

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

MARCH 2021

APRIL 20, 2021





AMBIENT AIR QUALITY MONTHLY REPORT

MARCH 2021

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: APRIL 20, 2021

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April 20, 2021

LAFARGE CANADA INC.
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Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – March 2021

The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Lagoon Station for March 2021.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	98.0%	-	1
PM _{2.5}	99.1%	0	0
PM ₁₀	98.5%	-	-
NO	99.7%	-	-
NO ²	99.7%	0	-
NO _x	99.7%	-	-
SO ²	100%	0	0
Met Parameters	100%	-	-

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The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Windridge Station for March 2021.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	100%	-	-	7
PM_{2.5}	100%	0	0	-
PM₁₀	100%	-	-	-

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. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and reported exceedances of the Guidelines at the GRIMM Monitors for March 2021.

GRIMM Stations	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of PM _{2.5} Guidelines	Exceedances of PM _{2.5} Guidelines	Exceedances of TSP Guidelines
West	62.1%	0	0	0
Berm	84%	2	1	17
Entrance	90.3%	0	0	13

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

SIGNATURES

PREPARED BY



April 20, 2021

Dylan Weyell, B.A.
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Date

APPROVED¹ BY *(must be reviewed for technical accuracy prior to approval)*



April 20, 2021

Tyler Abel, M.Sc.
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Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between March 1, 2021 and March 31, 2021.

This monthly report was prepared by Dylan Weyell, 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), the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in Summer 2020. The Windridge station was reinstalled on September 1, 2020 and is included in this report.



Figure 1 Photo of Completed Flood Mitigation Work at Exshaw Creek

1.2 FUGITIVE DUST CONTRIBUTIONS FROM LAC DES ARCS

In March 2021, Lafarge environmental staff noted the potential contributions of fugitive dust in the airshed from the exposed lake bed of Lac Des Arcs, immediately southwest of the Lafarge plant site. Low water levels have left more of the lake shore/bed exposed this winter (Figure 2). During high wind events, the sediments from the exposed lake bed can be re-suspended, dispersed in air and become a significant source of fugitive dust impacting the community. This additional source of fugitive dust in the airshed would have an impact on ambient concentration of particulate matter at the monitor and exacerbate any dust originating from the plant site itself. Under high wind speeds (>20 km/hr) and paired with the exposed silt on Lac Des Arcs, fugitive dust from Lac Des Arcs was a potential contributor to ambient particulate matter concentrations and AAAQO exceedances in March 2021.



Figure 2 Photo of the exposed silt on Lac Des Arcs

2 MARCH 2021 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)	99.7	27.6	0	11.0	-
SO ₂ (ppb)	100.0	15.8	0	2.1	0
PM _{2.5} (µg/m ³)	99.1	17.5	0 ¹	6.5	0
PM ₁₀ (µg/m ³)	98.5	485.1	-	93.5	-
TSP (µg/m ³)	98.0	602.1	-	152.7	1
Temperature (°C)	100.0	14.3	-	8.2	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	40.9/W	-	29.6/WSW	-
Precipitation (mm)	100.0	2.5 ²	-	7 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 were no exceedances of the 24-hour PM_{2.5} AAAQO.
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There was 1 exceedance of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, meteorological sensors had 100% uptime for the month of March. NO₂ recorded 99.7% uptime due to 2 hours of equipment malfunction on March 28th at 12:00 & 13:00.
- PM_{2.5} recorded 99.1% uptime due to one hour of equipment malfunction on March 10th at 2:00; four hours of routine maintenance on March 11th at 13:00 to 16:00; one hour of equipment malfunction on March 19th at 12:00, and; one hour of power failure on March 20th at 2:00.
- PM₁₀ recorded 98.5% uptime due to equipment malfunction on March 3rd at 14:00 & 23:00; March 5th at 23:00; March 6th at 16:00; March 8th at 1:00; March 9th at 13:00; and March 19th at 12:00. Further, there were three hours of routine maintenance occurring on March 11th between 14:00 - 16:00 and one hour of power failure occurring on March 20th at 2:00.
- TSP recorded 98.0% uptime due to one hour of equipment malfunction on March 10th at 2:00; 13 hours of equipment malfunction from March 18th at 24:00 to March 19th at 12:00, and; one hour of power failure occurring on March 20th at 2:00.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM _{2.5} (µg/m ³)	100.0	64.0	0*	12.2	0
PM ₁₀ (µg/m ³)	100.0	485.0	-	175.5	-
TSP (µg/m ³)	100.0	866.0	-	220.8	7

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQO.
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There were 7 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Windridge Station the analyzers had 100% uptime for the month of March.

2.3 WEST GRIMM

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

evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-3 West station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	62.1	15.2	0*	6.3	0
PM ₁₀ (µg/m ³)	62.1	18.6	-	8.3	-
TSP (µg/m ³)	62.1	20.6	-	8.0	0

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There were no exceedance of the 24-hour PM_{2.5} Guidelines.
- There were no exceedances of the 1-hour PM_{2.5} Guidelines.
- There were no exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 62.1% uptime for the month of March due to one hour of equipment malfunction on March 9 at 13:00. Further, 72 hours of collection error from March 19 at 16:00 – March 22 at 15:00. And further, 209 hours of equipment malfunction from March 23 from 2:00 – 9:00; 12:00; 15:00 – 20:00; 22:00; 24:00 – March 31 at 23:00.

2.4 BERM GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-4 Berm station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	84.0	109.2	2*	31.7	1
PM ₁₀ (µg/m ³)	84.0	773.4	-	235.0	-
TSP (µg/m ³)	84.0	2149.1	-	707.5	17

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There was 1 day exceeding the 24-hour PM_{2.5} Guidelines.
- There were 2 hours exceeding the 1-hour PM_{2.5} Guidelines.
- There were 17 days exceeding the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 84% uptime during the month of March due to 47 hours of equipment malfunction from March 9th at 13:00 to March 11 at 11:00. Further, 72 hours of collection error occurring between March 19 at 16:00 to March 22 at 15:00.

2.5 ENTRANCE GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

Table 2-5 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	90.3	71.4	0*	20.3	0
PM ₁₀ (µg/m ³)	90.3	619.7	-	144.9	-
TSP (µg/m ³)	90.3	2077.6	-	376.7	13

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} Guidelines.
- There were no exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 13 days exceeding the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 90.3% uptime for the month of March due to 72 hours of collection error occurring between March 19 at 16:00 to March 22 at 15:00.

3 LAGOON STATION

The Lagoon trailer contains NO_x, SO₂, TSP, PM₁₀, 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 March 2021.

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 March 9 th . The monitor had 99.1% uptime in March due to one hour of equipment malfunction on March 10 th at 2:00; four hours of routine maintenance on March 11 at 13:00 to 16:00; one hour of equipment malfunction on March 19 at 12:00, and; one hour of power failure on March 20 th at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on March 9 th . The monitor had 98.5% uptime in March due to equipment malfunction on March 3 rd at 14:00 & 23:00; March 5 th at 23:00; March 6 th at 16:00; March 8 th at 1:00; March 9 th at 13:00; and March 19 th at 12:00. Further, there were three hours of routine maintenance occurring on March 11 between 14:00 - 16:00 and one hour of power failure occurring on March 20 at 2:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on March 9 th . The monitor had 98.0% uptime in March due to one hour of equipment malfunction on March 10 th at 2:00; 13 hours of equipment malfunction from March 18 th at 24:00 to March 19 th at 12:00, and; one hour of power failure occurring on March 20 th at 2:00.

Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on March 11 th . The monitor had 99.7% uptime in March due to two hours of equipment malfunction on March 28 th at 12:00 & 13:00.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on March 11 th . The monitor had 100% uptime for the month of March.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of March.
Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of March.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of March.

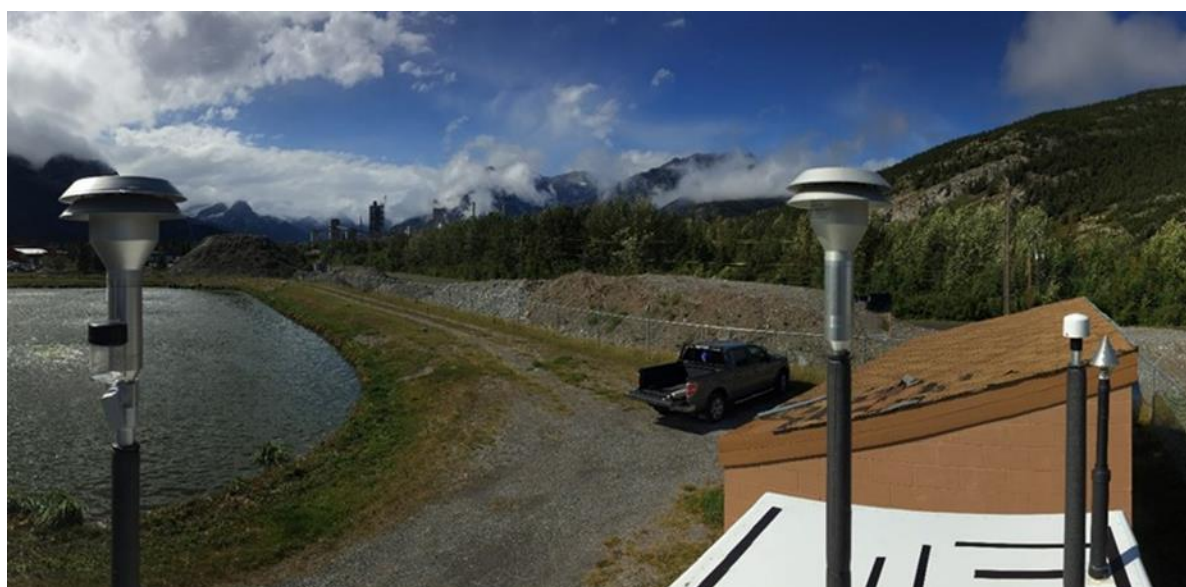


Figure 3-1 Inlets on the top of WSP's Lagoon monitor

3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-2) illustrates the frequency of wind speed by wind direction for the 24-hour TSP exceedance day. The wind rose indicates that the winds predominantly came from the west direction.

Table 3-2 summarizes the hourly and daily concentrations recorded in March 2021. Table 3-3 details the day of exceedance.

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 March 2021 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

There was one exceedance of the 24-hour TSP (100 µg/m³) AAAQO. There were no exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO. Further, there was no exceedances of the 1-hour PM_{2.5} AAAQG (80 µg/m³).

Historically in March, the average number of 24-hour TSP AAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances are both zero.

Further, the low precipitation and strong wind gusting that occurred in March would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, a section of exposed silt on Lac Des Arcs lake (Section 1.2), dry sections of the Bow River, roads (sanding from previous snowstorms) and open areas. The one TSP exceedance recorded was associated with a high wind event in March.

Table 3-2 Summary of March 2021 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/h r)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.0	4.8	27.6	3	9	6.0	95.7	11.0	26	99.7
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	0.5	15.8	13	11	19.9	286.6	2.1	5	100.0
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	2.9	17.5	21	12	21.9	263.5	6.5	5	99.1
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	24.6	485.1	11	9	23.4	300.4	93.5	5	98.5
TSP (µg/m ³)	-	100	Lagoon	-	1	0.5	35.5	602.1	5	13	31.2	280.7	152.7	5	98.0
Temperature (°C)	-	-	Lagoon	-	-	-13.1	2.0	14.3	13	17	23.1	268.4	8.2	14	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.6	20.6	40.9/W	12	1	40.9	259.1	29.6/WSW	31	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	2.5	11	17	30.6	263.9	7.0	-	100.0

Table 3-3 Days exceeding the TSP AAAQO or PM_{2.5} AAAQO at the Lagoon Station

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)
Lagoon						
2021-03-05	152.6	-	273.8	27.9	29.2	High wind event
Total # of Exceedances	1	0				
Maximum # of Exceedances (March)	1 (2015)	1 (2018)				
Average # of Exceedances (March)	0	0				
Minimum # of Exceedances (March)	0 (2010, 2011, 2012, 2013, 2014, 2016, 2017, 2018, 2019, 2020)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019, 2020)				

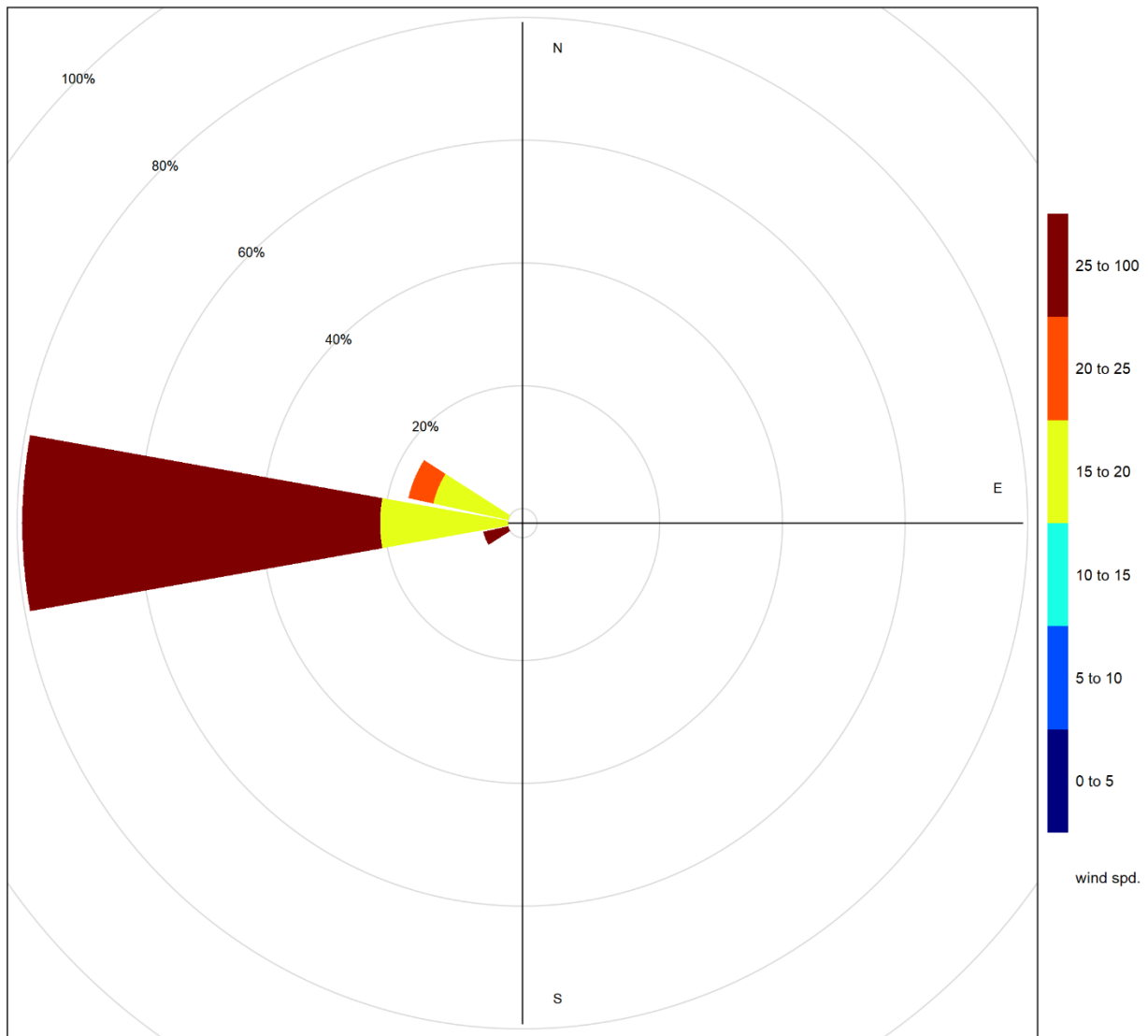


Figure 3-2 Wind rose for TSP exceedance day recorded at the Lagoon Station

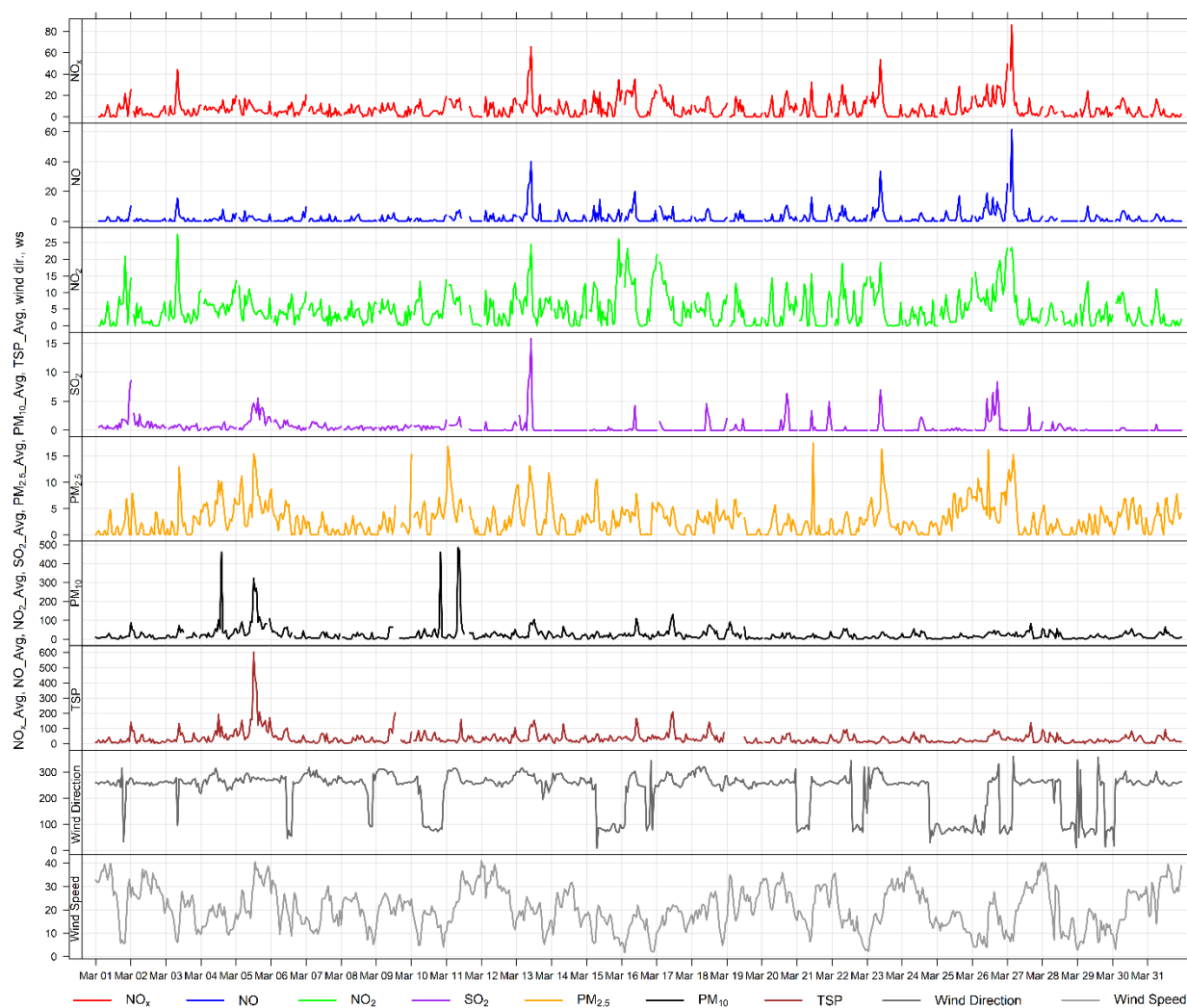


Figure 3-3 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

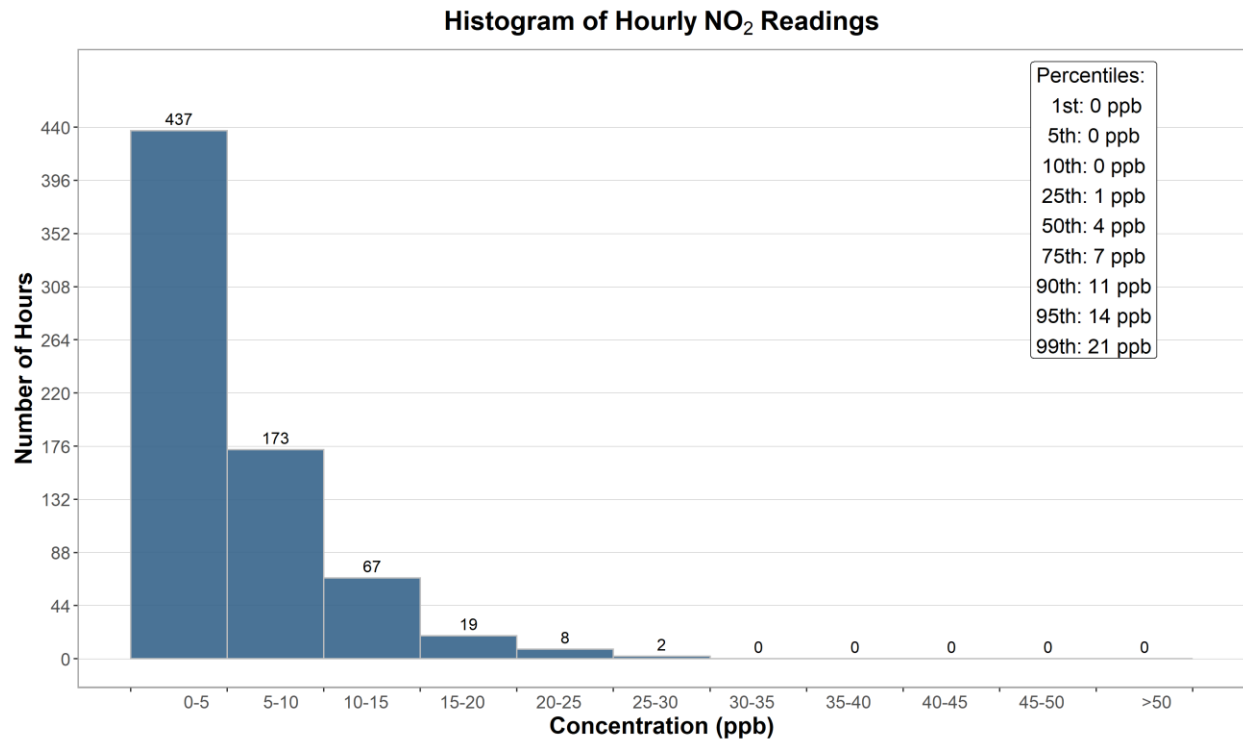


Figure 3-4 Histogram of hourly NO₂ concentrations at the Lagoon station

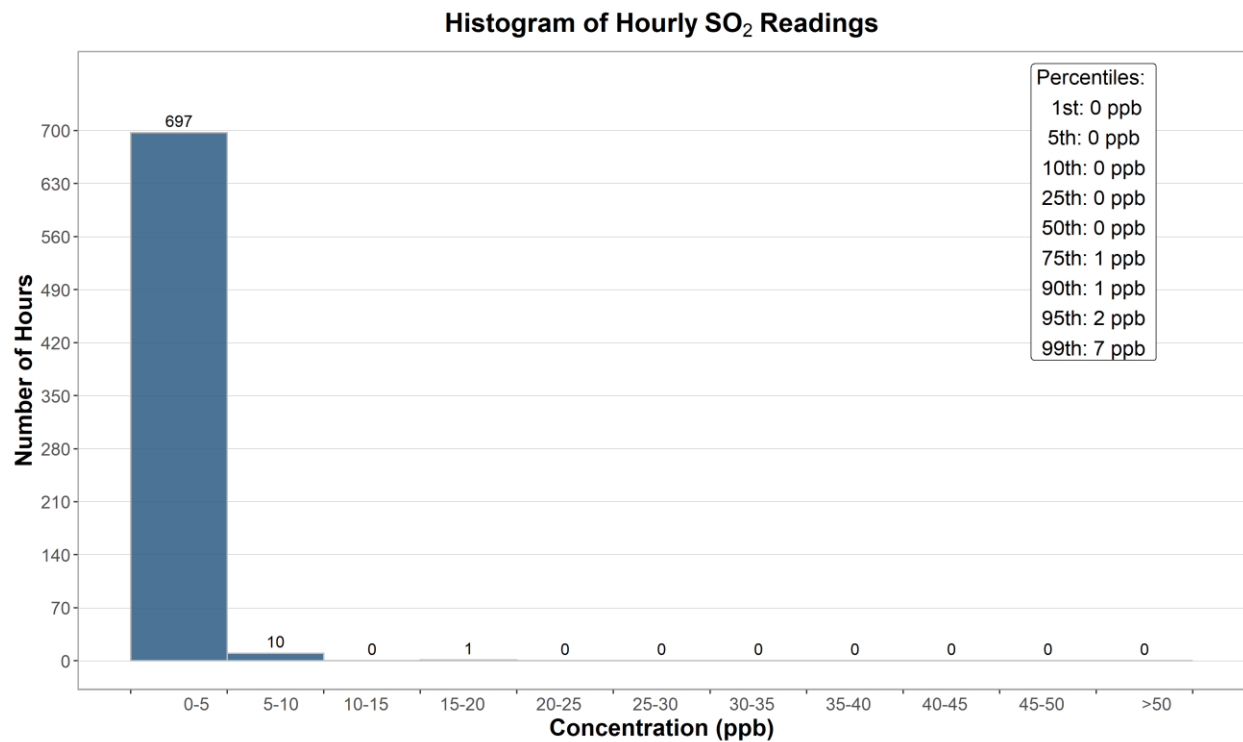


Figure 3-5 Histogram of hourly SO₂ concentrations at the Lagoon station

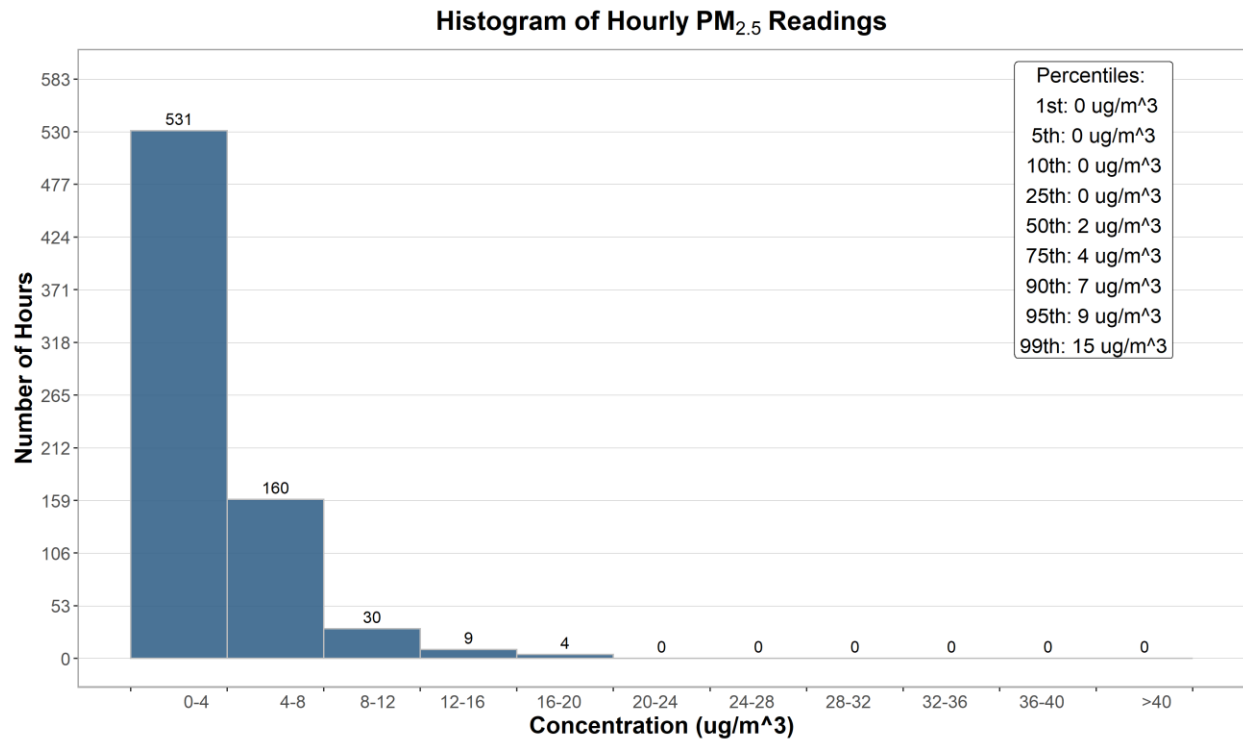


Figure 3-6 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

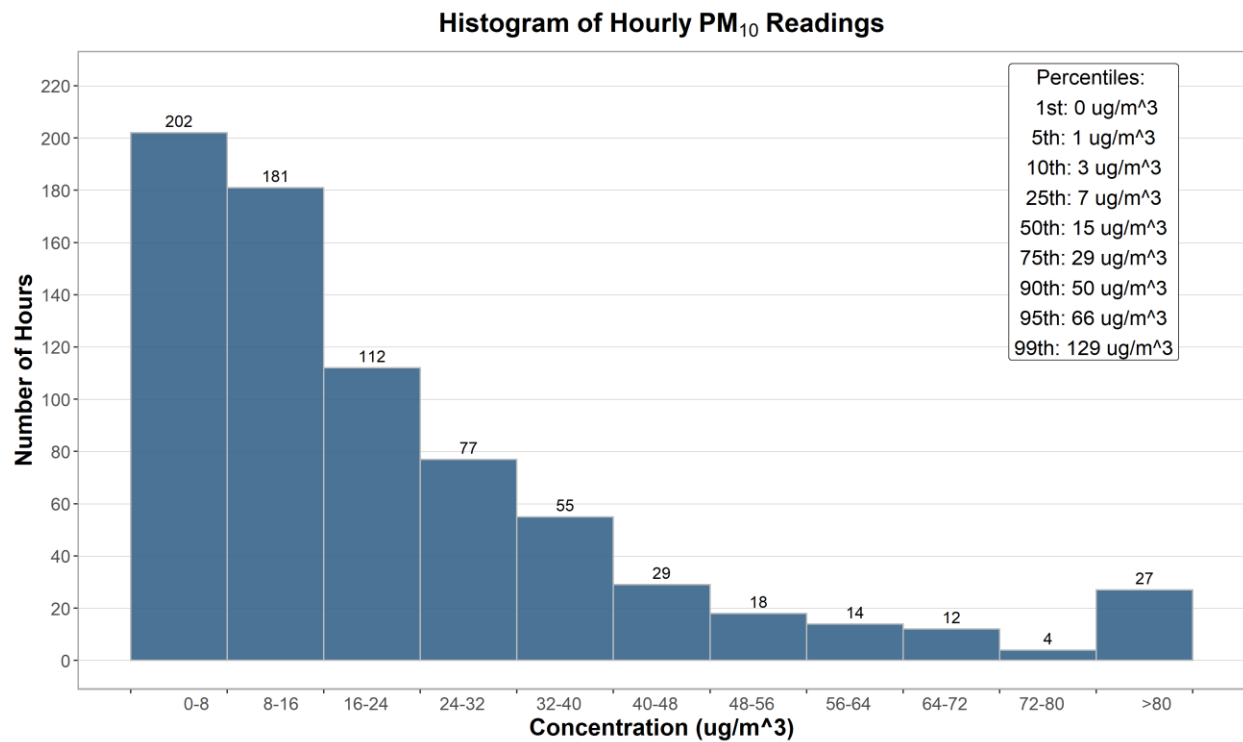


Figure 3-7 Histogram of hourly PM₁₀ concentrations at the Lagoon station

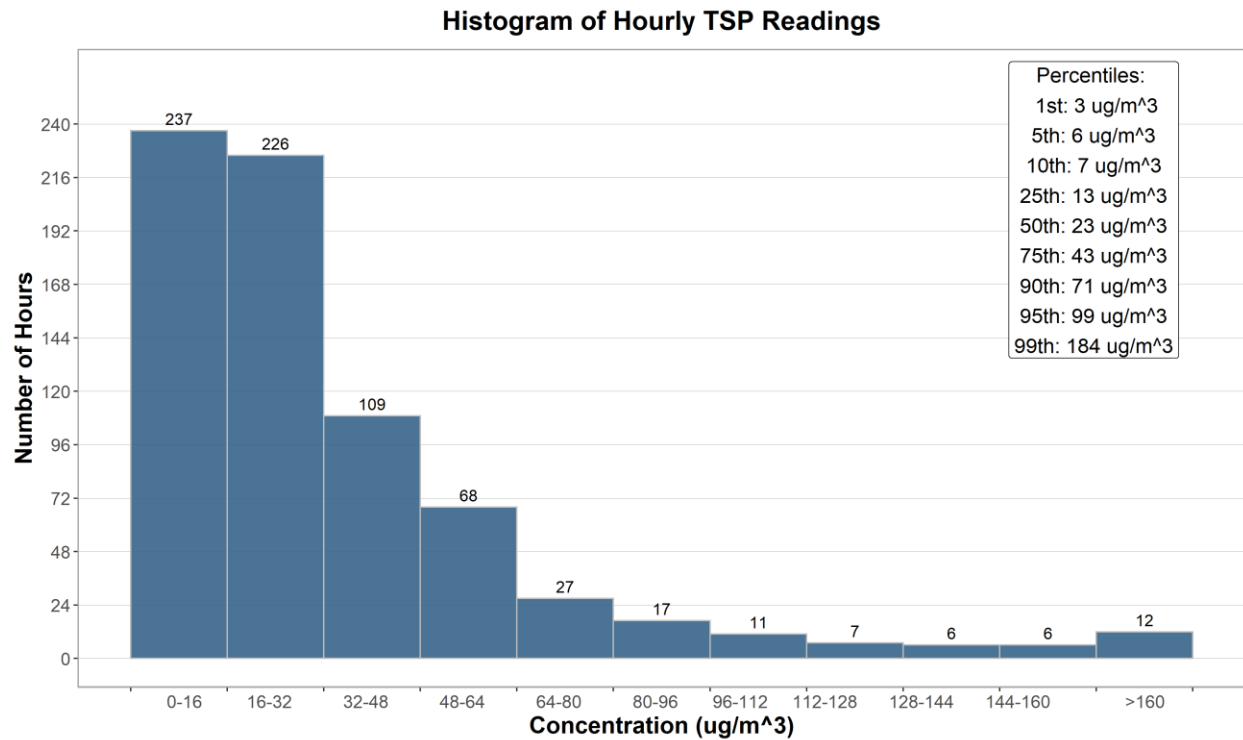


Figure 3-8 Histogram of hourly TSP concentrations at the Lagoon station

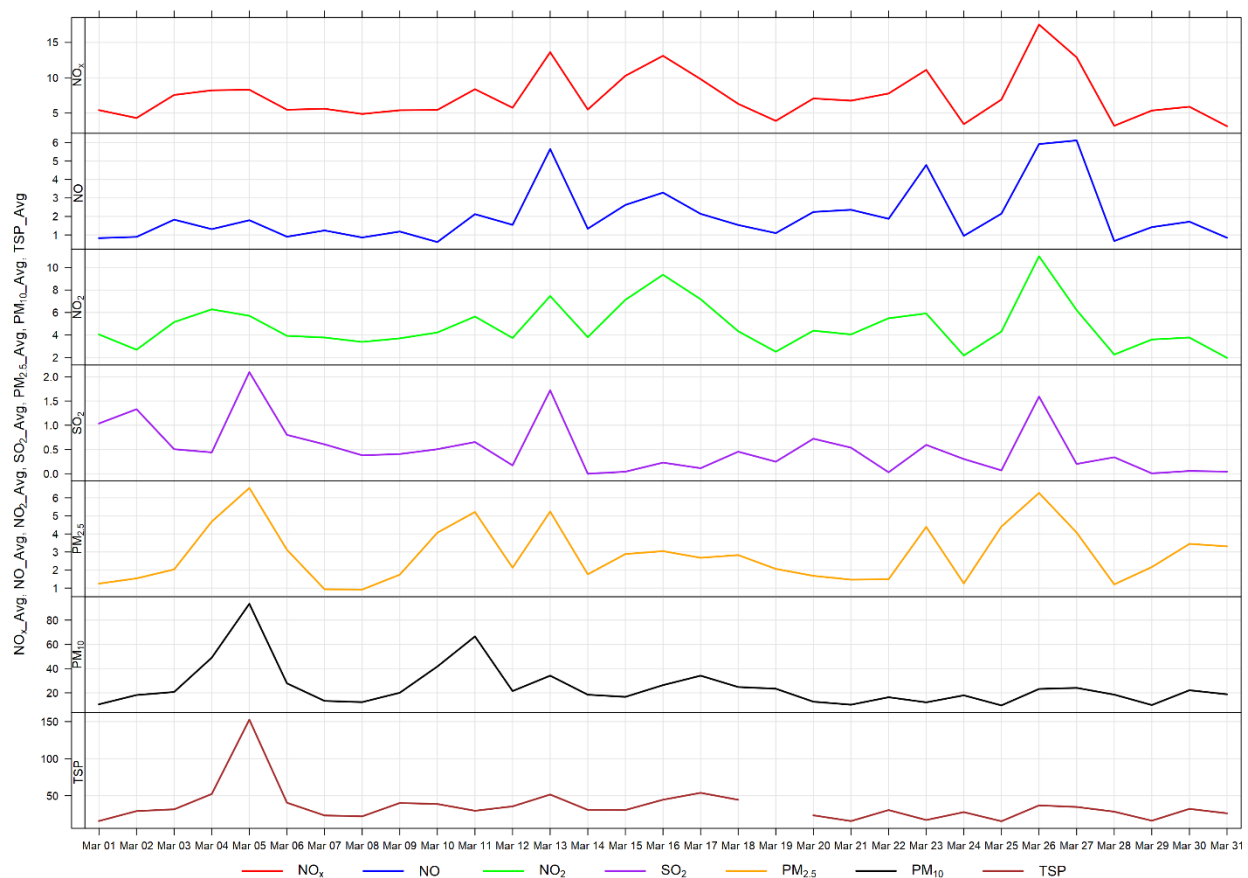


Figure 3-9 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO₂ and NO_x. The particulate matter plot in Figure 3-10 shows that PM₁₀ 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 3-11 shows the variation of SO₂ over various time periods. SO₂ concentrations patterns are dependent on the timing of the highest SO₂ concentrations recorded in the month because in general SO₂ concentrations are very low. Figure 3-12 shows the variation of NO_x, NO and NO₂, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

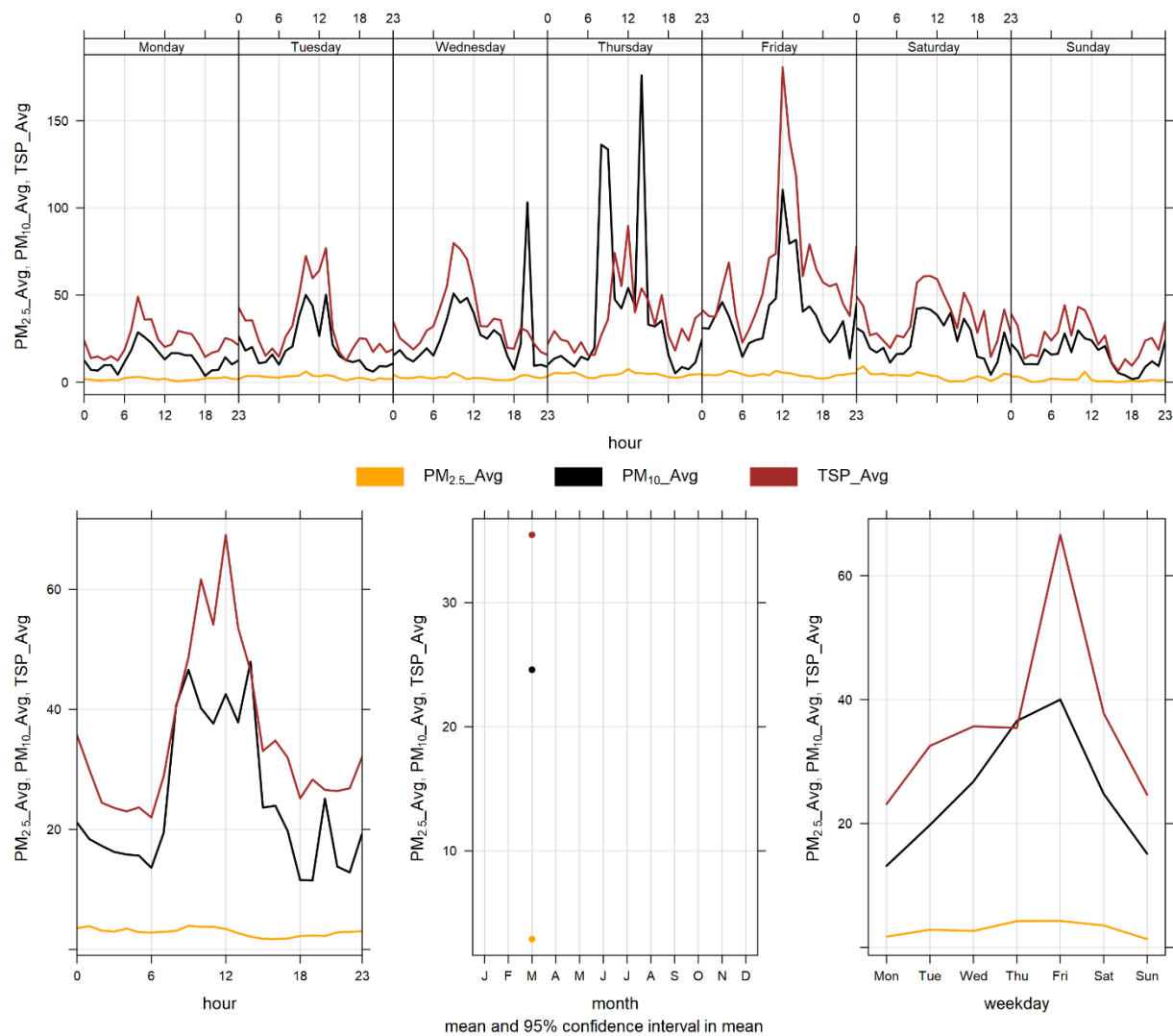


Figure 3-10 Lagoon monitor particulate matter time variation

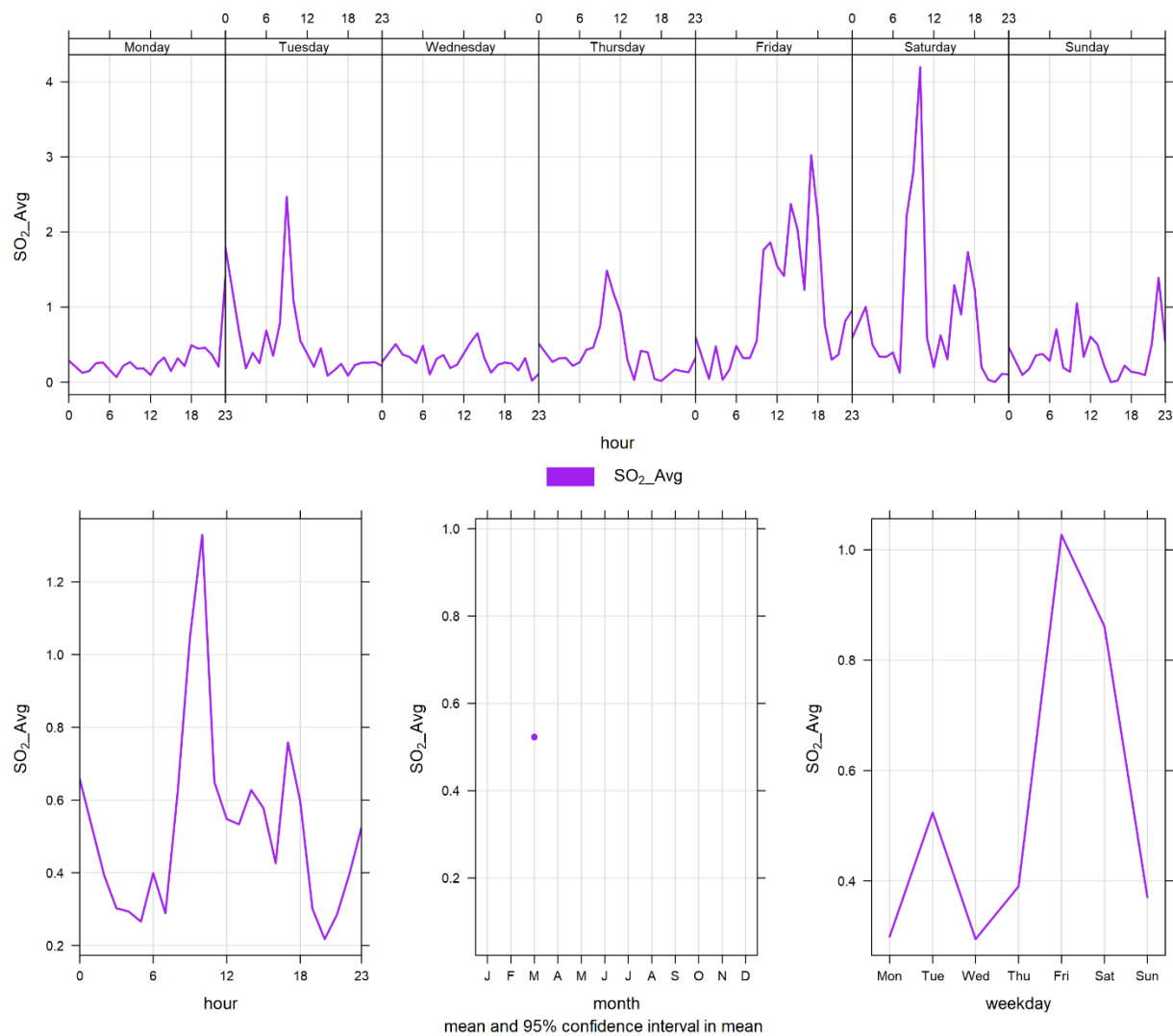


Figure 3-11 Lagoon monitor SO₂ time variation

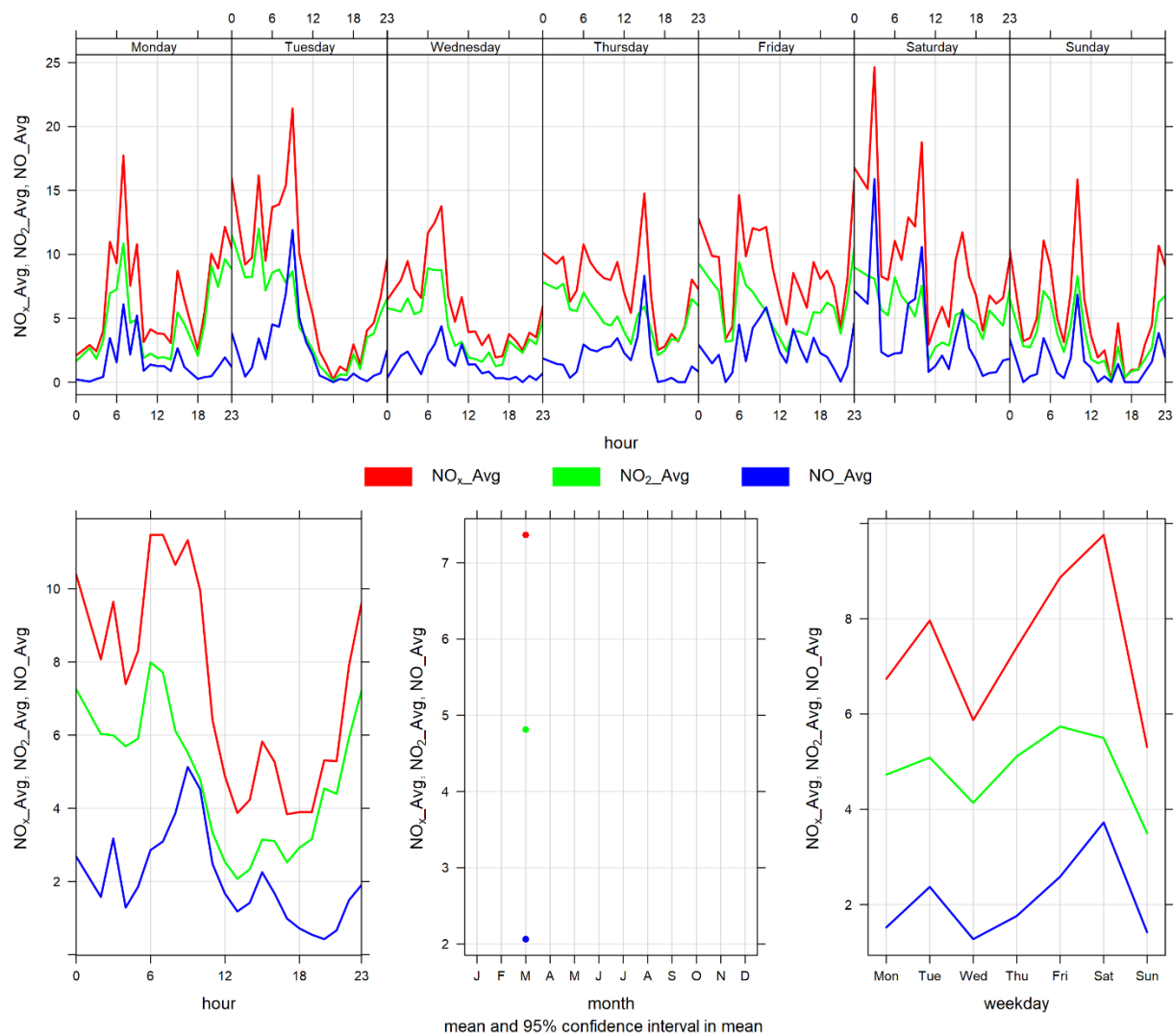


Figure 3-12 Lagoon monitor NO_x time variation

4 WINDRIDGE STATION

The Windridge station contains TSP, PM₁₀, and PM_{2.5} analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for March 2021.

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

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 Windridge monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on March 9. The monitor had 100% uptime for the month of March.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on March 9. The monitor had 100% uptime for the month of March.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on March 9. The monitor had 100% uptime for the month of March.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in March 2021, and Table 4-2 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrate the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP exceedance days, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM_{2.5} AAAQO, zero exceedances of the 1-hour PM_{2.5} AAQ, and 7 exceedances of the 24-hour TSP AAAQO. TSP exceedances occurred primarily on days with high westerly wind speeds.

Historically in March, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 4 and 0, respectively.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The Windridge station was reinstalled for September 1st, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge monitor that may contribute

to an increase in TSP levels. Further, the low precipitation and strong wind gusting that occurred in March would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, a section of exposed silt on Lac des Arcs lake (Section 1.2), dry sections of the Bow River, roads (sanding from previous snowstorms) and open areas. All of the TSP exceedances recorded were associated with high wind events in March.

Table 4-2 Summary of March 2021 data at the Windridge Station

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} (µg/m³)	80	29	Windridge	0	0	0.0	4.7	64.0	5	14	40.5	274.8	12.2	5	100.0
PM₁₀ (µg/m³)	-	-	Windridge	-	-	1.0	54.6	485.0	5	14	40.5	274.8	175.5	5	100.0
TSP (µg/m³)	-	100	Windridge	-	7	1.0	80.1	866.0	5	13	31.2	280.7	220.8	5	100.0

Table 4-3 Days exceeding the TSP AAAQO or PM_{2.5} AAAQO at the Windridge Station

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2021-03-02	141.1	-	257.6	29.3	36.7	High wind event
2021-03-05	220.8	-	273.9	27.9	29.3	High wind event
2021-03-09	102.8	-	282.6	22.2	36.2	High wind event
2021-03-11	139.3	-	271.5	26.2	48.0	High wind event
2021-03-12	155.0	-	262.0	29.5	29.7	High wind event
2021-03-20	113.5	-	260.2	27.8	39.4	High wind event
2021-03-24	160.7	-	259.1	26.4	46.7	High wind event
Total # of Exceedances	7	0				
Maximum # of Exceedances (March)	5 (2019)	1 (2018)				
Average # of Exceedances (March)	4	0				
Minimum # of Exceedances (March)	2 (2018)	0 (2019)				

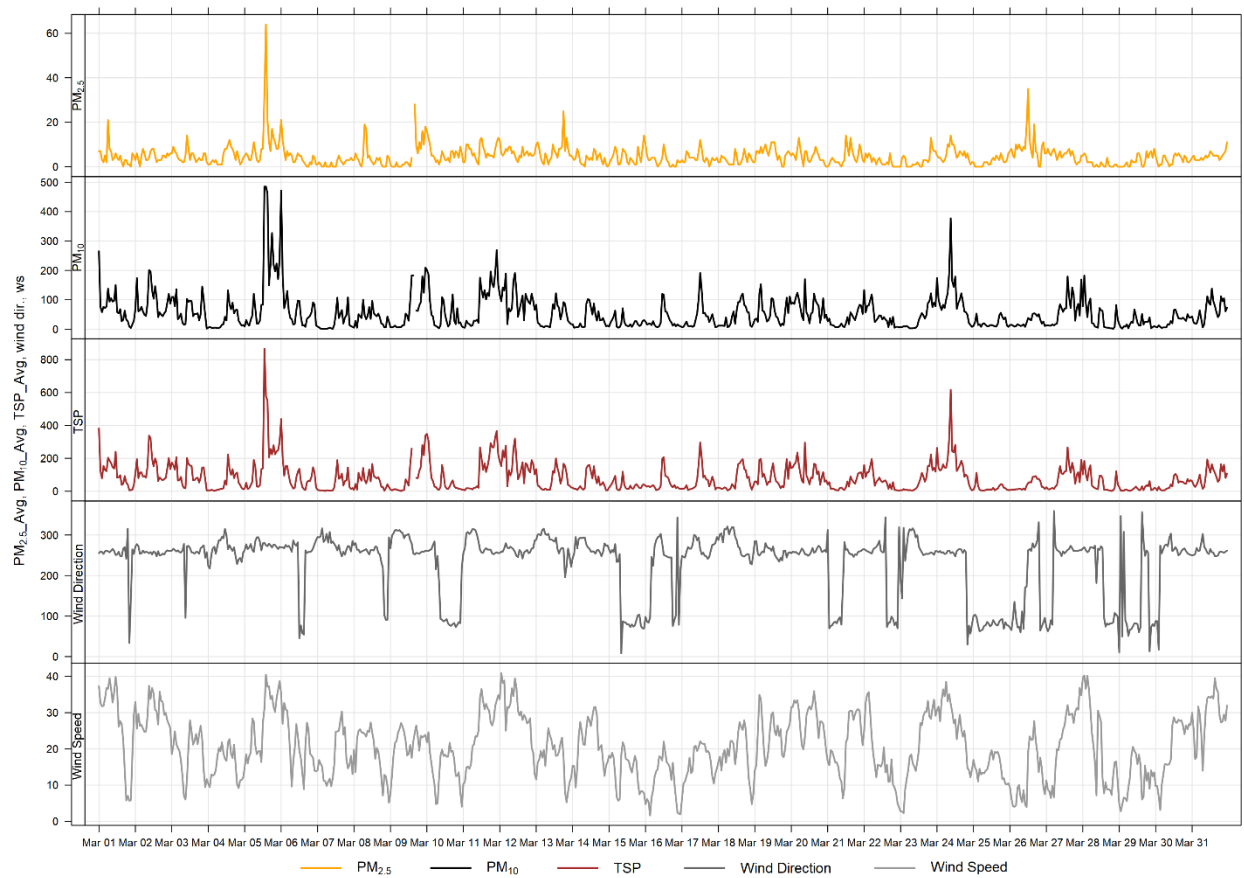


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

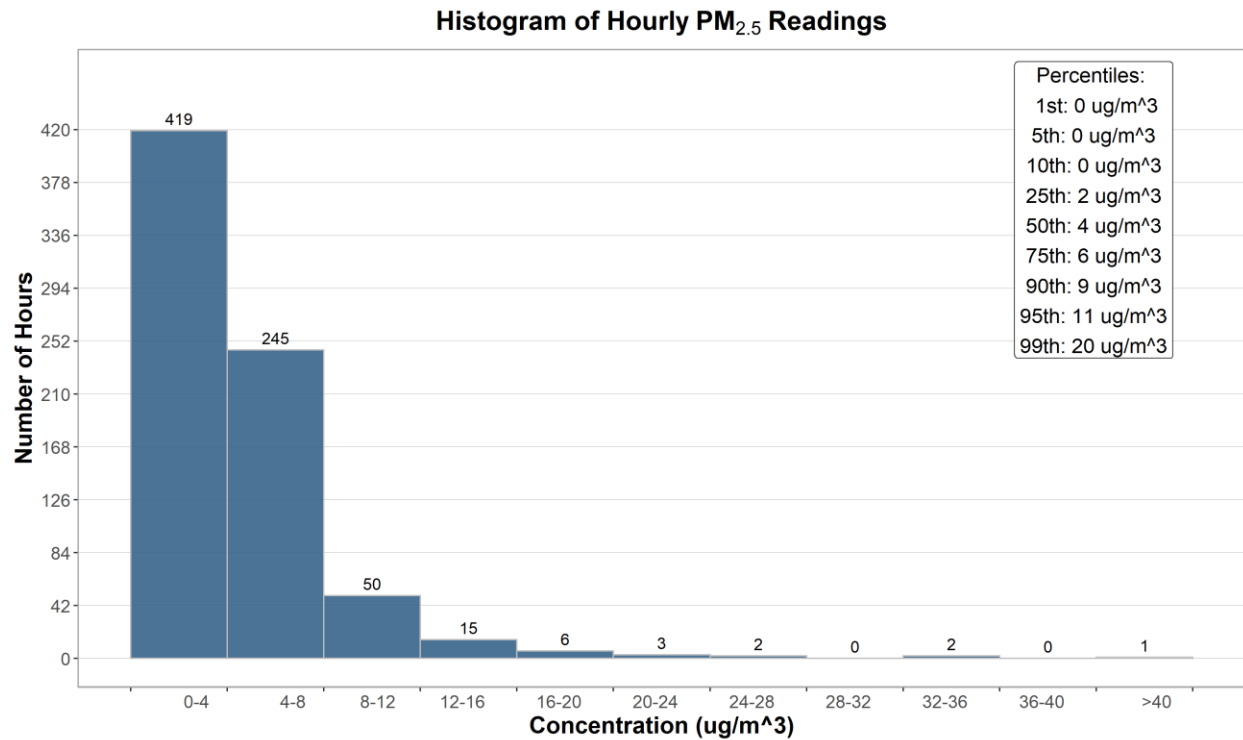


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

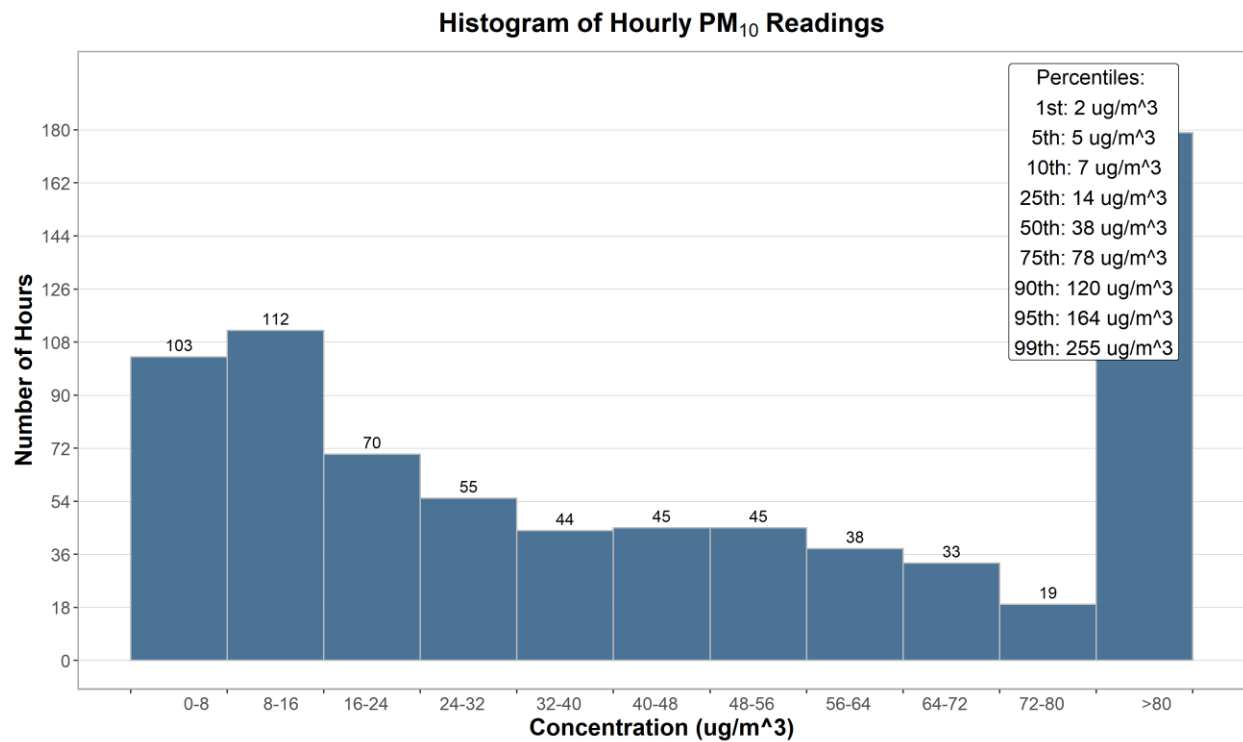


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

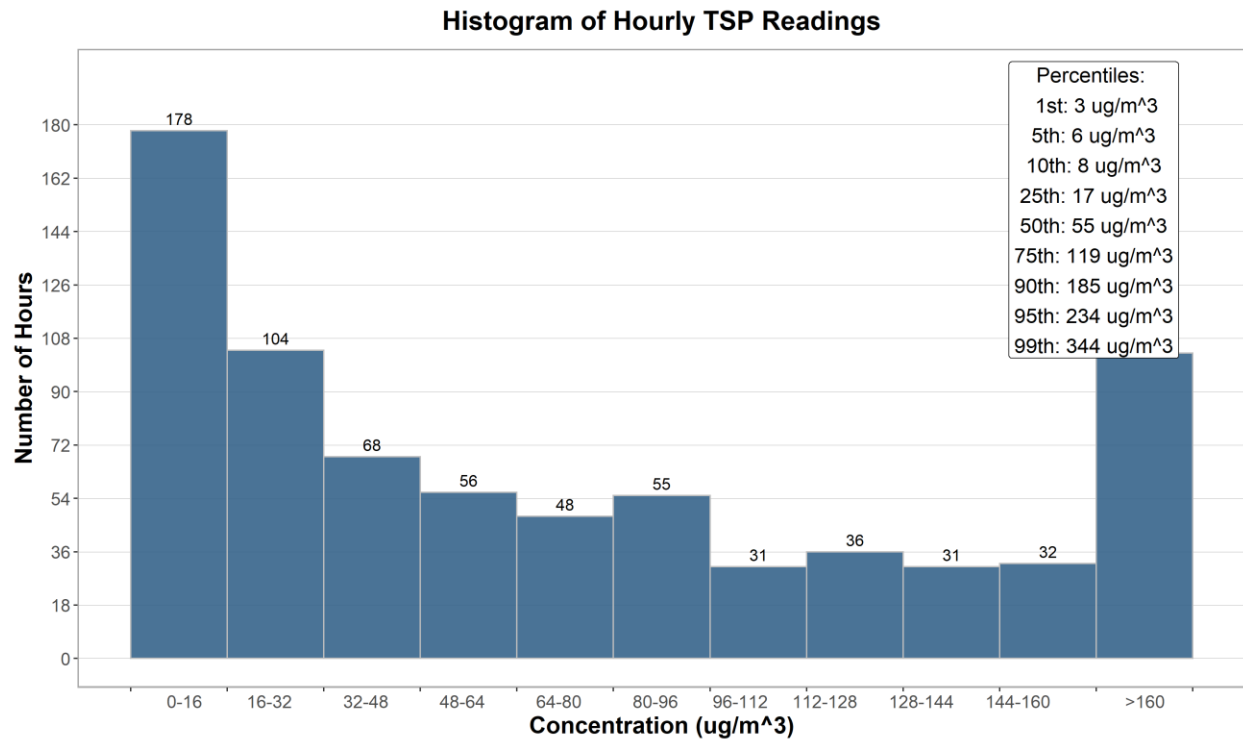


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

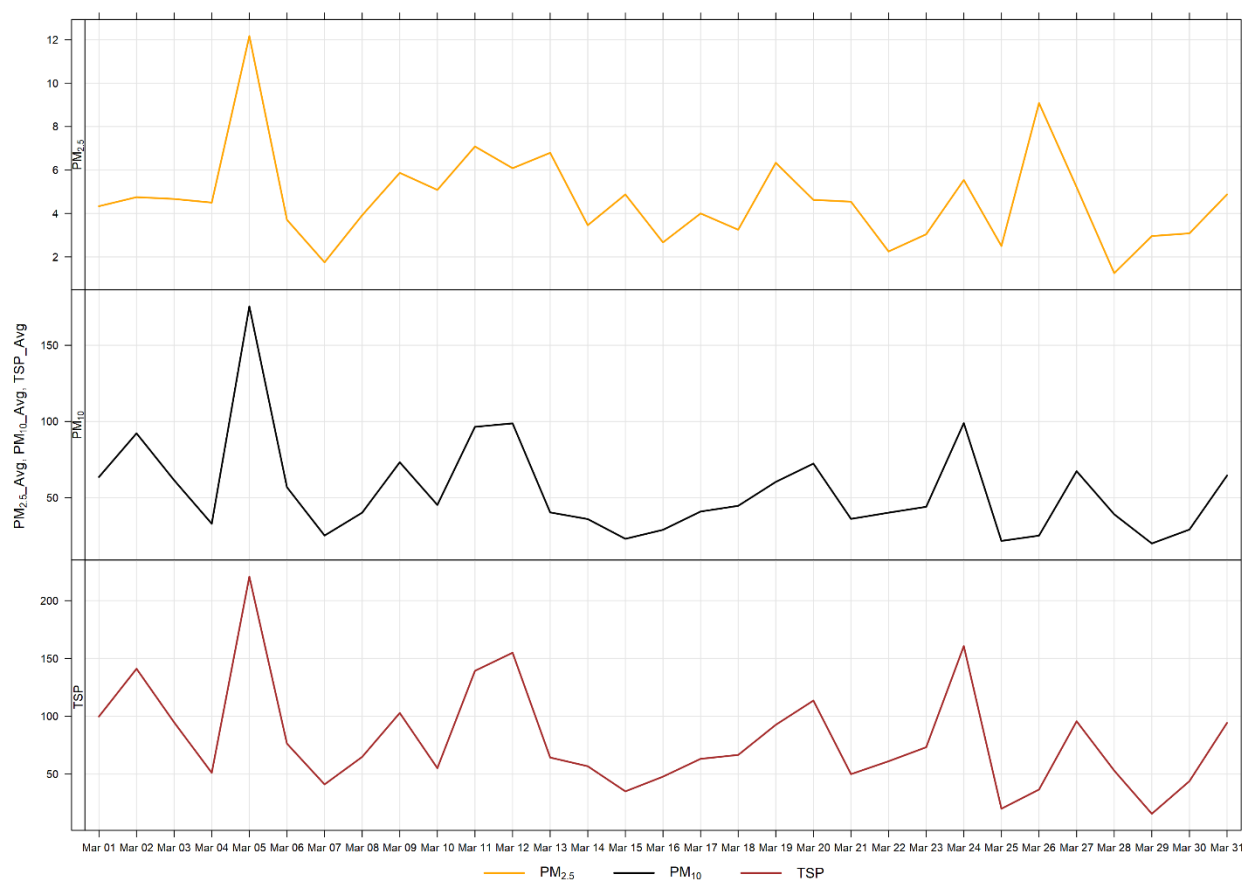


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 7 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west, and west-southwest directions, and were predominately over 25 km/hr.

Figure 4-7 illustrates the hourly PM concentrations recorded at the Windridge monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-7 is based on data collected during March 2021 and similar to the Lagoon station 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.

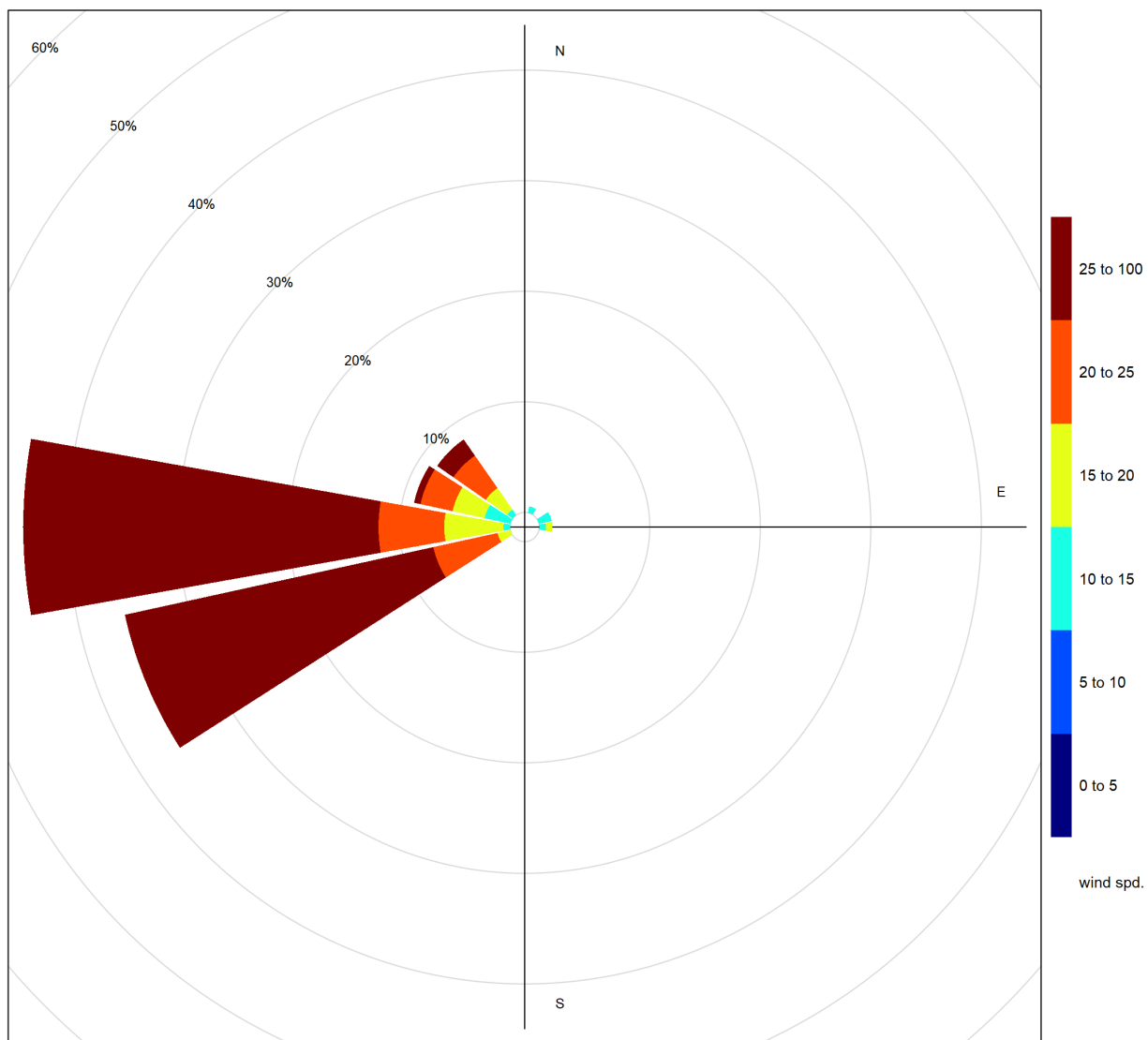


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

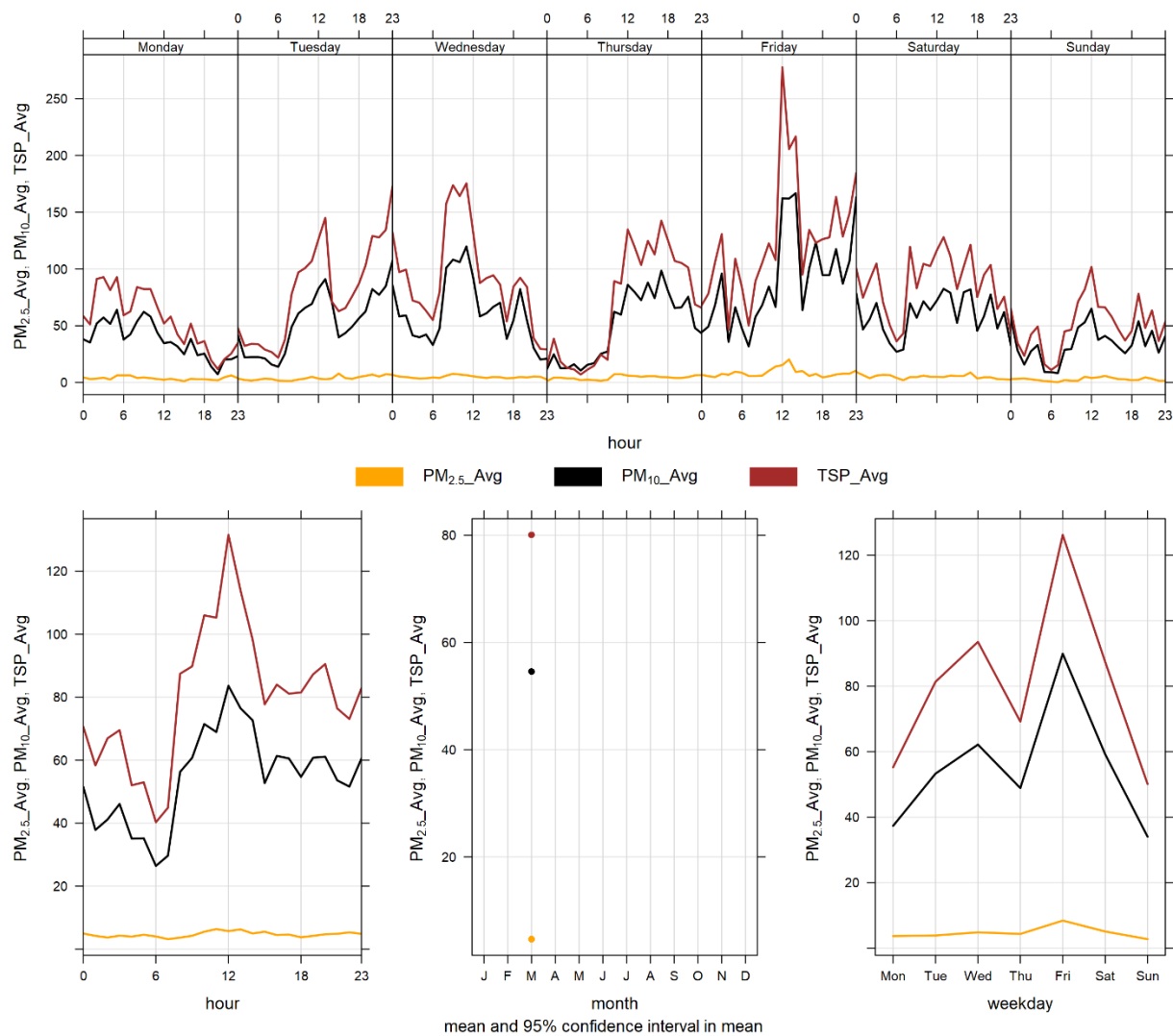


Figure 4-7 Windridge particulate matter time variation

5 WEST 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 West monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 62.1% uptime for the month of March due to one hour of equipment malfunction on March 9 at 13:00. Further, 72 hours of collection error from March 19 at 16:00 – March 22 at 15:00. And further, 209 hours of equipment malfunction from March 23 from 2:00 – 9:00; 12:00; 15:00 – 20:00; 22:00; 24:00 – March 31 at 23:00.

5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. Table 5-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month. 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 5-1 and Figure 5-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month.

There were zero exceedances of the 24-hour TSP Guideline (100 µg/m³) and zero exceedances of the 24-hour PM_{2.5} (29µg/m³) Guideline.

Historically in March, the average number of 24-hour TSP guideline exceedances and 24-hour PM_{2.5} guideline exceedances are 2 and 0, respectfully. The maximum number of 24-hour TSP guidelines exceedances was 10 days in 2014 for TSP, and 1 day in 2013 & 2018 for PM_{2.5}.

Table 5-2 Summary of March 2021 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} (µg/m ³)	80	29	West	0	0	0.4	3.7	15.2	11	2	14.8	304.3	6.3	4	62.1
PM₁₀ (µg/m ³)	-	-	West	-	-	0.4	5.0	18.6	4	10	18.8	292.1	8.3	4	62.1
TSP (µg/m ³)	-	100	West	-	0	0.3	4.7	20.6	4	10	18.8	292.1	8.0	16	62.1

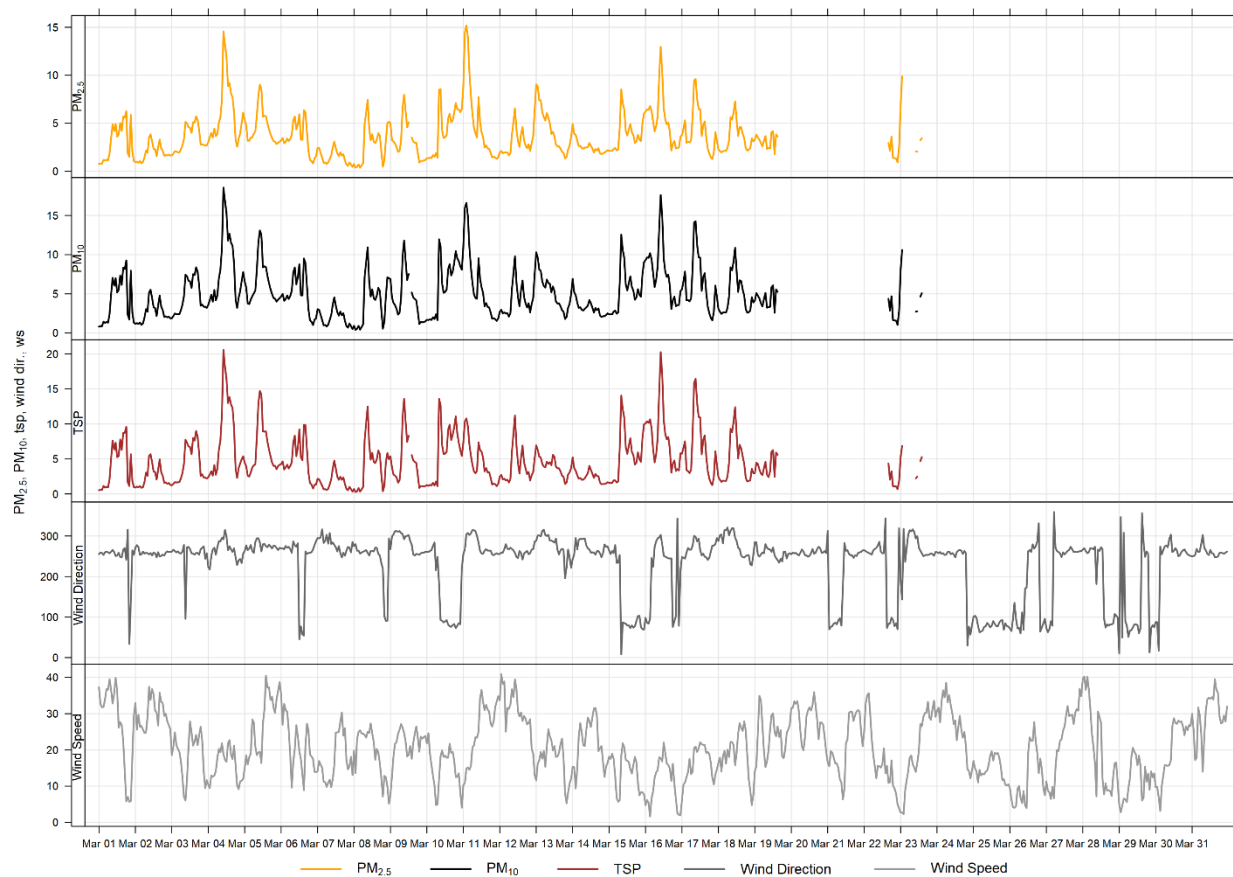


Figure 5-1 1-hour particulate matter concentrations at the West monitor

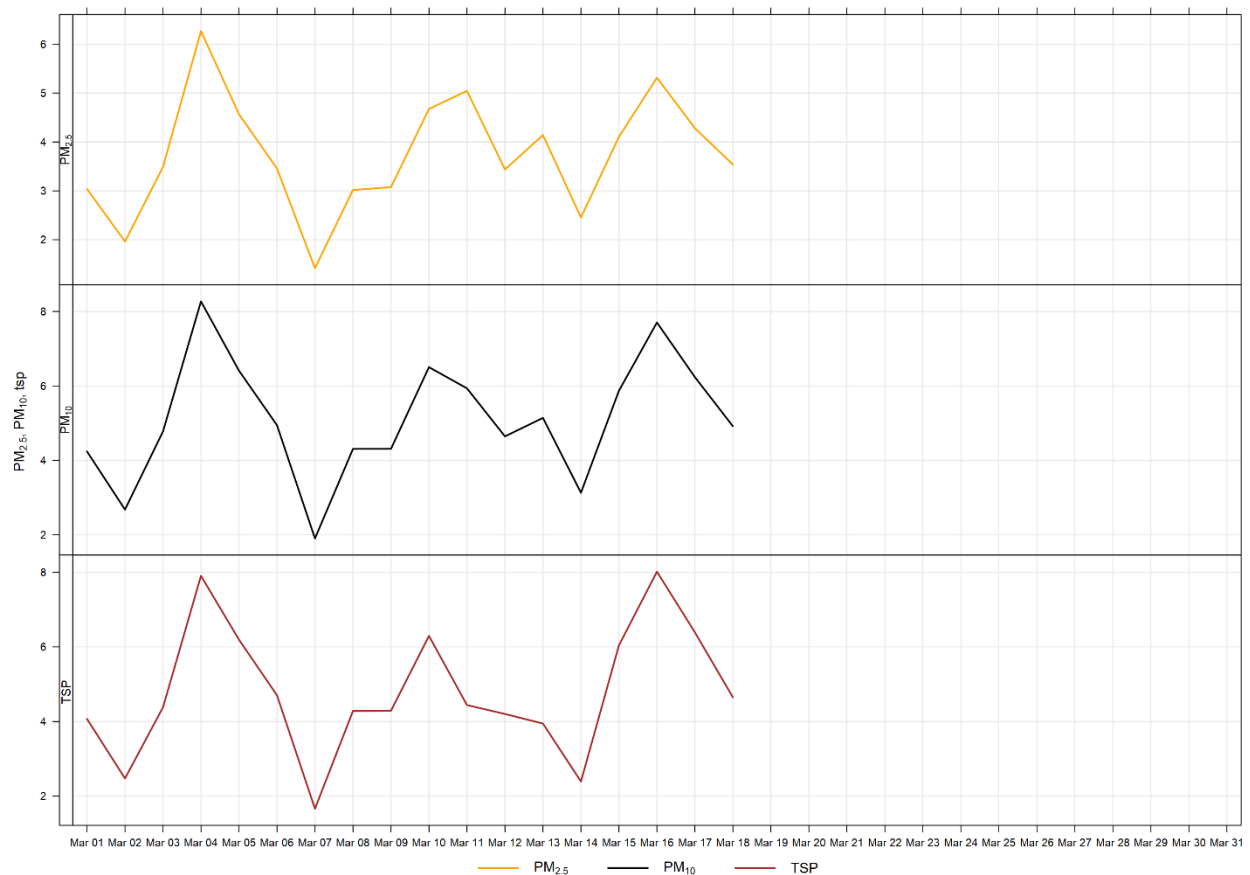


Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during March 2021. 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.

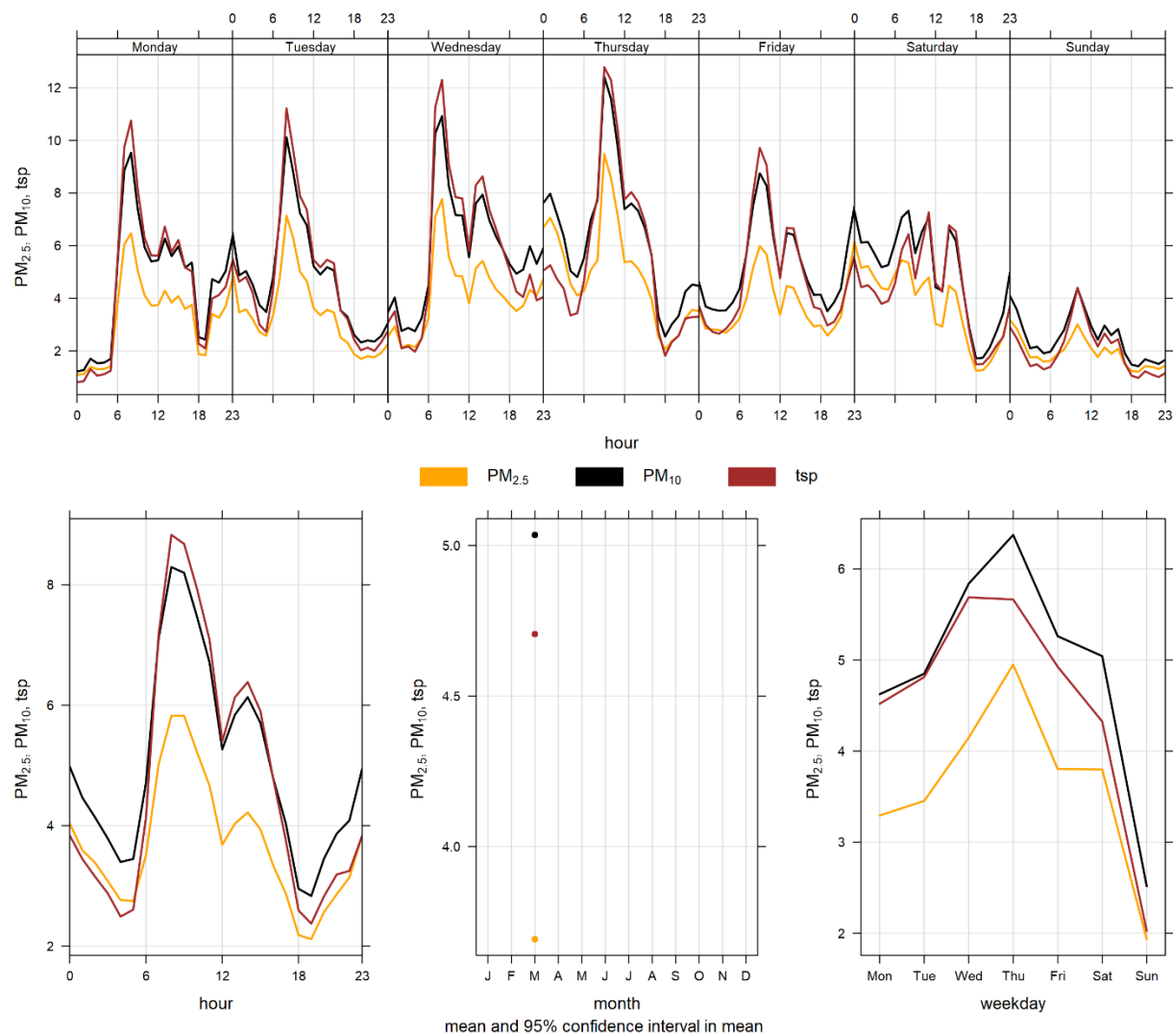


Figure 5-3 West particulate matter time variation

6 BERM 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 Berm monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 84% uptime for the month of March due to 47 hours of equipment malfunction from March 9 at 13:00 to March 11 at 11:00. Further, 72 hours of collection error occurring between March 19 at 16:00 to March 22 at 15:00.

6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility in 2009. Figure 6-1 and Figure 6-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 6-3 summarizes the recorded exceedances. 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 17 and 1 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were 2 hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of March, the Berm monitor records an average of 13 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during March occurred in 2010 where there were 28 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in March was 1 day in 2012.

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. The low precipitation and strong wind gusting that occurred in March would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, a section of exposed silt on Lac des Arcs lake (Section 1.2), dry sections of the Bow River, roads (sanding from previous snowstorms) and open areas.

Table 6-2 Summary of March 2021 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} (µg/m³)	80	29	Berm	2	1	0.3	10.7	109.2	5	12	27.3	279.5	31.7	5	84.0
PM₁₀ (µg/m³)	-	-	Berm	-	-	0.4	69.5	773.4	5	12	27.3	279.5	235.0	5	84.0
TSP (µg/m³)	-	100	Berm	-	17	0.2	189.2	2149.1	5	13	31.2	280.7	707.5	5	84.0

Table 6-3 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						
2021-03-01	198.1	-	258.8	26.9	47.1	High wind event
2021-03-02	385.8	-	257.6	29.3	36.7	High wind event
2021-03-03	200.4	-	261.0	18.4	38.8	Winds predominately from the west
2021-03-05	707.5	31.7	273.9	27.9	29.3	High wind event
2021-03-06	142.9	-	275.2	20.5	42.3	High wind event
2021-03-07	128.2	-	273.3	17.6	47.5	Winds predominately from the west
2021-03-08	153.8	-	259.7	18.7	43.7	Winds predominately from the west
2021-03-12	358.1	-	262.0	29.5	29.7	High wind event
2021-03-13	101.0	-	281.7	17.4	43.2	Winds predominately from the west
2021-03-14	126.6	-	270.2	22.0	31.9	High wind event
2021-03-17	120.7	-	268.6	16.7	42.5	Winds predominately from the west
2021-03-18	149.8	-	281.4	18.6	39.3	Winds predominately from the west
2021-03-23	161.7	-	266.9	21.5	55.0	High wind event
2021-03-24	379.9	-	259.1	26.4	46.7	High wind event

2021-03-27	269.5	-	263.4	23.9	48.5	High wind event
2021-03-29	119.2	-	64.9	11.9	73.0	Winds predominately from the east
2021-03-31	274.1	-	259.3	29.6	38.6	High wind event
Total # of Exceedances	17	1				
Maximum # of Exceedances (March)	28 (2010)	1 (2012)				
Average # of Exceedances (March)	13	0				
Minimum # of Exceedances (March)	4 (2018)	0 (2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020)				

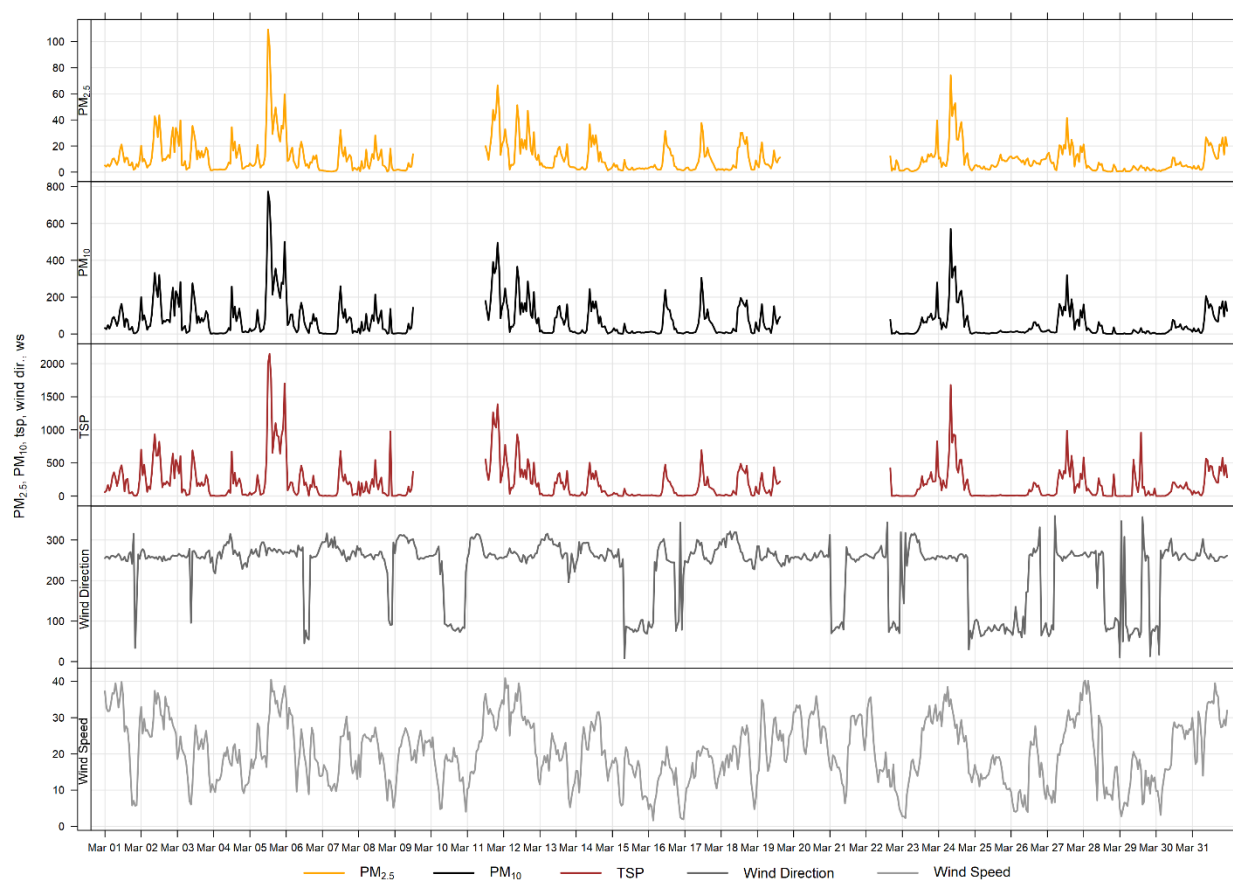


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

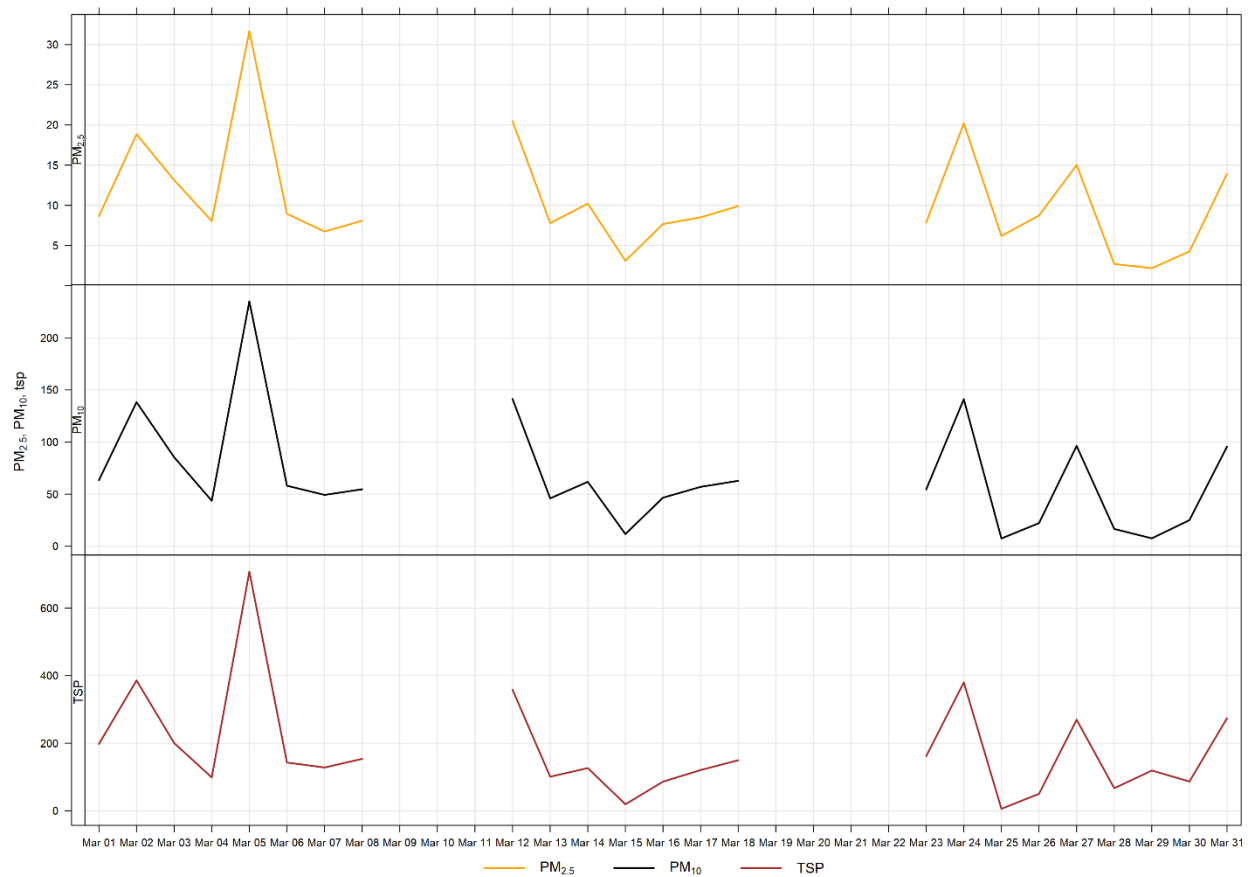


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 17 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west, and west-southwest directions, and were predominately over 20 km/hr.

Figure 6-4 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 other activities and sources in Exshaw.

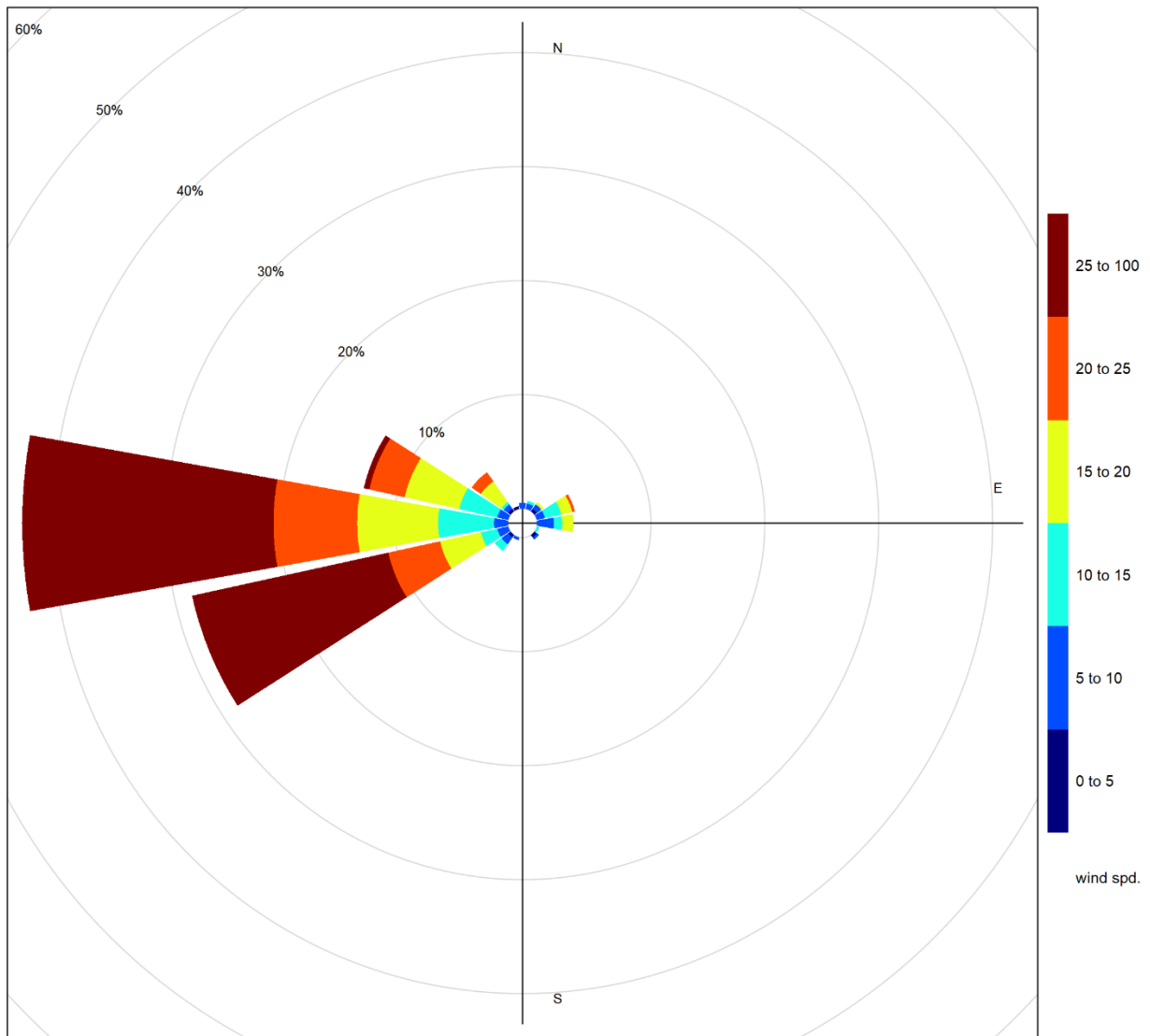


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

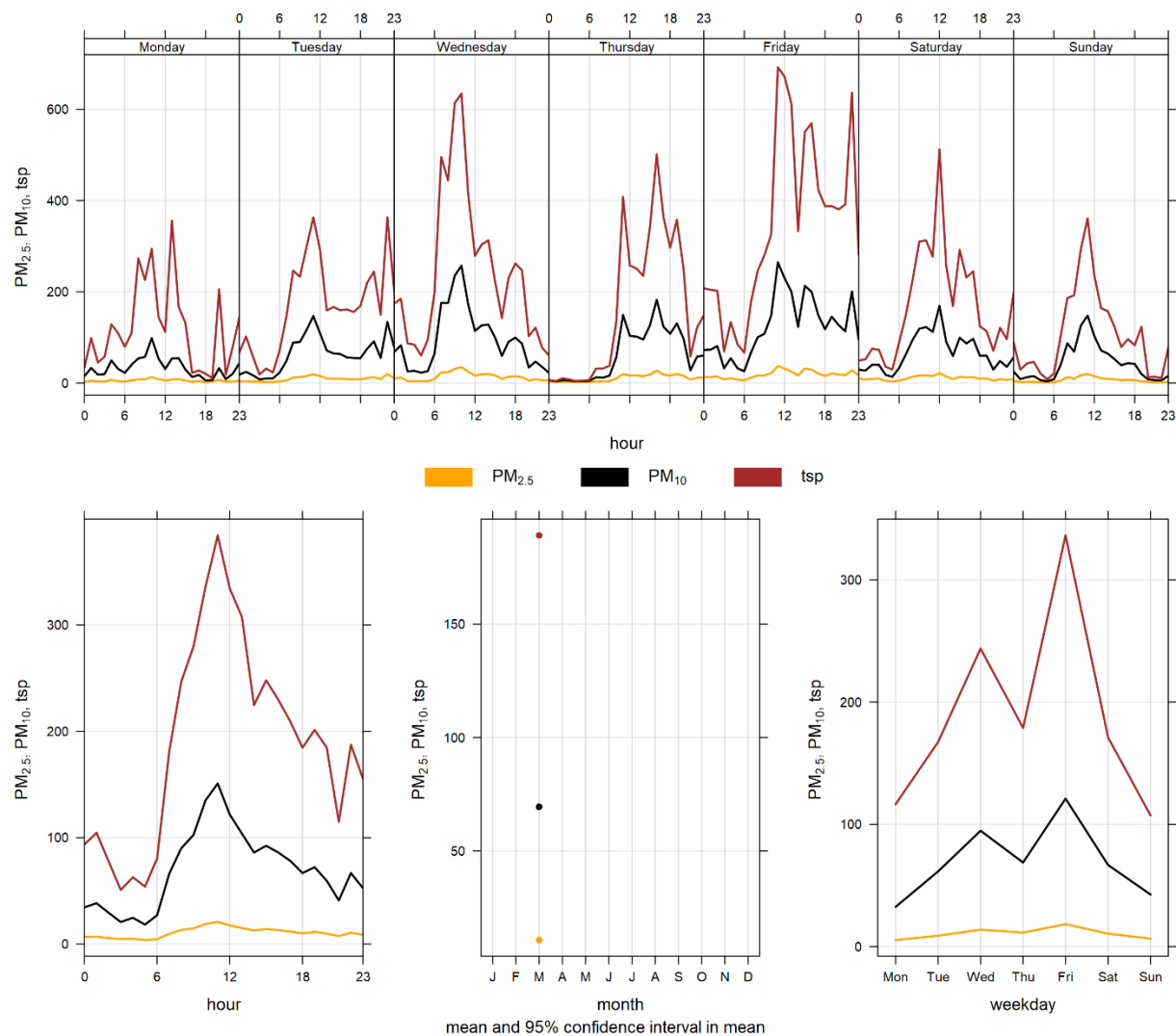


Figure 6-4 Berm particulate matter time variation

7 ENTRANCE INDUSTRIAL GRIMM

7.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 7-1.

Table 7-1 Instrumentation List at the Entrance monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 90.3% uptime for the month of March due to 72 hours of collection error occurring between March 19 at 16:00 to March 22 at 15:00.

7.2 MONITORING RESULTS AND TRENDS

The Entrance monitor was placed at its current location as a result of dispersion modelling conducted in 2009. This area was indicated as being the area where the maximum PM concentrations were expected. Figure 7-1 and Figure 7-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 7-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. Table 7-3 summarizes the recorded exceedances. 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 the month of March, there were 13 and zero exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively.

Historically, the Entrance monitor records an average of 12 and zero exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of March. The maximum number of TSP exceedances recorded during March occurred in 2014, which had 28 days that exceeded the guideline. The minimum number of TSP exceedances recorded during March occurred in 2011, which had 0 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances recorded during the month of March was 1 day in 2018.

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 low precipitation and strong wind gusting that occurred in March would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, a section of exposed silt on Lac des Arcs lake (Section 1.2), dry sections of the Bow River, roads (sanding from previous snowstorms) and open areas. Most of the TSP exceedances recorded were associated with high wind events in March.

Figure 7-3 shows the wind rose for the 13 days that exceeded the TSP Guideline. The wind rose indicates that the winds predominantly came from the west and west-southwest directions, and were predominately over 20 km/hr.

Table 7-2 Summary of March 2021 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} (µg/m ³)	80	29	Entrance	0	0	0.6	8.8	71.4	9	10	22.2	299.5	20.3	13	90.3
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	0.7	50.3	619.7	18	8	22.2	312.7	144.9	18	90.3
TSP (µg/m ³)	-	100	Entrance	-	13	0.5	134.0	2077.6	18	8	22.2	312.7	376.7	18	90.3

Table 7-3 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						
2021-03-04	287.5	-	269.2	15.9	46.0	Winds predominately from the west
2021-03-05	275.8	-	273.9	27.9	29.3	High wind event
2021-03-09	372.3	-	282.6	22.2	36.2	High wind event
2021-03-10	191.9	-	90.9	14.7	64.1	Winds predominately from the east
2021-03-11	116.3	-	271.5	26.2	48.0	High wind event
2021-03-12	126.1	-	262.0	29.5	29.7	High wind event
2021-03-13	260.9	-	281.7	17.4	43.2	Winds predominately from the west
2021-03-15	124.7	-	77.6	13.5	44.4	Winds predominately from the east
2021-03-16	143.7	-	264.8	11.1	53.0	Winds predominately from the west
2021-03-17	283.5	-	268.6	16.7	42.5	Winds predominately from the west
2021-03-18	376.7	-	281.4	18.6	39.3	Winds predominately from the west
2021-03-24	140.8	-	259.1	26.4	46.7	High wind event
2021-03-30	102.2	-	263.6	20.9	53.0	High wind event

Total # of Exceedances	13	0				
Maximum # of Exceedances (March)	28 (2014)	1 (2018)				
Average # of Exceedances (March)	12	0				
Minimum # of Exceedances (March)	0 (2011)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019, 2020)				

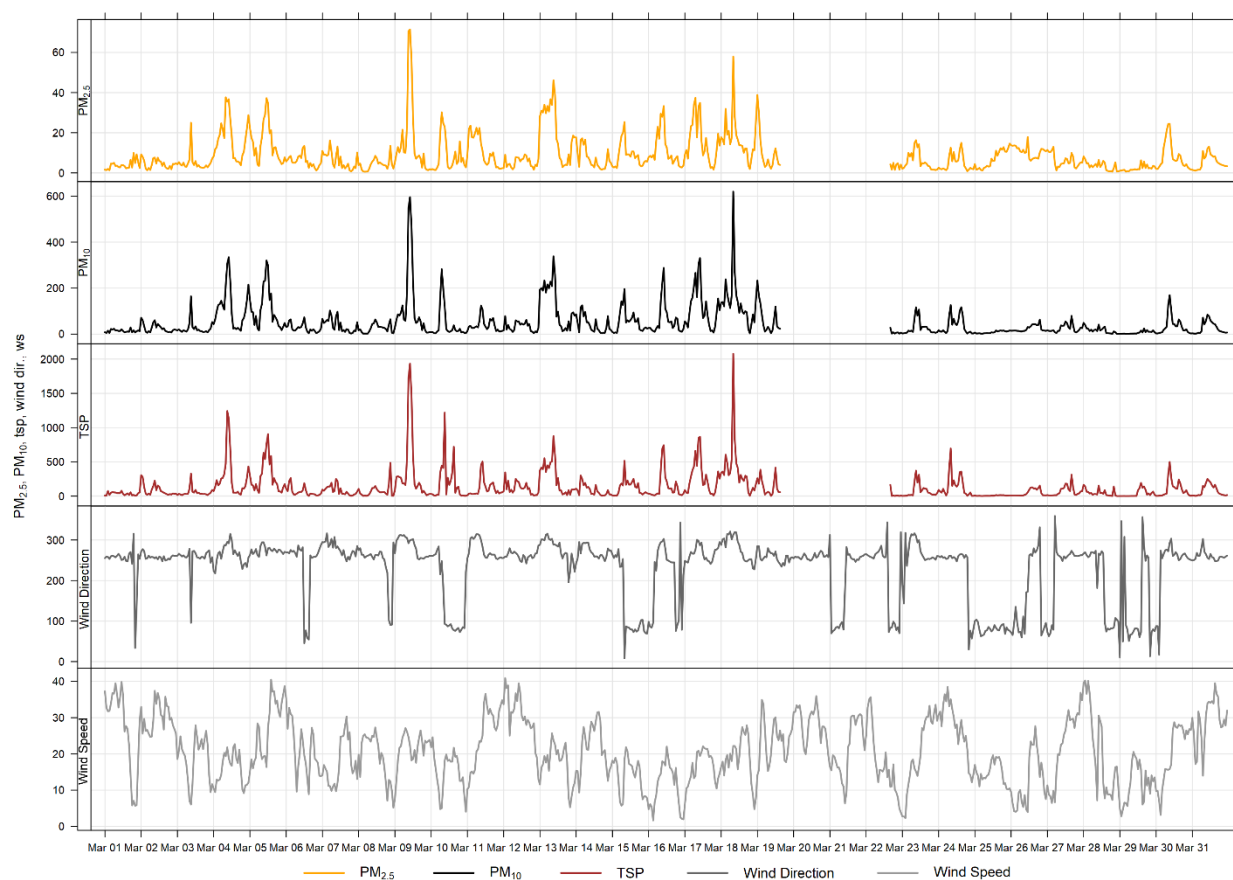


Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor

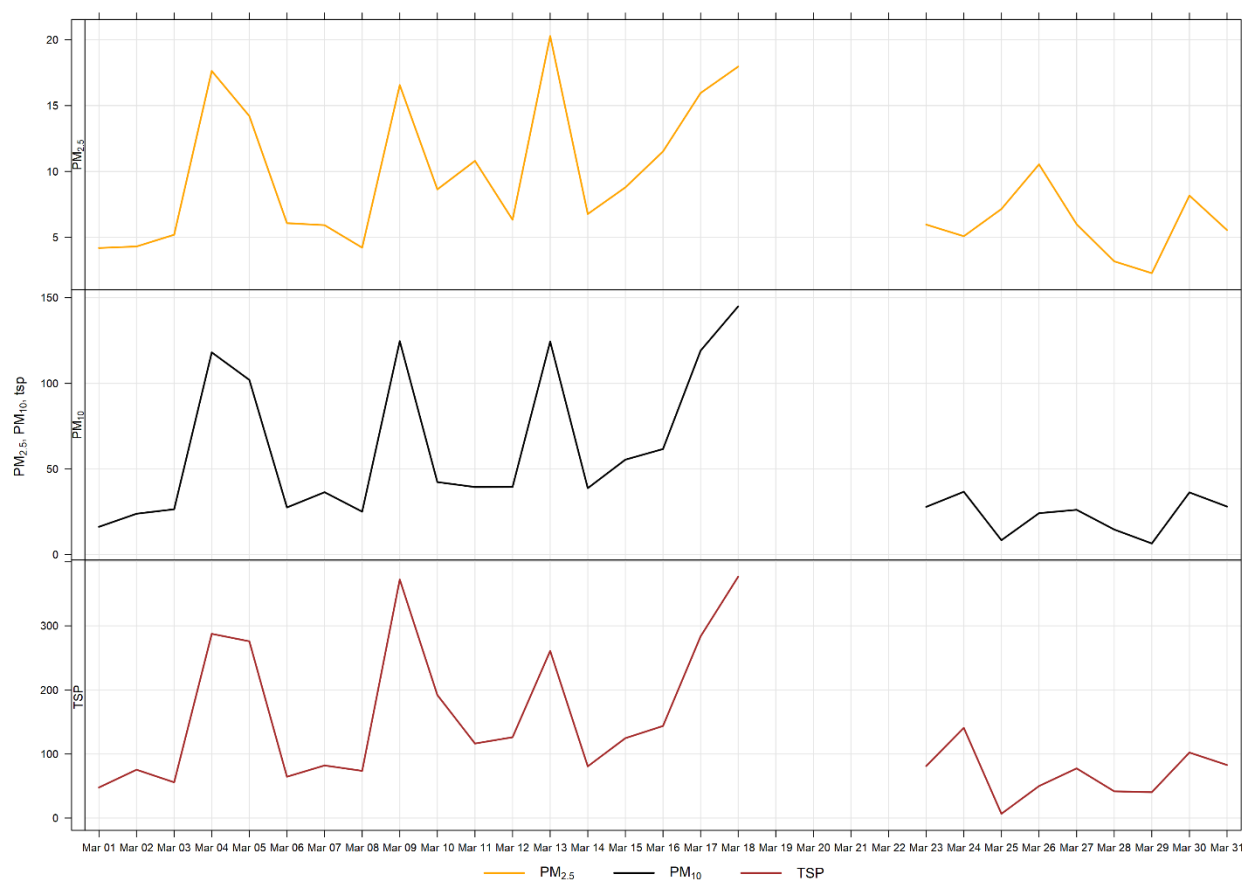


Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

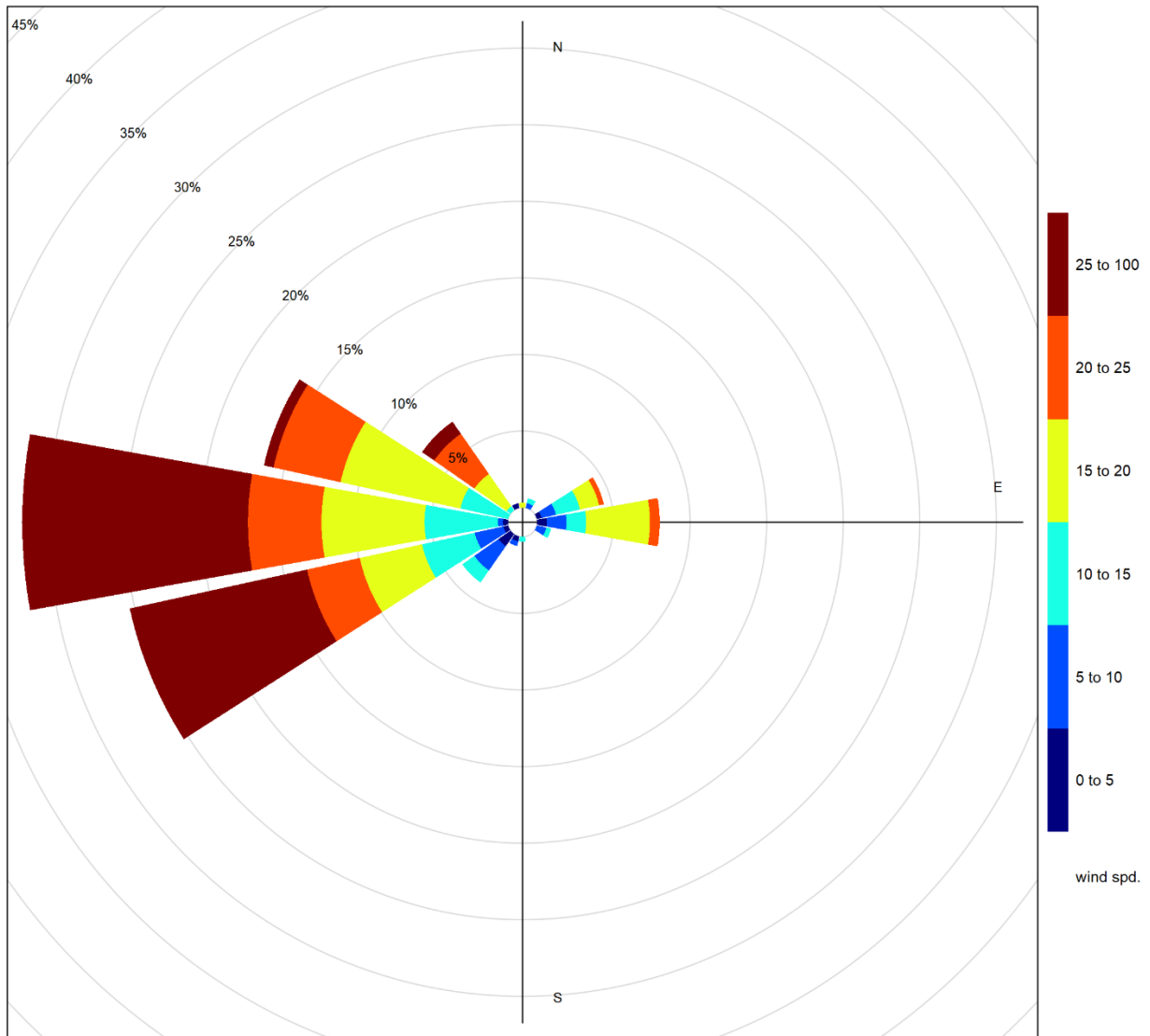


Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 7-4 illustrates the hourly PM concentrations recorded at the Entrance monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 7-4 is based on data collected during March 2021. The diurnal pattern differs from the Windridge, Lagoon and Berm stations and are 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.

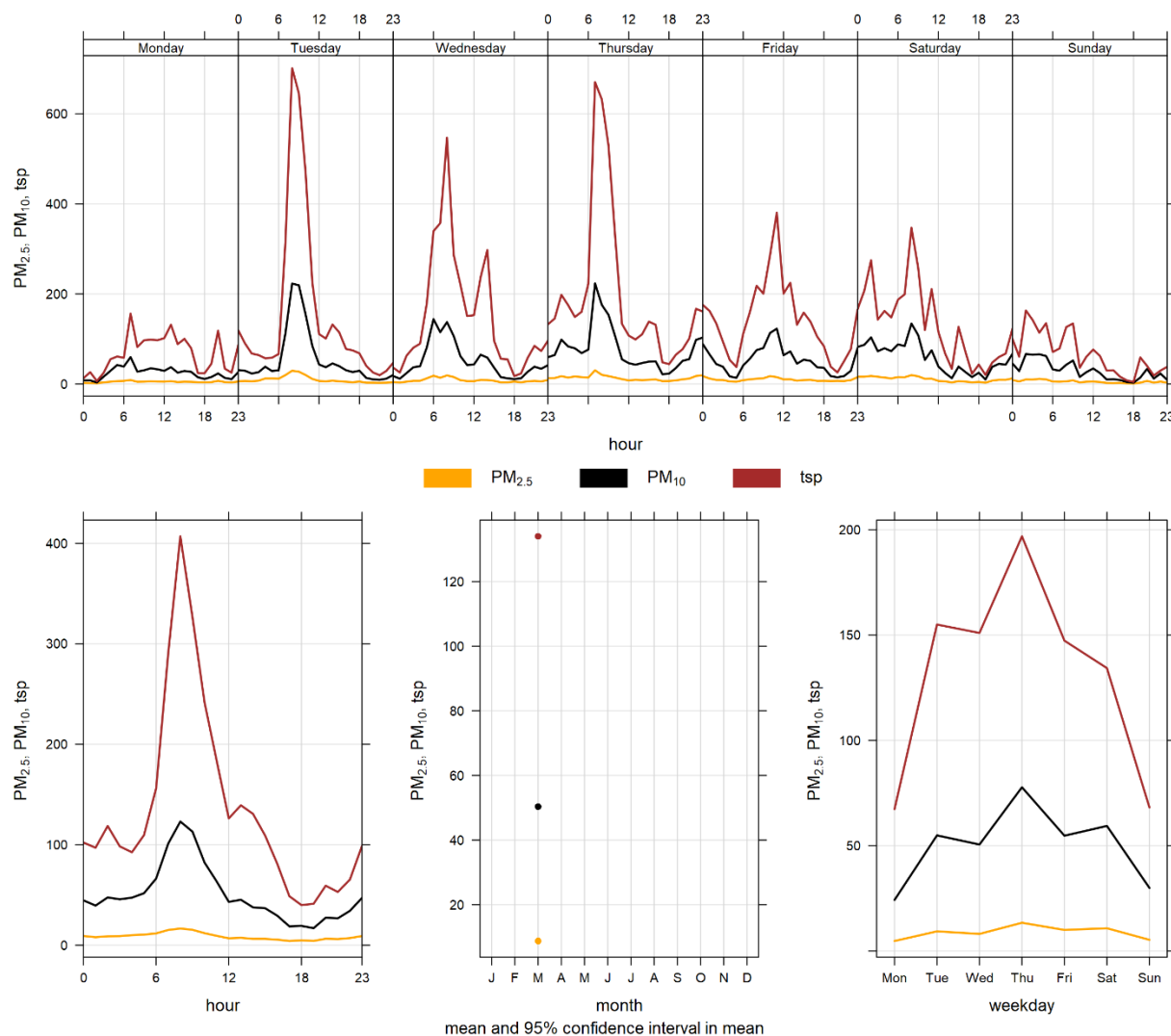


Figure 7-4 Entrance particulate matter time variation

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- Levelton Consultants Ltd. (2015, June 15). Comparison of GRIMM and E-BAM Data. Alberta, Can

APPENDIX

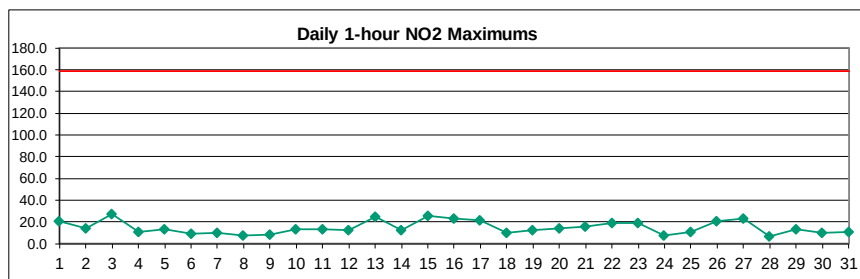
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – March 2021

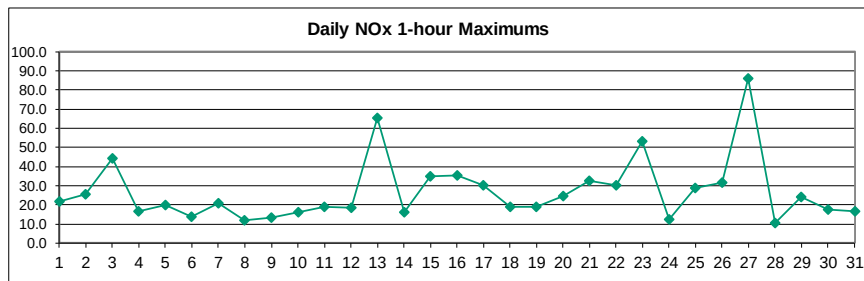
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.2	S	0.0	0.0	1.8	0.4	0.7	3.3	7.2	3.7	0.0	0.0	1.2	0.0	0.0	3.8	8.8	6.4	6.4	7.4	20.9	10.2	0.4	9.2	4.0	20.9
2	14.4	S	3.3	0.0	6.8	2.3	4.7	5.7	0.7	1.3	0.7	1.3	1.1	0.4	1.8	0.2	0.0	0.0	0.0	0.0	1.8	4.0	4.1	7.2	2.7	14.4
3	3.0	S	1.6	7.6	2.9	2.2	2.8	13.7	27.6	10.8	5.7	3.3	3.1	1.0	1.3	3.8	2.8	0.6	1.5	4.9	3.3	1.7	3.3	10.2	5.1	27.6
4	10.6	S	6.6	8.0	6.5	6.1	6.7	6.1	6.5	5.8	4.1	4.3	2.5	5.6	5.5	6.8	5.3	3.3	6.4	4.2	6.4	6.4	10.9	9.8	6.3	10.9
5	13.6	S	12.1	5.8	2.2	1.5	9.2	6.2	8.2	11.1	8.6	6.3	4.7	3.8	3.3	4.3	4.5	4.6	3.7	2.9	2.1	2.1	2.3	8.4	5.7	13.6
6	2.2	S	1.1	2.9	0.1	2.8	4.8	3.8	4.2	3.4	3.7	1.9	6.8	5.1	9.6	6.2	0.3	2.6	3.2	1.7	5.2	5.1	6.6	7.0	3.9	9.6
7	10.1	S	4.7	6.3	6.8	3.0	3.0	4.2	5.1	4.9	8.0	2.5	1.6	1.5	2.8	0.0	6.0	0.0	2.7	2.2	4.1	1.4	3.6	2.1	3.8	10.1
8	1.5	S	2.1	2.9	1.6	5.3	3.0	7.6	2.6	2.5	4.7	4.9	5.3	2.3	1.9	0.0	1.3	0.9	1.6	7.0	5.5	0.8	5.4	7.1	3.4	7.6
9	6.6	S	4.4	3.6	8.1	4.9	5.3	6.0	7.7	4.3	3.5	4.5	6.6	3.7	1.7	0.3	1.1	0.0	0.1	0.2	4.4	0.2	5.9	1.9	3.7	8.1
10	4.2	S	3.3	7.1	7.8	7.3	13.3	7.5	1.5	0.5	0.5	0.2	0.2	0.9	2.4	3.7	3.5	4.3	4.6	2.3	3.6	2.3	6.2	9.9	4.2	13.3
11	13.8	S	12.2	12.3	10.2	7.2	6.4	8.5	7.6	8.9	3.3	C	C	C	C	C	6.0	3.0	0.5	0.3	0.5	0.6	0.2	0.0	5.6	13.8
12	0.0	S	3.1	10.6	0.4	2.1	8.3	5.8	7.5	0.0	0.1	0.0	3.5	1.5	0.0	3.7	3.0	1.4	0.0	0.0	7.4	3.5	11.1	12.9	3.7	12.9
13	8.0	S	7.8	6.0	3.4	7.6	8.7	5.9	17.0	16.9	24.5	4.7	2.7	2.4	0.0	3.3	8.3	2.8	4.5	5.6	8.4	7.7	6.7	8.8	7.5	24.5
14	4.7	S	4.9	2.3	2.3	7.7	5.0	5.4	2.2	3.8	7.6	6.2	1.0	0.0	0.0	0.0	4.4	0.6	0.0	0.0	3.1	2.5	11.1	12.7	3.8	12.7
15	2.2	S	4.7	4.2	8.3	13.0	11.8	11.2	1.5	7.3	0.0	4.4	1.9	2.4	0.1	7.9	7.5	6.3	0.5	0.6	11.1	16.1	26.1	14.7	7.1	26.1
16	18.7	S	11.6	19.3	23.1	15.8	15.1	12.5	12.6	14.3	4.4	2.1	0.3	0.0	0.0	0.0	0.3	0.5	5.1	1.4	10.2	14.3	16.5	16.9	9.4	23.1
17	21.4	S	19.2	17.9	13.4	12.4	13.6	9.2	8.7	6.0	4.6	8.7	1.0	1.1	0.7	0.1	0.0	0.0	7.3	5.3	2.5	5.0	4.8	2.3	7.2	21.4
18	6.8	S	7.3	4.9	4.1	4.2	5.5	4.5	5.0	2.8	9.3	10.0	8.3	2.0	1.9	0.0	0.0	0.0	0.0	2.0	1.4	5.4	7.7	6.6	4.3	10.0
19	9.2	S	0.0	0.0	1.5	1.2	12.8	10.2	4.1	7.7	2.7	4.8	0.8	0.0	0.0	0.0	0.0	0.0	0.4	2.3	0.0	0.1	0.1	0.0	2.5	12.8
20	2.4	S	1.9	0.0	0.0	3.5	10.2	14.3	1.4	0.0	0.0	0.0	0.0	2.9	0.0	3.3	10.0	13.1	8.3	4.6	6.5	6.3	3.3	8.8	4.4	14.3
21	5.8	S	1.7	1.7	5.1	12.5	10.7	0.0	0.0	7.4	15.5	3.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.9	10.3	8.7	4.0	15.5
22	2.6	S	0.1	2.0	0.2	8.5	10.1	18.8	8.0	11.0	4.8	1.9	0.7	1.6	2.8	10.6	4.0	0.0	0.0	2.6	0.9	10.1	12.8	11.9	5.5	18.8
23	14.7	S	14.8	11.5	12.9	6.1	8.2	9.8	10.3	19.0	11.5	5.9	2.4	1.2	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.3	6.9	5.9	19.0
24	0.4	S	1.8	0.0	0.0	0.4	3.8	5.6	2.1	3.5	2.4	0.0	5.3	5.8	3.5	4.1	0.0	0.5	1.1	1.1	0.7	7.8	0.2	0.0	2.2	7.8
25	0.0	S	3.1	5.7	1.9	4.8	9.4	5.3	2.6	1.1	1.0	1.1	1.0	1.4	8.4	10.9	4.9	2.2	3.0	7.0	4.7	4.8	7.2	7.5	4.3	10.9
26	14.4	S	16.1	12.2	8.5	8.2	7.3	8.2	8.5	6.1	11.0	6.2	4.8	4.3	12.6	7.9	7.3	15.9	17.6	19.7	14.0	9.5	11.9	20.8	11.0	20.8
27	23.3	S	22.6	23.6	19.1	7.1	9.2	2.9	1.7	0.3	2.0	0.2	1.4	2.1	1.8	8.2	3.5	1.5	2.3	1.5	2.4	0.9	1.1	4.5	6.2	23.6
28	5.3	S	0.0	0.6	1.6	5.3	6.9	5.6	2.2	1.5	2.1	X	X	4.4	3.9	0.3	0.7	1.0	0.7	1.8	0.0	0.0	0.0	3.7	2.3	6.9
29	0.7	S	6.4	0.0	4.1	7.6	10.7	13.4	3.8	0.0	0.0	0.0	0.4	3.4	4.0	5.0	1.2	3.0	1.9	5.5	7.2	0.0	3.5	1.2	3.6	13.4
30	3.3	S	6.9	6.8	9.1	6.7	9.5	10.1	7.7	4.4	1.3	3.7	1.9	1.0	0.0	0.0	1.5	2.4	5.6	3.5	1.0	0.5	0.0	0.0	3.8	10.1
31	0.0	S	1.8	0.2	2.4	5.4	11.1	7.7	3.9	0.7	1.0	3.5	0.2	0.3	0.0	0.0	0.0	1.5	1.6	0.0	1.4	0.1	0.3	1.9	2.0	11.1
NO.	31	-	31	31	31	31	31	31	31	31	29	29	29	30	30	30	31	31	31	31	31	31	31	31	706	99.7%
MEAN	7.3	-	6.0	6.0	5.7	5.9	8.0	7.7	6.1	5.5	4.8	3.3	2.5	2.1	2.3	3.1	3.1	2.5	2.9	3.2	4.5	4.4	5.9	7.2		
MAX	23.3	-	22.6	23.6	23.1	15.8	18.8	27.6	19.0	24.5	10.0	8.3	5.8	12.6	10.9	10.0	15.9	17.6	19.7	20.9	16.1	26.1	20.8			



Number of 1HR Exceedences	0
Number of Non-Zero Readings	617
Maximum 1-HR Average	27.6 PPB
Maximum 24-HR Average	11.0 PPB
Monthly Calibration	5
Standard Deviation	4.8
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	4.8 PPB

Lagoon NOx (ppb) – March 2021

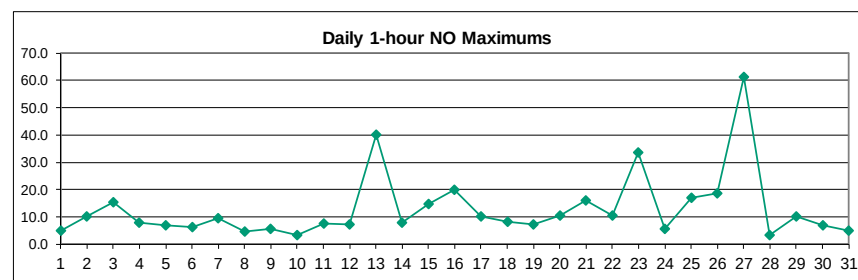
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.7	S	0.0	0.0	2.3	0.5	1.0	4.9	11.3	7.0	0.0	0.4	1.8	0.0	0.0	7.8	12.3	7.2	8.6	7.9	21.7	12.5	0.4	15.1	5.4	21.7
2	25.5	S	4.8	0.0	9.7	2.7	7.2	8.2	1.3	2.4	1.5	3.4	2.5	1.3	2.9	0.7	0.0	0.1	0.0	0.0	2.8	5.6	5.9	10.2	4.3	25.5
3	2.9	S	1.6	10.2	3.1	2.6	3.0	23.5	44.2	16.6	9.4	6.1	6.6	1.9	2.0	6.7	4.0	0.5	1.5	8.0	3.3	1.5	4.2	10.6	7.6	44.2
4	10.6	S	7.0	10.1	6.4	7.0	9.1	6.7	8.8	8.5	6.5	6.4	3.8	9.6	7.7	15.6	8.0	3.8	7.7	4.1	6.3	6.2	16.7	12.3	8.2	16.7
5	19.9	S	15.5	8.1	2.1	1.7	17.2	6.6	11.5	15.9	12.5	10.6	7.8	5.7	4.9	6.6	6.6	6.5	4.7	3.6	2.9	3.1	3.0	14.1	8.3	19.9
6	2.7	S	1.5	4.1	0.1	4.4	5.2	3.8	4.8	4.6	5.9	2.4	10.2	7.3	13.7	8.1	0.3	3.5	4.0	1.8	5.5	7.4	14.0	10.5	5.5	14.0
7	20.6	S	5.5	9.1	9.3	3.1	3.2	4.7	6.7	5.7	12.6	3.5	3.3	2.4	5.2	0.0	11.7	0.0	3.2	2.3	8.3	1.4	5.0	2.0	5.6	20.6
8	1.5	S	2.3	4.3	2.8	7.0	3.4	11.8	4.1	4.1	8.0	9.4	10.8	4.1	3.3	0.0	2.0	1.0	1.5	8.4	6.0	0.8	6.3	9.0	4.9	11.8
9	6.8	S	6.4	3.5	12.9	5.3	5.5	7.5	12.8	7.0	6.2	7.8	13.1	5.7	3.7	0.2	1.5	0.0	0.1	0.2	5.8	0.2	9.7	2.3	5.4	13.1
10	6.9	S	3.4	9.6	10.9	7.7	16.3	8.4	1.6	0.7	0.7	0.6	0.5	2.7	3.6	5.3	5.7	5.8	4.8	2.3	4.4	2.1	6.8	14.4	5.4	16.3
11	18.9	S	16.5	16.3	12.5	8.5	9.1	15.9	14.1	17.4	6.3	C	C	C	C	C	9.5	3.8	0.4	0.2	0.3	0.8	0.2	0.0	8.4	18.9
12	0.0	S	4.3	18.6	0.3	2.5	13.0	7.9	13.4	0.2	0.6	0.0	6.7	2.6	0.0	8.5	4.7	1.6	0.0	0.0	9.3	4.3	16.2	17.6	5.7	18.6
13	12.0	S	11.7	8.6	3.8	11.7	14.7	11.1	42.1	43.5	65.4	8.7	5.1	4.2	0.3	5.1	20.7	3.1	4.5	5.5	8.6	7.6	6.5	8.8	13.6	65.4
14	4.6	S	5.5	2.0	2.3	16.3	8.6	6.5	2.6	7.0	14.1	10.2	2.4	0.0	0.0	0.0	6.1	0.6	0.0	0.0	3.6	2.4	16.0	15.6	5.5	16.3
15	2.5	S	5.0	4.4	10.8	24.1	12.4	17.7	3.3	22.7	0.3	7.6	3.3	3.8	0.3	13.6	11.6	9.0	0.2	0.5	12.3	21.3	34.8	15.0	10.3	34.8
16	24.7	S	11.5	23.4	24.9	22.8	24.1	18.9	26.6	35.2	7.7	4.0	0.8	0.0	0.0	0.0	0.7	0.6	5.1	1.2	10.3	17.1	17.2	24.8	13.1	35.2
17	22.0	S	30.1	27.5	18.6	14.2	18.0	10.4	13.2	9.4	7.2	19.4	1.7	2.0	1.5	0.3	0.0	0.0	9.1	5.1	2.3	4.7	6.4	2.3	9.8	30.1
18	10.9	S	10.4	5.4	4.2	6.0	7.7	5.2	7.3	4.3	17.0	19.1	15.2	3.4	3.3	0.0	0.0	0.0	0.0	1.8	1.2	5.9	7.7	9.0	6.3	19.1
19	12.4	S	0.0	0.0	1.9	1.3	18.9	14.0	5.3	15.6	4.9	10.2	1.4	0.0	0.0	0.0	0.0	0.0	0.4	3.0	0.0	0.0	0.0	0.0	3.9	18.9
20	3.1	S	3.9	0.1	0.0	4.9	11.2	19.6	1.9	0.0	0.0	0.0	8.3	0.0	0.0	7.3	19.4	24.4	15.9	7.2	10.0	8.7	4.2	12.3	7.1	24.4
21	7.0	S	1.8	2.0	6.6	17.3	14.0	0.0	0.0	12.1	32.4	5.9	5.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	21.7	14.7	6.8	32.4
22	4.3	S	0.1	3.4	0.1	14.3	14.7	30.2	11.8	20.1	7.4	3.3	1.6	2.6	4.0	14.2	4.5	0.0	0.0	4.3	0.7	9.8	15.2	12.1	7.8	30.2
23	19.3	S	15.8	13.1	22.9	9.3	16.9	17.2	21.4	53.4	31.9	13.5	6.1	2.7	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.5	11.0	11.1	53.4
24	0.4	S	2.7	0.0	0.0	0.4	4.5	7.8	3.1	5.6	3.6	0.0	10.1	12.2	7.3	6.3	0.0	0.8	1.3	0.8	0.8	10.9	0.0	0.0	3.4	12.2
25	0.0	S	3.2	7.5	2.1	7.2	17.3	9.8	4.4	2.3	2.1	2.6	2.1	3.3	17.7	28.6	9.2	2.5	3.0	9.0	4.9	4.9	7.5	7.8	6.9	28.6
26	18.8	S	19.6	12.5	9.1	11.9	9.5	10.8	18.1	15.8	30.6	14.5	10.1	9.7	29.3	13.9	12.1	29.5	27.2	28.2	17.8	9.6	13.2	31.4	17.5	31.4
27	49.3	S	43.5	85.8	29.2	11.0	13.2	3.7	2.7	0.6	3.6	0.7	3.0	3.8	3.4	17.6	6.5	1.9	2.9	1.6	2.9	1.0	1.7	7.0	12.9	85.8
28	9.2	S	0.0	0.8	1.8	7.7	10.5	8.8	3.3	3.1	4.4	X	X	4.8	4.7	0.2	0.7	0.8	0.7	1.6	0.0	0.0	0.0	4.1	3.2	10.5
29	0.4	S	7.1	0.0	4.0	8.8	15.0	24.1	7.2	0.0	0.0	0.0	1.7	8.3	7.8	8.1	1.9	5.2	2.2	6.5	9.5	0.0	4.0	1.1	5.4	24.1
30	3.4	S	7.5	8.8	10.5	7.4	14.8	17.7	14.9	9.2	3.0	8.4	3.8	2.2	0.3	0.1	3.3	3.7	9.6	5.6	1.2	0.3	0.0	0.0	5.9	17.7
31	0.0	S	2.1	0.0	4.0	8.0	16.6	12.3	6.7	1.3	2.6	7.1	0.7	1.0	0.0	0.0	0.0	3.1	2.1	0.0	1.8	0.0	0.2	2.5	3.1	16.6
NO.	31	-	31	31	31	31	31	31	31	31	31	31	29	29	30	30	30	31	31	31	31	31	31	31	706	99.7%
MEAN	10.4	-	8.1	9.6	7.4	8.3	11.5	11.5	10.7	11.3	10.0	6.4	4.9	3.9	4.2	5.8	5.3	3.8	3.9	3.9	5.3	5.3	7.9	9.6		
MAX	49.3	-	43.5	85.8	29.2	24.1	24.1	30.2	44.2	53.4	65.4	19.4	15.2	12.2	29.3	28.6	20.7	29.5	27.2	28.2	21.7	21.3	34.8	31.4		



Number of Non-Zero Readings	620
Maximum 1-HR Average	85.8 PPB
Maximum 24-HR Average	17.5 PPB
Monthly Calibration	5
Standard Deviation	8.58
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	7.4 PPB

Lagoon NO (ppb) – March 2021

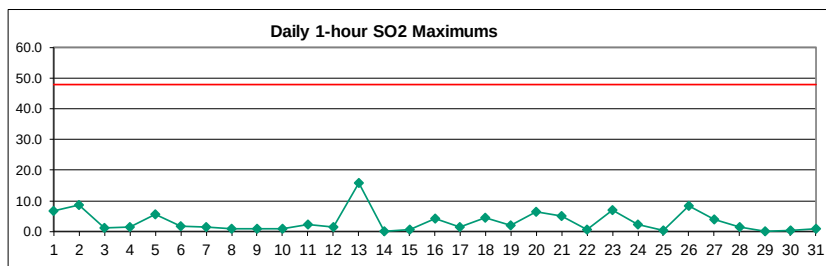
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	S	0.0	0.0	0.0	0.0	0.0	0.6	3.1	2.3	0.0	0.0	0.0	0.0	0.0	2.9	2.5	0.0	1.3	0.0	0.0	1.4	0.0	5.0	0.8	5.0
2	10.1	S	0.5	0.0	1.8	0.0	1.5	1.6	0.0	0.1	0.0	1.1	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	2.0	0.9	10.1
3	0.0	S	0.0	1.6	0.0	0.0	0.0	8.7	15.5	4.7	2.7	1.9	2.6	0.0	0.0	2.0	0.2	0.0	0.0	2.1	0.0	0.0	0.0	0.0	1.8	15.5
4	0.0	S	0.0	1.2	0.0	0.0	1.4	0.0	1.4	1.8	1.5	1.2	0.4	3.1	1.3	8.0	1.9	0.0	0.5	0.0	0.0	0.0	4.9	1.5	1.3	8.0
5	5.4	S	2.5	1.4	0.0	0.0	7.1	0.0	2.4	3.8	3.0	3.4	2.2	1.0	0.7	1.4	1.2	1.0	0.1	0.0	0.0	0.1	0.0	4.7	1.8	7.1
6	0.0	S	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.3	1.3	0.0	2.4	1.3	3.2	1.0	0.0	0.0	0.0	0.0	0.0	1.3	6.4	2.6	0.9	6.4
7	9.5	S	0.0	1.8	1.6	0.0	0.0	0.0	0.8	0.1	3.7	0.2	0.8	0.0	1.5	0.0	4.8	0.0	0.0	0.0	3.2	0.0	0.5	0.0	1.2	9.5
8	0.0	S	0.0	0.5	0.3	0.9	0.0	3.4	0.6	0.7	2.4	3.6	4.6	0.9	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.0	0.9	4.6
9	0.0	S	1.1	0.0	4.0	0.0	0.0	0.7	4.2	1.8	1.9	2.4	5.6	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.8	0.0	1.2	5.6
10	1.7	S	0.0	1.6	2.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.5	1.2	0.5	0.0	0.0	0.0	0.0	0.0	3.5	0.6	3.5
11	4.1	S	3.3	3.0	1.4	0.4	1.7	6.4	5.5	7.6	2.2	C	C	C	C	C	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	7.6
12	0.0	S	0.5	7.2	0.0	0.0	4.0	1.4	5.1	0.0	0.0	0.0	2.5	0.4	0.0	4.1	0.9	0.0	0.0	0.0	1.1	0.0	4.4	4.0	1.5	7.2
13	3.2	S	3.1	1.9	0.0	3.3	5.2	4.4	24.2	25.7	40.0	3.2	1.6	1.1	0.0	1.2	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	40.0
14	0.0	S	0.0	0.0	0.0	7.8	2.9	0.4	0.0	2.4	5.8	3.3	0.7	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	4.3	2.3	1.3	7.8
15	0.0	S	0.0	0.0	1.8	10.5	0.0	5.7	1.0	14.6	0.0	2.5	0.7	0.6	0.0	4.9	3.3	1.9	0.0	0.0	0.6	4.4	7.8	0.0	2.6	14.6
16	5.2	S	0.0	3.3	1.0	6.1	8.2	5.7	13.3	20.0	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	7.2	3.3	20.0
17	0.0	S	10.1	8.8	4.4	1.1	3.7	0.6	3.8	2.6	1.9	10.0	0.0	0.2	0.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.9	0.0	2.1	10.1
18	3.3	S	2.4	0.0	0.0	1.1	1.5	0.0	1.6	0.8	7.0	8.4	6.1	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.5	8.4
19	2.5	S	0.0	0.0	0.0	0.0	5.4	3.1	0.5	7.1	1.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.1	7.1
20	0.1	S	1.4	0.0	0.0	0.8	0.5	4.6	0.0	0.0	0.0	0.0	0.0	4.8	0.0	3.3	8.7	10.6	6.9	2.0	2.9	1.8	0.4	2.9	2.2	10.6
21	0.6	S	0.0	0.0	0.9	4.1	2.7	0.0	0.0	4.1	16.1	1.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	10.7	5.3	2.4	16.1
22	1.1	S	0.0	0.8	0.0	5.2	3.9	10.6	3.2	8.4	2.0	0.8	0.3	0.4	0.6	2.9	0.0	0.0	0.0	1.1	0.0	0.0	1.9	0.0	1.9	10.6
23	4.0	S	0.4	1.1	9.3	2.6	8.0	6.7	10.4	33.5	19.7	6.9	3.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.8	33.5
24	0.0	S	0.2	0.0	0.0	0.0	0.2	1.6	0.4	1.5	0.7	0.0	4.2	5.8	3.2	1.6	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	1.0	5.8
25	0.0	S	0.0	1.2	0.0	1.8	7.2	3.8	1.1	0.6	0.5	0.8	0.4	1.3	8.7	17.0	3.6	0.0	0.0	1.4	0.0	0.0	0.0	0.0	2.1	17.0
26	3.8	S	2.9	0.0	0.0	3.0	1.6	2.0	9.0	9.0	18.8	7.7	4.7	4.7	16.0	5.4	4.2	12.9	8.9	7.8	3.2	0.0	0.6	9.8	5.9	18.8
27	25.2	S	20.0	61.4	9.4	3.3	3.3	0.3	0.4	0.0	1.0	0.0	1.0	1.1	0.9	8.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.1	61.4
28	3.3	S	0.0	0.0	0.0	1.9	3.0	2.6	0.5	1.0	1.7	X	X	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.3
29	0.0	S	0.2	0.0	0.0	0.7	3.8	10.2	2.9	0.0	0.0	0.0	0.8	4.3	3.2	2.6	0.2	1.7	0.0	0.4	1.7	0.0	0.0	0.0	1.4	10.2
30	0.0	S	0.2	1.4	0.9	0.3	4.8	7.0	6.7	4.1	1.1	4.1	1.4	0.6	0.0	0.0	1.3	0.8	3.4	1.5	0.0	0.0	0.0	0.0	1.7	7.0
31	0.0	S	0.0	0.0	0.9	2.0	4.9	4.0	2.2	0.1	1.0	3.0	0.0	0.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	4.9
NO.	31	-	31	31	31	31	31	31	31	31	31	29	29	30	30	30	31	31	31	31	31	31	31	31	706	99.7%
MEAN	2.7	-	1.6	3.2	1.3	1.9	2.9	3.1	3.9	5.1	4.5	2.5	1.7	1.2	1.4	2.3	1.7	1.0	0.7	0.5	0.4	0.7	1.5	1.9		
MAX	25.2	-	20.0	61.4	9.4	10.5	8.2	10.6	24.2	33.5	40.0	10.0	6.1	5.8	16.0	17.0	11.7	12.9	8.9	7.8	3.2	6.4	10.7	9.8		



Number of Non-Zero Readings	400		
Maximum 1-HR Average	61.4 PPB		
Maximum 24-HR Average	6.1 PPB		
Monthly Calibration	5	Operational Time	742 HRS
Standard Deviation	4.462	Operational Uptime	99.7 %
		Monthly Average	2.1 PPB

Lagoon SO₂ (ppb) – March 2021

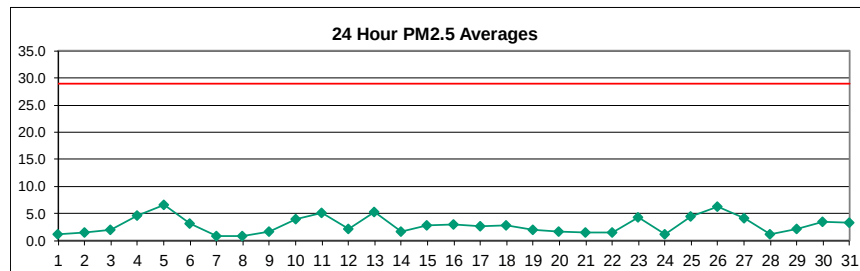
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.7	S	0.5	0.7	0.8	0.4	0.4	0.2	0.8	0.3	0.5	0.3	0.3	0.5	0.9	0.2	1.2	0.4	1.9	1.8	1.7	1.5	1.0	6.6	1.0	6.6
2	8.6	S	2.9	0.9	1.4	0.7	2.7	0.9	0.8	0.5	0.6	1.4	1.5	0.4	1.5	0.4	0.8	1.0	0.4	0.7	0.3	0.7	0.9	0.5	1.3	8.6
3	0.5	S	0.3	0.4	0.7	0.4	0.8	0.5	0.8	1.0	0.8	0.4	0.0	0.0	0.7	0.5	0.0	0.6	0.7	0.7	0.6	1.2	0.0	0.0	0.5	1.2
4	0.3	S	0.2	0.4	0.4	0.0	0.1	0.5	0.4	0.6	0.5	0.6	0.6	0.5	0.1	0.9	1.4	0.2	0.0	0.2	0.7	0.6	0.5	0.3	0.4	1.4
5	0.4	S	0.1	0.5	0.0	0.5	0.9	1.0	1.3	1.6	1.5	3.8	4.7	3.9	3.0	5.6	1.8	3.8	3.9	3.0	0.9	1.5	2.3	2.3	2.1	5.6
6	1.5	S	1.5	1.8	1.4	0.9	0.3	0.5	0.5	1.7	1.0	1.7	0.8	0.7	0.9	0.6	0.5	0.6	0.3	0.8	0.1	0.0	0.4	0.0	0.8	1.8
7	0.4	S	0.4	0.7	1.4	1.5	1.1	1.3	0.8	0.6	0.6	0.4	0.7	1.3	0.5	0.0	0.1	0.5	0.3	0.0	0.4	0.3	0.4	0.4	0.6	1.5
8	0.7	S	0.1	0.1	0.5	0.7	0.2	0.1	0.3	0.4	0.5	0.6	0.2	0.7	0.8	0.0	0.4	0.4	0.5	0.4	0.6	0.3	0.0	0.4	0.4	0.8
9	0.4	S	0.5	0.0	0.5	0.4	0.0	0.4	0.7	0.6	0.2	0.7	0.4	0.7	0.8	0.0	0.0	0.2	0.0	0.5	1.0	0.6	0.4	0.6	0.4	1.0
10	0.9	S	0.7	0.6	0.7	0.9	0.6	0.0	0.8	0.7	0.1	0.8	0.3	0.3	0.7	0.3	0.6	0.6	0.6	0.2	0.1	0.1	0.6	0.5	0.9	0.9
11	1.8	S	0.9	0.9	0.9	0.9	0.9	1.0	1.4	2.3	0.6	C	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.3
12	0.0	S	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.9	1.5	0.2	1.5
13	0.9	S	2.5	0.2	0.0	0.4	1.3	0.0	8.3	9.5	15.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	15.8
14	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	S	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
16	0.0	S	0.0	0.0	0.0	0.2	0.3	0.0	0.5	4.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.3
17	0.0	S	1.5	0.8	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	1.5
18	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	2.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	4.6
19	2.0	S	0.0	0.0	0.1	0.2	1.0	0.3	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.0
20	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.6	3.1	6.4	4.7	0.0	0.0	0.0	0.0	0.0	0.7	6.4
21	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.0	1.7	0.5	5.0
22	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
23	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	1.5	7.0	4.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	7.0
24	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.6	2.3	1.9	0.8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	2.3
25	0.0	S	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.1	0.4	0.0	0.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.4
26	0.0	S	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	5.5	1.6	1.5	1.8	6.5	2.6	3.0	8.3	4.8	0.0	0.3	0.0	0.0	0.0	1.6	8.3
27	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	4.0	
28	1.4	S	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.2	1.0	1.1	0.8	0.4	0.0	0.0	0.4	0.2	0.5	0.0	0.0	0.2	0.0	0.3	1.5
29	0.0	S	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30	0.0	S	0.0	0.0	0.0	0.0	0.5	0.4	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	0.1	0.5
31	0.0	S	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	0.0	0.0	0.0	0.0	0.0	0.0	1.0
NO.	31	-	31	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	708	100.0%
MEAN	0.7	-	0.4	0.3	0.3	0.3	0.4	0.3	0.6	1.0	1.3	0.6	0.5	0.5	0.6	0.6	0.4	0.8	0.6	0.3	0.2	0.3	0.4	0.5		
MAX	8.6	-	2.9	1.8	1.4	1.5	2.7	1.5	8.3	9.5	15.8	3.8	4.7	3.9	6.5	5.6	3.1	8.3	4.8	3.0	1.7	1.8	5.0	6.6		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	329
Maximum 1-HR Average	15.8 PPB
Maximum 24-HR Average	2.1 PPB
Monthly Calibration	5
Standard Deviation	1.259
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	0.5 PPB

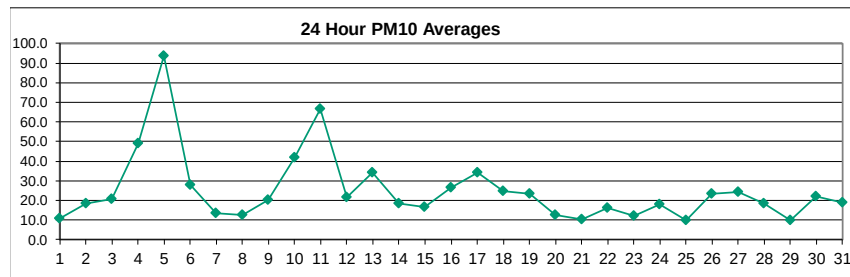
Lagoon PM_{2.5} (µg/m³) – March 2021

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.4	0.8	0.0	0.0	0.0	0.8	0.1	0.0	3.3	4.7	0.5	0.0	0.0	1.2	1.7	0.0	0.0	0.8	1.5	3.0	6.9	4.3	0.0	1.3	6.9
2	0.0	8.0	5.5	2.6	0.1	0.0	0.8	2.2	1.9	0.0	0.0	0.0	0.0	0.1	1.5	0.4	0.0	4.3	4.0	0.5	0.1	1.9	3.0	0.1	1.5	8.0
3	0.1	1.2	0.0	0.1	2.6	1.9	0.0	0.0	0.1	13.0	8.4	3.0	1.6	2.2	0.2	0.0	0.0	0.0	0.4	3.7	3.3	3.0	2.2	1.9	2.0	13.0
4	4.7	4.4	5.8	5.5	6.2	4.4	1.6	1.9	2.4	2.6	6.5	5.8	10.4	7.6	10.1	7.3	4.4	1.9	0.8	1.5	3.0	2.6	4.0	6.9	4.7	10.4
5	6.2	5.8	5.8	9.4	11.2	5.8	1.9	1.5	1.9	4.7	5.8	3.3	15.5	14.4	11.2	7.6	7.3	5.5	4.0	4.4	6.5	5.1	4.4	7.6	6.5	15.5
6	8.7	5.1	3.7	3.3	2.6	0.8	3.7	4.0	3.0	4.0	6.5	5.5	5.8	2.4	0.0	0.2	0.0	3.3	3.7	1.9	0.0	0.4	3.6	2.6	3.1	8.7
7	1.2	2.5	2.2	0.1	0.0	0.0	0.0	0.0	0.0	1.5	1.5	4.4	3.0	0.5	1.9	0.0	0.0	0.0	1.2	0.8	0.0	0.8	1.0	0.0	0.9	4.4
8	0.0	0.0	0.0	2.2	1.2	0.0	0.4	1.6	3.6	1.5	0.0	1.9	1.9	2.2	1.7	1.1	0.1	0.0	0.8	1.5	0.1	0.0	0.1	0.0	0.9	3.6
9	0.0	0.0	1.9	1.0	1.9	4.4	3.3	1.2	0.4	3.3	2.6	0.1	1.5	5.5	C	C	C	1.5	2.2	1.9	1.5	0.8	0.1	1.5	1.7	5.5
10	15.4	X	3.4	4.1	4.3	3.2	1.3	3.1	5.5	6.4	3.8	0.0	0.0	0.0	4.0	4.0	3.0	3.7	4.2	7.2	4.8	3.6	3.1	5.5	4.1	15.4
11	7.1	16.9	14.6	10.0	8.2	5.4	3.6	2.4	4.5	6.6	6.8	4.4	Y	Y	Y	Y	5.3	3.1	2.9	1.1	0.2	1.4	0.0	0.0	5.2	16.9
12	0.0	0.0	0.0	1.3	3.3	2.5	0.6	2.7	5.4	4.6	2.1	0.0	0.0	0.0	0.8	0.9	2.8	0.9	2.0	3.6	1.6	3.2	5.6	7.4	2.1	7.4
13	9.1	9.6	5.5	3.2	1.9	1.7	4.5	5.9	7.2	13.2	10.4	9.3	6.4	3.2	0.4	0.0	0.0	0.0	1.6	2.9	2.1	6.1	11.8	9.7	5.2	13.2
14	7.2	4.9	2.2	0.8	0.2	0.0	3.4	4.0	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.8	0.5	0.9	3.6	2.6	2.0	1.8	7.2
15	4.0	3.6	2.9	2.3	2.6	2.6	9.8	10.6	5.6	1.1	0.8	0.9	2.6	2.1	0.0	0.0	0.0	1.7	4.7	3.2	1.2	2.5	1.6	2.7	2.9	10.6
16	5.4	4.0	3.7	4.8	4.7	4.2	2.4	4.4	4.0	3.6	7.9	5.6	2.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.1	5.1	5.1	3.0	7.9
17	4.4	6.2	5.8	5.5	5.0	3.3	3.0	3.6	2.2	1.7	4.4	5.4	3.9	1.8	0.8	0.4	0.1	0.0	0.0	0.0	1.5	1.9	1.9	1.5	2.7	6.2
18	0.3	0.0	0.0	2.4	4.7	3.1	2.9	2.6	2.3	3.6	2.6	2.0	4.4	3.9	2.1	0.2	3.2	6.7	3.3	2.6	3.4	4.1	4.7	2.9	2.8	6.7
19	3.0	3.6	2.5	1.5	1.1	6.6	6.8	4.0	3.4	4.3	4.0	X	3.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.0	0.0	2.1	6.8
20	0.0	P	0.0	0.0	0.0	0.8	1.3	3.0	4.5	5.7	2.6	0.0	0.0	0.0	0.9	1.9	2.2	1.8	4.0	3.2	0.6	2.9	2.2	1.1	1.7	5.7
21	0.0	0.0	0.0	0.0	0.9	1.9	2.6	2.5	1.4	0.0	1.4	17.5	1.1	0.2	0.0	1.8	0.0	0.0	0.0	0.0	0.4	0.4	0.0	3.1	1.5	17.5
22	2.8	0.4	0.0	0.0	0.5	1.0	0.8	0.2	2.0	3.7	4.4	3.6	1.5	0.0	0.0	0.0	0.0	1.1	0.6	3.3	3.2	1.9	1.9	2.9	1.5	4.4
23	2.7	5.2	5.9	7.1	4.2	1.6	2.3	3.7	4.0	4.9	16.4	11.8	9.0	7.9	5.7	3.2	1.9	1.5	1.5	1.5	0.9	2.1	0.3	0.0	4.4	16.4
24	0.6	2.6	2.2	2.2	1.7	0.9	1.9	2.6	1.9	1.8	0.7	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	2.3	2.5	1.5	1.9	2.2	1.3	2.6
25	1.4	0.0	0.0	2.0	3.7	3.2	1.9	2.4	5.0	3.2	0.8	7.7	7.9	4.3	3.1	6.6	7.1	4.4	4.8	5.1	5.0	8.6	9.0	8.6	4.4	9.0
26	6.9	7.3	7.2	6.4	10.7	8.4	8.9	5.8	4.8	5.3	3.7	16.3	3.1	5.1	4.8	5.4	3.6	2.5	2.2	2.5	8.0	7.7	8.2	5.7	6.3	16.3
27	9.9	12.4	10.2	11.4	15.4	12.0	7.0	2.4	0.0	0.0	0.5	1.5	0.4	0.0	0.0	0.0	0.4	3.0	4.3	1.7	0.0	0.0	2.0	3.4	4.1	15.4
28	4.5	5.6	3.1	0.0	0.0	1.6	2.1	0.2	1.5	1.2	3.1	2.2	1.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.4	0.0	0.2	1.2	5.6
29	1.9	2.9	1.1	0.6	2.5	1.4	0.0	1.3	4.0	3.1	0.0	0.4	3.9	0.7	0.0	1.7	5.4	4.4	3.6	2.3	3.7	3.0	1.6	2.5	2.2	5.4
30	0.8	0.0	0.9	2.0	4.3	3.4	4.1	4.9	6.9	6.7	3.9	1.0	4.5	6.6	7.1	4.6	2.2	2.0	5.2	5.7	2.5	0.4	0.0	3.2	3.4	7.1
31	1.3	0.0	0.0	0.5	2.0	3.3	3.8	6.1	3.7	3.9	1.1	0.0	6.6	7.1	4.3	2.6	2.6	2.0	3.8	5.8	7.8	4.3	3.0	4.1	3.3	7.8
NO.	31	29	31	31	31	31	31	31	31	31	31	30	30	30	29	29	30	31	31	31	31	31	31	31	734	99.1%
MEAN	3.5	3.9	3.1	3.0	3.5	2.9	2.8	2.9	3.1	3.9	3.8	3.8	3.4	2.7	2.1	1.8	1.7	1.8	2.2	2.3	2.2	2.8	2.9	3.0		
MAX	15.4	16.9	14.6	11.4	15.4	12.0	9.8	10.6	7.2	13.2	16.4	17.5	15.5	14.4	11.2	7.6	7.3	6.7	5.2	7.2	8.0	8.6	11.8	9.7		



Lagoon PM₁₀ (µg/m³) – March 2021

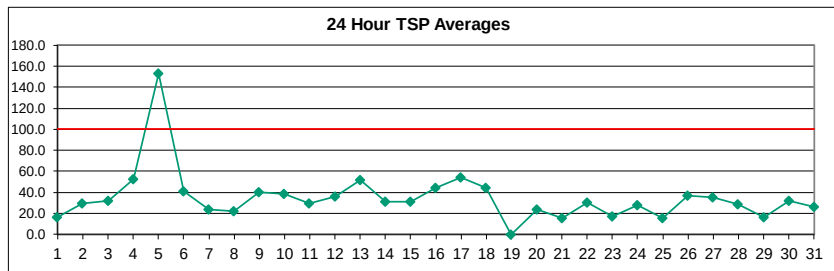
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9.9	7.2	4.9	7.5	10.1	10.1	11.5	12.0	17.0	31.0	16.2	4.7	4.8	6.5	3.1	0.1	4.8	18.2	5.5	8.9	9.1	15.6	17.3	16.7	10.5	31.0
2	86.7	50.5	44.9	11.2	7.4	8.9	13.1	37.5	30.6	20.3	9.4	9.9	19.8	24.2	10.6	18.4	0.0	1.4	3.4	4.7	5.9	4.8	6.7	6.1	18.2	86.7
3	8.1	21.5	19.4	8.1	9.1	15.8	8.0	9.2	32.7	71.8	36.7	52.7	38.5	X	8.0	8.1	9.4	10.0	10.8	35.1	21.2	14.1	X	6.9	20.7	71.8
4	22.4	21.1	24.9	22.2	10.3	34.8	16.0	12.7	13.1	32.5	56.5	41.4	102.4	56.1	461.5	35.1	34.5	46.1	10.3	2.1	17.1	23.2	28.3	51.8	49.0	461.5
5	56.5	33.2	36.0	65.8	91.3	52.1	19.6	21.4	27.9	35.7	93.8	88.7	322.1	254.7	270.5	90.2	117.1	89.4	53.7	59.5	82.1	81.5	X	107.2	93.5	322.1
6	60.4	38.8	42.9	35.1	33.7	19.5	17.8	11.7	30.6	58.2	59.3	63.3	20.4	11.3	34.0	X	16.2	4.7	4.0	4.7	4.8	9.3	44.4	15.0	27.8	63.3
7	3.6	8.2	11.3	8.6	5.3	5.4	5.9	4.7	6.0	6.9	23.6	35.4	38.3	11.5	35.8	10.0	9.3	7.2	4.8	8.3	24.6	16.0	0.7	28.2	13.3	38.3
8	X	8.8	9.3	7.0	0.6	1.1	3.3	2.5	25.5	22.4	14.0	35.5	17.4	22.0	29.6	25.4	8.5	5.8	1.8	0.2	6.3	35.2	0.0	1.2	12.3	35.5
9	6.2	9.4	9.9	5.9	4.1	5.8	1.9	1.7	11.6	64.4	65.0	64.2	X	124.4	C	C	6.7	6.6	4.6	3.4	5.3	4.7	6.1	9.5	20.1	124.4
10	11.5	11.6	11.4	11.8	31.3	45.2	4.8	9.2	31.8	56.0	27.7	15.8	22.0	16.6	13.0	42.1	55.1	22.2	10.3	59.7	460.8	13.9	10.6	7.3	41.7	460.8
11	6.1	21.2	25.1	15.3	9.9	7.1	15.5	40.4	485.1	465.5	104.7	49.7	29.4	Y	Y	Y	33.5	30.0	33.4	2.0	2.6	2.2	6.9	11.3	66.5	485.1
12	9.3	19.7	10.5	30.3	16.7	13.3	11.7	28.4	32.9	40.1	31.1	19.4	17.7	28.2	23.6	10.9	24.5	16.0	13.1	7.0	1.7	33.8	23.2	52.1	21.5	52.1
13	27.1	15.2	8.2	10.9	13.8	10.5	7.1	14.4	10.9	76.5	88.6	77.4	104.3	66.0	47.4	24.9	37.5	43.0	25.0	12.0	0.0	21.5	43.4	34.0	34.2	104.3
14	24.7	7.5	9.7	15.2	21.3	16.5	9.5	13.7	66.7	44.9	24.0	18.7	15.3	25.5	33.9	22.5	3.8	0.0	0.0	0.0	2.9	21.4	18.7	26.7	18.5	66.7
15	19.9	0.8	5.3	17.5	25.3	6.3	24.6	41.6	34.5	10.3	14.5	9.3	19.2	13.8	20.3	9.3	32.2	14.8	2.0	4.3	9.7	15.9	23.7	24.9	16.7	41.6
16	22.7	19.1	32.2	16.3	19.5	30.9	15.8	22.0	19.1	39.1	110.2	79.9	29.4	23.0	22.8	13.7	29.6	15.7	17.8	0.0	0.0	24.9	11.7	17.0	26.4	110.2
17	20.7	41.4	20.4	22.8	19.9	20.0	28.6	43.6	26.5	69.0	108.4	131.0	59.2	16.8	29.4	35.7	33.2	21.3	1.1	0.0	25.0	12.4	18.1	15.1	34.1	131.0
18	9.5	10.7	10.1	9.9	7.4	7.6	12.5	21.0	42.0	29.9	21.1	62.5	76.0	67.1	57.1	50.8	28.0	44.5	4.3	0.0	0.0	0.0	0.3	22.4	24.8	76.0
19	50.6	50.3	91.2	70.9	29.4	29.6	15.7	32.1	25.2	4.4	25.0	X	64.9	0.0	0.0	13.4	6.7	6.7	5.3	0.0	7.4	6.7	0.0	2.6	23.4	91.2
20	6.7	P	4.0	4.0	4.3	0.0	1.2	24.2	22.4	12.1	12.0	9.9	7.5	10.7	33.0	6.7	8.6	31.4	26.1	32.3	5.4	7.3	17.5	4.0	12.7	33.0
21	4.1	5.8	6.6	4.6	2.6	2.2	7.0	13.5	14.0	12.3	16.4	30.4	6.8	21.0	10.1	10.6	7.9	5.8	1.9	1.4	4.0	4.3	11.7	40.0	10.2	40.0
22	16.6	12.6	10.0	8.7	7.8	4.0	16.8	29.8	56.1	43.9	54.8	28.2	12.5	19.2	1.4	28.5	17.8	0.0	0.7	2.5	0.0	0.3	7.6	12.6	16.4	56.1
23	8.5	5.3	4.2	8.5	16.8	14.9	4.7	4.9	9.2	20.7	37.2	36.3	19.8	23.8	14.6	11.2	6.8	8.1	9.0	0.4	0.0	3.6	10.2	13.1	12.2	37.2
24	30.7	10.8	11.3	10.1	10.0	9.0	17.0	33.7	54.3	20.4	29.8	17.9	13.1	44.2	36.7	38.8	17.4	2.7	4.8	7.2	3.1	0.1	3.3	3.9	17.9	54.3
25	1.9	1.1	0.0	0.2	8.1	8.7	7.3	5.9	4.7	6.1	7.8	15.8	8.1	8.7	9.5	13.1	31.9	20.6	14.3	16.1	14.8	4.3	9.6	12.5	9.6	31.9
26	8.0	19.6	15.6	16.8	13.9	13.4	11.2	7.5	10.6	20.2	26.8	35.9	36.4	35.0	32.6	47.5	25.7	40.0	41.1	24.7	20.1	18.2	17.5	18.1	23.2	47.5
27	29.9	32.0	22.7	18.1	27.0	14.8	38.6	14.9	17.1	21.7	11.0	15.8	22.0	42.1	44.9	39.0	83.1	40.6	3.4	4.8	6.7	8.1	8.6	11.1	24.1	83.1
28	55.9	49.7	13.5	13.3	11.6	51.5	40.9	33.4	25.1	4.7	54.7	15.9	35.5	16.2	3.1	0.0	0.0	2.5	0.5	0.0	3.4	6.0	5.8	1.4	18.5	55.9
29	3.4	5.9	3.6	7.9	5.7	0.0	1.5	5.5	10.0	21.2	12.6	10.1	11.3	22.0	28.9	14.1	13.3	10.6	7.9	17.8	10.4	4.5	2.2	7.4	9.9	28.9
30	7.3	6.2	9.6	12.5	9.2	18.6	14.6	24.0	31.8	44.4	28.4	28.7	36.9	55.9	37.4	16.9	19.9	25.8	28.4	29.2	19.0	8.2	10.0	7.9	22.1	55.9
31	5.4	6.7	6.7	6.7	7.3	7.2	17.9	26.1	35.3	37.2	25.5	24.5	65.1	30.9	37.8	24.7	18.9	19.7	9.3	7.9	5.4	6.1	8.1	10.3	18.8	65.1
NO.	30	30	31	31	31	31	31	31	31	31	31	30	30	29	29	28	31	31	31	31	31	31	29	31	731	98.5%
MEAN	21.1	18.4	17.3	16.2	15.8	15.6	13.6	19.5	40.7	46.6	40.2	37.6	42.5	37.8	48.0	23.6	23.9	19.7	11.6	11.5	25.1	13.8	12.8	19.3		
MAX	86.7	50.5	91.2	70.9	91.3	52.1	40.9	43.6	485.1	465.5	110.2	131.0	322.1	254.7	461.5	90.2	117.1	89.4	53.7	59.7	460.8	81.5	44.4	107.2		



Number of Non-Zero Readings	706		
Maximum 1-HR Average	485.1 UG/M3		
Maximum 24-HR Average	93.5 UG/M3		
Monthly Calibration	2	Operational Time	733 HRS
Standard Deviation	42.31	Operational Uptime	98.5 %
		Monthly Average	24.6 UG/M3

Lagoon TSP (µg/m³) – March 2021

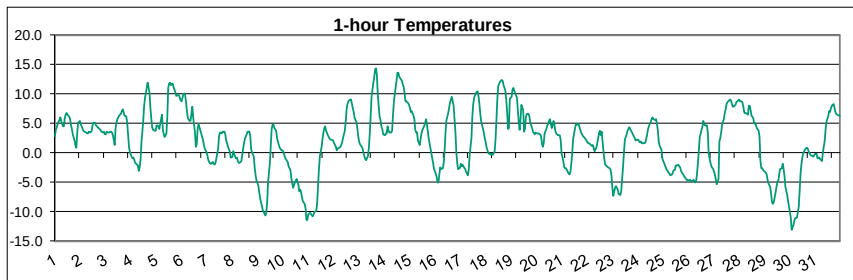
HOUR																								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	8.1	12.0	24.3	9.8	9.4	24.2	8.3	16.0	27.5	44.6	21.5	5.9	8.4	7.2	8.2	3.4	9.6	28.9	8.9	15.2	11.6	17.8	34.7	15.6
2	140.8	83.7	86.6	22.6	4.0	21.9	16.1	54.6	60.1	18.0	15.6	18.2	19.1	34.7	9.3	29.2	3.4	11.1	8.2	3.0	3.6	14.1	15.1	10.0
3	13.5	29.0	24.6	15.9	12.8	16.1	27.1	14.3	49.3	132.8	56.4	72.2	47.8	8.9	15.9	12.7	13.1	14.1	18.4	71.4	33.3	31.2	14.0	14.7
4	27.2	40.6	44.8	25.5	10.6	46.9	15.3	13.2	24.3	55.9	86.6	56.5	191.2	48.3	114.4	51.9	37.7	64.4	25.4	32.9	52.8	53.6	46.7	89.4
5	99.8	50.6	64.1	97.6	154.8	72.3	27.2	40.3	41.7	71.6	161.6	156.6	602.1	434.8	383.6	122.5	207.3	149.5	113.2	132.7	151.4	84.9	72.2	171.9
6	98.7	54.6	39.9	56.2	43.5	27.0	35.5	24.6	42.4	81.2	96.1	102.0	41.5	22.0	15.6	18.3	20.2	7.2	9.3	22.9	7.9	24.0	54.2	29.0
7	10.2	15.3	12.4	7.8	9.1	18.9	7.0	4.5	7.6	18.9	57.2	69.0	61.1	14.3	67.3	17.4	3.8	17.8	12.4	33.7	39.9	30.8	8.2	16.1
8	28.5	14.8	3.3	5.7	5.3	5.8	7.0	7.6	41.0	27.4	20.4	55.7	33.1	29.2	53.6	42.8	12.6	11.4	13.9	12.0	26.2	44.5	19.1	10.5
9	20.2	15.6	19.2	12.8	12.3	5.7	6.1	12.7	18.4	98.4	97.8	68.8	164.5	204.4	C	C	C	24.9	11.4	19.4	5.7	5.8	11.2	8.7
10	75.7	X	20.8	20.0	56.1	87.7	18.3	21.3	54.7	88.7	60.5	25.3	28.9	22.3	22.8	58.0	75.3	32.9	24.6	38.9	14.4	20.6	13.9	11.5
11	16.1	27.6	22.3	22.3	20.9	19.6	18.8	6.5	20.3	41.3	158.4	42.0	21.8	13.3	26.5	51.7	33.2	52.0	37.5	11.6	16.6	12.4	8.6	11.3
12	14.2	42.0	23.6	46.5	33.2	28.7	20.4	37.4	59.9	63.7	35.1	15.8	23.5	43.7	28.5	16.6	38.8	35.7	25.4	5.3	6.2	61.3	43.8	106.3
13	48.0	36.9	24.7	16.6	13.3	24.9	21.0	22.2	23.8	103.7	125.3	114.5	154.3	112.1	57.5	18.0	16.1	29.2	30.2	61.7	24.8	46.8	64.3	48.0
14	36.3	13.4	3.4	37.4	33.9	19.7	22.7	35.5	129.9	71.4	31.7	26.0	17.3	25.7	11.7	16.5	11.8	20.5	12.4	9.7	32.4	38.4	29.3	54.3
15	31.0	7.7	18.2	13.9	36.6	20.5	40.2	65.0	59.8	12.3	29.6	12.3	31.9	29.3	29.7	20.1	54.9	41.8	18.2	18.2	20.3	34.0	45.8	45.1
16	32.2	36.4	42.1	49.1	32.2	35.5	22.1	18.9	33.0	57.3	166.9	126.2	50.4	31.9	29.8	14.4	22.0	16.9	45.3	35.8	30.7	57.0	34.3	50.3
17	31.4	45.3	34.4	28.0	30.7	32.7	47.4	74.3	40.4	98.4	188.3	207.2	92.2	28.5	38.6	33.5	35.4	20.3	8.9	19.2	63.6	32.3	33.2	29.2
18	28.0	30.0	19.0	30.1	20.8	18.2	18.8	32.0	57.3	38.8	40.7	104.6	141.4	91.3	62.0	53.8	24.1	56.2	16.4	10.1	40.4	15.9	73.6	X
19	X	X	X	X	X	X	X	X	X	X	X	X	45.5	22.4	5.8	11.3	7.1	4.4	7.1	23.7	36.1	5.4	7.1	9.9
20	5.4	P	13.8	8.6	11.0	6.1	14.0	38.8	36.3	12.4	7.0	5.5	5.7	8.1	51.6	30.3	31.1	65.2	65.5	69.2	15.2	11.3	24.0	5.0
21	17.2	23.6	18.9	5.7	5.6	3.5	14.6	24.5	12.4	7.3	13.1	45.2	8.3	29.3	12.4	7.0	5.9	9.7	7.1	7.0	5.7	5.6	29.6	60.0
22	39.4	22.0	17.2	24.1	6.0	10.5	22.1	45.0	90.2	68.0	92.9	41.9	21.2	26.2	23.1	62.7	40.0	8.9	16.3	7.3	11.3	11.4	14.0	13.8
23	10.5	21.8	12.9	17.8	11.4	13.3	0.5	6.0	11.5	18.0	40.9	50.6	35.8	29.2	28.0	5.7	6.0	11.4	12.8	9.8	8.8	14.2	16.9	19.8
24	45.9	21.2	24.5	13.8	9.6	5.9	35.5	49.8	76.3	28.7	43.4	22.8	8.5	58.9	45.1	55.9	36.2	12.7	13.6	6.5	20.4	10.6	12.5	10.2
25	15.6	19.1	11.5	15.4	15.0	7.3	10.0	11.0	5.9	8.0	10.3	17.5	4.5	7.3	12.2	29.7	37.0	27.5	27.4	17.9	12.9	13.2	18.3	19.1
26	10.5	21.2	24.7	18.2	18.1	16.2	20.5	12.9	16.8	16.0	17.1	48.7	51.8	59.2	56.2	92.6	62.8	70.1	83.2	58.3	31.8	28.0	28.9	23.5
27	44.8	39.7	29.3	30.5	27.4	20.5	36.5	17.2	24.1	31.1	14.4	21.6	34.7	58.8	43.5	57.2	137.8	71.5	8.6	9.9	10.0	13.2	23.8	29.9
28	93.3	77.3	19.2	12.4	10.6	73.7	51.4	50.2	26.8	9.2	70.9	24.8	44.0	16.8	15.7	4.4	4.4	4.4	5.8	7.6	17.4	26.8	7.3	10.0
29	11.3	12.6	10.5	10.3	17.3	1.0	15.4	16.0	26.5	27.3	16.3	7.0	6.2	16.3	32.3	13.1	20.8	18.0	14.9	31.4	20.6	18.9	6.5	20.4
30	10.4	19.4	16.8	16.7	15.6	20.0	28.0	38.8	38.7	60.0	41.3	34.2	50.5	84.5	54.8	19.4	17.6	32.8	47.7	56.0	37.9	19.0	8.4	5.3
31	7.1	5.7	6.3	16.1	3.2	5.7	31.9	55.4	54.0	50.4	32.8	24.8	94.2	42.8	36.8	22.1	18.2	18.8	30.1	19.3	14.1	15.3	13.1	12.6
NO.	30	28	30	30	30	30	30	30	30	30	30	30	31	31	30	30	30	31	31	31	31	31	31	30
MEAN	35.7	30.0	24.4	23.6	23.0	23.7	22.0	28.9	40.4	48.7	61.7	54.1	69.1	53.6	46.4	33.1	34.8	31.9	25.2	28.3	26.6	26.4	26.9	32.0
MAX	140.8	83.7	86.6	97.6	154.8	87.7	51.4	74.3	129.9	132.8	188.3	207.2	602.1	434.8	383.6	122.5	207.3	149.5	113.2	132.7	151.4	84.9	73.6	171.9



Number of 24HR Exceedences	1
Number of Non-Zero Readings	726
Maximum 1-HR Average	602.1 UG/M3
Maximum 24-HR Average	152.7 UG/M3
Monthly Calibration	3
Standard Deviation	43.2
Operational Time	729 HRS
Operational Uptime	98.0 %
Monthly Average	35.5 UG/M3

Lagoon Temperature (°C) – March 2021

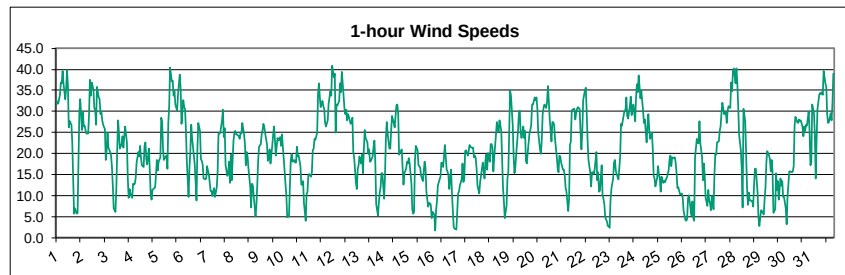
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	2.8	3.9	4.8	5.2	5.6	6.0	5.4	4.6	4.5	5.9	6.5	6.7	6.5	6.2	5.7	4.7	4.1	3.1	2.1	1.2	0.9	3.4	5.0	5.4	4.6	6.7
2	4.7	4.5	4.1	3.7	3.6	3.4	3.3	3.3	3.6	3.5	3.6	4.4	5.0	5.1	5.0	4.7	4.4	4.2	4.1	3.8	3.6	3.5	3.6	3.1	4.0	5.1
3	3.2	3.6	3.4	3.4	3.6	3.6	3.5	3.0	1.4	4.3	5.1	5.7	6.0	6.3	6.6	7.1	7.4	6.9	6.4	6.2	5.1	3.1	1.0	0.2	4.4	7.4
4	-0.6	-0.9	-0.8	-1.3	-1.7	-1.8	-2.2	-3.0	-2.5	-1.1	1.8	5.4	7.9	9.3	10.0	11.2	11.9	10.3	7.6	5.9	4.4	3.8	3.8	3.8	3.4	11.9
5	4.6	4.7	4.5	4.0	5.7	6.5	3.9	3.2	2.6	3.2	6.1	11.0	11.8	11.9	11.5	11.7	11.2	10.7	10.2	9.7	9.9	9.8	9.3	8.8	7.8	11.9
6	8.7	9.9	10.2	9.8	8.6	7.1	5.9	5.4	5.3	6.6	7.8	5.9	3.5	0.9	1.5	4.0	4.8	4.3	3.3	2.6	2.2	1.4	0.7	0.2	5.0	10.2
7	-0.5	-1.2	-1.5	-1.9	-1.8	-1.5	-1.9	-2.0	-1.7	-1.0	0.7	2.8	3.5	3.4	3.2	3.5	3.6	3.1	2.1	1.7	1.1	0.3	-0.9	-0.9	0.5	3.6
8	-0.7	0.3	-0.6	-1.0	-0.9	-1.3	-1.7	-1.7	-1.4	-0.3	0.7	1.6	2.4	3.2	3.6	3.6	3.6	2.8	0.6	-0.3	-0.7	-2.7	-3.8	-4.7	0.0	3.6
9	-5.6	-6.7	-7.6	-8.4	-9.0	-9.7	-10.4	-10.7	-10.1	-8.1	-4.9	-1.8	1.3	4.1	4.7	4.8	4.3	3.7	2.6	1.9	1.3	0.9	0.5	0.4	-2.6	4.8
10	0.3	-0.3	-0.8	-1.0	-1.6	-2.3	-2.6	-3.0	-4.2	-5.9	-5.5	-5.1	-4.8	-4.4	-5.5	-6.6	-6.3	-6.7	-7.6	-8.2	-8.6	-9.4	-11.4	-11.3	-5.1	0.3
11	-10.5	-10.2	-10.3	-10.7	-10.8	-10.5	-10.1	-9.8	-8.4	-5.7	-2.7	-0.7	1.0	2.4	3.5	4.1	4.4	3.7	3.0	2.6	2.3	2.2	2.2	2.1	-2.8	4.4
12	1.6	1.3	1.0	0.4	0.7	0.9	0.9	1.2	1.8	2.5	3.7	5.3	7.3	8.3	8.8	9.1	9.0	8.3	7.6	6.9	5.9	5.2	4.1	2.8	4.4	9.1
13	2.0	1.5	1.0	0.7	-0.1	-0.6	-1.1	-1.2	-0.5	0.9	3.4	6.4	9.5	11.9	12.8	14.2	14.3	13.2	9.7	6.2	5.6	4.6	4.1	3.2	5.1	14.3
14	3.0	3.3	3.3	4.5	3.7	3.5	3.4	3.7	6.3	8.5	9.9	12.2	13.6	13.6	13.0	12.7	12.3	11.6	11.1	10.1	8.7	8.7	8.4	8.2	8.2	13.6
15	7.6	6.9	7.1	6.3	5.8	3.9	3.4	3.4	2.1	1.4	2.4	3.3	3.8	4.2	5.0	5.7	5.0	3.7	2.6	1.6	0.0	-1.0	-1.8	-2.8	3.3	7.6
16	-3.1	-4.1	-5.1	-5.0	-3.7	-2.5	-2.7	-2.7	-1.6	0.7	3.7	5.6	6.7	7.7	8.6	9.1	9.5	8.0	5.7	3.6	0.2	-1.7	-2.8	-2.7	1.3	9.5
17	-1.9	-2.3	-2.0	-2.3	-2.8	-3.2	-3.5	-3.8	-2.8	-0.4	2.6	6.2	8.3	9.4	9.8	10.3	10.4	9.5	8.1	6.5	5.3	4.1	3.3	2.4	3.0	10.4
18	1.8	0.9	-0.1	-0.2	-0.3	-0.3	-0.1	-0.3	0.2	2.3	5.5	9.0	11.4	12.0	12.1	12.4	12.2	11.4	10.6	9.1	6.9	4.1	4.1	9.3	5.6	12.4
19	9.5	10.7	11.0	10.6	10.2	9.4	7.2	5.3	3.9	5.7	8.1	7.2	3.6	4.1	6.1	6.7	6.6	6.2	5.2	4.7	4.2	3.6	3.1	3.4	6.5	11.0
20	3.3	3.3	3.3	3.2	2.8	1.7	1.0	1.6	3.3	4.1	4.7	4.9	5.4	5.7	4.1	4.7	5.4	4.9	3.7	3.3	3.0	3.0	2.9	2.2	3.6	5.7
21	-0.1	-1.4	-2.5	-2.7	-2.7	-3.0	-3.5	-3.7	-3.2	-1.7	0.0	2.3	4.1	4.8	4.8	4.9	5.0	4.0	3.4	3.1	2.9	2.7	2.5	2.0	0.9	5.0
22	1.8	1.7	1.7	1.5	1.2	1.3	0.9	0.3	0.5	0.8	2.3	3.3	3.8	3.0	3.6	0.3	-1.2	-2.0	-2.2	-2.3	-2.5	-2.7	-2.9	-3.9	0.3	3.8
23	-5.9	-7.4	-5.9	-5.7	-5.9	-6.2	-6.9	-7.2	-6.4	-4.3	-2.3	0.1	2.2	3.1	3.7	4.0	4.4	4.0	3.5	3.1	2.9	2.6	2.1	2.2	-1.1	4.4
24	2.2	1.9	1.8	1.9	1.6	1.6	1.6	1.8	2.4	3.1	4.1	4.9	5.3	5.7	6.1	5.7	5.6	5.7	5.0	3.7	2.0	1.1	0.6	-1.0	3.1	6.1
25	-1.5	-1.8	-2.1	-2.8	-3.1	-3.3	-3.6	-3.8	-3.7	-3.2	-2.9	-2.9	-2.1	-2.2	-2.0	-2.4	-2.5	-3.0	-3.4	-3.8	-4.1	-4.2	-4.5	-4.7	-3.1	-1.5
26	-4.7	-4.7	-4.7	-4.8	-4.7	-4.6	-5.0	-4.8	-3.4	-1.5	0.6	2.7	3.9	4.6	5.4	4.8	4.6	4.6	3.5	-0.2	-1.0	-1.7	-2.3	-2.7	-0.7	5.4
27	-3.2	-3.6	-4.6	-5.3	-4.4	1.9	2.5	3.5	4.8	5.7	6.8	7.3	8.2	8.5	8.7	9.1	9.0	8.3	7.9	7.9	8.2	8.6	8.7	8.9	4.7	9.1
28	9.0	8.7	8.7	8.4	7.6	6.8	6.8	6.6	6.4	8.0	8.0	7.2	6.3	5.8	5.0	5.0	4.7	4.2	3.8	2.7	-1.4	-2.6	-2.7	-2.9	5.0	9.0
29	-3.2	-3.4	-3.7	-4.6	-5.2	-5.8	-6.9	-8.4	-8.6	-8.4	-6.7	-5.7	-4.9	-4.9	-3.7	-2.8	-2.6	-1.8	-2.8	-4.0	-5.8	-7.1	-8.2	-9.2	-5.3	-1.8
30	-10.1	-11.0	-13.1	-12.3	-11.5	-11.1	-11.2	-10.9	-9.2	-6.4	-3.5	-1.9	-0.8	0.0	0.5	0.7	0.9	0.7	0.2	-0.3	-0.5	-0.6	-0.7	-0.5	-4.7	0.9
31	-0.2	-0.2	-0.9	-0.8	-0.8	-1.1	-1.4	-0.1	1.0	1.9	3.9	5.2	6.2	7.0	7.0	7.6	8.0	8.3	7.6	6.9	6.6	6.4	6.3	6.2	3.8	8.3
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	100.0%
MEAN	0.5	0.3	0.0	-0.2	-0.3	-0.4	-0.8	-1.0	-0.6	0.7	2.4	3.8	4.7	5.2	5.5	5.6	5.6	5.0	4.0	3.1	2.2	1.6	1.1	0.9		
MAX	9.5	10.7	11.0	10.6	10.2	9.4	7.2	6.6	6.4	8.5	9.9	12.2	13.6	13.6	13.0	14.2	14.3	13.2	11.1	10.1	9.9	9.8	9.3	9.3		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	14.3 C		
Maximum 24-HR Average	8.2 C		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	5.199	Operational Uptime	100.0 %
		Monthly Average	2.0 C

Lagoon Wind Speed (km/hr) – March 2021

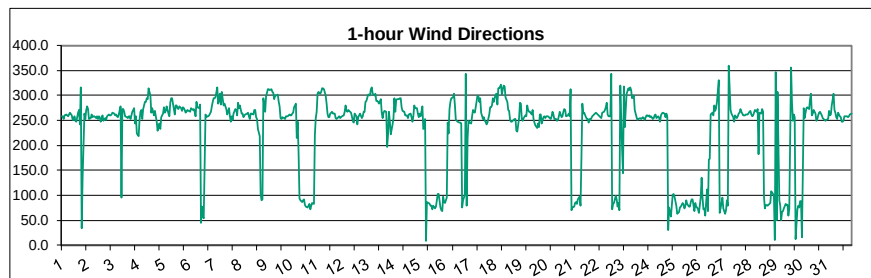
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	32.7	31.8	31.9	34.0	36.8	36.6	39.5	36.6	32.8	35.5	39.9	36.3	26.2	27.7	26.9	22.4	14.1	5.8	7.0	5.7	5.9	18.0	29.5	33.0	26.9	39.9
2	25.6	29.7	26.4	26.6	25.6	24.7	24.8	29.1	37.4	33.8	36.8	35.3	30.8	30.4	26.7	35.8	33.2	33.0	29.4	30.0	27.9	26.9	25.7	18.6	29.3	37.4
3	20.9	24.9	21.3	20.3	19.4	16.9	12.5	7.0	6.0	11.7	21.1	27.9	24.8	21.2	22.2	24.1	21.3	24.1	26.4	22.6	14.2	9.4	11.6	10.4	18.4	27.9
4	9.5	12.9	12.7	12.9	14.2	17.9	20.3	19.4	21.8	18.8	17.3	16.7	21.8	22.7	18.7	17.5	21.2	15.8	10.2	9.2	11.3	11.5	12.0	15.0	15.9	22.7
5	18.5	16.0	18.0	19.0	28.4	27.5	20.9	18.6	19.3	19.5	16.4	27.3	31.2	40.5	37.2	37.3	33.8	34.7	31.7	30.2	34.0	36.4	38.7	35.3	27.9	40.5
6	27.0	32.7	31.0	30.5	25.5	18.3	9.6	16.7	20.3	26.8	23.7	19.6	17.4	13.2	8.9	21.0	27.2	25.4	18.7	18.2	17.5	14.0	13.9	14.1	20.5	32.7
7	16.9	16.0	15.1	11.2	11.1	9.8	11.0	11.8	9.7	12.0	15.8	24.8	24.8	25.0	27.8	30.3	23.9	26.0	17.1	14.6	15.5	18.1	13.1	19.8	17.6	30.3
8	13.6	23.0	25.0	25.4	24.6	24.5	24.1	23.4	25.0	24.7	27.3	24.5	22.2	17.3	20.3	19.3	16.3	12.2	7.1	12.8	12.4	9.8	5.1	7.7	18.7	27.3
9	12.7	18.3	21.7	22.2	24.5	25.6	27.1	26.2	24.7	22.2	18.2	18.6	21.1	17.6	21.9	24.4	26.5	23.5	19.5	23.6	23.1	23.5	23.9	21.8	22.2	27.1
10	24.6	19.0	16.0	12.9	10.2	4.8	5.0	11.9	18.2	19.8	18.1	18.4	17.8	17.9	21.7	19.2	19.5	17.1	12.5	12.6	13.5	8.2	4.1	10.3	14.7	24.6
11	10.8	14.8	15.1	14.5	15.6	20.7	21.3	23.5	23.4	25.0	34.2	36.6	33.2	31.0	32.4	31.1	30.6	27.3	26.5	27.9	31.9	33.4	34.8	33.7	26.2	36.6
12	40.9	38.2	38.9	25.1	31.6	31.4	32.5	36.7	34.6	39.5	36.8	30.5	29.2	30.4	28.0	29.4	28.6	27.0	27.4	28.5	20.3	19.0	13.0	11.6	29.5	40.9
13	16.2	17.1	19.4	17.6	19.7	15.3	21.0	25.7	23.8	22.6	19.9	21.0	18.1	18.2	19.2	21.6	23.1	17.8	8.0	5.3	8.2	10.7	12.0	15.3	17.4	25.7
14	15.3	9.4	14.7	23.6	27.4	24.7	21.3	21.1	25.6	28.9	28.0	26.3	29.0	31.4	31.6	29.3	19.7	20.5	21.0	16.6	12.6	15.4	16.5	18.1	22.0	31.6
15	17.5	18.9	17.6	12.7	6.8	5.7	6.1	18.3	21.8	20.7	17.3	17.0	16.6	14.7	13.5	15.9	18.1	16.5	10.9	7.5	8.3	8.3	7.8	4.7	13.5	21.8
16	6.1	5.4	1.6	6.6	8.6	12.4	13.8	14.4	17.9	17.7	16.8	22.0	19.1	16.3	15.8	14.8	11.5	16.2	10.6	6.5	2.5	2.1	1.9	6.1	11.1	22.0
17	10.5	11.0	12.5	13.9	17.5	13.3	13.9	20.6	20.9	19.4	20.5	22.1	21.5	21.4	21.4	19.1	19.5	18.8	16.4	12.3	10.4	13.2	14.6	16.5	16.7	22.1
18	17.9	14.1	18.4	19.7	16.2	20.1	18.0	22.2	22.2	21.3	15.7	19.2	24.6	27.4	26.0	25.3	27.9	25.4	18.5	11.8	8.7	4.8	7.6	14.1	18.6	27.9
19	15.5	24.9	34.9	33.7	26.7	19.6	15.3	16.8	19.8	25.4	29.6	30.1	24.9	23.8	26.5	23.6	25.4	18.2	17.7	20.1	24.8	25.6	26.9	31.6	24.2	34.9
20	31.6	33.4	32.7	33.4	30.6	25.0	21.0	19.9	23.4	29.3	30.9	31.7	30.9	32.4	36.0	32.3	28.4	23.0	27.6	27.5	26.9	23.5	19.4	16.5	27.8	36.0
21	15.5	19.6	19.3	17.8	16.2	16.2	15.0	11.9	11.0	6.3	9.3	21.9	22.8	30.2	30.6	30.5	28.0	29.6	30.6	31.0	30.6	24.9	21.0	25.1	21.5	31.0
22	32.8	35.1	35.7	29.8	23.0	18.6	15.6	12.2	15.6	15.5	15.1	16.1	20.4	13.6	15.6	10.9	11.1	17.1	10.1	9.4	8.0	5.0	3.8	2.7	16.4	35.7
23	2.7	2.3	8.9	11.6	14.1	17.9	18.5	16.0	15.1	13.9	16.5	19.6	27.1	26.6	29.1	30.2	30.2	33.3	28.9	28.3	31.3	33.6	29.2	30.8	21.5	33.6
24	31.7	27.6	33.4	36.5	34.5	38.5	33.2	35.1	32.4	30.2	27.2	28.1	22.7	26.4	29.4	25.5	23.4	25.0	21.2	14.7	14.2	12.2	14.3	17.0	26.4	38.5
25	14.9	14.0	11.0	14.5	13.0	13.4	13.3	14.0	14.3	15.9	18.5	19.6	17.1	19.2	19.0	19.2	17.9	15.4	11.7	11.9	10.4	10.2	10.5	9.5	14.5	19.6
26	6.3	4.2	4.0	4.4	9.2	10.0	6.7	5.3	8.6	4.7	3.9	19.1	23.4	22.5	22.5	27.7	22.4	19.1	13.6	17.6	14.7	9.5	7.5	11.3	12.4	27.7
27	8.8	8.3	6.5	9.8	6.7	15.0	19.9	19.7	22.6	22.9	25.4	26.4	29.5	32.1	29.3	29.5	29.7	27.2	30.2	31.3	30.8	36.9	34.8	39.7	23.9	39.7
28	40.3	36.6	40.2	36.7	31.1	24.5	20.8	16.4	7.2	30.6	29.1	27.5	12.0	7.7	10.8	8.8	8.9	8.6	7.3	12.6	16.4	16.5	10.8	4.9	19.4	40.3
29	2.8	4.6	6.5	6.4	5.6	9.3	12.0	18.1	20.6	19.5	18.7	15.8	18.4	15.6	6.0	6.8	15.4	11.3	13.5	9.0	14.1	12.4	13.5	9.7	11.9	20.6
30	9.8	6.9	3.2	10.0	12.9	15.8	15.7	15.6	15.8	17.1	26.6	28.7	27.4	27.2	28.1	27.7	27.9	26.4	24.1	26.5	25.5	26.9	26.6	30.0	20.9	30.0
31	25.4	17.2	17.8	31.7	29.7	24.5	14.0	23.4	30.7	34.0	34.4	34.1	34.6	33.9	39.5	36.6	35.8	29.4	27.3	27.6	29.5	27.8	31.9	38.9	29.6	39.5
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	100.0%
MEAN	18.6	19.0	19.7	20.2	19.9	19.3	18.2	19.6	20.7	22.1	22.9	24.6	23.9	23.7	24.0	24.1	23.2	21.6	18.8	18.2	17.9	17.7	17.3	18.5		
MAX	40.9	38.2	40.2	36.7	36.8	38.5	39.5	36.7	37.4	39.5	39.9	36.6	34.6	40.5	39.5	37.3	35.8	34.7	31.7	31.3	34.0	36.9	38.7	39.7		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	40.9 KM/HR		
Maximum 24-HR Average	29.6 KM/HR		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	8.816	Operational Uptime	100.0 %
		Monthly Average	20.6 KM/HR

Lagoon Wind Direction (°) – March 2021

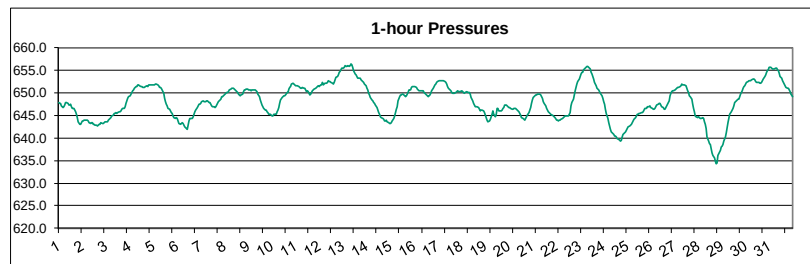
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	259.1	258.2	253.3	259.9	261.6	259.8	257.5	261.1	265.7	260.6	250.9	251.8	258.7	248.4	247.4	266.3	270.4	241.3	315.4	33.7	137.5	264.4	253.4	271.7	258.8	315.4
2	277.4	272.7	253.4	254.9	261.6	256.6	258.6	257.5	254.9	257.8	252.4	259.1	257.2	247.5	260.0	249.6	250.8	254.2	251.8	258.9	262.2	260.6	260.9	261.5	257.6	277.4
3	266.1	263.1	259.5	262.2	257.9	257.0	261.4	278.0	95.7	272.1	273.2	267.6	257.4	256.6	254.1	258.4	258.1	253.7	267.7	270.6	274.6	244.1	257.6	223.6	261.0	278.0
4	217.7	250.6	267.4	271.0	253.6	272.7	287.6	286.8	295.3	292.1	315.1	299.2	265.2	274.8	266.9	260.7	269.4	247.4	228.5	239.7	243.1	233.4	256.5	262.8	269.2	315.1
5	277.0	265.4	269.4	277.6	262.8	258.3	285.2	294.3	294.5	283.9	262.0	279.5	280.7	274.8	272.6	278.8	274.6	269.3	276.1	275.4	270.7	265.6	270.8	269.5	273.9	294.5
6	269.7	267.4	275.4	271.1	273.3	267.8	258.9	286.6	276.5	273.8	282.0	45.3	76.8	58.1	54.4	262.1	255.9	258.1	258.7	260.0	267.1	277.7	287.5	295.0	275.2	295.0
7	294.3	296.5	316.5	282.9	288.6	303.0	281.2	307.4	280.4	284.0	278.0	272.1	262.0	275.2	258.0	247.3	258.7	251.4	263.9	273.0	271.4	259.6	285.2	274.9	273.3	316.5
8	279.9	263.8	263.8	256.5	259.5	261.3	263.1	265.4	258.3	252.2	263.2	263.4	261.8	271.3	270.7	255.8	252.1	233.2	219.0	102.0	90.4	91.1	293.9	267.6	259.7	293.9
9	298.5	304.4	311.8	312.1	310.8	312.1	307.2	305.3	292.2	299.5	300.7	302.2	287.8	278.9	254.8	252.0	255.7	255.3	253.6	257.4	259.0	258.6	261.4	260.9	282.6	312.1
10	260.5	263.2	265.1	275.7	284.0	215.5	248.2	184.9	92.9	90.9	86.9	89.2	92.4	81.4	77.3	75.9	80.1	82.9	72.6	78.6	85.0	82.5	221.1	255.1	90.9	284.0
11	267.5	304.3	307.3	302.7	306.9	314.6	314.4	311.8	300.4	283.9	263.6	256.9	256.1	263.9	267.5	264.0	263.9	263.8	254.4	252.8	255.6	257.4	255.3	255.8	271.5	314.6
12	259.1	259.2	267.8	279.7	268.8	267.2	271.2	268.2	264.7	258.0	248.5	245.6	262.9	258.3	242.1	256.8	260.1	263.3	255.2	257.5	266.6	267.7	286.4	288.1	262.0	288.1
13	301.5	301.5	299.2	312.7	315.5	302.6	300.4	303.0	288.3	288.8	286.6	284.1	293.5	266.1	254.6	264.6	268.4	266.5	195.9	222.5	266.6	247.7	221.9	242.7	281.7	315.5
14	254.5	295.0	266.9	290.1	293.2	292.3	293.6	293.6	276.8	269.7	266.8	259.3	259.7	259.3	254.2	262.5	262.9	257.1	247.9	257.8	279.1	274.0	274.5	264.5	270.2	295.0
15	255.7	262.8	258.0	277.5	233.7	234.4	253.2	8.3	86.9	85.0	83.6	79.0	79.4	72.8	79.3	74.0	77.2	90.1	102.4	102.8	75.0	70.1	69.2	98.1	77.6	277.5
16	85.9	84.0	95.9	245.8	224.5	273.2	286.9	294.4	296.6	302.8	279.1	251.2	249.3	247.0	245.0	244.7	244.6	75.5	90.1	101.6	343.0	78.5	213.4	248.8	264.8	343.0
17	246.2	244.4	259.1	270.6	266.4	266.3	275.7	300.5	297.9	287.0	293.6	265.3	252.2	256.2	249.1	247.5	241.1	246.1	261.7	276.1	276.5	280.2	295.0	287.7	268.6	300.5
18	301.9	303.7	281.7	314.9	313.9	320.9	301.7	312.7	319.4	318.6	295.9	287.7	271.1	268.3	251.8	248.0	246.9	250.5	252.7	252.5	230.0	227.8	254.1	284.7	281.4	320.9
19	284.3	253.3	249.5	254.5	259.3	257.5	279.9	271.2	267.5	266.8	261.0	271.7	252.3	245.6	240.5	234.4	243.6	237.4	261.4	261.6	244.6	255.6	257.5	255.0	255.9	284.3
20	258.9	257.5	258.1	254.9	252.3	258.8	266.8	261.8	253.0	252.3	248.9	251.2	257.7	268.1	256.4	258.9	267.6	273.4	270.1	259.0	259.5	262.8	257.8	312.4	260.2	312.4
21	69.8	75.3	77.9	84.1	86.0	82.2	91.9	97.1	78.9	175.3	282.8	263.5	265.0	255.7	252.9	252.7	246.3	252.2	250.9	258.1	259.7	261.0	264.3	265.2	253.2	282.8
22	262.6	260.1	258.3	256.5	254.2	264.6	268.0	270.8	276.4	285.8	261.1	257.4	257.9	343.5	72.9	83.2	83.9	98.7	92.8	77.8	84.8	70.0	319.3	191.3	265.6	343.5
23	143.5	317.8	236.3	270.4	303.1	314.4	311.6	316.5	310.0	294.1	299.6	271.8	263.8	257.2	250.5	252.0	253.9	253.0	254.5	257.3	255.1	251.4	260.6	260.1	266.9	317.8
24	257.7	260.5	256.1	257.6	253.3	253.9	260.8	261.6	255.2	257.9	255.1	247.3	260.2	264.2	265.6	263.9	255.8	263.1	257.5	29.7	76.4	56.9	79.9	100.3	259.1	265.6
25	103.2	98.0	78.4	62.6	64.4	66.6	75.8	77.1	85.4	81.2	74.5	78.5	89.9	83.2	78.1	76.9	86.6	91.3	92.5	68.5	84.5	78.0	76.2	71.7	80.4	103.2
26	65.5	95.1	135.2	96.3	72.0	73.5	59.7	111.4	68.5	170.7	172.8	262.4	265.2	260.7	279.4	269.2	274.5	286.6	331.4	64.3	74.0	84.5	95.6	73.0	302.1	331.4
27	62.7	70.2	89.7	78.6	359.4	271.2	263.1	260.4	257.1	248.2	259.6	254.8	259.0	263.2	265.9	273.4	267.5	260.5	260.7	260.2	261.3	262.5	262.7	266.6	263.4	359.4
28	269.9	262.6	257.6	260.5	270.2	270.0	267.3	273.5	181.6	266.3	263.3	272.3	267.4	96.5	74.1	81.8	78.8	81.6	82.0	84.1	107.5	103.5	98.8	10.2	263.2	273.5
29	346.6	49.8	307.8	89.8	79.0	50.8	66.4	67.8	74.5	82.1	81.7	80.5	60.2	72.7	356.6	285.1	248.7	262.0	256.5	13.1	72.9	79.8	75.1	87.6	64.9	356.6
30	87.4	16.8	273.8	254.9	265.4	274.5	276.7	272.4	293.3	303.4	260.3	263.5	270.3	264.1	250.0	253.0	260.7	265.0	266.9	260.1	255.1	252.5	250.9	249.7	263.6	303.4
31	250.5	253.3	268.3	260.4	261.7	280.8	302.6	270.8	264.8	256.3	253.1	265.6	257.7	256.5	248.0	248.1	249.4	258.1	259.0	257.9	256.4	258.9	261.6	263.1	259.3	302.6
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	100.0%
MEAN	230.2	226.8	242.5	241.9	248.9	246.9	251.5	246.2	232.4	245.2	243.7	235.5	233.9	228.7	224.2	229.1	229.3	224.0	225.9	191.1	207.9	200.6	228.3	226.4		
MAX	346.6	317.8	316.5	314.9	359.4	320.9	314.4	316.5	319.4	318.6	315.1	302.2	293.5	343.5	356.6	285.1	274.6	286.6	331.4	276.1	343.0	280.2	319.3	312.4		



Number of Non-Zero Readings	744
Maximum 1-HR Average	359 degrees
Maximum 24-HR Average	302 degrees
Monthly Calibration	0
Standard Deviation	77.01
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	230.9 degrees

Lagoon Pressure (mmHg) – March 2021

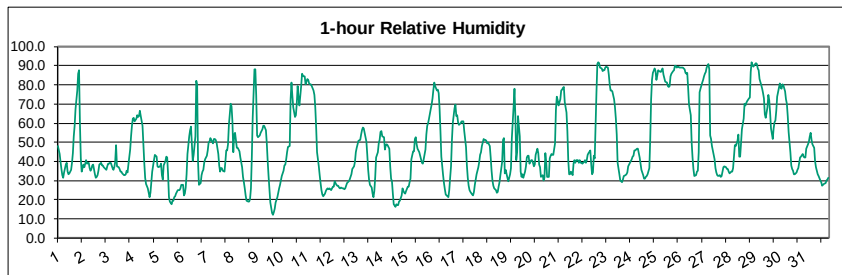
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	647.8	647.7	647.6	647.1	646.8	647.0	647.3	647.8	647.9	647.6	647.4	647.4	647.4	646.9	646.5	646.5	646.3	645.8	645.3	644.6	643.6	643.1	643.1	643.4	646.3	647.9
2	643.8	643.8	643.9	643.9	643.9	644.0	643.8	643.4	643.1	643.4	643.3	643.1	643.0	642.9	642.8	642.6	642.8	642.9	643.1	643.3	643.2	643.2	643.4	643.6	643.3	644.0
3	643.6	643.6	643.9	644.2	644.3	644.5	644.9	645.1	645.4	645.5	645.6	645.5	645.6	645.7	645.9	646.1	646.4	646.6	646.5	647.0	647.6	648.2	648.7	649.1	645.8	649.1
4	649.4	649.7	650.1	650.4	650.7	651.0	651.3	651.4	651.7	651.8	651.6	651.4	651.3	651.1	651.1	651.2	651.5	651.6	651.4	651.7	651.7	651.7	651.7	651.7	651.2	651.8
5	651.7	651.7	651.9	651.9	651.8	651.5	651.2	651.2	651.0	650.6	649.9	648.8	648.0	647.4	647.0	646.6	646.4	646.0	645.7	645.5	644.9	644.5	644.4	644.4	648.5	651.9
6	644.4	643.8	643.3	643.0	643.3	643.4	643.2	642.9	642.5	642.0	641.9	642.8	643.7	644.3	644.4	644.4	644.7	645.2	645.8	646.3	646.7	647.1	647.4	647.6	644.3	647.6
7	647.7	648.0	648.3	648.1	648.1	648.1	648.2	648.1	647.9	647.8	647.4	647.1	647.0	646.9	646.8	647.0	647.4	647.6	648.0	648.3	648.7	649.1	649.2	649.3	647.9	649.3
8	649.6	649.9	650.1	650.1	650.3	650.6	650.9	651.0	651.1	651.0	650.9	650.8	650.6	650.3	650.1	649.6	649.5	649.4	649.5	649.7	650.3	650.6	650.7	650.7	650.3	651.0
9	650.7	650.6	650.6	650.5	650.6	650.7	650.6	650.6	650.5	650.3	649.8	649.1	648.5	647.8	647.2	646.9	646.5	646.3	646.1	645.8	645.5	645.2	645.2	645.0	648.4	650.7
10	644.8	644.9	645.2	645.2	645.3	645.8	646.2	646.8	647.7	648.4	648.9	649.1	649.4	649.4	649.6	650.0	650.2	650.7	651.1	651.5	651.9	652.1	652.0	651.8	648.7	652.1
11	651.6	651.5	651.5	651.4	651.1	651.0	651.0	651.2	651.1	651.0	650.6	650.4	650.5	650.2	649.5	649.7	650.0	650.4	650.6	650.9	651.0	651.2	651.4	651.5	650.8	651.6
12	651.4	651.7	651.8	652.3	651.8	651.9	652.0	652.1	652.3	652.6	652.5	652.4	652.3	652.1	651.9	652.2	653.0	653.4	653.5	654.0	654.5	654.8	655.1	655.4	652.8	655.4
13	655.5	655.7	656.0	655.9	655.8	656.0	655.9	656.1	656.3	656.3	655.6	654.9	654.2	653.9	653.6	653.3	653.3	653.2	652.9	652.6	652.5	652.2	652.0	651.6	654.4	656.3
14	651.0	650.6	650.0	649.4	648.9	648.5	648.2	647.8	647.7	647.2	646.7	646.2	645.6	645.2	644.7	644.6	644.4	644.1	643.8	643.8	643.9	643.6	643.3	643.1	646.4	651.0
15	643.1	643.4	643.8	644.3	644.8	645.6	646.4	646.9	648.2	649.2	649.5	649.6	649.7	649.8	649.5	649.2	649.4	649.8	650.1	650.6	650.7	651.2	651.4	651.4	648.2	651.4
16	651.4	651.4	651.2	650.9	650.6	650.5	650.4	650.5	650.5	650.4	650.1	649.9	649.7	649.6	649.2	649.3	649.6	649.9	650.5	651.0	651.4	651.8	652.0	652.3	650.6	652.3
17	652.5	652.7	652.7	652.7	652.6	652.7	652.6	652.5	652.3	651.9	651.4	651.0	650.7	650.5	650.1	649.9	649.9	649.9	650.0	650.3	650.4	650.3	650.3	650.3	651.3	652.7
18	650.4	650.3	650.1	650.0	650.2	650.2	650.1	650.0	650.0	649.7	649.0	648.2	647.6	647.2	646.9	646.9	647.0	646.8	646.4	646.1	646.2	646.2	646.0	645.6	648.2	650.4
19	645.1	644.5	644.0	643.6	643.7	644.2	644.6	645.3	646.0	645.3	644.8	645.2	646.5	646.6	646.0	646.0	646.0	646.2	646.5	646.8	647.3	647.2	647.0	646.9	645.6	647.3
20	646.8	646.8	646.6	646.6	646.3	646.5	646.5	646.6	646.4	646.0	645.7	645.4	645.1	644.5	644.3	644.1	643.9	644.4	644.8	645.1	645.6	646.2	646.8	647.7	645.8	647.7
21	648.5	649.0	649.4	649.6	649.5	649.6	649.6	649.7	649.6	649.2	648.7	648.0	647.6	647.1	646.6	646.1	645.8	645.6	645.5	645.1	645.0	644.9	644.8	644.4	647.5	649.7
22	644.0	643.9	643.8	644.0	644.0	644.2	644.3	644.5	644.7	644.8	645.0	644.9	645.0	645.3	645.7	647.1	647.9	648.7	649.6	650.5	651.3	651.9	652.5	653.1	646.7	653.1
23	653.7	654.1	654.5	654.6	655.0	655.5	655.7	655.9	655.8	655.6	655.3	654.6	654.1	653.6	653.0	652.2	651.6	651.0	650.8	650.6	650.2	649.9	649.4	648.8	653.1	655.9
24	648.0	647.5	646.4	645.4	644.4	643.4	642.6	641.9	641.3	641.0	640.8	640.5	640.5	640.3	639.8	639.7	639.4	639.3	639.5	640.2	640.8	641.1	641.3	641.7	641.9	648.0
25	642.1	642.4	642.7	642.9	643.1	643.4	643.7	644.2	644.6	644.8	645.2	645.3	645.4	645.5	645.6	645.7	645.9	646.3	646.5	646.6	646.9	647.0	646.9	647.1	645.0	647.1
26	646.8	646.6	646.4	646.4	646.6	647.0	647.3	647.5	647.7	647.7	647.4	646.9	646.6	646.4	646.4	646.7	647.1	647.4	648.2	649.3	650.0	650.2	650.5	650.5	647.6	650.5
27	650.6	650.9	651.0	651.1	651.1	651.4	651.5	651.9	651.7	651.7	651.7	651.5	651.0	650.5	650.1	649.4	649.1	648.6	647.4	646.6	645.9	645.0	644.7	644.5	649.5	651.9
28	644.6	644.6	644.3	644.3	644.6	644.3	643.6	643.0	642.0	640.3	639.3	638.8	638.5	637.6	636.8	636.1	635.5	634.8	634.3	634.4	636.1	636.8	637.3	637.9	639.6	644.6
29	638.2	638.6	639.3	640.2	641.2	642.2	643.3	644.4	645.2	645.8	646.2	646.6	647.1	647.8	648.2	648.3	648.5	648.6	649.1	649.7	650.5	651.0	651.4	651.7	646.0	651.7
30	652.0	652.3	652.6	652.6	652.7	652.7	652.8	653.1	653.1	652.9	652.5	652.4	652.3	652.2	652.1	652.1	652.4	652.7	653.1	653.6	654.0	654.5	654.8	655.2	652.9	655.2
31	655.6	655.7	655.4	655.3	655.4	655.4	655.5	655.4	655.0	654.9	654.4	653.7	653.2	652.7	652.3	651.9	651.6	651.3	651.0	651.0	650.6	650.3	649.7	649.2	653.2	655.7
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	100.0%
MEAN	648.3	648.3	648.3	648.3	648.3	648.5	648.6	648.7	648.7	648.6	648.3	648.1	648.0	647.8	647.5	647.5	647.5	647.6	647.6	647.8	648.0	648.1	648.2	648.3		
MAX	655.6	655.7	656.0	655.9	655.8	656.0	655.9	656.1	656.3	656.3	655.6	654.9	654.2	653.9	653.6	653.3	653.3	653.4	653.5	654.0	654.5	654.8	655.1	655.4		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	656 MMHg		
Maximum 24-HR Average	654 MMHg		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	3.964	Operational Uptime	100.0 %
		Monthly Average	648.1 MMHg

Lagoon Relative Humidity (%) – March 2021

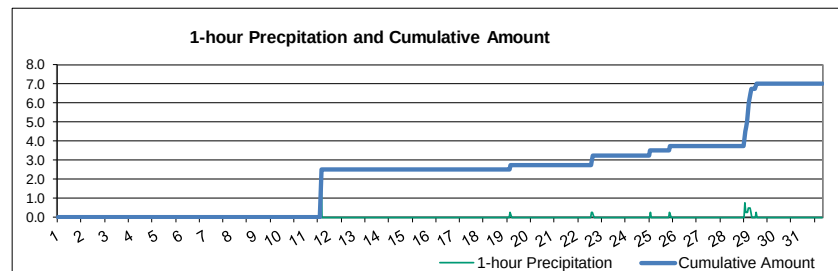
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	48.0	43.8	39.7	35.8	33.0	31.3	34.0	38.6	39.1	34.7	33.2	33.6	35.6	39.3	44.4	53.0	58.5	67.3	76.8	85.6	87.6	59.9	41.7	34.6	47.1	87.6
2	38.2	36.9	38.8	40.5	39.0	39.4	36.3	35.3	36.0	37.9	38.4	33.1	31.2	32.1	32.6	35.0	38.3	39.4	38.0	38.1	37.1	36.3	35.5	37.3	36.7	40.5
3	38.6	38.9	39.3	39.3	36.5	35.8	37.0	39.8	48.3	37.6	36.8	35.9	34.8	34.5	33.9	33.0	32.7	33.2	35.1	34.0	38.3	46.3	53.1	58.8	38.8	58.8
4	62.3	62.8	60.7	62.2	64.2	63.4	63.8	66.5	63.6	58.6	49.1	39.1	31.4	28.1	26.0	23.7	21.3	23.8	29.1	34.5	40.7	43.3	43.1	42.6	46.0	66.5
5	37.5	37.1	37.5	38.9	33.0	30.5	38.0	40.0	42.7	41.9	33.5	21.4	18.9	17.7	19.3	19.6	21.1	21.8	23.4	24.8	25.0	25.0	25.8	27.7	29.3	42.7
6	28.0	22.3	23.1	26.6	33.1	44.1	53.3	56.4	58.0	49.0	40.0	43.3	53.1	82.0	79.7	39.5	28.0	28.7	32.9	34.6	35.5	39.2	41.3	42.8	42.3	82.0
7	45.8	49.8	50.6	52.0	51.3	49.6	51.6	51.8	51.5	50.0	43.9	37.9	34.8	36.7	36.3	35.1	34.9	39.5	45.6	45.5	48.9	59.0	70.1	68.8	47.5	70.1
8	60.9	44.8	53.9	55.0	47.1	47.3	46.4	45.2	42.2	36.9	32.1	29.3	26.1	22.1	19.5	19.0	18.8	20.5	25.9	42.1	62.6	88.0	87.9	74.5	43.7	88.0
9	53.6	52.4	53.4	55.1	55.8	56.9	58.6	58.5	56.3	49.5	40.0	32.3	25.3	18.6	13.1	12.0	13.7	15.1	18.5	21.2	23.8	25.8	27.9	30.3	36.2	58.6
10	32.2	35.1	38.1	38.5	41.0	44.6	47.5	48.0	72.6	81.0	74.2	68.4	63.2	64.1	70.1	79.5	73.2	69.2	79.5	85.7	84.7	84.6	84.2	80.2	64.1	85.7
11	83.2	82.4	80.8	80.4	80.1	79.3	77.1	74.8	68.5	57.7	44.7	37.6	32.7	28.6	25.2	22.7	21.7	23.3	24.6	25.4	25.7	25.6	25.7	25.1	48.0	83.2
12	25.8	26.7	27.0	29.5	27.6	27.2	27.3	26.5	26.0	26.2	26.2	25.8	25.5	26.1	27.4	28.9	29.5	30.8	32.0	33.4	36.3	37.5	39.7	44.7	29.7	44.7
13	47.3	49.0	50.7	51.1	54.0	56.2	57.8	57.4	55.0	50.5	43.4	35.6	30.6	27.9	26.5	23.2	21.3	24.5	32.0	42.1	45.0	49.3	51.3	55.4	43.2	57.8
14	55.8	52.9	52.7	46.1	48.6	49.0	48.5	46.7	37.4	31.2	29.7	23.4	17.5	16.2	17.4	17.0	17.2	18.9	19.6	22.5	25.7	24.5	23.8	23.3	31.9	55.8
15	24.6	26.7	26.8	29.2	31.0	41.1	45.1	45.0	51.5	52.6	48.8	46.8	44.7	43.2	40.9	39.2	38.9	41.1	46.3	54.2	58.7	60.0	62.5	67.6	44.4	67.6
16	69.4	72.7	77.3	81.1	79.3	77.2	77.5	75.9	67.9	55.9	42.7	32.7	28.8	25.5	22.5	22.1	21.3	25.2	31.6	37.3	50.9	59.9	68.0	69.9	53.0	81.1
17	63.7	64.4	60.3	59.1	60.1	60.9	60.8	60.9	56.0	47.8	38.1	31.3	27.4	24.8	23.9	22.7	22.2	24.1	27.9	30.6	33.2	37.0	39.9	43.3	42.5	64.4
18	44.6	47.9	51.8	51.4	51.1	50.8	49.6	49.9	48.1	42.0	34.9	29.9	27.2	26.1	24.9	23.7	24.2	26.8	29.0	32.7	39.6	51.1	52.2	33.9	39.3	52.2
19	35.8	31.4	29.5	31.6	33.4	36.7	52.1	68.7	77.8	63.3	40.7	44.9	63.9	53.0	34.6	32.1	33.1	31.3	34.9	37.5	42.2	43.0	43.2	38.9	43.1	77.8
20	40.5	40.6	39.5	37.4	38.6	43.2	46.8	44.4	38.2	37.2	32.0	32.7	30.1	31.3	44.3	39.6	32.1	32.0	41.7	43.2	44.0	43.3	43.4	49.5	39.4	49.5
21	66.9	74.0	72.0	69.3	72.4	76.8	77.5	78.4	78.9	71.1	65.6	55.8	40.9	33.1	33.3	34.6	32.8	38.9	40.5	39.2	40.9	40.7	39.4	40.5	54.7	78.9
22	39.3	39.1	38.9	39.9	40.7	39.2	40.7	43.3	44.5	45.8	38.8	33.4	34.2	43.1	41.7	76.1	90.6	91.9	91.1	88.9	88.5	87.3	87.7	87.5	58.0	91.9
23	88.8	89.3	88.9	85.1	80.4	77.2	77.2	76.6	72.5	68.1	62.3	53.9	39.1	33.3	30.2	29.5	29.1	30.6	32.2	32.9	33.3	34.3	37.5	38.3	55.0	89.3
24	39.3	41.2	42.6	42.9	45.5	45.9	46.5	46.5	44.4	41.9	38.8	35.6	32.8	31.0	31.1	31.9	32.2	33.5	36.5	51.6	72.3	82.5	86.4	88.4	46.7	88.4
25	87.3	82.5	85.0	87.7	87.3	86.5	87.6	88.6	85.6	83.6	81.8	81.0	79.5	78.7	79.5	84.3	85.9	87.0	87.8	90.2	90.1	89.1	89.5	89.1	85.6	90.2
26	89.0	89.0	89.1	89.0	88.3	86.3	86.0	86.2	78.3	69.5	64.4	50.0	41.9	35.9	32.3	32.8	34.9	35.1	44.6	76.3	78.2	81.3	82.5	84.5	67.7	89.1
27	85.8	86.8	89.1	90.6	88.0	53.7	51.8	48.1	43.5	41.0	36.4	34.4	32.7	32.5	32.8	31.9	32.6	34.9	37.0	37.6	36.9	35.9	35.8	34.7	48.5	90.6
28	33.7	34.7	34.8	36.6	42.5	48.6	47.9	50.7	53.9	42.4	42.5	49.5	56.8	62.4	70.2	69.0	70.4	71.6	72.8	73.5	86.5	91.7	90.4	89.6	59.3	91.7
29	90.6	91.1	90.8	88.4	87.6	83.2	79.7	78.1	75.8	72.9	64.5	62.9	68.3	74.6	72.0	65.4	57.2	51.8	57.0	60.3	61.5	66.5	73.8	78.3	73.0	91.1
30	80.8	78.3	78.1	80.1	79.7	76.5	72.4	70.3	63.7	55.3	44.7	37.9	36.2	35.3	33.3	33.2	34.1	35.6	36.6	39.5	41.9	42.6	43.7	42.7	53.0	80.8
31	41.8	42.2	46.9	49.1	50.4	53.0	54.8	51.3	48.9	46.9	40.3	36.9	35.0	33.1	32.4	30.3	29.3	27.5	27.6	28.1	28.8	30.0	30.5	31.3	38.6	54.8
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	100.0%
MEAN	54.2	53.8	54.4	54.8	54.9	54.6	55.8	56.4	55.7	51.0	44.6	40.2	38.1	37.8	37.1	36.8	36.5	37.9	41.6	45.9	49.8	52.3	53.5	53.4		
MAX	90.6	91.1	90.8	90.6	88.3	86.5	87.6	88.6	85.6	83.6	81.8	81.0	79.5	82.0	79.7	84.3	90.6	91.9	91.1	90.2	90.1	91.7	90.4	89.6		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	91.9 %		
Maximum 24-HR Average	85.6 %		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	19.98	Operational Uptime	100.0 %
		Monthly Average	48.0 %

Lagoon Precipitation (mm) – March 2021

Day	HOUR																								MEAN	MAX			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	2.5	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	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	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
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	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	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	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	0.8	0.3	0.3	0.5	0.0	0.0	0.0	0.0	0.0
29	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	31	31	31	31	744
MEAN	0.0	0.0	0.0	0.0	0.0	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
MAX	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.5	0.0	0.0	0.3	0.8	0.3	0.3	0.5	0.0	0.0	0.0	0.0	100%



Number of Non-Zero Readings 14

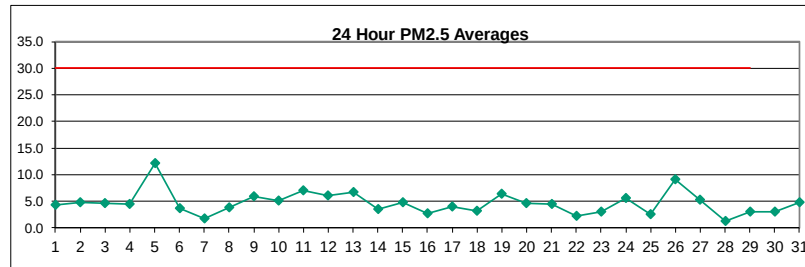
Maximum 1-HR Average 2.5 MM

Maximum 24-HR Average 0.1 MM

Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	0.104	Operational Uptime	100.0 %
		Monthly Average	0.01 MM

Windridge PM_{2.5} (µg/m³) – March 2021

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
1	7.0	3.0	2.0	5.0	2.0	21.0	8.0	7.0	3.0	4.0	6.0	4.0	3.0	5.0	2.0	0.0	3.0	3.0	1.0	1.0	0.0	6.0	5.0	3.0
2	6.0	3.0	0.0	5.0	8.0	6.0	3.0	3.0	4.0	7.0	8.0	8.0	5.0	2.0	3.0	3.0	3.0	5.0	5.0	4.0	6.0	5.0	6.0	6.0
3	9.0	7.0	6.0	4.0	3.0	3.0	2.0	2.0	5.0	14.0	8.0	3.0	6.0	6.0	4.0	2.0	3.0	4.0	3.0	3.0	6.0	6.0	2.0	1.0
4	1.0	2.0	3.0	2.0	3.0	1.0	1.0	1.0	1.0	6.0	8.0	8.0	10.0	12.0	9.0	8.0	6.0	3.0	7.0	4.0	1.0	2.0	4.0	5.0
5	6.0	5.0	3.0	3.0	6.0	11.0	7.0	3.0	2.0	3.0	8.0	8.0	33.0	64.0	21.0	11.0	7.0	17.0	13.0	11.0	8.0	8.0	13.0	21.0
6	12.0	7.0	3.0	7.0	5.0	6.0	5.0	2.0	2.0	4.0	6.0	5.0	5.0	3.0	2.0	1.0	0.0	0.0	2.0	1.0	5.0	4.0	1.0	1.0
7	2.0	1.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	3.0	5.0	3.0	2.0	1.0	2.0	3.0	3.0	3.0	4.0	3.0	3.0
8	6.0	4.0	3.0	1.0	0.0	5.0	19.0	17.0	4.0	5.0	3.0	2.0	1.0	2.0	4.0	3.0	4.0	1.0	0.0	0.0	0.0	5.0	4.0	1.0
9	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	1.0	0.0	4.0	C	28.0	9.0	6.0	11.0	8.0	16.0	10.0	18.0	16.0
10	13.0	10.0	5.0	5.0	4.0	2.0	3.0	1.0	3.0	7.0	5.0	3.0	3.0	4.0	2.0	7.0	7.0	4.0	7.0	6.0	4.0	9.0	6.0	2.0
11	2.0	10.0	10.0	8.0	8.0	5.0	6.0	4.0	2.0	1.0	12.0	13.0	9.0	7.0	4.0	6.0	5.0	5.0	5.0	4.0	8.0	11.0	13.0	12.0
12	6.0	5.0	6.0	8.0	7.0	9.0	9.0	6.0	7.0	5.0	3.0	2.0	5.0	4.0	9.0	5.0	6.0	7.0	5.0	6.0	5.0	5.0	6.0	10.0
13	11.0	8.0	4.0	2.0	1.0	6.0	4.0	1.0	3.0	4.0	10.0	7.0	6.0	4.0	8.0	8.0	9.0	25.0	7.0	13.0	8.0	5.0	5.0	4.0
14	3.0	4.0	8.0	6.0	2.0	1.0	1.0	0.0	5.0	4.0	3.0	4.0	3.0	8.0	7.0	3.0	5.0	6.0	3.0	1.0	4.0	1.0	0.0	1.0
15	3.0	4.0	6.0	9.0	7.0	1.0	1.0	3.0	8.0	7.0	6.0	2.0	1.0	4.0	3.0	2.0	1.0	1.0	9.0	5.0	2.0	8.0	14.0	10.0
16	5.0	3.0	3.0	4.0	4.0	4.0	2.0	0.0	1.0	2.0	4.0	10.0	6.0	3.0	2.0	0.0	0.0	1.0	0.0	0.0	3.0	2.0	2.0	3.0
17	2.0	2.0	7.0	6.0	4.0	4.0	4.0	4.0	3.0	3.0	7.0	12.0	8.0	3.0	2.0	4.0	3.0	0.0	2.0	4.0	3.0	3.0	4.0	2.0
18	2.0	5.0	4.0	4.0	3.0	2.0	1.0	1.0	1.0	1.0	8.0	5.0	1.0	1.0	2.0	4.0	8.0	5.0	2.0	6.0	5.0	3.0	2.0	2.0
19	7.0	7.0	6.0	9.0	6.0	8.0	10.0	7.0	5.0	8.0	11.0	11.0	11.0	6.0	3.0	5.0	3.0	0.0	0.0	5.0	6.0	7.0	6.0	5.0
20	6.0	5.0	3.0	8.0	13.0	8.0	4.0	0.0	7.0	7.0	3.0	2.0	3.0	5.0	6.0	9.0	7.0	5.0	3.0	3.0	3.0	1.0	0.0	0.0
21	1.0	3.0	4.0	3.0	2.0	2.0	2.0	1.0	0.0	2.0	3.0	14.0	9.0	5.0	13.0	8.0	5.0	3.0	2.0	5.0	10.0	7.0	3.0	2.0
22	6.0	4.0	6.0	5.0	2.0	4.0	3.0	1.0	3.0	4.0	2.0	1.0	1.0	1.0	2.0	1.0	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
23	4.0	5.0	4.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	1.0	0.0	0.0	3.0	3.0	3.0	2.0	3.0	13.0	8.0	7.0	7.0	5.0
24	4.0	4.0	3.0	2.0	3.0	5.0	10.0	9.0	14.0	10.0	10.0	7.0	4.0	5.0	7.0	6.0	5.0	7.0	4.0	6.0	3.0	1.0	2.0	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	1.0	1.0	3.0	4.0	3.0	5.0	4.0	3.0	6.0	4.0	2.0	2.0	3.0	6.0	7.0
26	8.0	5.0	4.0	10.0	8.0	10.0	8.0	7.0	9.0	8.0	19.0	35.0	12.0	7.0	4.0	19.0	7.0	6.0	0.0	0.0	9.0	11.0	6.0	6.0
27	8.0	6.0	5.0	7.0	8.0	6.0	3.0	5.0	7.0	4.0	5.0	6.0	6.0	7.0	8.0	5.0	7.0	5.0	2.0	1.0	2.0	2.0	5.0	5.0
28	6.0	5.0	2.0	2.0	2.0	2.0	0.0	0.0	1.0	0.0	0.0	2.0	1.0	0.0	0.0	4.0	1.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0
29	0.0	0.0	0.0	1.0	2.0	0.0	0.0	3.0	2.0	2.0	2.0	6.0	6.0	4.0	0.0	0.0	2.0	7.0	4.0	6.0	7.0	4.0	8.0	5.0
30	2.0	0.0	1.0	1.0	5.0	5.0	3.0	2.0	0.0	1.0	1.0	5.0	6.0	5.0	6.0	5.0	4.0	2.0	5.0	4.0	2.0	2.0	3.0	4.0
31	5.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0	5.0	4.0	5.0	7.0	6.0	5.0	5.0	5.0	5.0	3.0	4.0	5.0	6.0	7.0	11.0	6.0
NO.	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
MEAN	4.9	4.2	3.7	4.3	4.0	4.5	4.0	3.2	3.6	4.2	5.5	6.4	5.7	6.3	5.0	5.5	4.5	4.6	3.7	4.2	4.7	4.8	5.3	4.8
MAX	13.0	10.0	10.0	10.0	13.0	21.0	19.0	17.0	14.0	14.0	19.0	35.0	33.0	64.0	21.0	28.0	9.0	25.0	13.0	13.0	16.0	11.0	18.0	21.0

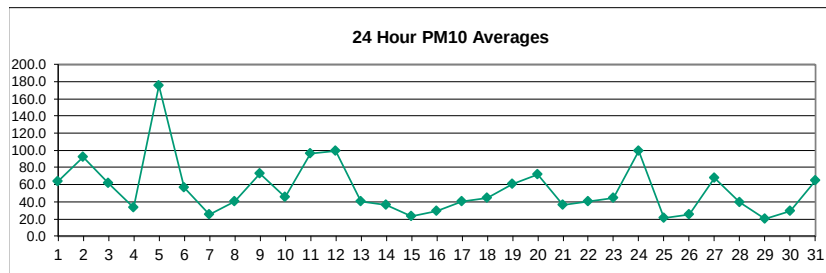


Windridge PM₁₀ (µg/m³) – March 2021

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
1	76.0	58.0	76.0	72.0	77.0	138.0	94.0	105.0	94.0	97.0	150.0	58.0	54.0	68.0	27.0	32.0	63.0	33.0	27.0	9.0	4.0	16.0	29.0	68.0
2	174.0	61.0	64.0	76.0	60.0	49.0	45.0	87.0	201.0	196.0	132.0	104.0	146.0	107.0	41.0	57.0	49.0	44.0	54.0	61.0	89.0	120.0	87.0	109.0
3	110.0	78.0	136.0	34.0	40.0	53.0	22.0	15.0	17.0	103.0	93.0	97.0	95.0	44.0	52.0	51.0	54.0	30.0	51.0	145.0	100.0	47.0	2.0	5.0
4	8.0	5.0	4.0	5.0	5.0	4.0	4.0	7.0	15.0	17.0	42.0	30.0	132.0	84.0	68.0	90.0	54.0	65.0	66.0	29.0	20.0	12.0	14.0	9.0
5	31.0	18.0	12.0	32.0	46.0	120.0	71.0	19.0	19.0	29.0	83.0	83.0	485.0	485.0	462.0	149.0	220.0	327.0	221.0	197.0	223.0	170.0	240.0	471.0
6	189.0	71.0	93.0	130.0	65.0	38.0	34.0	16.0	18.0	64.0	97.0	96.0	43.0	13.0	14.0	8.0	35.0	40.0	45.0	58.0	91.0	84.0	13.0	9.0
7	6.0	2.0	1.0	1.0	1.0	1.0	3.0	5.0	3.0	1.0	15.0	52.0	107.0	38.0	51.0	65.0	19.0	39.0	48.0	108.0	14.0	10.0	8.0	5.0
8	28.0	5.0	51.0	43.0	38.0	100.0	48.0	34.0	45.0	75.0	35.0	96.0	55.0	48.0	44.0	53.0	40.0	19.0	17.0	6.0	7.0	43.0	26.0	7.0
9	6.0	8.0	12.0	7.0	6.0	7.0	7.0	13.0	14.0	53.0	46.0	29.0	97.0	183.0	183.0	C	63.0	62.0	81.0	92.0	180.0	124.0	209.0	202.0
10	187.0	97.0	49.0	43.0	13.0	11.0	7.0	3.0	14.0	109.0	98.0	49.0	27.0	9.0	17.0	58.0	118.0	29.0	17.0	71.0	20.0	23.0	10.0	6.0
11	5.0	29.0	20.0	17.0	11.0	13.0	29.0	28.0	32.0	22.0	175.0	133.0	108.0	133.0	101.0	123.0	113.0	196.0	155.0	143.0	192.0	269.0	151.0	117.0
12	95.0	142.0	131.0	189.0	17.0	71.0	61.0	70.0	164.0	191.0	128.0	42.0	66.0	90.0	114.0	30.0	120.0	104.0	92.0	86.0	121.0	97.0	66.0	83.0
13	22.0	18.0	10.0	10.0	6.0	10.0	11.0	9.0	6.0	35.0	84.0	69.0	122.0	81.0	73.0	33.0	54.0	92.0	86.0	52.0	28.0	22.0	17.0	17.0
14	5.0	6.0	7.0	8.0	20.0	8.0	7.0	8.0	86.0	102.0	100.0	75.0	50.0	87.0	50.0	29.0	61.0	30.0	31.0	38.0	23.0	10.0	12.0	9.0
15	23.0	32.0	43.0	63.0	9.0	5.0	7.0	18.0	71.0	25.0	14.0	11.0	10.0	17.0	8.0	16.0	27.0	27.0	16.0	11.0	14.0	27.0	31.0	26.0
16	16.0	18.0	19.0	14.0	27.0	14.0	8.0	7.0	10.0	22.0	120.0	117.0	61.0	58.0	44.0	30.0	23.0	12.0	18.0	10.0	16.0	12.0	10.0	7.0
17	8.0	17.0	26.0	11.0	10.0	11.0	8.0	11.0	32.0	54.0	104.0	191.0	134.0	54.0	56.0	44.0	44.0	24.0	36.0	51.0	28.0	7.0	8.0	12.0
18	12.0	12.0	12.0	11.0	40.0	7.0	9.0	18.0	44.0	60.0	18.0	62.0	92.0	92.0	112.0	121.0	83.0	77.0	59.0	57.0	13.0	8.0	19.0	33.0
19	36.0	25.0	121.0	153.0	63.0	60.0	47.0	26.0	31.0	44.0	105.0	103.0	64.0	43.0	39.0	22.0	11.0	19.0	14.0	63.0	107.0	55.0	111.0	86.0
20	90.0	86.0	108.0	124.0	102.0	72.0	44.0	31.0	170.0	57.0	46.0	20.0	53.0	57.0	121.0	97.0	87.0	79.0	22.0	51.0	105.0	38.0	49.0	27.0
21	36.0	15.0	14.0	12.0	7.0	7.0	7.0	11.0	19.0	10.0	7.0	20.0	41.0	17.0	57.0	49.0	39.0	31.0	49.0	69.0	83.0	80.0	52.0	133.0
22	57.0	79.0	81.0	99.0	118.0	74.0	24.0	30.0	37.0	47.0	46.0	33.0	41.0	33.0	28.0	7.0	37.0	16.0	42.0	5.0	8.0	8.0	6.0	7.0
23	7.0	10.0	9.0	11.0	7.0	3.0	3.0	3.0	4.0	5.0	11.0	31.0	43.0	55.0	47.0	36.0	48.0	89.0	95.0	122.0	75.0	90.0	78.0	174.0
24	101.0	80.0	65.0	83.0	72.0	101.0	122.0	191.0	377.0	163.0	144.0	179.0	69.0	89.0	101.0	122.0	94.0	60.0	58.0	49.0	21.0	14.0	8.0	11.0
25	23.0	53.0	14.0	17.0	8.0	18.0	20.0	15.0	10.0	10.0	14.0	14.0	12.0	10.0	9.0	18.0	47.0	56.0	42.0	33.0	40.0	13.0	8.0	14.0
26	15.0	12.0	9.0	10.0	17.0	14.0	11.0	12.0	17.0	8.0	22.0	38.0	34.0	30.0	52.0	54.0	51.0	44.0	51.0	32.0	19.0	26.0	11.0	13.0
27	13.0	12.0	12.0	16.0	13.0	17.0	19.0	60.0	85.0	72.0	59.0	70.0	71.0	179.0	108.0	72.0	142.0	117.0	29.0	72.0	86.0	46.0	169.0	78.0
28	182.0	90.0	41.0	89.0	104.0	21.0	19.0	9.0	7.0	5.0	72.0	65.0	62.0	8.0	6.0	5.0	5.0	3.0	3.0	1.0	8.0	82.0	33.0	17.0
29	6.0	2.0	9.0	9.0	16.0	3.0	16.0	25.0	22.0	67.0	45.0	22.0	13.0	12.0	52.0	16.0	25.0	25.0	25.0	40.0	3.0	7.0	10.0	8.0
30	6.0	13.0	8.0	4.0	6.0	6.0	6.0	17.0	16.0	28.0	20.0	65.0	67.0	52.0	37.0	36.0	35.0	39.0	34.0	28.0	51.0	40.0	40.0	43.0
31	23.0	19.0	19.0	36.0	64.0	35.0	6.0	17.0	65.0	112.0	91.0	83.0	138.0	95.0	79.0	58.0	41.0	49.0	112.0	95.0	105.0	61.0	73.0	71.0

MEAN	MAX
63.5	150.0
92.2	201.0
61.4	145.0
32.9	132.0
175.5	485.0
56.8	189.0
25.1	108.0
40.1	100.0
73.2	209.0
45.2	187.0
96.5	269.0
98.8	191.0
40.3	122.0
35.9	102.0
23.0	71.0
28.9	120.0
40.9	191.0
44.6	121.0
60.3	153.0
72.3	170.0
36.0	133.0
40.1	118.0
44.0	174.0
98.9	377.0
21.6	56.0
25.1	54.0
67.4	179.0
39.0	182.0
19.9	67.0
29.0	67.0
64.5	138.0

NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31
MEAN	51.5	37.8	41.2	46.1	35.1	35.2	26.4	29.7	56.3	60.7	71.5	68.9	83.6	76.5	72.7	52.7	61.4	60.5	54.7	60.8	61.1	53.6	51.6	60.5
MAX	189.0	142.0	136.0	189.0	118.0	138.0	122.0	191.0	377.0	196.0	175.0	191.0	485.0	485.0	462.0	149.0	220.0	327.0	221.0	197.0	223.0	269.0	240.0	471.0



Number of Non-Zero Readings 743

Maximum 1-HR Average 485.0 UG/M3

Maximum 24-HR Average 175.5 UG/M3

Monthly Calibration 1

Standard Deviation 58.6

Operational Time 744 HRS

Operational Uptime 100.0 %

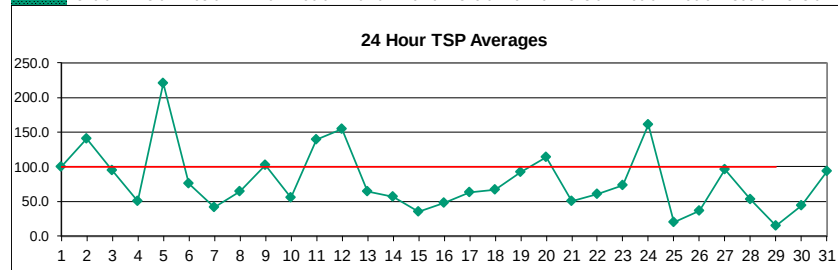
Monthly Average 54.6 UG/M3

Windridge TSP (µg/m³) – March 2021

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
1	124.0	79.0	154.0	130.0	122.0	204.0	186.0	171.0	146.0	138.0	240.0	82.0	85.0	97.0	39.0	45.0	92.0	53.0	40.0	6.0	7.0	9.0	38.0	107.0
2	195.0	80.0	114.0	114.0	89.0	92.0	82.0	151.0	338.0	323.0	197.0	151.0	199.0	173.0	62.0	83.0	74.0	66.0	74.0	82.0	137.0	202.0	134.0	174.0
3	159.0	132.0	208.0	65.0	66.0	87.0	37.0	20.0	18.0	202.0	166.0	156.0	154.0	67.0	68.0	79.0	82.0	53.0	83.0	144.0	144.0	72.0	4.0	6.0
4	4.0	9.0	6.0	2.0	5.0	9.0	10.0	14.0	14.0	18.0	65.0	40.0	224.0	134.0	100.0	134.0	80.0	106.0	113.0	52.0	38.0	20.0	12.0	16.0
5	51.0	13.0	19.0	37.0	57.0	190.0	151.0	29.0	27.0	36.0	134.0	139.0	866.0	578.0	551.0	206.0	257.0	224.0	279.0	224.0	243.0	248.0	301.0	439.0
6	209.0	94.0	152.0	153.0	98.0	51.0	33.0	16.0	21.0	84.0	118.0	136.0	62.0	25.0	12.0	8.0	54.0	64.0	63.0	88.0	145.0	114.0	23.0	8.0
7	6.0	5.0	5.0	4.0	1.0	6.0	4.0	4.0	4.0	5.0	24.0	89.0	189.0	76.0	82.0	107.0	35.0	62.0	66.0	144.0	26.0	13.0	19.0	8.0
8	44.0	10.0	112.0	78.0	64.0	141.0	68.0	48.0	76.0	132.0	60.0	166.0	92.0	85.0	78.0	86.0	63.0	27.0	26.0	3.0	19.0	42.0	25.0	10.0
9	6.0	10.0	13.0	10.0	7.0	4.0	1.0	6.0	8.0	72.0	55.0	34.0	160.0	259.0	C	C	81.0	80.0	123.0	147.0	281.0	219.0	338.0	348.0
10	310.0	182.0	80.0	62.0	28.0	25.0	12.0	9.0	27.0	160.0	106.0	30.0	16.0	14.0	28.0	50.0	66.0	30.0	20.0	20.0	13.0	14.0	10.0	9.0
11	6.0	18.0	18.0	17.0	16.0	11.0	21.0	21.0	30.0	21.0	266.0	199.0	130.0	169.0	117.0	154.0	203.0	293.0	267.0	267.0	330.0	366.0	222.0	181.0
12	153.0	248.0	204.0	277.0	30.0	128.0	96.0	124.0	257.0	320.0	194.0	73.0	93.0	131.0	176.0	48.0	171.0	161.0	128.0	115.0	189.0	166.0	103.0	134.0
13	34.0	30.0	17.0	11.0	9.0	16.0	10.0	9.0	9.0	45.0	123.0	113.0	199.0	141.0	107.0	46.0	79.0	167.0	154.0	108.0	38.0	33.0	23.0	21.0
14	15.0	15.0	8.0	19.0	31.0	16.0	10.0	18.0	139.0	156.0	160.0	121.0	78.0	152.0	84.0	48.0	90.0	37.0	41.0	55.0	34.0	6.0	6.0	22.0
15	34.0	49.0	70.0	93.0	16.0	7.0	7.0	32.0	119.0	39.0	19.0	14.0	14.0	34.0	17.0	16.0	34.0	43.0	31.0	20.0	19.0	38.0	41.0	33.0
16	28.0	31.0	25.0	31.0	37.0	25.0	7.0	10.0	14.0	33.0	197.0	207.0	94.0	89.0	81.0	50.0	33.0	24.0	38.0	19.0	25.0	17.0	14.0	16.0
17	14.0	20.0	36.0	7.0	12.0	13.0	17.0	22.0	30.0	71.0	165.0	296.0	206.0	85.0	94.0	71.0	70.0	29.0	55.0	88.0	60.0	11.0	21.0	22.0
18	19.0	15.0	16.0	23.0	20.0	5.0	9.0	17.0	43.0	31.0	15.0	100.0	164.0	170.0	185.0	195.0	135.0	128.0	80.0	88.0	35.0	10.0	34.0	59.0
19	59.0	42.0	191.0	197.0	87.0	104.0	74.0	38.0	56.0	56.0	128.0	170.0	97.0	60.0	53.0	38.0	18.0	32.0	23.0	110.0	195.0	75.0	178.0	141.0
20	146.0	164.0	176.0	235.0	160.0	105.0	64.0	52.0	295.0	95.0	73.0	42.0	83.0	80.0	167.0	162.0	103.0	120.0	39.0	83.0	116.0	58.0	66.0	41.0
21	55.0	15.0	16.0	14.0	8.0	6.0	5.0	20.0	22.0	13.0	8.0	24.0	59.0	28.0	90.0	68.0	56.0	45.0	74.0	107.0	113.0	114.0	78.0	159.0
22	86.0	115.0	117.0	153.0	196.0	108.0	33.0	57.0	67.0	83.0	64.0	55.0	62.0	66.0	48.0	15.0	43.0	12.0	55.0	8.0	7.0	5.0	4.0	6.0
23	6.0	13.0	8.0	9.0	6.0	7.0	5.0	4.0	10.0	15.0	26.0	49.0	74.0	112.0	89.0	58.0	83.0	154.0	153.0	223.0	128.0	142.0	119.0	263.0
24	141.0	126.0	133.0	163.0	144.0	143.0	194.0	319.0	617.0	243.0	237.0	282.0	123.0	140.0	158.0	185.0	157.0	88.0	100.0	89.0	43.0	17.0	6.0	9.0
25	31.0	112.0	33.0	9.0	5.0	3.0	5.0	7.0	11.0	10.0	11.0	9.0	21.0	6.0	12.0	16.0	33.0	43.0	40.0	21.0	18.0	9.0	7.0	7.0
26	9.0	10.0	10.0	12.0	12.0	14.0	14.0	9.0	17.0	9.0	34.0	50.0	55.0	53.0	87.0	88.0	92.0	75.0	75.0	62.0	27.0	25.0	14.0	24.0
27	13.0	11.0	16.0	20.0	14.0	29.0	38.0	96.0	153.0	108.0	104.0	119.0	122.0	266.0	160.0	113.0	173.0	134.0	45.0	100.0	115.0	54.0	190.0	102.0
28	184.0	104.0	65.0	132.0	157.0	36.0	25.0	19.0	15.0	12.0	93.0	94.0	81.0	10.0	9.0	9.0	6.0	4.0	1.0	6.0	19.0	121.0	43.0	25.0
29	4.0	3.0	3.0	10.0	9.0	4.0	2.0	5.0	12.0	19.0	28.0	16.0	7.0	8.0	30.0	7.0	27.0	36.0	30.0	61.0	7.0	9.0	19.0	18.0
30	5.0	27.0	10.0	5.0	6.0	6.0	14.0	18.0	20.0	42.0	29.0	94.0	105.0	92.0	52.0	60.0	57.0	56.0	47.0	45.0	74.0	59.0	67.0	61.0
31	38.0	26.0	40.0	64.0	101.0	47.0	15.0	27.0	96.0	193.0	147.0	113.0	164.0	132.0	112.0	87.0	57.0	69.0	164.0	120.0	161.0	81.0	107.0	100.0

MEAN	MAX
99.8	240.0
141.1	338.0
94.7	208.0
51.0	224.0
220.8	866.0
76.3	209.0
41.0	189.0
64.8	166.0
102.8	348.0
55.0	310.0
139.3	366.0
155.0	320.0
64.3	199.0
56.7	160.0
35.0	119.0
47.7	207.0
63.1	296.0
66.5	195.0
92.6	197.0
113.5	295.0
49.9	159.0
61.0	196.0
73.2	263.0
160.7	7.0
20.0	112.0
36.5	92.0
95.6	266.0
52.9	184.0
15.6	61.0
43.8	105.0
94.2	193.0

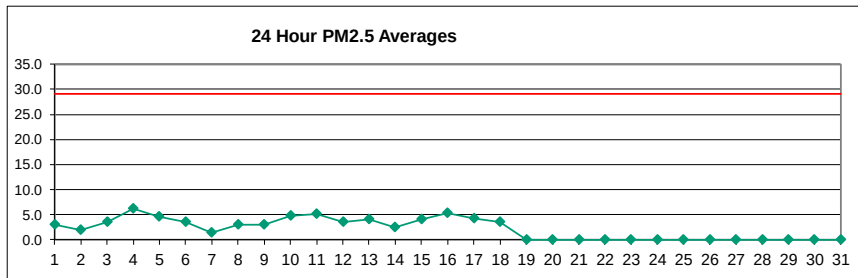
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31
MEAN	70.6	58.3	66.9	69.5	52.0	53.0	40.3	44.9	87.5	89.8	106.0	105.3	131.5	113.9	98.3	77.7	84.0	81.1	81.5	87.3	90.5	76.4	73.1	82.9
MAX	310.0	248.0	208.0	277.0	196.0	204.0	194.0	319.0	617.0	323.0	266.0	296.0	866.0	578.0	551.0	206.0	257.0	293.0	279.0	267.0	330.0	366.0	338.0	439.0



Number of 24HR Exceedences	7	Proposed Guideline
Number of Non-Zero Readings	742	
Maximum 1-HR Average	866.0 UG/M3	
Maximum 24-HR Average	220.8 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	85.3	Monthly Average
		744 HRS
		100.0 %
		80.1 UG/M3

West PM_{2.5} (µg/m³) – March 2021

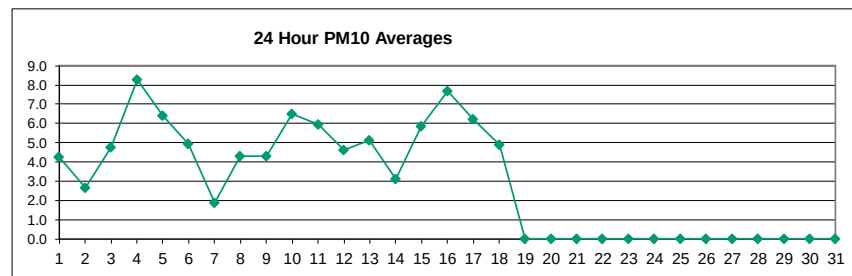
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	0.8	0.8	1.2	1.1	1.2	1.1	1.9	3.4	4.9	4.2	4.9	3.6	3.8	5.0	4.2	5.7	5.6	6.3	1.9	1.5	5.9	2.1	1.1	0.9
2	1.0	0.9	1.0	0.8	1.0	1.4	2.1	1.9	3.5	3.8	3.1	2.3	2.3	1.6	2.5	3.3	2.4	2.1	1.6	1.7	1.6	1.7	1.6	1.7
3	1.8	2.1	2.0	2.0	2.0	2.3	2.7	3.3	5.1	5.0	4.6	4.5	4.0	5.1	5.1	5.7	5.3	4.3	2.8	2.8	2.7	2.7	2.7	3.0
4	3.6	4.0	3.5	4.4	3.6	3.9	5.1	5.6	7.5	14.6	13.2	12.0	8.9	9.2	8.1	7.7	6.1	3.3	2.6	3.4	3.9	5.0	6.1	5.3
5	4.8	3.2	3.2	3.5	3.5	3.9	4.1	5.8	7.9	9.0	8.6	5.7	5.8	5.7	5.0	4.4	3.9	3.5	3.1	3.1	2.8	3.0	3.1	3.2
6	3.5	2.9	3.1	3.4	3.1	3.4	3.8	5.3	5.7	4.4	4.9	5.9	3.3	3.3	6.4	6.1	4.1	2.1	1.2	1.0	0.8	1.3	1.5	2.4
7	2.4	1.9	1.4	0.9	0.9	0.8	0.9	1.3	1.6	2.5	3.1	2.4	1.9	1.6	2.0	1.6	1.8	1.1	0.7	0.6	0.9	0.7	0.4	0.7
8	0.4	0.5	0.7	0.4	0.6	0.8	4.9	6.1	7.4	4.5	3.2	3.8	3.1	2.9	3.3	4.0	3.7	2.0	0.5	1.2	3.3	5.0	5.2	5.0
9	3.2	3.1	2.9	2.5	2.0	2.1	3.2	6.6	8.0	6.2	4.6	5.1	X	3.5	3.1	3.0	3.0	1.9	0.9	1.1	1.1	1.1	1.2	1.4
10	1.4	1.4	1.4	1.7	1.5	1.9	1.4	8.5	8.6	4.3	3.5	3.5	3.8	5.5	6.0	5.1	5.3	6.1	7.1	6.5	6.4	6.2	6.4	8.9
11	14.4	15.2	14.0	10.3	7.9	6.0	4.5	4.0	3.5	7.7	5.2	4.1	3.5	2.5	2.7	2.4	2.3	1.9	1.4	1.5	1.4	1.3	1.5	1.9
12	2.1	1.9	2.0	2.0	2.0	1.6	1.9	3.8	5.1	6.5	4.3	3.1	2.5	3.9	4.6	3.2	2.7	2.4	2.8	2.1	2.9	3.6	6.4	9.0
13	8.8	7.4	7.4	6.1	5.6	5.3	6.1	5.6	5.0	3.9	4.1	3.6	2.8	2.6	2.6	2.4	2.0	1.9	1.3	1.5	2.3	2.7	3.6	4.9
14	3.9	3.8	3.2	2.6	2.6	2.4	2.4	2.5	2.5	2.9	2.6	2.4	1.9	2.3	2.2	2.4	1.8	1.8	1.9	1.9	2.1	2.2	2.1	2.1
15	2.1	2.1	2.3	2.4	2.2	2.3	4.5	8.5	7.1	6.4	4.2	3.7	4.3	4.9	4.0	3.7	2.9	3.1	3.8	3.3	3.1	5.1	6.0	6.2
16	6.4	6.4	6.8	6.3	5.2	4.2	4.7	5.7	9.9	13.0	10.3	6.5	5.4	4.9	5.1	4.1	2.2	2.9	3.1	2.4	2.4	2.5	3.6	3.8
17	4.4	5.3	3.0	3.1	3.0	3.2	5.7	9.5	9.6	7.5	6.5	6.4	3.7	4.8	5.2	3.5	2.3	1.8	1.4	1.3	2.0	4.1	3.2	2.3
18	2.1	2.0	2.1	2.1	2.1	2.4	3.2	5.6	5.4	6.1	7.3	5.3	3.7	4.6	4.6	3.9	3.4	2.4	2.1	2.2	2.4	3.4	3.1	3.3
19	3.8	3.5	3.3	2.9	2.6	3.2	3.7	2.3	2.4	2.4	4.1	4.2	1.8	3.8	3.6	K	K	K	K	K	K	K	K	K
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	2.9	2.1	3.6	1.4	1.4	1.3	0.9	2.5	6.7
23	9.9	X	X	X	X	X	X	X	X	2.1	2.0	X	3.2	3.5	X	X	X	X	X	X	2.0	X	1.3	X
24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NO.	20	19	19	19	19	19	19	19	19	20	20	19	19	20	19	19	19	19	19	19	20	19	20	19
MEAN	4.0	3.6	3.4	3.1	2.8	2.7	3.5	5.0	5.8	5.8	5.2	4.7	3.7	4.0	4.2	3.9	3.3	2.9	2.2	2.1	2.6	2.9	3.1	3.8
MAX	14.4	15.2	14.0	10.3	7.9	6.0	6.1	9.5	9.9	14.6	13.2	12.0	8.9	9.2	8.1	7.7	6.1	6.3	7.1	6.5	6.4	6.2	6.4	9.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	462	
Maximum 1-HR Average	15.2 UG/M3	
Maximum 24-HR Average	6.3 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	2.366	Monthly Average
		462 HRS
		62.1 %
		3.7 UG/M3

West PM₁₀ (µg/m³) – March 2021

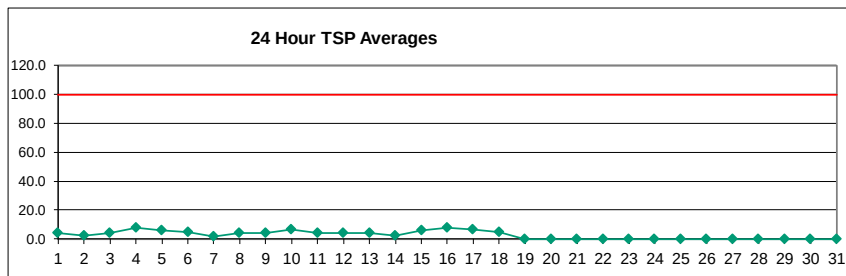
HOUR																											
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	
1	0.9	0.9	1.4	1.3	1.4	1.3	2.4	4.9	7.0	6.0	7.0	5.2	5.5	7.3	6.2	8.3	8.2	9.3	2.3	1.7	8.0	2.6	1.3	1.2	4.2	9.3	
2	1.3	1.2	1.3	1.0	1.2	2.0	3.0	2.7	5.2	5.5	4.5	3.3	3.2	2.2	3.6	4.8	3.4	2.9	2.1	2.1	2.0	2.1	1.9	1.9	2.7	5.5	
3	2.2	2.5	2.4	2.4	2.4	2.9	3.6	4.7	7.4	7.2	6.7	6.6	5.8	7.5	7.4	8.4	7.8	6.1	3.5	3.6	3.4	3.4	3.2	3.6	4.8	8.4	
4	4.2	4.9	4.0	5.5	4.2	4.8	7.0	8.1	10.8	18.6	16.9	15.4	11.8	12.7	11.5	11.1	8.8	4.3	3.2	4.5	5.3	6.6	7.8	6.6	8.3	18.6	
5	5.8	3.8	3.7	4.3	4.7	5.1	5.4	8.1	11.6	13.1	12.5	8.4	8.5	8.4	7.3	6.4	5.6	5.0	4.5	4.4	4.0	4.3	4.5	4.7	6.4	13.1	
6	5.0	4.1	4.3	4.8	4.3	4.7	5.4	7.8	8.4	6.2	7.1	8.8	4.8	4.8	9.5	8.9	6.0	3.0	1.6	1.4	1.0	1.7	1.9	3.0	4.9	9.5	
7	3.0	2.3	1.7	1.0	1.0	0.8	1.1	1.7	2.3	3.6	4.6	3.5	2.7	2.2	2.7	2.3	2.5	1.6	0.9	0.7	1.2	0.9	0.5	0.9	1.9	4.6	
8	0.4	0.5	0.9	0.4	0.8	1.1	7.2	9.1	10.9	6.5	4.7	5.6	4.4	4.2	4.8	5.8	5.4	2.9	0.6	1.5	4.7	7.1	7.0	6.9	4.3	10.9	
9	4.5	3.8	3.6	3.1	2.4	2.6	4.5	9.8	11.8	9.2	6.8	7.5	X	5.2	4.6	4.4	4.2	2.8	1.1	1.4	1.4	1.4	1.5	1.7	4.3	11.8	
10	1.7	1.7	1.7	2.0	1.8	2.4	1.7	12.0	11.0	6.3	5.1	5.2	5.5	8.2	8.8	7.4	7.8	9.0	10.5	9.5	9.2	8.5	8.1	11.0	6.5	12.0	
11	16.0	16.6	14.9	10.9	8.3	6.4	4.9	4.5	4.4	9.5	6.9	5.8	5.1	3.4	3.8	3.3	3.3	2.6	1.8	1.9	1.8	1.6	1.9	2.7	5.9	16.6	
12	3.0	2.5	2.6	2.5	2.5	2.1	2.5	5.6	7.6	9.8	6.4	4.6	3.4	5.5	6.7	4.6	3.8	3.3	3.8	2.6	3.7	4.5	7.6	10.3	4.6	10.3	
13	9.6	8.1	7.9	6.6	6.0	5.8	6.8	6.4	6.3	5.2	5.9	5.4	4.0	3.8	3.8	3.4	2.9	2.7	1.8	2.1	3.2	3.7	5.0	6.9	5.1	9.6	
14	5.2	4.8	3.9	3.2	3.3	3.0	2.9	3.1	3.3	3.5	4.2	3.8	3.2	2.6	3.2	2.9	3.1	2.2	2.1	2.1	2.2	2.3	2.5	2.4	3.1	5.2	
15	2.4	2.4	2.7	2.9	2.5	2.6	6.4	12.5	10.6	9.6	6.2	5.4	6.4	7.2	5.9	5.4	4.2	4.6	5.6	4.9	4.6	7.6	9.0	9.3	5.9	12.5	
16	9.6	9.6	10.2	9.4	7.6	5.9	6.8	8.5	13.4	17.6	14.9	9.5	7.8	7.2	7.4	6.0	3.1	4.2	4.6	3.4	3.6	3.6	5.4	5.6	7.7	17.6	
17	6.6	7.9	4.2	4.2	4.0	4.4	8.2	14.1	14.3	11.2	9.7	9.6	5.4	7.1	7.6	5.1	3.4	2.5	1.9	1.6	2.7	6.1	4.6	3.1	6.2	14.3	
18	2.7	2.4	2.6	2.6	2.6	3.2	4.7	8.4	8.0	9.2	10.9	7.9	5.2	6.7	6.6	5.5	4.8	3.1	2.6	2.7	2.9	4.6	3.9	4.1	4.9	10.9	
19	5.1	4.8	4.4	3.8	3.4	4.4	5.1	3.2	3.3	3.3	5.9	6.1	2.6	5.6	5.3	K	K	K	K	K	K	K	K	K	-	-	
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-	
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-	
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	4.4	2.9	4.7	1.6	1.6	1.6	1.0	2.8	8.0	-	-	
23	10.6	X	X	X	X	X	X	X	X	2.7	2.8	X	4.6	5.1	X	X	X	X	X	X	2.6	X	1.5	X	X	-	-
24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	
NO.	20	19	19	19	19	19	19	19	19	20	20	19	19	20	19	19	19	19	19	19	20	19	20	19	462	62%	
MEAN	5.0	4.5	4.1	3.8	3.4	3.4	4.7	7.1	8.3	8.2	7.5	6.7	5.3	5.8	6.1	5.7	4.8	4.0	3.0	2.8	3.5	3.9	4.1	4.9			
MAX	16.0	16.6	14.9	10.9	8.3	6.4	8.2	14.1	14.3	18.6	16.9	15.4	11.8	12.7	11.5	11.1	8.8	9.3	10.5	9.5	9.2	8.5	9.0	11.0			



Number of Non-Zero Readings	462		
Maximum 1-HR Average	18.6 UG/M3		
Maximum 24-HR Average	8.3 UG/M3		
IZS Calibration Time		OperatioEl Time	462 HRS
Down Time	0	OperatioEl Uptime	62.1 %
Standard Deviation	3.2	Monthly Average	5.0 UG/M3

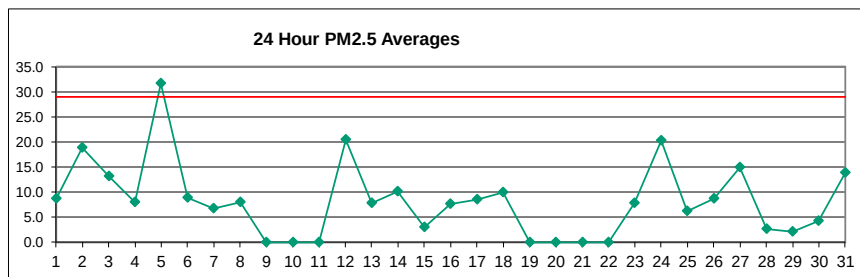
West TSP (µg/m³) – March 2021

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.6	0.6	1.1	0.9	1.0	0.9	2.1	5.0	7.6	6.3	7.3	5.3	5.4	7.8	6.3	8.7	8.7	9.6	1.7	1.1	5.7	1.9	1.0	0.9	4.1	9.6
2	1.1	1.0	1.1	0.9	1.0	1.7	3.0	2.6	5.5	5.7	4.6	3.2	3.1	2.1	3.5	4.9	3.1	2.6	1.6	1.7	1.5	1.6	1.3	1.2	2.5	5.7
3	1.4	1.7	1.6	1.7	1.7	2.2	3.0	4.3	7.8	7.3	6.8	6.7	5.7	8.0	7.6	9.0	8.1	5.8	2.6	2.8	2.4	2.3	2.2	2.4	4.4	9.0
4	2.8	3.2	2.6	4.1	2.7	3.6	6.3	7.6	11.4	20.6	18.2	16.5	13.0	13.8	12.8	12.3	9.4	3.6	2.3	3.7	4.3	5.0	5.4	4.5	7.9	20.6
5	4.0	2.6	2.5	3.1	3.8	4.1	4.2	8.1	12.9	14.7	14.2	9.0	8.9	8.9	7.4	6.3	5.4	4.5	4.0	4.0	3.5	4.0	4.2	4.3	6.2	14.7
6	4.6	3.5	3.8	4.2	3.6	4.0	4.5	7.4	8.3	5.4	6.6	9.2	5.2	4.8	9.9	9.8	6.4	3.0	1.6	1.4	0.8	1.3	1.4	2.2	4.7	9.9
7	2.1	1.6	1.2	0.7	0.7	0.6	0.7	1.4	2.1	3.6	4.8	3.6	2.5	2.0	2.5	2.0	2.4	1.4	0.7	0.5	1.0	0.7	0.3	0.7	1.7	4.8
8	0.3	0.4	0.8	0.3	0.7	1.0	7.7	10.2	12.5	7.1	4.9	5.9	4.6	4.4	4.9	6.2	5.7	2.8	0.4	1.2	4.6	5.8	5.0	5.4	4.3	12.5
9	3.8	2.8	2.6	2.4	1.6	1.9	4.2	10.9	13.6	10.3	7.4	8.3	X	5.5	4.8	4.6	4.4	2.7	0.9	1.1	1.1	1.1	1.1	1.3	4.3	13.6
10	1.2	1.3	1.2	1.6	1.2	1.8	1.1	13.6	12.7	7.0	5.7	5.7	6.0	9.2	9.9	7.7	8.5	9.6	11.1	8.7	7.3	6.3	5.4	7.3	6.3	13.6
11	10.4	10.8	9.7	7.1	5.4	4.2	3.2	3.0	3.3	7.4	6.3	6.0	5.2	3.2	3.7	3.1	3.1	2.3	1.4	1.5	1.4	1.1	1.5	2.5	4.4	10.8
12	2.7	2.1	2.2	1.9	2.0	1.6	2.1	6.0	8.6	11.2	6.9	4.4	2.9	5.2	6.9	4.5	3.6	2.8	3.1	1.9	2.7	3.1	5.1	6.9	4.2	11.2
13	6.3	5.3	5.2	4.3	3.9	3.8	4.6	4.3	4.5	4.1	5.6	5.3	3.9	3.7	3.7	3.2	2.6	2.5	1.4	1.6	2.8	3.1	3.7	5.2	3.9	6.3
14	3.7	3.3	2.7	2.2	2.3	2.0	2.0	2.2	2.6	3.0	4.0	3.5	2.9	2.3	2.9	2.6	2.5	1.6	1.4	1.4	1.4	1.5	1.7	1.6	2.4	4.0
15	1.6	1.6	1.9	1.9	1.6	1.8	6.5	14.0	12.1	10.9	6.7	5.7	6.9	7.9	6.0	5.5	4.2	4.5	5.9	4.9	4.6	8.1	10.0	10.1	6.0	14.0
16	10.4	10.2	10.7	9.4	6.4	4.5	5.6	8.0	14.6	20.3	17.1	10.6	8.5	7.8	8.1	6.5	3.0	4.3	4.8	3.3	3.6	3.4	5.8	5.8	8.0	20.3
17	6.6	7.5	3.4	3.2	3.0	3.4	8.4	15.9	16.4	13.0	11.0	10.9	5.7	7.7	8.4	5.4	3.3	2.2	1.6	1.3	2.4	6.1	4.1	2.4	6.4	16.4
18	2.0	1.7	1.9	1.9	1.9	2.5	4.4	9.3	8.8	10.4	12.4	8.5	5.1	7.0	6.5	5.4	4.3	2.3	1.8	1.9	2.0	3.6	3.0	3.0	4.6	12.4
19	4.4	4.3	3.5	2.9	2.7	3.7	4.6	2.8	2.4	3.2	6.0	6.3	2.5	5.9	5.6	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	4.4	2.0	3.2	1.1	1.1	1.1	0.7	1.8	5.2	-	-
23	6.9	X	X	X	X	X	X	X	X	2.2	2.5	X	4.7	5.3	X	X	X	X	X	X	2.4	X	1.1	X	-	-
24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
NO.	20	19	19	19	19	19	19	19	19	20	20	19	19	20	19	19	19	19	19	19	20	19	20	19	462	62%
MEAN	3.8	3.4	3.2	2.9	2.5	2.6	4.1	7.2	8.8	8.7	7.9	7.1	5.4	6.1	6.4	5.9	4.8	3.8	2.6	2.4	2.8	3.2	3.2	3.8		
MAX	10.4	10.8	10.7	9.4	6.4	4.5	8.4	15.9	16.4	20.6	18.2	16.5	13.0	13.8	12.8	12.3	9.4	9.6	11.1	8.7	7.3	8.1	10.0	10.1		



Berm PM_{2.5} (µg/m³) – March 2021

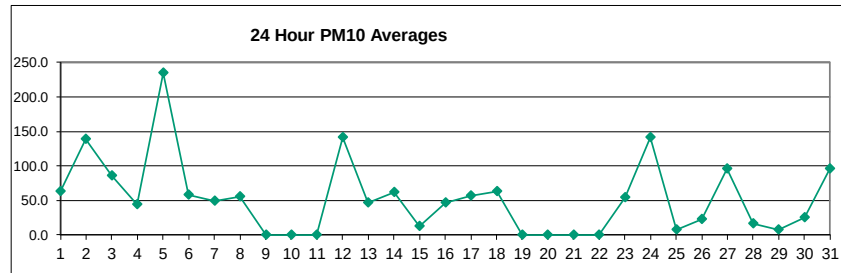
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.2	5.9	4.3	6.4	9.9	10.4	8.0	5.6	9.0	17.2	21.1	14.2	7.6	11.1	10.7	5.3	5.1	7.6	1.8	2.6	6.2	4.2	9.2	20.2	8.7	21.1
2	8.1	10.0	7.2	3.4	5.1	5.8	10.8	22.8	42.7	38.2	26.8	43.5	26.3	8.4	10.1	9.3	11.3	13.2	10.9	25.7	34.0	15.2	33.9	29.6	18.9	43.5
3	20.1	39.5	5.2	5.1	8.5	1.8	3.0	3.4	17.2	35.3	29.8	22.6	9.7	16.4	11.0	16.2	11.3	13.8	18.8	16.6	5.4	1.5	1.4	1.9	13.1	39.5
4	1.9	1.8	1.8	2.1	2.1	1.8	2.0	2.3	4.3	7.5	6.4	34.4	16.5	23.4	10.9	15.2	20.9	12.5	2.6	2.8	4.0	4.7	4.5	6.7	8.0	34.4
5	5.2	4.6	5.4	7.7	20.9	9.7	3.4	5.0	5.8	11.7	44.5	109.2	96.6	59.8	29.2	40.7	49.6	38.5	27.9	23.4	35.6	33.2	59.5	33.5	31.7	109.2
6	8.5	9.8	15.6	18.8	8.5	5.9	2.9	4.0	17.6	23.2	18.0	9.7	4.8	6.1	3.0	7.6	7.2	12.4	9.8	12.9	4.2	1.5	1.5	1.2	8.9	23.2
7	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.9	1.0	2.6	17.6	32.3	15.8	12.1	19.0	8.1	10.8	13.2	11.4	1.3	3.3	2.7	1.6	3.7	6.7	32.3
8	0.6	8.4	2.8	3.8	17.2	5.2	2.6	7.6	13.8	10.2	28.1	15.3	9.1	12.7	17.3	5.2	4.7	3.4	0.4	1.7	17.9	3.5	1.4	1.4	8.1	28.1
9	1.7	2.0	1.7	1.5	1.3	1.2	1.1	2.1	7.0	4.0	4.3	13.7	X	X	X	X	X	X	X	X	X	X	X	X	-	-
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
11	X	X	X	X	X	X	X	X	X	X	X	19.9	15.5	9.4	18.9	28.5	47.7	39.7	46.6	66.5	49.3	13.1	21.5	23.9	-	-
12	32.8	22.9	17.7	2.0	5.7	5.4	6.9	28.9	51.2	39.2	14.0	25.2	18.3	24.5	17.4	47.0	31.3	17.1	13.2	30.6	11.9	9.2	13.3	5.4	20.5	51.2
13	7.0	4.3	4.3	3.3	3.6	3.2	3.2	3.0	4.1	12.3	11.9	17.7	19.4	14.1	10.8	8.0	11.7	21.4	5.8	4.0	3.8	3.7	3.6	2.6	7.8	21.4
14	1.9	2.1	2.3	3.9	2.3	1.8	3.4	14.0	36.5	19.5	28.2	21.1	28.3	19.4	8.2	15.5	7.8	7.6	7.5	3.9	1.3	2.1	2.5	4.0	10.2	36.5
15	6.6	4.0	5.5	1.8	1.8	1.3	1.3	9.3	4.2	2.6	1.9	2.0	3.6	1.7	1.9	2.5	2.8	3.1	2.4	3.0	2.2	3.1	2.8	3.1	3.1	9.3
16	3.8	4.2	3.7	5.6	3.1	1.9	2.0	5.2	18.0	31.5	21.0	18.8	18.0	12.9	12.7	4.7	4.1	2.1	2.2	1.8	1.5	1.3	2.1	2.1	7.7	31.5
17	3.4	3.6	1.8	1.4	1.6	2.0	2.3	5.5	7.9	15.1	37.7	30.0	11.6	12.5	18.6	13.3	10.8	8.0	5.9	3.1	1.4	2.4	2.1	2.1	8.5	37.7
18	2.3	1.4	2.3	2.1	1.6	1.7	2.4	5.4	3.9	3.3	18.7	19.4	30.1	30.1	24.4	21.4	26.8	12.7	7.3	2.1	1.7	2.0	9.0	5.5	9.9	30.1
19	3.7	14.7	22.8	11.3	6.5	5.8	5.8	4.7	2.8	6.5	16.5	9.3	7.3	10.1	11.2	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	12.1	1.0	2.9	1.8	9.1	6.5	1.2	1.1	1.0	-	-
23	1.3	2.3	2.6	2.3	1.1	0.8	0.7	1.1	1.5	2.1	3.4	6.3	11.6	7.5	8.3	8.2	13.7	11.8	14.0	11.6	11.6	14.8	39.6	10.3	7.9	39.6
24	11.2	3.9	7.3	5.5	4.5	10.4	27.0	74.1	42.9	49.7	52.7	25.0	24.8	32.8	38.4	26.8	5.5	11.9	14.5	5.3	2.3	1.2	2.6	5.0	20.2	74.1
25	5.6	4.2	4.7	3.1	2.6	4.4	2.2	2.5	1.9	2.1	5.2	5.0	3.9	4.1	5.7	9.1	13.5	9.0	9.2	8.3	8.4	10.0	11.6	12.0	6.2	13.5
26	10.5	10.7	11.5	12.0	10.1	9.2	7.5	9.1	5.8	9.3	10.4	5.7	4.4	5.5	8.8	8.0	6.6	6.8	5.8	9.2	9.7	9.8	10.2	13.4	8.7	13.4
27	14.9	8.8	6.8	7.3	2.3	1.4	9.9	20.5	19.9	13.5	20.7	18.0	41.4	22.6	13.3	24.8	19.8	4.3	12.3	13.9	7.8	19.9	15.4	21.1	15.0	41.4
28	9.7	3.2	4.8	3.6	2.3	1.3	1.2	1.1	2.2	7.2	5.4	6.3	1.4	1.2	0.8	0.4	0.4	0.3	0.7	5.7	3.6	0.5	0.6	0.8	2.7	9.7
29	0.8	0.8	2.8	0.4	0.6	0.5	1.0	2.1	4.8	3.6	2.2	1.4	3.4	5.1	3.3	3.3	1.1	3.8	2.9	1.3	1.4	2.5	2.0	1.0	2.2	5.1
30	0.8	1.2	0.7	1.6	1.7	1.9	2.7	3.2	3.7	4.0	11.1	11.0	5.1	6.3	6.0	7.8	4.7	4.3	4.8	5.3	4.0	4.0	3.8	2.6	4.3	11.1
31	4.7	2.5	2.8	5.0	2.0	1.7	3.2	10.3	26.6	24.5	20.3	22.5	20.1	15.5	12.3	10.1	10.5	21.1	20.0	26.4	13.4	26.9	20.1	11.8	13.9	26.9
NO.	26	26	26	26	26	26	26	26	26	26	26	27	26	26	26	26	26	26	26	26	26	26	26	26	625	84%
MEAN	6.6	6.8	5.7	4.7	4.9	3.7	4.5	9.6	13.2	14.7	18.8	20.8	17.5	15.0	12.8	14.1	13.1	11.7	10.0	11.5	9.7	7.5	10.6	8.7		
MAX	32.8	39.5	22.8	18.8	20.9	10.4	27.0	74.1	51.2	49.7	52.7	109.2	96.6	59.8	38.4	47.0	49.6	39.7	46.6	66.5	49.3	33.2	59.5	33.5		



Number of 24HR Exceedences	1	Proposed Guideline	
Number of Non-Zero Readings	625		
Maximum 1-HR Average	109.2 UG/M3		
Maximum 24-HR Average	31.7 UG/M3		
		Operational Time	625 HRS
Monthly Calibration	0	Operational Uptime	84.0 %
Standard Deviation	12.3	Monthly Average	10.7 UG/M3

Berm PM₁₀ (µg/m³) – March 2021

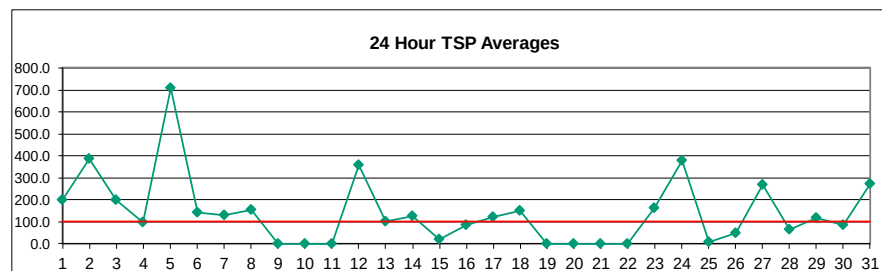
DAY	HOUR																								MEAN	MAX
1	26.0	48.1	29.1	50.3	85.5	92.3	70.6	43.6	72.0	133.3	163.8	106.6	37.1	83.4	75.4	23.4	25.4	38.9	4.1	3.1	8.4	20.3	81.1	200.0	63.4	200.0
2	74.3	101.8	67.7	22.4	39.8	42.9	103.1	211.9	331.5	245.2	200.5	320.6	178.8	55.8	71.4	66.1	76.8	76.3	63.1	176.4	251.4	97.9	232.4	211.2	138.3	331.5
3	146.4	281.8	20.1	31.4	44.3	5.2	10.5	17.0	132.0	274.9	215.9	144.6	58.6	96.4	61.9	86.5	68.0	84.2	123.9	107.0	32.2	2.2	2.2	3.6	85.4	281.8
4	2.3	2.1	2.2	3.4	3.7	2.7	2.9	5.7	14.2	32.1	20.1	256.9	89.8	148.8	69.1	95.0	137.6	77.1	11.1	9.6	14.5	9.8	9.0	28.4	43.7	256.9
5	15.4	20.1	24.1	38.4	131.2	55.7	11.5	20.2	25.6	75.8	317.8	773.4	720.6	521.3	213.7	290.6	355.0	292.1	237.1	194.8	278.7	271.2	500.5	253.9	235.0	773.4
6	47.8	63.6	105.4	106.8	41.4	24.8	7.8	21.3	126.0	169.3	130.8	64.6	37.3	20.3	3.7	60.1	55.3	108.1	69.4	85.7	30.7	6.1	5.5	2.6	58.1	169.3
7	1.7	2.6	1.1	1.1	0.6	0.5	0.7	1.3	2.6	18.8	157.4	259.3	126.8	87.0	135.2	62.4	76.1	91.5	82.8	5.5	15.9	13.2	8.5	30.2	49.3	259.3
8	1.7	65.9	17.0	24.7	108.8	29.8	15.5	57.9	102.8	70.6	213.8	98.4	58.4	96.5	127.4	26.7	25.9	18.8	1.1	5.9	136.2	4.5	1.9	2.5	54.7	213.8
9	3.2	4.3	3.9	3.6	2.4	3.0	2.4	11.5	55.8	25.9	35.2	142.6	X	X	X	X	X	X	X	X	X	X	X	X	-	-
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
11	X	X	X	X	X	X	X	X	X	X	X	179.3	123.1	75.2	143.8	250.4	391.5	329.7	359.5	495.5	360.5	85.2	146.7	173.3	-	-
12	247.4	170.1	125.3	10.3	40.6	39.2	56.5	206.1	365.1	295.5	106.0	169.3	119.4	167.4	122.5	284.9	200.2	102.6	86.6	227.3	91.2	56.5	88.0	12.5	141.3	365.1
13	18.5	6.9	6.3	4.5	5.2	5.8	4.5	4.2	13.3	87.6	89.8	144.5	151.8	92.1	79.8	49.7	78.4	160.6	43.7	15.2	14.3	9.4	12.5	5.0	46.0	160.6
14	2.7	2.9	6.4	21.4	7.6	5.3	19.8	112.9	244.3	122.7	177.2	138.4	177.4	123.0	56.9	94.1	39.8	39.2	41.6	17.5	2.0	5.6	9.1	16.7	61.9	244.3
15	31.2	17.0	23.2	3.4	3.1	1.5	1.8	56.0	18.2	8.2	5.1	5.6	15.2	4.0	5.6	8.8	11.3	11.3	6.7	7.7	6.8	9.8	9.5	10.3	11.7	56.0
16	12.4	12.2	10.9	10.0	4.3	2.2	2.5	4.2	30.4	139.6	239.8	148.0	132.6	129.8	84.7	72.4	25.1	28.0	7.1	6.1	5.0	3.2	2.4	6.1	46.6	239.8
17	10.4	10.0	5.6	4.5	5.0	7.6	9.4	29.3	57.3	130.5	305.2	210.0	81.2	86.7	133.6	77.0	64.3	54.6	37.8	18.8	4.2	8.6	8.6	8.0	57.0	305.2
18	6.7	3.0	8.9	8.1	4.6	4.0	8.2	29.6	18.9	14.0	143.2	155.6	195.8	179.0	161.5	149.1	183.0	75.8	51.0	8.3	2.5	5.1	63.9	27.5	62.8	195.8
19	15.6	91.3	161.6	65.4	35.0	25.0	27.4	30.2	5.1	48.4	150.7	86.7	54.3	79.6	92.7	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	77.0	1.3	4.2	2.5	13.5	9.4	1.6	1.2	1.1	-	-
23	1.4	2.4	2.7	2.4	1.2	0.8	0.8	2.1	6.5	15.0	30.2	51.9	90.0	60.6	65.4	62.7	92.5	91.5	110.9	77.3	81.1	93.7	279.3	86.8	54.6	279.3
24	84.4	25.4	61.4	43.2	33.9	86.6	215.9	570.7	305.5	353.8	367.5	173.7	171.0	220.1	235.5	164.7	38.4	76.4	99.4	41.4	5.3	1.4	3.7	7.4	141.1	570.7
25	8.3	6.3	7.0	4.5	3.7	6.5	3.2	3.1	2.3	2.5	5.9	5.8	4.5	4.5	7.0	12.1	18.3	11.0	10.8	9.4	8.6	10.1	11.8	12.5	7.5	18.3
26	10.6	11.0	13.1	15.1	10.7	9.7	7.8	9.8	5.9	12.3	15.8	28.7	24.5	32.5	63.5	64.0	44.7	51.0	29.6	14.8	12.0	12.7	13.9	19.6	22.2	64.0
27	21.7	11.7	8.2	8.4	7.0	10.0	86.7	162.9	144.2	100.3	147.5	127.3	318.8	157.9	93.7	188.4	126.6	22.2	66.2	79.1	43.3	129.3	88.5	160.1	96.3	318.8
28	72.6	20.3	31.0	23.3	10.7	5.4	4.6	5.1	14.7	64.6	43.8	45.9	5.2	4.0	1.3	0.5	0.8	0.4	0.8	36.0	5.8	0.5	0.6	0.9	16.6	72.6
29	0.8	0.9	3.8	0.5	0.8	0.5	1.3	3.0	22.8	17.3	11.1	3.9	12.0	32.0	9.4	11.5	2.8	15.8	13.7	2.4	2.7	6.3	6.4	1.3	7.6	32.0
30	1.0	1.7	0.8	2.0	2.0	2.3	7.1	11.6	20.6	23.8	76.5	71.2	33.3	37.6	38.3	52.8	30.3	23.1	37.1	41.7	28.1	25.3	21.9	11.7	25.1	76.5
31	31.2	13.8	15.2	28.3	7.5	4.8	21.9	86.5	205.6	181.9	140.8	161.6	146.1	102.5	81.6	70.0	67.3	146.8	137.4	177.8	94.8	175.7	125.6	70.5	95.6	205.6
NO.	26	26	26	26	26	26	26	26	26	26	26	26	27	26	26	26	26	26	26	26	26	26	26	26	625	84%
MEAN	34.4	38.4	29.3	20.7	24.6	18.2	27.1	66.1	90.1	102.5	135.1	150.9	121.7	103.8	86.0	92.3	86.0	78.1	66.7	72.2	59.4	41.0	66.7	52.4		
MAX	247.4	281.8	161.6	106.8	131.2	92.3	215.9	570.7	365.1	353.8	367.5	773.4	720.6	521.3	235.5	290.6	391.5	329.7	359.5	495.5	360.5	271.2	500.5	253.9		



Number of Non-Zero Readings	625
Maximum 1-HR Average	773.4 UG/M3
Maximum 24-HR Average	235.0 UG/M3
Monthly Calibration	0
Standard Deviation	94.94
Operational Time	625 HRS
Operational Uptime	84.0 %
Monthly Average	69.5 UG/M3

Berm TSP (µg/m³) – March 2021

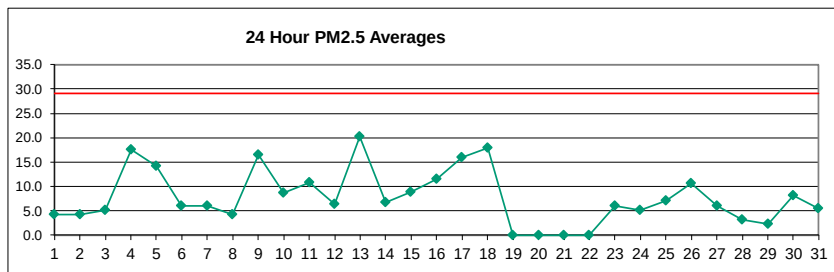
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	82.7	166.9	82.1	152.1	292.2	358.5	275.7	153.0	247.8	395.7	464.7	314.8	70.1	245.2	260.8	41.2	43.7	62.8	12.3	2.1	7.4	59.7	262.8	700.2	198.1	700.2
2	316.3	474.6	264.3	64.5	144.8	105.5	336.8	659.0	932.2	609.3	611.6	820.2	462.4	132.1	197.1	176.4	221.0	193.7	152.1	446.5	640.0	266.8	547.1	484.0	385.8	932.2
3	341.6	603.4	51.6	98.9	89.2	10.6	23.2	28.6	262.7	689.4	554.5	357.6	148.9	199.8	151.2	209.1	155.3	177.4	318.7	256.6	67.5	2.9	3.5	7.1	200.4	689.4
4	1.5	1.4	1.4	2.2	4.6	4.2	2.6	11.1	47.3	88.3	46.5	671.7	188.8	351.0	148.9	206.6	266.1	182.2	23.6	19.0	26.7	9.9	13.6	54.9	98.9	671.7
5	18.9	40.0	51.2	78.1	317.9	173.0	21.3	28.7	45.2	180.0	557.0	1997.9	2149.1	1765.3	652.8	903.6	1102.1	917.9	897.2	640.7	919.6	1022.9	1699.7	799.8	707.5	2149.1
6	87.1	136.6	209.1	202.1	79.7	36.6	14.8	45.8	318.9	458.8	368.5	165.0	204.6	121.7	3.1	167.4	137.7	307.2	130.3	143.0	63.8	14.5	10.7	2.0	142.9	458.8
7	1.8	5.9	1.0	3.9	3.1	1.1	0.5	3.2	4.8	52.7	374.7	679.6	320.3	225.4	326.5	204.9	176.0	214.8	172.2	10.1	26.3	34.1	17.9	215.6	128.2	679.6
8	2.2	196.5	55.1	75.4	219.4	77.8	40.3	171.6	256.1	141.8	544.6	194.2	101.1	217.8	279.2	44.0	45.1	27.1	2.1	15.6	977.5	3.6	1.4	2.4	153.8	977.5
9	3.3	17.2	19.4	16.4	7.8	5.0	5.6	32.3	143.6	61.3	100.0	367.4	X	X	X	X	X	X	X	X	X	X	X	X	-	-
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-
12	773.6	539.8	399.5	31.2	126.4	118.6	186.5	581.9	929.9	798.3	288.8	402.2	286.8	394.5	254.2	557.6	466.6	192.1	181.5	504.5	213.4	141.3	199.2	25.3	358.1	929.9
13	39.5	10.0	10.8	10.8	8.4	15.6	4.4	4.0	29.5	211.3	191.0	322.5	347.3	189.6	211.9	100.5	159.5	380.0	106.6	16.8	20.8	9.1	19.0	5.2	101.0	380.0
14	2.3	2.5	16.9	60.0	18.0	9.8	45.5	292.8	503.9	257.3	344.8	252.0	381.5	258.5	145.4	162.5	59.9	73.9	75.6	30.7	1.4	6.5	16.2	19.8	126.6	503.9
15	52.0	29.7	39.8	3.1	2.6	0.9	1.3	110.6	39.2	19.7	10.4	9.4	25.8	4.2	5.3	12.1	17.5	19.5	10.2	10.3	10.3	12.0	11.1	11.7	19.5	110.6
16	10.4	15.2	9.4	9.6	3.6	1.6	2.0	9.9	72.9	320.3	475.6	285.0	228.3	216.4	157.6	124.1	43.3	50.7	11.3	6.4	7.2	3.2	2.2	6.3	86.3	475.6
17	11.1	10.6	8.8	10.4	9.0	18.9	23.7	57.1	143.3	295.1	693.0	420.4	166.2	162.5	291.6	139.9	125.2	111.0	96.3	51.4	7.7	14.8	16.8	12.0	120.7	693.0
18	10.6	4.8	23.4	17.6	5.5	5.6	15.6	81.0	46.6	24.2	352.2	400.8	487.8	407.7	378.5	341.5	457.4	181.8	118.5	19.4	3.1	12.3	144.2	54.5	149.8	487.8
19	32.0	231.1	350.1	156.6	82.5	41.5	53.9	91.8	5.9	130.3	436.3	272.4	182.4	194.3	220.5	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	420.6	0.9	3.4	1.8	13.4	8.6	1.1	0.8	0.7	-	-
23	0.9	1.6	1.8	1.6	0.8	0.6	0.5	2.6	33.8	101.7	102.3	136.2	303.3	155.1	183.3	175.2	248.1	270.0	361.9	221.0	220.3	228.1	828.5	302.2	161.7	828.5
24	265.6	85.9	238.4	161.6	123.3	343.2	696.9	1677.4	806.3	930.2	915.2	425.5	355.0	544.0	550.1	331.9	90.5	188.5	253.3	101.7	21.9	1.0	3.4	7.6	379.9	1677.4
25	8.4	6.2	6.3	4.0	3.0	5.6	2.3	2.3	1.6	1.9	4.2	4.1	3.2	3.2	9.4	11.8	17.5	9.3	8.8	7.6	5.6	6.5	7.6	8.3	6.2	17.5
26	6.9	7.1	9.0	11.2	7.1	6.4	5.2	6.7	4.0	12.9	21.0	97.2	67.5	95.8	203.8	190.7	140.2	161.3	84.5	18.9	9.1	10.4	11.4	19.4	50.3	203.8
27	21.8	9.1	5.8	5.9	19.2	36.6	248.0	394.8	327.8	260.5	379.5	344.2	985.5	458.1	291.0	608.8	397.2	47.2	136.4	181.5	128.3	339.7	258.7	582.6	269.5	985.5
28	264.3	80.0	110.9	75.6	41.9	14.0	16.2	12.7	50.0	267.9	162.3	151.9	7.5	8.0	1.0	0.5	1.2	0.2	0.6	329.5	11.8	0.4	0.4	0.6	67.1	329.5
29	0.5	0.6	2.9	0.3	0.5	0.4	0.9	2.9	549.3	346.4	157.7	60.2	251.3	957.3	123.6	138.1	3.9	25.4	74.5	13.3	24.0	14.6	112.6	0.9	119.2	957.3
30	1.0	1.5	0.5	1.8	1.4	1.8	14.1	26.5	50.0	71.9	204.7	207.2	169.2	132.9	129.5	162.1	133.1	108.8	151.2	207.1	109.5	101.9	75.5	20.5	86.8	207.2
31	77.8	39.8	48.0	67.0	19.7	8.3	52.8	218.1	566.0	540.7	375.6	456.9	444.7	308.5	259.7	209.0	199.7	445.4	380.8	578.4	314.0	467.2	283.6	216.6	274.1	578.4
NO.	26	26	26	26	26	26	26	26	26	26	26	27	26	26	26	26	26	26	26	26	26	26	26	26	625	84%
MEAN	93.6	104.5	77.6	50.8	62.8	53.9	80.4	181.0	246.9	279.5	336.0	384.2	334.2	307.3	224.6	247.9	229.8	209.1	184.5	201.2	184.7	114.9	187.3	155.2		
MAX	773.6	603.4	399.5	202.1	317.9	358.5	696.9	1677.4	932.2	930.2	915.2	1997.9	2149.1	1765.3	652.8	903.6	1265.5	1083.7	1035.6	1386.6	977.5	1022.9	1699.7	799.8		



Number of 24HR Exceedences	17	Proposed Guideline
Number of Non-Zero Readings	625	
Maximum 1-HR Average	2149.1 UG/M3	
Maximum 24-HR Average	707.5 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	274.2	Monthly Average
		625 HRS
		84.0 %
		189.2 UG/M3

Entrance PM_{2.5} (µg/m³) – March 2021

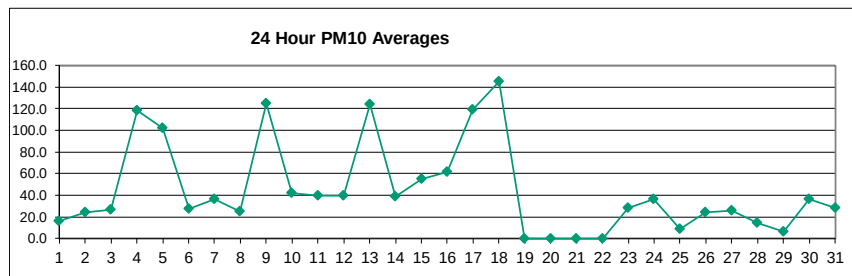
Day	HOURLY																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.4	2.0	1.3	4.6	4.5	5.0	3.5	3.6	2.9	2.8	3.9	3.8	3.4	2.3	2.5	2.6	6.5	2.7	9.9	4.9	9.3	5.4	2.4	9.2	4.2	9.9
2	8.0	6.1	2.2	1.3	2.5	1.5	3.9	7.4	7.6	4.7	7.6	5.9	5.7	3.5	5.1	3.0	2.3	2.0	3.5	1.8	4.5	4.4	4.8	4.3	4.3	8.0
3	5.4	4.2	3.7	5.1	3.2	3.1	4.8	6.7	25.0	5.3	3.9	5.9	3.1	3.9	2.9	2.7	2.5	2.8	3.7	2.8	3.9	5.0	7.1	8.3	5.2	25.0
4	11.8	12.8	17.0	18.9	24.7	21.8	17.3	37.6	35.5	36.7	26.6	18.1	7.3	7.5	5.8	5.7	5.2	3.8	8.7	10.6	16.5	22.1	28.7	22.4	17.6	37.6
5	17.5	15.6	8.6	12.4	4.2	3.4	13.4	17.9	26.6	28.9	37.2	34.7	19.8	21.3	8.8	12.6	12.8	9.6	7.2	5.9	4.4	4.9	7.7	5.7	14.2	37.2
6	6.5	7.8	8.4	5.3	5.0	5.1	6.0	8.1	8.6	7.4	12.6	13.4	5.5	6.0	2.5	4.9	3.2	4.3	2.3	1.2	2.1	3.9	4.8	11.0	6.1	13.4
7	9.1	9.1	8.5	9.2	16.1	10.7	4.4	2.6	8.1	13.1	3.7	8.1	2.4	3.9	2.2	3.2	4.6	1.3	0.8	1.4	3.2	2.4	10.1	3.9	5.9	16.1
8	4.7	1.7	0.7	0.6	0.6	0.7	2.1	4.3	5.6	6.5	8.5	7.3	4.6	5.3	4.6	4.1	3.8	3.7	2.0	4.8	13.5	4.2	2.2	5.3	4.2	13.5
9	9.4	12.8	10.2	13.0	21.5	10.2	10.1	22.7	70.6	71.4	56.3	27.4	9.6	7.1	8.0	8.7	7.1	2.6	9.7	2.5	1.6	1.4	1.8	1.8	16.6	71.4
10	1.9	1.5	1.4	2.6	4.5	19.8	30.2	24.7	22.9	14.5	3.0	2.2	2.4	3.8	6.7	10.6	4.5	5.7	15.7	5.5	7.5	4.0	2.8	9.0	8.6	30.2
11	21.9	23.6	17.8	17.5	19.7	22.4	19.2	22.4	14.6	11.1	6.2	4.9	4.0	4.9	9.5	8.5	10.2	6.3	2.7	3.0	2.2	2.1	2.4	2.4	10.8	23.6
12	9.0	3.0	4.2	4.5	2.7	1.8	2.8	7.9	7.7	7.6	5.8	6.7	7.1	9.2	8.6	5.8	7.2	3.4	3.2	1.6	4.1	3.3	6.8	28.1	6.3	28.1
13	31.0	30.1	33.9	29.7	33.3	30.6	36.7	33.9	46.1	38.9	16.8	14.5	7.6	6.4	2.9	3.6	4.1	3.9	9.2	3.9	15.4	18.6	17.6	17.7	20.3	46.1
14	9.7	3.1	16.4	17.2	14.0	16.5	8.2	7.9	6.3	4.0	3.8	2.8	7.6	4.0	3.0	2.0	1.6	2.0	1.9	4.6	11.8	6.0	5.0	3.2	6.8	17.2
15	2.7	3.2	2.4	8.3	13.7	18.5	20.0	25.3	9.0	9.3	9.2	8.1	10.7	10.7	7.4	8.1	8.9	4.0	3.3	3.6	5.3	6.0	5.6	7.8	8.8	25.3
16	8.5	7.6	8.9	6.5	15.9	22.9	17.1	29.4	28.0	33.3	14.4	12.6	7.0	7.5	8.6	4.5	6.0	7.4	8.3	3.5	2.9	2.7	3.6	9.0	11.5	33.3
17	11.4	7.1	16.4	23.2	23.9	34.0	37.4	17.7	33.0	34.9	15.9	8.8	10.7	17.4	10.8	6.3	2.5	3.0	1.7	4.8	11.2	19.5	13.6	17.8	16.0	37.4
18	16.7	14.2	31.9	19.0	21.0	14.3	17.5	57.9	28.1	18.8	16.6	13.8	13.8	13.4	10.0	12.2	12.1	3.8	1.9	6.8	11.8	11.3	25.3	38.8	18.0	57.9
19	29.7	16.1	9.3	5.9	3.0	3.8	6.7	3.7	2.1	3.8	9.2	12.2	7.7	4.3	4.0	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	4.2	1.7	5.0	1.5	4.2	4.8	1.6	4.1	2.0	-	-
23	2.6	3.7	4.6	10.0	8.2	9.9	6.2	14.8	16.3	12.7	14.2	3.3	4.9	4.7	5.2	4.6	3.5	3.2	1.8	1.6	1.6	1.4	1.7	2.6	6.0	16.3
24	2.0	1.8	2.2	1.8	1.4	2.4	8.6	12.5	5.8	10.4	5.8	5.7	6.2	11.7	15.0	9.5	3.4	2.3	0.9	1.6	2.5	2.0	1.8	4.4	5.1	15.0
25	1.6	1.9	2.5	1.5	1.2	2.5	2.8	3.5	3.2	3.3	7.1	5.9	6.1	11.1	8.6	10.5	12.3	11.5	12.8	10.6	10.5	12.2	14.6	13.8	7.2	14.6
26	13.5	13.7	13.6	12.3	12.4	10.8	10.3	11.5	10.0	10.3	17.9	6.9	6.1	6.9	7.3	7.5	7.5	7.1	10.2	12.0	11.9	11.2	10.8	11.4	10.5	17.9
27	10.5	10.4	11.3	13.0	4.4	1.3	3.2	3.0	4.5	4.7	4.8	7.3	6.9	4.8	5.0	9.9	8.2	2.8	2.2	3.2	4.4	5.2	5.0	8.2	6.0	13.0
28	6.9	4.8	4.8	2.7	3.8	2.8	3.6	4.5	3.0	6.4	3.0	4.1	6.0	5.1	1.3	1.0	0.8	0.9	0.6	2.4	5.3	0.6	0.7	1.1	3.2	6.9
29	1.1	1.4	1.5	0.6	1.0	0.8	1.6	1.5	1.6	1.9	1.6	1.9	1.8	6.3	2.4	5.6	2.5	4.2	2.3	2.4	2.2	3.5	3.2	2.0	2.3	6.3
30	1.9	3.0	4.2	5.0	12.6	16.5	21.2	24.4	24.4	14.3	7.0	6.3	6.0	6.3	9.4	8.7	5.5	3.7	3.4	4.3	2.7	2.1	1.6	1.5	8.2	24.4
31	1.3	1.1	1.4	1.6	1.6	3.0	11.0	7.2	8.4	12.1	13.0	9.2	8.6	8.0	8.3	5.9	5.0	4.6	4.1	3.9	3.6	3.4	3.3	3.5	5.6	13.0
NO.	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	672	90%
MEAN	9.2	8.0	8.9	9.0	10.0	10.6	11.8	15.2	16.6	15.3	12.0	9.4	6.9	7.4	6.3	6.3	5.5	4.2	4.8	4.3	6.4	6.1	7.1	9.1		
MAX	31.0	30.1	33.9	29.7	33.3	34.0	37.4	57.9	70.6	71.4	56.3	34.7	19.8	21.3	15.0	12.6	12.8	11.5	15.7	12.0	16.5	22.1	28.7	38.8		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	672	
Maximum 1-HR Average	71.4 UG/M3	
Maximum 24-HR Average	20.3 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	8.863	Operational Uptime
		Monthly Average
		672 HRS
		90.3 %
		8.8 UG/M3

Entrance PM₁₀ (µg/m³) – March 2021

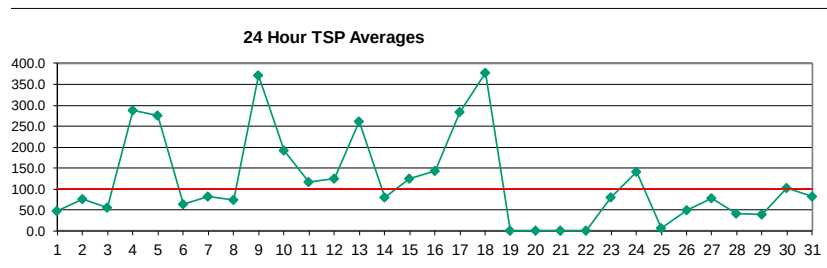
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.8	14.3	4.5	22.2	19.8	22.9	16.0	16.0	13.5	13.1	20.8	13.3	7.6	9.5	10.7	9.8	28.4	7.7	16.0	6.8	12.4	15.5	12.6	70.9	16.2	70.9
2	59.8	34.1	10.2	5.6	12.5	7.3	27.7	50.3	59.9	28.6	44.1	36.7	29.5	21.0	25.2	13.7	10.7	8.5	9.8	6.6	16.5	19.9	17.9	16.6	23.9	59.9
3	19.7	14.5	9.5	16.2	13.6	10.7	20.1	47.8	164.0	30.1	21.5	33.4	16.5	19.1	13.3	12.3	8.9	9.5	11.7	7.4	16.6	23.7	52.0	43.1	26.5	164.0
4	63.3	98.6	126.1	129.9	144.5	123.9	105.8	211.3	306.7	334.0	229.1	88.0	23.5	26.8	21.3	26.8	20.9	14.2	59.7	69.7	98.2	146.3	214.5	150.2	118.1	334.0
5	97.0	95.3	39.9	78.6	25.1	15.4	104.3	131.7	228.3	231.6	319.7	298.0	147.8	176.1	52.9	83.0	72.1	59.3	34.8	30.0	17.2	31.0	48.1	30.7	102.0	319.7
6	33.2	59.0	63.6	21.2	15.0	15.0	22.7	30.2	27.4	31.1	47.4	72.6	29.0	10.5	3.3	19.8	14.2	20.8	12.8	3.8	7.4	12.2	23.0	65.8	27.5	72.6
7	48.3	53.7	60.6	56.8	102.0	79.9	27.2	18.2	76.5	97.2	17.3	49.4	12.5	17.4	9.3	21.6	19.4	4.7	2.3	4.7	14.7	12.6	51.3	16.4	36.4	102.0
8	21.0	8.6	1.8	2.0	1.9	2.0	11.5	25.0	43.8	46.2	63.2	51.0	31.2	31.0	30.3	28.5	26.7	22.0	11.5	40.9	64.0	5.6	3.1	28.8	25.1	64.0
9	61.7	85.5	80.3	92.7	124.3	62.3	57.8	176.0	548.0	595.5	468.7	229.4	69.6	48.3	52.6	72.7	55.6	17.1	46.7	16.7	6.3	6.3	8.7	8.6	124.6	595.5
10	8.2	3.7	3.4	11.1	16.7	159.1	282.0	197.4	119.9	21.5	12.9	9.1	11.8	17.1	37.8	17.1	12.2	13.7	22.5	6.9	9.9	5.0	3.7	12.9	42.3	282.0
11	32.8	35.4	26.5	26.2	29.5	33.7	28.8	58.4	123.7	107.3	44.1	31.8	21.2	30.1	65.3	58.9	70.2	37.9	13.4	19.4	11.5	11.3	13.7	15.6	39.4	123.7
12	77.7	19.7	38.9	22.7	17.9	9.2	17.6	59.6	54.9	54.6	40.7	45.6	40.9	45.0	61.6	36.1	42.8	12.4	10.0	3.6	11.2	7.0	26.0	193.1	39.5	193.1
13	199.8	188.9	232.9	180.5	215.8	199.0	227.9	208.4	338.0	258.5	75.8	97.6	40.1	34.0	12.4	16.6	25.8	14.6	55.4	14.8	89.0	94.3	79.6	85.8	124.4	338.0
14	48.7	7.4	116.2	124.5	76.9	95.5	51.7	51.4	38.6	18.5	14.3	9.8	64.1	23.0	16.4	5.9	3.3	5.7	5.3	26.7	77.9	22.5	17.4	8.9	38.8	124.5
15	4.6	7.1	5.0	39.8	93.2	142.5	125.5	195.8	50.2	59.7	53.3	60.6	71.3	93.9	52.7	54.7	68.7	19.9	15.8	13.5	24.3	28.6	23.8	26.2	55.4	195.8
16	27.0	17.9	13.4	9.7	23.8	34.4	25.5	139.6	221.7	287.7	110.1	94.7	52.8	51.6	54.4	26.2	35.5	71.7	66.6	16.6	11.6	10.1	21.6	55.0	61.6	287.7
17	47.1	28.5	89.0	142.8	158.5	208.7	266.1	160.7	305.4	330.4	151.8	69.6	79.7	141.9	82.0	41.3	13.4	16.0	6.2	31.9	91.6	154.6	104.1	136.5	119.1	330.4
18	139.0	120.4	237.9	175.4	141.4	112.9	167.4	619.7	268.7	168.7	140.4	92.6	132.9	98.4	88.1	99.2	94.6	20.9	3.0	40.5	84.4	51.2	148.4	232.3	144.9	619.7
19	165.7	133.2	83.2	37.8	10.8	18.2	31.1	19.8	3.4	15.6	62.5	119.5	33.1	26.2	23.0	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	27.4	2.2	7.4	2.2	6.1	7.0	2.0	5.9	2.5	-	-
23	3.4	4.6	6.1	14.7	12.2	14.7	9.2	67.4	116.3	80.4	106.3	17.4	30.7	31.2	32.4	31.3	19.6	18.8	8.3	6.7	7.5	5.4	7.9	16.5	27.9	116.3
24	11.1	10.1	16.3	9.5	3.9	14.4	81.1	126.0	40.5	66.3	44.7	39.1	55.8	101.6	116.7	79.1	22.0	10.5	2.3	7.4	10.4	2.6	2.6	6.5	36.7	126.0
25	2.3	2.8	3.5	1.9	1.5	3.4	3.7	4.2	3.8	3.8	7.4	6.2	7.3	15.5	11.4	13.4	15.4	14.0	15.5	12.0	10.9	12.4	15.2	14.3	8.4	15.5
26	14.6	15.0	15.0	13.9	13.4	11.6	11.1	13.1	14.0	17.6	30.5	28.3	33.8	42.0	42.8	42.8	39.0	39.7	62.6	19.0	15.9	15.0	13.8	15.8	24.2	62.6
27	13.9	13.0	14.2	16.3	7.5	4.4	13.4	14.3	37.2	35.5	36.9	54.5	47.3	28.9	22.5	79.1	40.1	10.7	6.8	11.1	17.5	27.8	25.7	48.6	26.1	79.1
28	39.2	24.7	22.8	13.4	19.0	10.8	17.7	19.3	13.0	40.8	15.2	19.8	26.6	32.6	3.8	4.0	3.1	2.5	0.7	11.4	7.8	0.7	0.8	1.2	14.6	40.8
29	1.2	1.5	1.7	0.7	1.2	1.0	1.8	1.9	2.0	2.3	2.1	5.2	6.2	15.1	6.6	24.3	8.4	17.1	9.8	10.0	9.0	16.0	8.0	2.7	6.5	24.3
30	2.7	4.3	6.1	7.4	18.9	24.8	31.8	126.7	169.3	103.9	44.0	43.5	33.6	33.9	63.4	53.8	31.1	15.9	15.9	20.9	8.9	4.3	2.6	3.1	36.3	169.3
31	2.2	1.6	2.9	5.5	4.4	11.6	71.1	43.0	57.2	84.2	77.8	58.8	51.5	45.1	42.7	31.7	19.0	13.1	11.1	9.3	7.3	6.0	6.5	9.3	28.0	84.2
NO.	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	672	90%
MEAN	44.6	39.4	47.6	45.7	47.3	51.8	66.3	101.2	123.1	113.0	82.2	63.4	43.1	45.2	37.7	36.8	29.4	18.8	19.2	16.9	27.4	26.8	34.2	47.1	-	-
MAX	199.8	188.9	237.9	180.5	215.8	208.7	282.0	619.7	548.0	595.5	468.7	298.0	147.8	176.1	116.7	99.2	94.6	71.7	66.6	69.7	98.2	154.6	214.5	232.3	-	-



Number of Non-Zero Readings	672
Maximum 1-HR Average	619.7 UG/M3
Maximum 24-HR Average	144.9 UG/M3
Monthly Calibration	0
Standard Deviation	71.35
Operational Time	672 HRS
Operational Uptime	90.3 %
Monthly Average	50.3 UG/M3

Entrance TSP (µg/m³) – March 2021

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.1	74.0	16.7	47.2	59.9	53.9	51.7	43.6	43.1	42.7	78.4	32.2	12.6	25.9	40.1	16.1	54.5	10.0	17.0	6.1	9.9	41.5	54.9	304.7	47.7	304.7
2	279.3	131.4	36.0	18.6	37.5	19.5	94.5	145.1	225.4	85.6	154.3	135.8	73.1	62.4	48.9	39.1	27.0	19.9	28.7	24.0	37.9	34.7	35.4	16.0	75.4	279.3
3	32.4	24.3	13.9	26.2	32.3	29.6	32.6	108.9	327.6	62.1	51.4	90.4	43.0	49.6	34.4	33.6	29.4	31.2	25.6	14.7	32.6	49.1	89.9	73.2	55.7	327.6
4	135.5	232.1	155.2	181.0	255.1	265.3	318.3	475.7	1242.1	1129.5	684.1	195.2	49.8	50.3	47.8	63.9	29.2	22.5	115.5	108.8	143.4	263.9	431.1	304.4	287.5	1242.1
5	166.9	155.1	84.3	174.3	89.6	46.0	290.8	326.8	632.5	539.2	765.3	904.7	460.7	585.3	165.4	259.8	205.3	175.6	68.6	66.8	50.3	126.5	172.9	107.6	275.8	904.7
6	73.0	219.6	262.5	65.0	24.5	22.9	34.8	50.8	60.6	60.7	84.8	188.1	87.6	22.7	2.5	35.4	32.0	29.7	25.2	9.1	9.4	17.8	34.8	93.5	64.5	262.5
7	77.7	104.9	129.3	139.6	140.6	194.3	59.0	74.0	249.7	219.7	31.6	113.6	33.7	32.2	26.1	62.5	36.3	9.6	3.4	7.3	24.1	29.8	65.4	104.6	82.1	249.7
8	37.0	21.7	1.8	5.7	3.1	6.3	25.0	65.8	117.7	117.2	146.7	101.7	74.0	55.7	55.7	57.9	59.7	36.6	20.0	174.4	486.2	4.9	4.2	87.7	73.6	486.2
9	280.3	289.6	276.4	267.8	185.3	186.0	161.6	535.2	1720.9	1933.3	1468.2	587.7	170.2	107.8	146.1	195.2	154.1	49.2	77.2	44.4	11.9	23.9	31.0	31.0	372.3	1933.3
10	24.8	7.9	6.9	20.6	18.2	345.5	443.9	410.0	1218.6	24.5	266.3	163.4	223.4	348.3	719.8	47.8	120.5	137.1	24.0	5.5	9.5	3.7	3.3	12.9	191.9	1218.6
11	36.1	40.0	29.3	29.5	33.8	39.1	33.4	126.2	455.3	503.1	201.0	137.6	66.4	78.5	163.7	180.5	198.5	105.4	43.4	78.0	37.8	50.8	54.5	70.3	116.3	503.1
12	344.8	99.5	223.0	59.0	92.1	50.7	84.8	252.1	217.3	206.2	130.3	108.8	108.8	125.4	193.6	100.7	117.3	22.7	30.4	8.0	13.9	14.7	49.1	373.8	126.1	373.8
13	415.0	393.5	552.1	352.9	448.6	408.2	494.7	505.5	874.9	603.6	157.0	262.8	81.2	83.1	24.4	33.1	54.8	14.3	87.6	19.9	94.3	94.8	97.0	108.0	260.9	874.9
14	82.6	12.8	299.7	249.5	156.0	191.0	123.8	133.6	105.4	31.5	32.7	20.9	162.1	68.8	47.8	18.3	5.5	8.9	9.9	30.2	87.2	26.2	23.3	9.2	80.7	299.7
15	5.3	8.1	5.8	45.9	155.4	183.0	154.3	514.4	165.7	226.6	166.9	168.0	204.9	252.1	137.1	123.0	189.0	45.8	41.8	23.2	42.8	56.9	40.8	36.0	124.7	514.4
16	30.3	20.6	14.3	10.3	27.1	39.8	29.5	369.9	690.8	742.9	273.1	213.4	115.0	111.1	112.7	49.3	56.1	212.3	145.9	28.4	19.2	13.0	34.2	89.0	143.7	742.9
17	50.3	42.8	182.6	285.3	376.5	432.5	662.4	442.6	848.0	866.3	403.5	161.8	171.0	312.8	210.7	90.1	29.8	35.7	8.4	52.8	182.8	359.1	255.5	341.2	283.5	866.3
18	356.6	306.9	604.1	488.7	305.2	334.7	535.3	2077.6	829.2	480.4	412.2	196.4	308.2	251.4	220.3	296.7	284.0	51.7	3.7	64.0	120.5	82.2	172.4	259.6	376.7	2077.6
19	181.3	384.8	221.5	133.0	23.3	46.2	61.7	50.6	2.8	29.9	194.5	414.2	108.1	59.8	57.2	K	K	K	K	K	K	K	K	K	-	-
20	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
21	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	-	-
22	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	164.6	1.7	7.8	1.7	6.0	6.3	1.4	5.4	1.9	-	-
23	2.8	3.7	4.8	16.1	13.7	16.8	10.3	205.2	372.0	196.8	312.1	55.8	84.0	117.7	110.2	104.9	51.2	46.9	30.7	19.3	24.7	16.9	41.3	90.3	81.2	372.0
24	66.7	50.5	105.4	54.7	8.6	61.1	409.8	695.2	149.2	229.4	159.2	138.1	171.4	349.0	356.9	198.1	46.7	35.2	4.1	25.1	52.5	2.0	2.3	7.2	140.8	695.2
25	1.9	2.3	3.4	1.5	1.1	2.5	2.8	3.0	2.8	2.8	4.9	4.1	5.6	14.9	10.3	12.9	14.1	12.6	13.6	8.7	7.2	8.1	9.9	9.3	6.7	14.9
26	9.6	9.9	10.0	9.2	9.0	7.8	7.2	8.6	19.9	27.5	55.5	93.6	125.6	128.4	109.9	115.1	92.3	116.9	152.5	41.1	12.4	11.5	10.6	13.9	49.9	152.5
27	10.3	9.1	9.8	11.4	13.4	12.2	32.1	41.8	105.7	108.9	117.7	181.2	178.6	97.4	73.7	312.1	130.4	23.5	16.2	31.8	38.8	67.0	70.6	165.6	77.5	312.1
28	141.1	64.0	60.6	37.6	45.1	19.6	30.4	28.9	24.0	151.9	44.1	47.5	33.4	85.6	15.2	10.2	6.3	4.9	0.5	139.1	8.9	0.5	0.5	0.8	41.7	151.9
29	0.8	1.0	1.2	0.5	0.9	0.7	1.3	1.4	1.5	1.8	1.7	86.9	115.6	192.2	121.0	139.5	92.0	20.5	39.3	14.2	46.2	65.2	20.2	2.3	40.3	192.2
30	2.5	4.5	6.7	8.2	21.8	28.7	36.8	313.8	498.8	268.3	143.9	132.9	111.7	105.5	242.2	184.2	100.7	44.5	57.5	85.6	34.3	8.9	3.6	7.1	102.2	498.8
31	8.2	1.5	5.6	15.5	11.9	25.4	148.7	129.5	192.7	251.1	223.6	200.8	155.2	125.3	166.1	110.1	53.1	34.2	25.6	18.0	13.7	9.3	15.0	46.2	82.8	251.1
NO.	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	672	90%
MEAN	102.2	97.0	118.7	98.4	92.5	109.6	156.1	290.6	406.9	326.6	241.6	183.5	126.2	139.3	130.7	109.1	81.1	48.8	39.9	41.2	59.2	53.0	65.3	98.8		
MAX	415.0	393.5	604.1	488.7	448.6	432.5	662.4	2077.6	1720.9	1933.3	1468.2	904.7	460.7	585.3	719.8	312.1	284.0	212.3	152.5	174.4	486.2	359.1	431.1	373.8		



Number of 24HR Exceedences	13	Proposed Guideline
Number of Non-Zero Readings	672	
Maximum 1-HR Average	2077.6 UG/M3	
Maximum 24-HR Average	376.7 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	212.5	Operational Uptime
		Monthly Average
		672 HRS
		90.3 %
		134.0 UG/M3