

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

OCTOBER 2021

NOVEMBER 18, 2021



WSP



AMBIENT AIR QUALITY MONTHLY REPORT OCTOBER 2021

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: NOVEMBER 18, 2021

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November 18, 2021

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – October 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 October 2021.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	99.6%	-	0
PM _{2.5}	99.3%	0	0
PM ₁₀	99.6%	-	-
NO	99.7%	-	-
NO ₂	99.7%	0	-
NO _x	99.7%	-	-
SO ₂	99.7%	0	0
Met Parameters	99.9%	-	-

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WSP Canada Inc.

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 October 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%	-	-	10
PM_{2.5}	100%	0	0	-
PM₁₀	99.7%	-	-	-

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 October 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	99.9%	0	0	0
Berm	12.5%	0	0	3
Entrance	0%	0	0	0

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



November 18, 2021

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Date

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



November 18, 2021

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

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1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. The 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 October 1, 2021 and October 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 the past, Lafarge environmental staff have 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. In some months of the year, low water levels have left more of the lake shore/bed exposed. 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.

In October 2021, Lafarge environmental staff noted that water levels were low enough that the lake bed was exposed (Figure 2), therefore being a potential source of fugitive dust this month.



Figure 2 Photo of Lac Des Arcs (October 2021)

2 OCTOBER 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	35.3	0	18.7	-
SO ₂ (ppb)	99.7	11.5	0	2.7	0
PM _{2.5} (µg/m ³)	99.3	28.7	0 ¹	11.9	0
PM ₁₀ (µg/m ³)	99.6	136.2	-	42.1	-
TSP (µg/m ³)	99.6	245.2	-	68.9	0
Temperature (°C)	99.9	21.3	-	13.3	-
Wind Speed (km/hr) /Direction (Degrees)	99.9	45.1/W	-	35.7/WSW	-
Precipitation (mm)	99.9	1 ²	-	7.75 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 zero days exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero exceedances the 1-hour PM_{2.5} AAAQG.
- There were zero days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, the meteorological sensors recorded 99.9% uptime for the month of October due to one hour of power failure occurring on October 5th at 12:00.
 - The NO₂ and SO₂ recorded 99.7% uptime respectively due to two hours of power failure occurring on October 5th at 12:00 & 13:00.
 - TSP and PM₁₀ recorded 99.6% uptime, respectively, due to two hours of power failure occurring on October 5th at 12:00 & 13:00. Further, one hour of equipment malfunction occurred on October 22nd at 2:00.
 - PM_{2.5} recorded 99.3% uptime due to two hours of power failure occurring on October 5th at 12:00 & 13:00. Two hours of equipment malfunction occurred on October 21st at 2:00 & 7:00. Further, there was one hour of routine maintenance which occurred on October 21st at 12:00.
-

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} ($\mu\text{g}/\text{m}^3$)	100.0	33.0	0*	7.5	0
PM ₁₀ ($\mu\text{g}/\text{m}^3$)	99.7	468.0	-	187.2	-
TSP ($\mu\text{g}/\text{m}^3$)	100.0	616.0	-	274.9	10

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

Data Quality Notes:

- There was zero days exceeding the 24-hour PM_{2.5} AAAQO.
- There was zero exceedances of the 1-hour PM_{2.5} AAAQG.
- There were 10 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- TSP and PM_{2.5} recorded 100% uptime for the month of October.
 - The PM₁₀ monitor recorded 99.7% uptime for the month of October due to two hour of equipment malfunction occurring on October 29th at 9:00 and 14:00.
-

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} ($\mu\text{g}/\text{m}^3$)	99.9	19.6	0*	11.5	0
PM ₁₀ ($\mu\text{g}/\text{m}^3$)	99.9	28.6	-	15.4	-
TSP ($\mu\text{g}/\text{m}^3$)	99.9	22.5	-	13.0	0

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

Data Quality Notes:

- There was zero exceedances of the 24-hour PM_{2.5} Guidelines.
- There was zero exceedances of the 1-hour PM_{2.5} Guidelines.
- There was zero exceedance of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 99.9% uptime for the month of October due to one hour of power failure occurring on October 24th at 22:00.

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} ($\mu\text{g}/\text{m}^3$)	12.5	46.3	0*	12.1	0
PM ₁₀ ($\mu\text{g}/\text{m}^3$)	12.5	260.9	-	84.0	-
TSP ($\mu\text{g}/\text{m}^3$)	12.5	761.4	-	245.7	3

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

Data Quality Notes:

- There was 0 exceedance of the 24-hour PM_{2.5} Guidelines.
- There was 0 exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 3 days exceeding the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 12.5% uptime during the month of October due to the GRIMM monitor being removed for annual calibration and maintenance.

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} ($\mu\text{g}/\text{m}^3$)	0.0	N/A	N/A	N/A	N/A
PM ₁₀ ($\mu\text{g}/\text{m}^3$)	0.0	N/A	-	N/A	-
TSP ($\mu\text{g}/\text{m}^3$)	0.0	N/A	-	N/A	N/A

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

Calibration/Maintenance Notes:

- The analyzer had 0% uptime for the month of October due to the GRIMM monitor being removed for annual calibration and maintenance.

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 3-9) and tables and graphs illustrating the monitoring results for October 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 October 20 th . The monitor had 99.3% uptime due to two hours of power failure occurring on October 5 th at 12:00 & 13:00. Two hours of equipment malfunction occurred on October 21 st at 2:00 & 7:00. Further, there was one hour of routine maintenance which occurred on October 21 st at 12:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on October 21 st . The monitor had 99.6% uptime due to two hours of power failure occurring on October 5 th at 12:00 & 13:00. Further, one hour of equipment malfunction occurred on October 22 nd at 2:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on October 21 st . The monitor had 99.6% uptime due to two hours of power failure occurring on October 5 th at 12:00 & 13:00. Further, one hour of equipment malfunction occurred on October 22 nd at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on October 20 th . The monitor had 99.7% uptime for the month of October due to two hours of power failure occurring on October 5 th at 12:00 & 13:00.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on October 20 th . The monitor had 99.7% uptime for the month of

		October due to two hours of power failure occurring on October 5 th at 12:00 & 13:00.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 99.9% uptime for the month of October due to one hour of power failure occurring on October 5 th at 12:00.
Wind Speed	MetOne Wind Sensor	The monitor had 99.9% uptime for the month of October due to one hour of power failure occurring on October 5 th at 12:00.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 99.9% uptime for the month of October due to one hour of power failure occurring on October 5 th at 12:00.

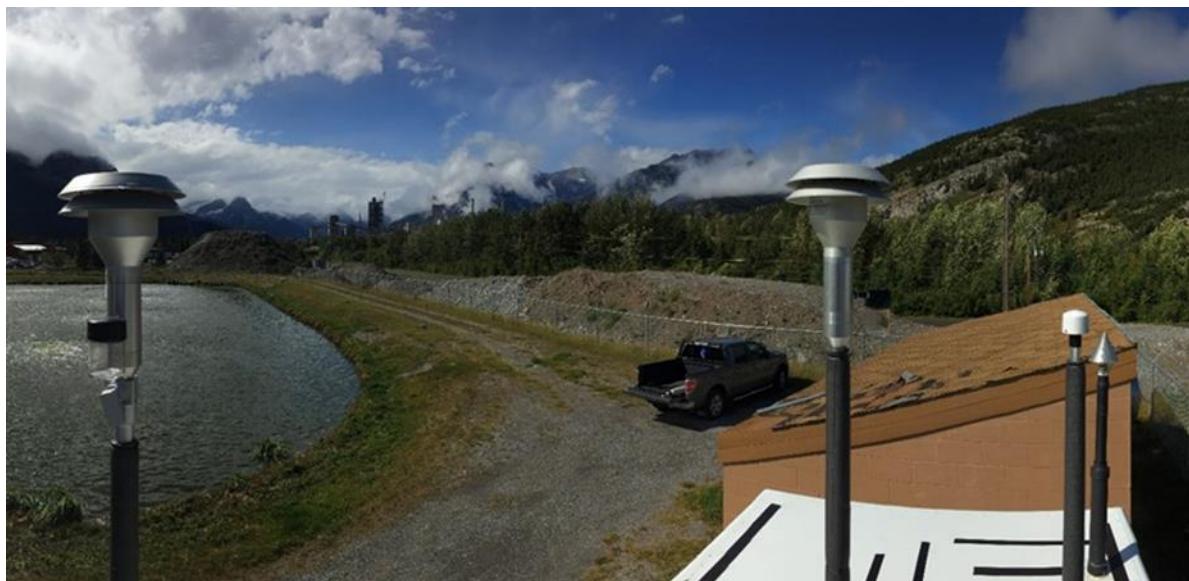


Figure 3-1 Inlets on the top of WSP's Lagoon monitor

3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in October 2021. Figure 3-2 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-8 shows daily average concentrations recorded during October 2021 for the pollutants listed in Table 3-2. Additionally, Figure 3-3 to Figure 3-7 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

There were zero exceedances of the 24-hour TSP (100 µg/m³) AAAQO. There were zero exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO. Further, there were zero exceedances of the 1-hour PM_{2.5} AAAQG (80 µg/m³).

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

At the Lagoon station strong wind gusting that typically occurs in the area contributes to increased particulate levels that may have arise from multiple sources including the Lafarge Plant, Exshaw Creek, dry sections of the Bow River, highway and rail traffic moving past the station and fugitive emissions from open areas.

Table 3-2 Summary of October 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/hr)	Wind Direction (degrees)	Maximum Concentration/Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.7	7.6	35.3	4	21	13.4	71.1	18.7	4	99.7
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	1.0	11.5	1	12	15.6	270.8	2.7	22	99.7
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	3.1	28.7	20	17	9.4	63.6	11.9	20	99.3
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	19.6	136.2	27	11	34.0	258.6	42.1	20	99.6
TSP (µg/m ³)	-	100	Lagoon	-	0	0.0	30.9	245.2	9	14	38.3	253.2	68.9	9	99.6
Temperature (°C)	-	-	Lagoon	-	-	-9.7	5.9	21.3	5	15	23.2	248.2	13.3	3	99.9
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.5	18.5	45.1/W	16	16	45.1	244.3	35.7/WSW	16	99.9
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	1.0	23	8	10.9	282.7	7.8	-	99.9

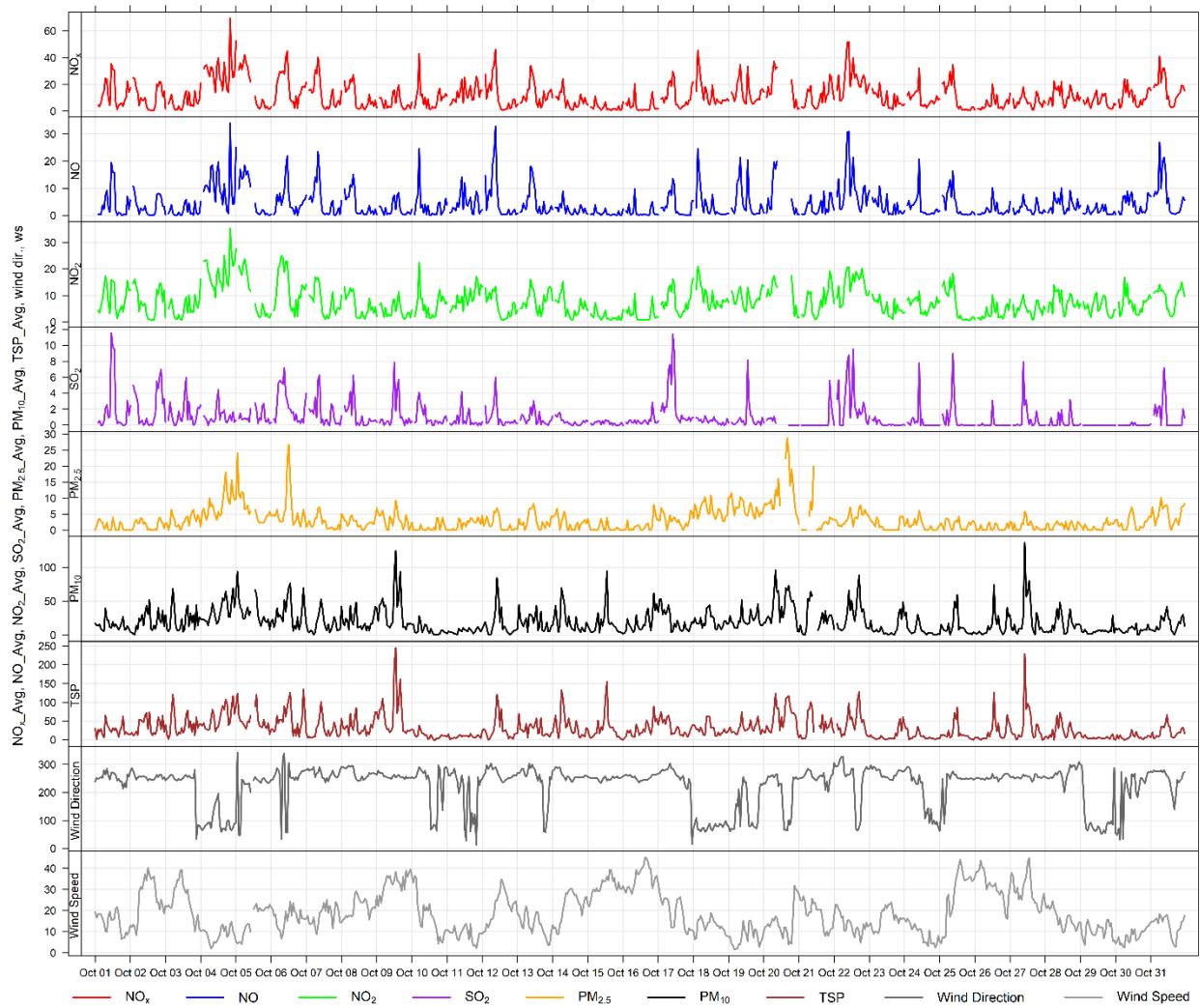


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

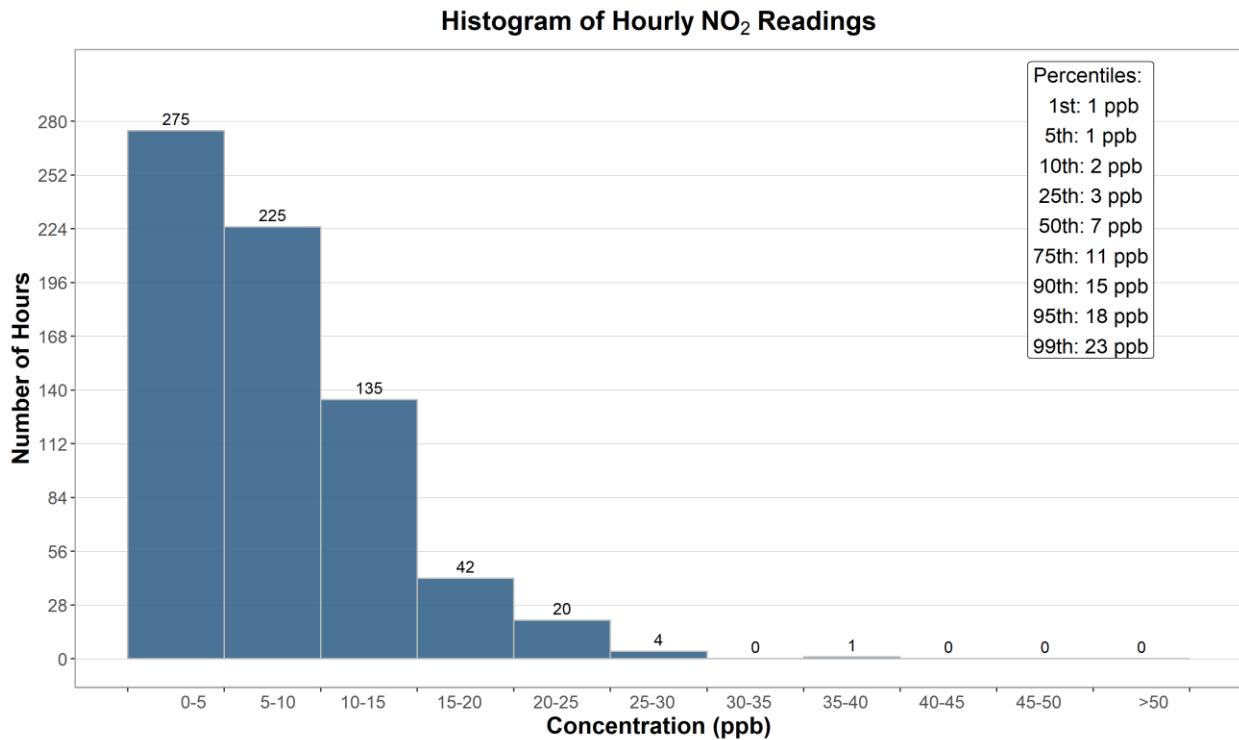


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

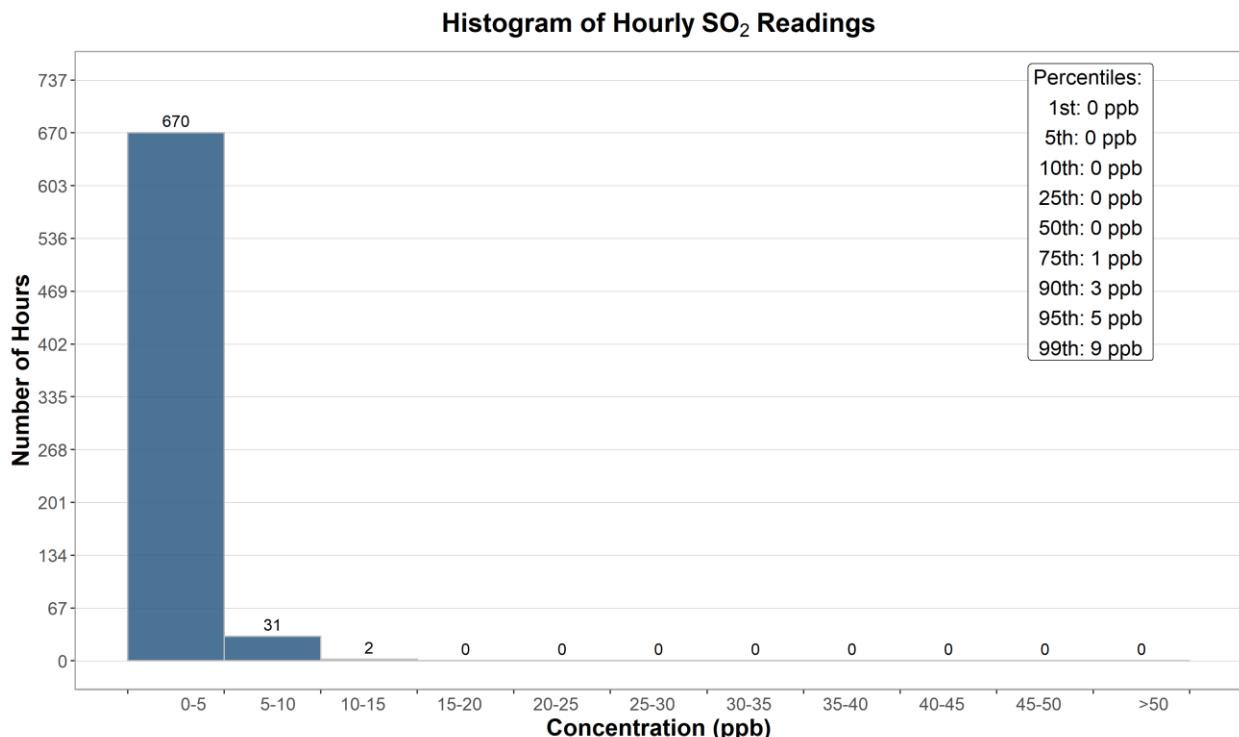


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

Histogram of Hourly PM_{2.5} Readings

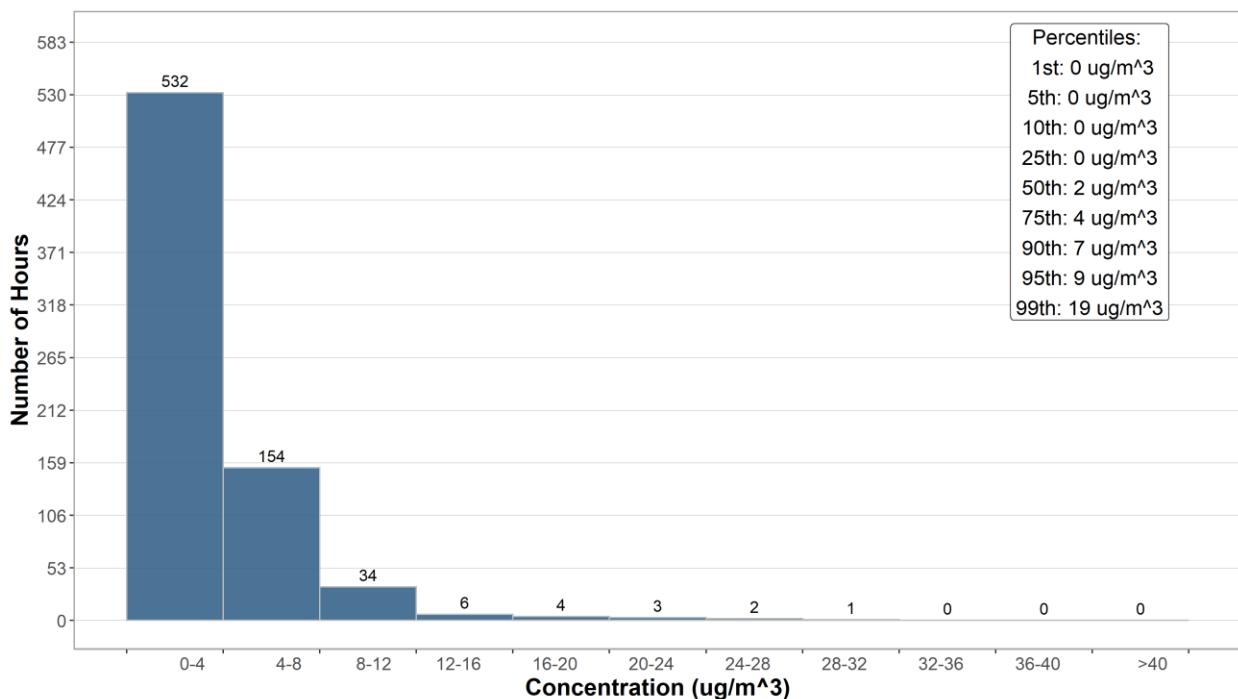


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

Histogram of Hourly PM₁₀ Readings

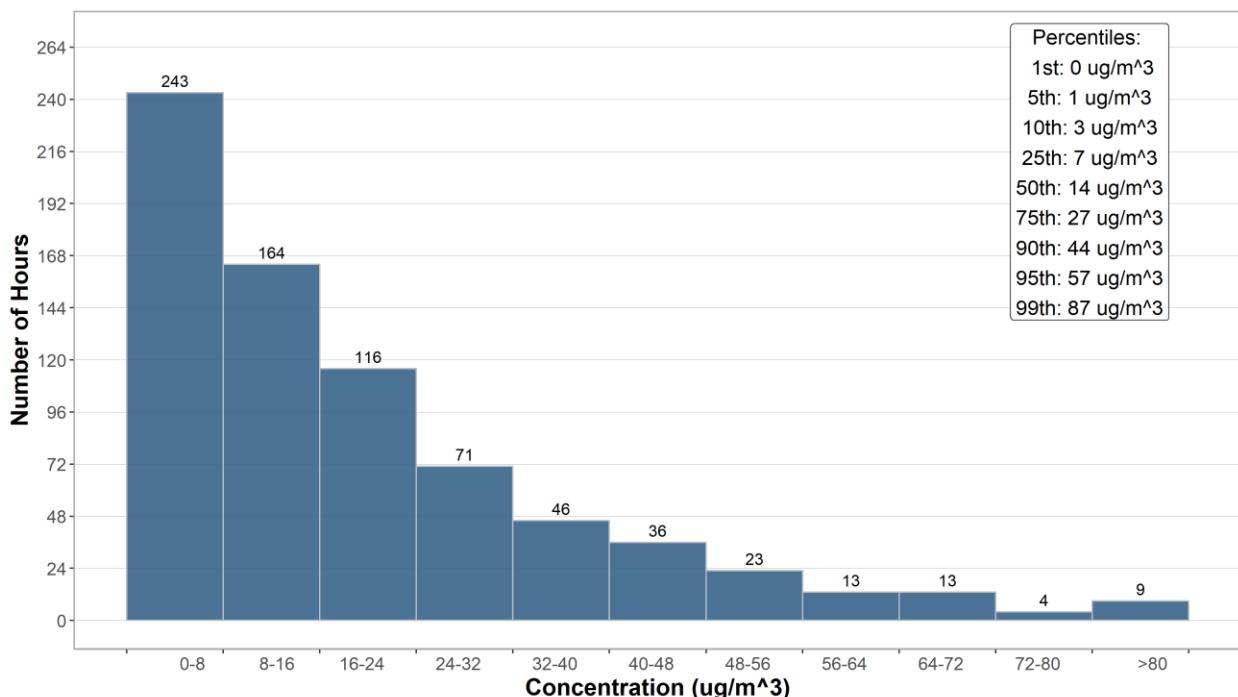


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

Histogram of Hourly TSP Readings

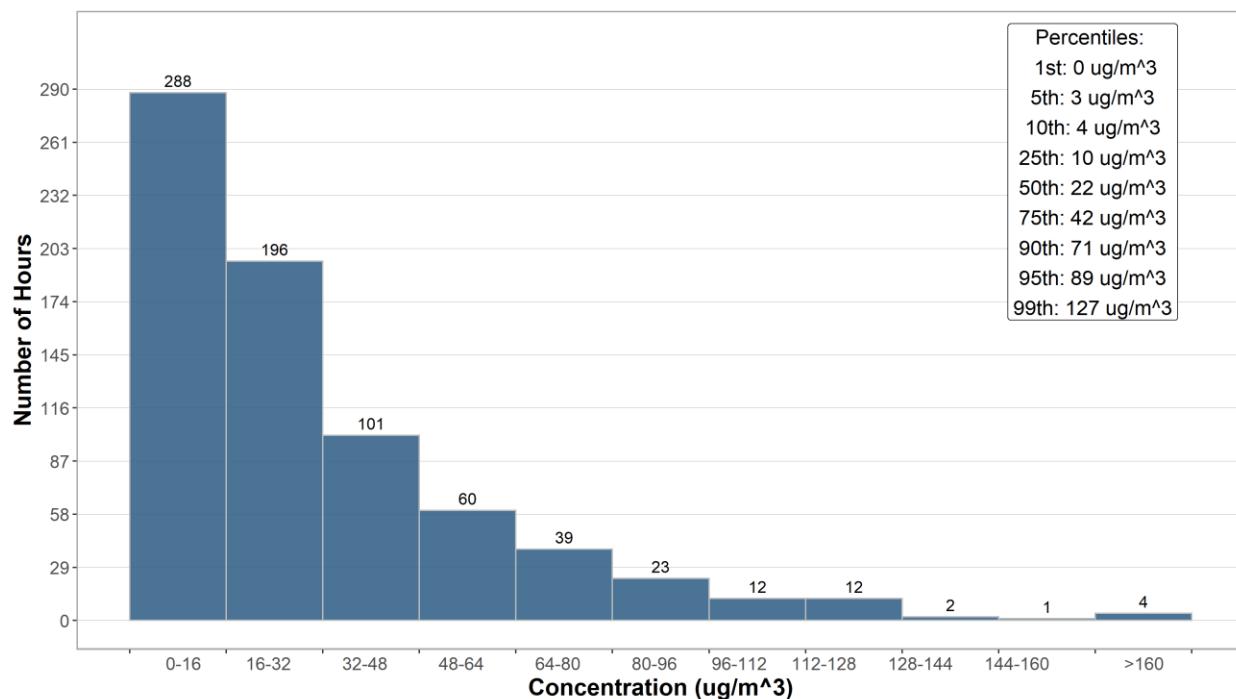


Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station

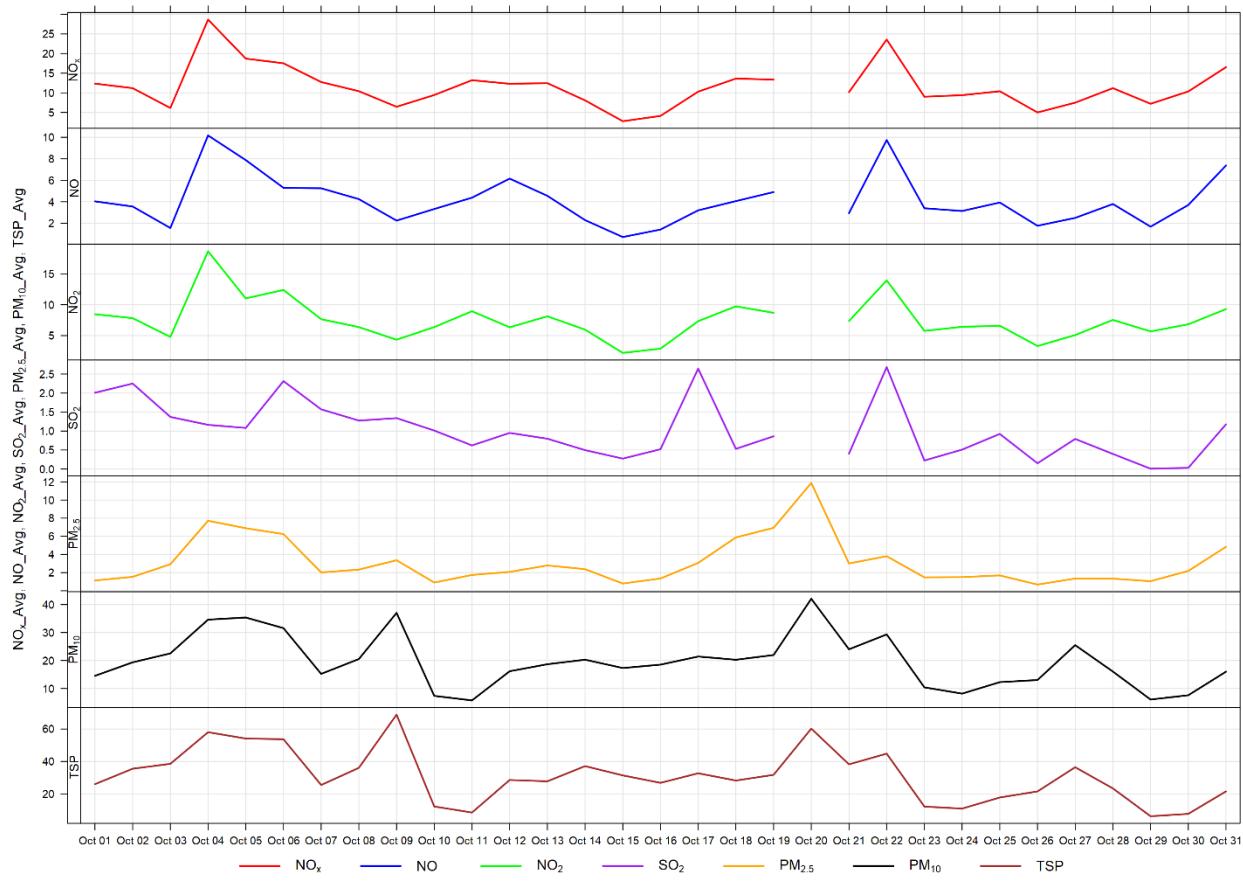


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

The following wind rose (Figure 3-9) shows the wind rose for October. The wind rose shows that the winds predominately came from the west-southwest and west directions, and were predominately over 20 km/hr.

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 typically shows that PM₁₀ and TSP concentrations have a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other airshed 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.

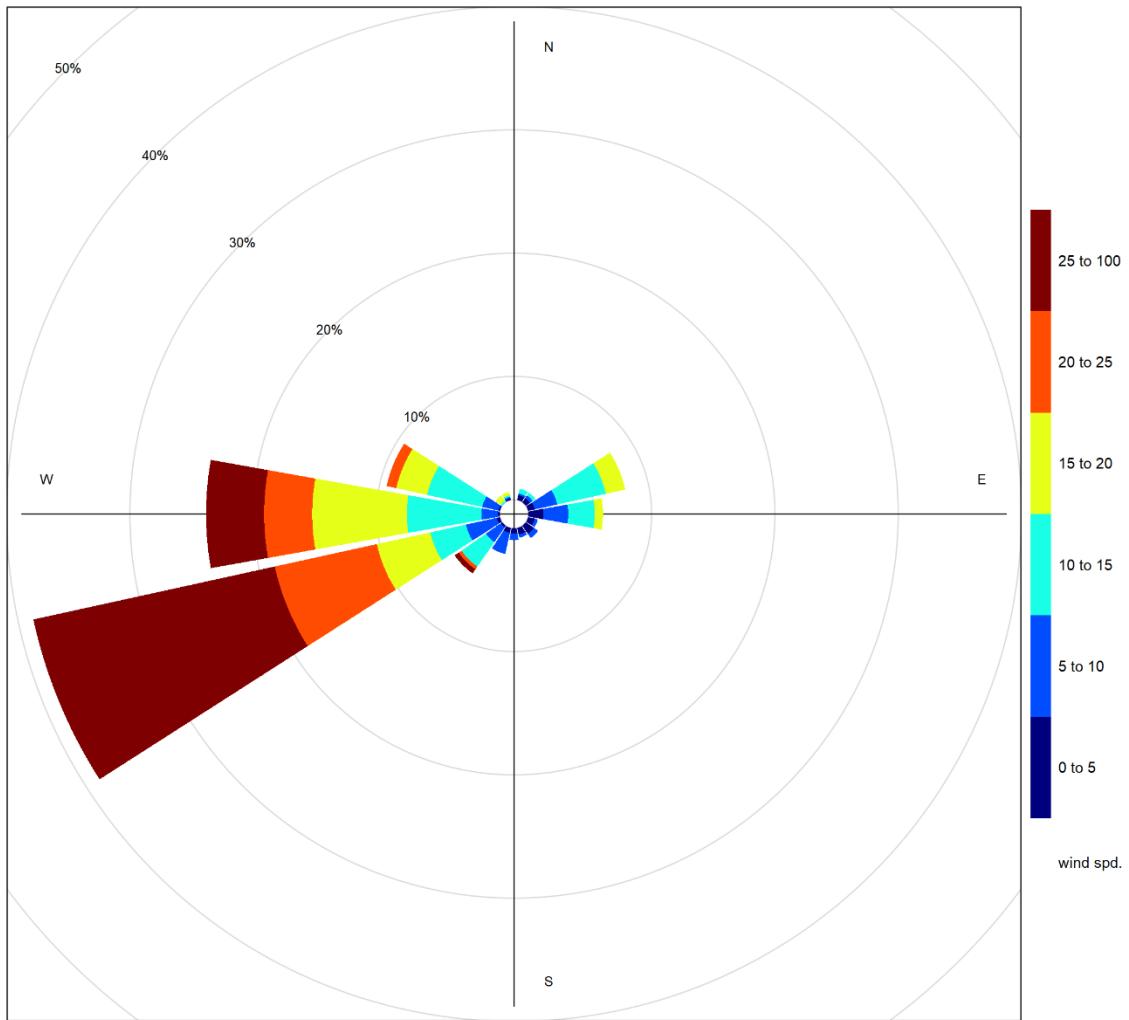


Figure 3-9 October wind rose for the Lagoon Station

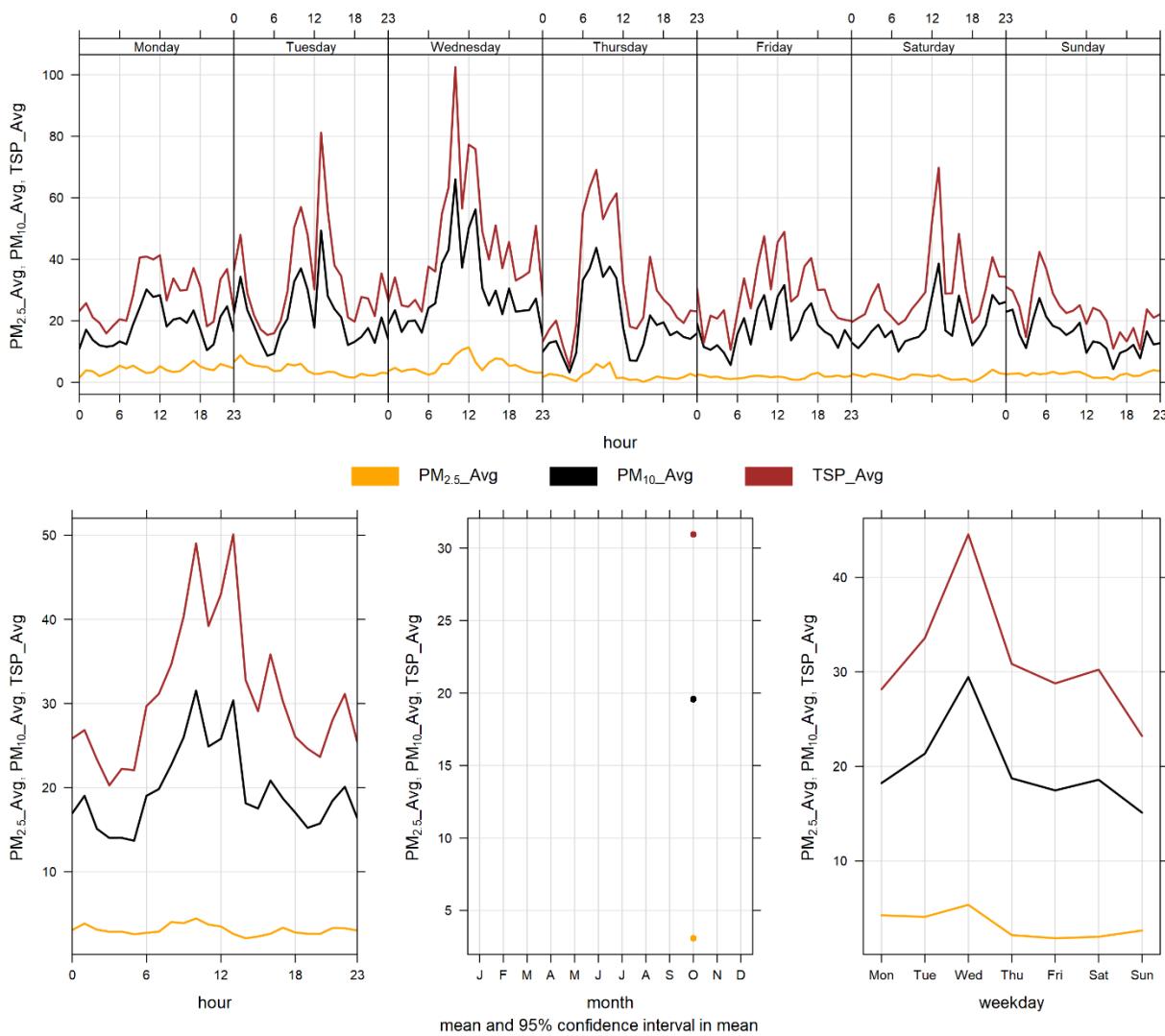


Figure 3-10 Lagoon monitor particulate matter time variation

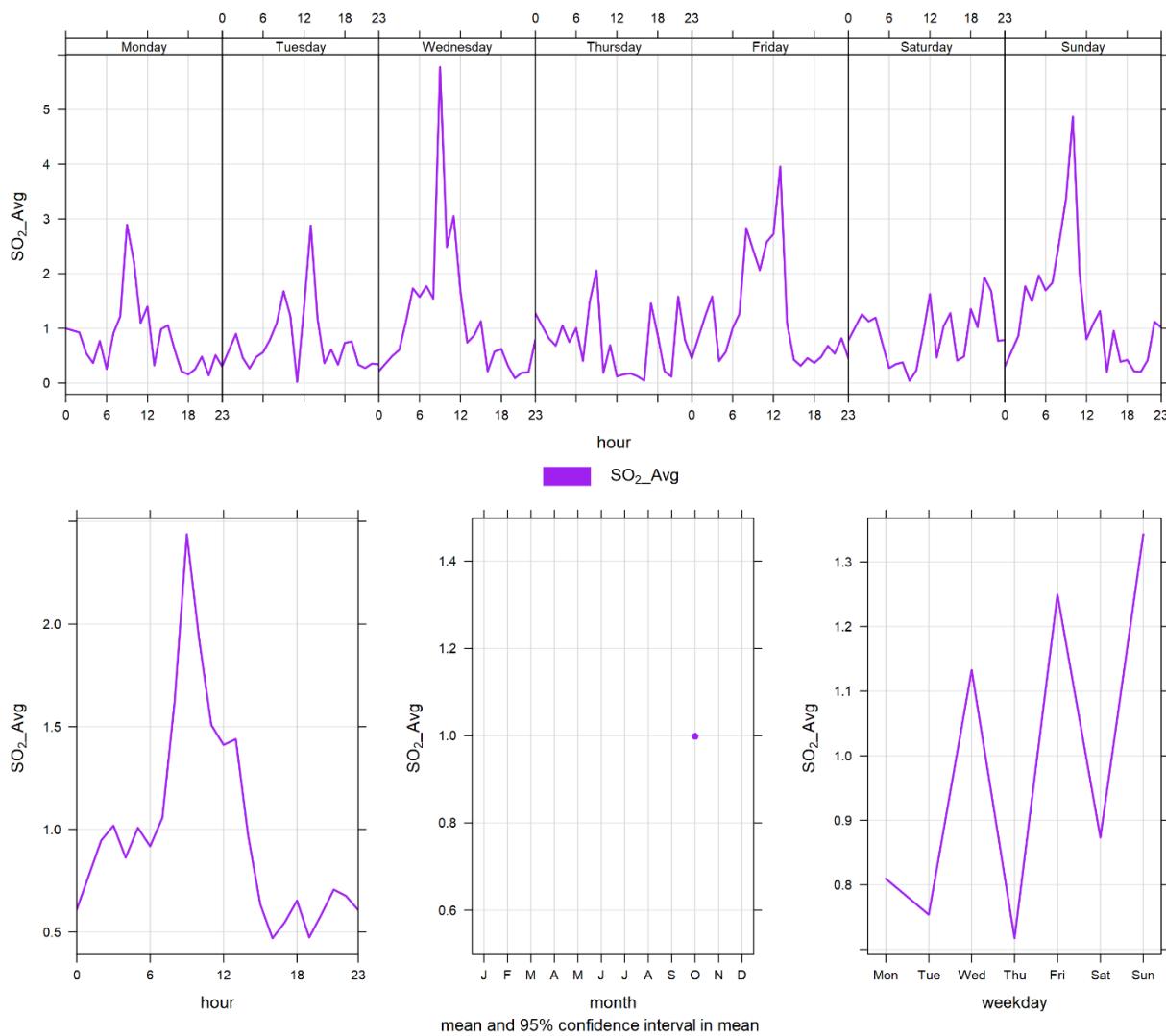


Figure 3-11 Lagoon monitor SO_2 time variation

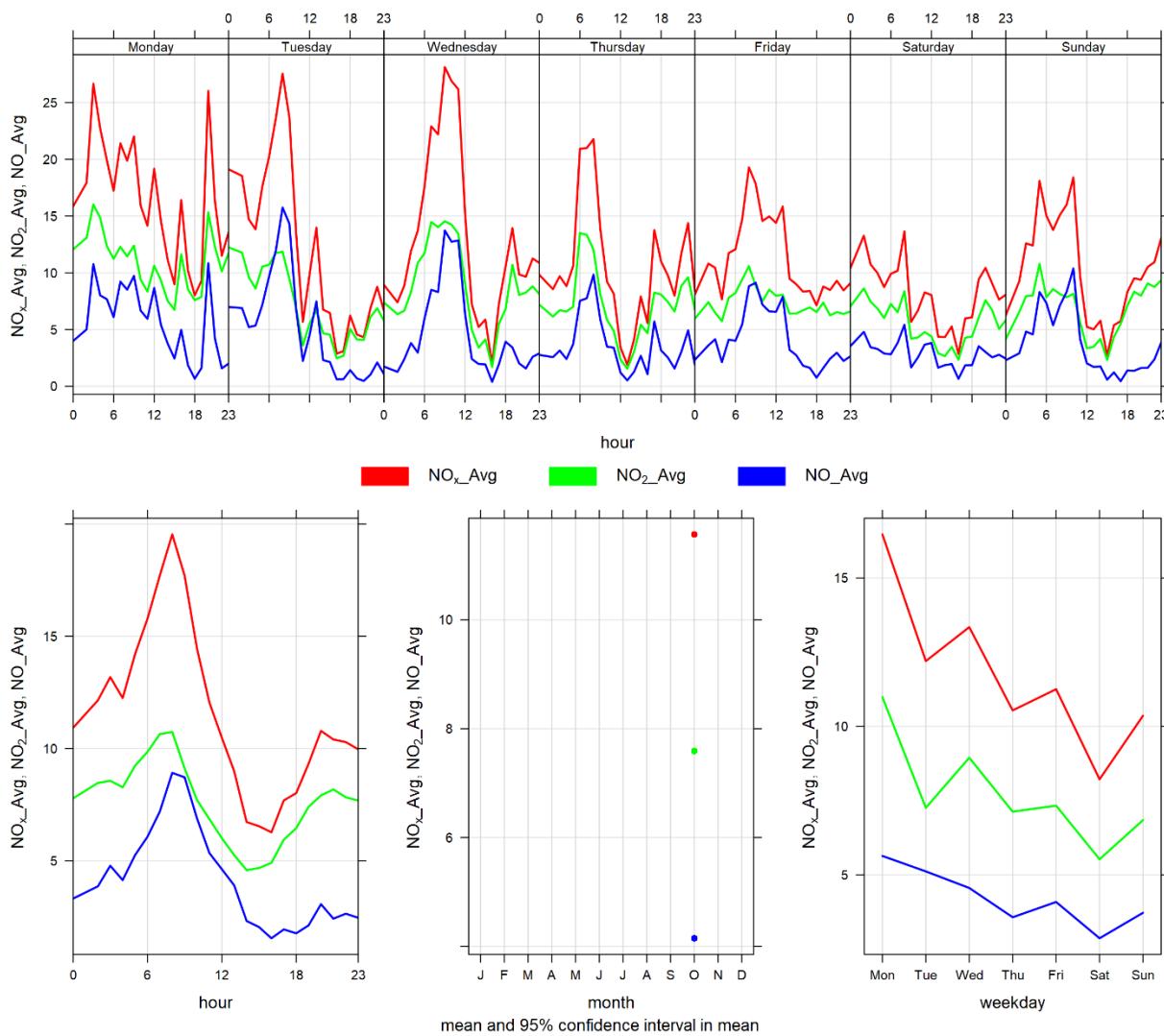


Figure 3-12 Lagoon monitor NO_x time variation

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 summarizes the hourly and daily concentrations recorded in October 2021, and Table 4-3 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrates 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, 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 exceedance of the 1-hour PM_{2.5} AAAQG, and 10 exceedances of the 24-hour TSP AAAQO. The TSP exceedances occurred predominantly on days with high speed westerly winds.

Historically in October, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 2 and 0, respectively. Prior to this year, the maximum number of 24-hour TSP AAAQO exceedances recorded in October was 3 days in 2018.

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 strong wind gusting that occurred in October would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for October 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 October 21 st . The monitor recorded 100% uptime for the month of October.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on October 21 st . The monitor recorded 99.7% uptime for the month of October due to two hour of equipment malfunction occurring on October 29 th at 9:00 and 14:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on October 21 st . The monitor recorded 100% uptime for the month of October.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in October 2021, and Table 4-3 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrates 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, 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 exceedance of the 1-hour PM_{2.5} AAAQG, and 10 exceedances of the 24-hour TSP AAAQO. The TSP exceedances occurred predominantly on days with high speed westerly winds.

Historically in October, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 2 and 0, respectively. Prior to this year, the maximum number of 24-hour TSP AAAQO exceedances recorded in October was 3 days in 2018.

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 strong wind gusting that occurred in October would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

Table 4-2 Summary of October 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/m ³)	80	29	Windridge	0	0	0.0	3.3	33.0	21	3	24.6	252.5	7.5	9	100.0
PM ₁₀ (µg/m ³)	-	-	Windridge	-	-	0.0	57.3	468.0	9	13	34.4	263.0	187.2	9	99.7
TSP (µg/m ³)	-	100	Windridge	-	10	0.0	84.6	616.0	9	13	34.4	263.0	274.9	9	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						
2021-10-02	131.8	-	254.2	25.7	36.7	High wind event
2021-10-03	115.1	-	252.6	24.9	33.2	High wind event
2021-10-05	138.8	-	240.6	15.1	46.8	Winds predominately from the west
2021-10-09	274.9	-	257.2	32.8	37.2	High wind event
2021-10-12	126.9	-	261.0	21.4	47.1	High wind event
2021-10-14	158.3	-	256.9	21.6	41.8	High wind event
2021-10-15	220.1	-	249.9	31.4	38.9	High wind event
2021-10-16	126.0	-	252.5	35.7	40.8	High wind event
2021-10-26	138.9	-	252.3	31.8	38.3	High wind event
2021-10-27	202.7	-	255.0	29.4	40.4	High wind event
Total # of Exceedances	10	0				
Maximum # of Exceedances (October)	3 (2018)	0 (2018, 2020)				
Average # of Exceedances (October)	2	0				
Minimum # of Exceedances (October)	2 (2020)	0 (2018, 2020)				

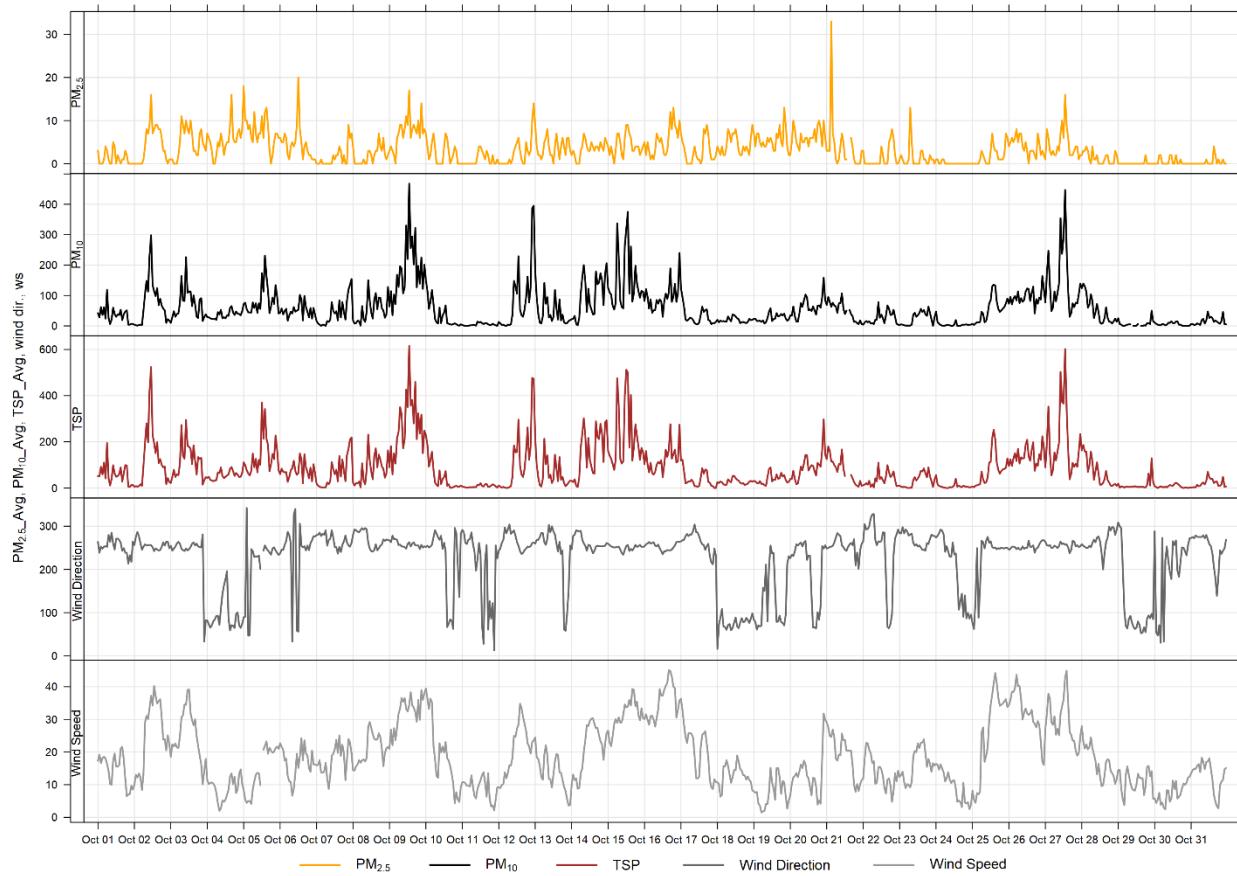


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

Histogram of Hourly PM_{2.5} Readings

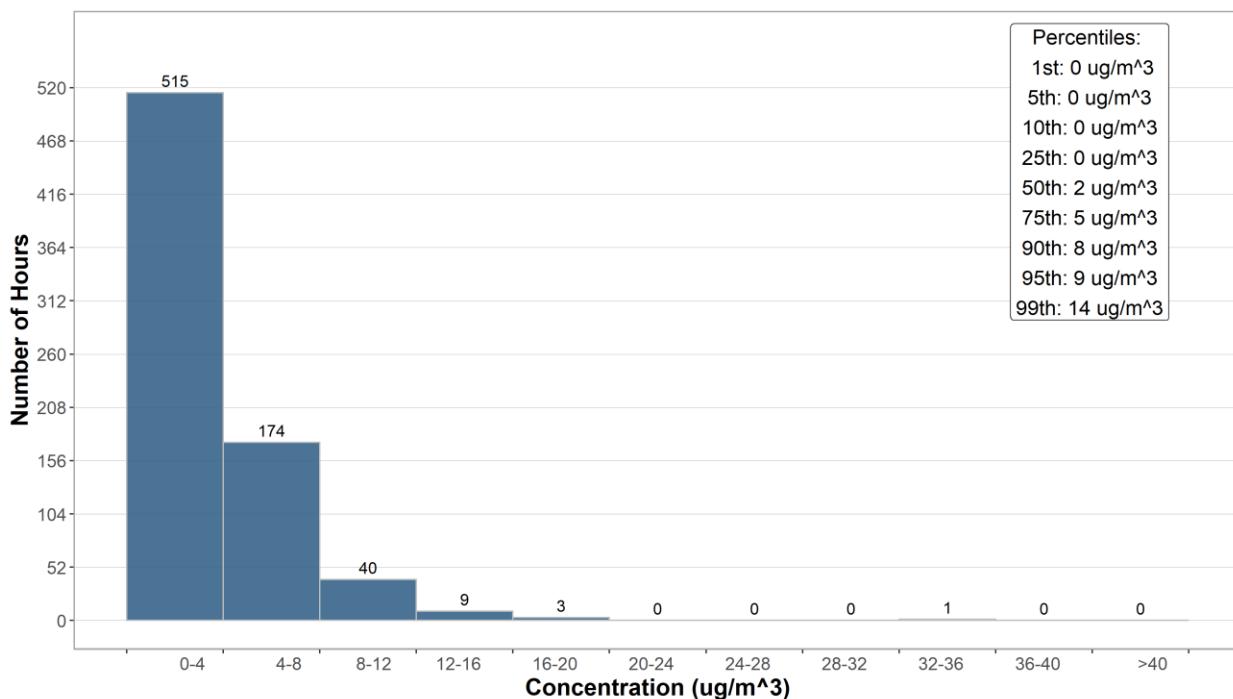


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

Histogram of Hourly PM₁₀ Readings

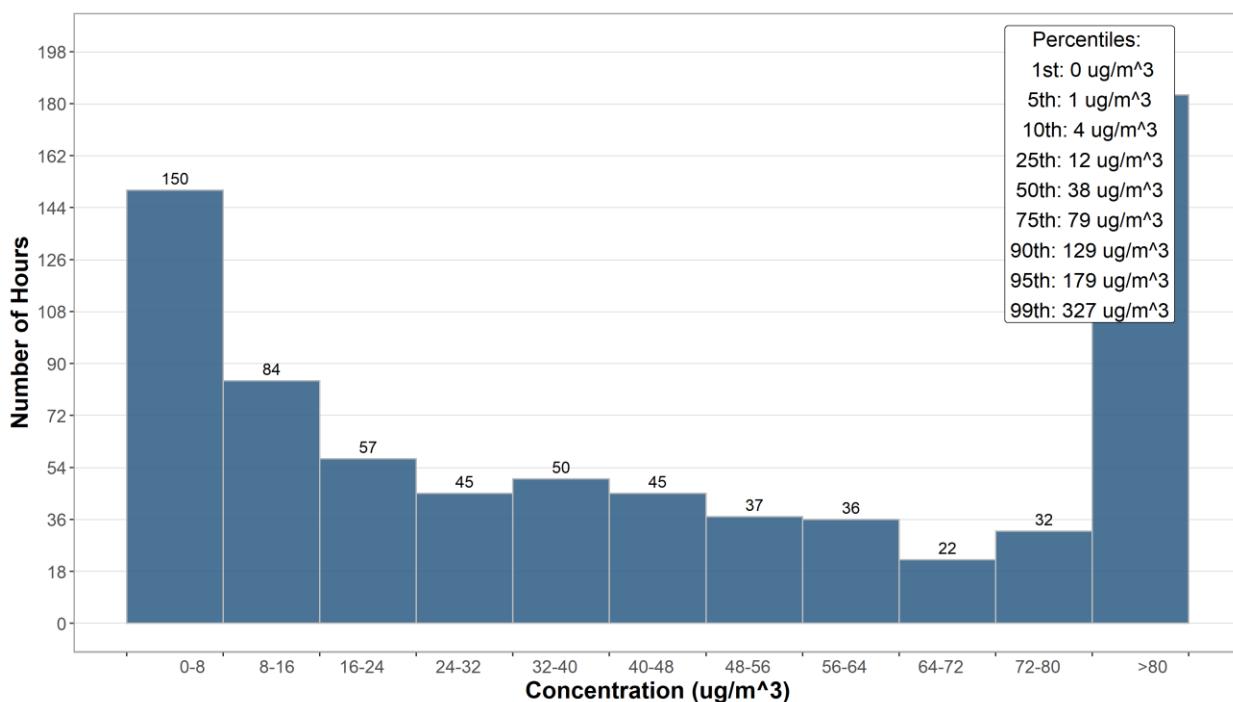


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

Histogram of Hourly TSP Readings

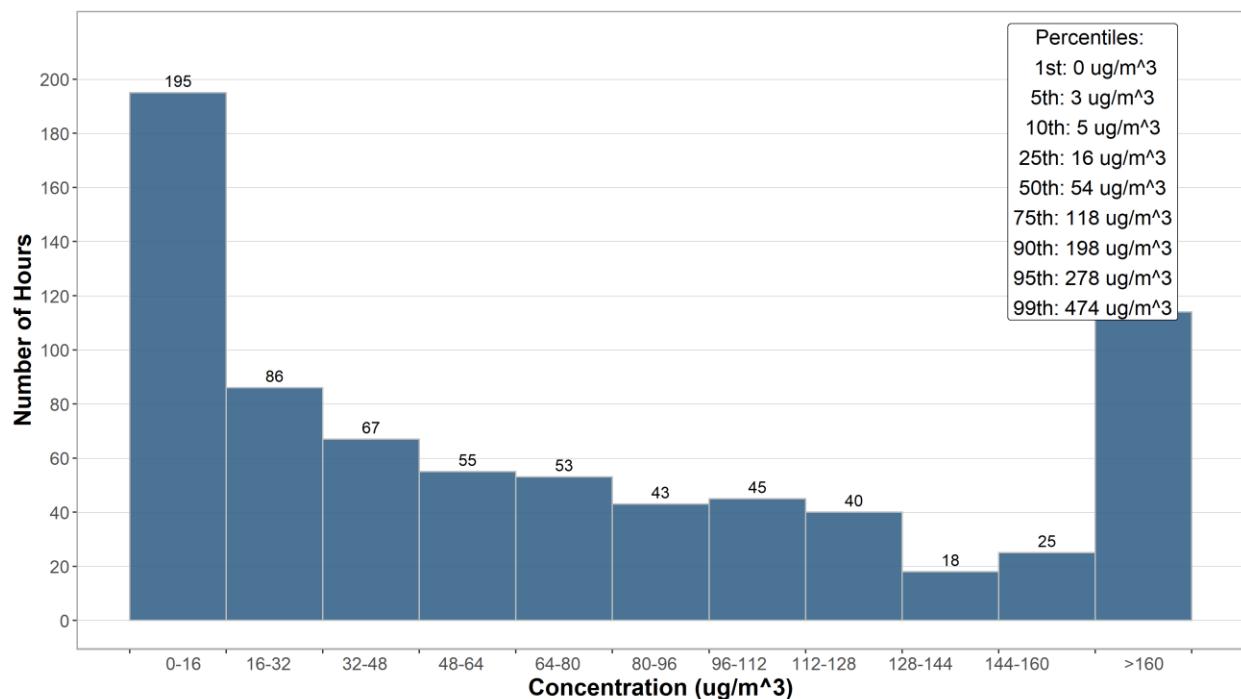


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

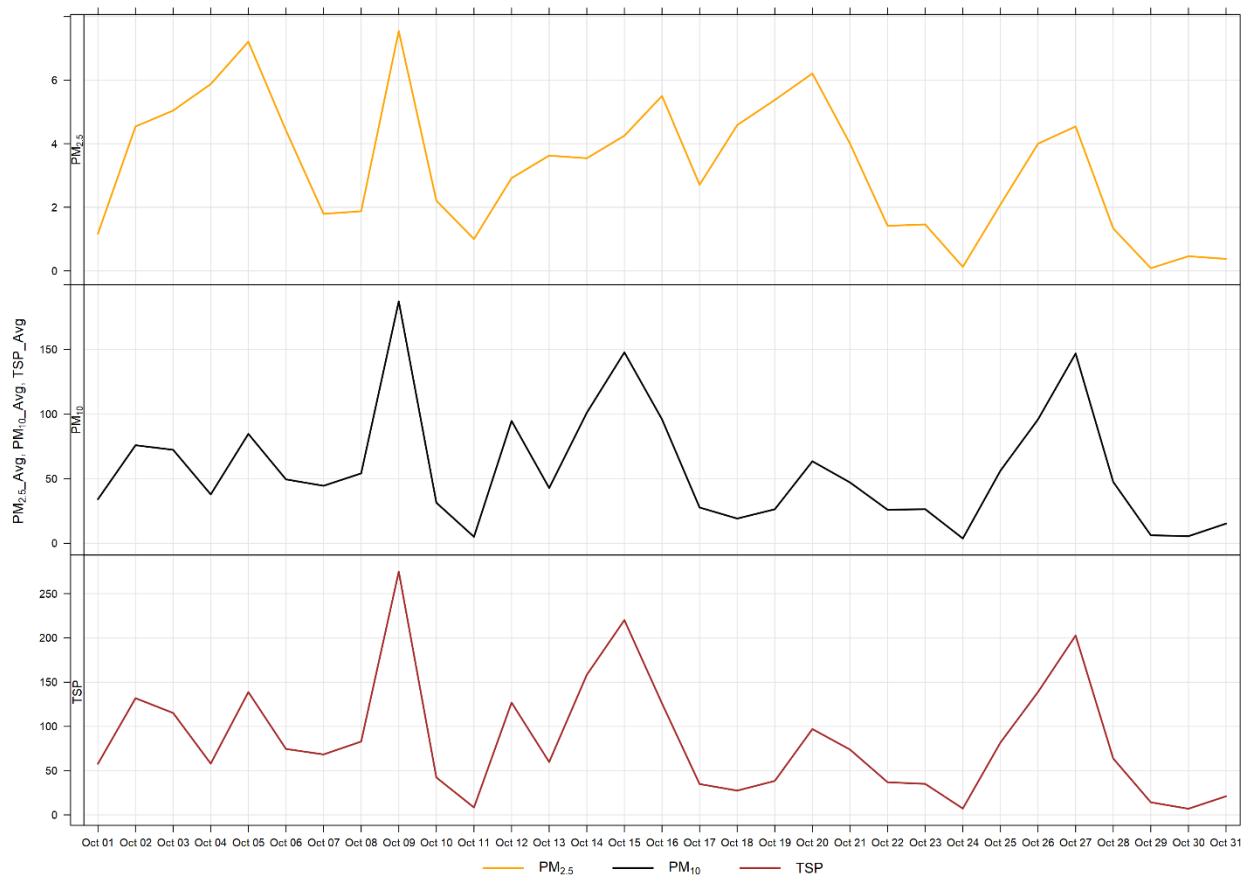


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 10 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west-southwest and west directions, and were predominately over 25 km/hr. This month the TSP exceedances were largely driven by windblown fugitive dust.

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 October 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.

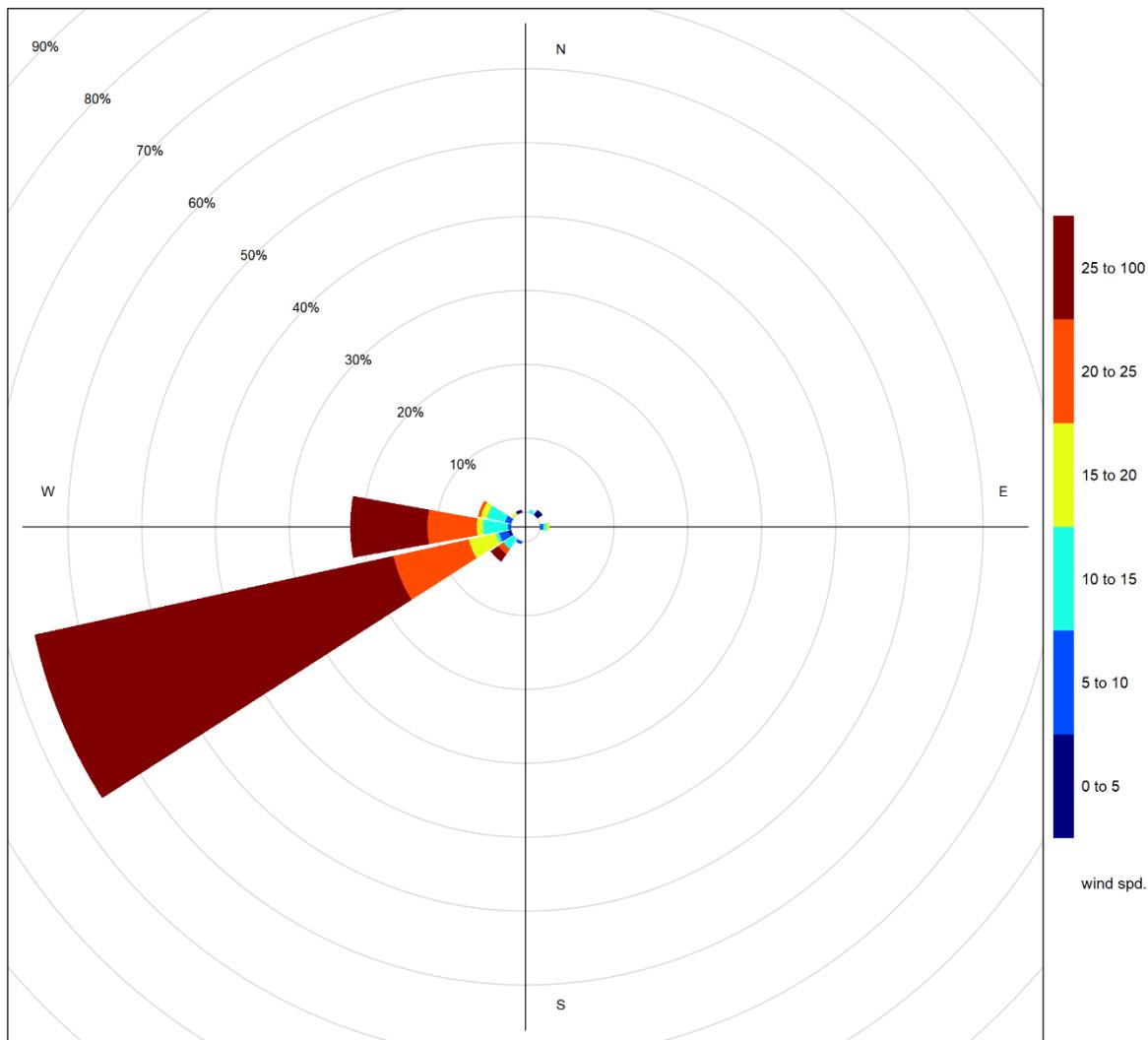


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

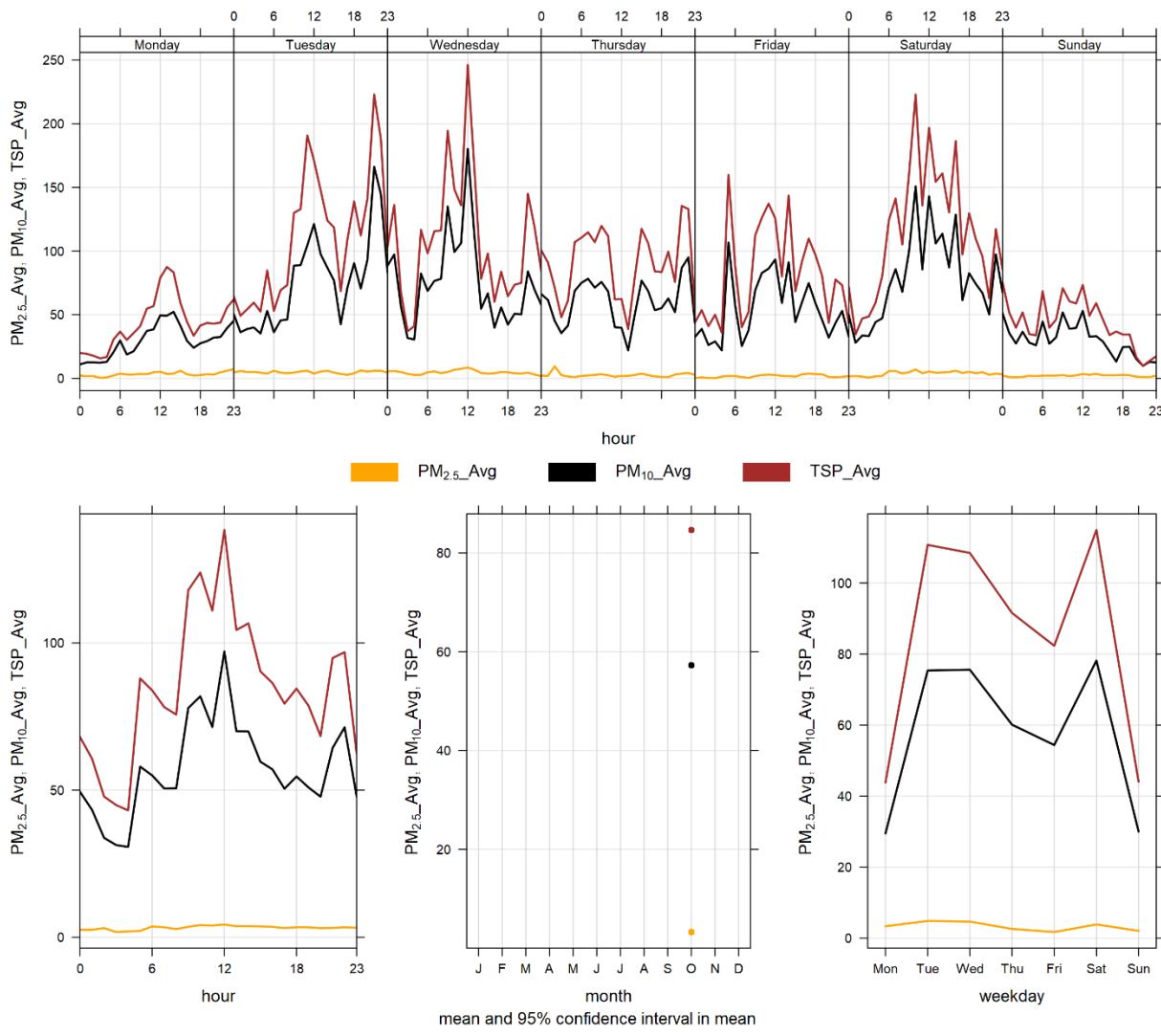


Figure 4-7 Windridge particulate matter time variation

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 99.9% uptime for the month of October due to one hour of power failure occurring on October 24 th at 22:00.

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 exceedance of the 24-hour TSP Guideline (100 µg/m³) and zero exceedances of the 24-hour PM_{2.5} (29 µg/m³) Guideline. Further, there were zero hours exceeding the 1-hour PM_{2.5} Guideline.

Historically in October there have been zero exceedances of the 24-hour TSP Guideline, and zero exceedances of the 24-hour PM_{2.5} Guideline.

Table 5-2 Summary of September 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	0.2	3.1	19.6	19	2	7.7	60.9	11.5	19	99.9
PM ₁₀ (µg/m ³)	-	-	West	-	-	0.2	4.2	28.6	19	2	7.7	60.9	15.4	19	99.9
TSP (µg/m ³)	-	100	West	-	0	0.1	3.7	22.5	19	2	7.7	60.9	13.0	19	99.9

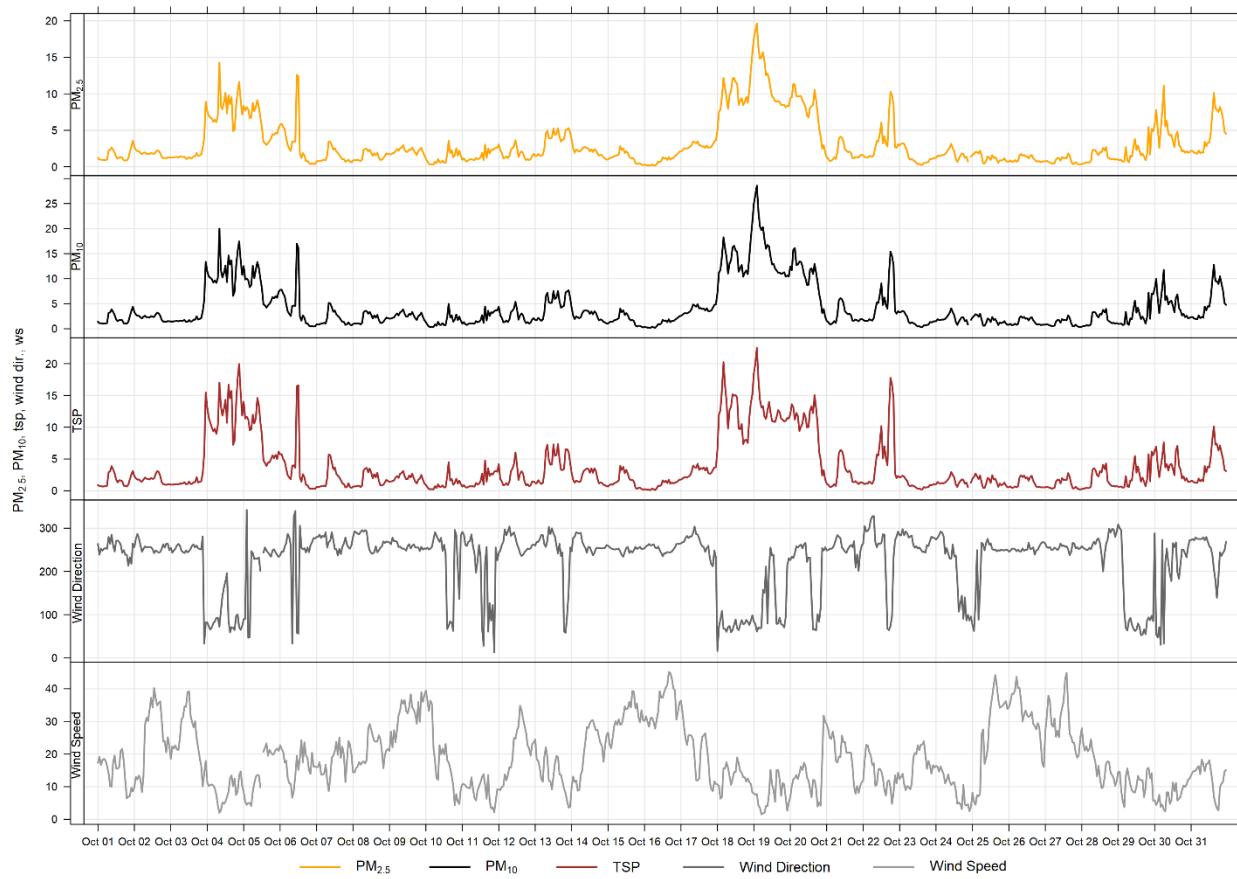


Figure 5-1 1-hour particulate matter concentrations at the West monitor

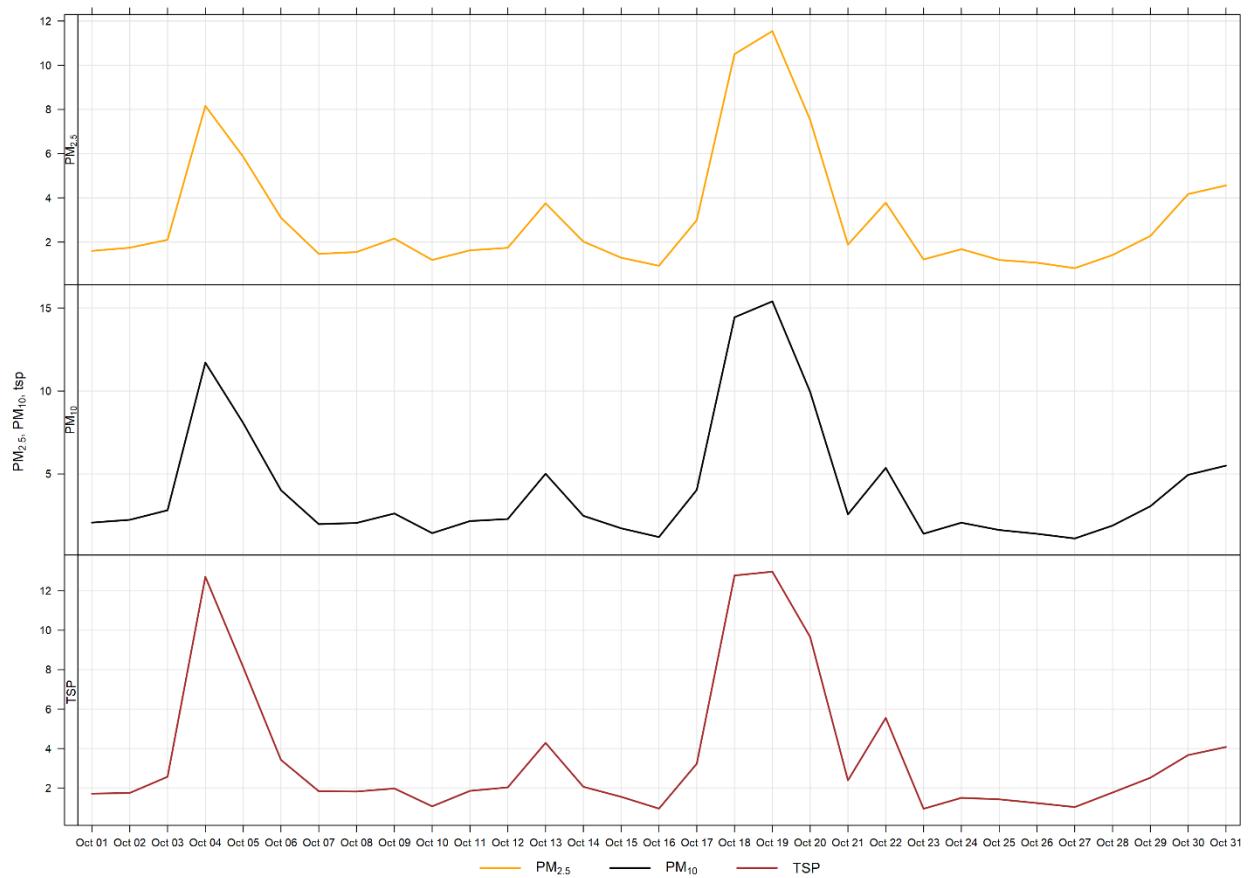


Figure 5-2 24-hour particulate matter concentrations at the West monitor

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 October 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.

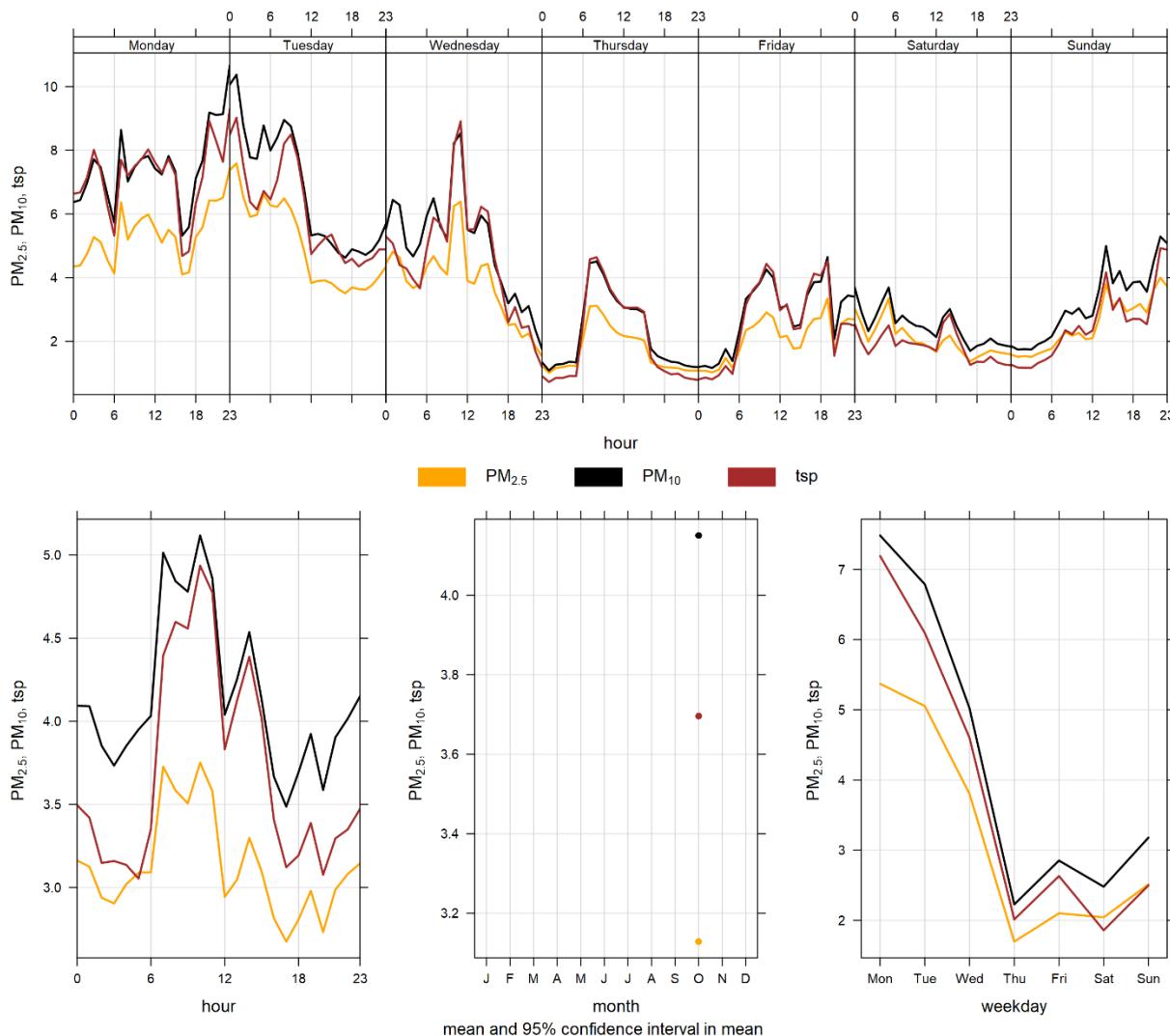


Figure 5-3 **West monitor particulate matter time variation**

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}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 12.5% uptime during the month of October due to the instrument being removed for annual calibration and maintenance.

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.

The Berm monitor was only operational for XX days in October 2021 due to annual calibration and maintenance on the monitor. Therefore, the analysis presented here is for only a small portion at the beginning of the month. There were 3 and zero exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were zero hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of October, the Berm monitor records an average of 15 and zero exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during October occurred in 2014 where there were 21 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in October 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 strong wind gusting that occurred in October would have also contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

Table 6-2 Summary of October 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/m ³)	80	29	Berm	0	0	0.8	9.3	46.3	3	12	39.2	246.8	12.1	2	12.5
PM ₁₀ (µg/m ³)	-	-	Berm	-	-	1.6	57.8	260.9	2	12	34.3	251.5	84.0	2	12.5
TSP (µg/m ³)	-	100	Berm	-	3	1.3	144.8	761.4	2	11	37.2	255.9	245.7	2	12.5

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						
2021-10-01	130.9	-	253.7	14.4	37.9	Wind predominately from the west
2021-10-02	245.7	-	254.2	25.7	36.7	High Wind Event
2021-10-03	150.9	-	252.6	24.9	33.2	High Wind Event
Total # of Exceedances	3	0				
Maximum # of Exceedances (October)	21 (2014)	1 (2012)				
Average # of Exceedances (October)	15	0				
Minimum # of Exceedances (October)	9 (2016)	0 (2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020)				

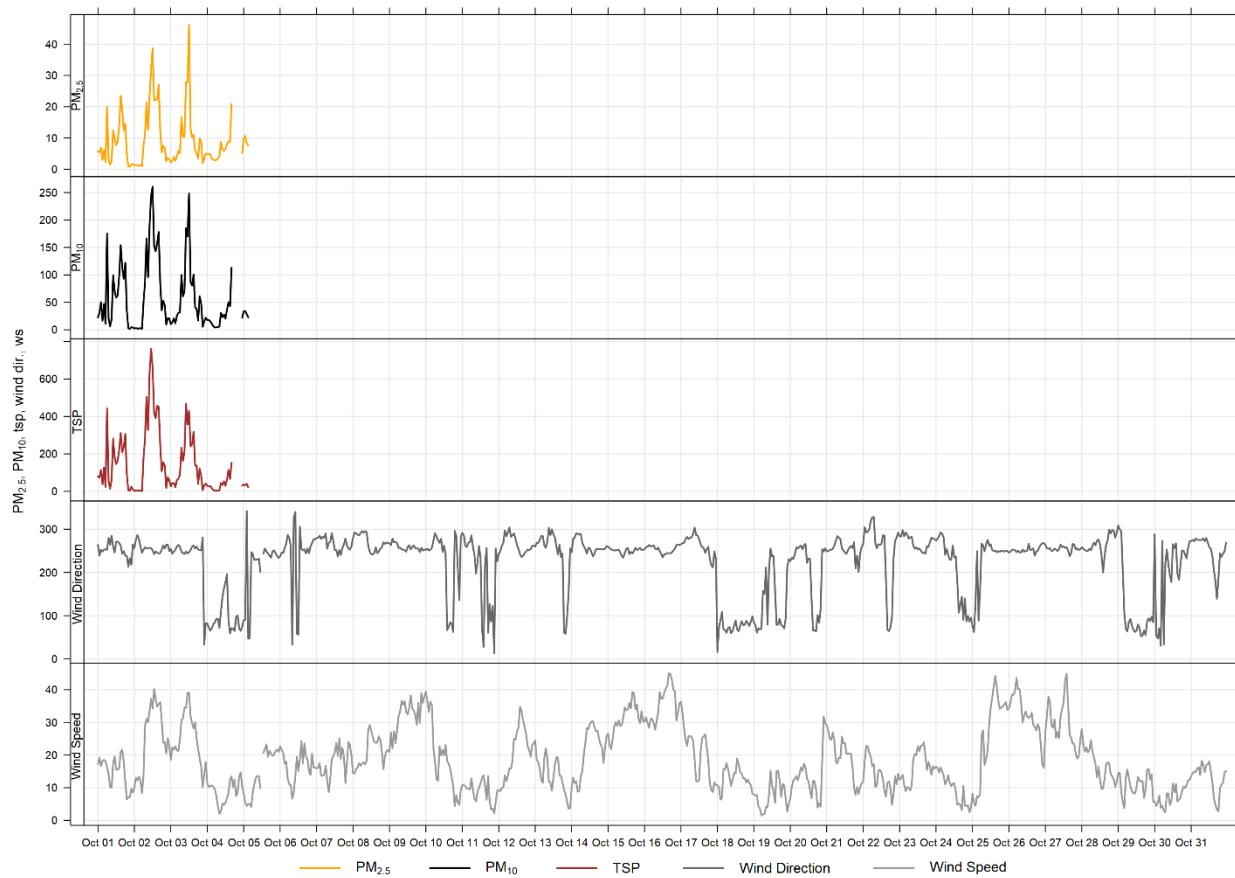


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

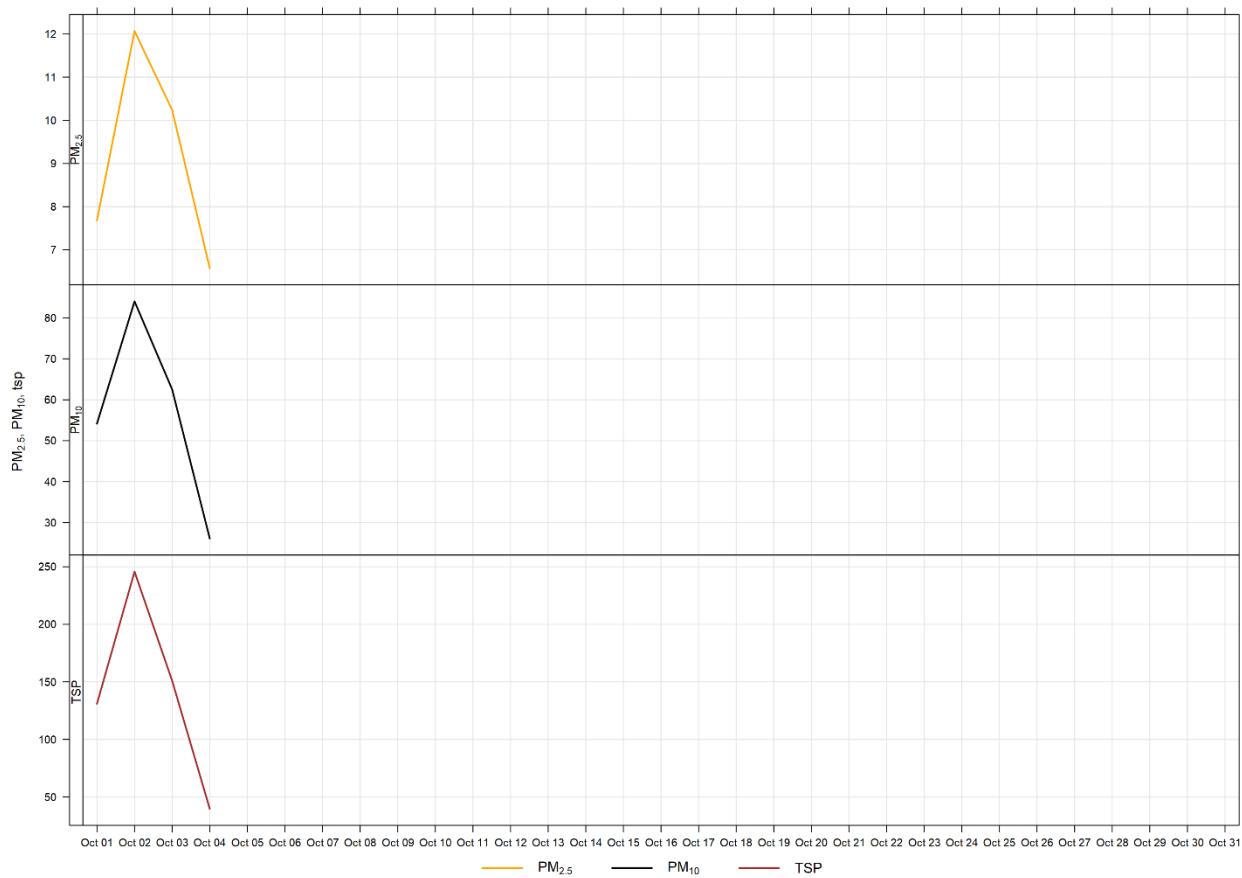


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 3 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. This month the TSP exceedances were largely driven by windblown fugitive dust.

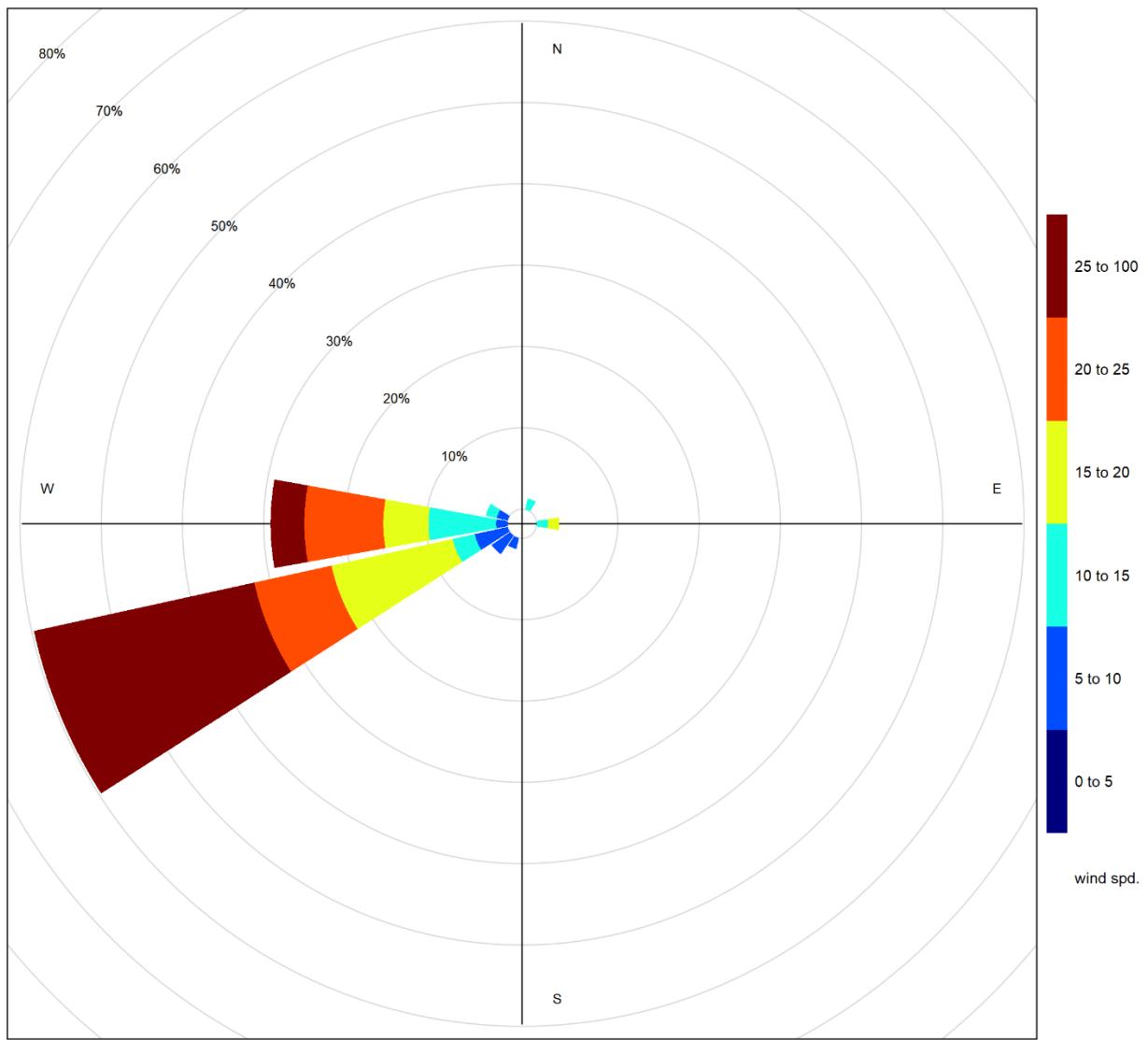


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

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}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 0% uptime for the month of October due to equipment being removed for annual calibration and maintenance.

7.2 MONITORING RESULTS AND TRENDS

The Entrance monitoring station was not operational during the month of October due to the monitoring equipment being removed for annual calibration and maintenance from October 1st at 1:00 to October 31st at 24:00.

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APPENDIX

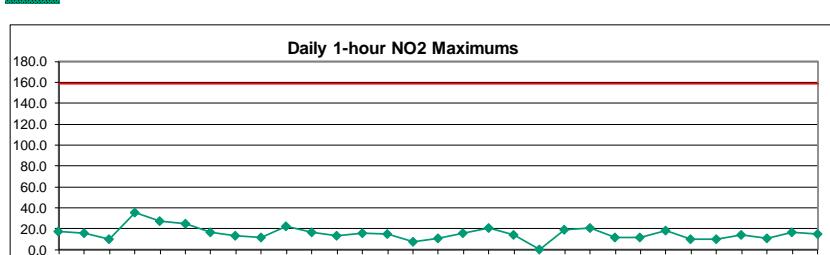
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – October 2021

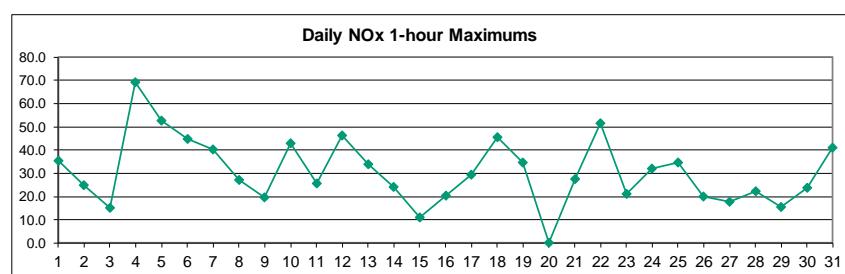
Day	HOUR																									MEAN	MAX
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		1.7	S	4.3	3.5	6.2	8.5	12.9	17.3	14.5	7.0	3.2	15.8	15.4	14.9	4.9	1.3	3.7	4.7	6.1	3.8	7.4	10.0	15.6	11.9	8.5	17.3
2		12.0	S	14.4	16.1	13.3	11.3	3.9	7.8	6.5	6.1	7.0	2.8	1.2	1.0	0.7	0.7	0.7	3.2	12.4	10.6	14.4	14.4	7.6	11.9	7.8	16.1
3		1.8	S	4.9	6.9	8.7	5.3	1.7	1.1	1.2	2.7	1.0	0.8	2.7	6.7	9.4	3.5	10.1	3.6	4.1	3.6	10.3	6.7	5.3	8.1	4.8	10.3
4		16.2	S	23.1	23.1	23.3	19.4	17.5	15.0	13.6	12.9	9.2	17.9	20.3	15.2	14.7	11.5	25.1	19.2	14.5	13.5	35.3	25.6	21.1	22.1	18.7	35.3
5		27.5	S	21.2	19.2	17.6	21.9	23.7	20.8	16.6	12.3	11.7	P	P	6.9	4.4	2.7	1.7	2.4	6.9	5.2	2.2	3.2	1.9	1.6	11.0	27.5
6		3.2	S	4.3	7.2	13.9	20.4	21.6	25.1	24.0	18.8	22.9	22.9	14.5	6.0	4.2	5.2	1.9	8.4	2.2	10.0	9.0	13.9	13.3	12.2	12.4	25.1
7		14.3	S	10.0	9.5	9.0	7.5	16.9	16.0	16.7	14.3	8.7	3.2	2.0	1.1	2.6	1.3	2.6	6.7	11.3	4.4	2.8	5.1	5.3	4.7	7.7	16.9
8		10.1	S	13.2	8.5	9.9	10.6	12.8	11.5	12.5	8.4	1.9	1.5	1.4	1.7	3.9	1.9	1.2	2.9	4.2	8.9	4.5	5.6	3.4	5.8	6.4	13.2
9		2.2	S	6.5	7.1	4.5	1.9	5.4	2.1	2.9	2.5	2.4	8.0	8.6	3.9	7.0	11.5	6.2	3.5	1.7	1.2	1.8	3.5	3.3	1.6	4.3	11.5
10		4.6	S	2.1	4.7	8.6	22.3	8.9	8.8	4.3	6.4	1.8	5.4	1.4	1.5	2.8	1.9	2.0	5.3	9.6	12.1	7.7	9.7	8.3	6.8	6.4	22.3
11		7.5	S	3.6	4.6	6.2	5.9	5.0	10.2	7.2	7.1	9.6	4.1	13.4	8.9	6.3	9.3	12.7	7.8	8.4	12.0	17.1	14.9	10.0	14.0	8.9	17.1
12		13.3	S	12.8	7.5	9.1	11.2	8.6	12.2	11.7	13.4	7.7	4.4	2.8	0.8	0.7	0.9	1.2	1.4	3.9	1.9	2.8	7.4	7.1	3.0	6.3	13.4
13		4.4	S	5.0	5.3	7.1	6.9	5.1	9.2	9.8	16.0	13.2	12.2	8.9	4.5	2.3	6.2	2.2	3.7	10.1	7.4	8.4	12.6	13.3	12.8	8.1	16.0
14		8.0	S	8.2	7.8	7.2	10.6	11.6	15.3	8.5	2.0	4.9	3.0	1.5	0.8	1.0	4.3	2.6	2.6	4.3	8.9	6.1	4.9	7.8	5.4	6.0	15.3
15		4.2	S	3.0	2.1	1.8	7.3	5.1	2.3	2.0	0.8	1.5	2.7	4.4	1.1	1.4	0.9	0.7	1.7	1.3	1.5	0.8	2.3	0.9	0.9	2.2	7.3
16		4.6	S	4.2	3.3	5.6	2.3	3.0	2.6	10.8	2.0	0.8	0.7	0.8	0.9	0.9	1.0	0.8	0.9	1.0	3.9	9.7	3.2	1.6	2.0	2.9	10.8
17		1.9	S	6.6	7.5	4.8	7.5	6.2	12.5	13.7	11.4	16.1	14.1	4.3	3.9	2.5	1.7	2.4	3.9	4.1	7.1	4.8	8.0	8.8	15.0	7.3	16.1
18		16.5	S	12.2	21.0	18.5	13.8	12.6	7.2	12.3	11.4	5.9	4.2	6.5	11.8	6.6	4.9	8.0	6.4	6.3	5.4	8.2	7.9	7.7	8.9	9.7	21.0
19		7.3	S	11.7	10.3	6.9	6.8	9.3	12.1	13.4	9.5	5.9	4.1	3.8	13.1	10.1	7.1	5.2	5.2	7.0	8.2	8.9	8.3	11.6	14.0	8.7	14.0
20		13.4	S	9.5	12.3	9.9	10.8	15.8	17.4	14.4	13.1	C	C	C	C	C	C	C	C	17.4	9.5	2.2	6.2	1.6	-	-	
21		1.7	S	2.7	1.9	3.1	6.9	11.6	10.6	11.5	3.8	2.3	1.2	1.2	2.3	5.3	8.1	5.5	12.9	6.7	10.1	11.9	19.2	17.2	11.5	7.4	19.2
22		7.0	S	8.9	13.5	5.5	5.9	6.7	14.1	18.6	20.6	20.6	11.4	14.5	18.1	15.2	19.0	17.8	16.1	16.9	20.1	16.8	13.4	10.0	9.9	13.9	20.6
23		11.6	S	10.5	8.7	7.7	8.3	7.2	10.5	7.0	3.4	3.2	4.8	7.4	2.1	2.1	1.6	1.1	8.9	3.1	6.7	4.6	4.3	4.3	3.4	5.8	11.6
24		3.6	S	8.3	9.1	6.2	7.5	8.2	8.9	9.3	7.8	11.6	3.1	3.4	2.8	4.2	2.3	3.9	5.4	7.4	6.8	5.2	6.0	9.4	7.1	6.4	11.6
25		8.0	S	13.4	15.4	11.4	10.2	9.8	16.7	12.8	18.2	12.8	7.2	2.3	1.4	2.6	1.1	0.8	0.7	1.2	0.7	0.7	1.8	1.9	6.6	18.2	
26		0.9	S	1.4	1.4	0.8	2.3	1.3	1.9	5.6	2.6	2.2	2.2	10.0	6.0	3.5	7.5	1.7	1.7	2.3	1.2	2.5	5.6	6.9	4.4	3.3	10.0
27		8.4	S	6.6	1.8	2.3	5.4	4.3	6.1	7.9	10.3	6.6	5.3	3.6	4.3	3.7	0.9	1.0	4.4	8.2	8.0	5.2	4.4	2.5	5.8	5.1	10.3
28		4.8	S	3.8	7.6	7.1	3.0	13.9	11.5	11.5	12.3	7.5	12.0	4.9	1.9	3.3	8.0	8.1	10.7	10.0	6.3	5.6	6.2	8.1	5.3	7.5	13.9
29		6.8	S	7.7	4.8	5.3	6.7	3.7	1.8	5.4	7.3	10.2	11.1	4.1	4.6	6.5	9.0	10.0	9.4	4.2	2.5	1.7	1.4	2.0	4.5	5.7	11.1
30		4.8	S	7.6	2.1	3.3	6.3	16.8	9.5	14.6	6.8	8.1	7.6	3.9	6.7	2.6	2.8	4.9	3.7	7.9	7.5	8.0	8.5	10.2	6.8	16.8	
31		8.9	S	10.9	11.5	11.7	11.4	14.2	11.6	12.1	10.9	10.3	4.8	4.9	2.5	2.0	2.3	3.4	9.3	10.4	12.0	15.0	12.0	9.8	9.3	15.0	
NO.		31	-	31	31	31	31	31	31	31	30	29	29	30	30	30	30	30	31	31	31	31	31	702	99.7%		
MEAN		7.8	-	8.5	8.6	8.3	9.2	9.8	10.6	10.7	9.1	7.7	6.9	6.0	5.2	4.6	4.7	4.9	5.9	6.4	7.4	7.9	8.2	7.8	7.7		
MAX		27.5	-	23.1	23.1	23.3	22.3	23.7	25.1	24.0	20.6	22.9	22.9	20.3	18.1	15.2	19.0	25.1	19.2	16.9	20.1	35.3	25.6	21.1	22.1		



Number of 1HR Exceedances	0
Number of Non-Zero Readings	702
Maximum 1-HR Average	35.3 PPB
Maximum 24-HR Average	18.7 PPB
Monthly Calibration Standard Deviation	5.4
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	7.6 PPB

Lagoon NOx (ppb) – October 2021

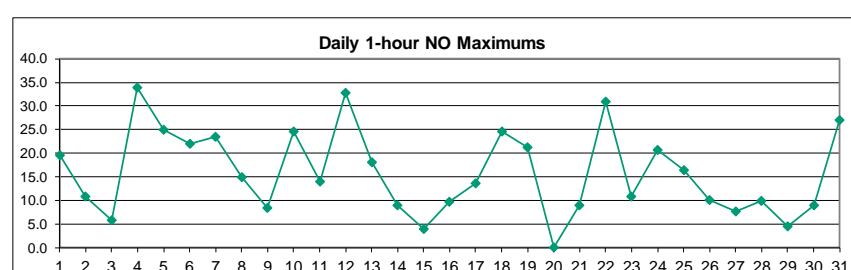
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	1.6	S	4.5	3.6	6.4	12.1	15.0	24.5	23.6	9.7	4.3	35.2	31.2	30.7	6.7	1.3	4.5	5.3	5.9	3.8	7.7	9.9	22.4	14.0	12.3	35.2	
2	17.4	S	24.9	24.2	17.3	13.9	4.1	10.1	8.2	8.0	10.3	3.5	1.3	1.0	0.5	0.6	0.6	3.9	19.9	18.5	22.2	21.1	10.9	14.9	11.2	24.9	
3	1.8	S	5.4	8.5	12.4	5.9	1.6	1.0	1.2	3.7	1.0	0.7	4.1	11.3	15.2	4.5	14.4	3.9	4.6	3.5	15.3	7.3	5.4	8.5	6.1	15.3	
4	21.0	S	31.7	33.7	34.3	29.4	25.9	33.0	31.9	23.1	13.9	33.8	39.8	23.9	22.3	15.2	36.6	24.7	15.4	14.0	69.2	34.5	24.9	26.6	28.6	69.2	
5	52.5	S	30.8	36.0	31.0	35.9	42.0	35.5	32.9	25.7	22.0	P	P	11.1	5.4	3.1	1.7	3.1	8.7	6.5	2.1	3.7	1.8	1.4	18.7	52.5	
6	3.3	S	4.4	8.2	21.3	25.4	29.6	28.8	30.0	27.7	40.2	44.8	22.1	8.9	7.0	7.2	2.1	11.4	2.0	12.1	12.5	17.6	18.5	17.8	17.5	44.8	
7	21.5	S	15.6	16.3	13.6	14.7	30.8	28.0	40.1	29.4	13.8	4.3	2.4	1.3	3.4	1.5	3.1	10.9	16.5	4.5	2.8	5.9	7.8	4.8	12.7	40.1	
8	15.3	S	22.6	14.1	16.3	17.2	23.8	21.7	27.2	18.3	2.7	2.0	1.9	2.2	5.7	2.2	1.3	3.0	5.6	12.4	5.1	7.2	3.7	7.9	10.4	27.2	
9	2.5	S	9.9	9.9	5.8	2.0	8.1	2.4	3.6	2.9	3.2	14.3	15.8	5.9	14.2	19.7	8.1	4.0	1.8	1.3	2.0	4.6	4.2	1.9	6.4	19.7	
10	6.7	S	2.2	10.0	15.9	42.8	11.7	12.5	5.1	10.4	2.1	9.0	1.4	1.4	3.4	2.2	2.2	5.7	14.1	16.9	7.7	10.6	10.4	12.9	9.4	42.8	
11	11.3	S	4.5	5.7	8.9	8.3	6.7	14.8	10.1	15.0	23.6	6.2	25.3	13.1	9.7	14.3	19.0	8.3	8.6	17.0	25.8	21.9	10.3	15.5	13.2	25.8	
12	15.3	S	27.4	9.2	15.9	20.5	15.3	30.7	34.1	46.1	19.4	7.3	4.3	0.9	0.8	1.1	1.5	1.7	5.8	1.9	2.9	8.6	9.0	3.2	12.3	46.1	
13	4.9	S	5.9	6.6	11.3	9.6	7.1	16.3	16.4	34.0	30.0	25.0	18.1	6.4	3.0	9.1	2.4	4.3	15.0	8.1	8.6	13.4	14.9	16.0	12.5	34.0	
14	9.9	S	10.8	10.5	8.4	14.6	14.2	24.1	12.1	2.5	8.2	4.8	2.0	0.8	1.2	6.5	3.4	2.9	5.4	12.6	8.7	5.7	10.3	6.0	8.1	24.1	
15	4.5	S	3.2	2.5	1.8	11.0	6.1	3.0	2.5	0.7	1.8	3.7	6.8	1.3	1.8	0.9	0.7	1.8	1.6	1.6	0.8	3.8	0.8	0.8	2.8	11.0	
16	6.8	S	5.9	4.1	9.7	2.4	3.3	3.4	20.4	2.4	0.8	0.7	1.0	0.7	0.9	0.9	0.8	0.9	0.8	7.1	14.4	3.7	1.6	2.1	4.1	20.4	
17	1.8	S	9.1	10.1	6.2	10.5	9.0	20.6	22.7	18.5	29.5	25.3	5.1	5.1	2.7	1.6	2.4	3.9	4.0	6.9	4.7	8.0	8.7	20.3	10.3	29.5	
18	21.8	S	14.8	45.4	34.7	23.7	16.7	8.1	18.1	15.3	6.9	4.6	8.3	19.4	8.8	5.1	9.0	7.0	6.6	5.5	8.3	8.0	7.8	9.2	13.6	45.4	
19	7.7	S	14.2	11.8	7.5	10.8	21.7	25.3	34.7	18.0	9.1	6.1	5.4	33.2	15.8	9.4	5.8	5.4	7.1	8.5	9.1	8.6	15.6	16.6	13.4	34.7	
20	14.1	S	10.2	18.4	12.3	12.8	28.4	37.1	31.4	32.9	C	C	C	C	C	C	C	C	C	23.1	12.3	2.4	8.7	1.8	-	-	
21	1.9	S	3.1	2.2	3.5	9.4	16.4	14.9	19.0	5.2	3.3	1.7	1.6	3.3	8.0	13.2	6.2	21.6	6.8	12.0	12.8	27.4	25.4	15.1	10.2	27.4	
22	8.8	S	15.5	26.9	7.7	8.1	10.4	22.3	36.8	51.3	51.5	18.4	27.2	39.5	24.7	27.7	23.9	18.6	18.0	23.6	26.8	24.1	13.3	16.8	23.6	51.5	
23	20.4	S	16.8	13.2	13.6	12.4	10.1	21.1	12.7	4.6	4.0	7.0	15.2	2.4	2.6	2.1	1.3	12.9	3.3	11.3	5.3	5.9	5.0	4.0	9.0	21.1	
24	5.3	S	11.9	14.4	8.3	11.0	11.9	13.5	14.7	15.2	32.1	4.4	4.5	3.5	5.0	2.5	4.2	5.7	7.8	7.5	5.4	7.4	11.5	8.3	9.4	32.1	
25	9.3	S	20.7	21.8	13.0	18.2	19.6	29.7	19.3	34.6	19.2	12.0	3.2	1.9	3.8	1.3	1.0	0.8	1.5	0.8	0.7	3.0	2.9	10.4	34.6		
26	1.0	S	1.7	1.9	0.9	3.2	1.9	2.9	8.4	5.0	3.3	3.6	20.0	10.6	5.0	12.3	2.5	2.2	3.3	1.4	3.2	6.7	8.6	5.3	5.0	20.0	
27	13.4	S	9.2	2.1	2.8	7.0	5.3	9.4	11.0	17.9	10.5	8.7	5.4	6.3	5.7	1.3	1.2	6.0	14.7	12.4	5.9	5.3	2.9	7.8	7.5	17.9	
28	5.9	S	4.7	9.8	9.9	3.6	22.3	17.0	15.8	18.6	11.6	21.9	7.7	2.2	3.9	10.4	9.6	19.7	15.2	10.0	7.0	7.7	8.0	14.0	7.8	11.2	22.3
29	10.3	S	8.2	5.1	6.1	10.3	5.0	2.0	6.3	9.0	12.5	15.5	5.0	5.6	8.5	12.9	11.4	13.2	4.5	2.7	2.0	1.6	2.1	5.8	7.2	15.5	
30	4.9	S	8.8	2.2	3.6	13.0	23.9	14.0	23.4	10.5	15.0	16.0	6.8	11.8	3.5	3.1	3.4	8.2	4.6	9.1	8.3	10.0	16.5	17.4	10.3	23.9	
31	15.7	S	17.8	20.1	19.2	20.3	41.0	21.2	31.7	32.2	27.3	9.0	11.1	3.8	2.6	2.9	3.8	9.6	11.1	12.8	13.8	19.2	18.8	15.3	16.5	41.0	



Number of Non-Zero Readings	702
Maximum 1-HR Average	69.2 PPB
Maximum 24-HR Average	28.6 PPB
Monthly Calibration Standard Deviation	10.03
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	11.6 PPB

Lagoon NO (ppb) – October 2021

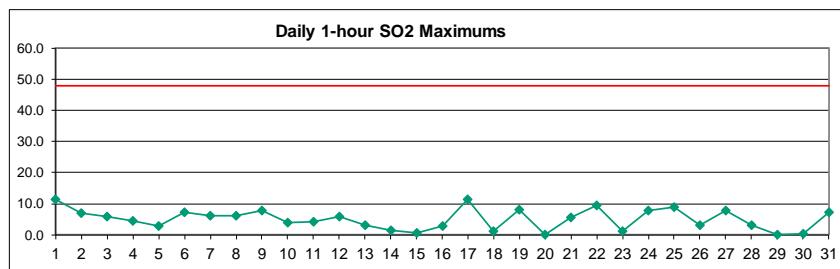
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	S	0.4	0.3	0.5	3.8	2.3	7.3	9.2	2.8	1.2	19.5	15.8	15.8	1.8	0.1	0.9	0.9	0.1	0.2	0.5	0.2	7.0	2.3	4.0	19.5
2	5.6	S	10.8	8.4	4.3	2.9	0.4	2.5	1.9	2.1	3.5	1.0	0.3	0.1	0.0	0.0	0.1	0.8	7.7	8.0	7.9	6.9	3.5	3.2	3.6	10.8
3	0.2	S	0.7	1.8	3.9	0.8	0.2	0.2	0.2	1.2	0.2	0.1	1.6	4.8	5.8	1.2	4.5	0.5	0.7	0.1	5.3	0.9	0.4	0.7	1.6	5.8
4	5.1	S	8.9	10.8	11.1	10.1	8.6	18.1	18.4	10.5	4.9	16.0	19.6	9.0	7.8	3.9	11.7	5.7	1.3	0.7	33.9	9.0	4.0	4.6	10.2	33.9
5	25.0	S	9.8	16.9	13.4	14.1	18.4	14.9	16.4	13.5	10.5	P	P	4.5	1.3	0.7	0.3	0.9	2.0	1.7	0.2	0.7	0.2	0.1	7.9	25.0
6	0.4	S	0.4	1.3	7.7	5.2	8.1	3.9	6.1	9.1	17.3	21.9	7.7	3.1	3.0	2.2	0.4	3.2	0.1	2.4	3.7	3.8	5.4	5.7	5.3	21.9
7	7.4	S	5.9	7.1	4.9	7.4	14.0	12.1	23.5	15.3	5.4	1.3	0.6	0.3	0.8	0.3	0.6	4.3	5.4	0.2	0.1	0.9	2.7	0.4	5.3	23.5
8	5.4	S	9.7	5.8	6.6	6.9	11.3	10.4	15.0	10.2	1.0	0.7	0.7	0.7	1.9	0.5	0.3	0.3	1.6	3.7	0.8	1.7	0.3	2.2	4.2	15.0
9	0.4	S	3.4	2.9	1.4	0.2	2.8	0.3	0.8	0.5	0.9	6.3	7.4	2.2	7.4	8.4	2.1	0.7	0.3	0.2	0.4	1.3	1.0	0.5	2.2	8.4
10	2.3	S	0.3	5.4	7.4	24.6	2.8	3.8	0.9	4.0	0.4	3.7	0.0	0.1	0.7	0.4	0.3	0.5	4.5	4.8	0.2	1.1	2.2	6.2	3.3	24.6
11	3.9	S	0.9	1.2	2.8	2.5	1.8	4.7	3.0	8.0	14.1	2.2	12.0	4.3	3.5	5.1	6.6	0.7	0.4	5.1	8.8	7.0	0.6	1.6	4.4	14.1
12	2.1	S	14.7	1.9	6.9	9.5	7.0	18.6	22.5	32.8	11.9	3.1	1.7	0.3	0.3	0.4	0.5	0.5	2.2	0.2	0.4	1.5	2.2	0.4	6.2	32.8
13	0.7	S	1.2	1.5	4.4	2.9	2.2	7.3	6.9	18.1	16.9	13.1	9.5	2.1	0.8	3.2	0.5	0.8	5.1	1.0	0.5	1.0	1.8	3.4	4.6	18.1
14	2.1	S	2.9	2.9	1.4	4.2	2.8	8.9	3.8	0.6	3.5	1.8	0.7	0.2	0.5	2.4	1.0	0.4	1.3	3.9	2.7	1.0	2.6	0.8	2.3	8.9
15	0.5	S	0.4	0.6	0.2	3.9	1.2	0.8	0.7	0.2	0.5	1.1	2.6	0.4	0.5	0.2	0.1	0.3	0.4	0.2	0.1	1.6	0.0	0.0	0.7	3.9
16	2.3	S	1.7	0.8	4.1	0.2	0.5	0.9	9.7	0.5	0.3	0.2	0.4	0.2	0.4	0.3	0.2	0.2	0.1	3.4	5.0	0.8	0.3	0.4	1.4	9.7
17	0.2	S	2.8	2.8	1.6	3.3	3.0	8.3	9.2	7.4	13.6	11.3	0.9	1.4	0.6	0.3	0.3	0.2	0.3	0.1	0.1	0.2	0.1	5.5	3.2	13.6
18	5.4	S	2.9	24.5	16.2	10.0	4.2	1.0	5.9	4.1	1.1	0.6	2.0	7.7	2.4	0.5	1.3	0.8	0.6	0.4	0.4	0.4	0.5	0.6	4.1	24.5
19	0.7	S	2.7	1.6	0.8	4.2	12.6	13.2	21.3	8.7	3.5	2.2	1.8	20.4	6.1	2.6	0.8	0.5	0.4	0.6	0.6	0.7	4.2	2.8	4.9	21.3
20	0.8	S	0.9	6.3	2.6	2.1	12.6	19.6	17.0	20.0	C	C	C	C	C	C	C	C	C	5.9	2.9	0.4	2.7	0.4	-	-
21	0.3	S	0.5	0.3	0.5	2.5	4.8	4.4	7.6	1.4	1.0	0.5	0.5	1.1	2.9	5.3	0.9	9.0	0.5	2.2	1.2	8.3	8.3	3.8	2.9	9.0
22	2.0	S	6.8	13.4	2.4	2.3	3.8	8.3	18.2	30.6	30.8	7.1	12.8	21.4	9.7	8.9	6.2	2.7	1.2	3.6	10.2	10.9	3.5	7.2	9.7	30.8
23	9.1	S	6.6	4.8	6.2	4.3	3.2	10.8	5.9	1.3	1.0	2.3	7.9	0.4	0.6	0.5	0.3	4.1	0.3	4.7	0.8	1.7	0.8	0.7	3.4	10.8
24	1.7	S	3.7	5.4	2.2	3.7	3.8	4.7	5.6	7.6	20.7	1.3	1.2	0.9	0.9	0.4	0.5	0.5	0.6	0.9	0.5	1.7	2.3	1.4	3.1	20.7
25	1.6	S	7.4	6.5	1.9	8.1	9.9	13.1	6.6	16.3	6.6	4.9	1.1	0.6	1.3	0.3	0.2	0.4	0.2	0.3	0.3	1.3	1.1	3.9	16.3	
26	0.2	S	0.4	0.5	0.3	0.9	0.7	1.1	2.8	2.3	1.1	1.4	10.1	4.7	1.6	4.9	0.8	0.6	1.0	0.3	0.7	1.2	1.8	1.0	1.8	10.1
27	5.1	S	2.7	0.4	0.6	1.7	1.1	3.3	3.2	7.7	4.0	3.6	1.9	2.1	2.1	0.5	0.3	1.8	6.6	4.4	0.9	1.0	0.6	2.1	2.5	7.7
28	1.2	S	1.0	2.2	2.8	0.7	8.5	5.6	4.4	6.3	4.2	10.0	3.1	0.5	0.9	2.7	1.8	9.1	5.4	3.8	2.2	2.0	6.1	2.6	3.8	10.0
29	3.7	S	0.7	0.5	1.0	3.7	1.5	0.4	1.1	1.8	2.5	4.6	0.9	1.2	2.1	4.0	1.5	4.0	0.5	0.4	0.5	0.4	0.3	1.4	1.7	4.6
30	0.3	S	1.5	0.3	0.5	6.9	7.2	4.6	8.9	3.9	7.1	8.6	3.1	5.3	1.0	0.6	0.6	3.4	1.0	1.3	1.1	2.2	8.3	7.4	3.7	8.9
31	7.0	S	7.1	8.7	7.7	9.1	27.0	9.9	19.7	21.4	17.1	4.4	6.4	1.4	0.8	0.7	0.5	0.5	0.9	0.9	1.9	4.2	6.8	5.6	7.4	27.0
NO.	31	-	31	31	31	31	31	31	31	30	29	29	30	30	30	30	30	30	31	31	31	31	31	702	99.7%	
MEAN	3.3	-	3.9	4.8	4.1	5.2	6.1	7.2	8.9	8.7	6.9	5.3	4.6	3.9	2.3	2.0	1.5	1.9	1.8	2.1	3.1	2.4	2.6	2.5		
MAX	25.0	-	14.7	24.5	16.2	24.6	27.0	19.6	23.5	32.8	30.8	21.9	19.6	21.4	9.7	8.9	11.7	9.1	7.7	8.0	33.9	10.9	8.3	7.4		



Number of Non-Zero Readings	701
Maximum 1-HR Average	33.9 PPB
Maximum 24-HR Average	10.2 PPB
Monthly Calibration Standard Deviation	5.291
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	4.1 PPB

Lagoon SO₂ (ppb) – October 2021

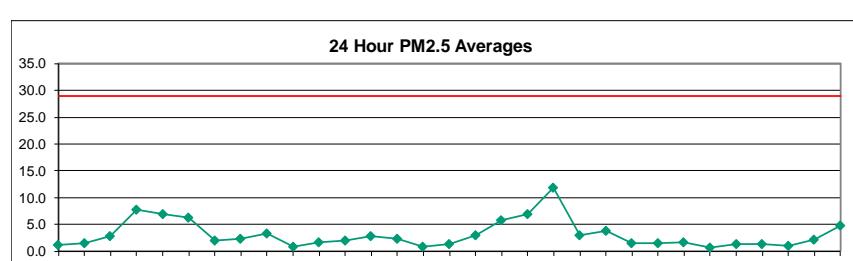
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.5	S	0.3	0.6	0.0	0.0	0.5	2.1	2.5	0.9	1.0	11.5	9.8	9.5	1.4	0.2	0.4	0.3	0.2	0.0	0.0	0.2	3.1	1.2	2.0	11.5
2	2.4	S	5.0	4.2	3.7	2.9	0.2	0.4	0.6	0.0	0.1	0.9	0.1	0.0	0.2	0.0	0.7	1.3	5.5	4.6	6.1	7.0	2.7	3.3	2.3	7.0
3	0.4	S	0.6	2.9	1.6	0.6	0.0	0.0	0.5	1.7	0.8	0.5	1.4	3.9	6.0	0.7	2.9	0.7	1.1	0.0	0.1	0.9	2.2	2.1	1.4	6.0
4	2.5	S	1.2	0.9	0.7	0.0	0.5	0.8	0.5	0.4	0.8	3.1	4.4	0.6	1.6	1.5	1.9	0.4	0.3	0.7	1.3	0.6	1.7	0.4	1.2	4.4
5	0.6	S	0.8	1.5	0.7	0.8	0.9	0.7	0.8	0.4	2.0	P	P	2.8	2.0	0.2	0.9	0.7	2.4	2.7	0.5	0.4	0.8	0.2	1.1	2.8
6	0.3	S	0.7	0.3	2.6	5.3	5.6	5.4	5.1	7.2	3.8	3.0	2.1	2.0	1.5	1.7	0.6	1.4	0.4	0.5	0.2	0.7	0.3	2.6	2.3	7.2
7	4.0	S	2.0	1.7	1.9	1.4	3.4	1.0	5.7	6.3	0.3	0.7	0.0	0.6	0.7	0.1	0.0	2.6	2.3	0.9	0.2	0.2	0.3	0.0	1.6	6.3
8	1.2	S	2.4	1.7	1.9	2.4	4.2	1.2	6.2	3.3	0.0	0.3	0.0	0.2	1.1	0.0	0.0	0.0	0.1	0.8	0.5	0.5	0.5	0.7	1.3	6.2
9	0.4	S	0.3	0.7	0.7	0.0	0.3	0.5	0.5	0.0	0.4	2.8	7.9	1.8	4.5	5.7	0.9	1.0	0.6	0.0	0.7	0.2	0.9	0.3	1.3	7.9
10	0.5	S	0.3	0.5	3.2	4.1	2.8	2.1	1.3	2.6	0.2	0.6	0.5	0.6	0.0	0.0	0.6	0.5	0.2	0.5	0.2	0.2	0.9	1.2	1.0	4.1
11	0.5	S	0.2	0.0	0.2	0.5	0.2	1.3	0.1	1.5	4.2	0.2	0.5	0.1	1.3	2.1	0.1	0.3	0.1	0.3	0.3	0.0	0.3	0.0	0.6	4.2
12	0.4	S	2.4	0.2	0.3	0.7	1.0	1.7	2.6	6.0	2.3	0.1	0.8	0.4	0.0	0.0	0.4	0.3	0.4	0.2	0.4	0.3	0.6	0.2	1.0	6.0
13	0.2	S	0.6	1.3	1.1	0.7	0.2	0.6	0.6	2.3	1.2	3.0	1.9	0.1	0.4	1.7	0.1	0.6	0.4	0.2	0.1	0.0	0.5	0.6	0.8	3.0
14	1.1	S	1.3	1.0	1.4	1.6	0.6	0.7	0.3	0.3	0.4	0.1	0.2	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.3	0.6	0.3	0.5	1.6	
15	0.5	S	0.2	0.0	0.1	0.4	0.3	0.5	0.5	0.1	0.5	0.2	0.7	0.5	0.6	0.1	0.3	0.0	0.2	0.0	0.0	0.1	0.3	0.3	0.7	
16	0.0	S	0.3	0.2	0.5	0.7	0.3	0.3	0.7	0.2	0.6	0.4	0.2	0.2	0.5	0.7	0.4	0.1	0.7	0.5	2.8	1.2	0.3	0.3	0.5	2.8
17	0.5	S	1.8	2.7	1.6	2.3	2.3	6.9	7.6	5.1	11.4	8.9	1.3	0.9	0.6	0.3	1.2	0.8	0.8	0.6	0.7	1.0	0.5	0.9	2.6	11.4
18	0.9	S	0.9	0.9	0.5	0.7	0.3	0.4	1.2	0.7	0.3	0.4	0.7	0.5	1.0	0.5	0.5	0.1	0.2	0.0	0.4	0.0	0.1	0.8	0.5	1.2
19	0.3	S	0.4	0.2	0.0	0.2	0.4	0.7	0.9	0.4	0.6	0.0	0.3	8.1	2.7	1.2	1.1	0.4	0.1	0.1	0.5	0.4	0.0	1.0	0.9	8.1
20	0.3	S	0.6	0.8	0.8	0.9	0.5	1.1	0.3	C	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	
21	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	0.4	5.6	
22	0.0	S	3.2	5.6	0.0	0.0	0.0	2.5	4.9	7.9	8.7	0.9	3.2	9.5	2.4	1.8	0.9	2.0	1.3	1.6	2.9	2.1	0.4	0.1	2.7	9.5
23	1.1	S	0.7	0.5	1.1	0.1	0.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	
24	0.0	S	0.3	0.2	0.0	0.7	0.9	0.2	0.5	0.3	7.8	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	7.8	
25	0.0	S	1.4	0.4	0.0	1.9	0.0	1.2	3.0	8.9	3.6	0.7	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	8.9	
26	0.0	S	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.1	
27	0.0	S	0.0	0.0	0.0	0.1	0.0	0.0	0.1	7.9	2.5	3.1	1.0	0.1	0.7	0.0	0.0	0.3	1.7	0.5	0.0	0.0	0.0	0.8	7.9	
28	0.0	S	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	1.9	0.3	0.0	0.0	0.0	0.0	0.0	3.2	1.1	0.0	0.0	0.0	0.0	0.4	3.2	
29	0.2	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	0.2	
30	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	
31	0.1	S	1.3	2.6	1.1	2.1	2.4	0.0	3.1	7.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.9	1.2	7.2
NO.	31	-	31	31	31	31	31	31	31	30	30	29	29	30	30	30	30	30	31	31	31	31	31	31	703	99.7%
MEAN	0.6	-	0.9	1.0	0.9	1.1	1.6	2.4	1.9	1.5	1.4	1.4	1.0	0.6	0.5	0.5	0.7	0.5	0.6	0.7	0.7	0.6	-	-	-	-
MAX	4.0	-	5.0	5.6	3.7	5.3	5.6	6.9	7.6	8.9	11.4	11.5	9.8	9.5	6.0	5.7	2.9	3.2	5.5	4.6	6.1	7.0	3.1	3.3	-	-



Number of 1HR Exceedences	0
Number of Non-Zero Readings	486
Maximum 1-HR Average	11.5 PPB
Maximum 24-HR Average	2.7 PPB
Monthly Calibration Standard Deviation	1.712
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	1.0 PPB

Lagoon PM_{2.5} ($\mu\text{g}/\text{m}^3$) – October 2021

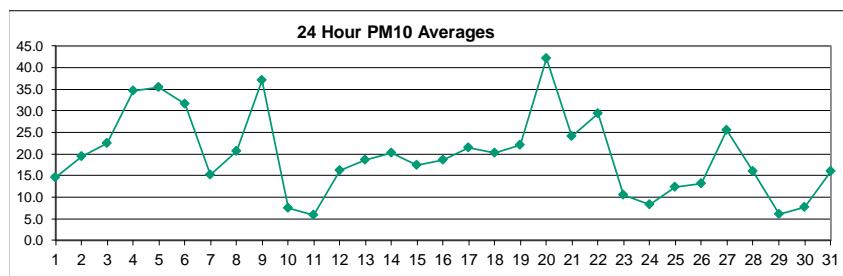
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0.0	1.3	3.0	3.6	2.6	2.5	0.4	0.6	2.4	0.0	0.0	0.0	3.9	1.9	0.0	0.0	0.0	2.6	2.1	0.3	0.0	0.0	0.1	0.0	1.1	3.9		
2	0.1	0.0	0.6	2.4	3.2	2.2	2.0	3.7	3.5	1.9	2.4	1.4	0.0	0.4	0.0	0.0	0.0	0.3	0.0	3.1	4.0	2.9	2.1	0.6	1.5	4.0		
3	2.2	2.0	0.0	1.8	6.4	4.3	3.5	1.0	1.2	1.7	0.0	0.5	2.3	2.7	4.0	4.2	1.3	4.1	5.5	6.4	3.9	2.7	4.7	3.5	2.9	6.4		
4	1.1	5.6	6.8	4.7	3.1	5.1	9.9	7.3	7.9	6.1	4.3	3.1	5.7	4.4	5.0	8.9	13.0	18.0	11.7	9.0	8.1	15.6	11.4	9.4	7.7	18.0		
5	9.7	24.0	11.4	9.9	11.9	11.6	6.5	6.6	7.8	4.8	5.8	P	P	6.4	5.0	2.9	2.3	2.5	2.2	2.3	3.4	4.4	4.5	5.7	6.9	24.0		
6	4.4	4.7	4.4	4.5	6.4	3.9	2.6	2.6	2.8	5.5	6.8	21.6	26.7	15.4	7.9	1.6	2.3	3.1	5.3	2.5	1.0	3.5	6.4	4.2	6.2	26.7		
7	0.9	2.0	2.9	1.5	0.9	1.7	3.7	3.9	6.6	7.2	4.6	1.9	2.9	2.8	0.4	0.4	0.5	0.8	0.7	0.0	0.4	0.2	1.7	0.1	2.0	7.2		
8	5.1	4.3	3.0	2.8	1.2	1.8	4.1	4.6	3.0	3.0	2.8	1.2	1.1	1.5	0.0	0.0	0.5	1.5	1.9	2.3	2.5	2.2	1.8	3.9	2.3	5.1		
9	6.8	5.4	4.4	4.8	6.1	3.9	1.7	0.0	0.0	4.3	3.2	1.3	4.4	9.3	6.7	3.3	2.9	2.1	0.1	1.4	4.7	3.0	0.0	0.9	3.4	9.3		
10	2.4	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.0	0.0	0.0	0.8	0.3	0.0	0.0	0.9	0.0	3.7	3.7	0.0	1.7	3.9	1.8	0.3	0.9	3.9		
11	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.6	3.7	3.1	0.2	2.2	2.1	0.9	2.9	2.3	3.6	3.6	2.6	2.3	2.4	4.0	2.9	1.8	1.7	4.0		
12	4.5	1.2	2.4	4.3	2.8	1.2	1.2	1.8	5.8	5.6	6.8	5.7	3.4	0.0	0.0	0.0	0.0	0.5	1.8	0.0	0.0	0.4	0.4	0.4	2.1	6.8		
13	0.3	3.6	1.9	1.7	2.4	0.0	0.9	3.2	6.5	6.6	7.0	8.2	6.0	2.8	1.0	0.0	0.2	2.5	1.4	0.6	2.6	2.1	1.0	4.4	2.8	8.2		
14	4.1	4.4	4.9	6.7	3.7	0.0	2.5	3.8	5.7	3.8	0.1	0.0	1.7	0.0	0.0	0.0	1.6	2.4	0.0	1.6	2.3	2.6	3.2	2.0	2.4	6.7		
15	3.5	1.4	0.0	0.0	0.2	0.0	0.0	0.2	1.7	3.6	1.9	0.0	0.0	3.9	1.3	0.0	0.0	0.0	0.5	0.8	0.3	0.0	0.0	0.8	3.9	3.9		
16	0.0	0.0	0.3	3.1	0.0	0.0	0.4	0.0	1.2	1.2	1.5	1.4	0.0	0.0	0.5	0.9	1.9	2.1	0.0	0.0	1.2	7.8	5.7	3.3	1.3	7.8		
17	3.3	2.9	6.9	6.1	5.0	3.1	0.0	2.1	4.6	2.6	3.4	4.0	3.1	2.3	3.2	1.8	1.1	0.0	0.9	2.2	1.2	2.5	6.1	5.5	3.1	6.9		
18	3.6	8.0	6.7	3.4	4.9	7.0	8.6	8.8	10.3	7.5	5.1	5.1	10.9	6.4	4.6	3.4	4.4	6.5	6.4	5.0	2.9	2.7	4.4	4.4	5.9	10.9		
19	10.1	10.2	11.5	7.7	4.6	7.2	6.9	6.8	10.3	9.8	9.2	5.4	4.7	4.5	6.7	8.6	6.7	4.3	3.6	7.2	5.7	4.1	5.6	5.0	6.9	11.5		
20	7.3	8.3	7.9	8.3	8.4	9.4	6.5	6.6	12.5	10.5	16.0	7.6	C	C	22.4	28.7	28.7	24.3	13.8	19.0	14.0	8.6	5.1	4.0	11.9	28.7		
21	1.9	X	0.0	0.0	0.0	0.0	X	4.3	8.9	6.2	19.8	Y	0.0	0.0	0.7	0.0	1.6	2.3	2.6	2.2	1.8	4.0	3.6	3.3	3.0	19.8		
22	3.3	3.3	2.5	1.2	1.5	1.0	1.9	1.9	2.9	3.1	4.9	7.1	4.2	1.0	3.7	4.0	3.5	7.0	7.8	4.7	4.9	6.4	5.1	4.7	3.8	7.8		
23	4.0	2.9	2.6	2.1	1.0	4.0	3.2	0.8	1.2	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	4.4	4.1	4.2	1.5	4.4		
24	1.2	2.0	3.5	1.1	0.9	1.5	1.7	3.5	1.6	3.1	6.0	3.9	2.2	1.0	0.0	0.0	0.0	0.5	1.3	0.0	0.0	0.0	0.0	0.8	1.5	6.0		
25	1.6	2.2	1.0	0.0	3.3	3.6	3.2	1.4	0.0	0.0	2.5	2.9	2.4	4.2	1.0	0.0	0.3	0.2	0.0	1.2	2.5	1.6	2.6	2.9	1.7	4.2		
26	2.1	0.0	0.0	0.2	1.6	0.0	0.0	0.0	0.0	1.9	2.4	0.0	0.0	0.5	2.2	1.8	0.3	0.0	0.0	0.0	0.6	2.1	0.6	0.7	2.4			
27	2.6	2.4	0.0	2.1	0.0	0.0	0.0	0.2	2.2	1.8	5.8	4.9	1.5	1.6	2.9	1.7	0.0	0.1	1.1	0.4	0.4	0.0	0.1	0.4	1.3	5.8		
28	0.0	1.9	2.1	0.0	0.0	0.0	1.5	1.9	2.8	1.9	1.6	2.2	1.4	0.3	2.8	0.4	0.0	2.3	2.9	1.4	0.0	0.0	2.6	2.2	1.3	2.9		
29	1.5	1.1	0.1	1.8	1.1	0.1	0.0	0.0	0.0	1.1	0.4	0.1	0.3	0.0	0.0	0.0	0.2	2.2	2.0	3.9	1.5	1.6	2.2	1.9	1.0	3.9		
30	3.3	3.2	1.2	1.2	2.2	0.0	0.0	0.0	0.7	4.5	5.6	7.1	5.3	2.4	0.0	0.0	0.0	1.1	0.8	0.9	2.6	2.6	3.4	4.4	2.2	7.1		
31	3.9	7.1	4.5	1.3	3.4	4.2	7.1	10.1	6.6	7.3	7.7	7.8	4.7	1.4	0.0	1.6	2.3	3.6	2.9	1.7	4.2	7.3	7.3	8.2	4.8	10.1		
NO.	31	30	31	31	31	31	30	31	31	31	31	31	31	29	29	30	30	31	31	31	31	31	31	31	736	99.3%		
MEAN	3.1	3.8	3.1	2.9	2.9	2.6	2.7	2.9	4.0	3.9	4.4	3.7	3.5	2.6	2.1	2.3	2.6	3.3	2.8	2.6	2.6	3.3	3.3	3.0				
MAX	10.1	24.0	11.5	9.9	11.9	11.6	9.9	10.1	12.5	10.5	19.8	21.6	26.7	15.4	7.9	22.4	28.7	24.3	13.8	19.0	14.0	15.6	11.4	9.4				



Number of 24HR Exceedences	0
Number of Non-Zero Readings	594
Maximum 1-HR Average	28.7 UG/M3
Maximum 24-HR Average	11.9 UG/M3
Monthly Calibration Standard Deviation	3.604
Operational Time	739 HRS
Operational Uptime	99.3 %
Monthly Average	3.1 UG/M3

Lagoon PM₁₀ ($\mu\text{g}/\text{m}^3$) – October 2021

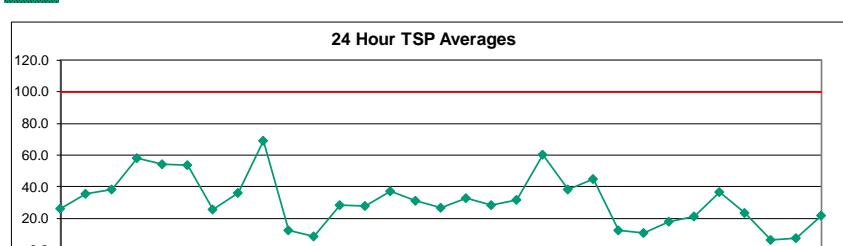
	Hourly Data Summary																								Mean	Max	
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	Max	
1	17.3	14.1	13.6	15.7	8.6	6.5	5.7	39.4	22.3	21.6	11.3	10.5	19.1	12.3	15.9	11.8	7.6	11.8	18.2	27.1	8.0	8.3	13.2	9.1	14.5	39.4	
2	4.6	3.3	1.8	0.2	13.7	8.5	24.7	20.9	29.9	14.0	32.5	43.0	30.7	51.9	9.2	7.1	13.8	8.7	17.5	40.0	21.9	18.2	36.1	12.7	19.4	51.9	
3	29.6	8.5	5.4	9.5	42.4	68.6	40.7	12.2	6.7	6.8	9.7	23.7	4.8	8.5	35.8	43.7	12.8	32.1	18.4	29.4	7.8	43.9	14.3	26.1	22.6	68.6	
4	23.6	22.9	22.8	20.9	20.4	14.1	24.7	32.0	46.7	37.1	25.0	16.3	19.6	30.3	40.8	54.5	51.0	64.1	50.5	26.9	26.5	50.1	69.0	41.0	34.6	69.0	
5	60.6	93.6	53.2	39.8	37.3	23.6	24.2	33.7	41.1	28.9	34.7	P	P	66.6	60.1	29.1	19.8	13.3	21.3	27.2	20.1	18.6	23.2	8.2	35.4	93.6	
6	19.9	22.8	11.2	19.6	39.6	26.5	29.6	25.8	19.8	51.5	34.5	56.4	70.3	76.3	33.2	5.9	13.7	8.6	26.4	7.8	15.3	35.6	69.6	37.8	31.6	76.3	
7	16.2	5.8	3.5	6.6	5.0	0.7	3.5	18.7	25.9	37.0	52.6	39.3	20.9	11.1	6.7	16.0	3.5	7.8	15.6	26.7	20.7	6.7	7.2	7.8	15.2	52.6	
8	42.3	17.9	14.2	24.2	21.2	7.3	43.2	20.7	14.8	35.5	48.2	10.8	11.6	13.1	8.3	13.1	16.8	6.5	13.0	6.7	16.9	16.9	28.0	41.9	20.5	48.2	
9	39.9	20.8	44.1	46.6	54.0	42.2	44.0	14.7	12.6	10.5	16.0	18.8	89.4	124.6	41.7	51.7	93.5	42.5	11.2	12.4	8.0	16.8	15.9	16.9	37.0	124.6	
10	15.6	16.0	3.9	3.3	4.3	27.8	19.1	3.6	8.5	15.4	14.2	5.7	2.4	9.0	3.5	0.0	0.0	0.6	0.6	1.6	6.7	7.2	4.6	3.2	7.4	27.8	
11	2.2	5.3	4.4	3.9	3.2	1.9	1.2	0.5	9.3	7.2	5.1	10.6	7.4	7.2	5.0	10.6	7.9	5.0	2.1	4.3	8.9	11.9	8.5	4.9	5.8	11.9	
12	9.0	13.8	19.1	11.5	1.6	0.0	1.2	10.9	19.2	37.7	84.6	61.3	18.5	41.1	8.3	12.6	9.7	4.5	1.9	0.7	2.1	4.8	6.7	7.3	16.2	84.6	
13	8.7	44.6	23.9	17.2	12.5	19.4	24.8	4.4	30.4	30.3	28.3	17.3	26.9	43.2	6.9	11.7	34.6	6.6	5.5	8.8	18.6	5.0	5.8	12.9	18.7	44.6	
14	14.8	26.2	43.2	20.4	3.9	15.8	69.8	58.2	46.3	19.7	12.5	27.6	15.2	9.3	7.8	6.1	26.7	11.2	7.7	3.8	11.1	6.5	4.9	18.6	20.3	69.8	
15	13.8	9.1	4.6	4.0	5.1	7.1	19.9	32.4	3.4	23.5	13.3	22.7	52.5	94.0	18.0	15.7	18.7	15.3	12.7	11.1	6.6	4.6	4.6	3.2	17.3	94.0	
16	2.0	2.7	5.9	23.7	15.3	12.5	7.8	4.1	7.5	29.4	13.8	9.3	7.4	9.1	14.7	13.8	32.3	39.3	20.0	6.4	24.2	61.8	36.4	45.1	18.5	61.8	
17	33.7	52.8	52.5	30.2	37.4	30.6	35.1	43.9	31.9	4.0	5.4	16.4	11.4	21.2	15.3	7.3	6.0	6.2	18.9	8.7	7.8	5.1	12.9	19.4	21.4	52.8	
18	17.4	25.1	17.5	16.8	16.8	25.3	10.1	17.2	13.8	39.3	41.5	44.1	27.0	27.5	24.6	8.6	7.9	15.9	12.5	8.2	12.0	20.9	20.6	16.1	20.3	44.1	
19	16.3	28.4	19.4	17.7	10.8	11.0	10.1	20.7	19.2	51.4	21.3	18.1	16.8	15.9	17.6	37.8	26.6	21.1	24.6	30.6	45.5	18.6	14.1	13.7	22.0	51.4	
20	17.5	17.9	23.9	27.5	24.4	17.2	33.6	63.2	95.3	63.6	65.1	18.5	42.1	25.4	34.1	69.4	66.1	72.8	57.6	49.5	50.9	42.3	26.3	5.3	42.1	95.3	
21	4.7	14.2	3.6	0.0	0.0	7.7	53.2	50.3	64.1	57.4	C	C	C	7.0	12.3	22.4	32.8	17.4	35.5	16.3	25.0	29.7	29.6	21.4	24.0	64.1	
22	8.2	X	17.0	8.7	8.5	6.1	8.2	10.6	19.7	34.0	65.6	36.1	50.2	31.6	20.5	36.4	66.6	88.4	44.6	34.1	38.1	20.9	10.7	9.9	29.3	88.4	
23	8.9	21.3	6.8	4.7	5.5	7.8	4.6	5.2	12.4	7.0	1.3	2.6	1.8	0.0	1.4	3.2	1.0	0.0	5.4	7.6	31.6	38.1	23.3	48.6	10.4	48.6	
24	28.4	33.6	10.5	7.1	3.8	2.0	3.3	4.0	15.8	29.9	22.1	9.8	5.3	5.1	2.4	0.1	2.6	3.2	2.6	2.4	0.0	0.0	0.0	1.8	8.2	33.6	
25	0.9	15.2	10.5	6.6	6.0	6.2	17.3	0.0	5.7	13.9	49.3	40.1	59.4	7.6	11.3	10.1	10.6	8.4	3.9	2.6	2.0	2.5	0.8	3.9	12.3	59.4	
26	3.2	1.3	2.8	5.2	3.0	0.0	2.0	2.6	3.3	13.1	7.6	11.0	18.1	73.8	26.2	15.8	28.5	9.8	5.0	0.7	2.9	9.5	40.3	27.3	13.0	73.8	
27	29.8	8.5	6.6	15.4	3.8	1.7	8.8	9.4	9.4	27.2	136.2	57.0	61.3	80.0	49.0	12.9	4.9	0.7	32.6	25.8	8.3	11.2	7.1	4.0	25.5	136.2	
28	4.1	5.2	3.5	5.8	4.0	14.3	6.8	20.8	38.7	23.1	47.9	34.7	17.1	1.3	1.4	4.6	24.0	38.3	19.2	14.4	9.2	16.1	14.9	16.1	47.9		
29	14.2	5.0	3.6	7.9	5.0	1.3	1.3	1.3	1.5	4.6	3.5	6.0	6.1	7.2	5.5	7.2	5.4	6.6	5.2	3.5	6.5	5.6	28.7	3.1	6.1	28.7	
30	9.9	7.5	9.3	7.9	5.2	2.5	2.8	5.2	4.3	10.1	10.2	12.7	10.5	7.4	17.3	0.0	0.4	7.7	6.1	7.4	7.6	7.3	15.7	7.6	7.6	17.3	
31	7.4	7.3	6.0	5.8	12.5	8.0	8.7	28.2	24.7	20.9	32.4	41.5	24.3	22.6	7.2	3.7	0.2	5.7	11.9	18.9	16.8	26.5	30.0	13.3	16.0	41.5	
NO.	31	30	31	31	31	31	31	31	31	30	29	29	31	31	31	31	31	31	31	31	31	31	31	31	31	738	99.6%
MEAN	16.9	19.0	15.1	14.0	14.0	13.7	19.0	19.8	22.7	26.0	31.5	24.9	25.8	30.4	18.1	17.5	20.8	18.7	17.0	15.2	15.7	18.4	20.1	16.4			
MAX	60.6	93.6	53.2	46.6	54.0	68.6	69.8	63.2	95.3	63.6	136.2	61.3	89.4	124.6	60.1	69.4	93.5	88.4	57.6	49.5	50.9	61.8	69.6	48.6			



Number of Non-Zero Readings	725		
Maximum 1-HR Average	136.2 UG/M3		
Maximum 24-HR Average	42.1 UG/M3		
Monthly Calibration	3	Operational Time	741 HRS
Standard Deviation	18.54	Operational Uptime	99.6 %
		Monthly Average	19.6 UG/M3

Lagoon TSP ($\mu\text{g}/\text{m}^3$) – October 2021

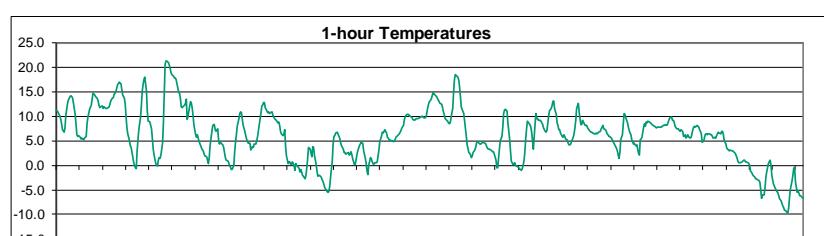
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	29.9	2.0	27.4	21.5	29.5	13.3	5.8	65.0	42.5	34.2	26.0	20.3	31.5	25.5	31.4	21.3	8.3	25.5	34.2	63.2	14.5	20.8	16.5	14.0	26.0	65.0
2	14.4	19.0	11.4	14.6	22.8	12.6	52.8	53.8	49.7	47.0	65.5	71.6	28.4	73.6	20.3	11.8	19.2	14.6	25.8	60.4	49.6	27.8	64.8	21.0	35.5	73.6
3	39.9	13.3	2.2	15.0	72.7	120.4	77.9	21.6	11.8	19.3	16.5	31.9	18.7	28.3	66.2	78.4	31.9	49.3	21.3	43.7	11.9	60.3	31.3	41.7	38.6	120.4
4	41.4	38.0	44.7	30.4	27.7	26.5	28.2	55.9	80.8	64.8	21.8	32.2	35.9	54.1	75.9	90.6	80.8	107.5	95.8	39.1	45.8	88.7	117.0	69.1	58.0	117.0
5	89.8	123.3	64.2	49.9	48.4	42.6	35.6	29.3	49.7	46.8	64.1	P	P	88.4	120.0	53.1	38.6	34.6	33.5	54.1	34.4	30.4	45.1	14.9	54.1	123.3
6	27.9	28.7	21.2	27.6	63.8	45.0	54.0	53.5	47.4	89.4	61.4	88.5	109.4	125.7	57.6	9.8	27.9	10.9	43.2	7.2	29.9	46.6	135.0	77.1	53.7	135.0
7	17.4	5.5	8.3	5.4	5.9	8.4	8.7	32.4	38.9	61.1	100.6	70.8	31.0	16.4	9.6	25.4	10.4	18.5	25.2	46.4	33.3	11.1	8.6	12.9	25.5	100.6
8	56.6	31.7	28.3	35.1	38.2	11.3	69.9	36.5	25.9	60.2	84.6	23.3	15.5	17.3	25.0	24.7	37.0	10.7	21.7	14.5	41.0	31.8	51.5	73.6	36.1	84.6
9	74.5	55.4	80.3	82.4	109.8	75.3	40.8	28.0	28.6	19.9	25.0	34.7	200.3	245.2	70.8	97.5	161.2	85.8	23.6	22.0	17.3	25.0	23.8	25.3	68.9	245.2
10	27.9	26.9	12.4	8.5	10.4	38.2	27.1	16.8	16.4	11.4	13.2	1.8	5.0	13.0	5.2	0.0	0.0	4.3	3.5	6.2	12.6	11.3	11.3	11.0	12.3	38.2
11	7.6	14.4	0.5	4.4	4.4	5.7	4.4	6.1	11.5	13.7	8.7	10.8	11.2	10.0	11.0	7.7	16.3	9.6	5.7	5.8	7.6	13.8	9.4	4.3	8.5	16.3
12	24.1	29.1	25.8	14.0	0.0	2.1	10.3	17.3	27.1	61.0	120.6	98.0	35.4	81.9	22.4	23.9	25.9	15.9	3.3	8.1	5.5	2.5	15.5	16.6	28.6	120.6
13	17.7	69.3	27.8	26.1	21.1	25.1	43.1	5.4	37.9	42.5	34.5	31.3	42.8	56.9	16.5	19.2	58.0	12.5	10.1	14.2	16.2	12.3	7.8	18.3	27.8	69.3
14	20.9	42.0	65.5	27.6	4.3	29.9	133.0	111.1	72.1	32.1	37.2	56.9	36.6	22.0	16.9	20.3	50.4	34.3	7.0	6.3	13.8	10.4	8.7	31.8	37.1	133.0
15	28.0	9.5	4.5	7.4	11.0	16.7	17.9	51.7	16.6	34.1	26.7	49.8	112.7	154.4	43.8	34.6	32.1	34.1	23.3	21.4	7.3	9.6	5.5	1.3	31.4	154.4
16	0.0	4.5	8.3	24.6	18.7	25.4	9.8	8.3	8.0	41.0	29.5	13.0	18.2	18.9	28.6	21.6	52.2	43.4	26.9	13.9	35.7	88.7	49.1	55.7	26.8	88.7
17	40.1	59.4	74.2	45.1	54.5	41.6	61.3	64.2	47.7	14.3	18.0	16.0	25.3	34.7	32.0	11.6	13.7	9.3	20.7	16.2	7.5	14.8	27.1	36.4	32.7	74.2
18	40.1	36.9	27.9	28.7	21.8	32.9	24.3	12.5	13.2	62.4	62.2	61.7	32.0	32.1	31.9	9.9	10.6	20.3	11.6	17.0	20.2	28.6	19.5	19.9	28.3	62.4
19	25.7	33.8	19.6	20.9	20.5	14.0	15.0	29.6	37.4	73.7	35.4	24.6	25.2	28.0	32.1	52.6	30.1	23.2	36.5	44.4	63.2	34.7	14.9	27.4	31.8	73.7
20	20.8	19.4	37.0	28.7	20.8	19.4	39.9	78.1	123.3	83.4	84.7	24.8	60.5	33.2	55.0	109.5	112.5	117.1	87.6	72.0	71.9	68.9	60.8	16.2	60.2	123.3
21	6.2	13.3	3.0	3.1	9.0	79.1	81.7	100.6	88.4	21.8	C	C	37.7	29.8	66.9	19.5	49.6	29.3	33.5	41.9	57.7	28.1	38.2	100.6	100.6	
22	19.0	X	42.0	26.1	31.8	8.8	15.2	12.5	31.9	54.4	97.4	54.6	60.9	41.8	26.8	56.0	106.9	127.3	62.6	46.3	52.8	32.1	13.8	9.8	44.8	127.3
23	8.8	12.3	7.0	5.5	2.9	1.6	3.0	3.5	11.0	6.9	2.8	0.3	1.7	3.0	3.0	3.4	4.2	2.6	17.6	10.6	42.7	55.9	23.4	59.8	12.2	59.8
24	40.9	29.4	30.0	0.4	3.0	3.3	8.4	7.5	14.1	35.0	24.1	9.8	8.7	10.8	4.3	4.3	3.2	6.9	4.3	3.0	2.9	1.5	3.0	4.3	11.0	40.9
25	3.6	13.6	11.4	13.8	9.7	8.3	25.2	5.8	7.8	21.6	70.9	55.1	86.3	10.3	16.5	11.4	12.6	11.3	11.3	10.9	5.6	2.9	1.4	0.0	17.8	86.3
26	5.7	5.8	6.9	2.7	0.0	3.0	3.1	4.3	4.4	20.1	8.0	21.1	30.1	126.4	48.1	22.5	43.7	10.9	5.6	4.4	6.1	18.7	66.2	49.3	21.5	126.4
27	37.7	19.2	14.2	15.8	1.6	2.4	13.6	7.3	10.8	38.5	229.3	81.4	96.5	87.4	67.7	21.3	5.7	8.0	41.6	39.0	19.4	15.6	0.0	0.7	36.4	229.3
28	8.5	8.2	3.6	12.2	7.2	27.3	0.0	27.7	64.7	30.8	72.5	56.5	29.7	16.1	5.8	8.8	35.6	47.5	25.9	17.3	4.1	13.9	18.3	19.6	23.4	72.5
29	18.9	8.2	6.3	13.6	6.8	3.0	3.0	3.4	3.1	5.6	3.0	3.2	7.0	5.5	4.4	4.3	4.4	4.6	8.3	5.5	2.1	10.2	14.5	1.0	6.2	18.9
30	0.0	13.4	3.8	12.2	5.6	2.6	0.0	0.5	4.4	4.6	9.7	27.0	12.7	8.1	21.6	10.6	4.5	6.9	2.9	1.8	5.7	6.1	11.2	9.6	7.7	27.0
31	6.7	19.7	4.4	4.8	11.1	8.5	10.1	34.6	34.6	32.7	44.6	66.0	37.4	34.4	8.3	5.7	6.1	11.6	17.0	19.5	19.0	30.8	32.4	17.7	21.6	66.0
NO.	31	30	31	31	31	31	31	31	31	31	31	29	29	30	31	31	31	31	31	31	31	31	31	31	738	99.6%
MEAN	25.8	26.8	23.3	20.3	22.2	22.1	29.7	31.2	34.6	40.3	49.0	39.2	43.0	50.1	32.8	29.1	35.8	30.3	26.0	24.6	23.6	28.0	31.1	25.4		
MAX	89.8	123.3	80.3	82.4	109.8	120.4	133.0	111.1	123.3	89.4	229.3	98.0	200.3	245.2	120.0	109.5	161.2	127.3	95.8	72.0	71.9	88.7	135.0	77.1		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	729
Maximum 1-HR Average	245.2 ug/m³
Maximum 24-HR Average	68.9 ug/m³
Monthly Calibration Standard Deviation	30.4
Operational Time	741 HRS
Operational Uptime	99.6 %
Monthly Average	30.9 ug/m³

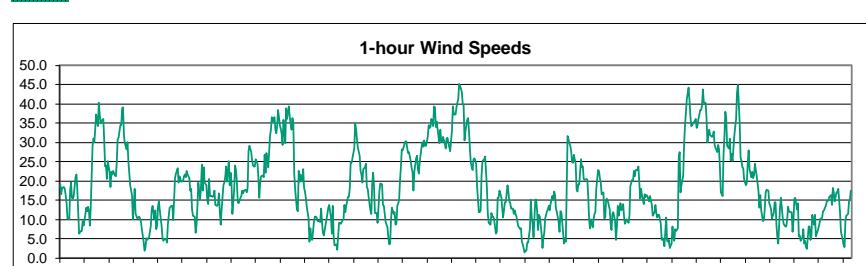
Lagoon Temperature (°C) – October 2021

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	11.3	11.0	10.4	10.0	9.4	8.5	7.2	6.7	7.6	10.2	11.5	12.7	13.4	14.0	14.2	14.0	13.6	12.6	10.4	8.3	6.3	5.8	6.0	5.6	10.0	14.2
2	5.4	5.6	5.4	5.2	5.5	5.9	8.5	9.9	10.5	11.4	12.3	13.5	14.6	14.5	14.4	13.9	13.7	13.1	12.4	11.7	11.9	12.2	11.6	11.9	10.6	14.6
3	11.7	11.6	11.7	11.7	12.0	12.5	13.2	13.5	13.8	14.5	14.7	15.1	15.8	16.4	16.9	16.8	16.7	15.4	14.4	13.7	12.5	9.9	7.7	6.4	13.3	16.9
4	5.0	4.0	3.6	2.6	1.6	0.6	-0.5	-0.6	2.9	5.3	7.3	9.7	12.1	15.0	16.5	17.5	18.0	15.3	11.1	8.9	8.9	8.8	7.5	5.3	7.8	18.0
5	3.2	2.0	1.2	0.3	-0.2	1.1	1.5	1.4	2.1	4.6	8.6	P	20.7	21.2	21.3	21.0	20.4	19.7	18.8	18.5	18.2	17.8	17.8	17.4	11.2	21.3
6	16.6	14.9	14.7	13.7	12.0	11.9	11.9	12.3	12.7	13.6	9.4	10.0	12.2	13.0	12.6	11.6	10.0	8.1	6.3	5.8	6.2	5.5	4.9	4.0	10.6	16.6
7	3.4	3.2	2.9	2.2	1.8	1.7	1.0	0.4	1.6	4.1	6.8	8.0	8.4	8.3	7.3	6.9	7.4	5.2	4.3	4.8	4.6	4.2	3.7	2.7	4.4	8.4
8	1.5	1.0	0.9	0.6	-0.2	-0.4	-0.9	-0.9	0.0	2.9	4.7	6.3	7.9	9.5	10.6	10.9	10.7	9.4	8.1	6.9	6.1	5.3	4.9	4.5	4.6	10.9
9	4.5	3.2	3.5	3.8	3.6	4.3	4.3	5.1	5.8	7.1	8.4	10.7	12.1	12.3	12.9	12.8	11.7	11.1	10.7	10.9	10.5	10.7	10.9	10.2	8.4	12.9
10	9.9	9.6	9.4	9.1	8.7	8.8	8.2	7.0	6.4	6.1	6.4	7.4	3.8	1.9	0.4	0.7	0.8	0.3	0.2	0.7	0.0	-1.1	0.3	0.1	4.4	9.9
11	-0.1	-0.6	-1.3	-0.9	-1.3	-2.0	-2.2	-2.8	-2.1	-0.4	1.5	3.7	3.3	2.5	1.7	3.7	3.7	2.2	0.1	-1.2	-2.2	-2.1	-2.1	-2.5	-0.1	3.7
12	-3.0	-3.3	-3.8	-4.4	-4.9	-5.3	-5.6	-5.4	-4.3	-2.3	0.9	4.3	5.8	6.1	6.6	6.7	6.3	5.8	5.3	4.6	3.9	3.3	2.7	2.6	0.9	6.7
13	2.3	2.4	2.6	2.1	2.3	2.7	2.3	1.4	0.2	0.3	1.1	2.1	3.0	4.0	4.3	4.6	4.6	4.4	3.0	1.4	0.3	-1.2	-1.9	0.0	2.0	4.6
14	1.6	1.4	0.7	0.3	0.2	0.5	0.5	0.7	1.8	3.2	4.8	5.9	6.7	6.5	7.0	7.3	6.6	5.7	5.5	5.2	5.2	5.0	5.0	4.8	3.8	7.3
15	4.9	5.2	5.8	6.1	6.2	6.4	6.7	7.1	7.6	8.2	9.4	9.9	10.3	10.4	10.4	10.0	10.1	9.8	9.7	9.3	9.1	9.4	9.5	9.5	8.4	10.4
16	9.5	9.8	9.9	9.9	10.1	9.9	9.7	9.7	10.3	11.2	12.1	12.8	13.4	13.7	14.5	14.8	14.6	14.2	14.0	13.7	13.3	13.0	12.7	12.4	12.0	14.8
17	11.8	10.8	10.3	9.6	9.1	9.1	8.6	8.5	8.7	9.7	11.5	15.0	17.5	18.5	18.4	17.9	17.5	16.1	14.2	12.0	11.5	10.5	9.0	7.4	12.2	18.5
18	5.9	4.1	2.6	2.5	2.0	1.6	2.0	2.6	3.1	3.6	4.5	4.9	4.6	4.4	4.4	4.5	4.6	4.7	4.5	4.4	3.9	3.5	3.3	3.2	3.7	5.9
19	3.1	2.9	2.8	2.7	2.3	1.1	-0.4	-0.5	1.5	3.4	5.0	5.9	7.8	10.6	11.3	11.4	11.0	8.7	7.1	5.4	3.2	0.8	0.1	0.2	4.5	11.4
20	0.5	0.0	-0.1	-0.2	-0.5	-0.8	-0.8	-1.0	-0.6	0.9	2.7	5.3	7.5	9.0	8.5	8.3	7.9	6.8	5.0	3.4	8.3	10.6	9.6	9.5	4.1	10.6
21	9.3	9.2	9.0	8.6	8.4	7.7	6.9	6.7	7.2	8.5	10.0	11.0	11.5	12.2	12.9	13.1	11.6	10.5	8.6	8.2	7.2	7.3	6.6	5.9	9.1	13.1
22	5.8	6.2	5.9	5.3	5.2	4.6	4.2	4.1	4.3	4.9	5.7	6.4	7.6	9.2	11.6	12.6	10.9	9.5	8.3	8.3	9.1	8.5	8.2	8.2	7.3	12.6
23	8.1	7.6	7.1	7.0	6.8	6.8	6.4	6.4	6.6	6.4	6.6	6.8	6.9	7.4	7.8	8.1	7.5	7.4	6.9	6.3	6.2	5.9	5.8	6.9	8.1	
24	5.6	5.2	4.8	4.6	4.2	3.4	2.9	2.0	1.4	2.5	5.1	6.2	8.5	10.6	10.4	9.6	8.6	7.9	7.1	6.6	6.2	5.2	4.4	4.5	5.7	10.6
25	4.2	4.0	4.1	2.4	2.1	5.3	5.4	5.7	7.8	8.5	8.0	8.9	8.7	9.0	8.8	8.8	8.5	8.3	8.2	8.0	7.8	7.7	7.8	7.8	6.9	9.0
26	7.7	7.7	7.8	7.9	8.1	8.1	8.2	8.2	8.3	8.8	9.3	9.7	9.8	9.2	8.9	8.0	7.5	7.4	7.4	7.1	7.0	7.2	6.9	8.1	9.8	
27	5.8	6.0	6.3	5.5	6.2	5.7	5.7	5.6	5.8	7.3	7.7	8.1	7.8	8.0	8.2	7.8	7.2	6.9	6.3	4.7	5.1	5.9	6.5	6.5	6.5	8.2
28	6.3	6.4	6.4	6.2	6.2	5.8	5.6	5.6	5.6	6.1	6.4	6.8	6.6	6.4	7.0	6.9	6.3	5.1	4.4	3.5	3.4	3.2	3.0	3.1	5.5	7.0
29	3.0	3.0	2.9	2.7	2.5	1.6	0.9	0.5	0.5	0.5	0.7	0.9	1.1	1.1	0.8	0.8	0.5	0.4	0.1	-1.2	-1.4	-2.0	-2.2	-2.4	0.6	3.0
30	-2.7	-2.7	-2.8	-3.1	-3.4	-5.0	-6.8	-6.1	-6.0	-4.6	-2.5	-1.4	-0.5	0.4	1.0	0.3	-1.9	-3.0	-3.8	-4.6	-5.1	-5.3	-5.5	-6.1	-3.4	1.0
31	-6.7	-7.3	-7.8	-8.3	-8.7	-9.1	-9.2	-9.7	-9.7	-8.6	-6.4	-4.8	-3.1	-2.0	-0.6	-0.8	-3.5	-5.5	-5.1	-5.7	-6.1	-6.3	-6.5	-6.8	-6.2	-0.6
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	743	99.9%
MEAN	5.0	4.6	4.4	4.1	3.8	3.6	3.4	3.4	3.9	5.1	6.3	7.4	8.6	9.1	9.4	9.4	8.8	7.9	6.9	6.2	5.9	5.5	5.1	4.8		
MAX	16.6	14.9	14.7	13.7	12.0	12.5	13.2	13.5	13.8	14.5	14.7	15.1	20.7	21.2	21.3	21.0	20.4	19.7	18.8	18.5	18.2	17.8	17.8	17.4		



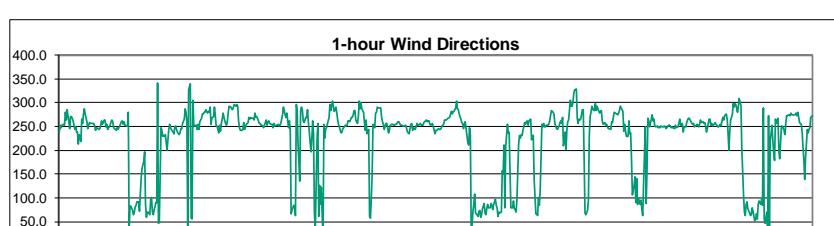
Lagoon Wind Speed (km/hr) – October 2021

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	19.2	16.6	18.2	18.5	18.1	16.4	14.2	10.2	10.0	17.5	19.5	15.6	15.5	16.0	21.0	21.6	17.8	11.9	6.5	7.0	7.1	9.7	8.5	9.9	14.4	21.6	
2	13.0	12.2	13.4	12.2	8.4	13.4	29.0	31.1	30.1	33.5	37.2	34.3	40.2	37.2	34.9	35.6	36.1	30.6	23.8	23.9	20.5	25.1	22.4	18.5	25.7	40.2	
3	22.4	21.7	22.6	21.4	21.2	24.9	30.7	31.2	34.6	34.4	38.9	39.2	31.9	29.7	28.2	30.0	24.9	21.9	18.9	16.3	10.1	14.1	17.9	11.4	24.9	39.2	
4	10.2	10.5	10.7	10.3	9.5	7.5	4.2	2.0	2.7	5.1	4.8	5.4	6.9	8.4	12.5	13.4	10.1	12.4	7.5	8.5	13.4	14.7	10.3	8.3	8.7	14.7	
5	5.4	4.4	5.0	5.0	4.1	8.6	11.1	13.1	13.6	13.4	9.8	P	20.7	21.9	23.2	19.5	21.3	20.5	19.8	20.1	21.2	21.7	21.0	22.7	15.1	23.2	
6	21.6	20.7	17.4	17.9	12.7	11.1	10.8	6.6	8.7	13.5	19.5	15.1	18.6	24.2	17.5	23.6	19.6	18.8	15.0	13.9	20.4	16.2	16.2	15.9	16.5	24.2	
7	16.1	17.5	13.7	13.7	14.0	16.7	11.9	8.7	12.7	18.8	19.5	20.9	23.7	19.8	25.1	18.8	22.2	19.6	11.4	17.7	24.0	22.9	19.7	14.4	17.6	25.1	
8	14.3	15.6	16.2	17.5	16.7	17.5	17.7	17.1	18.2	27.7	29.2	27.5	25.5	24.0	23.7	23.9	25.7	24.6	21.1	15.7	19.7	21.2	21.5	21.0	21.0	29.2	
9	26.8	22.1	27.3	23.6	27.6	31.8	33.3	36.6	35.4	36.5	33.2	32.4	34.4	38.3	34.4	33.6	32.2	29.3	35.9	29.9	39.0	36.0	38.0	39.4	32.8	39.4	
10	36.5	33.2	36.3	35.2	21.9	17.9	12.6	12.1	22.7	19.9	21.6	19.9	23.0	18.1	17.4	15.7	13.3	10.4	4.3	7.7	5.5	4.7	9.3	10.8	17.9	36.5	
11	10.8	10.4	9.7	9.6	9.5	12.8	9.4	6.6	5.8	8.8	10.1	11.3	13.0	13.8	10.5	6.3	13.6	5.6	3.3	3.7	2.2	5.6	9.2	9.1	8.8	13.8	
12	9.0	9.9	10.1	13.7	12.0	13.6	16.0	15.9	18.2	25.0	24.6	27.2	28.4	34.8	33.4	30.7	28.6	26.4	22.7	21.7	19.5	23.0	23.6	24.4	21.4	34.8	
13	18.4	17.9	15.8	12.4	11.5	19.2	22.1	18.9	11.8	11.6	9.1	13.2	17.2	19.4	19.1	13.7	13.6	11.5	9.3	8.0	5.5	3.6	3.8	10.0	13.2	22.1	
14	13.1	11.4	11.9	8.8	9.0	13.6	15.0	20.0	23.6	28.2	28.0	29.6	30.2	30.4	28.6	27.3	27.5	25.1	23.3	22.4	22.4	25.8	26.6	21.6	30.4		
15	23.0	21.8	24.9	28.6	30.0	28.9	30.6	29.0	29.1	31.5	34.6	33.7	33.9	36.0	34.3	39.3	39.0	34.0	35.4	31.4	29.7	33.4	30.4	30.1	31.4	39.3	
16	31.5	29.9	28.4	31.0	31.1	29.9	27.8	30.5	33.0	39.3	37.3	37.3	39.1	40.3	41.1	45.1	44.8	43.1	40.1	39.6	30.6	32.9	35.8	36.3	35.7	45.1	
17	32.8	28.4	24.7	22.8	25.7	25.8	25.5	24.4	18.7	12.0	11.9	12.5	21.4	25.2	25.7	26.4	22.5	18.3	11.4	9.2	8.7	11.6	10.9	10.7	19.5	32.8	
18	10.2	6.3	6.9	15.7	15.5	17.5	15.8	13.2	10.6	12.3	14.5	14.5	18.9	17.0	14.8	14.3	12.9	12.8	11.6	12.5	11.4	10.9	8.3	7.9	12.8	18.9	
19	7.6	7.7	4.2	3.5	1.5	1.8	2.0	4.1	4.1	7.8	15.2	10.6	8.8	5.4	15.1	15.2	12.2	7.2	11.1	10.7	6.5	2.7	5.1	6.7	7.4	15.2	
20	10.2	12.2	12.7	13.6	12.3	14.1	16.1	15.1	17.3	16.3	12.8	11.9	9.3	6.7	12.1	11.9	9.4	3.9	5.1	4.2	18.1	31.8	29.9	29.1	14.0	31.8	
21	27.6	25.0	24.6	26.9	24.4	18.0	17.4	19.2	19.0	25.7	23.6	23.7	20.5	20.4	20.5	20.4	16.2	10.0	7.8	10.2	8.1	10.1	11.4	11.8	18.4	27.6	
22	17.9	22.8	22.7	20.7	19.6	16.6	17.1	10.3	10.6	15.3	15.5	14.7	12.6	8.9	7.3	11.5	11.9	9.7	4.8	8.1	13.5	11.0	14.3	12.4	13.7	22.8	
23	13.0	13.9	10.8	9.0	10.2	9.9	9.2	10.9	18.8	20.3	20.0	22.7	21.2	22.9	22.9	23.9	19.7	15.5	17.9	16.4	13.9	16.6	15.9	16.4	16.3	23.9	
24	16.1	14.6	16.2	15.0	13.8	11.0	12.0	13.8	11.6	10.5	11.2	11.3	8.9	4.8	5.1	4.7	3.1	10.6	4.5	4.2	4.6	2.5	3.8	8.1	9.3	16.2	
25	5.4	4.5	7.4	7.1	7.8	26.0	27.5	17.0	18.9	21.5	29.6	34.5	37.6	41.1	44.2	41.1	36.7	34.2	34.5	34.8	35.6	36.2	33.8	34.4	27.1	44.2	
26	36.0	38.5	38.4	39.5	43.7	40.2	40.2	36.2	30.0	32.0	33.4	31.9	31.4	31.8	32.9	29.3	28.7	27.6	29.5	28.3	28.1	23.1	17.0	16.1	27.1	31.8	43.7
27	31.7	37.9	36.4	29.1	28.3	30.9	25.3	27.1	25.1	31.7	34.0	36.0	42.9	44.9	35.2	26.1	25.3	23.5	23.4	20.4	18.9	19.6	24.8	27.9	29.4	44.9	
28	23.2	21.1	22.3	20.8	21.5	24.5	21.1	19.3	17.3	13.2	16.4	12.5	9.6	9.8	12.8	17.1	17.8	17.5	14.1	13.5	12.5	10.3	11.7	14.5	16.4	24.5	
29	14.5	8.7	5.5	3.7	13.1	15.6	13.0	10.5	8.9	8.3	8.2	10.0	13.3	12.2	12.0	12.0	6.8	9.5	15.5	15.7	12.6	14.1	5.7	5.8	10.6	15.7	
30	4.4	5.3	7.5	3.8	4.5	2.9	2.5	8.3	8.2	4.8	5.8	11.3	8.7	11.1	5.8	6.3	7.0	8.9	10.3	10.0	10.6	12.2	12.5	13.5	7.8	13.5	
31	14.5	14.9	14.9	15.8	16.3	13.9	18.3	17.1	14.8	17.0	17.1	18.1	15.0	11.7	6.9	4.8	3.3	2.8	9.8	10.9	11.5	14.7	15.2	17.5	13.2	18.3	
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	743	99.9%	
MEAN	17.9	17.3	17.3	17.0	16.6	17.8	18.0	17.3	17.6	19.8	20.8	21.3	22.0	22.1	21.9	21.4	20.1	18.0	16.4	16.0	16.0	17.0	17.2	17.8			
MAX	36.5	38.5	38.4	39.5	43.7	40.2	40.2	36.6	35.4	39.3	38.9	39.2	42.9	44.9	44.2	45.1	44.8	43.1	40.1	39.6	39.0	36.2	38.0	39.4			



Lagoon Wind Direction (°) – October 2021

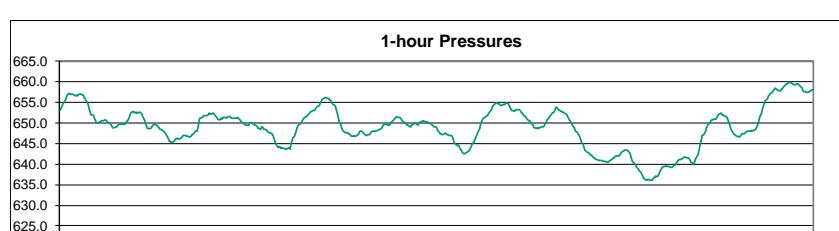
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	238.7	252.7	248.3	252.3	253.8	252.2	279.5	264.1	284.9	259.6	246.2	270.8	271.3	268.1	261.7	242.9	249.1	238.8	238.5	213.4	232.7	217.8	264.6	256.4	253.7	284.9
2	275.6	286.5	276.6	260.6	245.5	252.6	257.8	255.6	256.4	256.7	255.9	251.5	242.4	248.3	246.1	243.7	244.9	252.3	262.5	255.2	264.1	264.1	248.9	254.5	254.2	286.5
3	243.2	248.5	252.6	260.2	263.6	259.3	247.9	244.6	242.6	248.3	244.1	246.8	251.9	259.5	262.3	255.3	259.5	253.4	251.5	251.0	280.8	33.4	82.6	82.1	252.6	280.8
4	73.1	65.3	70.9	80.3	84.5	92.6	92.8	72.2	109.8	143.1	163.1	177.3	196.0	86.3	59.1	70.9	69.6	64.8	96.5	100.8	71.1	64.9	74.4	89.3	82.7	196.0
5	90.6	342.1	46.7	48.1	246.9	242.0	228.7	230.4	229.1	232.1	201.0	P	243.5	255.4	248.2	243.8	239.1	234.2	248.5	251.1	244.1	238.4	233.5	237.1	240.6	342.1
6	245.7	245.0	257.0	265.9	286.8	279.5	260.6	33.4	327.0	339.6	58.4	56.4	305.8	254.6	251.1	253.5	244.0	255.2	244.5	260.6	267.3	277.1	276.4	279.5	270.1	339.6
7	280.1	285.1	277.3	282.4	280.4	290.2	254.9	267.9	271.0	290.4	273.0	251.8	251.3	236.6	252.2	240.4	256.9	264.7	278.2	262.5	255.7	252.8	261.1	279.8	264.7	290.4
8	292.4	290.4	287.5	285.8	291.3	295.5	291.9	295.6	292.7	262.1	248.1	242.4	241.1	244.6	258.1	244.4	248.5	255.0	257.6	269.4	266.0	269.2	268.2	267.0	265.9	295.6
9	263.0	278.0	269.9	270.5	268.2	256.4	257.3	253.2	252.8	251.8	248.2	258.6	263.0	253.2	259.5	262.5	255.6	255.2	247.0	256.9	250.6	253.2	252.0	252.0	257.2	278.0
10	254.8	250.7	252.8	257.2	274.3	290.6	282.7	274.7	268.6	277.7	247.4	261.7	240.7	66.6	74.3	84.6	80.9	62.5	295.9	284.0	212.2	136.1	283.1	291.3	264.3	295.9
11	286.0	261.1	259.0	268.6	269.9	285.5	259.0	241.0	197.3	224.1	261.1	234.9	69.8	27.9	220.6	256.7	60.8	126.4	85.9	122.0	13.2	255.4	225.8	243.1	256.3	286.0
12	248.3	261.2	268.4	297.0	283.7	292.4	303.8	282.4	285.9	290.3	278.1	263.0	254.4	242.2	235.7	238.2	244.7	248.1	252.8	251.8	253.7	261.0	262.1	259.8	261.0	303.8
13	268.5	268.5	274.7	284.3	284.0	262.9	256.8	271.3	302.9	286.5	299.5	287.8	280.6	259.4	241.4	263.7	235.5	243.6	61.0	58.3	97.4	151.2	255.2	246.7	265.9	302.9
14	277.0	280.5	290.8	288.6	288.9	289.2	268.5	260.4	254.2	243.2	257.0	255.8	247.1	237.3	242.6	253.1	254.6	254.0	253.6	253.4	253.8	260.9	259.4	249.9	256.9	290.8
15	256.3	253.2	252.0	250.7	251.1	251.8	252.7	246.2	238.1	234.2	245.3	254.2	256.7	242.6	247.4	243.9	249.1	256.9	252.2	253.4	256.9	252.2	252.0	253.5	252.5	264.9
16	258.3	260.0	263.4	260.2	261.0	262.7	255.2	253.3	257.3	248.9	242.4	234.9	242.1	244.9	244.3	244.1	246.0	250.8	255.3	263.3	263.4	263.9	264.9	268.4	303.7	
17	267.6	268.3	277.2	281.9	277.2	280.9	280.9	289.3	303.7	286.3	285.2	276.4	264.6	258.2	256.4	245.2	253.8	259.2	230.7	216.4	211.9	248.3	231.8	16.0	76.0	108.5
18	71.8	88.9	108.5	67.8	67.0	60.4	71.5	73.6	59.4	64.6	77.2	88.8	68.4	64.4	76.7	87.3	78.4	79.2	87.9	83.6	76.3	85.9	98.2	84.1	110.0	255.2
19	78.6	60.9	70.5	68.4	70.0	157.6	150.4	211.3	79.7	206.9	255.2	236.7	237.7	154.7	78.7	79.5	93.1	78.2	76.2	70.7	95.2	213.1	230.6	226.3	247.3	265.9
20	233.8	230.9	242.1	258.1	255.4	259.4	261.9	253.3	262.5	265.9	222.2	231.6	231.5	139.6	65.8	66.5	63.6	101.2	84.2	116.2	254.0	248.4	255.7	248.6	256.2	283.8
21	249.2	252.4	252.5	254.8	262.1	273.5	283.8	280.2	276.9	255.6	251.2	245.7	242.9	251.9	257.6	261.1	256.3	269.8	209.4	238.9	201.4	243.6	259.3	264.5	293.0	328.1
22	304.7	293.0	293.5	300.0	319.1	327.1	328.1	268.1	256.2	265.0	263.8	265.6	285.6	285.0	184.6	67.5	64.3	74.0	96.9	232.0	271.8	280.8	292.1	264.8	297.6	
23	283.4	297.6	283.3	292.2	288.0	278.3	281.0	282.7	261.3	255.0	258.3	252.2	255.4	250.6	245.3	245.3	243.4	260.9	258.8	270.6	280.3	277.8	277.1	273.8	250.3	292.1
24	277.4	280.4	292.1	289.8	280.9	240.9	253.8	241.7	229.6	229.4	262.2	234.6	236.9	180.0	107.0	126.0	143.7	90.6	139.9	86.9	99.6	86.5	95.5	76.1	252.1	275.2
25	62.3	129.5	249.2	88.6	158.7	266.5	262.7	248.8	266.1	275.2	261.9	265.0	251.8	249.5	250.8	246.7	249.1	247.8	250.6	248.8	248.7	250.5	249.6	245.7	252.3	267.6
26	247.8	252.5	252.6	251.3	246.8	250.1	246.6	246.1	253.1	248.0	250.0	249.8	266.1	252.3	252.1	255.6	238.9	248.4	250.1	257.9	264.2	267.6	264.0	252.3	267.6	
27	256.0	254.6	256.2	249.8	250.4	254.9	252.8	249.2	254.2	264.3	258.6	260.1	257.1	257.8	251.0	237.7	245.1	265.8	264.7	253.6	255.8	253.6	258.4	255.0	265.8	
28	254.6	252.3	249.7	250.0	254.5	251.3	261.1	268.8	262.9	273.5	276.2	265.2	239.1	200.1	237.5	263.2	273.7	298.5	290.3	298.0	296.9	279.9	291.9	308.6	265.8	308.6
29	299.5	295.2	204.1	106.3	69.5	63.6	85.7	92.5	77.4	67.6	62.3	65.4	79.6	71.7	52.5	54.0	65.8	54.9	86.4	93.6	87.2	97.3	84.9	288.1	71.5	299.5
30	54.9	47.4	70.9	30.5	272.9	32.8	220.5	253.0	219.5	194.2	177.8	265.2	256.4	266.9	197.0	183.1	216.8	250.9	250.3	241.5	232.7	256.6	271.9	272.8	247.4	272.9
31	274.7	272.2	278.7	275.2	275.1	275.0	275.1	279.0	272.3	279.6	268.9	258.4	253.9	237.5	205.3	179.8	139.0	185.7	244.3	236.1	243.2	248.3	268.7	273.4	263.1	279.6
NO.	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	743	99.9%	
MEAN	228.0	239.0	233.2	225.1	241.3	239.6	244.1	235.0	238.9	242.6	232.3	233.7	235.0	211.1	204.0	201.3	195.5	202.5	206.7	210.8	213.2	218.7	232.1	232.3		
MAX	304.7	342.1	293.5	300.0	319.1	327.1	328.1	295.6	327.0	339.6	299.5	287.8	305.8	285.0	262.3	263.7	273.7	298.5	295.9	298.0	296.9	280.8	292.1	308.6	265.8	308.6



Number of Non-Zero Readings	743
Maximum 1-HR Average	342 degrees
Maximum 24-HR Average	293 degrees
Monthly Calibration Standard Deviation	72.64
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	224.8 degrees

Lagoon Pressure (mmHg) – October 2021

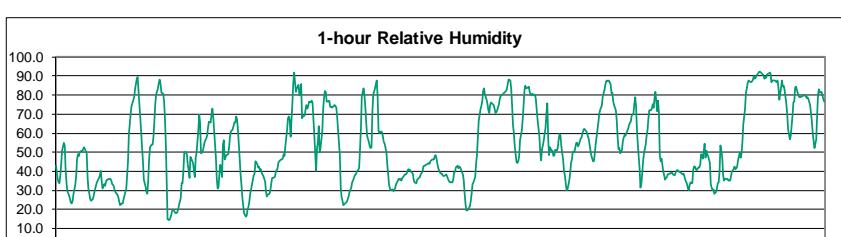
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	653.0	653.5	653.9	654.4	655.1	655.5	656.0	656.6	656.9	657.1	656.9	656.9	656.9	656.9	656.7	656.6	656.7	656.7	656.8	657.0	657.0	656.9	656.9	656.7	656.1	657.1	
2	656.2	655.9	655.5	654.9	654.3	653.3	652.5	652.0	652.1	651.7	651.0	650.7	650.0	649.9	650.1	650.2	650.5	650.4	650.6	650.8	650.7	650.6	650.4	650.4	651.9	656.2	
3	650.2	649.9	649.6	649.3	648.9	648.8	648.9	649.0	649.1	649.5	649.6	649.7	649.6	649.6	649.6	649.6	649.6	649.9	650.4	650.7	651.1	651.7	652.4	652.5	650.0	652.5	
4	652.7	652.6	652.5	652.4	652.5	652.5	652.7	652.5	652.4	652.1	651.4	650.7	650.1	649.4	648.9	648.7	648.5	648.7	648.9	649.1	649.4	649.7	649.7	649.4	650.7	652.7	
5	649.3	649.1	648.9	648.4	648.3	648.1	648.0	647.8	647.5	647.1	646.5	P	645.4	645.5	645.3	645.3	645.4	645.7	646.0	646.2	646.2	646.2	646.2	646.2	646.9	649.3	
6	646.4	646.8	646.9	647.0	646.9	646.7	646.8	646.7	646.6	646.7	647.1	647.1	647.4	647.3	647.5	647.9	648.9	648.8	649.9	651.1	651.1	651.3	651.5	651.7	651.9	648.3	651.9
7	651.8	651.9	651.9	652.3	652.2	652.1	652.1	652.3	652.2	652.6	651.8	651.5	651.2	650.9	650.8	650.9	650.8	650.9	651.1	651.0	651.3	651.5	651.5	651.5	651.5	652.3	
8	651.5	651.2	651.1	651.1	651.1	651.1	651.1	651.2	651.4	651.2	651.4	651.2	650.8	650.6	650.4	650.4	649.9	649.5	649.4	649.4	650.0	650.0	650.0	650.4	651.5	651.5	
9	649.4	649.4	649.2	649.1	648.7	648.6	648.5	648.9	649.1	648.7	648.5	648.4	648.2	647.8	647.8	647.7	647.5	647.4	646.9	646.6	646.6	645.7	645.0	644.4	644.1	647.7	649.4
10	644.2	644.2	643.9	643.9	643.8	643.8	643.9	643.7	643.7	643.8	643.9	643.6	644.8	645.4	646.3	646.8	647.3	648.1	648.7	649.2	649.5	649.9	650.1	650.4	646.0	650.4	
11	650.9	651.1	651.4	651.5	651.7	651.9	652.1	652.6	652.8	653.0	653.0	653.0	653.3	653.6	654.0	654.0	654.3	654.8	655.2	655.7	655.9	656.1	656.1	656.0	653.5	656.1	
12	656.0	655.8	655.6	655.4	655.2	654.7	654.4	654.2	653.5	652.8	652.1	651.2	650.3	649.4	648.7	648.3	648.0	647.6	647.6	647.5	647.6	647.4	647.3	647.0	651.1	656.0	
13	646.8	646.7	646.9	646.8	646.7	646.9	647.2	647.5	648.0	648.0	648.0	647.7	647.4	647.1	646.8	647.0	647.1	647.2	647.4	647.7	648.0	648.0	648.1	647.9	647.4	648.1	
14	647.9	648.1	648.3	648.4	648.7	649.1	649.5	649.7	649.7	649.8	649.5	649.4	649.5	649.7	649.7	650.0	650.6	650.8	650.9	651.2	651.4	651.4	651.3	649.8	651.4		
15	651.0	650.9	650.5	650.1	650.0	649.9	649.6	649.5	649.5	649.1	649.5	649.7	649.6	649.8	650.0	649.6	649.6	649.6	650.2	650.2	650.5	650.5	649.9	651.0			
16	650.3	650.3	650.3	650.1	650.9	650.0	649.8	649.6	649.3	649.1	649.0	648.7	648.3	647.8	647.5	647.5	647.3	647.2	647.1	647.3	647.5	647.4	647.2	648.6	650.3		
17	646.9	647.0	646.9	646.7	646.1	645.5	645.0	644.6	644.5	644.6	644.4	644.3	643.8	643.2	642.8	642.6	642.5	642.5	642.7	643.0	643.2	643.4	643.9	644.2	644.7		
18	645.2	645.7	646.2	646.8	647.5	648.2	648.7	649.7	650.3	650.7	651.2	651.4	651.5	651.7	651.8	652.1	652.6	652.9	653.5	654.1	654.4	654.6	655.0	650.9	655.0		
19	654.7	654.6	654.4	654.2	654.2	654.4	654.5	654.6	654.8	654.9	654.6	654.3	653.8	653.4	653.1	653.0	652.9	652.9	653.1	653.3	653.2	653.0	652.7	653.8	654.9		
20	652.3	652.1	651.8	651.5	651.1	651.0	650.7	650.5	650.4	649.9	649.6	649.2	648.8	648.7	648.7	648.7	648.7	648.8	649.1	649.1	649.4	649.8	649.9	652.2	652.3		
21	650.1	650.6	651.1	651.6	651.7	652.0	652.4	652.7	653.1	653.6	653.8	653.6	653.3	653.0	652.9	652.7	652.7	652.6	652.4	652.6	651.9	651.5	651.1	650.6			
22	650.1	649.6	649.2	649.0	648.6	648.0	647.7	647.5	647.2	647.2	646.6	646.1	645.3	644.8	644.1	643.1	643.0	642.7	642.6	642.4	642.2	642.0	641.7	641.4	645.3	650.1	
23	641.3	641.2	641.1	641.1	640.9	640.9	640.8	640.9	640.7	640.6	640.6	640.4	640.5	640.5	640.7	640.9	641.1	641.4	641.5	641.5	641.8	642.0	642.0	641.1	642.0		
24	642.1	642.4	642.8	643.0	643.3	643.3	643.4	643.4	643.4	642.9	642.7	642.1	641.2	640.6	640.4	640.0	639.7	639.3	639.0	638.9	638.4	638.0	637.6	637.0			
25	636.5	636.6	636.1	636.0	636.2	636.2	636.1	636.0	636.0	636.5	636.8	637.1	636.8	637.2	637.7	638.2	638.6	639.1	639.3	639.4	639.5	639.4	637.4	639.5			
26	639.4	639.3	639.2	639.3	639.3	639.5	639.6	639.9	640.2	640.4	640.8	641.0	641.2	641.2	641.4	641.7	641.6	641.4	641.4	641.5	641.2	640.9	640.6	640.6	641.7		
27	640.3	639.9	640.3	641.0	641.5	642.0	642.9	643.9	645.1	646.0	646.9	647.1	647.6	647.9	648.9	649.3	649.6	649.8	650.4	650.7	650.7	650.9	650.9	646.4	651.0		
28	651.4	651.8	652.0	652.4	651.9	652.0	651.8	651.7	651.6	651.4	650.6	650.1	649.5	648.8	648.2	647.5	647.2	647.2	646.9	646.8	646.5	646.8	649.7	652.4			
29	646.9	647.3	647.4	647.3	647.5	647.7	647.9	648.0	648.0	648.1	648.0	648.1	648.3	648.5	648.8	649.3	649.8	650.6	651.6	652.5	653.4	654.0	654.7	649.2	654.7		
30	655.2	655.5	656.0	656.5	656.8	657.1	657.3	657.7	658.0	658.2	658.4	658.3	658.1	657.9	657.9	657.9	658.1	658.2	658.6	659.0	659.2	659.4	659.6	657.9	659.7		
31	659.8	659.7	659.7	659.6	659.4	659.2	659.3	659.4	659.4	659.3	659.0	658.8	658.4	657.8	657.5	657.6	657.6	657.5	657.4	657.6	657.6	657.8	658.0	658.0	658.6	659.8	



Number of Non-Zero Readings	743
Maximum 1-HR Average	660 MMHg
Maximum 24-HR Average	659 MMHg
Monthly Calibration Standard Deviation	5.069
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	649.0 MMHg

Lagoon Relative Humidity (%) – October 2021

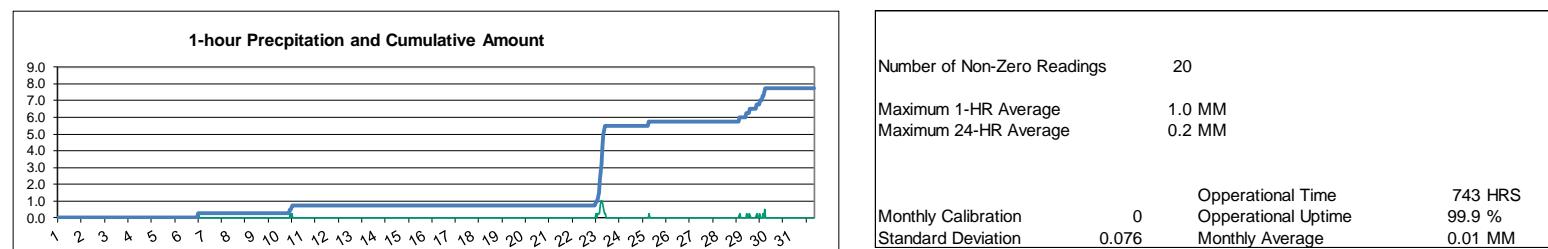
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	43.1	36.2	34.1	33.5	37.9	44.1	50.9	55.2	53.6	41.1	34.1	29.7	27.5	25.4	23.5	23.2	24.7	28.4	32.9	37.6	46.3	49.1	48.1	50.0	37.9	55.2	
2	50.8	50.4	51.6	52.4	51.9	49.6	37.0	30.5	28.1	25.6	24.6	25.4	27.1	29.7	31.2	33.3	34.7	36.7	37.8	40.1	35.2	31.0	33.3	32.5	36.7	52.4	
3	34.7	35.5	35.6	36.1	36.0	35.0	33.5	32.8	31.8	29.5	28.4	27.6	26.3	24.0	22.3	23.1	23.1	25.6	27.5	29.1	30.7	45.3	59.4	64.7	33.2	64.7	
4	70.2	74.2	75.4	79.0	83.1	85.9	88.5	89.7	81.6	67.6	60.4	52.1	45.2	35.6	31.8	29.4	28.2	35.5	46.3	52.6	54.1	53.8	58.3	66.5	60.2	89.7	
5	75.3	80.2	83.6	86.3	88.2	85.8	81.0	80.5	77.2	68.0	54.7	P	14.8	14.3	15.5	16.6	19.0	19.9	19.3	18.0	18.1	18.5	19.9	22.4	46.8	88.2	
6	25.8	33.6	33.6	40.3	49.7	50.2	48.8	43.3	40.7	36.7	47.6	46.7	44.3	40.2	37.0	47.0	49.8	61.2	69.5	65.7	49.5	49.9	50.5	55.0	46.5	69.5	
7	56.5	57.1	58.4	62.6	65.9	65.7	69.6	73.0	68.2	61.2	46.9	36.2	31.2	32.0	38.8	43.3	36.9	54.0	56.3	46.1	47.7	48.6	48.9	52.6	52.4	73.0	
8	58.0	60.7	61.3	61.8	65.4	65.6	68.8	67.4	62.1	47.0	38.8	33.1	26.9	22.2	18.1	16.3	16.6	19.8	21.4	24.3	28.1	32.7	35.6	37.9	41.2	68.8	
9	39.0	45.2	44.0	42.2	42.6	40.6	41.0	39.1	37.6	35.9	34.6	29.0	27.0	28.0	28.3	30.0	33.9	36.6	36.6	37.0	39.1	40.4	40.9	44.3	37.2	45.2	
10	45.1	46.0	46.2	46.8	49.0	48.3	52.9	61.9	67.7	68.6	66.9	58.1	75.5	86.1	91.7	86.9	81.7	83.3	85.3	79.7	81.7	85.8	67.9	68.6	68.0	91.7	
11	69.2	72.5	74.7	72.7	74.2	76.5	75.9	77.2	75.6	66.8	58.4	40.2	52.1	54.7	63.5	50.1	52.3	61.0	72.6	78.5	82.1	81.4	76.5	76.6	68.1	82.1	
12	77.0	74.0	73.8	73.5	74.2	74.7	74.5	73.4	68.4	61.2	48.7	32.0	26.3	24.8	22.3	22.7	23.7	24.2	25.5	27.0	29.2	31.2	34.3	35.3	47.1	77.0	
13	36.7	37.7	38.2	40.4	40.6	42.2	52.0	62.9	79.4	83.3	79.7	73.7	65.4	58.6	55.4	52.9	52.4	52.9	70.7	80.2	83.4	85.7	87.7	78.8	62.1	87.7	
14	61.5	59.9	61.2	60.5	58.3	55.5	54.3	49.8	43.3	38.1	32.8	31.0	29.9	30.4	29.8	29.9	31.4	33.4	34.0	35.9	35.6	35.9	35.0	36.5	41.8	61.5	
15	36.8	38.5	38.5	39.4	40.4	41.0	40.8	39.6	39.3	38.8	35.4	34.3	33.8	35.5	35.9	36.7	37.1	38.3	39.6	42.4	42.9	42.8	43.3	43.7	38.9	43.7	
16	44.3	44.0	45.2	45.6	46.0	46.4	47.8	48.3	46.6	44.1	41.8	39.3	38.8	38.7	37.9	37.5	37.8	38.3	37.4	36.1	35.1	34.1	34.1	40.8	48.3		
17	35.5	39.1	40.0	41.9	42.8	41.4	42.6	42.2	40.5	38.2	34.9	28.4	22.8	19.6	19.5	20.7	21.9	24.6	28.6	33.3	34.2	36.8	43.7	48.5	34.2	48.5	
18	57.7	66.3	72.4	74.3	76.4	82.2	83.6	80.5	77.7	75.3	71.8	70.8	74.6	76.2	75.3	74.7	72.7	70.7	71.2	71.8	75.0	78.0	79.6	80.0	74.5	83.6	
19	80.4	81.3	81.7	81.9	82.9	85.7	87.9	87.5	83.0	74.1	64.3	60.2	53.0	44.9	44.5	45.4	48.1	56.1	61.2	66.8	74.2	82.2	84.9	83.4	70.6	87.9	
20	83.8	84.3	81.5	80.3	79.8	80.7	79.6	80.2	78.0	72.0	67.1	58.0	50.1	45.8	51.6	53.7	56.2	62.7	70.1	75.7	75.7	48.3	52.8	51.0	66.7	84.3	
21	51.0	47.9	48.3	51.1	50.7	52.7	57.0	59.5	58.7	53.0	46.2	40.1	37.7	33.8	30.2	30.3	35.4	38.9	44.6	46.3	50.2	50.2	52.5	54.9	46.7	59.5	
22	54.9	53.1	54.1	57.2	57.6	60.1	61.5	62.4	62.0	60.5	58.4	57.3	54.5	51.4	48.7	45.2	45.5	49.0	54.2	57.8	65.1	69.6	72.1	73.3	57.7	73.3	
23	74.2	78.8	82.7	85.3	87.3	87.4	87.2	87.6	85.6	81.0	81.3	76.8	74.8	72.0	67.0	58.1	51.7	52.3	49.3	51.1	55.9	57.8	59.0	58.8	71.0	87.6	
24	59.9	62.3	64.2	65.3	66.1	69.2	70.1	75.3	78.7	74.1	61.9	54.1	41.8	31.6	33.4	38.8	45.2	49.6	53.8	58.7	61.2	67.2	71.9	72.0	59.4	78.7	
25	72.9	75.0	73.4	78.3	81.8	71.6	77.2	70.8	48.6	45.3	46.5	39.6	38.0	35.8	36.6	37.0	38.2	38.7	38.9	39.5	39.5	38.3	37.7	39.2	51.6	81.8	
26	40.4	40.5	40.4	39.8	39.1	38.9	38.5	38.7	37.5	35.6	33.2	31.2	30.0	33.0	34.0	33.6	40.5	42.5	42.4	41.0	40.6	42.1	41.9	43.4	38.3	43.4	
27	49.0	48.6	46.9	54.5	46.9	50.6	49.0	48.2	44.4	33.2	31.3	30.2	30.5	28.1	28.9	31.2	33.6	34.4	40.2	53.3	47.6	38.4	35.0	35.8	40.4	54.5	
28	36.1	35.9	35.2	35.2	35.1	37.3	39.7	41.2	42.4	41.1	41.7	42.6	45.7	49.8	47.0	49.4	55.2	64.7	72.7	81.2	83.7	86.1	87.8	87.2	53.1	87.8	
29	86.9	87.1	88.3	89.7	88.6	88.9	90.9	91.5	92.3	92.4	91.9	91.3	90.5	88.7	89.7	89.1	90.7	91.3	91.6	91.3	86.9	87.6	87.5	87.4	89.7	92.4	
30	87.0	86.6	87.6	84.1	77.7	84.0	87.6	84.2	85.1	82.6	75.4	69.8	61.9	59.6	56.7	58.5	69.4	76.2	76.6	83.8	84.4	82.7	79.2	78.7	77.5	87.6	
31	78.9	79.2	79.2	80.0	79.7	79.9	78.5	78.7	77.8	74.7	70.8	66.4	60.2	55.9	52.3	56.7	69.3	80.5	83.0	81.3	81.7	80.0	78.1	76.7	74.1	83.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	743	99.9%
MEAN	57.2	58.4	59.1	60.4	61.2	61.9	62.9	63.0	61.1	56.3	51.9	46.8	43.8	42.1	41.9	42.0	43.8	47.8	51.3	53.6	54.1	55.2	56.0	57.1			
MAX	87.0	87.1	88.3	89.7	88.6	88.9	90.9	91.5	92.3	92.4	91.9	91.3	90.5	88.7	91.7	89.1	90.7	91.3	91.6	91.3	86.9	87.6	87.8	87.4	89.7	92.4	



Number of Non-Zero Readings	743
Maximum 1-HR Average	92.4 %
Maximum 24-HR Average	89.7 %
Monthly Calibration Standard Deviation	19.96
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	53.7 %

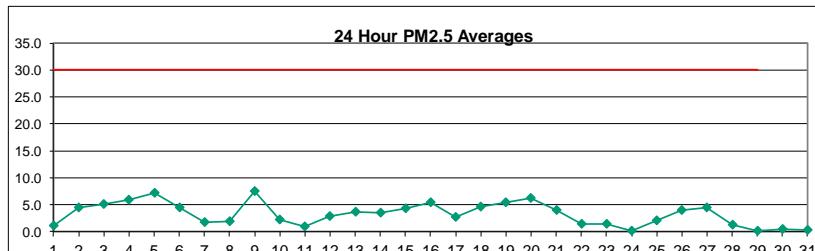
Lagoon Precipitation (mm) – October 2021

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	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	
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	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.3	0.0	0.3	0.3	0.8	1.0	1.0	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.3	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	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.5	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	
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	
NO.	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAX	0.0	0.3	0.0	0.3	0.3	0.8	1.0	1.0	0.8	0.3	0.3	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	



Windridge PM_{2.5} ($\mu\text{g}/\text{m}^3$) – October 2021

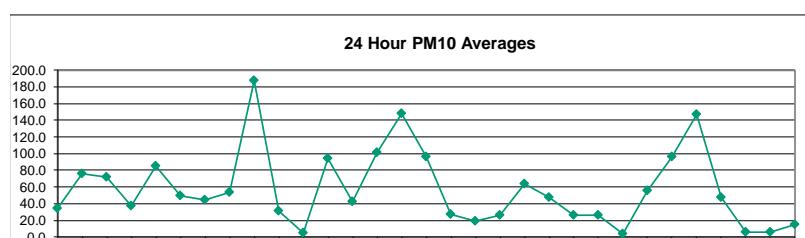
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.0	0.0	0.0	1.0	4.0	3.0	1.0	0.0	0.0	5.0	4.0	0.0	2.0	1.0	0.0	1.0	1.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	1.2	5.0	
2	0.0	0.0	0.0	0.0	0.0	1.0	4.0	8.0	7.0	9.0	16.0	7.0	8.0	9.0	9.0	8.0	8.0	6.0	3.0	3.0	1.0	0.0	1.0	1.0	4.5	16.0	
3	1.0	0.0	0.0	0.0	2.0	5.0	11.0	9.0	7.0	10.0	8.0	7.0	10.0	7.0	3.0	3.0	2.0	2.0	7.0	8.0	5.0	4.0	3.0	7.0	5.0	11.0	
4	6.0	5.0	3.0	0.0	0.0	2.0	5.0	4.0	7.0	5.0	2.0	4.0	5.0	5.0	9.0	16.0	6.0	5.0	5.0	7.0	8.0	6.0	18.0	7.2	13.0		
5	10.0	10.0	8.0	9.0	6.0	5.0	12.0	7.0	5.0	7.0	7.0	11.0	6.0	12.0	13.0	9.0	3.0	0.0	2.0	5.0	7.0	7.0	6.0	6.0	4.4	20.0	
6	5.0	5.0	7.0	6.0	2.0	1.0	4.0	5.0	4.0	5.0	9.0	20.0	8.0	5.0	1.0	4.0	5.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	1.8	9.0	
7	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	2.0	2.0	4.0	3.0	0.0	2.0	0.0	0.0	9.0	6.0	7.0	4.0	1.9	7.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	3.0	3.0	2.0	0.0	2.0	3.0	3.0	7.0	4.0	3.0	6.0	2.0	1.0	2.0	3.0	2.2	7.0
9	4.0	3.0	2.0	0.0	0.0	6.0	7.0	9.0	9.0	6.0	8.0	11.0	9.0	17.0	6.0	8.0	9.0	8.0	7.0	10.0	6.0	14.0	7.0	8.0	7.0	7.5	17.0
10	4.0	1.0	2.0	5.0	7.0	4.0	0.0	0.0	0.0	0.0	0.0	4.0	7.0	6.0	3.0	0.0	1.0	2.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	2.2	7.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	4.0	3.0	2.0	1.0	3.0	2.0	0.0	0.0	2.0	0.0	0.0	1.0	0.0	1.0	4.0
12	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	4.0	5.0	6.0	3.0	1.0	0.0	0.0	5.0	3.0	2.0	3.0	10.0	14.0	9.0	2.9	14.0	
13	4.0	2.0	2.0	1.0	2.0	5.0	6.0	8.0	4.0	2.0	2.0	0.0	4.0	7.0	4.0	1.0	4.0	6.0	4.0	2.0	6.0	6.0	3.0	2.0	3.6	8.0	
14	3.0	2.0	0.0	0.0	3.0	4.0	7.0	6.0	4.0	3.0	3.0	5.0	4.0	3.0	4.0	4.0	3.0	5.0	4.0	4.0	3.0	6.0	5.0	4.0	3.5	7.0	
15	2.0	4.0	2.0	0.0	3.0	7.0	7.0	5.0	2.0	1.0	6.0	9.0	9.0	7.0	6.0	3.0	3.0	4.0	4.0	4.0	2.0	3.0	4.0	5.0	4.3	9.0	
16	2.0	5.0	3.0	1.0	2.0	1.0	3.0	7.0	6.0	5.0	6.0	4.0	2.0	2.0	3.0	7.0	12.0	8.0	13.0	9.0	8.0	6.0	10.0	7.0	5.5	13.0	
17	5.0	4.0	2.0	0.0	0.0	0.0	0.0	2.0	4.0	2.0	1.0	1.0	0.0	1.0	8.0	7.0	9.0	7.0	3.0	1.0	1.0	1.0	2.0	4.0	2.7	9.0	
18	3.0	2.0	4.0	2.0	2.0	4.0	8.0	7.0	5.0	7.0	7.0	8.0	6.0	3.0	2.0	2.0	4.0	3.0	4.0	3.0	2.0	6.0	9.0	7.0	4.6	9.0	
19	4.0	7.0	7.0	5.0	4.0	5.0	4.0	6.0	5.0	5.0	6.0	5.0	3.0	3.0	7.0	6.0	9.0	5.0	4.0	13.0	9.0	4.0	2.0	2.0	5.4	13.0	
20	5.0	10.0	8.0	5.0	4.0	3.0	7.0	5.0	5.0	6.0	6.0	4.0	6.0	6.0	8.0	5.0	9.0	10.0	8.0	4.0	10.0	6.0	3.0	6.2	10.0	4.0	33.0
21	3.0	3.0	33.0	7.0	5.0	1.0	0.0	1.0	4.0	7.0	5.0	1.0	1.0	C	C	6.0	4.0	1.0	0.0	0.0	0.0	0.0	3.0	3.0	1.4	8.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0	0.0	0.0	0.0	5.0	6.0	8.0	6.0	2.0	0.0	0.0	1.0	1.5	13.0		
23	2.0	1.0	0.0	0.0	0.0	1.0	13.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	1.0	1.0	0.0	0.0	2.0	1.0	1.0	0.0	1.0	0.1	2.1	7.0
24	1.0	0.0	0.0	1.0	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	0.0	4.0	8.0	
25	0.0	0.0	0.0	0.0	0.0	1.0	3.0	2.0	1.0	0.0	0.0	3.0	7.0	4.0	3.0	3.0	1.0	1.0	1.0	1.0	2.0	7.0	6.0	4.0	4.5	16.0	
26	5.0	6.0	5.0	6.0	8.0	5.0	7.0	7.0	4.0	3.0	5.0	3.0	0.0	3.0	3.0	3.0	2.0	1.0	7.0	5.0	2.0	3.0	2.0	1.0	2.1	7.0	
27	8.0	6.0	3.0	2.0	3.0	2.0	2.0	4.0	3.0	7.0	10.0	6.0	16.0	9.0	6.0	2.0	2.0	2.0	3.0	4.0	4.0	1.0	2.0	2.0	4.5	16.0	
28	3.0	3.0	4.0	3.0	1.0	0.0	4.0	1.0	1.0	2.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	0.0	0.0	0.0	0.0	3.0	2.0	1.3	4.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0		
30	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0		
31	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	4.0	2.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.4	4.0		
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	742	100.0%		
MEAN	2.6	2.5	3.2	1.8	2.0	2.2	3.7	3.4	2.8	3.6	4.2	4.0	4.4	3.8	3.8	3.7	3.6	3.2	3.5	3.4	3.1	3.2	3.5	3.3	7.5		
MAX	10.0	10.0	33.0	9.0	8.0	7.0	13.0	9.0	7.0	10.0	16.0	20.0	17.0	12.0	13.0	16.0	12.0	9.0	13.0	13.0	14.0	10.0	14.0	18.0	17.4	70.0	



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	521	
Maximum 1-HR Average	33.0 UG/M3	
Maximum 24-HR Average	7.5 UG/M3	
Monthly Calibration Standard Deviation	2.3.5	Operational Time Operational Uptime Monthly Average
		744 HRS 100.0 % 3.3 UG/M3

Windridge PM₁₀ (µg/m³) – October 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	28.0	62.0	36.0	61.0	24.0	119.0	26.0	6.0	21.0	60.0	39.0	30.0	37.0	36.0	53.0	19.0	38.0	47.0	51.0	4.0	4.0	7.0	6.0	4.0	34.1	119.0		
2	2.0	1.0	3.0	4.0	3.0	51.0	105.0	148.0	113.0	231.0	298.0	134.0	114.0	98.0	124.0	68.0	89.0	67.0	57.0	51.0	10.0	22.0	17.0	10.0	2.0	75.8	298.0	
3	29.0	48.0	30.0	39.0	41.0	76.0	164.0	83.0	82.0	226.0	109.0	113.0	113.0	65.0	100.0	70.0	31.0	26.0	87.0	91.0	16.0	29.0	38.0	29.0	3.0	72.3	226.0	
4	28.0	25.0	23.0	22.0	23.0	20.0	45.0	38.0	53.0	25.0	28.0	25.0	34.0	33.0	59.0	65.0	44.0	36.0	47.0	40.0	39.0	35.0	48.0	72.0	37.8	72.0		
5	76.0	55.0	45.0	44.0	44.0	77.0	59.0	74.0	43.0	74.0	56.0	173.0	113.0	231.0	164.0	117.0	42.0	64.0	93.0	72.0	134.0	97.0	41.0	43.0	5.0	84.6	231.0	
6	57.0	38.0	49.0	56.0	17.0	34.0	46.0	41.0	62.0	47.0	50.0	53.0	102.0	87.0	18.0	99.0	62.0	46.0	28.0	59.0	24.0	59.0	36.0	16.0	6.0	49.4	102.0	
7	8.0	4.0	0.0	4.0	3.0	0.0	16.0	13.0	20.0	78.0	49.0	41.0	48.0	18.0	84.0	28.0	78.0	45.0	21.0	83.0	119.0	135.0	154.0	18.0	44.5	154.0		
8	8.0	9.0	17.0	15.0	1.0	65.0	22.0	13.0	47.0	150.0	84.0	44.0	24.0	86.0	108.0	55.0	93.0	92.0	58.0	50.0	27.0	38.0	128.0	64.0	5.0	54.1	150.0	
9	114.0	35.0	103.0	72.0	168.0	128.0	196.0	188.0	107.0	126.0	330.0	220.0	468.0	256.0	294.0	202.0	323.0	127.0	197.0	139.0	225.0	122.0	201.0	151.0	1.0	187.2	468.0	
10	115.0	56.0	79.0	118.0	72.0	23.0	12.0	8.0	60.0	9.0	34.0	44.0	67.0	9.0	7.0	5.0	4.0	6.0	8.0	6.0	2.0	1.0	5.0	3.0	31.4	118.0		
11	1.0	0.0	0.0	0.0	2.0	2.0	3.0	3.0	1.0	14.0	11.0	13.0	9.0	6.0	9.0	9.0	5.0	3.0	3.0	7.0	4.0	2.0	0.0	13.0	5.0	395.0		
12	8.0	3.0	4.0	1.0	0.0	4.0	3.0	5.0	37.0	148.0	130.0	106.0	229.0	53.0	35.0	30.0	54.0	94.0	162.0	77.0	128.0	387.0	395.0	179.0	3.0	42.8	141.0	
13	93.0	40.0	11.0	8.0	31.0	141.0	73.0	94.0	28.0	36.0	16.0	30.0	118.0	58.0	21.0	87.0	18.0	37.0	12.0	8.0	9.0	16.0	19.0	22.0	2.0	101.0	206.0	
14	23.0	33.0	6.0	2.0	26.0	107.0	160.0	200.0	146.0	46.0	122.0	70.0	54.0	38.0	39.0	179.0	137.0	142.0	173.0	151.0	68.0	170.0	206.0	125.0	3.0	147.7	375.0	
15	110.0	103.0	66.0	54.0	75.0	337.0	228.0	83.0	62.0	58.0	264.0	319.0	375.0	106.0	261.0	80.0	109.0	198.0	141.0	114.0	93.0	115.0	112.0	82.0	3.0	95.9	240.0	
16	121.0	96.0	57.0	87.0	43.0	51.0	52.0	85.0	73.0	87.0	81.0	30.0	82.0	106.0	89.0	110.0	189.0	79.0	96.0	138.0	79.0	107.0	240.0	124.0	3.0	27.7	94.0	
17	94.0	64.0	21.0	17.0	21.0	27.0	25.0	19.0	9.0	6.0	5.0	11.0	36.0	63.0	46.0	52.0	54.0	20.0	17.0	6.0	9.0	9.0	13.0	20.0	3.0	19.1	37.0	
18	12.0	17.0	15.0	16.0	14.0	14.0	31.0	22.0	15.0	37.0	36.0	31.0	25.0	22.0	9.0	12.0	13.0	11.0	9.0	13.0	23.0	19.0	20.0	23.0	3.0	26.3	58.0	
19	23.0	16.0	16.0	17.0	13.0	18.0	8.0	12.0	26.0	47.0	58.0	16.0	22.0	24.0	42.0	31.0	33.0	39.0	34.0	40.0	24.0	17.0	21.0	34.0	3.0	63.4	158.0	
20	34.0	64.0	32.0	14.0	14.0	41.0	75.0	63.0	84.0	103.0	94.0	51.0	54.0	49.0	64.0	51.0	37.0	66.0	67.0	60.0	94.0	158.0	84.0	69.0	3.0	47.0	107.0	
21	95.0	79.0	63.0	76.0	67.0	64.0	43.0	74.0	75.0	107.0	56.0	39.0	50.0	C	53.0	39.0	32.0	13.0	14.0	9.0	6.0	18.0	6.0	4.0	3.0	25.9	78.0	
22	11.0	16.0	12.0	15.0	8.0	9.0	6.0	20.0	21.0	78.0	27.0	37.0	25.0	9.0	34.0	67.0	57.0	36.0	37.0	53.0	30.0	7.0	4.0	3.0	26.4	63.0		
23	5.0	4.0	2.0	1.0	1.0	1.0	1.0	4.0	37.0	43.0	30.0	35.0	42.0	56.0	46.0	52.0	38.0	33.0	63.0	43.0	21.0	0.0	28.0	47.0	3.0	56.1	136.0	
24	12.0	7.0	3.0	1.0	0.0	1.0	3.0	3.0	2.0	0.0	0.0	4.0	19.0	0.0	0.0	0.0	3.0	4.0	4.0	5.0	3.0	4.0	4.0	7.0	3.0	47.5	139.0	
25	3.0	8.0	12.0	11.0	13.0	46.0	40.0	12.0	16.0	40.0	74.0	85.0	130.0	136.0	132.0	80.0	56.0	46.0	51.0	57.0	62.0	74.0	90.0	73.0	3.0	62.4	447.0	
26	95.0	71.0	90.0	98.0	84.0	113.0	75.0	91.0	79.0	85.0	112.0	123.0	121.0	82.0	107.0	129.0	41.0	88.0	73.0	93.0	87.0	164.0	122.0	77.0	3.0	6.2	50.0	
27	170.0	247.0	134.0	49.0	60.0	113.0	81.0	108.0	139.0	354.0	237.0	291.0	447.0	254.0	116.0	30.0	42.0	74.0	62.0	76.0	74.0	103.0	139.0	124.0	3.0	47.5	139.0	
28	139.0	130.0	112.0	60.0	70.0	104.0	81.0	26.0	44.0	72.0	46.0	11.0	7.0	10.0	26.0	61.0	27.0	14.0	13.0	8.0	15.0	24.0	14.0	25.0	3.0	6.2	50.0	
29	6.0	4.0	0.0	2.0	4.0	5.0	5.0	2.0	4.0	10.0	10.0	15.0	9.0	9.0	14.0	15.0	4.0	4.0	1.0	0.0	0.0	0.0	0.0	1.0	6.0	3.0	5.5	15.0
30	6.0	3.0	4.0	8.0	6.0	3.0	19.0	23.0	8.0	18.0	47.0	26.0	30.0	26.0	13.0	18.0	14.0	10.0	7.0	16.0	46.0	6.0	5.0	3.0	15.2	47.0		
NO.	31	31	31	31	31	31	31	31	31	30	31	31	31	31	29	31	31	31	31	31	31	31	31	31	741	99.7%		
MEAN	49.5	43.3	33.8	31.4	30.7	58.0	55.0	50.6	50.7	77.9	81.9	71.5	97.1	70.0	69.9	59.6	57.1	50.5	54.6	50.9	47.8	64.4	71.4	47.8	42.0	91.1	433.3	
MAX	170.0	247.0	134.0	118.0	168.0	337.0	228.0	200.0	146.0	354.0	330.0	319.0	468.0	256.0	294.0	202.0	323.0	198.0	197.0	151.0	225.0	387.0	395.0	179.0				



Number of Non-Zero Readings	717
Maximum 1-HR Average	468.0 UG/M3
Maximum 24-HR Average	187.2 UG/M3
Operational Time	742 HRS
Standard Deviation	65.54
Operational Uptime	99.7 %
Monthly Average	57.3 UG/M3

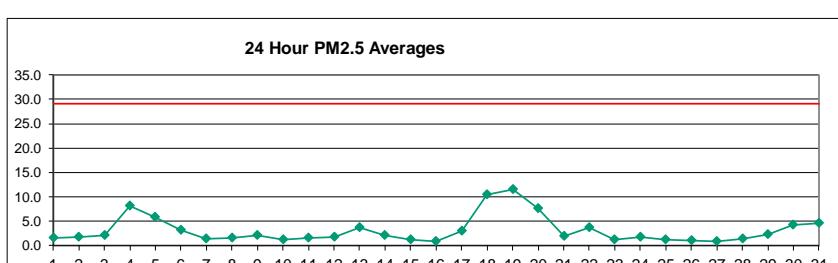
Windridge TSP ($\mu\text{g}/\text{m}^3$) – October 2021

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	51.0	92.0	59.0	110.0	42.0	195.0	42.0	11.0	40.0	99.0	63.0	49.0	52.0	60.0	89.0	28.0	63.0	99.0	98.0	6.0	5.0	13.0	13.0	6.0	57.7	195.0	
2	8.0	7.0	8.0	16.0	10.0	98.0	195.0	280.0	198.0	423.0	524.0	229.0	195.0	151.0	198.0	108.0	125.0	100.0	90.0	93.0	17.0	43.0	26.0	22.0	131.8	524.0	
3	49.0	79.0	48.0	60.0	56.0	107.0	273.0	140.0	127.0	295.0	183.0	179.0	170.0	104.0	185.0	118.0	59.0	134.0	126.0	131.0	15.0	34.0	47.0	44.0	115.1	295.0	
4	49.0	36.0	32.0	30.0	33.0	34.0	68.0	65.0	89.0	52.0	43.0	49.0	54.0	59.0	84.0	91.0	73.0	53.0	65.0	58.0	48.0	49.0	65.0	111.0	57.9	111.0	
5	99.0	77.0	63.0	55.0	75.0	149.0	90.0	126.0	68.0	122.0	101.0	369.0	214.0	342.0	213.0	188.0	73.0	103.0	148.0	125.0	227.0	167.0	77.0	60.0	138.8	369.0	
6	84.0	71.0	68.0	69.0	27.0	47.0	77.0	86.0	118.0	74.0	57.0	65.0	150.0	124.0	21.0	147.0	89.0	69.0	42.0	88.0	29.0	103.0	63.0	19.0	74.5	150.0	
7	10.0	6.0	3.0	3.0	3.0	3.0	24.0	17.0	29.0	112.0	81.0	60.0	79.0	29.0	139.0	50.0	124.0	74.0	30.0	142.0	169.0	210.0	219.0	23.0	68.3	219.0	
8	11.0	21.0	21.0	28.0	3.0	107.0	33.0	16.0	80.0	231.0	121.0	72.0	38.0	138.0	172.0	90.0	145.0	123.0	93.0	83.0	45.0	64.0	163.0	90.0	82.8	231.0	
9	181.0	59.0	150.0	106.0	216.0	243.0	350.0	321.0	172.0	210.0	426.0	351.0	616.0	357.0	381.0	280.0	460.0	212.0	323.0	236.0	318.0	151.0	248.0	230.0	274.9	616.0	
10	187.0	93.0	120.0	157.0	79.0	24.0	14.0	8.0	76.0	17.0	39.0	48.0	73.0	10.0	16.0	1.0	1.0	4.0	7.0	10.0	6.0	6.0	11.0	6.0	42.2	187.0	
11	5.0	3.0	2.0	2.0	4.0	3.0	4.0	4.0	4.0	14.0	13.0	21.0	9.0	7.0	16.0	18.0	5.0	6.0	11.0	16.0	13.0	7.0	2.0	11.0	8.3	21.0	
12	6.0	2.0	5.0	2.0	0.0	1.0	4.0	8.0	49.0	185.0	155.0	156.0	296.0	96.0	59.0	48.0	83.0	161.0	262.0	122.0	181.0	477.0	473.0	214.0	126.9	477.0	
13	100.0	46.0	13.0	7.0	39.0	213.0	103.0	141.0	44.0	58.0	22.0	37.0	144.0	86.0	30.0	134.0	36.0	48.0	22.0	8.0	15.0	24.0	32.0	31.0	59.7	213.0	
14	26.0	38.0	9.0	5.0	45.0	177.0	234.0	302.0	225.0	89.0	217.0	122.0	93.0	65.0	63.0	289.0	222.0	212.0	278.0	237.0	113.0	284.0	293.0	160.0	158.3	302.0	
15	141.0	127.0	104.0	79.0	124.0	475.0	360.0	127.0	106.0	116.0	400.0	512.0	500.0	175.0	403.0	119.0	179.0	276.0	226.0	180.0	122.0	174.0	155.0	103.0	220.1	512.0	
16	160.0	102.0	68.0	110.0	65.0	58.0	70.0	101.0	113.0	106.0	121.0	47.0	102.0	166.0	135.0	165.0	276.0	127.0	146.0	166.0	111.0	116.0	274.0	119.0	126.0	276.0	
17	122.0	73.0	21.0	23.0	29.0	28.0	36.0	27.0	8.0	8.0	6.0	9.0	45.0	86.0	62.0	80.0	78.0	27.0	23.0	10.0	8.0	0.0	0.0	26.0	34.8	122.0	
18	22.0	28.0	25.0	16.0	14.0	14.0	38.0	30.0	25.0	52.0	53.0	43.0	36.0	32.0	23.0	19.0	21.0	13.0	16.0	19.0	28.0	31.0	28.0	27.4	53.0		
19	29.0	22.0	20.0	30.0	18.0	19.0	12.0	10.0	48.0	83.0	89.0	29.0	37.0	35.0	59.0	40.0	43.0	66.0	50.0	56.0	35.0	24.0	27.0	39.0	38.3	89.0	
20	40.0	75.0	39.0	17.0	20.0	53.0	93.0	77.0	107.0	143.0	142.0	76.0	89.0	99.0	96.0	73.0	54.0	109.0	101.0	93.0	164.0	297.0	145.0	125.0	97.0	297.0	
21	180.0	162.0	115.0	114.0	99.0	90.0	70.0	104.0	102.0	167.0	84.0	52.0	C	C	57.0	43.0	26.0	15.0	10.0	6.0	31.0	10.0	12.0	73.8	180.0		
22	15.0	21.0	15.0	31.0	5.0	16.0	3.0	42.0	29.0	110.0	39.0	47.0	34.0	21.0	50.0	99.0	69.0	48.0	55.0	72.0	35.0	8.0	10.0	10.0	81.7	252.0	
23	6.0	4.0	5.0	4.0	1.0	0.0	1.0	1.0	35.0	47.0	33.0	42.0	53.0	75.0	72.0	85.0	64.0	46.0	89.0	50.0	30.0	5.0	36.0	56.0	36.8	110.0	
24	16.0	9.0	7.0	5.0	2.0	1.0	0.0	0.0	4.0	3.0	5.0	12.0	40.0	6.0	10.0	6.0	4.0	10.0	7.0	6.0	5.0	3.0	4.0	6.0	7.1	95.0	
25	4.0	10.0	12.0	15.0	16.0	71.0	37.0	22.0	24.0	46.0	110.0	114.0	217.0	252.0	210.0	110.0	79.0	62.0	74.0	81.0	83.0	88.0	128.0	95.0	80.0	138.9	224.0
26	124.0	96.0	129.0	151.0	117.0	170.0	106.0	133.0	128.0	130.0	187.0	209.0	137.0	118.0	165.0	198.0	75.0	106.0	96.0	146.0	122.0	224.0	176.0	90.0	202.7	602.0	
27	190.0	353.0	151.0	55.0	78.0	154.0	120.0	158.0	196.0	503.0	373.0	366.0	602.0	348.0	166.0	38.0	62.0	109.0	93.0	105.0	92.0	156.0	234.0	163.0	63.7	186.0	
28	186.0	158.0	158.0	70.0	98.0	158.0	114.0	36.0	72.0	111.0	65.0	14.0	15.0	22.0	38.0	74.0	35.0	24.0	11.0	9.0	15.0	17.0	10.0	19.0	14.2	129.0	
29	2.0	7.0	6.0	2.0	6.0	6.0	5.0	5.0	6.0	6.0	8.0	6.0	4.0	6.0	3.0	3.0	13.0	11.0	63.0	11.0	129.0	25.0	8.0	6.9	23.0		
30	4.0	0.0	4.0	7.0	5.0	3.0	6.0	3.0	8.0	13.0	11.0	10.0	18.0	23.0	19.0	14.0	7.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	21.0	70.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	30	30	30	31	31	31	31	31	31	31	31	31	741	100.0%	
MEAN	68.1	60.7	47.8	44.9	43.1	87.9	83.9	78.2	75.7	117.9	123.9	111.0	138.4	104.4	106.7	90.3	86.4	79.4	84.5	78.7	68.4	94.9	96.9	62.5			
MAX	190.0	353.0	158.0	157.0	216.0	475.0	360.0	321.0	225.0	503.0	524.0	512.0	616.0	357.0	403.0	289.0	460.0	276.0	323.0	237.0	318.0	477.0	473.0	230.0			

24 Hour TSP Averages		Number of 24HR Exceedences		10 Proposed Guideline	
		732			
		Maximum 1-HR Average		616.0 UG/M3	
		Maximum 24-HR Average		274.9 UG/M3	
		IZS Calibration Time		744 HRS	
		Down Time		100.0 %	
		Standard Deviation		84.6 UG/M3	
		Opperational Time			
		Opperational Uptime			
		Monthly Average			

West PM_{2.5} ($\mu\text{g}/\text{m}^3$) – October 2021

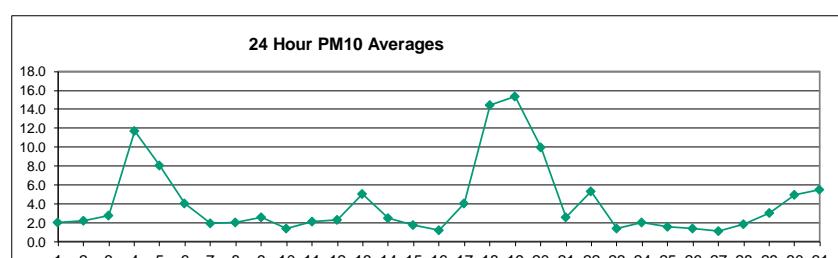
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	1.0	1.0	0.9	0.9	0.9	1.0	2.2	2.3	2.6	2.4	1.9	1.4	1.1	1.3	1.3	1.3	0.9	0.9	0.9	1.2	2.0	2.8	3.6	2.7	1.6	3.6		
2	2.3	2.1	2.1	1.9	1.7	1.9	2.0	1.8	1.8	1.7	1.9	1.8	1.8	2.0	2.2	2.2	1.9	1.4	1.2	1.2	1.2	1.3	1.3	1.3	1.7	2.3		
3	1.3	1.3	1.4	1.3	1.3	1.4	1.4	1.3	1.4	1.1	1.1	1.3	1.1	1.2	1.4	1.4	1.9	1.5	1.5	1.7	2.6	4.0	8.9	7.6	2.1	8.9		
4	7.0	6.8	6.6	6.2	6.5	6.1	7.1	14.3	8.4	7.9	8.9	10.1	7.3	9.8	8.6	9.5	4.9	5.1	8.3	10.3	11.6	9.1	7.2	8.3	8.2	14.3		
5	7.7	8.2	7.9	6.7	6.8	8.7	7.6	8.3	9.1	8.2	6.7	5.4	3.4	3.3	3.0	3.3	3.5	3.9	4.5	4.4	4.6	4.5	5.3	5.8	5.9	9.1		
6	5.9	5.5	5.1	3.9	3.0	2.5	2.2	3.5	3.5	3.5	12.6	12.4	1.9	1.2	1.9	1.5	0.8	0.8	0.5	0.4	0.5	0.4	0.4	0.7	3.1	12.6		
7	0.8	0.8	0.8	0.9	1.0	0.9	1.6	3.5	3.4	2.9	2.4	2.5	2.1	1.9	1.6	1.3	1.0	1.1	0.7	0.8	1.0	0.7	0.6	0.8	1.5	3.5		
8	1.0	0.9	1.0	0.9	0.8	1.0	2.3	2.5	2.4	2.1	2.3	1.9	1.5	1.8	1.6	1.9	1.3	0.9	1.0	1.2	1.5	1.8	1.8	1.7	1.5	2.5		
9	1.7	1.9	1.9	2.2	2.4	2.2	2.5	2.6	3.0	2.3	2.0	2.1	2.4	2.3	2.6	2.2	1.9	1.6	2.2	2.4	2.6	2.1	1.5	1.1	2.2	3.0		
10	0.7	0.4	0.3	0.3	0.3	0.7	0.5	1.1	0.6	0.6	0.8	0.6	0.6	1.6	3.6	1.9	2.3	1.3	1.6	2.5	1.5	2.2	1.5	0.9	1.2	3.6		
11	1.2	0.9	0.7	0.9	1.0	1.0	1.0	0.9	1.2	1.0	1.1	1.3	1.9	0.9	3.0	1.2	2.5	1.8	2.4	2.3	2.5	2.6	2.6	3.1	1.6	3.1		
12	2.3	1.9	1.2	1.2	1.4	1.2	1.5	2.4	2.6	2.8	3.6	2.7	1.3	1.9	2.1	1.9	1.2	0.9	1.1	0.9	1.1	1.5	1.8	1.5	1.7	3.6		
13	1.5	1.7	1.6	1.5	1.6	2.5	4.5	4.9	3.9	3.9	4.0	5.3	4.4	4.5	5.3	4.1	3.5	3.7	3.8	5.0	5.1	5.3	4.7	3.7	3.8	5.3		
14	2.5	1.9	2.4	2.2	2.1	2.2	2.5	2.7	2.7	2.6	2.5	2.1	2.4	2.0	2.4	2.3	1.8	1.5	1.6	1.6	1.3	1.1	1.0	1.0	2.0	2.7		
15	1.2	1.3	1.3	1.5	1.5	1.6	1.7	2.8	2.3	2.5	1.9	2.1	1.9	1.4	1.2	1.2	1.1	0.5	0.4	0.5	0.5	0.3	0.2	0.3	1.3	2.8		
16	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.7	0.6	0.8	1.3	1.1	1.2	0.9	1.3	1.0	1.2	1.2	1.4	1.6	1.9	2.1	2.1	0.9	0.9	2.1		
17	2.2	2.5	2.5	2.6	2.8	3.0	3.5	3.4	3.2	3.5	3.0	2.9	2.8	2.8	2.6	2.9	2.6	2.7	2.7	3.1	3.5	3.6	5.0	3.0	5.0	10.5	17.5	
18	7.5	7.9	9.6	12.2	10.8	9.5	7.9	9.8	10.4	12.1	12.2	11.6	11.4	8.5	9.0	9.4	8.5	8.9	9.6	8.8	10.5	13.1	15.5	17.5	11.5	19.6		
19	18.7	19.6	16.3	14.8	15.0	15.7	14.4	12.5	12.8	12.0	10.7	9.7	9.5	9.0	8.9	9.0	8.9	8.5	8.5	8.5	8.1	8.4	8.3	9.4	7.5	11.4		
20	9.5	11.4	11.3	9.7	9.6	9.7	9.7	9.1	8.7	8.2	7.1	6.7	8.1	8.3	8.5	10.5	9.1	7.3	5.3	4.2	2.5	3.0	2.0	1.3	1.9	4.1		
21	1.1	0.8	0.8	1.0	1.3	1.1	2.0	3.9	4.1	4.0	3.5	2.4	2.2	2.0	2.1	1.9	1.2	1.2	1.4	1.3	1.3	1.6	1.7	1.6	3.8	10.3		
22	1.4	1.3	1.2	1.5	1.5	1.4	1.7	2.7	3.5	3.5	4.6	6.1	3.2	4.2	3.2	2.8	7.4	10.3	9.7	8.5	2.7	2.6	3.1	2.9	1.2	3.2		
23	3.1	3.2	3.1	2.6	2.1	1.2	1.0	1.1	0.9	0.8	0.5	0.4	0.4	0.3	0.3	0.5	0.5	0.6	0.7	1.1	1.0	1.1	1.2	1.2	1.2	3.2	3.2	
24	1.5	1.5	1.6	1.6	1.6	1.8	2.0	2.4	2.6	3.1	2.6	2.1	1.1	0.7	1.1	1.5	1.8	1.8	1.2	1.4	0.7	P	1.4	1.6	1.7	3.1		
25	1.8	2.0	2.0	1.8	2.2	1.6	0.5	0.5	0.8	1.4	1.3	0.9	1.6	1.2	1.4	1.0	0.6	0.9	0.9	1.1	0.8	0.7	0.7	1.2	2.2	1.1	1.7	
26	0.9	0.6	0.8	0.9	0.7	0.8	1.6	1.7	1.5	1.6	1.4	1.5	1.2	1.5	1.6	1.2	1.0	0.8	0.8	0.8	0.6	0.7	0.8	0.7	0.8	1.7		
27	0.8	0.7	0.6	0.5	0.5	0.5	1.0	1.2	1.2	0.9	1.3	1.2	1.2	1.2	1.8	1.5	0.8	0.4	0.4	0.6	0.4	0.3	0.3	0.4	0.8	1.8		
28	0.5	0.5	0.6	0.6	0.6	0.7	2.3	2.3	1.9	1.6	2.0	2.0	2.6	2.3	2.7	1.3	1.1	1.1	1.1	1.0	1.1	1.0	1.1	0.9	1.4	2.7		
29	0.9	1.0	0.7	0.8	2.7	0.9	0.6	1.5	1.4	2.7	3.8	2.3	2.9	2.2	1.6	1.8	1.4	0.9	1.7	5.4	1.7	5.2	4.9	5.8	2.3	5.8	2.3	5.8
30	7.8	5.3	2.6	5.1	7.5	11.1	5.5	6.3	4.5	4.3	4.4	3.5	2.7	4.4	4.8	3.0	2.7	2.1	2.2	1.9	2.1	1.9	2.0	2.2	4.2	11.1	11.1	
31	2.2	1.9	1.9	1.8	2.2	1.9	2.0	1.9	3.4	2.8	3.3	3.3	4.7	7.5	10.1	8.0	7.8	7.5	8.2	7.6	6.6	4.8	4.5	3.4	4.6	10.1	10.1	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	743	100%			
MEAN	3.2	3.1	2.9	2.9	3.0	3.1	3.1	3.7	3.6	3.5	3.8	3.6	2.9	3.0	3.3	3.1	2.8	2.7	2.8	3.0	2.7	3.0	3.1	3.1				
MAX	18.7	19.6	16.3	14.8	15.0	15.7	14.4	14.3	12.8	12.1	12.6	12.4	11.4	9.8	10.1	10.5	9.1	10.3	9.7	10.3	11.6	13.1	15.5	17.5				



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	743	
Maximum 1-HR Average	19.6 UG/M3	
Maximum 24-HR Average	11.5 UG/M3	
Izs Calibration Time		
Down Time	0	
Standard Deviation	3.189	
Operational Time		
Operational Uptime		
Monthly Average		
		743 HRS
		99.9 %
		3.1 UG/M3

West PM₁₀ ($\mu\text{g}/\text{m}^3$) – October 2021

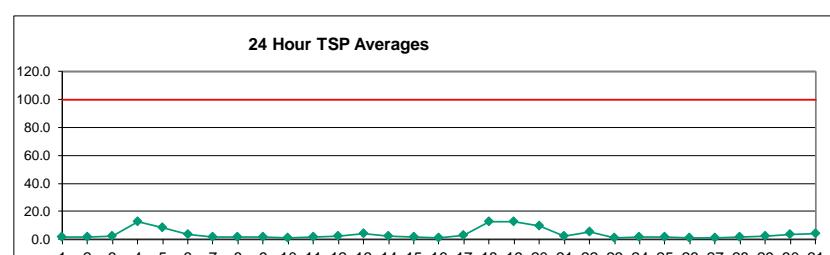
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.1	1.1	1.0	1.0	1.1	1.2	3.1	3.3	3.9	3.4	2.7	1.8	1.5	1.8	1.8	1.7	1.1	1.1	1.0	1.4	2.5	3.5	4.4	3.3	2.1	4.4
2	2.8	2.6	2.6	2.2	2.1	2.4	2.6	2.3	2.3	2.2	2.5	2.4	2.4	2.8	3.2	3.1	2.6	1.8	1.4	1.4	1.4	1.5	1.5	1.5	2.2	3.2
3	1.4	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.8	1.4	1.4	1.7	1.5	1.5	1.8	1.8	2.5	1.8	2.0	2.1	3.4	5.7	13.4	11.5	2.8	13.4
4	10.4	10.2	9.9	9.2	9.7	9.2	10.2	20.0	11.7	10.3	11.1	12.6	9.3	14.6	12.8	13.6	6.6	7.4	12.4	15.4	17.4	13.7	10.8	12.5	11.7	20.0
5	9.8	10.0	9.7	8.3	8.8	12.6	10.1	11.8	13.3	12.2	10.0	8.1	4.9	4.7	4.2	4.7	5.0	5.5	6.3	6.1	6.5	6.2	7.4	7.8	8.1	13.3
6	7.8	7.0	6.5	4.9	3.5	3.0	2.5	4.6	4.6	4.6	17.0	16.1	2.5	1.6	2.6	2.2	1.1	1.1	0.6	0.5	0.6	0.4	0.5	0.9	4.0	17.0
7	0.9	0.9	1.0	1.1	1.2	1.0	2.2	5.2	5.1	4.3	3.4	3.6	2.9	2.5	2.3	1.8	1.4	1.4	0.8	0.9	1.3	0.8	0.7	0.9	2.0	5.2
8	1.0	1.0	1.1	1.0	0.9	1.2	3.3	3.6	3.5	3.0	3.4	2.8	2.1	2.6	2.2	2.8	1.8	1.2	1.2	1.4	1.8	2.2	2.1	2.0	2.0	3.6
9	2.0	2.2	2.3	2.7	3.0	2.7	3.3	3.5	3.9	3.0	2.4	2.4	3.0	2.8	3.3	2.7	2.1	1.8	2.5	2.7	3.2	2.4	1.7	1.3	2.6	3.9
10	0.8	0.4	0.4	0.4	0.9	0.6	1.4	0.8	0.8	1.1	0.7	0.7	2.3	5.0	2.3	2.7	1.4	1.8	2.8	1.7	2.4	1.6	1.0	1.4	5.0	1.4
11	1.3	0.9	0.8	1.0	1.1	1.1	1.1	1.0	1.5	1.3	1.4	1.7	2.7	1.2	4.4	1.6	3.6	2.5	3.3	3.2	3.5	3.7	3.7	4.4	2.2	4.4
12	2.7	2.2	1.3	1.3	1.7	1.3	1.8	3.3	3.6	4.1	5.4	3.9	1.8	2.7	3.0	2.7	1.6	1.1	1.3	1.0	1.2	1.9	2.1	1.7	2.3	5.4
13	1.7	2.2	1.8	1.6	1.8	3.2	6.5	7.2	5.3	5.1	5.2	7.5	5.9	6.2	7.5	5.5	4.2	4.4	4.6	7.2	7.5	7.7	6.2	4.2	5.0	7.7
14	2.6	2.0	2.4	2.3	2.1	2.3	3.1	3.6	3.6	3.6	3.5	3.0	3.4	2.9	3.5	3.2	2.3	1.7	1.9	1.7	1.4	1.2	1.1	1.0	2.5	3.6
15	1.3	1.4	1.4	1.7	1.8	1.9	2.1	4.0	3.3	3.7	2.7	3.1	2.7	1.9	1.7	1.8	1.5	0.7	0.4	0.6	0.6	0.4	0.3	0.4	1.7	4.0
16	0.3	0.2	0.2	0.4	0.3	0.2	0.5	0.9	0.9	1.1	1.8	1.5	1.7	1.3	1.9	1.3	1.6	1.5	1.8	2.0	2.2	2.5	2.6	1.2	2.6	4.0
17	2.8	3.1	3.1	3.2	3.5	3.9	4.8	4.6	4.4	4.9	4.1	4.1	3.9	4.0	3.7	4.1	3.5	3.5	3.6	4.2	4.8	4.9	7.1	4.0	7.1	14.4
18	11.2	11.8	14.5	18.3	16.1	14.3	11.0	13.0	13.7	16.3	16.6	15.7	15.4	11.4	12.1	12.7	10.4	11.2	11.6	10.9	14.3	18.0	21.3	24.9	15.4	28.6
19	26.7	28.6	23.4	20.5	19.7	20.3	17.8	16.0	16.7	16.4	14.4	12.8	13.0	12.0	11.6	11.2	11.0	11.1	11.3	10.4	10.6	10.4	12.4	9.9	16.1	26.7
20	11.7	15.8	16.1	12.8	12.8	13.4	13.4	12.5	10.9	10.0	8.8	8.8	11.8	12.0	10.9	12.9	11.2	9.3	7.0	5.5	3.1	3.9	2.4	1.5	2.6	6.1
21	1.3	0.9	0.9	1.2	1.5	1.1	2.7	5.7	6.1	5.9	5.1	3.5	3.2	2.9	3.0	2.7	1.6	1.6	1.8	1.7	1.5	1.9	1.9	1.8	5.4	15.4
22	1.6	1.6	1.5	1.9	1.8	1.6	2.1	3.8	5.2	5.2	6.9	9.0	4.8	6.2	4.7	4.0	11.0	15.4	14.5	12.7	3.5	3.0	3.5	3.2	1.4	3.6
23	3.4	3.6	3.4	2.8	2.4	1.3	1.1	1.3	1.1	1.0	0.7	0.4	0.5	0.3	0.3	0.7	0.7	0.8	0.8	1.3	1.3	1.4	1.5	1.6	1.6	3.0
24	1.9	1.7	1.8	1.8	1.8	2.0	2.3	2.7	3.2	4.1	3.3	2.7	1.4	0.8	1.4	1.9	2.3	2.3	1.5	1.7	0.8	P	1.8	2.3	2.1	4.1
25	2.5	2.9	2.8	2.4	3.0	1.9	0.6	0.6	1.1	2.0	1.8	1.3	2.3	1.8	1.9	1.4	0.8	1.2	1.1	1.2	1.5	1.0	0.8	0.8	1.6	3.0
26	1.0	0.7	0.8	1.0	0.8	1.0	2.2	2.5	2.2	2.4	2.0	2.1	1.7	2.2	2.3	1.7	1.3	0.9	0.8	0.9	0.7	0.8	0.8	0.8	1.4	2.5
27	0.9	0.8	0.7	0.5	0.6	0.6	1.4	1.7	1.7	1.2	1.9	1.7	1.8	1.7	2.7	2.2	1.1	0.5	0.5	0.8	0.5	0.4	0.4	0.4	1.1	2.7
28	0.5	0.6	0.7	0.6	0.6	0.9	3.2	3.4	3.2	2.6	2.3	3.0	2.8	3.8	3.3	4.0	1.8	1.5	1.3	1.1	1.2	1.0	1.1	1.0	1.9	4.0
29	1.0	1.0	0.8	0.8	3.4	1.0	0.8	2.1	1.9	3.9	5.6	3.2	4.2	3.0	1.9	2.4	1.9	1.0	2.3	7.2	2.0	7.0	6.9	8.1	3.1	8.1
30	10.0	6.1	3.1	5.7	8.2	11.8	5.7	6.5	4.9	5.4	5.6	4.6	3.3	6.2	6.9	4.1	3.7	2.7	3.0	2.3	2.6	2.1	2.2	2.3	4.9	11.8
31	2.3	2.0	2.0	1.9	2.7	2.1	2.4	2.2	4.4	3.7	4.5	4.4	6.3	9.7	12.8	9.5	9.5	8.9	10.5	9.0	7.6	5.1	4.8	3.6	5.5	12.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	743	100%	
MEAN	4.1	4.1	3.9	3.7	3.9	4.0	4.0	5.0	4.8	4.8	5.1	4.9	4.0	4.3	4.5	4.1	3.7	3.5	3.7	3.9	3.6	3.9	4.2	4.2		
MAX	26.7	28.6	23.4	20.5	19.7	20.3	17.8	20.0	16.7	16.4	17.0	16.1	15.4	14.6	12.8	13.6	11.2	15.4	14.5	15.4	17.4	18.0	21.3	24.9		



Number of Non-Zero Readings	743
Maximum 1-HR Average	28.6 UG/M3
Maximum 24-HR Average	15.4 UG/M3
Izs Calibration Time	
Down Time	0
Standard Deviation	4.4
OpperatioEl Time	
OpperatioEl Uptime	
Monthly Average	4.2 UG/M3
743 HRS	
99.9 %	
4.2 UG/M3	

West TSP ($\mu\text{g}/\text{m}^3$) – October 2021

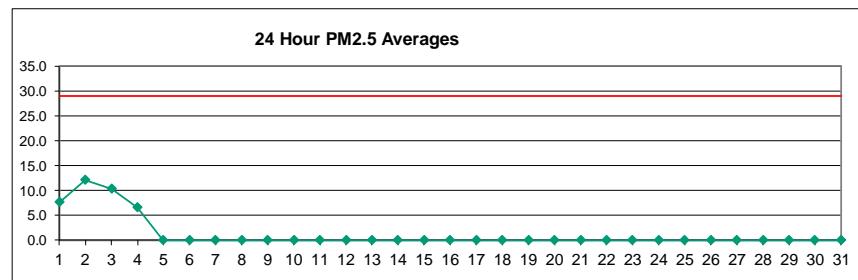
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.7	0.8	0.7	0.7	0.7	0.8	2.9	3.1	3.9	3.4	2.7	1.8	1.3	1.7	1.6	1.5	0.8	0.8	0.7	1.0	1.8	2.6	3.1	2.3	1.7	3.9
2	1.9	1.8	1.8	1.5	1.4	1.8	2.1	1.9	1.9	1.8	2.0	1.9	1.9	2.6	3.1	3.0	2.4	1.4	1.0	1.0	0.9	1.0	1.0	1.0	1.7	3.1
3	1.0	1.0	1.0	1.1	1.0	1.1	1.1	1.2	1.3	1.0	1.1	1.5	1.1	1.1	1.3	1.3	2.1	1.3	1.4	1.5	2.7	5.9	15.5	13.1	2.6	15.5
4	11.5	10.7	9.9	9.3	9.8	9.0	10.3	17.0	13.2	11.8	12.9	14.3	10.7	16.7	14.6	15.7	7.2	7.9	13.7	17.6	19.9	15.4	11.9	14.0	12.7	19.9
5	11.4	11.6	11.2	9.5	9.7	12.0	10.6	11.5	14.6	13.4	10.8	8.8	4.8	4.4	3.9	4.4	4.5	5.0	5.6	5.1	5.6	5.0	6.1	5.7	8.1	14.6
6	5.7	5.0	4.6	3.5	2.4	2.1	1.8	4.0	4.0	3.6	16.4	16.6	2.1	1.4	2.6	2.1	0.9	0.9	0.4	0.3	0.4	0.3	0.3	0.6	3.4	16.6
7	0.6	0.6	0.7	0.7	0.8	0.7	2.0	5.7	5.6	4.5	3.4	3.7	2.7	2.4	2.1	1.7	1.1	1.1	0.5	0.6	1.2	0.6	0.5	0.6	1.8	5.7
8	0.7	0.7	0.8	0.8	0.6	0.8	3.2	3.5	3.6	2.9	3.5	2.8	2.0	2.6	2.1	2.8	1.6	0.9	0.8	1.0	1.3	1.7	1.5	1.4	1.8	3.6
9	1.5	1.5	1.6	2.1	2.3	2.0	2.7	2.8	3.1	2.3	1.8	1.9	2.4	2.1	2.7	2.0	1.4	1.2	1.7	1.9	2.5	1.8	1.1	0.9	2.0	3.1
10	0.6	0.3	0.2	0.3	0.2	0.7	0.4	1.0	0.6	0.6	0.8	0.5	0.6	2.2	4.5	1.6	1.9	0.9	1.2	1.9	1.1	1.6	1.1	0.7	1.1	4.5
11	0.9	0.6	0.5	0.6	0.7	0.7	0.7	0.7	1.2	1.0	1.1	1.5	2.7	1.0	4.8	1.4	3.5	2.3	2.7	2.6	3.0	3.1	3.0	4.2	1.9	4.8
12	1.8	1.5	0.9	0.9	1.2	0.9	1.4	3.1	3.5	4.2	6.0	4.1	1.7	2.7	3.1	2.7	1.4	0.8	1.0	0.7	0.9	1.5	1.5	1.2	2.0	6.0
13	1.2	1.7	1.3	1.1	1.2	2.7	6.3	7.3	4.8	4.1	4.1	7.3	5.5	5.7	7.3	4.9	3.3	3.3	3.4	6.5	6.5	6.1	4.4	2.8	4.3	7.3
14	1.7	1.3	1.6	1.5	1.4	1.5	2.6	3.1	3.3	3.5	3.4	2.8	3.5	2.8	3.5	3.1	1.9	1.2	1.3	1.2	0.9	0.9	0.7	0.7	2.1	3.5
15	0.9	1.0	0.9	1.2	1.3	1.4	1.6	3.9	3.3	3.7	2.8	3.3	2.7	1.9	1.7	1.7	1.5	0.5	0.3	0.4	0.5	0.3	0.2	0.3	1.6	3.9
16	0.2	0.2	0.1	0.1	0.4	0.2	0.1	0.4	0.8	0.8	0.9	1.6	1.4	1.6	1.2	1.7	1.1	1.3	1.2	1.3	1.3	1.5	1.8	1.8	1.0	1.8
17	1.9	2.1	2.1	2.1	2.3	2.4	3.0	4.0	3.7	3.6	4.2	3.3	3.6	3.4	3.7	3.2	3.7	2.8	2.7	2.8	3.3	3.7	3.7	6.4	3.2	6.4
18	12.0	12.7	15.9	20.2	16.6	14.1	9.8	12.7	13.3	15.2	15.0	15.0	14.7	9.8	9.7	10.5	7.4	8.0	8.0	7.5	11.5	13.8	15.1	18.4	12.8	20.2
19	20.0	22.5	17.6	14.4	13.1	13.3	11.7	11.3	12.6	14.0	12.3	11.0	10.9	10.8	11.6	12.7	12.3	11.3	11.2	10.9	11.0	11.4	11.4	12.0	13.0	22.5
20	13.6	13.1	11.2	12.2	11.7	9.4	10.0	10.6	12.2	11.6	10.0	10.0	12.6	13.3	12.2	15.0	13.0	10.3	6.1	4.8	2.4	3.2	1.7	1.1	9.7	15.0
21	0.9	0.6	0.8	1.0	0.8	2.4	5.9	6.4	6.3	5.5	3.7	3.1	2.9	3.2	2.7	1.4	1.3	1.5	1.3	1.1	1.3	1.4	1.2	2.4	2.4	6.4
22	1.0	1.2	1.1	1.5	1.3	1.1	1.7	3.7	5.7	5.6	7.7	10.2	5.1	7.0	5.1	4.0	12.4	17.8	16.7	14.5	2.7	2.0	2.3	2.1	5.6	17.8
23	2.2	2.4	2.2	1.8	1.6	0.9	0.7	0.9	0.8	0.7	0.5	0.3	0.3	0.2	0.2	0.6	0.5	0.6	0.6	0.9	0.9	1.0	1.0	1.0	0.9	2.4
24	1.4	1.2	1.2	1.2	1.3	1.5	1.8	2.2	2.9	2.5	2.1	1.0	0.6	1.2	1.5	1.8	1.7	1.1	1.3	0.6	P	1.3	1.9	1.5	2.9	
25	2.2	2.7	2.3	1.8	2.4	1.3	0.5	0.4	1.1	2.0	1.8	1.2	2.4	1.8	1.9	1.3	0.6	1.1	0.9	1.0	1.3	0.9	0.6	0.6	1.4	2.7
26	0.7	0.5	0.5	0.7	0.5	0.7	2.1	2.4	2.2	2.4	2.0	2.1	1.6	2.2	2.3	1.6	1.1	0.7	0.6	0.6	0.5	0.5	0.5	0.5	1.2	2.4
27	0.6	0.5	0.5	0.4	0.4	0.5	1.4	1.7	1.8	1.2	2.0	1.7	1.7	2.8	2.2	2.1	1.1	0.4	0.4	0.6	0.4	0.3	0.2	0.3	1.0	2.8
28	0.4	0.4	0.5	0.4	0.4	0.6	3.3	3.5	3.3	2.5	2.3	3.1	2.9	4.1	3.4	4.3	1.5	1.2	0.9	0.7	0.8	0.7	0.7	0.6	1.8	4.3
29	0.6	0.7	0.5	0.6	2.3	0.7	0.6	1.6	1.6	3.7	5.5	2.9	3.8	2.7	1.4	2.0	1.4	0.7	1.8	5.7	1.5	6.2	5.6	6.3	2.5	6.3
30	6.9	4.1	2.2	3.8	5.4	7.6	3.7	4.2	3.2	4.1	4.2	3.5	2.4	6.4	7.1	3.9	3.3	2.0	2.3	1.6	2.0	1.4	1.4	1.5	3.7	7.6
31	1.5	1.3	1.3	1.2	1.9	1.5	1.7	1.5	3.9	2.9	3.8	3.7	5.5	8.2	10.1	7.3	7.3	6.3	7.1	6.0	5.0	3.3	3.1	2.3	4.1	10.1
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	743	100%	
MEAN	3.5	3.4	3.1	3.2	3.1	3.1	3.4	4.4	4.6	4.6	4.9	4.8	3.8	4.1	4.4	4.0	3.4	3.1	3.2	3.4	3.1	3.3	3.3	3.5		
MAX	20.0	22.5	17.6	20.2	16.6	14.1	11.7	17.0	14.6	15.2	16.4	16.6	14.7	16.7	14.6	15.7	13.0	17.8	16.7	17.6	19.9	15.4	15.5	18.4		



Number of 24HR Exceedences		0 Proposed Guideline
Number of Non-Zero Readings		743
Maximum 1-HR Average		22.5 $\mu\text{g}/\text{m}^3$
Maximum 24-HR Average		13.0 $\mu\text{g}/\text{m}^3$
IZS Calibration Time		
Down Time		0
Standard Deviation		4.203
Operational Time		743 HRS
Operational Uptime		99.9 %
Monthly Average		3.7 $\mu\text{g}/\text{m}^3$

Berm PM_{2.5} ($\mu\text{g}/\text{m}^3$) – October 2021

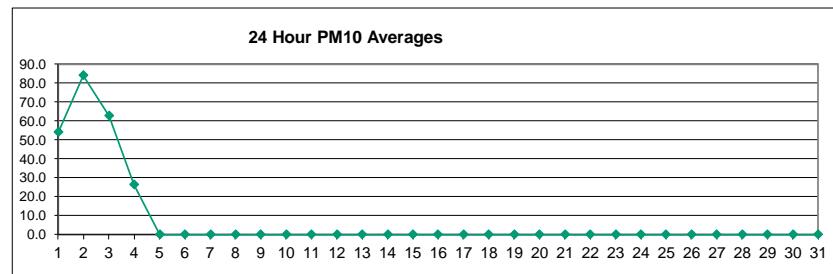
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.4	6.9	3.0	6.1	2.3	20.1	3.1	1.5	2.7	12.5	9.8	7.7	8.8	14.1	23.5	19.0	12.4	14.5	4.9	0.8	0.8	1.4	1.6	1.3	7.7	23.5
2	1.3	1.2	1.1	1.2	1.0	7.5	11.3	21.3	12.6	23.4	31.8	38.7	21.9	22.3	22.2	27.1	12.6	5.4	7.5	6.8	2.6	3.7	3.1	2.2	12.1	38.7
3	2.7	3.9	2.7	4.1	5.9	5.0	16.6	10.4	10.4	27.8	27.7	46.3	13.0	10.0	11.0	5.9	5.0	3.4	9.9	8.8	1.9	3.4	5.0	4.8	10.2	46.3
4	4.9	4.6	3.4	3.1	2.8	3.0	3.4	4.1	8.8	6.1	5.9	6.6	7.9	8.9	8.8	20.9	G	G	G	G	G	G	5.3	10.0	6.6	20.9
5	10.6	8.3	7.7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
31	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
NO.	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	4	4	93	13%
MEAN	5.0	5.0	3.6	3.6	3.0	8.9	8.6	9.3	8.6	17.5	18.8	24.8	12.9	13.8	16.4	18.2	10.0	7.8	7.4	5.5	1.8	2.8	3.8	4.6	-	-
MAX	10.6	8.3	7.7	6.1	5.9	20.1	16.6	21.3	12.6	27.8	31.8	46.3	21.9	22.3	23.5	27.1	12.6	14.5	9.9	8.8	2.6	3.7	5.3	10.0	-	-



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	93	
Maximum 1-HR Average	46.3 UG/M3	
Maximum 24-HR Average	12.1 UG/M3	
Monthly Calibration Standard Deviation	8.8	Operational Time Operational Uptime Monthly Average
		93 HRS 12.5 % 9.3 UG/M3

Berm PM₁₀ ($\mu\text{g}/\text{m}^3$) – October 2021

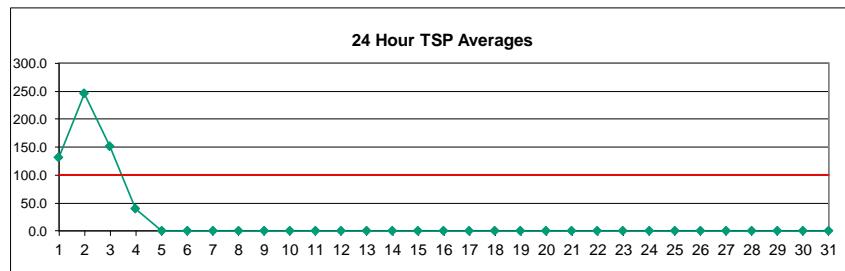
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	30.4	50.2	16.4	47.0	11.1	175.3	20.8	6.3	19.4	99.5	70.0	58.6	62.5	98.4	154.1	113.2	92.8	122.2	36.1	2.7	1.6	4.6	4.1	2.3	54.2	175.3	
2	3.1	2.2	2.3	2.8	1.7	49.1	87.1	166.3	96.1	189.7	244.2	260.9	152.6	143.1	157.4	178.2	86.5	35.3	52.5	44.4	9.5	21.2	20.7	10.2	84.0	260.9	
3	13.5	20.7	11.6	25.5	30.9	31.7	99.8	60.9	70.0	185.0	170.0	248.4	86.9	80.5	100.6	41.0	37.5	16.9	61.2	47.6	5.5	15.0	21.8	18.0	62.5	248.4	
4	17.8	15.5	10.7	6.4	4.1	4.3	4.8	5.9	31.0	23.0	27.6	20.3	36.7	50.2	43.1	113.0	G	G	G	G	G	G	G	22.1	33.4	26.1	113.0
5	33.8	28.4	22.7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
31	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-		
NO.	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	4	4	93	13%	
MEAN	19.7	23.4	12.8	20.4	12.0	65.1	53.1	59.9	54.1	124.3	128.0	147.1	84.7	93.1	113.8	111.3	72.3	58.1	50.0	31.6	5.5	13.6	17.2	16.0			
MAX	33.8	50.2	22.7	47.0	30.9	175.3	99.8	166.3	96.1	189.7	244.2	260.9	152.6	143.1	157.4	178.2	92.8	122.2	61.2	47.6	9.5	21.2	22.1	33.4			



Number of Non-Zero Readings		93
Maximum 1-HR Average	260.9 UG/M3	
Maximum 24-HR Average	84.0 UG/M3	
Monthly Calibration Standard Deviation	61.98	Operational Time Operational Uptime Monthly Average
		93 HRS 12.5 % 57.8 UG/M3

Berm TSP ($\mu\text{g}/\text{m}^3$) – October 2021

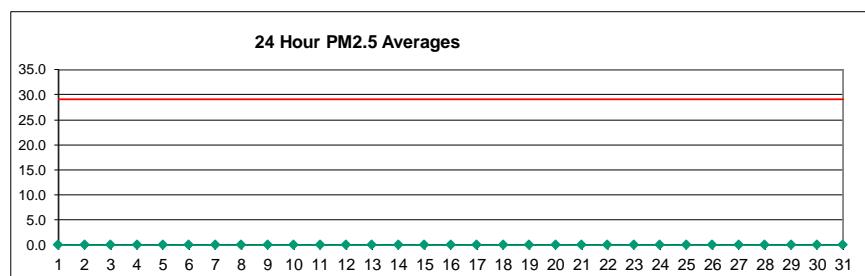
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	72.0	114.0	36.4	125.3	23.7	443.7	55.1	13.8	63.1	282.0	180.7	145.4	164.5	221.2	311.1	209.6	235.8	306.5	95.2	5.2	2.7	24.6	8.6	2.2	130.9	443.7	
2	3.6	3.9	3.1	4.7	1.3	173.8	283.1	503.0	327.6	629.2	761.4	660.9	416.9	389.9	456.2	451.2	250.3	107.0	155.2	136.6	17.6	74.6	58.8	26.9	245.7	761.4	
3	43.5	44.2	21.9	60.1	67.8	88.0	232.1	162.1	212.2	466.8	358.2	430.4	239.9	252.1	317.3	138.4	137.3	39.0	121.2	82.1	6.1	31.1	41.1	29.6	150.9	466.8	
4	25.5	27.9	16.0	6.9	3.5	3.6	4.2	5.1	44.7	33.9	53.2	29.2	63.3	113.9	66.0	152.1	G	G	G	G	G	G	G	29.9	36.3	39.7	152.1
5	32.3	39.4	21.5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
31	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
NO.	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	4	4	93	13%	
MEAN	35.4	45.9	19.8	49.3	24.1	177.3	143.6	171.0	161.9	353.0	338.4	316.5	221.2	244.3	287.6	237.8	207.8	150.9	123.9	74.6	8.8	43.4	34.6	23.7			
MAX	72.0	114.0	36.4	125.3	67.8	443.7	283.1	503.0	327.6	629.2	761.4	660.9	416.9	389.9	456.2	451.2	250.3	306.5	155.2	136.6	17.6	74.6	58.8	36.3			



Number of 24HR Exceedances	3	Proposed Guideline
Number of Non-Zero Readings	93	
Maximum 1-HR Average	761.4 $\mu\text{g}/\text{m}^3$	
Maximum 24-HR Average	245.7 $\mu\text{g}/\text{m}^3$	
Izs Calibration Time	0	Operational Time
Monthly Calibration	167.1	Operational Uptime
Standard Deviation		93 HRS
		12.5 %
		144.8 $\mu\text{g}/\text{m}^3$

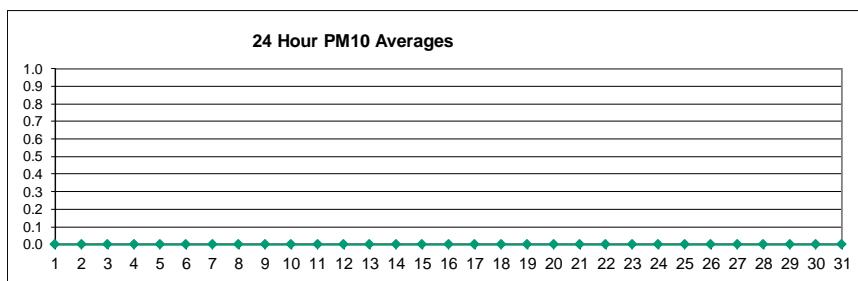
Entrance PM_{2.5} ($\mu\text{g}/\text{m}^3$) – October 2021

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	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
31	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	
MEAN	#DIV/0!	0	0%																								
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	0	
Maximum 1-HR Average	0.0 UG/M3	
Maximum 24-HR Average	0.0 UG/M3	
Monthly Calibration Standard Deviation	0 #####	Operational Time Operational Uptime Monthly Average 0 HRS 0.0 % #DIV/0! UG/M3

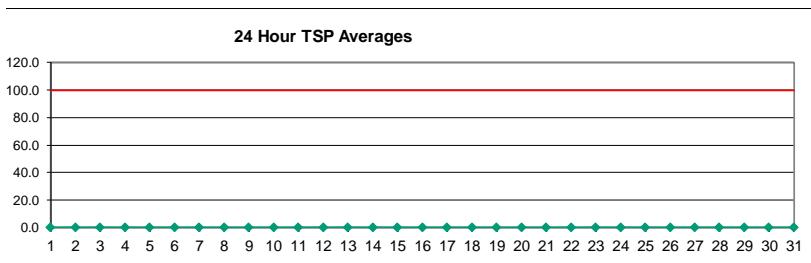
Entrance PM₁₀ ($\mu\text{g}/\text{m}^3$) – October 2021



Number of Non-Zero Readings	0
Maximum 1-HR Average	0.0 UG/M3
Maximum 24-HR Average	0.0 UG/M3
Monthly Calibration	0
Standard Deviation	#####
Operational Time	0 HRS
Operational Uptime	0.0 %
Monthly Average	#DIV/0! UG/M3

Entrance TSP ($\mu\text{g}/\text{m}^3$) – October 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	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
31	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-	
NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	
MEAN	#DIV/0!	0	0%																								
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Number of 24HR Exceedences		0 Proposed Guideline
Number of Non-Zero Readings		0
Maximum 1-HR Average	0.0	UG/M3
Maximum 24-HR Average	0.0	UG/M3
Monthly Calibration Standard Deviation	0 #DIV/0!	Operational Time Operational Uptime Monthly Average
		0 HRS 0.0 % #DIV/0! UG/M3