LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

MAY 2019

JUNE 25, 2019

AMBIENT AIR QUALITY MONTHLY REPORT

MAY 2019

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-00
DATE: JUNE 25, 2019

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June 25, 2019

LAFARGE CANADA INC.
Highway 1A
Exshaw, AB T0L 2C0

Attention: Janet Brygger

Dear Ms. Brygger

Subject: Ambient Air Quality Monthly Report - May 2019

The operational uptime for the meteorological systems and all analyzers at the Lagoon station was 100% in May, except for the PM_{10} analyzer which had 99.7% uptime. There were zero exceedances of the 24-hour TSP Alberta Ambient Air Quality Objectives (AAAQOs), 1 exceedance of the 24-hour $PM_{2.5}$ AAAQOs, and 4 exceedances of the 1-hour $PM_{2.5}$ AAAQG in May at the Lagoon monitoring location. The exceedances of the $PM_{2.5}$ objectives were a result of wildfire smoke originating from fires in other parts of the province.

The Windridge station was taken out of operation beginning April 8th as a result of construction work for flood mitigation along Exshaw Creek. The monitor at this station is expected to be re-installed sometime in 2020, after the completion of the construction work.

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; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. The operational uptime at all 3 monitors was 100% in May. The West GRIMM monitor recorded zero exceedances of the 24-hour TSP AAAQO and 1 exceedance of the 24-hour $PM_{2.5}$ AAAQO The Berm GRIMM had 2 exceedances of the TSP Objective and 1 exceedance of the $PM_{2.5}$ Objective. The Entrance GRIMM monitor exceeded the 24-hour TSP AAAQO for 8 days, and exceeded the 24-hour $PM_{2.5}$ AAAQO for 3 days. The exceedances of the $PM_{2.5}$ objectives were related to wildfire smoke originating from fires in other parts of the province.

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.
Team Leader, Environmental
Management, Vancouver Office

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June 25, 2019

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Date

APPROVED[1] BY *(must be reviewed for technical accuracy prior to approval)*

June 25, 2019

Tyler Abel, M.Sc.
Team Leader, Environmental Management,
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Date

[1] Approval of this document is an administrative function indicating readiness for release and does not impart legal liability on to the Approver for any technical content contained herein. Technical accuracy and fit-for-purpose of this content is obtained through the review process. The Approver shall ensure the applicable review process has occurred prior to signing the document.

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1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and 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, 2019 and May 31, 2019.

This monthly report was prepared by Rowena Seto, Junior Air Quality Specialist with WSP, on behalf of Lafarge and was reviewed by Tyler Abel, Team Leader of Environmental Management in the Vancouver Region at WSP.

1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1-1), the Windridge monitor was taken out of operation and removed from the site on April 8, 2019. The monitoring station will be re-installed after the completion of construction in 2020.

Dust created from the flood mitigation work has the potential to impact particulate matter concentrations at the remaining stations.

Figure 1-1 Photo of Flood Mitigation Construction at Exshaw Creek

1.2 WILDFIRE SMOKE

Wildfire smoke impacted many areas of the province in the last week of May. The wildfire smoke originated in the northern parts of the province, but in subsequent days impacted many areas of the province including Exshaw. The wildfire smoke is the primary cause of the exceedances of the $PM_{2.5}$ AAAQO reported this month.

2 MAY 2019 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	23.7	0	10.0	-
SO_2 (ppb)	100.0	6.6	0	1.3	0
$PM_{2.5}$ (µg/m³)	100.0	154.8	4[1]	39.1	1
PM_{10} (µg/m³)	99.7	153.5	-	48.0	-
TSP (µg/m³)	100.0	171.2	-	58.6	0
Temperature (°C)	100.0	26.0	-	17.7	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	29.5/W	-	18.9/WSW	-
Precipitation (mm)	100.0	3.3[2]	-	54[3]	-

[1] Any exceedances reported for 1-hour $PM_{2.5}$ are over the guideline level (AAAQG) of 80 µg/m³.
[2] Maximum Daily Total Accumulation of Precipitation (mm)
[3] Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

- There was 1 day exceeding the 24-hour $PM_{2.5}$ AAAQO. Exceedance due to wildfire smoke in airshed.
- There were 4 hours exceeding the 1-hour $PM_{2.5}$ AAAQG. Exceedances due to wildfire smoke in airshed.
- There were no exceedances of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- All analyzers (except for PM_{10}) and meteorological sensors had 100% uptime for the month of May.
- The PM_{10} analyzer had 99.7% uptime for the month of May due to 2 hours of maintenance.

2.2 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; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-2 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)	100.0	158.0	7*	41.4	1
PM_{10} (µg/m^3)	100.0	403.8	-	48.2	-
TSP (µg/m^3)	100.0	498.4	-	44.1	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 1 day exceeding the 24-hour $PM_{2.5}$ AAAQG. Exceedance due to wildfire smoke in airshed.
- There were 7 hours exceeding the 1-hour $PM_{2.5}$ AAAQG. Exceedances due to wildfire smoke in airshed.
- There were no exceedances of the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The analyzer had 100% uptime for the month of May.

2.3 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; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-3 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	136.0	7*	37.7	1
PM_{10} (µg/m^3)	100.0	202.7	-	56.8	-
TSP (µg/m^3)	100.0	603.3	-	142.8	2

* 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 1 day exceeding the 24-hour $PM_{2.5}$ AAAQG. Exceedance due to wildfire smoke in airshed.
- There were 7 hours exceeding the 1-hour $PM_{2.5}$ AAAQG. Exceedances due to wildfire smoke in airshed.
- There were 2 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The analyzer had 100% uptime for the month of May.

2.4 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; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-4 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	153.8	6*	43.6	3
PM_{10} (µg/m^3)	100.0	332.8	-	98.2	-
TSP (µg/m^3)	100.0	798.5	-	195.3	8

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

Data Quality Notes:

- There were 3 days exceeding the 24-hour $PM_{2.5}$ AAAQG. Exceedances likely due to wildfire smoke in airshed.
- There were 6 hours exceeding the 1-hour $PM_{2.5}$ AAAQG. Exceedances likely due to wildfire smoke in airshed.
- There were 8 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The analyzer 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 3-2) and tables and graphs illustrating the monitoring results for May 2019.

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

3.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 3-1.

Table 3-1 Instrumentation List at the Lagoon Station

Parameter Measured	Equipment Description	Notes
$PM_{2.5}$ Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The $PM_{2.5}$ monitor was calibrated on May 24th. The monitor had 100% uptime in May.
PM_{10} Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	Maintenance led to 2 hours of lost operational time on May 27th from 12:00 to 14:00. These hours were flagged as Y for "operational maintenance carried out on the instrument." The PM_{10} monitor was calibrated on May 24th. The monitor had 99.7% uptime in May.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on May 24th. The monitor had 100% uptime in May.
Oxides of Nitrogen	TEI 42C	Both monitors were calibrated on May 24th. The monitors had 100% uptime in May.
Sulphur Dioxide	Teledyne API 102A	
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime in May.
Wind Speed	MetOne Wind Sensor	The monitors had 100% uptime in May.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime in May.

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

3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-2) illustrates the frequency of wind speed by wind direction for the month of May 2019. The wind rose indicates that the winds predominantly came from the east-northeast direction.

Table 3-2 summarizes the hourly and daily concentrations recorded in May 2019, and Table 3-3 summarizes the recorded exceedances over the month.

Figure 3-3 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-9 shows daily average concentrations recorded during May 2019 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO_2, SO_2, $PM_{2.5}$, PM_{10}, and TSP measured at the Lagoon station.

Dust created from the flood mitigation work (section 1.1) has the potential to impact the monitored particulate matter concentrations in the airshed, including at the Lagoon station. There were zero exceedances of the 24-hour TSP (100 µg/m^3) AAAQO, 1 exceedance of the 24-hour $PM_{2.5}$ (29 µg/m^3) AAAQO, and 4 exceedances of the 1-hour $PM_{2.5}$ AAAQG. The exceedances of the $PM_{2.5}$ objectives were a result of wildfire smoke originating from fires in other parts of the province.

Historically in May, the average number of 24-hour TSP AAQO exceedances and 24-hour $PM_{2.5}$ AAAQO exceedances are both zero. This is the first time that the station has recorded an exceedance of the $PM_{2.5}$ AAAQO in May since monitoring began in 2010, signalling an earlier start to wildfires in the province this year. In terms of TSP, this station has never recorded an exceedance in May since 2010.

Table 3-2 Summary of May 2019 data at Lagoon

Parameter	Guideline / Objectives		Station	Exceedances		Monthly		1-hour					24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO_2 (ppb)	159	-	Lagoon	0	-	0.6	5.9	23.7	29	8	15.7	261.3	10.0	28	100.0
SO_2 (ppb)	172	48	Lagoon	0	0	0.0	0.6	6.6	14	10	8.1	68.2	1.3	28	100.0
$PM_{2.5}$ (µg/m^3)	80	29	Lagoon	4	1	0.0	7.6	154.8	31	3	7.3	251.5	39.1	31	100.0
PM_{10} (µg/m^3)	-	-	Lagoon	-	-	0.0	15.0	153.5	31	4	9.4	217.7	48.0	31	99.7
TSP (µg/m^3)	-	100	Lagoon	-	0	0.0	20.7	171.2	31	3	7.3	251.5	58.6	29	100.0
Temperature (°C)	-	-	Lagoon	-	-	-3.4	8.3	26.0	29	18	9.9	328.7	17.7	29	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.9	11.9	29.5/W	12	14	29.5	241.5	18.9/WSW	3	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.1	3.3	15	22	10.8	80.6	54.0	-	100.0

Table 3-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ at the Lagoon 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)
Trailer						
2019-05-31	-	39.1	261.7	11.6	63.2	Wildfire Smoke
Total # of Exceedances	**0**	**1**				
Maximum # of Exceedances (May)	**0 (2010 ~ 2018)**	**0 (2010 ~ 2018)**				
Average # of Exceedances (May)	**0**	**0**				
Minimum # of Exceedances (May)	**0 (2010 ~ 2018)**	**0 (2010 ~ 2018)**				

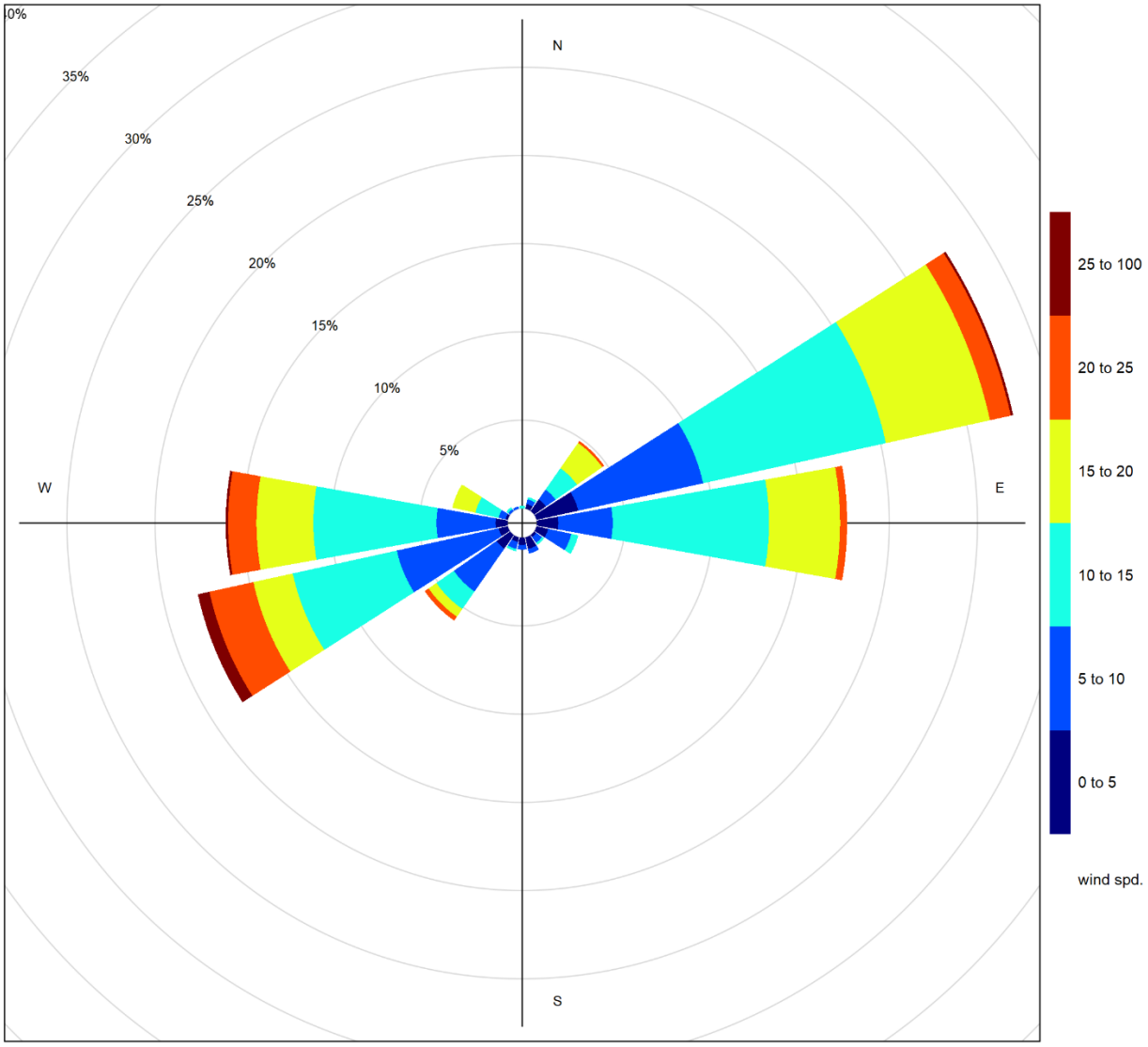

Figure 3-2 May 2019 wind rose from the Lagoon Station

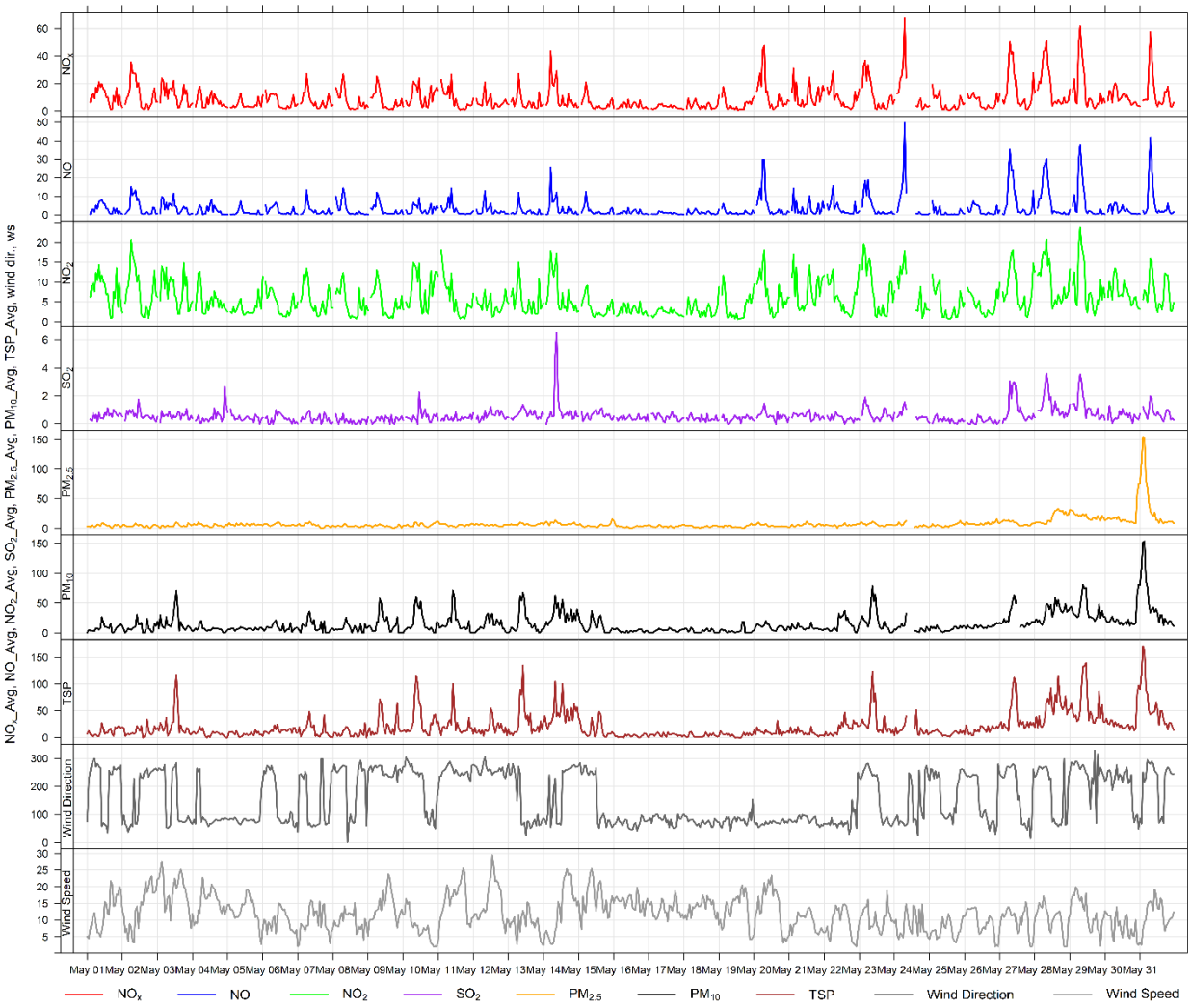

Figure 3-3 **1-hour concentrations of NO_x, SO_2, particulate matter, wind direction and wind speed at the Lagoon station**

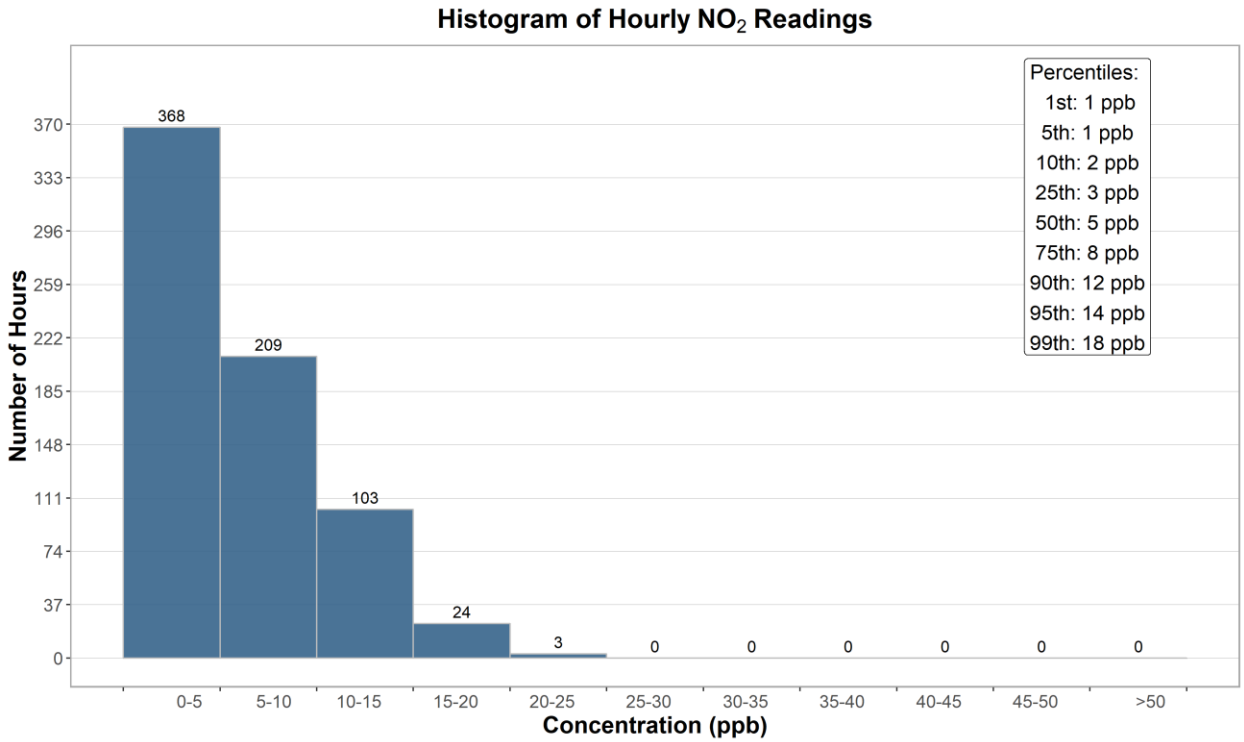

Figure 3-4 **Histogram of hourly NO_2 concentrations at the Lagoon station**

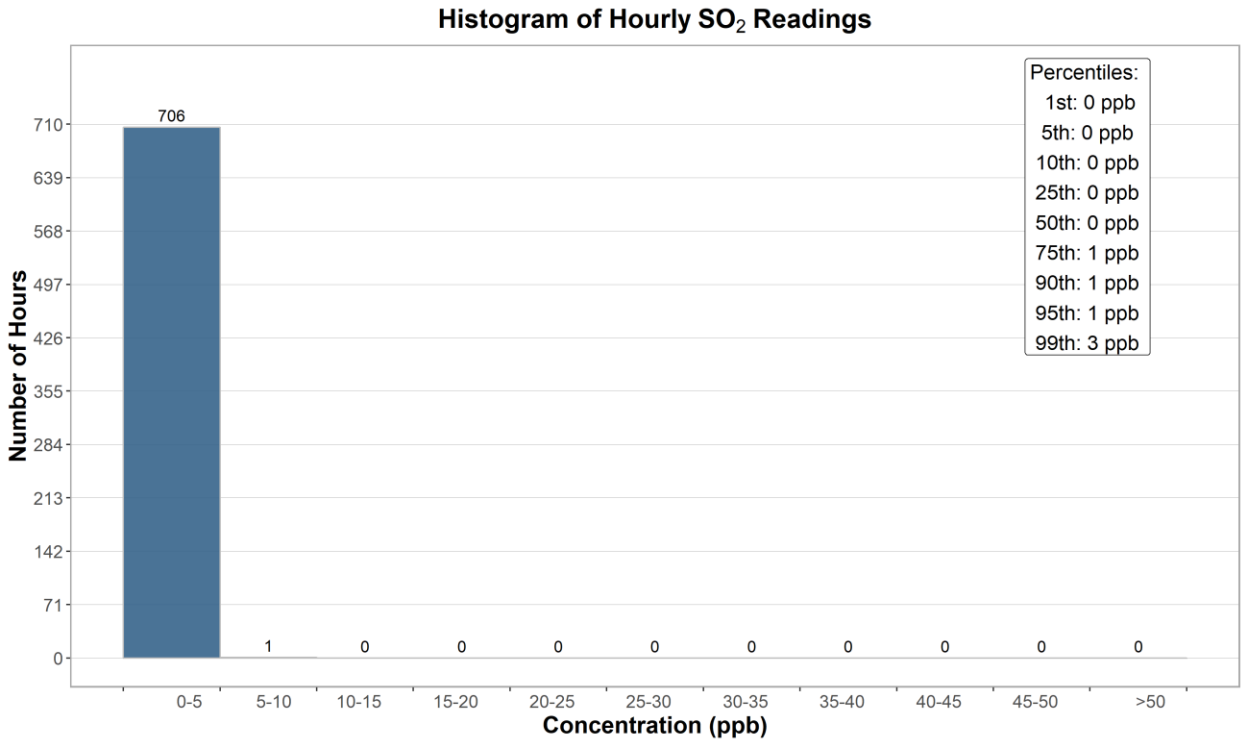

Figure 3-5 **Histogram of hourly SO_2 concentrations at the Lagoon station**

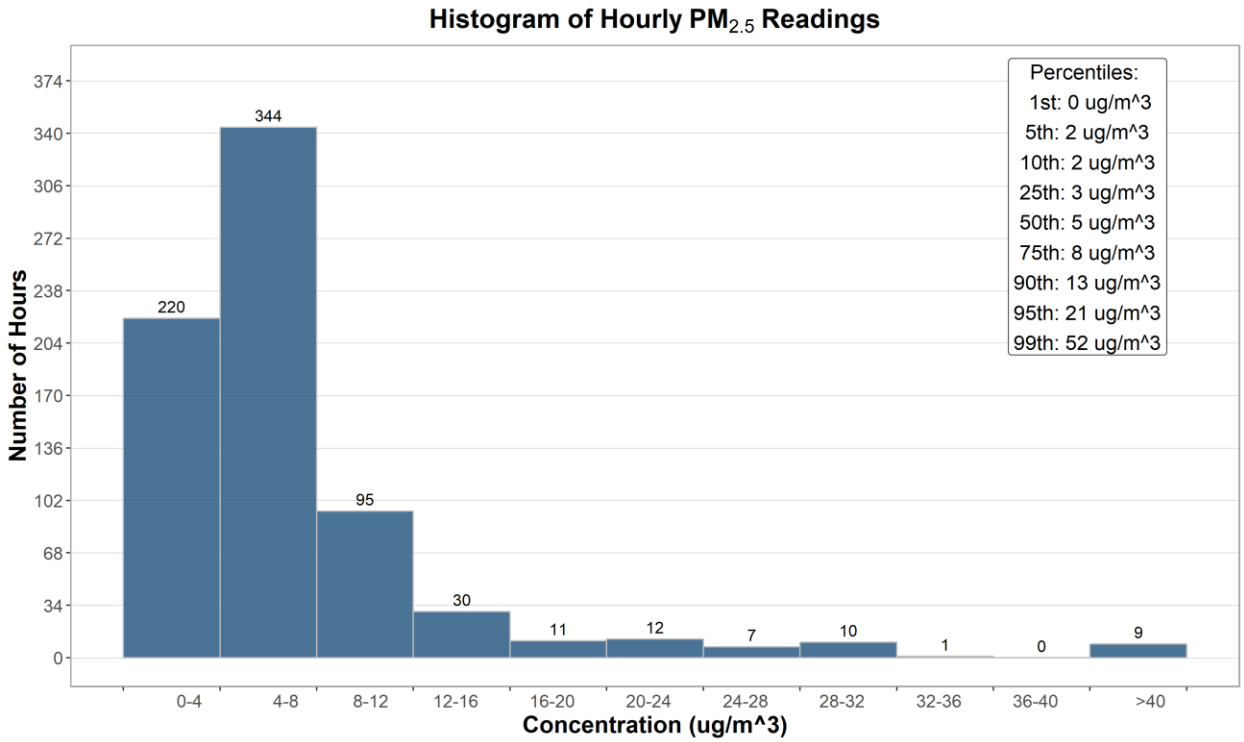

Figure 3-6 **Histogram of hourly $PM_{2.5}$ concentrations at the Lagoon station**

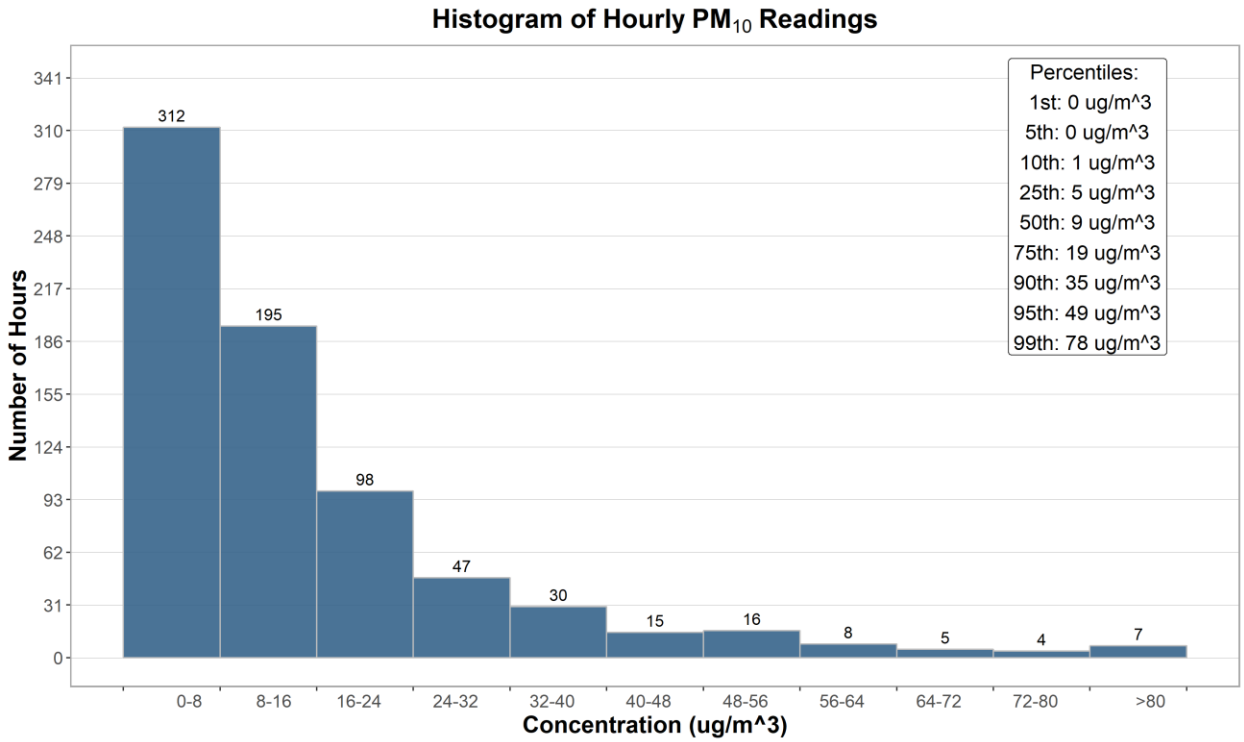

Figure 3-7 **Histogram of hourly PM_{10} concentrations at the Lagoon station**

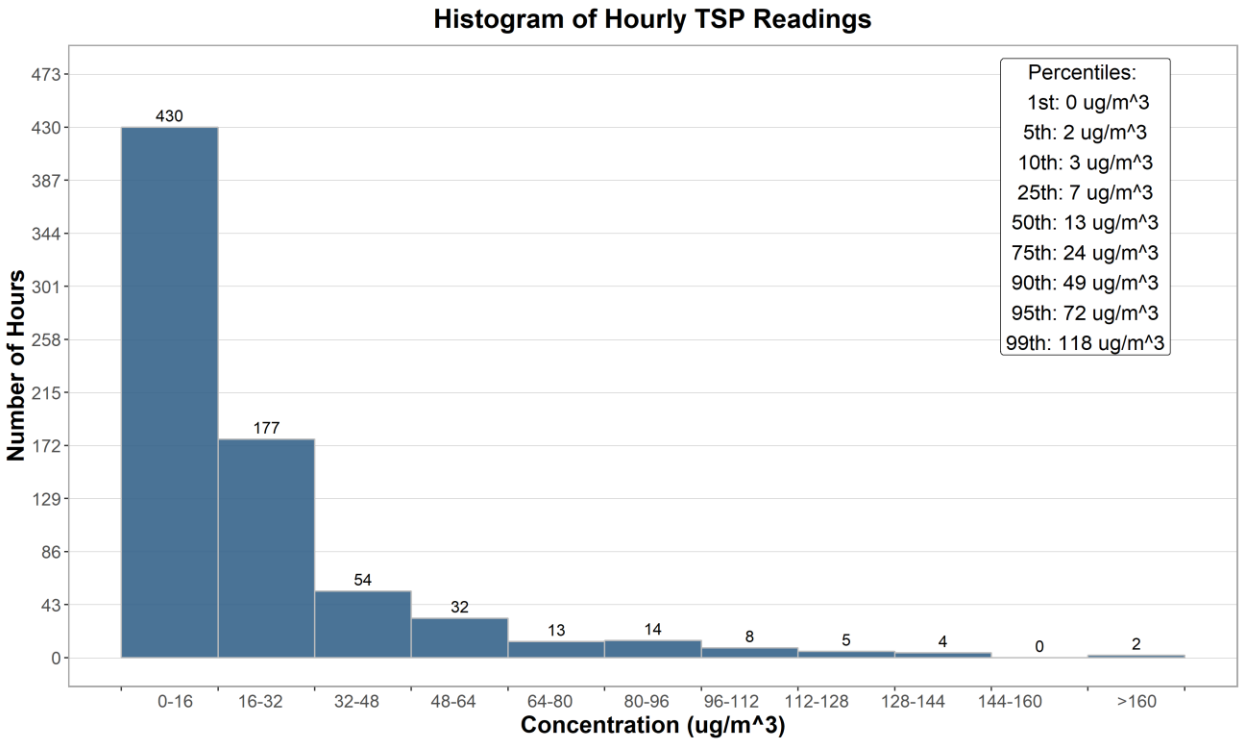

Figure 3-8 Histogram of hourly TSP concentrations at the Lagoon station

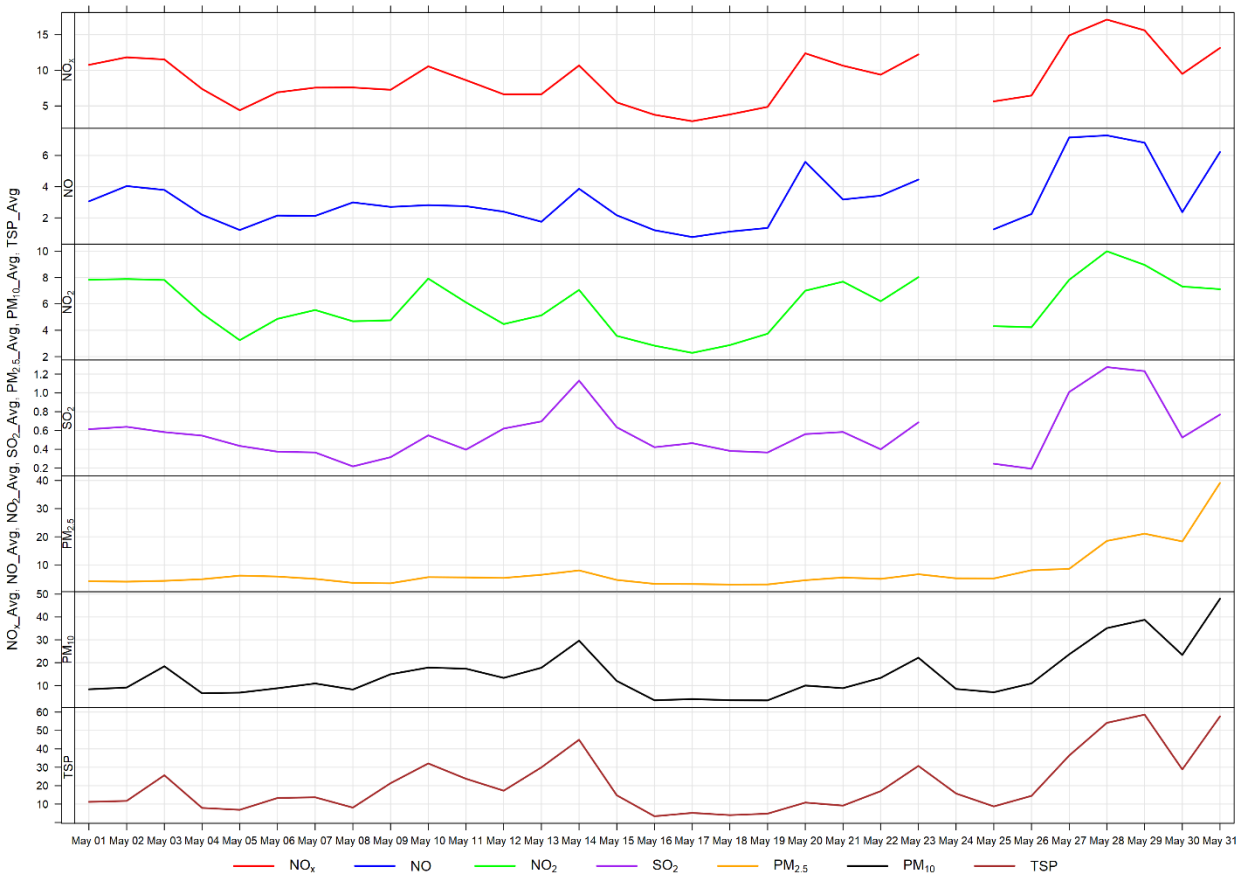

Figure 3-9 24-hour concentrations of NO_x, SO_2, and particulate matter at the Lagoon monitor

Figure 3-10 shows the wind rose for the one day exceeding the 24-hour $PM_{2.5}$ AAAQO. This wind rose shows that the winds predominantly came from the west-southwest direction, however the exceedances is due to wildfire smoke originating outside of the airshed.

Figure 3-11 through Figure 3-13 show the variation in concentrations over various time averaging periods for PM, SO_2 and NO_x. The particulate matter plot in Figure 3-11 shows that PM_{10} and TSP concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

Figure 3-12 shows the variation of SO_2 over various time periods. SO_2 concentrations patterns are dependent on the timing of the highest SO_2 concentrations recorded in the month because in general SO_2 concentrations are very low. Figure 3-13 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.

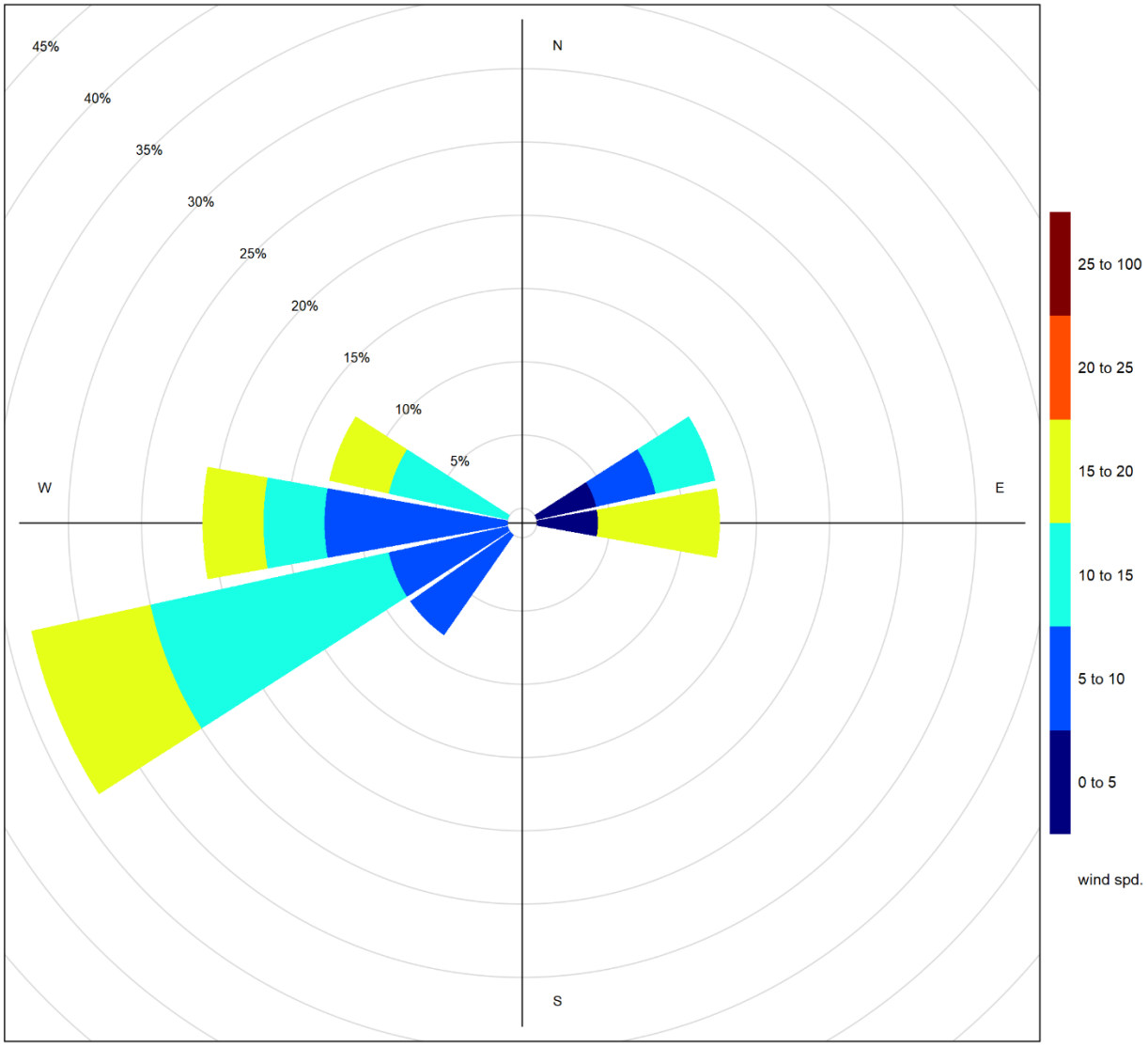

Figure 3-10 Wind rose for $PM_{2.5}$ exceedance days recorded at the Lagoon

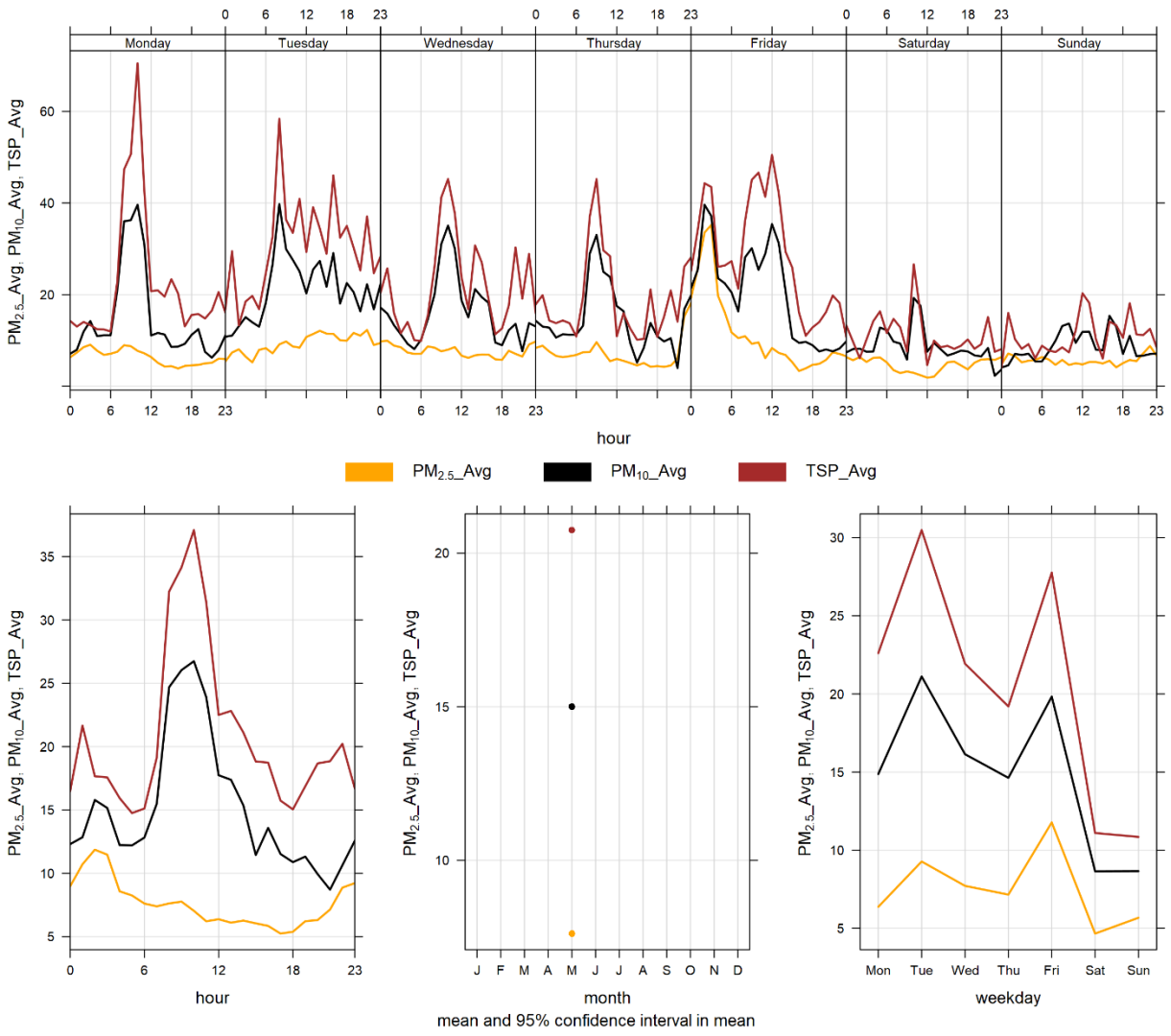

Figure 3-11 Lagoon monitor particulate matter time variation

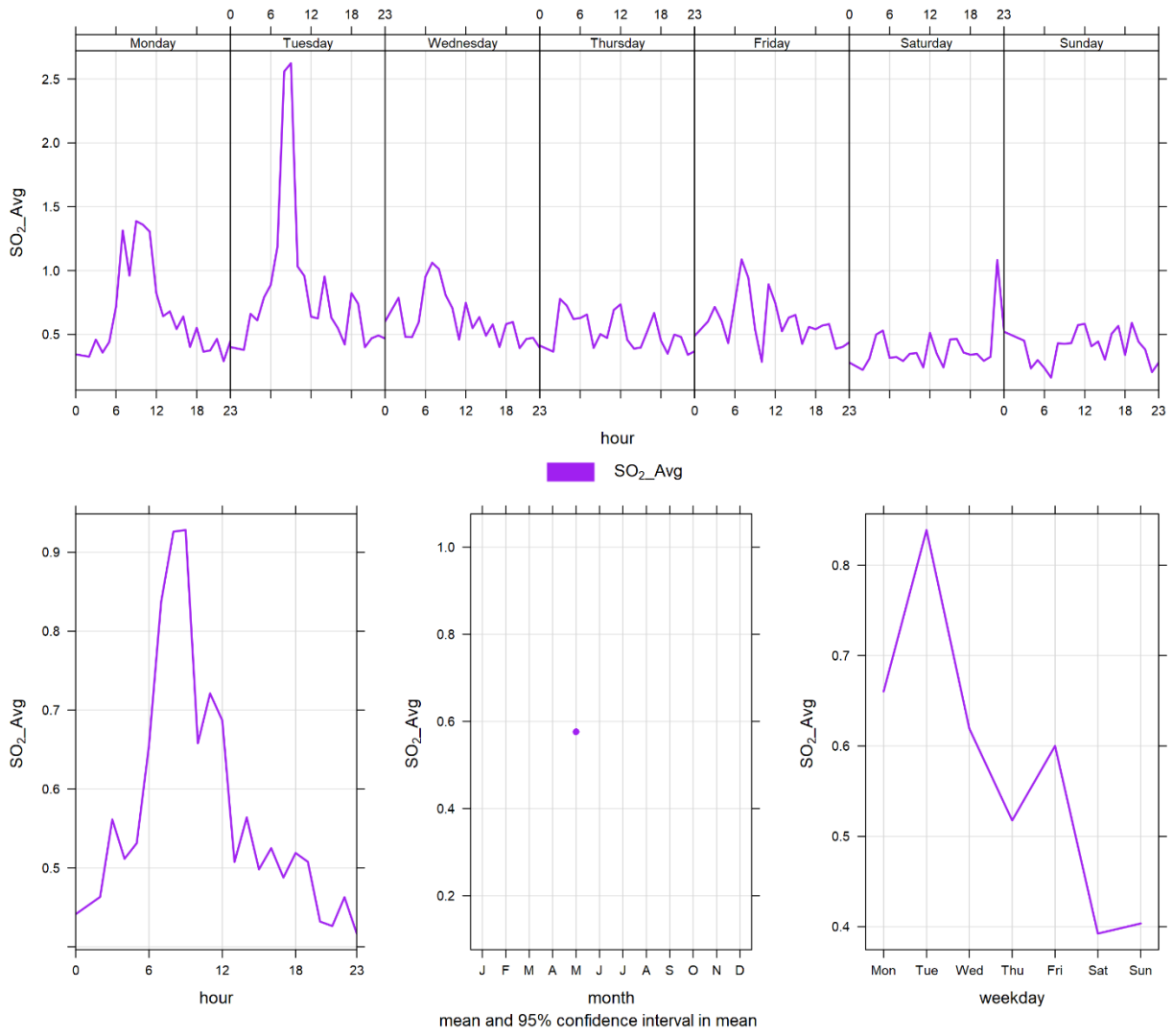

Figure 3-12 Lagoon monitor SO_2 time variation

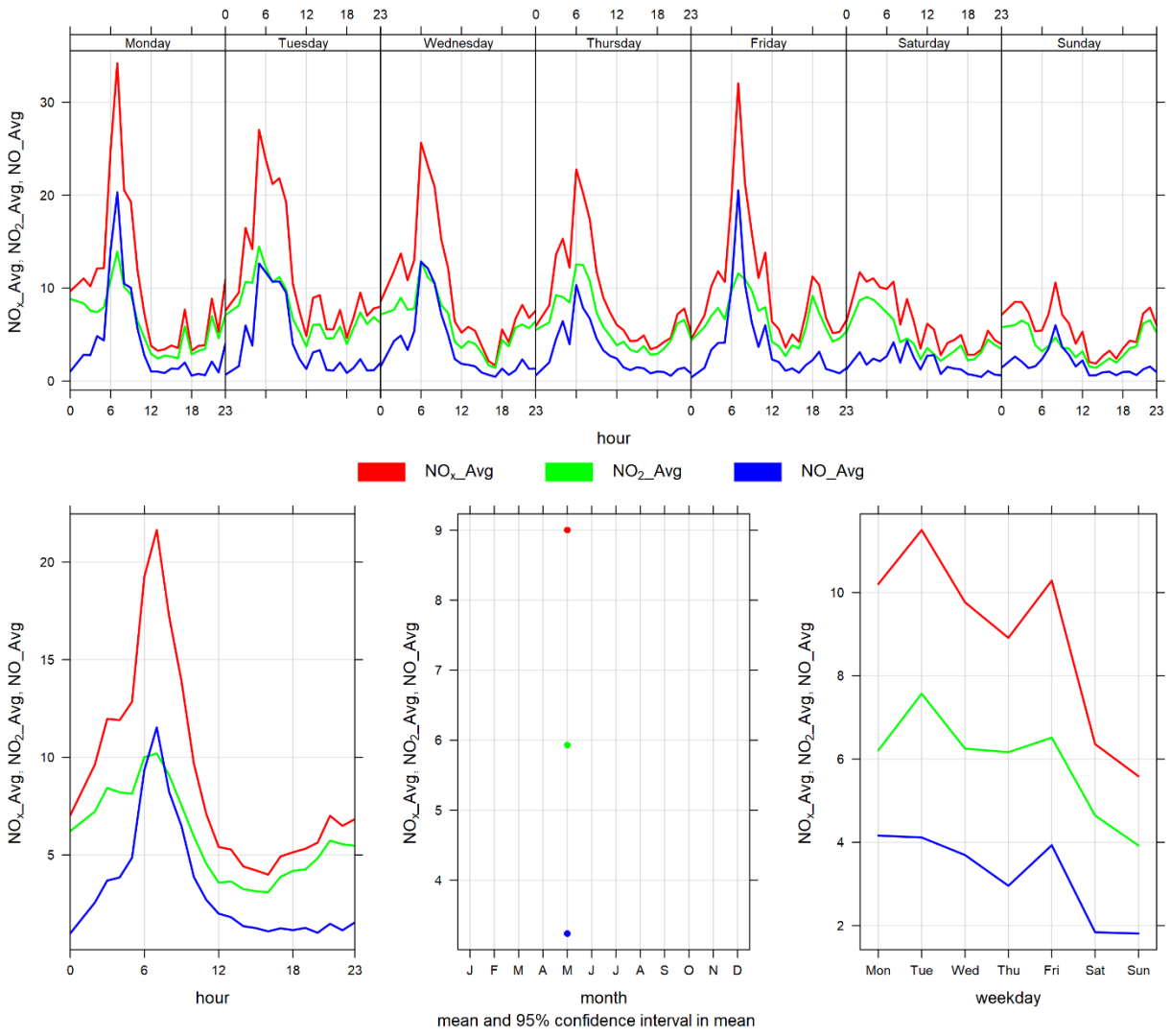

Figure 3-13 Lagoon monitor NO_x time variation

4 WEST INDUSTRIAL GRIMM

4.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 4-1.

Table 4-1 Instrumentation List at the West monitoring location

Parameter Measured	Equipment Description	Notes
$PM_{2.5}$, PM_{10}, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	No operational issues observed. The monitors had 100% uptime in May.

4.2 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. Table 4-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month, while Table 4-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

Figure 4-1 and Figure 4-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. There were zero exceedances of the 24-hour TSP guideline (100 µg/m^3) and 1 exceedance of the $PM_{2.5}$ (29µg/m^3) guideline. The exceedance of the $PM_{2.5}$ objectives was a result of wildfire smoke originating from fires in other parts of the province.

Historically in May, the average number of 24-hour TSP AAAQO exceedances and 24-hour $PM_{2.5}$ AAAQO exceedances are both zero. The maximum number of 24-hour $PM_{2.5}$ AAAQO exceedances was 1 day in May 2014. The station has not recorded an exceedance of the TSP AAAQO in May since monitoring began in 2010.

Table 4-2 Summary of May 2019 data at the West GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	West	7	1	0.3	7.9	158.0	31	1	3.3	87.0	41.4	31	100.0
PM_{10} ($\mu g/m^3$)	-	-	West	-	-	0.4	12.3	403.8	1	16	11.5	256.4	48.2	31	100.0
TSP ($\mu g/m^3$)	-	100	West	-	0	0.3	14.5	498.4	1	16	11.5	256.4	44.1	22	100.0

Table 4-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ at the West 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)
West						
2019-05-31	-	41.4	261.7	11.6	63.2	Wildfire Smoke
Total # of Exceedances	**0**	**1**				
Maximum # of Exceedances (May)	**0 (2010 ~ 2018)**	**1 (2014)**				
Average # of Exceedances (May)	**0**	**0**				
Minimum # of Exceedances (May)	**0 (2010 ~ 2018)**	**0 (2010 ~ 2013, 2015 ~ 2018)**				

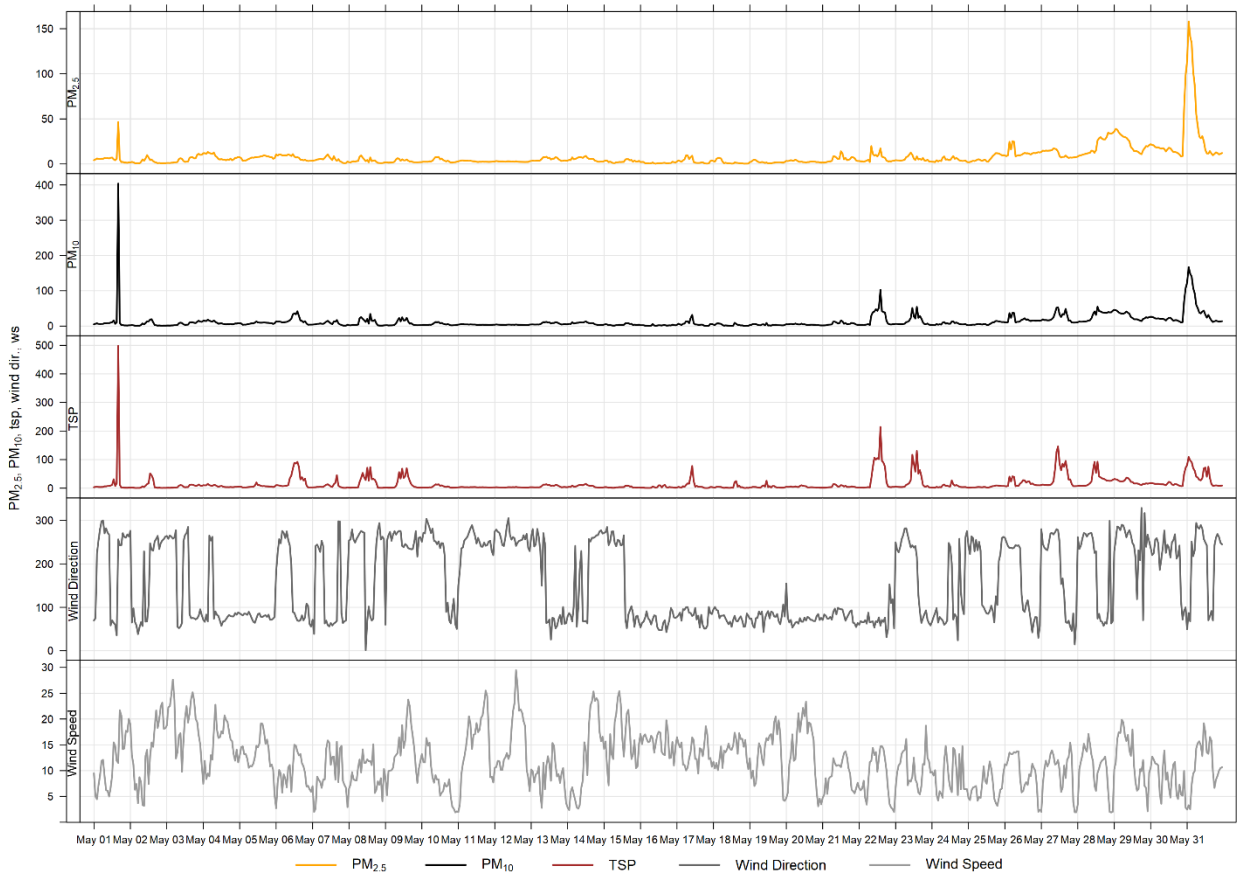

Figure 4-1 1-hour particulate matter concentrations at the West monitor

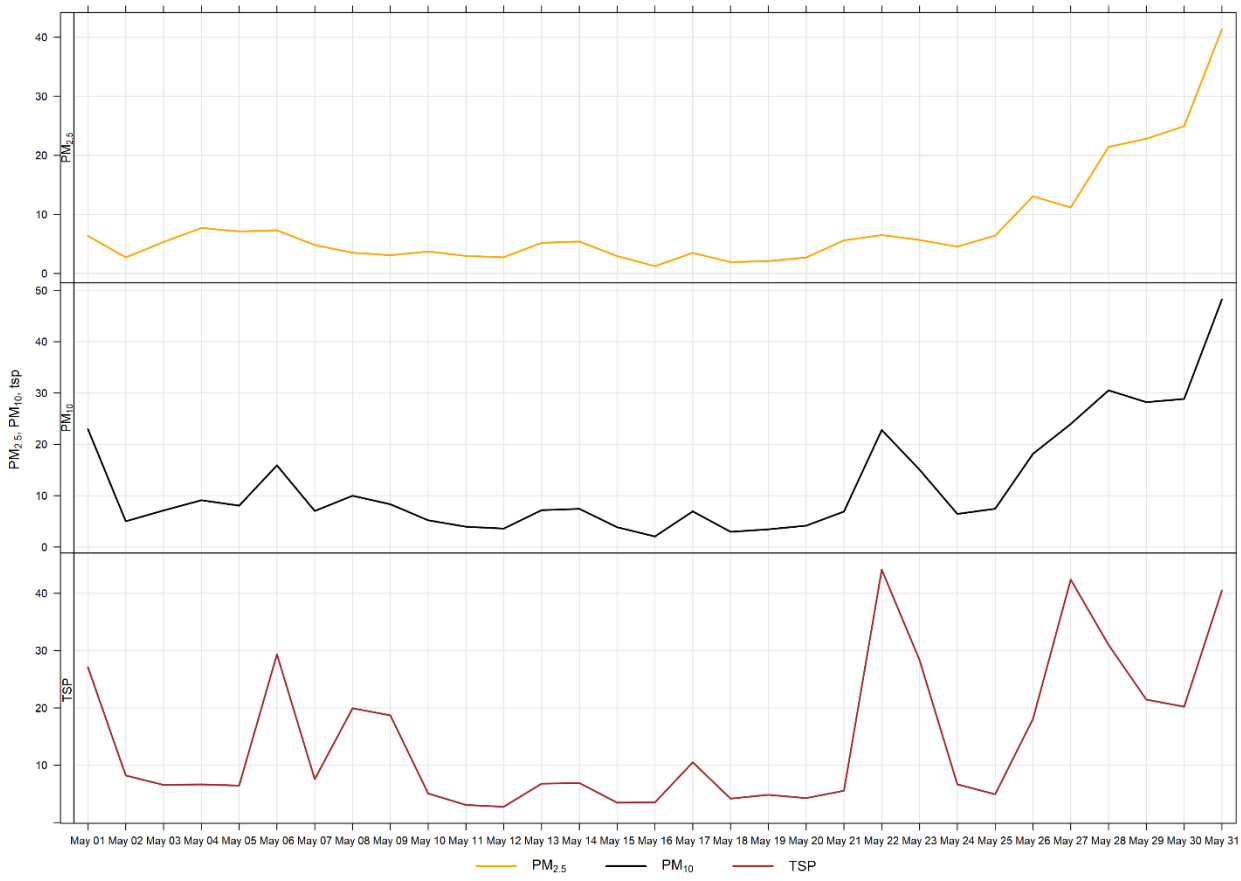

Figure 4-2 24-hour particulate matter concentrations at the West monitor

Figure 4-3 shows the wind rose for the 1 day of $PM_{2.5}$ exceedance. This wind rose shows that the winds predominantly came from the west-southwest direction, however the exceedances is due to wildfire smoke originating outside of the airshed.

Figure 4-4 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 4-4 is based on data collected during May 2019 and indicates a diurnal relationship that could be due to the proximity of the West monitor to the highway. As the monitor is generally 'up-wind' of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.

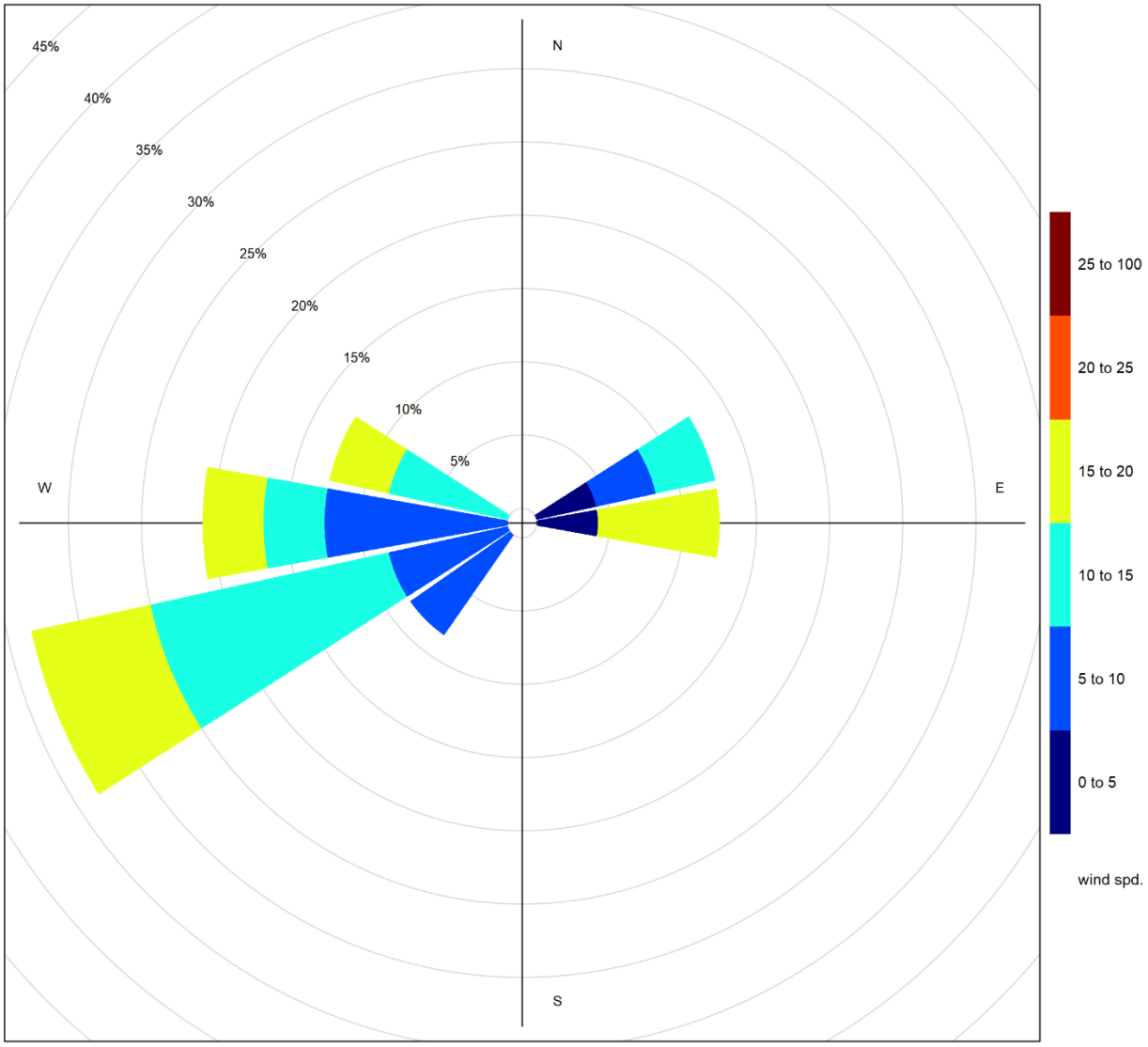

Figure 4-3 Wind rose for $PM_{2.5}$ exceedance days recorded at the West GRIMM

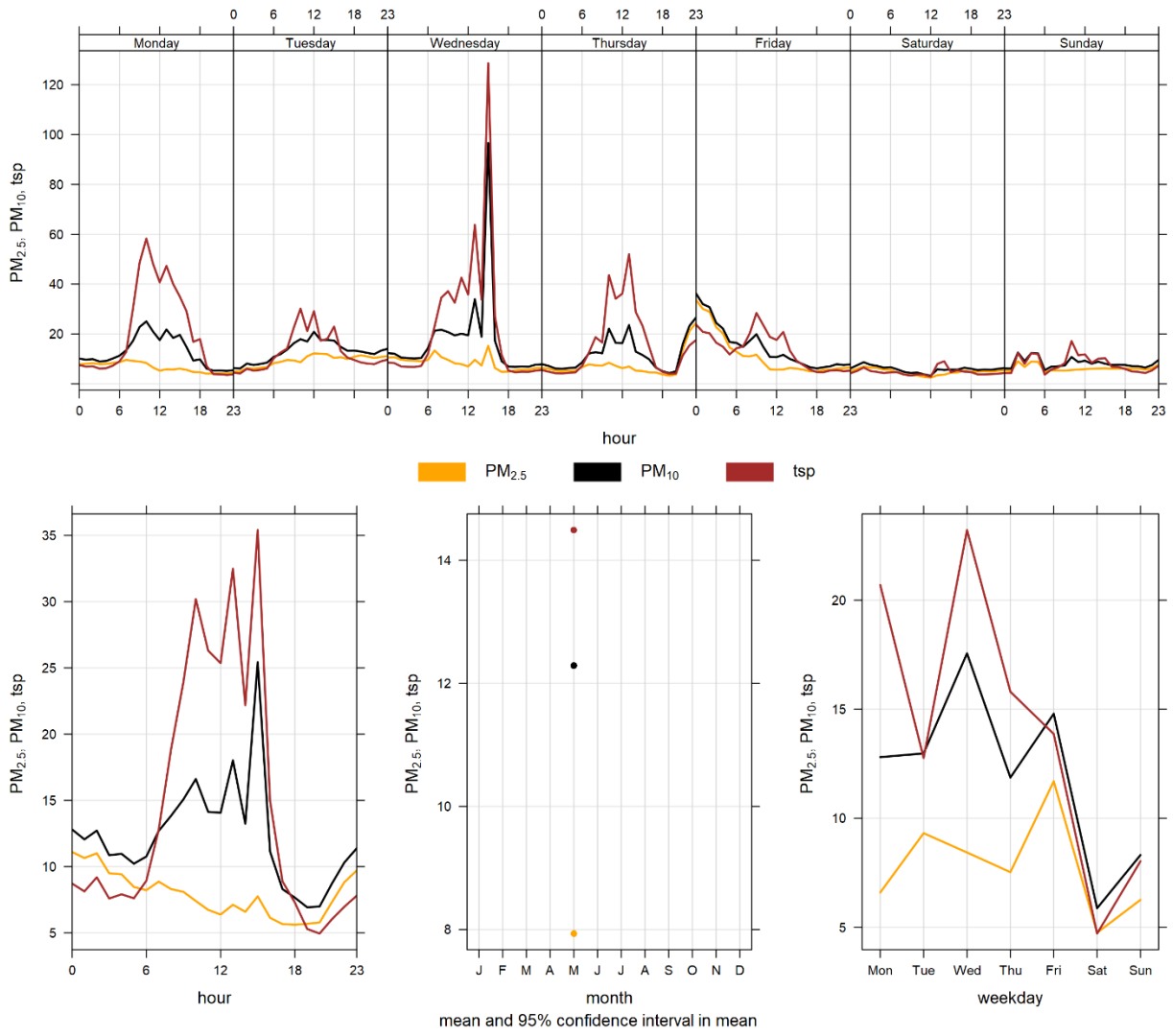

Figure 4-4 West particulate matter time variation

5 BERM INDUSTRIAL GRIMM

5.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 5-1.

Table 5-1 Instrumentation List at the Berm monitoring location

Parameter Measured	Equipment Description	Notes
$PM_{2.5}$, PM_{10}, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	No operational issues observed. The monitors had 100% uptime in May.

5.2 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 5-1 and Figure 5-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. Table 5-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 5-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

There were 2 and one exceedances of the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (29 µg/m^3) guidelines, respectively. Elevated TSP concentrations this month could be associated with Exshaw Creek flood mitigation construction activities. The exceedance of the $PM_{2.5}$ objectives was a result of wildfire smoke originating from fires in other parts of the province.

Historically during the month of May, the Berm monitor records an average of 8 and zero exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines, respectively. The maximum number of TSP exceedances recorded during May occurred in 2010 and 2012 where there were 16 days that exceeded the guideline. The minimum number of TSP exceedances was recorded during May 2014, which had 2 days that exceeded the guideline. The station had not recorded an exceedance of the $PM_{2.5}$ AAAQO in May since monitoring began in 2010.

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 5-2 Summary of May 2019 data at the Berm GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	Berm	7	1	0.1	7.8	136.0	31	3	7.3	251.5	37.7	31	100.0
PM_{10} ($\mu g/m^3$)	-	-	Berm	-	-	0.1	19.2	202.7	14	14	18.8	257.2	56.8	14	100.0
TSP ($\mu g/m^3$)	-	100	Berm	-	2	0.0	39.4	603.3	3	13	22.5	271.1	142.8	14	100.0

Table 5-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ 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						
2019-05-09	107.4	-	252.2	13.9	45.3	Dust, possibly from flood mitigation work
2019-05-14	142.8	-	266.2	13.0	52.7	Dust, possibly from flood mitigation work
2019-05-31	-	37.7	261.7	11.6	63.2	Wildfire Smoke
Total # of Exceedances	**2**	**1**				
Maximum # of Exceedances (May)	**16 (2010, 2012)**	**0 (2010 ~ 2018)**				
Average # of Exceedances (May)	**8**	**0**				
Minimum # of Exceedances (May)	**2 (2014)**	**0 (2010 ~ 2018)**				

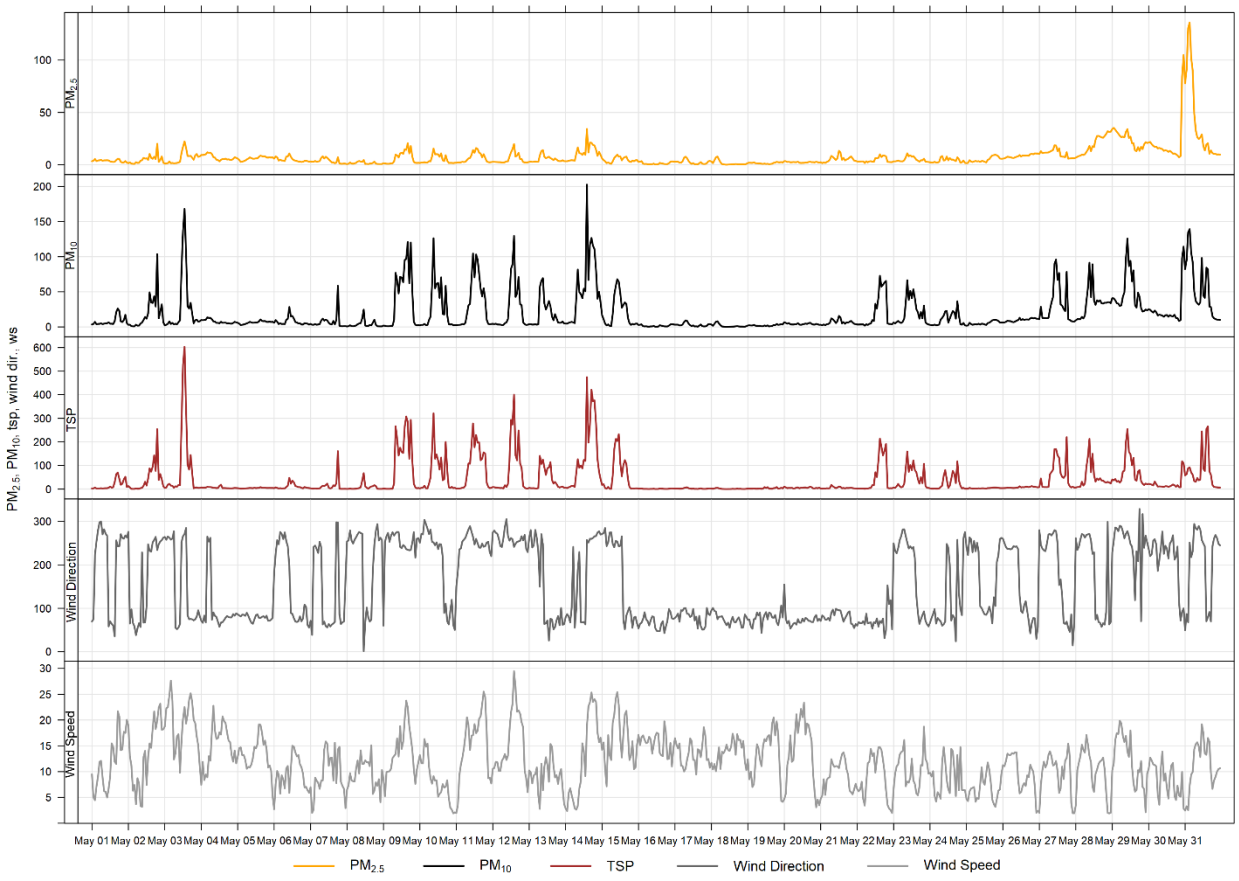

Figure 5-1 1-hour particulate matter concentrations recorded at the Berm monitor

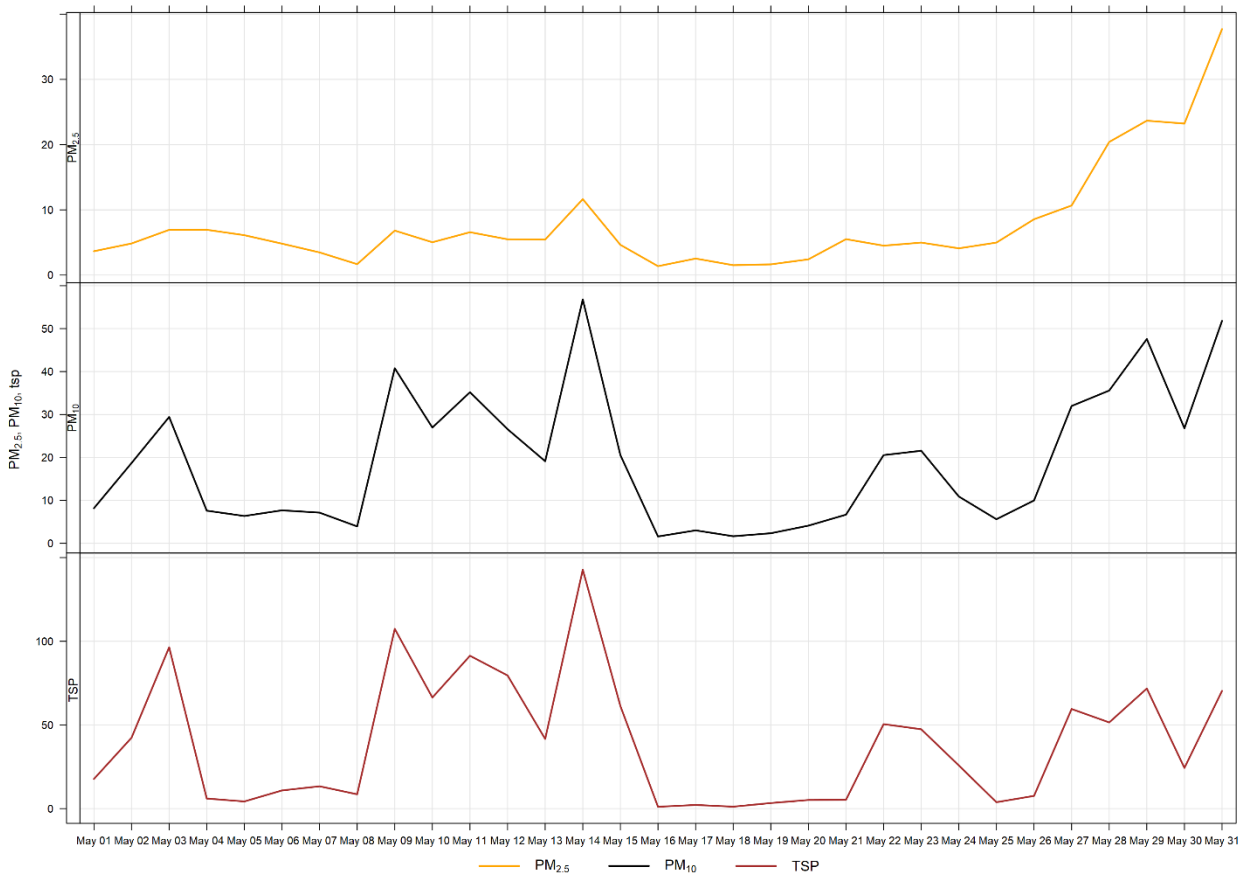

Figure 5-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 5-3 shows the wind rose for the 2 days of TSP exceedances, while Figure 5-4 shows the wind rose for the one day of $PM_{2.5}$ exceedances. The wind roses show that the winds predominantly came from the west for TSP exceedance days, while the winds predominantly came from the west-southwest for the $PM_{2.5}$ exceedance day. The $PM_{2.5}$ exceedance was due to wildfire smoke originating outside of the airshed.

Figure 5-5 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from traffic and other activities in Exshaw, such as the flood mitigation work that is currently underway.

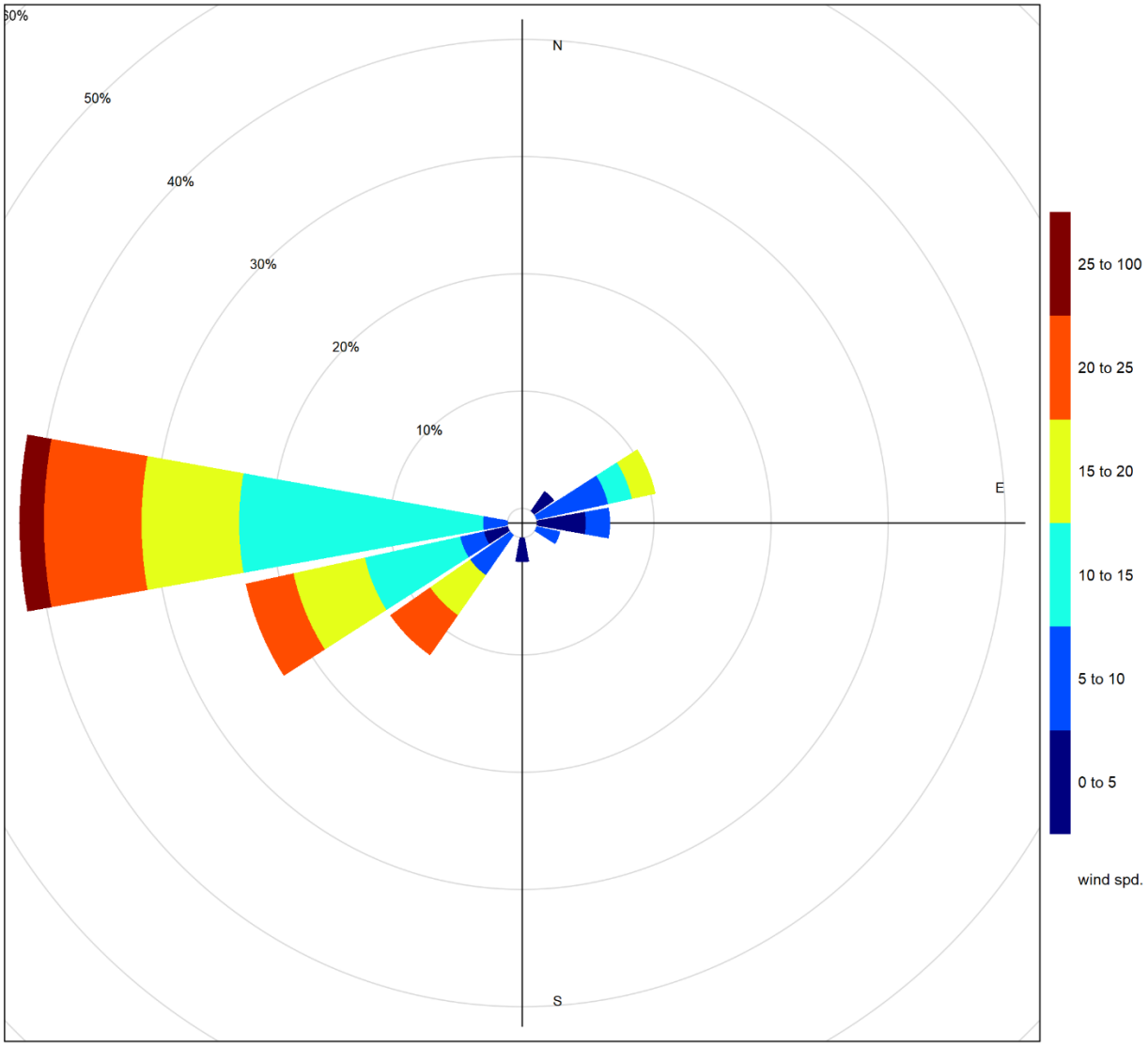

Figure 5-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

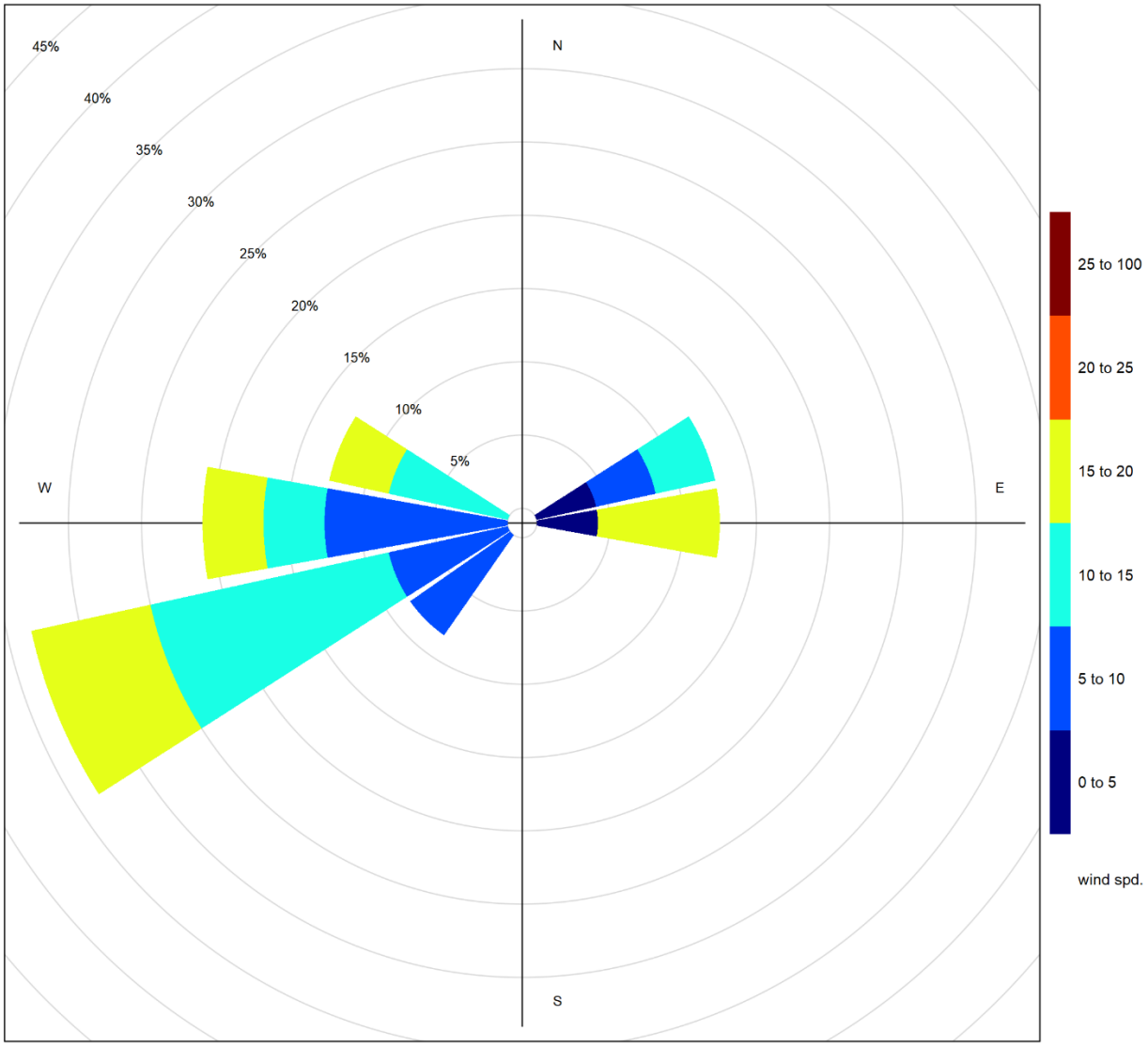

Figure 5-4 Wind rose for $PM_{2.5}$ exceedance days recorded at the Berm GRIMM

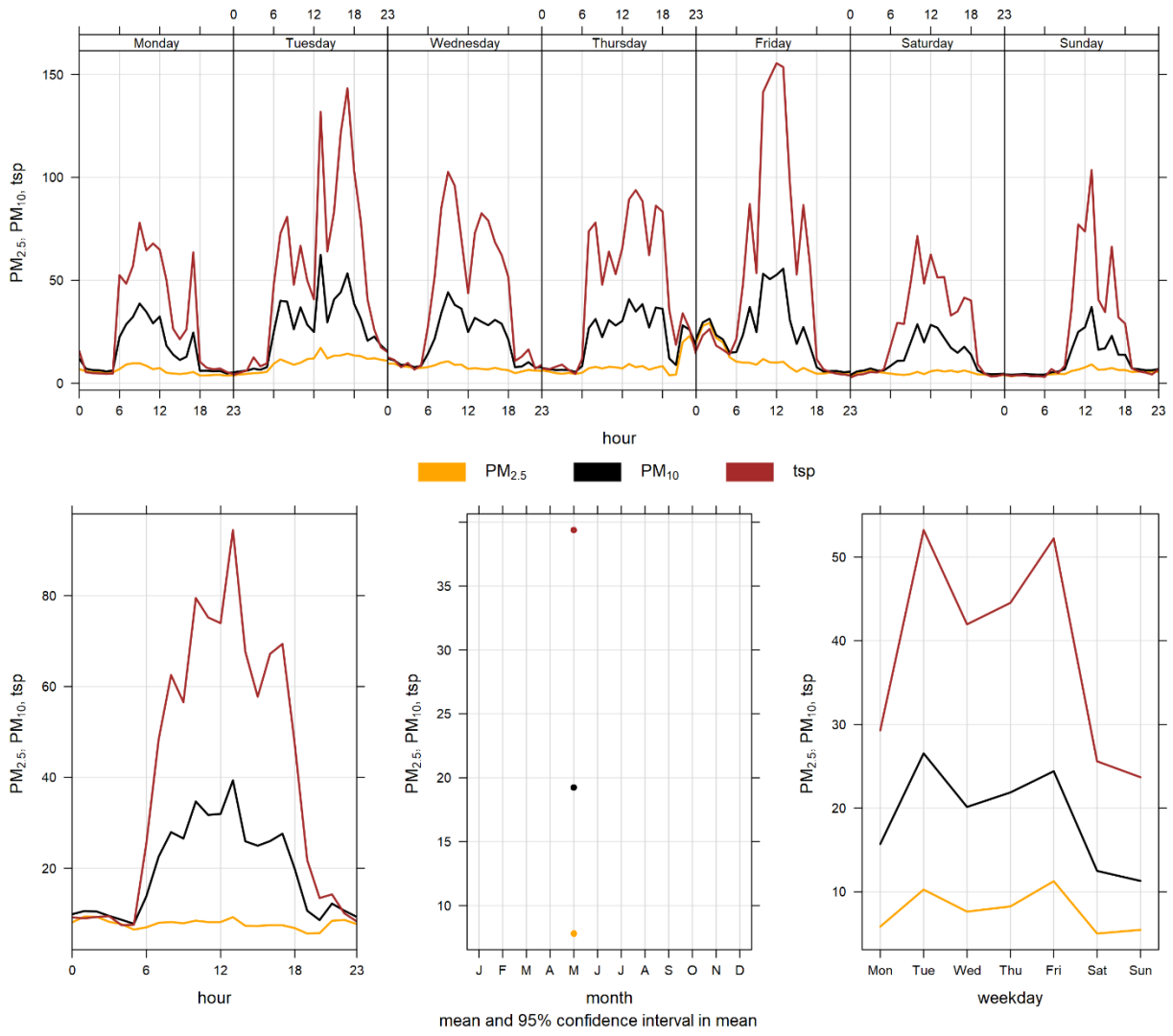

Figure 5-5 Berm particulate matter time variation

6 ENTRANCE INDUSTRIAL GRIMM

6.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 6-1.

Table 6-1 Instrumentation List at the Entrance monitoring location

Parameter Measured	Equipment Description	Notes
$PM_{2.5}$, PM_{10}, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	No operational issues observed. The monitors had 100% uptime in May.

6.2 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 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. Table 6-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

During May, there were 8 and 3 exceedances of the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (29 µg/m^3) guidelines, respectively. Dust created from the flood mitigation work (section 1.1) has the potential to impact particulate matter concentrations and may have contributed to particulate at the Entrance monitor. The exceedance of the $PM_{2.5}$ objectives was a result of wildfire smoke originating from fires in other parts of the province.

Historically, the Entrance monitor records an average of 13 and zero exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines respectively, during the month of May. The maximum number of TSP exceedances recorded during May occurred in 2014 (20 days), while the minimum number of TSP exceedances recorded during May occurred in 2017 (7 days). On the other hand, the maximum number of $PM_{2.5}$ AAAQO exceedances in May was 1 day, occurring in 2011, 2014, and 2016.

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 and exit the Lafarge facility for loading and deliveries. 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. The CPR rail crossing is in disrepair and may be contributing to PM concentrations at the Entrance monitor. Lafarge has been informed the crossing is scheduled to be repaired in the spring of 2019.

Figure 6-3 shows the wind rose for the 8 days that exceeded the TSP Guideline, while Figure 6-4 shows the wind rose for the 3 days that exceeded the $PM_{2.5}$ guideline. The wind roses indicate that the winds predominantly came from the westerly and east-northeast directions for both TSP and $PM_{2.5}$ exceedance days. High wind speeds were not a primary factor for the TSP and $PM_{2.}$exceedances in May at the Entrance station. The primary source of air quality

exceedances this month was the wildfire smoke in the latter part of the month. It is also likely that the flood mitigation work impacts particulate concentrations at the Entrance monitor. Other sources, such as industry, traffic and rail may have contributed to these exceedances.

Table 6-2 Summary of May 2019 data at the Entrance GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	Entrance	6	3	0.3	11.6	153.8	31	2	2.5	67.9	43.6	31	100.0
PM_{10} ($\mu g/m^3$)	-	-	Entrance	-	-	0.3	38.9	332.8	22	15	14.7	70.8	98.2	23	100.0
TSP ($\mu g/m^3$)	-	100	Entrance	-	8	0.2	76.1	798.5	22	15	14.7	70.8	195.3	23	100.0

Table 6-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ 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						
2019-05-10	130.2	-	268.9	7.8	46.5	Dust, possibly from flood mitigation work
2019-05-11	121.3	-	253.7	15.8	43.3	Dust, possibly from flood mitigation work
2019-05-13	109.8	-	59.0	9.0	46.1	Dust, possibly from flood mitigation work
2019-05-22	172.5	-	67.3	8.9	63.9	Dust, possibly from flood mitigation work
2019-05-23	195.3	-	236.0	10.5	50.4	Dust, possibly from flood mitigation work
2019-05-28	145.0	29.3	267.7	10.4	43.6	$PM_{2.5}$ and TSP - Wildfire Smoke TSP - Dust, possibly from flood mitigation work
2019-05-29	173.6	30.9	268.3	12.3	36.7	$PM_{2.5}$ and TSP - Wildfire Smoke TSP - Dust, possibly from flood mitigation work
2019-05-31	139.9	43.6	261.7	11.6	63.2	$PM_{2.5}$ and TSP - Wildfire Smoke TSP - Dust, possibly from flood mitigation work
Total # of Exceedances	8	3				

Maximum # of Exceedances (May)	**20 (2014)**	**1 (2011, 2014, 2016)**				
Average # of Exceedances (May)	**13**	**0**				
Minimum # of Exceedances (May)	**7 (2017)**	**0 (2010, 2012, 2013, 2015, 2017, 2018)**				

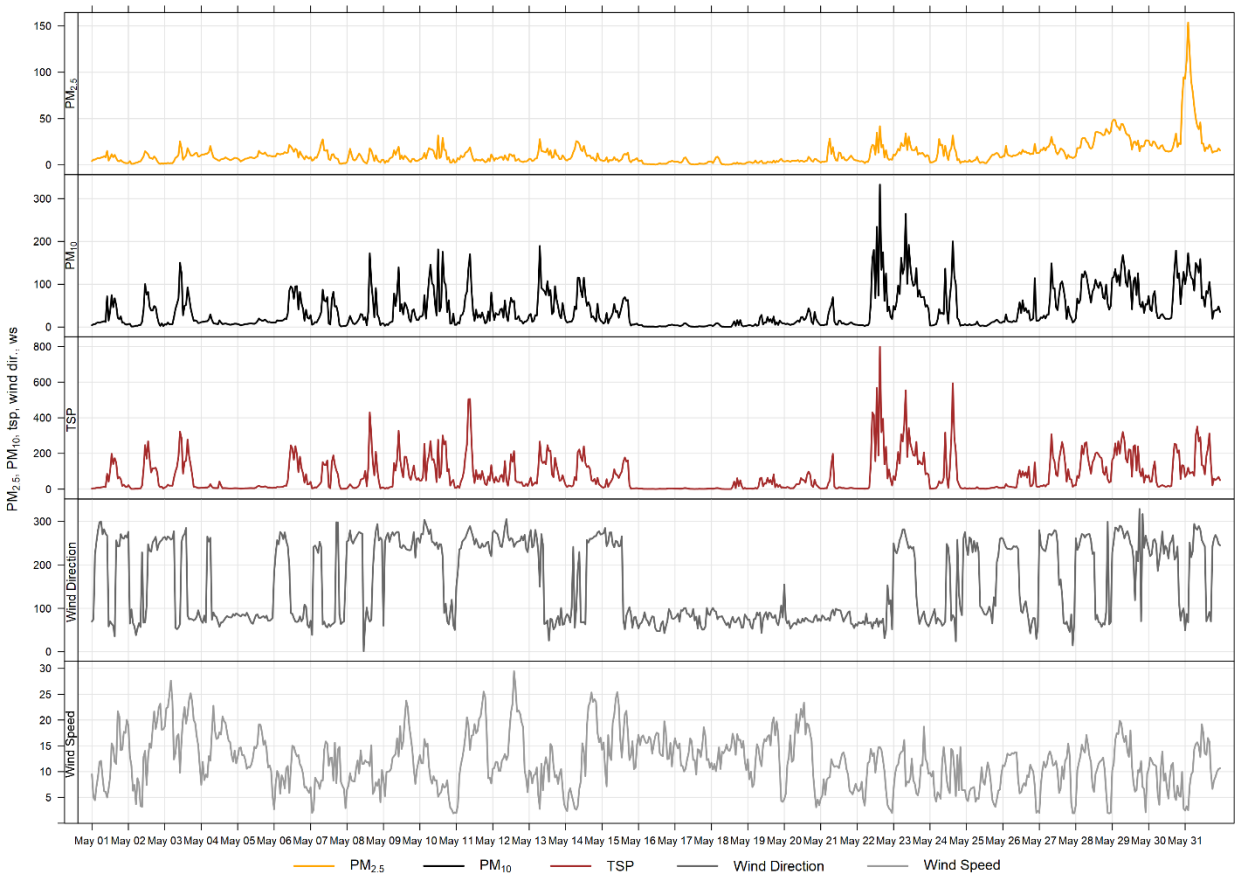

Figure 6-1 1-hour particulate matter concentrations recorded at the Entrance monitor

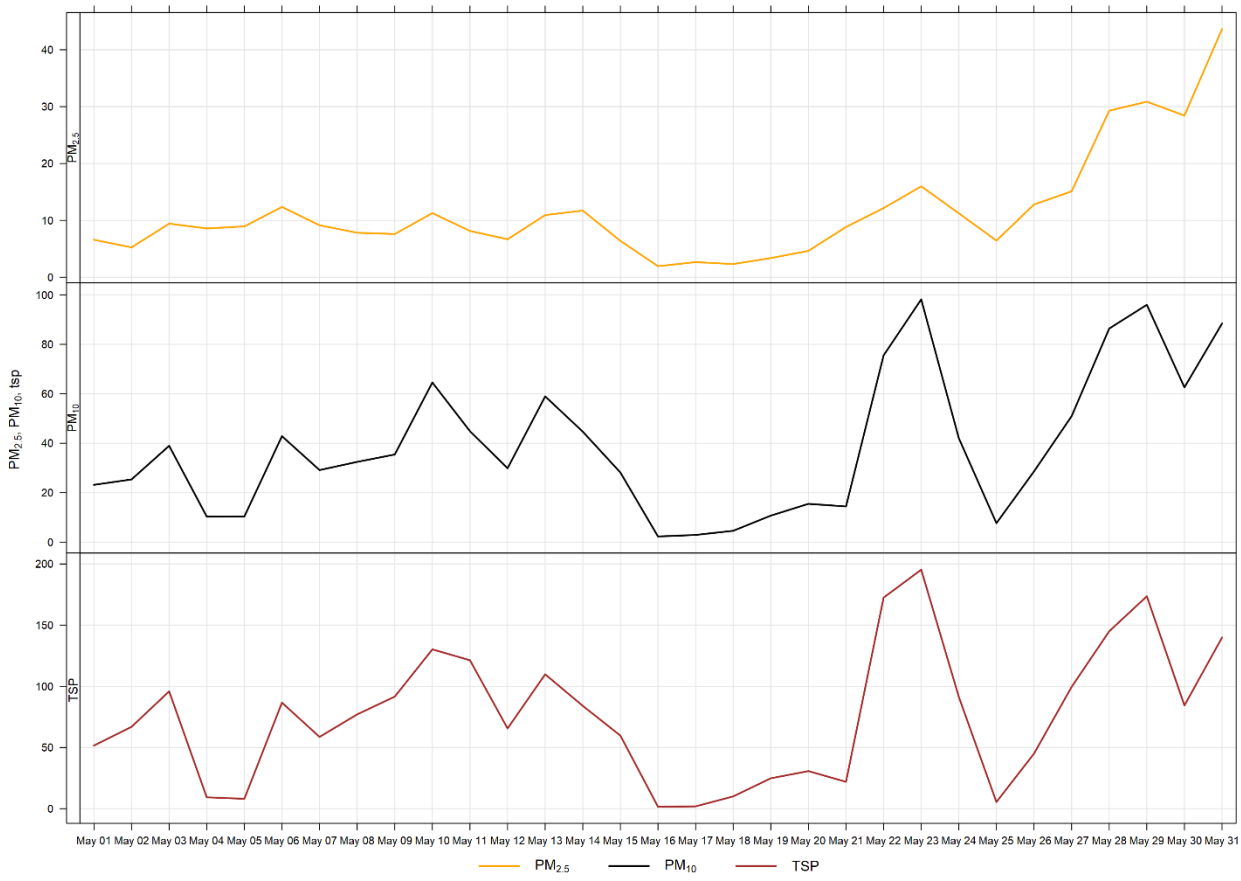

Figure 6-2 24-hour particulate matter concentrations at the Entrance monitor

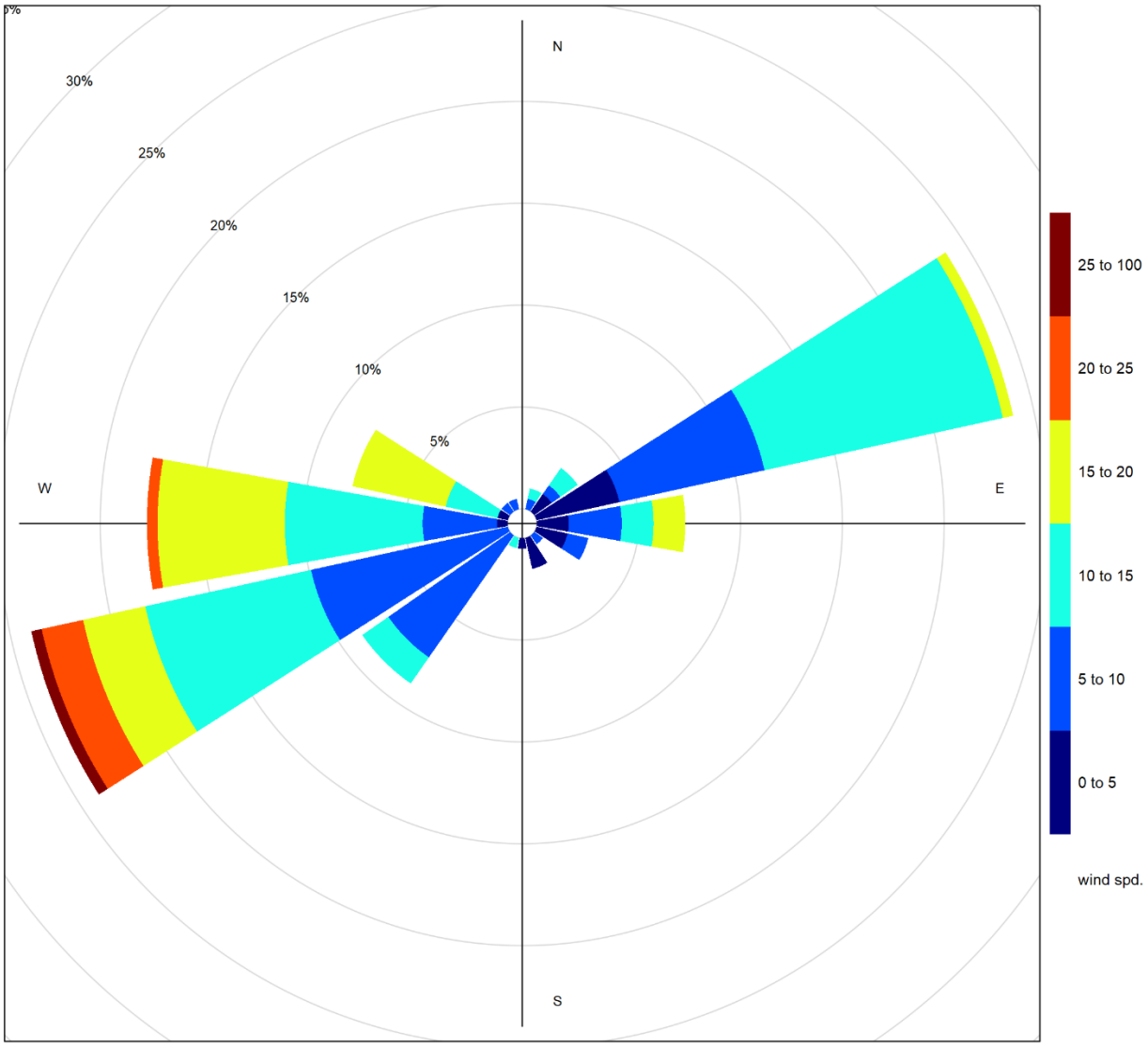

Figure 6-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

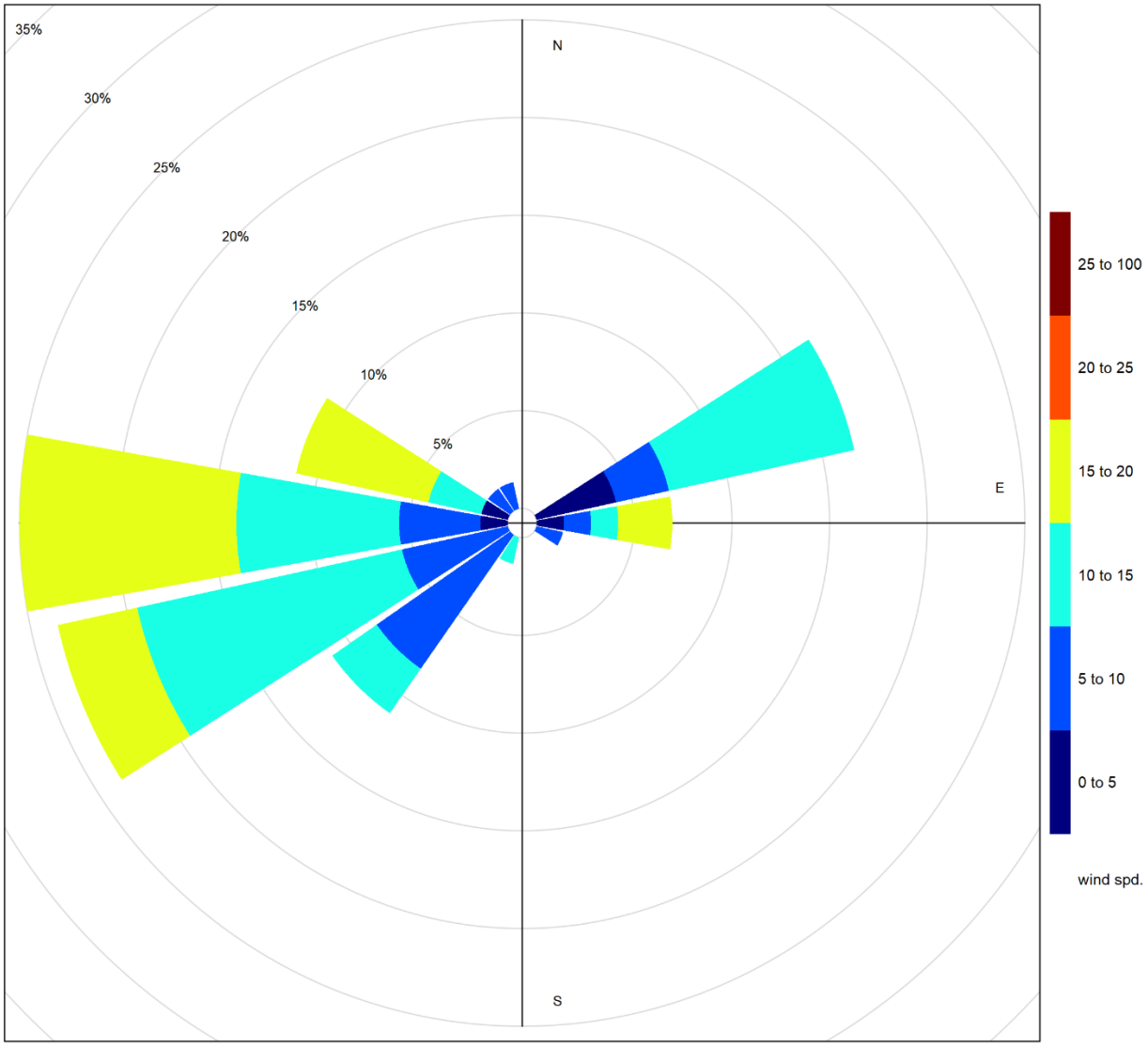

Figure 6-4 Wind rose for $PM_{2.5}$ exceedance days recorded at the Entrance GRIMM

Figure 6-5 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 6-5 is based on data collected during May 2019. The diurnal pattern is likely more influenced by daytime traffic emission (from vehicles serving Lafarge as well as regular highway traffic) given its location near the highway entrance to Lafarge, but can also be influenced by the flood mitigation work currently underway, as well as industry and rail sources.

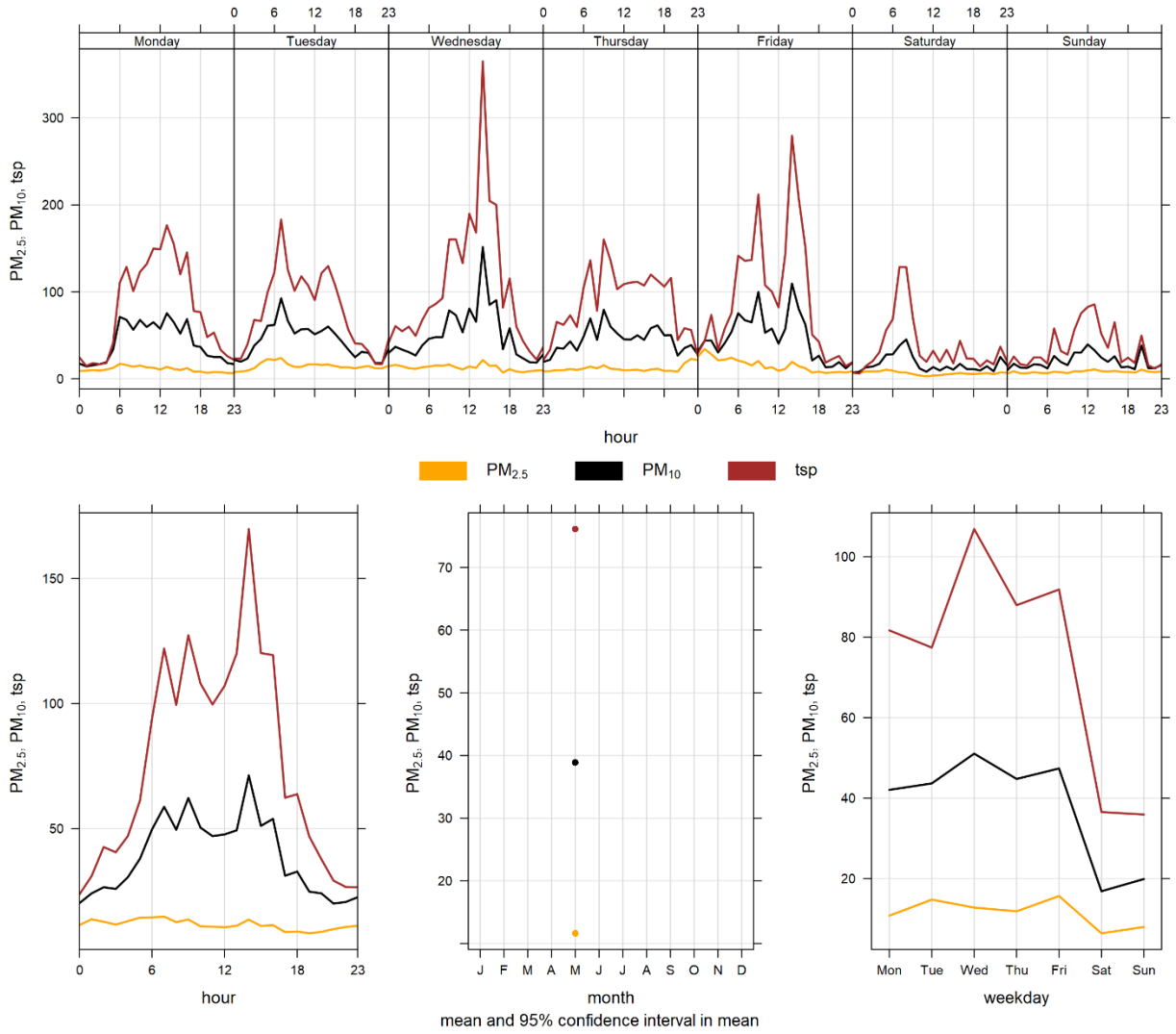

Figure 6-5 Entrance particulate matter time variation

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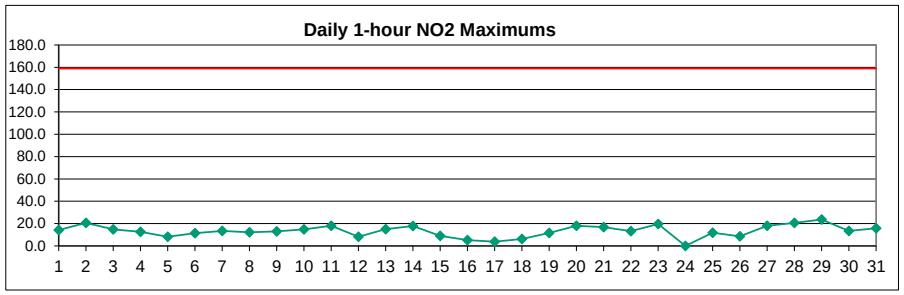
APPENDIX

A DATA & CALIBRATION REPORTS

APPENDIX

Lagoon NO_2 (ppb) – May 2019

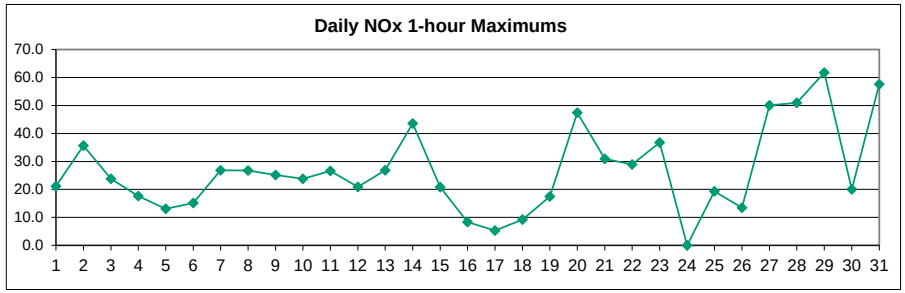
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.7	S	6.3	9.1	9.9	7.6	12.4	10.5	14.3	10.0	11.8	10.1	9.5	6.8	7.1	3.8	0.9	1.0	7.6	6.0	13.6	3.7	9.6	4.0	7.8	14.3
2	2.3	S	4.7	8.1	9.0	12.1	20.6	16.9	15.5	14.0	10.1	11.8	7.3	2.0	1.2	1.2	3.9	3.3	0.9	3.3	5.0	8.7	12.9	6.6	7.9	20.6
3	6.2	S	5.4	14.0	12.9	8.3	13.6	5.8	9.8	11.4	10.1	10.6	6.6	6.0	2.0	1.9	4.4	5.6	14.8	9.0	11.4	2.5	2.8	4.5	7.8	14.8
4	5.2	S	2.8	7.1	12.3	12.6	8.5	2.2	2.0	2.1	5.3	2.8	5.2	6.3	3.8	7.7	6.0	5.8	3.6	5.5	3.5	4.6	3.4	2.9	5.3	12.6
5	2.5	S	2.5	2.1	3.7	2.4	2.8	3.8	5.0	5.9	2.9	1.7	1.9	2.3	2.4	2.1	2.3	2.1	2.4	3.9	3.6	8.3	5.1	3.2	3.2	8.3
6	11.4	S	10.1	5.9	6.6	8.5	8.6	7.8	6.5	5.5	4.8	2.2	1.8	2.0	1.4	1.4	1.2	2.6	1.5	2.5	5.4	7.2	3.4	3.5	4.9	11.4
7	5.0	S	5.0	6.7	11.9	10.5	13.4	11.4	6.6	4.0	3.5	2.6	4.1	1.6	1.3	1.6	3.1	5.3	2.7	1.9	4.9	9.3	7.4	3.5	5.5	13.4
8	3.4	S	7.0	8.5	7.4	7.0	11.0	12.3	8.4	4.4	3.2	1.6	0.9	1.5	1.2	1.1	0.8	1.5	8.6	3.4	2.9	6.0	1.7	3.9	4.7	12.3
9	2.8	S	6.2	6.9	7.3	9.1	13.1	11.4	9.3	6.1	1.6	1.8	2.3	1.7	1.1	0.9	1.5	0.9	3.1	5.9	3.1	3.7	3.3	6.6	4.8	13.1
10	3.0	S	5.1	3.6	3.5	6.1	8.6	14.9	14.3	13.6	10.1	14.7	5.5	2.0	2.3	8.0	2.6	2.1	7.9	12.9	6.5	9.7	12.7	12.6	7.9	14.9
11	11.5	S	18.1	14.7	11.4	9.3	8.3	8.8	5.3	12.3	7.1	2.5	5.6	3.0	1.5	0.8	1.1	1.3	0.7	1.6	4.6	4.0	3.8	3.4	6.1	18.1
12	7.2	S	6.2	4.7	4.3	3.9	2.9	5.9	8.1	2.8	4.1	5.2	7.1	1.2	1.4	3.4	3.7	2.5	2.3	2.8	4.0	5.3	8.2	5.3	4.5	8.2
13	4.6	S	6.4	8.4	3.2	5.7	8.7	15.0	10.6	5.3	2.6	2.5	2.0	2.4	5.6	3.5	2.0	5.2	2.1	2.0	2.1	11.0	3.3	3.9	5.1	15.0
14	4.7	S	4.4	6.7	12.3	17.9	13.8	11.4	14.4	17.1	4.7	3.1	3.1	7.3	3.4	3.8	2.6	8.1	4.7	5.2	4.4	2.8	4.2	2.5	7.1	17.9
15	2.7	S	4.0	5.7	6.7	8.7	9.1	4.2	4.1	2.6	1.4	1.1	2.4	1.7	2.3	1.8	1.7	1.3	1.8	2.0	4.1	2.8	4.7	5.7	3.6	9.1
16	2.0	S	1.4	1.5	2.3	3.7	2.1	4.7	4.2	2.2	4.7	2.4	2.0	3.4	4.2	3.5	2.5	2.1	5.2	2.6	1.7	2.3	2.7	1.5	2.8	5.2
17	1.4	S	1.5	1.0	1.7	1.9	2.8	3.4	3.2	3.7	2.6	2.7	2.4	2.3	2.1	3.5	2.2	3.0	2.5	2.2	1.9	1.5	1.7	1.4	2.3	3.7
18	1.3	S	1.9	6.2	4.5	1.8	3.0	5.0	5.8	2.9	2.6	1.1	2.5	1.5	2.7	1.3	3.5	4.7	3.5	1.2	1.5	1.6	2.4	3.9	2.9	6.2
19	8.7	S	6.8	11.7	9.0	2.5	0.9	1.2	2.3	1.2	1.7	0.8	2.0	0.6	0.8	0.8	0.9	1.0	4.2	5.7	5.0	7.0	4.7	6.5	3.7	11.7
20	9.4	S	9.5	10.8	13.4	10.4	15.1	18.1	6.4	8.3	5.1	2.0	3.5	1.0	1.2	2.2	2.4	9.3	6.4	7.3	3.4	5.2	4.5	6.1	7.0	18.1
21	6.1	S	11.2	16.8	6.4	13.7	4.0	2.9	3.1	4.1	2.7	4.1	4.5	11.1	14.2	8.4	5.9	4.2	4.0	10.1	11.6	6.4	9.7	11.3	7.7	16.8
22	11.7	S	12.0	9.3	9.5	11.6	13.3	5.0	6.4	6.6	5.5	5.0	2.7	4.4	2.2	2.4	2.3	1.8	1.2	1.8	3.8	7.4	6.8	10.0	6.2	13.3
23	14.3	S	13.2	19.6	18.4	11.6	14.8	15.9	13.0	8.0	6.3	1.5	1.1	3.8	1.9	1.6	4.3	1.6	1.4	1.4	5.9	10.1	10.1	4.9	8.0	19.6
24	7.8	S	11.5	8.4	14.0	12.1	14.3	17.9	12.2	C	C	C	C	C	C	2.8	2.7	5.7	8.8	0.9	1.9	4.8	3.0	3.1	-	-
25	2.9	S	11.9	8.2	7.0	8.6	9.7	10.4	3.7	1.1	1.1	2.9	0.9	0.8	0.7	1.1	2.3	3.6	1.1	1.2	2.7	7.8	5.9	3.7	4.3	11.9
26	4.8	S	8.6	7.5	7.4	6.7	6.1	4.3	3.4	4.4	5.3	2.6	1.9	2.2	1.1	1.4	2.9	2.3	2.0	1.7	2.3	4.2	8.1	5.9	4.2	8.6
27	9.8	S	7.5	5.1	6.6	7.1	11.0	14.8	17.1	18.1	13.2	11.9	4.4	4.2	2.8	3.4	4.2	6.4	1.5	1.2	2.9	4.6	7.3	14.7	7.8	18.1
28	12.6	S	11.8	12.4	11.6	15.8	17.7	16.9	20.7	14.1	15.9	11.3	3.2	4.2	5.5	4.4	6.9	6.0	4.6	5.5	8.7	6.0	6.2	7.7	10.0	20.7
29	13.3	S	9.1	12.5	4.9	4.1	18.7	23.7	19.4	17.2	14.8	3.4	2.3	6.9	7.3	6.1	2.9	1.5	3.1	5.5	4.4	10.5	5.6	8.7	9.0	23.7
30	6.1	S	6.2	10.1	8.3	5.6	12.1	13.5	11.8	6.5	6.5	6.8	6.5	10.4	8.4	8.5	6.8	6.3	4.0	4.3	6.0	6.3	3.9	3.3	7.3	13.5
31	3.2	S	5.7	8.0	7.3	5.0	9.1	15.9	15.2	10.3	7.4	3.7	2.4	4.6	4.3	3.0	5.7	12.3	11.8	11.7	6.7	2.7	2.7	4.9	7.1	15.9
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	707	100%
MEAN	6.2	-	7.2	8.4	8.2	8.1	10.0	10.2	9.1	7.5	6.0	4.6	3.6	3.6	3.2	3.1	3.1	3.9	4.2	4.3	4.8	5.7	5.5	5.5		
MAX	14.3	-	18.1	19.6	18.4	17.9	20.6	23.7	20.7	18.1	15.9	14.7	9.5	11.1	14.2	8.5	6.9	12.3	14.8	12.9	13.6	11.0	12.9	14.7		



Number of 1HR Exceedences	0		
Number of Non-Zero Readings	707		
Maximum 1-HR Average	23.7 PPB		
Maximum 24-HR Average	10.0 PPB		
		Opperational Time	744 HRS
Monthly Calibration	6	Opperational Uptime	100.0 %
Standard Deviation	4.3	Monthly Average	5.9 PPB

Lagoon NOx (ppb) – May 2019

	HOUR																								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.9	S	6.4	11.7	12.8	9.0	17.2	13.6	21.2	17.4	19.7	16.1	15.0	9.9	10.1	5.0	1.2	1.3	11.1	6.9	16.9	4.2	11.6	4.6	10.8	21.2
2	2.6	S	5.0	9.2	11.0	15.1	35.7	27.6	27.2	27.2	17.7	20.3	11.9	2.7	1.5	1.5	5.3	4.6	1.1	3.5	5.3	12.6	16.5	6.9	11.8	35.7
3	6.7	S	6.0	23.8	21.8	11.0	20.1	8.6	15.9	16.7	14.7	22.2	11.3	10.3	2.4	2.4	5.9	8.4	19.2	12.1	15.0	2.8	2.9	4.8	11.5	23.8
4	5.6	S	3.0	7.4	15.1	17.6	12.2	2.3	2.3	2.6	9.9	4.8	10.9	14.6	5.1	12.6	9.1	7.8	4.8	7.3	3.5	4.8	3.5	2.9	7.4	17.6
5	2.6	S	2.6	2.2	4.0	2.5	3.4	5.4	9.0	13.1	5.9	2.7	2.9	3.3	3.4	2.8	2.8	2.7	2.8	4.2	3.7	10.5	5.3	3.2	4.4	13.1
6	11.5	S	15.1	6.3	8.0	11.9	12.4	12.3	11.8	12.1	9.6	3.3	2.6	2.6	1.6	1.7	1.5	3.6	2.0	2.5	7.0	11.5	3.8	3.9	6.9	15.1
7	5.1	S	5.2	6.9	13.6	13.8	26.8	18.1	9.7	6.7	5.5	3.7	6.5	2.1	1.6	2.2	4.1	7.3	3.4	2.1	5.8	12.5	7.7	3.6	7.6	26.8
8	4.3	S	16.8	13.8	9.5	9.4	19.8	26.7	19.5	8.2	5.1	2.2	1.1	2.0	1.4	1.3	1.6	1.7	10.4	4.1	3.3	6.3	1.7	4.1	7.6	26.7
9	2.8	S	9.6	9.4	12.4	13.4	25.1	21.7	16.1	10.0	2.1	2.5	3.1	2.1	1.4	0.9	1.8	0.9	3.5	7.9	3.3	4.0	4.2	8.9	7.3	25.1
10	3.1	S	7.5	4.0	3.8	6.8	9.5	21.4	19.4	18.7	13.5	23.8	7.7	2.6	3.7	10.2	2.9	2.5	10.6	18.6	6.6	13.6	15.1	17.3	10.6	23.8
11	14.9	S	22.7	16.8	12.4	11.9	11.9	18.3	8.9	26.6	11.3	3.6	8.9	4.5	1.9	0.8	1.2	1.6	0.8	1.6	4.9	4.3	3.8	4.2	8.6	26.6
12	9.0	S	8.9	5.2	4.7	4.3	3.7	12.2	20.9	4.3	6.9	8.9	13.1	1.6	1.8	5.5	5.1	3.1	2.8	4.5	5.1	6.8	8.4	5.6	6.6	20.9
13	4.7	S	6.8	9.4	3.3	6.4	10.8	26.8	15.0	8.0	3.3	3.1	2.1	3.9	7.1	5.9	2.3	6.3	2.3	2.0	2.0	13.7	3.3	4.0	6.6	26.8
14	4.7	S	4.4	6.8	15.7	43.6	20.4	18.3	23.3	29.1	6.0	3.6	4.2	11.2	4.1	4.6	3.1	12.2	6.0	8.1	5.0	3.0	5.7	2.5	10.7	43.6
15	2.8	S	4.9	8.4	11.1	20.8	14.7	6.0	6.6	3.7	1.7	1.4	3.5	2.2	3.7	2.2	1.9	1.4	1.8	2.2	5.0	3.2	7.5	9.3	5.5	20.8
16	2.0	S	1.5	1.6	2.6	4.6	2.4	6.4	5.7	2.5	8.3	3.1	2.4	4.8	6.5	6.1	3.3	2.5	7.9	3.4	1.9	2.4	2.9	1.6	3.8	8.3
17	1.4	S	1.7	1.1	1.8	2.0	2.9	5.2	4.5	5.3	3.3	3.8	3.4	2.9	2.8	4.5	2.4	3.9	3.4	2.5	2.0	1.5	1.8	1.5	2.9	5.3
18	1.2	S	1.9	9.2	5.5	2.0	3.9	6.9	9.1	4.9	3.4	1.3	3.8	2.3	3.5	1.5	4.9	6.4	4.5	1.3	1.9	1.6	2.5	4.2	3.8	9.2
19	11.4	S	10.0	17.5	11.8	3.1	1.3	1.6	3.7	1.6	2.1	1.0	2.8	0.6	1.1	1.0	1.0	1.1	6.2	6.7	5.6	7.0	4.8	8.6	4.9	17.5
20	10.3	S	14.4	20.0	27.3	17.9	44.7	47.5	14.1	14.4	7.8	2.4	4.7	1.0	1.5	3.0	3.7	12.2	7.1	9.5	3.5	5.3	4.5	7.9	12.4	47.5
21	7.3	S	13.3	30.9	7.2	20.7	4.7	4.2	3.4	8.1	3.1	4.7	5.0	16.5	24.3	10.1	7.0	4.5	4.1	11.6	17.5	6.8	11.5	18.4	10.6	30.9
22	15.0	S	17.4	11.6	14.3	20.5	28.9	7.9	11.1	13.1	8.7	7.1	3.6	6.2	2.9	3.1	2.9	2.2	1.2	1.9	3.8	14.1	7.5	10.8	9.4	28.9
23	16.0	S	17.1	32.9	36.8	22.0	33.6	25.4	20.2	12.1	8.9	1.8	1.2	5.2	2.2	1.8	5.6	1.7	1.5	1.5	6.4	10.6	11.5	5.1	12.2	36.8
24	7.9	S	12.6	13.9	23.4	25.4	34.1	67.4	24.1	C	C	C	C	C	C	3.4	3.1	7.3	9.3	0.9	2.0	4.8	3.3	3.1	-	-
25	3.6	S	19.3	9.3	11.2	8.9	11.5	15.3	4.0	1.1	1.3	4.3	1.1	0.8	0.7	1.5	2.5	4.1	1.2	1.2	3.2	11.0	7.9	4.6	5.6	19.3
26	5.5	S	12.6	9.1	9.1	11.5	13.5	9.9	8.8	9.5	9.9	3.4	2.4	2.7	1.3	1.5	4.1	2.7	2.3	1.9	2.4	4.7	13.1	6.6	6.5	13.5
27	12.1	S	7.8	5.2	9.9	12.4	31.4	50.1	41.3	42.6	26.8	20.3	5.7	5.5	3.4	4.6	6.8	8.7	1.6	1.0	2.9	5.0	9.6	27.7	14.9	50.1
28	13.1	S	15.2	21.3	20.2	30.0	43.3	44.2	50.9	33.2	27.3	17.9	3.6	6.0	7.0	5.4	8.1	6.7	5.1	5.5	9.8	5.9	6.2	7.6	17.1	50.9
29	15.8	S	13.7	23.2	6.5	5.4	47.6	61.8	46.3	33.7	25.6	5.2	2.9	8.9	8.9	7.3	3.2	1.7	3.3	5.7	4.5	13.2	5.6	9.0	15.6	61.8
30	6.2	S	7.5	14.9	13.7	5.9	17.1	20.0	17.6	7.2	8.0	9.2	11.7	12.6	10.0	11.4	8.6	7.4	4.4	4.6	6.3	6.4	4.0	3.5	9.5	20.0
31	3.3	S	7.6	8.2	8.3	8.1	32.0	57.6	42.3	23.1	12.9	5.5	3.2	6.7	5.5	4.6	6.8	14.3	13.8	17.6	8.4	3.1	3.3	6.0	13.1	57.6
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	707	100%
MEAN	7.0	-	9.6	12.0	11.9	12.8	19.2	21.6	17.2	13.9	9.7	7.1	5.4	5.3	4.4	4.2	4.0	4.9	5.1	5.3	5.6	7.0	6.5	6.8		
MAX	16.0	-	22.7	32.9	36.8	43.6	47.6	67.4	50.9	42.6	27.3	23.8	15.0	16.5	24.3	12.6	9.1	14.3	19.2	18.6	17.5	14.1	16.5	27.7		

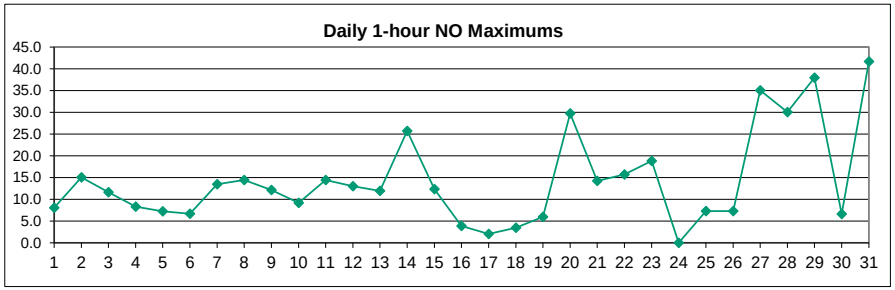


Number of Non-Zero Readings	707
Maximum 1-HR Average	61.8 PPB
Maximum 24-HR Average	17.1 PPB

		Opperational Time	744 HRS
Monthly Calibration	6	Opperational Uptime	100.0 %
Standard Deviation	9.099	Monthly Average	9.0 PPB

Lagoon NO (ppb) – May 2019

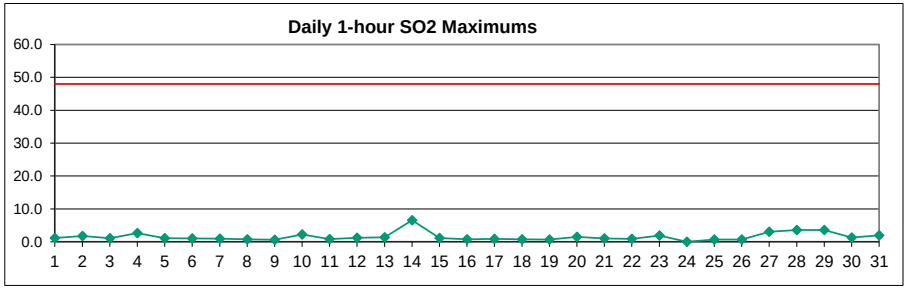
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.3	S	0.3	2.8	3.1	1.6	5.0	3.2	7.0	7.5	8.1	6.2	5.7	3.1	3.1	1.2	0.4	0.4	3.7	1.0	3.4	0.6	2.1	0.7	3.1	8.1
2	0.4	S	0.4	1.2	2.2	3.2	15.0	10.7	11.7	13.2	7.7	8.6	4.7	0.8	0.3	0.4	1.5	1.4	0.3	0.4	0.5	4.0	3.6	0.4	4.0	15.0
3	0.6	S	0.7	9.8	9.0	2.8	6.5	2.8	6.2	5.4	4.7	11.6	4.7	4.3	0.5	0.5	1.6	2.9	4.5	3.1	3.8	0.4	0.3	0.4	3.8	11.6
4	0.6	S	0.3	0.4	2.9	5.1	3.9	0.2	0.4	0.6	4.6	1.9	5.8	8.3	1.3	4.9	3.2	2.0	1.4	1.9	0.2	0.3	0.2	0.1	2.2	8.3
5	0.2	S	0.2	0.2	0.4	0.2	0.6	1.7	4.1	7.3	3.1	1.0	1.1	1.0	1.1	0.7	0.5	0.7	0.5	0.4	0.3	2.4	0.4	0.2	1.2	7.3
6	0.3	S	5.2	0.5	1.6	3.5	3.9	4.7	5.4	6.7	4.9	1.0	0.9	0.6	0.3	0.4	0.3	1.1	0.6	0.2	1.7	4.4	0.6	0.5	2.2	6.7
7	0.3	S	0.3	0.4	1.8	3.4	13.5	6.9	3.2	2.7	2.0	1.1	2.5	0.6	0.4	0.7	1.1	2.0	0.8	0.3	1.0	3.3	0.5	0.2	2.1	13.5
8	1.0	S	9.9	5.4	2.2	2.5	8.8	14.4	11.2	3.8	1.9	0.7	0.3	0.6	0.4	0.3	0.9	0.4	1.9	0.8	0.5	0.4	0.1	0.4	3.0	14.4
9	0.2	S	3.5	2.6	5.3	4.3	12.1	10.4	7.0	3.9	0.6	0.8	1.0	0.8	0.6	0.4	0.6	0.4	0.7	2.4	0.5	0.6	1.1	2.5	2.7	12.1
10	0.3	S	2.6	0.5	0.4	0.8	1.1	6.6	5.2	5.2	3.5	9.2	2.3	0.8	1.6	2.5	0.6	0.8	2.9	6.0	0.5	4.2	2.5	4.8	2.8	9.2
11	3.6	S	4.7	2.3	1.3	2.8	3.9	9.6	3.8	14.4	4.5	1.4	3.6	1.8	0.7	0.4	0.5	0.7	0.4	0.3	0.6	0.6	0.4	1.1	2.7	14.4
12	2.1	S	2.9	0.7	0.5	0.5	1.0	6.4	13.0	1.7	3.0	4.0	6.2	0.7	0.7	2.3	1.7	0.9	0.8	2.0	1.3	1.8	0.5	0.5	2.4	13.0
13	0.4	S	0.6	1.2	0.3	0.8	2.4	11.9	4.6	2.8	1.0	0.9	0.4	1.8	1.8	2.6	0.7	1.4	0.5	0.3	0.3	3.0	0.3	0.4	1.8	11.9
14	0.4	S	0.2	0.3	3.7	25.7	6.7	7.1	9.1	12.2	1.6	0.8	1.4	4.2	1.1	1.1	0.8	4.4	1.7	3.2	1.0	0.4	1.8	0.2	3.9	25.7
15	0.3	S	1.1	2.9	4.7	12.3	5.8	2.0	2.7	1.4	0.6	0.7	1.4	0.8	1.7	0.7	0.5	0.4	0.4	0.5	1.1	0.6	3.1	3.9	2.2	12.3
16	0.3	S	0.4	0.4	0.6	1.3	0.6	2.0	1.7	0.6	3.9	1.0	0.7	1.7	2.5	2.9	1.1	0.6	3.0	1.1	0.4	0.3	0.5	0.3	1.2	3.9
17	0.2	S	0.4	0.3	0.4	0.3	0.4	2.0	1.5	1.7	0.8	1.2	1.2	0.8	0.9	1.3	0.4	1.1	1.1	0.5	0.3	0.2	0.3	0.3	0.8	2.0
18	0.2	S	0.2	3.1	1.2	0.3	1.1	2.1	3.5	2.3	0.9	0.4	1.5	1.1	1.0	0.4	1.7	1.9	1.1	0.3	0.6	0.3	0.3	0.5	1.1	3.5
19	2.8	S	3.4	6.0	3.0	0.8	0.6	0.6	1.6	0.7	0.7	0.5	1.1	0.2	0.5	0.5	0.5	0.5	2.2	1.3	0.8	0.3	0.4	2.4	1.4	6.0
20	1.1	S	5.1	9.4	14.1	7.8	29.8	29.5	7.9	6.3	2.8	0.7	1.4	0.2	0.6	1.0	1.5	3.0	1.0	2.5	0.3	0.4	0.3	2.0	5.6	29.8
21	1.4	S	2.3	14.2	1.1	7.3	1.0	1.5	0.5	4.1	0.6	0.8	0.7	5.6	10.2	1.9	1.3	0.6	0.3	1.8	6.1	0.6	2.1	7.2	3.2	14.2
22	3.5	S	5.5	2.5	5.0	9.1	15.7	3.0	4.9	6.6	3.3	2.3	1.2	2.0	1.0	1.0	1.0	0.7	0.4	0.5	0.4	7.0	0.9	1.1	3.4	15.7
23	1.9	S	4.2	13.4	18.4	10.5	18.8	9.6	7.4	4.3	2.8	0.6	0.5	1.8	0.7	0.6	1.6	0.5	0.5	0.4	0.9	0.9	1.7	0.4	4.5	18.8
24	0.4	S	1.3	5.7	9.5	13.5	19.9	49.5	11.9	C	C	C	C	C	C	0.7	0.5	1.6	0.6	0.1	0.1	0.0	0.3	0.0	-	-
25	0.6	S	7.3	1.2	4.3	0.3	1.8	4.8	0.2	0.0	0.2	1.3	0.1	0.0	0.0	0.4	0.1	0.4	0.1	0.0	0.4	3.2	1.9	0.8	1.3	7.3
26	0.6	S	4.0	1.5	1.7	4.8	7.3	5.5	5.3	5.1	4.5	0.7	0.5	0.6	0.3	0.3	1.3	0.5	0.4	0.3	0.2	0.6	5.0	0.8	2.2	7.3
27	2.3	S	0.4	0.1	3.3	5.4	20.3	35.1	24.0	24.4	13.7	8.5	1.4	1.4	0.7	1.3	2.7	2.4	0.3	0.1	0.2	0.6	2.6	13.1	7.1	35.1
28	0.7	S	3.6	8.9	8.7	14.2	25.5	27.3	30.1	19.1	11.6	6.8	0.6	2.0	1.6	1.1	1.4	1.0	0.7	0.4	1.3	0.3	0.4	0.2	7.3	30.1
29	2.6	S	4.7	10.8	1.8	1.4	28.8	38.0	26.9	16.7	11.0	2.0	0.8	2.1	1.8	1.4	0.5	0.3	0.4	0.4	0.4	3.0	0.3	0.6	6.8	38.0
30	0.3	S	1.6	4.9	5.6	0.6	5.1	6.6	5.9	0.8	1.5	2.6	5.3	2.4	1.7	3.1	2.0	1.3	0.6	0.6	0.6	0.5	0.3	0.5	2.4	6.6
31	0.4	S	2.1	0.5	1.2	3.2	23.0	41.7	27.1	13.0	5.7	2.0	1.1	2.3	1.4	1.8	1.4	2.2	2.2	6.1	1.9	0.6	0.8	1.4	6.2	41.7
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	707	100%
MEAN	1.0	-	2.6	3.7	3.8	4.9	9.3	11.5	8.2	6.5	3.9	2.7	2.0	1.8	1.4	1.3	1.1	1.2	1.2	1.3	1.0	1.5	1.1	1.5		
MAX	3.6	-	9.9	14.2	18.4	25.7	29.8	49.5	30.1	24.4	13.7	11.6	6.2	8.3	10.2	4.9	3.2	4.4	4.5	6.1	6.1	7.0	5.0	13.1		



Number of Non-Zero Readings	701		
Maximum 1-HR Average	41.7 PPB		
Maximum 24-HR Average	7.3 PPB		
		Opperational Time	744 HRS
Monthly Calibration	6	Opperational Uptime	100.0 %
Standard Deviation	5.422	Monthly Average	3.2 PPB

Lagoon SO_2 (ppb) – May 2019

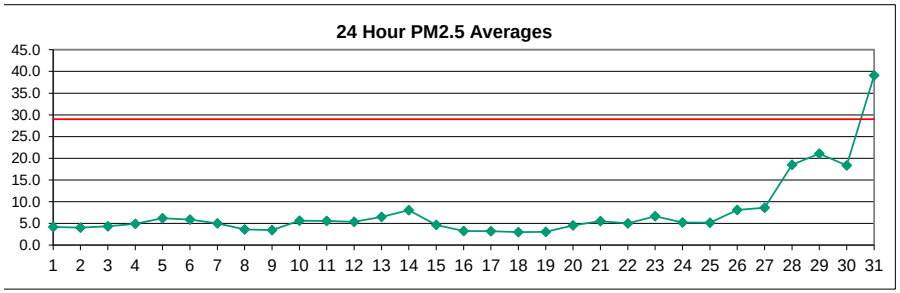
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.6	S	0.3	0.2	0.8	0.4	0.7	0.2	0.8	0.4	0.4	0.4	0.8	0.6	1.2	0.6	0.7	0.5	1.0	0.9	0.7	0.6	0.8	0.7	0.6	1.2
2	0.5	S	0.2	0.9	0.7	1.0	0.8	1.0	0.5	0.7	0.4	1.8	1.1	0.5	0.4	0.5	0.6	0.6	0.6	0.4	0.3	0.6	0.3	0.1	0.6	1.8
3	0.5	S	0.1	0.9	0.5	0.6	0.7	0.5	0.9	0.5	0.3	0.6	0.5	0.5	0.8	0.8	0.3	0.7	0.6	0.7	1.1	0.3	0.3	0.6	0.6	1.1
4	0.4	S	0.2	0.3	0.6	0.1	0.1	0.4	0.2	0.3	0.3	0.1	0.3	0.5	0.3	1.1	0.4	0.9	0.7	0.6	0.2	0.5	2.7	1.4	0.5	2.7
5	0.8	S	1.1	0.6	0.6	0.3	0.4	0.4	0.6	0.3	0.2	0.3	0.4	0.5	0.5	0.3	0.3	0.3	0.1	0.7	0.5	0.5	0.0	0.3	0.4	1.1
6	0.4	S	0.4	0.5	0.0	0.0	0.4	0.0	0.3	1.0	0.6	0.9	0.8	0.7	0.5	0.4	0.4	0.3	0.4	0.2	0.0	0.3	0.0	0.1	0.4	1.0
7	0.0	S	0.2	0.5	0.3	0.3	0.7	0.8	1.0	0.2	0.0	0.4	0.3	0.3	0.5	0.7	0.0	0.2	0.8	0.6	0.2	0.4	0.1	0.0	0.4	1.0
8	0.1	S	0.7	0.2	0.0	0.4	0.3	0.7	0.1	0.4	0.2	0.0	0.3	0.0	0.2	0.0	0.0	0.1	0.3	0.0	0.3	0.3	0.3	0.0	0.2	0.7
9	0.5	S	0.3	0.0	0.1	0.2	0.5	0.4	0.2	0.5	0.3	0.0	0.6	0.4	0.4	0.0	0.6	0.1	0.0	0.5	0.4	0.2	0.3	0.6	0.3	0.6
10	0.3	S	0.5	0.4	0.4	0.3	0.2	0.6	0.4	0.3	0.0	2.3	1.1	0.4	0.7	1.1	0.5	0.7	0.1	0.1	0.3	0.7	0.5	0.7	0.5	2.3
11	0.2	S	0.2	0.4	0.2	0.6	0.6	0.3	0.3	0.5	0.2	0.4	0.8	0.2	0.3	0.2	0.5	0.3	0.5	0.5	0.4	0.4	0.7	0.3	0.4	0.8
12	0.8	S	0.3	0.6	0.1	0.3	0.5	0.3	1.0	0.4	0.6	0.8	1.2	0.6	0.6	0.6	1.0	1.0	0.6	0.9	0.7	0.5	0.3	0.5	0.6	1.2
13	0.4	S	0.4	0.3	0.5	0.5	0.6	0.7	0.9	1.2	1.4	1.1	0.9	0.5	0.7	1.0	0.6	0.7	1.0	0.5	0.3	0.5	0.4	0.9	0.7	1.4
14	0.7	S	0.0	0.4	0.5	0.9	0.5	0.5	5.0	6.6	1.9	1.0	0.9	0.4	0.7	0.6	0.8	0.6	1.0	0.9	0.3	0.4	0.9	0.5	1.1	6.6
15	0.5	S	0.9	0.2	0.4	0.6	0.7	0.3	0.3	0.7	0.7	0.9	1.0	0.7	0.7	1.1	1.1	0.5	0.5	0.7	0.6	0.7	0.4	0.3	0.6	1.1
16	0.5	S	0.4	0.2	0.4	0.5	0.3	0.6	0.3	0.4	0.5	0.6	0.4	0.3	0.3	0.3	0.4	0.7	0.3	0.3	0.4	0.5	0.2	0.6	0.4	0.7
17	0.2	S	0.7	0.7	0.5	0.3	0.7	0.8	0.5	0.5	0.2	0.1	0.5	0.5	0.4	0.6	0.9	0.5	0.6	0.5	0.2	0.1	0.3	0.4	0.5	0.9
18	0.4	S	0.4	0.2	0.6	0.8	0.4	0.2	0.4	0.4	0.4	0.1	0.7	0.3	0.3	0.1	0.7	0.2	0.2	0.3	0.3	0.3	0.6	0.2	0.4	0.8
19	0.3	S	0.4	0.7	0.2	0.3	0.0	0.0	0.2	0.3	0.4	0.6	0.5	0.4	0.5	0.0	0.5	0.5	0.4	0.7	0.5	0.3	0.5	0.3	0.4	0.7
20	0.2	S	0.4	0.6	0.7	0.8	1.0	1.5	0.9	0.5	0.5	0.6	0.5	0.6	0.2	0.0	0.9	0.3	0.6	0.4	0.6	0.6	0.4	0.1	0.6	1.5
21	0.5	S	0.4	0.8	0.7	0.7	0.5	0.7	0.7	0.7	0.5	0.5	0.8	0.9	1.0	0.2	0.3	0.3	0.8	0.6	0.6	0.3	0.4	0.5	0.6	1.0
22	0.4	S	0.6	0.4	0.2	0.6	0.3	0.5	0.9	0.6	0.6	0.5	0.5	0.3	0.0	0.2	0.4	0.3	0.4	0.3	0.1	0.4	0.3	0.4	0.4	0.9
23	0.3	S	0.6	1.4	1.9	1.3	1.3	0.8	0.6	0.4	0.1	0.4	0.5	0.4	0.2	0.4	0.5	1.2	1.0	0.5	0.6	0.6	0.4	0.2	0.7	1.9
24	0.8	S	0.5	0.6	0.9	0.6	1.2	1.6	1.1	C	C	C	C	C	C	0.5	0.3	0.5	0.4	0.5	0.5	0.5	0.5	0.2	-	-
25	0.1	S	0.0	0.3	0.6	0.7	0.2	0.3	0.3	0.2	0.5	0.2	0.2	0.4	0.0	0.4	0.2	0.0	0.0	0.0	0.3	0.2	0.4	0.2	0.2	0.7
26	0.2	S	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.5	0.5	0.2	0.1	0.2	0.2	0.3	0.5	0.3	0.1	0.0	0.3	0.0	0.0	0.2	0.7
27	0.3	S	0.1	0.4	0.3	0.5	0.9	3.1	1.8	2.9	3.0	2.7	1.0	0.8	1.2	0.8	0.6	0.4	0.2	0.4	0.5	0.4	0.3	0.7	1.0	3.1
28	0.4	S	0.9	1.0	0.9	1.2	1.9	2.7	3.6	3.0	1.7	1.9	0.6	1.0	1.6	1.0	1.1	0.6	0.7	0.9	0.4	0.8	0.5	0.8	1.3	3.6
29	1.4	S	1.4	1.4	1.1	1.0	2.8	3.6	3.0	2.0	1.6	0.4	1.0	1.1	1.1	0.6	0.6	0.6	0.7	1.1	0.3	0.4	0.6	0.6	1.2	3.6
30	0.3	S	0.3	1.3	0.5	0.0	0.3	0.4	0.4	0.4	0.9	0.6	1.1	0.7	0.6	0.8	0.5	0.8	0.3	0.0	0.7	0.5	0.4	0.3	0.5	1.3
31	0.7	S	1.2	0.9	0.7	0.3	1.0	2.0	1.8	0.9	0.6	0.6	0.9	0.6	0.6	0.3	0.2	0.5	1.0	1.0	0.8	0.3	0.4	0.3	0.8	2.0
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	707	100%
MEAN	0.4	-	0.5	0.6	0.5	0.5	0.7	0.8	0.9	0.9	0.7	0.7	0.7	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4		
MAX	1.4	-	1.4	1.4	1.9	1.3	2.8	3.6	5.0	6.6	3.0	2.7	1.2	1.1	1.6	1.1	1.1	1.2	1.0	1.1	1.1	0.8	2.7	1.4		



Number of 1HR Exceedences	0		
Number of Non-Zero Readings	680		
Maximum 1-HR Average	6.6 PPB		
Maximum 24-HR Average	1.3 PPB		
		Opperational Time	744 HRS
Monthly Calibration	6	Opperational Uptime	100.0 %
Standard Deviation	0.541	Monthly Average	0.6 PPB

Lagoon $PM_{2.5}$ ($\mu g/m^3$) – May 2019

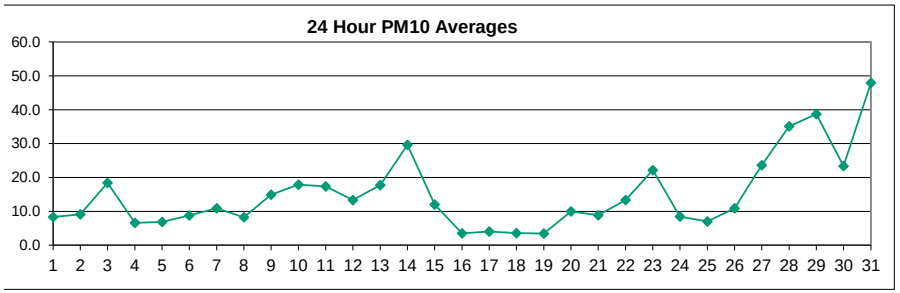
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	2.6	2.6	2.2	5.1	3.3	1.9	3.7	6.5	5.5	3.7	8.3	8.3	6.6	5.1	3.7	4.4	1.5	0.0	3.3	5.8	4.8	5.8	4.1	1.9	4.2	8.3
2	4.4	6.2	4.4	3.3	2.7	2.7	3.3	3.3	4.7	8.3	6.1	4.4	6.2	5.1	2.6	1.2	4.0	4.7	1.2	0.0	1.9	5.1	5.8	5.1	4.0	8.3
3	4.4	1.9	0.1	4.0	4.0	1.9	3.3	4.7	2.6	3.3	3.0	2.6	7.2	10.1	8.4	5.5	3.3	3.0	4.0	3.0	2.6	9.0	6.9	4.8	4.3	10.1
4	5.5	6.9	6.2	5.5	10.1	7.6	7.3	5.5	3.3	4.7	5.1	3.0	1.5	1.5	2.6	7.6	6.6	4.6	3.7	4.5	3.3	1.9	3.0	6.2	4.9	10.1
5	4.8	9.0	6.3	6.1	5.5	3.7	8.3	5.5	5.5	8.7	6.6	4.8	4.8	8.0	6.2	4.6	7.6	6.2	8.0	5.1	5.1	6.5	5.8	5.5	6.2	9.0
6	4.8	7.3	7.3	6.9	5.2	3.3	4.4	5.5	6.9	8.3	9.8	10.1	7.6	4.4	5.8	5.1	3.7	4.5	5.1	4.0	5.8	5.5	4.8	4.4	5.9	10.1
7	5.8	7.6	4.4	4.0	4.4	9.0	8.9	8.0	11.2	9.4	5.5	6.9	5.1	4.4	5.5	2.3	0.0	0.0	1.2	4.4	4.8	3.7	1.9	2.0	5.0	11.2
8	4.4	3.3	2.2	4.0	4.0	3.3	2.7	4.7	8.0	5.8	3.0	2.6	3.0	2.7	2.6	4.0	3.7	2.6	1.2	1.9	3.7	2.3	5.1	5.8	3.6	8.0
9	4.0	5.1	3.7	1.2	3.7	5.5	4.4	5.5	6.9	5.5	4.4	3.3	2.2	4.0	3.4	2.6	1.5	0.1	0.4	1.9	2.6	6.5	4.1	0.6	3.5	6.9
10	4.4	4.4	4.0	6.5	4.0	2.3	3.0	3.0	10.1	9.8	6.2	4.0	8.7	9.0	5.1	3.0	2.2	1.5	3.3	5.1	6.5	8.3	9.4	11.6	5.6	11.6
11	11.9	7.7	7.6	7.6	6.9	7.3	5.5	3.0	4.0	4.7	3.4	2.6	1.5	3.3	5.8	6.2	5.5	5.1	3.0	5.1	6.2	4.8	6.5	8.0	5.5	11.9
12	6.9	5.5	7.6	6.6	5.1	7.6	6.9	6.2	3.7	6.2	4.6	4.7	5.5	5.8	4.4	6.5	4.4	3.7	3.3	2.6	2.9	6.2	5.5	6.2	5.4	7.6
13	5.2	5.8	6.9	5.5	5.8	5.8	4.8	6.9	9.8	9.1	8.3	5.8	6.5	7.6	5.5	5.1	4.7	4.7	4.4	5.5	6.9	6.9	8.7	9.1	6.5	9.8
14	5.9	9.0	11.2	8.3	4.8	10.0	9.8	9.1	13.7	11.2	9.0	9.0	6.3	6.2	6.1	5.8	6.2	7.2	6.5	6.5	8.3	9.8	6.6	6.2	8.0	13.7
15	5.8	6.9	4.4	3.0	1.9	2.6	4.0	4.0	3.3	3.3	3.0	2.6	1.9	1.5	4.0	6.5	6.5	3.7	4.4	4.4	4.0	5.8	8.3	15.4	4.6	15.4
16	13.4	7.0	3.0	4.0	3.0	3.3	2.6	1.2	0.8	2.6	1.9	0.0	0.0	0.8	1.9	2.9	4.0	3.3	3.7	3.0	3.3	4.4	3.7	4.5	3.3	13.4
17	5.8	4.8	2.6	2.2	2.2	1.9	3.3	5.4	5.1	2.7	1.9	3.3	3.3	0.8	2.9	4.0	1.5	0.6	2.2	3.0	2.6	4.4	4.4	5.8	3.2	5.8
18	5.8	4.8	4.8	3.7	4.4	4.7	3.0	1.2	0.8	1.9	1.2	0.0	1.5	1.5	2.2	3.3	4.0	2.3	1.2	2.9	4.4	4.4	4.4	3.7	3.0	5.8
19	2.3	3.3	3.3	1.3	4.7	4.0	2.6	4.7	4.0	1.9	1.5	2.2	2.2	1.5	1.9	1.2	0.1	0.1	2.0	4.4	4.7	5.5	8.0	5.5	3.0	8.0
20	6.6	5.8	7.6	9.8	7.3	5.2	5.5	6.2	7.2	4.5	3.0	3.3	4.4	4.0	2.3	3.3	2.7	2.6	2.6	3.7	3.3	3.3	2.6	2.2	4.5	9.8
21	1.2	2.7	6.5	3.4	2.3	4.4	6.5	4.8	4.4	5.1	7.6	6.9	11.9	8.7	6.6	6.9	6.1	3.0	3.0	5.8	6.9	7.3	4.8	5.8	5.5	11.9
22	4.1	6.2	5.1	5.1	4.4	3.7	3.7	5.8	3.7	0.5	3.8	4.7	4.5	5.8	9.0	5.5	3.7	6.1	4.4	5.1	6.2	5.1	6.5	7.6	5.0	9.0
23	6.6	10.8	9.8	7.3	6.9	4.8	7.2	8.0	8.9	11.5	10.2	8.4	6.6	4.4	3.3	4.7	3.9	3.0	5.4	6.2	6.1	5.5	5.5	5.1	6.7	11.5
24	5.1	5.1	6.2	10.1	7.0	4.8	6.2	10.4	12.6	C	C	C	C	C	1.9	2.9	1.5	3.7	4.4	2.6	5.5	4.4	3.0	1.9	5.2	12.6
25	2.2	3.3	6.9	4.4	3.3	5.5	5.1	4.4	3.3	1.5	2.0	4.0	3.0	2.0	4.0	3.8	5.5	6.2	6.9	8.0	9.4	12.6	9.1	7.6	5.2	12.6
26	5.1	10.7	9.1	6.9	6.9	7.6	7.6	6.9	5.5	6.2	5.8	8.3	6.6	5.8	8.7	7.6	10.1	6.6	6.9	10.8	9.1	10.5	15.8	9.5	8.1	15.8
27	8.7	10.5	12.3	14.1	12.7	13.0	13.7	11.6	11.9	13.0	9.8	9.4	7.0	4.4	3.7	4.0	4.4	5.8	6.2	5.5	3.9	4.7	8.0	8.0	8.6	14.1
28	8.7	10.1	10.1	10.1	9.4	8.4	8.0	6.9	7.3	13.3	12.6	10.9	19.7	26.2	30.2	30.9	33.4	29.9	29.2	29.9	24.2	28.4	22.8	23.8	18.5	33.4
29	32.0	30.6	30.3	25.3	23.1	23.8	21.3	22.3	21.6	24.8	21.9	24.5	17.4	15.9	14.4	14.2	19.1	17.0	15.5	21.6	16.6	13.4	21.5	18.1	21.1	32.0
30	13.4	15.2	16.9	17.3	15.5	16.6	16.6	19.1	15.9	20.2	14.9	11.2	14.8	13.4	14.1	11.2	11.9	10.2	11.3	10.1	8.7	8.7	57.1	75.7	18.3	75.7
31	76.6	112.2	154.8	153.1	81.5	69.9	43.1	28.9	24.2	21.3	27.2	14.6	14.1	9.1	15.8	10.8	8.0	10.8	9.4	10.8	11.6	10.9	11.6	8.7	**39.1**	154.8
NO.	31	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	739	100%
MEAN	9.0	10.7	11.9	11.5	8.6	8.3	7.6	7.4	7.6	7.8	7.0	6.2	6.4	6.1	6.3	6.1	5.9	5.2	5.4	6.2	6.3	7.1	8.9	9.2		
MAX	76.6	112.2	154.8	153.1	81.5	69.9	43.1	28.9	24.2	24.8	27.2	24.5	19.7	26.2	30.2	30.9	33.4	29.9	29.2	29.9	24.2	28.4	57.1	75.7		



Number of 24HR Exceedences	1		
Number of Non-Zero Readings	732		
Maximum 1-HR Average	154.8	UG/M3	
Maximum 24-HR Average	39.1	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	5	Opperational Uptime	100.0 %
Standard Deviation	11.48	Monthly Average	7.6 UG/M3

Lagoon PM_{10} ($\mu g/m^3$) – May 2019

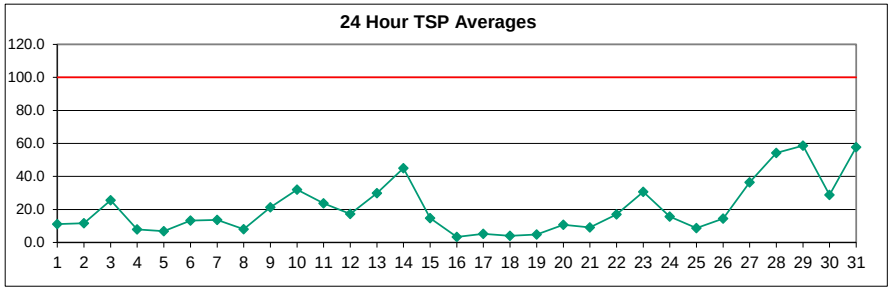
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.6	5.3	4.0	4.0	3.3	3.2	8.0	8.0	5.3	8.0	26.9	18.3	10.2	10.1	8.7	8.0	16.1	0.0	0.0	4.6	8.7	11.4	12.1	15.5	8.4	26.9
2	11.6	6.0	0.0	3.3	8.0	6.0	5.3	8.0	9.4	10.7	30.9	14.2	14.1	17.5	0.0	0.0	6.0	24.2	7.5	6.0	1.3	1.3	15.4	12.1	9.1	30.9
3	19.5	7.4	30.2	12.9	9.4	8.0	26.9	12.8	12.8	10.8	16.8	29.3	51.2	71.6	38.8	3.6	18.8	12.2	7.4	4.7	8.6	12.1	10.1	6.0	18.4	71.6
4	2.6	4.7	8.0	5.4	8.0	18.1	20.8	7.5	8.0	4.7	3.3	5.3	4.0	6.0	8.7	7.4	7.4	7.4	6.7	6.7	4.7	0.6	0.0	2.6	6.6	20.8
5	5.3	6.0	6.7	8.0	7.4	3.3	6.0	6.7	7.4	10.0	8.7	8.0	6.7	5.3	7.3	7.4	6.7	4.7	4.7	8.7	6.7	5.3	8.6	9.4	6.9	10.0
6	6.7	3.3	6.7	10.7	9.4	9.4	8.7	15.4	18.9	21.6	10.8	8.7	4.0	4.6	15.4	1.4	4.6	6.0	6.0	16.9	1.4	4.6	7.3	8.8	8.8	21.6
7	8.0	4.0	0.6	14.7	13.5	10.8	11.4	30.9	36.4	21.1	14.9	22.3	5.5	4.0	5.3	6.7	19.4	0.0	20.1	0.0	0.0	0.6	3.9	7.3	10.9	36.4
8	7.3	4.7	6.0	5.3	6.0	5.8	6.0	7.3	16.1	26.2	16.3	13.5	8.1	0.0	5.9	12.0	6.7	0.8	5.3	14.7	0.0	0.0	15.3	8.1	8.2	26.2
9	10.1	12.1	8.8	3.4	2.6	4.0	18.7	18.9	57.8	50.1	27.2	19.6	20.9	27.6	15.6	1.4	2.0	7.3	10.7	12.6	26.9	0.0	0.0	0.0	14.9	57.8
10	0.0	4.6	6.7	8.7	9.4	7.4	10.7	14.8	49.0	61.4	45.5	40.7	52.6	30.6	22.5	8.8	9.4	6.7	5.3	9.3	6.0	0.0	0.0	18.7	17.9	61.4
11	16.9	8.7	10.1	12.8	11.3	10.8	13.4	24.8	25.6	17.6	71.8	61.0	22.0	23.6	16.9	7.5	7.4	9.4	10.1	6.1	8.0	20.8	0.1	0.0	17.4	71.8
12	0.0	0.0	2.5	5.3	6.7	10.0	8.7	7.3	17.4	30.2	33.1	16.3	29.6	32.4	12.9	12.8	23.5	18.5	13.5	22.3	7.5	7.4	2.0	0.0	13.3	33.1
13	0.0	2.6	9.3	8.1	4.7	3.3	6.0	20.1	62.4	53.5	68.1	55.6	23.8	26.3	15.6	16.8	8.7	10.0	14.7	3.4	5.6	0.0	1.2	6.6	17.8	68.1
14	6.7	11.4	18.8	12.7	18.1	20.2	24.3	35.0	63.2	41.5	49.9	25.3	40.3	55.3	37.4	17.1	32.9	21.7	25.6	39.6	19.8	32.9	21.7	39.7	29.6	63.2
15	29.9	18.3	14.9	10.1	4.1	2.0	1.9	5.6	10.7	36.9	25.1	16.9	8.8	9.4	26.1	29.7	17.0	8.8	0.0	0.0	0.0	0.0	3.9	8.0	12.0	36.9
16	5.7	6.0	8.0	5.7	3.3	0.6	1.9	1.3	0.6	3.9	0.0	2.6	4.0	2.0	3.3	2.6	4.0	6.0	6.7	6.0	2.0	0.6	3.9	4.0	3.5	8.0
17	0.6	0.0	0.0	0.0	2.6	4.0	5.3	7.3	6.0	5.3	4.0	5.3	4.7	4.7	8.7	7.4	4.7	4.0	4.6	2.0	1.3	3.9	5.3	5.6	4.1	8.7
18	6.0	8.0	6.7	2.0	3.9	9.3	6.7	0.7	0.6	0.0	0.0	0.0	1.2	5.3	2.7	6.0	8.0	3.4	2.6	7.2	5.4	0.0	0.0	0.0	3.6	9.3
19	0.0	5.2	6.0	4.0	5.3	1.3	0.0	3.1	2.0	3.3	2.0	0.6	1.3	1.9	2.6	3.3	19.3	18.9	0.0	0.0	0.0	0.0	0.4	3.1	3.5	19.3
20	4.6	10.0	14.7	14.2	12.6	10.8	10.8	12.7	20.8	14.9	15.5	9.5	5.4	4.0	4.0	3.3	8.6	11.4	11.4	11.5	10.1	4.7	4.0	10.0	10.0	20.8
21	10.1	5.4	14.7	10.8	8.1	7.4	17.4	10.2	10.7	9.4	6.1	5.3	8.0	8.0	8.0	18.0	8.9	6.7	7.4	8.0	6.7	6.7	5.6	4.7	8.8	18.0
22	6.0	6.7	7.4	6.0	2.7	3.1	6.6	8.7	5.4	3.2	32.6	25.7	27.6	29.3	37.7	21.8	26.2	17.7	15.5	11.5	11.4	1.4	0.0	5.9	13.3	37.7
23	16.7	20.9	28.9	22.4	19.6	17.6	10.2	18.7	53.5	79.0	52.5	64.7	34.9	18.6	9.5	6.7	7.3	19.3	11.6	9.4	7.4	0.7	0.0	1.8	22.2	79.0
24	5.9	5.3	8.7	10.7	9.4	15.4	11.3	12.8	32.8	C	C	C	C	C	4.0	3.0	2.0	1.0	8.0	7.0	4.0	2.0	11.0	7.0	8.5	32.8
25	4.0	11.0	8.0	10.0	7.0	13.0	8.0	6.0	3.0	1.0	2.0	4.0	3.0	3.0	4.0	6.0	6.0	11.0	11.0	7.0	8.0	12.0	9.0	12.0	7.0	13.0
26	11.0	7.0	13.0	10.0	9.0	7.0	7.0	13.0	13.0	9.0	11.0	13.0	10.0	8.0	9.0	8.0	12.0	10.0	10.0	13.0	12.0	14.0	17.0	16.0	10.9	17.0
27	17.0	16.0	17.0	24.0	17.0	21.0	19.0	36.0	42.0	55.0	64.0	50.0	Y	Y	10.1	12.8	12.7	9.6	12.7	18.0	12.9	15.6	18.9	18.9	23.6	64.0
28	18.4	23.5	18.3	22.1	16.1	13.7	19.9	30.3	48.6	47.7	39.5	47.3	27.2	34.6	58.6	45.1	55.1	43.7	37.1	34.6	38.9	48.9	35.9	37.8	35.1	58.6
29	42.0	44.3	34.4	31.1	30.3	26.4	28.2	43.2	62.8	80.8	74.5	75.9	38.9	26.4	27.6	25.6	24.9	20.3	24.0	30.3	48.0	25.4	37.5	27.7	38.8	80.8
30	27.4	20.2	18.2	18.4	23.1	28.1	20.2	19.0	23.6	21.3	14.3	18.0	13.5	16.3	18.7	15.1	22.6	12.3	18.1	14.8	14.8	17.2	64.8	81.2	23.4	81.2
31	80.8	109.8	152.5	153.5	87.1	77.5	48.2	34.0	40.0	43.0	35.3	40.3	33.0	17.9	30.5	29.8	12.5	24.5	19.4	15.0	20.2	20.0	14.7	11.5	48.0	153.5
NO.	31	31	31	31	31	31	31	31	31	30	30	30	29	29	31	31	31	31	31	31	31	31	31	31	737	100%
MEAN	12.3	12.8	15.8	15.2	12.2	12.2	12.8	15.5	24.7	26.0	26.8	23.9	17.7	17.4	15.4	11.4	13.6	11.5	10.9	11.3	9.9	8.7	10.6	12.6		
MAX	80.8	109.8	152.5	153.5	87.1	77.5	48.2	43.2	63.2	80.8	74.5	75.9	52.6	71.6	58.6	45.1	55.1	43.7	37.1	39.6	48.0	48.9	64.8	81.2		



Number of Non-Zero Readings	692		
Maximum 1-HR Average	153.5 UG/M3		
Maximum 24-HR Average	48.0 UG/M3		
		Opperational Time	742 HRS
Monthly Calibration	5	Opperational Uptime	99.7 %
Standard Deviation	17.03	Monthly Average	15.0 UG/M3

Lagoon TSP (µg/m^3) – May 2019

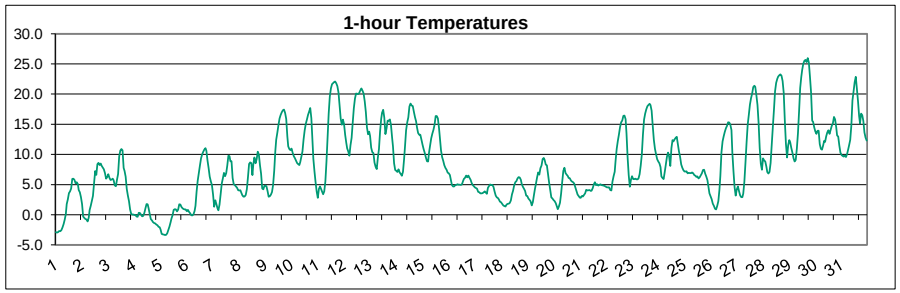
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	7.1	12.8	7.1	3.0	1.6	5.0	5.7	3.0	3.0	9.8	27.8	16.9	7.2	9.8	8.5	15.4	16.8	7.2	3.0	19.5	18.2	20.9	21.0	18.4	11.2	27.8
2	19.6	18.4	3.0	5.7	7.1	5.7	7.7	8.5	7.1	8.5	22.2	16.8	12.7	22.3	0.0	1.6	7.9	34.6	12.8	7.1	5.7	8.5	22.2	15.5	11.7	34.6
3	18.2	12.7	27.5	22.4	12.7	16.8	37.4	3.3	7.8	15.4	27.8	29.2	89.7	117.5	64.7	8.8	23.6	14.1	9.9	8.5	18.1	16.8	7.2	5.7	25.7	117.5
4	9.8	11.3	7.1	8.5	12.6	20.9	13.1	18.2	8.0	1.6	0.0	2.9	0.9	7.1	11.2	8.5	9.8	9.9	8.5	5.8	7.1	5.2	1.6	0.0	7.9	20.9
5	0.2	9.8	9.9	11.3	8.5	5.8	12.6	5.8	0.2	1.6	2.9	7.1	5.7	7.1	4.4	5.7	9.9	5.8	4.4	15.3	8.5	11.3	5.3	5.7	6.9	15.3
6	3.0	11.2	11.3	9.8	7.1	11.2	14.0	11.3	23.6	15.5	25.0	12.7	8.5	14.0	14.0	15.4	12.7	12.6	16.1	16.8	8.2	18.4	18.2	8.6	13.3	25.0
7	9.8	19.5	1.7	8.5	14.0	14.0	19.5	33.3	48.5	21.1	19.6	23.7	3.1	5.7	3.0	1.6	7.1	8.5	42.4	8.7	8.5	4.4	1.0	1.0	13.7	48.5
8	0.2	9.8	7.9	3.0	7.1	3.0	4.3	12.6	15.4	20.8	19.6	14.1	1.7	3.0	1.6	8.1	5.4	0.2	3.0	14.0	7.2	4.4	27.7	0.0	8.1	27.7
9	11.2	18.3	4.5	11.2	5.8	8.5	7.1	26.3	71.7	63.8	33.6	14.2	7.2	26.3	22.3	11.3	7.1	16.7	5.8	33.2	64.9	18.5	11.3	11.3	21.3	71.7
10	12.6	14.0	9.9	15.4	11.3	12.6	19.5	29.2	83.1	116.1	99.8	65.4	59.6	17.1	9.9	14.0	8.5	4.4	4.3	27.6	24.2	41.5	43.1	26.6	32.1	116.1
11	30.6	16.2	4.4	19.4	20.9	16.8	16.8	29.1	33.3	24.1	100.5	54.4	13.0	28.2	18.2	11.2	8.5	12.6	12.6	12.6	14.0	37.3	16.9	18.2	23.8	100.5
12	7.2	18.1	8.6	9.9	14.0	7.2	14.0	3.1	15.3	12.7	12.6	19.5	54.3	47.2	22.5	8.6	20.8	27.8	18.2	26.4	14.1	8.5	19.5	4.5	17.3	54.3
13	16.2	5.8	8.5	4.4	9.8	9.9	11.3	22.2	89.4	80.5	135.1	53.4	34.9	41.6	23.8	45.9	7.4	16.7	11.3	13.7	20.9	10.0	30.4	15.5	29.9	135.1
14	29.1	40.2	24.0	15.5	27.6	26.5	33.3	47.1	104.7	39.5	46.1	39.0	55.3	100.4	49.0	28.0	52.5	32.2	32.0	55.3	32.8	62.1	50.1	56.7	45.0	104.7
15	37.8	30.4	12.8	8.5	11.2	5.8	3.0	3.4	7.1	37.2	21.1	1.7	4.3	18.0	48.3	44.4	19.8	4.5	1.6	1.6	7.1	7.1	7.1	10.7	14.8	48.3
16	7.2	3.0	3.0	0.2	1.6	1.6	1.6	0.0	5.7	3.3	5.7	4.4	1.6	3.0	5.8	4.4	3.0	0.2	0.2	3.3	4.3	8.1	7.1	3.0	3.4	8.1
17	0.2	5.7	5.7	5.7	3.0	7.1	9.9	7.1	3.0	1.6	9.8	4.4	1.2	9.8	5.8	5.7	7.1	7.1	5.8	5.7	3.0	4.3	4.4	1.6	5.2	9.9
18	4.3	3.0	0.2	1.6	9.8	11.3	5.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.0	9.8	5.8	1.6	7.1	4.4	8.5	4.4	3.0	1.6	4.0	11.3
19	3.0	12.6	8.5	5.8	5.7	7.1	4.4	7.1	3.0	5.7	3.0	0.0	0.2	0.2	0.0	0.0	3.5	9.8	4.4	8.5	4.4	8.5	4.4	5.4	4.8	12.6
20	13.9	5.9	19.4	12.7	13.1	9.9	9.9	7.1	15.3	9.9	9.9	8.5	5.8	7.1	7.1	7.1	31.7	6.0	14.0	3.3	10.5	8.5	9.8	12.6	10.8	31.7
21	8.5	19.4	8.6	9.8	16.2	7.2	20.6	10.0	12.6	11.3	5.8	8.5	5.8	7.1	5.7	20.8	8.6	8.5	5.8	4.4	1.6	4.3	4.4	4.4	9.2	20.8
22	3.0	10.6	4.4	4.4	8.5	5.8	3.0	8.4	8.5	5.8	23.9	16.6	29.1	21.0	46.9	25.3	25.1	17.0	18.1	15.4	32.5	26.5	27.8	21.0	17.0	46.9
23	22.3	23.7	34.6	26.6	24.0	21.0	16.9	33.2	78.5	124.1	67.2	82.9	16.2	9.9	15.3	12.7	8.5	39.9	14.3	9.9	16.7	16.8	8.6	14.0	30.7	124.1
24	4.5	19.4	7.3	11.2	14.0	13.4	19.5	23.7	40.1	C	C	C	C	C	16.8	51.1	6.2	4.4	18.1	12.7	7.2	8.5	15.4	5.8	15.7	51.1
25	8.5	8.5	12.6	11.3	13.4	16.4	11.3	9.9	8.5	3.0	4.3	4.4	3.0	3.0	1.6	5.7	8.5	11.2	12.6	9.9	7.1	13.5	8.5	12.6	8.7	16.4
26	5.8	23.6	14.1	5.8	8.5	4.4	4.4	15.3	11.3	14.0	11.0	22.2	20.9	18.2	14.0	9.9	22.2	10.0	15.4	22.3	18.2	16.4	20.9	18.2	14.5	23.6
27	23.9	29.2	16.9	26.4	19.6	18.5	12.7	51.1	60.9	96.6	112.0	95.6	33.8	21.0	33.3	25.1	29.2	16.9	20.9	29.2	19.6	29.2	23.7	27.7	36.4	112.0
28	19.6	38.8	18.8	40.1	21.1	19.6	25.4	40.2	67.7	73.4	62.5	92.6	53.0	43.1	80.0	65.3	115.9	80.6	59.8	52.8	58.2	77.4	43.3	51.3	54.2	115.9
29	54.1	65.1	47.3	39.0	41.7	30.7	33.4	49.8	96.5	132.5	134.0	139.6	76.7	32.3	48.4	41.7	27.9	27.8	37.4	37.5	86.6	36.5	60.8	29.5	58.6	139.6
30	29.2	36.0	26.6	25.1	33.3	32.0	21.0	29.2	22.4	26.4	19.6	23.7	16.9	18.2	19.5	20.9	25.0	14.1	20.9	22.3	12.7	18.6	81.3	96.9	28.8	96.9
31	90.1	118.9	171.2	162.8	89.3	81.9	50.2	43.1	45.8	47.2	49.1	66.4	51.4	23.9	49.7	49.9	34.9	25.2	26.1	15.5	28.4	27.9	21.0	14.1	57.7	171.2
NO.	31	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	739	100%
MEAN	16.5	21.7	17.7	17.6	15.9	14.8	15.1	19.1	32.3	34.1	37.1	31.4	22.5	22.8	21.1	18.8	18.7	15.7	15.1	16.9	18.7	18.9	20.2	16.7		
MAX	90.1	118.9	171.2	162.8	89.3	81.9	50.2	51.1	104.7	132.5	135.1	139.6	89.7	117.5	80.0	65.3	115.9	80.6	59.8	55.3	86.6	77.4	81.3	96.9		



Number of 24HR Exceedences	0		
Number of Non-Zero Readings	731		
Maximum 1-HR Average	171.2	UG/M3	
Maximum 24-HR Average	58.6	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	5	Opperational Uptime	100.0 %
Standard Deviation	24.1	Monthly Average	20.7 UG/M3

Lagoon Temperature (°C) – May 2019

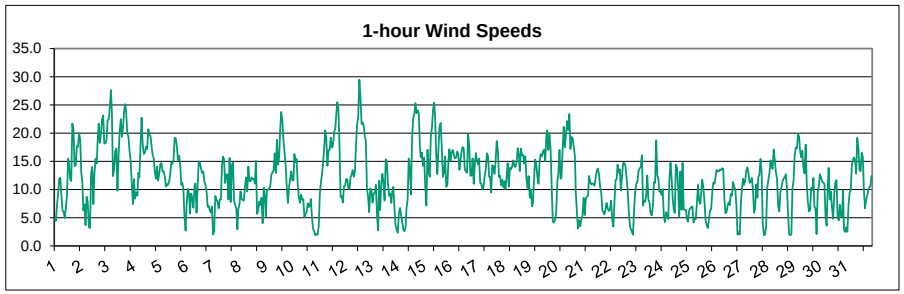
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	-2.9	-2.9	-2.9	-2.7	-2.7	-2.5	-2.1	-1.6	-0.8	0.1	1.8	2.6	3.6	3.9	4.4	5.9	6.0	5.7	5.2	5.4	5.1	4.1	3.7	2.9	1.6	6.0
2	1.8	-0.3	-0.5	-0.7	-0.8	-1.1	-0.5	0.8	1.5	2.3	3.1	5.2	7.3	6.6	8.4	8.6	8.2	8.5	8.1	7.8	7.5	6.9	6.0	6.2	4.2	8.6
3	6.7	6.1	5.8	5.8	6.0	5.7	4.9	4.7	5.8	6.7	9.7	10.7	10.9	10.7	7.8	7.3	6.3	4.3	3.2	2.3	0.9	0.1	0.0	0.0	5.5	10.9
4	-0.1	-0.1	-0.3	-0.3	0.3	0.3	0.0	-0.3	-0.2	0.3	1.1	1.8	1.7	1.1	0.2	-0.7	-0.9	-1.2	-1.4	-1.4	-1.6	-1.7	-2.0	-2.1	-0.3	1.8
5	-2.4	-3.2	-3.2	-3.3	-3.4	-3.3	-3.0	-2.5	-2.0	-1.3	-0.6	-0.1	0.8	0.9	0.9	0.5	0.9	1.7	1.7	1.3	1.1	1.0	0.9	0.9	-0.7	1.7
6	0.6	0.8	0.5	0.3	-0.1	-0.1	0.1	0.6	1.5	3.8	5.6	6.9	8.2	9.3	10.0	10.4	10.8	11.0	10.6	9.0	7.8	6.3	5.5	4.9	5.2	11.0
7	3.4	1.3	2.4	1.8	1.1	0.7	1.7	3.4	5.1	6.0	6.9	6.4	6.9	8.2	9.8	9.7	8.9	8.9	6.1	5.1	4.9	4.7	4.5	4.1	5.1	9.8
8	4.0	4.0	3.7	3.2	3.0	3.0	3.3	4.2	6.2	8.4	8.7	8.6	6.6	8.3	9.5	8.5	9.2	10.4	10.0	8.2	6.8	4.4	4.2	4.8	6.3	10.4
9	4.8	4.7	3.9	3.0	3.0	3.3	3.8	4.9	7.3	10.5	12.5	13.6	14.8	16.0	16.6	17.0	17.3	17.4	16.9	15.9	13.0	11.3	10.9	10.7	10.6	17.4
10	11.0	10.3	9.7	9.4	9.0	8.6	8.4	8.3	8.7	9.6	10.5	12.5	14.0	15.1	15.8	16.6	17.1	17.7	16.0	13.1	9.3	7.2	5.4	3.8	11.1	17.7
11	2.8	4.3	4.7	4.3	3.8	3.4	3.9	5.5	8.8	12.8	16.8	19.6	20.9	21.6	21.8	22.0	22.1	21.8	21.3	20.3	18.1	15.9	14.9	15.8	13.6	22.1
12	15.0	13.3	11.9	11.0	10.5	9.8	11.5	12.7	15.3	17.6	19.2	20.1	20.1	20.0	20.2	20.6	20.9	20.6	20.1	18.8	17.0	14.5	13.3	13.8	16.2	20.9
13	13.1	11.1	10.4	10.2	8.6	7.9	7.6	9.5	10.9	13.8	15.9	16.9	17.4	16.1	13.4	14.3	15.6	15.6	15.8	14.9	12.8	11.3	8.5	7.4	12.5	17.4
14	7.3	7.1	7.5	7.0	6.8	6.5	7.1	9.2	11.2	14.0	15.3	16.2	18.0	18.4	18.1	18.0	17.1	16.2	15.5	14.5	13.5	13.3	13.3	12.4	12.6	18.4
15	11.6	10.9	10.2	9.5	8.9	8.8	10.3	11.5	12.7	13.4	14.1	14.9	16.4	16.3	16.0	14.4	12.7	10.7	9.6	8.9	8.2	7.8	7.5	7.0	11.3	16.4
16	6.9	6.6	5.7	4.9	4.7	4.7	4.9	5.0	5.1	5.0	5.0	5.0	5.0	5.6	5.9	6.1	6.5	6.2	6.5	6.1	5.8	5.2	4.9	4.7	5.5	6.9
17	4.5	4.4	4.3	3.8	3.7	3.5	3.5	3.6	3.7	3.9	3.6	3.5	4.5	4.8	5.0	4.9	5.0	4.6	3.9	3.2	2.9	2.8	2.6	2.2	3.8	5.0
18	2.1	1.8	1.5	1.5	1.4	1.7	1.8	1.8	2.0	2.4	3.3	4.0	4.9	5.4	5.6	6.0	6.2	6.2	5.8	5.1	4.7	4.3	4.0	3.2	3.6	6.2
19	3.1	2.7	2.5	2.2	1.5	2.1	3.1	4.2	5.2	6.2	7.0	6.6	7.7	8.1	9.2	9.4	9.1	8.3	8.2	6.8	5.4	4.1	2.9	2.7	5.4	9.4
20	2.4	2.3	1.9	1.5	0.9	1.4	2.0	3.5	5.5	7.3	7.8	6.9	6.6	6.4	6.1	6.1	5.7	5.5	5.4	5.2	4.5	3.9	3.4	3.1	4.4	7.8
21	2.8	2.8	3.1	3.0	3.3	3.6	4.1	4.0	4.0	4.1	3.9	4.0	4.4	5.0	5.4	4.9	5.1	4.9	5.0	5.1	4.9	4.9	4.8	4.8	4.2	5.4
22	4.6	4.6	4.6	4.5	4.1	4.0	5.5	6.4	7.1	9.0	10.9	12.2	13.3	14.5	15.3	15.6	16.4	16.4	15.8	13.5	9.5	6.6	4.6	5.8	9.4	16.4
23	6.4	5.9	5.9	6.0	5.9	5.9	6.0	6.7	8.2	10.0	13.3	15.8	16.8	17.5	18.0	18.2	18.4	18.2	17.3	14.8	12.4	10.9	10.0	9.2	11.6	18.4
24	8.8	8.5	7.9	6.4	6.1	5.9	7.1	8.3	9.6	10.3	9.6	8.1	11.0	12.4	12.1	12.5	12.7	12.9	11.7	10.5	9.6	8.3	7.8	7.4	9.4	12.9
25	7.2	7.2	7.2	6.9	6.9	6.9	6.9	7.0	6.9	6.6	6.5	6.3	6.3	6.0	6.2	6.5	6.9	7.4	7.5	6.8	6.3	5.7	4.8	3.6	6.5	7.5
26	3.1	2.6	1.8	1.5	1.0	0.9	1.5	2.3	4.2	6.4	10.3	12.1	13.0	13.7	14.3	14.7	15.3	15.3	14.9	14.0	10.3	7.2	4.6	3.2	7.8	15.3
27	4.2	4.7	3.9	3.2	2.9	2.9	3.5	5.5	8.7	12.0	14.9	16.5	18.2	19.3	20.1	21.1	21.4	21.2	19.8	18.2	15.2	11.0	8.5	7.4	11.9	21.4
28	9.4	9.0	8.8	8.0	7.1	6.8	7.1	8.6	11.6	14.5	17.4	20.5	21.9	22.5	22.9	23.1	23.2	23.0	22.2	20.2	15.5	11.7	9.5	11.5	14.8	23.2
29	12.4	12.1	11.1	10.3	9.4	8.8	9.1	11.0	13.5	17.1	21.0	22.9	24.0	25.0	25.5	25.7	25.3	26.0	25.2	22.9	20.2	15.6	15.4	14.5	17.7	26.0
30	13.8	13.4	13.9	13.9	11.7	10.9	10.8	11.4	12.3	12.1	13.0	13.7	14.0	13.4	14.1	14.7	15.1	16.2	15.8	14.5	13.1	13.0	11.5	10.3	13.2	16.2
31	9.9	9.7	9.6	9.8	9.6	10.1	10.9	11.5	12.4	14.8	18.9	20.4	22.0	22.9	20.9	18.8	16.4	15.1	16.8	16.5	15.5	13.6	12.8	12.3	14.6	22.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	5.8	5.3	5.1	4.7	4.3	4.2	4.7	5.5	6.8	8.4	9.9	10.8	11.6	12.1	12.2	12.3	12.3	12.2	11.6	10.6	9.0	7.6	6.7	6.4		
MAX	15.0	13.4	13.9	13.9	11.7	10.9	11.5	12.7	15.3	17.6	21.0	22.9	24.0	25.0	25.5	25.7	25.3	26.0	25.2	22.9	20.2	15.9	15.4	15.8		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	26.0 C		
Maximum 24-HR Average	17.7 C		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	6.138	Monthly Average	8.3 C

Lagoon Wind Speed (km/hr) – May 2019

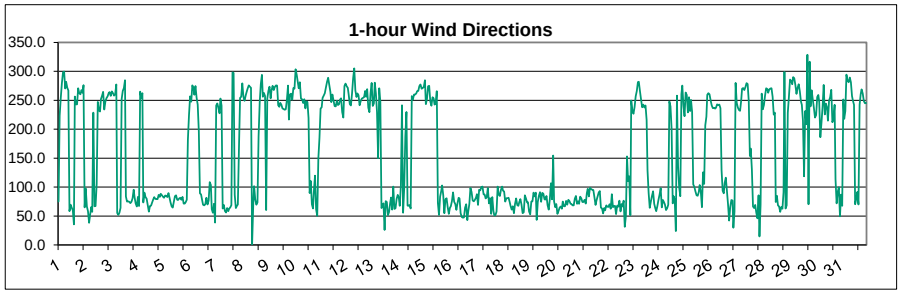
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.0	4.5	7.2	9.1	11.9	12.1	8.9	6.2	6.1	5.0	6.7	9.0	15.5	14.8	11.9	11.5	21.7	20.7	14.2	14.3	17.7	17.5	20.0	18.9	12.1	21.7
2	13.0	11.1	6.3	7.4	3.7	8.7	7.8	3.4	3.2	12.9	14.0	7.4	12.8	15.5	14.6	18.4	21.7	18.3	19.9	22.4	23.2	18.1	18.2	18.8	13.4	23.2
3	22.3	22.5	24.8	27.6	23.7	12.4	13.6	16.8	17.3	9.8	16.2	20.3	22.5	19.3	21.1	23.9	25.2	23.6	20.0	19.4	16.9	15.1	11.1	7.4	18.9	27.6
4	11.9	8.4	9.4	8.9	13.0	12.1	17.7	22.8	18.0	16.3	16.5	17.6	17.2	20.7	19.8	19.4	17.6	16.0	15.7	13.2	11.9	14.1	11.6	12.8	15.1	22.8
5	14.5	14.7	13.2	13.2	12.3	10.6	10.9	10.9	11.4	12.6	14.8	14.5	15.3	19.2	19.1	17.6	15.2	16.0	14.4	10.8	11.2	10.2	5.3	2.7	12.9	19.2
6	7.5	10.1	9.4	5.7	9.3	8.5	6.8	10.6	11.1	5.9	10.5	15.0	14.8	13.7	13.0	13.2	11.4	10.8	9.6	6.9	7.1	6.4	5.9	7.0	9.6	15.0
7	2.0	2.6	8.8	8.3	7.8	6.7	8.3	8.3	14.3	15.8	15.4	11.1	12.6	12.7	8.2	15.6	7.8	14.3	14.8	8.0	7.2	6.7	2.9	6.5	9.4	15.8
8	7.3	9.7	8.3	8.1	8.1	10.6	12.1	9.6	14.1	11.5	11.5	12.2	11.8	11.9	11.1	15.1	5.7	6.3	7.9	7.3	8.5	4.1	10.3	8.7	9.7	15.1
9	5.3	9.9	10.0	10.1	10.6	12.6	13.0	13.4	16.4	12.9	18.8	14.4	15.8	20.2	23.8	22.4	18.8	16.6	14.3	10.5	7.6	10.4	11.8	13.2	13.9	23.8
10	11.6	11.6	16.3	14.8	15.4	10.9	8.7	7.7	9.1	8.2	8.3	5.1	5.7	6.0	7.6	6.9	7.1	8.3	4.9	3.0	2.6	1.9	2.1	2.0	7.8	16.3
11	3.4	9.3	11.3	12.7	14.5	17.0	20.5	19.0	14.2	17.0	17.1	19.2	17.5	17.9	20.2	20.7	23.0	25.5	24.4	17.8	8.7	8.8	7.7	10.5	15.8	25.5
12	10.7	11.9	11.8	10.1	10.2	12.1	12.6	13.4	12.3	13.1	17.9	21.5	23.1	29.5	26.3	21.6	21.9	21.2	19.6	18.6	10.2	8.7	6.0	10.2	15.6	29.5
13	9.9	7.7	9.3	9.5	10.8	5.4	2.8	11.5	6.4	11.0	12.8	11.3	8.0	15.4	14.8	11.1	8.9	9.3	7.6	9.5	10.5	6.8	3.7	2.9	9.0	15.4
14	2.4	5.9	6.8	5.4	4.2	2.9	2.6	3.4	6.7	8.1	15.5	13.9	9.1	18.8	22.6	23.4	25.3	23.5	24.0	23.5	17.6	15.7	16.6	14.2	13.0	25.3
15	15.6	10.5	7.1	17.1	13.1	12.3	19.4	21.0	24.2	25.4	22.9	16.3	12.7	17.2	21.1	21.8	17.5	12.2	13.1	15.9	10.5	10.8	15.2	17.2	16.3	25.4
16	15.1	16.7	17.0	16.2	15.5	15.6	16.8	16.3	13.5	15.2	16.9	17.5	17.4	13.6	13.2	13.0	19.8	17.7	12.4	12.5	15.5	11.0	14.6	16.5	15.4	19.8
17	15.2	14.5	15.5	11.1	11.1	10.0	10.6	12.3	13.6	16.4	15.9	12.3	12.2	9.5	14.3	14.1	12.8	15.0	18.6	16.9	12.2	12.4	10.8	11.7	13.3	18.6
18	10.4	11.5	10.1	12.3	14.7	10.5	13.8	13.6	14.2	15.2	14.2	14.0	14.8	17.3	16.1	13.3	17.3	16.1	16.2	14.6	15.9	12.0	10.3	12.4	13.8	17.3
19	8.5	10.0	7.0	7.6	11.9	15.3	14.6	12.3	11.1	15.0	16.3	15.9	16.8	17.1	15.1	19.3	20.5	17.0	19.7	17.2	10.6	4.3	4.1	4.7	13.0	20.5
20	5.7	11.3	12.9	17.0	11.9	12.2	17.1	21.1	17.5	19.7	22.1	20.6	23.4	17.2	19.3	19.0	17.5	15.9	9.5	6.0	3.1	4.6	3.5	4.8	13.9	23.4
21	5.3	8.5	5.5	8.5	8.8	8.9	12.4	11.5	10.9	11.1	11.1	10.7	12.1	13.4	13.7	12.6	10.5	9.4	6.3	6.0	5.6	6.6	7.6	6.6	9.3	13.7
22	6.2	6.5	8.0	4.7	3.4	7.8	11.6	11.9	14.4	13.0	13.6	9.8	12.5	14.7	14.7	14.2	12.3	10.0	6.4	3.6	2.9	2.6	2.0	6.6	8.9	14.7
23	9.6	11.0	11.4	13.3	13.8	14.0	16.1	7.2	8.1	7.9	8.8	12.5	8.3	7.6	5.8	5.4	7.1	11.3	11.2	18.7	12.5	11.8	9.6	9.8	10.5	18.7
24	9.1	10.1	5.3	4.2	6.0	5.5	4.8	11.8	14.8	11.9	8.4	6.6	5.8	14.4	13.9	10.4	5.3	13.2	6.4	14.7	6.4	6.4	6.4	4.7	8.6	14.8
25	4.3	6.1	6.7	6.8	7.0	4.2	4.9	4.7	7.5	10.8	8.0	7.5	9.7	11.8	10.4	8.0	4.6	3.7	3.2	4.7	6.3	6.5	9.6	11.3	7.0	11.8
26	11.0	12.0	13.5	13.2	13.2	13.6	13.5	13.8	13.7	8.6	5.8	6.0	7.2	7.8	7.2	9.3	8.9	11.3	10.6	10.0	7.2	2.0	2.4	2.0	9.3	13.8
27	7.4	10.3	11.9	10.8	11.5	13.3	13.9	13.0	11.2	11.4	12.1	10.0	5.9	6.7	11.0	8.6	12.1	12.6	15.4	13.1	4.0	1.9	1.9	3.5	9.7	15.4
28	10.3	11.7	12.9	15.2	14.2	13.7	17.1	15.2	13.0	11.8	7.1	6.1	9.5	10.4	11.5	12.0	12.2	12.7	10.4	6.0	2.0	1.9	2.0	10.2	10.4	17.1
29	11.6	16.1	17.4	17.3	19.9	19.3	16.9	15.7	16.9	13.9	12.9	18.0	11.1	7.8	6.1	6.4	10.3	9.9	12.1	7.0	6.6	2.1	9.6	10.5	12.3	19.9
30	12.7	12.2	11.4	11.3	11.0	5.5	3.6	10.7	13.9	8.2	9.7	6.8	4.8	9.2	11.3	11.7	5.3	4.5	7.3	5.3	5.2	9.9	2.8	2.5	8.2	13.9
31	3.3	2.5	7.3	9.4	9.9	14.3	15.3	15.7	14.9	12.8	19.2	17.5	13.5	13.3	16.5	15.8	9.8	6.7	8.2	9.0	10.0	10.5	10.7	12.4	11.6	19.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	9.3	10.4	10.8	11.2	11.4	10.9	11.9	12.4	12.7	12.5	13.6	12.9	12.9	14.3	14.7	14.7	14.0	13.9	12.8	11.8	9.6	8.4	8.3	9.1		
MAX	22.3	22.5	24.8	27.6	23.7	19.3	20.5	22.8	24.2	25.4	22.9	21.5	23.4	29.5	26.3	23.9	25.3	25.5	24.4	23.5	23.2	18.1	20.0	18.9		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	29.5 KM/HR		
Maximum 24-HR Average	18.9 KM/HR		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	5.205	Monthly Average	11.9 KM/HR

Lagoon Wind Direction (°) – May 2019

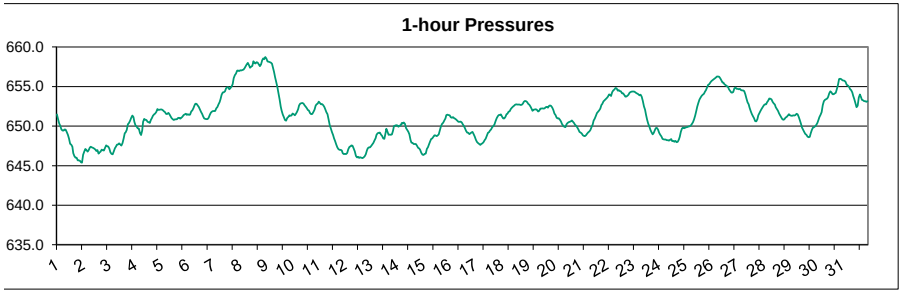
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	75.0	223.3	254.3	279.6	298.0	299.7	270.3	281.8	271.9	267.0	58.6	69.7	64.5	59.8	35.7	256.4	243.1	242.8	270.6	262.3	260.4	267.6	263.2	276.2	274.6	299.7
2	65.1	97.5	66.4	58.3	38.4	53.6	65.8	57.1	228.7	67.1	67.5	105.4	247.3	232.7	230.4	252.0	257.5	264.5	234.2	247.7	253.8	256.9	262.7	264.3	251.5	264.5
3	257.8	265.5	262.4	258.2	260.7	277.4	55.3	52.1	55.8	64.2	252.4	266.3	271.1	284.8	83.9	74.9	75.5	74.8	72.5	74.6	80.7	95.4	82.3	71.6	19.4	284.8
4	66.6	83.3	67.4	264.9	253.7	262.3	73.5	90.5	82.8	80.0	69.0	57.6	67.3	68.1	72.8	78.3	82.6	79.6	79.2	79.2	86.7	83.2	88.4	86.2	76.7	264.9
5	83.6	81.5	85.6	85.1	82.8	89.7	82.7	74.1	66.7	64.5	74.6	84.2	86.0	78.0	77.8	80.5	81.7	78.1	83.0	71.5	71.5	73.9	78.0	182.0	79.7	182.0
6	224.9	257.0	247.6	275.7	271.1	259.6	274.7	254.4	242.6	196.6	89.4	87.3	77.3	69.7	68.5	70.5	81.5	70.2	76.7	108.7	103.6	61.9	55.9	71.3	85.3	275.7
7	38.9	241.2	244.3	236.7	227.6	253.1	240.5	63.0	69.4	59.0	56.1	63.9	58.4	62.8	65.1	68.9	298.0	297.5	86.5	63.8	67.9	69.9	167.0	254.0	57.8	298.0
8	256.2	279.3	255.9	249.1	257.9	263.8	270.5	275.7	273.3	271.6	1.3	68.8	101.6	78.8	69.6	73.6	187.7	246.1	277.9	293.8	256.0	262.5	257.1	60.2	280.3	293.8
9	253.0	266.1	273.6	253.3	267.3	275.2	267.6	272.9	276.0	275.3	241.4	238.6	245.8	242.7	236.2	234.9	233.7	234.3	251.2	275.2	216.8	260.0	261.6	251.1	252.2	276.0
10	271.2	270.2	303.7	294.0	283.4	270.9	281.1	253.0	251.8	245.2	251.9	236.1	247.9	247.0	219.4	89.5	110.7	70.3	63.0	92.8	119.8	61.6	50.3	149.7	268.9	303.7
11	185.1	235.5	238.1	254.1	258.1	262.4	272.2	281.9	289.0	276.6	264.4	246.9	259.8	250.0	240.0	239.5	249.0	241.8	243.2	251.2	253.2	229.5	220.0	274.6	253.7	289.0
12	278.8	274.1	271.6	260.1	243.3	241.2	261.3	288.1	305.1	266.8	255.9	261.8	258.6	241.5	248.7	252.9	254.2	255.4	265.9	256.2	269.1	237.3	229.5	262.3	258.9	305.1
13	280.1	240.3	244.6	280.4	261.8	229.9	149.8	270.7	247.6	63.8	66.1	71.9	26.0	76.0	74.5	51.6	56.9	72.3	81.9	61.1	100.9	62.2	63.6	79.6	59.0	280.4
14	86.8	81.1	67.5	102.2	241.4	55.7	98.3	187.4	229.7	68.2	67.6	68.8	63.2	257.2	251.6	260.0	259.9	261.9	265.8	266.3	274.5	277.3	269.8	271.1	266.2	277.3
15	273.4	284.7	243.2	251.7	274.4	274.9	248.2	240.6	255.2	253.6	242.6	244.0	265.7	72.6	51.9	83.4	93.2	102.7	86.4	55.1	78.9	80.6	65.5	53.9	263.4	284.7
16	64.2	67.1	75.7	90.9	74.8	70.7	60.6	72.3	81.5	80.4	54.8	48.2	47.3	47.5	64.5	70.4	43.1	57.8	70.9	98.6	91.8	77.0	75.6	78.1	68.4	98.6
17	81.8	87.9	69.3	95.6	94.4	100.3	100.9	87.3	87.1	80.3	82.5	98.6	71.8	80.8	53.8	82.8	59.0	51.1	51.4	57.7	101.0	86.9	84.6	95.4	79.2	101.0
18	100.9	94.1	92.4	74.9	80.8	80.8	81.7	74.3	67.2	61.0	67.1	55.1	71.0	80.3	68.7	67.6	74.3	79.1	69.6	55.1	56.5	85.9	80.4	73.4	73.7	100.9
19	74.0	57.9	53.0	75.2	75.5	90.4	83.8	90.4	43.5	74.6	85.2	91.2	74.6	90.0	88.7	79.0	78.5	84.5	68.3	61.0	79.2	106.6	79.0	154.7	78.8	154.7
20	75.6	65.2	71.0	53.7	58.8	64.8	66.6	62.6	75.2	67.0	66.9	76.4	69.8	78.1	75.8	71.3	71.0	68.5	68.5	80.1	84.5	71.0	75.6	71.1	69.3	84.5
21	83.7	80.7	74.2	74.2	78.0	71.7	89.9	97.0	84.0	99.0	96.6	95.5	95.1	82.2	69.3	76.8	83.5	90.6	93.1	64.8	63.0	54.6	63.7	60.0	81.9	99.0
22	68.3	66.1	65.8	70.5	62.6	87.7	65.4	66.8	67.6	53.3	68.0	66.1	76.7	58.0	70.8	66.7	76.4	31.5	50.1	153.0	110.0	118.6	51.6	249.5	67.3	249.5
23	232.6	226.7	238.5	256.9	266.2	281.5	282.0	266.2	251.4	237.8	242.6	237.6	241.0	216.0	128.9	90.0	64.2	74.9	84.5	92.9	71.3	63.4	58.4	67.1	236.0	282.0
24	77.9	86.9	98.3	65.0	77.8	73.7	69.9	60.2	63.3	69.4	248.1	239.7	200.4	72.0	84.1	78.2	24.2	257.9	136.1	99.2	84.4	260.7	275.4	241.0	82.1	275.4
25	222.6	263.2	259.3	229.2	255.2	231.4	250.7	229.8	104.9	100.5	92.4	85.7	85.1	91.5	103.6	91.9	65.4	125.5	105.4	206.8	221.8	259.5	262.2	260.2	164.6	263.2
26	250.1	241.1	236.5	237.3	235.6	237.2	243.1	241.6	242.7	236.3	129.3	93.7	89.5	107.2	116.4	94.0	70.3	42.3	65.8	77.7	77.0	29.7	57.5	279.9	206.3	279.9
27	245.9	237.4	233.4	231.6	249.4	270.1	271.1	267.8	272.8	279.8	277.9	248.7	153.6	166.4	130.3	66.6	63.9	69.3	55.4	46.2	85.8	14.7	69.5	261.4	259.0	279.8
28	234.5	241.8	258.1	270.9	269.6	262.9	268.9	270.4	270.9	256.3	225.4	228.7	74.3	85.0	68.5	66.6	57.4	65.6	62.5	91.4	299.1	63.1	68.5	228.6	267.7	299.1
29	255.9	285.9	283.9	277.7	290.1	288.1	276.7	261.3	271.4	277.8	265.5	248.2	242.3	214.6	118.8	231.3	208.8	328.7	70.3	316.8	239.4	267.3	251.6	237.1	268.3	328.7
30	220.2	224.5	255.7	259.0	247.0	186.3	211.1	238.6	276.7	225.5	244.1	237.6	214.9	249.2	255.2	268.0	212.2	218.2	242.2	113.8	72.0	91.8	99.9	49.6	237.0	276.7
31	87.0	67.9	251.5	217.7	231.3	294.3	284.1	281.2	289.3	281.1	257.2	249.5	242.2	70.2	79.5	91.6	69.8	242.0	260.6	268.7	261.8	248.7	245.0	245.2	261.7	294.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	163.6	179.8	185.3	193.0	198.9	195.5	181.2	181.0	183.7	161.3	147.2	147.5	141.6	132.6	116.2	121.3	125.4	144.5	128.8	140.1	144.9	138.0	139.1	169.7		
MAX	280.1	285.9	303.7	294.0	298.0	299.7	284.1	288.1	305.1	281.1	277.9	266.3	271.1	284.8	255.2	268.0	298.0	328.7	277.9	316.8	299.1	277.3	275.4	279.9		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	329 degrees		
Maximum 24-HR Average	280 degrees		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	91.13	Monthly Average	156.7 degrees

Lagoon Pressure (mmHg) – May 2019

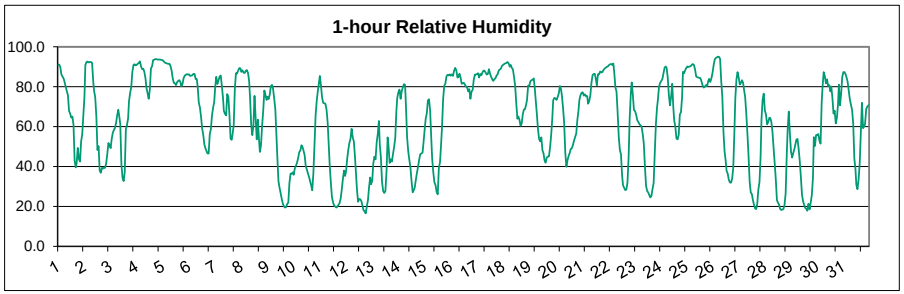
	HOUR																								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	651.5	650.9	650.3	650.0	649.6	649.4	649.4	649.6	649.6	649.3	648.9	648.4	647.8	647.6	647.4	646.6	646.2	646.0	646.0	645.7	645.7	645.6	645.4	645.4	648.0	651.5
2	646.4	646.8	647.1	647.0	646.8	647.0	647.3	647.4	647.3	647.2	647.2	647.1	646.9	647.0	646.5	646.7	646.8	647.0	646.9	646.9	647.2	647.6	647.5	647.4	647.0	647.6
3	647.2	646.7	646.5	646.4	646.8	647.2	647.4	647.7	647.7	647.8	647.7	647.6	647.9	648.4	649.1	649.2	649.5	650.2	650.4	650.7	651.1	651.3	651.1	650.6	648.6	651.3
4	650.1	649.9	649.7	649.7	649.1	648.9	649.4	650.5	650.9	650.8	650.8	650.5	650.5	650.4	650.8	651.0	651.3	651.5	651.6	651.8	652.2	652.0	652.1	652.1	650.7	652.2
5	652.1	652.0	651.9	651.8	651.5	651.5	651.7	651.5	651.3	651.0	650.9	650.8	650.9	650.8	650.9	651.0	651.1	650.9	651.1	651.2	651.4	651.5	651.6	651.4	651.3	652.1
6	651.5	651.4	651.5	651.8	652.0	652.3	652.7	652.8	652.8	652.6	652.4	652.1	651.8	651.5	651.2	651.0	650.9	650.9	650.9	651.1	651.4	651.7	651.8	651.9	651.8	652.8
7	651.9	651.9	652.2	652.4	652.8	653.1	653.4	654.0	654.2	654.3	654.4	654.8	654.9	654.9	654.7	654.8	655.0	655.3	656.1	656.4	656.6	657.0	657.0	657.0	654.5	657.0
8	657.1	657.0	657.1	657.2	657.3	657.6	657.8	658.0	657.7	657.4	657.5	657.6	658.2	658.0	657.9	658.1	658.0	657.8	657.6	657.8	658.3	658.6	658.4	658.7	657.8	658.7
9	658.6	658.2	658.1	658.1	658.0	657.9	657.4	656.9	656.2	655.6	654.9	654.1	653.4	652.5	652.0	651.5	651.1	650.8	650.7	651.0	651.2	651.4	651.3	651.3	654.3	658.6
10	651.6	651.5	651.4	651.6	651.8	652.2	652.6	652.8	652.9	652.9	652.8	652.6	652.4	652.2	652.0	652.0	651.7	651.5	651.5	651.8	652.1	652.6	652.8	652.9	652.2	652.9
11	653.1	652.9	652.8	652.8	652.7	652.4	652.1	651.8	651.5	650.8	650.1	649.7	649.2	648.9	648.5	648.1	647.7	647.3	647.1	647.0	647.0	646.9	646.6	646.5	649.7	653.1
12	646.5	646.5	646.6	647.1	647.4	647.5	647.6	647.5	647.2	646.8	646.2	646.0	646.1	646.0	646.1	646.0	646.0	646.0	646.2	646.4	646.9	647.2	647.3	647.3	646.7	647.6
13	647.5	647.7	647.9	648.2	648.5	648.9	649.1	649.1	649.2	648.9	648.7	648.4	648.4	648.9	649.7	649.3	648.9	648.9	648.9	649.0	649.4	650.0	650.1	650.1	648.9	650.1
14	650.1	649.9	650.1	650.1	650.4	650.3	650.5	650.3	649.7	649.5	649.3	648.9	648.2	647.9	647.9	647.7	647.7	647.7	647.5	647.3	647.2	647.0	646.6	646.4	648.7	650.5
15	646.4	646.5	646.5	647.1	647.3	647.7	648.0	648.4	648.4	648.6	648.8	648.8	648.7	648.8	649.0	649.5	650.0	650.3	650.4	650.7	651.0	651.4	651.5	651.4	649.0	651.5
16	651.4	651.1	651.1	651.1	651.0	651.0	650.8	650.7	650.5	650.5	650.6	650.5	650.2	650.0	649.8	649.4	649.2	649.2	649.0	649.1	649.2	649.3	649.0	648.7	650.1	651.4
17	648.3	648.0	647.9	647.7	647.6	647.7	647.8	648.0	648.2	648.4	648.8	649.1	649.2	649.4	649.6	649.9	650.0	650.2	650.6	651.0	651.2	651.4	651.4	651.5	649.3	651.5
18	651.2	651.0	651.0	651.2	651.5	651.6	651.8	651.9	652.2	652.3	652.5	652.6	652.7	652.7	652.7	652.7	652.7	652.7	652.7	652.8	653.1	653.2	653.1	653.0	652.3	653.2
19	652.8	652.7	652.5	652.2	651.9	652.1	652.1	652.1	652.0	651.9	651.9	652.2	652.2	652.2	652.2	652.2	652.4	652.4	652.3	652.6	652.6	652.5	652.4	652.0	652.3	652.8
20	651.6	651.4	651.1	651.0	651.0	650.8	650.6	650.3	650.1	649.9	649.9	650.2	650.4	650.5	650.5	650.6	650.7	650.5	650.4	650.1	650.1	649.8	649.6	649.3	650.4	651.6
21	649.2	649.1	648.8	648.8	648.7	648.9	649.1	649.2	649.3	649.5	649.9	650.2	650.7	650.9	651.3	651.6	651.8	652.0	652.2	652.7	652.8	653.1	653.3	653.4	650.7	653.4
22	653.5	653.7	654.0	654.0	653.8	654.3	654.5	654.6	654.8	654.8	654.5	654.5	654.4	654.4	654.2	654.1	653.9	653.7	653.7	653.9	654.0	654.2	654.3	654.4	654.2	654.8
23	654.4	654.4	654.3	654.2	654.1	654.0	653.9	654.0	653.7	653.2	652.5	652.1	651.5	650.8	650.3	649.9	649.5	649.2	648.9	649.2	649.4	649.7	649.8	649.5	651.8	654.4
24	649.2	648.9	648.7	648.4	648.3	648.3	648.3	648.2	648.2	648.2	648.3	648.4	648.1	648.1	648.0	648.1	648.0	648.0	648.3	648.6	649.3	649.7	649.8	649.7	648.5	649.8
25	649.8	649.9	649.9	649.9	650.0	650.1	650.3	650.5	650.9	651.3	651.9	652.5	652.9	653.3	653.6	653.8	654.0	654.1	654.4	654.5	654.9	655.2	655.3	655.5	652.4	655.5
26	655.7	655.8	655.9	656.0	656.1	656.3	656.3	656.2	656.0	655.8	655.5	655.5	655.3	655.2	655.0	655.0	654.6	654.5	654.3	654.2	654.3	654.8	654.9	654.7	655.3	656.3
27	654.7	654.7	654.7	654.6	654.5	654.5	654.4	654.0	653.5	653.0	652.7	652.3	651.9	651.5	651.3	651.0	650.6	650.6	650.9	651.4	651.7	651.9	652.2	652.4	652.7	654.7
28	652.6	652.7	652.7	653.0	653.2	653.5	653.5	653.4	653.1	652.9	652.7	652.4	652.2	651.9	651.6	651.3	651.1	650.9	650.8	650.9	651.1	651.2	651.3	651.5	652.1	653.5
29	651.4	651.3	651.3	651.4	651.3	651.4	651.6	651.5	651.2	650.7	650.3	649.8	649.5	649.3	649.0	648.9	648.7	648.6	648.7	649.1	649.5	649.8	649.9	650.0	650.2	651.6
30	650.1	650.4	650.8	651.1	651.4	651.8	652.6	653.2	653.3	653.4	653.5	653.7	654.1	654.4	654.3	654.0	654.0	654.1	654.2	654.7	655.2	656.0	656.0	655.9	653.4	656.0
31	655.8	655.8	655.7	655.6	655.2	655.1	655.0	654.7	654.5	654.3	653.8	653.4	652.9	652.4	652.6	653.6	654.0	653.7	653.3	653.3	653.2	653.2	653.1	653.2	654.1	655.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	651.4	651.3	651.3	651.3	651.4	651.5	651.6	651.6	651.6	651.4	651.3	651.2	651.1	651.0	651.0	650.9	650.9	650.9	650.9	651.1	651.3	651.5	651.5	651.5		
MAX	658.6	658.2	658.1	658.1	658.0	657.9	657.8	658.0	657.7	657.4	657.5	657.6	658.2	658.0	657.9	658.1	658.0	657.8	657.6	657.8	658.3	658.6	658.4	658.7		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	659	MMHg	
Maximum 24-HR Average	658	MMHg	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	2.855	Monthly Average	651.3 MMHg

Lagoon Relative Humidity (%) – May 2019

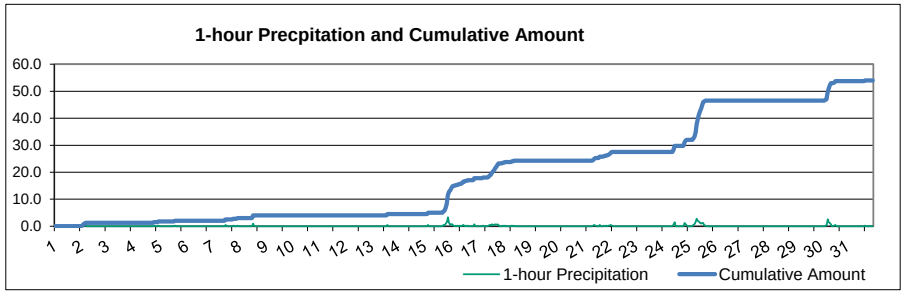
	HOUR																									
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	90.8	91.2	89.8	86.1	85.1	84.0	81.9	79.5	77.4	75.9	67.8	66.5	64.5	65.0	60.7	43.0	39.6	41.7	49.3	43.8	42.5	52.6	56.2	65.9	66.7	91.2
2	75.2	90.9	92.4	92.6	92.1	92.3	92.3	91.9	82.8	77.9	74.8	65.3	48.3	50.1	38.0	36.9	39.3	39.0	39.3	39.3	41.6	46.2	51.8	50.7	64.2	92.6
3	49.2	53.3	56.6	58.3	59.2	61.7	65.5	68.4	64.8	61.3	41.1	34.4	32.7	37.3	58.7	60.8	64.1	72.7	76.9	79.8	87.4	90.9	91.3	90.7	63.2	91.3
4	91.0	91.5	92.0	92.7	90.1	88.7	88.9	87.2	83.9	79.5	76.8	74.0	78.5	89.1	90.2	93.4	93.5	93.9	93.8	93.6	93.6	93.6	93.4	93.4	89.0	93.9
5	93.2	92.6	92.0	91.8	91.6	91.5	91.4	90.1	87.7	84.5	82.1	81.6	80.8	82.2	82.9	83.2	82.3	80.2	81.2	84.3	85.5	85.9	86.2	86.1	86.3	93.2
6	86.1	85.4	85.5	85.7	86.4	86.4	83.8	83.8	80.0	72.0	69.5	64.9	59.1	55.8	51.0	48.9	47.8	46.5	46.6	56.2	58.7	65.6	69.5	72.3	68.7	86.4
7	79.4	84.9	81.4	83.1	85.0	85.6	80.4	74.6	67.9	66.4	65.6	76.2	74.9	65.8	53.9	53.4	56.3	60.6	78.7	86.7	86.6	88.1	89.3	89.3	75.6	89.3
8	87.4	88.2	87.1	86.9	88.0	88.3	86.8	82.8	74.6	61.2	55.8	60.3	75.4	64.4	53.7	63.4	55.4	47.3	50.7	60.4	68.1	78.1	75.8	73.3	71.4	88.3
9	75.0	73.8	76.0	80.3	80.9	78.9	74.0	68.7	58.2	44.9	32.7	29.3	26.5	23.6	21.2	20.1	19.5	19.6	21.2	22.0	31.7	36.5	36.4	37.0	45.3	80.9
10	35.8	38.9	40.3	41.9	44.3	47.2	48.1	50.7	50.0	47.9	45.7	40.2	38.5	36.4	34.8	32.4	30.7	28.1	36.4	50.5	65.6	72.8	77.8	81.8	46.5	81.8
11	85.4	80.5	74.6	72.0	71.7	71.5	68.4	61.9	52.6	40.8	32.1	24.8	22.0	20.5	19.9	19.4	19.9	20.8	21.6	23.9	28.5	33.7	38.0	35.3	43.3	85.4
12	37.4	43.6	48.3	51.8	53.9	58.9	54.6	52.6	46.5	37.7	28.2	22.4	23.7	23.6	22.6	20.6	18.2	17.5	16.6	20.1	23.1	29.7	34.5	31.1	34.1	58.9
13	32.8	41.6	44.9	43.6	52.0	56.3	62.9	51.1	44.3	32.2	27.8	26.8	27.8	37.5	54.6	50.2	41.8	43.6	42.4	46.4	49.7	54.2	67.7	74.4	46.1	74.4
14	77.2	78.5	73.9	77.8	79.7	81.2	80.9	69.9	54.7	47.7	43.3	39.3	32.6	27.1	28.3	29.4	33.3	36.8	39.9	43.4	46.2	46.5	46.9	51.4	52.7	81.2
15	57.8	63.8	66.7	73.1	73.7	68.0	54.3	44.0	37.2	32.2	30.6	27.3	26.1	39.4	42.0	49.3	59.5	73.7	80.4	81.5	85.2	86.0	85.6	86.2	59.3	86.2
16	85.5	86.2	85.4	88.0	89.4	88.2	84.6	84.8	86.5	84.6	81.5	81.7	81.9	80.9	79.9	80.0	77.6	78.8	74.0	77.5	78.4	83.4	86.0	86.0	83.0	89.4
17	86.3	86.7	84.6	86.4	85.7	87.2	88.1	88.0	87.0	86.1	86.4	88.8	86.4	84.8	83.6	82.9	83.7	84.3	85.7	86.3	88.2	88.6	89.3	90.4	86.5	90.4
18	90.9	91.4	91.6	91.9	92.4	91.7	90.0	90.9	89.4	88.6	84.9	80.5	71.6	64.0	65.0	63.5	60.5	61.5	66.1	68.5	68.8	71.0	73.3	80.6	78.7	92.4
19	80.4	82.7	83.3	83.5	84.2	78.8	73.1	66.3	58.7	53.8	52.6	54.6	48.0	46.5	43.2	41.9	44.5	44.9	45.0	49.6	55.8	64.2	73.2	74.4	61.8	84.2
20	74.2	73.4	74.8	76.7	80.3	78.8	75.4	69.4	61.9	47.1	39.9	43.2	45.3	46.8	48.7	49.1	50.7	52.9	54.7	56.5	63.4	67.9	73.2	75.7	61.7	80.3
21	76.9	77.2	75.6	76.2	75.2	75.3	71.4	72.8	75.6	82.1	85.7	86.4	86.4	83.6	80.7	86.2	86.2	87.7	87.1	87.3	88.4	89.1	89.4	89.9	82.2	89.9
22	90.1	90.7	91.2	91.4	90.9	91.5	86.9	79.7	77.5	67.1	55.0	48.4	46.0	35.5	30.7	29.3	28.2	28.4	32.0	44.5	64.7	76.8	82.1	75.8	63.9	91.5
23	68.3	67.8	65.8	63.1	62.2	61.2	60.7	60.0	56.4	51.5	40.0	30.3	27.7	27.0	25.8	24.5	25.3	28.7	31.8	46.9	61.1	69.5	73.5	80.0	50.4	80.0
24	81.9	82.8	83.8	86.8	89.5	90.1	89.4	84.5	75.7	70.7	74.9	81.4	69.5	63.1	59.9	54.1	53.6	55.8	66.1	67.2	74.4	87.4	86.8	88.3	75.7	90.1
25	89.5	90.1	89.9	90.1	90.3	90.9	91.3	90.9	88.7	85.2	84.7	84.7	84.4	84.3	82.6	80.5	79.5	80.1	80.8	80.2	82.8	84.0	82.3	84.2	85.5	91.3
26	86.9	90.6	93.6	94.3	94.7	95.0	94.9	93.9	82.9	74.8	57.4	47.6	42.8	37.9	36.4	33.4	32.0	31.9	34.0	39.6	57.9	74.2	83.6	87.3	66.6	95.0
27	84.6	81.1	81.9	83.3	81.8	78.4	74.8	66.6	56.8	45.6	32.5	27.0	26.2	23.6	21.0	19.1	18.7	21.3	28.5	32.3	45.0	63.6	73.4	76.5	51.8	84.6
28	68.1	66.1	61.1	62.2	64.4	64.4	62.4	57.6	49.5	41.7	33.4	23.2	21.8	21.0	18.8	18.2	18.5	18.7	20.8	26.6	46.1	58.5	67.5	56.3	43.6	68.1
29	47.3	44.5	46.7	48.8	51.3	53.5	53.8	49.0	42.8	34.8	25.9	22.6	20.7	19.3	18.9	17.9	21.4	18.5	21.9	25.8	34.3	54.7	50.3	55.8	36.7	55.8
30	55.8	56.3	52.9	51.5	71.9	80.0	87.3	85.4	81.7	83.7	80.3	80.8	77.6	80.1	74.3	66.5	67.9	61.6	64.4	71.1	81.0	70.7	76.4	85.0	72.7	87.3
31	87.3	87.3	86.2	84.3	82.5	78.0	73.6	70.9	68.4	61.5	44.1	38.7	30.7	28.7	33.5	41.5	57.0	71.9	59.2	60.2	61.5	68.7	70.0	70.7	63.2	87.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	74.5	75.9	75.8	76.6	78.1	78.2	76.5	73.2	67.8	62.0	55.9	53.3	50.9	49.8	48.9	48.2	48.6	50.0	52.5	56.5	62.8	68.8	72.0	73.4		
MAX	93.2	92.6	93.6	94.3	94.7	95.0	94.9	93.9	89.4	88.6	86.4	88.8	86.4	89.1	90.2	93.4	93.5	93.9	93.8	93.6	93.6	93.6	93.4	93.4		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	95.0 %		
Maximum 24-HR Average	89.0 %		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	22.2	Monthly Average	63.8 %

Lagoon Precipitation (mm) – May 2019

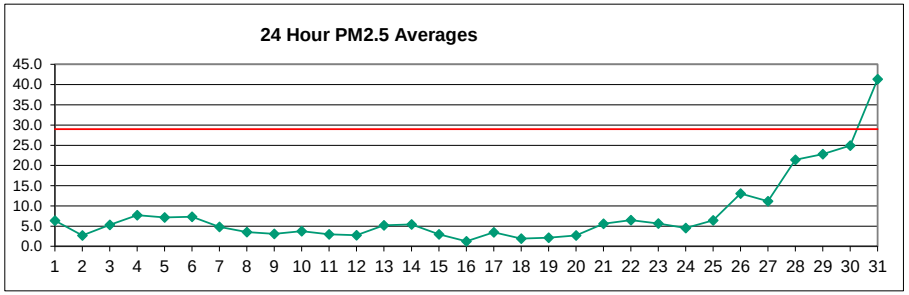
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.3	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
3	0.0	0.0	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	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.3
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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.5
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	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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	0.5	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	0.5	0.3	1.0	1.5	3.3	1.3	0.5	0.4	3.3
16	0.8	0.8	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.5	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.8
17	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.5	0.3	0.8	0.5	0.5	0.8	0.5	0.8	0.5	0.0	0.0	0.0	0.3	0.2	0.8
18	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	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	0.3
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	0.3	0.5	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.3	0.1	0.5
22	0.3	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	0.0	0.0	0.0	0.0	0.5
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	0.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.8	0.3	0.0	0.2	1.5
25	0.0	0.0	0.0	0.0	0.5	0.8	1.5	2.8	2.0	1.8	1.3	1.0	1.3	1.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.8
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.3	0.3	2.5	1.5	1.3	0.8	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.5
31	0.0	0.0	0.0	0.0	0.0	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	0.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0		
MAX	0.8	0.8	0.5	0.5	0.5	0.8	2.5	2.8	2.0	1.8	1.3	1.5	1.3	1.3	0.5	0.5	0.8	0.5	0.8	1.0	1.5	3.3	1.3	0.5		



Number of Non-Zero Readings	82		
Maximum 1-HR Average	3.3 MM		
Maximum 24-HR Average	0.6 MM		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	0.287	Monthly Average	0.07 MM

West $PM_{2.5}$ (µg/m^3) – May 2019

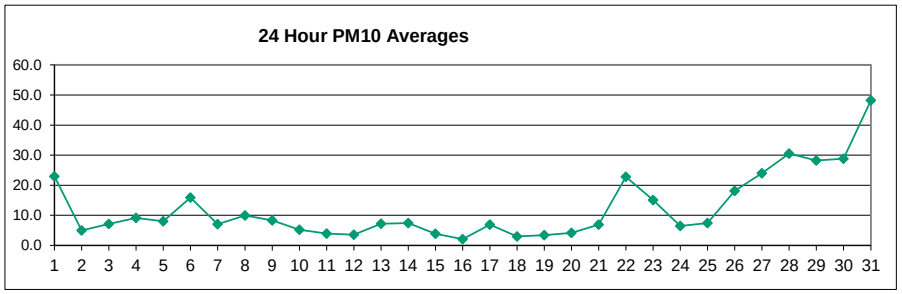
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.1	6.1	5.7	5.5	5.8	5.8	6.6	6.4	6.6	6.2	6.9	7.2	5.2	4.2	5.8	46.5	5.0	2.1	2.3	1.5	1.5	1.3	1.7	1.7	6.4	46.5
2	2.3	1.9	0.9	0.8	1.0	0.7	2.3	5.1	3.6	6.1	9.9	7.2	4.4	5.0	3.1	2.2	1.6	0.9	1.2	0.9	0.8	1.0	0.9	1.2	2.7	9.9
3	1.2	1.1	1.4	1.4	1.9	1.9	2.2	5.6	6.4	5.7	3.3	2.4	2.6	2.8	6.9	7.6	7.4	6.3	6.4	10.2	11.2	10.1	10.2	11.9	5.3	11.9
4	12.0	11.3	13.3	12.3	11.7	11.3	12.7	8.9	7.7	5.4	5.1	5.4	4.8	4.9	4.1	5.1	4.6	5.9	4.2	5.2	6.7	6.9	7.8	7.5	7.7	13.3
5	6.5	3.5	4.0	3.9	4.8	5.7	6.4	7.2	6.9	7.4	7.6	7.8	7.9	8.5	8.8	9.7	9.2	8.4	8.4	7.6	7.7	5.9	6.5	10.6	7.1	10.6
6	9.3	10.7	10.5	9.5	9.6	9.7	9.6	10.7	9.9	8.9	11.0	8.3	7.2	7.4	6.9	4.8	4.7	4.1	4.6	3.8	3.3	3.5	3.5	3.7	7.3	11.0
7	4.0	4.3	5.0	5.3	5.7	5.5	5.2	6.7	9.0	10.6	8.0	5.9	4.3	8.6	5.3	3.5	5.4	3.1	2.4	1.2	0.9	1.1	2.7	2.0	4.8	10.6
8	1.8	2.7	3.0	2.6	3.2	3.3	8.1	9.5	7.0	5.2	3.2	4.4	1.9	7.3	3.1	3.8	4.1	2.4	1.2	1.2	1.0	1.1	1.5	1.8	3.5	9.5
9	1.8	1.4	1.5	1.6	1.9	2.6	5.2	6.4	5.7	3.5	5.2	4.1	4.1	5.0	3.6	2.8	3.0	2.2	1.9	2.0	1.9	2.0	2.1	2.2	3.1	6.4
10	2.5	2.5	2.5	2.5	3.0	2.8	3.7	5.9	7.7	7.3	7.9	5.2	6.0	4.4	3.6	2.9	3.7	2.7	1.6	1.6	1.9	2.1	2.5	3.0	3.7	7.9
11	3.4	4.0	4.0	3.8	3.6	3.7	3.5	3.6	3.2	3.0	3.0	2.5	2.2	2.5	2.4	2.7	2.5	2.5	2.4	2.3	2.4	2.5	2.8	2.8	3.0	4.0
12	3.4	3.1	2.9	2.8	2.9	2.8	2.5	3.0	3.0	2.9	2.6	2.8	2.5	3.0	2.6	2.4	2.4	2.3	2.3	2.2	2.3	2.3	3.2	3.4	2.7	3.4
13	3.7	3.5	3.5	3.7	3.6	4.1	5.9	7.7	7.5	8.1	6.6	7.0	5.0	5.9	6.0	7.5	7.1	5.3	4.3	3.3	3.6	4.1	3.7	3.9	5.2	8.1
14	4.5	4.3	7.3	5.3	5.6	6.4	7.3	7.6	7.4	6.8	8.2	8.9	6.8	5.8	5.6	5.7	5.5	3.8	3.3	2.5	2.5	2.7	2.6	3.2	5.4	8.9
15	3.9	3.7	2.0	2.7	1.7	1.1	1.1	1.9	1.8	2.2	2.2	2.3	2.3	5.0	5.5	5.3	4.1	4.5	2.5	3.7	2.8	2.8	3.5	2.1	2.9	5.5
16	2.3	2.2	0.9	0.7	0.7	0.6	0.8	1.6	0.6	0.3	0.7	0.9	1.0	1.0	1.3	1.3	0.8	0.8	1.1	1.1	2.5	2.1	1.6	2.8	1.2	2.8
17	4.0	3.2	2.5	4.1	5.2	9.6	9.5	5.5	7.6	9.1	2.2	1.4	1.2	1.2	1.2	1.6	1.9	0.8	0.5	0.4	0.6	3.3	4.1	3.3	3.5	9.6
18	2.6	5.6	6.7	6.7	6.1	2.7	0.9	1.4	1.0	0.7	0.6	0.4	0.4	1.6	1.4	1.2	0.9	0.6	0.7	0.4	0.4	0.4	0.5	2.1	1.9	6.7
19	2.5	4.2	4.8	4.2	2.9	2.0	1.8	2.2	1.9	1.2	1.6	0.8	0.8	0.7	1.2	1.4	1.8	1.9	2.0	2.0	1.6	1.5	2.3	3.5	2.1	4.8
20	3.2	3.5	4.3	3.7	3.8	4.8	3.9	2.8	2.4	2.7	2.1	2.1	1.7	2.1	2.2	2.7	2.8	2.7	2.5	2.1	2.2	1.7	1.5	1.5	2.7	4.8
21	1.6	1.8	2.4	2.8	3.0	3.4	8.5	8.3	7.1	5.5	5.9	14.1	11.7	5.3	6.7	4.3	4.6	5.4	7.8	7.4	6.4	4.0	3.3	3.4	5.6	14.1
22	3.0	3.0	2.5	3.1	3.7	4.8	2.2	19.9	11.1	9.2	10.2	8.4	10.9	17.2	8.2	7.4	6.8	3.9	3.0	3.1	3.0	3.5	3.7	4.3	6.5	19.9
23	4.1	4.0	3.9	3.9	4.2	4.8	7.7	8.3	10.5	12.6	10.3	5.9	4.5	8.4	5.1	5.8	4.7	6.7	3.9	3.8	4.7	2.9	2.7	2.5	5.7	12.6
24	2.4	2.1	4.2	3.0	3.7	3.3	7.1	8.3	4.8	5.3	4.3	4.5	6.7	8.7	5.9	6.7	5.5	4.0	3.7	3.3	3.5	3.8	2.3	1.9	4.5	8.7
25	2.2	2.9	3.6	3.3	4.0	5.1	5.2	4.2	3.4	4.4	4.6	2.8	2.5	4.8	6.6	8.8	10.3	12.0	11.9	11.6	10.7	9.7	9.8	9.4	6.4	12.0
26	8.8	9.7	24.6	16.0	25.3	24.7	8.4	9.3	9.7	9.7	10.3	11.4	12.3	11.8	11.9	11.3	10.6	11.7	12.3	12.0	12.6	13.1	12.8	13.4	13.1	25.3
27	14.8	14.4	14.9	14.6	14.8	14.9	15.4	17.2	16.9	16.2	13.7	8.8	7.2	7.9	7.9	9.3	7.8	6.8	7.2	7.0	7.3	7.4	7.7	8.3	11.2	17.2
28	9.4	9.6	10.2	10.8	11.2	11.6	12.1	12.5	14.7	14.6	12.5	15.3	26.1	28.5	29.8	28.0	27.3	27.3	29.9	34.7	33.9	33.6	34.5	36.0	21.4	36.0
29	39.0	37.9	35.1	33.0	31.7	30.3	29.8	29.2	27.1	25.2	18.7	17.0	14.4	14.3	14.1	13.1	11.7	10.9	15.2	17.5	19.9	19.4	21.0	22.0	22.8	39.0
30	21.1	20.7	18.8	18.4	18.5	17.6	17.2	17.6	16.7	14.0	16.1	17.9	17.4	15.2	13.2	13.3	12.9	12.0	10.6	8.4	8.8	60.1	98.5	113.6	24.9	113.6
31	158.0	141.3	134.0	102.4	87.5	55.2	42.0	30.6	28.5	30.9	25.2	15.6	11.8	11.6	14.3	11.6	9.7	11.2	12.9	12.1	10.6	11.3	12.2	12.3	41.4	158.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	11.1	10.6	11.0	9.5	9.4	8.5	8.2	8.9	8.3	8.1	7.4	6.7	6.4	7.1	6.6	7.8	6.1	5.7	5.6	5.7	5.8	7.3	8.8	9.7		
MAX	158.0	141.3	134.0	102.4	87.5	55.2	42.0	30.6	28.5	30.9	25.2	17.9	26.1	28.5	29.8	46.5	27.3	27.3	29.9	34.7	33.9	60.1	98.5	113.6		



Number of 24HR Exceedences	1	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	158.0	UG/M3	
Maximum 24-HR Average	41.4	UG/M3	
IZS Calibration Time		Opperational Time	744 HRS
Down Time	0	Opperational Uptime	100.0 %
Standard Deviation	13.23	Monthly Average	7.9 UG/M3

West PM_{10} ($\mu g/m^3$) – May 2019

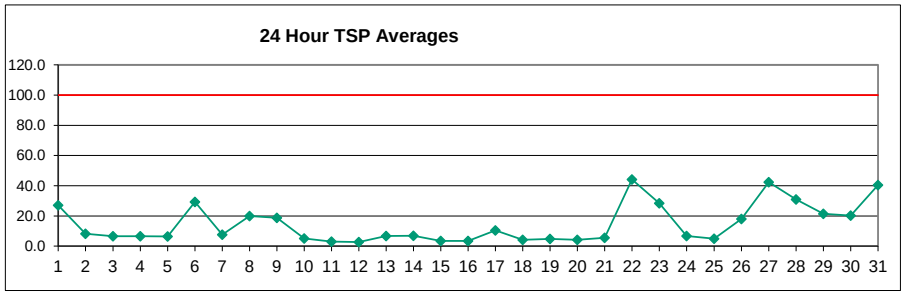
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	6.5	7.3	6.1	5.8	6.0	6.2	8.0	7.8	8.3	8.2	9.7	10.9	15.9	6.2	10.3	403.8	9.0	2.8	2.9	1.7	1.7	1.5	2.1	2.1	23.0	403.8
2	2.9	2.1	1.0	0.8	1.1	0.8	2.9	7.2	4.7	8.4	13.4	13.3	18.3	19.3	10.7	3.0	2.2	1.1	1.7	1.0	0.9	1.2	1.0	1.4	5.0	19.3
3	1.5	1.3	1.7	1.8	2.5	2.5	3.1	8.2	9.4	8.5	4.7	3.3	3.7	4.0	9.8	10.6	10.5	9.2	8.5	12.2	15.0	12.4	11.7	14.9	7.1	15.0
4	14.6	14.2	18.0	15.3	13.4	12.7	15.7	11.7	9.3	6.4	7.1	7.7	6.2	5.5	4.8	5.3	4.9	6.2	4.7	5.3	7.1	6.9	8.1	7.8	9.1	18.0
5	7.0	3.6	4.1	3.9	4.9	5.9	6.7	7.6	7.5	9.7	12.9	10.3	9.6	9.4	9.6	10.1	9.7	9.2	9.0	8.1	8.2	5.9	7.7	12.8	8.1	12.9
6	12.3	12.5	12.0	10.1	10.7	11.2	11.7	13.8	16.1	20.7	32.8	36.0	33.4	41.7	28.8	15.7	14.4	10.7	13.9	7.3	3.8	4.0	4.0	4.1	15.9	41.7
7	4.5	4.8	6.2	6.3	7.1	6.5	6.1	8.7	12.4	14.7	11.1	7.5	5.4	12.6	12.3	16.9	7.9	4.5	3.2	1.5	1.1	1.3	3.7	2.4	7.0	16.9
8	2.0	2.9	3.1	2.8	3.5	4.0	22.1	25.4	20.7	16.5	11.5	20.1	6.9	34.1	14.7	14.5	17.3	7.6	1.9	1.4	1.2	1.3	1.9	2.3	10.0	34.1
9	2.4	1.7	1.8	1.9	2.2	3.4	7.6	15.6	22.7	13.3	24.5	15.9	16.3	23.3	12.5	6.8	7.7	4.4	2.8	2.7	2.3	2.5	2.6	2.7	8.3	24.5
10	3.2	3.0	3.0	2.9	3.8	3.5	5.2	8.5	11.4	10.9	11.6	7.7	8.8	6.5	5.3	4.1	5.5	3.9	2.1	2.0	2.4	2.6	3.3	4.0	5.2	11.6
11	4.6	5.4	5.3	4.7	4.5	4.6	4.1	4.6	4.3	4.2	4.2	3.4	3.1	3.6	3.3	3.8	3.4	3.5	3.4	3.0	3.2	3.3	3.7	3.7	4.0	5.4
12	4.5	4.0	3.7	3.5	3.5	3.4	3.1	3.8	4.1	4.0	3.6	4.0	3.5	4.3	3.6	3.4	3.3	3.1	2.9	2.8	2.8	2.8	4.1	4.4	3.6	4.5
13	4.5	4.2	4.2	4.4	4.2	5.2	8.1	11.0	10.9	11.9	9.8	10.3	7.4	8.6	8.7	10.6	10.3	7.8	6.0	4.2	4.8	5.6	4.7	5.0	7.2	11.9
14	6.3	5.7	10.8	7.4	7.8	9.1	9.2	10.3	10.3	9.9	11.3	13.2	10.0	8.6	8.0	8.4	7.6	4.7	4.0	2.9	2.9	3.2	3.0	4.1	7.4	13.2
15	5.1	4.4	2.4	3.1	1.8	1.2	1.4	2.7	2.7	3.3	3.2	3.2	3.4	7.4	8.1	7.8	5.9	6.4	2.9	4.0	3.0	3.1	3.8	2.3	3.9	8.1
16	2.5	2.4	1.1	0.9	0.8	0.7	1.2	5.5	1.7	0.7	1.4	2.3	2.0	1.6	2.8	2.9	1.4	1.5	2.1	1.7	3.7	3.1	2.0	3.4	2.1	5.5
17	6.6	4.6	3.0	6.3	7.0	13.6	13.4	8.2	22.5	31.5	8.3	4.4	4.3	3.4	3.3	4.1	3.5	1.0	0.6	0.5	0.9	6.1	5.6	4.1	6.9	31.5
18	2.9	6.8	7.3	6.8	6.2	2.9	1.0	1.9	1.4	1.0	0.9	0.7	0.8	9.0	6.0	3.4	3.2	1.7	2.0	0.4	0.4	0.8	0.6	3.0	3.0	9.0
19	3.4	5.7	5.9	5.5	3.6	2.6	2.2	4.3	4.9	2.1	8.6	1.6	1.9	1.2	3.4	2.8	3.3	2.6	2.5	2.3	2.0	1.9	3.3	5.0	3.5	8.6
20	4.7	5.1	6.3	5.2	5.5	7.0	5.5	4.5	4.6	6.8	4.7	5.0	3.7	3.0	3.0	3.7	3.7	3.5	3.3	2.6	2.9	2.1	1.8	1.8	4.2	7.0
21	1.9	2.1	3.2	3.8	4.1	4.6	12.4	12.2	10.2	7.3	8.0	15.6	13.4	6.6	8.6	5.2	5.7	6.2	8.8	7.9	6.8	4.2	3.4	3.5	6.9	15.6
22	3.2	3.2	2.7	3.5	4.3	5.4	2.9	29.7	38.9	41.0	47.6	43.2	51.9	102.7	42.2	39.4	38.5	14.5	6.8	4.9	4.2	5.0	5.2	6.3	22.8	102.7
23	5.9	5.6	5.2	5.2	5.7	6.6	11.1	12.0	15.5	23.0	51.1	27.3	21.4	54.3	23.4	28.4	21.0	10.4	5.7	5.6	7.0	3.9	3.4	3.0	15.1	54.3
24	2.8	2.4	5.8	3.8	4.9	4.1	9.7	10.9	7.0	7.8	6.4	6.5	12.8	12.8	8.5	9.9	8.0	5.6	4.9	4.6	4.8	5.2	3.1	2.3	6.4	12.8
25	2.6	3.4	4.1	3.7	4.5	5.8	5.9	5.0	4.2	5.7	5.7	3.3	2.8	5.3	8.0	10.5	11.2	14.3	14.1	13.2	12.1	11.3	11.5	10.8	7.5	14.3
26	9.8	11.2	36.6	23.4	37.3	37.0	10.0	11.8	11.7	13.7	17.8	19.0	22.0	17.4	18.9	15.9	14.0	15.6	15.8	15.0	15.2	15.4	15.0	16.1	18.2	37.3
27	18.8	16.9	17.1	16.2	16.3	17.2	19.9	24.6	37.1	51.9	52.9	32.5	25.7	33.9	33.1	48.5	30.6	15.3	16.0	10.3	9.7	9.7	10.0	11.0	24.0	52.9
28	12.6	12.0	12.2	12.6	12.8	13.9	15.5	16.2	21.9	33.3	41.2	31.6	54.6	42.4	41.3	38.8	38.0	37.7	37.3	39.4	38.8	39.0	43.1	46.1	30.5	54.6
29	45.0	42.6	38.4	36.3	35.3	35.0	37.0	41.0	37.9	34.7	25.1	23.1	19.2	19.2	19.2	17.5	15.4	14.1	20.2	21.8	24.8	23.3	25.2	26.2	28.2	45.0
30	25.8	24.1	21.7	21.2	21.8	20.7	20.2	20.5	18.9	15.7	20.3	23.1	23.5	19.3	15.0	16.6	16.7	15.0	12.7	10.4	11.0	68.8	106.9	122.6	28.9	122.6
31	167.0	148.5	140.3	107.5	92.6	60.0	50.8	38.1	35.9	40.8	43.6	32.1	24.0	31.4	23.0	15.9	11.4	13.6	14.8	13.9	12.1	13.1	13.9	13.8	48.2	167.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	12.8	12.1	12.7	10.9	11.0	10.2	10.8	12.7	13.8	15.1	16.6	14.1	14.1	18.0	13.2	25.4	11.1	8.3	7.7	6.9	7.0	8.7	10.3	11.4		
MAX	167.0	148.5	140.3	107.5	92.6	60.0	50.8	41.0	38.9	51.9	52.9	43.2	54.6	102.7	42.2	403.8	38.5	37.7	37.3	39.4	38.8	68.8	106.9	122.6		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	403.8 UG/M3		
Maximum 24-HR Average	48.2 UG/M3		
IZS Calibration Time		OpperatioEl Time	744 HRS
Down Time	0	OpperatioEl Uptime	100.0 %
Standard Deviation	21.6	Monthly Average	12.3 UG/M3

West TSP (µg/m^3) – May 2019

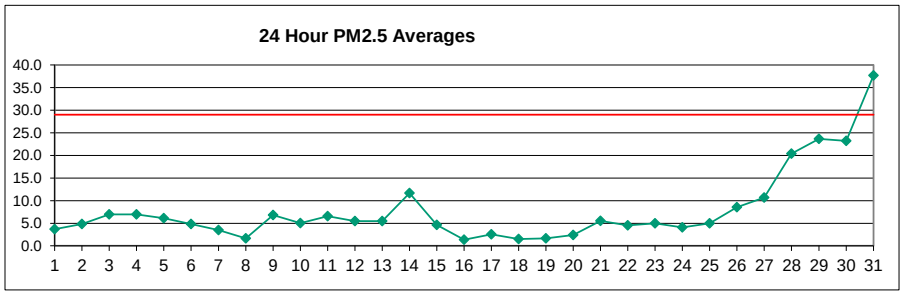
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.5	4.9	4.0	3.7	3.9	4.2	6.5	6.3	7.4	7.6	9.0	11.7	31.1	7.2	17.0	498.4	12.0	2.2	2.4	1.2	1.2	1.0	1.6	1.5	27.1	498.4
2	2.1	1.5	0.6	0.5	0.7	0.6	2.1	6.2	3.7	8.4	14.0	17.1	51.4	44.5	32.5	2.7	2.0	0.8	1.4	0.8	0.6	0.9	0.7	1.1	8.2	51.4
3	1.1	0.9	1.4	1.4	2.2	2.0	2.8	8.8	10.6	9.6	4.7	3.0	3.6	3.7	11.0	12.2	12.0	9.8	8.0	9.0	12.6	9.1	7.9	10.1	6.6	12.6
4	9.7	9.9	14.9	10.5	8.8	8.2	11.0	10.3	7.1	4.8	6.6	7.7	5.5	4.0	3.5	3.5	3.3	4.0	3.3	3.4	4.6	4.5	5.3	5.1	6.7	14.9
5	4.9	2.4	2.6	2.5	3.2	3.8	4.4	5.0	5.0	8.7	19.7	10.6	10.5	7.9	6.8	7.4	6.4	6.3	6.0	5.3	5.5	3.8	5.6	10.4	6.5	19.7
6	10.2	9.3	8.4	6.8	7.1	7.8	8.5	10.8	34.2	44.0	68.1	88.3	86.2	91.9	74.3	30.7	38.1	27.1	33.0	9.3	2.5	2.7	2.7	2.7	29.4	91.9
7	2.9	3.2	4.2	4.2	4.8	4.3	4.4	8.2	11.9	13.3	10.0	5.8	4.2	13.4	18.5	45.0	8.7	4.4	3.0	1.1	0.8	0.9	2.7	1.7	7.6	45.0
8	1.3	1.9	2.0	1.8	2.3	2.8	22.0	36.2	53.1	37.6	28.2	71.2	26.6	73.3	30.9	32.3	29.3	18.7	1.3	1.0	0.8	0.9	1.4	1.7	19.9	73.3
9	1.8	1.1	1.2	1.3	1.5	2.6	7.4	23.4	55.8	33.9	68.1	36.0	42.0	69.6	40.5	25.3	13.6	8.2	4.4	3.7	2.1	1.8	1.8	1.8	18.7	69.6
10	2.2	2.0	2.0	1.9	2.9	2.5	4.6	8.9	13.0	12.1	13.2	8.3	9.8	7.1	5.4	4.1	6.1	4.0	1.5	1.4	1.6	1.8	2.3	2.8	5.1	13.2
11	3.4	3.9	3.7	3.2	3.2	3.3	2.8	3.5	3.4	3.6	3.8	3.0	2.6	3.1	2.8	3.3	2.8	2.9	2.7	2.2	2.4	2.4	2.8	2.7	3.1	3.9
12	3.3	2.8	2.6	2.4	2.4	2.3	2.1	2.8	3.4	3.3	3.0	3.6	2.9	4.1	3.0	2.8	2.7	2.3	2.2	2.0	1.9	1.9	3.2	3.2	2.8	4.1
13	3.1	2.9	2.8	2.9	2.8	3.8	7.5	12.3	12.2	13.4	10.6	11.5	7.6	9.3	8.3	10.8	10.9	7.6	5.2	2.8	3.6	4.2	3.2	3.4	6.8	13.4
14	4.9	4.0	9.2	5.4	5.6	6.7	9.9	11.1	11.0	10.0	12.6	14.9	10.6	8.9	7.9	8.5	7.1	3.4	2.8	2.0	1.9	2.1	2.0	3.2	6.9	14.9
15	3.8	3.1	1.6	2.1	1.2	0.9	1.3	2.8	2.8	3.5	3.4	3.5	3.6	8.2	8.8	8.3	5.8	6.2	1.9	2.7	1.9	2.0	2.5	1.5	3.5	8.8
16	1.6	1.5	0.7	0.6	0.6	0.6	1.0	5.7	3.7	1.9	3.2	9.9	9.6	2.5	8.9	11.3	3.6	2.1	3.9	3.1	3.0	2.0	1.4	2.2	3.5	11.3
17	4.3	3.0	2.1	6.7	4.6	11.0	16.4	15.6	42.4	77.5	24.9	5.0	7.8	5.2	4.9	4.7	3.4	0.6	0.4	0.3	0.9	4.0	3.8	2.7	10.5	77.5
18	1.9	4.5	4.8	4.4	4.0	1.9	0.7	1.5	1.2	0.8	0.7	1.6	1.3	21.3	24.5	4.8	8.5	3.1	3.4	0.8	0.3	1.2	0.5	2.7	4.2	24.5
19	2.7	4.3	4.0	3.8	2.5	1.9	1.6	6.7	9.7	5.4	25.7	3.6	6.8	2.2	7.5	7.3	3.8	2.1	2.7	1.6	1.4	1.5	2.8	4.7	4.8	25.7
20	4.3	4.5	5.9	4.2	4.5	6.0	4.4	3.7	7.6	10.0	8.2	7.2	6.6	2.7	2.6	3.2	3.2	2.8	2.5	1.9	2.5	1.4	1.2	1.2	4.3	10.0
21	1.3	1.5	2.5	3.1	3.3	3.8	14.0	13.6	10.4	5.4	5.9	10.4	9.3	5.8	8.2	4.0	4.0	4.1	5.9	5.2	4.4	2.7	2.2	2.3	5.6	14.0
22	2.1	2.1	1.7	2.3	2.8	3.6	2.3	34.0	73.9	106.3	100.1	105.1	101.5	214.0	95.7	89.1	75.2	20.0	6.1	3.9	3.3	4.4	4.2	5.5	44.1	214.0
23	4.7	4.1	3.8	3.7	4.2	5.4	11.7	13.6	17.9	28.3	116.7	85.6	57.9	130.2	51.1	62.8	41.3	11.4	5.8	5.6	7.7	3.0	2.3	2.0	28.4	130.2
24	1.8	1.6	4.5	2.6	3.7	3.1	10.1	12.6	7.6	8.4	6.5	6.0	26.8	13.2	8.8	10.8	8.2	5.1	3.8	3.5	3.6	3.9	2.3	1.6	6.7	26.8
25	1.8	2.2	2.7	2.4	3.0	3.8	3.9	3.4	2.9	4.1	3.9	2.2	1.9	3.5	5.4	7.0	7.3	9.4	9.3	8.6	7.9	7.4	7.5	7.0	4.9	9.4
26	6.4	7.7	40.3	23.3	41.1	39.4	6.7	8.5	8.2	15.9	20.2	28.0	26.9	19.5	22.9	23.6	14.3	16.3	12.8	10.9	10.1	10.1	9.9	10.8	18.1	41.1
27	12.5	11.0	11.1	10.4	10.5	11.5	15.8	24.4	65.8	127.0	146.1	85.8	62.5	85.2	74.9	95.2	64.1	29.9	30.9	14.4	6.9	6.9	7.0	7.6	42.4	146.1
28	8.7	7.9	8.1	8.5	8.5	9.6	12.7	17.2	23.3	61.5	92.0	53.6	92.4	41.1	37.6	34.2	32.7	30.1	26.5	26.0	25.4	25.8	29.2	31.7	31.0	92.4
29	31.0	29.6	25.5	23.9	23.5	24.4	27.8	36.3	35.6	30.8	21.9	21.5	16.3	16.3	16.4	14.9	12.3	10.9	14.9	14.4	16.8	15.5	16.6	17.6	21.5	36.3
30	17.4	16.0	14.8	14.8	14.9	13.9	13.6	13.5	12.3	10.3	16.0	22.0	20.0	13.0	10.8	14.5	13.5	10.8	8.4	6.9	7.2	48.9	70.8	80.7	20.2	80.7
31	109.1	96.7	91.3	69.9	61.0	40.4	37.1	29.0	27.4	34.4	68.9	71.7	40.1	74.7	36.1	14.4	7.7	9.0	9.7	9.0	7.9	8.5	9.0	8.9	40.5	109.1
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	8.7	8.1	9.2	7.6	7.9	7.6	8.9	12.8	18.9	23.9	30.2	26.3	25.4	32.5	22.2	35.4	15.0	8.9	7.3	5.3	4.9	6.0	7.0	7.8		
MAX	109.1	96.7	91.3	69.9	61.0	40.4	37.1	36.3	73.9	127.0	146.1	105.1	101.5	214.0	95.7	498.4	75.2	30.1	33.0	26.0	25.4	48.9	70.8	80.7		



Number of 24HR Exceedences	0 Proposed Guideline		
Number of Non-Zero Readings	744		
Maximum 1-HR Average	498.4 UG/M3		
Maximum 24-HR Average	44.1 UG/M3		
IZS Calibration Time		Opperational Time	744 HRS
Down Time	0	Opperational Uptime	100.0 %
Standard Deviation	28.53	Monthly Average	14.5 UG/M3

Berm $PM_{2.5}$ ($\mu g/m^3$) – May 2019

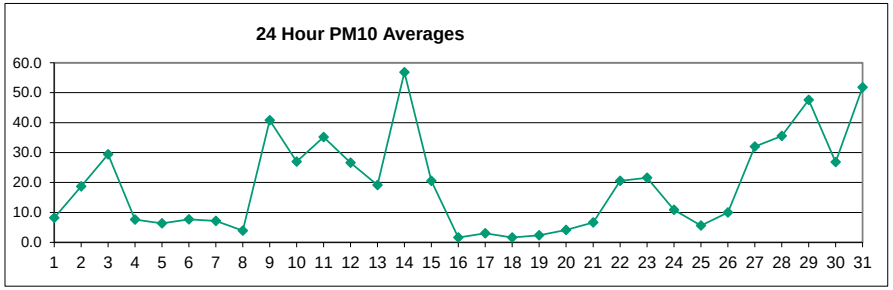
DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	3.9	5.5	3.5	4.1	4.3	4.7	3.8	4.2	4.2	4.3	4.1	3.2	2.9	2.6	2.9	4.4	5.7	5.5	2.8	2.1	2.3	3.5	2.1	1.5	3.7	5.7
2	2.2	1.1	0.9	0.8	2.4	1.7	1.8	3.7	4.5	6.6	5.8	6.1	4.7	10.4	6.6	5.7	7.6	5.3	20.1	2.7	4.7	7.9	2.1	1.1	4.9	20.1
3	1.3	1.6	3.2	1.5	1.7	1.4	1.5	1.7	2.2	2.7	11.4	17.3	22.3	16.2	8.4	8.3	8.5	6.7	4.9	8.9	10.3	7.5	8.0	9.3	6.9	22.3
4	9.3	9.5	10.1	11.9	11.4	11.6	10.3	7.3	6.8	4.9	4.5	3.3	4.7	5.4	5.3	5.9	5.0	5.2	4.7	4.6	5.6	7.2	6.6	5.9	7.0	11.9
5	4.6	2.6	3.0	3.5	4.1	5.1	5.9	7.0	6.4	5.7	5.8	6.1	6.1	7.6	8.7	8.2	7.9	8.0	7.0	6.8	7.1	6.8	7.1	5.8	6.1	8.7
6	8.0	7.1	4.0	4.8	4.1	4.0	3.6	7.7	8.0	10.8	7.7	5.4	4.4	3.9	3.6	3.1	3.0	2.6	2.9	3.6	3.7	3.4	3.0	3.2	4.8	10.8
7	2.8	2.9	3.6	2.9	3.2	3.5	6.6	8.0	6.0	7.6	6.5	5.1	3.6	2.3	2.3	1.4	2.1	7.2	1.3	0.9	0.9	1.1	1.0	0.6	3.5	8.0
8	1.0	2.2	1.2	0.9	1.4	1.9	3.1	3.6	3.1	2.7	4.6	0.8	0.9	0.7	1.0	1.2	1.7	3.0	1.1	0.8	0.8	0.7	0.7	1.5	1.7	4.6
9	1.3	0.9	0.9	0.9	1.3	1.4	3.1	9.6	9.0	6.9	10.9	11.5	10.4	14.8	14.2	20.5	10.8	17.9	7.8	2.6	1.9	1.7	1.8	1.7	6.8	20.5
10	2.1	2.1	2.5	2.1	2.2	3.5	3.2	7.9	15.4	10.0	10.1	9.9	7.6	10.9	4.3	3.5	9.2	3.9	1.7	1.7	1.7	1.6	1.8	1.9	5.0	15.4
11	2.2	2.2	2.4	2.8	2.6	2.9	4.6	6.0	6.5	9.4	14.1	11.5	16.0	15.1	11.6	10.7	7.2	10.1	6.7	3.3	2.5	2.4	2.5	2.8	6.6	16.0
12	2.7	2.6	2.6	2.5	2.5	2.2	2.2	2.5	3.3	3.3	7.7	11.9	15.0	19.9	7.8	8.9	11.3	5.5	5.5	2.6	2.3	2.2	2.3	2.8	5.5	19.9
13	3.0	2.7	2.8	3.2	2.8	2.8	9.0	13.0	14.0	7.6	6.3	7.0	7.7	6.3	5.5	4.5	6.0	5.0	3.8	3.4	3.5	4.3	3.4	3.4	5.5	14.0
14	3.4	3.8	4.2	4.3	4.2	3.9	10.6	16.5	11.1	10.8	9.5	11.6	9.5	34.2	11.8	21.2	20.9	19.0	18.4	14.4	8.5	12.4	9.4	6.0	11.6	34.2
15	4.4	3.3	1.6	2.2	1.4	0.9	3.2	6.5	8.1	9.6	7.7	7.9	4.2	6.5	7.3	7.8	4.5	3.1	2.6	4.0	3.3	4.3	4.5	2.6	4.6	9.6
16	3.0	3.5	1.1	0.7	0.9	0.5	0.3	0.6	0.6	1.0	0.3	0.3	0.5	1.8	1.4	1.1	0.8	0.7	0.6	1.5	2.8	3.3	3.1	2.9	1.4	3.5
17	2.9	2.9	2.0	2.1	3.2	6.8	7.7	6.2	3.5	1.8	0.8	1.6	0.5	0.7	0.3	1.4	2.5	1.0	0.7	0.8	1.6	3.4	3.6	3.1	2.5	7.7
18	1.6	4.3	7.1	7.8	4.9	2.3	0.7	0.4	0.1	0.1	0.1	0.2	0.3	0.3	0.5	0.8	0.6	0.5	0.4	0.5	0.4	0.3	0.8	1.7	1.5	7.8
19	1.9	1.8	1.8	2.3	1.5	1.4	1.2	1.2	0.9	0.8	1.0	0.7	0.9	0.6	0.8	1.0	1.8	2.1	2.8	2.4	2.4	2.6	2.2	3.5	1.7	3.5
20	3.4	2.6	2.8	2.4	2.4	2.6	2.5	2.5	2.9	1.9	1.7	1.8	1.8	2.1	2.1	2.6	2.9	2.5	2.5	2.3	2.8	2.5	2.0	2.4	2.4	3.4
21	1.5	2.2	1.7	2.7	3.3	5.0	8.5	7.4	6.0	4.5	6.2	13.4	11.7	4.8	6.6	4.2	5.0	5.6	6.9	7.9	6.0	4.0	3.7	3.2	5.5	13.4
22	3.1	3.2	3.3	3.3	1.7	3.4	2.4	3.2	3.4	2.9	2.8	6.4	6.3	6.6	9.9	7.4	8.8	8.7	8.1	2.7	2.6	2.5	2.5	3.3	4.5	9.9
23	3.3	3.5	4.0	3.4	3.3	3.3	4.3	7.1	10.9	8.1	9.1	7.6	8.2	6.7	4.7	4.0	3.0	4.3	4.3	5.8	3.1	2.8	2.6	2.4	5.0	10.9
24	2.2	2.1	2.8	2.1	2.2	2.7	7.4	8.3	4.1	4.4	7.8	4.2	6.4	4.9	5.0	4.3	3.5	7.1	5.3	1.9	2.4	4.1	1.8	1.5	4.1	8.3
25	1.8	4.3	3.1	2.6	3.2	3.6	3.2	3.4	2.7	3.6	3.5	2.8	2.3	4.6	5.4	7.3	8.9	9.2	9.5	9.1	8.0	5.9	5.7	5.8	5.0	9.5
26	6.1	6.8	7.7	7.4	7.1	6.6	6.5	7.0	7.7	8.1	9.3	7.9	8.9	8.6	8.8	8.9	8.6	10.1	10.5	10.0	10.9	10.8	10.8	10.3	8.6	10.9
27	13.0	11.1	11.5	11.6	11.6	11.7	12.5	13.3	14.1	18.6	18.4	13.1	15.8	8.1	7.7	7.7	7.2	12.0	5.8	6.0	6.1	6.2	6.2	6.8	10.7	18.6
28	7.6	8.3	8.7	9.7	9.4	10.1	12.2	14.6	18.1	13.0	17.7	16.9	23.7	27.5	27.6	26.9	26.1	25.8	27.4	29.4	32.0	31.3	31.6	34.1	20.4	34.1
29	35.2	33.5	31.5	29.8	27.7	26.4	26.8	26.2	31.3	34.1	25.5	26.9	20.6	20.5	13.6	13.1	16.8	13.3	17.1	15.0	19.6	21.5	20.8	21.2	23.7	35.2
30	21.8	19.7	18.1	17.1	17.3	15.7	16.1	15.5	15.0	13.3	13.8	13.4	12.3	13.3	12.1	10.7	10.8	10.0	8.9	7.1	8.3	84.3	105.0	77.8	23.2	105.0
31	90.9	130.8	136.0	102.3	90.0	49.0	32.9	26.4	24.6	26.1	28.9	18.0	13.6	19.4	20.5	10.6	13.7	11.1	10.4	10.4	9.8	9.9	9.7	10.1	**37.7**	136.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	8.1	9.4	9.3	8.2	7.7	6.5	7.0	8.0	8.2	7.9	8.5	8.2	8.2	9.3	7.4	7.3	7.5	7.5	6.9	5.7	5.7	8.5	8.7	7.8		
MAX	90.9	130.8	136.0	102.3	90.0	49.0	32.9	26.4	31.3	34.1	28.9	26.9	23.7	34.2	27.6	26.9	26.1	25.8	27.4	29.4	32.0	84.3	105.0	77.8		



Number of 24HR Exceedences	1	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	136.0	UG/M3	
Maximum 24-HR Average	37.7	UG/M3	
		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	12.1	Monthly Average	7.8 UG/M3

Berm PM_{10} ($\mu g/m^3$) – May 2019

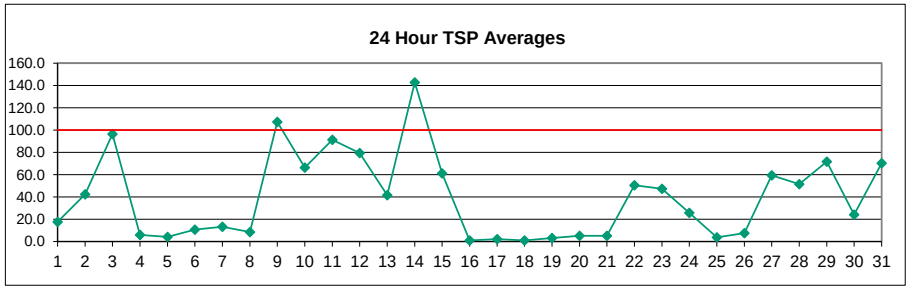
DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.2	7.1	3.7	4.2	4.4	5.1	4.0	4.6	5.1	5.2	6.5	4.6	4.5	4.1	8.2	21.2	26.2	22.9	8.0	6.9	9.6	17.2	5.3	3.0	8.2	26.2
2	3.2	1.1	0.9	0.8	3.2	1.8	1.9	4.7	6.2	10.0	14.2	11.8	19.3	49.2	34.8	34.1	43.6	29.1	103.7	12.4	21.7	32.0	6.6	2.1	18.7	103.7
3	3.0	4.4	7.8	4.3	5.7	3.7	4.5	3.7	6.7	9.5	82.2	137.5	168.1	104.8	29.4	26.2	34.3	19.5	5.3	9.5	10.4	7.6	8.1	9.8	29.4	168.1
4	9.5	9.9	10.3	13.6	12.8	12.9	11.0	7.8	7.7	5.7	5.7	5.3	7.2	5.8	5.9	6.0	5.2	5.2	4.7	4.6	5.6	7.2	6.6	5.9	7.6	13.6
5	4.6	2.6	3.0	3.5	4.1	5.1	5.9	7.2	6.5	5.8	6.0	6.1	6.4	7.8	10.7	8.5	8.2	8.4	7.2	7.0	7.4	7.0	7.2	5.9	6.3	10.7
6	9.7	7.5	4.1	5.2	4.1	4.3	4.0	10.1	11.6	28.3	15.1	15.6	11.9	6.9	6.3	4.9	5.1	3.4	3.4	5.2	5.0	4.5	3.4	4.3	7.7	28.3
7	3.1	3.0	4.1	3.0	3.5	4.0	9.1	11.7	9.0	10.4	9.2	5.9	4.0	3.6	8.5	3.7	10.1	58.5	1.7	1.1	1.0	1.1	1.1	0.7	7.1	58.5
8	1.1	2.3	1.2	1.0	1.4	2.0	3.9	4.8	5.5	12.1	24.6	1.9	1.4	1.3	2.9	2.2	5.9	10.2	3.0	0.9	0.8	0.8	0.8	2.0	3.9	24.6
9	1.6	1.1	1.0	1.0	1.5	1.6	10.2	77.0	66.4	47.7	71.3	70.2	63.6	95.1	97.0	120.9	62.1	120.1	51.5	7.3	3.1	2.2	2.5	2.2	40.8	120.9
10	2.9	2.9	4.2	2.6	2.8	9.9	14.7	59.2	126.3	55.0	61.5	62.7	41.3	70.6	18.6	17.6	58.5	17.0	3.9	3.4	3.9	2.3	2.5	2.5	27.0	126.3
11	2.8	2.9	3.2	4.1	3.6	5.9	18.6	30.7	32.9	68.9	104.4	70.5	103.1	96.2	75.8	54.6	43.6	55.0	40.4	10.3	4.4	3.8	4.1	4.4	35.2	104.4
12	4.0	4.5	3.5	3.3	3.2	2.7	2.8	5.2	6.4	11.2	44.0	82.8	89.1	129.7	42.8	47.5	71.0	32.4	30.9	6.5	4.0	2.8	3.1	3.9	26.6	129.7
13	3.9	3.3	3.4	3.8	3.2	3.8	56.9	65.7	69.5	33.4	24.9	30.3	36.9	29.4	14.8	9.4	18.2	12.4	6.4	5.8	5.9	7.8	4.9	4.7	19.1	69.5
14	4.7	5.8	6.7	7.1	6.6	5.4	41.4	81.7	49.5	46.6	41.0	54.5	50.8	202.7	66.8	117.0	126.7	115.6	110.7	81.1	40.2	49.9	34.8	16.6	56.8	202.7
15	10.9	4.6	2.1	3.5	1.5	1.1	18.2	45.3	58.1	67.9	64.3	47.8	27.4	31.2	34.9	32.6	13.0	5.5	2.9	4.3	3.5	4.5	4.8	2.7	20.5	67.9
16	3.1	3.5	1.1	0.7	0.9	0.5	0.3	0.8	0.7	1.4	0.3	0.3	0.5	2.4	1.8	1.4	0.8	0.7	0.7	1.8	3.4	4.0	3.5	3.2	1.6	4.0
17	3.2	3.2	2.1	2.2	3.4	7.0	9.2	8.5	4.6	2.5	1.1	2.2	0.7	0.9	0.4	1.9	3.4	1.1	0.7	0.8	1.6	3.9	4.0	3.3	3.0	9.2
18	1.6	4.5	7.2	8.0	4.9	2.3	0.7	0.4	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.9	1.2	0.7	0.5	0.5	0.4	0.3	1.0	2.0	1.6	8.0
19	2.3	2.0	2.0	3.0	1.7	1.6	1.4	1.5	1.0	1.0	2.0	1.2	2.2	0.8	1.1	1.3	2.7	2.5	4.1	2.9	3.3	3.8	3.6	6.8	2.3	6.8
20	5.7	4.6	5.5	3.7	3.4	3.4	3.8	3.9	5.3	3.3	2.9	3.6	4.1	4.7	4.3	5.3	6.0	4.3	3.4	3.2	4.3	3.7	3.0	3.1	4.1	6.0
21	2.4	3.4	2.5	3.9	4.1	5.7	12.1	10.9	8.5	5.5	8.2	15.7	13.5	5.1	7.0	4.5	6.4	6.3	7.3	8.6	6.3	4.5	3.9	3.4	6.7	15.7
22	3.3	3.4	3.5	3.6	1.8	3.7	2.8	4.4	4.8	9.8	8.5	32.9	26.3	41.9	72.8	57.5	60.0	63.2	65.5	5.0	4.2	4.2	3.7	6.2	20.5	72.8
23	5.1	6.8	8.5	6.6	5.6	7.3	11.9	34.6	66.6	38.4	51.3	41.0	53.6	40.9	25.3	20.8	11.8	21.3	12.3	30.4	6.4	4.5	3.4	3.0	21.5	66.6
24	2.5	2.4	3.3	2.3	2.6	3.3	10.5	12.9	16.2	22.1	22.9	6.0	11.8	17.6	22.5	20.8	11.8	36.6	16.5	3.7	3.2	5.7	2.1	1.8	10.9	36.6
25	2.0	5.9	4.1	3.0	3.5	3.9	3.5	4.5	3.4	4.5	4.3	3.5	2.8	5.5	6.0	7.6	9.4	9.9	10.1	9.7	8.5	6.4	6.2	6.2	5.6	10.1
26	6.5	7.3	8.8	8.4	8.2	7.2	6.7	7.5	9.1	9.6	13.0	9.7	11.1	10.1	10.6	10.7	10.4	12.1	13.0	12.2	12.8	11.8	11.5	11.1	10.0	13.0
27	28.6	12.9	12.7	12.6	12.4	13.0	25.1	34.9	42.5	89.9	96.0	67.0	76.8	32.0	30.3	25.7	22.5	78.4	11.0	10.0	8.3	7.8	7.7	9.3	32.0	96.0
28	11.0	11.1	11.1	14.3	12.1	16.2	36.6	56.1	91.5	42.5	89.1	37.8	31.4	37.9	36.2	37.9	33.5	33.2	34.5	34.3	35.3	35.3	33.9	41.0	35.6	91.5
29	40.6	37.9	33.8	33.1	29.9	30.8	42.9	49.1	97.4	125.8	86.5	94.1	65.0	80.4	30.7	27.6	48.8	42.7	26.7	21.8	22.7	24.7	23.6	25.2	47.6	125.8
30	24.3	22.0	20.5	23.3	20.9	16.4	17.4	16.9	16.1	14.5	16.6	17.0	14.5	16.7	15.4	15.0	17.3	12.8	12.5	8.4	9.9	97.9	114.4	82.4	26.8	114.4
31	95.3	134.9	139.3	105.7	92.2	50.6	36.8	33.8	31.7	34.9	98.2	44.6	41.4	84.3	82.0	29.1	28.2	15.3	12.4	11.2	10.4	10.4	10.1	10.6	51.8	139.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	9.9	10.6	10.5	9.5	8.7	7.8	13.8	22.6	28.0	26.6	34.7	31.7	32.0	39.4	25.9	25.0	26.0	27.6	19.8	10.7	8.6	12.2	10.7	9.3		
MAX	95.3	134.9	139.3	105.7	92.2	50.6	56.9	81.7	126.3	125.8	104.4	137.5	168.1	202.7	97.0	120.9	126.7	120.1	110.7	81.1	40.2	97.9	114.4	82.4		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	202.7	UG/M3	
Maximum 24-HR Average	56.8	UG/M3	
		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	27.83	Monthly Average	19.2 UG/M3

Berm TSP (µg/m^3) – May 2019

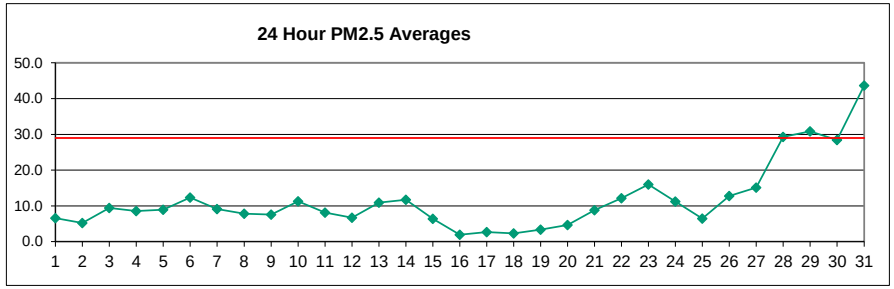
DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	2.9	6.2	2.5	2.8	2.8	3.6	2.6	3.3	3.7	3.7	5.7	10.3	6.2	7.9	29.6	63.0	69.8	44.0	18.3	22.2	41.5	51.8	8.4	12.6	17.7	69.8
2	6.7	0.7	0.6	0.5	2.6	1.2	1.2	3.9	5.4	14.0	30.8	15.0	44.4	87.9	73.8	94.9	142.8	77.1	253.6	38.8	63.5	41.1	11.6	4.6	42.4	253.6
3	6.9	18.4	22.3	14.6	13.9	5.9	11.9	10.0	17.4	16.4	275.5	528.3	603.3	335.5	104.0	82.3	144.5	70.1	3.6	6.3	6.7	4.9	5.2	6.5	96.4	603.3
4	6.2	6.4	6.7	9.1	8.5	8.4	7.3	5.3	5.4	4.1	4.7	13.4	18.3	3.8	4.2	4.0	3.5	3.4	3.1	2.9	3.6	4.6	4.3	3.8	6.0	18.3
5	3.0	1.7	2.0	2.2	2.7	3.3	3.8	4.7	4.2	3.7	5.7	4.0	4.8	5.0	8.2	5.6	5.3	5.5	4.7	4.6	4.9	4.5	4.7	3.8	4.3	8.2
6	7.0	4.9	2.6	3.8	2.7	3.1	3.0	8.4	14.2	47.8	22.8	35.4	28.4	12.9	10.9	8.1	8.3	5.2	3.2	8.6	6.5	5.0	4.2	3.3	10.8	47.8
7	2.1	2.0	2.8	2.0	2.3	2.8	9.1	14.2	12.8	16.5	23.0	5.2	2.8	5.0	15.8	12.0	24.4	160.6	1.4	0.7	0.6	0.7	0.7	0.5	13.3	160.6
8	0.7	1.5	0.8	0.6	0.9	1.3	3.0	4.2	7.6	35.7	67.4	11.0	5.8	1.6	7.0	11.1	12.0	16.4	12.5	1.2	0.6	0.5	0.5	1.6	8.6	67.4
9	1.1	0.7	0.7	0.7	1.0	1.1	24.0	266.5	214.6	142.0	175.1	157.7	152.7	264.2	307.6	284.9	128.7	293.1	121.4	22.3	7.2	3.2	4.7	2.8	107.4	307.6
10	5.2	6.1	14.0	3.5	3.0	23.2	49.7	163.3	321.1	128.7	146.1	121.1	82.6	133.7	37.4	42.1	199.5	79.5	7.7	4.9	9.3	4.0	5.3	2.1	66.4	321.1
11	2.5	2.2	3.6	5.6	7.0	14.8	61.6	108.6	107.4	187.5	277.9	177.4	229.3	196.8	197.8	122.3	128.8	155.8	150.2	27.5	9.7	4.1	5.2	8.7	91.3	277.9
12	7.9	6.3	6.2	5.3	4.1	4.8	2.7	15.8	8.7	21.9	119.5	293.1	273.8	400.0	143.2	121.8	248.2	108.1	90.3	12.1	5.9	2.6	2.1	5.1	79.6	400.0
13	3.7	3.6	3.9	2.6	2.3	4.5	140.8	106.6	124.8	91.6	60.0	88.6	91.2	114.1	38.7	23.3	30.0	21.4	9.9	6.9	8.8	10.5	5.2	5.6	41.6	140.8
14	4.3	7.5	9.8	14.0	12.8	9.0	69.2	126.4	90.3	99.4	87.9	123.7	119.3	474.4	197.3	272.4	421.0	372.4	375.6	279.9	127.4	73.3	42.4	17.3	142.8	474.4
15	20.6	4.1	1.7	9.0	1.0	0.7	56.4	168.4	212.3	203.7	232.5	109.1	54.6	101.2	122.7	106.4	43.2	9.1	1.9	2.8	2.3	3.0	3.1	1.8	61.3	232.5
16	2.0	2.3	0.7	0.5	0.6	0.3	0.2	0.6	0.5	1.1	0.2	0.2	0.3	2.2	1.5	1.1	0.6	0.5	0.4	1.2	2.3	2.7	2.3	2.1	1.1	2.7
17	2.1	2.1	1.3	1.4	2.2	4.5	6.5	7.3	3.6	2.2	0.8	1.8	0.6	0.7	0.2	1.6	3.2	0.8	0.5	0.5	1.1	2.5	2.7	2.2	2.2	7.3
18	1.1	2.9	4.7	5.2	3.2	1.5	0.4	0.3	0.1	0.0	0.1	0.2	0.2	0.9	0.4	0.6	1.4	0.7	1.1	0.3	0.3	0.2	0.8	1.5	1.2	5.2
19	1.6	1.3	1.4	2.4	1.2	1.1	1.4	2.1	0.6	1.9	8.3	4.4	8.1	1.7	1.3	1.0	3.9	4.4	8.5	2.0	2.7	5.4	2.9	10.1	3.3	10.1
20	7.1	3.9	4.9	4.5	5.1	2.4	3.2	6.4	6.8	3.3	5.7	5.6	6.6	6.7	4.6	6.9	9.8	7.8	3.0	2.9	4.8	3.5	6.0	2.2	5.2	9.8
21	1.9	2.6	2.3	3.5	2.9	3.9	17.6	11.3	7.4	3.9	6.6	10.9	9.4	3.4	4.6	3.0	4.7	4.2	4.8	5.6	4.1	3.0	2.6	2.2	5.3	17.6
22	2.2	2.2	2.3	2.3	1.2	2.4	2.1	4.2	4.6	16.5	16.4	71.2	51.1	122.0	213.7	179.0	143.0	161.5	191.3	5.3	3.2	3.8	3.3	6.6	50.5	213.7
23	5.1	11.3	21.9	12.0	7.3	9.4	22.5	87.3	159.2	72.8	101.6	80.3	121.2	80.7	70.9	42.1	22.8	51.0	25.0	107.3	12.9	5.3	4.9	3.1	47.4	159.2
24	1.6	1.6	2.2	1.5	1.7	2.5	8.7	14.6	56.3	80.2	40.7	4.7	14.2	43.8	77.1	63.2	25.3	117.7	37.2	14.1	2.7	5.0	1.4	1.2	25.8	117.7
25	1.3	4.9	3.0	2.0	2.3	2.5	2.3	3.2	2.5	3.3	3.4	2.8	2.2	4.1	4.1	4.9	6.1	6.5	6.6	6.3	5.5	4.1	4.0	4.0	3.8	6.6
26	4.2	4.8	6.1	5.7	5.7	4.8	4.4	4.9	6.2	6.6	11.7	7.2	8.3	7.6	10.0	9.9	7.9	10.0	12.4	10.1	9.9	8.3	7.5	8.2	7.6	12.4
27	44.8	9.1	8.3	8.3	8.1	8.7	63.0	72.1	82.1	169.3	169.9	142.0	133.2	66.6	51.8	47.3	56.8	220.1	25.5	11.8	7.0	9.7	6.4	6.7	59.5	220.1
28	8.3	8.8	10.0	31.0	15.0	22.9	94.5	139.0	212.9	71.5	149.5	60.1	31.5	44.6	38.6	45.7	36.2	35.8	30.1	27.6	30.4	27.4	24.0	40.7	51.5	212.9
29	37.0	42.6	31.7	34.7	27.4	36.3	74.1	78.0	197.9	253.8	157.7	147.7	101.2	132.1	39.8	35.7	74.6	80.2	33.6	22.9	17.3	23.2	20.5	22.2	71.8	253.8
30	20.8	18.5	15.8	31.7	20.8	10.6	11.3	11.0	10.4	9.5	12.1	11.9	9.8	11.5	15.2	19.2	16.3	9.7	16.4	7.8	7.6	117.7	109.7	58.2	24.3	117.7
31	63.3	88.3	91.7	70.4	60.5	34.0	30.7	46.7	37.2	40.0	244.3	86.8	76.7	254.1	265.3	75.0	60.3	17.8	9.2	8.1	7.5	6.7	6.5	7.1	70.3	265.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	9.2	9.0	9.3	9.5	7.5	7.6	25.5	48.3	62.5	56.5	79.5	75.2	73.9	94.4	67.7	57.8	67.2	69.4	47.2	21.8	13.5	14.3	10.1	8.3		
MAX	63.3	88.3	91.7	70.4	60.5	36.3	140.8	266.5	321.1	253.8	277.9	528.3	603.3	474.4	307.6	284.9	421.0	372.4	375.6	279.9	127.4	117.7	109.7	58.2		



Number of 24HR Exceedences	2	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	603.3	UG/M3	
Maximum 24-HR Average	142.8	UG/M3	
IZS Calibration Time		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	73.4	Monthly Average	39.4 UG/M3

Entrance $PM_{2.5}$ (µg/m^3) – May 2019

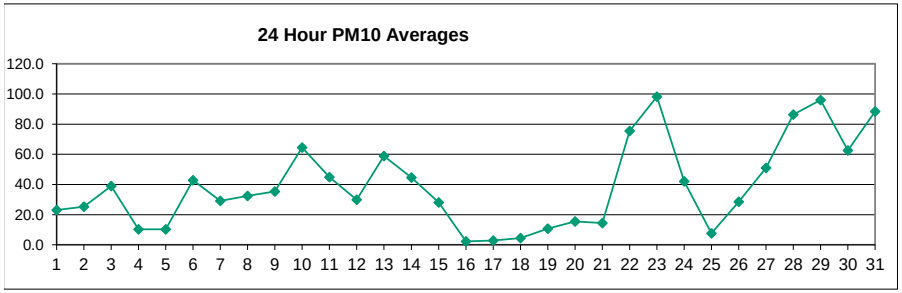
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.8	5.8	6.7	7.4	7.1	8.0	8.3	9.3	8.4	15.1	4.7	7.7	11.5	8.4	10.8	7.3	4.4	3.9	5.2	3.6	2.6	2.1	2.0	2.1	6.6	15.1
2	4.1	1.2	1.2	1.7	2.4	2.6	3.7	3.9	6.5	9.4	14.8	13.3	11.4	7.7	7.3	6.5	9.1	7.4	4.0	2.0	1.1	1.7	1.2	1.8	5.2	14.8
3	1.5	2.2	1.7	2.0	1.9	4.0	7.7	8.7	10.7	25.5	17.9	5.6	8.1	10.1	18.1	14.3	10.4	10.0	10.7	12.5	13.1	9.1	9.5	10.7	9.4	25.5
4	11.3	11.3	12.2	12.3	13.8	20.3	13.5	8.3	7.0	6.1	5.1	4.6	6.0	6.5	6.8	8.1	7.0	6.2	5.2	5.7	6.6	7.7	7.5	6.9	8.6	20.3
5	5.7	3.7	4.8	5.6	6.7	6.9	7.5	8.0	8.1	7.6	7.3	8.4	9.2	15.2	13.1	12.3	12.0	13.5	11.0	9.6	9.9	9.6	9.3	9.6	8.9	15.2
6	9.4	12.4	11.8	11.4	12.0	12.1	13.8	13.0	13.3	21.5	19.9	17.4	14.2	17.4	16.0	8.0	14.5	10.9	8.6	6.0	9.7	7.9	6.8	8.6	12.4	21.5
7	4.6	5.6	8.1	7.6	11.7	16.2	23.2	27.6	15.7	15.3	16.2	6.2	5.2	11.1	11.6	8.1	7.0	6.5	1.9	1.2	1.6	2.1	1.9	3.1	9.1	27.6
8	9.1	17.3	11.2	5.8	4.9	6.2	9.2	12.3	10.0	6.7	3.7	2.5	1.6	5.9	17.9	15.6	10.2	4.2	10.5	5.4	3.5	2.9	5.6	5.5	7.8	17.9
9	2.1	4.5	3.2	6.7	7.8	8.7	15.7	11.0	15.5	19.6	6.4	10.0	6.0	9.9	8.5	6.5	4.2	3.1	6.5	6.5	4.5	4.2	4.9	6.2	7.6	19.6
10	6.4	8.1	12.8	6.8	13.1	18.1	17.0	16.7	15.1	9.0	6.6	31.7	7.4	8.9	29.2	16.4	15.7	5.9	8.3	2.5	2.6	6.1	2.7	3.5	11.3	31.7
11	7.6	5.8	10.0	8.4	9.2	13.3	14.0	16.0	19.0	12.1	6.6	4.1	6.2	5.1	5.2	4.8	6.2	4.7	2.9	3.4	6.9	4.0	11.3	8.5	8.1	19.0
12	4.6	7.5	6.5	7.5	8.6	8.7	5.5	10.5	6.9	5.0	11.6	11.3	9.4	10.7	4.5	5.2	6.6	4.1	3.8	3.0	4.0	3.8	4.6	6.6	6.7	11.6
13	6.4	4.2	4.9	6.8	7.1	13.8	27.8	15.3	14.6	14.1	13.7	17.6	10.8	15.7	7.7	8.4	16.3	11.0	10.0	6.2	6.2	10.4	7.9	5.4	10.9	27.8
14	4.8	6.2	6.6	8.8	13.7	17.2	25.8	25.0	22.7	16.7	15.0	20.5	13.7	9.5	10.4	10.2	7.1	8.0	5.6	4.2	12.5	7.1	5.2	4.9	11.7	25.8
15	4.2	5.0	8.2	3.1	5.4	4.9	5.3	8.4	5.5	6.1	3.7	5.1	6.2	10.6	12.0	11.0	13.4	4.7	2.9	5.1	5.2	6.3	7.2	4.0	6.4	13.4
16	4.4	5.0	1.5	1.0	1.2	0.9	1.1	0.7	0.8	0.8	0.3	0.5	1.2	1.9	1.2	1.2	1.3	1.2	2.1	3.3	3.6	4.4	3.9	3.4	1.9	5.0
17	3.4	3.5	2.5	2.6	4.1	7.5	8.0	5.3	2.6	1.2	0.8	0.6	0.4	0.7	0.8	1.5	1.3	1.2	1.1	1.5	2.1	3.5	3.8	3.7	2.7	8.0
18	2.1	4.8	8.1	8.8	6.8	2.6	0.8	0.7	0.3	0.4	0.3	0.4	0.5	1.3	2.1	1.3	2.6	1.2	1.9	1.2	1.2	1.2	2.2	2.9	2.3	8.8
19	3.2	2.9	2.1	2.5	4.9	2.3	2.2	3.7	4.4	1.9	2.1	2.0	3.4	3.0	3.2	2.4	4.8	2.5	4.3	3.3	5.2	6.7	4.2	3.8	3.4	6.7
20	4.0	4.4	4.1	3.5	4.4	4.6	4.3	4.5	5.2	3.6	4.7	4.3	3.4	4.3	4.6	8.8	7.0	4.4	3.6	6.4	6.3	4.6	3.8	2.6	4.6	8.8
21	3.5	3.1	3.9	3.9	19.6	28.5	11.9	19.3	9.2	5.1	4.6	13.5	12.8	7.0	8.5	5.5	4.9	6.0	8.1	10.0	7.6	5.6	5.0	4.9	8.8	28.5
22	4.1	3.8	4.1	3.6	2.0	3.5	3.1	6.6	16.6	21.6	20.9	11.0	34.8	13.3	41.7	19.0	21.7	8.2	15.9	7.6	5.6	6.1	5.7	11.2	12.2	41.7
23	10.3	13.2	17.3	15.4	23.7	20.6	20.6	34.0	16.1	30.6	21.6	16.2	16.0	16.1	19.4	11.3	12.8	12.2	13.1	10.9	8.8	10.6	9.7	2.9	16.0	34.0
24	2.9	3.1	4.1	4.9	12.0	27.9	21.1	21.7	9.6	20.7	11.5	5.2	14.9	18.0	31.6	18.6	14.5	5.1	6.3	2.0	3.5	3.1	4.3	3.4	11.2	31.6
25	3.2	5.3	3.2	3.8	4.9	5.6	8.7	4.3	2.2	3.0	3.1	2.1	2.0	4.1	6.2	8.7	10.8	10.8	12.1	13.1	11.5	8.4	8.0	9.6	6.4	13.1
26	9.5	20.5	11.6	10.1	9.7	8.9	10.5	10.1	10.7	11.5	13.6	11.8	16.3	14.0	14.4	12.8	13.2	11.5	12.3	12.2	22.8	12.9	12.8	13.3	12.8	22.8
27	16.4	16.1	18.9	15.5	19.1	19.5	22.8	30.2	22.0	21.7	14.2	11.5	14.1	17.7	16.9	15.2	11.3	6.6	10.8	8.6	8.5	7.4	8.2	9.6	15.1	30.2
28	18.2	18.2	18.8	28.4	29.2	29.0	25.3	23.6	19.0	17.5	19.0	25.8	35.2	35.8	35.1	34.8	33.5	32.1	32.6	38.9	36.5	33.8	36.1	46.7	29.3	46.7
29	48.8	48.2	41.7	40.7	37.7	44.1	43.9	39.9	34.6	32.4	32.2	27.4	16.7	24.5	25.3	21.4	26.2	14.9	20.6	19.8	20.7	26.5	26.5	26.1	30.9	48.8
30	21.6	20.6	25.5	24.6	21.0	18.1	17.7	20.4	21.3	17.1	15.0	15.0	14.4	14.7	15.4	19.0	26.0	33.8	19.4	23.3	22.5	68.5	94.5	93.1	28.4	94.5
31	113.2	153.8	119.9	90.3	78.9	63.3	50.5	42.0	38.6	45.9	23.3	22.9	15.0	18.8	17.7	21.8	18.6	13.3	14.4	14.7	14.8	17.8	15.8	21.9	43.6	153.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	11.5	13.8	12.8	11.7	13.0	14.4	14.5	14.9	12.6	13.7	11.0	10.8	10.6	11.2	13.7	11.2	11.4	8.7	8.9	8.2	8.8	9.9	10.7	11.2		
MAX	113.2	153.8	119.9	90.3	78.9	63.3	50.5	42.0	38.6	45.9	32.2	31.7	35.2	35.8	41.7	34.8	33.5	33.8	32.6	38.9	36.5	68.5	94.5	93.1		



Number of 24HR Exceedences	3	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	153.8	UG/M3	
Maximum 24-HR Average	43.6	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	13.27	Monthly Average	11.6 UG/M3

Entrance PM_{10} ($\mu g/m^3$) – May 2019

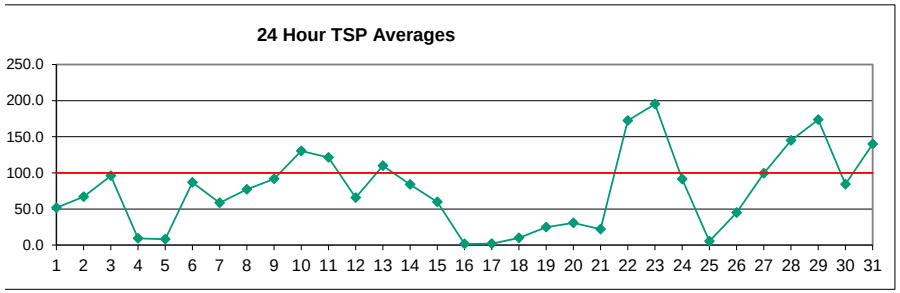
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	6.3	6.7	9.3	10.5	9.8	11.4	12.2	13.6	11.9	71.6	15.3	35.7	74.3	46.3	66.9	50.9	21.7	18.2	24.8	9.9	9.9	6.2	5.5	6.8	23.2	74.3
2	7.3	1.3	1.2	1.8	3.0	2.9	4.4	4.8	11.7	40.3	100.3	75.8	81.7	47.1	38.7	38.6	48.9	46.2	23.6	9.2	2.7	8.4	2.2	6.3	25.3	100.3
3	5.4	10.3	6.2	6.6	6.4	22.5	41.9	53.9	66.9	150.3	125.3	27.4	49.3	51.7	92.4	70.2	44.5	28.5	15.0	15.5	14.0	9.2	9.6	11.5	38.9	150.3
4	11.9	12.3	13.3	13.6	17.7	29.3	16.6	9.1	7.9	7.5	6.3	15.5	10.6	6.8	7.5	8.2	7.2	6.2	5.2	5.7	6.6	7.7	7.6	6.9	10.3	29.3
5	5.8	3.8	4.8	5.6	6.8	6.9	7.5	8.2	8.3	7.7	7.5	9.4	13.6	19.8	16.5	14.9	15.0	17.5	13.7	11.2	11.8	10.6	10.1	10.9	10.3	19.8
6	10.5	15.5	14.8	14.8	15.0	15.8	19.6	18.4	31.7	84.9	95.0	89.9	65.9	94.7	95.5	41.3	81.8	56.1	42.9	14.7	40.1	21.8	19.5	27.7	42.8	95.5
7	5.4	7.3	11.7	10.7	17.3	24.2	34.8	87.0	61.9	60.0	69.9	8.3	6.0	64.3	82.1	48.0	48.6	33.8	5.3	1.4	1.8	2.5	2.3	4.5	29.1	87.0
8	13.5	25.8	16.3	8.4	6.8	9.0	13.7	19.4	30.3	29.0	16.1	22.6	4.0	35.8	172.3	104.4	66.8	22.7	91.1	29.0	21.2	4.0	8.3	8.1	32.4	172.3
9	2.8	6.5	4.6	9.8	11.6	13.1	77.9	49.2	79.7	139.5	36.9	53.1	29.4	56.7	50.4	38.9	17.9	11.9	38.4	41.2	24.7	16.1	15.9	24.1	35.4	139.5
10	24.4	28.4	74.4	19.6	66.2	112.1	145.2	101.9	97.7	52.4	27.2	181.4	36.2	47.7	175.7	105.8	98.3	35.0	62.6	7.8	8.3	30.9	5.1	5.1	64.6	181.4
11	10.7	8.5	27.1	28.8	39.1	72.7	82.7	137.6	170.1	88.7	37.1	14.1	40.4	21.6	28.5	21.7	33.9	22.2	8.5	11.4	36.3	14.9	80.5	39.2	44.8	170.1
12	16.2	32.4	29.2	28.7	41.0	42.8	21.8	61.9	27.2	13.8	44.5	68.2	58.3	61.1	18.6	19.2	25.7	14.5	13.9	7.8	12.2	13.0	16.8	27.8	29.9	68.2
13	30.4	12.3	14.3	27.6	26.7	83.4	189.5	91.4	87.8	83.6	74.8	107.1	73.5	86.3	29.9	35.2	95.2	65.5	48.3	27.5	20.4	55.9	32.2	15.3	58.9	189.5
14	10.4	11.8	12.1	13.0	20.2	47.8	41.8	115.3	114.8	85.3	69.6	115.2	74.1	49.7	57.8	48.2	22.7	25.0	19.3	12.6	54.2	23.0	15.3	12.3	44.7	115.3
15	7.9	11.8	32.6	8.8	18.4	23.9	32.6	53.6	35.4	37.8	21.6	34.5	49.4	66.0	69.6	61.2	63.1	13.5	3.3	5.7	5.5	6.9	7.7	4.3	28.1	69.6
16	4.7	5.1	1.6	1.1	1.2	0.9	1.1	0.9	1.1	1.0	0.4	0.6	1.2	2.1	1.3	1.4	1.4	1.2	3.0	4.5	4.5	5.6	4.5	3.7	2.3	5.6
17	3.7	3.7	2.6	2.8	4.4	8.1	8.6	5.9	2.9	1.5	1.0	0.8	0.5	0.9	0.9	1.8	1.4	1.3	1.2	1.5	2.2	3.7	3.9	3.8	2.9	8.6
18	2.1	5.0	8.2	8.9	6.8	2.7	0.8	0.8	0.3	0.4	0.3	0.4	0.5	5.5	13.3	2.9	16.0	4.6	16.2	3.9	1.4	2.1	2.7	3.7	4.6	16.2
19	4.1	3.7	2.4	3.2	6.8	2.9	4.3	21.9	28.1	6.1	10.9	9.8	23.5	12.8	18.2	10.0	24.4	5.4	11.4	4.8	15.0	10.4	8.3	8.1	10.7	28.1
20	6.6	7.9	6.4	4.7	6.1	6.4	9.5	12.3	15.1	11.6	22.5	23.5	16.0	19.3	29.2	43.6	34.4	12.6	7.0	35.1	18.4	11.9	7.2	3.8	15.5	43.6
21	4.8	4.1	5.6	5.4	29.1	42.5	51.0	69.6	13.2	6.1	5.3	14.9	14.0	7.8	9.4	6.4	5.5	6.3	8.7	11.0	8.2	6.1	5.4	5.2	14.4	69.6
22	4.4	4.1	4.4	4.0	2.2	4.0	3.9	9.4	57.9	160.3	180.1	67.3	234.2	73.8	332.8	133.8	174.6	61.1	124.9	36.6	47.5	24.3	18.4	49.0	75.5	332.8
23	40.9	59.0	97.1	77.0	161.6	123.9	139.0	264.4	101.0	192.0	143.7	111.7	96.2	100.0	137.7	71.0	85.6	69.5	70.3	70.5	47.8	51.0	42.4	3.4	98.2	264.4
24	3.4	3.7	5.2	6.6	17.5	41.7	31.4	32.5	29.9	136.3	44.2	7.6	68.4	102.5	200.1	118.3	99.2	21.2	16.3	2.9	4.7	4.2	6.3	4.3	42.0	200.1
25	3.9	6.7	4.1	5.0	5.5	6.3	12.4	5.4	2.5	3.3	3.4	2.3	2.1	4.2	6.4	9.2	11.6	11.8	14.6	17.3	13.4	9.8	9.6	12.6	7.6	17.3
26	12.0	29.2	14.5	12.5	11.9	11.3	14.3	12.9	13.5	35.2	57.7	32.7	62.4	37.3	44.4	33.8	38.3	15.4	16.6	20.5	114.0	15.2	14.4	16.3	28.6	114.0
27	22.3	21.1	26.6	20.0	28.1	28.7	65.9	148.7	90.7	90.6	46.1	39.6	74.7	101.1	106.7	87.7	62.9	18.6	47.8	28.8	21.3	10.6	13.5	20.4	50.9	148.7
28	66.4	55.4	63.9	123.4	116.4	130.3	119.9	98.2	76.6	56.9	82.9	90.5	110.6	98.0	91.2	104.8	95.3	68.8	65.9	99.2	54.6	40.7	49.3	114.3	86.4	130.3
29	117.1	135.3	105.0	121.5	96.6	143.8	167.9	143.6	103.6	94.5	132.7	107.3	41.5	106.2	116.0	74.7	125.5	54.9	46.3	58.8	33.0	53.2	52.5	72.3	96.0	167.9
30	41.4	37.2	73.7	83.7	37.5	21.3	20.3	27.6	30.2	23.7	18.9	19.4	18.9	19.4	21.9	73.8	137.0	178.4	115.0	125.4	53.4	95.0	128.8	100.2	62.6	178.4
31	121.3	172.4	131.2	115.6	110.9	85.0	149.3	142.1	127.3	158.7	67.0	71.0	47.6	83.8	78.6	105.3	67.7	19.3	37.4	38.6	39.6	47.8	35.4	68.9	88.4	172.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	20.3	24.1	26.6	25.9	30.6	38.0	49.7	58.8	49.6	62.3	50.5	47.0	47.7	49.4	71.3	51.1	53.9	31.2	32.9	24.8	24.1	20.1	20.7	22.6		
MAX	121.3	172.4	131.2	123.4	161.6	143.8	189.5	264.4	170.1	192.0	180.1	181.4	234.2	106.2	332.8	133.8	174.6	178.4	124.9	125.4	114.0	95.0	128.8	114.3		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	332.8 UG/M3		
Maximum 24-HR Average	98.2 UG/M3		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	44	Monthly Average	38.9 UG/M3

Entrance TSP (µg/m^3) – May 2019

Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.4	4.5	7.3	8.7	7.6	10.0	11.0	13.2	10.8	85.7	42.4	103.9	197.8	140.4	173.1	147.3	59.2	67.9	55.7	17.3	24.2	13.9	11.0	21.7	51.6	197.8
2	10.0	0.9	0.8	1.2	2.3	1.9	3.0	3.6	19.6	112.1	246.3	170.9	267.5	169.8	93.4	115.6	116.8	119.3	94.2	21.0	10.7	13.1	2.9	9.0	66.9	267.5
3	12.8	24.4	18.8	19.3	18.3	62.1	98.2	124.6	183.2	321.6	284.9	86.8	153.4	159.4	277.4	184.5	135.6	81.5	13.7	12.0	9.4	5.9	6.2	7.5	95.9	321.6
4	7.7	8.1	9.1	9.0	12.9	27.4	12.4	6.4	5.7	5.7	5.7	42.1	20.9	4.6	5.6	5.3	4.7	4.0	3.4	3.7	4.3	5.0	4.9	4.4	9.3	42.1
5	3.7	2.4	3.1	3.6	4.4	4.4	4.9	5.4	5.4	5.0	4.9	8.1	15.0	18.5	14.2	12.0	12.4	15.8	11.5	8.3	9.0	7.6	6.6	8.9	8.1	18.5
6	7.1	12.0	10.9	11.2	11.9	13.7	19.4	18.1	50.2	153.6	245.3	227.2	164.6	240.7	196.2	95.3	181.6	117.7	89.1	35.8	83.5	26.0	28.2	40.5	86.7	245.3
7	4.0	6.0	10.4	8.8	17.4	27.1	40.0	151.1	136.0	135.4	160.5	12.1	5.1	151.1	189.1	136.2	104.3	83.1	20.7	0.9	1.2	1.7	1.6	4.3	58.7	189.1
8	14.3	26.8	16.8	7.3	5.4	7.6	12.1	22.4	51.2	57.8	59.8	101.9	15.3	118.1	430.9	297.8	147.4	77.6	209.9	105.0	42.1	3.8	9.1	8.9	77.1	430.9
9	2.4	6.8	4.1	10.0	12.2	14.2	145.8	103.9	167.8	327.1	164.9	105.2	66.1	181.4	180.4	132.8	68.5	51.7	91.3	132.1	68.9	51.7	61.4	47.5	91.6	327.1
10	48.5	67.0	254.2	48.4	153.6	191.5	269.7	163.7	167.5	130.1	39.6	276.8	63.5	90.7	300.7	250.8	268.3	100.2	113.2	19.9	41.2	50.8	8.2	6.4	130.2	300.7
11	18.3	7.1	41.7	62.1	100.6	189.7	251.1	503.9	505.6	269.6	97.9	34.1	106.0	56.4	81.4	54.3	101.0	64.6	28.6	22.9	70.2	47.5	134.0	62.7	121.3	505.6
12	36.4	68.5	44.4	41.7	73.4	80.1	40.9	157.5	47.9	18.9	80.5	194.6	153.0	213.2	48.7	39.3	39.8	34.5	39.6	18.3	17.3	29.9	17.5	38.2	65.6	213.2
13	64.6	19.3	28.8	37.5	30.1	118.2	266.6	162.3	146.0	154.5	139.0	246.0	215.3	214.9	81.9	67.0	175.6	129.8	93.2	47.1	50.2	77.8	47.1	22.5	109.8	266.6
14	11.1	20.2	17.8	14.6	20.6	67.2	49.8	207.9	222.1	178.4	156.4	240.1	146.6	123.6	129.2	113.8	50.6	43.9	56.8	26.7	63.5	26.5	19.2	10.6	84.1	240.1
15	8.6	12.7	55.4	12.5	32.4	44.1	61.4	110.6	83.6	78.1	62.2	82.9	98.7	153.6	177.0	154.8	160.9	22.0	2.3	3.8	3.6	4.5	5.0	2.8	59.7	177.0
16	3.0	3.3	1.0	0.7	0.8	0.6	0.7	0.7	0.8	0.8	0.3	0.4	0.8	1.4	1.0	1.0	1.0	0.8	2.7	4.1	3.4	3.8	3.0	2.4	1.6	4.1
17	2.4	2.4	1.7	1.8	2.8	5.3	5.7	4.1	2.1	1.1	0.9	0.7	0.3	0.8	0.6	1.3	0.9	0.8	0.8	1.0	1.5	2.4	2.5	2.4	1.9	5.7
18	1.4	3.2	5.3	5.7	4.4	1.7	0.5	0.5	0.2	0.2	0.2	0.3	0.4	13.5	42.1	5.9	61.1	16.2	49.1	16.5	1.0	6.7	2.0	3.1	10.1	61.1
19	3.4	3.1	1.7	2.5	6.6	2.3	13.7	59.5	64.0	15.5	32.2	30.5	63.2	36.8	50.8	27.4	82.8	10.3	28.4	12.1	23.5	8.7	10.4	7.3	24.9	82.8
20	7.7	11.9	8.9	3.8	5.1	5.0	15.1	27.2	28.0	29.3	61.6	52.7	49.1	36.1	79.9	98.0	81.3	22.7	11.6	51.6	25.1	16.0	7.5	2.8	30.7	98.0
21	4.1	3.0	5.3	4.6	32.1	47.6	138.0	197.8	13.5	4.4	3.7	10.5	9.7	5.5	6.3	4.4	3.7	4.1	5.8	7.2	5.3	4.0	3.5	3.4	22.0	197.8
22	2.8	2.7	2.9	2.6	1.5	2.7	2.7	9.9	147.7	429.8	415.0	156.5	567.6	189.1	798.5	319.1	394.3	138.8	237.1	59.3	109.3	55.9	20.2	72.9	172.5	798.5
23	51.2	113.9	207.7	143.5	306.6	266.8	361.3	554.2	180.7	342.8	256.5	224.3	190.4	186.5	264.2	138.5	157.9	142.6	137.7	205.6	83.0	88.8	80.6	2.4	195.3	554.2
24	2.3	2.5	4.4	5.7	18.1	44.2	32.9	35.6	62.3	316.8	76.8	7.1	110.4	280.9	593.4	291.2	206.8	49.6	27.1	8.6	3.8	3.6	6.0	3.0	91.4	593.4
25	2.6	5.0	3.0	4.1	3.7	4.5	11.0	3.9	1.7	2.1	2.3	1.5	1.4	2.7	4.2	5.9	7.6	7.8	10.7	13.6	9.0	7.1	6.6	9.5	5.5	13.6
26	8.3	28.2	16.8	14.2	13.8	11.0	10.6	9.0	10.2	71.6	106.4	67.6	99.3	73.9	94.0	63.8	125.3	15.6	17.2	34.4	148.9	15.6	12.3	13.0	45.0	148.9
27	18.1	16.3	23.2	14.4	25.5	27.3	140.9	307.2	179.0	154.0	81.9	73.2	166.6	214.5	264.4	220.4	142.7	41.8	112.1	57.2	53.6	12.9	20.8	21.0	99.5	307.2
28	74.0	62.5	125.4	242.9	195.5	257.3	262.3	175.6	129.5	86.9	150.5	167.5	200.8	205.7	193.9	179.1	173.5	93.9	79.6	125.0	55.5	36.8	42.9	163.3	145.0	262.3
29	178.4	256.2	191.0	268.6	199.7	273.8	320.0	274.3	170.0	149.2	222.3	219.8	69.8	239.1	245.9	103.9	238.7	103.1	72.0	114.4	36.5	77.4	64.9	76.6	173.6	320.0
30	40.2	42.1	113.2	154.6	43.1	14.5	13.4	18.6	22.3	17.9	13.7	14.3	19.4	14.3	18.4	148.0	254.7	250.5	204.3	217.0	56.4	133.4	131.7	68.5	84.4	254.7
31	82.2	119.3	87.6	92.2	95.8	74.2	301.0	350.4	268.0	290.8	136.0	129.6	82.7	185.2	226.0	311.3	141.9	21.4	58.3	51.2	57.5	68.3	50.2	76.4	139.9	350.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	23.7	31.0	42.7	40.6	47.0	61.2	94.1	122.0	99.4	127.3	108.1	99.7	107.1	120.1	169.8	120.2	119.4	62.4	63.8	46.9	37.8	29.3	26.7	26.6		
MAX	178.4	256.2	254.2	268.6	306.6	273.8	361.3	554.2	505.6	429.8	415.0	276.8	567.6	280.9	798.5	319.1	394.3	250.5	237.1	217.0	148.9	133.4	134.0	163.3		



Number of 24HR Exceedences	8	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	798.5	UG/M3	
Maximum 24-HR Average	195.3	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	97.7	Monthly Average	76.1 UG/M3