REPORT Nº 171-00556-00

AMBIENT AIR QUALITY MONTHLY REPORT

MAY 2018

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WSP

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MAY 2018

Lafarge Canada Inc.

Project no: 171-00556-00
Date: May 2018

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Project Number: 171-00556-00

June 15, 2018

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Dear Ms. Brygger,

Subject: Ambient Air Quality Monthly Report – May 2018

The operational uptime for the meteorological systems and all analyzers at the Lagoon station was over 99% in May. There were no contraventions of the 24-hour TSP and $PM_{2.5}$ Alberta Ambient Air Quality Objectives (AAAQOs) in May at the Lagoon monitoring location.

All analyzers at the Windridge station had over 99% operational uptime in May. There was 1 exceedance of the 24-hour TSP AAAQO. There were no exceedances of the 24-hour $PM_{2.5}$ AAAQO and 1 exceedance of the 1-hour $PM_{2.5}$ AAAQG.

Data collected at all of the GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw's Fugitive Dust Control Best Management Practices – Program. While Berm and Entrance monitors had 100% operational time, West monitor had 98.8% operational time due to 9 hours of power outage. The Entrance GRIMM monitor exceeded the 24-hour TSP AAAQO for 11 days and did not exceed the 24-hour $PM_{2.5}$ AAAQO, while the Berm GRIMM had 9 exceedances of the TSP Objective and 0 exceedances of the $PM_{2.5}$ Objective. The West GRIMM monitor did not record any exceedances of the 24-hour TSP or $PM_{2.5}$ Objective, as well as the 1-hour $PM_{2.5}$ AAAQG.

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements.

Sincerely,

Tyler Abel, M.Sc.
Group Manager, Air Quality
Environment

SIGNATURES

PREPARED BY

Rowena Seto, B.Sc.
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REVIEWED BY

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1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and the GRIMM monitors in Exshaw, AB. The station is operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and is a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between May 1, 2018 and May 31, 2018.

This monthly report was prepared by Rowena Seto, an Air Quality Specialist with WSP, on behalf of Lafarge and was reviewed by Tyler Abel, Manager of Air Quality and Air Quality Specialist at WSP.

2 MAY 2018 REPORT SUMMARY

This summary section provides the pertinent details on data collected and maintenance/calibration activities at each of the monitoring locations. The monitoring results for the stations are described in further detail in their corresponding sections. Maximum hourly concentrations are shown for all particulate matter size fractions, but there are no Alberta Ambient Air Quality Objectives (AAAQO) for 1-hour PM concentrations. The exceedances reported for 1-hour $PM_{2.5}$ are those above the 1-hour $PM_{2.5}$ Alberta Ambient Air Quality Guidelines (AAAQG).

2.1 LAGOON STATION

Table 2-1 Lagoon station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
NO_2 (ppb)	100.0	20.8	0	7.8	-
SO_2 (ppb)	100.0	18.2	0	4.0	0
$PM_{2.5}$ ($\mu g/m^3$)	100.0	31.0	0	15.4	0
PM_{10} ($\mu g/m^3$)	99.7	163.1	-	49.5	-
TSP ($\mu g/m^3$)	100.0	311.1	-	79.1	0
Temperature (°C)	100.0	25.3	-	19.3	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	35.8/W	-	21.5/WSW	-
Precipitation (mm)[2]	100.0	3.5	-	49.5*	-

* Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

- There was no exceedance of the 24-hour $PM_{2.5}$ AAAQO
- There was no exceedance of the 1-hour $PM_{2.5}$ AAAQG.
- There was no exceedance of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- A 72-hour zero sequence on the TSP and PM_{10} analyzers was completed at the 18th hour of May 1st.
- Instrument maintenance was performed on the PM_{10} analyzer for two hours on May 17th.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
$PM_{2.5}$ (µg/m^3)	99.3	90.8	1*	20.9	0
PM_{10} (µg/m^3)	100.0	334.7	-	80.5	-
TSP (µg/m^3)	100.0	503.9	-	131.3	1

* Any exceedances reported for 1-hour $PM_{2.5}$ are over the guideline level (AAAQG) of 80 µg/m^3.

Data Quality Notes:

- There was no exceedance of the 24-hour $PM_{2.5}$ AAAQO
- There was 1 exceedance of the 1-hour $PM_{2.5}$ AAAQG.
- There was 1 exceedance of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- A 72-hour zero sequence on the TSP and PM_{10} analyzers was completed at the 18th hour of May 1st.
- The $PM_{2.5}$ analyzer had 99.3% uptime for the month of May due to 4 hours of instrument maintenance and 1 hour of power outage.

2.3 WEST GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their Fugitive Dust Control Best Management Practices – Program (FDCBMP-P). The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P.

Table 2-3 West station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
$PM_{2.5}$ (µg/m^3)	98.8	41.2	0*	10.5	0
PM_{10} (µg/m^3)	98.8	238.0	-	40.7	-
TSP (µg/m^3)	98.8	295.1	-	72.5	0

* Any exceedances reported for 1-hour $PM_{2.5}$ are over the guideline level (AAAQG) of 80 µg/m^3.

Data Quality Notes:

- → There was no exceedance of the 24-hour $PM_{2.5}$ AAAQG.
- → There was no exceedance of the 1-hour $PM_{2.5}$ AAAQG.
- → There was no exceedance of the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- → The monitor had 98.8% uptime for the month of May due to 9 hours of power outage.

2.4 BERM GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P.

Table 2-4 Berm station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
$PM_{2.5}$ (µg/m^3)	100.0	63.1	0*	16.0	0
PM_{10} (µg/m^3)	100.0	425.7	-	99.5	-
TSP (µg/m^3)	100.0	1421.9	-	329.2	9

* Any exceedances reported for 1-hour $PM_{2.5}$ are over the guideline level (AAAQG) of 80 µg/m^3.

Data Quality Notes:

- → There was no exceedance of the 24-hour $PM_{2.5}$ AAAQG.
- → There was no exceedance of the 1-hour $PM_{2.5}$ AAAQG.

→ There were 9 exceedances of the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

→ The monitor had 100% uptime for the month of May.

2.5 ENTRANCE GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P.

Table 2-5 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
$PM_{2.5}$ (µg/m^3)	100.0	48.6	0*	19.6	0
PM_{10} (µg/m^3)	100.0	314.3	-	98.6	-
TSP (µg/m^3)	100.0	804.1	-	224.6	11

* Any exceedances reported for 1-hour $PM_{2.5}$ are over the guideline level (AAAQG) of 80 µg/m^3.

Data Quality Notes:

→ There was no exceedance of the 24-hour $PM_{2.5}$ AAAQO

→ There was no exceedance of the 1-hour $PM_{2.5}$ AAAQG.

→ There were 11 exceedances of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

→ The monitor had 100% uptime for the month of May.

3 LAGOON STATION

The Lagoon trailer contains NO_x, SO_2, TSP, PM_{10}, and $PM_{2.5}$ analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-3) and tables and graphs illustrating the monitoring results for May 2018.

All of the monitors comply with Alberta Environment and Parks Air Monitoring Directive (2016).

Table 3-1 Instrumentation List at the Lagoon Station

Equipment Description	Parameter Measured
MetOne BAM-1020 FRM Continuous Particulate Monitor	$PM_{2.5}$ Concentrations
MetOne BAM-1020 Continuous Particulate Monitor	PM_{10} Concentrations
MetOne BAM-1020 Continuous Particulate Monitor	TSP Concentrations
TEI 42C	Oxides of Nitrogen
Teledyne API 102A	Sulphur Dioxide
MetOne 130 Rain/Snow Gauge	Precipitation
MetOne Wind Sensor	Wind Speed
	Wind Direction
MetOne Ambient Temperature Sensor	Ambient Temperature

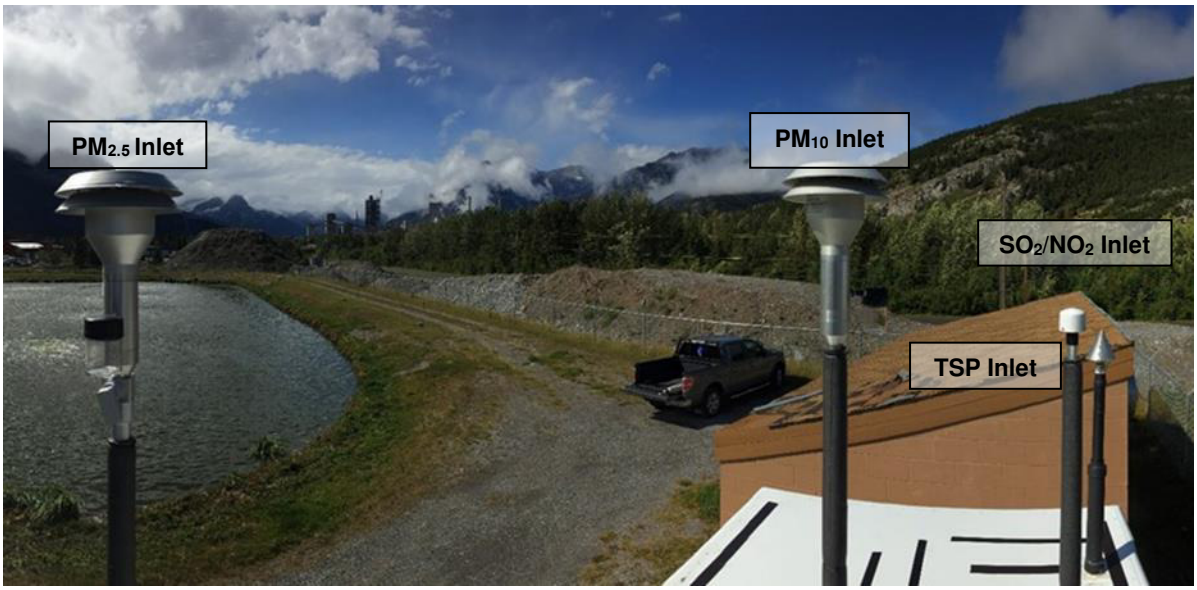

Figure 3-1 Inlets on the top of WSP's Lagoon monitor

3.1 SITE VISIT NOTES

A summary of site visit notes for each of the monitors is provided in this section.

3.1.1 NO_X MONITORING

The NO_x monitor was calibrated on May 17th. The monitor had 100% uptime in May.

3.1.2 SO_2 MONITORING

The SO_2 monitor was calibrated on May 17th. The monitor had 100% uptime in May.

3.1.3 PM MONITORING

A 72-hour zero sequence reached completion on the TSP and PM_{10} analyzers on May 1st. All BAM monitors were calibrated on May 2nd. For the month of May, the TSP and $PM_{2.5}$ analyzers had 100% operation time, while the PM_{10} analyzer had 99.7% operation time due to 2 hours of instrument maintenance on May 17th.

3.1.4 METEOROLOGICAL MONITORING

All meteorological sensors had 100% uptime.

3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-3) illustrates the frequency of wind speed by wind direction for the month of May 2018. Table 3-2 summarizes the hourly and daily concentrations recorded in May 2018. Figure 3-4 graphically illustrates the time series for hourly concentrations as well as wind speed

and direction, while Figure 3-5 shows daily average concentrations recorded during May 2018 for the pollutants listed in Table 3-2.

There was no exceedance of both the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (30 µg/m^3) AAAQO. Historically in May, there were no exceedances of the 24-hour TSP AAQO nor the 24-hour $PM_{2.5}$ AAQO.

Since flooding in 2013, the Municipal District has built up stockpiles of dirt on the far western edge of the wastewater treatment facility. During the summer of 2016, the Municipal District has planted grass seed on these stockpiles in an effort to reduce the amount of fugitive dust generated. Figure 3-2 shows the extent of the grass planted by the MD.

Figure 3-2 Grass planted on the stockpiles near the Lagoon monitor. Photo taken Mar 12, 2016.

The wind rose (Figure 3-3) indicates that the winds predominantly came from the west, following the general orientation of the valley. As typical of the wind characteristics at the Lagoon site, the westerly winds were more intense (higher than 20 km/hr) than the easterly winds.

Table 3-2 Summary of May 2018 data at Lagoon

Parameter	Guideline / Objectives		Station	Exceedances		Monthly Average	1-hour					24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr		Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO_2 (ppb)	159	-	Lagoon	0	-	4.7	20.8	22	21	2.0	30.8	7.8	23	100.0
SO_2 (ppb)	172	48	Lagoon	0	0	1.6	18.2	15	8	19.6	271.0	4.0	15	100.0
$PM_{2.5}$ ($\mu g/m^3$)	80	30	Lagoon	0	0	8.3	31.0	28	12	22.6	265.0	15.4	16	100.0
PM_{10} ($\mu g/m^3$)	-	-	Lagoon	-	-	19.9	163.1	24	16	33.7	253.4	49.5	24	99.7
TSP ($\mu g/m^3$)	-	100	Lagoon	-	0	30.3	311.1	7	16	6.2	83.6	79.1	24	100.0
Temperature (°C)	-	-	Lagoon	-	-	12.9	25.3	15	15	17.4	256.0	19.3	28	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	13.7	35.8/W	24	15	35.8	252.2	21.5/WSW	2	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.1	3.5					49.5	-	100.0

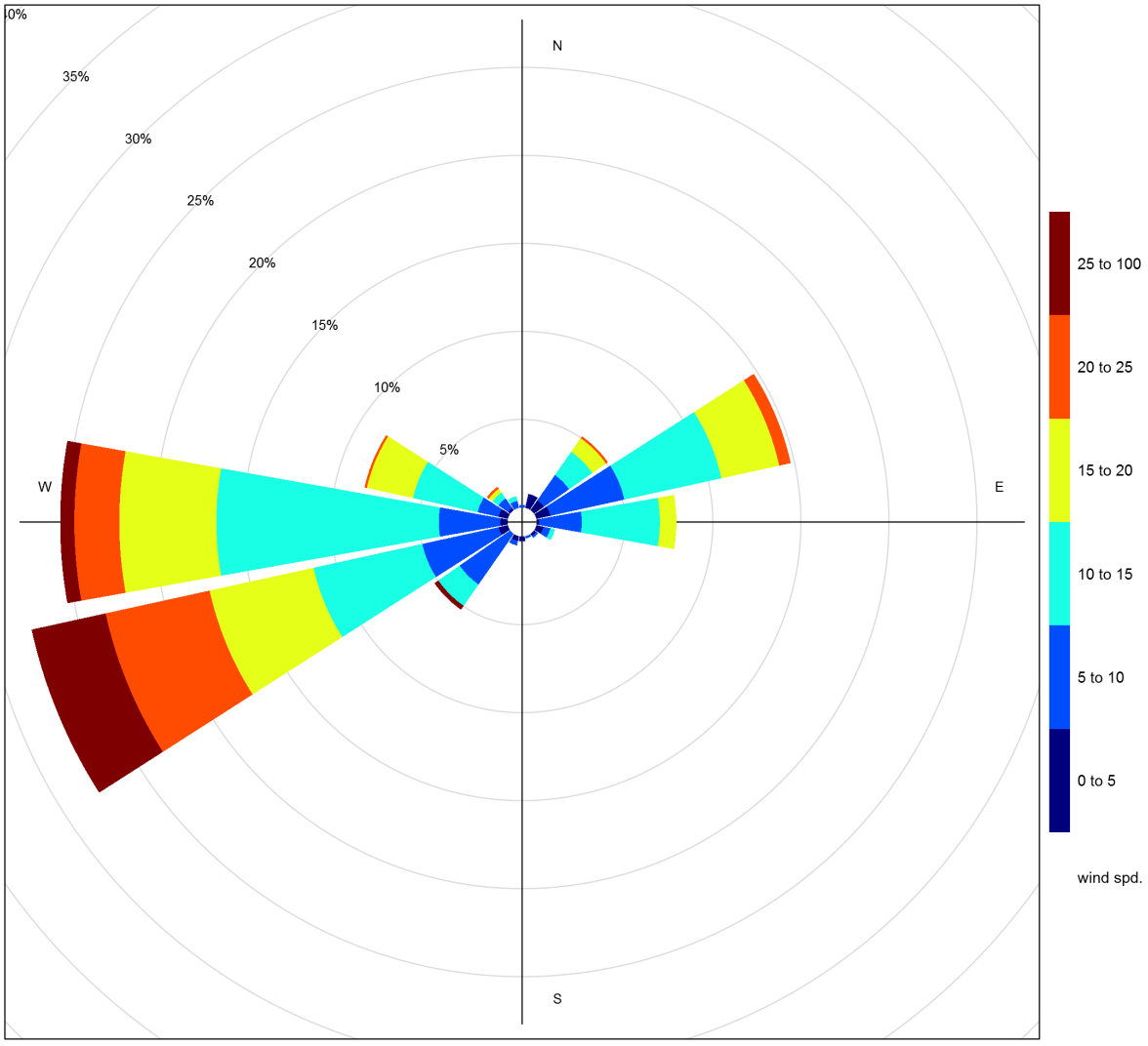

Figure 3-3 May 2018 wind rose from the Lagoon Station

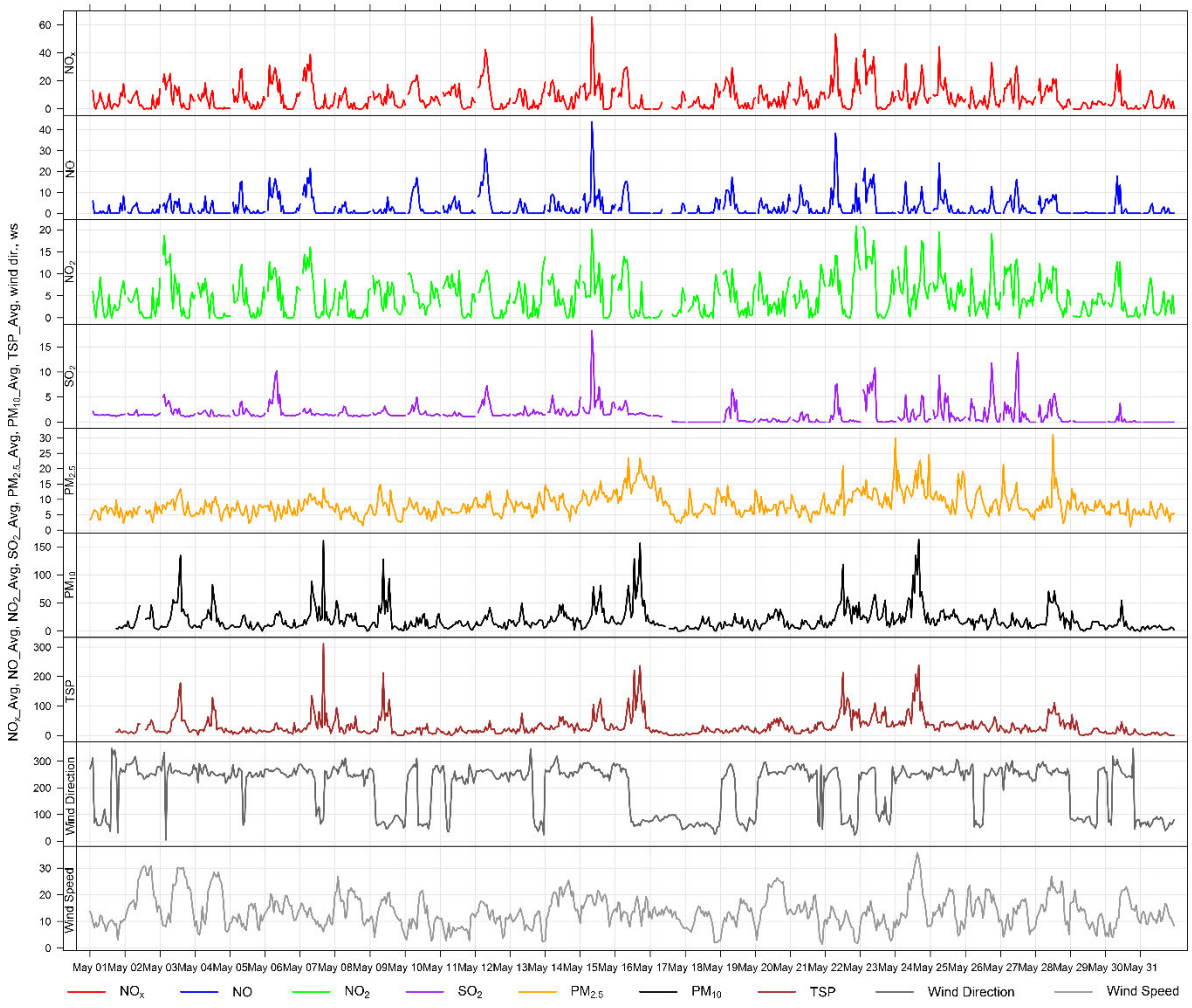

Figure 3-4 1-hour concentrations of NO_x, SO_2, particulate matter, wind direction and wind speed at the Lagoon monitor

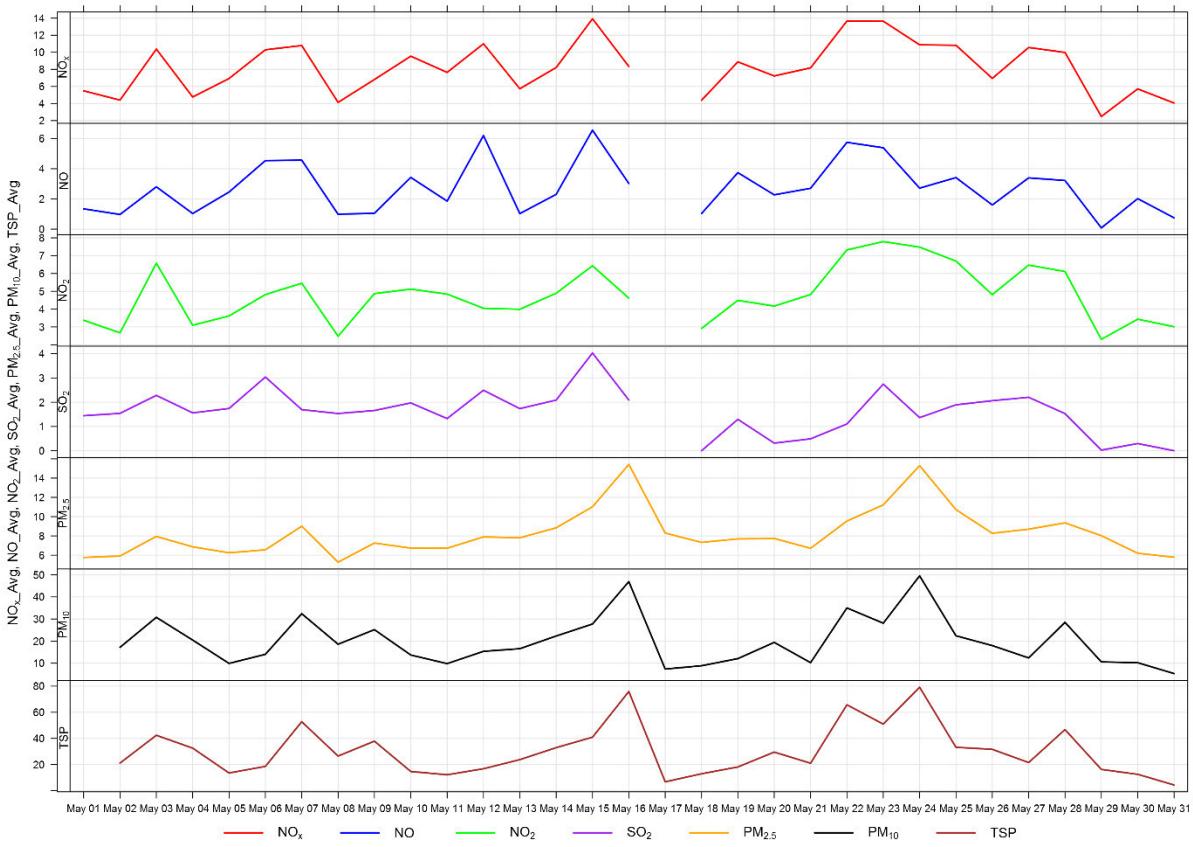

Figure 3-5 24-hour concentrations of NO_x, SO_2, and particulate matter at the Lagoon monitor

Figure 3-6 through Figure 3-8 show the variation in concentrations over various time averaging periods for PM, SO_2 and NO_x. The particulate matter plot in Figure 3-6 shows that PM_{10} and TSP concentrations show a strong diurnal pattern associated with Lafarge operations and daytime activities from other industrial sources and impacts from traffic. PM_{10} and TSP are generally associated with dust from fugitive sources.

Figure 3-7 shows the variation of SO_2 over various time periods. SO_2 concentrations were very low in May. Figure 3-8 shows the variation of NO_x, NO and NO_2, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

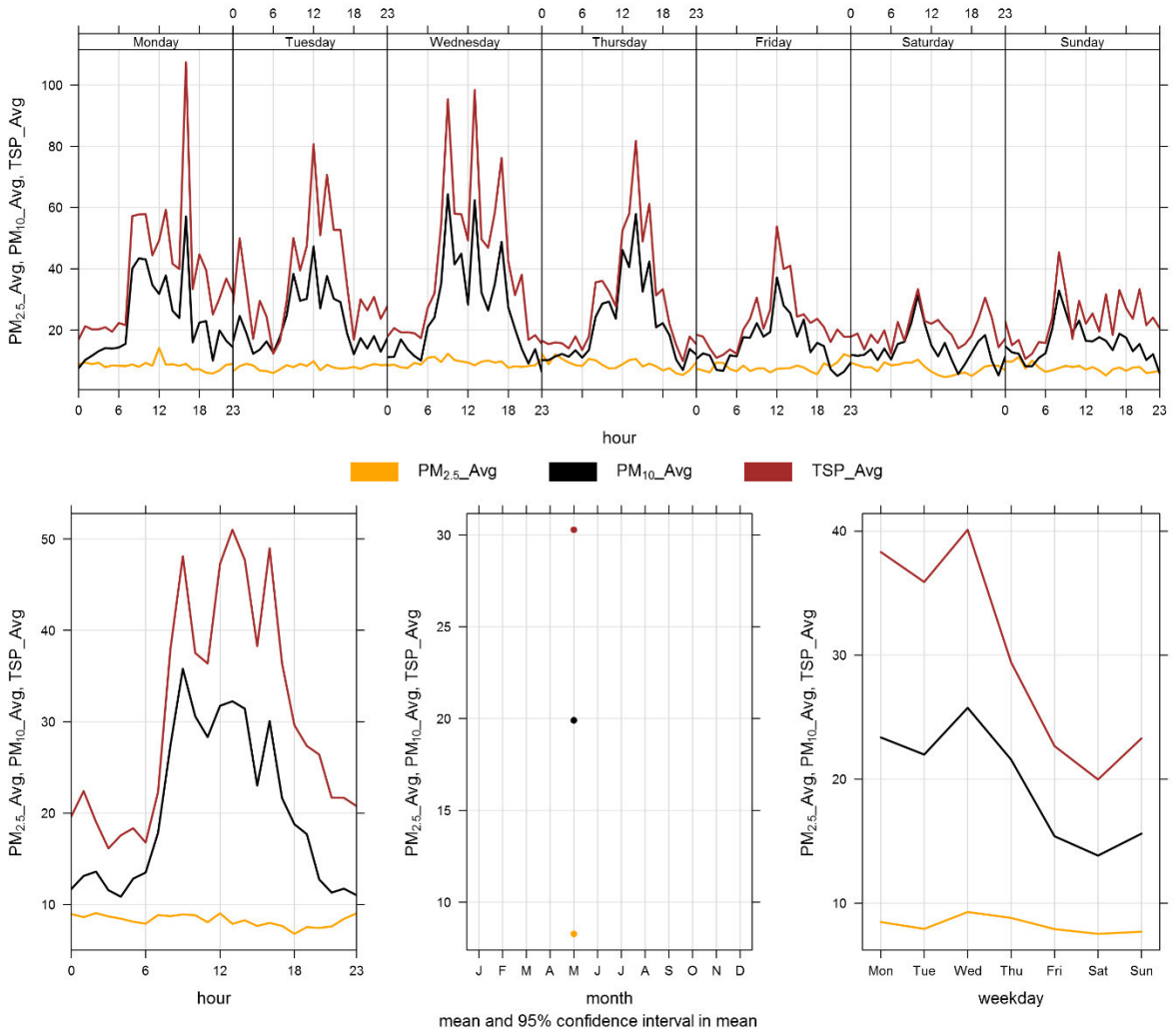

Figure 3-6 Lagoon Monitor particulate matter time variation

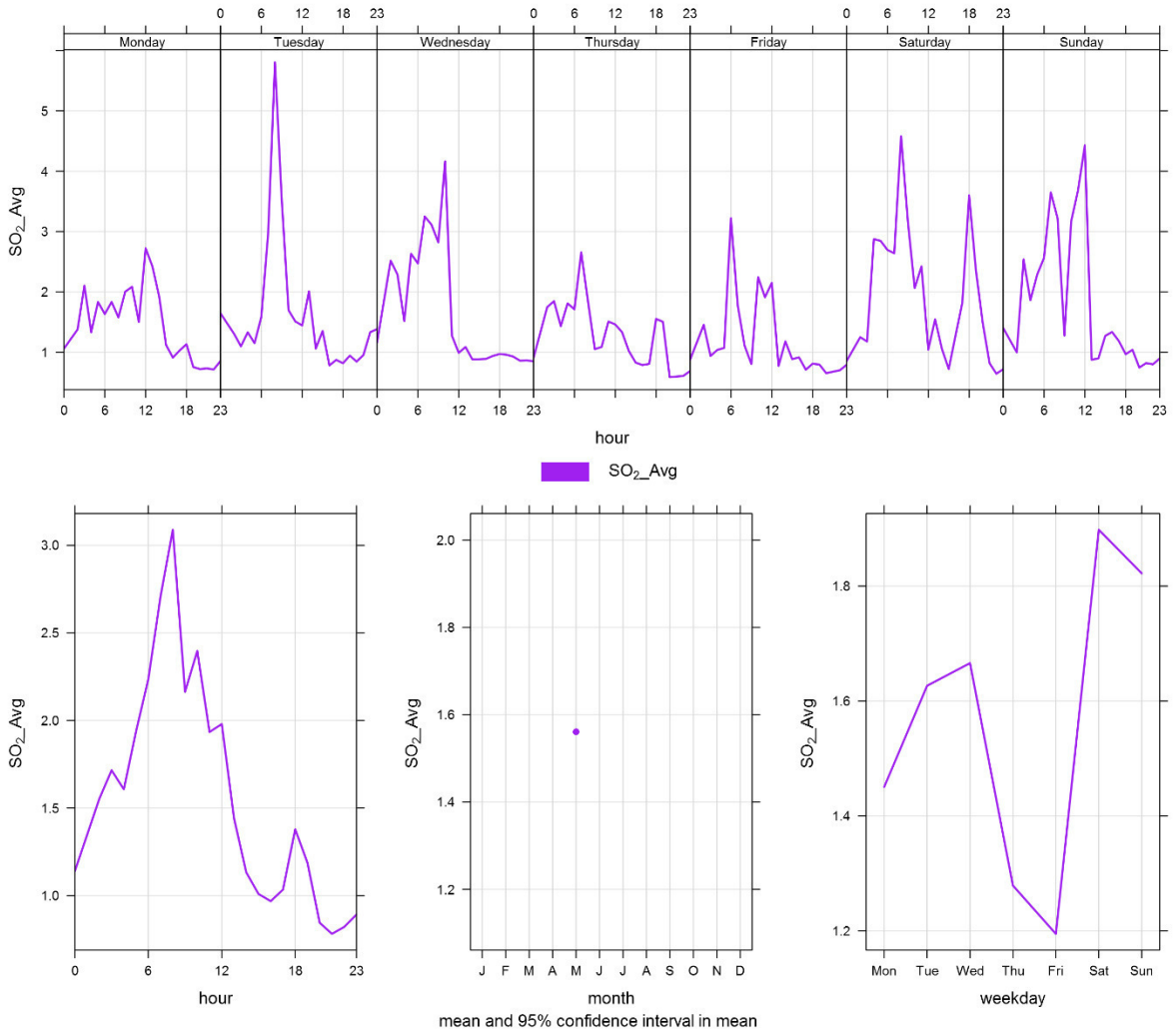

Figure 3-7 Lagoon Monitor SO_2 time variation

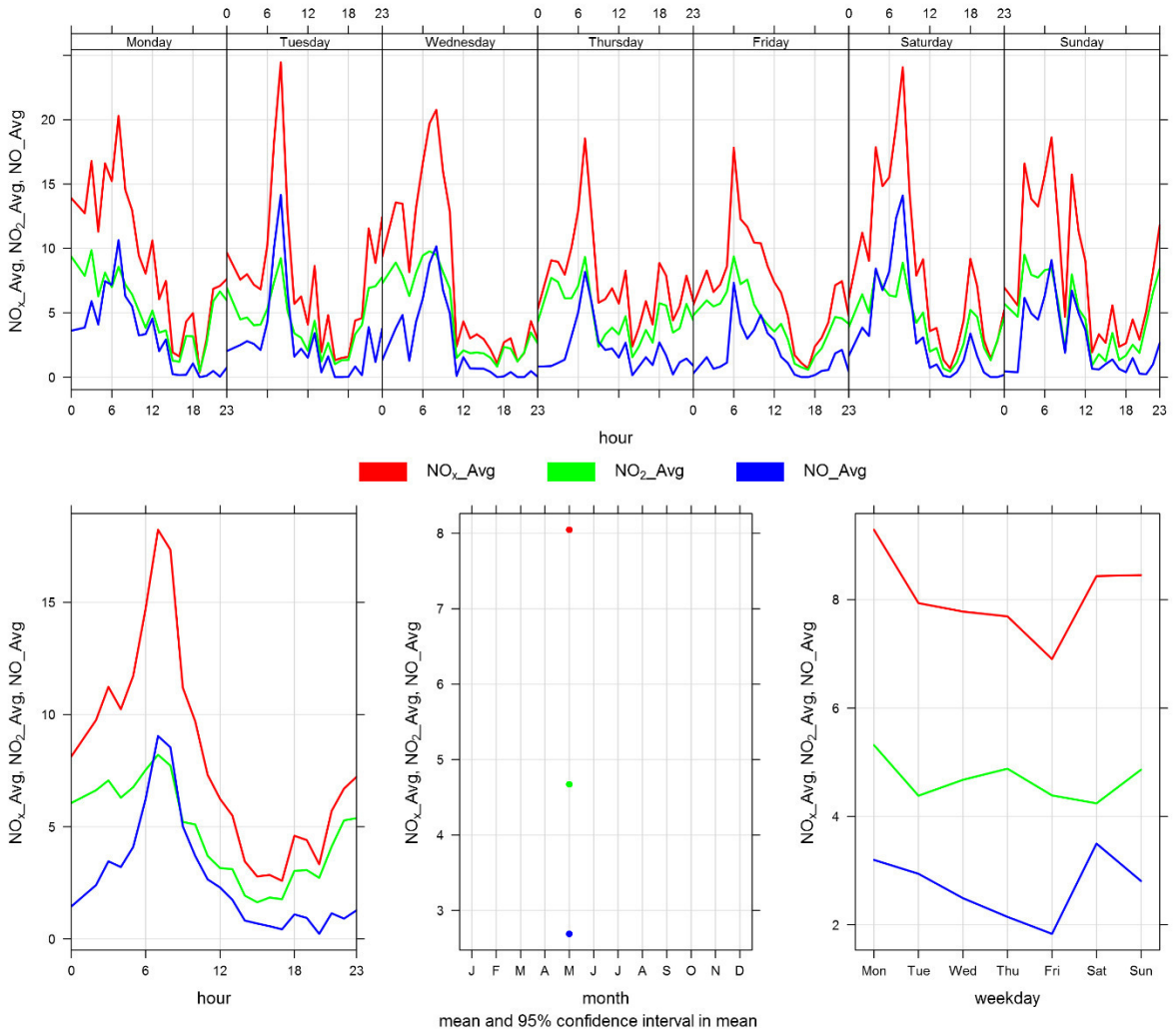

Figure 3-8 Lagoon Monitor NO_x time variation

4 WINDRIDGE STATION

4.1 SITE VISIT NOTES

The Windridge station contains TSP, PM_{10}, and $PM_{2.5}$ analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for May 2018.

All of the monitors comply with Alberta Environment and Parks Air Monitoring Directive (2016).

Table 4-1 Equipment at the Windridge monitoring location

Equipment Description	Parameter Measured
MetOne BAM-1020 FRM Continuous Particulate Monitor	$PM_{2.5}$ Concentrations
MetOne BAM-1020 Continuous Particulate Monitor	PM_{10} Concentrations
MetOne BAM-1020 Continuous Particulate Monitor	TSP Concentrations

4.2 SITE VISIT NOTES

On May 1st, a 72-hour zero sequence was completed on the TSP and PM_{10} analyzers. All BAM monitors were calibrated on May 2nd. The operation time for the TSP and PM_{10} analyzers was 100%, while the operation time for the $PM_{2.5}$ analyzer was 99.3% due to 4 hours of instrument maintenance (May 1st) and 1 hour of power outage (May 22nd).

4.3 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in May 2018. Figure 4-3 illustrates the time series for hourly PM.

There were no exceedances of the 24-hour $PM_{2.5}$ AAAQO and 1 exceedance of the 1-hour $PM_{2.5}$ AAAQG. There was 1 exceedance of the 24-hour TSP AAAQO. The exceedance of the 1-hour $PM_{2.5}$ AAAQG and the 24-hour TSP AAAQO both occurred on May 24th. This suggests that there was a combination of combustion sources and fugitive dust sources that contributed to particulate matter levels on the day of the predicted exceedances.

Table 4-2 Summary of May 2018 data at the Windridge Station

Parameter	Guideline / Objective		Station	Exceedances		Monthly Average	Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr		Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	30	Windridge	1	0	6.4	90.8	24	16	33.7	253.4	20.9	24	99.3
PM_{10} ($\mu g/m^3$)	-	-	Windridge	-	-	23.4	334.7	24	16	33.7	253.4	80.5	24	100.0
TSP ($\mu g/m^3$)	-	100	Windridge	-	1	36.2	503.9	24	16	33.7	253.4	131.3	24	100.0

Table 4-3 Days exceeding the Objective for TSP at the Windridge Monitor

Date	TSP (ug/m^3)	$PM_{2.5}$ (ug/m^3)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
5/24/2018	131.3	-	252.3	18.8	36.4	Wild fire; high wind gusts
Total # of Exceedances	**1**	**0**				

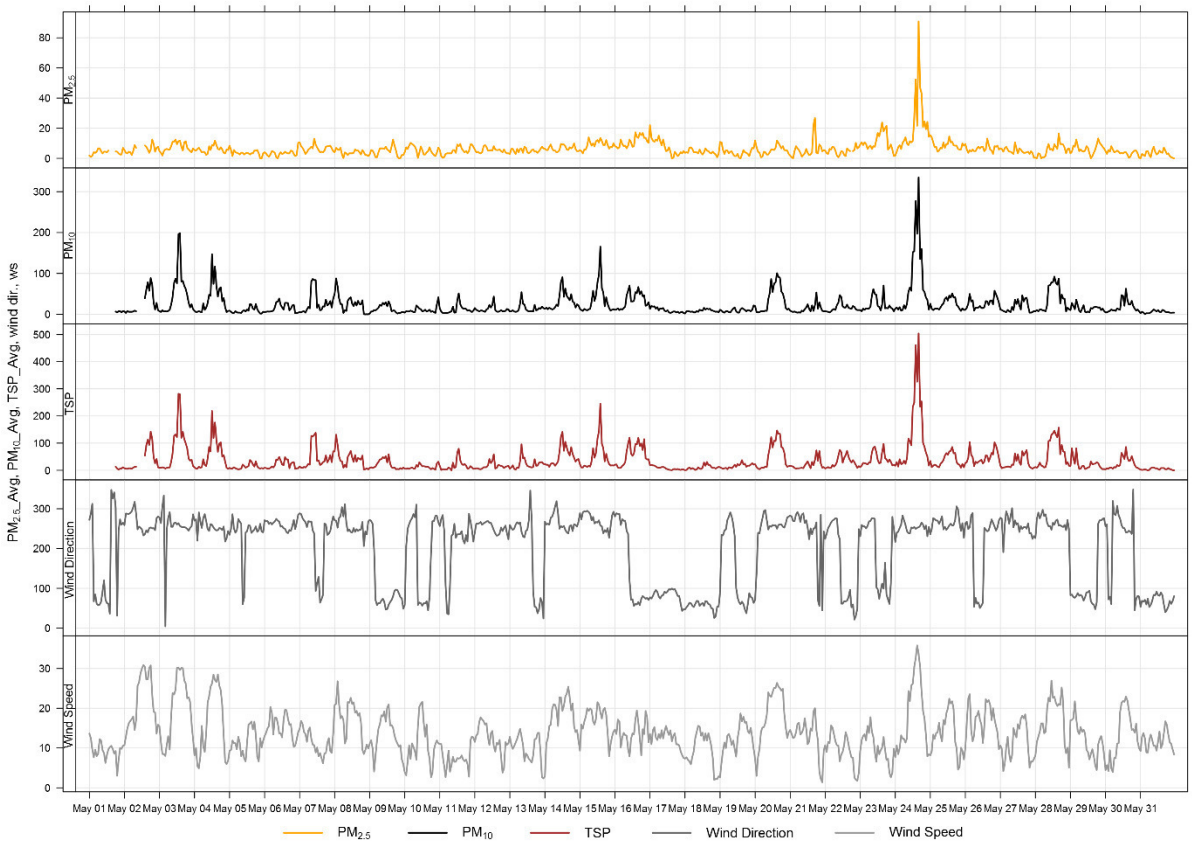

Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

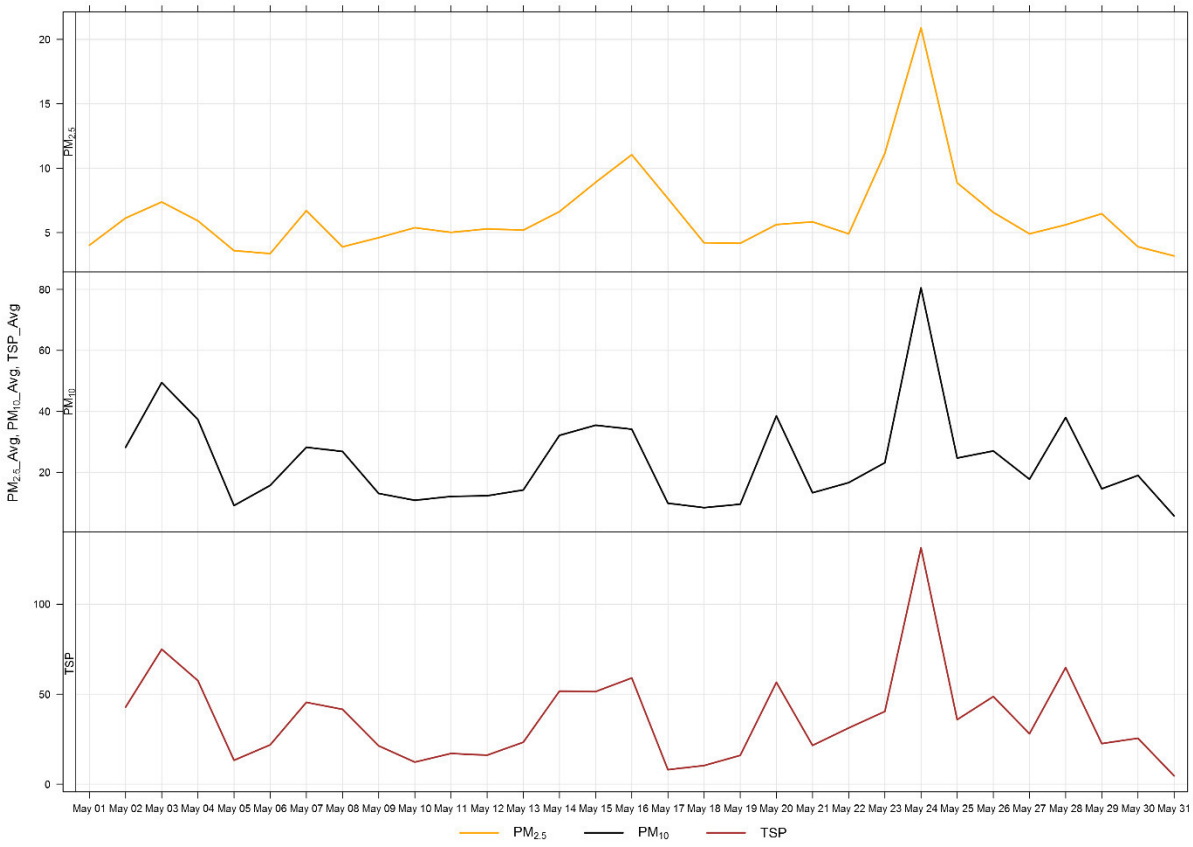

Figure 4-2 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-3 illustrates the hourly PM concentrations recorded at the Windridge monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-3 is based on data collected during May 2018 and indicates a diurnal pattern that is similar to the Lagoon station, but more consistent with the diurnal patterns associated with higher wind speeds.

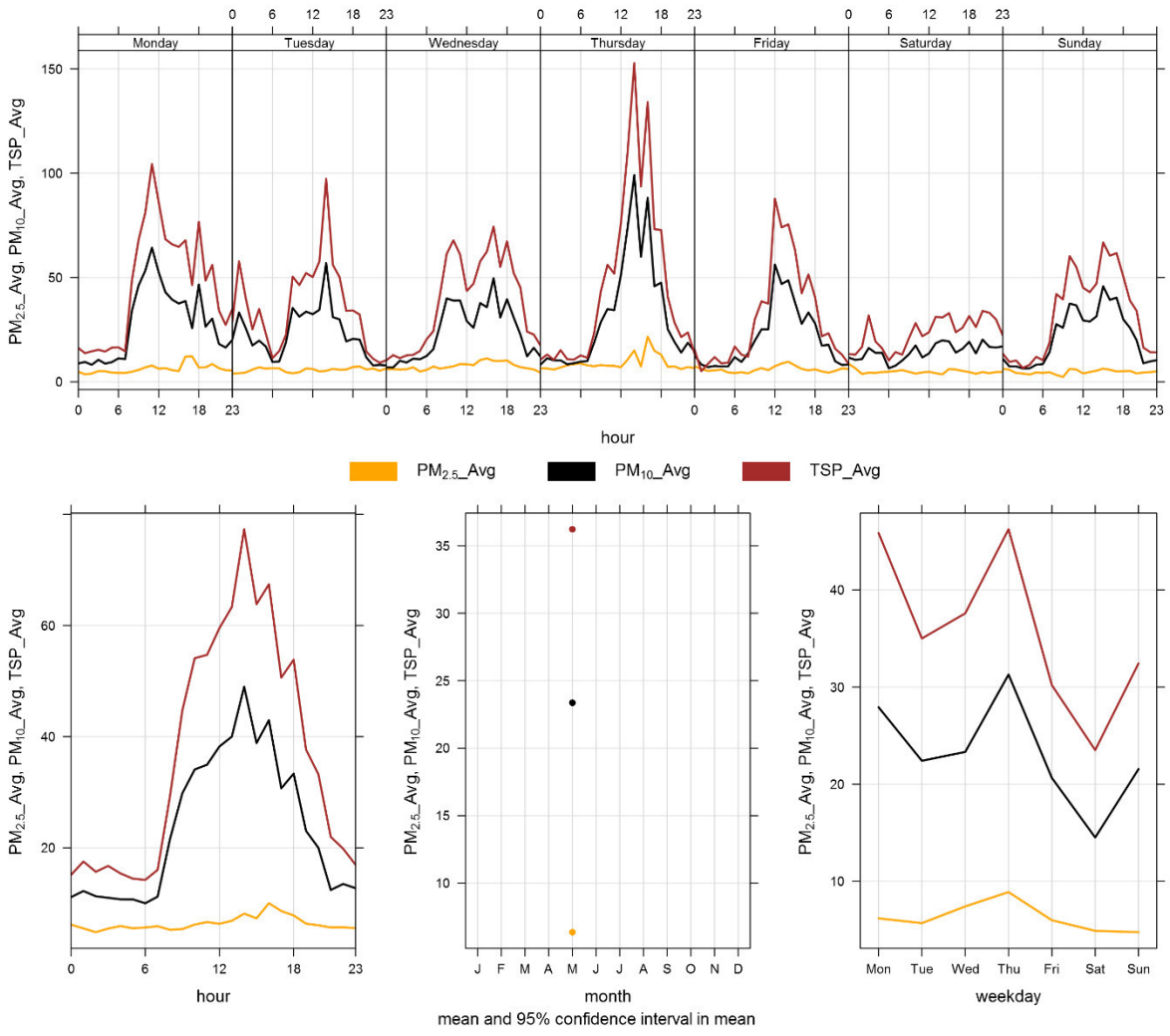

Figure 4-3 Windridge particulate matter time variation

5 WEST GRIMM

5.1 SITE VISIT NOTES

Table 5-1 indicates the equipment that is installed at the West monitoring location. During the month of May, the West GRIMM had 98.8% uptime due to a 9 hour power outage on May 31st.

Table 5-1 Equipment at the West monitoring location

Equipment Description	Parameter Measured
GRIMM 365 Continuous Particulate Monitor	$PM_{2.5}$, PM_{10}, TSP Concentrations

5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. As indicated in Figure 3-3, the majority of winds came from the west during May. Table 5-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month.

Figure 5-1 and Figure 5-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. There was no exceedance of both the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (30 µg/m^3) guidelines. Historically, there has not been exceedances of the TSP guideline at the West Monitor in May.

Table 5-2 Summary of May 2018 data at the West GRIMM

Parameter	Guideline		Station	Exceedances		Monthly Average	Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr		Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	30	West	0	0	5.0	41.2	23	11	6.6	103.1	10.5	16	98.8
PM_{10} ($\mu g/m^3$)	-	-	West	-	-	12.7	238.0	23	11	6.6	103.1	40.7	23	98.8
TSP ($\mu g/m^3$)	-	100	West	-	0	26.7	295.1	24	8	12.5	243.6	72.5	24	98.8

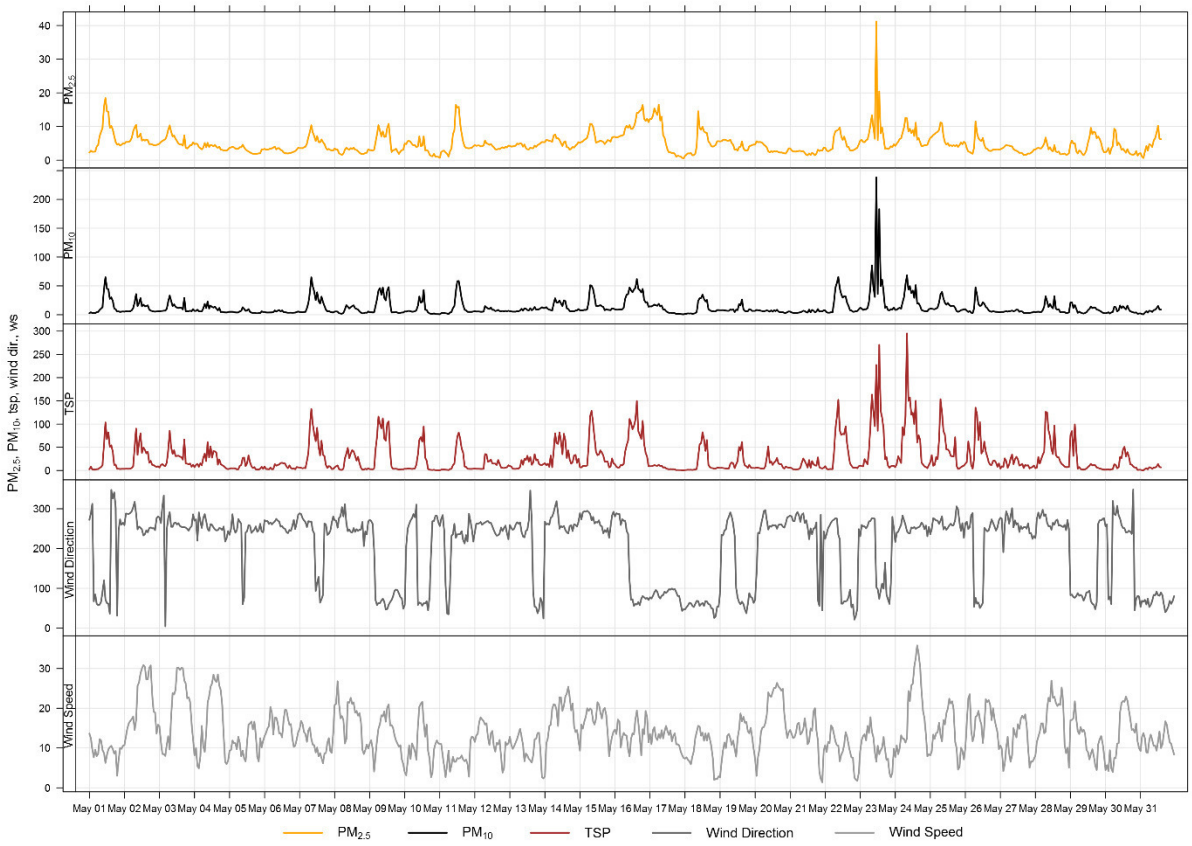

Figure 5-1 1-hour particulate matter concentrations at the West monitor

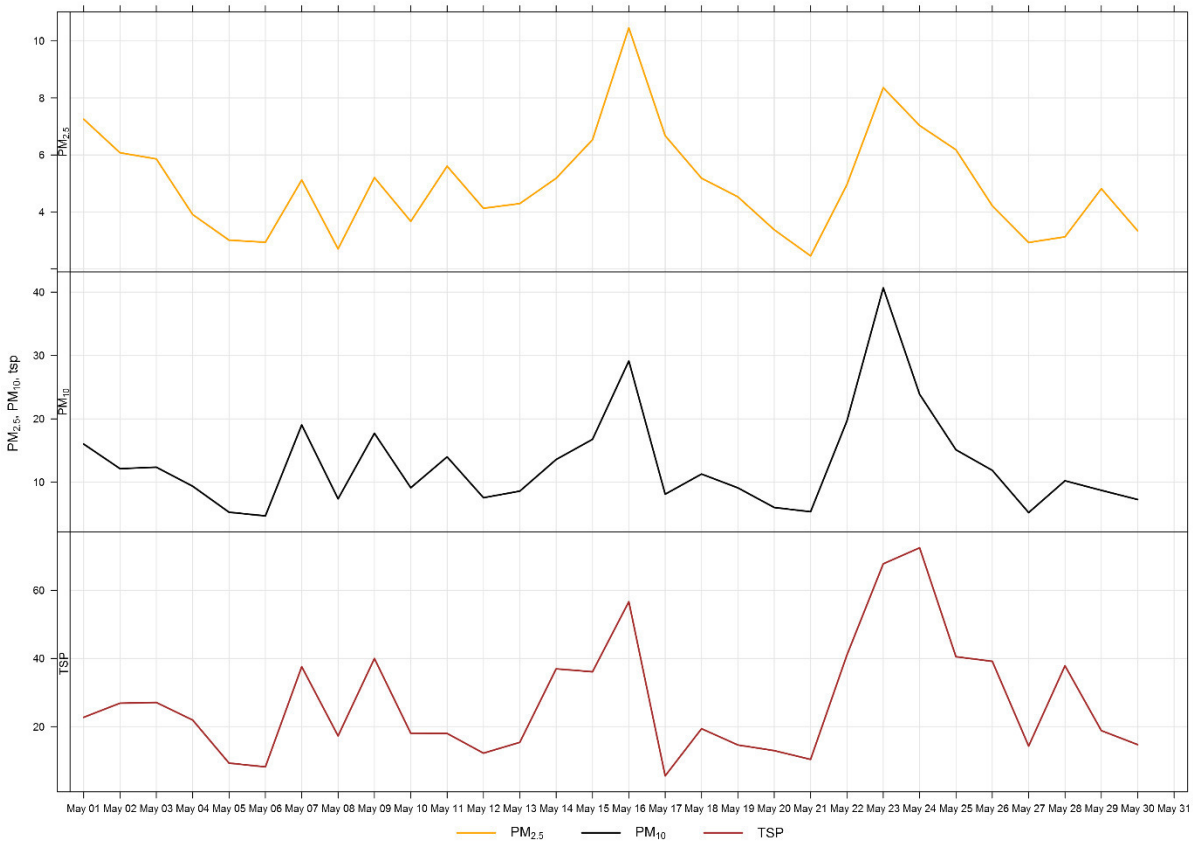

Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during May 2018 and indicates a strong relationship between TSP and hours which Lafarge is typically operational. Due to the proximity of the West monitor to the highway, the daily variations in PM may also be a result of higher traffic volume during daylight hours.

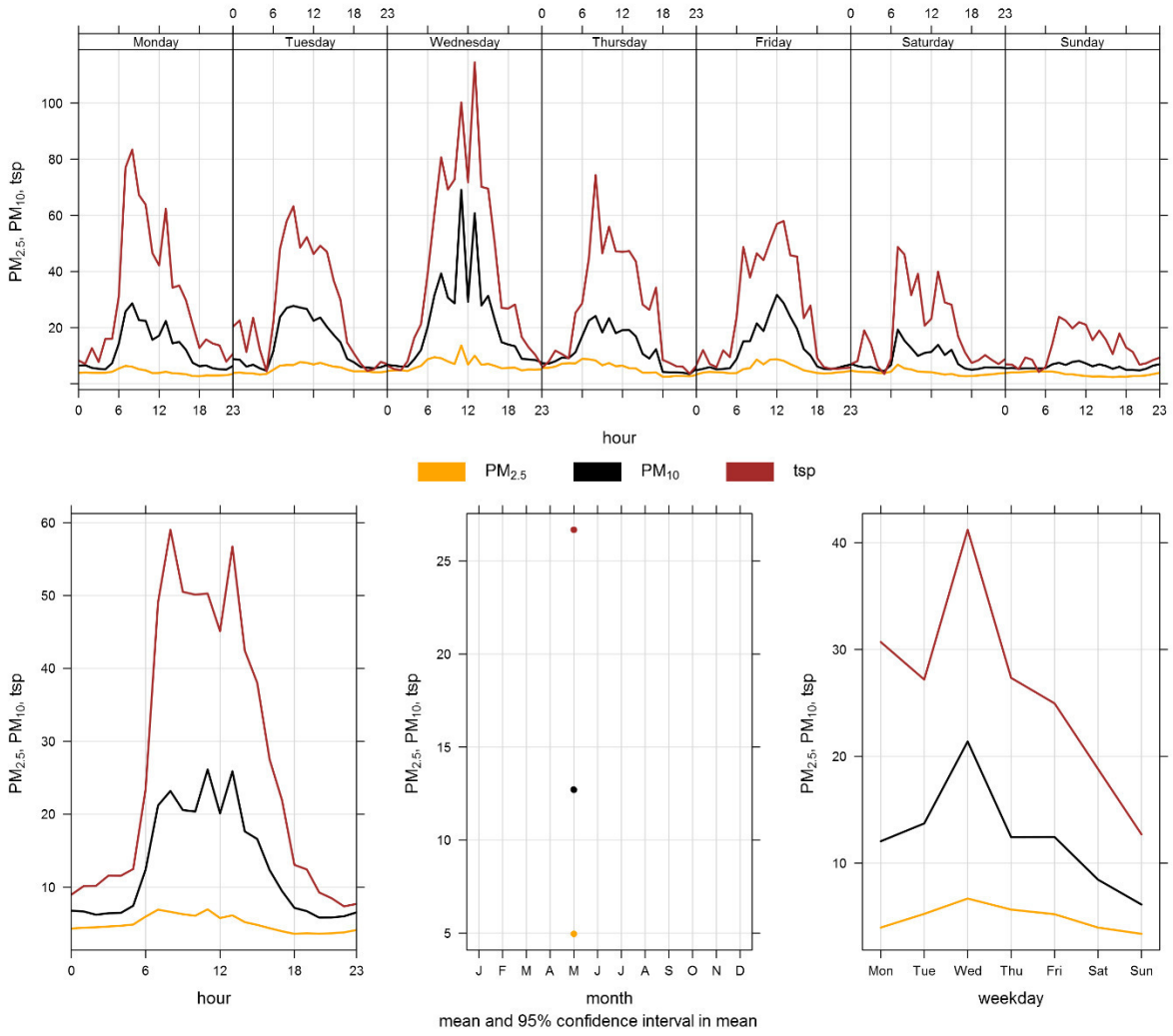

Figure 5-3 West particulate matter time variation

6 BERM GRIMM

6.1 SITE VISIT NOTES

This station was found to be in good operating condition and no repairs were required during the month. During the month of May, the Berm GRIMM had 100% uptime.

Table 6-1 Equipment at the Berm monitoring location

Equipment Description	Parameter Measured
GRIMM 365 Continuous Particulate Monitor	$PM_{2.5}$, PM_{10}, TSP Concentrations

6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility in 2009. Figure 6-1 and Figure 6-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 6-3 summarizes the recorded exceedances.

In May, there was 9 and 0 exceedances of the 24-hour TSP (30 µg/m^3) and $PM_{2.5}$ (100 µg/m^3) guidelines, respectively. Historically, the Berm monitor records an average of 8 and 0 exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines respectively, during the month of May. The largest number of TSP exceedances recorded during May occurred in 2010 and 2012, which had 16 days that exceeded the guideline. The fewest number of TSP exceedances was recorded during May 2014, which had 2 days that exceeded the guideline. There has never been any $PM_{2.5}$ exceedance recorded during May.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The $PM_{2.5}$ size fraction has been shown to match other regulatory approved $PM_{2.5}$ monitors, but the TSP concentrations recorded by the GRIMM tend to be higher than regulatory approved monitors (Levelton, 2015).

The Berm monitor is located along a ridge at the edge of the Lafarge property and is in an area where on-site trucks drive through site, which can create fugitive dust. Quarry blasting also has the potential to impact short term PM immediately following a blast.

Table 6-2 Summary of May 2018 data at the Berm GRIMM

Parameter	Guideline		Station	Exceedances		Monthly Average	Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr		Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ (µg/m^3)	80	30	Berm	0	0	5.8	63.1	24	13	30.4	253.8	16.0	24	100.0
PM_{10} (µg/m^3)	-	-	Berm	-	-	26.5	425.7	24	13	30.4	253.8	99.5	24	100.0
TSP (µg/m^3)	-	100	Berm	-	9	67.3	1421.9	24	13	30.4	253.8	329.2	24	100.0

Table 6-3 Days exceeding the Guideline for TSP at the Berm Monitor

Date	TSP (ug/m^3)	$PM_{2.5}$ (ug/m^3)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Berm						
5/2/2018	152.7	-	260.1	21.5	46.3	high wind event
5/3/2018	221.5	-	261.8	19.7	36.2	
5/4/2018	180.1	-	253.3	16.5	39.4	
5/8/2018	104.8	-	257.5	17.2	44.0	
5/14/2018	120.7	-	263.4	18.0	35.7	
5/15/2018	117.1	-	270.5	16.7	31.0	
5/20/2018	138.5	-	261.1	18.2	47.1	
5/24/2018	329.2	-	252.3	18.8	36.4	fires, wind gusts
5/28/2018	151.3	-	264.8	17.0	29.6	
Total # of Exceedances	**9**	**0**				
Maximum # of Exceedances (May)	**16 (2010, 2012)**	**0 (2010 ~ 2017)**				
Average # of Exceedances (May)	**8**	**0**				
Minimum # of Exceedances (May)	**2 (2014)**	**0 (2010 ~ 2017)**				

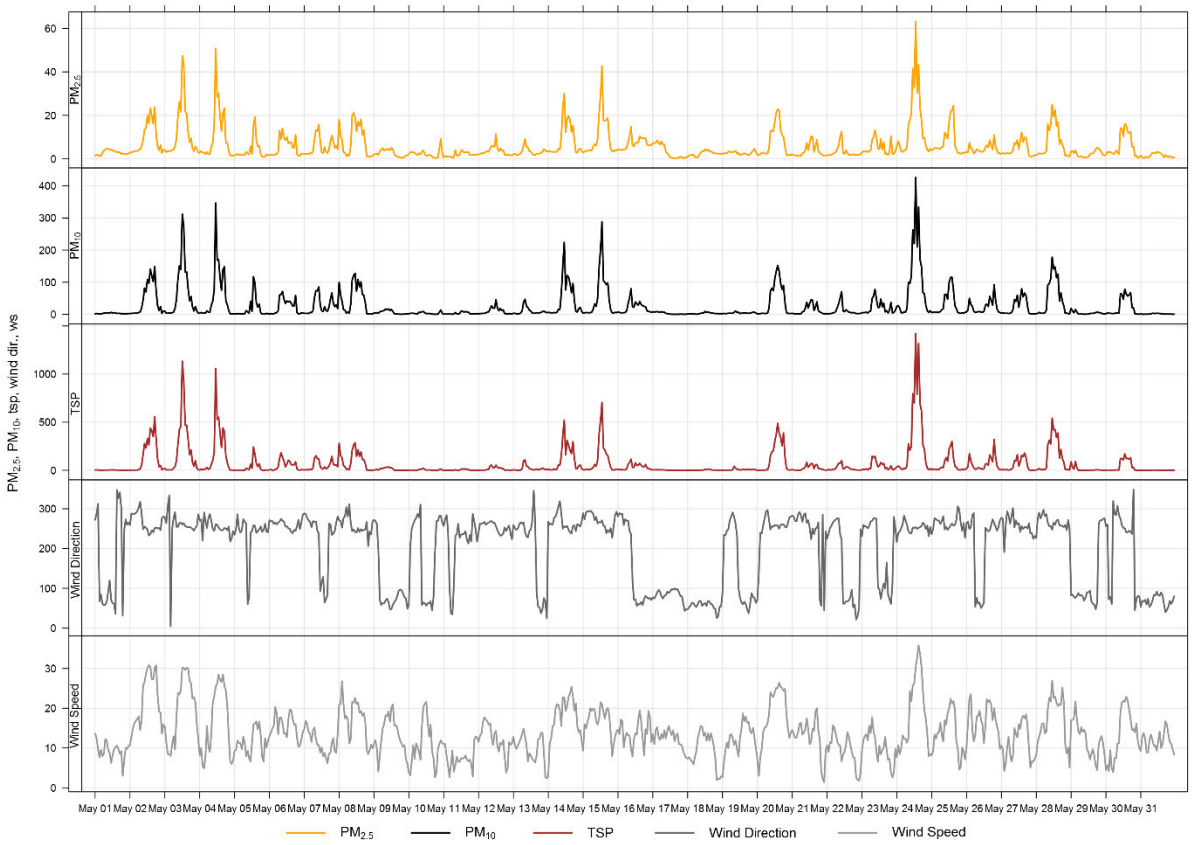

Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

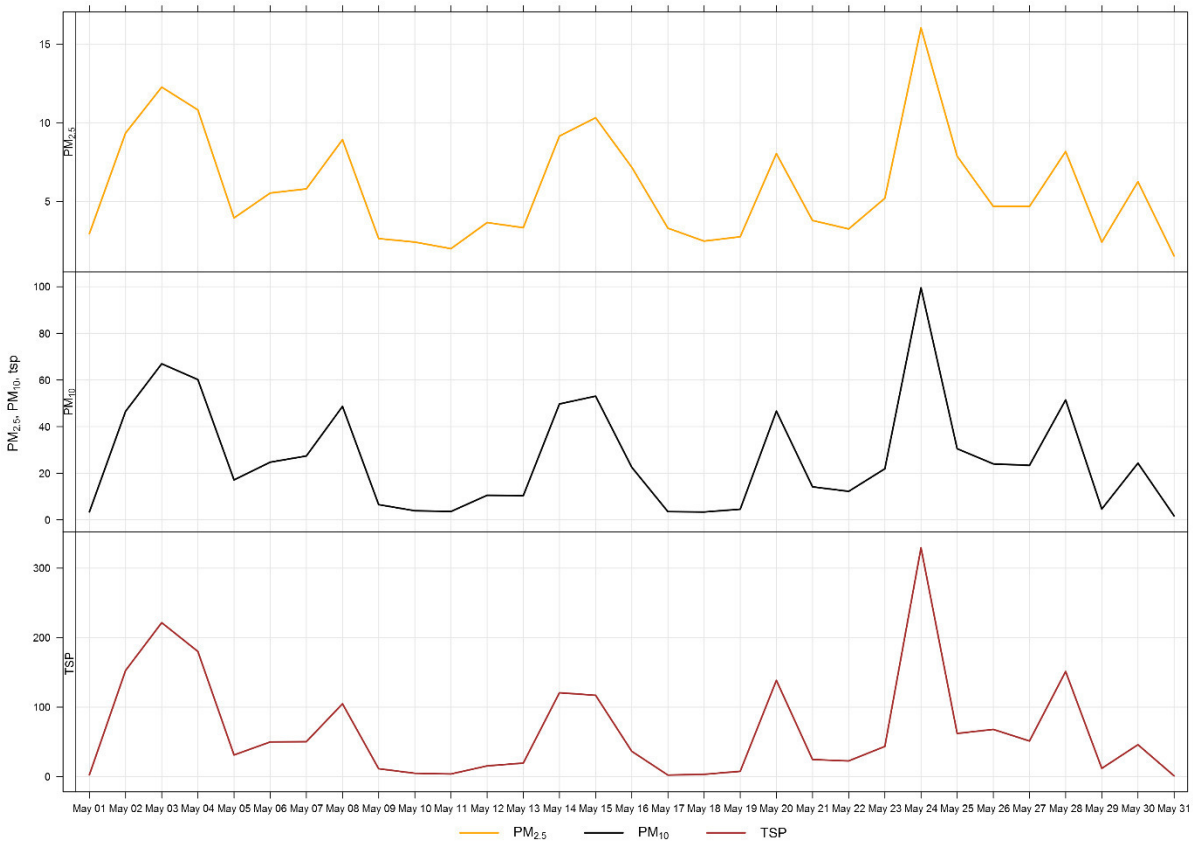

Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind roses for the 9 days of TSP exceedances. The wind rose shows that the winds predominantly come from the WSW and over 20 km/kr.

Figure 6-4 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor, on average, recorded elevated PM concentrations during standard operating hours of Lafarge and consistent with the diurnal patterns associated with higher wind speeds.

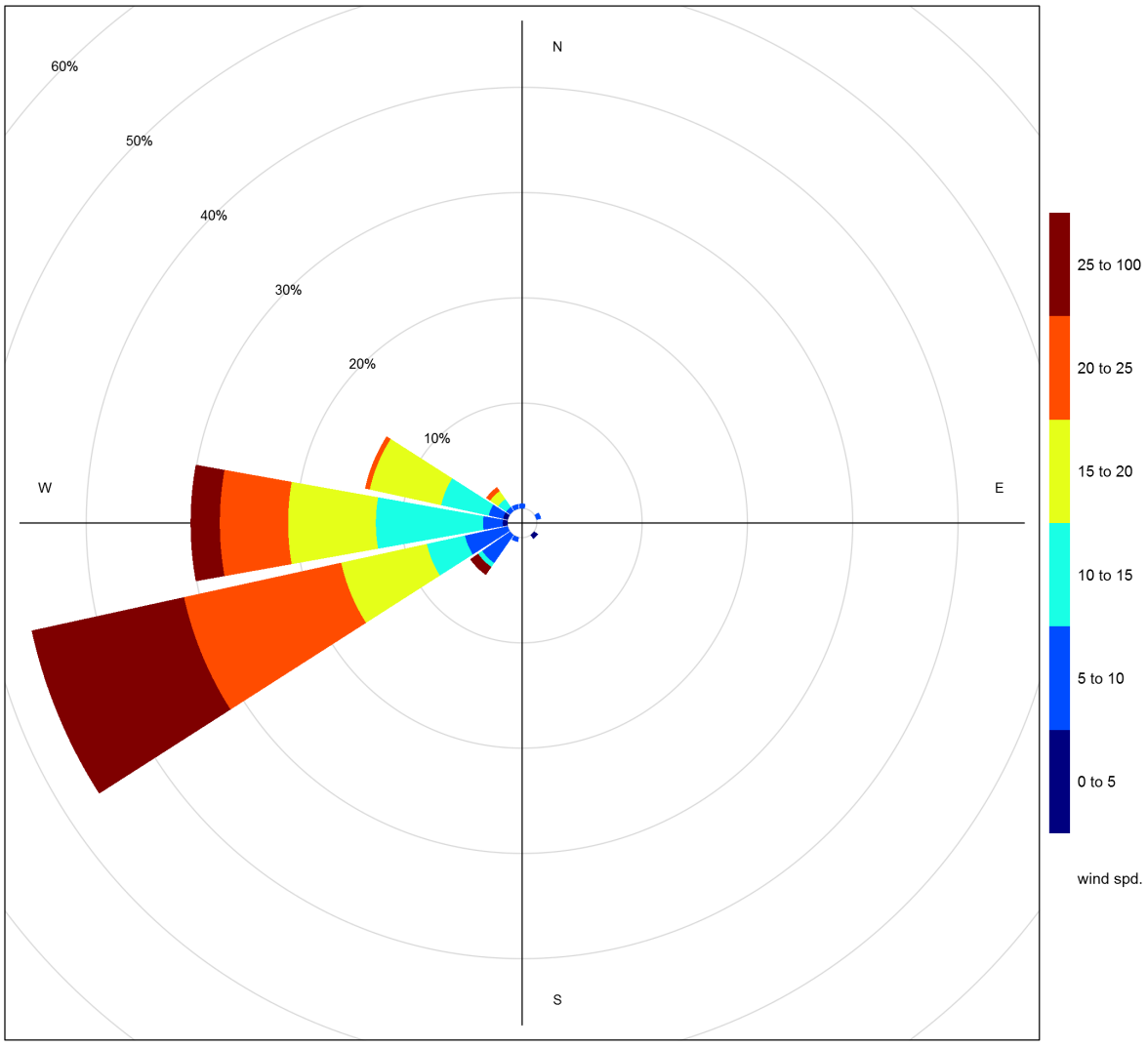

Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

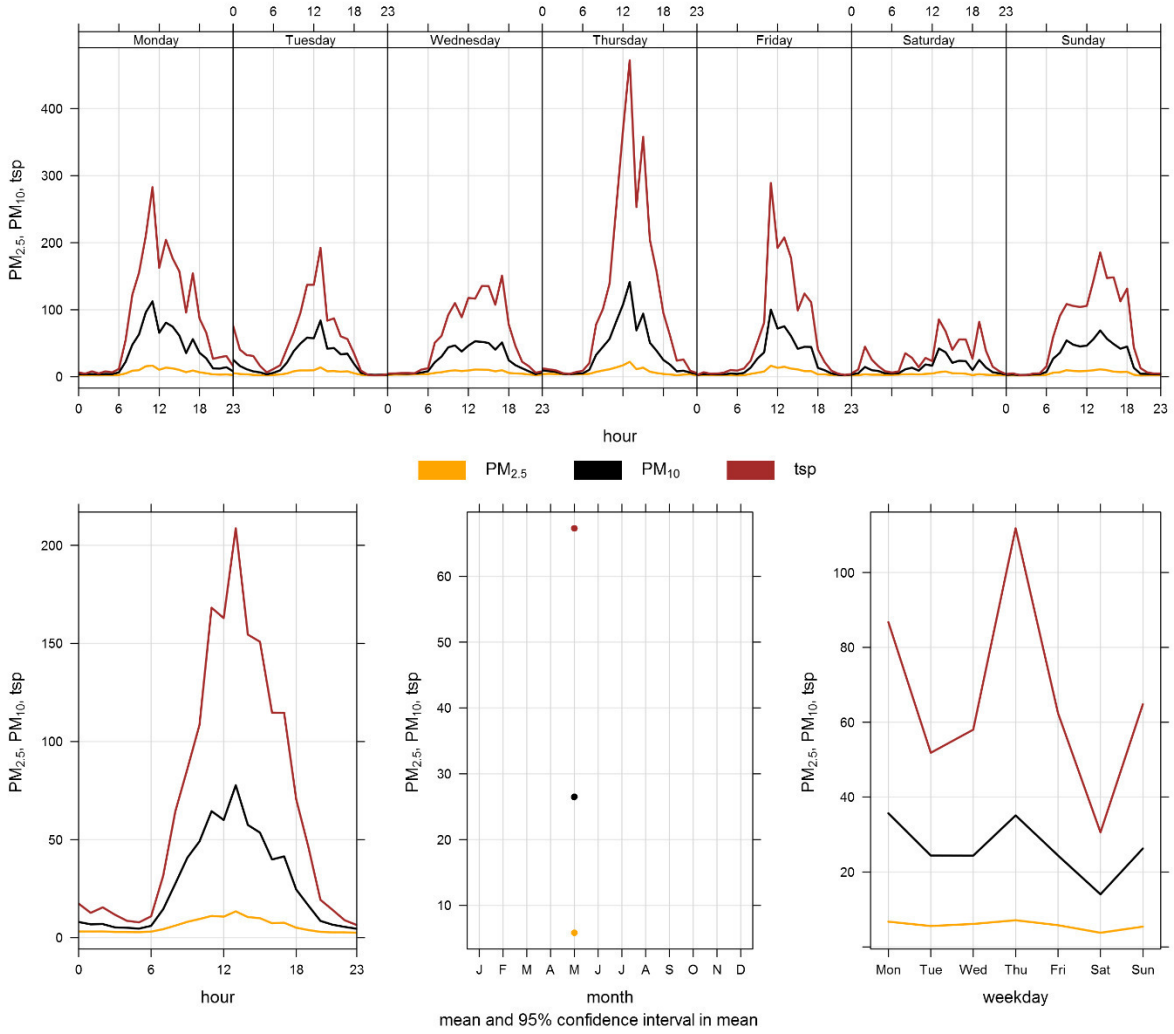

Figure 6-4 Berm particulate matter time variation

7 ENTRANCE GRIMM

7.1 SITE VISIT NOTES

This station was found to be in good operating condition and no repairs were required during the month. During the month of May, the Entrance GRIMM had 100% uptime.

Table 7-1 Equipment at the Entrance monitoring location

Equipment Description	Parameter Measured
GRIMM 365 Continuous Particulate Monitor	$PM_{2.5}$, PM_{10}, TSP Concentrations

7.2 MONITORING RESULTS AND TRENDS

The Entrance monitor was placed at its current location as a result of dispersion modelling conducted in 2009. This area was indicated as being the area where the maximum PM concentrations were expected. Figure 7-1 and Figure 7-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. Table 7-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. Table 7-3 summarizes the recorded exceedances.

During May, there were 11 and 0 exceedances of the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (30 µg/m^3) guidelines, respectively. Historically, the Entrance monitor records an average of 14 and 0 exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines respectively, during the month of May. The largest number of TSP exceedances recorded during May occurred in 2014, which had 20 days that exceeded the guideline. The fewest number of TSP exceedances recorded during May occurred in 2017, which had 7 days that exceeded the guideline. On the other hand, the largest number of $PM_{2.5}$ exceedances recorded during the month of May was 1 day of exceedance during the years of 2011, 2014, and 2016. The fewest number of $PM_{2.5}$ exceedances for May was 0 days of exceedances occurring in 2010, 2012, 2013, 2015, and 2017.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The $PM_{2.5}$ size fraction has been shown to match other regulatory approved $PM_{2.5}$ monitors, but the TSP concentrations recorded by the GRIMM tend to be higher than regulatory approved monitors (Levelton, 2015).

The Entrance monitor is impacted by fugitive dust from plant activities, and high wind events. Trucks also pass near to the Entrance monitor as they enter the Lafarge facility for loading. Additionally, the monitor is closely located to Highway 1A. Traffic, particularly large trucks, can create dust while crossing over the railway tracks. This can all lead to the monitor recording high TSP concentrations, which are typically associated with fugitive dust sources.

Figure 7-3 shows the wind roses for the days that exceeded the TSP Guideline at the Entrance GRIMM. High wind speeds were not a primary factor in TSP exceedances in May at the Entrance station, which would suggest that some of the other sources, such as traffic and rail may have contributed to the exceedances.

Table 7-2 Summary of May 2018 data at the Entrance GRIMM

Parameter	Guideline		Station	Exceedances		Monthly Average	Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr		Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	30	Entrance	0	0	10.9	48.6	25	7	13.3	269.7	19.6	16	100.0
PM_{10} ($\mu g/m^3$)	-	-	Entrance	-	-	44.4	314.3	25	7	13.3	269.7	98.6	23	100.0
TSP ($\mu g/m^3$)	-	100	Entrance	-	11	94.9	804.1	25	7	13.3	269.7	224.6	24	100.0

Table 7-3 Days exceeding the Guideline for TSP at the Entrance Monitor

Date	TSP (ug/m^3)	$PM_{2.5}$ (ug/m^3)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
5/1/2018	107.0	-	8.2	9.4	67.4	North wind
5/2/2018	104.7	-	260.1	21.5	46.3	high wind event
5/7/2018	132.3	-	261.4	11.4	42.4	
5/14/2018	162.6	-	263.4	18.0	35.7	
5/15/2018	160.0	-	270.5	16.7	31.0	
5/16/2018	161.9	-	37.5	13.9	40.6	NE wind
5/22/2018	130.5	-	283.3	9.4	47.0	
5/23/2018	185.3	-	244.8	10.2	41.7	
5/24/2018	224.6	-	252.3	18.8	36.4	fires, wind gusts
5/25/2018	186.4	-	261.4	13.6	43.1	
5/28/2018	180.5	-	264.8	17.0	29.6	
Total # of Exceedances	**11**	**0**				
Maximum # of Exceedances (May)	**20 (2014)**	**1 (2011, 2014, 2016)**				
Average # of Exceedances (May)	**14**	**0**				
Minimum # of Exceedances (May)	**7 (2017)**	**0 (2010, 2012, 2013, 2015, 2017)**				

Note: The rail crossing, on the 1A highway is in need of repair. Traffic hits the crossing and dust is dislodged from haul trucks as well as dust/dirt from the road, caught in the crossing, is lifted up and airborne. The particulate seems to be influencing the entrance monitor due to it's proximity to the highway.

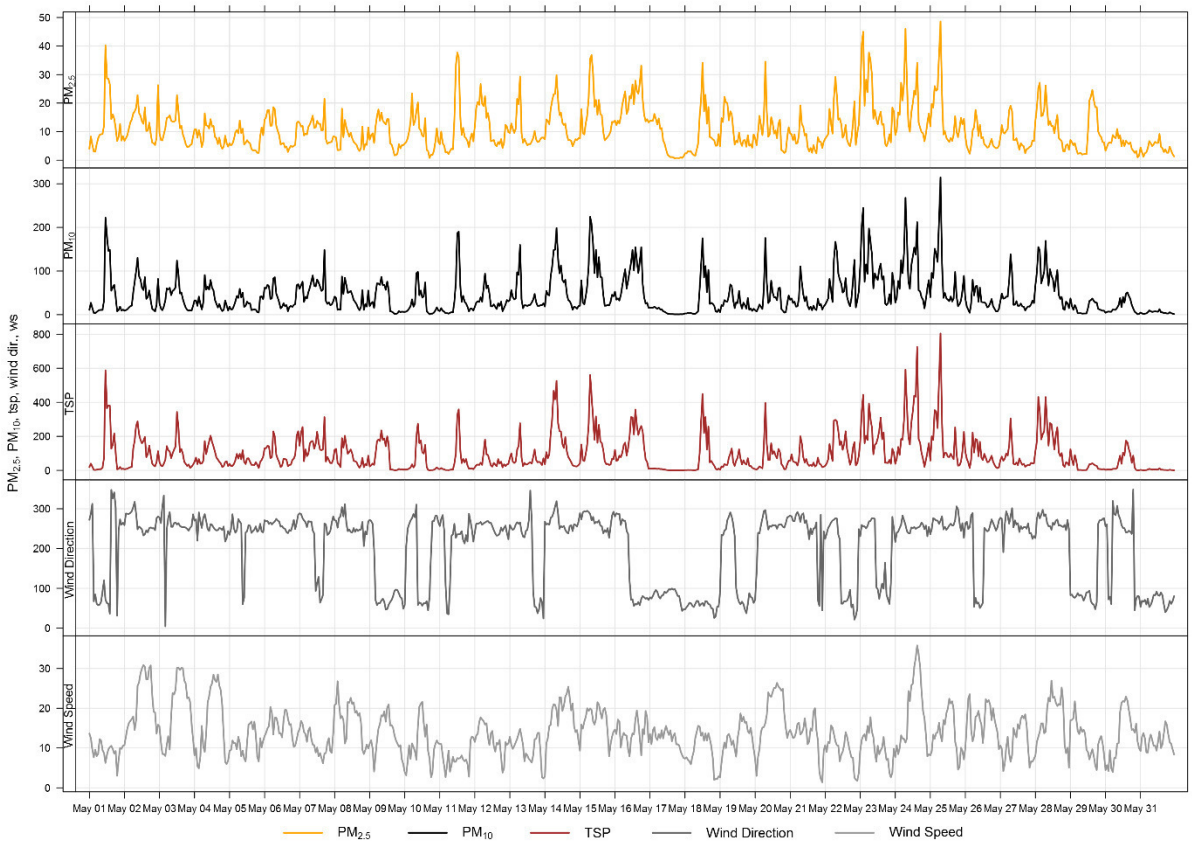

Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor

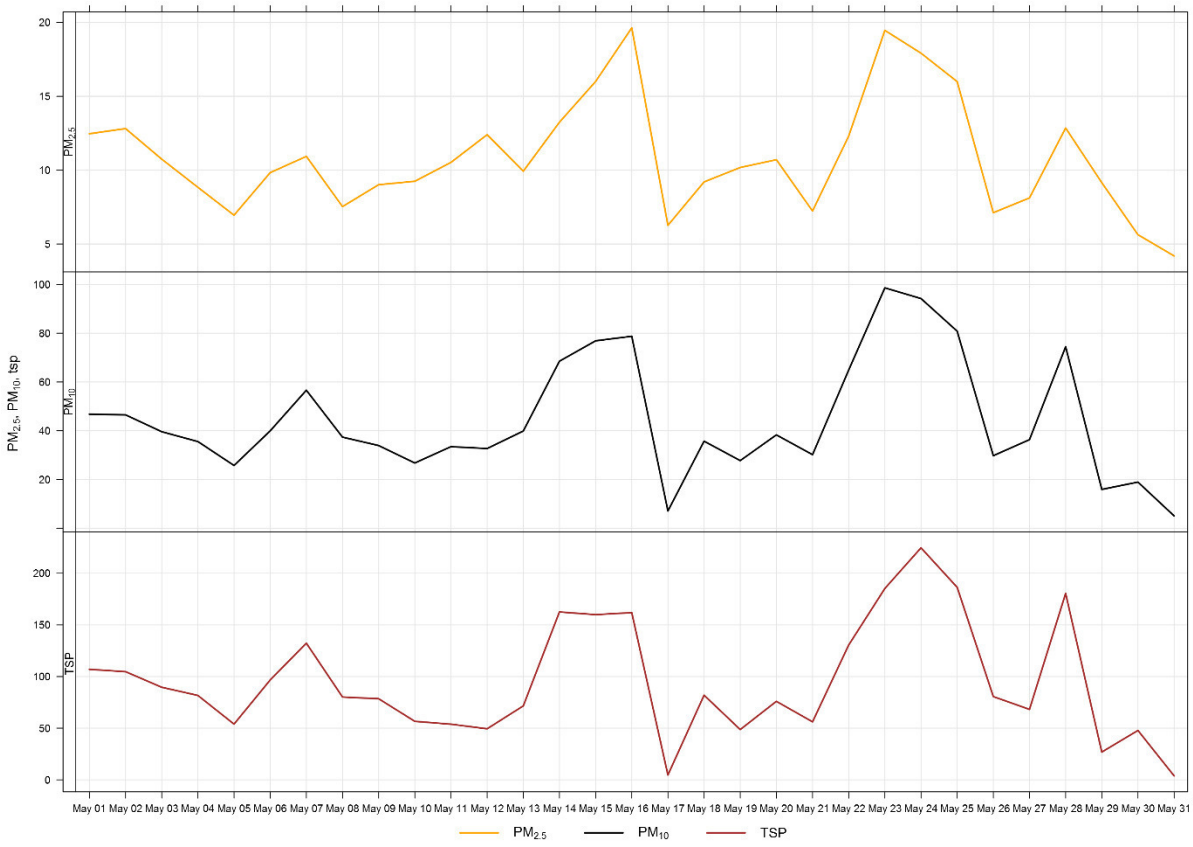

Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

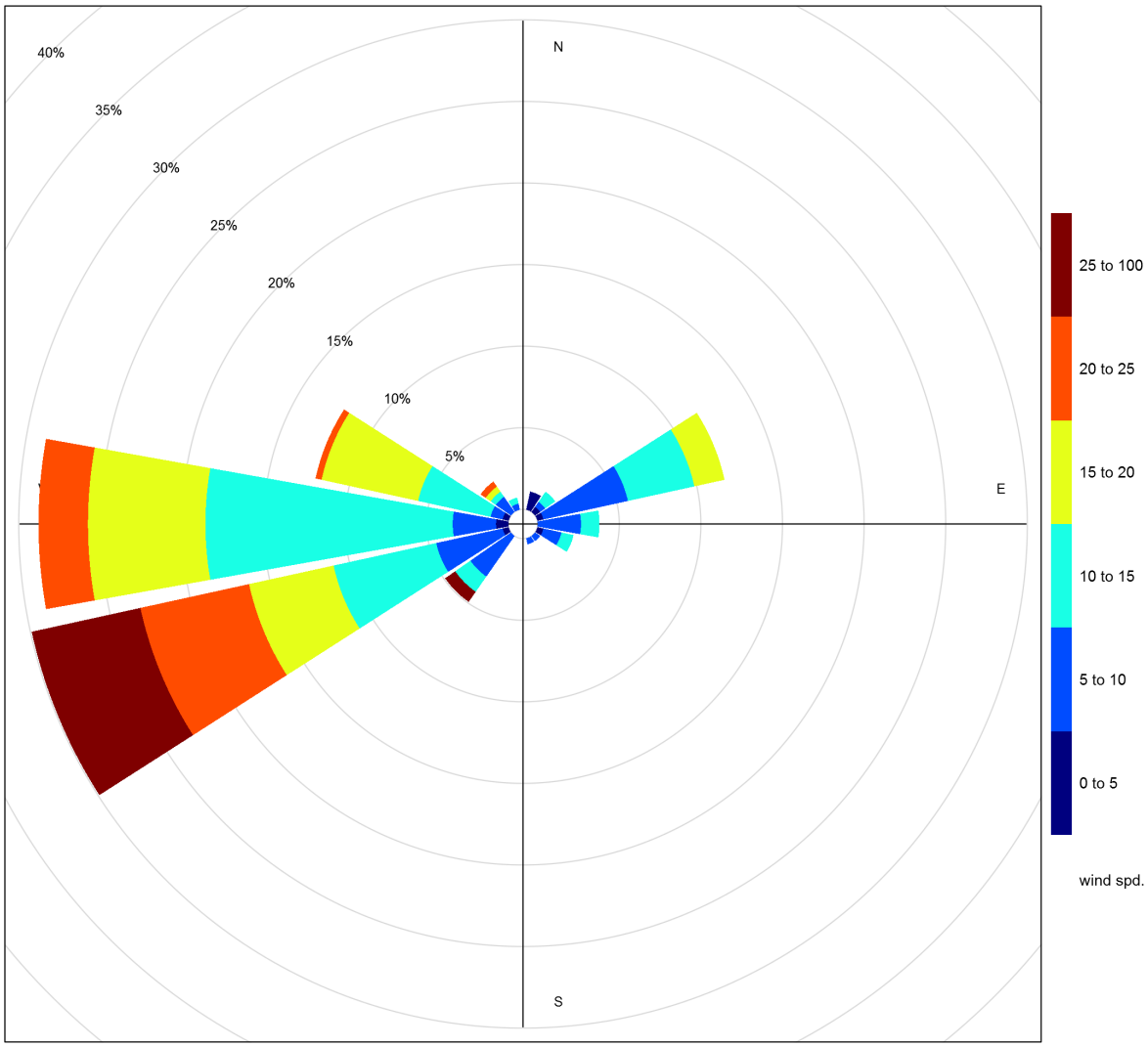

Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 7-4 illustrates the hourly PM concentrations recorded at the Entrance monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 7-4 is based on data collected during May 2018 and indicates a diurnal pattern at this station that is more consistent with the NOx variation at the Lagoon station, suggesting influences of traffic sources at the Entrance location.

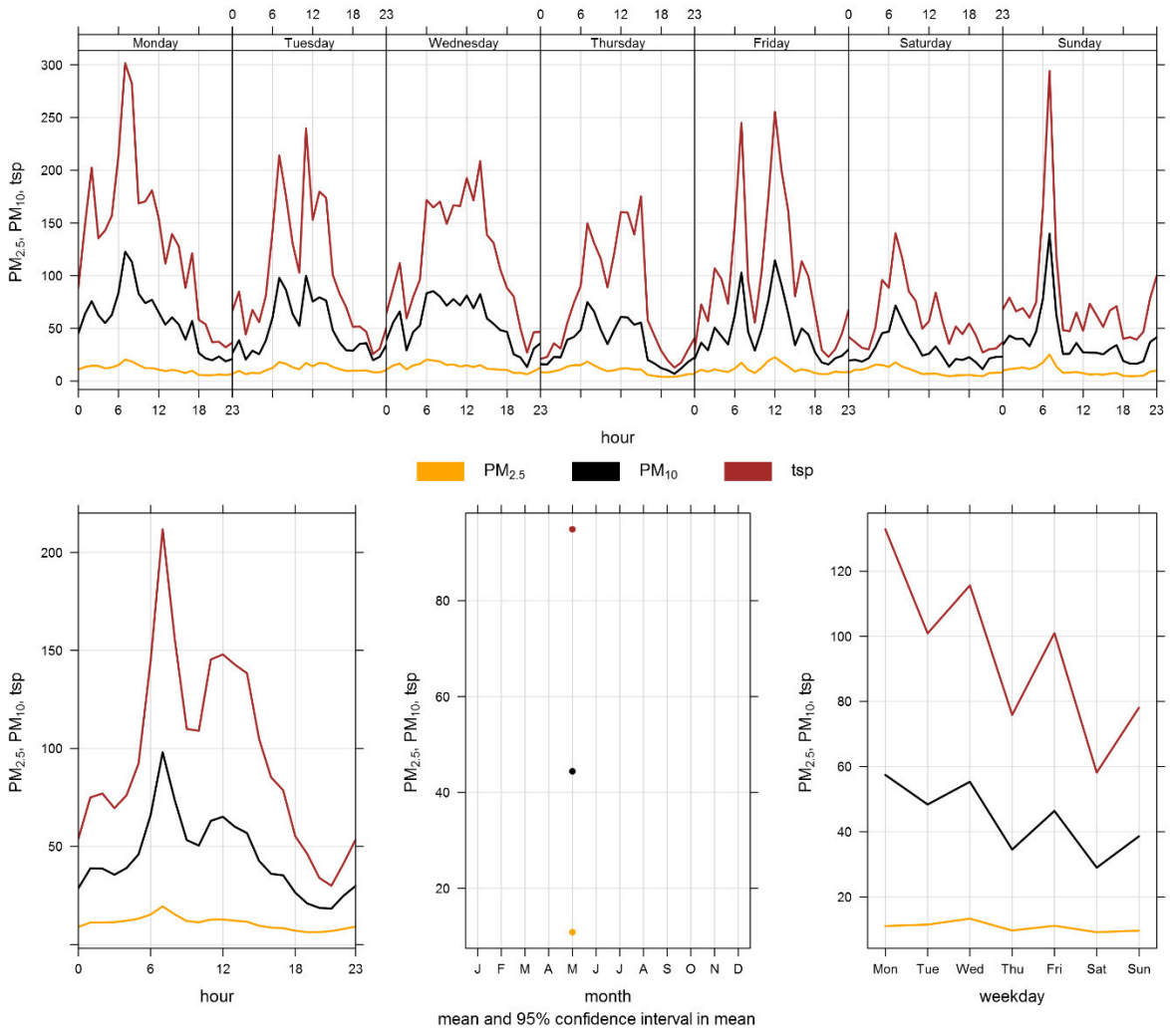

Figure 7-4 Entrance particulate matter time variation

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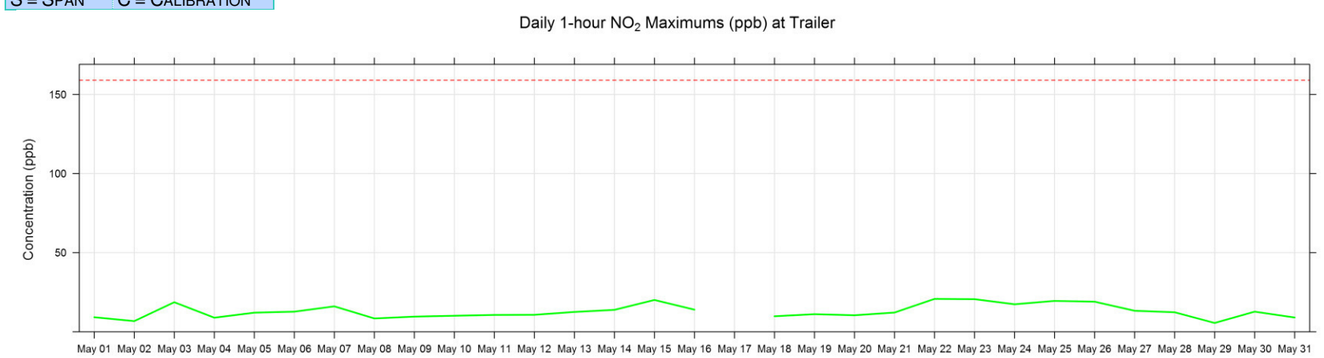
Appendix A

DATA & CALIBRATION REPORTS

Lagoon NO_2 (ppb) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	6.3	**S**	6.0	2.1	0.0	3.8	4.9	9.2	5.1	1.8	0.0	0.2	0.8	5.3	1.1	0.0	1.9	3.0	1.7	1.7	2.4	5.1	6.9	8.4	9.2	3.4
2	5.4	**S**	4.5	3.8	3.5	3.6	4.7	5.8	6.7	4.5	1.0	1.4	0.6	0.0	0.0	0.1	0.0	0.1	0.0	6.8	1.6	0.3	4.5	2.6	6.8	2.7
3	9.0	**S**	14.3	18.7	12.1	12.6	12.6	14.4	5.3	2.0	9.8	7.8	5.4	7.7	2.1	0.4	2.3	0.4	0.0	0.0	0.0	4.4	5.8	4.3	18.7	6.6
4	5.1	**S**	7.9	6.7	4.7	7.8	6.1	8.9	6.3	3.4	0.0	5.0	5.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	1.1	0.4	0.3	0.4	8.9	3.1
5	0.4	**S**	7.5	3.4	3.7	4.0	6.1	10.8	12.1	4.4	2.9	6.8	3.1	2.6	0.3	0.0	1.1	0.0	0.0	2.3	0.4	0.9	3.6	6.9	12.1	3.6
6	4.2	**S**	6.1	12.7	8.7	8.9	11.1	11.4	8.4	3.8	9.3	1.8	5.1	0.1	1.3	0.0	0.0	0.0	0.0	0.0	0.6	3.6	7.1	6.6	12.7	4.8
7	6.3	**S**	10.2	14.4	10.8	13.7	11.5	16.1	10.8	8.3	3.2	0.4	0.1	0.0	0.3	1.4	0.6	8.7	1.5	0.6	0.0	1.8	1.9	3.1	16.1	5.5
8	6.6	**S**	0.6	5.8	4.3	4.4	7.3	8.4	5.0	0.3	0.2	1.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.4	1.5	2.0	0.2	6.3	8.4	2.5
9	6.6	**S**	9.6	5.4	8.2	7.8	8.5	6.7	2.8	1.5	5.5	2.2	8.2	5.0	5.4	8.0	7.0	2.0	2.0	1.2	0.8	0.9	1.7	5.1	9.6	4.9
10	2.8	**S**	9.9	10.2	9.6	7.8	5.9	5.8	5.8	5.3	2.1	2.6	3.2	2.7	0.6	2.3	2.8	2.9	8.2	5.8	4.3	6.8	6.3	4.2	10.2	5.1
11	2.5	**S**	6.6	7.5	8.5	9.5	7.0	6.7	10.0	7.1	7.8	5.1	4.8	10.7	4.2	0.8	0.0	0.0	0.2	1.0	0.7	0.0	5.3	5.4	10.7	4.8
12	3.5	**S**	5.8	5.8	7.6	8.7	8.2	10.1	10.7	9.9	6.9	3.8	1.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.1	1.0	3.8	3.3	10.7	4.0
13	5.5	**S**	3.6	3.2	4.5	6.0	8.4	6.1	3.4	0.9	7.7	4.8	0.0	0.0	1.1	0.1	5.0	0.5	2.3	0.0	2.9	3.1	10.2	12.6	12.6	4.0
14	13.9	**S**	8.5	7.5	8.4	9.9	7.3	2.6	2.8	6.4	3.0	3.0	4.4	3.0	0.8	0.0	0.0	1.4	5.0	0.0	1.2	8.6	7.9	6.8	13.9	4.9
15	11.9	**S**	8.2	7.7	4.6	4.9	5.0	4.7	20.1	14.5	5.3	7.4	8.2	12.6	3.6	8.8	0.0	0.0	0.0	0.0	0.4	1.5	9.8	8.9	20.1	6.4
16	9.7	**S**	6.3	7.7	6.3	11.1	14.0	12.6	13.2	10.1	1.2	0.1	0.0	0.0	0.1	1.8	1.0	0.3	1.3	8.1	1.0	0.0	0.0	0.2	14.0	4.6
17	0.0	**S**	0.0	0.1	0.0	0.2	0.3	1.1	1.6	**C**	**C**	**C**	**C**	**C**	**C**	0.9	0.4	0.4	0.3	1.1	1.8	1.2	6.8	5.6	-	-
18	3.8	**S**	1.4	1.8	2.4	2.6	4.8	3.7	5.1	4.3	1.1	0.3	0.0	3.0	0.4	0.6	0.1	0.8	1.2	0.0	6.4	9.8	7.7	5.6	9.8	2.9
19	5.1	**S**	9.9	10.4	10.7	8.1	7.2	3.6	11.1	7.6	3.5	6.2	1.9	0.2	1.2	1.7	0.5	2.2	0.0	3.5	0.8	0.5	0.8	6.6	11.1	4.5
20	7.5	**S**	3.9	10.5	8.8	4.8	3.0	4.1	5.2	0.5	3.0	1.2	2.7	3.5	2.6	0.7	4.4	0.9	2.0	6.0	0.4	5.3	6.2	8.9	10.5	4.2
21	9.3	**S**	4.8	5.3	2.1	3.2	3.6	8.4	6.0	4.4	5.9	6.3	4.5	0.0	2.2	0.0	0.9	0.7	4.6	1.1	6.9	12.2	10.5	7.9	12.2	4.8
22	7.1	**S**	7.2	7.4	10.9	7.2	9.2	14.1	14.0	5.3	8.6	4.0	0.8	1.9	0.4	0.2	0.0	0.0	2.0	9.1	10.7	20.8	15.1	12.4	20.8	7.3
23	10.9	**S**	20.6	19.8	11.1	13.9	14.0	13.6	12.2	17.5	14.1	1.7	0.0	0.8	0.7	0.0	0.0	0.1	1.2	1.9	3.0	5.9	10.9	5.3	20.6	7.8
24	8.8	**S**	11.5	7.4	5.9	5.4	9.0	16.3	8.8	1.1	0.2	4.4	4.0	7.6	1.9	5.0	6.8	9.0	17.4	16.9	7.4	5.7	4.3	7.1	17.4	7.5
25	7.8	**S**	8.0	6.0	7.2	6.7	19.5	9.6	8.9	7.7	10.1	5.9	3.6	1.9	6.8	2.8	3.0	1.5	5.1	8.0	5.4	8.5	4.9	5.2	19.5	6.7
26	6.5	**S**	2.6	0.3	11.1	7.3	3.9	0.5	1.6	2.5	3.6	3.3	1.9	6.2	1.2	0.0	3.0	8.2	19.0	12.9	6.9	2.8	3.4	1.7	19.0	4.8
27	5.7	**S**	5.1	11.6	9.8	11.3	10.8	12.2	5.9	2.8	11.9	13.3	10.3	0.0	2.2	4.2	4.3	3.9	2.5	4.0	3.6	4.7	2.8	5.7	13.3	6.5
28	8.0	**S**	8.0	12.4	3.8	5.6	5.5	7.1	9.1	6.6	8.6	5.6	11.7	10.8	11.2	3.8	3.4	2.1	1.7	0.1	2.2	1.1	6.4	6.0	12.4	6.1
29	2.8	**S**	0.4	0.2	0.3	0.1	0.2	0.4	2.0	3.7	2.9	1.8	0.3	0.4	1.0	4.3	3.2	3.6	2.9	5.6	5.3	5.3	3.3	2.8	5.6	2.3
30	3.8	**S**	3.4	2.6	2.5	3.9	6.0	10.3	12.7	7.1	12.7	2.1	1.6	3.5	1.7	0.1	0.3	0.4	0.5	0.3	0.7	2.5	0.2	0.0	12.7	3.4
31	0.9	**S**	2.9	0.6	3.0	4.7	7.7	9.0	6.4	1.1	1.1	0.7	0.7	0.9	1.7	3.5	6.0	0.6	2.8	4.0	3.8	0.9	5.2	0.9	9.0	3.0
Hourly Max	13.9	-	20.6	19.8	12.1	13.9	19.5	16.3	20.1	17.5	14.1	13.3	11.7	12.6	11.2	8.8	7.0	9.0	19.0	16.9	10.7	20.8	15.1	12.6		
Hourly Average	6.1	-	6.6	7.1	6.3	6.8	7.5	8.2	7.7	5.2	5.1	3.7	3.2	3.1	1.9	1.6	1.8	1.8	3.0	3.1	2.7	4.1	5.3	5.4		

S = SPAN C = CALIBRATION

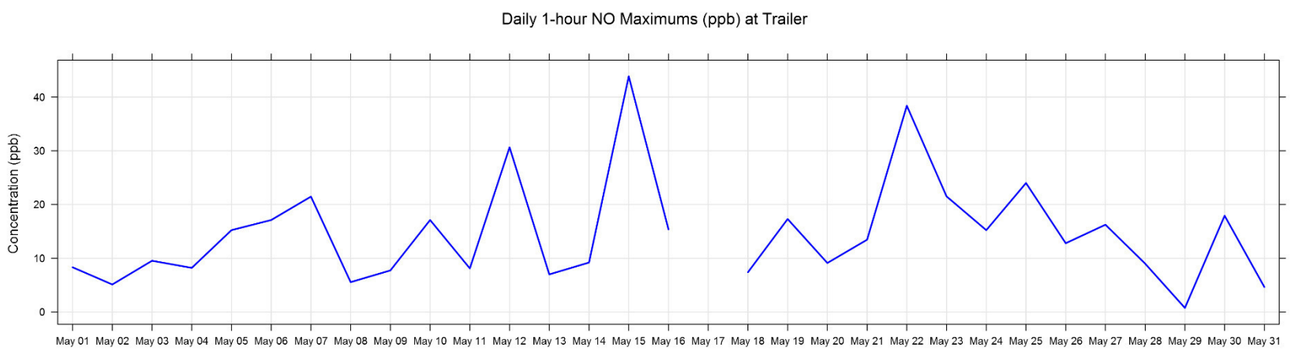


Number of 1HR Exceedances	0		Objective	159	PPB
Number of Non-Zero Readings	642				
Maximum 1-HR Average	20.8	PPB			
Maximum 24-HR Average	7.8	PPB			
IZS Calibration Time	31	HRS	Operational Time	744	HRS
Monthly Calibration Time	6	HRS	Operational Uptime	100.0	%
Standard Deviation	4.2		Monthly Average	4.7	PPB

Lagoon NO (ppb) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	3.9	**S**	5.9	0.0	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.2	4.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	4.9	1.2	8.3	8.3	1.3
2	1.6	**S**	0.5	0.0	0.0	2.3	3.4	3.8	5.1	1.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.9	0.0	5.1	1.0
3	4.1	**S**	3.5	4.9	0.5	5.3	6.6	9.5	1.0	0.0	5.5	5.6	2.9	6.9	0.6	0.0	0.6	0.0	0.0	0.0	0.0	4.8	1.8	0.2	9.5	2.8
4	0.0	**S**	1.1	0.0	0.0	2.1	1.1	8.2	0.7	0.4	0.0	3.8	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	1.0
5	0.0	**S**	5.4	0.1	4.1	0.0	4.2	14.7	15.2	2.4	0.2	3.6	1.7	1.7	0.0	0.0	0.9	0.0	0.0	1.6	0.0	0.0	0.0	0.7	15.2	2.5
6	0.8	**S**	1.5	17.1	8.5	7.6	13.0	16.6	12.6	6.9	10.5	1.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	2.5	1.3	17.1	4.5
7	4.5	**S**	8.8	13.8	7.8	16.9	14.4	21.5	7.4	7.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	21.5	4.6
8	3.2	**S**	0.0	2.3	0.3	3.9	3.4	5.5	0.8	0.0	0.0	0.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.7	5.5	1.0
9	0.8	**S**	1.8	0.0	0.0	0.0	1.2	2.0	0.0	0.0	2.1	0.0	7.7	2.0	1.2	3.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.7	1.1
10	0.0	**S**	0.0	0.6	6.3	10.3	12.8	12.9	17.1	10.9	2.9	1.2	1.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7	0.0	17.1	3.4
11	0.0	**S**	3.7	0.4	1.2	0.3	4.2	1.7	4.5	6.0	8.1	2.1	2.8	5.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	8.1	1.9
12	0.0	**S**	8.0	8.9	14.9	13.4	18.4	30.6	23.9	13.9	6.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	30.6	6.2
13	1.0	**S**	0.0	0.0	0.0	1.6	4.6	7.0	1.9	0.0	4.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	1.0
14	4.1	**S**	1.4	0.7	8.4	9.2	7.7	1.2	1.3	5.8	1.3	1.1	3.7	1.5	0.5	0.0	0.0	0.4	2.6	0.0	0.0	1.9	0.2	0.0	9.2	2.3
15	3.0	**S**	6.5	9.4	0.5	2.3	5.3	5.4	43.9	28.6	3.0	8.2	7.3	11.6	1.8	7.7	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.3	43.9	6.6
16	4.2	**S**	1.2	2.6	1.3	7.7	12.9	15.0	15.4	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	15.4	3.0
17	0.0	**S**	0.0	0.0	0.0	0.0	0.0	0.0	1.8	**C**	**C**	**C**	**C**	**C**	**C**	0.0	0.0	0.0	0.0	0.0	0.3	0.0	4.8	4.2	-	-
18	1.1	**S**	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	2.2	7.4	6.5	1.7	7.4	1.0
19	6.6	**S**	2.0	3.8	11.1	11.1	10.2	4.0	17.3	11.2	2.1	4.4	1.2	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	17.3	3.7
20	0.0	**S**	0.0	5.2	7.2	2.9	2.2	4.2	4.2	0.0	1.0	0.0	1.4	2.6	0.9	0.0	3.2	0.0	0.7	5.4	0.0	0.5	1.4	9.1	9.1	2.3
21	5.9	**S**	1.0	0.8	0.1	1.6	3.6	13.5	9.4	3.8	3.7	6.3	5.6	0.0	2.3	0.0	0.0	0.0	1.6	0.0	0.4	0.0	0.0	2.8	13.5	2.7
22	0.0	**S**	0.0	2.3	12.1	4.4	12.7	38.4	25.9	3.1	4.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.7	14.2	0.8	7.5	38.4	5.7
23	0.0	**S**	15.6	21.5	5.1	11.5	13.1	16.4	12.4	18.7	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	21.5	5.4
24	0.0	**S**	0.8	0.0	0.0	0.3	5.1	15.2	4.0	0.0	0.0	2.1	1.4	3.5	0.0	1.9	4.0	4.7	12.8	5.9	0.7	0.0	0.0	0.0	15.2	2.7
25	0.0	**S**	1.4	2.2	2.0	2.1	24.0	6.7	6.2	4.8	11.2	7.6	2.6	0.4	4.0	0.8	0.0	0.0	0.0	1.9	0.0	0.0	0.5	0.0	24.0	3.4
26	0.0	**S**	0.0	0.0	3.7	2.5	0.0	0.0	0.0	1.1	1.6	1.2	0.0	2.3	0.4	0.0	0.7	4.1	12.8	5.0	1.5	0.0	0.0	0.0	12.8	1.6
27	0.0	**S**	0.0	2.4	4.1	5.7	5.6	8.6	2.3	0.7	10.4	16.2	9.6	0.0	1.5	4.0	2.2	2.5	0.9	0.5	0.7	0.0	0.0	0.1	16.2	3.4
28	0.0	**S**	4.2	8.3	0.0	2.1	2.9	6.4	7.0	4.7	6.3	6.0	9.0	6.6	8.9	0.9	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	3.2
29	0.0	**S**	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1
30	0.0	**S**	0.0	0.0	0.0	0.0	0.0	7.1	17.9	4.4	13.5	0.0	0.0	1.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9	2.0
31	0.0	**S**	0.0	0.0	0.0	0.0	0.8	3.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0	2.3	3.1	0.0	0.6	2.5	0.0	0.0	0.0	0.0	4.6	0.7
Hourly Max	6.6	-	15.6	21.5	14.9	16.9	24.0	38.4	43.9	28.6	13.5	16.2	9.6	11.6	8.9	7.7	4.0	4.7	12.8	5.9	2.2	14.2	6.5	9.1		
Hourly Average	1.4	-	2.4	3.5	3.2	4.1	6.2	9.0	8.5	5.0	3.7	2.7	2.3	1.7	0.8	0.7	0.6	0.4	1.1	0.9	0.2	1.1	0.9	1.3		

S = SPAN C = CALIBRATION



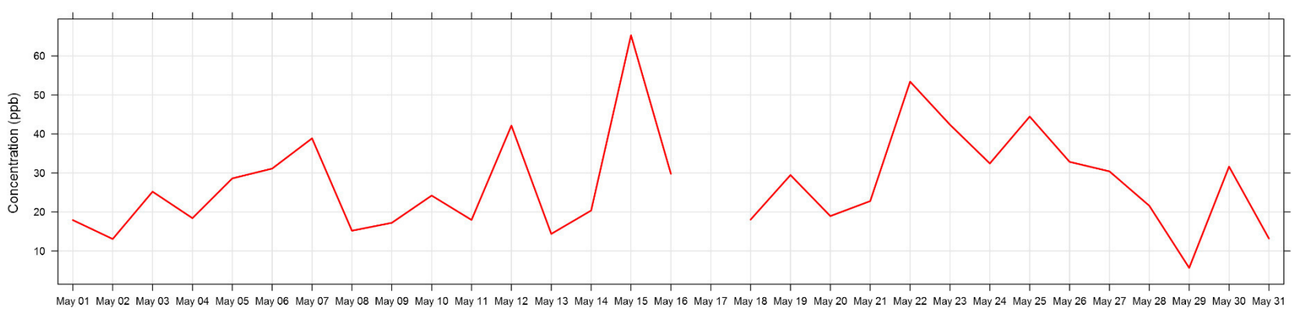
Number of 1HR Exceedances	n/a		Objective	n/a	PPB
Number of Non-Zero Readings	377				
Maximum 1-HR Average	43.9	PPB			
Maximum 24-HR Average	6.6	PPB			
IZS Calibration Time	31	HRS	Operational Time	744	HRS
Monthly Calibration Time	6	HRS	Operational Uptime	100.0	%
Standard Deviation	4.9		Monthly Average	2.7	PPB

Lagoon NO_x (ppb) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	11.4	S	13.1	2.0	0.0	3.9	5.2	11.6	6.2	4.2	0.0	0.8	2.3	10.6	1.8	0.0	3.0	3.6	3.0	1.7	3.4	11.2	9.3	17.9	17.9	5.5
2	8.1	S	6.2	4.5	4.2	7.2	9.4	10.8	13.1	7.4	2.2	2.9	1.7	0.0	0.0	0.5	0.0	0.5	0.0	9.8	2.1	0.3	7.6	2.9	13.1	4.4
3	14.3	S	19.1	24.9	13.8	19.1	20.5	25.2	7.5	3.1	16.6	14.6	9.5	15.8	3.8	0.8	4.0	1.1	0.0	0.0	0.0	10.4	8.8	5.8	25.2	10.4
4	5.9	S	10.2	6.9	5.7	11.2	8.5	18.4	8.3	5.2	0.1	10.0	13.2	1.8	0.8	0.0	0.6	0.3	0.4	0.0	1.0	0.4	0.3	0.4	18.4	4.8
5	0.2	S	14.1	4.7	9.0	4.9	11.7	26.8	28.6	8.0	4.3	11.6	6.0	5.5	0.9	0.0	3.3	0.0	0.0	5.1	0.5	1.7	3.6	8.8	28.6	6.9
6	6.1	S	8.8	31.1	18.5	17.7	25.4	29.3	22.4	12.0	21.0	4.0	10.0	0.5	2.4	0.0	0.0	0.0	0.0	0.0	2.3	5.2	10.8	9.2	31.1	10.3
7	11.9	S	20.2	29.5	19.8	31.9	27.3	38.9	19.5	17.4	6.1	0.7	0.4	0.0	0.6	2.1	0.6	10.3	1.7	0.5	0.1	2.3	1.9	4.4	38.9	10.8
8	11.0	S	0.7	9.3	5.7	9.5	11.9	15.2	7.0	0.8	0.8	3.9	0.0	4.6	0.0	0.6	0.0	0.0	0.0	0.5	1.8	3.6	0.1	8.2	15.2	4.1
9	8.6	S	12.5	6.6	8.7	8.4	10.9	9.9	3.9	2.6	8.8	3.5	17.2	8.2	7.8	12.5	10.3	2.7	2.3	1.2	0.8	0.9	1.9	6.4	17.2	6.8
10	2.9	S	10.4	12.0	17.2	19.4	20.0	20.0	24.2	17.5	6.3	4.9	6.2	4.2	0.8	2.8	3.1	4.0	8.6	7.0	5.7	9.1	8.3	5.0	24.2	9.5
11	2.7	S	11.7	9.2	11.0	11.1	12.6	9.7	15.8	14.5	17.3	8.5	9.0	18.0	5.9	1.2	0.1	0.0	0.4	1.5	0.9	1.2	8.0	5.4	18.0	7.6
12	4.6	S	15.1	16.0	23.9	23.5	27.9	42.2	36.1	25.2	14.8	8.2	1.6	0.0	0.0	0.0	0.0	0.0	3.9	0.0	1.3	1.0	4.1	3.5	42.2	11.0
13	7.6	S	4.2	3.9	5.4	8.8	14.2	14.4	6.7	1.9	13.8	8.7	0.2	0.0	1.8	0.3	6.1	0.8	2.6	0.0	3.8	3.3	10.6	12.5	14.4	5.7
14	19.2	S	11.0	9.4	18.1	20.4	16.3	5.2	5.4	13.4	5.5	5.4	9.4	5.8	2.7	0.0	0.0	3.0	8.9	0.0	1.3	11.7	9.3	7.6	20.4	8.2
15	16.2	S	15.9	18.3	6.3	8.3	11.4	11.2	65.3	44.4	9.5	16.9	16.9	25.5	6.8	17.9	0.0	0.0	0.0	0.0	0.3	1.8	14.9	12.5	65.3	13.9
16	15.1	S	8.8	11.5	8.7	20.0	28.1	28.8	29.8	20.2	1.9	0.6	0.5	0.3	2.9	1.5	0.3	1.8	9.8	1.1	0.0	0.0	0.0	0.1	29.8	8.3
17	0.0	S	0.0	0.0	0.0	0.0	0.2	1.9	4.6	C	C	C	C	C	C	1.2	0.4	0.2	0.0	1.2	3.0	0.9	12.6	10.8	-	-
18	6.0	S	1.1	1.4	2.1	2.5	5.8	3.9	6.6	8.8	1.9	1.5	0.1	3.2	0.6	1.0	0.0	0.9	2.8	0.0	9.5	18.1	15.1	8.2	18.1	4.4
19	12.5	S	12.8	15.2	22.7	20.2	18.5	8.6	29.5	19.8	6.4	11.4	4.0	0.3	2.0	2.7	0.6	4.3	0.0	4.3	0.5	0.1	0.5	7.1	29.5	8.9
20	7.9	S	4.0	16.6	16.9	8.7	6.1	9.3	10.4	0.6	5.0	2.2	5.1	7.2	4.5	1.2	8.7	1.2	3.6	12.5	0.2	6.8	8.6	19.0	19.0	7.2
21	16.1	S	6.6	6.8	3.1	5.7	8.2	22.8	16.4	9.0	10.5	13.6	11.1	0.0	5.5	0.0	0.8	0.9	7.2	1.0	8.2	12.4	10.6	11.7	22.8	8.2
22	6.8	S	8.0	10.4	23.9	12.4	22.7	53.4	40.9	9.2	14.0	6.4	0.9	2.3	0.3	0.1	0.0	0.0	2.0	14.2	12.3	36.2	16.9	20.8	53.4	13.7
23	11.0	S	37.3	42.4	17.0	26.3	27.9	30.8	25.4	37.1	24.3	2.0	0.0	0.9	1.3	0.0	0.0	0.0	1.1	3.1	2.6	5.8	12.2	5.1	42.4	13.6
24	8.7	S	13.1	7.6	6.2	6.5	15.0	32.4	13.6	1.3	0.1	7.5	6.3	12.1	2.8	7.9	11.9	14.7	31.3	23.8	9.0	6.7	4.0	7.5	32.4	10.9
25	7.8	S	10.2	9.0	10.0	9.7	44.5	17.1	16.0	13.4	22.3	14.4	7.2	3.3	11.8	4.6	3.7	1.5	6.0	10.7	5.6	8.9	6.4	4.9	44.5	10.8
26	6.9	S	2.9	0.2	15.8	10.7	4.0	0.2	2.1	4.4	6.0	5.3	2.7	9.5	2.5	0.0	4.6	13.3	32.9	18.9	9.3	2.9	3.1	1.4	32.9	6.9
27	6.2	S	5.2	14.8	14.7	17.8	17.1	21.5	9.0	4.3	23.2	30.4	20.8	0.0	4.6	9.1	7.5	7.4	4.3	5.4	5.3	5.0	2.7	6.6	30.4	10.6
28	8.4	S	13.1	21.5	4.2	8.5	9.2	14.3	16.9	12.1	15.8	12.5	21.6	18.4	21.0	5.6	5.0	3.0	2.1	0.0	2.1	1.0	6.5	6.8	21.6	10.0
29	3.0	S	0.1	0.0	0.0	0.0	0.0	0.0	3.0	4.7	4.2	3.4	0.3	0.2	0.9	5.4	3.6	3.8	2.8	5.7	5.1	5.0	3.1	2.7	5.7	2.5
30	4.0	S	3.0	2.4	2.2	4.0	6.9	18.2	31.6	12.5	27.1	2.9	2.3	5.7	4.6	0.2	0.1	0.4	0.4	0.0	0.6	2.3	0.0	0.0	31.6	5.7
31	0.6	S	2.8	0.4	2.7	5.4	9.4	13.2	12.0	1.2	1.2	0.6	0.7	1.0	2.2	6.7	10.1	0.4	4.4	7.4	4.3	0.6	5.7	0.5	13.2	4.1
Hourly Max	19.2	-	37.3	42.4	23.9	31.9	44.5	53.4	65.3	44.4	27.1	30.4	21.6	25.5	21.0	17.9	11.9	14.7	32.9	23.8	12.3	36.2	16.9	20.8		
Hourly Average	8.1	-	9.8	11.2	10.2	11.7	14.7	18.2	17.3	11.2	9.7	7.3	6.2	5.5	3.5	2.8	2.9	2.6	4.6	4.4	3.3	5.7	6.7	7.2		

S = SPAN C = CALIBRATION

Daily 1-hour NO_x Maximums (ppb) at Trailer



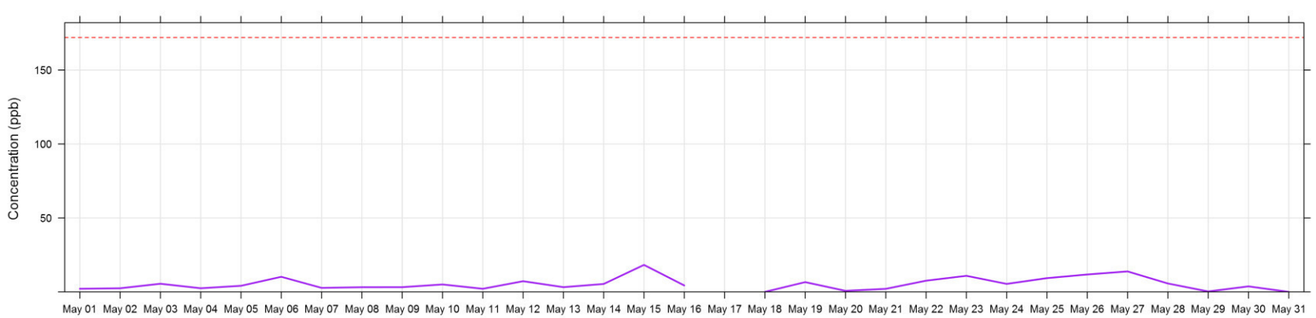
Number of 1HR Exceedances	n/a		Objective	n/a	PPB
Number of Non-Zero Readings	640				
Maximum 1-HR Average	65.3	PPB			
Maximum 24-HR Average	13.9	PPB			
IZS Calibration Time	31	HRS	Operational Time	744	HRS
Monthly Calibration Time	6	HRS	Operational Uptime	100.0	%
Standard Deviation	8.7		Monthly Average	8.0	PPB

Lagoon SO_2 (ppb) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	1.5	**S**	2.1	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.3	1.3	1.3	1.4	1.2	1.3	1.3	1.4	1.6	1.5	2.1	1.4
2	1.6	**S**	1.8	1.4	1.5	1.5	1.5	2.0	2.4	1.3	1.4	1.4	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.6	1.3	1.3	1.4	1.6	2.4	1.5
3	1.8	**S**	4.9	5.5	3.2	3.6	4.3	3.5	1.9	1.5	2.6	2.6	1.7	2.8	1.4	1.3	1.3	1.1	1.2	1.2	1.1	1.4	1.3	1.3	5.5	2.3
4	1.7	**S**	1.9	1.6	1.7	1.8	2.2	2.3	1.9	1.3	1.1	2.5	2.2	1.2	1.2	1.2	1.4	1.4	1.2	1.3	1.2	1.2	1.2	1.3	2.5	1.6
5	1.2	**S**	2.4	1.5	1.4	1.4	1.4	3.7	4.1	1.6	1.8	2.8	2.3	1.9	1.5	1.2	1.5	1.2	1.2	1.3	1.1	1.2	1.2	1.3	4.1	1.7
6	1.7	**S**	2.1	4.5	3.8	3.8	6.6	9.3	10.2	3.7	5.5	1.4	1.9	1.5	1.3	1.3	1.4	1.3	1.3	1.4	1.3	1.4	1.5	1.6	10.2	3.0
7	1.8	**S**	2.1	2.7	1.9	1.8	2.1	2.7	1.5	1.6	1.3	1.7	1.7	1.6	1.5	1.4	1.4	1.6	1.7	1.5	1.3	1.5	1.3	1.3	2.7	1.7
8	1.5	**S**	1.2	1.8	1.9	2.0	3.2	3.0	1.8	1.3	1.3	1.3	1.2	1.4	1.2	1.3	1.1	1.1	1.3	1.4	1.3	1.3	1.2	1.3	3.2	1.5
9	1.5	**S**	1.8	1.5	1.5	1.8	1.9	1.8	2.2	2.3	3.2	2.3	1.7	1.5	1.4	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.3	3.2	1.7
10	1.4	**S**	1.6	1.8	2.3	3.4	2.2	3.3	5.0	2.7	1.7	1.5	1.6	1.8	2.2	1.4	1.4	1.4	1.3	1.2	1.4	1.6	1.6	1.5	5.0	2.0
11	1.3	**S**	1.5	1.4	1.3	1.2	1.4	1.2	1.2	1.6	2.1	1.3	1.3	1.9	1.6	1.2	1.2	1.1	1.1	1.1	1.1	1.2	1.1	1.1	2.1	1.3
12	1.2	**S**	1.9	2.7	3.2	4.5	3.3	5.8	7.2	5.1	4.0	2.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.4	1.3	1.3	7.2	2.5
13	1.6	**S**	1.5	1.3	1.3	1.6	1.5	1.9	1.6	1.4	3.2	2.2	1.3	1.3	1.7	1.7	2.5	1.7	1.9	2.1	1.7	1.9	1.6	1.4	3.2	1.7
14	1.5	**S**	2.0	1.9	3.3	5.4	3.5	1.7	1.9	2.6	1.5	1.5	2.8	2.4	2.1	1.2	1.4	1.7	2.2	1.3	1.5	1.3	1.5	2.0	5.4	2.1
15	5.0	**S**	3.0	2.1	1.9	1.7	1.7	3.2	18.2	13.2	2.9	4.3	4.4	7.1	2.7	4.1	1.5	1.4	1.4	1.6	1.5	1.8	3.8	4.0	18.2	4.0
16	2.8	**S**	2.5	3.0	2.4	2.5	3.3	4.3	3.4	1.5	1.7	1.6	1.6	1.6	1.5	1.6	1.6	1.9	1.8	1.6	1.6	1.5	1.4	1.3	4.3	2.1
17	1.3	**S**	1.3	1.3	1.3	1.3	1.2	1.2	1.2	**C**	**C**	**C**	**C**	**C**	**C**	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
18	0.0	**S**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	**S**	0.0	0.2	2.3	2.7	3.0	0.7	6.6	5.5	2.1	4.4	0.5	0.1	0.4	0.3	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.3	6.6	1.3
20	0.6	**S**	0.0	0.3	0.6	0.4	0.4	0.5	0.6	0.0	0.1	0.2	0.7	0.7	0.5	0.0	0.5	0.0	0.2	0.1	0.0	0.0	0.2	0.6	0.7	0.3
21	1.0	**S**	0.4	0.3	0.1	0.1	0.3	1.6	2.0	0.3	1.0	1.5	1.6	0.0	0.2	0.0	0.0	0.0	0.6	0.2	0.0	0.0	0.0	0.0	2.0	0.5
22	0.0	**S**	0.0	0.0	1.3	0.6	1.7	7.3	7.6	1.5	2.9	0.5	0.2	0.1	0.1	0.0	0.0	0.5	0.2	0.4	0.1	0.2	0.1	0.1	7.6	1.1
23	0.0	**S**	6.4	5.5	2.2	7.4	5.7	7.9	6.4	8.8	10.9	0.7	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.3	0.2	0.1	10.9	2.7
24	0.1	**S**	1.0	0.6	0.3	0.7	0.9	5.4	1.1	0.0	0.1	1.9	2.6	0.7	0.4	1.2	1.3	1.5	5.3	5.0	0.5	0.1	0.1	0.6	5.4	1.4
25	0.6	**S**	2.4	0.8	1.2	1.3	9.3	3.6	1.3	0.4	5.8	3.9	5.1	0.0	1.9	1.2	1.1	0.3	0.9	0.8	0.3	0.3	0.5	0.8	9.3	1.9
26	1.0	**S**	0.7	0.3	4.6	2.9	3.0	0.3	0.4	0.5	0.3	0.2	0.1	2.9	1.1	0.1	2.0	4.5	11.8	6.6	3.3	0.7	0.1	0.0	11.8	2.1
27	1.6	**S**	0.4	4.0	1.8	3.4	1.7	2.9	0.5	0.0	3.9	10.9	13.8	0.0	0.1	2.0	0.9	1.7	0.5	0.6	0.0	0.0	0.0	0.0	13.8	2.2
28	0.0	**S**	1.0	3.4	0.0	0.0	0.7	1.4	0.8	3.5	4.5	1.3	4.8	5.7	3.9	1.9	0.9	0.8	0.2	0.0	0.0	0.1	0.1	0.2	5.7	1.5
29	0.3	**S**	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
30	0.0	**S**	0.1	0.0	0.0	0.0	0.0	0.2	1.2	0.2	3.7	0.2	0.1	0.6	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.0	3.7	0.3
31	0.0	**S**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hourly Max	5.0	-	6.4	5.5	4.6	7.4	9.3	9.3	18.2	13.2	10.9	10.9	13.8	7.1	3.9	4.1	2.5	4.5	11.8	6.6	3.3	1.9	3.8	4.0		
Hourly Average	1.1	-	1.6	1.7	1.6	1.9	2.2	2.7	3.1	2.2	2.4	1.9	2.0	1.4	1.1	1.0	1.0	1.0	1.4	1.2	0.8	0.8	0.8	0.9		

S = SPAN C = CALIBRATION

Daily 1-hour SO_2 Maximums (ppb) at Trailer

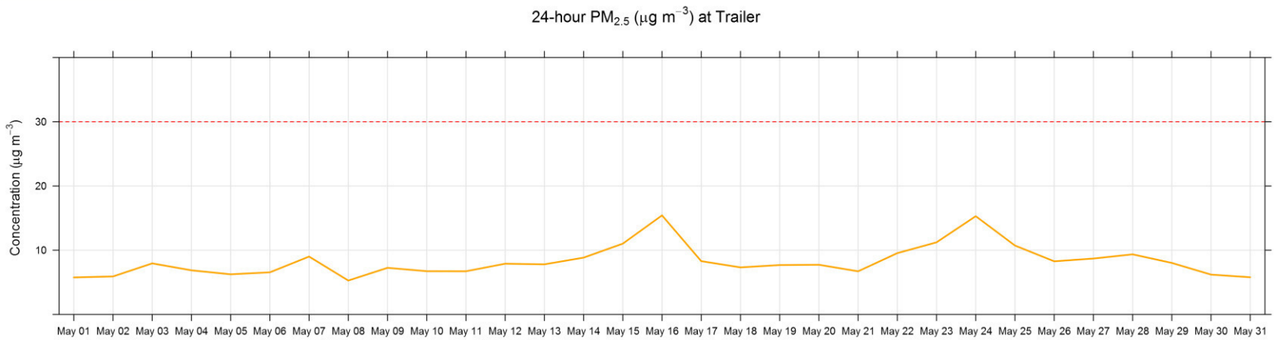


Number of 1HR Exceedances	0		Objective	172	PPB
Number of 24HR Exceedances	0		Objective	48	PPB
Number of Non-Zero Readings	592				
Maximum 1-HR Average	18.2	PPB			
Maximum 24-HR Average	4.0	PPB			
IZS Calibration Time	31	HRS	Operational Time	744	HRS
Monthly Calibration Time	6	HRS	Operational Uptime	100.0	%
Standard Deviation	1.9		Monthly Average	1.6	PPB

Lagoon $PM_{2.5}$ ($\mu g/m^3$) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	3.3	4.0	5.5	6.5	6.2	5.8	3.3	3.3	7.3	6.5	7.6	8.0	5.5	6.5	7.3	6.9	5.5	4.7	9.8	5.8	4.0	7.3	5.5	2.2	9.8	5.8
2	4.4	6.2	4.7	6.2	6.2	4.0	7.1	5.8	5.1	7.3	7.7	C	C	C	6.5	5.5	5.8	6.5	4.4	2.6	5.8	9.1	5.5	7.8	9.1	5.9
3	6.5	5.5	8.3	7.6	6.9	9.1	8.7	8.5	9.8	10.1	6.5	9.4	11.2	12.3	13.4	10.5	6.4	4.7	6.2	9.1	6.2	4.8	4.4	4.8	13.4	8.0
4	4.7	5.8	5.1	5.5	7.3	6.5	5.1	9.8	7.6	7.6	8.7	5.5	9.4	9.1	10.8	8.3	8.0	5.1	2.9	4.8	6.5	6.9	8.3	5.5	10.8	6.9
5	4.0	7.3	7.3	6.2	6.5	9.4	8.0	6.2	5.1	4.7	6.3	8.0	5.5	2.3	2.9	4.7	8.0	6.2	4.4	5.8	8.3	8.0	7.3	7.6	9.4	6.2
6	8.0	7.6	8.0	6.2	9.4	7.3	6.2	2.9	5.4	8.3	6.2	3.7	5.5	7.8	5.5	5.5	9.8	7.3	5.8	4.8	7.3	4.7	4.7	9.8	9.8	6.6
7	7.3	6.2	6.9	10.1	9.4	8.4	11.2	11.9	9.8	10.1	10.8	8.7	8.3	9.4	8.7	7.3	13.7	10.1	9.1	9.4	7.6	7.3	7.6	6.9	13.7	9.0
8	5.8	8.7	8.0	5.5	3.3	6.2	5.8	7.3	5.8	6.5	7.6	5.1	4.7	3.5	5.8	4.8	2.9	2.9	2.6	1.5	4.4	5.5	5.5	6.9	8.7	5.3
9	8.3	7.6	5.5	4.7	5.5	8.7	13.7	14.8	10.9	8.0	9.1	8.7	6.5	4.7	13.0	9.0	7.3	5.8	3.7	3.0	3.0	2.6	3.0	7.3	14.8	7.3
10	6.5	6.9	8.0	10.5	9.4	7.6	6.9	8.4	9.1	6.3	5.1	5.1	6.2	7.6	6.2	3.7	6.9	5.5	3.0	4.0	6.4	4.0	9.4	9.1	10.5	6.7
11	7.3	6.2	4.7	7.3	7.3	6.9	6.5	6.9	5.5	5.8	5.8	5.8	5.5	5.8	6.2	7.3	8.7	8.0	5.5	8.3	5.8	7.6	7.3	9.4	9.4	6.7
12	10.5	10.5	7.3	8.3	7.6	7.3	8.7	7.3	11.9	9.8	12.6	8.3	6.2	4.7	5.5	5.5	5.1	4.4	3.7	5.1	8.7	7.6	13.0	10.1	13.0	7.9
13	9.8	8.7	7.3	5.8	9.4	8.0	8.0	8.7	9.1	7.6	7.1	7.6	6.9	8.7	6.2	4.0	4.7	7.6	5.5	10.5	12.3	9.4	8.0	6.5	12.3	7.8
14	14.8	13.0	13.0	10.9	9.4	9.4	10.9	9.1	6.5	6.5	11.2	10.5	11.9	8.3	7.3	6.5	5.8	2.9	8.0	7.6	6.9	5.5	8.0	8.3	14.8	8.8
15	9.4	9.4	13.0	11.2	11.6	8.7	8.0	8.7	10.8	11.9	13.0	9.8	10.8	13.0	15.9	11.9	12.3	10.8	11.2	9.0	10.5	9.8	10.9	13.0	15.9	11.0
16	11.9	13.4	8.7	10.9	9.8	12.7	15.9	17.0	13.7	23.4	15.2	11.9	14.4	15.5	15.5	18.4	18.4	23.4	18.7	18.0	16.2	17.7	15.5	14.1	23.4	15.4
17	13.7	13.8	17.7	15.5	12.3	9.4	12.3	13.7	10.1	8.0	9.4	9.1	8.0	8.0	5.1	5.1	5.1	3.3	2.6	3.3	3.0	2.2	4.4	4.1	17.7	8.3
18	6.5	4.7	5.1	13.4	9.8	5.5	4.7	5.5	4.0	5.5	5.5	6.2	6.5	8.7	8.3	8.3	7.3	7.8	5.8	5.1	5.1	10.1	13.7	12.7	13.7	7.3
19	11.6	9.1	10.9	10.9	8.0	14.4	10.1	10.1	7.6	9.4	8.0	5.1	5.1	6.5	4.4	4.4	5.5	6.5	6.2	6.2	6.2	8.0	5.5	5.1	14.4	7.7
20	13.0	11.6	8.3	5.8	10.9	7.3	5.1	8.0	5.8	6.9	6.2	6.5	7.0	8.4	8.3	4.6	7.6	9.4	8.7	9.4	6.9	5.5	7.3	7.3	13.0	7.7
21	6.9	11.6	9.4	8.3	6.3	6.2	4.0	4.7	8.0	6.5	8.0	6.5	5.5	3.3	2.6	5.5	6.2	5.3	6.2	5.1	5.5	8.0	9.8	11.9	11.9	6.7
22	7.6	5.8	8.3	7.3	5.5	5.8	5.1	8.0	9.8	8.0	11.5	10.1	20.9	4.7	8.0	8.7	10.1	9.8	9.1	12.6	12.6	12.9	13.7	13.0	20.9	9.5
23	12.3	11.2	14.2	11.6	16.2	10.5	10.9	10.5	9.8	13.4	13.7	13.0	11.2	8.3	8.7	7.3	9.4	11.9	8.3	10.8	8.0	6.9	13.4	18.0	18.0	11.2
24	29.9	12.7	19.5	14.3	13.4	11.6	8.7	13.0	14.4	13.4	11.9	10.8	11.9	16.2	19.5	13.7	21.3	22.7	15.2	16.3	11.2	10.1	11.2	24.5	29.9	15.3
25	11.2	10.5	9.8	11.6	12.7	10.1	9.8	11.6	9.4	10.8	10.1	7.3	8.0	6.3	5.1	9.8	7.3	5.1	8.0	18.4	14.8	13.4	19.1	17.7	19.1	10.7
26	11.2	7.6	6.2	6.2	4.0	6.9	7.3	11.2	12.6	13.4	14.4	10.8	9.1	7.6	5.8	5.5	4.4	7.6	5.8	9.1	9.4	10.1	7.6	4.7	14.4	8.3
27	8.3	10.9	21.3	11.9	10.5	8.7	6.2	8.0	10.2	10.5	12.3	15.5	9.1	6.9	7.3	6.5	6.5	6.9	6.9	6.3	5.5	4.4	5.1	3.3	21.3	8.7
28	6.2	6.9	6.2	8.0	6.5	9.8	7.3	7.3	10.8	8.7	7.3	7.6	31.0	13.7	17.0	14.1	10.1	10.1	5.8	2.2	3.3	6.7	9.4	8.7	31.0	9.4
29	6.5	13.4	10.1	11.9	7.3	6.5	7.6	8.7	9.1	6.5	5.1	8.3	7.3	6.5	6.5	6.5	6.2	9.4	7.3	7.6	9.8	9.1	7.3	8.0	13.4	8.0
30	5.5	5.1	6.2	4.7	8.7	8.0	7.3	8.3	8.3	9.4	5.5	5.5	5.5	5.5	4.7	10.1	6.1	1.2	3.3	6.5	6.9	5.1	5.3	6.2	10.1	6.2
31	4.7	5.5	6.9	5.1	5.1	5.2	4.7	9.4	7.3	5.5	4.4	3.7	6.9	6.9	8.7	7.6	5.5	4.7	7.3	5.1	2.7	5.5	5.1	5.5	9.4	5.8
Hourly Max	29.9	13.8	21.3	15.5	16.2	14.4	15.9	17.0	14.4	23.4	15.2	15.5	31.0	16.2	19.5	18.4	21.3	23.4	18.7	18.4	16.2	17.7	19.1	24.5		
Hourly Average	9.0	8.6	9.1	8.7	8.5	8.1	7.9	8.9	8.7	8.9	8.8	8.1	9.0	7.9	8.3	7.7	8.0	7.7	6.8	7.5	7.4	7.6	8.4	9.0		

C = CALIBRATION

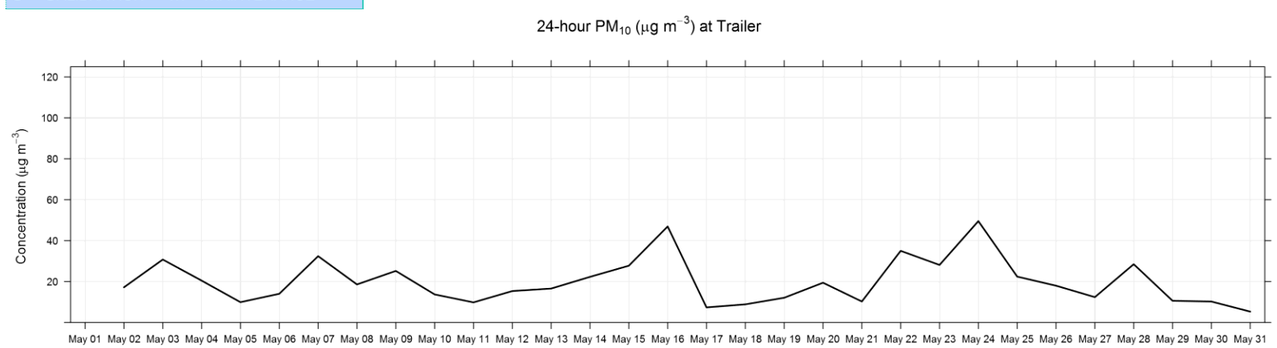


Number of 1HR Exceedances	0		Guideline	80	UG/M3
Number of 24HR Exceedances	0		Objective	30	UG/M3
Number of Non-Zero Readings	741				
Maximum 1-HR Average	31.0	UG/M3			
Maximum 24-HR Average	15.4	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	3	HRS	Operational Uptime	100.0	%
Standard Deviation	3.7		Monthly Average	8.3	UG/M3

Lagoon PM_{10} (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	4.6	4.0	7.3	6.1	4.6	8.7	-	-
2	10.1	8.0	17.5	7.4	5.3	4.6	6.7	15.5	22.3	35.0	44.6	**C**	**C**	**C**	21.1	22.3	23.5	21.6	46.0	33.1	6.0	4.6	3.5	2.6	46.0	17.2
3	5.3	8.8	6.7	7.3	6.7	8.6	16.8	20.9	36.5	55.4	50.0	50.7	50.7	89.3	134.7	34.4	38.3	29.0	27.0	29.0	10.1	7.4	5.3	9.4	134.7	30.8
4	10.7	6.7	7.4	8.7	5.3	18.9	19.6	22.1	22.9	37.8	31.8	19.5	82.5	58.8	43.9	16.2	22.3	8.7	14.8	14.1	6.0	3.3	4.6	4.6	82.5	20.5
5	7.4	10.1	10.1	7.2	7.4	8.0	6.7	8.0	17.5	27.7	28.4	12.8	8.9	4.6	16.2	3.3	2.6	6.0	9.4	15.5	9.4	6.0	0.0	5.3	28.4	9.9
6	9.4	8.0	11.4	9.4	8.0	10.1	11.5	27.0	31.1	26.9	35.1	27.7	13.5	11.3	18.2	9.4	8.7	6.7	5.3	6.7	19.5	6.0	6.7	9.4	35.1	14.0
7	9.4	10.1	10.7	20.2	12.1	20.2	25.0	28.5	88.0	63.6	52.7	39.2	18.2	43.9	18.9	22.9	161.0	18.9	33.8	18.2	20.8	11.4	12.1	18.2	161.0	32.4
8	29.7	54.1	44.4	13.5	18.2	17.5	8.0	18.2	29.7	29.0	25.0	30.4	17.5	20.0	31.7	11.4	8.6	8.0	8.7	8.0	8.7	5.3	0.0	0.6	54.1	18.6
9	7.3	10.7	15.5	14.8	7.4	6.7	45.3	31.7	42.0	127.9	30.4	54.8	34.5	93.4	43.3	4.0	7.4	8.7	6.7	4.0	1.9	4.6	1.3	0.6	127.9	25.2
10	16.2	2.6	4.0	10.1	17.5	9.4	8.5	7.4	24.3	10.7	22.9	13.9	27.0	31.1	8.7	20.2	4.6	5.3	6.7	8.0	8.7	6.0	24.3	31.1	31.1	13.7
11	16.2	12.8	8.7	5.3	6.0	4.0	4.6	6.7	8.0	10.7	11.4	16.1	13.5	18.9	16.8	10.1	8.7	10.1	11.5	16.7	7.4	3.3	1.7	6.7	18.9	9.8
12	10.1	16.2	10.2	10.1	10.8	16.2	21.6	27.7	20.2	29.7	41.2	31.1	16.8	11.4	12.8	10.7	7.2	9.4	6.0	6.0	14.8	2.6	6.0	20.2	41.2	15.4
13	18.9	14.8	18.2	10.7	8.7	14.8	16.2	30.4	50.0	28.4	11.4	17.5	11.4	10.1	6.0	14.8	14.1	11.4	12.1	15.5	19.5	18.9	18.9	5.3	50.0	16.6
14	6.6	8.7	16.2	15.5	26.3	18.2	16.8	18.2	25.0	28.4	46.6	32.4	47.3	26.3	33.1	22.9	24.3	20.2	18.9	23.6	1.9	17.5	23.6	16.8	47.3	22.3
15	18.9	2.6	4.6	5.3	8.0	13.5	16.8	23.6	29.5	78.5	45.3	29.7	48.6	57.5	81.2	33.1	40.4	15.5	17.5	14.1	14.1	23.6	26.3	17.5	81.2	27.7
16	14.1	12.1	14.8	12.8	12.1	17.5	22.9	34.7	56.8	81.2	48.7	24.3	33.1	128.6	57.5	73.1	98.8	156.3	66.3	43.9	54.1	17.5	28.5	16.8	156.3	46.9
17	14.7	13.5	18.2	10.7	12.1	13.5	10.1	10.2	10.1	9.4	8.0	**M**	**M**	4.6	4.0	4.6	4.0	6.7	5.3	0.0	0.0	0.0	1.3	1.3	18.2	7.4
18	3.3	8.5	8.5	4.0	4.6	4.0	3.3	6.7	4.6	2.6	8.7	15.5	26.3	12.8	12.8	17.5	24.3	8.0	8.7	7.2	0.6	0.0	7.4	12.8	26.3	8.9
19	15.5	4.0	5.3	16.8	10.7	10.7	11.4	10.1	8.7	17.5	30.4	15.5	16.2	12.8	12.8	25.0	6.0	8.0	12.1	20.2	9.4	2.1	0.6	8.4	30.4	12.1
20	19.8	12.8	5.3	2.6	10.1	12.8	12.8	14.1	18.2	30.4	20.8	26.3	22.9	31.1	39.2	35.1	19.5	38.3	29.7	26.3	7.4	10.1	17.5	3.3	39.2	19.4
21	6.7	11.4	9.4	5.3	6.0	6.0	3.3	4.7	19.5	11.4	18.9	16.8	11.4	10.0	4.6	3.9	3.3	5.3	10.1	18.2	12.8	27.7	12.1	7.4	27.7	10.3
22	14.8	6.0	9.4	16.2	10.7	19.5	18.3	27.7	37.2	46.0	47.5	56.1	118.4	27.7	32.4	60.4	50.7	35.1	13.5	43.9	29.7	45.1	23.6	50.7	118.4	35.0
23	21.6	21.6	28.4	23.6	25.0	14.8	20.2	29.1	43.3	56.1	65.4	46.0	20.8	19.5	22.3	26.1	41.8	54.8	10.1	16.2	7.4	16.8	33.1	11.3	65.4	28.1
24	14.8	19.5	20.9	30.4	13.5	26.3	16.2	25.0	43.3	58.8	56.1	24.3	99.5	67.6	134.7	100.8	163.1	60.9	69.7	51.4	29.0	14.8	32.4	16.2	163.1	49.5
25	12.1	21.6	22.3	10.1	10.7	20.2	18.2	35.1	34.4	37.8	19.5	26.3	26.3	21.6	28.5	27.7	38.5	24.3	28.4	20.9	14.8	13.5	12.1	13.5	38.5	22.4
26	14.8	16.2	22.3	20.9	12.1	20.9	1.9	16.2	18.2	14.1	25.6	29.4	18.2	16.8	21.6	2.6	6.7	12.1	22.9	23.6	39.9	29.0	14.1	11.4	39.9	18.0
27	10.7	15.4	14.1	10.1	6.0	6.0	9.4	10.4	32.4	18.4	9.4	20.9	18.2	12.8	7.4	6.7	11.4	18.9	22.9	4.0	15.3	6.0	5.5	5.3	32.4	12.4
28	7.4	10.7	10.2	11.4	12.1	11.4	12.1	10.7	27.7	70.3	54.1	50.4	50.3	71.1	48.7	46.0	39.9	19.5	27.0	31.7	4.6	22.9	18.2	15.2	71.1	28.5
29	1.9	35.8	17.5	14.1	17.5	14.8	7.4	1.9	2.6	0.0	0.6	4.6	4.6	3.3	5.3	16.2	16.9	16.8	16.2	16.8	10.1	10.1	10.1	9.4	35.8	10.6
30	2.6	4.0	8.7	10.1	8.0	6.7	10.0	9.4	11.1	21.6	18.2	54.8	25.0	8.0	17.5	6.7	4.0	2.6	8.0	4.6	0.0	1.8	2.6	0.0	54.8	10.2
31	0.0	6.7	7.2	2.6	6.7	9.4	3.3	4.0	7.4	8.7	9.4	6.0	7.4	10.0	7.4	2.6	1.9	2.6	2.6	3.3	4.0	6.7	6.0	1.9	10.0	5.3
Hourly Max	29.7	54.1	44.4	30.4	26.3	26.3	45.3	35.1	88.0	127.9	65.4	56.1	118.4	128.6	134.7	100.8	163.1	156.3	69.7	51.4	54.1	45.1	33.1	50.7		
Hourly Average	11.7	13.1	13.6	11.6	10.9	12.8	13.5	17.9	27.4	35.8	30.6	28.3	31.7	32.2	31.4	23.0	30.1	21.7	18.8	17.7	12.7	11.3	11.7	11.0		

C = CALIBRATION M = MAINTENANCE

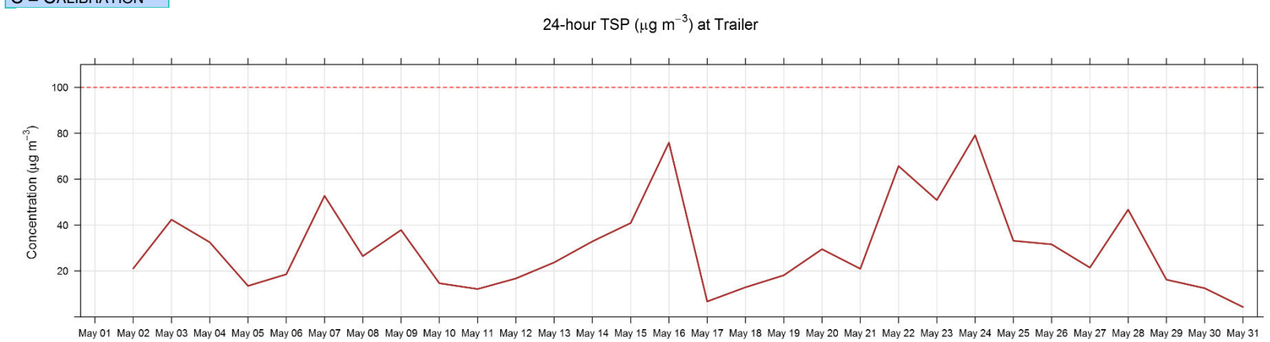


Number of 1HR Exceedances	n/a		Objective	n/a	UG/M3
Number of Non-Zero Readings	711				
Maximum 1-HR Average	163.1	UG/M3			
Maximum 24-HR Average	49.5	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	742	HRS
Monthly Calibration Time	21	HRS	Operational Uptime	99.7	%
Standard Deviation	20.7		Monthly Average	19.9	UG/M3

Lagoon TSP (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	11.4	11.3	20.9	12.6	9.9	14.0	-	-
2	14.0	11.3	7.1	8.5	12.6	9.9	7.1	8.4	15.4	38.9	38.9	C	C	C	19.5	20.9	36.1	36.1	52.7	41.7	20.9	14.1	12.6	15.4	52.7	21.1
3	11.3	14.0	12.6	12.6	8.5	7.1	12.6	14.0	49.1	55.5	61.0	77.6	84.5	146.7	178.4	49.2	52.6	49.3	34.7	26.5	11.3	11.3	16.7	19.5	178.4	42.4
4	16.8	16.9	1.6	16.8	19.6	19.6	14.0	30.6	41.7	63.8	32.0	32.0	128.7	88.6	84.5	19.5	23.7	25.1	26.5	16.8	9.9	23.6	15.4	12.6	128.7	32.5
5	9.9	15.4	4.3	11.3	8.5	5.7	7.1	12.6	14.0	27.8	20.9	8.5	17.2	12.6	26.5	15.4	12.6	11.3	7.1	11.8	18.2	16.8	11.3	16.8	27.8	13.5
6	15.4	11.3	12.6	11.3	14.1	18.2	18.2	38.9	41.7	20.9	25.1	25.1	17.2	15.4	14.0	21.2	8.5	9.9	8.5	4.3	43.0	12.6	15.4	22.3	43.0	18.5
7	12.6	11.3	19.6	25.1	19.6	33.0	41.7	38.9	135.6	97.9	73.4	36.1	22.3	81.7	38.9	26.5	311.1	34.7	76.2	30.6	30.6	7.1	20.9	40.3	311.1	52.7
8	51.3	94.2	65.2	11.3	27.8	22.3	5.7	8.5	33.4	37.5	16.8	40.3	25.1	23.7	65.1	19.5	11.3	12.6	9.9	12.6	15.4	11.2	7.1	7.1	94.2	26.5
9	7.1	12.6	13.9	22.3	12.6	14.0	65.2	51.3	72.1	213.0	51.3	76.2	65.2	121.8	72.1	5.7	12.6	11.3	4.3	0.0	0.2	1.6	0.0	1.6	213.0	37.8
10	15.4	11.3	5.7	5.7	8.5	15.4	9.9	8.5	25.8	19.5	26.5	1.6	25.1	25.1	21.2	38.9	8.5	8.5	7.1	4.3	7.1	5.7	25.1	20.9	38.9	14.6
11	16.7	9.9	12.6	5.7	4.3	3.0	14.0	1.6	0.2	5.7	8.5	23.7	11.3	20.9	30.6	16.8	14.1	9.9	7.1	15.4	16.8	16.7	8.5	16.9	30.6	12.1
12	9.9	18.2	8.5	16.8	12.6	12.6	12.6	29.2	18.2	23.7	49.9	19.5	22.3	20.9	5.7	7.1	5.7	7.1	7.1	12.6	22.3	14.0	19.6	25.1	49.9	16.7
13	16.8	11.3	22.3	15.4	5.7	20.9	14.1	29.2	74.8	33.4	8.5	23.7	8.5	8.5	14.1	23.7	9.9	26.5	22.3	33.4	38.9	43.0	33.4	30.6	74.8	23.7
14	21.2	25.1	20.9	19.6	33.4	23.7	20.9	27.8	29.2	29.2	63.8	48.6	63.8	36.1	48.6	44.4	28.4	30.6	38.9	30.6	9.9	30.6	41.7	22.3	63.8	32.9
15	19.5	15.4	22.3	18.2	22.3	15.4	14.0	23.7	33.4	105.2	49.6	47.2	83.1	103.8	124.5	49.9	58.2	23.7	20.9	18.2	18.2	38.9	34.7	20.9	124.5	40.9
16	25.8	29.2	20.9	18.2	18.2	20.9	22.3	44.4	84.5	126.5	74.8	40.5	66.5	221.3	85.9	121.8	174.3	236.5	117.6	77.6	116.3	25.1	24.7	27.8	236.5	75.9
17	14.0	9.9	19.6	11.3	18.2	14.0	9.9	14.0	9.9	5.7	7.1	8.5	3.0	0.2	0.2	0.0	0.0	4.3	3.0	0.0	1.6	4.3	1.6	0.2	19.6	6.7
18	5.7	8.5	4.3	3.0	4.3	7.1	5.7	5.7	7.1	5.7	12.6	12.6	34.7	18.2	11.4	27.8	22.3	14.0	14.0	11.3	9.9	20.9	20.9	20.9	34.7	12.9
19	12.6	15.4	7.1	11.3	18.2	11.3	9.9	16.8	12.6	22.3	25.1	16.7	12.6	23.7	23.7	34.7	25.1	19.5	29.2	29.2	18.2	16.8	12.6	9.9	34.7	18.1
20	25.9	12.6	11.3	5.7	11.3	14.0	20.9	12.6	22.3	40.3	16.8	44.4	37.5	55.5	43.0	58.2	33.0	59.8	48.6	44.4	25.1	18.2	33.4	12.6	59.8	29.5
21	20.9	32.0	22.3	7.1	8.5	5.7	5.7	5.7	19.5	14.0	16.8	18.2	25.1	8.5	8.5	16.8	15.4	36.2	19.4	44.4	37.5	46.4	43.1	25.1	46.4	20.9
22	21.1	19.6	18.2	20.9	18.2	33.4	25.1	32.0	49.9	57.5	88.6	98.3	213.0	70.7	88.6	127.3	117.6	79.0	16.9	87.2	66.5	80.3	58.2	88.7	213.0	65.7
23	28.3	44.4	48.5	40.3	45.8	32.0	36.1	49.9	70.7	79.0	109.3	67.9	43.0	44.4	43.0	77.6	66.5	95.6	30.6	30.6	30.6	32.0	47.2	28.3	109.3	50.9
24	37.5	36.1	38.9	48.6	34.8	48.8	32.0	48.6	83.1	89.8	63.8	40.3	142.8	116.3	207.4	152.2	239.2	84.5	114.9	76.2	55.5	27.8	45.8	34.8	239.2	79.1
25	34.8	36.1	37.5	18.2	19.6	25.1	15.4	43.0	45.8	47.2	28.8	38.1	40.5	32.0	37.5	33.4	40.5	40.3	47.2	40.6	27.8	19.5	26.5	20.9	47.2	33.2
26	38.9	26.5	34.7	34.7	23.7	50.0	19.6	32.0	20.9	27.8	37.5	47.2	36.1	36.1	26.5	16.8	12.6	23.7	29.2	40.3	63.8	48.6	14.0	17.1	63.8	31.6
27	33.4	25.1	20.9	9.9	18.2	11.3	9.9	15.4	43.0	36.1	18.2	25.1	25.1	22.3	7.1	23.7	22.3	36.1	29.2	12.6	26.5	12.6	14.2	16.8	43.0	21.5
28	12.6	16.8	18.2	29.2	22.3	15.4	20.9	14.1	44.4	90.0	77.5	74.8	85.9	110.7	70.7	72.0	74.8	32.0	44.4	52.7	22.3	37.5	41.7	40.3	110.7	46.7
29	20.9	70.7	30.6	18.2	50.0	26.5	4.3	1.6	1.6	0.0	3.0	4.3	1.6	5.7	4.3	14.0	23.7	22.3	25.1	20.9	11.3	11.2	8.5	8.5	70.7	16.2
30	14.0	5.7	5.7	7.1	5.7	9.9	5.7	5.7	29.2	19.5	15.4	46.7	22.3	6.1	27.8	8.5	3.0	1.6	7.1	7.1	22.3	11.5	7.1	4.3	46.7	12.5
31	4.3	5.8	3.0	0.2	0.2	4.3	3.0	4.3	9.9	9.9	4.3	11.3	7.1	1.6	1.6	4.3	5.7	9.9	7.1	3.0	0.2	0.0	0.2	1.6	11.3	4.3
Hourly Max	51.3	94.2	65.2	48.6	50.0	50.0	65.2	51.3	135.6	213.0	109.3	98.3	213.0	221.3	207.4	152.2	311.1	236.5	117.6	87.2	116.3	80.3	58.2	88.7		
Hourly Average	19.6	22.4	19.0	16.1	17.6	18.3	16.8	22.3	38.0	48.1	37.5	36.4	47.3	51.0	47.7	38.3	49.0	36.4	29.6	27.4	26.4	21.7	21.7	20.8		

C = CALIBRATION

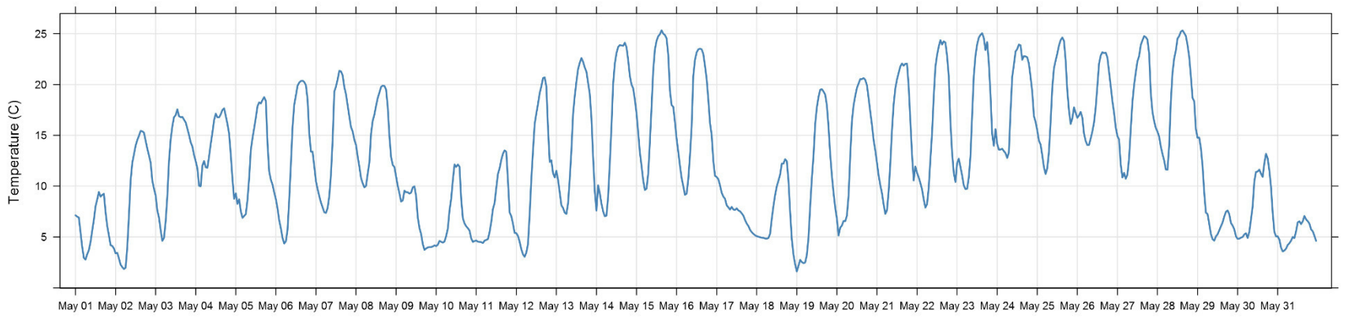


Number of 24HR Exceedances	0		Objective	100	UG/M3
Number of Non-Zero Readings	716				
Maximum 1-HR Average	311.1	UG/M3			
Maximum 24-HR Average	79.1	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	21	HRS	Operational Uptime	100.0	%
Standard Deviation	33.6		Monthly Average	30.3	UG/M3

Lagoon Temperature (°C) – May 2018

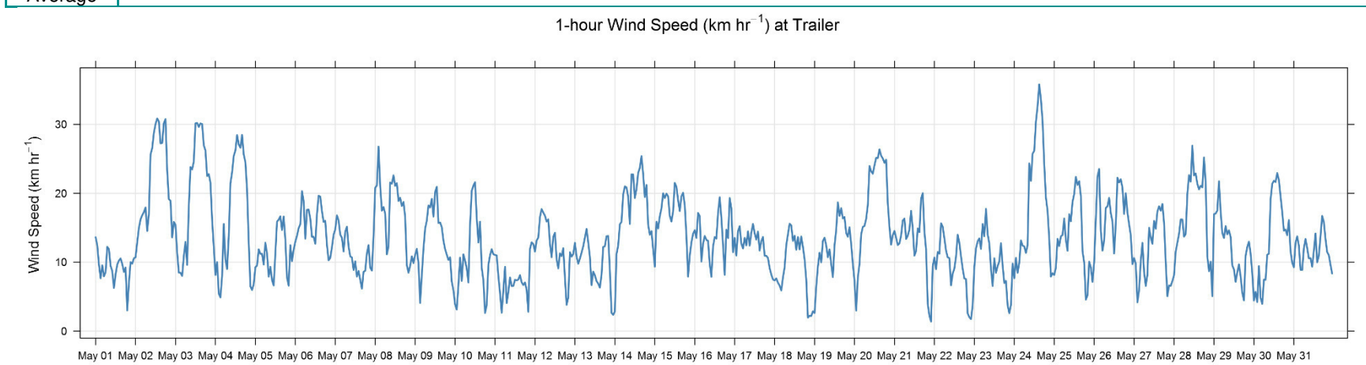
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	7.1	7.0	6.9	5.5	4.0	2.9	2.8	3.3	3.7	4.5	5.6	6.7	8.0	8.7	9.4	9.0	9.1	9.3	7.5	6.1	5.2	4.2	4.1	3.9	9.4	6.0
2	3.4	3.5	2.9	2.3	2.0	1.9	2.0	4.0	7.1	10.5	12.3	13.1	14.0	14.5	15.0	15.4	15.4	15.3	14.5	13.7	13.0	12.3	10.6	9.8	15.4	9.5
3	9.1	7.6	6.9	5.7	4.6	4.9	6.5	9.0	12.5	14.6	15.9	16.8	17.0	17.6	16.9	16.8	16.8	16.5	16.3	15.7	15.0	14.3	13.9	13.1	17.6	12.7
4	12.5	11.8	10.0	10.0	12.0	12.5	11.9	11.8	12.9	14.2	15.3	16.5	17.1	16.8	16.8	17.1	17.5	17.7	16.9	16.1	15.2	13.1	10.7	8.8	17.7	14.0
5	9.3	8.3	8.7	7.5	6.9	7.1	7.3	8.7	10.8	13.6	14.7	15.7	16.7	17.9	18.2	18.1	18.5	18.8	18.4	14.2	11.4	10.6	10.1	9.4	18.8	12.5
6	8.7	7.8	6.6	5.9	4.9	4.4	4.6	5.7	8.7	12.2	15.8	18.0	18.9	19.9	20.2	20.3	20.4	20.2	19.9	18.5	15.2	13.4	13.4	12.0	20.4	13.2
7	10.5	9.7	9.0	8.4	7.9	7.4	7.4	7.9	9.0	11.2	14.5	19.3	19.8	20.5	21.3	21.3	20.9	19.7	19.0	17.9	16.8	15.8	15.4	14.6	21.3	14.4
8	14.1	12.9	11.9	10.8	10.3	9.9	10.0	11.2	12.3	15.2	16.4	17.0	17.9	18.7	19.2	19.8	19.9	19.9	19.5	17.8	15.0	12.9	12.1	11.9	19.9	14.9
9	11.0	10.0	9.3	8.5	8.6	9.6	9.4	9.4	9.3	9.4	9.9	10.0	9.0	6.9	5.9	5.3	4.3	3.7	3.9	4.0	4.0	4.0	4.1	4.2	11.0	7.2
10	4.1	4.2	4.6	4.5	4.4	4.6	5.1	5.8	7.6	8.8	10.6	12.1	11.9	12.1	11.9	8.7	6.8	6.3	6.1	5.9	5.6	4.9	4.5	4.6	12.1	6.9
11	4.7	4.5	4.5	4.5	4.4	4.6	4.7	4.8	5.5	6.5	7.8	8.3	9.8	11.2	11.8	12.6	13.2	13.5	13.4	10.5	7.4	7.1	6.3	5.4	13.5	7.8
12	5.4	5.1	4.5	3.8	3.3	3.1	3.5	4.3	7.2	10.7	13.5	16.1	17.1	18.1	19.1	19.8	20.6	20.7	19.8	15.7	12.4	12.5	11.3	10.9	20.7	11.6
13	11.5	10.6	9.4	8.1	7.9	7.4	7.3	8.3	10.7	13.5	17.1	18.9	20.3	21.5	22.1	22.6	22.2	21.7	21.3	20.2	19.1	16.7	12.9	9.5	22.6	15.0
14	7.6	10.1	9.3	8.3	7.5	7.0	7.1	9.0	12.3	15.9	20.1	22.1	23.1	23.7	23.9	23.8	23.8	24.1	23.7	22.4	20.8	20.0	19.6	18.5	24.1	16.8
15	17.2	15.3	13.3	12.0	10.6	9.6	9.8	11.2	14.3	17.8	21.4	23.4	24.3	24.7	24.9	25.3	25.0	24.9	24.5	22.9	19.4	18.0	17.8	16.3	25.3	18.5
16	14.7	13.4	12.0	10.8	10.0	9.1	9.3	10.7	13.0	15.8	20.8	22.4	23.2	23.5	23.5	23.5	23.0	21.8	20.6	18.5	16.2	15.0	12.5	11.0	23.5	16.4
17	10.9	10.7	10.1	9.4	9.0	8.8	8.1	7.9	7.7	8.0	7.7	7.7	7.8	7.6	7.5	7.3	7.1	6.7	6.3	6.1	5.7	5.5	5.3	5.2	10.9	7.7
18	5.1	5.0	5.0	4.9	4.9	4.9	4.8	4.9	5.3	6.8	8.0	9.1	10.0	10.5	11.1	12.2	12.2	12.7	12.5	10.6	7.5	4.8	3.3	2.3	12.7	7.4
19	1.6	2.2	2.8	2.5	2.4	2.5	3.2	4.9	8.0	10.7	13.0	16.1	17.7	18.8	19.5	19.5	19.3	19.0	17.9	15.8	13.1	11.1	9.3	7.9	19.5	10.8
20	6.8	5.1	5.9	6.1	6.6	6.6	7.1	9.1	13.0	16.4	18.0	18.9	19.7	20.1	20.5	20.5	20.6	20.5	19.9	18.7	17.3	16.0	14.5	13.5	20.6	14.2
21	12.3	11.0	10.1	9.3	8.2	7.3	7.6	9.5	12.2	15.5	18.1	19.6	20.5	21.2	21.8	22.1	21.8	22.0	22.1	19.8	16.5	13.1	10.6	11.9	22.1	15.2
22	11.3	10.9	10.3	9.7	8.7	7.9	8.2	9.8	12.6	15.2	18.8	21.7	22.9	23.7	24.4	23.9	24.2	24.1	22.8	20.8	16.3	13.3	11.3	10.4	24.4	16.0
23	12.3	12.7	11.9	11.1	10.1	9.7	9.7	10.9	12.9	17.0	20.9	22.8	23.9	24.6	24.9	25.0	24.6	23.4	24.2	22.1	19.0	15.1	14.0	15.6	25.0	17.4
24	14.2	13.6	13.6	13.7	13.5	13.2	12.8	13.3	17.3	20.7	21.9	23.2	23.5	23.9	23.9	22.4	22.8	22.8	22.7	22.0	20.7	19.3	16.9	16.3	23.9	18.7
25	15.5	14.5	14.1	13.0	11.9	11.2	11.8	13.4	16.3	19.7	21.6	22.3	23.0	23.8	24.4	24.6	24.3	22.4	19.4	17.4	16.1	16.7	17.8	17.2	24.6	18.0
26	16.7	17.0	17.3	16.7	15.2	14.4	14.0	14.1	14.7	15.4	16.3	17.7	19.8	22.0	22.8	23.2	23.1	23.1	22.7	21.3	19.8	18.4	17.2	15.8	23.2	18.3
27	14.9	14.6	12.1	10.9	11.3	10.7	11.1	12.8	15.6	18.3	20.0	21.2	22.3	22.8	23.9	24.3	24.8	24.7	24.4	23.0	19.2	17.3	16.4	15.7	24.8	18.0
28	15.4	14.9	13.9	13.2	12.5	11.6	11.6	13.9	18.3	21.1	22.6	23.3	24.5	24.8	25.2	25.3	25.1	24.8	23.9	22.7	20.8	18.7	18.4	15.6	25.3	19.3
29	14.8	14.8	13.8	12.0	9.4	7.4	7.3	6.3	5.3	4.8	4.6	5.1	5.3	5.7	6.1	6.4	7.0	7.5	7.6	7.3	6.4	6.1	5.8	5.1	14.8	7.6
30	4.8	4.8	4.9	5.0	5.2	5.4	4.9	5.5	6.7	8.0	10.5	11.4	11.4	11.6	11.2	10.9	12.3	13.2	12.7	11.5	9.9	7.4	5.5	5.1	13.2	8.3
31	5.1	4.7	4.0	3.6	3.7	3.9	4.2	4.4	4.6	5.0	4.9	5.6	6.4	6.5	6.3	6.5	7.1	6.7	6.6	6.3	5.8	5.6	5.1	4.6	7.1	5.3
Hourly Max	17.2	17.0	17.3	16.7	15.2	14.4	14.0	14.1	18.3	21.1	22.6	23.4	24.5	24.8	25.2	25.3	25.1	24.9	24.5	23.0	20.8	20.0	19.6	18.5		
Hourly Average	10.1	9.6	9.0	8.3	7.8	7.5	7.6	8.6	10.6	12.8	14.8	16.2	17.0	17.5	17.9	17.9	17.9	17.7	17.1	15.7	13.7	12.4	11.3	10.5		

1-hour Temperature (C) at Trailer



Lagoon Wind Speed (km/hr) – May 2018

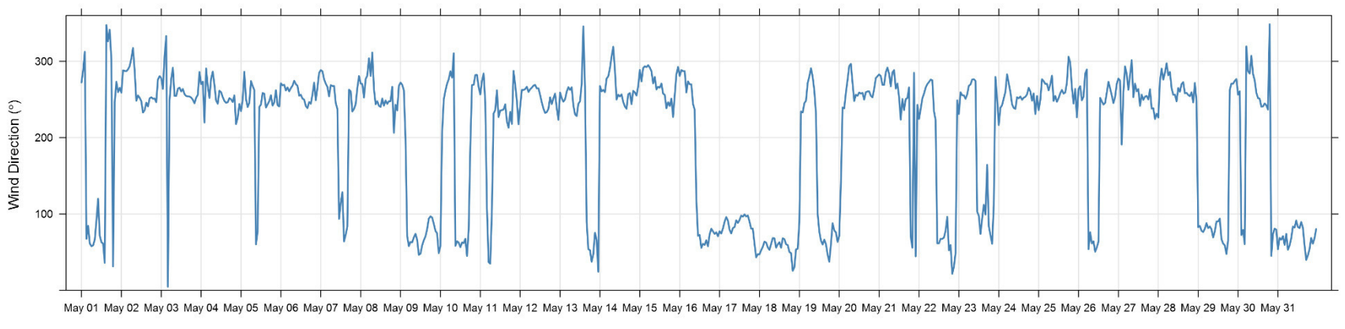
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	13.6	12.5	9.6	7.7	9.6	8.0	8.6	12.2	11.9	9.5	8.7	6.3	8.2	9.7	10.2	10.6	9.8	8.6	9.2	3.0	6.9	10.0	9.8	10.6	13.6	9.4
2	10.7	12.9	15.0	16.2	16.8	17.3	17.9	14.5	17.0	25.6	26.5	28.8	30.0	30.9	30.4	27.2	27.3	30.2	30.8	23.4	19.2	18.9	13.6	15.8	30.9	21.5
3	15.4	11.4	8.5	8.5	8.0	10.9	13.0	9.6	18.0	23.8	23.5	24.6	30.2	30.2	29.6	30.1	30.1	27.0	26.2	22.5	22.8	21.5	16.2	12.2	30.2	19.7
4	8.2	10.0	5.5	4.9	8.0	15.6	10.4	9.0	13.8	21.4	23.0	25.4	26.2	28.5	27.1	26.6	28.5	25.7	24.5	20.5	12.9	6.5	6.0	6.8	28.5	16.5
5	9.3	9.5	11.9	11.2	11.2	9.7	12.8	11.3	7.9	9.3	7.4	6.6	11.2	15.9	16.2	16.7	14.7	16.6	13.3	7.8	6.6	12.5	10.2	11.8	16.7	11.3
6	13.0	13.8	14.9	15.5	20.3	18.9	13.4	17.6	17.6	16.3	13.7	13.7	12.7	17.0	19.6	19.5	17.4	15.8	16.0	12.5	10.3	10.6	12.2	14.0	20.3	15.3
7	14.8	16.8	16.0	14.0	13.5	11.6	14.4	15.2	12.3	10.9	10.7	8.9	10.1	7.9	8.7	7.5	6.2	8.6	8.8	11.3	12.5	9.2	8.8	13.8	16.8	11.4
8	20.8	21.1	26.8	21.1	17.5	18.0	17.0	11.1	12.3	21.6	21.4	22.6	21.1	21.5	18.9	19.4	18.2	18.8	16.6	9.6	8.5	9.5	10.9	9.9	26.8	17.2
9	11.1	11.9	9.8	4.1	8.1	12.0	14.9	16.0	18.2	17.9	19.2	16.6	20.2	20.9	15.7	15.8	15.1	13.1	11.9	11.1	10.3	10.7	7.2	5.9	20.9	13.2
10	3.9	3.1	6.7	10.7	7.3	11.2	10.2	9.1	7.1	15.5	20.4	21.1	21.6	16.5	12.9	15.9	9.2	7.4	2.6	3.8	9.6	11.0	11.9	11.2	21.6	10.8
11	11.1	11.0	8.0	5.5	2.7	5.8	9.3	4.1	5.7	7.8	6.5	6.6	7.5	7.4	7.5	8.1	7.1	6.7	7.1	6.0	2.8	11.9	12.9	12.6	12.9	7.6
12	11.5	13.1	13.6	16.6	17.7	17.2	16.8	15.9	16.2	12.7	10.7	13.7	14.3	10.5	9.1	11.3	10.9	12.0	7.7	3.8	4.9	11.5	10.8	11.2	17.7	12.2
13	12.8	10.8	9.8	10.5	11.4	12.3	13.6	14.8	12.9	10.8	6.7	8.6	8.1	7.3	6.9	6.3	8.2	12.2	12.3	13.8	13.8	8.8	2.7	2.4	14.8	9.9
14	2.9	11.2	12.4	15.5	15.9	19.8	21.0	20.9	19.5	15.5	22.8	22.7	19.3	20.6	22.9	23.7	25.4	22.8	19.5	21.2	15.5	14.0	14.5	11.9	25.4	18.0
15	9.3	15.9	14.9	16.7	17.8	20.0	19.3	20.0	19.6	16.7	15.9	17.4	21.5	20.9	19.0	17.4	19.5	20.1	18.3	13.8	7.9	10.9	12.9	14.1	21.5	16.7
16	14.6	13.5	17.2	16.7	10.1	12.7	13.8	13.2	13.1	9.7	7.9	12.3	13.7	13.4	17.1	19.4	16.5	12.5	8.2	14.7	13.5	19.3	17.8	11.5	19.4	13.9
17	13.5	11.0	14.5	15.2	12.7	12.0	13.5	12.4	14.5	12.4	14.3	15.6	14.2	13.3	14.4	11.7	13.0	13.7	10.9	10.9	10.6	9.2	8.2	7.5	15.6	12.5
18	7.4	7.7	7.0	6.6	5.9	7.8	9.2	12.5	14.0	15.6	15.3	13.1	13.9	11.8	13.7	11.9	13.7	12.2	10.4	7.5	2.0	2.2	2.2	2.9	15.6	9.4
19	2.6	6.4	9.4	11.4	10.0	13.1	13.6	12.4	10.7	11.9	9.7	7.8	12.4	14.7	18.7	16.7	17.8	16.4	16.6	14.2	13.7	15.1	12.6	9.7	18.7	12.4
20	7.3	3.0	7.8	9.7	14.0	15.1	15.3	16.3	18.3	24.0	23.2	22.8	24.1	25.1	25.1	26.4	25.5	25.1	24.4	24.9	18.6	15.1	12.6	13.9	26.4	18.2
21	14.5	13.6	12.5	12.7	13.9	16.1	16.3	13.4	13.9	14.8	17.5	14.9	11.0	11.6	14.9	14.4	19.2	20.0	14.5	11.8	4.0	2.3	1.4	9.4	20.0	12.8
22	10.7	9.0	11.5	11.2	15.7	15.1	13.5	11.7	10.7	10.6	6.6	8.3	9.1	10.8	14.0	12.8	10.8	9.1	7.6	7.6	2.6	2.0	1.7	3.7	15.7	9.4
23	9.3	12.0	13.0	13.5	11.9	15.6	13.8	17.7	14.1	12.7	9.1	6.6	10.6	8.5	9.4	10.1	12.8	9.5	7.0	7.3	3.8	2.6	3.8	9.8	17.7	10.2
24	7.7	10.6	8.5	9.9	13.2	12.4	12.3	11.4	12.5	24.3	21.8	25.7	26.2	30.4	32.6	35.8	33.7	30.5	24.3	19.4	17.5	13.4	7.9	8.4	35.8	18.8
25	8.2	9.2	13.4	12.3	13.8	14.0	16.3	13.3	11.7	17.0	15.9	18.7	19.9	22.4	21.2	21.8	19.6	11.6	10.0	4.6	5.2	10.1	9.3	7.1	22.4	13.6
26	10.0	16.3	22.4	23.5	14.6	11.7	13.1	17.9	18.1	19.3	17.1	15.9	11.3	15.5	22.3	21.6	22.0	20.8	17.0	20.0	17.2	15.5	13.9	9.7	23.5	17.0
27	10.6	9.8	4.2	5.9	10.1	12.8	8.6	6.6	8.2	15.0	13.6	12.7	16.0	14.9	17.4	18.1	17.5	18.5	15.7	10.0	5.1	6.6	6.6	7.3	18.5	11.3
28	8.1	11.6	12.8	14.1	16.2	16.2	13.7	14.1	19.9	22.6	21.7	26.9	22.6	22.9	21.4	20.6	21.1	20.9	25.2	21.6	10.9	8.7	10.1	5.1	26.9	17.0
29	17.0	17.1	17.5	21.7	17.4	14.2	13.5	15.3	14.0	14.6	13.7	9.5	9.0	7.2	8.5	9.7	7.9	5.6	4.5	10.9	12.2	13.0	11.3	8.4	21.7	12.2
30	4.4	5.7	4.2	9.4	4.8	3.9	7.5	7.4	11.1	11.3	19.1	21.4	21.8	21.6	22.9	21.9	19.6	17.3	14.6	14.7	13.9	16.1	11.6	9.9	22.9	13.2
31	9.3	12.8	13.8	12.4	8.9	8.9	12.0	13.4	12.1	10.6	10.6	9.3	11.6	14.2	10.0	10.9	13.7	16.7	15.9	13.4	11.5	11.0	9.6	8.3	16.7	11.7
Hourly Max	20.8	21.1	26.8	23.5	20.3	20.0	21.0	20.9	19.9	25.6	26.5	28.8	30.2	30.9	32.6	35.8	33.7	30.5	30.8	24.9	22.8	21.5	17.8	15.8		
Hourly Average	10.4	11.4	12.0	12.4	12.2	13.2	13.5	13.2	13.8	15.5	15.3	15.7	16.4	16.9	17.4	17.4	17.2	16.3	14.6	12.8	10.5	11.0	9.7	9.6		



Lagoon Wind Direction (°) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
b	272.2	288.2	312.4	67.5	84.5	61.4	57.8	59.0	66.5	91.8	120.0	71.5	63.0	61.3	35.9	347.4	326.1	341.2	301.6	31.3	246.1	273.2	259.6	265.2	347.4	8.2
2	258.9	288.1	287.5	287.0	289.4	293.6	303.7	317.4	287.8	248.2	255.3	252.2	247.8	232.8	236.0	245.8	240.9	251.4	252.9	251.0	251.3	246.4	276.1	280.5	317.4	260.1
3	278.1	263.8	306.7	333.1	4.7	248.8	276.8	291.5	254.7	254.5	264.0	265.5	260.5	263.7	256.9	254.5	254.1	253.8	252.5	249.7	245.0	252.2	256.1	285.9	333.1	261.8
4	270.1	273.3	219.8	290.7	267.8	251.9	277.1	286.5	269.2	248.7	244.4	261.4	259.5	253.1	248.0	245.6	246.4	251.6	250.2	246.7	255.3	217.7	226.0	244.1	290.7	253.3
5	234.6	249.5	286.3	250.6	240.0	245.6	274.1	267.6	262.4	60.2	77.0	240.2	243.4	258.5	257.4	239.4	243.5	247.8	255.6	242.0	246.1	262.1	242.5	240.8	286.3	252.2
6	271.2	268.6	269.2	261.7	265.7	260.6	264.9	268.1	274.5	270.1	267.9	255.0	256.1	251.1	249.8	241.4	238.7	246.7	244.3	256.5	272.1	249.0	265.6	284.8	284.8	260.0
7	288.5	286.8	276.4	270.7	266.4	254.1	268.8	267.6	267.7	245.3	237.5	93.5	114.4	128.5	64.1	73.0	83.6	262.8	260.7	234.3	237.6	243.9	264.9	280.7	288.5	261.4
8	270.9	270.2	252.5	276.7	281.1	303.9	280.8	311.3	263.8	243.6	247.8	241.7	240.2	251.3	241.8	248.6	244.2	247.7	247.9	266.6	206.3	243.1	235.6	267.9	311.3	257.5
9	272.0	269.3	262.0	198.1	70.8	57.9	63.4	62.9	69.4	74.1	66.2	46.5	48.0	58.8	65.6	70.7	80.1	93.9	96.8	95.4	87.3	77.9	74.7	48.8	272.0	67.3
10	58.2	205.4	249.8	261.4	270.6	276.5	286.8	278.6	310.4	58.2	64.3	62.5	56.5	62.6	61.8	67.5	44.9	79.3	188.7	268.9	269.2	282.0	282.2	266.1	310.4	13.8
11	256.5	274.3	283.9	245.6	107.8	37.0	34.8	106.5	231.5	236.2	262.0	227.0	235.5	236.0	236.9	243.6	221.4	212.9	233.7	217.9	287.5	269.2	248.1	217.5	287.5	245.2
12	240.9	262.5	262.4	263.6	266.7	259.8	263.4	265.4	268.2	269.1	264.4	264.6	255.9	246.2	238.0	232.3	233.5	237.7	252.7	243.9	251.6	257.7	238.6	223.4	269.1	254.7
13	259.1	251.8	247.0	250.2	260.2	266.0	262.5	265.9	242.3	230.5	228.2	244.2	247.7	270.5	345.6	266.4	89.7	54.0	52.5	37.4	47.4	75.4	65.9	24.4	345.6	272.4
14	267.7	260.5	262.4	259.6	277.4	280.3	290.8	306.0	319.0	288.4	249.9	256.2	253.9	256.7	246.7	240.8	237.8	256.7	258.4	243.8	261.3	259.3	255.2	267.1	319.0	263.4
15	288.6	273.6	291.1	293.5	292.3	294.9	291.8	286.8	271.0	279.5	263.2	266.6	265.4	270.9	257.6	256.0	238.5	246.3	241.5	251.2	227.0	255.4	283.0	292.6	294.9	270.5
16	280.7	288.5	287.2	287.0	259.1	273.6	270.0	269.8	244.1	236.5	119.7	71.5	72.5	55.6	61.0	59.5	65.7	57.8	73.3	80.7	77.3	74.0	75.9	70.8	288.5	37.5
17	77.4	74.4	81.0	89.8	95.9	91.3	79.4	74.5	81.5	82.9	91.7	88.3	92.2	97.9	96.6	99.5	96.7	98.0	90.0	80.9	80.8	61.1	43.3	47.2	99.5	85.0
18	47.1	52.5	57.1	63.8	62.6	56.4	53.1	60.7	68.6	68.1	55.9	60.4	63.0	55.8	68.2	67.0	60.4	59.3	50.3	48.7	25.6	30.2	53.8	54.5	68.6	59.2
19	89.4	234.3	233.0	245.1	248.4	271.5	280.2	290.9	279.8	261.7	231.0	100.8	76.9	65.2	60.0	66.4	60.4	47.0	37.5	60.5	87.9	78.5	75.9	63.4	290.9	48.9
20	71.1	140.5	239.5	238.3	258.8	275.6	293.7	296.6	271.7	247.9	256.1	254.8	259.1	257.7	258.6	249.8	259.4	260.5	260.6	254.9	252.7	263.6	278.0	280.4	296.6	261.1
21	282.8	280.7	269.0	269.0	285.4	291.8	283.5	267.2	285.4	288.4	264.3	271.0	253.0	223.6	250.6	236.1	250.4	251.9	265.8	70.6	55.8	284.9	44.5	243.0	291.8	267.8
22	224.4	237.3	251.3	257.5	265.5	270.1	272.8	275.9	275.3	234.6	222.9	61.6	61.6	67.6	67.4	69.1	78.1	96.3	52.4	59.4	21.6	30.8	49.0	248.8	275.9	283.3
23	230.9	259.4	255.5	255.4	250.8	256.8	268.0	269.7	276.1	276.5	274.3	103.1	97.6	73.9	94.3	112.1	99.3	164.4	83.9	72.5	61.0	111.5	279.5	251.0	279.5	244.8
24	216.5	239.2	242.5	251.5	260.1	282.9	271.1	259.5	243.6	238.9	237.7	252.9	251.5	253.8	249.6	252.2	253.4	256.6	265.2	260.4	248.4	257.8	230.9	254.5	282.9	252.3
25	235.9	249.3	276.5	274.1	270.3	270.4	261.9	269.7	281.1	248.0	254.6	247.0	251.8	258.1	262.4	257.7	259.1	272.0	305.9	298.5	265.7	244.6	263.8	226.7	305.9	261.4
26	263.6	267.3	248.9	253.7	283.9	289.2	53.9	76.0	61.5	64.2	50.6	56.3	63.9	252.1	247.6	243.3	245.4	259.0	273.2	264.5	255.3	245.2	253.3	270.5	289.2	267.7
27	277.5	274.6	190.9	259.6	293.3	283.1	262.6	281.4	301.4	253.1	270.7	260.6	263.6	241.6	256.2	249.5	253.7	254.7	250.0	263.3	238.0	238.5	224.4	231.4	301.4	259.1
28	226.3	274.8	290.3	275.9	285.0	297.4	281.6	285.9	264.7	256.1	256.3	247.5	265.0	260.1	270.2	272.7	258.0	258.6	255.9	254.3	259.3	246.1	271.5	247.9	297.4	264.8
29	82.7	84.4	78.1	76.3	80.8	88.1	81.5	83.7	80.0	69.2	77.2	90.1	90.2	94.0	67.2	61.4	59.0	47.6	65.1	262.5	270.9	270.6	274.3	276.7	276.7	74.6
30	256.2	260.6	72.4	79.2	60.4	319.5	287.0	284.0	307.2	283.4	275.1	258.8	251.7	251.1	240.6	240.9	244.8	242.4	236.8	348.5	45.1	73.7	80.9	79.4	348.5	266.1
31	53.7	68.7	66.3	71.0	59.6	74.0	53.3	58.7	68.3	83.5	82.2	91.4	82.9	81.5	89.5	82.2	59.3	39.9	45.7	53.9	68.6	61.1	68.1	80.3	91.4	67.1
Hourly Max	288.6	288.5	312.4	333.1	293.3	319.5	303.7	317.4	319.0	288.4	275.1	271.0	265.4	270.9	345.6	347.4	326.1	341.2	305.9	348.5	287.5	284.9	283.0	292.6		
Hourly Average	216.2	234.6	232.6	227.7	211.8	228.5	221.0	227.3	227.4	202.9	197.8	179.5	178.8	183.6	183.3	190.1	181.5	191.9	193.6	189.4	184.0	194.7	194.9	207.0		

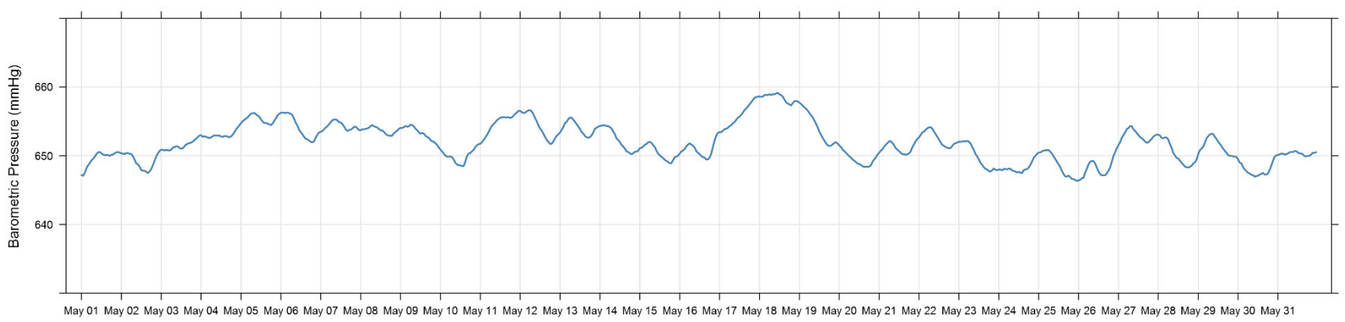
1-hour Wind Direction (°) at Trailer



Lagoon Pressure (mmHg) – May 2018

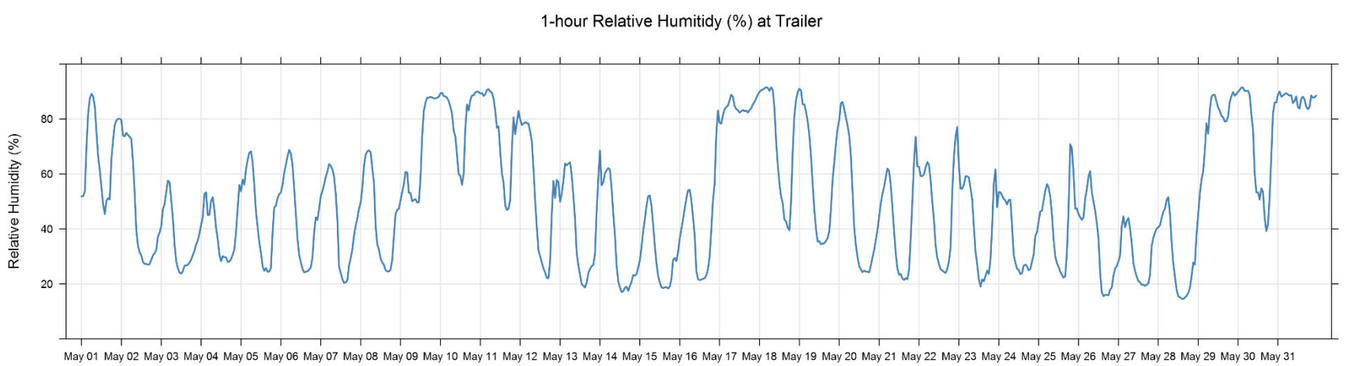
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	647.2	647.1	647.5	648.2	648.6	648.9	649.3	649.6	649.9	650.3	650.5	650.6	650.3	650.2	650.1	650.1	650.1	650.0	650.1	650.2	650.4	650.5	650.6	650.4	650.6	649.6
2	650.4	650.3	650.3	650.4	650.4	650.3	650.2	649.9	649.4	648.9	648.8	648.4	647.9	647.8	647.8	647.7	647.5	647.7	648.1	648.6	649.3	649.9	650.3	650.7	650.7	649.2
3	650.9	650.8	650.8	650.8	650.8	650.8	650.9	651.2	651.2	651.4	651.4	651.1	651.0	651.1	651.4	651.6	651.8	651.9	651.9	652.0	652.3	652.5	652.7	652.9	652.9	651.5
4	653.0	652.8	652.8	652.8	652.6	652.6	652.7	652.9	653.0	652.9	652.9	652.9	652.8	652.7	652.8	652.9	652.8	652.7	652.8	653.1	653.4	653.8	654.1	654.4	654.4	653.0
5	654.7	655.0	655.2	655.4	655.6	655.9	656.1	656.2	656.2	656.0	655.8	655.7	655.3	655.0	654.8	654.8	654.7	654.6	654.5	654.7	655.1	655.5	655.9	656.1	656.2	655.4
6	656.2	656.3	656.2	656.2	656.3	656.2	656.1	655.9	655.3	654.8	654.3	653.8	653.4	653.1	652.7	652.5	652.4	652.2	652.0	652.0	652.1	652.7	653.1	653.4	656.3	654.1
7	653.5	653.6	653.9	654.1	654.3	654.6	654.9	655.2	655.3	655.3	655.2	654.9	654.8	654.6	654.3	653.9	653.6	653.7	653.8	654.0	654.2	654.2	654.0	653.7	655.3	654.3
8	653.7	653.9	653.9	653.9	654.0	654.1	654.3	654.5	654.3	654.2	654.1	653.9	653.7	653.7	653.5	653.2	653.0	652.9	652.9	652.9	653.3	653.5	653.7	653.9	654.5	653.7
9	654.1	654.0	654.2	654.3	654.2	654.3	654.5	654.5	654.3	653.9	653.7	653.4	653.2	653.3	653.2	652.9	652.7	652.6	652.3	652.1	652.0	651.8	651.6	651.2	654.5	653.3
10	650.9	650.6	650.3	650.0	649.9	649.9	649.9	649.8	649.4	649.0	648.7	648.6	648.6	648.5	648.5	649.2	650.0	650.3	650.4	650.6	650.9	651.3	651.5	651.7	651.7	649.9
11	651.7	652.0	652.3	652.6	653.0	653.4	654.0	654.4	654.6	654.9	655.2	655.4	655.5	655.6	655.6	655.6	655.6	655.6	655.5	655.6	655.8	656.1	656.3	656.5	656.5	654.7
12	656.5	656.3	656.2	656.3	656.5	656.6	656.6	656.4	656.0	655.5	655.0	654.4	653.9	653.6	653.2	652.7	652.3	652.0	651.7	651.8	652.1	652.6	652.9	653.1	656.6	654.3
13	653.4	653.8	654.2	654.8	654.9	655.3	655.6	655.5	655.2	654.9	654.6	654.2	653.9	653.5	653.2	652.9	652.7	652.6	652.7	653.0	653.4	654.0	654.1	654.2	655.6	654.0
14	654.3	654.4	654.4	654.4	654.3	654.3	654.2	654.0	653.5	653.1	652.5	652.3	652.0	651.6	651.4	651.0	650.6	650.6	650.3	650.2	650.4	650.6	650.6	650.7	654.4	652.3
15	651.1	651.1	651.4	651.6	651.7	652.0	652.0	651.9	651.5	651.3	650.7	650.3	650.1	649.8	649.7	649.4	649.3	649.1	648.9	648.9	649.4	649.8	649.9	650.0	652.0	650.5
16	650.3	650.6	650.8	651.0	651.4	651.6	651.8	651.6	651.5	651.2	650.7	650.4	650.2	649.9	649.8	649.7	649.5	649.5	649.8	650.3	651.3	652.2	652.9	653.4	653.4	650.9
17	653.4	653.4	653.6	653.9	653.9	654.1	654.3	654.4	654.8	654.9	655.2	655.5	655.7	656.0	656.3	656.7	656.9	657.2	657.5	657.8	658.1	658.4	658.5	658.6	658.6	655.8
18	658.6	658.6	658.6	658.8	658.9	658.8	659.0	658.8	659.0	658.9	659.1	659.2	658.9	658.8	658.6	658.2	657.8	657.6	657.5	657.3	657.6	657.9	658.0	657.9	659.2	658.4
19	657.7	657.5	657.3	657.0	656.8	656.6	656.2	655.9	655.6	655.1	654.7	654.1	653.5	653.1	652.6	652.2	651.8	651.5	651.4	651.5	651.6	651.9	652.0	651.8	657.7	654.2
20	651.5	651.3	650.9	650.7	650.4	650.2	649.9	649.7	649.4	649.3	649.1	648.9	648.8	648.7	648.5	648.4	648.4	648.4	648.4	648.6	649.1	649.5	649.7	650.2	651.5	649.5
21	650.4	650.7	650.9	651.3	651.6	651.8	652.1	652.1	651.8	651.5	651.1	650.9	650.7	650.4	650.2	650.2	650.2	650.2	650.3	650.6	651.2	651.7	652.1	652.5	652.5	651.1
22	652.7	653.0	653.4	653.5	653.8	654.0	654.1	654.2	653.9	653.5	653.1	652.8	652.4	652.0	651.6	651.5	651.3	651.2	651.1	651.1	651.4	651.7	651.8	651.9	654.2	652.5
23	652.0	652.0	652.1	652.1	652.1	652.1	652.1	651.8	651.3	650.8	650.3	649.9	649.5	649.0	648.7	648.3	648.1	648.0	647.8	647.7	647.9	648.1	648.0	647.9	652.1	649.9
24	648.0	648.0	647.9	648.1	648.1	648.0	648.1	648.1	647.9	647.8	647.7	647.6	647.7	647.5	647.5	647.9	648.0	648.1	648.3	648.7	649.2	649.7	650.0	650.3	650.3	648.2
25	650.5	650.5	650.6	650.8	650.8	650.8	650.8	650.6	650.3	649.9	649.5	649.1	648.8	648.3	647.8	647.3	647.0	647.0	647.1	646.9	646.6	646.6	646.5	646.4	650.8	648.8
26	646.4	646.5	646.7	646.8	647.6	648.1	648.7	649.1	649.2	649.2	648.9	648.3	647.7	647.3	647.1	647.1	647.2	647.4	647.8	648.3	649.1	650.0	650.5	651.1	651.1	648.2
27	651.6	652.0	652.6	653.0	653.4	653.9	654.0	654.3	654.3	653.8	653.6	653.3	653.0	652.7	652.5	652.3	652.1	651.9	651.9	652.2	652.4	652.8	652.9	653.1	654.3	652.9
28	653.1	653.0	652.6	652.5	652.7	652.6	652.4	651.7	651.2	650.4	650.0	649.7	649.6	649.3	649.0	648.7	648.4	648.3	648.3	648.4	648.5	648.9	649.0	649.4	653.1	650.3
29	650.2	650.8	651.0	651.3	651.9	652.5	652.8	653.1	653.2	653.2	652.8	652.4	652.1	651.7	651.4	651.0	650.7	650.4	650.1	650.0	650.0	649.9	649.9	649.8	653.2	651.3
30	649.5	649.0	648.9	648.3	648.0	647.8	647.5	647.4	647.2	647.2	647.0	647.0	647.1	647.3	647.4	647.5	647.3	647.3	647.4	647.9	648.6	649.3	649.9	650.0	650.0	648.0
31	650.1	650.2	650.3	650.3	650.2	650.2	650.3	650.5	650.6	650.5	650.7	650.7	650.5	650.3	650.3	650.2	649.9	649.9	650.0	650.0	650.2	650.4	650.4	650.5	650.7	650.3
Hourly Max	658.6	658.6	658.6	658.8	658.9	658.8	659.0	658.8	659.0	658.9	659.1	659.2	658.9	658.8	658.6	658.2	657.8	657.6	657.5	657.8	658.1	658.4	658.5	658.6		
Hourly Average	652.2	652.2	652.3	652.4	652.5	652.7	652.8	652.7	652.6	652.4	652.2	651.9	651.7	651.5	651.3	651.2	651.1	651.0	651.1	651.2	651.5	651.9	652.0	652.2		

1-hour Barometric Pressures (mmHg) at Trailer



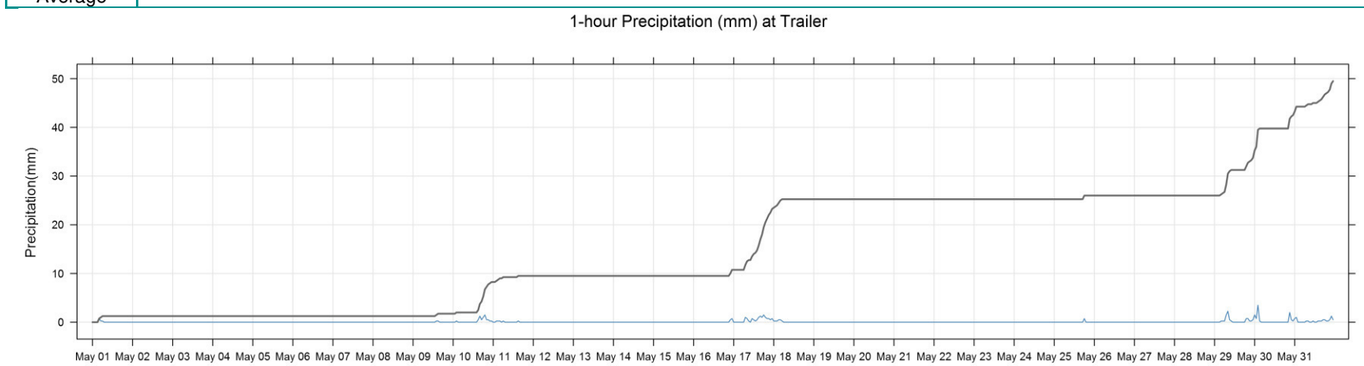
Lagoon Relative Humidity (%) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	51.9	51.9	53.6	69.6	81.9	87.4	89.1	88.3	84.7	75.3	66.6	61.4	55.1	49.0	45.4	50.3	51.2	50.7	65.3	72.3	77.7	79.4	80.1	80.0	89.1	67.4
2	79.6	73.9	73.7	75.0	74.1	73.5	72.7	64.3	53.3	39.4	33.8	31.5	30.3	28.0	27.2	27.3	27.0	27.2	28.8	30.4	31.2	32.4	37.1	38.7	79.6	46.3
3	40.9	47.1	49.0	53.4	57.6	57.0	50.6	43.8	34.3	28.3	25.7	24.1	23.8	24.6	26.6	26.7	26.9	27.8	28.8	30.5	32.0	34.4	35.8	38.4	57.6	36.2
4	41.4	44.5	52.8	53.3	45.0	45.1	50.3	51.5	46.8	40.4	36.1	30.6	28.2	30.1	29.7	29.6	28.0	28.1	29.0	30.6	32.5	38.9	47.6	56.0	56.0	39.4
5	53.7	58.0	56.2	61.7	65.1	67.7	68.2	64.2	55.9	46.3	40.7	35.2	31.2	26.4	24.7	25.7	24.4	24.5	25.8	38.7	47.8	48.5	51.3	52.7	68.2	45.6
6	53.3	56.0	60.5	63.3	66.5	68.8	67.5	63.3	54.6	45.5	36.4	30.5	27.8	25.5	24.2	24.4	24.6	25.2	26.0	29.6	38.7	44.2	43.3	47.4	68.8	43.6
7	52.0	53.8	56.2	59.0	60.8	63.6	62.9	61.7	59.0	52.9	43.2	26.3	24.0	21.8	20.4	20.6	21.3	26.7	29.3	32.5	37.6	41.3	43.8	47.3	63.6	42.4
8	49.6	54.9	62.9	67.0	68.2	68.6	67.9	62.2	56.7	41.3	34.3	32.5	29.2	27.8	26.9	25.0	24.5	24.5	25.2	28.7	37.4	45.4	46.9	47.3	68.6	44.0
9	50.4	53.5	56.3	60.7	60.5	53.1	53.1	50.1	50.5	50.8	49.6	49.6	58.3	73.6	83.0	85.9	87.7	87.7	88.0	87.8	87.5	87.5	87.7	88.1	88.1	68.4
10	89.3	89.5	88.3	88.2	87.7	86.5	84.4	81.9	75.6	73.6	66.6	59.8	59.3	56.1	60.1	76.8	85.3	83.1	86.8	88.5	88.6	89.6	90.0	89.8	90.0	80.2
11	89.2	89.4	88.4	89.0	90.6	90.9	90.0	89.6	87.3	82.9	76.8	77.3	67.9	60.2	56.8	48.5	47.0	47.3	50.5	69.1	80.6	74.5	78.7	82.9	90.9	75.2
12	79.8	77.8	78.3	78.8	78.4	78.3	75.4	71.9	61.9	50.3	40.7	32.2	30.0	27.8	25.6	24.2	22.2	22.1	28.2	45.2	57.5	51.3	57.8	57.1	79.8	52.2
13	49.9	52.8	57.5	63.8	63.1	63.7	64.2	59.6	52.1	43.7	31.3	26.7	23.4	19.9	19.3	18.7	20.4	23.9	25.5	26.4	27.0	30.8	46.1	58.5	64.2	40.4
14	68.5	55.9	56.9	60.3	61.4	62.1	61.5	54.9	45.6	37.8	27.0	21.0	18.7	17.1	17.3	18.6	19.0	17.4	19.3	20.7	23.2	23.0	23.5	25.9	68.5	35.7
15	28.5	33.2	39.1	43.4	48.4	51.9	52.1	48.5	41.5	34.1	27.6	22.9	20.6	18.8	18.4	18.8	18.8	18.3	19.0	21.7	28.7	29.4	28.3	31.6	52.1	31.0
16	36.4	39.9	43.5	47.5	51.1	54.0	54.2	50.4	44.4	37.7	24.7	21.7	21.4	21.6	21.8	22.1	23.1	25.3	30.0	39.6	50.4	56.3	74.1	83.1	83.1	40.6
17	78.6	78.3	81.4	83.5	84.3	84.8	86.8	88.8	88.1	84.7	83.7	83.2	82.3	82.8	83.3	82.8	83.1	82.3	83.2	83.8	85.3	86.2	87.5	88.8	88.8	84.1
18	89.8	90.5	90.7	91.1	91.6	91.3	90.2	91.5	90.6	83.9	72.0	63.4	56.6	51.9	49.2	43.4	42.7	40.4	39.5	49.6	68.5	81.2	86.8	89.8	91.6	72.3
19	91.0	90.4	85.3	85.3	82.6	79.2	74.2	66.5	56.3	46.9	40.1	35.4	35.5	34.4	34.7	34.8	35.6	36.7	39.1	47.3	57.8	64.2	70.9	76.5	91.0	58.4
20	79.5	85.8	86.2	83.7	80.4	77.7	74.0	66.4	53.7	40.5	34.2	29.8	26.5	25.2	24.3	24.9	24.5	24.4	24.2	26.6	29.6	32.3	35.9	39.5	86.2	47.1
21	44.5	49.2	52.8	55.3	58.8	61.9	61.1	55.9	47.9	39.2	31.1	25.6	23.4	23.6	22.0	21.4	22.1	21.7	25.2	36.5	50.1	64.6	73.5	62.8	73.5	42.9
22	62.6	59.3	59.2	59.9	62.3	64.3	63.3	57.6	49.8	43.2	34.0	29.5	27.2	25.3	24.9	24.4	24.0	25.3	28.2	33.3	53.4	66.1	73.5	77.1	77.1	47.0
23	63.3	54.7	54.6	56.0	59.1	59.2	58.7	54.8	50.9	40.9	31.8	27.1	21.7	19.0	21.6	21.0	22.9	24.9	23.6	28.8	40.7	56.4	61.7	47.9	63.3	41.7
24	53.4	53.3	52.1	50.9	50.3	48.9	50.5	50.6	41.0	30.5	27.7	25.5	25.0	23.6	23.9	26.6	27.0	26.4	24.9	25.4	28.1	30.7	37.5	38.9	53.4	36.4
25	42.8	46.4	46.7	50.4	53.9	56.3	55.0	51.7	45.1	36.1	30.0	27.5	26.2	24.4	23.3	22.3	22.8	31.3	47.2	70.8	69.3	60.1	47.4	47.4	70.8	43.1
26	45.4	44.2	43.3	44.2	51.1	54.4	59.1	61.0	53.4	49.9	46.6	42.1	36.7	24.1	16.9	15.5	16.0	16.1	15.8	17.9	18.7	23.0	25.6	26.5	61.0	35.3
27	28.2	30.4	40.9	44.6	40.6	42.8	43.9	40.2	34.8	27.7	24.7	22.7	21.1	20.6	19.6	19.8	19.2	19.7	20.2	23.3	33.6	36.8	38.7	40.1	44.6	30.6
28	40.6	41.3	44.0	46.2	47.4	50.5	51.6	45.6	35.2	27.6	22.7	17.9	15.5	15.2	14.7	14.4	15.0	15.6	16.6	18.4	22.6	27.7	27.0	37.8	51.6	29.6
29	45.2	52.7	58.0	60.9	68.5	78.5	74.7	83.2	88.1	88.8	88.8	86.4	84.2	82.9	81.2	80.6	79.1	79.2	80.9	86.3	88.3	89.8	88.4	89.1	89.8	78.5
30	89.9	90.6	91.4	91.4	90.1	90.2	90.3	88.7	81.7	76.1	60.2	53.3	53.3	50.7	54.7	53.5	44.1	39.2	41.6	51.6	66.3	82.0	86.0	86.0	91.4	71.0
31	88.8	90.0	88.1	88.5	89.1	89.4	88.9	88.5	88.7	85.8	86.5	88.2	84.3	83.8	87.3	88.1	87.2	84.5	83.5	84.4	88.6	87.7	87.9	88.5	90.0	87.3
Hourly Max	91.0	90.6	91.4	91.4	91.6	91.3	90.3	91.5	90.6	88.8	88.8	88.2	84.3	83.8	87.3	88.1	87.7	87.7	88.0	88.5	88.6	89.8	90.0	89.8		
Hourly Average	59.9	60.9	62.8	65.4	66.8	67.8	67.3	64.4	58.4	51.0	44.4	40.0	37.7	36.0	35.8	36.0	36.0	36.4	38.7	44.4	51.0	54.7	58.1	60.1		



Lagoon Precipitation (mm) – May 2018

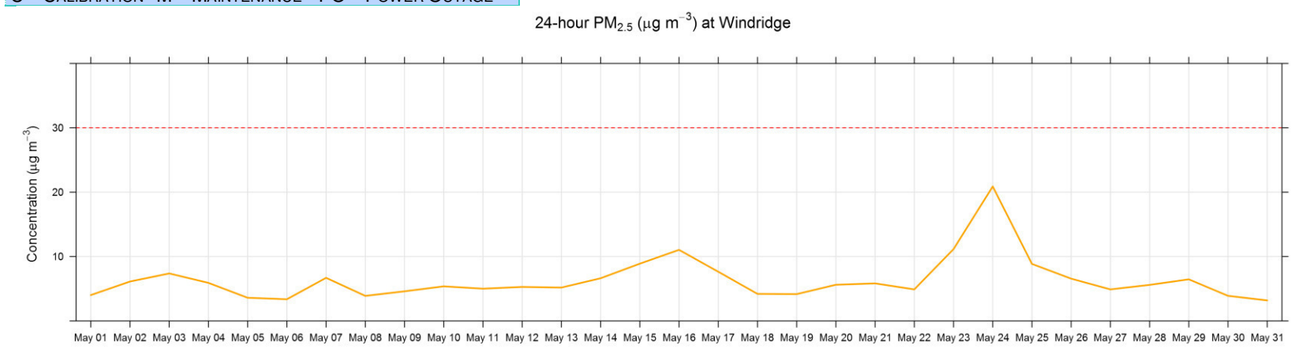
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Total
1	0.0	0.0	0.0	0.0	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.3
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5
10	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	0.5	1.0	1.5	0.5	0.5	0.3	0.3	1.5	6.5
11	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.8	1.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.3	0.0	0.8	0.5	0.3	0.5	1.0	1.3	1.0	1.5	1.0	0.8	0.8	0.5	0.8	1.5	12.5
18	0.3	0.3	0.3	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.8
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.3	0.3	0.3	1.5	2.3	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.3	0.3	0.5	2.3	7.8
30	1.5	0.8	3.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	0.3	3.5	8.8
31	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.3	0.5	0.5	0.3	0.3	0.5	1.3	0.5	1.3	7.0
Hourly Max	1.5	1.0	3.5	0.5	0.8	0.3	0.3	1.5	2.3	0.5	0.3	0.8	0.5	0.3	0.5	1.0	1.3	1.0	1.5	1.5	0.8	2.0	1.3	0.8		
Hourly Average	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	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	0.1		



Windridge $PM_{2.5}$ (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	1.8	0.9	1.8	4.0	3.7	4.4	6.6	6.6	4.8	3.3	4.4	4.4	4.0	5.1	**M**	**M**	**M**	**M**	4.6	4.4	3.3	2.6	2.6	7.0	7.0	4.0
2	5.5	3.7	3.3	4.4	4.0	2.2	4.8	8.8	7.0	**C**	**C**	**C**	**C**	**C**	8.5	7.6	5.9	3.7	5.9	12.5	9.6	4.4	7.0	7.7	12.5	6.1
3	4.8	3.7	1.8	4.8	5.9	6.2	5.9	5.9	8.1	11.0	11.0	12.5	9.4	11.4	11.7	7.7	5.1	10.6	11.4	7.0	5.9	4.8	4.0	6.6	12.5	7.4
4	5.5	5.1	6.2	7.0	5.5	4.0	4.4	4.0	2.3	2.9	8.0	5.5	8.8	8.4	11.7	8.8	6.2	5.9	7.3	5.9	3.7	3.3	5.9	5.5	11.7	5.9
5	8.4	5.5	1.5	5.5	4.0	3.7	3.3	2.6	3.7	3.7	2.6	3.3	3.7	3.3	2.6	3.3	3.3	5.1	5.1	5.5	3.3	0.0	0.0	3.3	8.4	3.6
6	4.0	3.3	1.8	1.1	2.6	4.8	4.4	3.7	0.7	0.0	2.6	4.0	2.9	3.3	4.4	3.7	3.3	3.3	5.1	4.8	2.9	1.5	2.2	10.3	10.3	3.4
7	10.6	8.1	7.0	5.1	2.9	4.0	5.9	6.6	7.7	6.6	13.1	9.2	7.2	5.5	4.0	4.4	4.0	5.1	7.7	8.1	8.1	8.4	6.6	4.8	13.1	6.7
8	4.0	7.0	5.9	5.5	7.0	2.6	0.2	3.9	3.3	2.2	3.3	3.3	3.3	3.7	5.9	5.2	5.1	4.0	2.6	5.5	4.0	2.2	2.2	1.5	7.0	3.9
9	2.6	5.5	5.1	3.3	0.7	0.7	4.0	6.6	6.6	6.6	6.2	7.7	5.9	5.1	4.0	7.9	12.5	8.4	5.2	1.1	0.0	0.1	2.2	2.2	12.5	4.6
10	4.0	7.3	6.2	8.4	10.3	9.6	8.8	7.7	5.5	0.3	3.7	7.9	5.5	2.6	2.6	4.0	4.8	7.3	4.8	3.3	2.2	1.5	3.7	7.2	10.3	5.4
11	5.5	1.5	0.4	0.7	2.9	3.3	3.3	3.3	3.3	5.5	5.5	3.7	9.2	8.1	9.5	6.5	5.1	4.0	4.8	3.4	4.8	9.2	9.2	7.7	9.5	5.0
12	5.9	4.0	4.4	3.7	3.3	4.0	8.1	8.8	7.6	5.1	5.1	5.5	5.1	8.1	5.9	5.5	5.5	5.9	4.8	4.0	5.9	4.0	3.3	3.3	8.8	5.3
13	2.9	6.2	6.2	4.4	2.9	6.2	4.0	6.2	6.2	3.7	7.7	7.0	4.0	3.4	4.0	5.5	5.9	4.4	4.6	3.7	4.8	6.2	7.7	6.6	7.7	5.2
14	6.4	5.5	5.5	7.7	9.2	6.4	5.1	5.1	3.9	4.4	5.5	9.5	9.2	9.2	8.1	5.9	5.5	7.3	6.6	7.3	9.9	6.2	4.8	4.8	9.9	6.6
15	5.5	4.8	3.3	5.9	5.9	8.4	13.9	10.6	8.4	9.9	7.9	11.4	12.1	10.5	13.6	11.6	8.8	8.8	12.1	8.9	6.5	7.6	7.3	9.9	13.9	8.9
16	8.1	7.6	6.6	7.3	12.5	9.5	8.1	8.4	6.7	8.4	12.5	10.6	7.7	8.1	17.3	14.3	13.6	16.9	15.4	16.9	13.6	13.6	11.4	10.3	17.3	11.0
17	22.0	13.6	11.7	11.0	12.5	11.7	15.0	11.4	8.6	12.5	8.1	4.8	5.1	7.3	4.5	0.0	0.3	4.4	2.8	1.5	2.6	4.0	3.3	4.8	22.0	7.6
18	3.7	4.0	3.7	7.0	7.3	6.2	4.0	4.0	4.0	3.3	5.9	3.7	2.6	4.0	6.6	5.1	4.8	3.7	3.3	4.4	3.3	2.6	0.7	2.9	7.3	4.2
19	10.9	10.6	5.5	2.9	5.3	5.1	3.3	4.4	4.6	2.6	1.5	1.5	2.9	0.4	0.0	2.6	5.5	4.0	3.7	2.9	1.5	4.8	7.0	6.6	10.9	4.2
20	11.7	7.3	4.4	3.7	0.7	1.1	4.4	4.0	2.6	2.6	4.0	5.9	5.9	5.5	7.0	11.7	10.3	8.4	6.6	8.1	5.5	5.4	5.1	2.9	11.7	5.6
21	1.8	0.7	0.0	4.8	8.1	6.6	5.5	3.7	1.1	2.2	3.3	6.2	3.7	2.2	2.6	4.0	22.3	26.7	3.7	3.3	9.2	8.1	4.6	5.5	26.7	5.8
22	5.1	3.4	2.9	6.2	5.9	7.7	7.3	5.1	1.8	0.7	2.2	4.8	4.4	2.2	1.5	6.6	5.5	4.8	**PO**	4.8	5.5	10.3	6.6	7.3	10.3	4.9
23	9.2	10.6	8.8	10.6	9.5	6.2	7.7	8.4	6.2	8.1	7.7	12.1	16.9	14.7	18.3	23.8	18.0	19.8	21.6	5.9	7.0	9.2	5.9	1.6	23.8	11.2
24	1.8	4.4	7.3	8.7	6.2	10.3	11.7	13.9	9.9	8.8	11.4	10.6	11.6	26.7	52.4	21.6	90.8	46.9	43.2	20.9	24.5	19.4	24.2	14.3	90.8	20.9
25	15.4	13.9	10.6	7.3	7.7	4.4	5.2	7.0	6.6	10.5	7.0	9.5	9.5	14.5	10.6	11.0	8.6	8.4	8.4	6.2	5.9	5.9	9.9	8.4	15.4	8.9
26	9.5	5.9	3.7	5.5	4.5	5.9	4.8	4.8	6.6	7.7	6.6	7.7	7.6	4.8	5.9	13.1	9.2	5.9	5.1	3.0	8.1	7.7	8.4	5.9	13.1	6.6
27	6.6	6.2	4.4	6.7	7.7	5.9	4.4	4.4	3.7	2.9	10.6	6.6	3.3	6.6	5.9	4.4	3.7	3.7	4.0	4.4	2.9	4.8	3.4	0.4	10.6	4.9
28	0.4	0.0	3.3	2.9	0.0	0.7	0.7	1.7	6.6	9.5	5.9	6.2	5.1	9.3	7.7	6.2	16.5	9.5	9.5	9.2	7.0	3.4	6.2	6.6	16.5	5.6
29	3.3	4.4	8.4	7.7	12.4	8.4	4.8	5.9	4.8	4.4	5.1	8.1	7.0	3.3	0.0	1.5	3.7	5.9	9.2	13.2	10.3	9.2	7.7	6.6	13.2	6.5
30	4.8	2.9	5.5	4.4	8.1	5.9	4.0	4.4	5.1	4.4	3.3	3.7	3.3	4.0	4.0	2.6	0.4	1.1	3.3	4.4	5.1	5.1	3.3	0.4	8.1	3.9
31	0.0	2.9	2.2	1.5	4.8	4.8	2.2	0.7	5.3	7.7	4.4	2.6	3.3	5.1	4.0	3.7	7.2	5.1	2.9	3.3	1.6	0.7	0.3	0.0	7.7	3.2
Hourly Max	22.0	13.9	11.7	11.0	12.5	11.7	15.0	13.9	9.9	12.5	13.1	12.5	16.9	26.7	52.4	23.8	90.8	46.9	43.2	20.9	24.5	19.4	24.2	14.3		
Hourly Average	6.4	5.6	4.9	5.6	6.0	5.5	5.8	6.1	5.3	5.3	6.3	6.8	6.4	6.9	8.3	7.5	10.1	8.8	8.0	6.5	6.2	5.8	5.9	5.8		

C = CALIBRATION M = MAINTENANCE PO = POWER OUTAGE

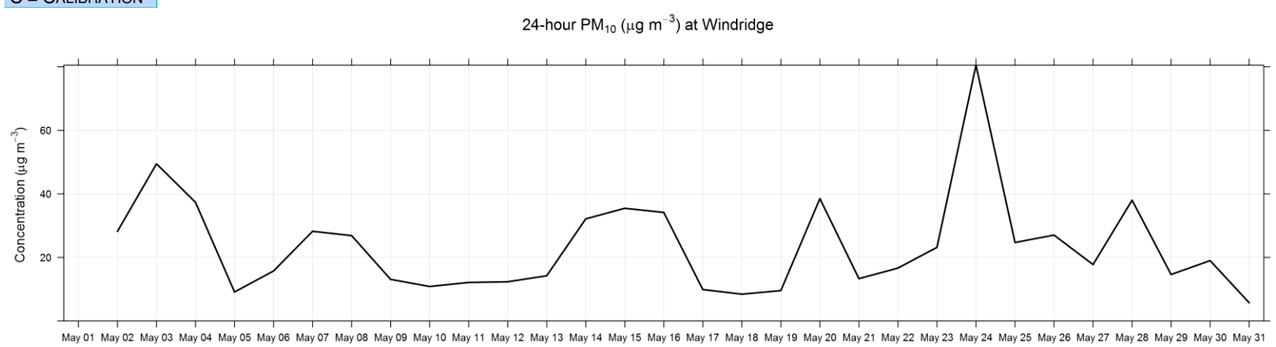


Number of 1HR Exceedances	1		Guideline	80	UG/M3
Number of 24HR Exceedances	0		Objective	30	UG/M3
Number of Non-Zero Readings	725				
Maximum 1-HR Average	90.8	UG/M3			
Maximum 24-HR Average	20.9	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	739	HRS
Monthly Calibration Time	5	HRS	Operational Uptime	99.3	%
Standard Deviation	5.6		Monthly Average	6.4	UG/M3

Windridge PM_{10} (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	6.8	4.7	7.6	7.6	4.7	8.3	-	-
2	7.0	3.3	8.3	6.2	6.2	6.2	6.9	9.0	7.6	C	C	C	C	C	39.3	60.4	78.5	57.6	88.6	73.1	28.0	11.8	28.0	10.0	88.6	28.2
3	7.6	5.9	9.7	6.9	7.6	6.9	8.3	11.1	23.8	42.8	76.7	87.2	76.0	195.8	198.6	80.2	81.6	69.6	61.9	47.1	28.0	17.0	24.5	12.5	198.6	49.5
4	8.6	5.4	6.2	7.6	6.1	5.4	26.7	11.1	16.0	27.3	47.8	44.9	147.2	74.6	116.9	69.6	43.5	62.6	66.1	32.0	39.9	16.7	5.4	8.3	147.2	37.3
5	9.0	6.2	3.3	3.3	7.6	4.7	4.0	4.0	3.3	8.3	9.7	6.9	11.8	9.0	25.2	23.8	13.6	11.8	25.2	12.3	6.2	1.9	2.0	6.2	25.2	9.1
6	5.5	6.2	6.9	6.6	6.8	7.6	9.0	16.7	30.0	30.9	38.6	23.1	16.7	11.8	28.0	28.0	27.3	9.7	13.9	21.7	23.1	2.6	3.0	4.0	38.6	15.7
7	5.5	4.7	6.9	7.6	4.1	11.8	18.1	14.6	80.9	86.5	83.7	83.7	16.0	23.8	9.9	11.1	19.6	18.8	35.8	21.7	25.2	32.3	16.7	38.6	86.5	28.2
8	49.8	87.9	68.2	39.3	25.2	24.5	3.3	9.7	8.3	33.4	38.8	41.4	25.9	20.3	30.1	21.7	33.0	25.2	23.8	34.4	0.5	0.0	0.3	0.0	87.9	26.9
9	1.9	6.9	6.9	10.4	9.7	12.5	16.1	23.1	21.0	28.0	24.5	29.4	19.6	31.5	23.1	7.6	9.0	9.0	4.7	1.9	3.3	3.3	5.4	5.5	31.5	13.1
10	4.0	7.6	6.9	7.1	9.0	7.6	5.5	5.4	21.7	18.1	13.9	12.5	7.6	8.3	11.1	6.8	8.5	11.1	6.2	7.6	5.5	3.3	23.8	41.4	41.4	10.8
11	13.9	6.9	3.3	2.6	3.3	3.3	4.0	5.6	7.6	18.8	4.0	4.7	35.1	51.3	25.1	17.4	13.9	14.6	13.2	9.0	10.4	8.2	5.4	9.0	51.3	12.1
12	15.3	11.1	9.0	7.6	9.0	9.0	7.6	6.2	11.8	13.9	23.1	16.7	23.1	43.5	10.4	6.7	6.2	7.6	10.4	7.3	7.6	8.3	13.1	11.8	43.5	12.3
13	6.9	7.6	9.7	6.9	6.2	6.9	10.4	25.9	54.1	25.9	23.8	11.8	9.0	6.9	7.6	8.3	6.9	23.1	9.7	11.3	15.3	13.6	18.8	15.3	54.1	14.2
14	13.2	16.1	12.5	16.0	13.9	12.2	13.2	17.4	23.8	20.3	45.6	78.8	90.8	42.8	63.0	44.9	40.0	34.4	49.2	31.5	28.7	16.7	24.5	21.7	90.8	32.1
15	13.4	10.4	8.3	13.2	11.1	9.7	12.5	13.2	30.9	57.6	33.0	46.3	77.4	96.4	165.5	64.7	53.4	19.6	41.4	25.2	15.3	9.0	11.2	12.5	165.5	35.5
16	11.1	11.8	14.6	10.4	13.2	11.8	15.3	18.8	46.3	57.6	70.3	31.8	31.5	33.0	54.1	52.0	66.8	49.2	56.2	44.3	46.3	21.0	22.4	29.9	70.3	34.2
17	13.2	20.3	18.9	19.6	13.9	17.4	9.7	14.6	13.9	15.3	8.6	7.6	9.7	4.7	3.3	4.7	6.9	6.9	4.7	6.2	3.3	4.7	6.2	3.0	20.3	9.9
18	1.9	7.6	8.3	6.9	6.2	6.9	4.7	4.7	8.0	6.2	11.1	9.6	9.0	16.0	11.8	13.9	12.5	13.6	9.7	9.0	7.6	6.2	6.9	4.7	16.0	8.4
19	11.1	9.0	5.5	4.0	7.6	7.6	5.5	4.7	9.7	13.9	16.7	7.6	4.3	4.0	11.8	15.3	13.2	10.4	7.6	10.4	9.7	7.6	10.9	21.7	21.7	9.6
20	20.3	5.5	4.7	5.5	7.6	7.6	7.2	9.0	8.3	36.5	52.0	86.5	54.8	75.3	78.1	100.6	91.5	89.4	55.5	50.6	37.2	15.3	11.8	13.9	100.6	38.5
21	9.0	6.9	5.8	6.9	5.2	4.0	4.7	4.0	9.0	7.6	12.5	16.7	24.5	13.2	7.6	21.7	8.3	23.1	53.2	13.9	29.4	16.7	8.5	7.6	53.2	13.3
22	7.6	6.9	6.2	4.7	6.9	11.1	13.2	10.8	22.4	28.3	47.1	42.1	19.6	16.7	16.7	23.8	16.0	14.6	13.2	20.3	18.1	12.5	10.4	10.4	47.1	16.6
23	10.4	7.6	13.9	11.1	14.6	13.9	13.9	18.8	46.3	61.9	49.9	47.8	20.3	18.1	9.7	23.8	70.3	14.6	15.4	14.6	21.7	16.0	13.9	7.6	70.3	23.2
24	13.9	16.6	11.8	17.4	9.0	10.4	22.3	13.9	25.9	54.8	65.4	57.6	152.1	154.2	277.1	197.2	334.7	135.2	159.9	59.7	54.8	41.2	35.1	11.8	334.7	80.5
25	25.9	13.4	10.4	13.4	13.9	13.9	11.8	16.7	23.1	26.6	37.9	41.4	33.7	45.6	40.9	51.3	41.2	42.1	23.1	19.6	13.2	8.3	14.6	10.9	51.3	24.7
26	11.1	16.0	25.9	49.9	31.5	34.4	9.0	16.0	16.0	16.7	20.3	15.6	15.3	17.4	32.2	31.5	23.1	33.7	33.7	24.5	57.6	49.3	39.9	28.1	57.6	27.0
27	11.8	10.4	8.3	6.7	5.2	10.7	7.6	5.4	18.1	10.4	35.8	25.2	37.3	21.7	11.8	46.3	31.5	39.3	40.7	20.0	4.0	4.0	5.4	8.3	46.3	17.7
28	7.6	10.4	7.4	11.8	11.8	9.7	9.0	7.6	22.4	70.3	71.3	78.1	78.8	92.2	77.4	72.4	87.2	26.6	48.5	38.6	37.9	6.9	16.0	12.5	92.2	38.0
29	10.4	27.8	20.3	12.5	35.8	22.4	9.0	5.5	13.9	22.4	6.2	4.7	6.9	4.7	15.3	13.9	17.4	18.1	17.8	16.7	16.9	10.4	13.9	8.3	35.8	14.6
30	4.7	4.7	6.9	8.3	11.8	9.7	9.7	8.3	14.6	12.5	11.1	47.1	44.9	21.0	62.6	35.1	23.8	23.8	33.0	20.3	13.9	9.0	11.8	7.6	62.6	19.0
31	2.6	6.2	4.2	0.5	2.6	2.5	2.7	4.7	8.3	11.8	9.8	6.9	10.4	6.2	5.4	10.7	9.7	6.2	5.1	5.5	4.0	3.7	4.0	4.0	11.8	5.7
Hourly Max	49.8	87.9	68.2	49.9	35.8	34.4	26.7	25.9	80.9	86.5	83.7	87.2	152.1	195.8	277.1	197.2	334.7	135.2	159.9	73.1	57.6	49.3	39.9	41.4		
Hourly Average	11.4	12.4	11.5	11.4	11.0	11.0	10.3	11.4	22.0	30.5	35.0	36.0	39.2	41.2	50.5	39.8	44.1	31.6	34.3	23.6	20.5	12.7	13.8	13.0		

C = CALIBRATION

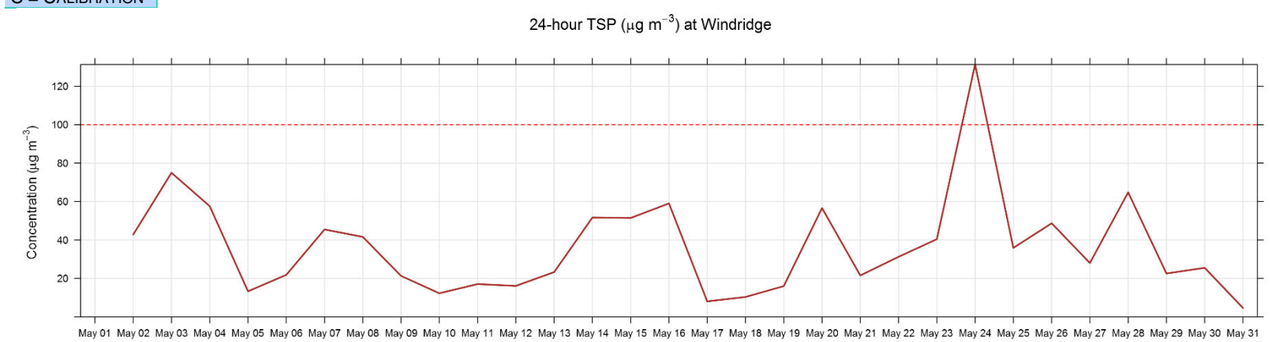


Number of 1HR Exceedances	n/a		Objective	n/a	UG/M3
Number of Non-Zero Readings	719				
Maximum 1-HR Average	334.7	UG/M3			
Maximum 24-HR Average	80.5	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	23	HRS	Operational Uptime	100.0	%
Standard Deviation	29.9		Monthly Average	23.4	UG/M3

Windridge TSP (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	13.2	6.9	2.6	6.2	6.9	11.1	-	-
2	7.5	6.2	5.5	7.6	7.6	6.2	9.7	12.7	13.2	**C**	**C**	**C**	**C**	**C**	54.1	92.2	112.6	93.6	142.2	116.1	47.8	25.9	41.4	11.1	142.2	42.8
3	9.0	9.0	11.1	9.7	6.9	9.0	10.4	10.4	30.8	63.3	126.7	131.7	122.5	281.8	279.7	119.7	141.5	114.0	99.2	80.2	42.8	35.8	38.6	15.6	281.8	75.0
4	11.1	6.3	6.9	13.2	9.2	11.8	40.7	20.3	15.6	42.8	85.8	69.5	218.4	119.0	176.1	112.4	68.1	98.5	102.7	50.6	56.2	31.5	9.0	5.4	218.4	57.5
5	9.0	6.2	6.9	11.1	7.6	5.5	3.3	4.7	6.2	21.0	16.0	9.7	12.5	15.6	37.9	32.2	21.7	13.9	33.0	14.6	8.3	6.9	8.3	6.9	37.9	13.3
6	9.0	8.3	6.2	6.2	9.0	13.9	10.4	17.4	40.0	38.6	49.2	35.8	21.7	18.8	48.5	40.0	40.0	7.6	24.5	28.7	30.1	5.4	7.5	7.6	49.2	21.8
7	13.9	9.7	8.3	12.5	10.4	16.0	23.8	21.0	126.7	124.6	130.2	138.1	34.4	36.5	19.6	23.1	30.1	33.0	54.8	29.4	39.3	56.2	30.1	69.6	138.1	45.5
8	69.6	131.0	93.6	51.3	34.4	32.9	9.7	20.3	11.1	49.9	59.0	71.0	47.1	30.8	56.2	31.5	45.6	42.1	39.3	54.1	2.6	4.0	7.6	3.4	131.0	41.6
9	9.0	11.1	8.3	11.1	13.9	23.8	30.8	40.0	40.7	48.5	44.9	51.3	28.7	59.0	24.5	11.1	8.3	10.4	4.0	4.9	4.0	8.3	4.7	9.7	59.0	21.3
10	6.2	5.4	7.6	5.5	8.3	9.7	6.9	6.2	18.8	13.2	29.4	21.7	14.6	15.3	13.9	13.2	13.2	8.3	4.0	8.3	5.5	2.3	25.2	31.5	31.5	12.3
11	16.0	1.2	4.0	3.3	3.3	3.3	10.4	6.9	0.0	28.0	8.3	12.5	66.1	79.5	37.4	23.8	19.6	23.1	17.4	6.2	7.6	15.3	10.4	5.4	79.5	17.0
12	6.2	7.6	7.6	4.7	4.0	6.2	11.1	11.1	11.8	17.9	41.4	26.6	34.4	59.0	6.9	9.0	19.6	18.1	16.0	14.6	8.3	13.2	14.6	16.7	59.0	16.1
13	6.2	10.6	18.1	5.4	2.6	10.4	8.3	33.0	95.7	44.2	47.1	26.6	16.0	13.9	11.8	10.4	12.6	40.7	16.7	17.4	28.0	29.4	30.1	23.8	95.7	23.3
14	23.1	20.3	20.3	12.7	23.3	26.6	24.5	16.7	23.8	32.2	67.5	123.2	141.5	71.7	104.9	83.7	65.4	54.8	85.1	60.0	46.3	32.2	39.3	41.4	141.5	51.7
15	22.4	10.4	10.4	17.4	15.4	12.5	16.9	13.9	33.7	81.6	46.3	64.0	115.4	142.9	245.2	98.5	81.6	33.0	60.4	36.5	23.1	17.4	18.1	17.4	245.2	51.4
16	20.3	21.7	10.4	8.3	9.1	16.0	21.0	29.4	69.6	98.5	120.4	61.9	53.4	61.9	96.4	95.7	119.7	90.1	98.5	74.6	114.7	44.2	40.0	40.7	120.4	59.0
17	18.9	19.6	18.1	17.4	14.0	10.4	9.7	9.7	11.8	12.5	10.4	6.2	4.0	1.9	1.2	0.5	4.0	4.7	3.3	4.7	2.6	1.2	3.3	2.6	19.6	8.0
18	0.5	1.2	6.9	10.4	4.7	8.3	5.5	1.2	3.3	11.1	6.2	4.7	9.7	28.7	16.7	30.8	19.6	20.3	11.8	8.3	9.0	6.9	9.7	12.6	30.8	10.3
19	11.1	8.3	6.2	7.6	9.0	4.0	11.1	9.7	7.6	13.2	20.3	12.5	23.1	17.9	23.8	37.2	21.7	24.5	13.2	17.4	16.7	21.0	25.9	21.0	37.2	16.0
20	22.4	11.8	6.2	4.0	8.3	9.7	9.7	13.9	11.8	54.8	83.0	122.5	84.4	109.1	107.7	146.5	134.5	134.5	86.5	82.3	64.7	21.7	13.2	15.3	146.5	56.6
21	16.0	15.3	13.9	8.3	6.9	7.6	7.6	8.3	9.0	7.6	17.4	25.2	33.0	19.6	7.6	30.8	18.8	38.6	73.1	35.1	71.0	25.2	9.7	11.6	73.1	21.5
22	6.9	9.0	11.8	8.3	9.0	19.6	13.9	18.9	30.1	53.4	75.3	66.8	28.0	45.6	55.5	71.7	49.9	36.5	28.7	37.2	29.7	19.6	9.0	15.3	75.3	31.2
23	11.7	17.4	27.2	25.9	24.5	21.7	28.7	28.7	66.8	83.0	87.2	66.8	37.9	25.9	28.0	66.8	97.1	44.9	40.0	30.1	40.0	30.8	18.1	20.3	97.1	40.4
24	16.7	30.1	13.9	40.7	23.1	24.5	35.1	23.8	44.3	116.9	106.3	92.2	233.9	249.4	460.8	326.3	503.9	234.6	253.6	102.0	86.5	65.4	50.6	17.4	503.9	131.3
25	34.4	11.7	16.7	20.4	18.1	13.2	11.1	23.8	29.4	37.9	54.1	63.3	56.9	68.9	71.7	85.8	62.6	64.0	30.1	22.4	20.3	9.7	23.1	11.1	85.8	35.9
26	26.9	30.1	46.3	103.7	56.9	48.5	15.4	31.5	26.6	31.5	34.9	38.6	25.2	32.2	54.8	53.4	32.2	47.1	64.0	58.3	102.7	91.5	71.0	44.9	103.7	48.7
27	16.7	7.6	10.4	11.1	12.5	13.9	13.2	11.1	21.0	20.3	61.9	35.1	58.3	30.1	20.3	70.3	54.8	64.0	74.6	27.4	13.2	9.0	6.2	9.7	74.6	28.0
28	11.8	9.7	16.0	28.0	17.4	15.3	10.4	12.5	34.4	107.7	109.0	131.0	135.9	145.8	131.7	121.1	157.1	59.0	93.6	69.6	67.5	23.1	30.1	16.7	157.1	64.8
29	16.0	80.9	44.9	23.8	80.9	27.3	5.0	6.2	15.3	16.7	4.8	6.9	10.4	11.7	32.2	22.4	23.8	24.5	29.4	26.6	14.6	8.3	4.0	4.7	80.9	22.6
30	3.3	7.6	5.5	10.4	9.7	6.2	11.8	10.4	18.8	15.3	18.8	64.0	54.1	41.4	85.8	46.3	34.4	36.5	52.0	35.1	19.6	11.1	9.0	5.5	85.8	25.5
31	2.6	1.2	1.9	2.6	1.9	0.0	1.2	7.6	10.4	10.4	7.6	7.6	4.7	1.9	8.3	8.3	8.3	4.0	4.0	8.3	4.7	2.6	0.5	0.0	10.4	4.6
Hourly Max	69.6	131.0	93.6	103.7	80.9	48.5	40.7	40.0	126.7	124.6	130.2	138.1	233.9	281.8	460.8	326.3	503.9	234.6	253.6	116.1	114.7	91.5	71.0	69.6		
Hourly Average	15.6	18.1	16.2	17.2	15.9	15.0	14.7	16.3	29.9	45.9	55.8	56.4	61.5	65.5	79.7	65.7	69.4	52.2	55.5	38.6	34.2	22.6	20.5	17.5		

C = CALIBRATION

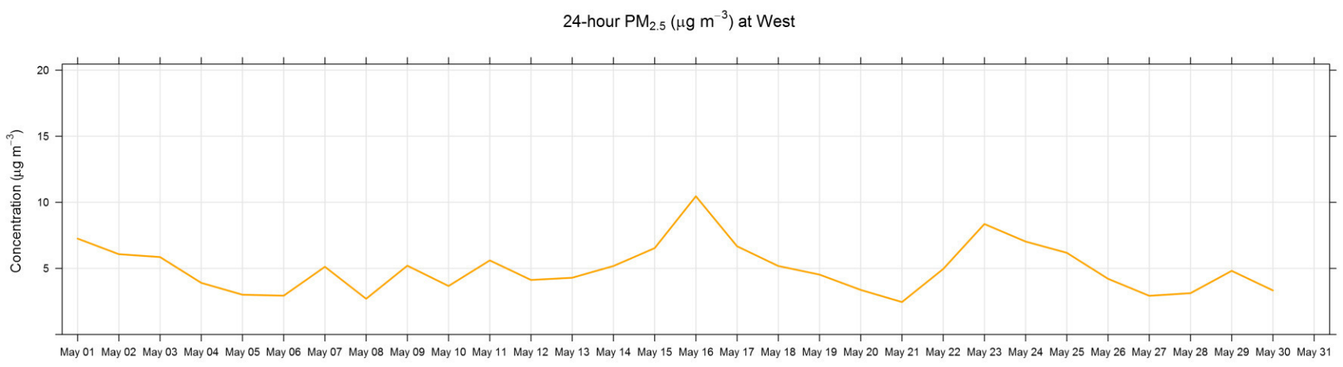


Number of 24HR Exceedances	1		Objective	100	UG/M3
Number of Non-Zero Readings	718				
Maximum 1-HR Average	503.9	UG/M3			
Maximum 24-HR Average	131.3	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	23	HRS	Operational Uptime	100.0	%
Standard Deviation	47.7		Monthly Average	36.2	UG/M3

West $PM_{2.5}$ (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	2.3	2.8	2.5	2.5	2.5	4.0	4.5	7.2	8.4	9.6	15.9	18.5	14.5	14.3	9.6	10.2	9.1	7.1	5.4	4.6	4.9	4.3	4.6	5.0	18.5	7.3
2	4.9	5.4	5.4	5.4	5.8	6.6	8.6	9.7	10.5	6.8	7.0	7.8	5.8	6.1	5.8	6.1	5.9	4.8	4.7	4.7	4.4	4.3	4.5	4.7	10.5	6.1
3	4.9	5.4	5.7	6.0	6.2	7.2	9.1	10.3	8.4	7.0	7.3	6.3	5.7	4.9	4.7	4.7	4.3	7.3	3.7	3.5	3.9	4.4	4.4	5.3	10.3	5.9
4	4.8	4.9	4.8	3.9	3.6	3.2	3.7	5.1	3.8	5.1	3.9	4.5	4.4	4.1	4.6	4.0	3.7	4.0	3.1	3.1	2.8	2.9	2.8	3.2	5.1	3.9
5	3.7	3.8	4.0	3.8	3.4	3.3	3.4	3.8	3.8	4.6	3.8	3.2	2.8	2.6	2.3	2.0	1.9	1.9	1.8	1.9	2.0	2.0	3.2	3.2	4.6	3.0
6	3.3	3.1	3.1	3.3	3.4	3.5	3.7	4.0	3.2	3.6	3.5	3.0	2.8	2.3	2.0	2.0	2.0	2.1	2.2	2.3	2.5	2.7	3.1	3.7	4.0	2.9
7	3.6	3.6	3.5	3.8	4.0	4.9	6.8	8.4	10.4	8.2	7.1	5.7	7.2	5.4	5.3	6.2	5.4	4.8	3.7	3.1	3.3	3.0	2.9	2.8	10.4	5.1
8	3.5	3.1	3.1	2.0	1.8	1.6	2.0	3.1	3.7	3.3	3.1	3.6	3.3	3.7	3.1	3.0	2.7	2.2	1.9	1.7	1.9	2.1	2.2	3.2	3.7	2.7
9	3.0	3.0	2.9	3.0	5.3	7.7	10.4	8.8	7.0	8.5	6.9	7.0	9.6	10.8	6.3	2.4	3.0	3.0	3.4	2.6	1.8	2.5	3.0	3.1	10.8	5.2
10	4.9	4.7	5.6	5.7	5.4	4.8	4.4	4.4	3.8	4.1	7.0	4.1	4.3	7.0	2.9	3.0	2.7	1.6	1.2	1.2	1.8	1.1	1.0	1.0	7.0	3.7
11	0.7	2.4	2.7	2.8	2.3	1.9	1.1	2.6	3.4	7.6	8.9	16.4	15.6	15.8	10.7	7.8	5.5	4.1	3.6	3.6	3.5	3.6	3.7	4.1	16.4	5.6
12	4.5	4.3	4.3	4.4	4.1	4.2	4.3	5.8	5.0	4.8	4.5	4.8	4.2	3.8	3.2	3.2	3.3	3.3	3.6	3.8	3.6	3.9	3.8	4.3	5.8	4.1
13	4.2	4.0	4.1	4.2	4.3	4.9	4.7	5.0	4.9	4.0	4.6	3.6	3.2	3.2	3.7	3.5	3.5	4.3	4.0	4.5	4.7	5.0	5.4	5.3	5.4	4.3
14	5.3	6.0	5.9	5.7	5.7	5.5	7.3	7.7	6.5	6.5	6.0	5.1	4.2	5.3	5.6	3.8	3.8	3.1	3.4	3.9	3.7	4.3	4.7	5.3	7.7	5.2
15	5.1	5.4	5.6	6.0	6.3	6.7	8.4	10.8	10.8	9.9	7.9	5.2	5.4	5.5	5.8	5.6	5.4	4.8	5.3	6.0	5.8	5.5	6.8	6.9	10.8	6.5
16	6.9	6.7	6.8	7.0	7.2	7.3	7.6	9.4	10.2	9.7	10.4	9.3	9.3	10.0	11.4	14.0	14.1	14.7	14.9	16.4	12.3	11.7	12.3	11.3	16.4	10.5
17	12.3	12.2	13.2	15.3	14.4	13.4	16.4	11.8	12.9	7.3	6.7	4.6	3.1	2.3	2.3	2.1	2.1	1.8	1.0	1.3	1.2	1.1	0.7	0.5	16.4	6.7
18	1.2	1.7	2.0	2.0	2.1	1.4	1.5	1.9	4.1	14.5	9.5	9.0	9.9	8.5	8.2	8.0	5.6	5.0	4.2	4.0	4.2	4.5	5.6	5.6	14.5	5.2
19	5.6	5.6	6.0	6.1	5.9	5.8	5.8	6.1	5.0	4.5	3.1	3.3	2.8	3.8	4.0	5.6	3.5	2.9	2.9	3.0	4.1	4.3	4.5	4.6	6.1	4.5
20	4.6	5.6	5.3	5.4	5.3	5.1	4.6	4.3	3.8	2.6	2.3	2.7	2.4	2.7	2.5	2.6	2.4	2.3	2.3	2.1	2.0	2.0	2.7	3.5	5.6	3.4
21	3.5	2.9	2.6	2.5	2.5	2.6	2.7	2.7	2.6	2.7	2.2	1.6	1.5	2.0	1.5	2.2	1.9	1.5	1.9	3.1	2.7	2.9	2.8	3.7	3.7	2.5
22	3.6	2.9	2.6	2.8	3.2	3.4	7.2	8.6	8.8	9.0	9.7	7.0	6.0	7.0	5.6	4.0	3.9	2.9	2.9	2.9	3.1	3.4	3.7	4.7	9.7	5.0
23	5.8	6.0	5.4	5.4	5.9	6.2	7.9	10.5	13.3	9.7	6.3	41.2	5.9	20.4	8.0	9.7	6.6	3.4	3.5	3.3	3.5	4.1	3.9	4.7	41.2	8.4
24	4.2	4.9	5.4	6.3	6.5	8.1	9.7	12.6	12.4	8.5	9.3	8.0	8.9	7.2	11.1	6.1	6.6	5.3	4.1	4.2	4.4	4.4	4.6	5.8	12.6	7.0
25	6.6	6.9	7.5	7.8	8.1	8.4	9.0	11.2	10.9	7.2	5.3	4.6	5.0	4.3	4.4	4.2	4.4	4.2	4.5	3.9	4.5	5.2	4.7	5.5	11.2	6.2
26	5.1	3.6	2.5	2.4	2.1	1.9	3.7	11.5	8.0	6.5	6.0	5.7	6.6	4.5	3.5	3.4	2.8	2.7	2.8	3.2	3.1	3.2	3.2	3.2	11.5	4.2
27	3.2	3.5	3.7	4.1	4.5	4.3	4.3	4.1	4.1	3.3	3.0	2.8	2.5	2.1	2.2	2.0	1.5	1.6	1.7	2.0	1.9	2.2	2.5	3.1	4.5	2.9
28	3.2	3.5	3.6	3.5	3.5	4.1	4.9	6.7	4.9	3.2	3.8	2.9	2.6	4.4	2.5	2.4	2.6	1.7	1.8	1.8	2.0	1.6	1.7	2.1	6.7	3.1
29	4.8	5.8	4.9	5.0	2.6	2.0	2.9	2.6	1.9	1.5	2.0	3.0	5.2	6.7	9.6	7.7	8.4	8.2	6.5	7.0	6.3	5.1	3.2	2.4	9.6	4.8
30	2.3	2.7	3.6	1.8	3.4	4.2	9.3	8.8	4.4	5.2	4.5	3.0	3.4	2.8	2.2	3.3	2.3	1.8	1.7	1.6	1.8	2.7	1.4	1.9	9.3	3.3
31	2.1	1.0	0.6	2.6	4.2	2.8	4.7	4.5	3.9	5.8	6.6	8.1	10.2	6.3	6.2	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	-	-
Hourly Max	12.3	12.2	13.2	15.3	14.4	13.4	16.4	12.6	13.3	14.5	15.9	41.2	15.6	20.4	11.4	14.0	14.1	14.7	14.9	16.4	12.3	11.7	12.3	11.3		
Hourly Average	4.3	4.4	4.5	4.6	4.7	4.9	6.0	6.9	6.6	6.3	6.1	7.0	5.8	6.1	5.2	4.8	4.4	3.9	3.6	3.7	3.6	3.7	3.8	4.1		

PO = Power Outage

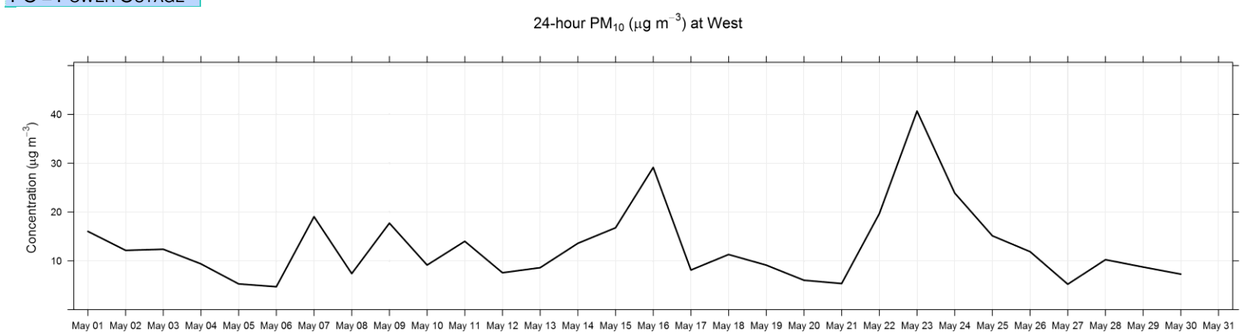


Number of 1HR Exceedances	0		Guideline	80	UG/M3
Number of 24HR Exceedances	0		Guideline	30	UG/M3
Number of Non-Zero Readings	735				
Maximum 1-HR Average	41.2	UG/M3			
Maximum 24-HR Average	10.5	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	735	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	98.8	%
Standard Deviation	3.2		Monthly Average	5.0	UG/M3

West PM_{10} (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	2.6	4.1	2.8	2.7	2.8	4.4	4.8	8.3	10.7	13.1	45.1	65.1	45.0	44.3	27.6	29.9	24.0	10.9	9.3	5.5	5.8	4.9	5.3	5.6	65.1	16.0
2	5.3	5.9	5.7	5.7	6.1	7.7	11.5	21.6	35.8	15.0	20.1	28.8	14.6	17.5	14.5	14.9	16.1	9.0	7.1	6.3	5.6	5.4	5.7	5.8	35.8	12.1
3	5.9	6.4	6.6	6.9	7.0	10.2	23.0	33.2	23.9	15.0	17.9	13.9	12.3	11.7	12.3	12.0	9.2	29.1	5.9	6.1	6.1	6.9	6.0	9.7	33.2	12.4
4	6.6	6.6	8.6	5.9	5.6	5.8	10.8	18.7	11.5	22.8	10.7	15.7	13.5	12.5	14.0	10.4	7.5	11.6	4.6	4.9	4.3	3.9	3.8	4.5	22.8	9.4
5	5.0	5.0	5.0	4.5	4.0	3.8	3.9	5.7	6.7	12.9	10.2	6.6	7.2	9.7	5.0	3.6	3.0	3.3	2.6	2.5	2.7	2.8	5.9	4.7	12.9	5.3
6	4.7	3.9	3.7	3.8	3.9	4.0	4.5	7.3	5.4	7.0	7.9	5.7	7.3	4.7	4.3	3.8	3.3	3.4	3.5	3.2	3.4	3.7	4.6	5.5	7.9	4.7
7	4.7	4.5	4.3	4.7	4.9	11.3	20.4	38.2	64.9	49.4	40.2	25.2	38.8	23.9	19.5	31.3	22.1	15.2	8.7	5.8	6.3	4.9	4.1	3.9	64.9	19.0
8	5.3	5.6	5.3	2.6	2.1	1.8	3.1	9.2	16.5	13.9	10.8	12.9	15.0	16.2	11.3	10.1	8.9	5.8	3.5	2.3	2.6	3.6	3.2	5.6	16.5	7.4
9	4.3	4.3	3.9	4.1	15.0	27.0	41.9	46.1	34.7	47.2	29.2	24.8	42.1	47.9	19.2	4.0	4.2	4.2	4.8	3.6	2.4	3.1	3.8	3.8	47.9	17.7
10	5.7	5.4	6.4	6.7	6.0	5.2	5.4	5.9	7.8	15.5	31.5	21.1	22.1	42.6	8.7	8.1	3.9	2.2	1.7	1.5	2.3	1.2	1.1	1.1	42.6	9.1
11	0.8	2.6	2.9	3.0	2.5	2.2	1.3	3.7	4.7	11.2	15.2	40.4	58.1	58.5	43.6	27.1	16.7	8.8	7.4	5.1	4.9	4.9	5.0	5.6	58.5	14.0
12	6.0	5.5	5.5	5.5	5.1	5.1	5.5	14.9	12.6	10.7	9.9	12.4	8.5	8.4	6.4	7.0	8.2	6.4	6.2	6.5	5.7	6.7	6.0	6.8	14.9	7.6
13	6.2	5.7	5.3	5.3	5.3	6.2	6.0	7.3	10.1	7.0	11.1	10.4	8.0	7.4	11.2	7.6	9.5	13.4	8.8	9.2	9.6	11.2	12.9	11.6	13.4	8.6
14	11.6	13.1	10.1	8.8	8.1	7.2	19.1	28.5	21.4	21.1	24.5	19.6	14.9	24.8	23.7	11.1	9.9	6.3	6.1	5.8	5.9	7.2	7.4	9.9	28.5	13.6
15	7.6	7.5	7.5	8.4	8.3	9.5	22.9	51.1	50.3	44.3	31.3	15.3	14.9	15.4	16.5	14.7	13.4	7.7	9.5	8.6	8.3	7.8	11.0	10.4	51.1	16.8
16	9.3	8.7	8.8	9.1	9.3	9.4	12.2	27.8	34.6	35.9	47.2	42.4	39.1	43.6	46.5	61.8	44.8	42.7	38.7	44.8	25.5	21.3	22.0	13.9	61.8	29.1
17	14.5	14.2	15.8	17.6	16.4	15.5	18.9	14.4	15.8	9.4	9.3	6.3	4.3	3.2	3.4	3.0	3.1	2.6	1.3	1.6	1.5	1.3	0.8	0.7	18.9	8.1
18	1.5	1.9	2.3	2.1	2.3	1.7	2.0	2.6	4.9	24.1	28.5	29.1	34.8	27.2	23.1	25.6	9.8	7.7	6.4	6.2	5.5	6.0	8.0	8.0	34.8	11.3
19	7.7	7.8	7.9	7.4	7.0	6.7	6.7	9.0	8.2	9.1	4.6	8.7	8.0	18.3	16.1	26.4	9.3	6.4	5.9	6.0	9.6	8.7	6.5	6.7	26.4	9.1
20	6.6	8.3	7.6	7.4	6.8	6.3	5.6	6.7	7.2	6.7	5.3	7.6	5.2	7.6	6.2	8.5	5.5	4.4	4.4	4.3	3.2	3.0	4.4	5.6	8.5	6.0
21	5.4	4.0	3.1	3.1	3.0	3.1	3.6	4.2	5.2	6.9	6.3	4.2	3.8	8.8	4.2	8.3	7.0	4.0	5.6	9.9	5.4	5.9	5.6	7.8	9.9	5.3
22	7.2	4.2	3.4	3.5	4.2	4.2	21.3	46.7	55.0	65.4	45.6	35.4	29.6	32.0	31.6	20.8	15.1	7.8	7.2	5.1	5.3	6.0	6.5	9.4	65.4	19.7
23	12.1	10.6	8.3	9.6	9.4	11.4	22.2	49.2	85.5	47.8	30.9	238.0	35.8	183.1	49.7	60.4	38.9	12.0	14.3	8.2	7.5	9.7	9.2	12.2	238.0	40.7
24	8.3	8.6	10.7	12.0	10.4	21.4	30.5	52.5	68.2	43.5	49.5	37.6	41.8	29.3	51.3	19.5	19.7	15.3	8.2	6.9	6.3	6.3	6.0	9.6	68.2	23.9
25	10.4	10.2	9.8	9.5	10.7	12.5	21.1	35.4	39.5	28.0	20.8	17.3	20.4	16.8	14.7	15.2	15.4	12.1	6.3	5.1	6.0	7.9	8.4	9.4	39.5	15.1
26	9.6	6.9	4.9	6.6	3.4	2.7	10.8	47.5	33.8	18.2	15.0	16.2	21.8	18.9	13.5	11.5	7.4	5.7	5.1	6.1	5.4	5.0	4.8	4.4	47.5	11.9
27	4.5	4.8	4.7	5.5	6.0	5.3	6.2	6.4	7.1	6.0	6.7	8.8	8.4	5.1	6.0	5.4	3.0	3.2	3.1	3.1	2.9	3.6	3.9	5.1	8.8	5.2
28	4.3	4.9	5.2	4.7	4.6	7.7	14.0	31.9	23.2	13.2	18.8	13.6	11.0	32.0	10.3	8.9	9.4	4.3	4.6	4.7	4.5	2.7	3.0	4.0	32.0	10.2
29	21.1	21.5	11.6	16.8	10.2	3.2	5.4	3.7	2.6	2.1	2.8	4.4	7.8	10.1	14.3	11.5	12.5	12.2	8.8	8.3	7.0	5.5	3.5	2.7	21.5	8.7
30	2.5	2.9	4.1	2.1	4.0	4.7	13.7	13.0	6.0	7.5	15.9	11.4	14.6	11.8	9.4	15.6	9.2	6.0	4.9	4.0	3.4	3.9	1.6	2.2	15.9	7.3
31	2.3	1.1	0.7	3.6	6.0	3.7	7.0	6.5	4.9	7.9	8.6	11.3	15.1	9.1	8.9	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	-	-
Hourly Max	21.1	21.5	15.8	17.6	16.4	27.0	41.9	52.5	85.5	65.4	49.5	238.0	58.1	183.1	51.3	61.8	44.8	42.7	38.7	44.8	25.5	21.3	22.0	13.9		
Hourly Average	6.8	6.7	6.2	6.4	6.5	7.4	12.4	21.2	23.2	20.6	20.4	26.1	20.1	25.9	17.6	16.6	12.3	9.5	7.2	6.7	5.8	5.8	6.0	6.5		

PO = Power Outage

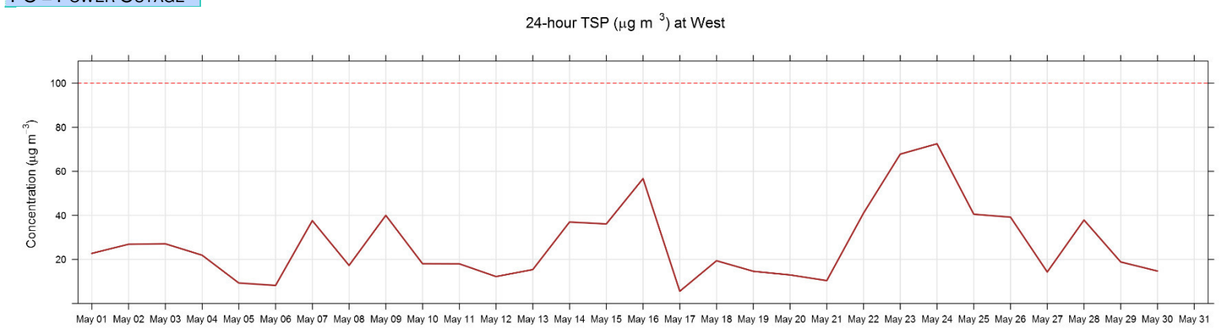


Number of 1HR Exceedances	n/a		Guideline	n/a	UG/M3
Number of Non-Zero Readings	735				
Maximum 1-HR Average	238.0	UG/M3			
Maximum 24-HR Average	40.7	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	735	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	98.8	%
Standard Deviation	16.2		Monthly Average	12.7	UG/M3

West TSP (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	2.7	8.2	2.3	1.8	1.8	2.9	3.1	5.5	7.6	11.6	56.8	103.6	67.6	82.0	50.7	54.2	40.7	11.9	12.6	3.6	3.8	3.2	3.5	3.7	103.6	22.7
2	3.4	3.9	3.7	3.7	4.0	5.5	9.2	51.4	90.2	33.6	59.8	79.9	38.0	49.5	44.5	37.0	40.4	16.8	20.7	12.1	11.4	9.3	7.8	9.0	90.2	26.9
3	6.4	11.9	13.7	10.7	9.6	17.0	44.1	85.6	49.8	35.9	43.5	31.2	31.4	32.0	29.9	28.7	23.5	66.8	14.9	14.7	13.5	14.9	8.2	12.3	85.6	27.1
4	7.2	11.9	14.4	8.2	15.5	11.2	27.3	36.3	20.2	61.2	28.1	52.0	27.7	41.8	41.0	38.0	12.7	23.7	13.7	11.3	9.6	6.4	3.7	3.0	61.2	21.9
5	3.8	5.0	4.8	4.9	4.6	2.4	2.6	10.0	11.8	26.9	27.7	9.3	15.6	32.4	17.8	9.2	5.2	7.2	2.5	1.8	1.8	4.1	7.8	3.5	32.4	9.3
6	8.5	3.2	3.2	2.5	6.1	2.6	3.2	13.6	10.4	11.8	13.0	16.1	16.6	15.3	15.0	8.7	5.0	11.0	5.6	3.6	4.7	2.7	7.3	6.8	16.6	8.2
7	6.3	5.7	4.8	5.5	5.0	20.8	38.1	95.4	132.5	99.8	78.9	63.3	91.9	51.2	32.7	64.0	33.6	30.8	11.9	5.4	9.5	8.5	3.2	3.4	132.5	37.6
8	6.6	9.2	10.9	3.0	1.4	1.2	4.0	26.0	36.4	48.7	26.7	36.6	43.8	41.0	31.7	21.3	29.5	15.7	5.9	1.6	1.9	3.9	2.4	4.9	48.7	17.3
9	2.8	2.9	2.5	3.9	44.8	72.6	116.0	101.0	90.9	112.2	68.6	64.5	101.4	105.6	39.2	7.5	3.6	3.6	3.8	3.0	1.9	2.2	2.8	2.6	116.0	40.0
10	3.8	3.5	4.2	4.3	3.9	3.4	3.9	4.6	13.1	34.0	65.9	71.6	62.2	94.5	27.8	21.2	3.2	1.7	1.3	1.1	1.6	0.8	0.7	0.7	94.5	18.0
11	0.5	1.7	1.9	1.9	1.6	1.4	0.9	3.1	3.6	11.3	15.0	46.6	72.6	81.6	68.2	47.2	38.3	8.7	7.6	3.9	3.5	3.4	3.4	3.9	81.6	18.0
12	4.1	3.7	3.7	3.7	3.3	3.4	3.7	35.3	34.5	18.8	20.1	23.5	15.3	14.7	14.9	11.8	22.7	14.3	6.4	5.5	5.3	6.3	6.8	11.2	35.3	12.2
13	9.8	8.4	3.7	3.6	3.5	4.2	4.0	7.6	22.4	12.5	25.0	22.7	31.6	19.2	28.9	12.5	17.4	34.9	22.1	23.7	13.9	12.0	11.8	13.8	34.9	15.4
14	15.6	11.4	14.5	8.0	32.1	7.2	42.4	80.1	59.2	57.3	82.1	63.4	35.1	79.1	65.0	27.1	43.2	23.6	14.6	18.0	32.4	33.6	16.3	25.5	82.1	37.0
15	7.2	6.6	9.7	10.2	9.1	11.3	57.7	117.2	128.3	101.8	70.7	40.3	33.1	34.4	43.3	38.9	32.4	19.3	18.8	19.2	6.7	8.6	25.9	15.5	128.3	36.1
16	13.4	8.1	6.2	6.6	11.9	11.1	14.5	41.2	54.3	65.0	110.9	102.7	88.9	96.1	108.8	149.6	84.6	76.8	68.1	106.9	57.3	38.1	29.8	9.1	149.6	56.7
17	9.4	9.2	10.2	11.4	10.7	10.1	12.2	9.6	10.4	6.3	7.0	4.6	3.4	2.6	3.0	2.7	2.8	2.3	0.9	1.1	1.0	0.9	0.6	0.5	12.2	5.5
18	1.0	1.2	1.6	1.4	1.5	1.2	1.6	2.0	3.3	28.6	56.2	58.9	82.2	66.8	42.3	65.6	12.1	7.6	5.3	5.1	3.8	4.4	5.9	5.8	82.2	19.4
19	5.5	5.6	5.3	4.9	4.6	4.4	4.4	14.2	17.3	15.1	5.0	13.2	20.2	50.6	42.6	61.5	21.5	10.8	9.0	5.6	12.2	6.5	5.2	5.4	61.5	14.6
20	5.2	6.6	5.8	5.2	4.5	4.2	3.8	9.0	28.3	51.9	16.5	19.4	12.2	17.2	20.2	27.0	14.9	13.7	13.5	6.7	4.0	8.3	6.8	5.9	51.9	12.9
21	6.3	5.1	2.6	2.6	2.2	2.5	3.3	6.2	17.2	25.8	20.4	14.0	6.3	22.5	5.8	20.3	13.9	10.9	10.4	28.2	6.9	5.2	4.6	5.7	28.2	10.4
22	9.3	3.9	2.3	3.1	3.2	2.9	36.1	88.7	115.5	152.2	86.1	76.6	79.0	78.1	94.9	58.3	35.5	15.2	10.4	6.3	6.0	6.6	4.9	9.2	152.2	41.0
23	10.6	9.4	9.0	24.4	18.3	13.7	43.7	97.4	163.4	128.1	95.5	227.3	85.5	270.5	128.1	113.9	88.9	24.4	28.9	10.5	6.1	9.1	10.2	10.0	270.5	67.8
24	7.3	13.8	30.5	23.4	16.2	93.1	76.1	117.3	295.1	149.9	157.2	120.3	124.1	100.0	150.3	60.4	75.9	66.2	16.9	12.9	8.9	7.5	4.9	11.9	295.1	72.5
25	17.9	33.1	10.3	12.2	28.9	24.1	65.1	153.5	124.3	84.8	76.9	45.5	45.2	41.6	31.6	30.5	30.5	71.5	10.1	3.4	4.5	7.1	9.3	10.5	153.5	40.5
26	14.5	18.0	62.3	42.9	12.1	3.9	25.5	135.3	120.6	65.4	104.0	36.8	41.6	62.1	40.5	30.2	17.9	12.5	11.9	20.5	21.6	17.1	8.1	15.1	135.3	39.2
27	4.3	9.1	8.0	26.1	20.1	5.7	12.8	26.1	34.3	13.7	24.3	29.6	23.9	10.5	11.8	14.3	5.1	12.1	10.5	11.2	4.6	6.2	7.8	10.7	34.3	14.3
28	4.9	6.2	28.9	14.9	24.8	33.6	40.7	126.4	124.8	86.2	73.8	45.7	35.4	96.6	33.5	28.6	28.2	19.1	14.1	11.5	8.5	7.3	7.4	8.0	126.4	37.9
29	75.9	84.9	31.5	99.4	45.2	3.8	7.3	3.0	2.0	1.8	2.5	4.3	7.7	10.3	14.3	11.0	11.7	11.2	6.5	5.5	4.5	3.6	2.3	1.8	99.4	18.8
30	1.6	1.9	2.7	1.4	2.6	3.1	13.3	11.9	4.7	7.2	29.1	26.8	45.1	51.1	30.3	39.6	30.3	13.4	12.5	8.6	6.6	6.4	1.1	1.5	51.1	14.7
31	1.5	0.7	0.4	3.0	5.0	2.6	7.0	6.3	3.5	6.2	6.4	8.5	13.9	7.5	6.8	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	**PO**	-	-
Hourly Max	75.9	84.9	62.3	99.4	45.2	93.1	116.0	153.5	295.1	152.2	157.2	227.3	124.1	270.5	150.3	149.6	88.9	76.8	68.1	106.9	57.3	38.1	29.8	25.5		
Hourly Average	9.0	10.1	10.2	11.6	11.6	12.5	23.5	49.1	59.0	50.5	50.1	50.3	45.1	56.7	42.4	38.0	27.5	21.9	13.0	12.4	9.3	8.5	7.4	7.7		

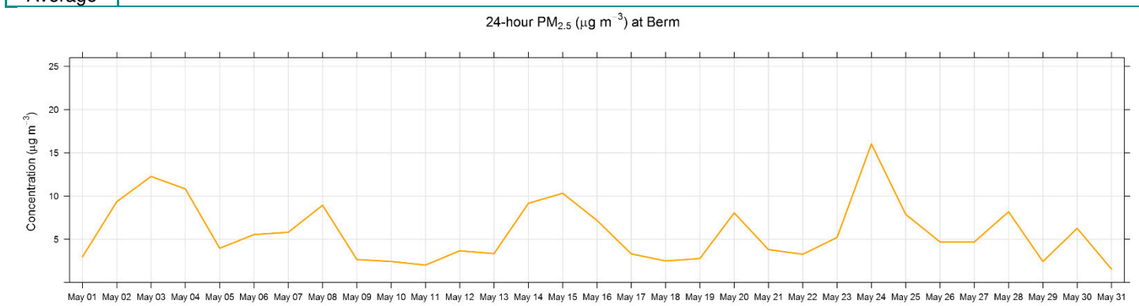
PO = POWER OUTAGE



Number of 24HR Exceedances	0		Guideline	100	UG/M3
Number of Non-Zero Readings	735				
Maximum 1-HR Average	295.1	UG/M3			
Maximum 24-HR Average	72.5	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	735	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	98.8	%
Standard Deviation	35.1		Monthly Average	26.7	UG/M3

Berm $PM_{2.5}$ (µg/m^3) – May 2018

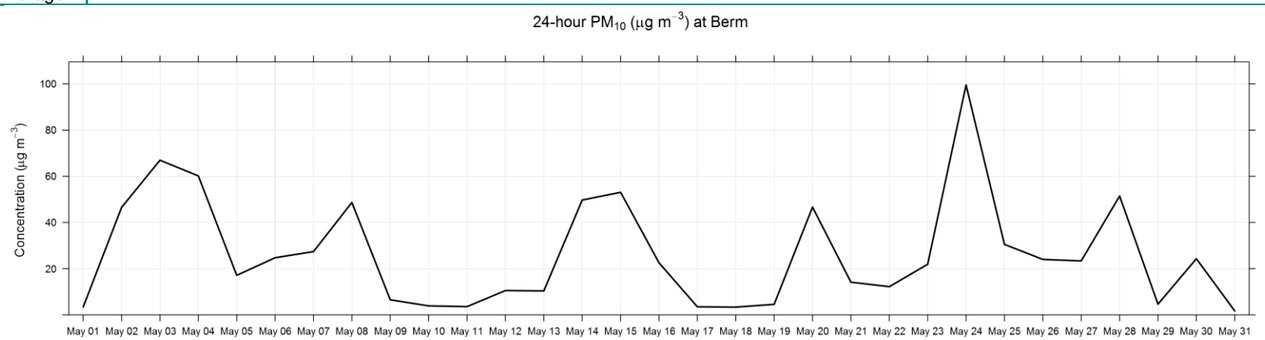
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	1.5	1.9	1.6	1.4	1.5	2.7	3.8	4.3	4.7	4.6	4.3	4.4	3.8	3.8	3.3	3.1	3.1	3.1	2.3	2.5	2.3	2.2	2.4	2.6	4.7	3.0
2	2.8	3.2	3.2	3.5	3.6	3.7	4.1	4.5	5.9	8.6	13.4	14.2	20.0	16.4	23.3	19.6	16.3	23.8	11.4	5.7	4.0	6.4	2.7	4.1	23.8	9.3
3	4.1	3.2	3.5	3.5	3.7	4.1	4.3	5.8	9.3	19.9	26.2	21.6	47.4	43.7	21.9	20.8	12.6	7.7	9.5	4.9	3.5	5.6	4.7	2.9	47.4	12.3
4	2.9	3.5	3.0	2.8	2.2	3.3	2.1	2.2	5.7	7.5	15.7	50.7	28.4	30.1	19.2	12.9	21.0	23.4	7.3	7.4	3.7	1.6	1.5	1.5	50.7	10.8
5	1.6	1.9	2.2	2.0	1.9	1.9	1.8	1.9	3.2	2.6	2.1	5.7	2.3	15.3	19.3	8.6	5.8	5.9	2.0	1.1	1.0	1.1	2.1	1.6	19.3	4.0
6	1.8	1.8	1.7	1.8	2.2	2.1	3.2	13.0	9.2	14.0	9.7	8.6	10.1	7.2	7.5	7.7	5.1	5.2	11.1	2.2	1.4	1.5	2.4	2.4	14.0	5.5
7	2.3	2.2	2.3	2.1	2.8	2.4	3.5	8.7	13.2	12.8	15.7	7.8	3.0	2.7	5.4	3.1	2.7	4.3	8.0	10.7	8.0	5.1	6.1	4.4	15.7	5.8
8	18.0	10.3	8.8	3.1	2.9	1.2	2.1	1.4	5.9	19.8	21.1	19.1	12.7	17.1	15.2	18.2	11.2	13.1	7.0	1.3	1.1	1.1	1.1	1.4	21.1	8.9
9	2.2	2.1	2.4	1.9	3.4	4.3	4.9	3.8	4.5	4.2	4.6	4.0	5.1	4.6	2.2	1.4	1.1	0.9	0.8	0.5	0.6	1.0	1.5	1.6	5.1	2.6
10	2.2	3.0	3.3	3.1	2.8	2.1	1.8	2.6	2.1	3.4	3.8	2.1	1.5	1.5	1.9	1.6	1.1	0.5	0.5	0.4	0.6	4.7	9.1	2.4	9.1	2.4
11	0.7	1.4	0.9	1.2	1.2	1.0	0.6	1.0	4.0	1.5	1.4	2.0	3.9	3.9	2.9	3.0	3.1	3.2	1.8	1.8	1.8	1.9	1.9	2.0	4.0	2.0
12	2.1	2.2	2.6	2.5	2.7	3.3	3.4	3.3	4.8	6.0	6.0	5.6	11.4	4.9	3.5	4.9	3.7	4.0	1.9	1.9	1.9	1.8	1.7	1.7	11.4	3.7
13	2.2	2.4	1.8	1.8	2.1	2.5	3.7	6.0	9.1	5.5	5.2	3.6	3.4	2.2	1.9	1.9	2.3	2.4	2.5	2.9	3.2	4.5	3.8	3.4	9.1	3.3
14	3.4	3.5	3.3	3.2	3.3	3.2	3.3	4.7	4.3	10.1	23.8	30.1	12.3	18.7	19.7	17.9	12.4	15.3	8.5	3.1	2.8	4.3	4.7	3.7	30.1	9.2
15	2.8	3.4	3.6	3.8	3.9	4.0	4.0	5.9	6.8	6.0	9.3	21.0	29.3	42.7	17.8	17.5	17.9	18.8	9.8	4.7	3.5	3.3	4.0	3.9	42.7	10.3
16	4.5	4.2	4.1	4.3	4.4	4.4	5.0	7.8	10.7	14.8	6.3	5.7	7.3	7.5	7.6	10.5	9.5	9.4	9.5	9.4	6.7	6.1	6.2	6.4	14.8	7.2
17	7.3	7.2	7.5	8.5	7.4	6.6	8.1	6.6	6.3	3.2	2.6	1.6	0.8	0.5	0.4	0.3	0.3	0.3	0.7	1.0	0.6	0.6	0.3	0.6	8.5	3.3
18	1.1	1.5	1.8	1.8	1.9	0.9	0.6	0.8	1.9	3.0	3.4	3.5	4.5	3.8	4.3	3.6	3.4	3.1	2.6	2.5	2.6	2.4	2.4	2.4	4.5	2.5
19	2.3	2.7	2.4	2.7	3.3	3.3	3.1	3.1	3.3	3.7	2.4	2.7	1.7	2.0	2.4	2.6	2.2	2.0	1.7	2.1	3.0	3.8	4.6	3.1	4.6	2.8
20	1.9	1.8	2.1	2.8	2.8	2.5	2.4	2.5	4.7	12.8	13.1	12.6	17.2	21.2	22.9	22.2	13.3	11.0	10.1	5.8	2.0	1.6	1.8	1.9	22.9	8.0
21	2.0	1.8	1.6	1.6	1.5	1.6	1.5	2.6	2.8	3.9	7.4	4.0	7.4	10.4	10.0	3.2	5.6	8.8	3.8	2.6	2.3	1.6	1.6	1.6	10.4	3.8
22	1.6	1.8	1.8	1.9	2.4	2.6	3.2	4.5	6.2	10.2	12.6	2.7	2.3	4.0	2.7	2.0	2.0	1.8	2.2	1.9	1.9	1.9	2.0	2.1	12.6	3.3
23	2.9	3.4	3.3	3.6	3.2	3.6	4.1	8.7	10.1	13.3	10.0	4.8	4.4	9.1	4.2	7.7	2.3	2.6	1.8	3.3	10.4	2.2	2.4	3.6	13.3	5.2
24	5.8	8.1	6.1	3.4	3.2	4.0	4.0	5.4	16.0	17.7	20.9	41.5	32.9	63.1	30.2	43.3	23.4	18.1	9.4	9.8	6.1	4.3	3.3	4.7	63.1	16.0
25	4.0	4.4	5.0	4.9	4.9	4.8	4.8	5.4	5.8	12.1	11.0	9.4	16.9	21.7	22.5	24.5	6.4	4.4	2.8	2.6	2.3	2.9	2.5	3.2	24.5	7.9
26	3.0	3.0	7.4	5.0	4.4	2.4	3.1	4.4	3.8	3.7	3.3	3.2	3.7	5.3	6.3	5.3	8.6	6.3	4.3	11.0	6.1	3.7	2.6	2.5	11.0	4.7
27	2.2	2.7	2.4	2.5	2.6	2.5	2.5	2.9	4.0	7.4	6.8	8.6	4.5	8.5	12.2	7.8	9.9	9.7	6.0	1.5	1.2	1.1	1.4	1.6	12.2	4.7
28	1.8	2.1	2.6	2.4	2.4	2.5	2.8	3.8	15.9	13.0	15.8	24.9	19.4	22.5	15.0	16.8	6.8	9.0	6.5	4.8	1.3	1.8	1.4	1.1	24.9	8.2
29	3.5	3.7	2.7	4.0	2.1	1.0	1.0	1.1	0.9	0.5	0.7	0.8	1.0	2.2	2.5	2.5	3.2	4.4	5.1	4.8	4.1	3.0	1.9	1.6	5.1	2.4
30	1.8	3.2	3.1	3.2	2.8	2.4	2.4	3.9	3.0	2.2	14.2	14.0	10.4	16.2	15.4	12.3	11.9	12.4	5.6	5.6	1.2	1.6	0.4	0.9	16.2	6.3
31	1.5	0.6	0.4	0.9	0.8	0.7	1.0	1.8	2.8	2.8	2.6	3.2	3.1	2.9	2.4	1.8	0.7	1.8	1.1	0.8	1.3	0.9	0.6	0.7	3.2	1.5
Hourly Max	18.0	10.3	8.8	8.5	7.4	6.6	8.1	13.0	16.0	19.9	26.2	50.7	47.4	63.1	30.2	43.3	23.4	23.8	11.4	11.0	10.4	6.4	9.1	6.4		
Hourly Average	3.2	3.2	3.2	2.9	2.9	2.8	3.1	4.3	6.2	8.1	9.5	11.1	10.7	13.4	10.5	9.9	7.4	7.6	5.1	3.9	3.0	2.8	2.7	2.5		



Number of 1HR Exceedances	0		Guideline	80	UG/M3
Number of 24HR Exceedances	0		Guideline	30	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	63.1	UG/M3			
Maximum 24-HR Average	16.0	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	6.9		Monthly Average	5.8	UG/M3

Berm PM_{10} (µg/m^3) – May 2018

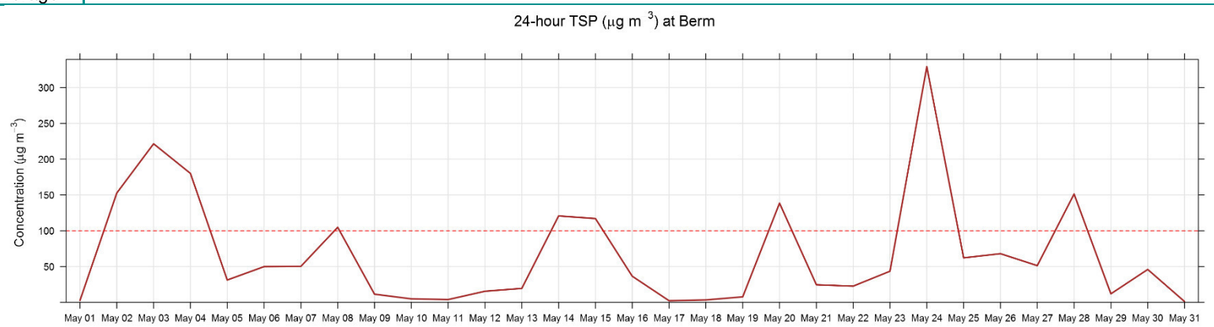
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	2.2	3.0	2.3	1.5	1.6	2.8	4.0	4.5	5.0	4.8	4.4	6.2	4.6	5.6	4.4	3.2	3.3	3.4	2.3	2.6	2.3	2.3	2.5	2.8	6.2	3.4
2	2.9	3.3	3.3	3.7	3.9	3.8	6.1	7.7	20.2	44.4	81.7	70.1	108.8	96.7	141.2	119.0	102.1	148.6	71.8	27.9	12.1	24.3	3.1	10.0	148.6	46.5
3	10.2	3.5	3.9	4.0	4.1	5.3	6.8	18.5	47.4	110.8	150.6	139.4	311.7	273.8	131.1	132.2	81.3	42.8	55.7	24.0	10.6	24.8	11.0	3.7	311.7	67.0
4	3.4	6.1	3.8	4.3	3.8	11.4	6.8	6.8	29.1	41.7	77.5	346.2	168.8	170.6	112.5	75.2	139.3	148.0	41.2	30.1	11.9	2.0	1.8	1.7	346.2	60.2
5	1.8	2.2	2.7	2.2	2.1	2.1	2.1	2.2	11.8	7.6	4.3	40.9	9.1	117.2	98.0	35.6	22.6	31.7	5.2	1.5	1.1	1.2	3.4	2.1	117.2	17.1
6	2.3	2.5	2.0	2.1	4.1	5.3	11.7	60.2	61.9	71.6	47.7	34.3	42.0	38.7	41.1	35.1	26.0	26.7	59.3	6.1	1.9	2.1	4.9	3.9	71.6	24.7
7	3.5	3.3	3.2	2.9	6.0	5.6	12.6	51.3	73.9	72.9	85.5	27.9	11.3	8.9	24.1	12.2	9.9	21.9	47.6	66.5	34.1	24.0	30.1	18.1	85.5	27.4
8	100.2	59.7	41.0	15.0	13.4	3.3	7.6	3.9	32.4	107.5	121.0	127.5	72.3	108.6	86.0	101.3	62.2	59.4	37.0	2.6	1.5	1.2	1.3	1.7	127.5	48.7
9	4.1	4.0	5.3	3.4	7.9	9.9	10.8	12.4	17.0	14.4	17.4	11.9	15.6	9.0	2.6	1.5	1.2	1.0	0.8	0.5	0.7	1.1	1.8	1.7	17.4	6.5
10	2.4	3.3	3.7	3.3	3.1	2.2	1.9	6.7	5.6	8.6	8.9	5.0	2.5	3.2	2.9	2.5	1.3	0.6	0.6	0.5	0.7	7.0	13.6	3.4	13.6	3.9
11	0.8	1.5	1.0	1.4	1.3	1.1	0.6	1.2	5.9	2.0	1.9	2.8	10.2	9.7	7.2	9.0	7.5	7.1	2.4	2.1	2.1	2.2	2.2	2.4	10.2	3.6
12	2.5	2.5	3.2	3.1	3.4	4.5	7.1	8.0	17.8	26.6	19.2	19.4	45.5	19.5	11.3	18.5	12.5	13.8	2.6	2.5	2.3	2.4	2.1	2.0	45.5	10.5
13	3.3	3.6	2.1	2.0	2.4	3.6	11.1	38.0	47.0	25.8	21.2	13.2	10.4	4.5	3.6	3.5	5.1	5.1	4.6	6.6	8.4	10.9	6.8	5.8	47.0	10.4
14	5.9	5.8	5.0	4.8	5.9	4.8	6.8	16.2	15.8	65.3	149.6	224.3	76.2	120.9	116.5	95.6	67.7	96.4	43.1	9.1	7.8	18.1	21.7	10.0	224.3	49.7
15	3.8	5.1	5.9	5.3	5.3	5.4	7.4	17.5	33.0	25.3	50.4	146.6	200.8	288.1	105.1	100.1	92.3	98.4	42.9	14.1	5.0	4.2	6.3	5.6	288.1	53.1
16	7.2	6.1	5.1	5.1	5.3	6.2	11.1	33.9	52.5	79.8	23.7	22.1	38.9	32.6	29.1	39.9	30.8	27.1	24.9	24.1	11.3	9.1	8.5	6.9	79.8	22.6
17	7.8	7.8	8.2	8.9	7.6	6.8	8.3	7.0	6.5	3.3	2.8	1.7	0.8	0.6	0.4	0.4	0.4	0.3	0.7	1.2	0.7	0.7	0.4	0.7	8.9	3.5
18	1.2	1.6	2.1	2.0	2.2	1.0	0.6	1.0	2.3	3.4	4.0	4.5	9.3	6.1	7.9	5.7	5.0	3.9	3.5	2.9	2.9	2.6	2.5	2.5	9.3	3.4
19	2.5	3.1	2.7	2.9	3.6	3.6	3.4	3.7	6.4	11.0	5.7	6.7	2.7	3.5	4.4	4.7	4.1	3.8	3.3	4.0	5.5	6.7	6.8	4.0	11.0	4.5
20	2.2	2.1	2.6	3.6	3.3	2.9	3.1	3.7	19.0	73.1	81.6	73.7	111.1	134.2	152.2	133.5	97.7	77.7	90.2	37.4	5.8	2.9	3.2	2.9	152.2	46.6
21	3.3	2.6	2.0	2.1	1.8	2.0	1.8	7.9	9.5	19.0	37.9	19.8	33.8	45.9	44.0	12.4	22.3	39.2	11.6	7.6	5.6	2.8	2.5	2.2	45.9	14.2
22	2.2	2.5	2.5	3.1	4.9	5.4	9.7	21.2	34.0	52.0	70.8	10.8	8.5	14.5	11.1	6.7	6.3	4.8	6.0	4.3	2.8	2.9	2.9	3.0	70.8	12.2
23	4.8	5.7	5.8	6.8	4.2	8.6	10.9	49.2	56.9	77.6	46.7	21.8	21.8	47.8	23.9	35.1	8.0	11.7	4.5	13.8	37.2	4.3	5.9	12.8	77.6	21.9
24	24.9	27.3	20.0	5.5	4.7	7.9	6.9	18.4	100.5	96.4	117.3	263.1	220.2	425.7	209.5	333.5	170.3	148.4	67.8	64.0	27.9	11.5	5.9	11.4	425.7	99.5
25	5.7	6.4	7.5	6.1	6.6	6.3	9.0	14.5	17.7	61.5	62.6	47.2	99.5	114.8	115.6	77.2	26.9	18.3	6.0	4.0	3.2	5.3	3.6	6.5	115.6	30.5
26	8.0	13.3	50.0	31.6	25.3	9.9	6.1	7.0	8.6	9.1	7.2	6.7	9.1	28.4	32.4	24.6	56.3	43.9	29.0	92.2	46.4	17.1	8.2	5.8	92.2	24.0
27	3.8	5.3	3.8	3.4	3.7	3.0	3.3	5.9	15.3	46.4	40.7	59.8	22.2	47.8	79.7	54.7	66.4	58.1	26.0	3.6	1.8	1.5	1.9	2.3	79.7	23.4
28	2.6	3.0	6.2	4.0	3.3	3.8	5.1	13.6	91.7	95.9	111.3	178.0	141.2	147.4	114.5	125.5	41.7	67.2	40.7	26.7	3.3	4.1	2.8	1.7	178.0	51.5
29	19.1	10.5	4.9	15.4	7.7	1.2	1.2	1.4	1.1	0.5	0.9	0.9	1.3	3.0	3.3	3.2	4.0	5.9	6.7	6.0	5.0	3.5	2.2	1.9	19.1	4.6
30	2.3	4.4	3.6	3.4	3.0	2.9	2.9	5.3	4.0	3.4	64.2	62.9	47.1	78.5	63.6	57.0	60.6	67.7	21.3	20.1	1.9	2.0	0.4	1.0	78.5	24.3
31	1.6	0.6	0.5	0.9	0.8	0.7	1.1	2.0	3.5	3.4	2.7	3.6	3.2	3.1	2.5	1.9	0.7	1.8	1.1	0.9	1.4	0.9	0.6	0.8	3.6	1.7
Hourly Max	100.2	59.7	50.0	31.6	25.3	11.4	12.6	60.2	100.5	110.8	150.6	346.2	311.7	425.7	209.5	333.5	170.3	148.6	90.2	92.2	46.4	24.8	30.1	18.1		
Hourly Average	8.0	6.8	7.0	5.3	5.1	4.6	6.1	14.5	27.5	40.8	49.1	64.5	60.0	77.7	57.5	53.6	39.9	41.4	24.5	16.4	8.6	6.6	5.5	4.6		



Number of 1HR Exceedances	n/a		Guideline	n/a	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	425.7	UG/M3			
Maximum 24-HR Average	99.5	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	47.2		Monthly Average	26.5	UG/M3

Berm TSP (µg/m^3) –May 2018

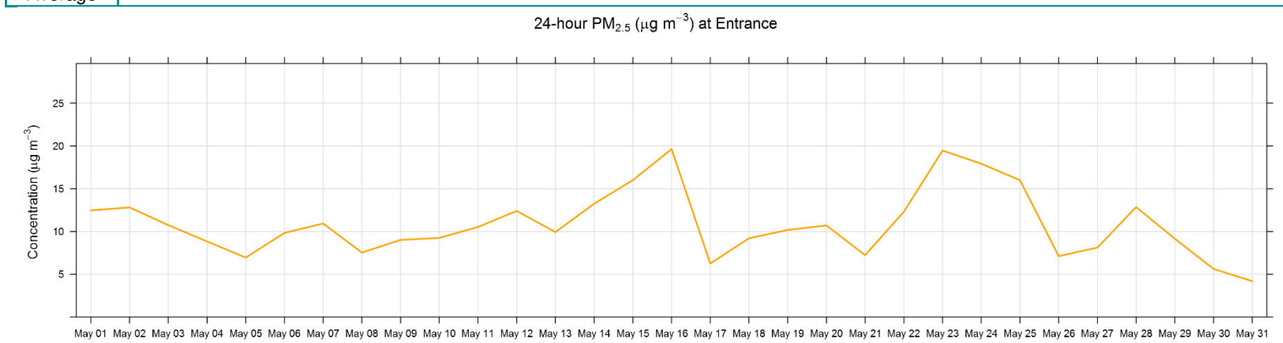
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	3.4	4.5	3.9	1.0	1.0	1.8	2.6	2.9	3.2	3.1	3.1	4.9	3.6	5.1	3.2	2.5	2.2	2.5	1.5	1.8	1.5	1.5	1.6	2.0	5.1	2.7
2	1.9	2.2	2.2	2.5	2.7	2.5	8.7	13.8	55.0	164.8	277.7	232.9	329.0	264.9	438.5	409.9	350.5	556.2	321.1	119.8	36.6	50.5	5.3	15.8	556.2	152.7
3	18.2	4.1	5.2	4.5	4.2	5.8	20.3	39.1	98.5	275.3	421.5	458.8	1133.3	932.2	468.1	468.4	329.1	163.2	210.9	85.6	40.8	99.2	23.8	5.7	1133.3	221.5
4	3.7	10.9	5.6	10.4	13.7	30.3	12.1	15.9	61.8	104.0	187.3	1057.2	528.0	550.9	387.6	237.0	439.4	401.7	147.1	80.3	29.7	1.9	3.5	2.1	1057.2	180.1
5	1.2	1.7	3.2	1.4	2.1	1.6	1.3	1.5	21.3	14.6	6.5	62.9	21.6	242.1	168.7	70.7	38.6	68.3	9.0	1.7	1.0	0.8	4.3	2.3	242.1	31.2
6	4.4	7.6	1.4	1.8	8.7	13.4	34.6	125.5	182.0	134.3	96.7	35.8	62.4	104.8	93.3	58.6	57.0	56.7	87.8	13.6	4.3	2.1	6.5	4.6	182.0	49.9
7	4.6	3.5	7.3	3.8	10.7	8.1	25.0	124.0	151.7	121.0	120.0	37.8	18.1	14.6	35.1	16.5	25.6	42.8	81.3	143.9	65.6	52.2	56.1	37.7	151.7	50.3
8	281.8	154.3	130.0	49.7	36.7	9.7	16.9	5.2	72.2	209.8	264.3	286.4	144.3	213.3	146.5	191.7	113.6	110.5	71.0	3.5	1.5	0.9	0.9	1.2	286.4	104.8
9	3.0	5.4	7.8	2.9	13.2	21.9	18.6	26.8	30.3	32.2	35.5	24.5	28.2	15.2	1.7	1.0	0.8	0.7	0.5	0.4	0.5	0.8	1.3	1.1	35.5	11.4
10	1.5	2.1	2.4	2.1	2.0	1.4	1.2	10.4	9.1	15.2	22.1	8.4	2.2	3.6	4.2	3.0	0.9	0.4	0.4	0.3	0.5	7.0	13.8	3.2	22.1	4.9
11	0.6	1.0	0.7	1.0	0.8	0.7	0.4	0.9	5.9	1.5	1.5	2.4	10.4	14.7	11.5	15.3	7.0	8.5	2.2	1.3	1.4	1.4	1.5	1.6	15.3	3.9
12	1.7	1.6	2.2	2.1	2.4	3.6	10.5	10.4	49.0	52.9	22.9	29.1	52.6	31.0	22.3	28.8	18.7	17.8	1.9	1.9	4.3	1.9	1.4	1.3	52.9	15.5
13	5.3	4.5	1.3	1.6	1.6	2.4	15.7	98.4	107.9	45.8	37.4	16.2	15.6	6.5	4.1	6.3	12.5	6.1	8.1	14.8	23.7	16.2	8.3	7.8	107.9	19.5
14	9.7	6.6	3.9	4.5	14.6	8.6	12.0	56.6	52.3	151.3	362.1	521.1	161.5	309.4	261.5	206.0	174.7	297.9	123.6	18.9	18.2	47.5	54.9	20.0	521.1	120.7
15	4.7	4.8	10.9	9.6	5.6	9.8	17.7	29.2	61.4	42.7	106.5	376.3	518.5	704.8	231.2	212.1	168.6	153.0	85.2	31.5	4.9	3.1	6.5	11.1	704.8	117.1
16	10.6	6.1	6.6	6.0	4.7	4.9	15.4	64.2	80.2	115.6	31.4	30.0	77.7	51.6	52.2	71.5	52.8	36.7	35.2	60.7	25.4	16.4	15.5	4.5	115.6	36.5
17	5.1	5.1	5.4	5.7	4.9	4.4	5.4	4.5	4.2	2.2	1.8	1.1	0.5	0.4	0.3	0.3	0.3	0.2	0.5	0.8	0.5	0.5	0.2	0.5	5.7	2.3
18	0.8	1.0	1.4	1.3	1.4	0.7	0.4	0.7	1.6	2.3	2.6	3.1	10.5	8.3	11.7	11.7	6.1	2.6	4.1	1.9	2.1	1.8	1.6	1.6	11.7	3.4
19	1.6	2.0	1.8	1.9	2.4	2.4	2.4	5.4	41.6	24.1	8.8	9.4	3.6	4.3	9.8	7.9	4.5	8.4	9.2	4.6	6.4	9.2	8.4	5.1	41.6	7.7
20	1.5	1.4	1.8	2.5	2.3	2.0	6.2	3.6	45.4	152.9	191.1	202.7	300.9	375.2	487.7	384.0	343.9	254.7	387.8	142.2	21.9	6.0	2.9	4.1	487.7	138.5
21	6.5	3.7	2.4	1.9	1.4	1.6	2.5	14.8	19.4	35.5	83.7	30.5	49.2	70.2	67.7	18.0	55.8	59.7	20.4	15.9	13.8	9.6	4.6	2.3	83.7	24.6
22	1.9	10.4	3.2	4.5	11.0	10.8	20.3	47.8	72.0	72.6	100.6	18.0	18.8	35.5	35.2	26.8	14.8	10.8	9.9	6.0	4.5	3.4	2.8	2.3	100.6	22.7
23	6.6	8.1	9.2	14.9	4.0	22.5	18.5	144.5	136.0	146.0	81.6	36.0	46.2	80.4	62.8	70.6	18.5	29.0	5.6	19.4	46.5	9.2	8.6	18.5	146.0	43.5
24	36.6	43.7	34.8	15.0	9.2	22.8	16.9	46.7	274.9	208.1	247.7	796.6	700.4	1421.9	791.5	1316.6	690.6	618.3	264.3	219.2	77.7	21.9	6.8	18.0	1421.9	329.2
25	5.2	14.3	10.5	6.5	8.5	8.6	24.4	32.0	27.4	99.1	132.0	93.9	220.5	257.0	298.9	132.1	43.9	31.0	9.2	4.0	3.7	13.7	4.2	11.3	298.9	62.2
26	16.3	38.1	172.6	97.6	56.1	25.8	11.5	14.0	28.9	21.3	18.7	11.1	16.4	64.8	69.9	53.7	160.9	127.8	87.3	320.1	143.4	48.6	19.2	7.6	320.1	68.0
27	5.1	6.5	6.1	4.4	6.1	2.5	5.7	10.6	27.7	100.8	97.3	161.7	44.0	88.2	156.4	140.7	179.8	132.6	42.6	5.5	1.5	1.6	1.6	2.1	179.8	51.3
28	4.5	5.3	18.5	10.0	5.5	8.2	7.3	23.4	266.2	313.7	274.1	541.9	421.5	423.1	342.0	388.0	127.3	217.1	122.2	84.0	9.9	7.2	8.2	2.6	541.9	151.3
29	88.4	28.4	14.3	90.2	26.6	0.9	0.9	1.0	0.8	0.3	0.6	0.6	1.0	2.7	2.6	2.3	2.9	4.7	5.0	4.2	3.4	2.3	1.5	1.4	90.2	12.0
30	1.7	3.5	2.4	2.2	2.0	2.0	1.9	4.8	3.3	3.0	123.6	120.5	107.6	170.6	122.0	123.5	115.0	131.5	28.1	28.7	2.6	1.4	0.3	0.6	170.6	46.0
31	1.0	0.4	0.3	0.6	0.5	0.5	0.9	1.4	3.0	2.8	1.8	2.5	2.1	2.1	1.6	1.2	0.5	1.2	0.7	0.6	0.9	0.6	0.4	0.5	3.0	1.2
Hourly Max	281.8	154.3	172.6	97.6	56.1	30.3	34.6	144.5	274.9	313.7	421.5	1057.2	1133.3	1421.9	791.5	1316.6	690.6	618.3	387.8	320.1	143.4	99.2	56.1	37.7		
Hourly Average	17.4	12.7	15.5	11.7	8.6	7.8	10.9	31.6	64.3	86.1	108.5	168.2	162.9	208.7	154.5	150.9	114.7	114.6	70.5	46.4	19.3	14.2	8.9	6.5		



Number of 24HR Exceedances	9		Guideline	100	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	1421.9	UG/M3			
Maximum 24-HR Average	329.2	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	147.9		Monthly Average	67.3	UG/M3

Entrance $PM_{2.5}$ (µg/m^3) – May 2018

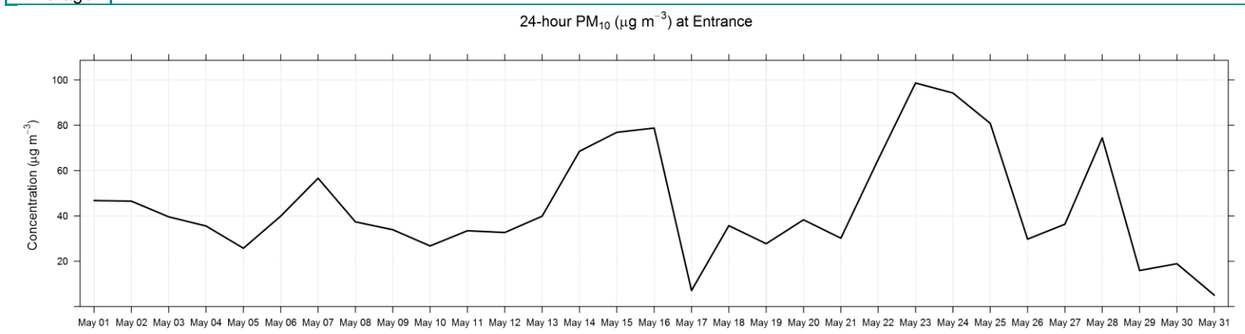
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	4.0	8.3	5.4	3.0	3.0	5.6	7.7	8.9	9.1	9.2	12.1	40.3	28.7	28.6	26.6	14.4	16.1	14.5	11.2	6.7	8.1	12.7	6.9	8.4	40.3	12.5
2	6.8	7.7	8.7	11.0	13.2	14.2	16.3	17.1	18.4	22.8	16.6	15.5	13.6	12.7	18.4	10.3	10.4	13.1	9.3	6.2	5.9	5.3	7.9	26.3	26.3	12.8
3	9.5	7.1	6.9	9.1	11.2	14.8	15.0	15.7	13.9	13.5	13.5	14.0	22.8	17.1	11.2	12.1	9.1	7.5	5.6	4.6	4.7	5.3	5.6	8.3	22.8	10.7
4	10.7	10.9	7.9	10.5	8.4	4.6	6.8	16.4	12.2	12.1	11.1	14.4	11.8	12.0	8.1	7.7	5.7	7.9	5.1	4.0	4.8	8.6	6.0	4.8	16.4	8.8
5	5.9	5.2	5.8	7.3	9.8	10.5	9.4	13.9	9.5	11.0	5.5	6.0	7.0	6.3	5.9	3.9	3.4	3.5	3.3	2.6	2.6	8.5	11.5	8.8	13.9	7.0
6	14.2	15.1	17.5	17.5	12.1	12.1	18.6	17.8	12.0	10.3	8.7	5.5	5.9	6.0	4.4	4.8	2.9	4.2	5.0	4.7	5.0	5.4	13.0	13.6	18.6	9.8
7	13.1	11.8	12.1	8.7	9.3	9.0	11.7	12.6	13.9	15.6	11.3	11.5	13.8	12.7	12.8	10.4	10.6	21.5	7.3	5.7	6.2	6.3	6.4	8.3	21.5	10.9
8	8.2	7.9	3.5	3.5	3.7	18.1	8.1	14.1	11.5	9.8	8.2	9.6	7.7	6.4	5.9	5.3	3.9	3.2	4.2	11.7	3.7	5.7	5.3	11.5	18.1	7.5
9	7.2	8.7	9.4	6.0	11.7	15.5	17.7	13.9	16.7	13.9	13.1	12.5	14.4	14.4	5.9	5.5	3.8	1.7	1.8	2.3	5.6	4.2	5.2	5.3	17.7	9.0
10	5.8	6.4	7.6	10.0	13.4	23.4	12.3	13.6	17.3	20.3	11.0	10.4	8.5	8.3	14.7	3.6	3.2	0.8	1.9	1.8	3.3	6.5	11.1	6.5	23.4	9.2
11	5.6	10.0	6.0	5.1	2.7	2.9	2.1	3.2	4.0	3.8	14.1	33.1	37.7	35.9	15.6	8.9	11.3	8.2	7.6	6.6	4.5	7.7	9.4	6.6	37.7	10.5
12	12.1	18.4	20.4	19.4	26.7	19.8	19.0	22.4	14.8	16.5	13.5	6.6	6.9	7.1	5.4	4.9	6.4	5.7	7.4	4.3	6.0	12.4	11.7	9.8	26.7	12.4
13	9.6	12.9	11.1	9.6	11.0	21.5	19.6	29.3	9.7	6.1	7.5	6.3	5.2	5.7	5.6	6.6	7.8	10.2	7.3	6.3	6.5	7.4	7.9	7.9	29.3	9.9
14	7.3	14.3	13.7	12.6	18.1	20.9	23.1	23.3	29.8	21.2	15.8	16.7	13.1	12.3	12.8	9.0	7.1	7.1	6.8	4.9	6.2	7.4	7.0	7.7	29.8	13.2
15	7.6	17.9	9.4	9.0	12.9	15.7	22.0	35.6	36.8	30.1	18.7	21.1	15.9	21.1	16.1	15.7	9.8	7.0	7.5	8.2	8.8	10.1	13.4	13.3	36.8	16.0
16	13.9	12.3	13.8	12.9	15.2	19.4	21.9	24.1	16.2	17.6	22.4	21.7	26.5	19.6	27.9	24.2	23.3	27.0	33.1	21.2	15.9	13.6	14.4	13.3	33.1	19.6
17	13.8	13.8	13.8	16.2	14.5	12.5	14.6	11.0	11.3	7.0	5.8	3.8	2.0	1.4	1.1	1.1	1.0	0.6	0.8	0.7	0.7	1.0	0.8	1.3	16.2	6.3
18	2.4	2.4	3.1	2.9	3.1	2.2	1.8	1.6	3.7	5.9	15.3	21.4	34.2	17.1	22.9	12.8	18.6	8.1	7.9	7.3	6.9	5.1	5.1	9.1	34.2	9.2
19	4.9	14.7	13.4	22.2	20.4	19.9	14.0	17.1	16.1	10.7	5.5	6.8	6.3	9.6	6.4	5.0	6.9	7.0	4.7	8.7	5.1	5.5	4.4	9.0	22.2	10.2
20	7.8	5.3	9.6	15.5	12.2	8.8	14.6	34.5	17.1	8.2	9.1	15.1	13.1	9.3	10.4	7.7	12.8	14.2	3.5	3.2	2.5	3.0	8.1	11.5	34.5	10.7
21	9.4	9.0	7.0	9.0	5.8	6.0	8.7	19.2	12.7	11.7	8.7	9.2	4.5	3.1	4.2	2.6	5.2	3.5	2.4	8.0	6.5	6.4	4.3	6.5	19.2	7.2
22	7.5	8.3	9.1	18.0	12.9	9.3	21.8	29.1	22.7	14.2	14.6	12.6	7.9	8.9	12.3	7.1	5.7	4.9	7.7	12.7	20.6	5.4	9.6	12.4	29.1	12.3
23	23.6	40.3	45.0	19.1	28.2	23.9	37.7	35.0	30.1	14.5	17.6	14.5	12.6	15.1	16.9	12.4	12.7	5.9	4.9	6.2	9.1	6.2	18.4	17.1	45.0	19.5
24	8.8	10.5	16.8	15.9	27.1	21.0	27.1	46.0	27.0	12.5	10.0	16.8	19.9	24.4	23.0	34.2	13.3	11.4	9.8	9.4	6.6	9.3	13.2	16.3	46.0	17.9
25	11.8	19.7	18.4	26.0	24.4	24.8	37.0	48.6	23.0	9.0	10.1	7.9	7.0	6.4	7.8	6.8	8.9	15.4	9.9	8.1	11.0	14.8	12.6	14.5	48.6	16.0
26	8.3	4.9	3.5	2.3	5.2	10.5	11.5	17.6	14.2	8.5	12.4	7.7	8.1	5.6	5.1	4.4	4.6	6.0	7.4	5.1	4.6	4.2	4.3	5.1	17.6	7.1
27	8.0	12.3	9.7	9.4	10.2	10.9	17.6	19.0	17.1	7.1	7.0	7.7	5.7	3.7	6.0	5.2	4.9	2.4	3.8	4.1	4.6	4.9	6.9	6.7	19.0	8.1
28	13.8	18.5	25.3	27.1	15.4	15.7	17.8	26.2	18.1	12.3	13.7	12.0	12.0	9.4	13.0	15.8	7.8	7.1	6.7	3.2	3.0	5.3	5.5	3.6	27.1	12.9
29	7.1	6.3	5.3	6.0	3.9	2.2	2.4	2.5	2.0	2.1	2.2	2.1	10.1	20.9	22.3	24.6	21.1	18.6	18.6	10.0	8.8	8.1	6.4	6.2	24.6	9.2
30	3.3	4.6	6.0	6.2	6.0	8.8	8.1	7.7	10.9	7.6	8.7	4.9	7.0	4.9	6.8	6.1	5.6	6.2	4.0	3.3	2.6	3.2	1.0	1.6	10.9	5.6
31	4.4	2.8	1.2	2.4	2.7	4.2	6.7	5.9	5.0	5.6	6.4	6.0	6.0	9.2	4.7	4.2	2.9	3.8	2.6	2.6	4.7	3.3	2.1	1.3	9.2	4.2
Hourly Max	23.6	40.3	45.0	27.1	28.2	24.8	37.7	48.6	36.8	30.1	22.4	40.3	37.7	35.9	27.9	34.2	23.3	27.0	33.1	21.2	20.6	14.8	18.4	26.3		
Hourly Average	8.9	11.2	11.2	11.4	12.1	13.2	15.2	19.4	15.4	11.9	11.3	12.7	12.8	12.1	11.6	9.6	8.6	8.3	7.1	6.3	6.3	6.9	7.9	9.1		



Number of1HR Exceedances	0		Guideline	80	UG/M3
Number of 24HR Exceedances	0		Guideline	30	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	48.6	UG/M3			
Maximum 24-HR Average	19.6	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	7.4		Monthly Average	10.9	UG/M3

Entrance PM_{10} (µg/m^3) – May 2018

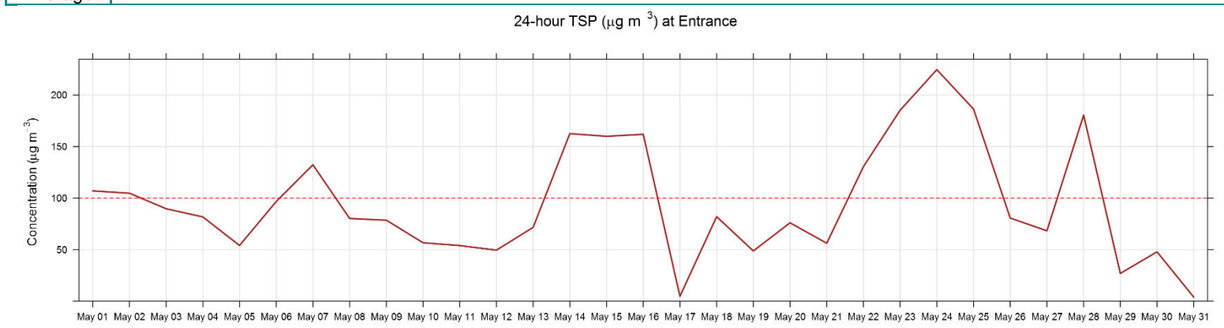
Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	11.0	27.3	15.3	4.0	3.5	6.2	9.0	10.6	10.8	11.0	32.2	222.5	180.2	146.2	148.8	55.0	62.7	68.5	40.5	7.9	10.3	18.4	9.3	11.5	222.5	46.8
2	9.0	10.4	12.3	16.1	19.2	20.6	50.3	75.3	99.2	130.1	88.1	80.4	61.9	56.5	85.9	36.2	40.4	55.3	32.8	13.5	10.8	7.4	22.5	81.9	130.1	46.5
3	26.1	14.1	10.3	18.9	32.6	60.0	57.9	61.5	44.7	54.5	57.1	62.7	123.7	91.4	48.6	50.7	35.9	24.8	15.8	10.9	9.1	9.8	9.3	20.0	123.7	39.6
4	32.7	32.4	20.2	41.3	24.5	12.1	28.0	90.6	57.4	64.0	57.4	79.4	61.7	55.6	33.6	24.9	16.5	24.5	14.0	8.3	11.1	32.5	21.2	9.5	90.6	35.6
5	18.1	12.2	12.6	20.1	30.4	42.7	38.5	59.1	39.5	50.2	17.9	20.3	29.7	25.7	26.3	10.6	11.3	12.2	11.2	5.8	5.0	41.0	41.9	35.4	59.1	25.7
6	61.6	60.2	68.5	65.0	36.2	37.2	83.0	85.5	48.0	39.0	28.1	14.4	17.9	26.0	19.3	21.8	8.0	17.4	19.9	17.9	22.2	24.2	67.4	69.7	85.5	39.9
7	59.4	67.4	75.5	29.3	40.7	37.0	51.5	62.2	76.1	89.6	66.2	64.9	80.4	73.7	64.2	54.4	58.0	148.3	31.3	24.7	28.3	21.9	23.2	30.6	148.3	56.6
8	41.3	37.8	11.2	12.5	11.2	87.3	47.2	84.6	67.6	49.9	51.8	54.4	45.6	33.6	29.2	23.7	15.4	10.3	17.4	55.9	11.1	24.1	18.5	55.2	87.3	37.4
9	19.4	26.0	29.2	15.4	47.6	71.7	71.1	68.4	86.4	67.1	68.7	56.9	75.9	56.1	8.0	7.1	4.9	1.9	2.0	3.1	8.2	5.6	6.9	6.5	86.4	33.9
10	6.4	7.0	9.4	14.0	19.7	35.0	18.3	25.3	94.9	98.1	44.6	55.2	39.1	42.1	73.6	8.2	4.3	0.9	2.5	2.5	4.7	9.8	16.7	9.7	98.1	26.8
11	8.3	14.9	8.8	7.0	3.1	3.5	2.4	4.3	5.6	5.3	29.6	74.0	186.7	190.2	68.7	29.5	43.2	29.8	25.5	18.1	7.5	14.0	13.6	9.4	190.2	33.5
12	17.9	27.6	30.6	29.1	40.1	29.7	61.0	93.9	60.5	66.7	48.5	19.3	19.1	23.4	18.0	12.8	26.2	20.0	29.6	7.9	15.4	23.1	33.6	30.6	93.9	32.7
13	33.9	56.4	40.6	35.1	37.1	97.1	91.1	159.7	35.9	14.6	21.6	21.3	19.8	22.1	22.6	27.8	34.6	47.4	28.5	20.2	19.9	21.7	21.9	25.9	159.7	39.9
14	18.7	54.4	45.9	44.1	89.1	110.9	148.0	149.1	198.5	129.2	94.7	112.9	79.5	74.1	79.8	47.9	33.6	30.8	23.8	11.4	18.1	16.9	13.7	19.4	198.5	68.5
15	20.4	78.8	27.6	23.7	42.1	66.4	114.4	224.1	206.7	161.0	95.2	148.6	85.6	131.7	86.8	85.1	45.5	20.3	20.7	22.2	21.2	29.5	45.5	42.3	224.1	76.9
16	52.5	34.4	37.1	32.5	44.6	65.8	86.4	104.0	59.7	78.0	99.2	118.8	148.2	101.3	154.3	122.4	95.6	122.4	154.5	70.3	39.5	25.4	27.3	16.0	154.5	78.8
17	15.8	16.0	15.9	18.1	15.8	13.5	16.0	12.2	12.3	7.9	6.6	4.4	2.5	1.7	1.4	1.4	1.2	0.8	0.9	0.9	0.8	1.2	0.9	1.6	18.1	7.1
18	2.9	2.8	3.8	3.3	3.7	2.6	1.9	1.8	4.7	8.2	58.8	113.9	175.1	85.3	111.4	51.7	102.5	24.6	27.0	24.7	20.2	7.8	6.2	12.1	175.1	35.7
19	5.7	21.8	19.5	33.3	30.5	29.9	44.0	69.2	65.4	33.8	15.1	28.2	26.6	54.2	25.3	14.1	27.6	22.0	13.9	38.1	11.3	14.0	8.7	13.4	69.2	27.7
20	10.3	7.2	13.9	23.3	18.0	12.9	59.2	175.6	73.5	26.7	31.4	77.8	51.1	39.6	40.4	32.9	60.4	61.8	12.8	9.1	4.8	5.8	26.3	43.9	175.6	38.3
21	34.2	36.9	26.7	29.6	18.4	19.1	37.3	110.6	73.7	46.4	30.9	41.4	20.2	12.4	18.3	10.1	20.6	13.2	10.6	36.6	21.5	24.6	12.1	18.9	110.6	30.2
22	23.0	29.5	36.9	81.9	55.9	29.0	126.8	166.9	145.2	93.9	79.9	70.8	50.8	54.1	83.7	40.4	27.8	19.2	37.7	76.2	125.4	16.7	33.0	52.9	166.9	64.9
23	109.2	200.5	244.4	75.3	115.1	93.8	197.4	167.5	139.4	60.3	94.7	85.8	79.4	103.8	116.8	80.8	87.8	25.9	22.0	26.1	46.8	24.2	95.9	73.7	244.4	98.6
24	27.5	38.6	77.2	59.1	124.8	95.2	141.5	267.7	171.5	75.9	59.5	113.1	132.6	153.5	138.0	212.0	55.9	53.2	39.9	34.3	14.5	35.9	60.9	79.2	267.7	94.2
25	40.0	95.5	84.3	151.0	139.8	120.9	217.0	314.3	118.8	38.5	49.5	37.4	34.2	31.0	41.6	30.2	37.5	97.8	42.0	19.3	24.1	32.1	54.7	89.0	314.3	80.8
26	36.3	18.8	11.2	4.3	27.1	79.6	44.1	64.8	66.0	29.7	61.9	29.0	28.5	28.4	25.6	16.8	18.7	26.1	35.8	19.4	13.4	7.7	7.3	13.2	79.6	29.7
27	31.0	48.6	36.8	37.4	41.1	41.4	78.3	138.4	95.5	22.5	23.0	30.8	20.1	20.3	25.2	18.9	18.4	9.7	15.3	18.9	18.5	23.4	32.2	26.6	138.4	36.3
28	68.0	96.2	154.8	147.1	71.9	84.0	98.2	169.2	103.8	66.7	104.0	89.2	81.0	53.9	79.3	102.3	45.2	36.0	40.6	13.7	11.1	29.9	25.9	14.9	169.2	74.5
29	37.2	19.7	11.1	21.9	14.5	3.0	3.2	3.4	2.5	2.7	2.8	2.8	15.0	31.4	33.4	36.9	31.5	27.7	27.5	13.4	11.8	10.3	8.9	9.1	37.2	15.9
30	4.4	6.2	7.2	6.7	6.7	11.7	11.3	11.2	16.1	22.0	37.9	17.1	40.4	27.7	47.8	50.9	42.9	36.0	22.4	14.0	6.8	3.9	1.1	1.7	50.9	18.9
31	4.8	3.1	1.3	2.5	2.9	5.5	9.5	7.8	6.3	7.1	7.6	7.1	6.8	12.7	5.5	5.2	3.4	3.9	2.8	2.7	5.3	3.5	2.3	1.4	12.7	5.0
Hourly Max	109.2	200.5	244.4	151.0	139.8	120.9	217.0	314.3	206.7	161.0	104.0	222.5	186.7	190.2	154.3	212.0	102.5	148.3	154.5	76.2	125.4	41.0	95.9	89.0		
Hourly Average	28.6	38.8	38.7	35.6	39.0	46.0	65.9	98.0	73.7	53.2	50.5	63.1	65.1	60.0	56.8	42.7	36.0	35.2	26.5	20.9	18.7	18.3	24.8	29.8		



Number of 1HR Exceedances	n/a		Guideline	n/a	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	314.3	UG/M3			
Maximum 24-HR Average	98.6	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	44.1		Monthly Average	44.4	UG/M3

Entrance TSP (µg/m^3) – May 2018

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily Max	24-hour Average
1	19.7	39.8	22.2	3.2	2.4	4.0	5.9	7.1	7.6	15.6	73.3	587.8	365.0	380.8	379.8	127.6	151.0	218.0	103.9	6.6	9.2	19.6	7.8	10.1	587.8	107.0
2	6.8	8.3	10.1	15.0	18.5	20.4	126.1	175.9	261.6	287.8	212.7	178.9	159.1	172.5	196.3	77.7	95.9	145.2	90.3	40.5	28.8	23.8	48.5	112.8	287.8	104.7
3	48.8	28.3	24.3	39.7	62.2	142.7	118.4	111.1	72.3	99.9	122.2	140.5	343.5	247.7	107.2	125.3	97.0	49.8	38.5	26.3	34.5	14.7	21.7	34.2	343.5	89.6
4	49.4	75.2	37.2	66.0	38.9	41.0	56.1	171.9	95.7	135.9	169.4	203.9	167.5	140.7	109.2	75.3	63.8	50.1	40.6	20.2	24.9	49.0	53.7	25.4	203.9	81.7
5	38.7	25.3	26.7	37.5	60.2	96.8	69.4	97.0	64.6	117.9	50.5	37.5	69.6	70.6	50.8	32.9	32.0	31.0	48.0	32.8	13.5	50.1	61.2	80.3	117.9	54.0
6	129.8	130.5	144.0	141.3	72.3	78.0	229.2	198.3	91.6	67.5	47.9	19.8	28.1	68.1	66.9	62.7	24.3	32.0	34.0	60.6	69.3	90.4	203.7	229.7	229.7	96.7
7	144.8	222.3	254.8	53.8	123.0	83.9	97.9	158.2	170.9	172.3	126.9	157.3	226.8	163.3	121.8	118.6	124.0	313.0	52.0	79.6	60.9	43.1	42.4	64.0	313.0	132.3
8	120.6	126.2	43.5	35.1	19.6	189.3	132.9	203.3	146.9	97.5	108.4	122.8	99.6	56.5	53.7	48.5	28.7	16.0	30.1	72.9	18.7	37.9	29.3	86.3	203.3	80.2
9	23.2	29.8	40.3	32.1	95.8	171.2	181.7	172.6	234.6	178.1	187.3	141.6	200.0	152.5	5.9	4.9	3.3	1.3	1.3	2.8	8.4	5.4	6.1	4.5	234.6	78.5
10	4.2	4.6	6.3	10.7	17.2	35.4	17.2	31.1	199.1	274.3	160.4	175.5	106.4	99.4	149.8	20.5	3.1	0.6	1.8	1.9	3.6	9.3	17.4	9.1	274.3	56.6
11	7.6	13.8	8.4	5.8	2.1	2.4	1.6	3.3	4.3	4.5	39.8	99.0	325.1	358.2	123.3	42.9	67.5	47.3	66.5	29.0	9.6	11.5	12.2	7.3	358.2	53.9
12	17.6	30.6	34.0	32.1	44.8	32.5	104.4	181.7	94.2	90.5	60.4	29.5	22.4	44.0	33.8	24.5	66.1	39.9	50.8	18.0	35.5	25.9	34.6	38.4	181.7	49.4
13	73.5	99.9	52.1	43.5	51.6	121.8	143.5	277.0	79.0	24.5	44.2	34.4	35.7	43.2	47.1	39.6	78.5	122.5	60.8	47.9	50.5	44.6	31.8	70.4	277.0	71.6
14	36.3	106.9	70.9	93.7	219.7	303.0	467.1	417.8	526.1	279.0	230.6	228.0	155.0	131.8	195.1	113.8	78.6	65.2	48.6	30.0	25.8	23.8	23.6	31.0	526.1	162.6
15	41.2	151.9	60.1	54.8	97.5	153.4	275.3	560.1	434.7	306.2	180.4	316.4	162.5	267.2	169.0	160.3	118.8	53.4	37.1	39.0	31.6	35.1	67.6	65.4	560.1	160.0
16	120.0	56.1	60.5	86.4	77.7	102.3	148.7	162.9	87.6	132.0	198.4	312.4	310.8	210.4	357.2	263.9	208.2	241.2	260.5	228.7	134.7	64.4	49.8	10.5	357.2	161.9
17	10.3	10.5	10.5	11.8	10.3	8.8	10.4	8.0	7.9	5.3	4.5	3.0	1.8	1.3	1.1	1.1	0.9	0.5	0.6	0.6	0.5	0.8	0.6	1.1	11.8	4.7
18	1.9	1.8	2.5	2.2	2.5	1.7	1.3	1.2	3.2	6.5	99.9	286.8	449.0	218.8	313.0	122.3	257.2	47.1	55.4	40.5	27.4	9.6	4.4	10.8	449.0	82.0
19	3.8	23.2	18.8	36.5	32.4	32.5	75.3	98.6	128.4	47.6	26.3	56.7	74.3	123.4	69.7	35.1	59.2	41.3	34.2	71.3	27.0	26.4	14.8	11.1	128.4	48.7
20	7.4	5.2	11.7	23.6	17.5	12.1	140.7	396.2	154.3	62.2	62.1	159.4	96.5	111.8	87.5	70.7	125.9	107.9	37.7	25.4	6.9	8.0	36.7	56.7	396.2	76.0
21	56.5	94.0	53.0	48.8	46.5	28.4	61.9	200.1	158.3	77.6	46.3	66.9	37.6	27.0	31.9	25.7	45.3	22.9	29.7	74.7	39.7	33.9	19.2	21.7	200.1	56.1
22	27.0	39.8	63.6	154.2	103.0	55.6	293.1	296.7	287.6	230.9	150.0	169.3	121.1	158.0	229.7	125.0	82.1	33.2	59.1	131.6	165.6	29.2	41.8	85.3	296.7	130.5
23	168.4	340.7	443.9	159.4	203.4	178.4	392.4	303.4	252.4	94.6	149.0	158.7	188.2	233.1	309.7	182.8	222.7	45.4	45.0	43.0	61.6	38.6	127.0	104.6	443.9	185.3
24	38.6	69.1	137.4	90.5	184.0	180.8	295.4	591.3	370.9	195.7	152.2	280.8	344.5	438.6	433.2	725.3	185.7	162.1	102.3	66.8	21.6	60.6	105.8	158.4	725.3	224.6
25	57.5	200.0	179.2	353.8	344.7	248.6	533.5	804.1	277.6	75.4	102.5	101.7	80.0	78.1	97.6	81.1	66.0	252.6	95.8	27.7	29.8	50.5	109.7	225.9	804.1	186.4
26	107.8	68.3	46.6	14.2	65.6	222.3	104.9	183.8	179.5	83.5	167.9	75.0	60.8	97.1	74.5	48.5	49.8	65.8	86.0	51.5	32.4	18.4	12.9	17.8	222.3	80.6
27	60.2	80.9	56.7	68.4	98.9	87.2	144.8	305.0	154.2	39.1	34.7	46.2	30.4	70.0	48.8	32.7	38.8	21.6	27.8	32.6	30.4	43.9	41.3	42.3	305.0	68.2
28	114.6	169.4	431.0	345.9	182.0	211.8	229.4	430.4	273.6	145.5	277.7	271.4	199.5	123.7	209.1	253.0	105.6	84.0	101.6	31.4	20.9	48.4	42.7	29.5	431.0	180.5
29	124.5	66.5	31.4	89.9	56.9	2.2	2.6	2.6	1.7	1.9	2.0	2.2	16.5	36.0	37.2	41.5	34.7	29.1	26.9	9.2	8.2	6.9	6.3	7.6	124.5	26.9
30	3.1	4.4	4.7	4.4	4.4	8.7	9.5	9.0	15.0	53.2	86.2	38.6	104.6	88.4	174.3	164.0	125.4	96.3	44.7	86.5	17.0	2.8	0.7	1.1	174.3	47.8
31	3.1	2.0	0.9	1.6	1.9	4.5	9.3	6.5	4.5	5.4	5.3	5.1	4.9	12.5	3.9	3.8	2.5	2.6	1.8	1.8	3.5	2.4	1.6	0.9	12.5	3.8
Hourly Max	168.4	340.7	443.9	353.8	344.7	303.0	533.5	804.1	526.1	306.2	277.7	587.8	449.0	438.6	433.2	725.3	257.2	313.0	260.5	228.7	165.6	90.4	203.7	229.7		
Hourly Average	53.8	75.0	77.0	69.5	76.0	92.3	144.5	211.8	156.1	109.9	109.0	145.4	148.0	142.7	138.3	104.9	85.2	78.7	55.3	46.2	33.9	30.0	41.2	53.4		



Number of 24HR Exceedances	11		Guideline	100	UG/M3
Number of Non-Zero Readings	744				
Maximum 1-HR Average	804.1	UG/M3			
Maximum 24-HR Average	224.6	UG/M3			
IZS Calibration Time	0	HRS	Operational Time	744	HRS
Monthly Calibration Time	0	HRS	Operational Uptime	100.0	%
Standard Deviation	106.3		Monthly Average	94.9	UG/M3

MetOne BAM $PM_{2.5}$ Calibration

AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Lagoon	DATE:	May 2, 2018
START TIME (MST):	11:15	END TIME (MST):	11:50

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
Configuration	PM2.5	Audit Device S/N	624
Serial Number	T19087	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	13.0	647	0.00	16.7	11:45
As Found Data	MEASURED (AF)	13.0	647	0.30	16.60	11:45
	AF Difference (AF-I)	0.0	0	0.30	-0.10	0:00
Adjusted Data	MEASURED (M)	13.0	647	0.30	16.75	11:45
	Adj Difference (M-I)	0.0	0	0.30	0.05	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: new roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

MetOne BAM PM_{10} Calibration

AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Lagoon	DATE:	May 2, 2018
START TIME (MST):	11:40	END TIME (MST):	11:55

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
Configuration	PM10	Audit Device S/N	624
Serial Number	A3315	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚ C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	13.0	647	0.00	16.7	11:50
As Found Data	MEASURED (AF)	13.0	647	0.40	16.60	11:50
	AF Difference (AF-I)	0.5	0	0.40	-0.10	0:00
Adjusted Data	MEASURED (M)	13.0	647	0.40	16.72	11:50
	Adj Difference (M-I)	0.0	0	0.40	0.02	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: half roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

MetOne BAM TSP Calibration

AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Lagoon	DATE:	May 2, 2018
START TIME (MST):	11:50	END TIME (MST):	12:25

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
Configuration	TSP	Audit Device S/N	624
Serial Number	A3589	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚ C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	13.0	647	0.00	16.7	12:21
As Found Data	MEASURED (AF)	13.0	648	0.50	16.60	12:21
	AF Difference (AF-I)	0.0	1	0.50	-0.10	0:00
Adjusted Data	MEASURED (M)	13.0	647	0.50	16.67	12:21
	Adj Difference (M-I)	0.0	0	0.50	-0.03	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: new roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	9:25		End Time (MST)	14:15	
Barometric Pressure	656	mmHg	Station Temperature	22.0	Deg C
Calibrator	SABIO		Serial Number	103951108	
NO Cal Gas Conc	51.4	ppm	Cal Gas Expiry Date	February 14, 2020	
NOx Cal Gas Conc	51.5	ppm	Cal Gas Serial #	CC27839	

DACS Information

DACS make: Campbell Scientific CR1000 | DACS serial No.: 67802

Parameter		NO2	NOx	NO
Before	Data Slope	0.996061	1.000008	0.994490
	Data Offset	1.645716	2.355678	2.818515
After	Data Slope	1.005837	0.996541	0.991117
	Data Offset	1.166293	2.005527	2.481432
Channel #		3	1	2
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model: T200 | Analyzer serial #: 642

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO Slope	1.045		1.057	
NO Offset	0.0	mV	0.7	mV
NOX Slope	1.043		1.053	
NOX Offset	0.6	mV	1.2	mV
HVPS	771	V	771	V
Moly Temp	314.6	degC	316.8	degC
O3 Flow	82	ccm	81	ccm
RxCell Press	6.7	inHg	6.7	inHg
Sample press	24.4	inHg	24.0	inHg
Sample flow	448	ccm	441	ccm

Notes: Adjusted Zero and Span.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date: May 17, 2018 Station Location: Exshaw - Lagoon

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	5000	0.00	0.0	0.0	0.0	-1.0	-1.0	-0.9	N/A	N/A
1	5000	39.00	398.6	397.8	0.8	398.7	399.8	-1.6	0.9997	0.9951
2	5000	20.00	205.2	204.8	0.4	202.7	202.9	-0.7	1.0124	1.0091
3	7000	14.00	102.8	102.6	0.2	100.6	99.8	-0.1	1.0217	1.0277
AFZ	5000	0.00	0.0	0.0	0.0	-1.1	-1.1	-0.8	0.0000	0.0000
AFS	5000	40.00	408.7	407.9	0.8	391.9	392.6	-1.2	1.0430	1.0390
							Average Correction Factor		1.0113	1.0107

As Found Concentrations: NO_X= 395.3 NO= 396.6 As Found Percent Change NO_X= -3.3% NO= -2.8%

GPT Calibration Data

Dilution Flow 5000 ccm Source Gas Flow 39.00 ccm

O3 Setpoint (V)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-1.0	-1.0	0.0	-1.0	-1.0	-0.9	N/A	N/A	N/A	N/A
NO point	399.5	399.5	0.0	398.0	399.5	-2.0	1.0038	1.0000	N/A	N/A
0.77V	399.5	118.6	280.9	396.9	118.6	277.7	1.0064	1.0000	1.0114	98.9%
0.5V	399.5	231.4	168.1	399.2	231.4	167.0	1.0008	1.0000	1.0066	99.3%
0.3V	399.5	322.0	77.5	397.7	322.0	74.9	1.0045	1.0000	1.0340	96.7%
					Average Correction Factor		1.0039	1.0000	1.0173	98.3%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.9	0.2	1.5	ppb	0.7	0.2	1.3	ppb
Auto span	389.9	0.5	388.4	ppb	388.0	-1.6	388.7	ppb

Calibration Performed By: Darrin Pike

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

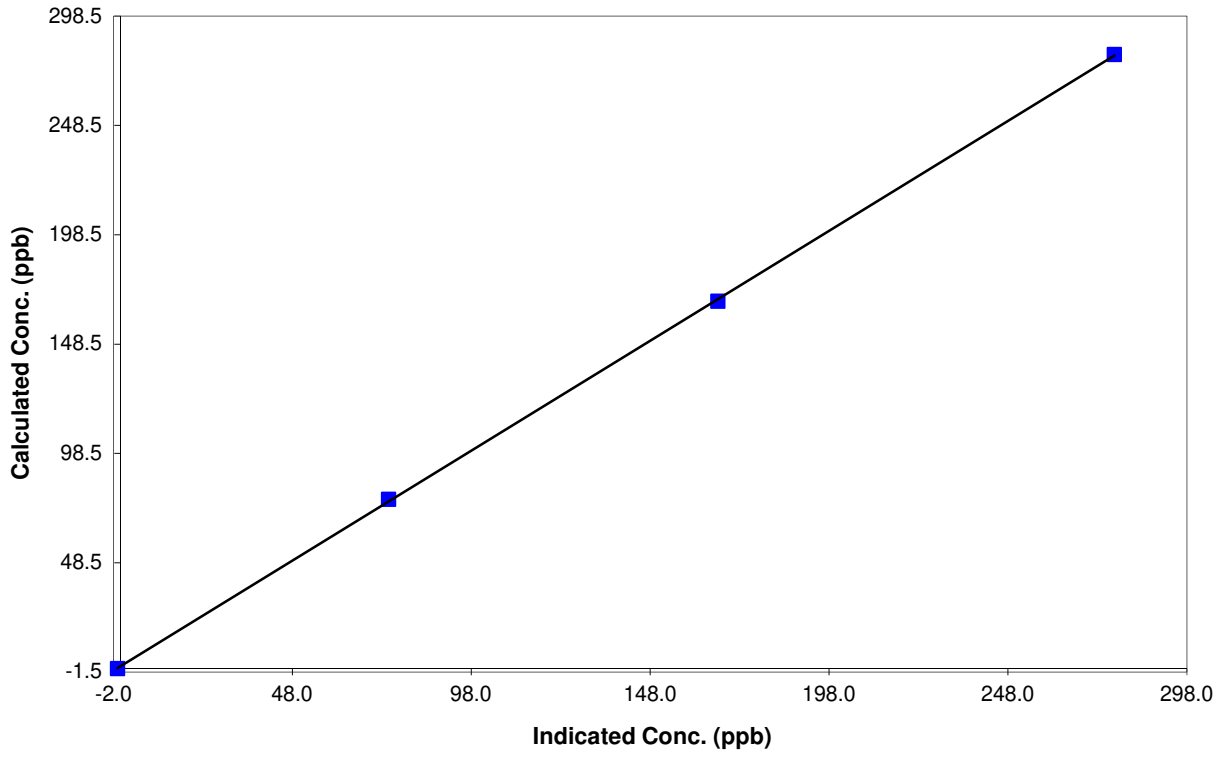
Station Information

Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon
Start Time (MST)	9:25	End Time (MST)	14:15
Analyzer make	T200	Analyzer serial #	642

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.9	N/A		
280.9	277.7	1.0114	Correlation Coefficient	0.999950
168.1	167.0	1.0066		
77.5	74.9	1.0340	Slope	1.005837
			Intercept	1.166293

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

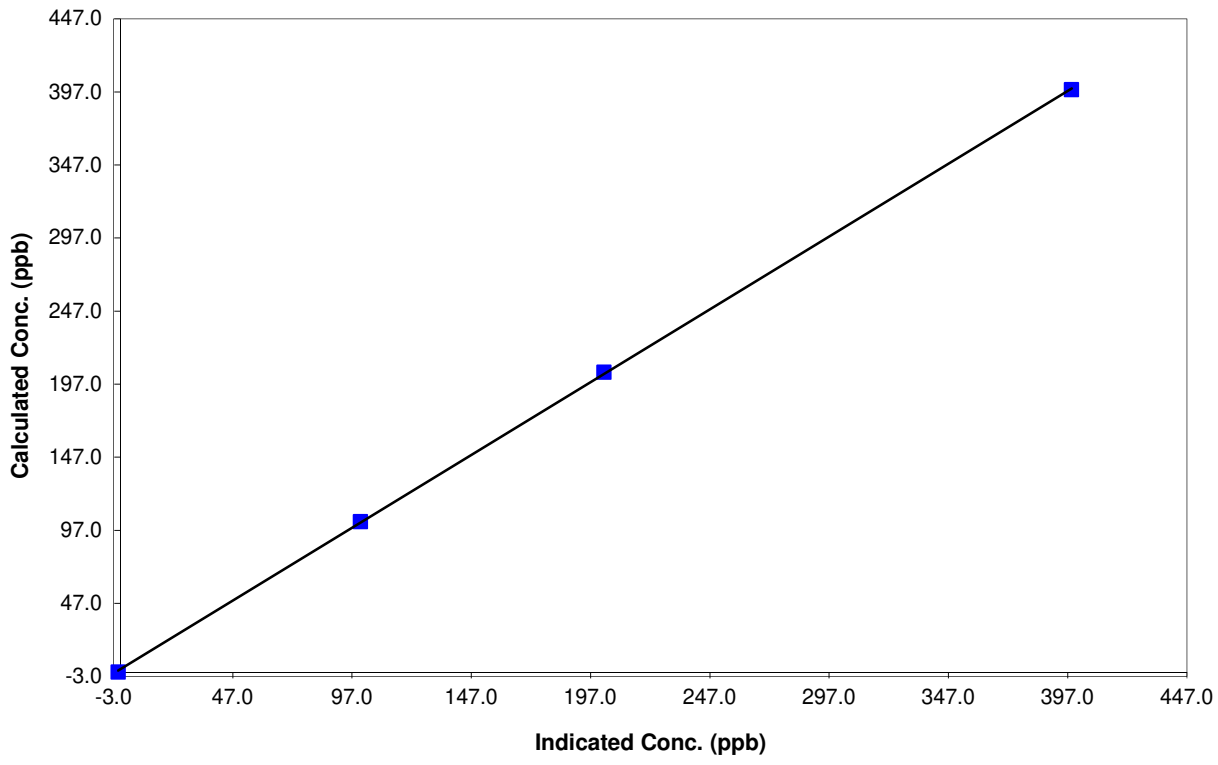
Station Information

Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon
Start Time (MST)	9:25	End Time (MST)	14:15
Analyzer make	T200	Analyzer serial #	642

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.0	N/A		
398.6	398.7	0.9997	Correlation Coefficient	0.999962
205.2	202.7	1.0124		
102.8	100.6	1.0217	Slope	0.996541
			Intercept	2.005527

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

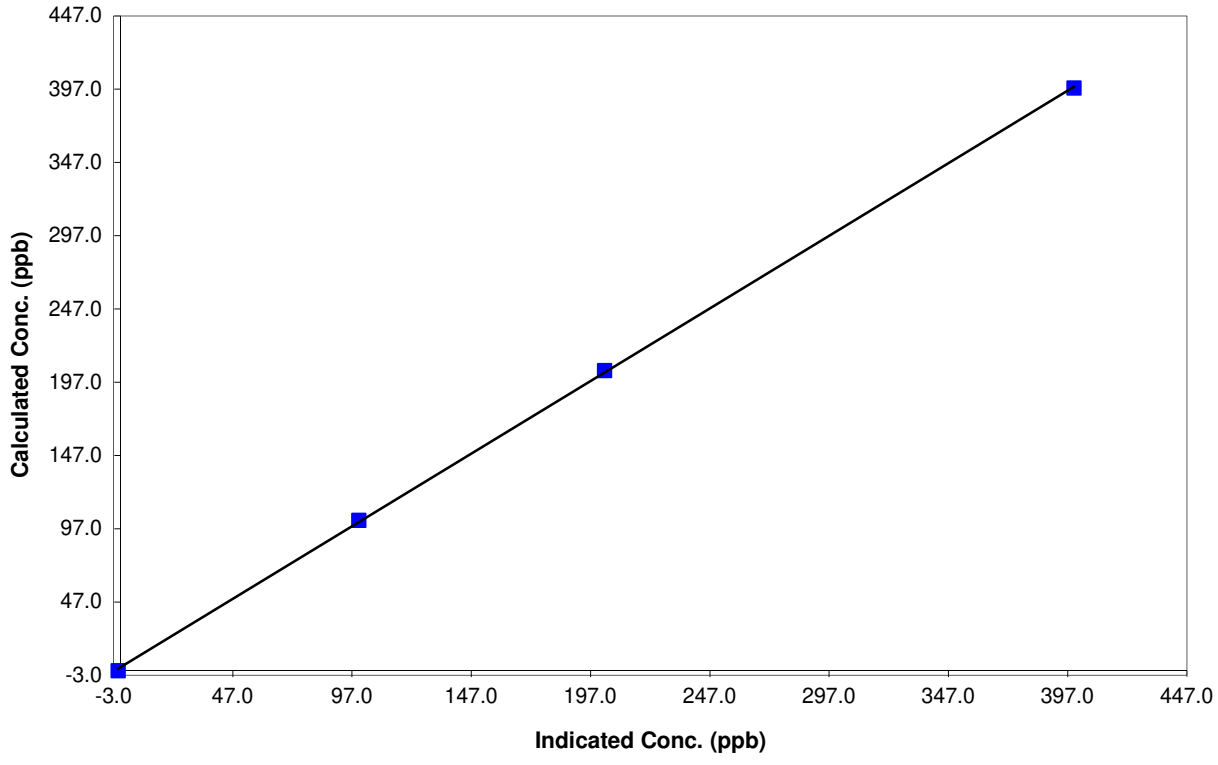
Station Information

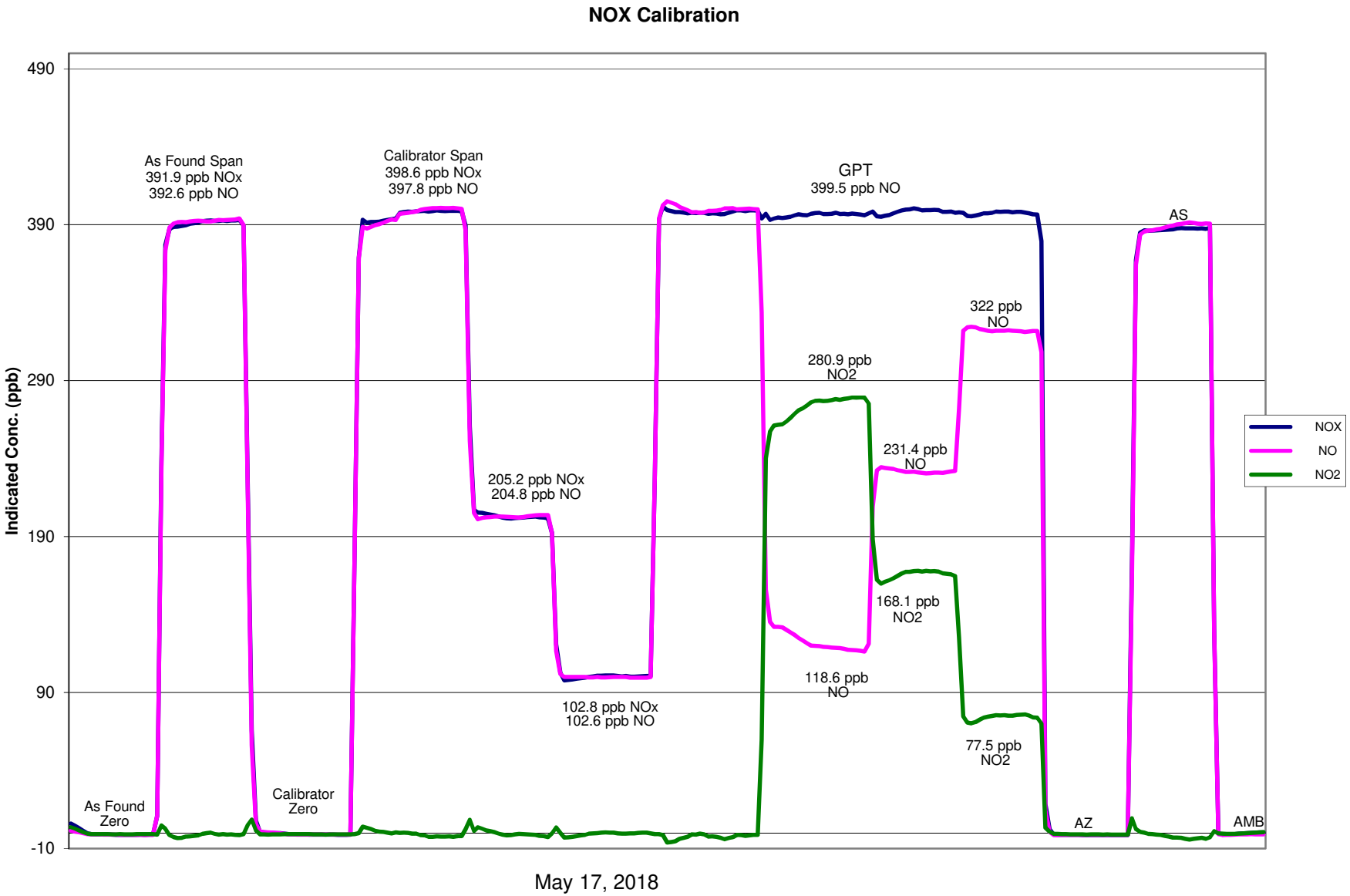
Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon
Start Time (MST)	9:25	End Time (MST)	14:15
Analyzer make	T200	Analyzer serial #	642

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.0	N/A		
397.8	399.8	0.9951	Correlation Coefficient	0.999934
204.8	202.9	1.0091		
102.6	99.8	1.0277	Slope	0.991117
			Intercept	2.481432

NO Calibration Curve




NOX Calibration
490
390
290
190
90
-10
Indicated Conc. (ppb)
As Found Span
391.9 ppb NOx
392.6 ppb NO
Calibrator Span
398.6 ppb NOx
397.8 ppb NO
GPT
399.5 ppb NO
AS
322 ppb
NO
280.9 ppb
NO2
231.4 ppb
NO
205.2 ppb NOx
204.8 ppb NO
168.1 ppb
NO2
118.6 ppb
NO
102.8 ppb NOx
102.6 ppb NO
77.5 ppb
NO2
As Found
Zero
Calibrator
Zero
AZ
AMB
NOX
NO
NO2
May 17, 2018

Calibration Report

Parameter **SO2**

Air Monitoring Network **Lafarge - Exshaw**

WSP AIR QUALITY MONITORING

Station Information

Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:30	End Time (MST)	14:10
Barometric Pressure	656 mmHg	Station Temperature	22.0 Deg C
Calibrator	SABIO 2010	Serial Number	103951108
Cal Gas Concentratio	50.8 ppm	Cal Gas Expiry Date	July 14, 2020
Gas Cert Reference	CC27839		
DACS make	Campbell Scientific CR1000	DACS serial No.	67802
DACS voltage range	0 - 5 VDC	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.998021	Calculated slope	0.995758
Calculated intercept	0.458463	Calculated intercept	0.835354
Analyzer make	API Model 102A	Analyzer serial #	393

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Slope	0.912		0.908	
Offset	44.4	mV	47.2	mV
Pressure	24.0	in Hg	24.2	in Hg
Sample Flow	495	ccm	397	ccm
UV Lamp	2594	mV	2579	mV
HVPS	690	V	690	V
PMT Temp	7.3	degC	7.3	degC

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)
5000	0.00	0.0	0.1	N/A
5000	39.00	393.2	394.3	0.9970
5000	20.00	202.4	202.3	1.0004
7000	14.00	101.4	99.9	1.0154
5000	0.00	0.0	1.1	As found zero
5000	39.00	393.2	395.4	As found span
			Average Correction Factor	1.0043

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

	before calibration		after calibration	
Auto zero	1.1	ppb	0.1	ppb
Auto span	386.5	ppb	388.6	ppb

Notes: Calibrated Zero and Span.

Calibration Performed By: Darrin Pike

Calibration Summary

Parameter **SO2**

Air Monitoring Network **Lafarge - Exshaw**

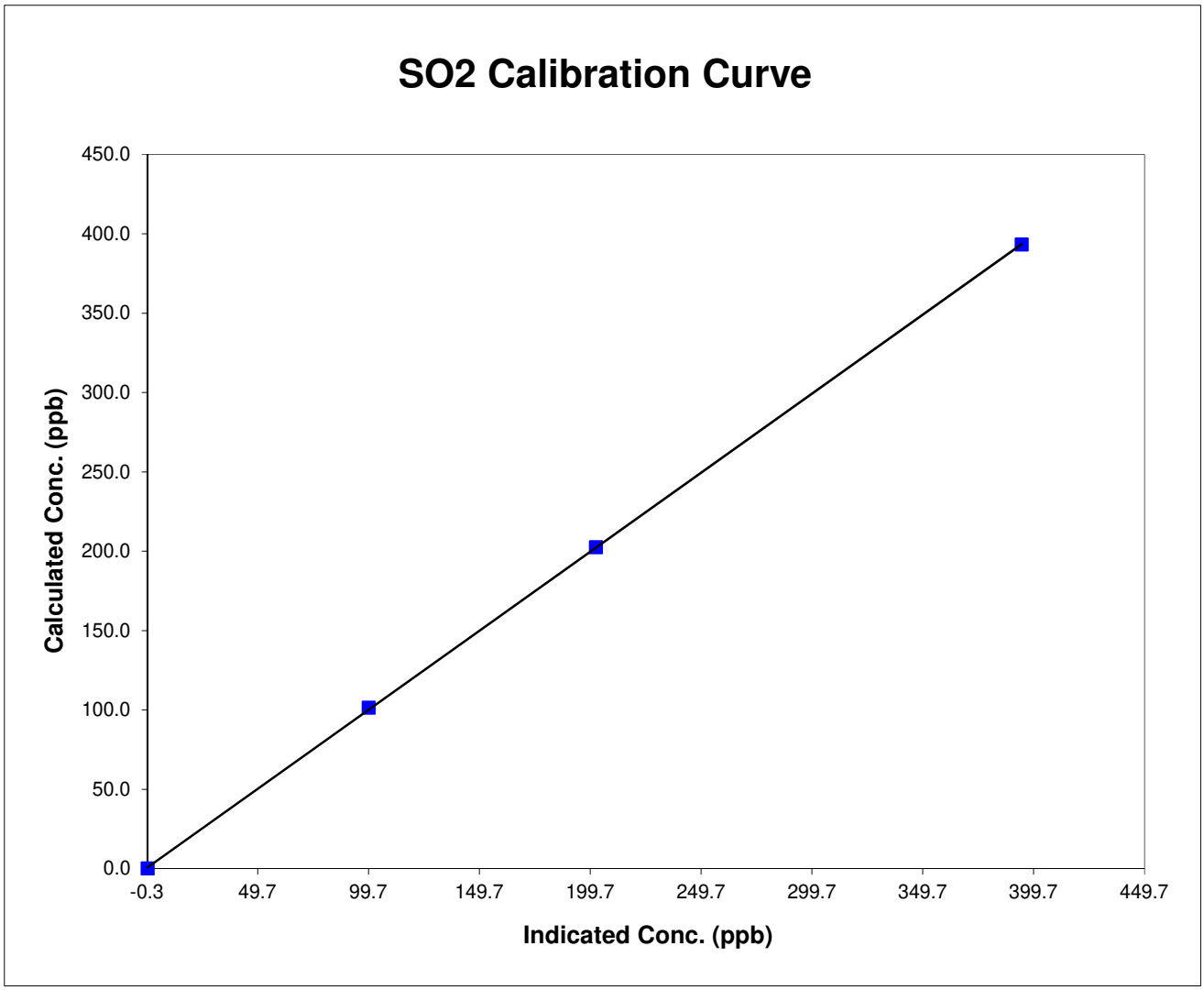
WSP AIR QUALITY MONITORING

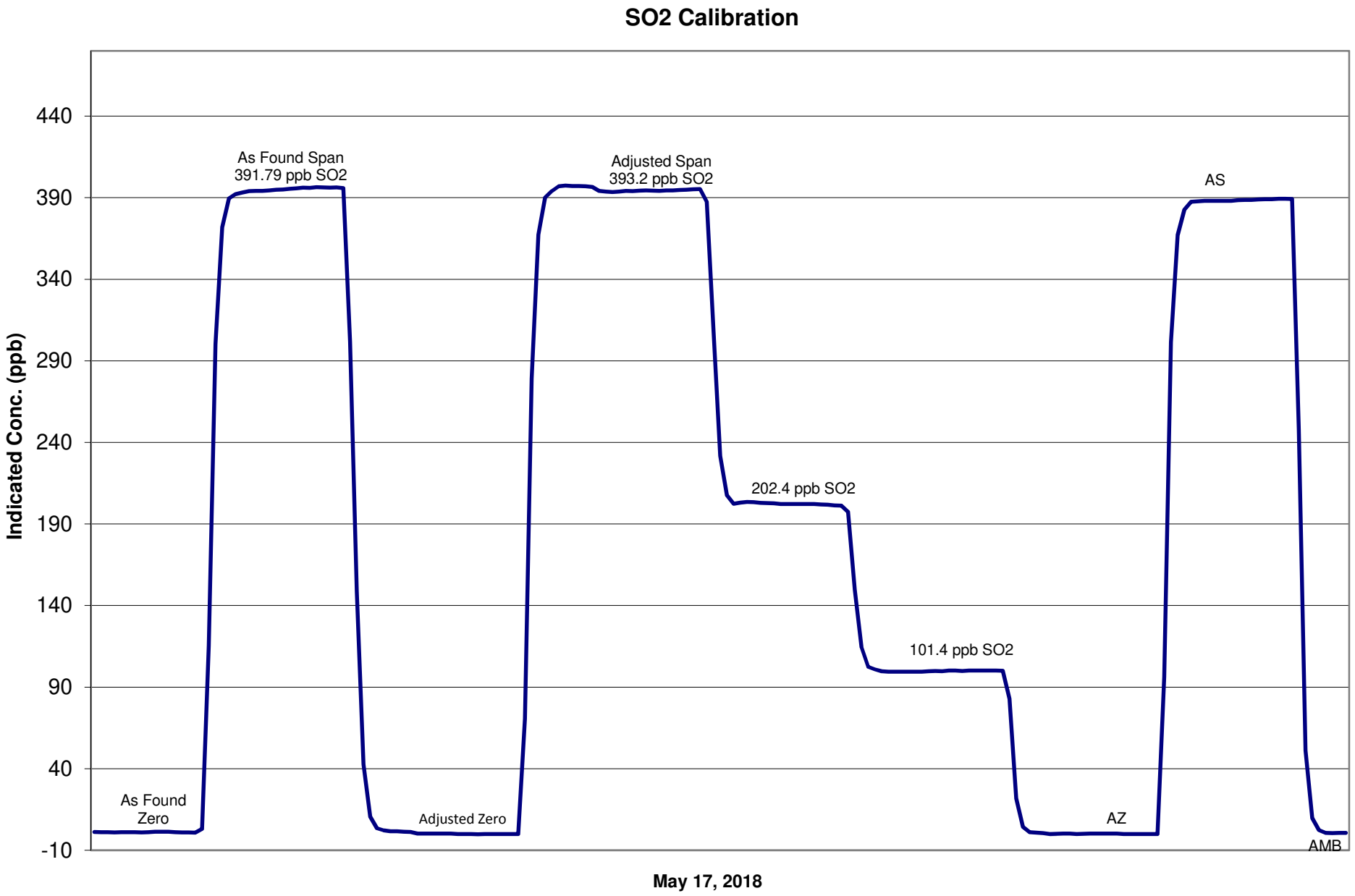
Station Information

Calibration Date	May 17, 2018	Previous Calibration	April 23, 2018
Station Number	N/A	Station Location	Exshaw - Lagoon
Start Time (MST)	9:30	End Time (MST)	14:10
Analyzer make/model	API Model 102A	Analyzer serial #	393

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
393.2	394.3	0.9970	Correlation Coefficient	0.999974
202.4	202.3	1.0004		
101.4	99.9	1.0154	Slope	0.995758
			Intercept	0.835354




SO2 Calibration
Indicated Conc. (ppb)
440
390
340
290
240
190
140
90
40
-10
As Found Span
391.79 ppb SO2
Adjusted Span
393.2 ppb SO2
AS
202.4 ppb SO2
101.4 ppb SO2
As Found
Zero
Adjusted Zero
AZ
AMB
May 17, 2018

AIR QUALITY MONITORING

Field Service Report

Air Monitoring Network / Client: Lafarge – Exshaw

Station Information

Visit Date: May 2, 2018
Station Location: Exshaw – Lagoon
Reason for Visit: Routine monthly calibrations
Arrival Time: 11:00 MST
Weather Conditions: sunny and 6 degC.

Project Number: 151-09626-00
Station Name: Lafarge – Exshaw

Departure Time: 12:30 MST

Record of Hours ***Parts Used***

Employee	Category	Hours	Qty	Parts Description
DP	TRA	3		
DP	CAL	2		

Station Information

Time (MST) Comments

11:00 - Arrived at station

11:05- Flagged all PM channels at Lagoon site. Proceeded with Bam 1020 calibrations

11:50 - BAM PM2.5 calibration completed with no issues.

11:55 - BAM PM10 calibration completed with no issues.

12:25 - BAM TSP calibration completed with no issues.

12:30 – Calibrations complete.

12:30 Left plant after signing out.

NOTES:
- All analyzers in sample mode → OK
- Confirmed operation of manifold intake fan → OK
- All sample lines connected properly → OK

Technician – Darrin Pike

AIR QUALITY MONITORING

Field Service Report

Air Monitoring Network / Client: Lafarge – Exshaw

Station Information

Visit Date: May 17, 2018
Station Location: Exshaw – Lagoon
Reason for Visit: Routine monthly calibrations
Arrival Time: 08:30 MST
Weather Conditions: light rain

Project Number: 151-09626-00
Station Name: Lafarge – Exshaw

Departure Time: 16:00 MST

Record of Hours ***Parts Used***

Employee	Category	Hours	Qty	Parts Description
DP	TRA	3	2	47mm filters
DP	CAL	6.5		

Station Information

Time (MST) Comments

08:30 – Signed in at Lafarge Plant

08:45 - Arrived at station. Started unloading and setting up gear

09:25 - Started AF calibrator Zero on NOx and SO2.

09:46 – AF Zero was good. Started AF calibrator Span.

10:19 - NOx/SO2 zeros adjusted

10:46 - NOx/SO2 spans adjusted

11:50 - SO2 calibration completed, no issues noted. NOx GPT reference point started, no issues noted in the first portion of the calibration.

12:24 - Started introducing O3 for GPT portion of calibration.

13:22 - GPT portion of calibration went well, no issues noted. Started AIC on NOx and SO2.

14:15 – Calibrations complete.

14:15 – left station to conduct audit on Grimms

West Sharp:
Measured Sample flow = 1.18 LPM
Sharp AmbT = 11.6 degC
Audit AmbT = 12 degC

AIR QUALITY MONITORING

Field Service Report

Berm Sharp:
Measured Sample flow = 1.13 LPM
Sharp AmbT = 11 degC
Audit AmbT = 11.3 degC

Entrance Sharp:
Measured Sample flow = 1.14 LPM
Sharp AmbT = 11.2 degC
Audit AmbT = 12.1 degC

15:30 – Grimms audit completed

16:00 Left plant after signing out.

NOTES:
- All analyzers in sample mode → OK
- Confirmed operation of manifold intake fan → OK
- All sample lines connected properly → OK

Technicians – Darrin Pike

MetOne BAM $PM_{2.5}$ Calibration

WSP
AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Windridge	DATE:	May 2, 2018
START TIME (MST):	9:30	END TIME (MST):	10:15

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
Configuration	PM2.5	Audit Device S/N	624
Serial Number	U21074	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚ C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	11.4	647	0.00	16.7	10:11
As Found Data	MEASURED (AF)	11.5	648	0.50	16.88	10:11
	AF Difference (AF-I)	0.1	1	0.50	0.18	0:00
Adjusted Data	MEASURED (M)	11.4	647	0.50	16.67	10:11
	Adj Difference (M-I)	0.0	0	0.50	-0.03	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: new roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

MetOne BAM PM_{10} Calibration

AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Windridge	DATE:	May 2, 2018
START TIME (MST):	10:10	END TIME (MST):	10:30

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
	PM10	Audit Device S/N	624
Serial Number	U21075	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	12.0	647	0.00	16.7	10:24
As Found Data	MEASURED (AF)	12.0	648	0.30	16.95	10:24
	AF Difference (AF-I)	0.0	1	0.30	0.25	0:00
Adjusted Data	MEASURED (M)	12.0	647	0.30	16.68	10:24
	Adj Difference (M-I)	0.0	0	0.30	-0.02	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: new roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

MetOne BAM TSP Calibration

AIR QUALITY MONITORING

STATION:	Lafarge	OPERATOR:	Darrin Pike
LOCATION:	Exshaw - Windridge	DATE:	May 2, 2018
START TIME (MST):	10:20	END TIME (MST):	10:40

MONITOR INFO / PARAMETER VALUES:

Make/Model	MetOne BAM	Audit Device Model	Delta Cal
Configuration	TSP	Audit Device S/N	624
Serial Number	U21073	Certification Date	30-Nov-17

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (˚C)	Ambient Pres. (mmHg)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
	Audit values (I)	12.0	647	0.00	16.7	10:36
As Found Data	MEASURED (AF)	12.0	646	0.40	16.70	10:36
	AF Difference (AF-I)	0.0	-1	0.40	0.00	0:00
Adjusted Data	MEASURED (M)	12.0	647	0.40	16.70	10:36
	Adj Difference (M-I)	0.0	0	0.40	0.00	0:00
	LIMITS	**± 4.0 ^{0}C**	**5 mm Hg**	**1.0 L/min**	**± 1.0 L/min**	**±2 min**

Sample Head Inspect/Cleaning: inspected and cleaned

Status of sampling tape: new roll

Nozzle Inspection / cleanliness: clean

COMMENTS:

AIR QUALITY MONITORING

Field Service Report

Air Monitoring Network / Client: Lafarge – Exshaw

Station Information

Visit Date: May 2, 2018
Station Location: Exshaw – Windridge
Reason for Visit: Routine monthly calibrations
Arrival Time: 9:00 MST
Weather Conditions: clear and 12 degC.

Project Number: 151-09626-00
Station Name: Lafarge – Windridge

Departure Time: 11:00 MST

Record of Hours ***Parts Used***

Employee	Category	Hours	Qty	Parts Description
DP	CAL	2		
DP	TRA	3		

Station Information

Time (MST) Comments

09:00 – Arrived at LaFarge plant, signed in at the Plant

09:05 – Arrived at the Windridge

09:15 - Flagged all PM channels at Windridge site for BAM 1020 calibrations.

10:15 - BAM PM2.5 calibration completed with no issues.

10:30 - BAM PM10 calibration completed with no issues.

10:40 - BAM TSP calibration completed with no issues.

11:00 – left Windridge station and proceeded to the Lagoon site.

NOTES:
- All analyzers in sample mode → OK
- Confirmed operation of manifold intake fan → OK
- All sample lines connected properly → OK

Technician: Darrin Pike