

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2023

JULY 25, 2023



wsp



AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2023

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: JULY 25, 2023

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July 25, 2023

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – June 2023

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 June 2023.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	99.9%	-	1
PM _{2.5}	97.8%	0	0
PM ₁₀	99.9%	-	-
NO	100.0%	-	-
NO ₂	100.0%	0	-
NO _x	100.0%	-	-
SO ₂	96.9%	0	0
Temperature	100.0%	-	-
Wind Speed / Direction	100.0%	-	-
Pressure	100.0%	-	-
Relative Humidity	100.0%	-	-
Precipitation	100.0%	-	-

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The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAOs) or Guidelines (AAAQG) at the Windridge Station for June 2023.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	99.9%	-	-	1
PM _{2.5}	99.9%	0	0	-
PM ₁₀	100.0%	-	-	-

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 exceedances of the Guidelines at the GRIMM Monitors for June 2023.

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	99.2%	0	0	0
Berm	98.1%	1	0	7
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.
Senior Air Quality Specialist,
Vancouver Region

SIGNATURES

PREPARED BY



July 25, 2023

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Date

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



July 25, 2023

Tyler Abel, M.Sc.
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Vancouver Region, Environment

Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB (Figure 1-1). 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 June 1, 2023 and June 30, 2023.

This monthly report was prepared by Tuonan Li, Air Quality Specialist with WSP, on behalf of Lafarge and was reviewed by Tyler Abel, Senior Air Quality Specialist at WSP.

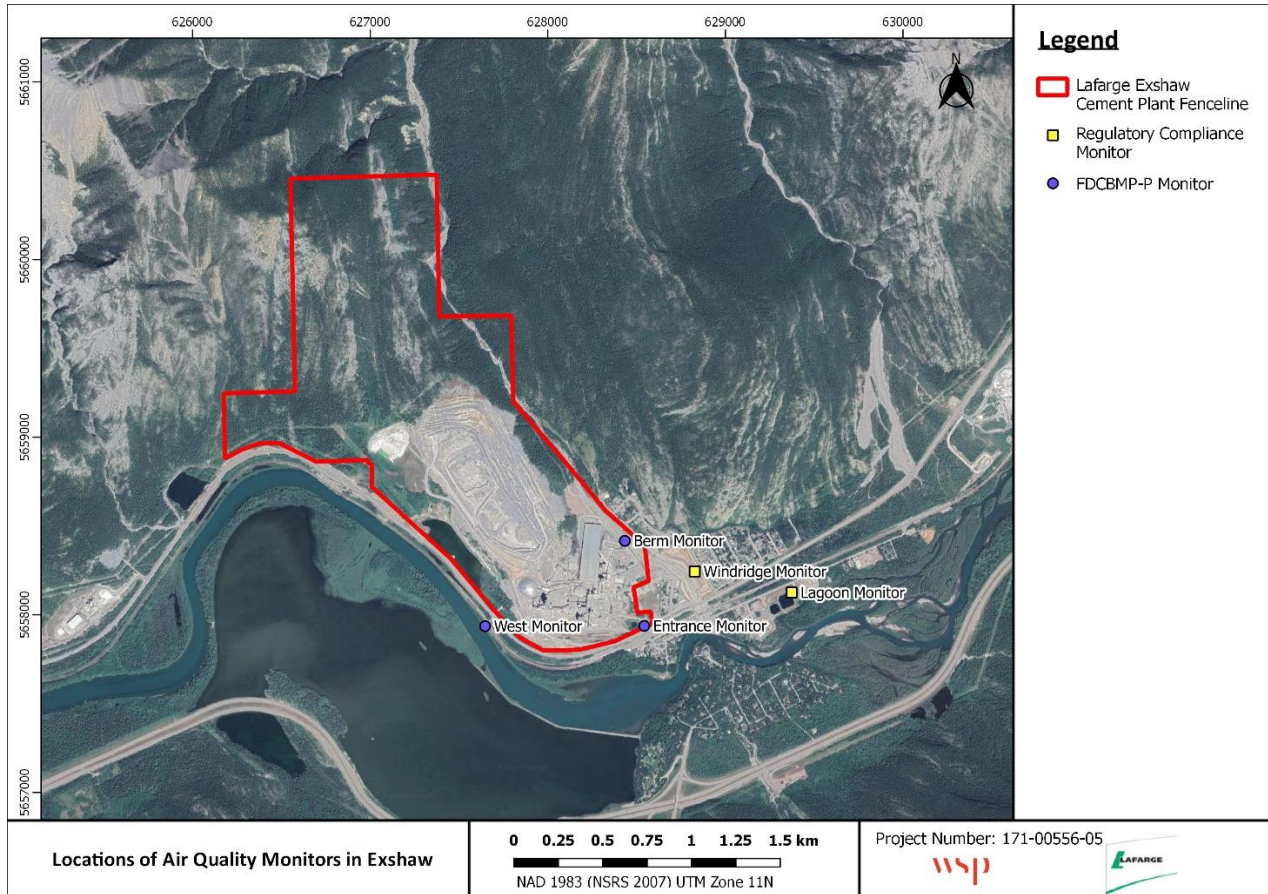


Figure 1-1 Locations of Air Quality Monitors in Exshaw

1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1-2), 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. The flood mitigation work has left an exposed creek bed area (see Figure below) that is a potential source of fugitive dust between Lafarge’s eastern fenceline and the Windridge station.



Figure 1-2 Photo of Completed Flood Mitigation Work at Exshaw Creek

2 JUNE 2023 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 each station 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
NO₂ (ppb)	100.0	36.8	0	11.0	-
SO₂ (ppb)	96.9	18.1	0	4.8	0
PM_{2.5} (µg/m³)	97.8	48.6	0 ¹	20.8	0
PM₁₀ (µg/m³)	99.9	403.6	-	52.0	-
TSP (µg/m³)	99.9	370.5	-	102.3	1
Temperature (°C)	100.0	28.8	-	21.2	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	35.9/W	-	26.8/WSW	-
Precipitation (mm)	100.0	15.75 ²	-	88.25 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) – freezing temperatures can impact the precipitation totals in winter months

³ Monthly Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

Data Quality Notes:

- There were zero day exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero exceedances of the 1-hour PM_{2.5} AAAQG.
- There were one day exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, NO₂ analyzer recorded 100% uptime during the month of June.
- All meteorological analyzers recorded 100% uptime during the month of June.
- PM₁₀ and TSP analyzers recorded 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 13th at 2:00.
- The PM_{2.5} analyzer recorded 97.8% uptime for the month of June due to 16 hours of equipment malfunction occurring at 2:00 on June 1st – 3rd, June 10th – 13th, June 16th – 24th.
- SO₂ analyzers recorded 96.9% uptime for the month of June due to 18 hours of power failure occurring on June 28th at 16:00 – June 29th at 9:00. Further, four hours of non-routine maintenance occurring on June 29th at 10:00 – 14:00.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM _{2.5} (µg/m ³)	99.9	74.0	0*	24.1	0
PM ₁₀ (µg/m ³)	100.0	485.0	-	61.8	-
TSP (µg/m ³)	99.9	985.0	-	109.5	1

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

Data Quality Notes:

- There were zero days exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero hours exceeding the 1-hour PM_{2.5} AAAQG.
- There were one day exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Windridge station, PM₁₀ monitor recorded 100% uptime during the month of June.
- The TSP and PM_{2.5} monitor recorded 99.9% uptime during the month of June due to one hour of equipment malfunction occurring on June 28th at 16:00.

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} (µg/m ³)	99.2	50.4	0*	15.5	0
PM ₁₀ (µg/m ³)	99.2	64.2	-	16.5	-
TSP (µg/m ³)	99.2	64.2	-	17.7	0

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- The PM_{2.5}, PM₁₀, and TSP analyzers recorded 99.2% uptime during the month of June due to six hours of equipment malfunction occurring on June 19th at 8:00 – 9:00, June 20th at 20:00 – 22:00 and June 21st at 5:00.

2.4 BERM GRIMM

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

Table 2-4 Berm station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	98.1	141.9	1*	19.8	0
PM ₁₀ (µg/m ³)	98.1	1192.1	-	111.3	-
TSP (µg/m ³)	98.1	1699.6	-	231.3	7

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

Data Quality Notes:

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

- There were seven exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The PM_{2.5}, PM₁₀, and TSP monitors recorded 98.1% uptime during the month of June due to 14 hours of equipment malfunction occurring on June 1st at 6:00 – 17:00, June 21st at 5:00, and June 29th at 14:00.
-

2.5 ENTRANCE GRIMM

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

Calibration/Maintenance Notes:

- The analyzer had 0% uptime for the month of June due to collection error (i.e., communication error).

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 (**Error! Reference source not found.**) and tables and graphs illustrating the monitoring results for June 2023.

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 June 27 th – 28 th . The monitor had 97.8% uptime for the month of June due to 16 hours of equipment malfunction occurring at 2:00 on June 1 st – 3 rd , June 10 th – 13 th , June 16 th – 24 th .
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 27 th . The monitor had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 13 th at 2:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 27 th . The monitor had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 13 th at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on June 28 th . The monitor had 100% uptime for the month of June.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on June 28 th . The monitor had 96.9% uptime for the month of June due to 18 hours of power failure occurring on June 28 th at 16:00 – June 29 th at 9:00. Further, four hours of non-routine maintenance occurring on June 29 th at 10:00 – 14:00.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of June.

Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of June.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of June.

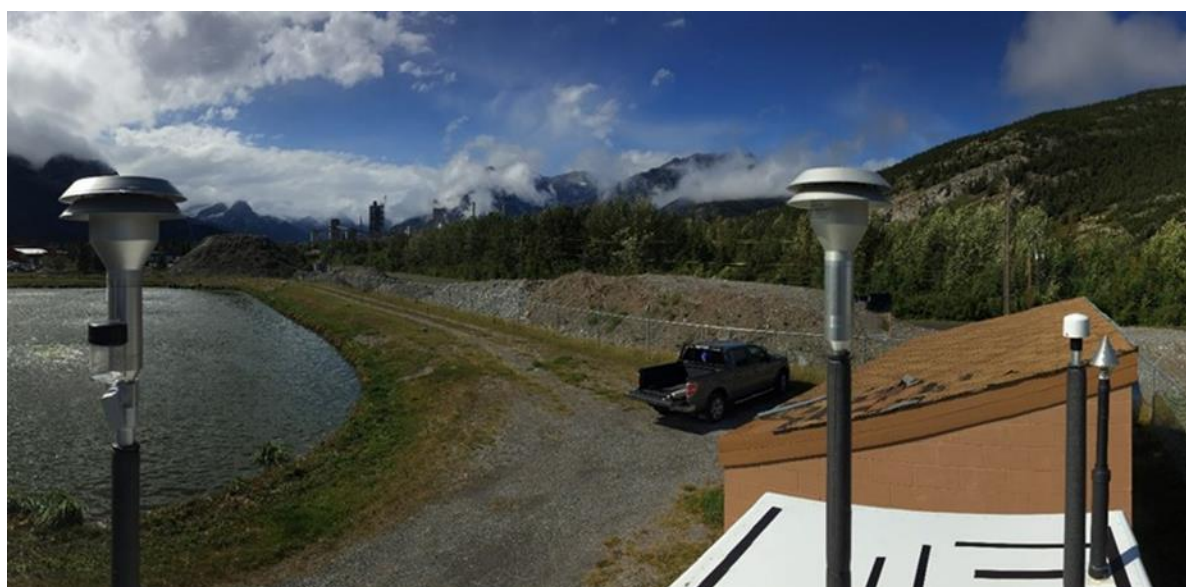


Figure 3-1 Inlets on the top of WSP’s Lagoon monitor

3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in June 2023. 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 June 2023 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 was one day exceeding the 24-hour TSP (100 µg/m³) AAAQO. There were 0 exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO. Further, there were 0 exceedances of the 1-hour PM_{2.5} AAAQG (80 µg/m³).

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances are 4 and 0. The maximum number of 24-hour TSP AAAQO exceedances recorded in June was 4 days in 2013.

At the Lagoon station strong wind gusting that typically occurs in the area contributes to increased particulate levels that may 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 June 2023 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
NO₂ (ppb)	159	-	Lagoon	0	-	0.5	7.0	36.8	9	8	13.7	49.3	11.0	8	100.0
SO₂ (ppb)	172	48	Lagoon	0	0	0.0	1.6	18.1	23	8	14.1	259.6	4.8	17	99.4
PM_{2.5} (µg/m³)	80	29	Lagoon	0	0	0.0	8.7	48.6	12	16	9.7	297.9	20.8	15	97.8
PM₁₀ (µg/m³)	-	-	Lagoon	-	-	0.0	22.0	403.6	13	16	8.4	237.4	52.0	8	99.9
TSP (µg/m³)	-	100	Lagoon	-	1	0.5	42.6	370.5	13	16	8.4	237.4	102.3	8	99.9
Temperature (°C)	-	-	Lagoon	-	-	4.4	15.7	28.8	8	15	19.5	63.7	21.2	30	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.4	12.5	35.9/W	13	18	35.9	234.3	26.8/WSW	19	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.1	15.8 ¹	28	15	12.9	36.2	88.3 ²		100.0

¹ Maximum Daily Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

² Monthly Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Lagoon						
2023-06-08	102.3	-	65.4	12.8	34.6	Wind primarily from the east suggests influence from sources other than Lafarge
Total # of Exceedances	1	0				
Maximum # of Exceedances (June)	4 (2013)	0 (2010 — 2022)				
Average # of Exceedances (June)	0	0				
Minimum # of Exceedances (June)	0 (2011, 2012, 2014 — 2022)	0 (2010 — 2022)				

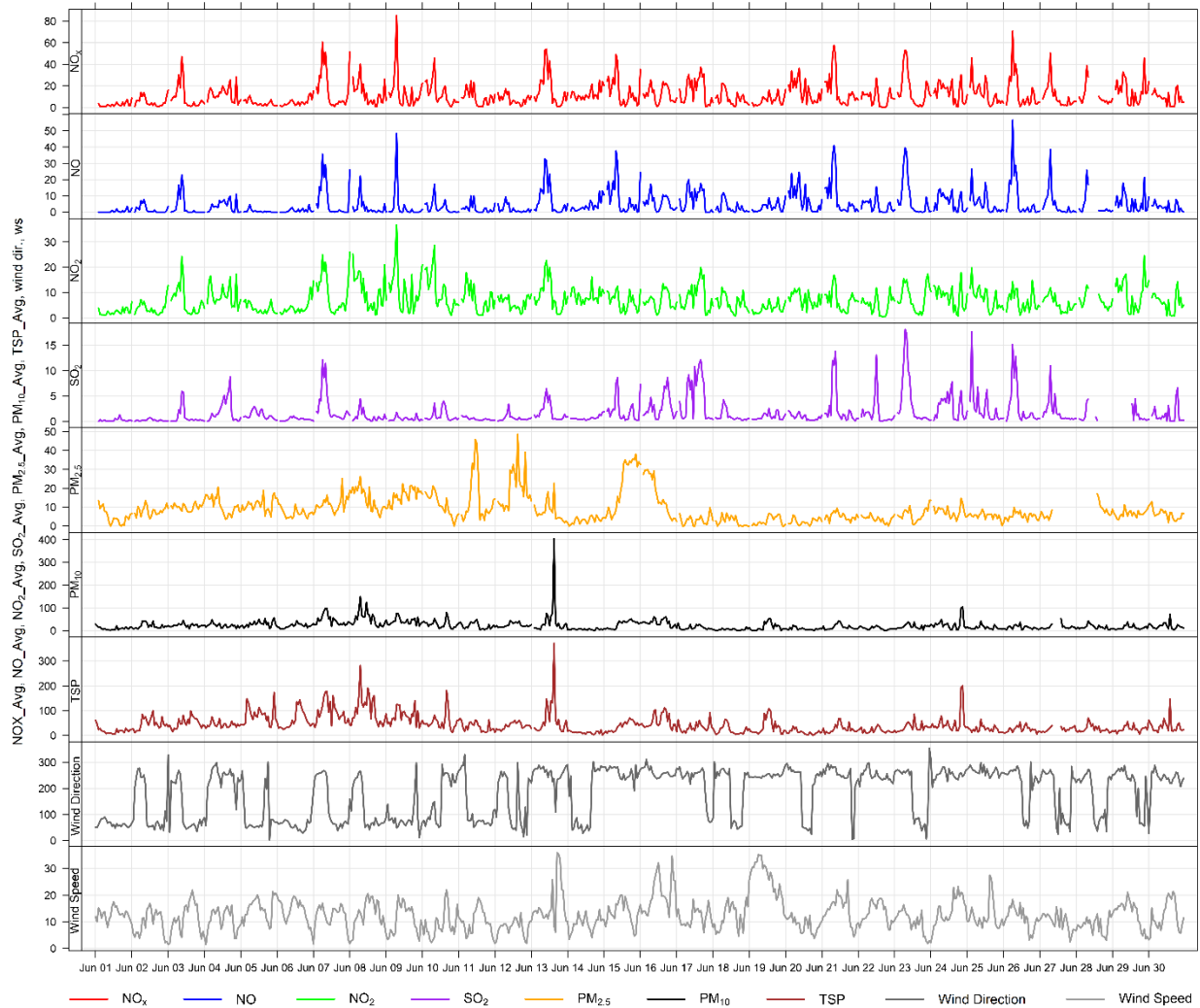


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

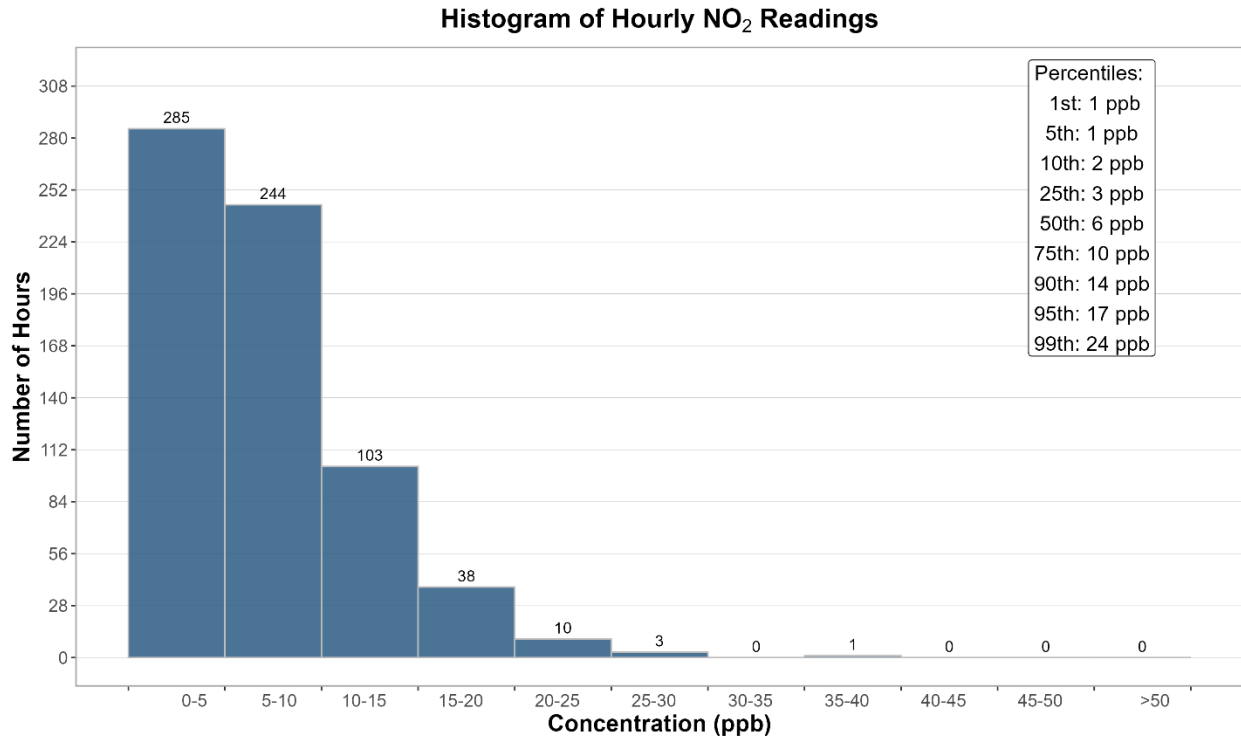


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

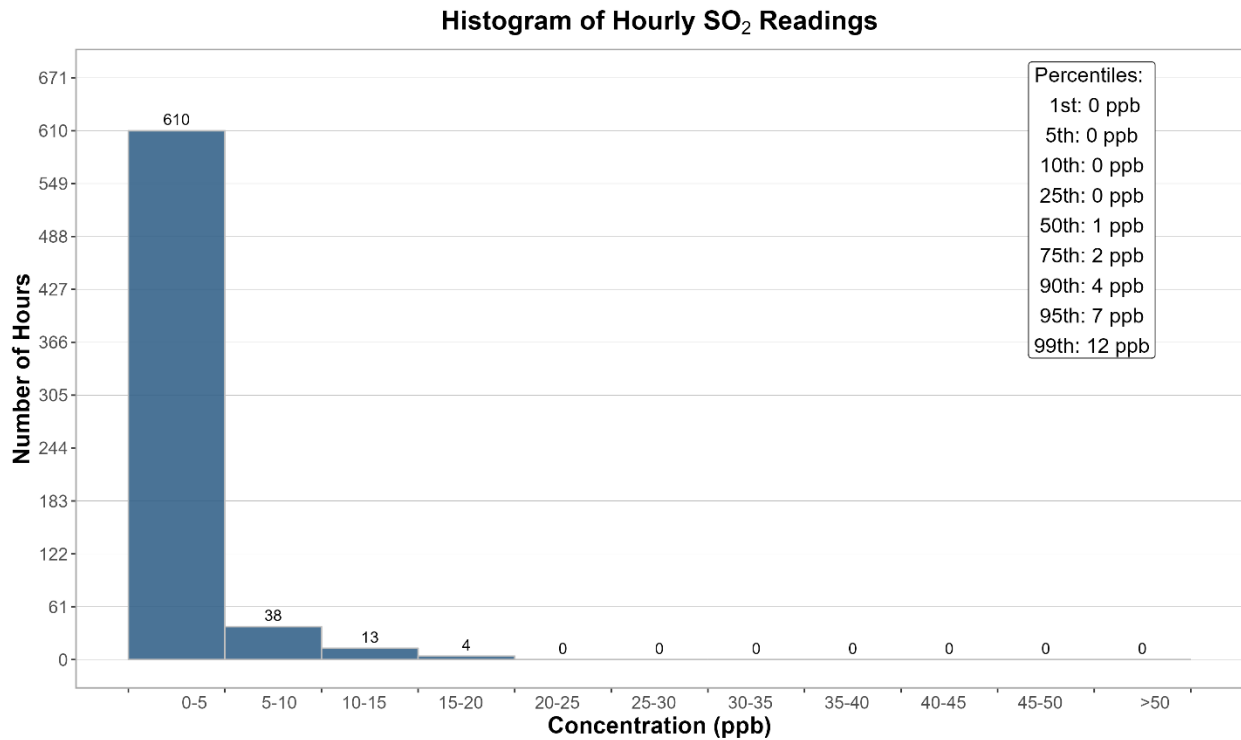


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

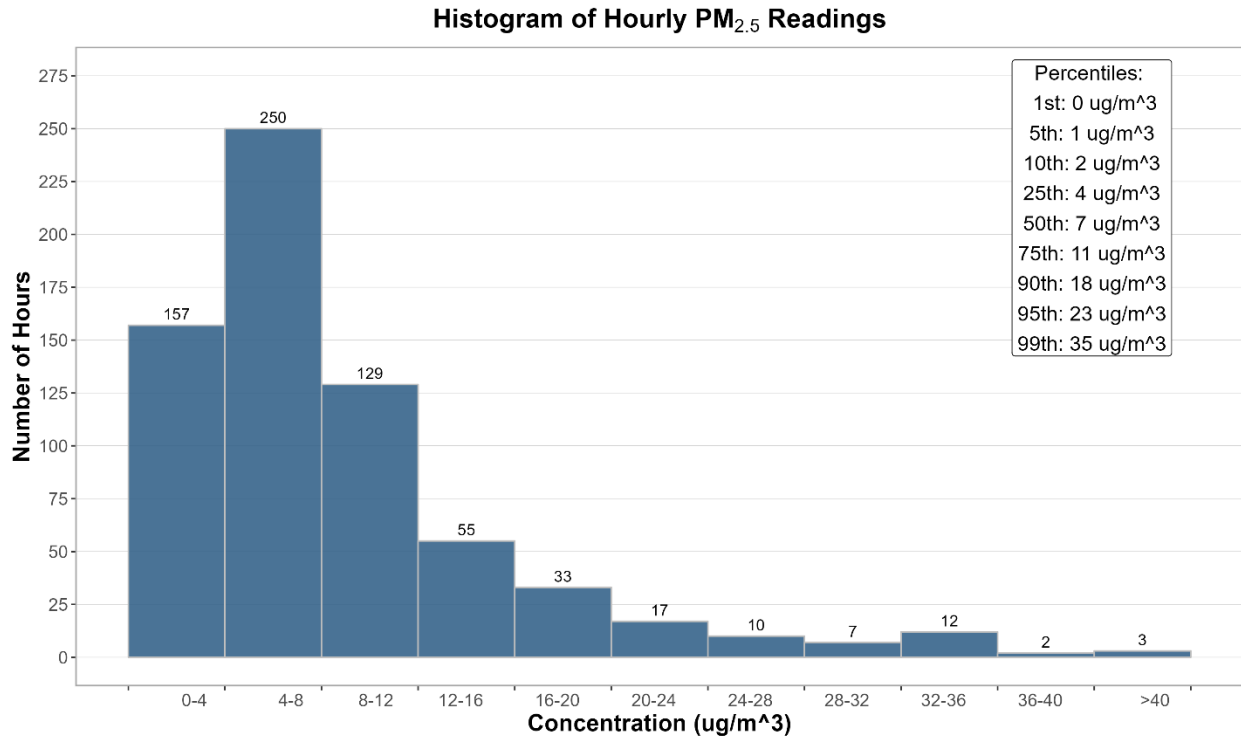


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

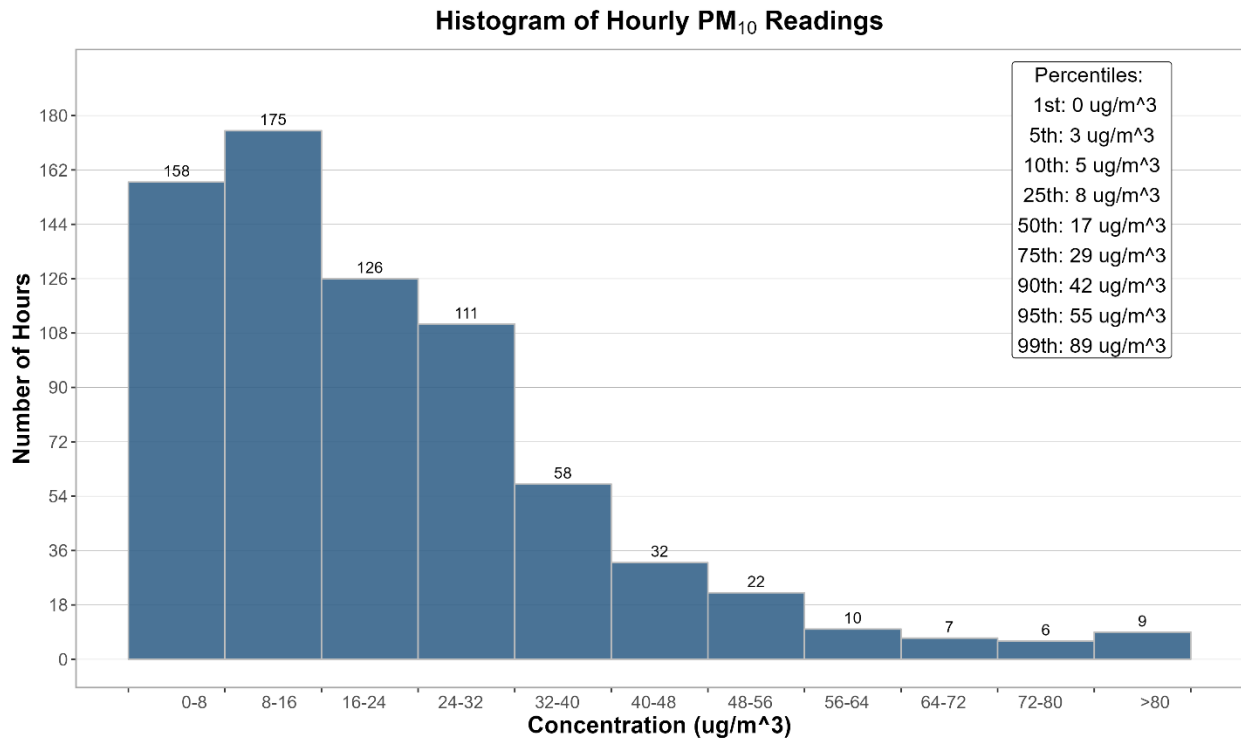


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

Histogram of Hourly TSP Readings

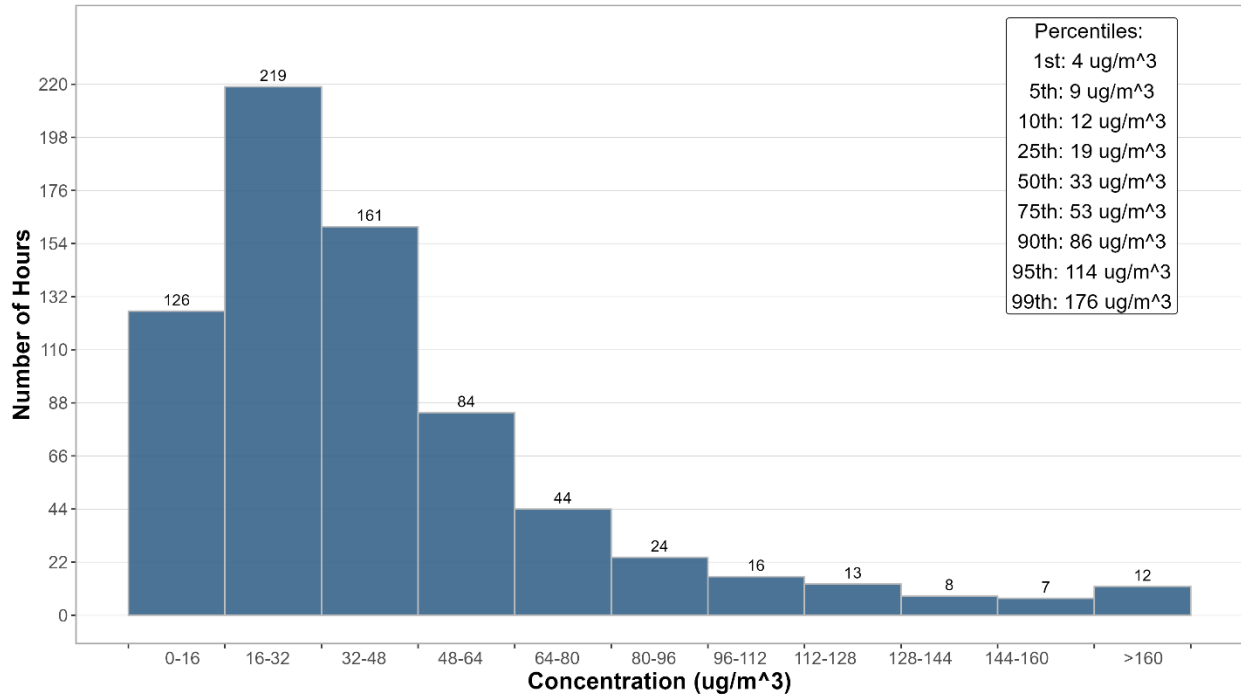


Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station

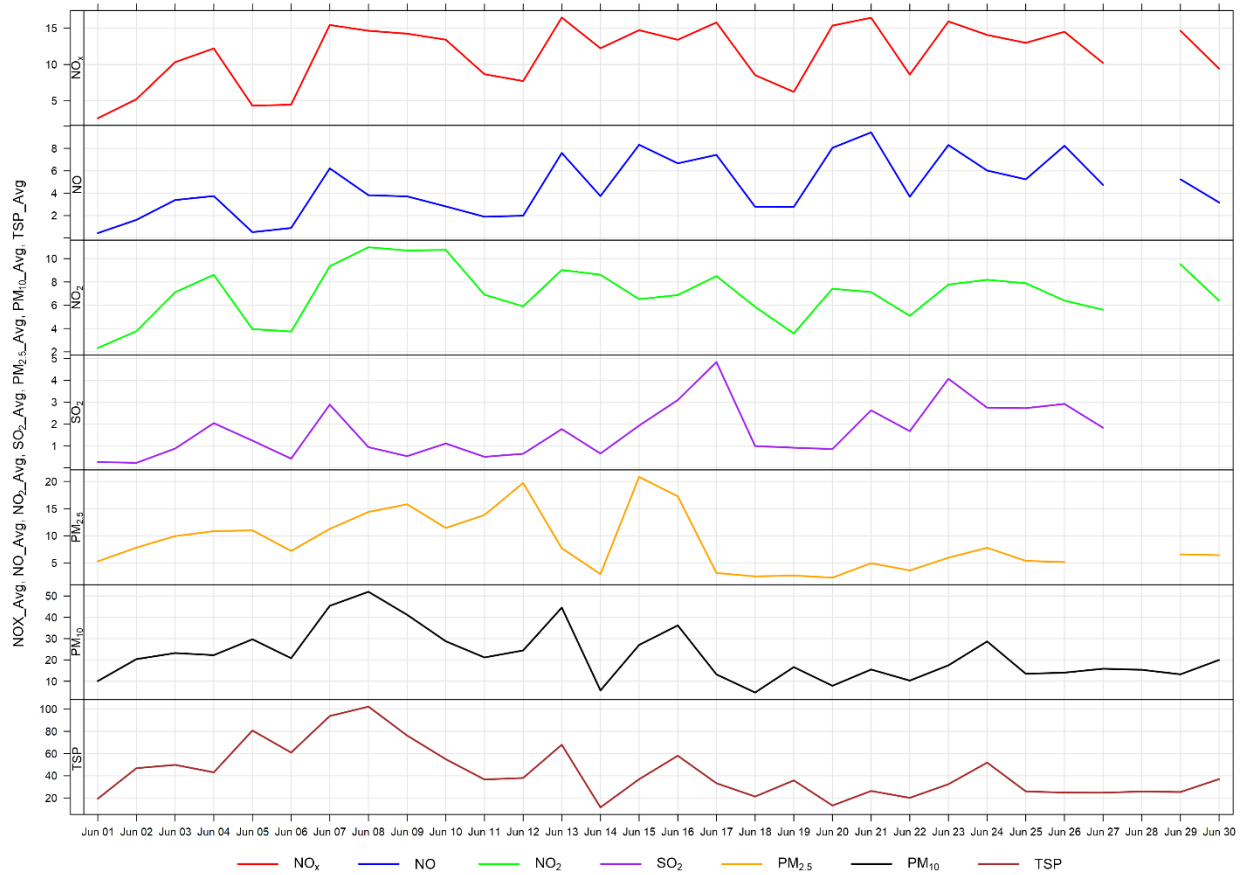


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

Figure 3-9 shows the wind rose for the one day of exceedance in June. The wind rose shows that the winds predominately came from the east-northeast.

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 typically 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.

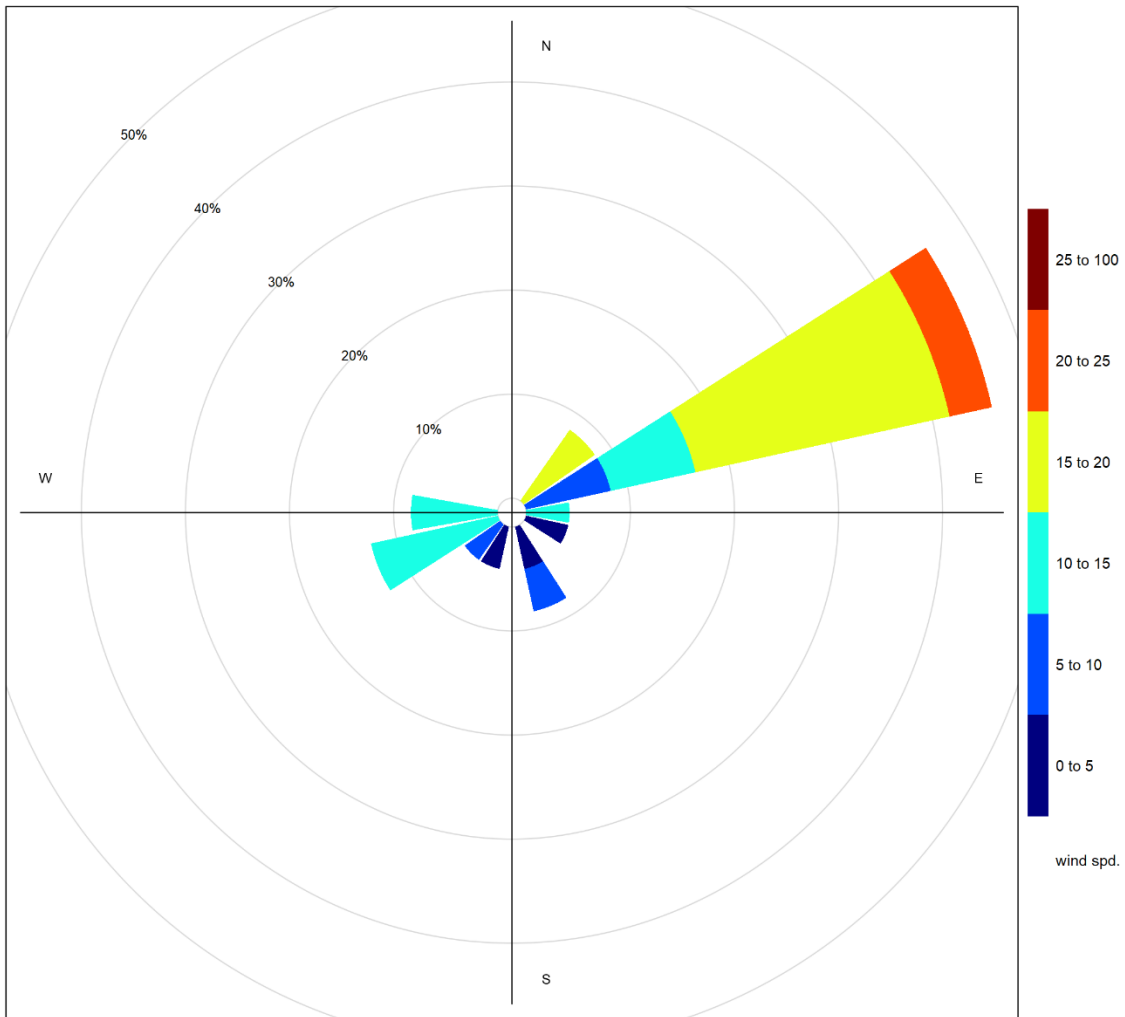


Figure 3-9 Wind rose for TSP exceedance days recorded at the Lagoon Station

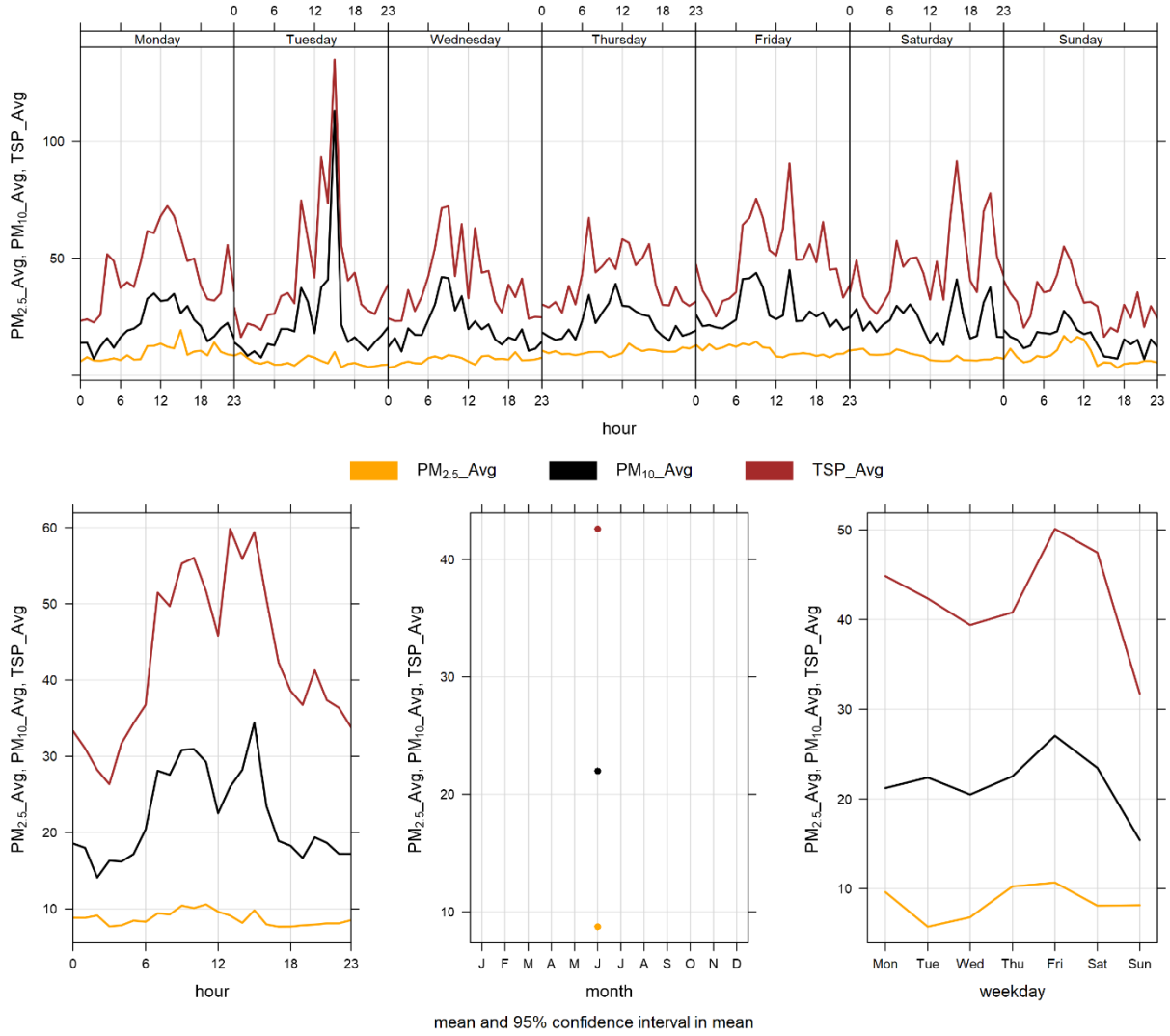


Figure 3-10 Lagoon monitor particulate matter time variation

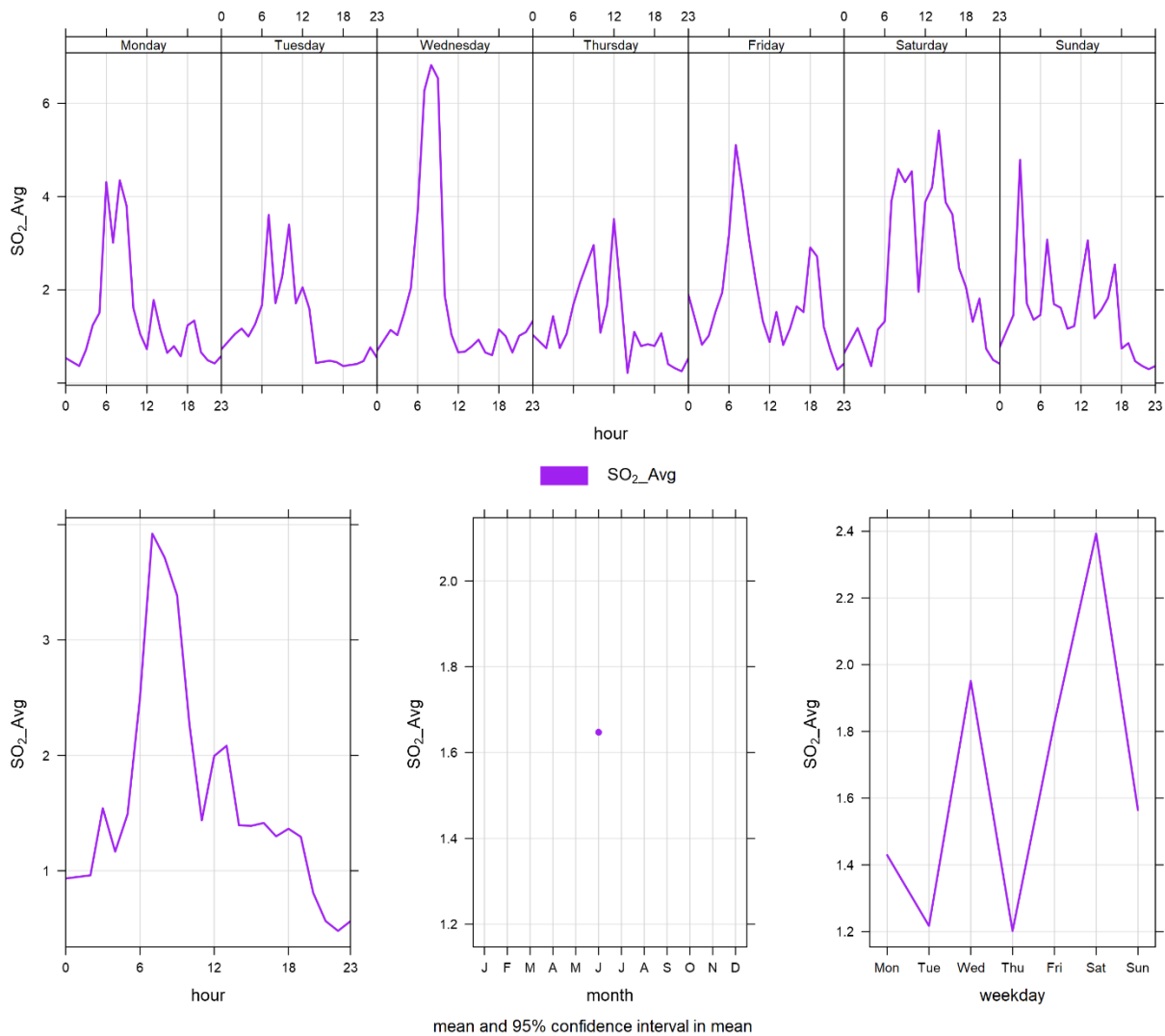


Figure 3-11 Lagoon monitor SO₂ time variation

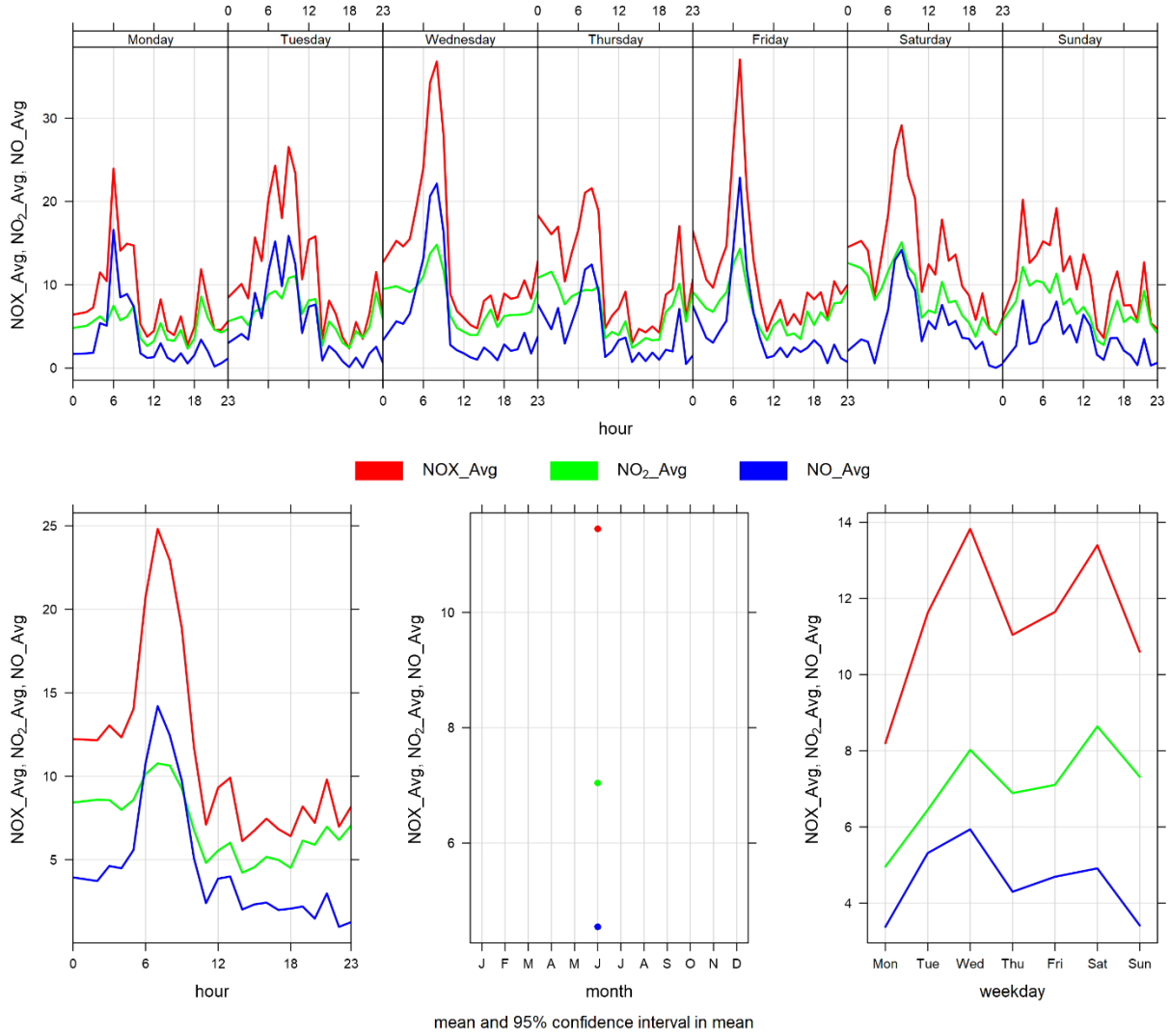


Figure 3-12 Lagoon monitor NO_x time variation

4 WINDRIDGE STATION

The Windridge station contains TSP, PM₁₀, and PM_{2.5} analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for June 2023.

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 June 27 th . The monitor recorded 99.9% uptime during the month of June due to one hour of equipment malfunction occurring on June 28 th at 16:00.
PM ₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on June 27 th . The monitor recorded 100% uptime during the month of June.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 27 th . The monitor recorded 99.9% uptime during the month of June due to one hour of equipment malfunction occurring on June 28 th at 16:00.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in June 2023, and **Error! Reference source not found.** 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, **Error! Reference source not found.** 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 0 exceedances of the 24-hour PM_{2.5} AAAQO, 0 exceedances of the 1-hour PM_{2.5} AAQ, and one exceedance of the 24-hour TSP AAAQO.

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 5 and 0, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in June was 5 days in 2021.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8th, 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 June 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 June 2023 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	7.9	74.0	15	21	4.6	191.1	24.1	16	99.9
PM₁₀ (µg/m ³)	-	-	Windridge	-	-	0.0	26.8	485.0	13	15	25.9	226.2	61.8	13	100.0
TSP (µg/m ³)	-	100	Windridge	-	1	0.0	42.6	985.0	13	15	25.9	226.2	109.5	13	99.9

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

Date	TSP (ug/m³)	PM_{2.5} (ug/m³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2023-06-13	109.5	-	255.3	16.5	50.9	
Total # of Exceedances	1	0				
Maximum # of Exceedances (June)	5 (2021)	0 (2018, 2021, 2022)				
Average # of Exceedances (June)	3	0				
Minimum # of Exceedances (June)	2 (2022)	0 (2018, 2021, 2022)				



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

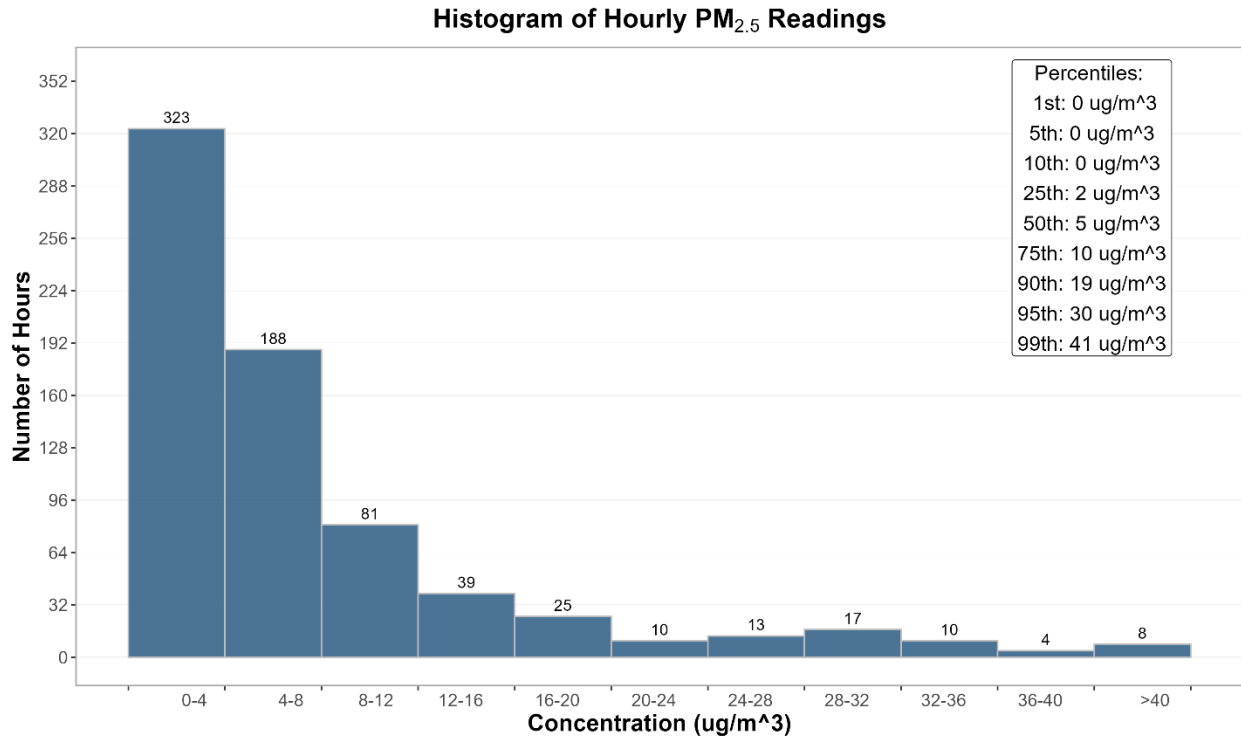


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

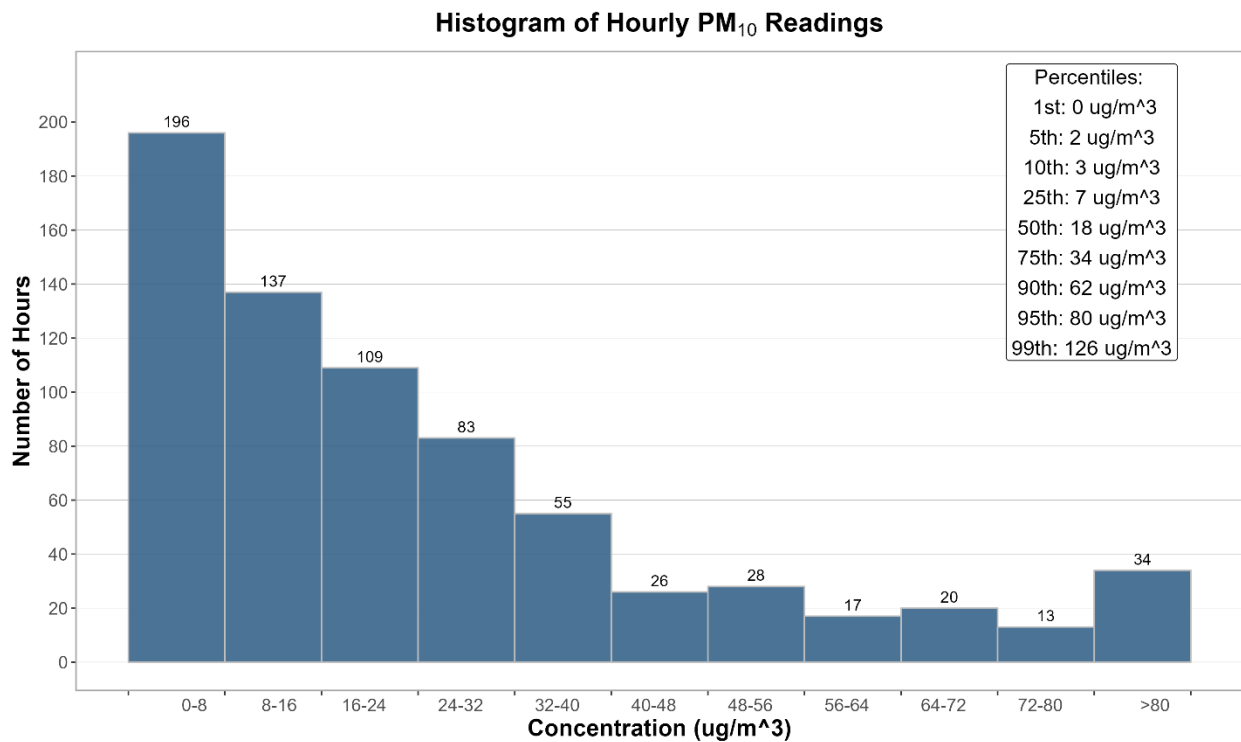


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

Histogram of Hourly TSP Readings

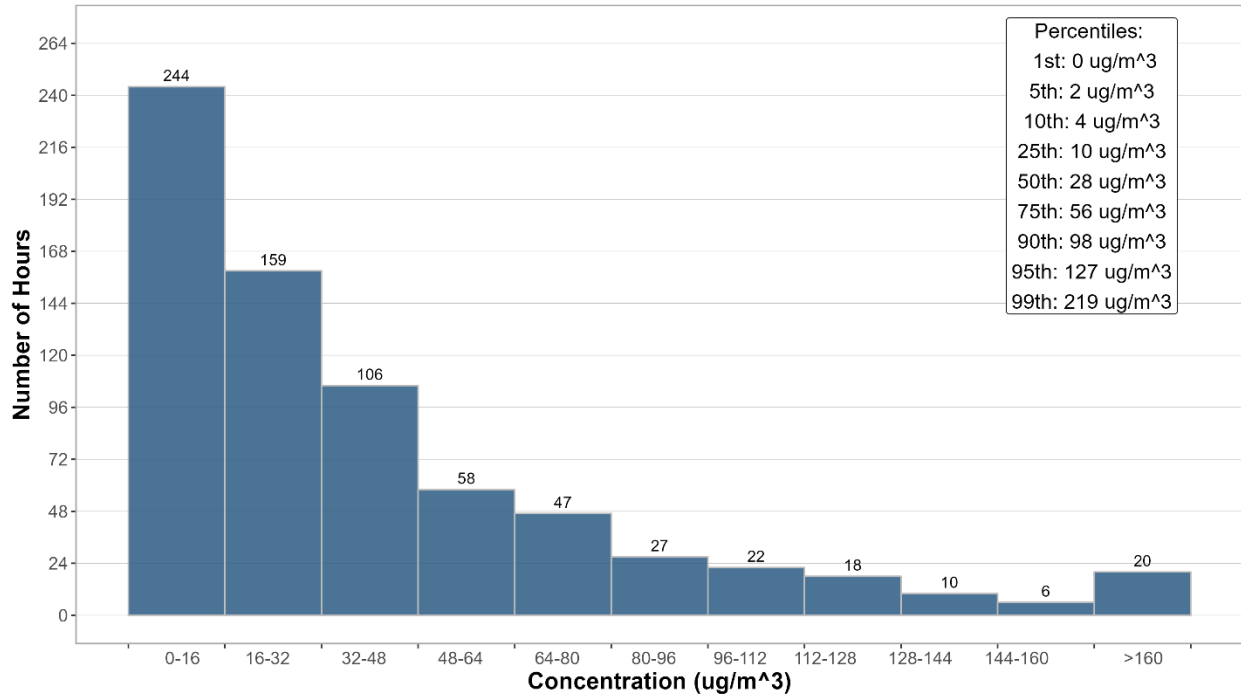


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

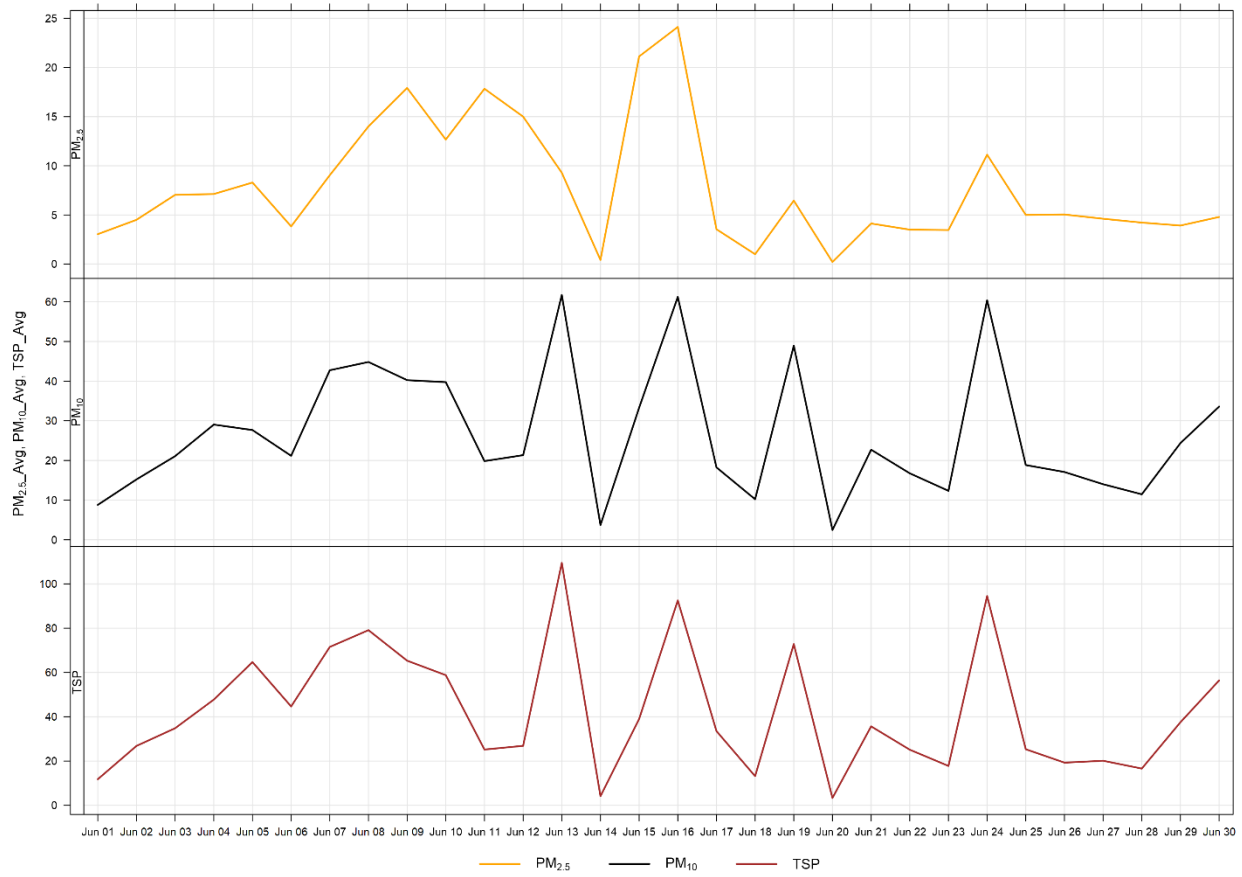


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the one day of exceedance in June. The wind rose shows that the winds predominately came from the west.

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 June 2023. Similar to the Lagoon station, typically PM concentrations show 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.

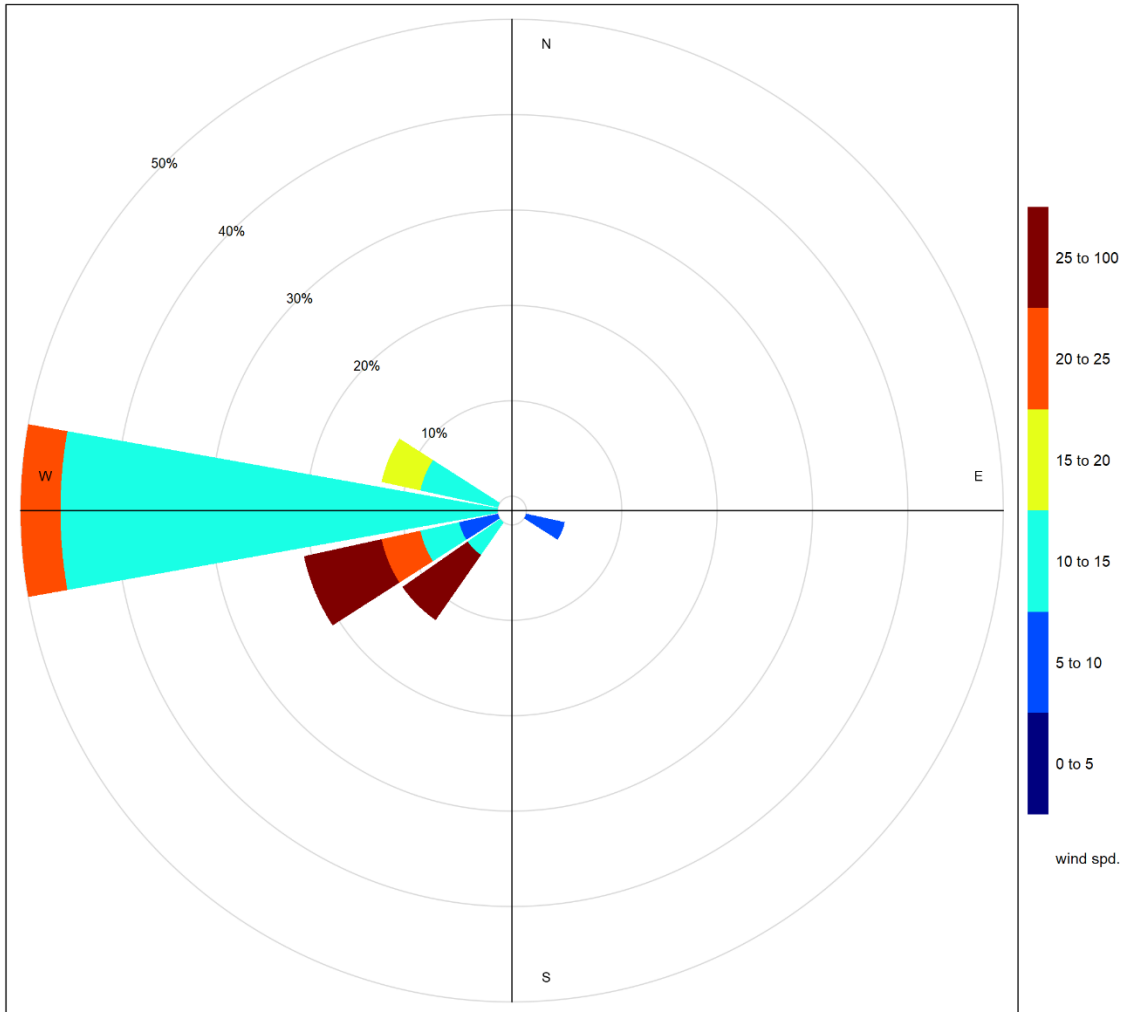


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

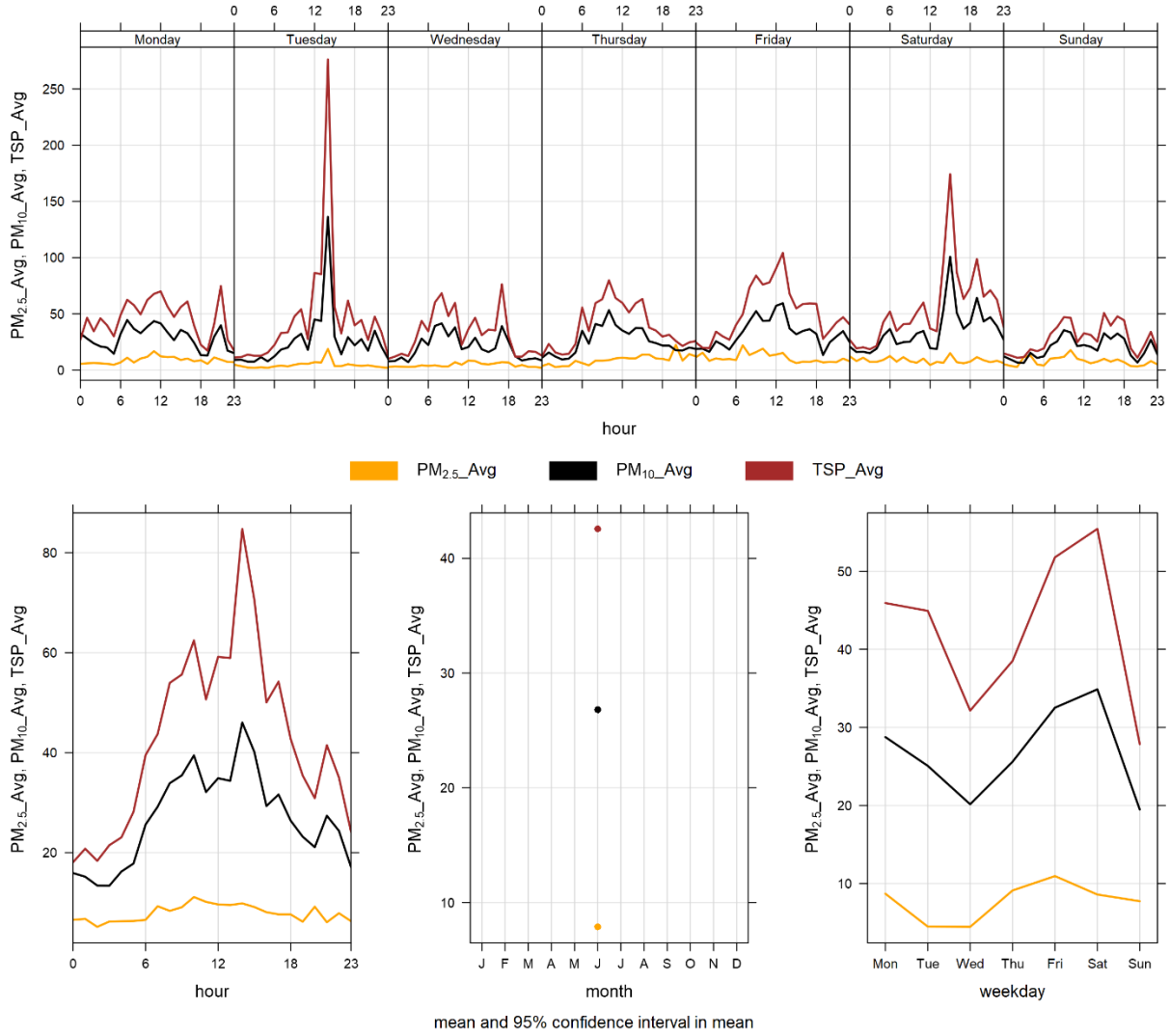


Figure 4-7 Windridge particulate matter time variation

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} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 99.2% uptime during the month of June due to six hours of equipment malfunction occurring on June 19 th at 8:00 – 9:00, June 20 th at 20:00 – 22:00 and June 21 st at 5:00.

5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was moved to its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. Table 5-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

Figure 5-1 and Figure 5-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month.

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

Historically during the month of June, the West monitor records an average of 0 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines.

Table 5-2 Summary of June 2023 data at the West GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour				Maximum 24-hour		Operational Time (Percent)	
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration		Day
PM_{2.5} ($\mu\text{g}/\text{m}^3$)	80	29	West	0	0	0.0	6.9	50.4	11	11	13.3	50.9	15.5	15	99.2
PM₁₀ ($\mu\text{g}/\text{m}^3$)	-	-	West	-	-	0.0	8.0	64.2	11	12	13.9	57.2	16.5	11	99.2
TSP ($\mu\text{g}/\text{m}^3$)	-	100	West	-	0	0.0	8.4	64.2	11	12	13.9	57.2	17.7	9	99.2

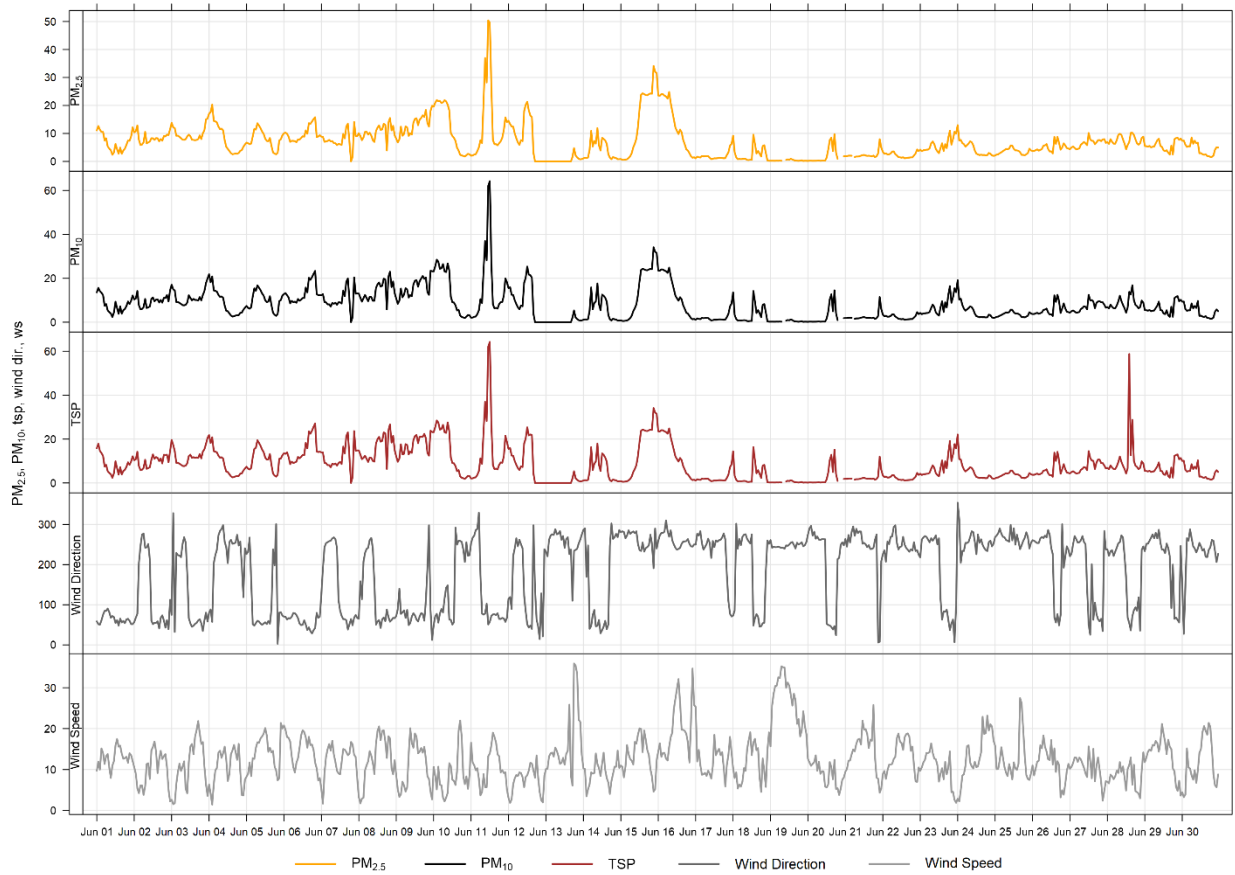


Figure 5-1 1-hour particulate matter concentrations at the West monitor

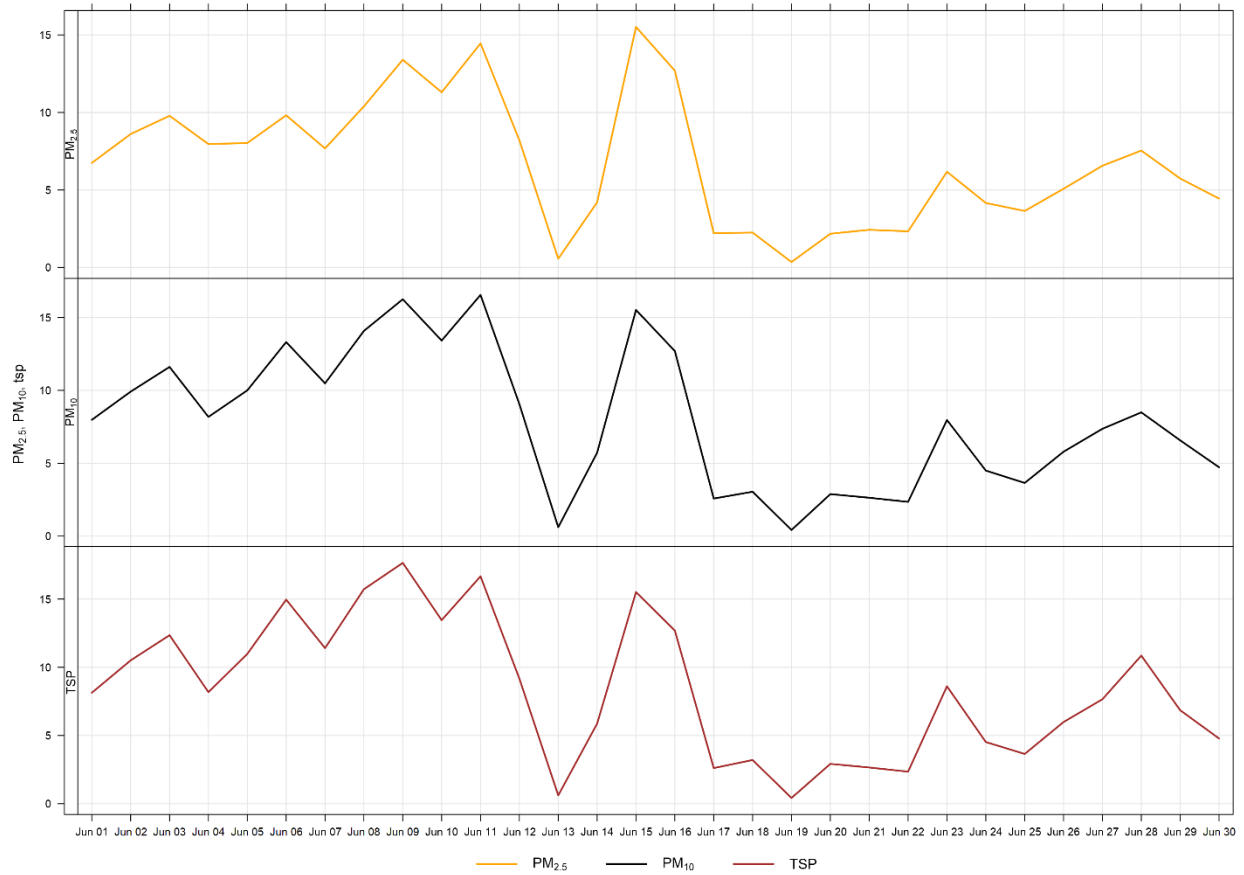


Figure 5-2 24-hour particulate matter concentrations at the West monitor

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 June 2023. The diurnal pattern is not significant due to the low PM concentrations recorded in June. Historically this monitor saw daily variations in PM that were more likely a result of higher traffic volume during daylight hours than specific Lafarge operations. The West monitor was moved to its current location (Figure 1-1) on December 1st, 2021, and will continue to be evaluated to better understand influences from background sources, Lafarge Exshaw, as well as highway and rail sources.

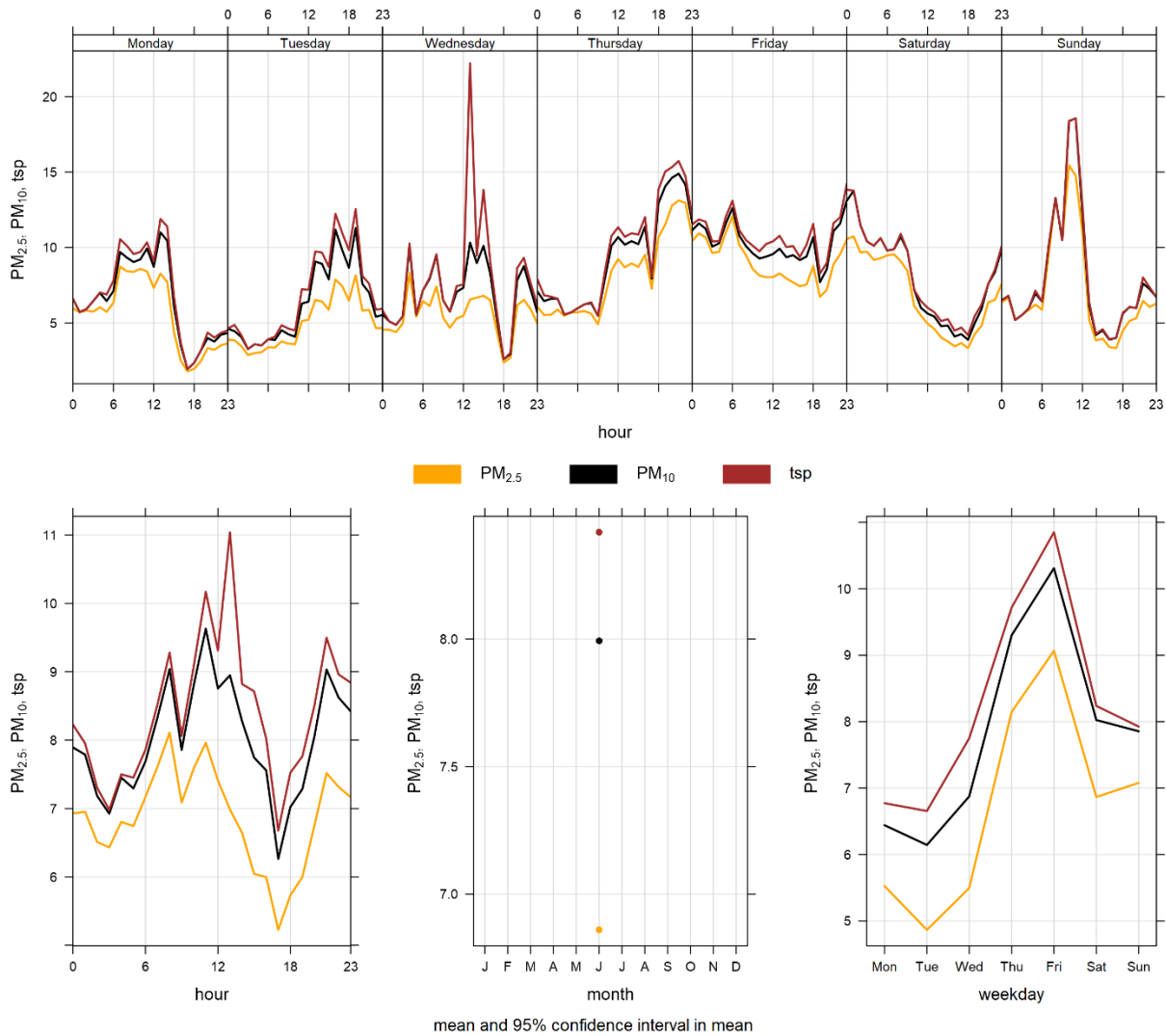


Figure 5-3 West monitor particulate matter time variation

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} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 98.1% uptime during the month of June due to 14 hours of equipment malfunction occurring on June 1 st at 6:00 – 17:00, June 21 st at 5:00, and June 29 th at 14:00.

6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility. Figure 6-1 and Figure 6-2 show the hourly and daily PM_{2.5}, PM₁₀, and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 6-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

There were 7 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were 1 hour exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of June, the Berm monitor records an average of 10 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during June occurred in 2016 where there were 18 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in June was 3 days in 2011.

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 June 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 June 2023 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	1	0	0.3	8.2	141.9	13	15	25.9	226.2	19.8	24	98.1
PM₁₀ (µg/m ³)	-	-	Berm	-	-	0.3	30.7	1192.1	13	15	25.9	226.2	111.3	24	98.1
TSP (µg/m ³)	-	100	Berm	-	7	0.3	68.5	1699.6	13	15	25.9	226.2	231.3	24	98.1

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						
2023-06-04	108.9	-	254.4	10.5	41.7	
2023-06-07	120.9	-	36.4	12.2	32.9	
2023-06-13	228.6	-	255.3	16.5	50.9	
2023-06-16	191.3	-	256.3	20.4	47.9	High wind event
2023-06-19	163.0	-	247.3	26.8	56.9	High wind event
2023-06-24	231.3	-	252.4	14.1	41.6	
2023-06-30	125.1	-	242.2	12.1	42.6	
Total # of Exceedances	7	0				
Maximum # of Exceedances (June)	18 (2016)	3 (2011)				
Average # of Exceedances (June)	10	0				
Minimum # of Exceedances (June)	0 (2013, 2014)	0 (2010, 2012 — 2021)				

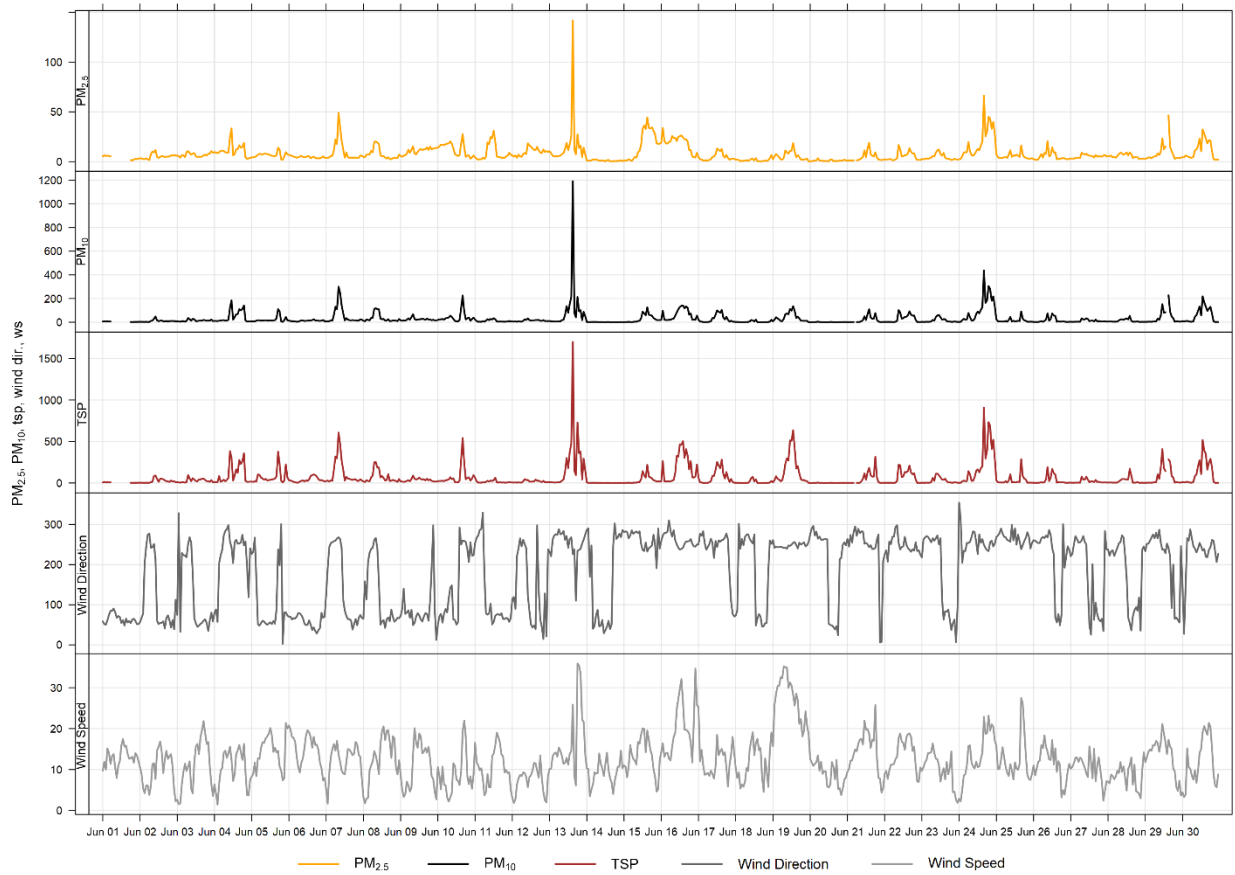


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

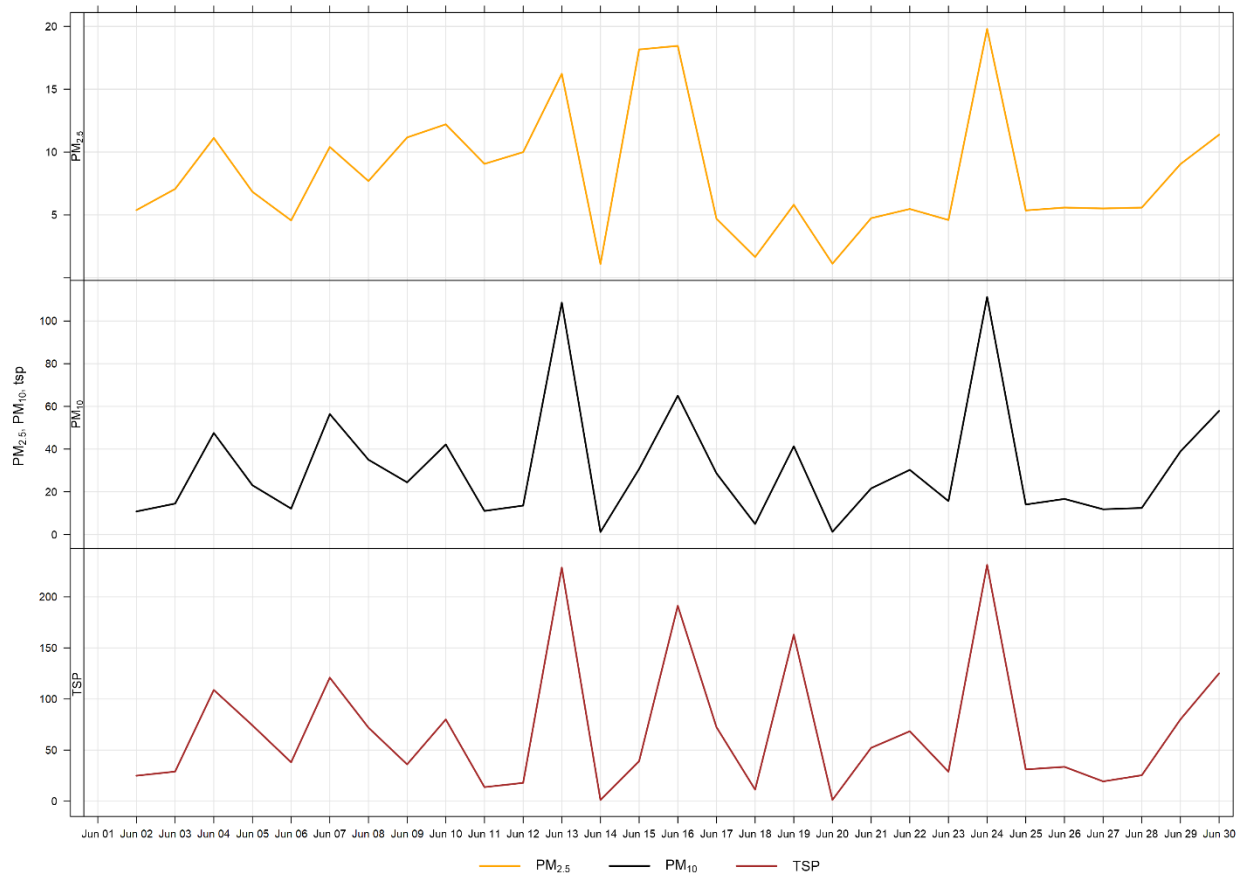


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 7 days of TSP exceedances. The wind rose shows that the wind predominately came from the west-southwest direction. This month many of the TSP exceedances were driven by windblown fugitive dust, and winds from the west which suggest impacts from the Lafarge Facility.

Figure 6-4 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Lagoon station, and is associated with Lafarge operations, but also daytime emissions from other activities and sources in Exshaw.

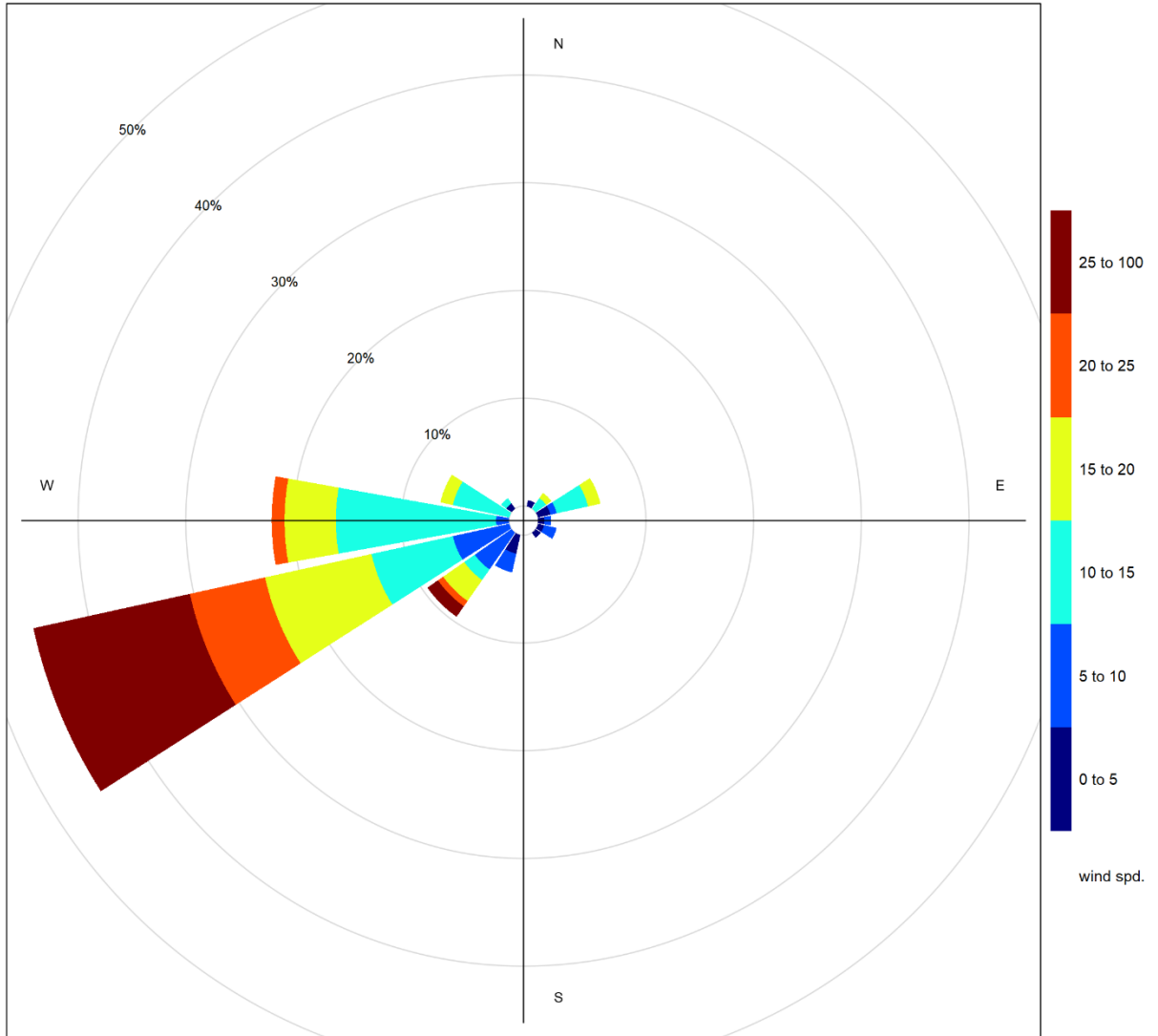


Figure 6-3 Windrose for TSP exceedance days recorded at the Berm GRIMM

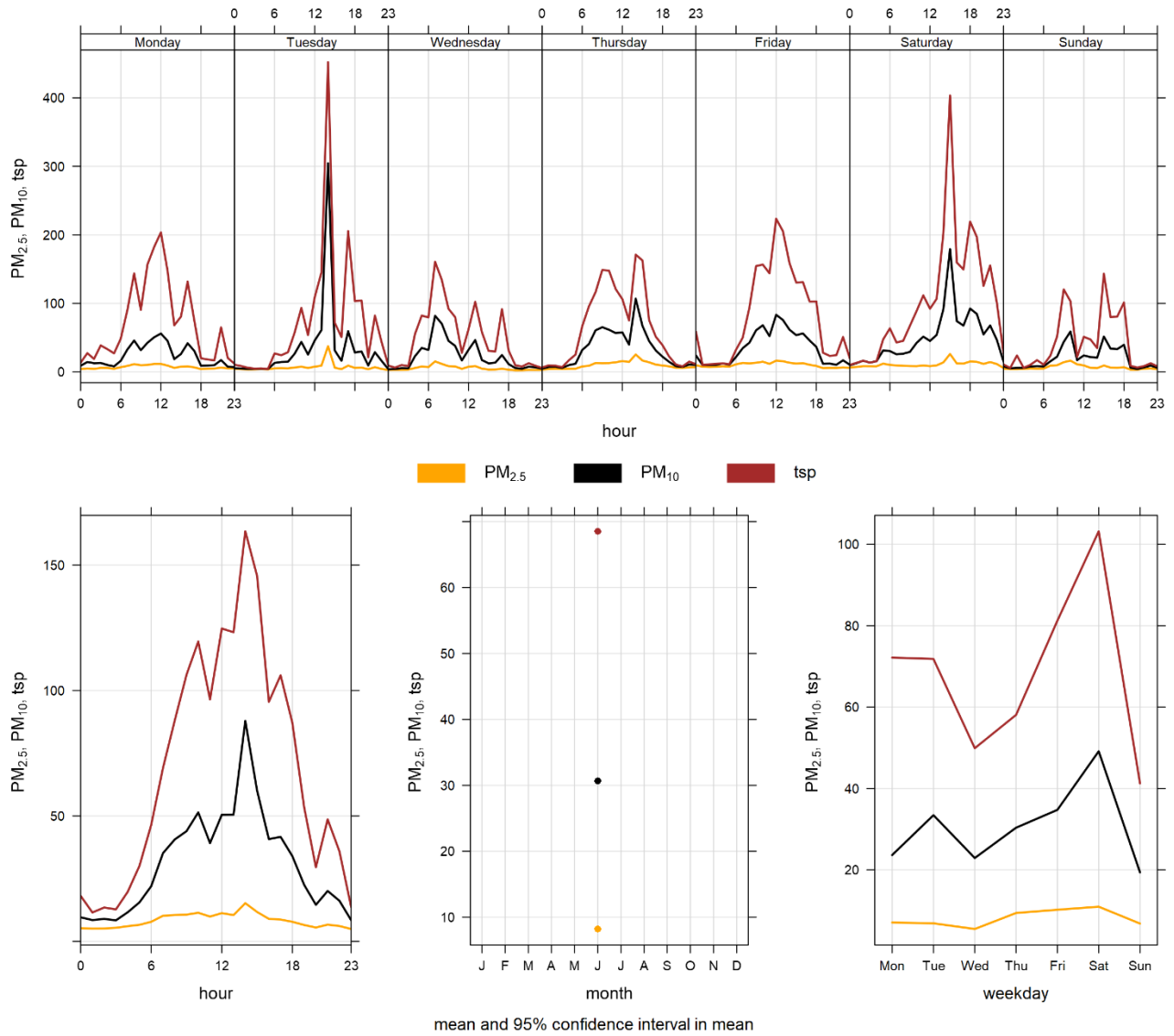


Figure 6-4 Berm particulate matter time variation

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APPENDIX

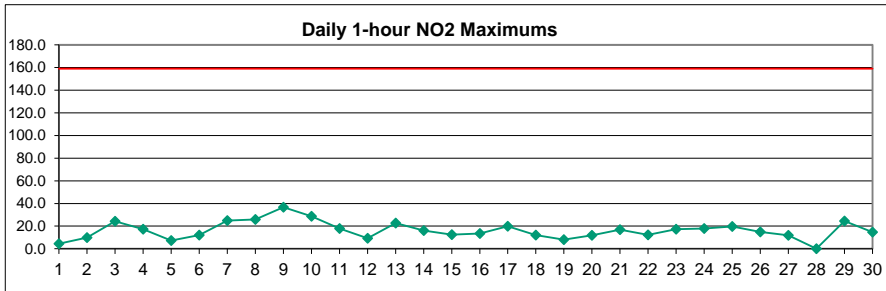
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – June 2023

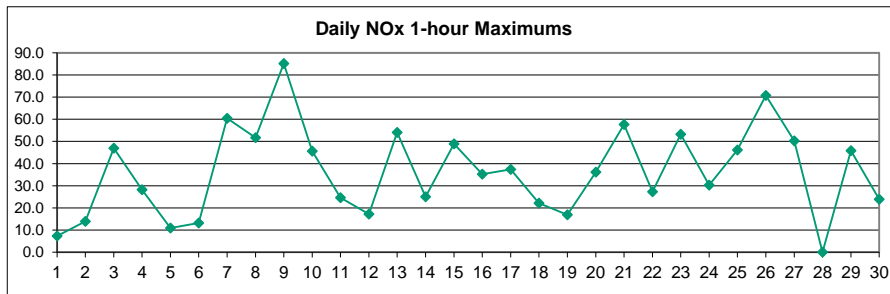
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	4.6	S	3.8	1.4	1.2	1.2	1.1	1.2	2.6	1.9	1.3	1.9	1.5	2.4	3.0	2.6	1.9	1.6	4.3	2.1	4.1	4.0	1.9	1.9	2.3	4.6	
2	6.3	S	1.4	3.3	4.3	4.7	7.2	5.2	6.4	4.7	2.6	2.7	2.4	4.0	2.0	3.0	1.6	1.2	1.2	2.1	2.0	4.4	4.2	9.8	3.8	9.8	
3	12.8	S	6.9	8.5	9.7	8.5	11.9	13.8	10.6	24.2	17.1	3.4	2.7	1.9	1.8	1.3	1.9	4.1	1.8	1.8	2.0	4.5	6.8	5.8	7.1	24.2	
4	3.7	S	5.6	14.7	16.5	10.6	6.8	5.6	7.4	7.0	7.1	8.0	13.3	9.6	8.1	7.9	11.5	16.2	4.3	4.7	4.3	17.2	2.6	5.4	8.6	17.2	
5	7.2	S	6.4	7.2	4.0	6.8	6.5	5.1	3.0	3.5	3.4	2.1	2.2	3.1	2.0	1.7	3.1	1.6	3.0	4.5	7.3	3.3	2.2	1.8	4.0	7.3	
6	1.7	S	2.1	1.3	1.9	3.4	2.5	3.1	3.5	4.7	4.4	3.6	1.9	2.6	3.7	1.9	3.6	2.6	2.7	3.4	4.6	7.2	12.1	7.3	3.7	12.1	
7	14.7	S	13.8	10.4	14.2	14.4	24.9	18.4	22.0	15.1	7.3	3.3	2.1	2.1	1.4	3.2	3.0	4.6	4.0	5.9	5.7	2.8	7.4	14.4	9.3	24.9	
8	25.9	S	25.2	14.6	15.4	15.7	18.6	18.2	9.9	15.6	6.0	10.3	2.7	4.0	5.5	3.1	6.1	1.2	1.5	11.0	11.4	5.0	4.7	21.0	11.0	25.9	
9	7.0	S	13.8	10.1	14.1	16.8	24.2	36.8	14.1	4.2	2.5	2.1	15.2	10.9	5.7	1.7	2.3	17.1	1.7	4.5	8.8	6.8	9.4	16.5	10.7	36.8	
10	21.0	S	19.2	19.9	11.3	13.5	18.2	23.0	28.6	6.2	4.5	7.3	7.0	7.6	13.3	12.5	5.4	4.6	2.3	1.0	3.4	7.3	5.1	5.4	10.8	28.6	
11	5.0	S	7.4	6.2	9.5	17.9	14.3	8.9	14.8	6.8	13.5	6.3	1.9	1.2	1.2	1.1	1.1	5.8	6.7	2.4	3.0	10.3	9.9	3.6	6.9	17.9	
12	6.9	S	8.4	6.5	9.2	6.2	7.4	8.0	7.3	9.2	2.6	4.0	4.6	5.0	3.6	4.4	3.8	1.4	2.0	6.9	3.3	8.7	9.1	7.4	5.9	9.2	
13	9.4	S	8.2	5.0	6.9	7.1	11.4	11.9	10.6	20.5	22.7	14.5	19.9	15.6	3.4	7.0	6.1	1.4	1.5	1.5	2.4	4.9	10.4	5.4	9.0	22.7	
14	8.4	S	8.5	12.0	12.2	8.6	5.5	9.9	8.7	5.0	7.3	5.5	7.9	7.6	7.2	7.7	16.1	7.0	7.7	7.9	5.7	12.3	8.5	11.3	8.6	16.1	
15	9.8	S	10.5	10.2	5.5	7.7	8.5	7.7	11.4	12.4	5.3	1.8	2.3	5.5	1.4	2.8	6.0	11.3	6.3	8.9	5.2	4.7	1.9	2.9	6.5	12.4	
16	11.1	S	6.2	5.0	6.5	6.1	7.4	8.5	7.6	7.2	2.9	1.1	1.7	4.1	8.9	13.5	11.4	12.3	11.1	9.6	3.9	4.4	4.3	3.3	6.9	13.5	
17	6.2	S	9.1	3.9	4.4	3.3	5.4	8.7	10.8	9.3	13.1	3.8	12.8	8.8	13.7	15.5	19.9	15.4	16.9	1.0	1.1	2.9	2.0	7.6	8.5	19.9	
18	4.7	S	7.5	7.9	3.6	4.9	12.1	10.1	10.4	8.5	4.3	5.2	2.6	2.2	1.0	0.8	8.2	7.4	4.2	6.7	10.9	4.5	4.3	2.9	5.9	12.1	
19	2.0	S	3.1	1.3	2.2	1.7	1.7	2.1	2.8	5.5	4.0	3.3	3.6	7.6	5.3	2.3	4.0	4.1	4.4	8.1	3.5	2.5	2.4	4.7	3.6	8.1	
20	6.8	S	8.1	6.5	10.2	9.3	11.5	10.0	10.9	11.8	7.3	3.1	6.1	9.7	2.1	11.0	7.1	5.9	3.6	6.2	4.6	4.4	9.4	5.1	7.4	11.8	
21	9.3	S	9.1	9.1	5.9	10.4	4.5	13.6	16.9	15.0	4.2	5.7	3.1	2.2	3.3	2.6	1.6	1.9	7.0	7.5	9.8	7.9	6.6	6.8	7.1	16.9	
22	6.5	S	5.8	7.9	6.0	5.5	6.1	4.6	6.2	1.5	2.4	6.3	11.9	7.5	0.8	0.7	0.5	0.6	0.6	2.1	6.2	12.4	7.0	8.1	5.1	12.4	
23	6.6	S	6.4	5.7	6.2	10.3	15.5	13.8	15.1	11.0	9.4	5.4	5.4	3.2	1.9	1.7	1.1	2.5	1.0	3.0	8.8	15.2	17.4	12.5	7.8	17.4	
24	10.5	S	12.7	12.0	7.3	12.6	11.1	8.1	10.4	8.6	9.9	9.7	5.1	8.3	12.6	2.2	5.1	1.3	0.8	11.2	17.9	4.2	2.9	3.9	8.2	17.9	
25	9.5	S	11.6	19.8	9.9	8.6	7.9	11.5	12.9	8.3	8.5	6.4	11.6	11.1	3.0	1.2	1.5	3.0	6.9	10.8	3.6	5.0	4.2	4.8	7.9	19.8	
26	3.2	S	2.3	7.5	9.5	7.2	14.4	7.8	11.5	11.6	4.2	1.1	2.6	5.9	2.6	4.7	7.3	2.2	4.7	14.8	10.0	3.9	3.3	5.0	6.4	14.8	
27	4.5	S	6.3	7.7	8.3	8.6	9.9	12.0	8.4	6.2	9.8	4.6	5.2	1.6	2.4	2.0	2.3	1.8	6.6	3.0	3.2	4.3	5.5	5.6	12.0		
28	5.6	S	7.8	6.3	4.1	5.7	9.2	13.0	11.7	C	C	C	C	C	C	9.4	7.3	6.2	6.3	4.2	4.4	2.8	4.6	4.3	-	-	
29	7.4	S	12.4	15.7	10.1	12.9	10.6	15.1	16.4	17.3	2.9	1.3	1.4	8.6	1.5	5.7	3.6	2.0	4.4	9.6	10.8	24.6	12.4	12.2	9.5	24.6	
30	14.7	S	8.0	9.6	9.6	7.7	7.9	7.4	6.3	5.4	6.1	5.3	0.8	7.1	1.1	0.8	1.0	0.8	10.8	14.3	5.0	8.2	4.1	5.0	6.4	14.7	
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	684	100%
MEAN	8.4	-	8.6	8.6	8.0	8.6	10.1	10.8	10.6	9.2	6.8	4.8	5.5	6.0	4.2	4.5	5.2	5.0	4.5	6.1	5.9	7.0	6.2	7.1			
MAX	25.9	-	25.2	19.9	16.5	17.9	24.9	36.8	28.6	24.2	22.7	14.5	19.9	15.6	13.7	15.5	19.9	17.1	16.9	14.8	17.9	24.6	17.4	21.0			



Number of 1HR Exceedences	0
Number of Non-Zero Readings	684
Maximum 1-HR Average	36.8 PPB
Maximum 24-HR Average	11.0 PPB
Monthly Calibration	6
Standard Deviation	5.0
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	7.0 PPB

Lagoon NOx (ppb) – June 2023

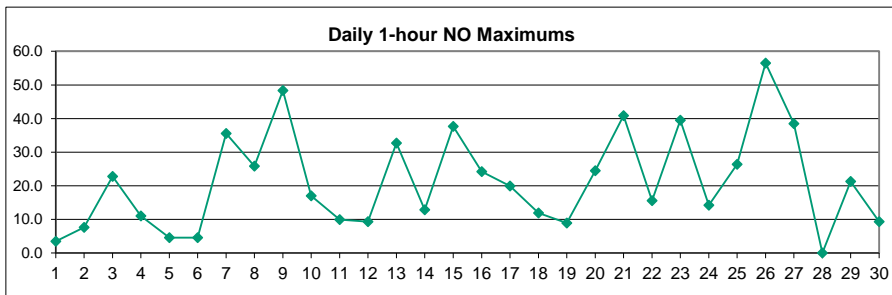
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.8	S	3.6	1.1	0.9	0.9	0.9	0.9	2.6	1.9	1.1	2.9	1.3	2.7	4.8	3.0	1.8	1.4	5.1	1.9	5.3	7.4	1.9	2.0	2.6	7.4
2	8.7	S	1.1	6.2	6.5	6.0	13.9	10.3	13.8	8.9	3.3	2.9	2.4	4.2	2.0	4.2	1.6	0.9	1.0	1.8	1.8	4.2	3.9	10.7	5.2	13.9
3	16.1	S	6.7	8.7	10.3	9.7	17.8	30.2	18.4	47.0	33.3	3.9	3.8	1.8	1.8	1.1	1.7	4.8	1.4	1.5	1.7	4.1	6.5	5.4	10.3	47.0
4	3.4	S	5.2	14.8	18.1	15.3	9.7	9.0	10.6	9.8	14.2	13.7	19.9	17.1	13.2	11.8	19.8	25.7	5.2	4.6	4.2	28.2	2.3	5.1	12.2	28.2
5	7.2	S	6.3	7.3	4.0	8.8	11.0	6.3	3.2	4.0	4.0	2.1	2.3	3.6	1.8	1.5	3.6	1.4	3.3	4.8	7.2	3.0	1.7	1.4	4.3	11.0
6	1.6	S	1.9	1.0	1.5	3.1	2.3	3.4	4.3	6.6	7.0	4.6	2.0	2.9	5.3	1.7	4.8	4.7	2.9	4.8	4.3	11.7	13.2	7.3	4.5	13.2
7	15.1	S	18.9	12.8	29.7	27.5	60.5	39.7	51.0	29.0	9.3	3.6	2.1	2.3	1.0	3.4	3.3	5.9	4.6	6.2	5.6	2.4	7.1	14.2	15.4	60.5
8	51.6	S	28.3	14.8	16.5	17.2	27.6	40.2	13.1	21.8	6.7	13.4	2.8	4.7	6.7	3.3	6.9	0.9	1.2	12.1	11.7	4.6	4.4	26.0	14.6	51.6
9	6.7	S	13.9	9.7	14.4	19.1	43.7	85.2	18.9	4.5	2.3	1.9	19.7	12.7	6.0	1.4	2.0	18.7	1.4	4.4	8.6	6.5	9.3	16.9	14.2	85.2
10	22.5	S	24.1	25.4	11.2	13.7	21.1	31.3	45.6	8.4	5.0	8.2	9.0	10.1	17.2	19.9	7.3	5.0	2.1	0.6	3.1	7.5	4.8	5.4	13.4	45.6
11	4.9	S	9.3	8.5	11.2	21.3	16.2	9.2	24.6	9.4	23.2	7.5	2.0	1.1	1.0	0.9	0.9	7.9	9.0	2.3	2.9	11.6	10.0	4.3	8.7	24.6
12	12.1	S	13.5	6.2	10.3	7.1	11.8	17.2	11.9	14.8	2.6	4.3	6.8	5.7	3.8	4.8	4.1	1.1	1.7	7.4	3.3	9.0	11.0	7.0	7.7	17.2
13	10.7	S	9.5	5.8	11.3	12.6	25.5	25.1	21.7	53.1	54.1	26.3	43.2	27.3	3.9	8.4	6.8	1.0	1.2	1.0	2.4	7.0	14.6	6.1	16.5	54.1
14	13.5	S	9.1	14.8	14.2	9.3	6.3	11.0	10.3	7.2	10.1	7.1	11.6	10.4	8.5	14.7	21.6	8.3	11.7	11.0	7.8	25.0	14.0	24.0	12.2	25.0
15	20.4	S	24.2	28.9	10.4	18.8	27.5	21.2	48.9	42.0	9.3	1.9	2.7	7.2	1.1	3.0	7.8	20.0	9.4	13.3	6.4	9.2	1.6	3.4	14.7	48.9
16	35.2	S	12.4	9.0	13.4	10.6	18.9	25.5	14.2	15.9	4.3	0.9	1.9	6.1	14.1	23.9	20.7	22.3	20.1	16.1	6.0	6.7	5.4	4.8	13.4	35.2
17	8.7	S	17.0	5.0	4.6	4.4	9.6	25.8	30.6	18.5	25.4	5.6	27.0	15.7	25.9	27.9	37.4	28.5	30.9	0.7	0.8	2.7	1.8	8.7	15.8	37.4
18	4.5	S	8.8	11.4	3.5	4.9	22.2	21.9	19.7	14.2	5.5	7.3	3.3	3.3	0.7	0.8	14.0	9.6	5.5	10.4	11.9	4.6	5.1	3.2	8.5	22.2
19	2.3	S	4.5	1.2	2.7	1.7	2.2	2.8	4.4	9.9	8.3	7.6	5.7	16.0	9.7	3.4	7.0	6.2	9.7	16.9	6.7	2.6	2.7	8.9	6.2	16.9
20	16.6	S	21.0	14.6	33.8	18.0	27.2	18.4	28.9	36.2	15.6	4.5	10.9	26.7	2.8	19.8	12.3	6.9	3.7	6.4	4.6	4.5	13.3	6.3	15.4	36.2
21	16.7	S	23.6	24.1	14.3	31.3	13.0	47.8	57.6	47.6	7.2	9.8	4.4	2.7	4.8	4.0	2.2	2.0	12.7	11.0	14.5	11.3	6.7	8.6	16.4	57.6
22	6.9	S	7.7	14.6	11.6	11.9	12.6	10.1	14.0	1.8	3.3	11.4	27.3	14.4	0.7	0.8	0.1	0.3	0.3	2.1	11.3	18.2	8.6	8.4	8.6	27.3
23	7.9	S	13.9	9.9	10.5	25.4	46.2	53.2	51.4	28.4	22.0	8.0	7.5	4.0	2.2	1.8	0.8	2.6	0.5	2.9	9.1	24.2	21.2	12.7	15.9	53.2
24	10.7	S	13.3	17.4	8.5	25.8	25.1	17.3	22.0	17.9	17.7	18.8	10.0	17.2	26.5	2.6	8.1	1.1	0.5	20.3	30.3	5.0	2.9	4.4	14.1	30.3
25	11.7	S	18.7	46.1	17.6	12.6	12.7	18.9	21.9	13.0	10.8	9.1	29.5	22.6	4.1	1.0	1.4	3.2	10.3	12.9	3.8	6.4	4.2	6.1	13.0	46.1
26	4.1	S	2.5	14.5	28.9	24.2	70.7	30.0	40.1	30.1	6.1	1.0	3.0	7.6	2.7	6.0	10.1	2.1	4.9	18.4	14.6	3.7	3.0	5.1	14.5	70.7
27	5.0	S	7.9	12.0	16.1	17.6	26.1	50.3	17.2	10.3	16.8	7.1	5.4	6.3	2.1	2.4	2.1	2.3	1.6	9.8	2.7	2.9	5.0	5.7	10.2	50.3
28	5.4	S	9.5	6.7	3.9	9.9	16.3	38.6	28.3	C	C	C	C	C	10.2	7.9	6.8	6.8	5.1	6.2	3.4	5.6	4.5	-	-	-
29	8.1	S	16.4	25.5	12.6	20.0	14.2	32.8	29.3	27.0	3.5	1.8	1.8	16.7	1.8	13.4	4.8	2.4	5.3	14.8	12.5	45.8	13.0	13.4	14.6	45.8
30	23.9	S	11.9	13.4	17.4	12.1	10.0	11.1	9.7	7.8	8.6	8.4	0.7	13.9	1.2	1.1	1.0	0.8	18.2	20.3	5.1	10.5	4.7	5.0	9.4	23.9
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	684	100%
MEAN	12.2	-	12.2	13.0	12.3	14.0	20.8	24.8	22.9	18.9	11.7	7.1	9.3	9.9	6.1	6.7	7.5	6.8	6.4	8.2	7.2	9.8	7.0	8.2	-	-
MAX	51.6	-	28.3	46.1	33.8	31.3	70.7	85.2	57.6	53.1	54.1	26.3	43.2	27.3	26.5	27.9	37.4	28.5	30.9	20.3	30.3	45.8	21.2	26.0	-	-



Number of Non-Zero Readings	684	Operational Time	720 HRS
Maximum 1-HR Average	85.2 PPB	Operational Uptime	100.0 %
Maximum 24-HR Average	16.5 PPB	Monthly Average	11.4 PPB
Monthly Calibration	6	Standard Deviation	11.2

Lagoon NO (ppb) – June 2023

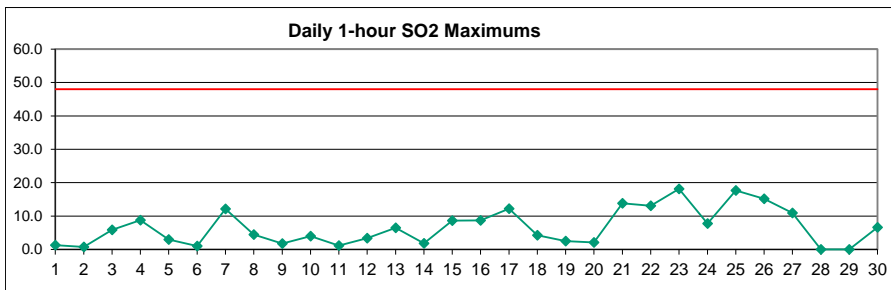
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.3	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.4	1.9	0.5	0.0	0.0	0.9	0.0	1.3	3.5	0.0	0.1	0.4	3.5
2	2.4	S	0.0	3.0	2.3	1.4	6.9	5.3	7.7	4.4	0.8	0.3	0.1	0.3	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.6	7.7
3	3.4	S	0.0	0.3	0.7	1.3	6.1	16.5	8.0	22.8	16.3	0.6	1.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.4	22.8
4	0.0	S	0.0	0.2	1.8	4.8	3.1	3.6	3.3	2.9	7.1	5.8	6.7	7.6	5.2	3.9	8.4	9.6	1.1	0.0	0.0	11.0	0.0	0.0	3.7	11.0
5	0.1	S	0.0	0.2	0.1	2.1	4.6	1.3	0.3	0.6	0.6	0.0	0.2	0.5	0.0	0.0	0.6	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.5	4.6
6	0.0	S	0.0	0.0	0.0	0.0	0.0	0.3	0.8	2.0	2.7	1.1	0.2	0.3	1.7	0.0	1.3	2.2	0.3	1.5	0.0	4.6	1.2	0.1	0.9	4.6
7	0.6	S	5.2	2.5	15.6	13.3	35.6	21.4	29.0	14.0	2.2	0.3	0.1	0.2	0.0	0.2	0.3	1.3	0.7	0.4	0.0	0.0	0.0	0.0	6.2	35.6
8	25.8	S	3.3	0.4	1.2	1.7	9.2	22.1	3.5	6.4	0.8	3.3	0.2	0.8	1.3	0.4	0.9	0.0	0.0	1.1	0.4	0.0	0.0	5.1	3.8	25.8
9	0.0	S	0.2	0.0	0.4	2.5	19.6	48.4	4.9	0.4	0.0	0.0	4.5	1.9	0.4	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.5	3.7	48.4
10	1.6	S	5.0	5.6	0.1	0.4	3.1	8.6	17.0	2.4	0.7	1.1	2.2	2.7	4.1	7.6	1.9	0.5	0.0	0.0	0.0	0.3	0.0	0.0	2.8	17.0
11	0.1	S	2.0	2.3	1.8	3.6	2.1	0.5	10.0	2.8	9.9	1.3	0.1	0.0	0.0	0.0	0.0	2.2	2.4	0.0	0.0	1.4	0.2	0.8	1.9	10.0
12	5.3	S	5.2	0.0	1.3	1.0	4.6	9.4	4.8	5.8	0.1	0.4	2.4	0.9	0.2	0.6	0.5	0.0	0.0	0.7	0.1	0.5	2.1	0.0	2.0	9.4
13	1.5	S	1.5	0.8	4.6	5.7	14.2	13.4	11.3	32.7	31.4	12.0	23.4	11.8	0.6	1.6	0.8	0.0	0.0	0.0	0.1	2.2	4.4	0.8	7.6	32.7
14	5.2	S	0.7	2.9	2.2	0.8	0.9	1.2	1.8	2.3	3.0	1.7	3.8	2.9	1.4	7.1	5.6	1.4	4.2	3.2	2.2	12.8	5.7	12.9	3.7	12.9
15	10.8	S	13.9	18.8	5.0	11.3	19.1	13.7	37.6	29.6	4.2	0.1	0.5	1.9	0.0	0.3	1.9	8.9	3.1	4.5	1.3	4.6	0.0	0.5	8.3	37.6
16	24.2	S	6.3	4.0	7.1	4.7	11.7	17.1	6.8	8.7	1.5	0.0	0.3	2.1	5.4	10.6	9.5	10.1	9.2	6.6	2.2	2.4	1.2	1.6	6.7	24.2
17	2.7	S	8.0	1.2	0.3	1.1	4.5	17.2	19.9	9.3	12.4	1.9	14.3	7.0	12.2	12.5	17.5	13.2	14.1	0.0	0.0	0.0	0.0	1.3	7.4	19.9
18	0.0	S	1.5	3.6	0.0	0.1	10.3	11.9	9.5	5.8	1.3	2.2	0.8	1.2	0.0	0.0	6.0	2.3	1.3	3.8	1.1	0.1	0.9	0.3	2.8	11.9
19	0.4	S	1.4	0.0	0.6	0.1	0.7	0.9	1.7	4.6	4.4	4.5	2.3	8.7	4.6	1.2	3.1	2.2	5.4	8.9	3.2	0.2	0.3	4.3	2.8	8.9
20	9.9	S	13.0	8.3	23.7	8.9	15.8	8.7	18.2	24.5	8.5	1.5	5.0	17.1	0.7	8.9	5.4	1.0	0.2	0.3	0.1	0.1	4.0	1.3	8.0	24.5
21	7.5	S	14.6	15.2	8.4	21.0	8.7	34.3	40.9	32.7	3.2	4.3	1.4	0.7	1.6	1.6	0.7	0.3	5.9	3.7	4.8	3.5	0.2	2.0	9.4	40.9
22	0.5	S	2.0	6.9	5.8	6.5	6.6	5.6	8.0	0.3	1.0	5.2	15.6	7.1	0.0	0.2	0.0	0.0	0.0	0.1	5.2	6.0	1.7	0.5	3.7	15.6
23	1.3	S	7.5	4.3	4.5	15.3	30.8	39.5	36.4	17.6	12.7	2.7	2.3	0.9	0.5	0.2	0.0	0.2	0.0	0.0	0.5	9.2	4.0	0.4	8.3	39.5
24	0.5	S	0.7	5.5	1.2	13.3	14.2	9.5	11.8	9.5	8.0	9.2	5.0	9.0	14.0	0.5	3.2	0.0	0.0	9.2	12.6	1.0	0.1	0.7	6.0	14.2
25	2.4	S	7.2	26.4	7.9	4.1	4.9	7.5	9.2	4.9	2.5	2.9	18.1	11.6	1.2	0.0	0.0	0.3	3.5	2.3	0.3	1.5	0.1	1.4	5.2	26.4
26	1.0	S	0.4	7.1	19.6	17.2	56.5	22.4	28.8	18.6	2.0	0.0	0.5	1.8	0.2	1.3	2.9	0.0	0.3	3.8	4.8	0.0	0.0	0.2	8.2	56.5
27	0.6	S	1.8	4.5	7.9	9.3	16.3	38.5	9.0	4.3	7.1	2.3	0.9	1.3	0.6	0.0	0.2	0.0	0.0	3.3	0.0	0.0	0.8	0.3	4.7	38.5
28	0.0	S	1.9	0.6	0.0	4.3	7.4	25.7	16.8	C	C	C	C	C	1.0	0.7	0.7	0.6	1.0	2.0	0.6	1.1	0.3	-	-	-
29	0.8	S	4.2	9.9	2.8	7.3	3.8	17.8	13.0	9.8	0.7	0.5	0.5	8.2	0.4	7.7	1.3	0.4	1.0	5.3	1.8	21.3	0.7	1.3	5.2	21.3
30	9.3	S	4.1	3.9	7.9	4.5	2.3	4.0	3.6	2.5	2.6	3.2	0.0	6.9	0.1	0.4	0.1	0.1	7.6	6.2	0.2	2.5	0.7	0.1	3.2	9.3
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	684	100%
MEAN	3.9	-	3.7	4.6	4.5	5.6	10.8	14.2	12.5	9.7	5.1	2.4	3.9	4.0	2.0	2.3	2.4	2.0	2.1	2.2	1.5	3.0	1.0	1.3		
MAX	25.8	-	14.6	26.4	23.7	21.0	56.5	48.4	40.9	32.7	31.4	12.0	23.4	17.1	14.0	12.5	17.5	13.2	14.1	9.2	12.6	21.3	5.7	12.9		



Number of Non-Zero Readings	571		
Maximum 1-HR Average	56.5 PPB		
Maximum 24-HR Average	9.4 PPB		
Operational Time		720 HRS	
Monthly Calibration	6	Operational Uptime	100.0 %
Standard Deviation	7.23	Monthly Average	4.5 PPB

Lagoon SO₂ (ppb) – June 2023

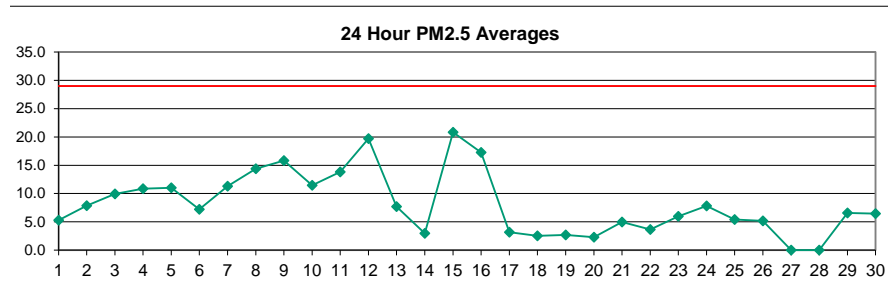
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.5	S	0.0	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.4	0.5	1.3	0.4	0.2	0.2	0.1	0.0	0.2	0.2	0.3	1.3
2	0.1	S	0.0	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.3	0.6	0.7	0.6	0.3	0.3	0.2	0.0	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.7
3	0.1	S	0.0	0.1	0.0	0.0	0.4	2.2	1.5	5.9	5.8	0.7	0.5	0.3	0.2	0.4	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.1	0.9	5.9
4	0.1	S	0.0	0.1	0.7	1.6	1.0	0.9	1.4	1.5	2.1	2.9	3.8	5.1	3.4	5.0	6.0	8.8	1.4	0.2	0.4	0.4	0.1	0.1	2.0	8.8
5	0.8	S	0.9	1.0	0.8	0.7	0.9	1.9	2.5	2.9	2.4	1.4	1.0	2.1	2.4	1.2	0.6	0.4	0.6	1.1	1.1	0.8	0.5	0.3	1.2	2.9
6	0.2	S	0.1	0.1	0.0	0.1	0.2	0.3	0.6	1.0	0.7	1.0	0.7	0.6	0.4	0.4	0.6	0.6	0.3	0.4	0.4	0.3	0.3	0.3	0.4	1.0
7	0.1	S	2.0	1.6	4.4	4.1	12.1	8.6	11.4	5.4	3.0	1.2	0.8	1.2	1.0	0.9	0.8	0.7	0.5	0.5	1.3	2.0	1.6	2.9	12.1	
8	1.2	S	0.1	0.4	0.9	0.5	2.3	4.5	1.4	2.7	1.0	0.7	0.3	0.4	0.0	0.2	1.0	0.3	0.2	1.0	0.6	0.4	0.3	1.4	4.5	
9	0.5	S	0.1	0.2	0.2	0.2	0.7	1.8	0.9	0.7	0.4	0.2	0.6	0.8	0.6	0.3	0.3	0.5	0.2	0.3	1.6	0.5	0.1	0.4	0.5	1.8
10	0.3	S	0.6	0.6	0.3	0.4	0.7	1.4	3.6	0.7	0.6	0.8	0.7	3.3	4.0	3.2	1.5	0.4	0.2	0.3	0.4	0.6	0.7	0.3	1.1	4.0
11	0.6	S	1.1	0.9	0.9	1.1	0.7	0.4	0.5	0.6	0.7	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.5	1.1
12	0.2	S	0.1	0.2	0.2	0.2	0.5	1.0	1.6	3.4	0.8	0.9	0.7	0.5	0.4	0.3	0.8	0.4	0.4	0.4	0.4	0.3	0.5	0.5	0.6	3.4
13	0.7	S	1.2	0.8	1.2	0.9	2.1	2.4	2.5	4.8	6.5	3.7	5.2	3.0	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.7	1.4	0.8	1.8	6.5
14	0.9	S	0.6	0.6	0.6	0.6	0.5	0.3	0.4	0.4	0.4	0.5	0.2	0.3	0.4	0.5	0.8	0.7	0.5	0.6	0.7	1.4	1.1	1.8	0.7	1.8
15	1.9	S	2.0	2.6	0.9	1.8	2.4	2.3	7.5	8.7	1.5	0.5	0.6	1.2	0.3	0.4	0.4	1.8	3.0	3.4	0.5	0.3	0.2	0.3	1.9	8.7
16	7.3	S	1.2	1.4	1.9	1.8	2.9	4.7	1.9	3.3	0.5	0.4	0.4	2.2	2.2	4.5	7.0	6.5	8.7	5.6	3.3	1.9	0.5	1.1	3.1	8.7
17	1.9	S	3.9	1.2	0.5	0.6	0.9	7.5	9.2	6.2	8.1	0.5	10.8	7.1	9.7	11.5	12.2	8.9	7.5	0.6	0.6	0.7	0.6	0.6	4.8	12.2
18	0.4	S	0.7	0.5	0.6	0.6	2.2	4.2	3.4	2.8	0.8	1.0	0.7	0.6	0.4	0.5	0.7	0.6	0.5	0.2	0.3	0.4	0.3	0.6	1.0	4.2
19	0.5	S	0.4	0.3	0.4	0.4	0.6	0.5	0.5	1.2	1.6	1.5	1.0	2.5	0.9	0.5	1.0	0.6	2.2	2.2	0.4	0.3	0.3	1.0	0.9	2.5
20	1.4	S	2.1	1.8	1.1	1.0	0.6	0.8	1.5	2.0	0.9	0.5	1.1	1.3	0.2	0.4	0.2	0.2	0.2	0.2	0.4	0.3	0.9	0.6	0.9	2.1
21	1.2	S	1.5	1.5	0.8	3.2	1.1	12.0	11.1	13.8	2.2	1.4	1.0	0.4	1.4	1.2	0.3	0.3	2.2	1.9	0.8	0.4	0.1	0.6	2.6	13.8
22	0.6	S	0.8	2.4	1.1	1.7	1.8	1.8	1.2	0.4	1.8	5.4	13.1	4.0	0.2	0.0	0.0	0.2	0.1	0.2	0.4	0.3	0.3	0.5	1.7	13.1
23	1.2	S	1.7	1.6	2.5	7.1	11.8	18.1	17.3	10.2	8.8	3.8	2.6	1.0	0.9	0.6	0.7	0.6	0.4	0.7	0.8	0.7	0.4	0.3	4.1	18.1
24	0.3	S	0.2	1.3	0.6	3.6	3.3	4.5	4.1	4.5	3.7	5.9	3.5	6.1	7.8	0.5	0.4	0.3	0.2	4.1	6.0	1.3	0.4	0.6	2.7	7.8
25	2.0	S	4.0	17.7	4.7	2.2	1.9	6.8	1.5	1.6	1.1	0.7	3.9	6.2	1.6	0.5	0.4	0.4	0.6	2.6	0.9	0.4	0.6	0.6	2.7	17.7
26	0.6	S	0.0	1.3	3.5	4.7	15.2	8.6	12.8	7.7	1.6	0.5	0.1	1.9	0.8	0.6	0.7	0.9	1.7	1.7	0.7	0.5	0.4	0.6	2.9	15.2
27	0.6	S	0.8	2.0	1.7	3.0	3.9	11.0	2.3	1.5	5.5	1.6	1.3	1.5	0.6	0.5	0.6	0.7	0.5	0.6	0.4	0.5	0.4	0.5	1.8	11.0
28	0.6	S	0.5	0.4	0.2	0.3	0.9	4.1	4.4	C	C	C	C	0.8	0.2	P	P	P	P	P	P	P	P	P	-	-
29	P	P	P	P	P	P	P	P	P	NRK	NRK	NRK	NRK	3.5	0.2	4.4	1.2	1.5	0.4	0.5	0.4	0.5	0.3	0.3	-	-
30	0.4	S	1.1	1.7	2.9	0.6	0.5	0.7	0.4	1.0	0.8	1.6	0.1	3.2	0.1	0.1	0.0	0.0	5.0	6.6	0.2	0.3	0.2	0.2	1.2	6.6
NO.	29	-	29	29	29	29	29	29	29	28	28	28	28	30	30	29	29	29	29	29	29	29	29	29	665	97%
MEAN	0.9	-	1.0	1.5	1.2	1.5	2.5	3.9	3.7	3.4	2.3	1.4	2.0	2.1	1.4	1.4	1.4	1.3	1.4	1.3	0.8	0.6	0.5	0.6		
MAX	7.3	-	4.0	17.7	4.7	7.1	15.2	18.1	17.3	13.8	8.8	5.9	13.1	7.1	9.7	11.5	12.2	8.9	8.7	6.6	6.0	1.9	2.0	1.8		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	655
Maximum 1-HR Average	18.1 PPB
Maximum 24-HR Average	4.8 PPB
Monthly Calibration	4
Standard Deviation	2.57
Operational Time	698 HRS
Operational Uptime	96.9 %
Monthly Average	1.6 PPB

Lagoon PM_{2.5} (µg/m³) – June 2023

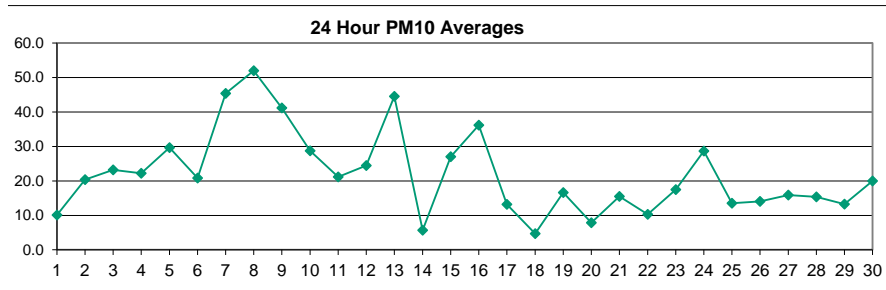
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	16.1	X	13.5	9.3	10.5	11.6	7.7	7.7	5.7	1.6	0.0	1.7	4.2	4.1	4.0	3.2	0.6	0.0	0.7	0.4	5.2	4.5	3.5	6.2	5.3	16.1	
2	6.6	X	6.7	4.1	10.4	8.7	4.9	8.2	9.5	13.3	11.1	5.9	3.7	5.3	8.7	8.5	6.2	6.4	6.7	8.2	7.1	8.8	9.4	12.0	7.8	13.3	
3	9.4	X	10.6	9.3	12.2	10.9	9.9	10.3	9.1	7.9	11.8	11.0	8.9	7.4	7.3	7.4	8.2	11.4	13.1	10.4	8.9	11.1	10.3	11.8	9.9	13.1	
4	14.1	16.6	16.1	14.2	14.5	16.9	10.2	15.3	14.5	20.6	11.8	9.7	8.3	5.7	3.6	4.1	6.7	6.2	4.4	7.7	10.2	10.2	11.2	7.7	10.9	20.6	
5	7.6	11.0	8.3	9.3	10.6	12.9	11.6	11.9	8.5	9.9	12.6	13.4	12.6	10.0	12.5	18.7	5.1	8.5	9.1	7.3	4.9	15.7	17.6	14.6	11.0	18.7	
6	14.7	11.6	11.3	9.4	7.8	6.1	4.0	4.5	4.4	5.1	4.0	5.0	11.6	8.6	6.4	6.2	6.5	9.2	7.3	5.1	3.9	6.5	6.9	7.3	7.2	14.7	
7	6.1	7.6	11.2	10.4	9.7	10.2	11.0	13.9	12.5	16.4	11.6	11.9	10.3	7.7	5.8	7.9	8.5	11.1	12.9	25.0	7.5	11.7	15.8	14.0	11.3	25.0	
8	18.8	17.6	20.7	17.2	20.8	18.6	21.8	26.2	17.3	19.5	17.5	11.8	9.7	20.6	7.9	7.6	13.8	9.4	9.4	6.1	4.5	8.2	10.1	10.3	14.4	26.2	
9	9.2	9.6	13.6	9.4	8.9	17.6	14.9	16.8	13.7	14.1	11.5	22.4	18.2	17.9	15.3	13.4	21.3	21.3	19.1	20.8	14.1	20.2	18.0	18.2	15.8	22.4	
10	16.9	X	18.0	16.5	15.0	14.6	15.9	21.2	19.8	17.3	13.7	10.9	10.6	10.2	8.6	7.0	14.8	8.8	6.2	6.2	2.8	0.0	2.9	5.5	11.5	21.2	
11	6.4	X	5.7	2.5	4.3	7.8	7.6	10.9	20.4	33.3	30.0	45.8	43.5	26.6	3.2	6.5	6.1	3.1	8.9	7.2	6.7	8.1	9.4	14.0	13.8	45.8	
12	14.4	X	12.8	11.7	10.5	11.5	8.0	10.5	10.5	8.2	29.6	28.0	32.5	27.7	20.7	48.6	24.4	21.1	21.1	15.5	39.0	16.2	14.6	16.4	19.7	48.6	
13	13.3	X	11.0	7.6	5.3	6.5	5.9	6.2	7.3	7.2	14.3	18.1	9.1	8.5	7.2	22.6	3.9	4.1	4.5	4.2	3.9	2.5	1.8	2.6	7.7	22.6	
14	1.7	0.0	0.7	1.5	1.0	3.7	5.0	3.5	1.0	2.6	3.4	3.5	2.6	1.0	2.8	5.4	5.6	4.1	2.0	5.8	4.5	3.1	2.4	4.2	3.0	5.8	
15	4.3	4.1	6.3	10.0	7.1	3.3	5.4	6.3	8.7	15.5	12.4	18.6	22.7	33.0	35.1	32.8	32.3	34.4	33.6	35.6	35.1	38.1	31.4	33.9	20.8	38.1	
16	32.7	X	27.4	29.5	29.7	29.8	27.6	27.7	24.6	29.2	19.5	16.0	12.1	12.6	11.6	14.0	12.2	12.1	8.0	5.9	4.1	2.8	4.1	4.0	17.3	32.7	
17	2.4	X	6.5	3.2	0.0	0.1	1.9	3.8	3.5	5.4	3.4	0.0	0.0	3.6	3.4	3.5	5.5	3.3	1.3	1.3	0.8	3.9	9.6	6.4	3.2	9.6	
18	2.8	X	2.7	0.0	1.0	2.4	7.0	3.5	2.2	6.9	5.0	3.0	5.6	4.7	2.9	5.5	2.2	0.0	0.2	0.0	0.0	0.5	0.4	0.0	2.5	7.0	
19	0.0	X	0.4	1.5	0.4	0.2	1.8	2.0	1.1	1.8	1.4	0.7	4.4	6.7	6.3	5.4	3.3	4.7	5.0	6.2	6.3	2.6	0.0	0.0	2.7	6.7	
20	0.9	X	1.2	1.1	2.1	5.7	5.3	2.5	1.1	0.1	0.8	2.1	2.1	1.4	1.9	1.0	0.0	1.4	4.2	3.7	3.1	2.7	4.7	4.1	2.3	5.7	
21	2.3	X	3.5	5.8	4.9	1.4	6.0	6.8	8.1	7.0	9.5	6.9	4.8	5.0	6.7	5.5	3.2	3.4	3.5	1.6	4.6	4.4	3.2	6.1	5.0	9.5	
22	4.5	X	5.7	4.8	4.3	4.1	4.7	4.2	7.1	5.3	3.7	2.6	3.0	4.8	3.7	2.2	4.1	1.6	0.7	1.7	0.0	1.9	4.3	4.8	3.6	7.1	
23	6.0	X	5.8	5.0	5.0	3.8	7.4	8.6	7.9	6.8	10.8	6.3	1.0	0.9	1.7	2.8	3.7	3.4	5.0	5.8	9.0	9.6	7.8	13.6	6.0	13.6	
24	13.6	X	10.4	6.5	7.5	9.8	9.0	9.2	9.1	6.7	6.0	10.6	6.5	3.7	4.9	6.9	5.0	2.4	5.1	7.3	14.6	12.2	7.7	4.7	7.8	14.6	
25	5.1	6.1	6.5	5.4	4.9	5.9	5.9	4.1	6.0	6.6	8.9	7.2	3.6	6.0	6.2	6.1	6.4	3.6	6.0	5.9	3.9	5.8	3.4	0.1	5.4	8.9	
26	1.7	4.5	4.0	2.5	5.1	4.7	4.7	9.9	6.8	7.7	6.4	8.3	4.7	4.4	6.5	4.3	2.1	6.3	6.7	5.0	6.1	5.7	3.5	2.8	5.2	9.9	
27	4.7	7.6	5.9	4.0	4.7	5.2	3.1	5.3	8.4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
28	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	17.0	14.7	10.2	9.7	8.5	7.0	9.0	6.8	5.8	6.0	-	-
29	8.9	6.6	5.5	3.8	3.2	5.3	6.2	5.0	11.3	7.8	5.2	7.5	8.1	5.4	7.3	5.9	4.4	8.2	6.2	6.4	6.2	7.0	7.9	8.8	6.6	11.3	
30	10.8	11.6	12.8	7.7	5.4	5.8	6.2	6.6	8.9	8.4	7.0	7.8	5.6	1.8	7.3	7.0	4.0	2.6	2.5	3.8	3.7	3.8	6.8	6.7	6.4	12.8	
NO.	29	13	29	29	29	29	29	29	29	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	675	98%	
MEAN	8.8	8.8	9.1	7.7	7.8	8.5	8.3	9.4	9.3	10.4	10.1	10.6	9.6	9.1	8.2	9.8	7.9	7.6	7.7	7.8	7.9	8.1	8.1	8.5			
MAX	32.7	17.6	27.4	29.5	29.7	29.8	27.6	27.7	24.6	33.3	30.0	45.8	43.5	33.0	35.1	48.6	32.3	34.4	33.6	35.6	39.0	38.1	31.4	33.9			



Number of 24HR Exceedences	0		
Number of Non-Zero Readings	659		
Maximum 1-HR Average	48.6 UG/M3		
Maximum 24-HR Average	20.8 UG/M3		
Monthly Calibration	29	Operational Time	704 HRS
Standard Deviation	7.34	Operational Uptime	97.8 %
		Monthly Average	8.7 UG/M3

Lagoon PM₁₀ (µg/m³) – June 2023

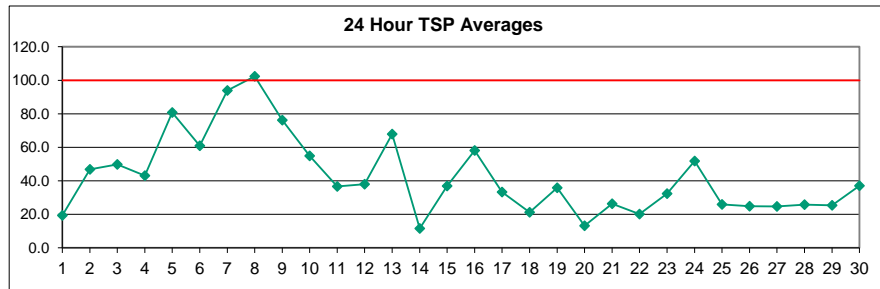
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	28.8	21.7	15.0	16.6	8.5	5.6	7.6	5.2	3.0	2.6	2.0	3.9	4.4	5.1	21.4	2.9	8.6	9.8	10.6	8.1	16.1	9.7	8.5	16.5	10.1	28.8
2	14.3	7.7	10.3	11.9	6.7	16.1	18.6	42.1	42.4	41.2	34.1	14.5	25.2	19.2	42.2	14.4	16.3	12.6	11.4	11.7	26.5	13.6	19.4	17.0	20.4	42.4
3	21.8	17.3	17.1	18.4	24.7	23.7	22.6	29.9	26.9	27.7	44.2	27.2	16.4	23.0	8.2	25.3	29.7	22.6	25.1	27.9	14.6	19.9	21.8	21.3	23.2	44.2
4	24.2	15.5	21.9	26.0	30.2	47.5	30.3	27.0	18.9	25.0	32.2	11.4	12.3	23.3	27.9	13.5	14.1	19.6	27.4	20.5	21.7	9.2	22.2	12.0	22.2	47.5
5	19.6	22.5	11.8	17.8	26.9	15.2	34.6	25.1	28.0	41.4	27.3	32.7	49.4	32.6	31.0	27.9	52.7	26.6	35.8	9.4	15.1	45.5	55.7	27.7	29.7	55.7
6	17.2	16.0	7.9	8.8	8.8	9.7	15.9	16.1	18.9	25.3	28.9	20.0	24.6	43.3	31.0	28.3	28.9	21.9	17.9	31.5	12.9	20.7	19.5	25.7	20.8	43.3
7	29.8	25.0	26.9	54.7	42.2	45.1	68.5	86.3	98.0	96.9	52.0	60.9	18.7	55.6	48.7	42.5	31.8	24.9	29.9	25.4	35.6	23.6	27.2	39.2	45.4	98.0
8	35.1	30.0	26.0	34.4	64.4	48.1	89.8	149.2	66.6	59.8	61.0	124.3	72.8	66.5	29.9	71.1	59.5	27.7	17.2	13.6	32.9	18.9	16.9	31.7	52.0	149.2
9	46.7	27.8	24.7	31.3	35.4	40.6	40.3	75.8	73.9	57.2	34.4	37.3	33.4	38.0	48.9	28.7	29.7	50.5	47.7	54.4	21.0	58.4	20.3	31.9	41.2	75.8
10	37.1	40.5	34.6	34.8	19.2	27.6	27.9	31.4	52.8	38.1	25.3	9.6	11.5	17.5	17.1	35.2	79.4	55.8	22.0	8.8	6.3	15.9	16.5	25.5	28.8	79.4
11	32.2	36.5	28.4	12.3	8.5	15.7	12.7	26.0	38.0	35.3	32.8	42.3	48.1	25.6	3.6	6.4	9.0	4.7	7.3	9.6	26.9	7.5	14.9	23.7	21.2	48.1
12	15.6	21.5	13.3	15.9	16.5	15.7	16.8	20.0	21.9	23.6	43.7	39.5	31.7	35.3	37.2	32.8	41.3	24.3	19.6	20.0	19.6	22.1	17.5	21.6	24.5	43.7
13	25.3	X	12.6	11.2	8.2	7.3	4.9	24.2	28.2	24.3	75.7	63.0	21.4	64.3	76.6	403.6	33.6	19.1	32.2	11.9	8.5	11.3	25.4	31.7	44.5	403.6
14	3.9	5.9	3.9	8.1	7.7	6.0	4.6	6.3	8.9	8.0	2.8	7.3	4.3	2.2	8.1	6.1	3.1	2.0	1.2	11.3	9.8	3.8	7.3	3.9	5.7	11.3
15	7.8	6.1	11.5	8.9	6.9	5.9	6.3	4.1	7.9	29.2	41.0	37.3	32.9	42.2	38.2	36.0	41.8	48.5	51.3	41.9	40.5	35.7	36.5	30.5	27.0	51.3
16	33.4	34.4	39.1	36.6	33.3	31.7	29.3	41.1	36.9	61.1	53.8	27.2	27.4	25.1	47.9	49.8	57.0	60.4	31.6	40.9	11.3	10.5	21.2	27.6	36.2	61.1
17	11.3	32.5	9.9	5.5	4.7	5.2	6.6	8.9	10.1	27.6	7.8	9.6	11.4	26.7	22.0	27.1	22.0	17.2	11.3	9.8	4.8	10.4	7.8	7.0	13.2	32.5
18	5.1	2.8	0.3	0.4	3.5	3.5	10.6	6.3	2.9	8.5	7.5	5.4	2.6	7.2	8.9	4.4	0.0	0.0	0.9	4.3	2.4	2.8	16.2	6.9	4.7	16.2
19	13.1	4.3	0.0	0.0	0.6	1.2	7.8	7.6	4.1	2.5	39.9	31.1	42.0	54.2	51.6	24.7	8.7	31.0	17.9	23.2	18.1	0.4	8.1	7.2	16.6	54.2
20	7.2	6.2	2.8	13.8	5.1	23.9	18.4	18.2	3.6	6.8	7.6	11.4	8.1	5.1	3.0	3.6	5.9	5.2	2.6	0.0	8.2	5.7	6.6	10.1	7.9	23.9
21	7.9	18.9	2.3	5.4	6.3	6.1	7.5	8.6	18.3	28.8	29.8	43.2	39.5	26.6	13.6	14.1	13.0	9.5	22.9	15.4	11.0	9.2	7.3	7.1	15.5	43.2
22	10.2	17.8	18.0	12.6	10.8	9.4	5.0	3.2	9.8	18.2	12.8	16.0	22.9	17.8	16.9	6.4	6.9	2.1	0.1	1.7	5.9	6.5	8.8	7.9	10.3	22.9
23	7.2	6.4	11.5	11.2	13.0	13.2	17.2	25.3	29.6	36.9	30.9	13.7	14.1	36.9	14.3	12.8	8.4	8.2	24.4	2.1	23.5	19.8	21.5	17.4	17.5	36.9
24	27.2	23.0	15.0	32.5	25.5	30.1	37.3	48.6	16.7	27.7	27.9	32.3	15.0	4.9	4.6	23.1	32.8	4.5	4.7	20.8	98.7	104.1	19.7	11.4	28.7	104.1
25	16.0	11.0	10.4	7.6	8.7	7.2	18.7	11.5	15.6	41.4	24.0	18.2	7.5	17.6	12.3	8.1	7.6	4.0	25.8	18.6	9.8	8.2	8.2	6.2	13.5	41.4
26	7.2	7.4	3.4	15.8	19.5	15.0	5.8	23.5	25.9	20.9	19.9	36.6	4.0	6.2	19.4	20.9	15.8	13.2	10.7	5.6	14.0	12.6	8.2	5.6	14.0	36.6
27	6.6	13.1	10.1	7.3	8.3	12.7	11.8	20.7	28.4	C	C	C	C	52.7	16.3	18.2	10.7	12.3	9.3	13.0	18.9	16.5	14.7	15.9	52.7	
28	6.8	14.0	7.7	11.9	13.2	11.6	14.2	19.7	42.6	32.3	26.3	23.7	16.4	7.9	8.3	24.3	13.4	16.2	10.9	8.2	22.1	5.5	3.8	7.8	15.4	42.6
29	9.9	7.2	5.3	6.1	7.2	7.2	7.8	9.8	24.4	23.9	37.1	14.0	15.7	15.4	30.1	12.8	9.4	9.7	4.9	8.7	10.1	13.7	18.2	9.4	13.3	37.1
30	28.8	28.8	21.7	11.5	11.6	7.5	13.3	21.5	24.2	22.2	35.1	34.9	19.8	8.7	71.3	9.8	5.5	4.8	10.7	25.4	21.3	16.0	15.2	10.5	20.0	71.3
NO.	30	29	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	714	100%
MEAN	18.6	18.0	14.1	16.3	16.2	17.2	20.4	28.1	27.6	30.8	31.0	29.3	22.5	26.0	28.2	34.4	23.5	18.9	18.3	16.7	19.4	18.7	17.2	17.2		
MAX	46.7	40.5	39.1	54.7	64.4	48.1	89.8	149.2	98.0	96.9	75.7	124.3	72.8	66.5	76.6	403.6	79.4	60.4	51.3	54.4	98.7	104.1	55.7	39.2		



Number of Non-Zero Readings	709	Operational Time	719 HRS
Maximum 1-HR Average	403.6 UG/M3	Operational Uptime	99.9 %
Maximum 24-HR Average	52.0 UG/M3	Monthly Average	22.0 UG/M3
Monthly Calibration	5		
Standard Deviation	22.7		

Lagoon TSP ($\mu\text{g}/\text{m}^3$) – June 2023

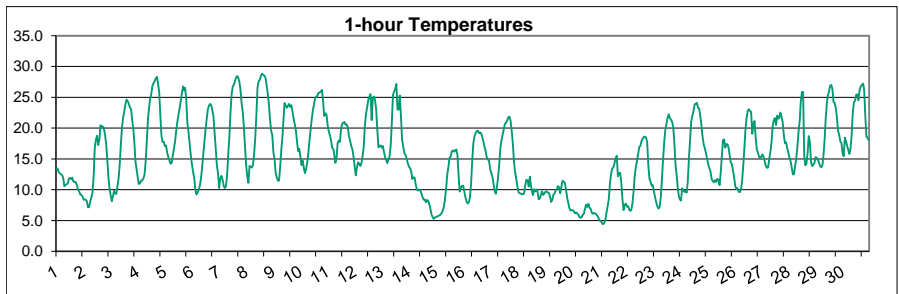
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	61.7	46.9	23.7	28.1	18.3	17.0	14.7	7.2	10.5	10.2	8.9	6.9	6.2	6.4	26.6	12.0	20.0	19.8	18.0	10.8	28.3	22.4	16.0	23.2	19.3	61.7
2	24.7	25.5	11.0	18.0	18.0	18.6	42.0	84.6	66.6	75.8	56.0	41.2	59.0	77.6	99.7	40.8	52.2	42.2	30.6	35.5	75.6	45.7	37.9	45.5	46.8	99.7
3	34.8	41.2	26.1	14.3	28.6	25.2	27.9	66.5	45.0	46.5	81.1	53.3	41.4	63.8	47.5	98.6	79.9	72.6	66.4	66.0	54.0	43.0	30.3	42.3	49.8	98.6
4	38.5	28.2	39.5	35.4	46.9	75.1	55.3	40.3	36.1	47.1	68.0	29.9	33.3	47.0	45.9	31.7	31.8	39.1	57.3	42.8	47.5	33.8	45.5	38.1	43.1	75.1
5	43.5	44.0	41.6	48.6	147.6	133.5	105.6	79.1	64.4	93.8	76.9	74.9	112.6	99.6	84.7	86.2	90.0	60.0	77.2	34.5	31.5	69.2	172.7	66.3	80.8	172.7
6	53.4	28.9	33.3	30.2	24.2	25.9	31.3	34.5	33.0	40.6	60.3	47.3	60.3	134.8	124.0	144.0	114.4	97.4	87.4	69.8	54.8	48.7	38.1	45.3	60.9	144.0
7	48.2	31.7	50.9	103.1	73.0	94.3	118.7	158.8	176.0	177.6	94.7	137.1	38.5	160.1	112.9	100.7	86.6	65.2	77.5	80.6	96.7	48.8	52.0	68.7	93.8	177.6
8	41.8	40.7	71.0	71.6	113.3	86.9	159.1	281.4	131.1	114.6	134.3	121.5	191.1	162.9	66.0	146.5	160.6	71.5	53.4	34.6	58.3	49.1	35.1	58.8	102.3	281.4
9	86.7	47.6	53.7	37.2	66.4	70.3	61.2	124.2	123.6	121.8	61.8	93.7	96.6	80.7	75.9	70.8	45.2	86.4	78.0	139.6	32.0	99.3	30.5	46.8	76.3	139.6
10	59.8	46.0	45.0	48.5	36.3	43.3	46.1	58.5	81.7	63.6	57.3	32.7	30.6	52.5	27.6	69.9	180.9	126.7	44.9	18.0	12.0	35.0	39.6	61.6	54.9	180.9
11	61.4	68.9	58.3	26.1	16.9	37.5	22.3	51.6	53.3	45.5	40.8	62.1	57.3	38.3	34.9	12.7	18.0	14.2	12.7	14.9	62.7	18.3	24.2	26.6	36.7	68.9
12	12.0	26.4	22.2	24.4	16.8	24.9	25.0	43.8	37.5	34.8	47.8	52.1	51.6	60.6	48.6	53.1	59.6	51.2	28.6	32.1	38.1	41.8	40.6	39.0	38.0	60.6
13	27.9	X	30.2	22.9	20.0	18.8	23.7	36.6	54.3	39.6	147.3	113.5	55.3	140.1	130.6	370.5	63.6	42.5	64.5	26.8	16.3	15.3	42.3	60.3	68.0	370.5
14	17.1	18.8	17.3	13.2	11.2	14.2	11.0	11.5	13.4	11.2	7.0	9.2	5.2	13.5	12.2	12.2	6.4	3.3	4.8	17.0	17.0	7.2	22.2	0.9	11.5	22.2
15	8.2	16.6	8.5	18.0	16.8	18.5	12.9	15.3	21.5	35.3	40.6	50.0	33.5	47.3	55.5	45.3	57.6	70.4	64.4	62.8	53.8	41.8	50.2	40.8	36.9	70.4
16	43.8	47.2	38.5	32.8	36.5	36.8	39.3	41.5	56.2	97.5	103.1	45.3	40.1	48.4	92.7	93.2	111.2	105.4	55.6	87.8	30.8	19.8	44.8	44.9	58.1	111.2
17	14.6	62.5	30.8	17.0	10.5	18.3	9.0	26.2	27.7	49.2	23.2	28.8	19.6	53.5	34.3	60.6	43.8	35.8	31.3	22.4	19.5	33.1	91.3	34.8	33.2	91.3
18	27.8	16.0	3.6	7.0	12.8	29.9	29.1	38.8	65.1	61.8	51.2	22.7	12.0	11.9	8.6	4.1	6.3	5.8	8.7	8.9	5.1	19.5	34.7	19.5	21.3	65.1
19	26.8	15.3	13.7	13.9	12.2	11.2	6.3	11.2	18.8	25.3	88.6	62.2	93.2	107.7	99.6	45.9	16.1	57.0	30.2	38.8	34.9	5.0	5.0	20.7	35.8	107.7
20	17.8	9.2	7.7	19.4	17.9	37.7	24.4	32.5	13.7	11.9	16.3	14.2	9.6	4.5	3.6	2.6	13.9	6.4	0.5	3.5	10.2	10.9	18.7	9.7	13.2	37.7
21	13.5	28.5	5.0	14.9	9.7	7.7	14.9	16.3	26.2	43.8	30.9	66.4	68.5	41.0	26.1	29.1	21.0	18.4	54.0	17.8	26.1	19.5	15.5	16.3	26.3	68.5
22	21.2	25.3	32.8	9.4	23.9	10.5	9.2	11.4	16.6	34.3	11.2	21.7	34.5	44.0	37.3	22.9	16.3	13.9	10.2	16.6	18.5	14.5	13.5	13.3	20.1	44.0
23	20.0	11.2	15.7	17.0	18.3	19.0	23.6	35.0	47.0	53.6	46.5	36.8	22.9	86.2	38.5	22.2	22.2	22.9	58.9	20.7	37.3	38.4	33.0	31.3	32.4	86.2
24	33.3	46.5	32.8	36.0	29.9	36.0	60.3	78.5	31.1	40.5	39.7	59.6	37.8	24.4	19.7	36.7	61.1	18.8	19.3	35.5	194.0	199.9	42.0	31.3	51.9	199.9
25	34.5	27.2	24.2	12.9	24.4	17.3	35.0	13.9	17.8	65.6	36.3	38.8	21.5	28.2	28.6	17.3	25.1	15.5	42.0	31.8	26.4	11.0	13.7	13.5	25.9	65.6
26	10.7	10.2	12.7	16.3	30.3	25.4	12.4	25.1	30.4	39.0	33.0	53.8	14.4	21.2	39.2	50.3	29.4	31.3	16.8	24.9	23.2	24.2	4.3	17.3	24.8	53.8
27	16.6	11.0	17.3	12.5	15.5	21.0	25.6	31.8	39.6	C	C	C	C	C	35.5	22.2	30.2	15.5	22.9	21.0	29.4	29.6	33.5	39.3	24.7	39.6
28	18.6	13.7	20.0	14.2	16.0	17.6	24.4	30.8	69.6	56.0	37.0	45.8	19.5	37.0	24.1	36.5	12.2	20.5	18.5	18.3	25.4	21.2	10.2	13.0	25.9	69.6
29	18.5	15.5	20.5	6.5	18.6	18.6	20.5	21.0	40.1	38.3	55.8	26.8	25.4	22.2	49.8	23.6	25.9	16.8	4.7	24.4	29.9	30.4	33.5	21.5	25.4	55.8
30	62.1	49.3	38.8	20.5	19.5	19.3	11.2	36.0	42.8	28.2	69.1	50.1	37.3	19.5	145.7	19.5	16.6	23.2	18.3	43.8	49.6	24.2	20.0	23.7	37.0	145.7
NO.	30	29	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	714	100%
MEAN	33.3	31.0	28.2	26.3	31.7	34.3	36.7	51.5	49.7	55.3	56.0	51.7	45.8	59.8	55.9	59.4	50.6	42.3	38.6	36.7	41.3	37.4	36.4	33.8		
MAX	86.7	68.9	71.0	103.1	147.6	133.5	159.1	281.4	176.0	177.6	147.3	137.1	191.1	162.9	145.7	370.5	180.9	126.7	87.4	139.6	194.0	199.9	172.7	68.7		



Number of 24HR Exceedences	1
Number of Non-Zero Readings	714
Maximum 1-HR Average	370.5 UG/M3
Maximum 24-HR Average	102.3 UG/M3
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Calibration	5
Standard Deviation	36.6
Monthly Average	42.6 UG/M3

Lagoon Temperature (°C) – June 2023

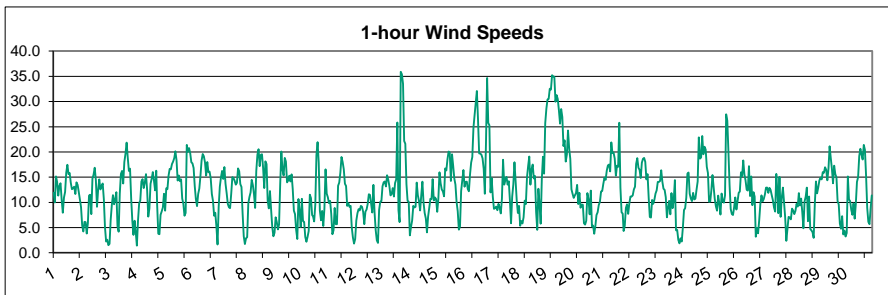
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	13.4	13.4	12.9	12.7	12.5	12.4	11.9	10.5	10.8	10.9	11.0	11.8	11.9	11.7	12.0	11.3	11.3	11.2	10.7	10.1	9.8	9.3	9.2	8.9	11.3	13.4	
2	8.4	8.4	8.4	8.1	7.2	7.2	8.1	8.8	9.6	12.2	16.9	18.1	18.7	17.2	18.1	20.5	20.2	20.3	20.0	18.9	17.5	15.1	12.1	10.2	13.8	20.5	
3	9.1	8.1	8.9	9.8	9.3	9.3	10.6	11.9	14.2	17.4	20.1	21.7	22.8	23.9	24.6	24.4	23.9	23.3	23.0	21.3	19.8	17.4	14.6	13.4	16.8	24.6	
4	12.0	10.9	11.0	11.5	11.5	11.8	12.4	14.5	17.7	21.2	23.3	24.8	25.5	26.8	27.3	27.6	28.1	28.3	27.2	25.7	22.0	18.7	17.7	17.8	19.8	28.3	
5	17.1	17.2	16.0	15.3	14.7	14.2	14.4	15.6	16.7	17.9	19.6	21.0	22.2	23.2	24.5	25.7	26.7	26.1	26.5	24.7	20.8	19.4	17.5	15.6	19.7	26.7	
6	14.1	13.0	11.9	10.0	9.2	9.5	10.0	10.7	11.9	13.6	15.7	17.7	19.7	21.4	23.0	23.6	23.9	23.7	22.8	21.9	19.2	16.7	13.9	12.7	16.2	23.9	
7	10.3	11.8	12.3	11.6	10.6	10.3	10.6	12.3	15.7	18.6	22.6	25.5	26.7	27.1	27.5	28.1	28.5	28.2	27.5	26.2	24.0	22.6	20.2	16.9	19.8	28.5	
8	14.0	12.1	11.1	13.9	13.8	13.6	14.0	15.7	18.4	22.1	26.5	27.6	27.8	28.5	28.8	28.6	28.5	28.2	27.0	25.7	23.9	21.5	19.6	18.9	21.2	28.8	
9	16.1	15.0	12.7	12.0	11.4	11.5	13.8	16.5	18.6	21.6	24.1	23.7	23.3	23.6	23.9	23.5	23.8	22.7	21.6	20.7	19.6	17.9	16.2	16.6	18.8	24.1	
10	15.3	14.0	14.7	13.6	12.7	13.3	14.4	15.9	18.0	19.8	21.4	22.9	23.9	24.9	25.1	25.3	25.8	25.8	26.0	26.2	24.4	21.9	22.4	22.2	20.4	26.2	
11	20.5	19.5	18.8	18.1	16.8	16.6	15.8	14.4	15.0	17.5	18.0	17.8	19.8	20.7	20.9	21.0	20.6	20.6	20.1	18.7	18.0	17.1	16.6	15.4	18.2	21.0	
12	13.9	12.3	13.6	14.4	14.3	13.8	14.3	15.5	16.9	20.4	22.3	23.4	24.5	25.1	25.5	21.3	24.8	25.1	24.5	23.0	19.6	16.9	17.2	17.2	19.2	25.5	
13	16.8	17.1	16.2	15.3	14.8	14.3	15.0	15.4	17.2	21.0	25.4	25.9	26.4	27.2	23.0	23.0	25.3	22.0	18.1	17.1	15.9	15.7	15.1	14.3	19.1	27.2	
14	13.8	13.5	13.0	11.7	12.0	12.0	10.9	10.0	9.9	10.0	9.9	9.5	8.8	8.4	8.4	8.0	8.4	8.2	7.6	6.9	6.0	5.6	5.3	5.4	9.3	13.8	
15	5.6	5.7	5.7	5.8	6.0	6.2	6.6	7.2	8.5	10.1	12.5	13.7	15.2	15.3	16.2	16.4	16.2	16.4	16.5	15.6	12.3	9.7	10.3	10.6	11.0	16.5	
16	10.7	9.8	8.8	8.1	7.8	7.9	8.7	10.9	14.6	17.6	18.6	19.2	19.5	19.6	19.1	19.3	19.1	18.6	17.9	17.0	16.3	15.3	14.9	14.8	14.7	19.6	
17	13.4	12.7	12.1	11.0	9.8	9.3	10.4	12.0	14.0	16.7	18.0	19.0	19.8	20.7	20.9	21.2	21.7	21.8	21.2	19.6	17.5	14.6	12.9	11.8	15.9	21.8	
18	10.6	9.7	9.4	9.4	9.3	9.2	9.5	10.8	11.6	11.5	10.5	12.1	10.6	9.7	9.1	10.1	9.7	10.1	9.6	8.4	8.6	9.2	9.7	9.2	9.9	12.1	
19	9.4	9.7	9.7	9.6	9.5	8.9	8.0	8.4	9.2	9.4	9.9	10.1	10.6	10.4	9.4	10.5	11.4	11.3	11.2	10.1	8.8	7.9	7.1	6.6	9.5	11.4	
20	6.7	6.7	6.5	6.2	6.3	6.1	5.9	5.5	5.5	5.5	6.1	6.9	7.6	7.2	7.7	7.1	6.9	6.2	6.1	6.2	6.2	6.0	5.8	6.4	7.7	6.4	7.7
21	5.4	4.9	5.0	4.5	4.4	4.7	5.1	6.3	7.4	8.5	11.0	12.6	13.4	13.6	14.3	15.1	15.5	12.2	12.7	12.7	11.1	8.5	6.7	7.6	9.3	15.5	
22	7.8	7.2	7.3	6.8	6.6	6.7	7.8	9.6	12.1	13.7	14.6	15.8	16.9	17.1	17.9	18.3	18.6	18.6	18.5	17.7	14.0	11.8	11.3	10.7	12.8	18.6	
23	10.8	9.7	8.8	7.9	7.2	7.0	7.2	8.8	11.7	14.9	17.7	19.7	20.7	21.7	22.2	21.7	21.3	21.0	20.2	17.4	14.1	12.3	10.2	8.9	14.3	22.2	
24	8.4	8.2	10.3	9.9	9.6	9.8	9.5	11.4	15.1	18.1	21.0	22.0	22.7	23.8	23.9	24.1	23.3	23.2	22.0	20.5	18.6	17.4	16.7	15.9	16.9	24.1	
25	15.0	14.2	13.5	13.0	11.7	11.4	11.2	11.5	11.3	11.8	11.6	10.8	12.7	15.4	18.0	18.2	16.8	17.4	17.4	16.8	15.7	14.5	14.2	13.1	14.0	18.2	
26	12.0	10.6	10.1	10.3	9.7	9.6	10.0	11.3	13.7	16.6	19.7	21.7	22.8	23.1	22.8	22.6	19.1	20.6	21.2	18.5	16.6	16.0	15.3	15.1	16.2	23.1	
27	15.4	15.7	15.3	14.6	13.9	13.6	13.6	15.0	16.1	17.7	20.3	21.3	21.6	20.5	22.0	21.5	21.7	22.5	21.8	21.0	18.9	17.5	17.7	16.8	18.2	22.5	
28	16.0	15.2	14.6	13.6	12.5	12.5	13.9	15.1	17.0	19.4	21.2	24.3	25.9	25.8	15.6	14.0	14.3	16.0	18.7	17.7	14.5	13.9	14.1	14.3	16.7	25.9	
29	15.3	15.2	14.9	14.4	13.9	13.6	13.9	15.6	18.3	21.7	24.1	25.3	25.9	26.9	27.0	26.4	24.3	24.1	23.3	21.8	19.5	18.9	17.9	17.6	20.0	27.0	
30	15.9	15.4	18.5	17.9	17.1	16.5	15.8	16.7	18.9	22.5	24.2	24.5	25.4	25.5	24.5	26.2	26.7	27.0	27.3	26.3	22.0	18.7	18.4	18.1	21.2	27.3	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%	
MEAN	12.4	11.9	11.7	11.4	10.9	10.8	11.1	12.1	13.8	16.0	17.9	19.0	19.8	20.2	20.1	20.2	20.2	20.0	19.6	18.5	16.5	14.9	14.0	13.4			
MAX	20.5	19.5	18.8	18.1	17.1	16.6	15.8	16.7	18.9	22.5	26.5	27.6	27.8	28.5	28.8	28.6	28.5	28.3	27.5	26.3	24.4	22.6	22.4	22.2			



Number of Non-Zero Readings	720	Operational Time	720 HRS
Maximum 1-HR Average	28.8 C	Operational Uptime	100.0 %
Maximum 24-HR Average	21.2 C	Monthly Average	15.7 C
Monthly Calibration	0		
Standard Deviation	5.98		

Lagoon Wind Speed (km/hr) – June 2023

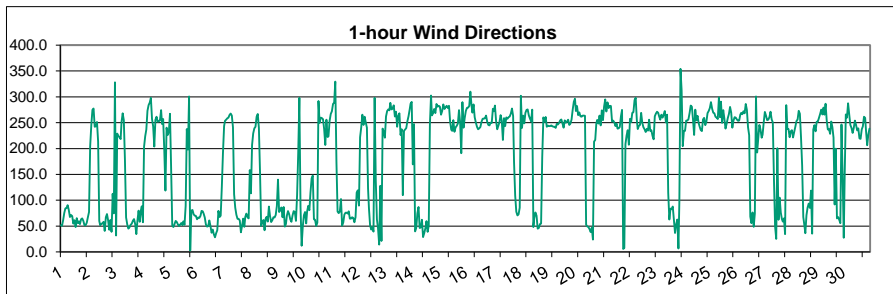
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	11.9	10.0	15.1	14.1	11.4	13.3	13.8	10.5	7.9	11.0	12.1	15.9	17.5	15.6	15.8	13.9	12.6	12.8	13.1	11.7	14.0	13.5	12.1	10.6	12.9	17.5
2	9.0	5.4	4.2	6.1	6.1	3.8	5.9	11.3	11.5	7.7	14.7	15.5	16.9	14.4	9.1	12.5	14.6	12.6	13.3	13.8	10.7	5.1	2.2	2.6	9.5	16.9
3	1.5	1.8	6.5	9.4	11.4	9.6	10.7	12.0	5.3	4.2	11.8	15.6	16.3	13.7	18.0	19.6	21.8	18.9	16.2	16.7	10.8	6.4	3.6	6.4	11.2	21.8
4	4.1	1.4	6.4	9.8	10.4	14.1	14.6	12.9	14.0	15.6	12.4	7.2	8.8	13.7	14.7	16.0	14.3	12.4	16.3	9.4	3.8	3.7	7.6	8.2	10.5	16.3
5	9.0	11.7	8.4	12.8	12.6	15.3	16.7	16.6	17.6	18.1	18.8	20.1	18.3	14.3	15.3	14.2	14.6	10.8	9.7	7.4	7.9	21.4	20.1	20.8	14.7	21.4
6	19.8	17.9	17.7	16.8	13.2	10.6	9.3	11.7	12.7	15.3	18.3	19.6	19.1	17.9	15.3	18.0	16.0	16.1	14.8	11.7	10.3	7.3	7.9	5.2	14.3	19.8
7	1.7	9.1	13.1	15.0	16.2	14.6	17.0	13.7	11.9	9.7	9.1	8.8	11.7	15.0	14.9	14.3	13.5	13.9	16.7	16.2	13.6	13.1	7.8	3.3	12.2	17.0
8	1.7	2.9	3.1	9.8	11.1	12.0	14.5	13.4	11.6	8.9	16.2	19.4	20.5	17.2	19.5	19.6	16.8	12.8	18.2	17.6	10.3	8.8	12.3	8.6	12.8	20.5
9	5.2	3.3	4.0	7.0	6.1	4.6	5.6	13.7	20.1	16.5	15.3	18.8	18.1	13.9	14.4	15.3	14.1	15.6	12.6	8.3	7.7	4.6	2.7	10.7	10.8	20.1
10	8.4	5.2	10.7	6.3	6.1	3.1	2.2	3.1	4.3	11.5	10.8	7.5	7.2	6.2	9.6	19.4	22.0	17.9	8.3	6.4	8.3	5.3	8.8	16.6	9.0	22.0
11	11.8	11.0	9.8	10.3	7.7	3.7	4.5	8.9	5.7	5.7	13.3	13.9	15.9	19.0	18.0	16.6	13.7	13.3	9.3	9.9	9.1	9.3	5.1	3.0	10.4	19.0
12	1.8	2.7	6.4	7.8	8.7	8.4	9.3	9.1	8.1	5.7	8.2	8.6	9.7	11.6	11.5	9.7	8.0	13.5	8.0	4.5	2.5	2.0	8.5	10.1	7.7	13.5
13	10.2	13.2	14.0	14.1	13.2	15.4	14.5	13.3	11.4	11.7	12.9	11.2	13.8	14.6	25.9	8.4	6.1	35.9	35.4	33.5	22.2	21.6	13.6	10.3	16.5	35.9
14	10.1	3.4	5.1	6.4	9.3	9.0	9.1	13.9	11.4	10.3	8.4	11.4	14.1	9.9	7.9	6.8	4.0	7.2	8.9	10.7	10.7	14.6	10.4	11.0	9.3	14.6
15	10.7	8.1	10.7	16.0	13.8	12.6	12.2	11.2	16.7	16.3	18.5	20.1	19.9	14.2	19.5	17.3	14.8	13.5	10.1	8.2	4.6	5.2	12.3	14.4	13.4	20.1
16	16.4	13.1	14.1	14.1	12.6	12.2	15.6	17.9	19.0	24.8	27.3	29.7	32.1	26.5	19.7	19.5	18.7	16.6	11.7	21.7	34.7	25.8	25.3	20.4	34.7	20.4
17	12.0	14.8	11.1	8.7	8.9	9.2	8.4	9.7	8.9	7.8	10.8	18.5	13.5	14.4	15.0	13.5	14.2	10.4	5.9	11.1	13.6	18.0	14.2	10.4	11.8	18.5
18	7.9	9.3	5.4	6.3	5.8	7.1	10.3	9.7	15.0	17.2	19.1	13.5	16.6	17.5	14.7	15.3	8.1	4.5	12.7	9.6	5.8	14.6	19.1	15.7	11.7	19.1
19	25.7	28.5	30.4	30.5	32.5	32.4	35.2	35.0	34.9	30.0	31.3	30.5	28.3	25.6	28.5	26.9	21.2	22.3	18.1	19.5	24.2	20.7	18.6	12.6	26.8	35.2
20	11.7	10.9	11.4	11.8	13.5	9.7	11.9	9.0	9.6	9.5	5.9	5.6	6.4	11.8	10.6	7.6	12.3	5.2	5.4	3.8	5.3	7.5	8.1	9.5	8.9	13.5
21	10.1	12.2	12.2	13.7	14.9	14.5	16.3	17.3	17.5	16.1	21.9	19.7	19.9	18.7	15.3	17.3	17.0	25.8	12.9	8.0	7.8	4.3	5.4	8.9	14.5	25.8
22	9.6	7.7	9.8	11.2	11.2	11.4	12.6	13.1	17.7	18.8	16.8	16.5	14.8	17.9	18.6	18.8	18.0	14.5	15.6	10.9	7.1	7.0	10.5	9.7	13.3	18.8
23	10.5	11.7	12.4	14.1	14.0	14.3	16.4	14.1	12.7	12.5	11.0	7.0	9.0	10.3	7.6	11.9	8.8	10.5	14.4	4.5	4.6	2.6	1.9	2.9	10.0	16.4
24	2.2	5.0	8.5	8.9	11.0	15.7	15.9	11.7	10.8	10.3	11.9	10.6	10.8	12.5	14.1	22.9	18.7	18.9	23.2	19.5	21.1	20.5	17.1	15.8	14.1	23.2
25	10.1	10.2	12.4	15.4	13.1	10.6	9.2	8.4	11.3	9.8	7.6	11.7	10.3	9.9	11.4	27.5	26.2	20.0	13.4	8.7	7.7	7.5	9.0	11.0	12.2	27.5
26	8.6	10.2	11.9	12.2	16.0	15.2	18.3	15.6	14.4	12.5	12.3	17.2	11.2	15.2	9.4	12.0	11.1	3.2	4.9	3.9	6.5	9.7	11.4	10.2	11.4	18.3
27	10.7	11.6	12.9	12.9	11.9	12.9	12.5	11.4	10.4	9.0	8.2	15.6	12.0	7.9	15.1	7.1	11.0	12.9	10.1	7.0	2.4	4.7	7.1	7.0	10.2	15.6
28	6.6	8.8	8.4	7.7	8.3	9.7	9.2	11.8	9.4	10.7	8.1	4.9	10.1	11.1	12.9	6.3	11.2	4.7	4.5	4.1	3.0	9.7	14.2	11.8	8.6	14.2
29	12.9	14.3	14.9	14.6	16.0	15.9	17.0	16.5	14.4	16.7	21.1	18.8	16.7	13.8	17.3	15.6	15.0	10.3	9.6	5.8	4.8	7.3	3.6	4.4	13.2	21.1
30	3.2	3.9	15.1	10.6	10.2	8.5	7.5	9.8	6.8	9.7	14.1	15.0	19.2	20.6	19.5	18.5	21.4	20.4	15.3	8.9	6.1	5.7	8.8	11.4	12.1	21.4
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	9.2	9.3	10.9	11.8	11.9	11.6	12.5	12.9	12.8	12.8	14.3	15.0	15.3	14.8	15.3	15.4	14.7	14.3	13.1	10.8	9.6	10.5	10.3	10.3		
MAX	25.7	28.5	30.4	30.5	32.5	32.4	35.2	35.0	34.9	30.0	31.3	30.5	32.1	26.5	28.5	27.5	26.2	35.9	35.4	33.5	24.2	34.7	25.8	25.3		



Number of Non-Zero Readings	720	Operational Time	720 HRS
Maximum 1-HR Average	35.9 KM/HR	Operational Uptime	100.0 %
Maximum 24-HR Average	26.8 KM/HR	Monthly Average	12.5 KM/HR
Monthly Calibration	0		
Standard Deviation	5.93		

Lagoon Wind Direction (°) – June 2023

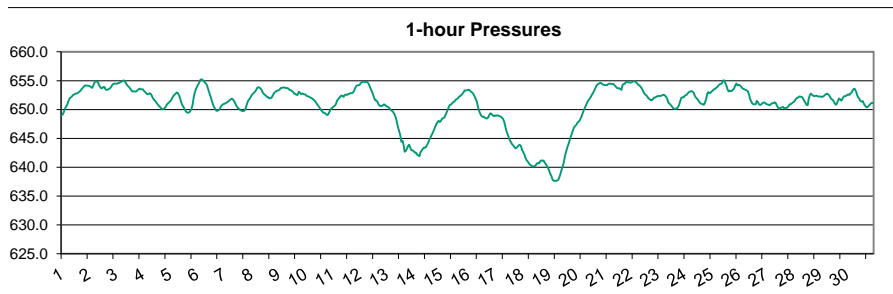
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	51.6	50.3	61.2	74.9	84.5	84.8	90.5	81.3	67.7	71.7	69.2	54.6	61.5	48.2	65.2	55.9	59.4	53.9	63.2	64.9	60.1	51.7	51.6	56.6	63.6	90.5
2	67.3	77.5	204.2	245.1	274.7	277.2	242.3	243.2	251.4	213.5	60.1	51.6	54.9	54.9	58.5	40.9	67.2	73.4	61.1	43.1	61.7	38.8	112.4	74.8	55.9	277.2
3	328.2	32.1	229.1	223.4	222.8	218.4	251.2	268.1	254.9	176.9	66.6	53.6	45.0	47.7	52.4	54.7	60.7	63.8	53.9	34.7	60.8	80.1	58.2	80.2	55.0	328.2
4	88.2	57.3	203.4	223.5	236.9	272.8	284.0	289.0	298.2	257.2	243.0	203.7	255.9	261.6	251.8	252.7	255.1	274.1	247.6	257.3	196.2	118.7	240.5	226.4	254.4	298.2
5	231.9	267.3	162.7	51.4	48.0	54.1	60.0	58.0	53.1	50.1	53.2	56.1	51.8	59.3	52.7	89.2	237.7	198.1	300.8	2.7	80.0	81.3	73.0	70.3	60.6	300.8
6	69.9	63.2	66.6	65.9	70.0	79.3	78.6	74.3	66.6	53.1	49.2	50.0	61.0	50.5	37.0	43.4	34.0	28.4	36.5	42.0	79.7	67.5	70.3	125.6	57.3	125.6
7	191.3	243.5	253.5	255.9	258.3	259.7	265.1	267.8	263.5	241.1	111.8	85.5	72.2	64.2	64.1	61.0	38.2	51.0	64.3	48.8	67.5	74.3	67.0	65.0	36.4	267.8
8	158.4	113.6	207.0	229.2	239.1	242.1	261.4	266.6	239.7	153.7	50.3	58.1	61.8	42.2	63.7	68.1	59.0	87.7	69.3	57.8	61.6	67.3	66.5	71.7	65.4	266.6
9	88.9	139.9	77.1	80.8	85.9	67.2	87.1	49.3	54.3	70.4	78.9	73.4	63.4	58.2	70.8	79.1	77.1	60.1	109.8	191.8	297.9	86.8	12.1	49.2	71.1	297.9
10	71.2	77.3	55.4	78.3	89.3	80.8	115.7	142.4	147.9	63.0	62.3	50.6	56.5	292.1	249.8	259.7	259.0	256.5	237.9	206.7	255.6	222.2	223.4	253.5	248.4	292.1
11	267.0	272.2	286.2	288.6	329.2	174.7	78.0	75.3	78.0	102.5	50.9	57.2	72.3	75.8	76.0	74.3	78.5	64.7	64.5	67.1	65.7	57.4	67.2	114.9	61.8	329.2
12	119.1	89.5	221.9	240.6	265.5	245.6	261.7	250.7	240.4	123.1	84.5	51.1	43.2	47.9	39.6	297.9	137.9	63.2	45.3	14.4	128.0	21.2	238.4	232.5	343.3	297.9
13	220.9	262.0	272.4	275.6	273.9	288.3	275.6	277.2	283.6	261.9	271.0	241.9	263.5	268.1	226.2	237.4	110.0	234.3	236.6	239.4	252.7	262.3	275.0	286.6	255.3	288.3
14	290.3	169.6	247.6	40.0	46.8	74.6	86.9	46.3	47.3	62.1	28.9	36.4	45.6	59.8	38.9	50.7	246.5	302.4	264.1	268.2	276.6	268.5	286.0	280.8	4.9	302.4
15	282.8	281.1	265.6	272.7	285.3	276.7	280.2	282.5	278.3	282.8	251.6	236.4	234.0	255.0	232.5	241.0	243.7	248.2	274.3	250.7	191.1	289.8	240.2	258.7	258.8	289.8
16	272.7	278.8	279.1	282.0	310.1	283.7	269.6	285.4	260.5	250.3	241.9	237.2	239.2	241.8	251.8	257.5	257.9	258.6	263.6	251.9	245.5	244.8	250.2	249.8	256.3	310.1
17	276.9	271.9	283.1	253.5	237.1	243.8	251.3	264.4	254.3	216.6	258.8	243.6	260.3	257.4	260.8	261.9	267.7	277.5	262.6	174.4	109.4	77.6	70.8	72.8	254.0	283.1
18	85.5	301.9	239.7	263.8	248.5	269.2	274.6	275.6	264.0	257.9	252.8	275.2	48.2	65.9	76.5	70.4	45.2	46.4	53.9	54.9	183.2	260.2	251.8	260.9	288.8	301.9
19	242.0	244.4	243.3	243.5	244.9	243.0	241.9	241.9	239.7	247.7	246.6	249.8	254.4	256.2	248.8	240.3	254.4	250.0	252.3	255.6	245.7	248.3	256.4	275.0	247.3	275.0
20	290.6	296.3	272.5	282.0	264.6	269.8	262.4	261.6	263.6	263.5	263.1	52.6	49.5	48.4	44.4	38.4	46.7	23.9	213.4	216.7	249.1	255.4	248.1	263.8	286.8	296.3
21	244.8	273.8	255.1	281.1	295.1	271.6	289.1	278.4	282.5	282.3	252.1	254.0	250.6	243.4	248.2	238.7	239.1	241.6	261.9	274.8	5.9	7.6	208.4	225.4	261.7	295.1
22	235.5	207.5	257.5	251.0	269.0	270.3	293.7	297.9	254.7	237.8	243.8	245.6	269.0	249.7	241.2	237.1	232.1	238.1	234.8	255.7	234.0	235.7	224.7	218.0	247.5	297.9
23	262.4	267.6	271.0	269.0	262.3	255.7	265.6	259.6	265.7	272.6	250.5	265.5	114.9	62.8	83.8	82.4	87.7	62.3	36.8	53.6	62.9	6.7	96.5	354.2	280.7	354.2
24	312.2	204.5	234.2	234.0	254.0	253.8	256.6	268.6	282.9	280.8	256.8	226.1	275.1	254.4	263.1	249.2	241.3	236.1	233.8	256.2	259.4	245.3	252.1	268.5	252.4	312.2
25	272.5	278.3	289.8	277.2	269.4	268.1	261.4	259.6	257.0	298.8	260.4	290.4	249.7	274.4	257.8	238.4	248.2	258.8	266.7	280.5	269.3	240.3	254.2	260.7	263.7	298.8
26	259.7	256.1	253.7	253.8	265.4	268.8	266.2	272.1	267.9	286.1	274.5	241.2	225.7	68.4	55.8	76.4	48.6	74.6	300.7	192.5	219.5	245.5	236.4	220.9	260.1	300.7
27	226.9	250.5	270.9	263.5	254.9	255.8	260.4	271.0	256.3	250.6	140.6	49.7	25.2	200.8	62.4	104.9	76.4	63.8	58.6	64.8	34.4	283.8	238.0	237.7	268.3	283.8
28	221.9	233.3	235.7	221.4	232.0	242.0	253.2	256.1	272.8	267.3	221.9	167.4	67.8	54.4	36.2	71.1	86.2	93.4	85.2	118.5	35.5	236.7	245.2	233.5	233.9	272.8
29	251.8	252.1	259.3	267.0	275.2	265.8	279.2	265.3	286.8	254.5	236.9	237.8	228.4	252.4	241.4	221.1	91.8	200.0	64.9	67.8	62.2	55.8	246.4	148.3	250.6	286.8
30	27.4	146.1	265.8	259.7	287.7	265.9	245.6	239.9	230.3	239.9	254.1	245.6	235.0	239.0	219.6	218.6	236.6	243.1	261.4	259.2	233.8	206.5	226.7	238.4	242.2	287.7
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	200.3	198.7	224.2	218.3	226.0	220.8	223.0	222.3	218.8	203.0	172.9	154.7	141.2	148.5	139.0	150.4	147.5	154.3	166.0	152.2	152.8	154.6	179.6	192.5		
MAX	328.2	301.9	289.8	288.6	329.2	288.3	293.7	297.9	298.2	298.8	274.5	290.4	275.1	292.1	263.1	297.9	267.7	302.4	300.8	280.5	297.9	289.8	286.0	354.2		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	354 degrees		
Maximum 24-HR Average	343 degrees		
Operational Time		720 HRS	
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	94.4	Monthly Average	181.7 degrees

Lagoon Pressure (mmHg) – June 2023

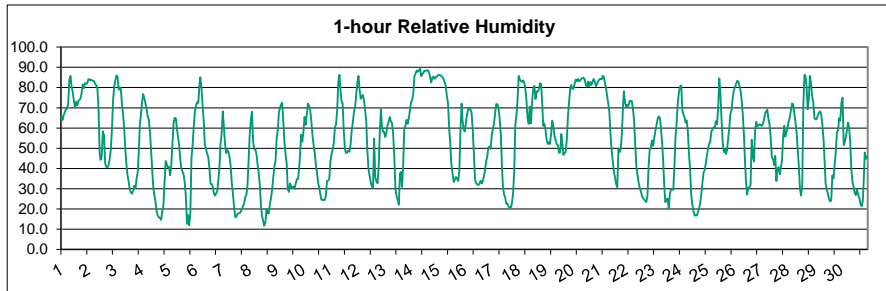
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	649.0	649.2	649.6	650.2	650.5	650.9	651.4	651.9	652.1	652.2	652.5	652.6	652.7	652.8	652.8	653.0	653.1	653.3	653.6	653.8	654.0	654.2	654.1	654.1	652.2	654.2	
2	654.1	654.0	653.9	653.8	654.1	654.7	654.9	654.8	654.8	654.3	653.9	653.7	653.7	653.9	653.9	653.5	653.4	653.5	653.6	653.7	654.0	654.3	654.5	654.5	654.1	654.9	
3	654.5	654.5	654.6	654.6	654.8	654.8	654.9	655.1	654.9	654.6	654.2	654.0	653.8	653.5	653.2	653.1	653.2	653.1	653.1	653.3	653.5	653.6	653.5	653.5	654.0	655.1	
4	653.5	653.2	653.0	652.8	652.7	652.7	652.8	652.7	652.3	651.9	651.7	651.4	651.2	650.9	650.7	650.5	650.3	650.0	650.1	650.2	650.4	650.8	651.0	651.2	651.6	653.5	
5	651.4	651.6	652.0	652.4	652.6	652.8	653.0	652.8	652.4	651.9	651.3	650.8	650.4	650.1	649.7	649.5	649.4	649.5	649.8	650.1	650.8	652.1	653.0	653.5	651.4	653.5	
6	654.0	654.4	654.8	655.2	655.3	655.1	654.9	654.7	654.5	654.1	653.4	652.8	652.3	651.6	650.9	650.4	650.1	649.8	649.8	649.8	649.9	650.0	650.5	650.7	650.9	652.5	655.3
7	651.0	651.1	651.2	651.3	651.4	651.6	651.8	651.9	651.7	651.4	651.0	650.6	650.3	650.2	649.9	649.8	649.8	649.7	649.8	650.2	650.8	651.4	651.7	652.0	650.9	652.0	
8	652.4	652.7	652.9	653.0	653.3	653.7	653.9	653.8	653.7	653.6	653.4	653.0	652.8	652.6	652.5	652.2	652.1	651.9	652.0	652.1	652.4	652.8	653.0	653.2	652.8	653.9	
9	653.3	653.4	653.7	653.7	653.8	653.8	653.8	653.7	653.7	653.6	653.4	653.3	653.2	653.1	652.8	652.7	652.6	652.5	653.1	653.0	652.6	652.7	652.7	652.7	652.6	653.8	
10	652.6	652.4	652.3	652.2	652.1	652.0	651.9	651.7	651.6	651.4	651.0	650.7	650.5	650.2	649.9	649.6	649.4	649.4	649.3	649.1	649.1	649.5	649.9	650.2	650.7	652.6	
11	650.3	650.5	650.6	650.9	651.6	651.8	652.0	652.3	652.5	652.3	652.2	652.5	652.6	652.5	652.7	652.7	652.8	652.9	652.9	653.2	653.7	654.1	654.2	654.2	652.4	654.2	
12	654.3	654.6	654.8	654.8	654.8	654.8	654.8	654.7	654.5	654.0	653.5	653.1	652.6	652.0	651.6	651.6	651.2	650.8	650.6	650.6	650.6	650.8	650.9	650.7	652.8	654.8	
13	650.5	650.5	650.3	650.1	649.9	649.8	649.5	649.1	648.6	647.9	646.9	646.3	645.6	644.4	644.6	643.8	642.7	642.8	643.2	643.7	643.9	643.4	642.9	642.9	646.4	650.5	
14	642.8	642.6	642.5	642.2	642.1	641.9	642.6	642.9	643.2	643.4	643.4	643.5	643.9	644.3	644.8	645.2	645.6	646.0	646.5	647.0	647.4	647.8	648.0	647.8	644.5	648.0	
15	648.0	648.4	648.5	648.6	649.0	649.4	649.9	650.4	650.8	650.9	651.1	651.3	651.4	651.7	651.8	651.9	652.2	652.3	652.5	652.7	653.0	653.3	653.3	653.3	651.1	653.3	
16	653.4	653.4	653.2	653.0	652.9	652.7	652.3	651.9	651.3	650.4	649.7	649.2	648.9	648.7	648.7	648.6	648.5	648.4	648.6	649.0	649.4	649.2	649.0	648.8	650.4	653.4	
17	649.0	648.9	649.0	648.9	648.8	648.8	648.6	648.4	647.9	647.1	646.4	645.9	645.3	644.8	644.4	644.0	643.8	643.6	643.3	643.4	643.5	643.8	643.9	643.6	646.1	649.0	
18	643.0	642.6	642.2	641.6	641.3	641.0	640.7	640.5	640.3	640.1	640.1	640.2	640.3	640.6	640.7	640.7	641.0	641.2	641.2	641.2	640.8	640.5	640.2	639.9	640.9	643.0	
19	639.5	638.9	638.5	637.9	637.7	637.7	637.6	637.7	637.8	638.3	638.9	639.6	640.1	641.0	642.0	642.7	643.3	643.9	644.5	645.2	645.7	646.3	646.9	647.2	641.2	647.2	
20	647.3	647.7	647.9	648.1	648.5	649.0	649.6	650.1	650.5	650.9	651.3	651.6	651.9	652.2	652.6	652.9	653.3	653.7	654.1	654.4	654.5	654.8	654.9	654.6	654.6	654.6	
21	654.3	654.2	654.2	654.2	654.3	654.5	654.5	654.4	654.4	654.4	654.2	654.0	653.7	653.7	653.7	653.5	653.4	654.3	654.4	654.5	654.8	654.9	654.7	654.7	651.5	654.6	
22	654.7	654.7	654.8	654.9	654.9	654.7	654.6	654.3	654.2	653.9	653.7	653.3	652.9	652.6	652.5	652.2	652.0	651.8	651.6	651.6	651.8	652.1	652.1	652.2	653.2	654.9	
23	652.3	652.3	652.4	652.4	652.5	652.6	652.5	652.3	652.1	651.6	651.1	651.0	650.7	650.5	650.2	650.1	650.1	650.2	650.4	650.7	651.4	652.0	652.1	652.1	651.5	652.6	
24	652.4	652.5	652.6	652.9	653.0	653.1	653.2	653.1	653.0	652.4	652.1	651.9	651.6	651.3	651.1	651.0	650.9	650.8	651.2	651.8	652.7	653.0	652.8	652.9	652.2	653.2	
25	653.1	653.3	653.5	653.6	653.7	653.9	654.1	654.4	654.4	654.6	655.0	655.1	654.6	654.2	653.5	653.1	653.3	653.2	653.2	653.5	653.7	654.2	654.5	654.2	653.9	655.1	
26	654.3	654.2	654.0	653.8	653.6	653.5	653.4	653.3	653.1	652.6	651.9	651.4	651.1	650.9	650.9	650.9	651.5	651.3	650.9	650.8	650.9	651.1	651.2	651.2	652.2	654.3	
27	651.0	650.9	650.8	650.7	650.8	651.0	651.1	651.2	651.3	651.0	650.6	650.3	650.1	650.3	650.4	650.5	650.3	650.2	650.3	650.3	650.6	650.9	650.9	651.0	650.7	651.3	
28	651.2	651.3	651.6	651.9	652.0	652.2	652.3	652.2	652.2	651.9	651.5	651.2	650.8	650.7	651.9	652.5	652.8	652.6	652.4	652.3	652.4	652.4	652.3	652.2	652.0	652.8	
29	652.3	652.2	652.2	652.3	652.5	652.6	652.8	652.6	652.5	652.1	651.9	651.7	651.5	651.1	650.8	651.0	651.5	651.9	651.7	651.5	651.9	652.2	652.3	652.4	652.0	652.8	
30	652.5	652.6	652.5	652.8	652.9	653.3	653.6	653.5	653.1	652.5	652.1	651.8	651.4	651.4	651.5	650.9	650.6	650.4	650.4	650.6	650.8	651.0	651.2	651.1	651.9	653.6	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%	
MEAN	651.1	651.1	651.1	651.2	651.2	651.3	651.4	651.4	651.3	651.0	650.8	650.6	650.4	650.3	650.2	650.1	650.1	650.2	650.3	650.5	650.7	651.0	651.1	651.1			
MAX	654.7	654.7	654.8	655.2	655.3	655.1	654.9	655.1	654.9	654.6	655.0	655.1	654.6	654.2	653.9	653.5	653.4	654.3	654.4	654.5	654.8	654.9	654.7	654.7			



Number of Non-Zero Readings	720
Maximum 1-HR Average	655 MMHg
Maximum 24-HR Average	654 MMHg
Operational Time	720 HRS
Monthly Calibration	0
Operational Uptime	100.0 %
Standard Deviation	3.73
Monthly Average	650.8 MMHg

Lagoon Relative Humidity (%) – June 2023

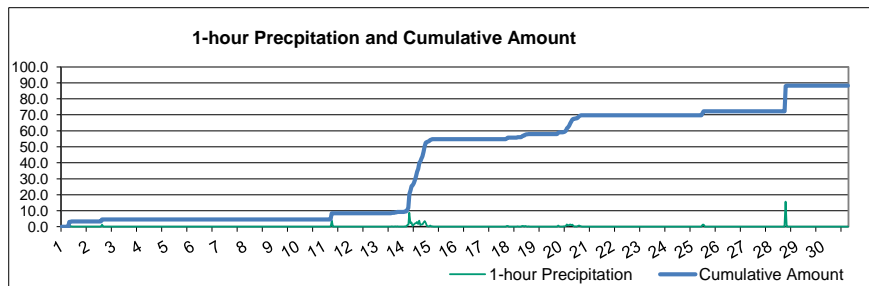
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	65.9	64.0	66.4	67.7	69.4	69.5	72.2	83.5	85.8	80.6	77.7	73.5	70.2	73.0	71.1	73.4	73.9	74.5	77.0	81.5	79.7	82.2	81.9	82.1	74.9	85.8
2	84.1	84.1	83.5	83.8	83.3	83.2	81.7	81.2	79.4	69.3	47.0	44.3	46.3	58.4	56.4	42.7	40.7	40.5	41.5	44.7	49.2	59.1	73.5	80.4	64.1	84.1
3	83.6	86.0	85.3	78.9	80.0	79.5	72.2	66.7	60.1	49.5	42.2	36.5	33.4	29.4	28.0	27.7	29.0	31.5	30.2	35.1	38.3	49.4	61.6	66.6	53.4	86.0
4	73.0	76.8	74.8	72.0	69.4	65.7	64.1	57.6	48.7	38.6	30.1	26.3	22.8	18.2	16.6	15.7	15.6	14.6	18.9	21.4	32.7	43.7	42.3	40.4	41.7	76.8
5	40.8	36.6	41.8	52.3	62.4	65.0	64.8	59.4	55.4	51.1	45.2	40.2	38.6	37.0	33.3	26.4	12.6	17.0	12.0	17.9	45.4	51.4	60.5	68.0	43.1	68.0
6	71.0	72.6	72.4	80.9	85.1	80.2	71.2	63.5	51.6	50.0	47.3	45.8	40.5	32.3	32.3	31.0	27.7	26.7	27.7	29.0	34.4	41.7	52.1	57.0	51.0	85.1
7	68.3	61.0	52.1	47.6	49.1	48.4	45.5	41.1	32.6	27.5	20.9	16.0	16.1	17.6	17.9	18.0	18.6	19.9	21.5	22.3	25.8	27.0	31.4	43.8	32.9	68.3
8	56.5	64.2	68.0	53.4	49.6	49.5	46.9	41.6	37.5	31.4	22.5	16.9	14.2	11.7	13.2	20.0	17.9	17.8	22.5	25.4	29.6	35.7	41.2	43.8	34.6	68.0
9	55.3	59.2	67.9	69.9	71.5	72.5	63.7	53.3	47.2	42.8	29.9	28.5	32.5	31.1	30.2	31.1	29.9	32.6	34.7	34.8	39.8	48.6	56.7	53.2	46.5	72.5
10	58.2	65.5	61.7	67.1	72.1	70.9	68.7	63.4	56.3	51.5	47.4	41.9	38.0	32.9	30.5	27.1	24.6	24.6	24.3	24.4	26.6	33.8	33.9	35.0	45.0	72.1
11	43.2	47.2	49.3	52.4	60.2	61.9	69.0	82.8	86.3	78.3	73.3	72.2	58.7	49.6	47.6	47.8	49.0	48.3	51.6	58.7	62.9	68.1	70.3	76.6	61.1	86.3
12	82.4	85.7	78.7	74.5	75.4	76.3	73.8	68.9	63.7	49.2	39.7	36.6	33.1	31.3	30.4	54.8	35.6	33.6	32.7	40.5	57.8	69.4	61.3	58.2	56.0	85.7
13	58.2	55.6	58.0	61.3	63.1	65.5	63.4	62.4	57.0	45.8	29.8	26.3	24.4	22.1	37.5	38.3	31.0	41.0	59.8	61.1	64.1	62.1	64.8	68.9	50.9	68.9
14	72.8	73.9	77.2	85.8	86.9	88.4	87.8	88.6	89.2	85.6	86.4	87.2	88.3	88.2	88.5	88.6	87.7	84.9	82.5	84.8	85.4	84.3	85.3	85.4	85.2	89.2
15	86.2	86.1	86.1	85.6	85.2	84.4	82.6	80.9	75.7	72.3	60.0	52.1	41.8	37.6	33.3	34.4	35.8	34.9	33.8	38.7	59.5	72.1	63.9	59.4	61.8	86.2
16	58.3	62.6	66.8	69.3	69.7	69.3	67.5	59.2	47.9	34.9	32.7	32.2	31.8	32.7	34.0	32.6	33.8	35.9	39.0	43.4	45.8	50.3	50.8	49.6	47.9	69.7
17	56.6	59.4	62.2	67.5	71.8	71.7	69.9	64.5	57.3	40.8	32.0	27.4	26.0	22.6	22.6	21.2	20.7	20.5	22.7	27.6	38.0	61.6	66.3	74.2	46.0	74.2
18	85.7	83.9	83.2	82.8	83.6	82.7	79.8	73.9	65.0	62.0	70.6	62.3	73.1	79.3	80.8	74.4	78.1	78.1	79.0	82.2	81.6	71.6	61.1	62.2	75.7	85.7
19	59.3	54.4	52.2	53.0	52.1	57.3	63.7	60.7	56.0	53.9	51.9	51.5	47.8	48.0	57.1	51.9	46.7	47.6	48.0	54.1	65.3	72.5	79.4	81.3	56.9	81.3
20	79.2	79.4	82.0	84.0	83.1	84.3	83.1	83.5	84.4	84.7	84.8	84.0	81.3	80.5	82.9	80.6	82.8	81.3	82.9	84.2	82.8	80.7	81.8	83.2	82.6	84.8
21	84.0	84.3	84.1	85.7	85.4	82.5	80.0	75.9	72.1	67.9	57.0	49.1	43.5	38.5	35.5	32.3	30.8	50.0	48.2	49.4	56.6	70.1	78.2	72.6	63.1	85.7
22	70.5	71.5	70.9	73.3	73.5	73.3	69.6	63.7	52.3	41.0	36.8	33.0	30.4	28.7	26.3	25.2	24.7	24.0	23.4	26.4	40.8	49.6	50.1	53.9	47.2	73.5
23	51.2	55.0	58.5	61.4	64.5	65.7	64.9	60.1	52.0	42.3	31.7	23.4	24.8	25.2	20.3	27.5	29.7	29.4	41.1	55.7	62.9	72.3	77.8	47.0	77.8	
24	80.5	81.0	69.1	66.6	65.7	62.7	63.8	59.0	47.6	40.0	27.3	22.3	19.1	16.8	16.9	16.8	18.5	20.4	23.2	27.7	33.3	38.2	39.0	42.2	41.6	81.0
25	46.2	49.6	52.1	53.3	58.2	59.3	60.3	59.9	63.4	61.9	69.9	84.5	76.9	64.2	53.2	48.2	49.5	47.2	48.9	54.4	59.9	67.0	68.8	74.6	59.6	84.5
26	78.3	80.1	81.7	83.3	82.9	80.8	78.5	73.4	66.3	56.2	44.8	33.4	27.2	30.6	30.5	31.8	54.3	46.0	43.4	58.7	63.1	60.8	61.6	61.8	58.7	83.3
27	61.4	61.1	62.2	64.4	67.2	68.3	69.0	64.5	61.8	55.1	45.5	44.8	41.8	46.3	33.9	40.0	40.7	37.1	40.7	44.2	56.0	61.1	55.7	57.9	53.4	69.0
28	59.9	63.2	65.2	68.7	72.2	71.6	67.2	63.1	57.9	49.6	41.2	30.1	26.6	31.6	72.0	86.3	85.8	80.8	69.2	74.2	85.8	81.8	75.5	72.5	64.7	86.3
29	64.9	64.2	64.6	66.3	67.6	68.2	66.7	61.4	54.4	43.1	32.9	29.8	27.6	25.2	23.7	24.3	36.6	35.2	41.5	48.0	57.9	58.8	64.8	63.7	49.6	68.2
30	72.5	75.0	51.6	52.6	55.3	58.7	62.6	60.1	52.7	39.0	33.3	31.0	27.8	26.9	29.5	27.0	25.4	22.7	21.4	23.7	35.6	47.9	44.8	46.0	42.6	75.0
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	66.9	68.1	67.6	68.9	70.5	70.6	69.1	65.9	60.6	53.2	46.4	42.8	40.1	38.9	39.5	39.9	39.6	40.0	41.1	45.3	53.0	58.8	61.0	63.1		
MAX	86.2	86.1	86.1	85.8	86.9	88.4	87.8	88.6	89.2	85.6	86.4	87.2	88.3	88.2	88.5	88.6	87.7	84.9	82.9	84.8	85.8	84.3	85.3	85.4		



Number of Non-Zero Readings	720
Maximum 1-HR Average	89.2 %
Maximum 24-HR Average	85.2 %
Monthly Calibration	0
Standard Deviation	20.5
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	54.6 %

Lagoon Precipitation (mm) – June 2023

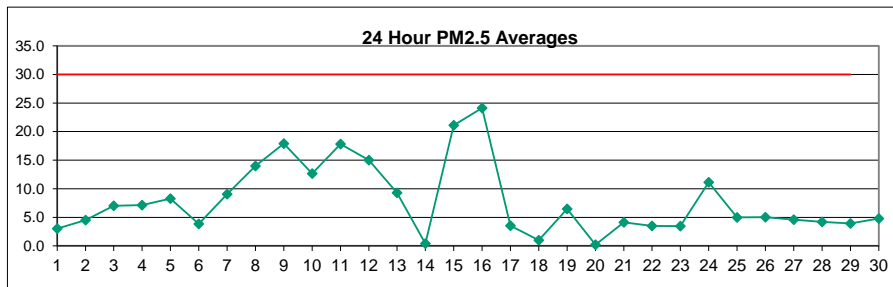
Day	HOUR																								24-HOUR TOTAL	DAILY MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.8	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	4.0	3.8
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	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.8	0.3
14	0.0	0.0	0.3	0.0	1.0	1.3	8.8	2.3	2.8	0.5	1.3	2.0	2.3	3.0	1.8	3.8	1.0	1.5	1.5	2.8	3.5	2.3	0.5	0.3	44.0	8.8
15	0.3	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.8
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	0.5	0.5
18	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.5	0.0	0.5	0.3	0.0	0.3	0.0	0.0	0.0	0.0	2.8	0.5
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	0.8	0.3	1.0	0.8
20	0.0	0.0	0.0	0.3	0.3	0.5	1.5	0.8	1.0	1.5	1.0	1.3	0.5	0.0	0.3	0.0	0.5	0.8	0.5	0.3	0.0	0.0	0.0	0.0	10.8	1.5
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3
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	15.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	15.8
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0		
MAX	0.5	0.8	0.3	0.3	1.0	1.3	8.8	3.8	2.8	1.5	1.3	2.0	2.3	3.0	15.8	3.8	1.0	1.5	1.5	2.8	3.5	2.3	0.8	0.5		



Number of Non-Zero Readings	62		
Maximum 1-HR Total	44.0 MM		
Maximum 24-HR Total	15.8 MM		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	0.78	Operational Uptime	100.0 %
		Monthly Average	0.12 MM

Windridge PM_{2.5} (µg/m³) – June 2023

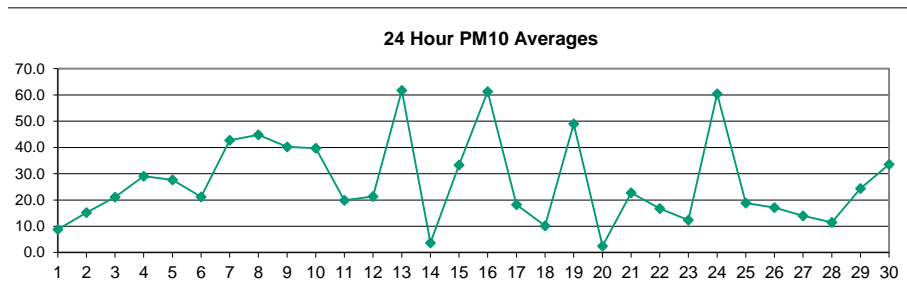
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9.0	7.0	5.0	6.0	6.0	8.0	5.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	4.0	2.0	1.0	10.0	3.0	10.0	
2	7.0	3.0	2.0	4.0	1.0	0.0	0.0	4.0	7.0	7.0	6.0	3.0	4.0	7.0	5.0	4.0	3.0	4.0	7.0	7.0	6.0	5.0	5.0	4.5	7.0	
3	5.0	5.0	6.0	6.0	6.0	7.0	10.0	7.0	5.0	9.0	8.0	6.0	7.0	5.0	6.0	6.0	6.0	8.0	7.0	6.0	7.0	9.0	11.0	11.0	7.0	11.0
4	12.0	10.0	7.0	9.0	16.0	8.0	8.0	7.0	6.0	9.0	9.0	4.0	3.0	10.0	8.0	9.0	5.0	3.0	6.0	4.0	2.0	6.0	6.0	4.0	7.1	16.0
5	3.0	4.0	6.0	9.0	6.0	6.0	7.0	7.0	9.0	9.0	10.0	10.0	6.0	6.0	16.0	4.0	12.0	10.0	10.0	6.0	11.0	16.0	8.0	8.0	8.3	16.0
6	8.0	7.0	9.0	7.0	4.0	1.0	1.0	5.0	3.0	1.0	1.0	1.0	3.0	4.0	4.0	3.0	3.0	3.0	1.0	2.0	8.0	5.0	4.0	4.0	3.8	9.0
7	4.0	5.0	6.0	7.0	6.0	12.0	10.0	10.0	9.0	7.0	9.0	10.0	12.0	10.0	6.0	8.0	10.0	9.0	19.0	8.0	14.0	8.0	11.0	7.0	9.0	19.0
8	5.0	20.0	6.0	7.0	8.0	27.0	22.0	13.0	15.0	25.0	6.0	12.0	11.0	5.0	1.0	30.0	30.0	12.0	10.0	5.0	26.0	8.0	26.0	6.0	14.0	30.0
9	8.0	6.0	9.0	16.0	14.0	16.0	12.0	66.0	11.0	20.0	49.0	18.0	23.0	23.0	13.0	14.0	19.0	14.0	15.0	12.0	12.0	12.0	17.0	11.0	17.9	66.0
10	33.0	18.0	30.0	15.0	16.0	16.0	31.0	17.0	32.0	13.0	8.0	9.0	7.0	20.0	4.0	10.0	10.0	5.0	1.0	2.0	3.0	2.0	0.0	2.0	12.7	33.0
11	2.0	3.0	1.0	32.0	30.0	9.0	7.0	30.0	28.0	30.0	58.0	33.0	27.0	12.0	19.0	11.0	8.0	21.0	13.0	8.0	10.0	11.0	16.0	9.0	17.8	58.0
12	9.0	7.0	6.0	5.0	4.0	5.0	5.0	8.0	5.0	24.0	30.0	39.0	27.0	24.0	20.0	21.0	18.0	14.0	20.0	14.0	14.0	11.0	13.0	17.0	15.0	39.0
13	10.0	6.0	0.0	1.0	1.0	3.0	7.0	6.0	4.0	14.0	11.0	13.0	18.0	9.0	64.0	8.0	8.0	13.0	10.0	7.0	4.0	4.0	2.0	0.0	9.3	64.0
14	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.0
15	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.0	5.0	7.0	19.0	25.0	34.0	34.0	34.0	29.0	32.0	30.0	34.0	29.0	74.0	32.0	43.0	42.0	21.1	74.0
16	35.0	59.0	24.0	27.0	26.0	27.0	28.0	34.0	37.0	37.0	26.0	32.0	35.0	32.0	18.0	10.0	10.0	8.0	10.0	7.0	10.0	11.0	22.0	14.0	24.1	59.0
17	7.0	3.0	3.0	2.0	0.0	0.0	0.0	1.0	5.0	4.0	2.0	20.0	1.0	4.0	10.0	6.0	1.0	3.0	3.0	2.0	1.0	1.0	3.0	3.0	3.5	20.0
18	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	9.0	4.0	1.0	9.0
19	8.0	13.0	10.0	6.0	6.0	5.0	11.0	18.0	6.0	4.0	3.0	3.0	4.0	8.0	7.0	5.0	7.0	1.0	0.0	0.0	18.0	8.0	4.0	0.0	6.5	18.0
20	0.0	0.0	0.0	0.0	1.0	1.0	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	0.2	3.0
21	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	16.0	5.0	17.0	15.0	7.0	4.0	10.0	15.0	3.0	1.0	0.0	0.0	0.0	1.0	4.1	17.0
22	3.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	16.0	7.0	5.0	3.0	3.0	7.0	10.0	6.0	2.0	5.0	5.0	4.0	4.0	0.0	0.0	1.0	3.5	16.0
23	3.0	2.0	1.0	2.0	2.0	3.0	5.0	4.0	5.0	9.0	7.0	5.0	1.0	0.0	0.0	1.0	2.0	3.0	5.0	5.0	5.0	4.0	5.0	4.0	3.5	9.0
24	4.0	6.0	5.0	6.0	7.0	13.0	9.0	5.0	4.0	5.0	8.0	6.0	3.0	0.0	6.0	38.0	11.0	8.0	19.0	36.0	24.0	16.0	19.0	9.0	11.1	38.0
25	5.0	2.0	3.0	5.0	6.0	3.0	1.0	4.0	7.0	6.0	3.0	1.0	3.0	2.0	3.0	20.0	17.0	13.0	9.0	2.0	1.0	0.0	1.0	3.0	5.0	20.0
26	2.0	0.0	3.0	4.0	6.0	3.0	4.0	11.0	7.0	4.0	4.0	15.0	12.0	8.0	4.0	6.0	4.0	6.0	5.0	2.0	2.0	2.0	4.0	3.0	5.0	15.0
27	1.0	1.0	0.0	0.0	4.0	3.0	2.0	5.0	6.0	4.0	11.0	8.0	C	14.0	7.0	3.0	3.0	5.0	6.0	6.0	5.0	4.0	4.0	4.0	4.6	14.0
28	7.0	7.0	4.0	4.0	6.0	5.0	4.0	5.0	3.0	4.0	3.0	4.0	5.0	7.0	6.0	X	4.0	4.0	5.0	3.0	4.0	3.0	0.0	0.0	4.2	7.0
29	1.0	0.0	2.0	4.0	3.0	3.0	3.0	2.0	3.0	3.0	14.0	12.0	7.0	6.0	7.0	4.0	4.0	4.0	1.0	4.0	4.0	0.0	1.0	2.0	3.9	14.0
30	4.0	7.0	5.0	3.0	4.0	3.0	0.0	2.0	7.0	7.0	7.0	6.0	6.0	14.0	8.0	2.0	3.0	7.0	6.0	3.0	2.0	2.0	2.0	5.0	4.8	14.0
NO.	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	718	99.9%
MEAN	6.6	6.8	5.2	6.2	6.3	6.3	6.6	9.3	8.4	9.1	11.1	10.2	9.7	9.5	9.9	9.1	8.1	7.7	7.7	6.2	9.2	6.1	7.9	6.3	7.5	7.5
MAX	35.0	59.0	30.0	32.0	30.0	27.0	31.0	66.0	37.0	37.0	58.0	39.0	35.0	34.0	64.0	38.0	32.0	30.0	34.0	36.0	74.0	32.0	43.0	42.0	17.4	70.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	611	
Maximum 1-HR Average	74.0 UG/M3	
Maximum 24-HR Average	24.1 UG/M3	
Monthly Calibration	1	Operational Time
Standard Deviation	9.5	Operational Uptime
		Monthly Average
		719 HRS
		99.9 %
		7.9 UG/M3

Windridge PM₁₀ (µg/m³) – June 2023

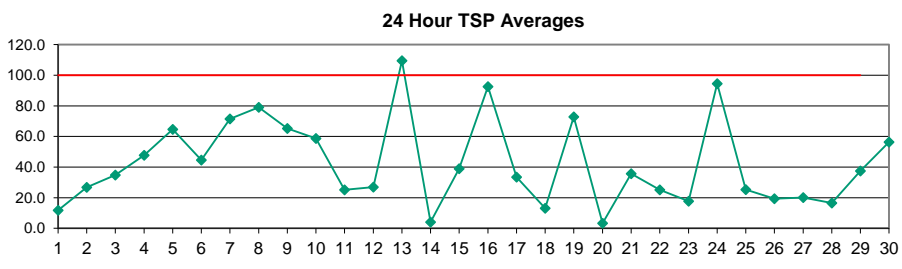
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	22.0	10.0	19.0	13.0	12.0	10.0	11.0	9.0	7.0	6.0	5.0	4.0	4.0	3.0	5.0	5.0	4.0	10.0	5.0	8.0	16.0	3.0	4.0	16.0	8.8	22.0
2	9.0	8.0	8.0	5.0	6.0	6.0	14.0	26.0	25.0	46.0	14.0	15.0	19.0	21.0	9.0	10.0	14.0	11.0	17.0	16.0	18.0	19.0	14.0	15.0	15.2	46.0
3	13.0	9.0	12.0	12.0	16.0	30.0	40.0	22.0	16.0	30.0	35.0	20.0	13.0	16.0	22.0	22.0	25.0	26.0	19.0	22.0	25.0	22.0	18.0	21.0	21.1	40.0
4	23.0	18.0	15.0	15.0	33.0	24.0	20.0	16.0	21.0	60.0	43.0	23.0	40.0	45.0	41.0	49.0	37.0	48.0	56.0	29.0	8.0	11.0	9.0	13.0	29.0	60.0
5	10.0	8.0	13.0	25.0	17.0	16.0	22.0	25.0	24.0	24.0	29.0	27.0	27.0	28.0	27.0	42.0	65.0	44.0	8.0	6.0	39.0	86.0	24.0	28.0	27.7	86.0
6	16.0	19.0	14.0	14.0	15.0	21.0	23.0	25.0	20.0	16.0	23.0	26.0	28.0	23.0	24.0	33.0	19.0	17.0	14.0	17.0	23.0	37.0	18.0	23.0	21.2	37.0
7	17.0	18.0	34.0	17.0	48.0	99.0	65.0	123.0	117.0	74.0	34.0	26.0	14.0	27.0	24.0	24.0	22.0	21.0	75.0	35.0	22.0	28.0	35.0	27.0	42.8	123.0
8	21.0	51.0	30.0	28.0	32.0	56.0	150.0	65.0	86.0	80.0	55.0	47.0	44.0	18.0	35.0	50.0	22.0	15.0	30.0	24.0	30.0	33.0	52.0	22.0	44.8	150.0
9	33.0	26.0	28.0	77.0	66.0	51.0	67.0	55.0	48.0	36.0	41.0	50.0	36.0	30.0	38.0	39.0	39.0	38.0	35.0	19.0	24.0	32.0	33.0	25.0	40.3	77.0
10	32.0	35.0	27.0	26.0	34.0	30.0	45.0	52.0	48.0	25.0	13.0	14.0	15.0	14.0	76.0	152.0	101.0	38.0	29.0	29.0	15.0	31.0	33.0	40.0	39.8	152.0
11	17.0	15.0	8.0	6.0	17.0	9.0	20.0	53.0	33.0	40.0	43.0	43.0	27.0	15.0	10.0	10.0	7.0	9.0	10.0	16.0	11.0	17.0	20.0	20.0	19.8	53.0
12	13.0	9.0	5.0	10.0	11.0	7.0	7.0	39.0	24.0	38.0	36.0	32.0	31.0	30.0	27.0	26.0	27.0	18.0	22.0	24.0	17.0	18.0	23.0	18.0	21.3	39.0
13	14.0	13.0	7.0	4.0	6.0	5.0	9.0	25.0	70.0	67.0	29.0	103.0	104.0	485.0	72.0	26.0	88.0	65.0	81.0	33.0	89.0	54.0	8.0		61.8	485.0
14	6.0	4.0	4.0	6.0	5.0	3.0	7.0	6.0	5.0	5.0	6.0	2.0	5.0	6.0	6.0	2.0	0.0	0.0	1.0	2.0	2.0	3.0	1.0	2.0	3.7	7.0
15	2.0	3.0	1.0	2.0	4.0	4.0	4.0	10.0	23.0	28.0	83.0	58.0	63.0	57.0	72.0	62.0	59.0	56.0	44.0	38.0	30.0	35.0	31.0	30.0	33.3	83.0
16	31.0	25.0	29.0	35.0	26.0	25.0	28.0	28.0	50.0	98.0	88.0	92.0	158.0	113.0	73.0	80.0	71.0	47.0	43.0	11.0	56.0	81.0	110.0	72.0	61.3	158.0
17	15.0	11.0	5.0	0.0	1.0	1.0	1.0	6.0	21.0	19.0	29.0	80.0	38.0	33.0	66.0	23.0	20.0	21.0	12.0	7.0	6.0	8.0	6.0	9.0	18.3	80.0
18	5.0	2.0	2.0	0.0	0.0	0.0	3.0	3.0	9.0	27.0	30.0	13.0	10.0	5.0	3.0	3.0	1.0	4.0	5.0	3.0	3.0	27.0	74.0	13.0	10.2	74.0
19	58.0	93.0	76.0	40.0	38.0	26.0	79.0	97.0	76.0	56.0	64.0	49.0	64.0	56.0	40.0	55.0	31.0	26.0	12.0	13.0	56.0	49.0	14.0	7.0	49.0	97.0
20	0.0	0.0	6.0	5.0	19.0	1.0	4.0	3.0	0.0	0.0	1.0	1.0	4.0	4.0	2.0	0.0	0.0	0.0	2.0	3.0	3.0	1.0	0.0	0.0	2.5	19.0
21	0.0	4.0	1.0	0.0	2.0	6.0	3.0	6.0	15.0	17.0	91.0	23.0	54.0	66.0	26.0	31.0	42.0	119.0	16.0	7.0	5.0	3.0	3.0	5.0	22.7	119.0
22	5.0	8.0	6.0	2.0	1.0	1.0	2.0	12.0	71.0	30.0	27.0	23.0	10.0	35.0	36.0	34.0	21.0	24.0	21.0	24.0	2.0	1.0	3.0	3.0	16.8	71.0
23	1.0	4.0	6.0	5.0	3.0	1.0	16.0	24.0	32.0	37.0	29.0	18.0	12.0	11.0	7.0	11.0	10.0	6.0	2.0	9.0	19.0	14.0	12.0	7.0	12.3	37.0
24	23.0	9.0	21.0	22.0	25.0	61.0	60.0	12.0	14.0	27.0	53.0	25.0	12.0	12.0	51.0	206.0	57.0	62.0	108.0	199.0	127.0	127.0	99.0	38.0	60.4	206.0
25	4.0	3.0	2.0	4.0	11.0	10.0	6.0	16.0	39.0	15.0	18.0	6.0	12.0	18.0	15.0	69.0	66.0	69.0	41.0	4.0	5.0	5.0	5.0	9.0	18.8	69.0
26	49.0	2.0	1.0	9.0	14.0	9.0	20.0	17.0	23.0	13.0	25.0	66.0	44.0	21.0	12.0	20.0	8.0	9.0	11.0	9.0	7.0	6.0	8.0	7.0	17.1	66.0
27	6.0	5.0	3.0	7.0	6.0	4.0	13.0	20.0	35.0	26.0	38.0	16.0	C	C	34.0	13.0	11.0	12.0	9.0	10.0	10.0	11.0	10.0	9.0	14.0	38.0
28	8.0	6.0	6.0	5.0	6.0	4.0	14.0	22.0	29.0	24.0	21.0	23.0	9.0	16.0	18.0	7.0	13.0	16.0	10.0	5.0	5.0	5.0	3.0	0.0	11.5	29.0
29	5.0	6.0	4.0	2.0	2.0	7.0	8.0	21.0	18.0	52.0	96.0	68.0	55.0	48.0	39.0	35.0	22.0	15.0	9.0	15.0	10.0	15.0	10.0	23.0	24.4	96.0
30	20.0	32.0	10.0	6.0	11.0	8.0	8.0	38.0	63.0	45.0	47.0	45.0	61.0	122.0	58.0	19.0	40.0	80.0	64.0	12.0	6.0	3.0	4.0	4.0	33.6	122.0
NO.	30	30	30	30	30	30	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	718	100.0%
MEAN	15.9	15.2	13.4	13.4	16.2	17.8	25.6	29.2	33.9	35.5	39.5	32.1	34.9	34.4	46.0	40.1	29.3	31.6	26.4	23.2	21.1	27.4	24.4	17.1	42.0	
MAX	58.0	93.0	76.0	77.0	66.0	99.0	150.0	123.0	117.0	98.0	96.0	92.0	158.0	122.0	485.0	206.0	101.0	119.0	108.0	199.0	127.0	127.0	110.0	72.0	91.1	433.3



Number of Non-Zero Readings	700
Maximum 1-HR Average	485.0 UG/M3
Maximum 24-HR Average	61.8 UG/M3
Monthly Calibration	2
Standard Deviation	32.02
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	26.8 UG/M3

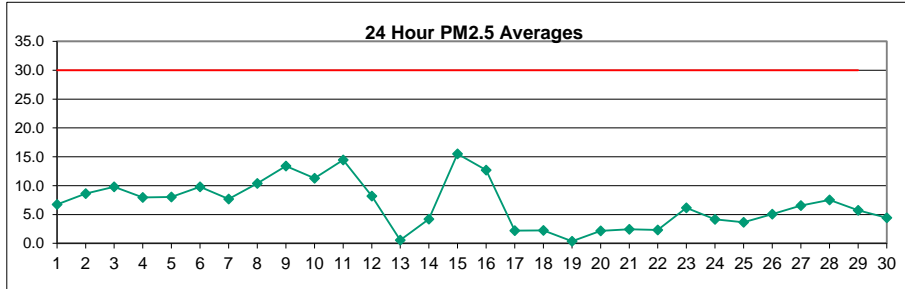
Windridge TSP ($\mu\text{g}/\text{m}^3$) – June 2023

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	26.0	17.0	23.0	14.0	11.0	10.0	13.0	10.0	9.0	5.0	2.0	4.0	10.0	6.0	11.0	7.0	7.0	21.0	2.0	15.0	25.0	8.0	6.0	21.0	11.8	26.0
2	8.0	5.0	4.0	6.0	3.0	8.0	28.0	37.0	39.0	73.0	30.0	32.0	42.0	45.0	28.0	31.0	31.0	24.0	23.0	30.0	32.0	32.0	30.0	23.0	26.8	73.0
3	19.0	14.0	14.0	16.0	19.0	46.0	62.0	39.0	25.0	54.0	55.0	36.0	25.0	30.0	51.0	53.0	68.0	45.0	32.0	29.0	22.0	30.0	21.0	31.0	34.8	68.0
4	22.0	25.0	20.0	21.0	48.0	36.0	30.0	29.0	39.0	97.0	73.0	38.0	71.0	65.0	62.0	80.0	58.0	78.0	98.0	53.0	21.0	26.0	30.0	26.0	47.8	98.0
5	21.0	22.0	22.0	99.0	81.0	58.0	54.0	49.0	53.0	48.0	57.0	65.0	57.0	67.0	67.0	81.0	144.0	80.0	26.0	6.0	69.0	221.0	60.0	46.0	64.7	221.0
6	27.0	26.0	24.0	21.0	18.0	30.0	41.0	46.0	33.0	28.0	38.0	39.0	63.0	81.0	92.0	88.0	69.0	64.0	34.0	38.0	41.0	55.0	39.0	37.0	44.7	92.0
7	24.0	36.0	42.0	36.0	89.0	153.0	110.0	186.0	207.0	139.0	59.0	38.0	40.0	58.0	45.0	58.0	61.0	53.0	67.0	39.0	36.0	50.0	52.0	39.0	71.5	207.0
8	21.0	84.0	47.0	42.0	45.0	96.0	247.0	115.0	132.0	146.0	113.0	99.0	121.0	36.0	75.0	114.0	43.0	28.0	58.0	42.0	41.0	41.0	70.0	43.0	79.1	247.0
9	44.0	29.0	50.0	121.0	99.0	79.0	98.0	97.0	94.0	55.0	96.0	98.0	61.0	43.0	63.0	62.0	71.0	59.0	66.0	30.0	30.0	39.0	44.0	40.0	65.3	121.0
10	36.0	42.0	37.0	28.0	40.0	43.0	59.0	82.0	67.0	35.0	25.0	18.0	23.0	19.0	139.0	218.0	156.0	65.0	35.0	41.0	25.0	55.0	64.0	59.0	58.8	218.0
11	20.0	15.0	10.0	14.0	18.0	11.0	36.0	75.0	33.0	31.0	50.0	44.0	38.0	32.0	19.0	23.0	14.0	12.0	18.0	16.0	13.0	23.0	24.0	16.0	25.2	75.0
12	10.0	6.0	10.0	13.0	13.0	10.0	16.0	50.0	34.0	43.0	43.0	36.0	35.0	31.0	41.0	33.0	48.0	31.0	26.0	29.0	19.0	24.0	26.0	18.0	26.9	50.0
13	15.0	15.0	16.0	16.0	5.0	19.0	13.0	54.0	44.0	124.0	113.0	49.0	193.0	171.0	985.0	106.0	40.0	163.0	108.0	119.0	52.0	124.0	78.0	6.0	109.5	985.0
14	9.0	6.0	5.0	6.0	6.0	8.0	8.0	6.0	3.0	3.0	4.0	3.0	6.0	7.0	4.0	0.0	0.0	0.0	1.0	0.0	0.0	5.0	3.0	6.0	4.1	9.0
15	3.0	0.0	0.0	3.0	3.0	3.0	5.0	4.0	23.0	29.0	105.0	75.0	89.0	77.0	95.0	72.0	73.0	66.0	44.0	43.0	34.0	34.0	27.0	29.0	39.0	105.0
16	29.0	26.0	29.0	27.0	31.0	28.0	34.0	35.0	73.0	171.0	140.0	162.0	219.0	199.0	124.0	131.0	113.0	73.0	81.0	30.0	80.0	119.0	147.0	120.0	92.5	219.0
17	16.0	9.0	6.0	4.0	6.0	4.0	6.0	9.0	46.0	33.0	48.0	141.0	73.0	65.0	110.0	58.0	32.0	44.0	26.0	16.0	23.0	12.0	9.0	9.0	33.5	141.0
18	6.0	3.0	2.0	1.0	1.0	3.0	5.0	3.0	22.0	42.0	44.0	11.0	11.0	9.0	5.0	0.0	0.0	0.0	1.0	2.0	5.0	36.0	79.0	25.0	13.2	79.0
19	75.0	158.0	106.0	66.0	52.0	41.0	107.0	134.0	110.0	85.0	117.0	88.0	110.0	93.0	59.0	85.0	44.0	40.0	17.0	21.0	70.0	51.0	18.0	1.0	72.8	158.0
20	0.0	0.0	4.0	6.0	22.0	4.0	11.0	6.0	1.0	0.0	0.0	1.0	3.0	4.0	1.0	3.0	3.0	2.0	2.0	4.0	1.0	1.0	1.0	0.0	3.3	22.0
21	0.0	0.0	2.0	1.0	1.0	6.0	6.0	14.0	19.0	23.0	144.0	21.0	80.0	92.0	46.0	50.0	64.0	230.0	35.0	3.0	5.0	7.0	5.0	2.0	35.7	230.0
22	4.0	5.0	1.0	5.0	4.0	0.0	3.0	14.0	105.0	42.0	37.0	46.0	23.0	51.0	53.0	52.0	36.0	38.0	34.0	36.0	6.0	3.0	0.0	5.0	25.1	105.0
23	7.0	4.0	1.0	6.0	6.0	7.0	30.0	21.0	45.0	49.0	45.0	23.0	18.0	8.0	15.0	22.0	14.0	14.0	9.0	18.0	29.0	17.0	11.0	8.0	17.8	49.0
24	36.0	12.0	24.0	26.0	21.0	77.0	81.0	9.0	25.0	43.0	77.0	45.0	27.0	24.0	88.0	368.0	90.0	99.0	200.0	309.0	191.0	187.0	156.0	54.0	94.5	4.0
25	11.0	9.0	12.0	10.0	7.0	17.0	6.0	22.0	59.0	18.0	19.0	6.0	11.0	19.0	15.0	100.0	86.0	101.0	60.0	6.0	5.0	2.0	3.0	4.0	25.3	101.0
26	2.0	0.0	0.0	6.0	13.0	11.0	18.0	17.0	34.0	22.0	32.0	82.0	78.0	36.0	22.0	25.0	8.0	7.0	21.0	13.0	6.0	3.0	4.0	3.0	19.3	82.0
27	3.0	5.0	11.0	8.0	6.0	9.0	24.0	26.0	56.0	39.0	65.0	21.0	C	C	27.0	27.0	18.0	18.0	15.0	17.0	13.0	10.0	16.0	9.0	20.1	65.0
28	7.0	6.0	9.0	7.0	4.0	8.0	14.0	35.0	44.0	27.0	32.0	28.0	20.0	29.0	29.0	X	16.0	22.0	18.0	6.0	7.0	5.0	5.0	4.0	16.6	44.0
29	7.0	10.0	7.0	5.0	9.0	7.0	10.0	30.0	29.0	93.0	142.0	96.0	56.0	86.0	63.0	71.0	30.0	23.0	11.0	21.0	23.0	21.0	20.0	31.0	37.5	142.0
30	35.0	35.0	13.0	11.0	11.0	13.0	11.0	58.0	116.0	72.0	69.0	75.0	113.0	226.0	109.0	28.0	65.0	126.0	116.0	31.0	3.0	4.0	3.0	11.0	56.4	226.0
NO.	30	30	30	30	30	30	30	30	30	30	30	30	29	29	30	29	30	30	30	30	30	30	30	30	717	99.9%
MEAN	18.1	20.8	18.4	21.5	23.1	28.2	39.5	43.7	54.0	55.6	62.5	50.7	59.2	58.9	84.8	70.6	50.1	54.2	42.8	35.4	30.9	41.5	35.0	24.2		
MAX	75.0	158.0	106.0	121.0	99.0	153.0	247.0	186.0	207.0	171.0	144.0	162.0	219.0	226.0	985.0	368.0	156.0	230.0	200.0	309.0	191.0	221.0	156.0	120.0		



West PM_{2.5} (µg/m³) – June 2023

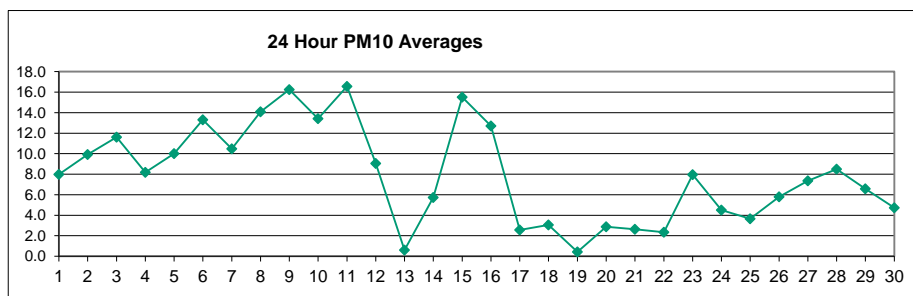
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	12.6	11.3	10.5	10.6	7.5	8.3	5.3	4.6	4.0	2.4	3.2	6.2	4.3	2.8	4.9	2.7	3.9	4.6	5.9	7.4	7.4	8.9	12.1	10.4	6.7	12.6
2	10.8	12.8	7.7	5.9	6.0	6.8	10.6	6.4	6.8	7.1	8.3	8.3	7.7	8.3	8.3	7.2	8.0	7.4	9.0	8.9	9.6	9.5	11.5	13.8	8.6	13.8
3	12.2	11.9	9.2	9.2	8.8	8.3	7.8	7.7	7.9	9.0	9.5	9.0	7.8	7.7	7.6	7.7	8.0	9.3	8.0	10.0	11.1	15.0	15.3	17.1	9.8	17.1
4	17.6	20.3	14.5	14.3	13.9	12.4	11.6	11.7	11.1	7.6	5.2	4.5	3.7	3.0	2.6	2.7	2.8	2.7	3.0	3.8	4.1	5.2	6.0	6.7	8.0	20.3
5	6.5	6.2	6.4	8.9	11.6	11.4	13.6	12.8	11.9	10.7	9.8	8.1	7.3	7.2	8.4	5.6	3.2	2.8	2.5	3.1	7.5	7.9	9.3	10.1	8.0	13.6
6	10.3	9.9	8.8	7.0	7.4	7.3	7.2	6.9	7.9	7.8	8.3	9.0	8.8	11.1	9.9	13.7	13.5	14.3	15.1	15.8	8.7	8.9	9.4	8.8	9.8	15.8
7	8.8	7.0	7.1	7.3	7.7	7.2	7.3	6.5	6.5	5.8	6.3	6.1	5.9	9.8	8.3	12.5	13.5	7.0	0.0	1.6	14.1	9.0	9.0	10.1	7.7	14.1
8	9.1	7.6	8.5	10.6	10.6	9.6	10.2	9.2	7.5	7.0	10.8	12.1	12.9	11.2	11.4	13.5	13.1	3.9	13.9	15.5	11.1	12.7	9.3	8.1	10.4	15.5
9	6.8	7.9	12.4	9.2	9.8	12.5	12.1	9.1	10.0	9.6	13.8	15.2	15.4	12.9	14.9	15.5	16.5	15.9	18.4	13.7	12.5	18.0	19.9	19.6	13.4	19.9
10	21.0	21.9	21.6	21.6	20.8	21.1	21.9	21.5	20.3	18.3	10.2	9.1	8.4	7.3	4.9	3.9	2.4	2.1	2.0	1.8	2.2	2.7	2.5	2.0	11.3	21.9
11	2.1	2.4	2.6	3.7	5.0	7.6	6.6	21.5	36.9	28.2	50.4	49.6	26.8	7.6	6.2	6.2	5.7	6.5	7.2	8.5	11.3	15.7	14.1	14.5	14.5	50.4
12	13.3	12.5	12.4	10.0	8.3	6.8	5.9	7.6	7.2	17.9	20.2	21.3	18.2	16.4	15.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	21.3
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	1.6	4.8	2.2	1.4	0.9	0.7	0.8	1.1	0.6	4.8
14	1.3	1.2	1.4	4.2	10.9	5.4	7.3	6.4	11.9	5.7	3.9	8.4	8.0	7.5	6.3	2.6	1.3	0.8	1.6	1.3	1.2	0.8	0.8	0.8	4.2	11.9
15	0.6	0.6	0.6	0.8	1.2	1.8	2.9	5.0	6.4	8.2	12.4	18.7	23.8	24.3	24.0	23.7	23.6	24.0	24.3	24.2	34.1	32.0	31.5	23.6	15.5	34.1
16	23.5	24.0	24.0	23.5	23.2	22.5	24.8	20.9	18.0	15.1	12.1	10.9	9.8	11.4	10.4	7.7	6.1	4.3	3.9	2.9	1.8	1.3	1.5	1.1	12.7	24.8
17	1.7	1.5	1.4	1.9	1.8	1.9	1.9	1.9	1.3	0.8	0.9	1.1	1.1	1.2	1.3	1.3	1.2	1.1	1.2	2.3	3.2	5.6	6.3	9.2	2.2	9.2
18	3.3	1.4	0.8	0.9	0.8	0.9	0.9	0.9	0.5	0.5	0.6	0.6	9.5	6.4	2.8	3.7	2.7	1.8	5.5	5.8	3.0	0.4	0.2	0.2	2.3	9.5
19	0.2	0.2	0.2	0.3	0.2	0.3	0.2	X	X	0.5	0.7	0.6	0.9	0.7	0.4	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.4	0.9
20	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	1.4	4.2	7.7	8.5	3.7	9.7	3.1	0.9	X	X	X	1.8	1.9	2.2	9.7
21	1.9	2.0	2.0	2.0	X	1.6	1.7	1.7	1.8	2.0	2.2	2.3	2.1	2.0	2.0	1.9	1.8	2.1	1.5	1.8	2.9	7.9	5.0	3.4	2.4	7.9
22	2.7	2.9	2.5	2.5	2.8	3.5	3.6	2.6	2.1	1.5	1.5	1.3	1.5	1.1	1.2	1.3	1.4	1.4	1.4	2.1	2.8	4.2	3.7	4.2	2.3	4.2
23	3.6	4.0	4.0	4.2	4.2	4.7	6.5	7.1	6.2	4.4	3.6	2.9	4.8	6.5	3.7	6.1	4.7	8.5	11.0	6.0	8.0	10.6	9.9	13.0	6.2	13.0
24	7.5	7.7	6.6	6.1	5.3	5.8	6.4	7.2	6.9	5.8	3.9	2.8	2.5	2.3	2.4	2.3	2.3	2.2	2.2	3.0	2.7	2.1	2.0	2.1	4.2	7.7
25	2.4	2.5	2.9	3.2	3.7	4.0	4.4	4.4	4.6	5.7	5.6	4.5	3.9	3.9	3.8	3.3	2.3	2.3	2.2	2.5	3.0	4.5	3.9	3.7	3.6	5.7
26	3.7	4.0	4.3	3.9	4.1	4.5	5.6	5.8	6.2	4.4	3.6	3.6	2.9	8.8	6.3	8.8	6.6	4.2	5.0	6.4	5.7	4.8	4.6	4.4	5.1	8.8
27	5.0	5.3	4.9	4.3	4.5	4.6	6.0	6.4	7.0	6.4	5.8	10.2	7.8	7.4	7.3	6.2	6.8	7.6	7.6	7.3	7.9	8.0	6.6	6.9	6.6	10.2
28	6.3	8.0	7.0	6.4	6.3	7.6	9.5	9.9	9.5	7.8	6.3	4.3	5.8	6.9	10.2	10.2	9.4	7.9	6.4	6.0	6.5	8.4	8.9	5.5	7.5	10.2
29	5.4	5.3	5.5	5.0	5.2	5.3	6.5	7.5	8.1	5.5	5.2	4.0	3.7	4.0	3.1	2.4	5.6	2.4	8.0	8.3	8.5	7.7	8.1	7.4	5.7	8.5
30	7.4	6.0	5.2	5.4	5.4	8.5	6.3	7.4	6.5	6.7	2.9	3.0	2.6	2.4	2.5	1.9	1.9	1.6	1.6	2.1	4.2	5.0	4.9	5.3	4.4	8.5
NO.	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	714	99.2%
MEAN	6.9	7.0	6.5	6.4	6.8	6.7	7.2	7.6	8.1	7.1	7.6	8.0	7.4	7.0	6.6	6.0	6.0	5.2	5.7	6.0	6.8	7.5	7.3	7.2	7.5	7.5
MAX	23.5	24.0	24.0	23.5	23.2	22.5	24.8	21.5	36.9	28.2	50.4	49.6	26.8	24.3	24.0	23.7	23.6	24.0	24.3	24.2	34.1	32.0	31.5	23.6	17.4	70.0



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	689		
Maximum 1-HR Average	50.4 UG/M3		
Maximum 24-HR Average	15.5 UG/M3		
Monthly Calibration	0	Operational Time	714 HRS
Standard Deviation	6.3	Operational Uptime	99.2 %
		Monthly Average	6.9 UG/M3

West PM₁₀ (µg/m³) – June 2023

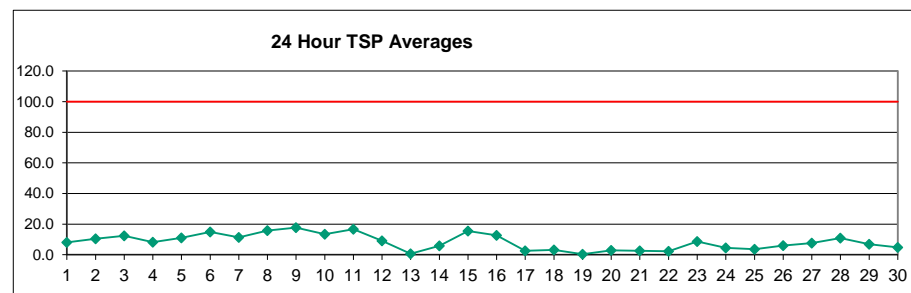
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	15.6	14.2	13.4	12.3	7.5	8.3	5.3	4.6	4.0	2.4	4.4	9.3	6.4	3.8	7.2	3.9	5.5	6.0	7.3	9.4	8.3	9.8	12.1	10.4	8.0	15.6
2	10.8	14.2	7.7	5.9	6.0	6.8	10.6	6.4	6.8	7.1	10.6	11.3	9.6	10.3	10.4	9.0	10.1	8.9	11.1	11.0	12.4	9.5	14.6	17.0	9.9	17.0
3	15.0	14.4	9.2	9.2	8.8	8.3	7.8	7.7	7.9	9.0	12.3	11.1	10.0	10.6	10.1	10.1	9.9	11.4	9.9	12.4	14.2	17.8	19.9	21.8	11.6	21.8
4	18.2	20.8	14.5	14.3	13.9	12.4	11.6	11.7	11.1	7.6	5.2	5.0	4.0	3.0	2.6	2.7	3.0	3.2	3.2	4.3	4.4	5.7	6.6	7.4	8.2	20.8
5	6.5	6.2	6.8	11.7	15.4	14.3	16.7	15.7	14.6	13.1	12.1	10.0	9.2	9.4	11.8	7.8	4.3	3.4	2.9	3.7	9.6	10.1	12.1	12.8	10.0	16.7
6	13.3	12.3	11.2	8.6	9.7	9.1	9.3	8.9	10.6	9.8	10.2	11.0	11.0	15.8	13.6	20.2	19.3	20.5	22.0	23.3	12.8	12.3	12.4	12.3	13.3	23.3
7	12.8	9.2	9.0	8.1	8.1	7.2	8.7	8.4	8.8	8.0	9.0	9.0	8.5	14.4	11.9	18.5	19.9	10.2	0.0	2.2	20.4	13.0	13.1	13.0	10.5	20.4
8	11.2	9.4	10.9	12.4	11.0	9.6	11.6	11.4	9.7	9.7	15.5	17.2	18.1	16.2	16.6	19.8	19.5	5.8	20.7	23.0	16.0	18.5	13.3	10.8	14.1	23.0
9	8.4	9.8	15.3	11.3	12.5	15.5	14.9	11.2	12.3	11.8	17.2	18.9	19.2	16.1	18.6	19.9	21.0	19.7	20.4	13.7	12.5	23.4	23.2	23.1	16.3	23.4
10	25.5	28.4	27.6	24.3	24.6	26.5	23.1	22.8	26.8	23.6	11.7	9.1	8.9	7.7	5.4	5.6	3.0	2.4	2.2	1.9	2.6	3.3	3.1	2.0	13.4	28.4
11	2.1	2.4	2.6	3.7	5.4	10.5	8.7	23.7	36.9	28.2	62.1	64.2	26.8	8.1	6.3	6.5	6.2	8.3	9.2	9.2	12.2	19.9	18.2	15.5	16.5	64.2
12	15.9	12.5	12.4	10.0	8.3	6.8	5.9	7.6	7.2	17.9	20.2	25.3	21.7	21.4	20.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	25.3
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	2.1	5.3	2.2	1.4	0.9	0.7	0.8	1.1	0.6	5.3
14	1.3	1.2	1.4	5.3	15.8	5.9	8.7	9.5	17.7	8.2	5.4	12.6	12.0	11.2	9.3	3.2	1.3	0.8	1.6	1.3	1.2	0.8	0.8	0.8	5.7	17.7
15	0.6	0.6	0.6	0.8	1.2	1.8	2.9	5.0	6.4	8.2	12.4	18.7	23.8	24.3	24.0	23.7	23.6	24.0	24.3	24.2	34.1	32.0	31.5	23.6	15.5	34.1
16	23.5	24.0	24.0	23.5	23.2	22.5	24.8	20.9	18.0	15.1	12.1	10.9	9.8	11.4	10.4	7.7	6.1	4.3	3.9	2.9	1.8	1.3	1.5	1.1	12.7	24.8
17	1.7	1.5	1.4	1.9	1.8	1.9	1.9	1.9	1.3	0.8	0.9	1.1	1.1	1.2	1.3	1.3	1.2	1.1	1.2	2.3	3.8	7.2	8.5	13.5	2.6	13.5
18	3.3	1.4	0.8	0.9	0.8	0.9	0.9	0.9	0.5	0.5	0.6	0.6	14.2	9.5	4.2	5.5	4.0	2.3	7.9	8.2	4.4	0.4	0.2	0.2	3.0	14.2
19	0.2	0.2	0.2	0.3	0.2	0.3	0.2	X	X	0.7	1.0	0.9	1.2	1.0	0.5	0.4	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.4	1.2
20	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	1.7	4.8	10.4	12.7	5.0	14.5	4.1	0.9	X	X	X	1.8	1.9	2.9	14.5
21	1.9	2.0	2.0	2.0	X	1.6	1.7	1.7	1.8	2.0	2.2	2.3	2.1	2.0	2.0	1.9	1.8	2.1	1.5	1.8	2.9	11.5	6.0	3.4	2.6	11.5
22	2.7	2.9	2.5	2.5	2.8	3.5	3.6	2.6	2.1	1.5	1.5	1.3	1.5	1.1	1.2	1.3	1.4	1.4	1.4	2.1	2.8	4.6	3.7	4.2	2.3	4.6
23	3.6	4.0	4.0	4.2	4.2	4.7	6.5	8.0	6.9	4.4	3.6	3.0	6.8	9.5	4.6	9.0	6.7	12.4	16.5	8.8	11.4	15.4	13.7	19.2	8.0	19.2
24	10.3	10.7	7.8	6.1	5.3	5.8	6.4	7.2	6.9	5.8	3.9	2.8	2.5	2.3	2.4	2.3	2.3	2.2	2.2	3.4	3.2	2.1	2.0	2.1	4.5	10.7
25	2.4	2.5	2.9	3.2	3.7	4.0	4.4	4.4	4.6	5.7	5.6	4.5	3.9	3.9	3.8	3.3	2.3	2.3	2.2	2.5	3.0	4.5	3.9	3.7	3.6	5.7
26	3.7	4.0	4.3	3.9	4.1	4.5	5.6	5.8	6.2	4.4	3.6	3.6	2.9	12.2	9.3	12.5	9.6	4.2	6.2	8.6	6.3	4.8	4.6	4.4	5.8	12.5
27	5.0	5.3	4.9	4.3	4.5	4.6	6.0	6.4	7.3	7.0	5.9	12.5	9.9	10.1	9.4	6.4	8.8	9.4	9.5	9.1	9.0	8.0	6.6	6.9	7.4	12.5
28	6.3	8.0	7.0	6.4	6.3	7.6	9.5	12.0	9.6	7.8	6.3	4.3	6.7	13.8	12.6	16.8	10.0	7.9	7.3	6.3	6.9	9.8	8.9	5.5	8.5	16.8
29	5.4	5.3	5.5	5.0	5.2	5.3	6.5	7.5	9.4	5.5	5.4	4.0	3.7	5.4	3.1	2.4	7.0	2.4	11.0	11.6	11.9	9.5	10.2	9.3	6.6	11.9
30	9.4	6.0	5.2	5.4	5.4	8.5	6.3	7.4	6.5	9.7	2.9	3.0	2.6	2.4	2.8	1.9	1.9	1.6	1.6	2.1	4.8	5.8	5.0	5.3	4.7	9.7
NO.	30	30	30	30	29	30	30	29	29	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	714	99%
MEAN	7.9	7.8	7.2	6.9	7.5	7.3	7.7	8.3	9.0	7.9	8.8	9.6	8.8	8.9	8.3	7.7	7.6	6.3	7.0	7.3	8.1	9.0	8.6	8.4		
MAX	25.5	28.4	27.6	24.3	24.6	26.5	24.8	23.7	36.9	28.2	62.1	64.2	26.8	24.3	24.0	23.7	23.6	24.0	24.3	24.2	34.1	32.0	31.5	23.6		



Number of Non-Zero Readings	689		
Maximum 1-HR Average	64.2 UG/M3		
Maximum 24-HR Average	16.5 UG/M3		
IZS Calibration Time		OperatioEI Time	714 HRS
Down Time	0	OperatioEI Uptime	99.2 %
Standard Deviation	7.3	Monthly Average	8.0 UG/M3

West TSP ($\mu\text{g}/\text{m}^3$) – June 2023

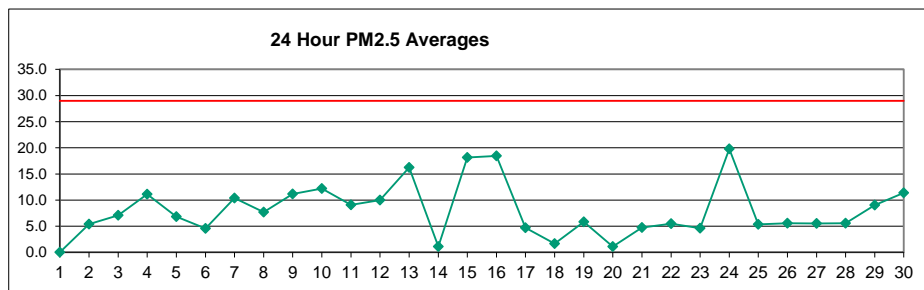
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	17.8	14.6	13.6	12.3	7.5	8.3	5.3	4.6	4.0	2.4	4.4	9.9	6.7	3.8	7.2	3.9	5.5	6.0	7.3	9.4	8.3	9.8	12.1	10.4	8.1	17.8	
2	10.8	14.2	7.7	5.9	6.0	6.8	10.6	6.4	6.8	7.1	10.6	13.0	11.1	11.8	11.4	10.0	11.2	8.9	12.8	12.7	12.8	9.5	14.6	19.6	10.5	19.6	
3	17.3	14.4	9.2	9.2	8.8	8.3	7.8	7.7	7.9	9.0	12.3	12.9	11.5	11.7	11.5	11.6	11.4	13.1	11.2	14.3	15.3	17.8	20.5	21.8	12.4	21.8	
4	18.2	20.8	14.5	14.3	13.9	12.4	11.6	11.7	11.1	7.6	5.2	5.0	4.0	3.0	2.6	2.7	3.0	3.2	3.2	4.3	4.4	5.7	6.6	7.4	8.2	20.8	
5	6.5	6.2	6.8	11.7	15.5	16.0	19.5	18.3	16.9	15.2	14.0	11.6	10.6	10.8	13.2	8.3	4.3	3.4	2.9	3.7	11.0	11.1	12.6	13.5	11.0	19.5	
6	13.3	13.9	11.7	8.6	9.7	9.1	9.3	9.7	11.9	11.2	11.9	12.8	12.7	18.3	15.8	23.5	22.4	23.8	25.6	27.1	14.4	14.1	14.2	14.0	15.0	27.1	
7	13.8	9.2	9.0	8.1	8.1	7.2	8.7	8.5	8.8	8.0	9.0	9.6	8.7	16.5	13.5	21.4	23.1	11.8	0.0	2.6	23.7	14.7	14.8	14.8	11.4	23.7	
8	13.0	10.8	11.5	12.4	11.0	9.6	11.6	11.4	10.0	9.7	17.9	19.9	21.0	18.8	19.2	23.0	22.6	6.4	23.9	26.7	18.4	21.5	15.0	12.1	15.7	26.7	
9	9.7	11.1	17.6	13.0	13.3	17.7	17.3	13.0	14.3	13.7	19.5	21.3	21.9	18.1	21.0	21.1	21.0	22.4	20.4	13.7	12.5	23.8	23.2	23.1	17.7	23.8	
10	25.5	28.4	27.6	24.3	24.6	26.5	23.1	22.8	27.5	23.6	11.7	9.1	8.9	7.7	5.4	5.9	3.0	2.4	2.2	1.9	2.6	3.3	3.1	2.0	13.5	28.4	
11	2.1	2.4	2.6	3.7	5.4	11.2	8.7	23.7	36.9	28.2	62.1	64.2	26.8	8.1	6.3	6.5	6.2	8.3	9.4	9.2	12.2	21.5	18.7	15.5	16.7	64.2	
12	15.9	12.5	12.4	10.0	8.3	6.8	5.9	7.6	7.2	17.9	20.2	25.3	21.7	22.1	21.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	25.3	
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	2.1	5.3	2.2	1.4	0.9	0.7	0.8	1.1	0.6	5.3
14	1.3	1.2	1.4	5.3	16.4	5.9	8.7	9.8	18.0	8.2	5.4	13.5	12.8	11.6	9.7	3.2	1.3	0.8	1.6	1.3	1.2	0.8	0.8	0.8	5.9	18.0	
15	0.6	0.6	0.6	0.8	1.2	1.8	2.9	5.0	6.4	8.2	12.4	18.7	23.8	24.3	24.0	23.7	23.6	24.0	24.3	24.2	34.1	32.0	31.5	23.6	15.5	34.1	
16	23.5	24.0	24.0	23.5	23.2	22.5	24.8	20.9	18.0	15.1	12.1	10.9	9.8	11.4	10.4	7.7	6.1	4.3	3.9	2.9	1.8	1.3	1.5	1.1	12.7	24.8	
17	1.7	1.5	1.4	1.9	1.8	1.9	1.9	1.9	1.3	0.8	0.9	1.1	1.1	1.2	1.3	1.3	1.2	1.1	1.2	2.3	3.8	7.2	8.5	14.4	2.6	14.4	
18	3.3	1.4	0.8	0.9	0.8	0.9	0.9	0.9	0.5	0.5	0.6	0.6	16.3	10.4	4.4	5.8	4.2	2.3	7.9	8.2	4.5	0.4	0.2	0.2	3.2	16.3	
19	0.2	0.2	0.2	0.3	0.2	0.3	0.2	X	X	0.7	1.0	0.9	1.2	1.0	0.5	0.4	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.4	1.2	
20	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	1.7	4.8	10.4	12.8	5.0	15.1	4.1	0.9	X	X	X	1.8	1.9	2.9	15.1	
21	1.9	2.0	2.0	2.0	X	1.6	1.7	1.7	1.8	2.0	2.2	2.3	2.1	2.0	2.0	1.9	1.8	2.1	1.5	1.8	2.9	12.0	6.0	3.4	2.7	12.0	
22	2.7	2.9	2.5	2.5	2.8	3.5	3.6	2.6	2.1	1.5	1.5	1.3	1.5	1.1	1.2	1.3	1.4	1.4	1.4	2.1	2.8	4.6	3.7	4.2	2.3	4.6	
23	3.6	4.0	4.0	4.2	4.2	4.7	6.5	8.0	6.9	4.4	3.6	3.0	6.8	10.2	4.6	9.8	6.7	13.7	19.1	10.0	13.0	17.7	15.7	22.1	8.6	22.1	
24	10.9	10.7	7.8	6.1	5.3	5.8	6.4	7.2	6.9	5.8	3.9	2.8	2.5	2.3	2.4	2.3	2.3	2.2	2.2	3.4	3.2	2.1	2.0	2.1	4.5	10.9	
25	2.4	2.5	2.9	3.2	3.7	4.0	4.4	4.4	4.6	5.7	5.6	4.5	3.9	3.9	3.8	3.3	2.3	2.3	2.2	2.5	3.0	4.5	3.9	3.7	3.6	5.7	
26	3.7	4.0	4.3	3.9	4.1	4.5	5.6	5.8	6.2	4.4	3.6	3.6	2.9	13.8	10.1	14.2	10.3	4.2	6.2	8.6	6.3	4.8	4.6	4.4	6.0	14.2	
27	5.0	5.3	4.9	4.3	4.5	4.6	6.0	6.4	7.3	7.0	5.9	14.5	11.4	10.2	10.1	6.4	9.3	10.7	10.6	9.1	9.0	8.0	6.6	6.9	7.7	14.5	
28	6.3	8.0	7.0	6.4	6.3	7.6	9.5	12.0	9.6	7.8	6.3	4.3	6.7	58.7	12.6	28.8	10.0	7.9	7.3	6.3	6.9	9.8	8.9	5.5	10.9	58.7	
29	5.4	5.3	5.5	5.0	5.2	5.3	6.5	7.5	9.4	5.5	5.4	4.0	3.7	5.5	3.1	2.4	7.0	2.4	12.3	12.8	13.0	10.8	11.4	10.0	6.9	13.0	
30	10.1	6.0	5.2	5.4	5.4	8.5	6.3	7.4	6.5	10.3	2.9	3.0	2.6	2.4	2.8	1.9	1.9	1.6	1.6	2.1	4.8	5.8	5.0	5.3	4.8	10.3	
NO.	30	30	30	30	29	30	30	29	29	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	714	99%	
MEAN	8.2	8.0	7.3	7.0	7.5	7.5	7.9	8.5	9.3	8.1	9.1	10.2	9.3	11.0	8.8	8.7	8.0	6.7	7.5	7.8	8.5	9.5	9.0	8.8			
MAX	25.5	28.4	27.6	24.3	24.6	26.5	24.8	23.7	36.9	28.2	62.1	64.2	26.8	58.7	24.0	28.8	23.6	24.0	25.6	27.1	34.1	32.0	31.5	23.6			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	689	
Maximum 1-HR Average	64.2 UG/M3	
Maximum 24-HR Average	17.7 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	7.918	Monthly Average
		714 HRS
		99.2 %
		8.4 UG/M3

Berm PM_{2.5} (µg/m³) – June 2023

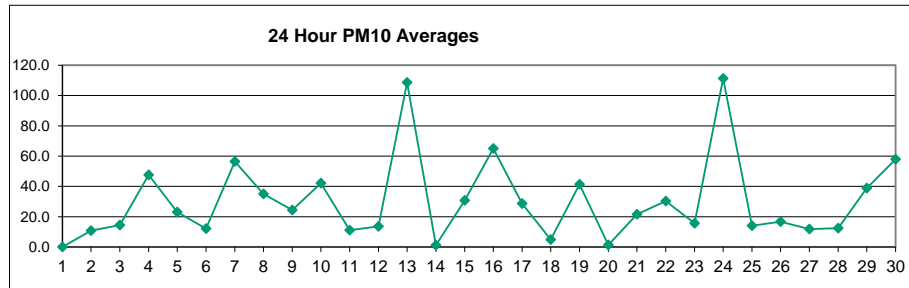
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.3	5.7	6.1	5.6	5.5	X	X	X	X	X	X	X	X	X	X	X	1.6	1.3	2.2	2.7	2.5	3.0	3.4	-	-	
2	3.2	2.6	2.5	3.3	2.4	1.5	7.3	10.1	9.4	11.7	4.7	3.8	4.8	5.6	5.1	4.7	5.1	4.9	5.4	6.1	6.1	6.5	6.1	6.0	5.4	11.7
3	5.6	4.1	6.6	6.4	4.5	9.6	10.6	8.8	7.0	8.4	8.6	5.3	4.7	5.0	4.8	5.1	6.4	7.0	6.2	7.7	8.2	10.6	9.0	9.5	7.1	10.6
4	9.2	8.6	9.4	10.7	11.2	10.7	9.5	9.1	9.1	24.6	33.4	6.4	7.5	12.3	12.7	16.5	14.0	14.8	18.8	4.4	2.8	3.4	3.6	4.4	11.1	33.4
5	4.3	4.7	5.6	6.9	7.9	7.5	7.3	7.8	8.0	7.6	7.2	6.6	5.9	5.7	5.3	6.6	14.0	12.1	2.3	1.8	5.2	9.4	7.4	6.9	6.8	14.0
6	6.2	5.9	5.0	4.6	4.0	4.4	5.1	5.9	4.8	4.4	4.8	5.3	5.4	3.5	4.3	5.1	3.6	3.4	3.4	3.3	4.1	5.3	4.0	3.8	4.6	6.2
7	3.7	4.4	5.8	5.8	11.5	22.3	17.7	49.0	34.2	21.0	12.1	4.0	9.0	4.5	3.9	4.0	4.1	4.0	4.1	3.9	3.9	6.0	5.9	4.8	10.4	49.0
8	4.4	7.0	7.3	7.4	10.7	9.4	19.7	20.2	19.2	17.7	6.6	5.3	5.6	4.1	3.2	4.4	2.6	2.4	3.5	4.0	3.7	3.6	7.0	5.8	7.7	20.2
9	4.9	6.1	6.3	8.2	11.9	9.0	12.0	15.5	8.1	7.4	9.9	11.8	12.7	11.6	12.4	12.4	14.4	11.9	15.0	12.3	13.3	13.2	13.9	14.0	11.2	15.5
10	15.3	17.2	17.0	16.5	17.6	18.1	18.4	20.3	18.0	13.4	7.5	6.5	5.7	6.6	18.2	27.6	14.3	4.8	6.1	6.2	3.0	4.3	6.1	4.3	12.2	27.6
11	3.0	2.1	2.5	2.4	4.0	2.9	5.0	19.3	17.4	24.7	23.5	31.1	20.2	5.3	4.5	4.6	4.0	4.0	3.8	5.2	6.2	8.9	7.0	6.2	9.1	31.1
12	5.0	6.2	3.9	7.0	5.2	4.9	7.7	8.7	7.7	18.5	16.2	15.1	13.1	12.0	11.6	14.9	11.3	9.1	8.7	12.1	9.8	10.6	9.9	10.5	10.0	18.5
13	8.3	6.1	5.1	5.3	5.3	5.6	6.1	7.6	8.5	12.9	18.8	11.5	17.3	25.6	141.9	12.0	7.4	27.3	13.8	16.0	4.6	14.0	7.2	1.1	16.2	141.9
14	1.0	1.0	1.4	2.3	1.8	2.4	1.5	1.1	1.2	1.0	0.9	0.3	1.4	1.7	0.5	0.3	0.7	0.5	0.6	0.7	0.8	1.4	0.7	1.0	1.1	2.4
15	1.1	1.3	2.4	1.6	0.8	2.7	4.7	4.1	9.5	10.9	16.7	33.0	36.1	32.9	44.4	33.9	33.3	34.4	30.9	27.5	18.5	17.9	18.1	19.0	18.2	44.4
16	34.0	21.0	18.3	18.2	19.7	20.3	25.7	23.7	24.0	20.7	25.0	25.6	26.4	24.3	22.5	22.5	20.3	11.7	11.5	5.0	4.8	4.1	8.8	4.6	18.4	34.0
17	2.4	2.2	1.2	1.2	1.5	1.2	1.7	2.5	4.7	5.2	7.3	13.2	11.9	10.6	12.8	5.8	4.1	6.8	3.6	1.9	2.7	3.1	2.9	2.1	4.7	13.2
18	2.0	1.6	0.5	0.8	0.8	1.0	1.5	1.2	1.5	2.8	2.7	1.3	3.5	0.5	0.4	0.5	0.4	0.9	1.0	0.7	1.5	3.5	6.7	2.3	1.7	6.7
19	5.3	7.6	6.2	4.5	2.3	2.2	3.9	11.3	9.3	8.0	10.9	11.0	18.6	10.3	4.6	6.5	4.6	2.1	2.2	2.0	2.6	2.9	0.3	0.3	5.8	18.6
20	0.4	0.9	0.9	1.3	3.4	1.1	1.2	0.7	0.6	0.7	0.5	0.4	2.3	2.1	0.4	0.8	0.6	0.7	1.2	1.2	1.1	2.0	1.3	1.2	1.1	3.4
21	1.4	1.2	1.3	1.3	X	1.5	1.5	2.4	3.3	4.9	11.4	4.6	13.7	18.9	7.4	5.9	5.2	9.3	4.2	2.2	1.8	1.6	1.9	2.4	4.7	18.9
22	2.2	2.3	2.5	2.5	1.4	1.6	2.2	3.5	16.7	12.8	5.2	5.5	6.5	6.7	8.2	13.5	9.9	8.3	8.4	3.7	1.7	1.8	1.6	2.6	5.5	16.7
23	2.6	2.5	3.3	2.9	3.5	4.1	5.7	5.2	9.0	11.4	12.1	7.5	6.1	8.8	3.9	3.2	2.9	2.5	1.6	1.9	2.9	2.4	2.2	2.3	4.6	12.1
24	2.7	5.4	9.0	9.5	9.5	19.6	10.5	6.6	6.0	7.5	10.3	12.8	11.4	16.2	20.0	66.3	25.3	30.1	45.0	43.1	33.0	39.7	28.0	7.4	19.8	66.3
25	4.4	3.8	3.6	3.9	4.4	4.6	3.8	7.1	11.4	4.8	6.4	5.9	7.0	5.9	4.8	16.2	7.1	4.6	3.9	3.3	2.9	3.1	3.4	2.6	5.4	16.2
26	2.0	1.9	2.3	5.0	7.7	4.0	8.7	7.7	20.7	5.2	6.7	14.2	9.4	9.4	2.4	2.9	2.7	3.4	3.5	3.4	2.5	2.4	3.1	3.1	5.6	20.7
27	3.1	3.0	3.7	3.8	3.9	3.9	8.9	7.8	7.1	7.9	6.5	6.0	5.8	5.6	4.1	6.6	5.0	5.6	5.3	5.0	6.2	6.7	5.1	5.8	5.5	8.9
28	5.5	6.1	4.3	4.7	3.9	5.7	7.6	8.9	8.3	6.9	7.9	9.2	6.3	9.3	7.6	3.6	4.6	4.4	4.5	2.5	3.0	3.1	2.9	3.1	5.6	9.3
29	3.2	4.2	4.3	3.4	4.8	5.2	5.5	8.2	6.8	10.0	23.4	12.5	15.3	X	46.4	14.8	10.6	7.0	2.9	3.6	3.9	3.5	4.0	4.5	9.0	46.4
30	4.3	6.1	5.5	4.7	4.1	4.0	4.9	11.3	12.3	15.7	22.9	10.4	32.3	28.2	23.3	18.4	21.5	21.2	10.7	2.6	2.0	2.2	2.1	2.6	11.4	32.3
NO.	30	30	30	30	29	29	29	29	29	29	29	29	29	28	29	29	29	30	30	30	30	30	30	30	706	98%
MEAN	5.2	5.1	5.1	5.4	6.0	6.6	7.8	10.2	10.5	10.7	11.4	9.9	11.2	10.5	15.2	11.7	9.0	8.7	7.8	6.5	5.5	6.7	6.1	4.9		
MAX	34.0	21.0	18.3	18.2	19.7	22.3	25.7	49.0	34.2	24.7	33.4	33.0	36.1	32.9	141.9	66.3	33.3	34.4	45.0	43.1	33.0	39.7	28.0	19.0		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	706	
Maximum 1-HR Average	141.9 UG/M3	
Maximum 24-HR Average	19.8 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	9.4	Operational Uptime
		Monthly Average
		706 HRS
		98.1 %
		8.2 UG/M3

Berm PM₁₀ (µg/m³) – June 2023

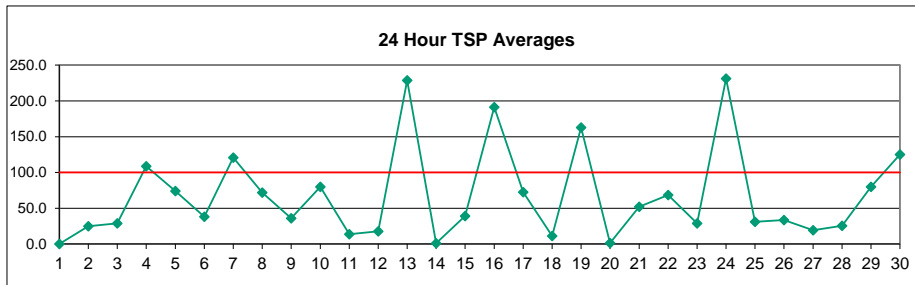
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.1	5.7	8.0	5.9	6.3	X	X	X	X	X	X	X	X	X	X	X	X	2.0	1.3	2.2	2.7	2.5	3.0	3.4	-	-
2	3.2	2.6	2.5	3.3	2.4	1.5	10.5	14.5	28.8	47.9	15.0	8.9	12.8	13.6	7.9	8.8	9.7	8.5	9.3	11.1	10.1	10.2	7.9	7.6	10.8	47.9
3	6.6	4.1	9.2	8.9	4.5	11.2	35.7	24.8	12.6	28.3	25.0	9.7	9.6	12.5	12.8	14.2	19.2	16.6	11.7	13.8	12.4	22.9	9.9	11.1	14.5	35.7
4	10.9	9.8	12.5	14.3	17.2	17.7	12.8	14.6	20.8	122.5	184.3	21.9	41.6	66.9	69.0	109.8	100.2	111.1	141.6	14.9	5.4	7.1	5.9	8.1	47.5	184.3
5	7.0	7.8	12.5	17.4	16.8	14.0	13.1	16.1	17.1	14.6	15.6	15.8	15.5	16.1	17.4	32.8	110.8	91.7	6.7	3.1	16.1	44.5	17.0	13.6	23.0	110.8
6	9.9	9.5	7.6	6.5	4.0	4.6	9.9	16.1	14.3	10.4	11.6	12.2	15.6	14.9	18.0	24.7	15.6	14.1	12.3	10.7	13.3	18.7	8.5	7.7	12.1	24.7
7	6.6	9.0	14.5	12.9	63.5	130.7	110.4	300.0	247.9	142.1	74.2	15.5	34.2	21.3	17.6	16.3	18.2	16.6	16.6	14.1	13.4	24.5	21.0	12.3	56.4	300.0
8	8.9	21.9	19.3	16.1	36.0	36.9	112.1	117.9	109.8	108.8	30.6	24.9	27.7	14.2	14.6	25.1	9.8	10.4	14.4	16.2	12.1	10.0	26.4	16.2	35.0	117.9
9	11.6	14.3	14.4	20.2	32.5	21.2	44.0	68.1	27.0	19.5	22.2	25.2	24.9	30.2	24.9	21.2	30.9	22.1	23.4	16.8	20.0	16.3	16.3	18.6	24.4	68.1
10	23.5	24.5	27.0	22.2	33.6	35.1	40.3	55.2	44.2	27.3	11.2	7.6	6.7	19.0	122.7	225.7	90.5	23.2	33.3	39.7	12.0	26.5	38.5	22.3	42.2	225.7
11	10.2	3.2	4.5	3.0	8.3	4.4	13.5	25.4	17.4	27.1	23.5	33.7	24.9	7.0	4.5	5.6	4.9	5.0	3.8	5.2	6.2	10.2	7.0	6.2	11.0	33.7
12	5.0	6.7	3.9	7.5	5.2	4.9	11.4	24.7	18.9	32.1	17.8	15.1	16.7	16.7	18.4	18.3	19.2	12.2	10.8	18.2	9.8	10.6	9.9	10.5	13.5	32.1
13	8.3	7.0	5.1	6.1	5.8	6.6	8.3	18.0	20.4	62.6	136.4	79.4	153.4	213.4	1192.1	78.1	40.9	213.0	92.6	101.6	17.2	87.2	49.9	2.4	108.6	1192.1
14	1.9	1.0	2.1	2.3	1.8	2.4	1.5	1.1	1.2	1.0	0.9	0.3	1.4	1.7	0.5	0.3	0.7	0.5	0.6	0.7	0.8	1.4	0.7	1.0	1.2	2.4
15	1.3	1.6	3.3	1.8	0.8	2.7	4.7	4.1	10.5	11.7	32.2	88.7	74.2	59.1	126.1	64.0	59.0	54.9	35.1	27.5	18.5	17.9	18.1	19.0	30.7	126.1
16	97.0	21.0	18.3	18.2	19.7	20.3	27.7	30.4	54.7	83.0	110.0	128.7	138.9	141.6	117.6	133.6	121.7	63.7	73.8	20.7	22.7	20.0	55.8	21.1	65.0	141.6
17	5.1	4.9	1.2	1.2	1.5	1.5	3.6	7.9	35.4	32.9	63.9	99.5	89.0	80.3	103.2	39.9	24.2	45.7	19.5	4.5	12.7	4.7	3.7	2.1	28.7	103.2
18	2.0	1.6	0.5	0.8	0.8	1.0	1.5	1.9	6.7	18.8	15.5	6.7	20.9	0.5	0.4	0.5	0.4	0.9	1.0	0.7	1.9	5.2	20.1	7.5	4.9	20.9
19	22.0	41.7	32.4	22.7	9.9	9.7	29.3	68.4	72.7	67.3	111.1	98.1	135.6	95.7	35.3	46.4	32.9	13.3	11.8	11.6	11.3	11.8	0.3	0.3	41.3	135.6
20	0.4	1.0	1.0	1.8	5.1	1.3	1.5	0.8	0.7	0.7	0.5	0.4	2.3	2.1	0.4	0.8	0.6	0.7	1.2	1.2	1.1	2.0	1.3	1.2	1.2	5.1
21	1.4	1.2	1.3	1.3	X	1.5	1.5	2.9	8.0	18.0	49.4	19.2	69.3	109.3	39.4	30.0	30.7	77.1	21.3	5.4	1.8	1.6	2.2	2.7	21.6	109.3
22	2.5	2.8	2.7	2.5	1.4	1.6	3.7	11.6	102.0	83.8	31.2	33.4	44.7	46.4	59.8	92.0	63.3	55.5	56.5	19.7	2.1	1.9	1.6	3.4	30.3	102.0
23	2.6	2.5	3.9	2.9	3.6	6.3	19.7	14.4	44.0	57.6	61.4	41.7	22.2	25.6	25.1	9.2	5.4	5.5	3.0	3.2	6.2	3.7	3.0	2.5	15.6	61.4
24	3.2	17.6	28.2	22.2	22.8	77.8	42.2	15.3	14.6	28.8	69.6	89.4	75.7	104.6	127.3	437.3	163.2	185.1	305.6	281.1	182.1	217.3	134.6	24.7	111.3	437.3
25	8.6	6.4	5.8	5.7	5.6	10.8	4.6	20.1	44.0	7.1	12.5	6.8	9.2	12.4	9.6	90.9	30.5	16.1	12.0	3.6	3.9	4.1	3.8	2.6	14.0	90.9
26	2.0	1.9	2.3	5.0	9.0	4.0	11.2	22.5	74.9	13.0	26.0	73.7	56.4	53.2	3.8	7.5	4.6	5.2	6.7	4.9	2.5	2.4	3.5	3.5	16.7	74.9
27	3.1	3.0	4.3	3.8	4.3	3.9	32.8	23.3	24.1	32.8	26.8	9.6	12.2	13.4	7.7	21.6	8.3	10.3	7.3	5.9	6.3	7.4	5.1	5.8	11.8	32.8
28	5.5	6.1	4.3	4.7	3.9	5.7	14.9	23.7	24.6	20.6	27.6	32.0	24.3	54.0	12.0	3.6	4.6	4.4	7.2	2.5	3.0	3.1	2.9	3.1	12.4	54.0
29	3.2	4.2	4.3	3.4	5.3	6.9	7.6	29.3	20.8	57.0	152.3	80.0	84.3	X	227.1	88.2	48.2	33.9	4.2	7.8	7.1	4.8	5.0	9.4	38.9	227.1
30	6.1	9.9	11.4	6.8	4.1	4.0	7.7	46.2	59.3	96.0	132.1	57.0	218.1	168.6	132.4	95.6	113.6	129.9	73.5	7.6	2.0	2.2	2.1	2.7	57.9	218.1
NO.	30	30	30	30	29	29	29	29	29	29	29	29	29	28	29	29	29	30	30	30	30	30	30	30	706	98%
MEAN	9.6	8.5	8.9	8.4	11.6	15.5	22.0	35.1	40.6	43.9	51.4	39.1	50.4	50.5	87.9	60.1	40.7	41.6	33.9	22.5	14.6	20.1	16.2	8.4		
MAX	97.0	41.7	32.4	22.7	63.5	130.7	112.1	300.0	247.9	142.1	184.3	128.7	218.1	213.4	1192.1	437.3	163.2	213.0	305.6	281.1	182.1	217.3	134.6	24.7		



Number of Non-Zero Readings	706	Operational Time	706 HRS
Maximum 1-HR Average	1192.1 UG/M3	Operational Uptime	98.1 %
Maximum 24-HR Average	111.3 UG/M3	Monthly Average	30.7 UG/M3
Monthly Calibration	0		
Standard Deviation	63.15		

Berm TSP ($\mu\text{g}/\text{m}^3$) – June 2023

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	13.0	5.7	11.3	5.9	9.2	X	X	X	X	X	X	X	X	X	X	X	X	2.6	1.3	2.2	2.7	2.5	3.0	3.4	-	-	
2	3.2	2.6	2.5	3.3	2.4	1.5	10.6	14.5	84.5	89.9	48.7	13.9	49.9	52.1	44.1	31.7	22.3	18.6	12.7	29.1	20.0	19.6	10.4	9.7	24.9	89.9	
3	6.8	4.1	9.2	9.2	4.5	11.2	95.4	54.7	22.0	58.2	40.0	23.2	20.6	41.5	41.8	53.0	50.7	36.2	22.4	21.6	13.8	34.7	9.9	11.1	29.0	95.4	
4	12.9	11.4	84.1	14.3	25.3	39.3	21.3	36.8	63.8	384.0	302.7	28.6	88.9	163.4	122.8	275.9	229.5	261.9	359.3	26.2	13.9	14.6	15.4	16.5	108.9	384.0	
5	13.7	19.8	18.3	102.4	97.3	65.9	53.4	39.7	49.4	31.8	35.1	37.3	42.8	46.2	52.7	80.8	376.9	229.3	25.8	5.8	30.2	224.7	66.9	33.6	74.2	376.9	
6	30.4	23.3	13.5	8.2	4.0	4.6	17.2	25.4	31.7	17.9	33.0	24.8	42.8	83.2	96.0	102.1	95.7	76.9	45.4	32.4	35.2	27.4	18.9	23.7	38.1	102.1	
7	28.3	17.3	32.9	25.9	160.8	319.4	296.2	606.6	470.0	269.0	158.0	29.3	72.9	53.8	49.6	42.2	36.6	45.0	44.6	24.7	26.4	44.8	30.6	17.0	120.9	606.6	
8	12.5	34.3	23.9	21.5	68.1	88.9	249.2	251.5	185.7	186.5	67.4	83.0	61.4	29.9	36.2	106.7	23.5	28.1	37.1	29.7	22.9	13.6	47.6	18.3	72.0	251.5	
9	16.4	14.3	15.2	25.9	32.5	21.2	49.3	89.5	51.6	41.7	49.6	64.8	46.5	43.5	45.3	31.5	50.5	33.1	43.1	25.2	20.1	16.3	16.3	21.2	36.0	89.5	
10	24.7	24.5	27.0	22.2	33.6	35.6	43.6	69.1	46.4	56.4	11.3	7.6	6.7	29.2	287.0	541.6	239.3	45.0	60.8	67.7	28.9	53.6	94.6	63.4	80.0	541.6	
11	20.3	3.9	5.7	3.0	9.8	5.0	14.0	26.3	17.4	29.2	23.5	33.7	63.8	9.3	4.5	10.0	4.9	7.1	3.8	5.2	6.2	10.2	7.0	6.2	13.7	63.8	
12	5.0	6.9	3.9	7.5	5.2	4.9	19.1	46.2	35.6	35.9	17.8	15.1	16.7	19.3	40.6	26.4	27.5	17.2	11.8	25.8	9.8	10.6	9.9	10.5	17.9	46.2	
13	8.3	7.3	5.1	6.1	7.2	7.8	12.7	28.7	41.1	135.7	300.7	179.7	370.3	476.0	1699.6	147.7	95.1	728.7	359.1	377.6	42.7	292.1	149.7	8.5	228.6	1699.6	
14	2.1	1.0	2.1	2.3	1.8	2.4	1.5	1.1	1.2	1.0	0.9	0.3	1.4	1.7	0.5	0.3	0.7	0.5	0.6	0.7	0.8	1.4	0.7	1.0	1.2	2.4	
15	1.3	1.6	3.3	1.8	0.8	2.7	4.7	4.1	10.5	11.7	43.9	142.4	89.5	66.2	218.9	78.7	67.3	54.9	35.1	27.5	18.5	17.9	18.1	19.0	39.2	218.9	
16	264.8	21.0	18.3	18.2	19.7	20.3	27.7	36.3	119.6	325.8	318.1	467.0	460.6	503.1	302.0	407.2	332.0	164.2	263.9	68.5	66.0	78.8	222.6	64.3	191.3	503.1	
17	6.2	6.1	1.2	1.2	1.5	1.5	8.8	22.0	86.2	85.7	157.9	252.7	212.9	178.4	281.2	109.8	54.3	131.9	61.3	12.3	48.6	12.2	3.8	2.1	72.5	281.2	
18	2.0	1.6	0.5	0.8	0.8	1.0	1.5	1.9	20.7	60.8	73.8	18.7	43.3	0.5	0.4	0.5	0.4	0.9	1.0	0.7	1.9	5.2	24.4	7.5	11.3	73.8	
19	33.1	81.4	51.3	40.1	21.5	33.7	111.0	232.7	297.7	271.4	512.6	508.7	635.5	423.1	174.5	202.5	116.2	45.4	34.2	35.7	25.6	22.3	0.3	0.3	163.0	635.5	
20	0.4	1.0	1.0	1.8	5.2	1.3	1.5	0.8	0.7	0.7	0.5	0.4	2.3	2.1	0.4	0.8	0.6	0.7	1.2	1.2	1.1	2.0	1.3	1.2	1.2	5.2	
21	1.4	1.2	1.3	1.3	X	1.5	1.5	2.9	19.8	51.0	115.0	38.8	129.9	182.6	94.3	76.7	77.8	316.4	68.2	10.8	1.8	1.6	2.2	2.7	52.2	316.4	
22	2.5	2.8	2.7	2.5	1.4	1.6	4.3	24.2	218.8	214.3	71.9	78.8	131.8	129.4	144.5	210.0	126.9	105.6	117.8	41.1	2.5	1.9	1.6	3.5	68.4	218.8	
23	2.6	2.5	4.0	2.9	3.6	9.4	61.7	26.6	110.8	112.9	93.6	67.0	42.8	38.1	51.0	21.3	6.4	7.7	3.3	3.3	9.3	5.6	3.6	2.5	28.8	112.9	
24	3.2	18.4	28.2	22.2	22.8	141.8	106.6	26.2	27.4	69.3	146.7	163.7	128.7	178.2	199.4	909.3	294.8	385.1	733.0	686.6	411.2	520.9	294.6	32.8	231.3	909.3	
25	8.6	6.4	5.9	6.3	5.6	23.6	5.6	30.0	104.1	7.9	12.7	6.8	9.2	16.1	11.7	287.5	85.0	53.2	41.3	3.6	3.9	4.2	3.8	2.6	31.1	287.5	
26	2.0	1.9	2.3	5.0	9.0	4.0	11.2	44.2	192.7	23.5	62.3	169.1	119.1	101.7	4.4	13.2	6.9	7.3	8.0	5.2	2.5	2.4	4.4	4.0	33.6	192.7	
27	3.1	3.0	5.0	3.8	4.6	3.9	76.9	42.7	41.7	75.7	39.7	10.4	20.4	18.6	11.9	36.3	12.2	16.4	7.8	5.9	6.3	7.4	5.1	5.8	19.4	76.9	
28	5.5	6.1	4.3	4.7	3.9	5.7	19.2	32.4	46.6	47.9	46.2	43.5	44.7	171.3	88.1	3.6	4.6	4.4	11.5	2.5	3.0	3.1	2.9	3.1	25.4	171.3	
29	3.2	4.2	4.3	3.4	5.4	8.2	8.1	102.9	51.3	182.6	408.4	180.1	142.3	X	285.1	255.8	85.2	65.8	4.2	11.8	7.7	4.8	5.0	12.1	80.1	408.4	
30	6.1	9.9	15.8	8.6	4.1	4.0	13.0	83.6	103.7	202.2	273.4	107.3	517.7	391.1	350.9	161.0	244.6	290.7	191.7	14.4	2.0	2.2	2.1	2.7	125.1	517.7	
NO.	30	30	30	30	29	29	29	29	29	29	29	29	29	28	29	29	29	30	30	30	30	30	30	30	30	706	98%
MEAN	18.1	11.5	13.5	12.7	19.7	30.1	46.4	69.1	88.0	106.2	119.5	96.4	124.7	123.2	163.4	145.7	95.5	106.0	87.0	53.5	29.5	48.6	35.9	13.7			
MAX	264.8	81.4	84.1	102.4	160.8	319.4	296.2	606.6	470.0	384.0	512.6	508.7	635.5	503.1	1699.6	909.3	376.9	728.7	733.0	686.6	411.2	520.9	294.6	64.3			



Number of 24HR Exceedences	7	Proposed Guideline
Number of Non-Zero Readings	706	
Maximum 1-HR Average	1699.6 UG/M3	
Maximum 24-HR Average	231.3 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	130.5	Monthly Average
		706 HRS
		98.1 %
		68.5 UG/M3