -1.0%

	before calibration		after calibration	
Auto zero	-0.3	ppb	0.0	ppb
Auto span	58.2	ppb	58.1	ppb

Notes: No adjustments made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:15	End Time (MST)	16:20
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		
80.0	81.2	0.9856	Correlation Coefficient	0.999999
40.2	40.9	0.9820		
20.1	20.5	0.9795	Slope	0.987672
			Intercept	-0.186830

SO2 Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As found Span
80.0 ppb SO2
re-purge regulator
40.1 ppb SO2
20.1 ppb SO2
Analyzer
Span 58.1 ppb.
As Found Zero
Analyzer
Zero
Ambient
June 20, 2012

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge

Reason: Routine Installation Removal Other:

Start Time (MST)	7:23		End Time (MST)	12:50	
Barometric Pressure	0.917	Atm	Station Temperature	23.0	Deg C
Calibrator	Environics		Serial Number	2844	
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date	March 28, 2013	
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #	LL8575	

DACS Information

DACS make AP1000 DACS serial No.

Parameter		NO2	NOx	NO
Before	Data Slope	0.999602	0.998455	0.998681
	Data Offset	0.074589	-0.187514	0.364751
After	Data Slope	0.999071	1.001421	1.000457
	Data Offset	0.181528	-0.311772	0.040407
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	2.1	mV	2.2	mV
NOx bkgnd	2.4	mV	2.5	mV
NO coefficient	1.459		1.520	
NOx coefficient	0.996		0.996	
NO2 conv temp	326.8	Deg C	326.8	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-671.2	mV	-671.2	mV
R Cell Press	176.3	in Hg	177.1	in Hg
Sample Flow	0.750	ccm	0.759	ccm

Notes:

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 20, 2012 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	4989	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	N/A	N/A
1	4989	39.86	416.1	416.1	0.0	415.5	415.8	-0.5	1.0016	1.0009
2	4989	19.92	208.8	208.8	0.0	209.7	209.0	-0.1	0.9957	0.9991
3	4989	9.93	104.3	104.3	0.0	104.2	104.1	-0.1	1.0012	1.0021
AFZ	4989	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	0.0000	0.0000
AFS	4989	39.86	416.1	416.1	0.8	398.7	399.0	-0.4	1.0438	1.0431
							Average Correction Factor		0.9995	1.0007

As Found Concentrations: NO_X= 398.4 NO= 399.4 As Found Percent Change NO_X= -4.3% NO= -4.0%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-0.1	-0.1	0.0	0.1	-0.1	0.1	N/A	N/A	N/A	N/A
NO point	415.7	415.7	0.0	415.5	415.7	-0.4	1.0005	1.0000	N/A	N/A
300	415.7	75.5	340.2	416.7	75.5	340.5	0.9976	1.0000	0.9992	100.1%
200	415.7	217.9	197.8	416.1	217.9	197.6	0.9990	1.0000	1.0009	99.9%
100	415.7	353.0	62.7	415.5	353.0	62.4	1.0005	1.0000	1.0054	99.5%
					Average Correction Factor		0.9990	1.0000	1.0018	99.8%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	0.8	0.6	0.0	ppb
Auto span	238.0	235.5	1.6	ppb	208.8	206.8	1.3	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:23	End Time (MST)	12:50
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		
340.2	340.5	0.9992	Correlation Coefficient	0.999998
197.8	197.6	1.0009		
62.7	62.4	1.0054	Slope	0.999071
			Intercept	0.181528

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:23	End Time (MST)	12:50
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		
416.1	415.5	1.0016	Correlation Coefficient	0.999989
208.8	209.7	0.9957		
104.3	104.2	1.0012	Slope	1.001421
			Intercept	-0.311772

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:23	End Time (MST)	12:50
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		
416.1	415.8	1.0009	Correlation Coefficient	0.999998
208.8	209.0	0.9991		
104.3	104.1	1.0021	Slope	1.000457
			Intercept	0.040407

NO Calibration Curve

PASZA Beaverlodge NOx Calibration
440
390
340
290
240
190
140
90
40
-10
Span
416.1 ppb NOX
416.1 ppb NO
GPT
416.1 ppb NOX
As found Span
416.1 ppb NOX
416.1 ppb NO
340.2 ppb
NO2
353.0 ppb
NO
217.9 ppb
NO
As Left Span
NOx: 208.8 ppb
NO2: 206.8 ppb
208.8 ppb NOX
208.8 ppb NO
197.8 ppb
NO2
104.3 ppb NOX
104.3 ppb NO
75.5 ppb
NO
62.7 ppb
NO2
Zero
As found
Zero
AMB
NOX
NO
NO2
June 20, 2012

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	11:50	End Time (MST)	14:46
Barometric Pressure	0.917 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.995663	Calculated slope	1.005935
Calculated intercept	0.725367	Calculated intercept	0.788734
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.90	ppb	1.00	ppb
slope	1.020		1.020	
Lamp temp	56.3	mV	56.3	mV
Lamp Intensity A/B	52655/58123	mV	54668/59773	mV
Pressure	682.9	mm Hg	685.1	mm Hg
Flow A	0.756	ccm	0.755	ccm
Flow B	0.710	ccm	0.710	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)
4989	0.0	0.0	-0.3	N/A
4989	0.3	340.2	338.0	1.0066
4989	0.2	197.8	194.9	1.0147
4989	0.1	62.7	61.4	1.0206
4989	0.0	0.0	-0.3	As found zero
4989	0.3	340.2	338.0	As found span
			Average Correction Factor	1.0140

Calculated value of As Found Response: 337.5 ppm Percent Change of As Found: -0.8%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.0	ppb
Auto span	114.3	ppb	109.4	ppb

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2012	Previous Calibration	May 26, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:50	End Time (MST)	14:46
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	NA		
340.2	338.0	1.0066	Correlation Coefficient	0.999980
197.8	194.9	1.0147		
62.7	61.4	1.0206	Slope	1.005935
			Intercept	0.788734

O3 Calibration

June 20, 2012

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 29, 2012	Previous Calibration	May 24, 2012
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:32	End Time (MST)	14:30
Barometric Pressure	702.00 mmHg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Cert Date	11/29/2011
Gas Cylinder Num.	LL158102	Cal gas Exp. Date	11/29/2013
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	1.000764	Calculated slope	1.002763
Calculated intercept	0.212682	Calculated intercept	0.016140
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	30.9		31.2	
Coefficient	0.871		0.871	
UV Lamp Voltage	967	LPM	967	LPM
Chamber Temp	44.2	V	44.2	V
Perm Gas Temp	26.8	C	26.8	C
Pressure	606.8	in Hg	605.9	in Hg
Sample Flow	0.558	LPM	0.559	LPM
Lamp Intensity	48371	Hz	48366	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)
4989	0.00	0.0	-0.1	N/A
4989	39.85	394.6	393.4	1.0031
4989	19.93	198.1	197.9	1.0014
4989	9.94	99.0	98.7	1.0037
4989	0.00	0.0	-0.1	As found zero
4989	39.85	394.6	393.4	As found span
			Average Correction Factor	1.0027

Calculated value of As Found Response: 394.0 ppm Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	155.5	ppm	154.2	ppm

Notes: No adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29, 2012	Previous Calibration	May 24, 2012
Station Number	6	Station Location	Valleyview
Start Time (MST)	11:32	End Time (MST)	14:42
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
394.6	393.4	1.0031	Correlation Coefficient	0.999999
198.1	197.9	1.0014		
99.0	98.7	1.0037	Slope	1.002763
			Intercept	0.016140

SO2 Calibration
490
390
290
190
90
-10
PPB
As found Span
394.6 ppb SO2
198.1 ppb SO2
99.0ppb SO2
AZ
AS
154.2 ppb SO2
As found
Zero
Ambient
June 29, 2012

Calibration Report

Parameter **H2S**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29, 2012	Previous Calibration	May 24, 2012
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	8:55	End Time (MST)	12:42
Barometric Pressure	702.00 mm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentratior	5.77 ppm	Cal Gas Expiry Date	7/22/2011
Gas Cert Reference	BLM001715		
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	1.000086	Calculated slope	1.009017
Calculated intercept	0.009546	Calculated intercept	-0.027494
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.1	ppb	7.4	ppb
Coefficient	1.363		1.393	
Lamp Voltage	788	V	788	V
Chamber Temp	45.1	c	45.1	c
Perm Oven Temp	44.33	c	44.33	c
Pressure	617.90	mm Hg	615.20	mm Hg
Sample Flow	0.419	ccm	0.420	ccm
Lamp Intensity	91.0	%	91.0	%

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)
4989	0.00	0.0	0.2	N/A
4989	69.78	79.6	78.9	1.0092
4989	34.86	40.0	39.9	1.0044
4989	8.93	10.3	10.0	1.0329
4989	0.00	0.0	0.2	As found zero
4989	69.78	79.6	75.3	As found span
			Average Correction Factor	1.0155

Calculated value of As Found Response: 75.18 ppm Percent Change of As Found: 5.5%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.1	ppm
Auto span	70.6	ppm	76.0	ppm

Notes: Slight adjust 80% point.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29, 2012	Previous Calibration	May 24, 2012
Station Number	6	Station Location	Valleyview
Start Time (MST)	8:55	End Time (MST)	12:42
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
79.6	78.9	1.0092	Correlation Coefficient	0.999968
40.0	39.9	1.0044		
10.3	10.0	1.0329	Slope	1.009017
			Intercept	-0.027494

H2S Calibration
99
79
59
39
19
-1
PPB
As found Span
79.6 ppb H2S
Span
79.6 ppb H2S
AS
76.0 ppb H2S
40.0 ppb H2S
10.3 ppb H2S
As found
Zero
AZ
Ambient
June 29, 2012

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2011	Previous Calibration	May 12, 2011
Station Number	9	Station Location	Sunset House
Reason: Routine	Install	Removal	Other:
Start Time (MST)	7:30	End Time (MST)	11:15
Barometric Pressure	31.70 inches Hg	Station Temperature	19.7 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	4/6/2012
Gas Cert Reference	LL85275		
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	1.004637	Calculated slope	0.998254
Calculated intercept	-1.460941	Calculated intercept	0.822500
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	16.8		17.3	
Coefficient	0.961		0.987	
UV Lamp Voltage	832	V	829	V
Chamber Temp	44.7	C	44.8	C
Perm Gas Temp	45	C	45	C
Pressure	661.5	mm Hg	658.2	mm Hg
Sample Flow	0.481	LPM	0.479	LPM
Lamp Intesity	37589	Hz	37466	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)
4990	0.00	0.0	-0.5	N/A
4990	39.87	394.7	394.9	0.9997
4990	19.91	197.9	197.0	1.0045
4990	9.94	99.0	98.2	1.0086
4990	0.00	0.0	-0.5	As found zero
4990	39.87	394.7	382.9	As found span
			Average Correction Factor	1.0043

Calculated value of As Found Response: 383.727 ppm Percent Change of As Found: 2.8%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	264.0	ppm	267.4	ppm

Notes: Slight span adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 30, 2011	Previous Calibration	May 12, 2011
Station Number	9	Station Location	Sunset House
Start Time (MST)	7:30	End Time (MST)	11:15
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	-0.5	N/A		
394.7	394.9	0.9997	Correlation Coefficient	0.999995
197.9	197.0	1.0045		
99.0	98.2	1.0086	Slope	0.998254
			Intercept	0.822500

SO2 Calibration

June 30, 2011

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House

Reason: Routine Install Removal Other:

Start Time (MST)	7:30		End Time (MST)	13:14	
Barometric Pressure	0.909	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date	November 29, 2013	
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #	LL85275	

DACS Information

DACS make	CR3000	DACS serial No.	5407

Parameter		NO2	NOx	NO
Before	Data Slope	1.001714	1.000396	1.004108
	Data Offset	-0.268999	-3.061992	-2.996482
After	Data Slope	1.001304	0.995685	0.998887
	Data Offset	0.483155	-0.688401	-0.591805
Channel #		5	3	4
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	0701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.4	mV	4.8	mV
NOx bkgnd	4.5	mV	5.0	mV
NO coefficient	1.202		1.308	
NOx coefficient	0.997		0.997	
NO2 conv temp	323.9	Deg C	325.0	Deg C
PMT Temp	-2.6	Deg C	-2.8	Deg C
PMT Volt	-773.3	mV	-774.0	mV
R Cell Press	161.5	in Hg	157.8	in Hg
Sample Flow	0.820	ccm	0.853	ccm

NOTES: Installed new daily span perm tube. Span adjust 80% point.

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 30, 2012 Station Location: Sunset House

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	4989	0.00	0.0	0.0	0.0	0.6	0.4	0.1	N/A	N/A
1	4990	39.87	416.1	416.1	0.0	418.4	417.0	-0.5	0.9946	0.9980
2	4989	19.91	208.7	208.7	0.0	210.9	209.9	0.0	0.9896	0.9940
3	4989	9.94	104.4	104.4	0.0	105.3	105.0	0.2	0.9913	0.9938
AFZ	4989	0.00	0.0	0.0	0.0	0.6	0.4	0.1	0.0000	0.0000
AFS	4989	39.84	415.9	415.9	0.0	383.6	382.2	-0.3	1.0842	1.0881
							Average Correction Factor		0.9918	0.9953

As Found Concentrations: NO_X= 380.0 NO= 378.8 As Found Percent Change NO_X= -8.6% NO= -8.9%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 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	0.4	0.4	0.0	0.6	0.4	0.1	N/A	N/A	N/A	N/A
NO point	417.6	417.6	0.0	419.0	417.6	-0.9	0.9966	1.0000	N/A	N/A
300	417.6	82.7	334.9	418.6	82.7	334.2	0.9975	1.0000	1.0021	99.8%
200	417.6	219.7	197.9	419.2	219.7	197.0	0.9962	1.0000	1.0046	99.5%
100	417.6	353.5	64.1	418.7	353.5	62.9	0.9974	1.0000	1.0195	98.1%
					Average Correction Factor		0.9971	1.0000	1.0087	99.1%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	0.6	0.1	0.5	ppb
Auto span	200.0	197.1	1.6	ppb	184.5	181.0	2.3	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	7:30	End Time (MST)	13:14
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		
334.9	334.2	1.0021	Correlation Coefficient	0.999987
197.9	197.0	1.0046		
64.1	62.9	1.0195	Slope	1.001304
			Intercept	0.483155

NO_2 Calibration Curve

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	7:30	End Time (MST)	13:14
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	0.6	N/A		
416.1	418.4	0.9946	Correlation Coefficient	0.999995
208.7	210.9	0.9896		
104.4	105.3	0.9913	Slope	0.995685
			Intercept	-0.688401

NOx Calibration Curve

Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	7:30	End Time (MST)	13:14
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	0.4	N/A		
416.1	417.0	0.9980	Correlation Coefficient	0.999997
208.7	209.9	0.9940		
104.4	105.0	0.9938	Slope	0.998887
			Intercept	-0.591805

NO Calibration Curve

PASZA Sunset House NO_X Calibration

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House
Reason: Routine	Install	Removal remove	Other:
Start Time (MST)	11:44	End Time (MST)	15:06
Barometric Pressure	0.894 atm	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	1.000958	Calculated slope	1.004585
Calculated intercept	-0.405807	Calculated intercept	0.306461
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0.3	ppb	0.3	ppb
Span	1.035		1.035	
Cell A intensity	91807	Hz	91765	Hz
Cell B intensity	84880	Hz	84763	Hz
Pressure	682.30	in Hg	687.50	in Hg
CellA Flow	0.943	ccm	0.939	ccm
Cell B Flow	0.721	cmm	0.719	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)
4995	0.00	0.0	0.1	N/A
4995	0.30	334.9	333.3	1.0047
4995	0.20	197.9	196.3	1.0079
4995	0.10	64.1	63.1	1.0154
4995	0.00	0.0	0.1	As found zero
4995	0.30	334.9	324.2	As found span
			Average Correction Factor	1.0093

Calculated value of As Found Response: 324.0 ppm Percent Change of As Found: -3.3%

	before calibration		after calibration	
Auto zero	0.6	ppb	0.3	ppb
Auto span	137.7	ppb	199.3	ppb

Notes: slight adjust 80% point

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	11:44	End Time (MST)	15:06
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
334.9	333.3	1.0047	Correlation Coefficient	0.999992
197.9	196.3	1.0079		
64.1	63.1	1.0154	Slope	1.004585
			Intercept	0.306461

390
340
290
240
190
140
90
40
-10
Span
334.9 ppb O3
As Found Span
334.9 ppb O3
197.9 ppb O3
64.1 ppb O3
AS
199.3 ppb O3
AMB
As Found Zero
AZ
June 30, 2012

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Name	PAZA Rover	Station Location	Sunset House
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	13:35	End Time (MST)	17:04
Barometric Pressure	27.5 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	5.77 ppm	Cal Gas Expiry Date	9/3/2011
Gas Cert Reference	BLM001434		
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	1.007351	Calculated slope	0.980687
Calculated intercept	0.393473	Calculated intercept	0.759319
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	14.4	ppb	15.1	ppb
Coefficient	1.440		1.504	
Lamp Voltage	796	V	796	V
Chamber Temp	44.1	C	44.1	C
Perm gas Temp	45.0	C	45.0	C
Pressure	645.1	mmHg	646.0	mmHg
Sample Flow	0.424	ccm	0.425	ccm
Lamp Intensity	38974.0	Hz	39180.0	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)
4989	0.0	0.0	-0.6	N/A
4989	69.81	79.6	80.3	0.9911
4989	34.88	40.1	40.3	0.9939
4989	8.96	10.3	9.5	1.0929
4989	0.00	0.0	-0.6	As found zero
4989	69.81	79.6	75.2	As found span
			Average Correction Factor	1.0259

Calculated value of As Found Response: 76.78 ppm Percent Change of As Found: 3.6%

	before calibration		after calibration	
Auto zero	-0.6	ppm	0.3	ppm
Auto span	69.6	ppm	73.3	ppm

Notes: Slight adjust 80% up.
Sox material was tested - good.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 30, 2012	Previous Calibration	May 12, 2012
Station Number	PAZA Rover	Station Location	Sunset House
Start Time (MST)	13:35	End Time (MST)	17:04
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	-0.6	N/A		
79.6	80.3	0.9911	Correlation Coefficient	0.999955
40.1	40.3	0.9939		
10.3	9.5	1.0929	Slope	0.980687
			Intercept	0.759319

TRS Calibration
95
80
65
50
35
20
5
-10
PPB
As Found Zero
As Found Span
79.6 ppb TRS
Span
79.6 ppb TRS
40.1 ppb TRS
10.3 ppbTRS
SOx
Scrubber
test
AZ
AS
73.3 ppb H2S
Ambient
June 30, 2012