

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JANUARY 2023

FEBRUARY 27, 2023



wsp



AMBIENT AIR QUALITY MONTHLY REPORT

JANUARY 2023

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: FEBRUARY 27, 2023

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February 27, 2023

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – January 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 January 2023.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	96.6%	-	2
PM _{2.5}	99.5%	0	0
PM ₁₀	99.9%	-	-
NO	99.6%	-	-
NO ₂	99.6%	0	-
NO _x	99.6%	-	-
SO ₂	97%	0	0
Temperature	100%	-	-
Wind Speed / Direction	100%	-	-
Pressure	100%	-	-
Relative Humidity	100%	-	-
Precipitation	100%	-	-

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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 January 2023.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	100%	-	-	7
PM _{2.5}	100%	0	0	-
PM ₁₀	100%	-	-	-

The GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw’s Fugitive Dust Control Best Management Practices – Program; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and exceedances of the Guidelines at the GRIMM Monitors for January 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	99.9%	0	0	0
Berm	99.9%	2	2	19
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



February 27, 2023

Tuonan Li, M.Sc.
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Date

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



February 27, 2023

Tyler Abel, M.Sc.
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Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB (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 January 1, 2023 and January 31, 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.

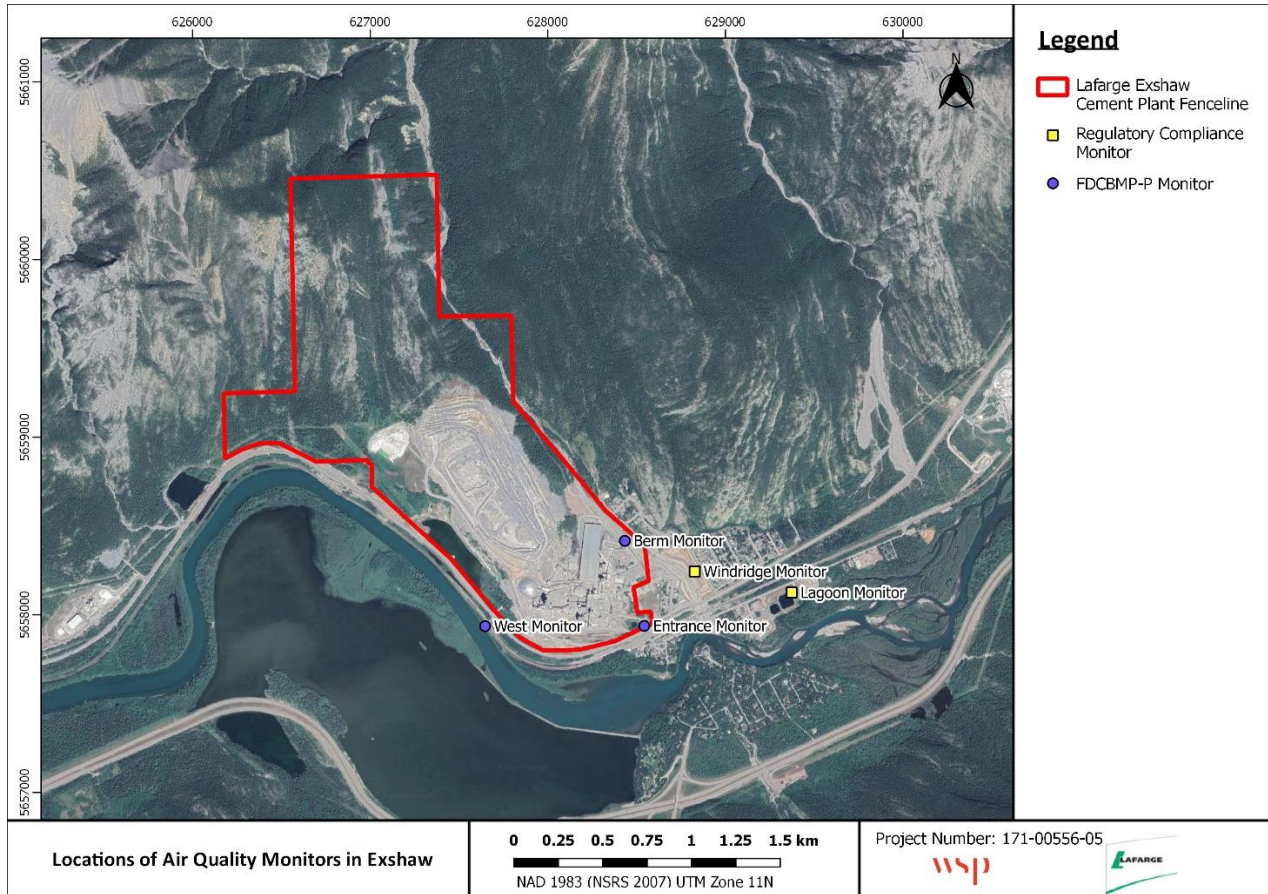


Figure 1-1 Locations of Air Quality Monitors in Exshaw

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 and is included in this report. 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 JANUARY 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)	99.6	28.8	0	17.1	-
SO₂ (ppb)	97.0	9.7	0	3.6	0
PM_{2.5} (µg/m³)	99.5	32.4	0 ¹	8.4	0
PM₁₀ (µg/m³)	99.9	223.3	-	63.3	-
TSP (µg/m³)	96.6	362.5	-	117.5	2
Temperature (°C)	100.0	10.3	-	7.0	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	49.9/W	-	37.1/WSW	-
Precipitation (mm)	100.0	0 ²	-	0 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 days exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero exceedances of the 1-hour PM_{2.5} AAAQG.
- There were two days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, meteorological analyzers recorded 100% uptime for the month of January.
- The PM₁₀ analyzer recorded 99.9% uptime for the month of January due to one hour of equipment malfunction occurring on January 24th at 13:00.
- NO₂ recorded 99.6% uptime for the month of January due to two hours equipment malfunction occurring on January 19th at 11:00 & 12:00, and one additional hour on January 20th at 11:00.
- The PM_{2.5} analyzer recorded 99.5% uptime for the month of January due to four hours of equipment malfunction occurring on January 8th at 2:00, January 9th at 2:00, January 10th at 2:00, and January 23rd at 2:00.
- SO₂ recorded 97% uptime due to twenty-one hours of equipment change occurring on January 18th at 14:00 – January 19th at 10:00. And further, one hour of equipment malfunction occurring on January 20th at 11:00.
- The TSP analyzer recorded 96.6% uptime for the month of January due to one hour of equipment malfunction occurring on January 10th at 2:00, and twenty-four hours on January 12th 14:00 – January 13th 13:00.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM _{2.5} (µg/m ³)	100.0	24.0	0*	12.1	0
PM ₁₀ (µg/m ³)	100.0	485.0	-	184.9	-
TSP (µg/m ³)	100.0	666.0	-	275.2	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 days exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero hours exceeding the 1-hour PM_{2.5} AAAQG.
- There were seven days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- The PM_{2.5}, PM₁₀, and TSP monitors recorded 100% uptime during the month of January.

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)	99.9	15.6	0*	9.9	0
PM ₁₀ (µg/m ³)	99.9	22.8	-	14.3	-
TSP (µg/m ³)	99.9	26.4	-	15.9	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 analyzer recorded 99.9% uptime during the month of January due to one hour of power failure on January 2nd at 4:00.

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)	99.9	85.6	2*	32.3	2
PM ₁₀ (µg/m ³)	99.9	750.4	-	298.9	-
TSP (µg/m ³)	99.9	2647.8	-	1029.7	19

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- The analyzer had 99.9% uptime during the month of January due to one hour of power failure on January 2nd at 4:00.
-

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 January due to electrical issues requiring factory replacement of the AC-DC board.

3 LAGOON STATION

The Lagoon trailer contains NO_x, SO₂, TSP, PM₁₀, and PM_{2.5} analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-9) and tables and graphs illustrating the monitoring results for January 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 January 9 th . The monitor had 99.5% uptime for the month of January due to four hours of equipment malfunction occurring on January 8 th at 2:00, January 9 th at 2:00, January 10 th at 2:00, and January 23 rd at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on January 9 th . The monitor had 99.9% uptime for the month of January due to one hour of equipment malfunction occurring on January 24 th at 13:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on January 9 th . The monitor had 96.6% uptime for the month of January due to one hour of equipment malfunction occurring on January 10 th at 2:00, and twenty-four hours on January 12 th 14:00 – January 13 th 13:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on January 18 th & January 24 th . The monitor had 99.6% uptime for the month of January due to three hours of equipment malfunction occurring on January 19 th at 11:00 & 12:00, and January 20 th at 11:00.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on January 18 th & January 19 th . The monitor had 97% uptime due to twenty-one hours of equipment change occurring on January 18 th at 14:00 – January 19 th at 10:00.

		And further, one hour of equipment malfunction occurring on January 20 th at 11:00.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of January.
Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of January.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of January.



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

Historically in January, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances are zero. The maximum number of 24-hour TSP AAAQO exceedances recorded in January was 2 days in 2021.

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 January 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	-	0.9	9.3	28.8	29	5	10.9	224.9	17.1	29	99.6
SO₂ (ppb)	172	48	Lagoon	0	0	0.0	1.0	9.7	21	3	30.9	277.8	3.6	21	97.0
PM_{2.5} (µg/m³)	80	29	Lagoon	0	0	0.0	3.3	32.4	8	1	13.0	296.3	8.4	11	99.5
PM₁₀ (µg/m³)	-	-	Lagoon	-	-	0.0	25.5	223.3	26	11	32.5	249.5	63.3	21	99.9
TSP (µg/m³)	-	100	Lagoon	-	2	0.0	43.7	362.5	26	11	32.5	249.5	117.5	20	96.6
Temperature (°C)	-	-	Lagoon	-	-	-34.0	-10.6	10.3	26	14	30.0	245.2	5.4	26	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.7	21.5	49.9/W	12	24	49.9	240.3	37.1/WSW	31	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	0.0 ¹	1	24	26.1	278.9	0.0 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						
2023-01-20	117.5	-	251.2	31.1	39.2	High wind event
2023-01-23	103.2	-	242.5	34.2	41.7	High wind event
Total # of Exceedances	2	0				
Maximum # of Exceedances (January)	2 (2021)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022)				
Average # of Exceedances (January)	0	0				
Minimum # of Exceedances (January)	0 (2010, 2011, 2012, 2013, 2014, 2017, 2018, 2020, 2022)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022)				

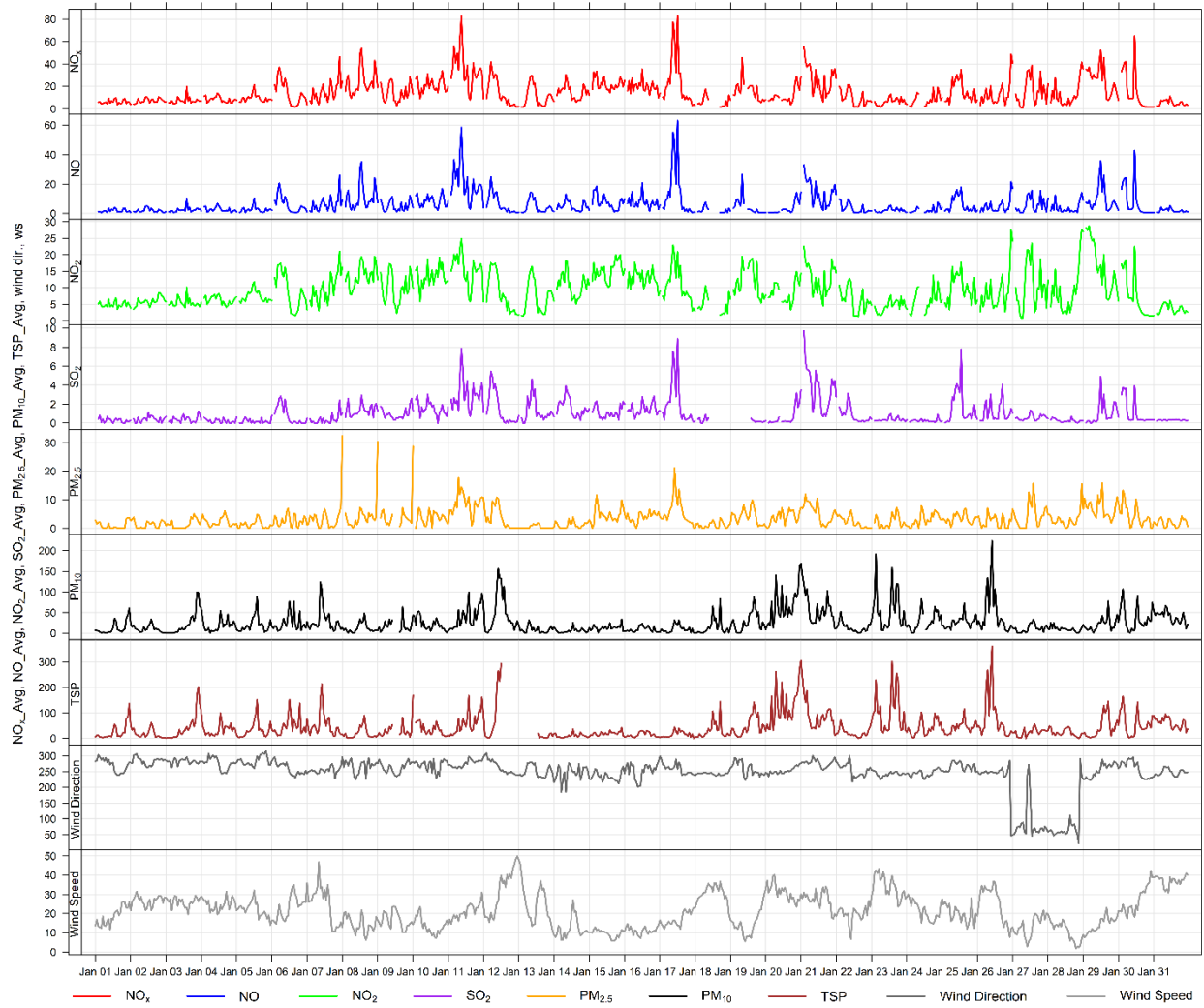


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

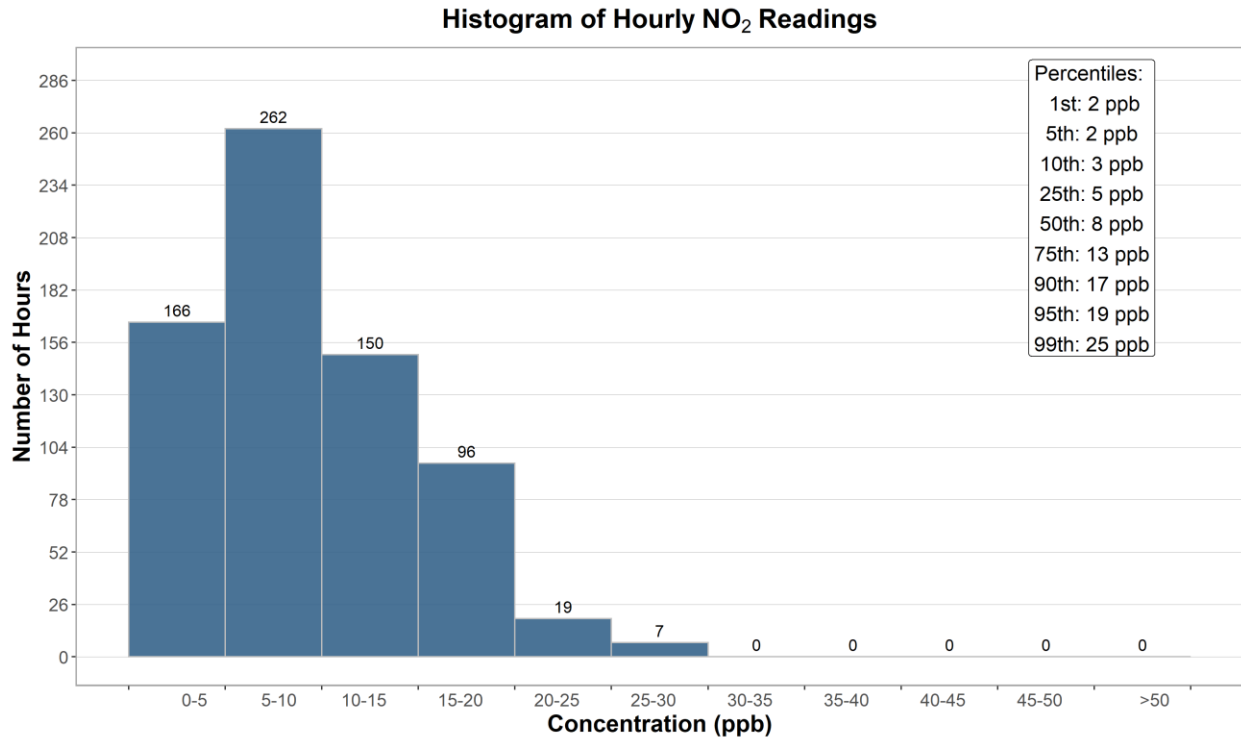


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

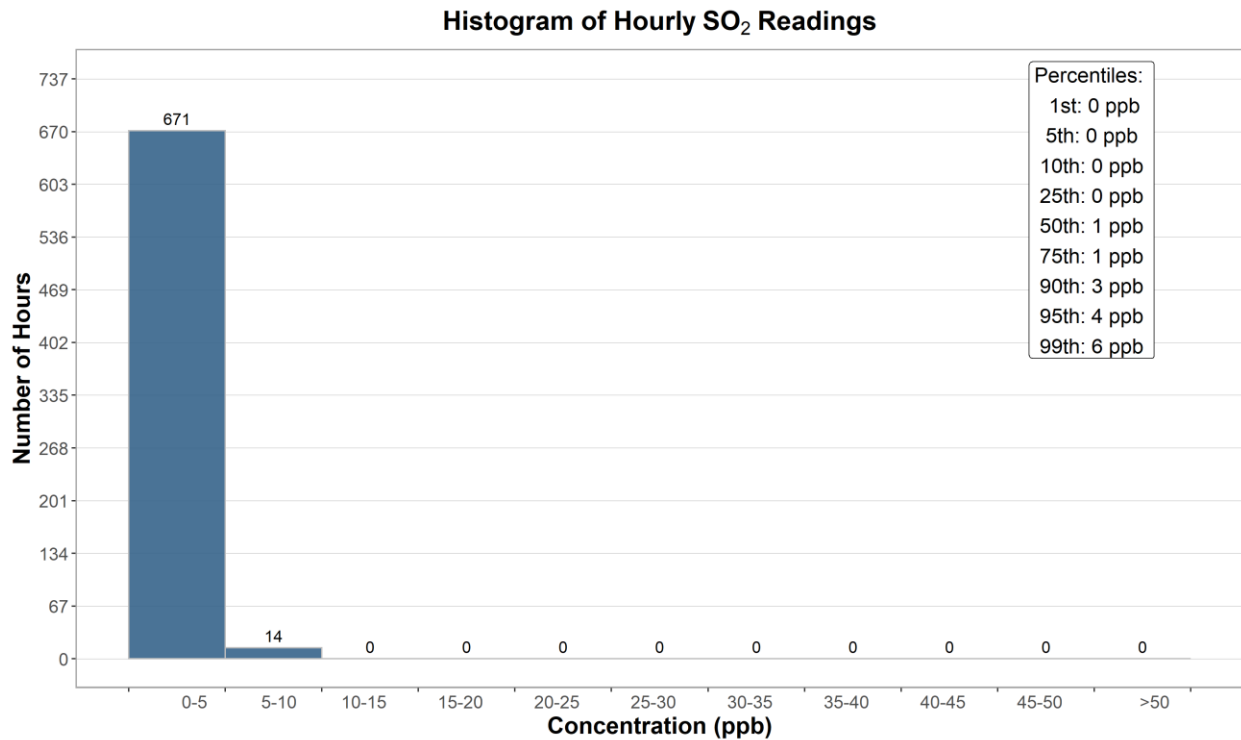


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

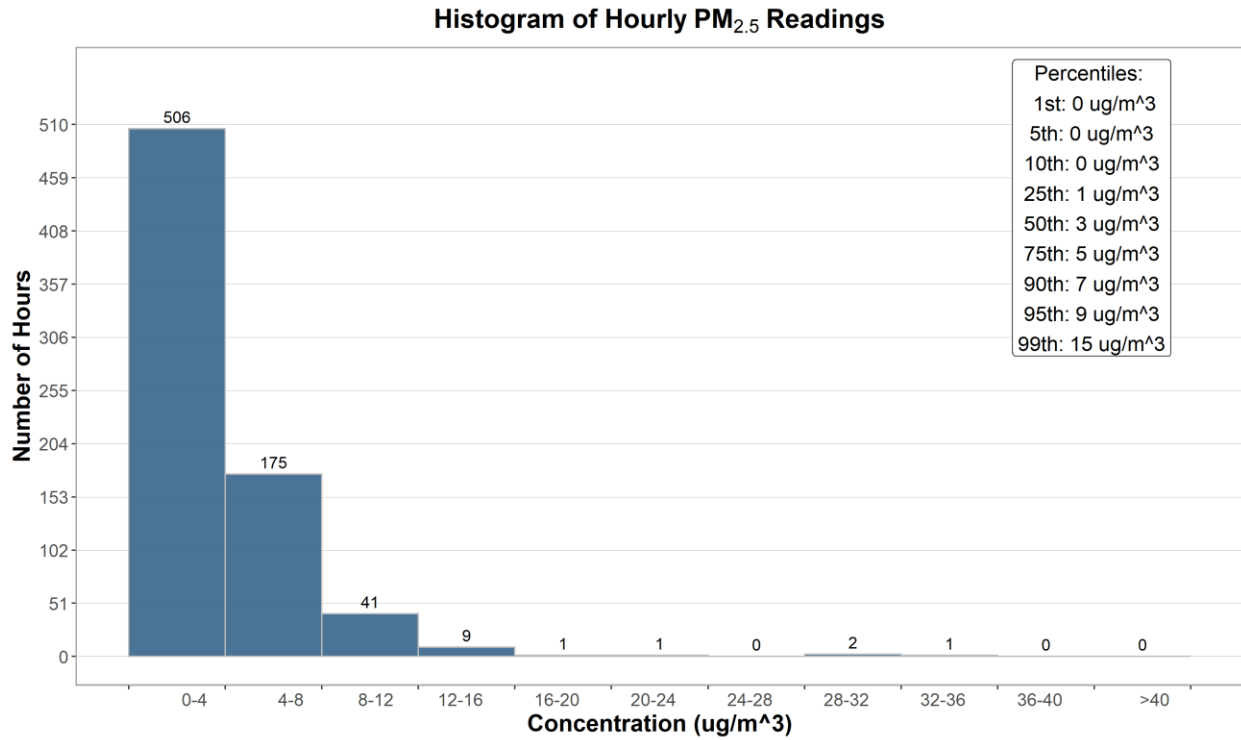


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

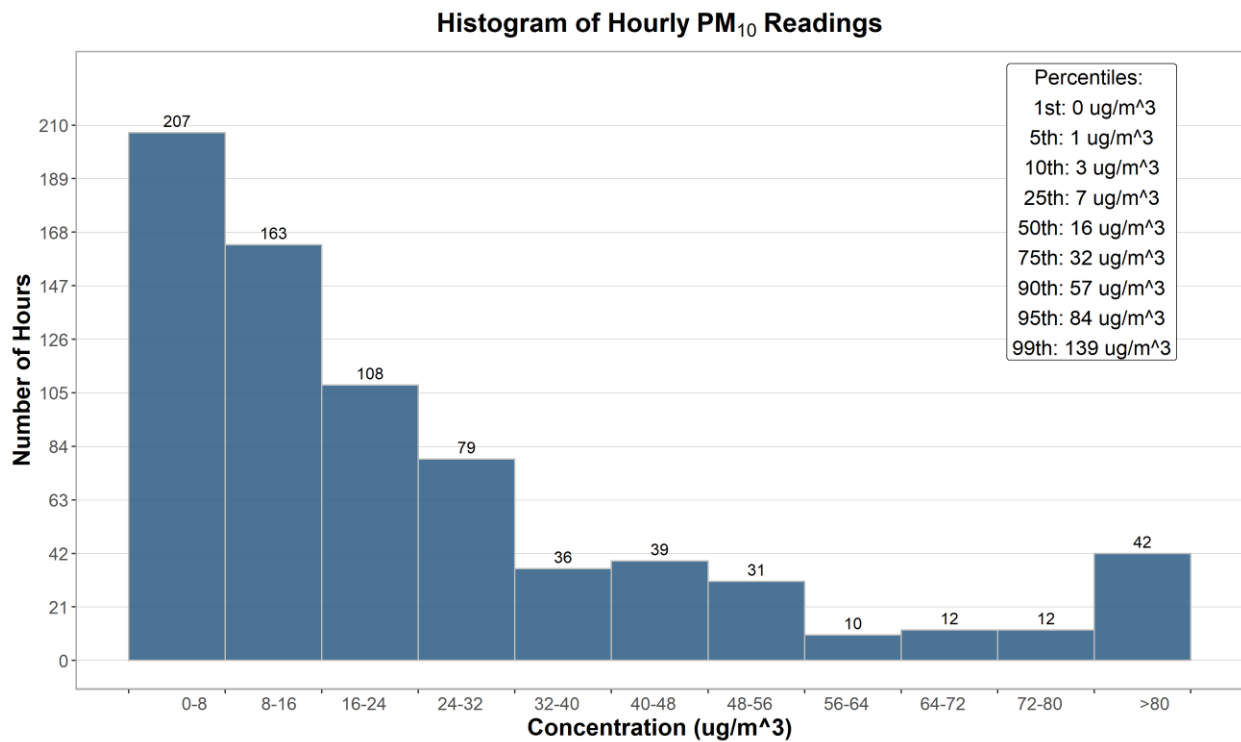


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

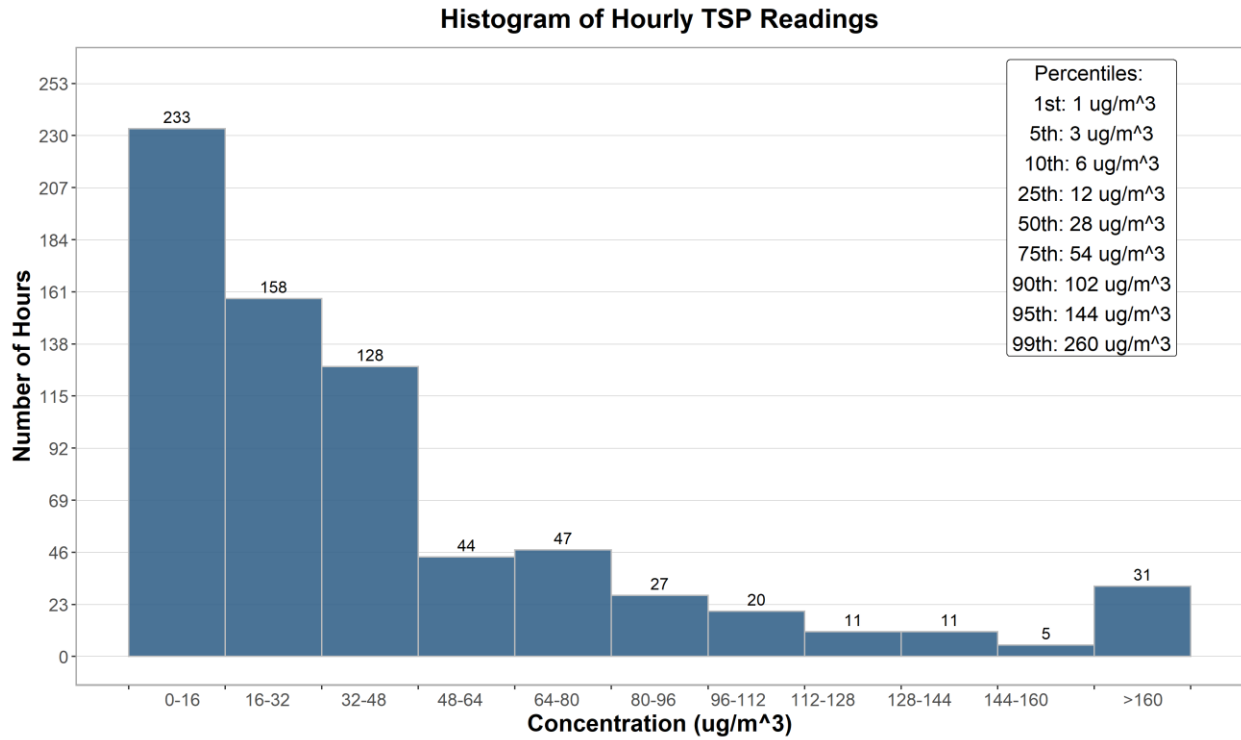


Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station

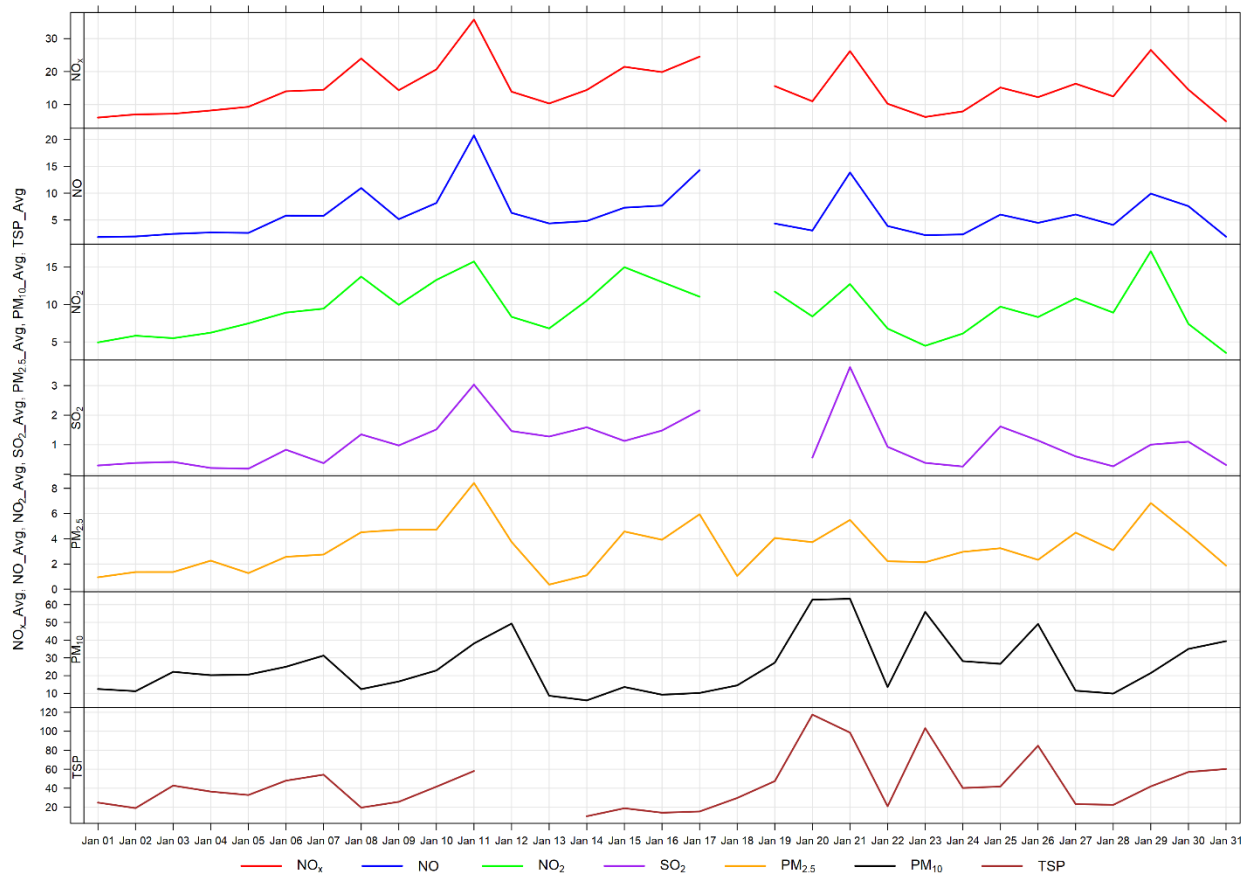


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

Figure 3-9 shows the wind rose for the 2 days of TSP exceedances in January. The wind roses shows that the winds predominately came from the west and west-southwest, with lighter winds prevailing 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.

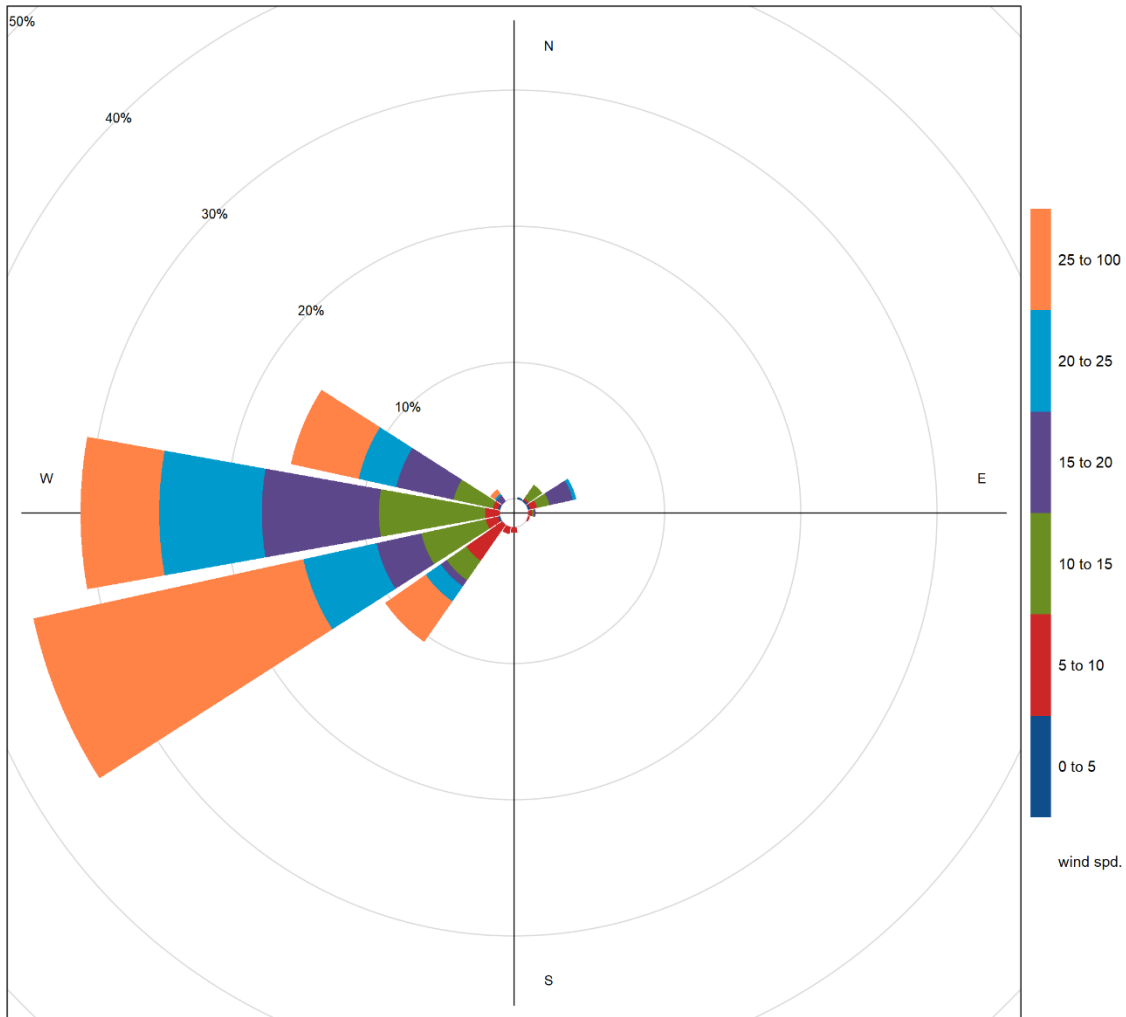


Figure 3-9 Wind rose for TSP exceedance days recorded at the Lagoon Station

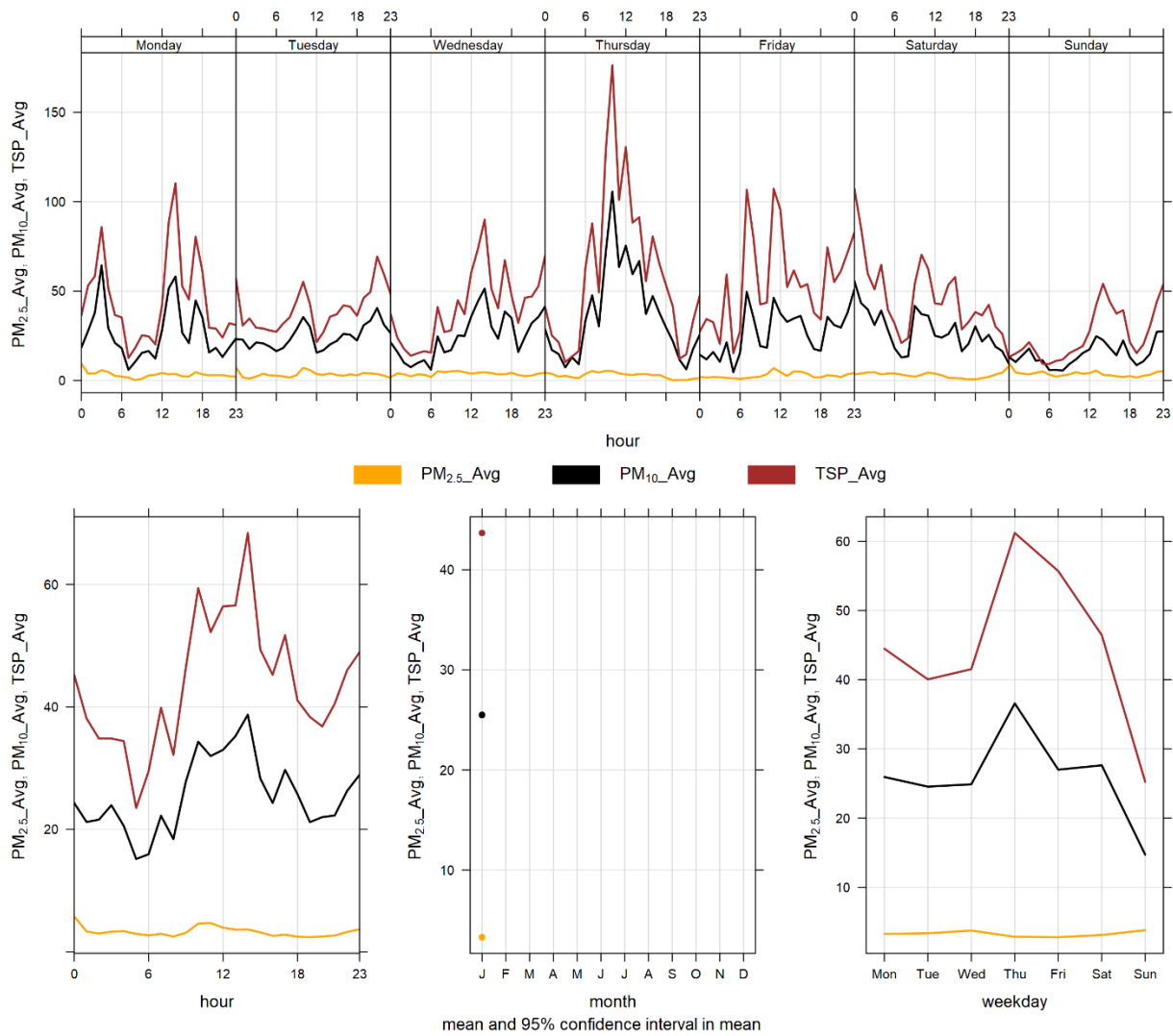


Figure 3-10 Lagoon monitor particulate matter time variation

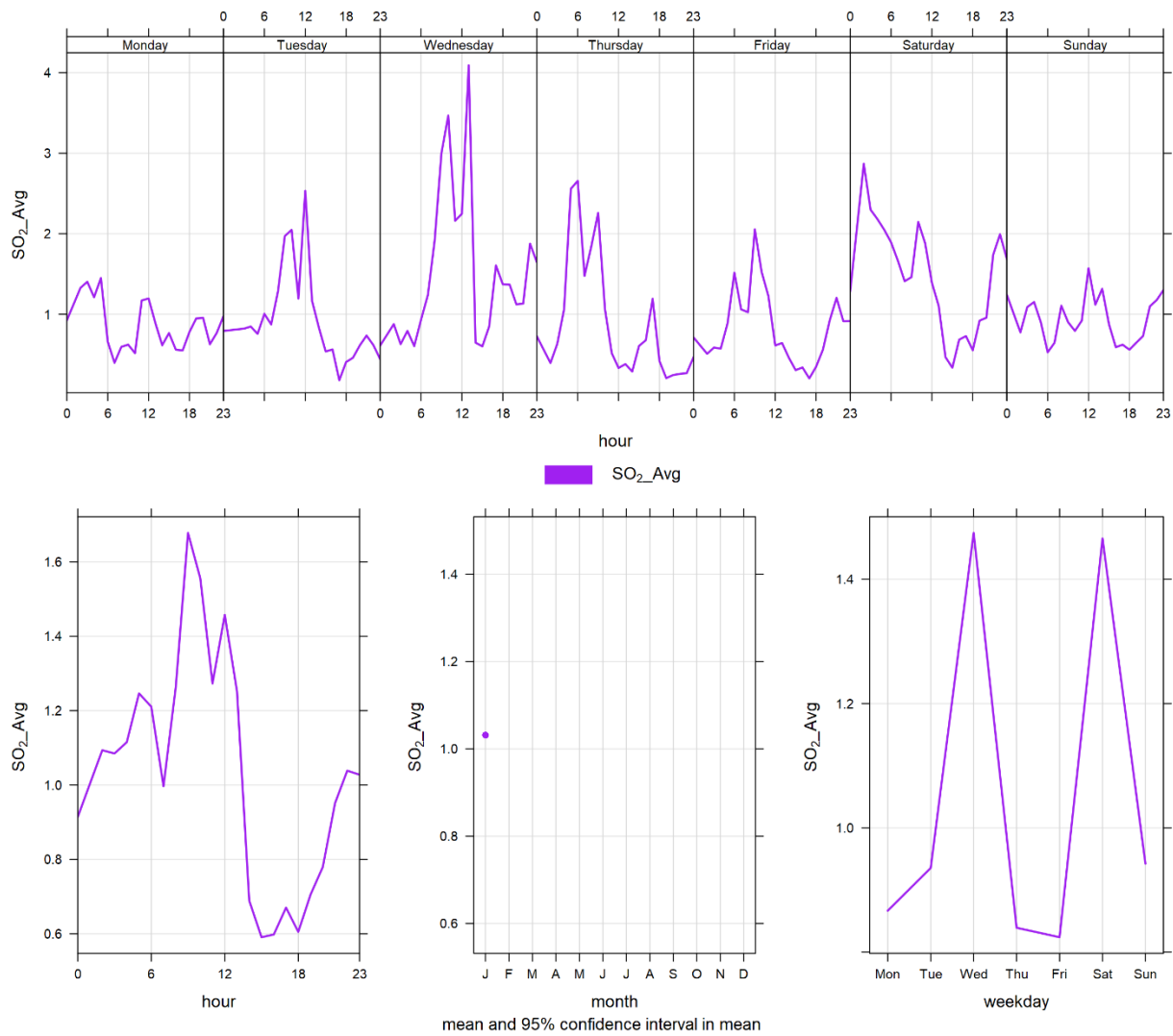


Figure 3-11 Lagoon monitor SO₂ time variation

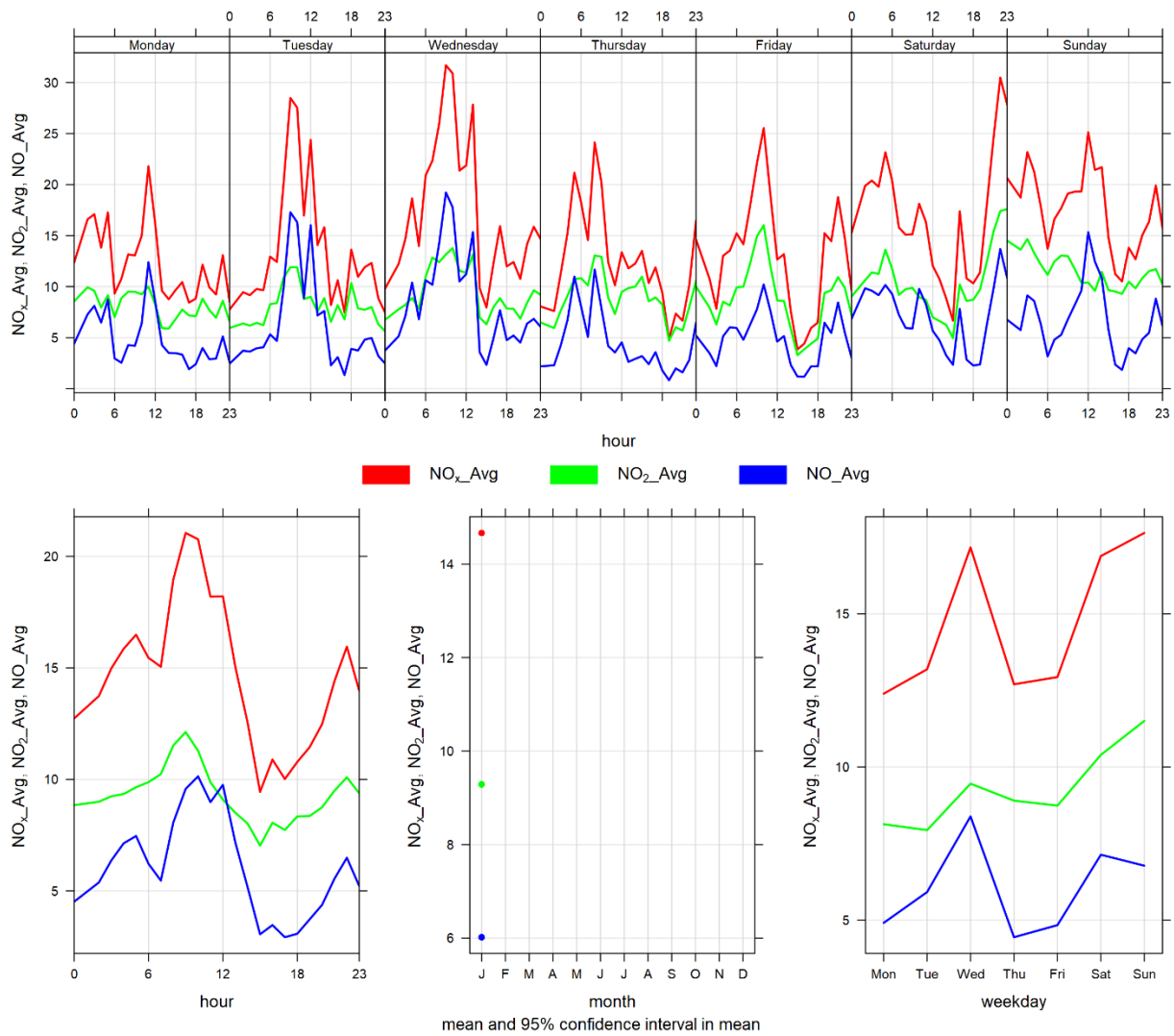


Figure 3-12 Lagoon monitor NO_x time variation

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 January 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 January 9 th . The monitor recorded 100% uptime during the month of January.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on January 9 th . The monitor recorded 100% uptime during the month of January.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on January 9 th . The monitor recorded 100% uptime during the month of January.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in January 2023, and Table 4-3 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrates the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM_{2.5} AAAQO, zero exceedances of the 1-hour PM_{2.5} AAQ, and 7 exceedances of the 24-hour TSP AAAQO.

Historically in January, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 10 and 0, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in January was 11 days in 2022.

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 January 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 January 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	2.0	24.0	18	13	31.3	242.2	12.1	18	100.0
PM₁₀ (µg/m ³)	-	-	Windridge	-	-	0.0	57.9	485.0	18	14	35.8	240.2	184.9	20	100.0
TSP (µg/m ³)	-	100	Windridge	-	7	0.0	81.8	666.0	20	7	40.1	249.7	275.2	20	100.0

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2023-01-06	103.4	-	255.2	22.9	48.9	High wind event
2023-01-12	218.6	-	258.3	31.2	59.0	High wind event
2023-01-18	232.8	-	242.8	30.7	50.4	High wind event
2023-01-20	275.2	-	251.2	31.1	39.2	High wind event
2023-01-23	238.6	-	242.5	34.2	41.7	High wind event
2023-01-26	150.6	-	248.7	25.3	41.7	High wind event
2023-01-31	166.0	-	247.0	37.1	48.3	High wind event
Total # of Exceedances	7	0				
Maximum # of Exceedances (January)	11 (2022)	0 (2018, 2019, 2021, 2022)				
Average # of Exceedances (January)	10	0				
Minimum # of Exceedances (January)	7 (2018)	0 (2018, 2019, 2021, 2022)				

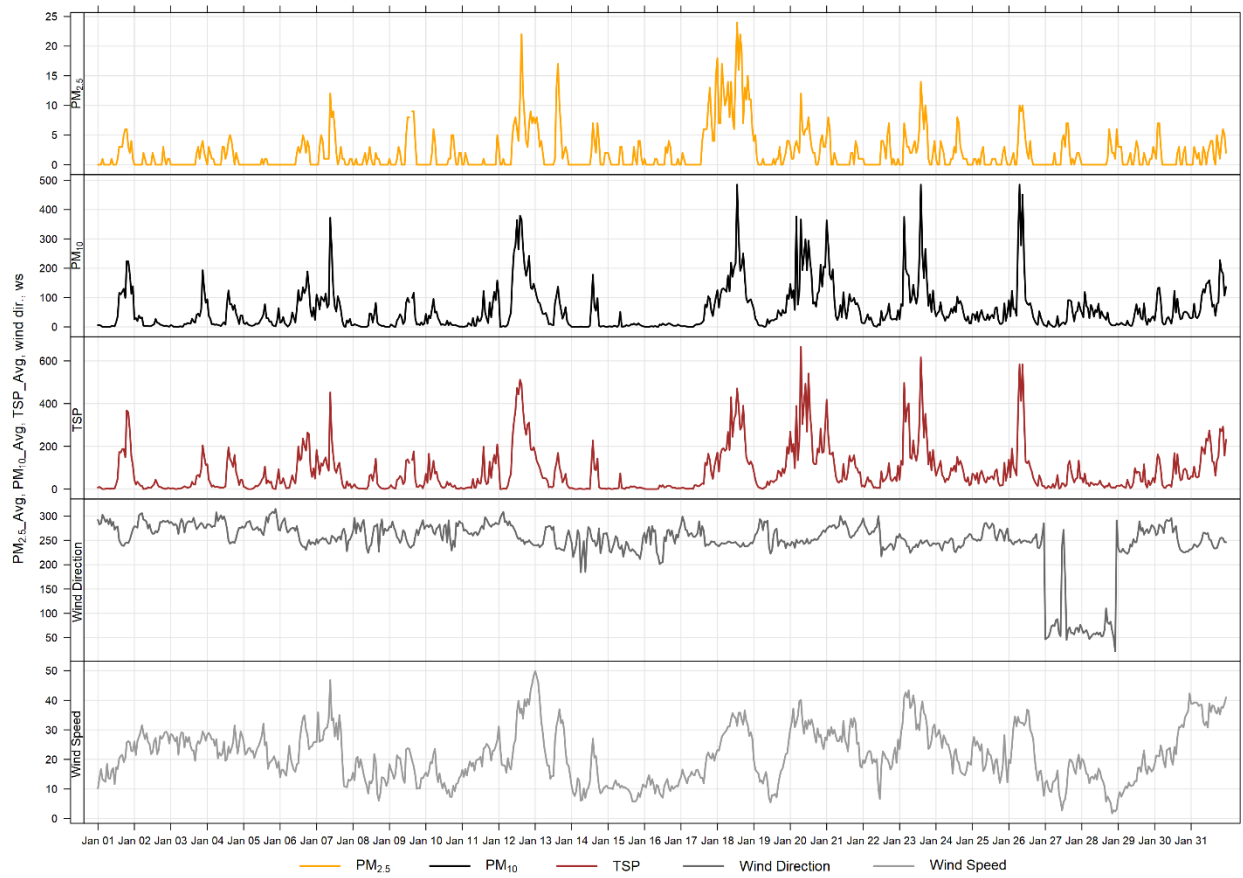


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

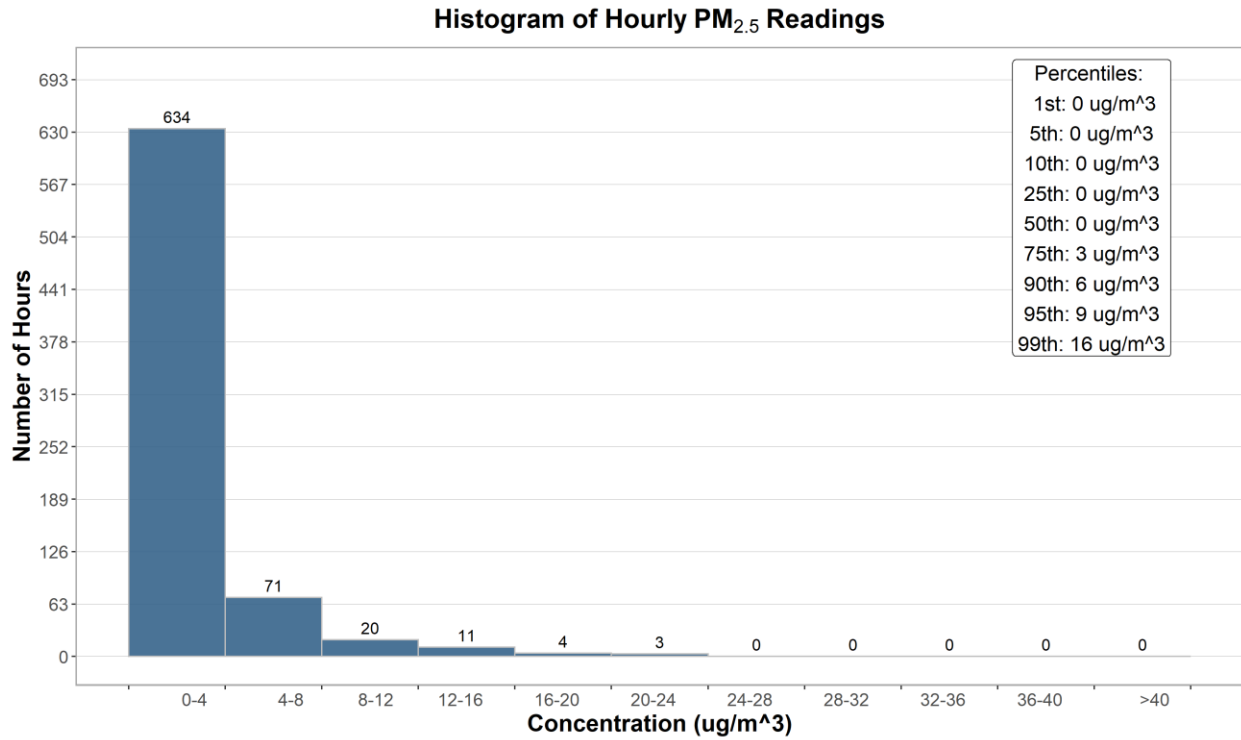


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

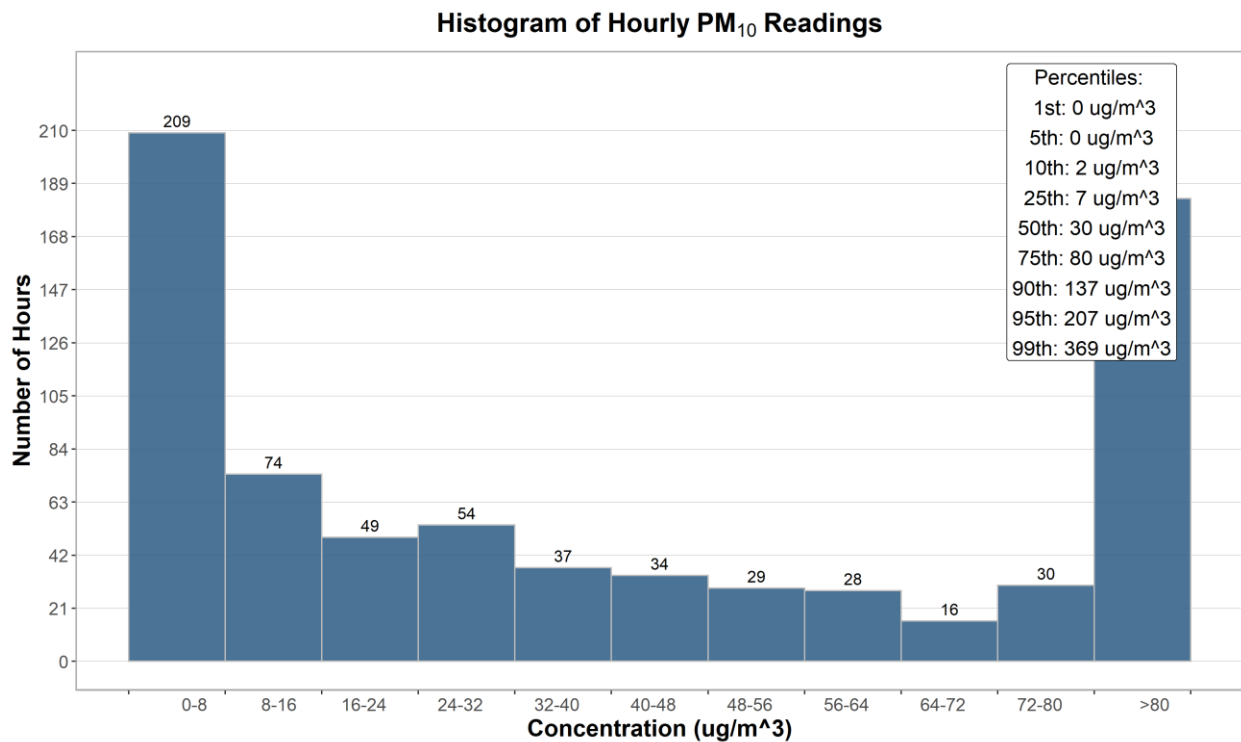


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

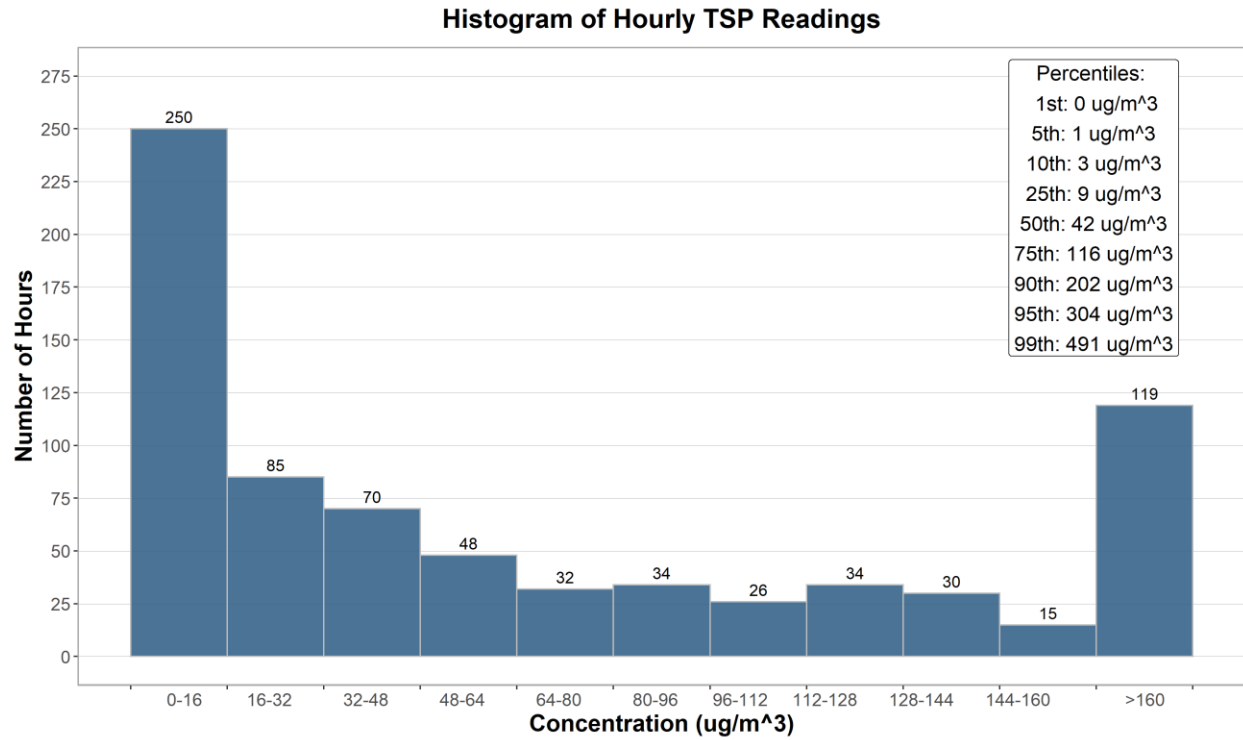


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

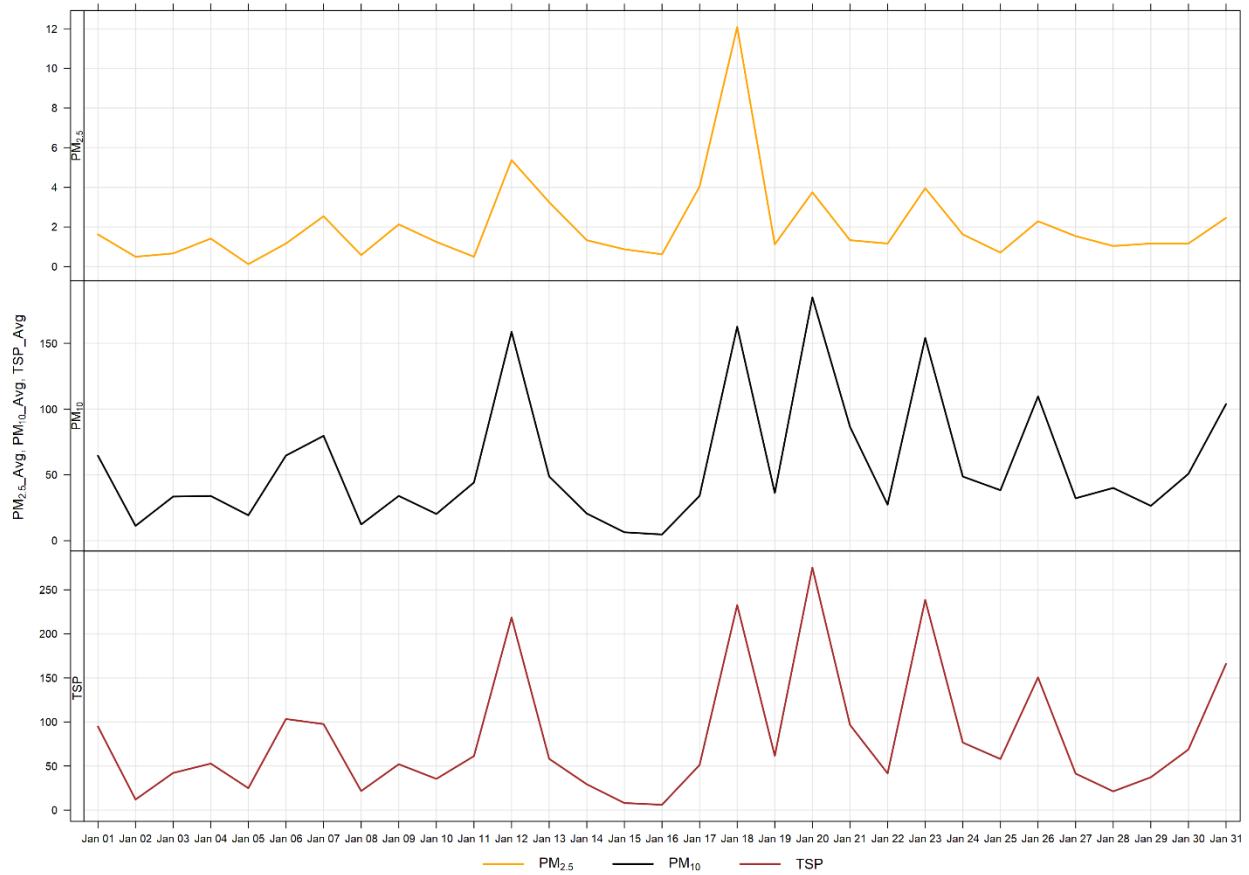


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 7 days of TSP exceedances. The wind roses shows that the winds predominantly came from the west-southwest direction.

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 January 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.

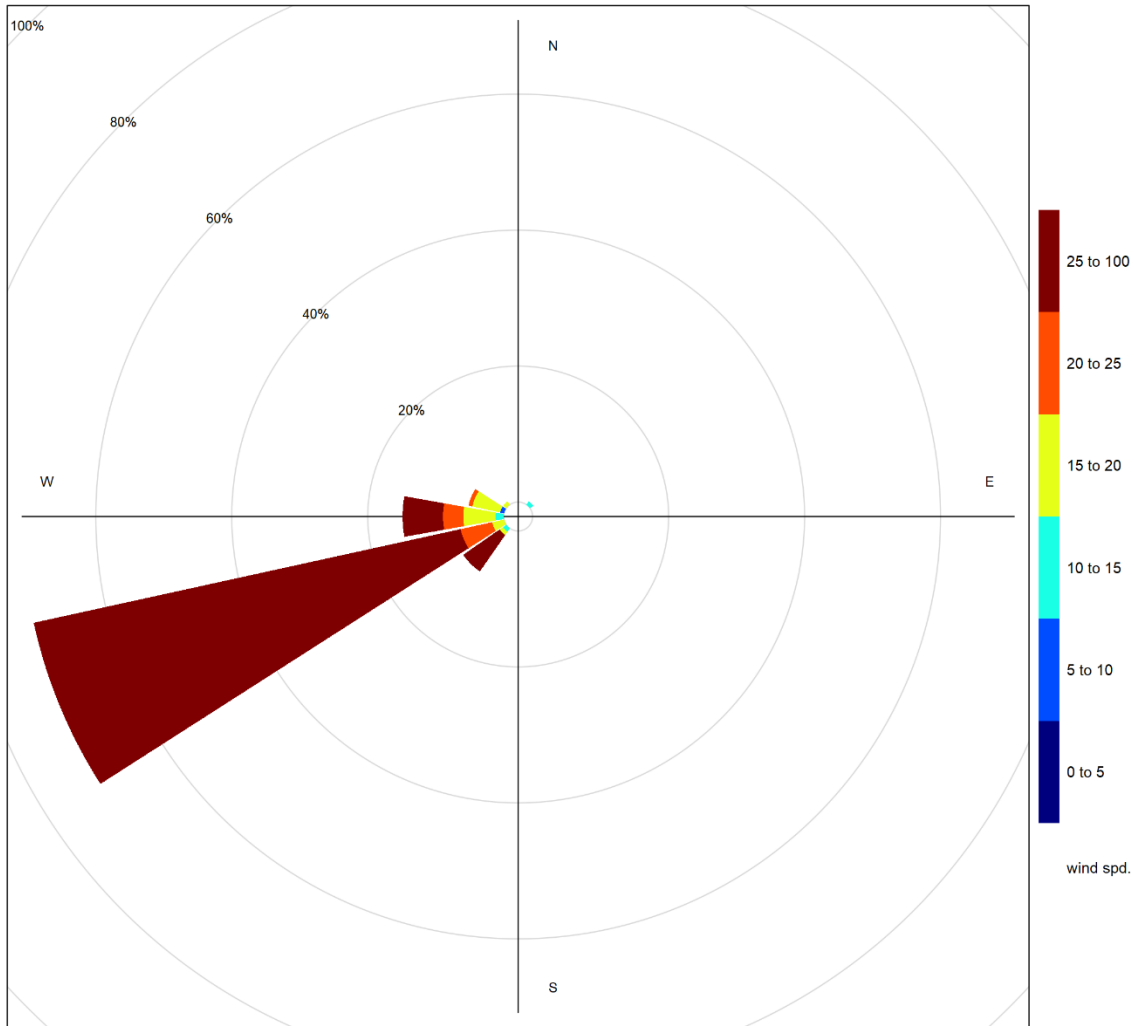


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

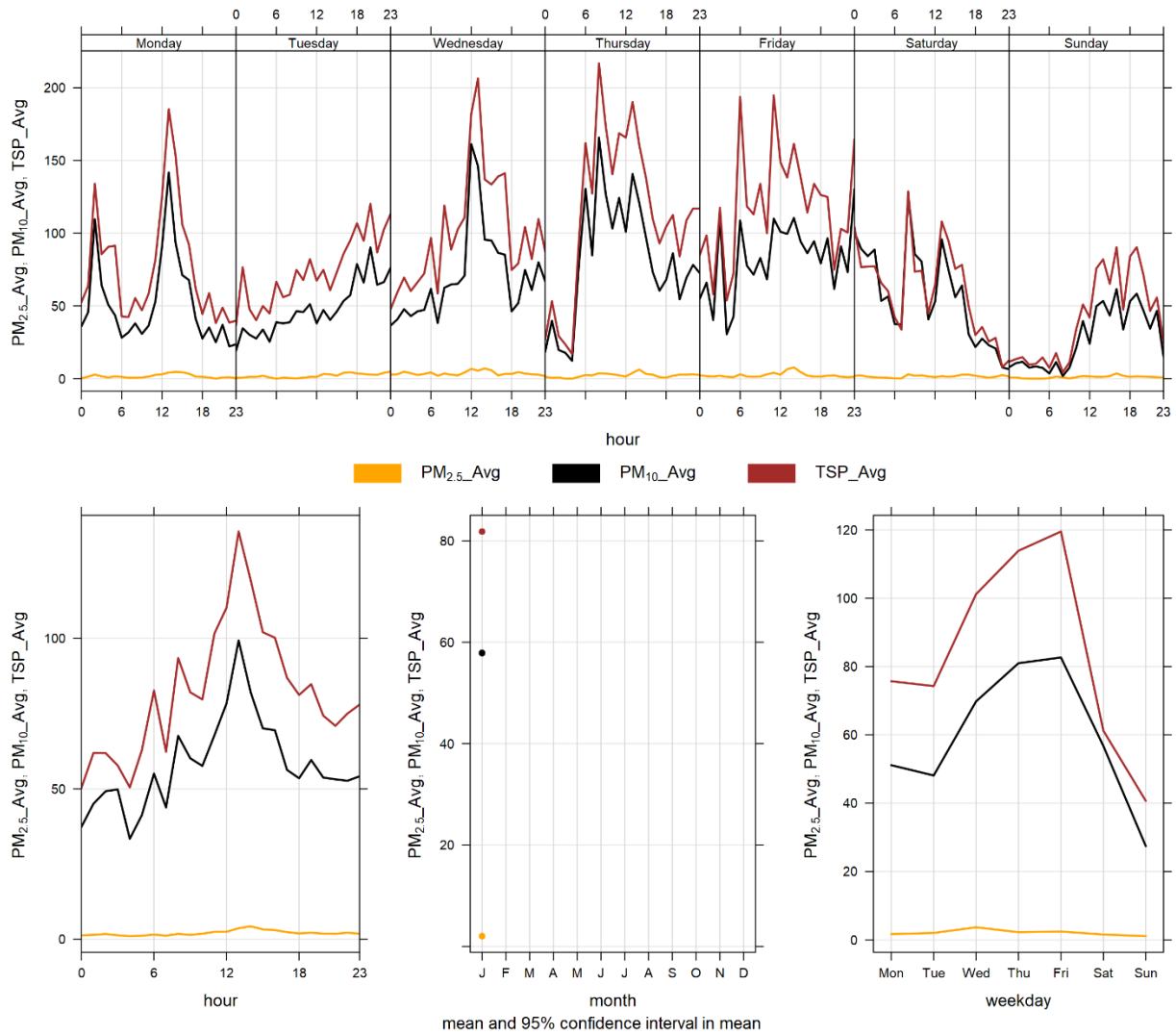


Figure 4-7 Windridge particulate matter time variation

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 99.9% uptime during the month of January due to one hour of power failure occurring on January 2 nd at 4:00.

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 January, the West monitor records an average of two and zero exceedances of the 24-hour TSP and PM_{2.5} guidelines. The maximum number of 24-hour TSP AAAQO exceedances recorded in January was seven days in 2013.

Table 5-2 Summary of January 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} (µg/m ³)	80	29	West	0	0	0.2	2.1	15.6	28	6	13.9	51.4	9.9	28	99.9
PM₁₀ (µg/m ³)	-	-	West	-	-	0.2	2.8	22.8	28	6	13.9	51.4	14.3	28	99.9
TSP (µg/m ³)	-	100	West	-	0	0.1	2.5	26.4	28	6	13.9	51.4	15.9	28	99.9

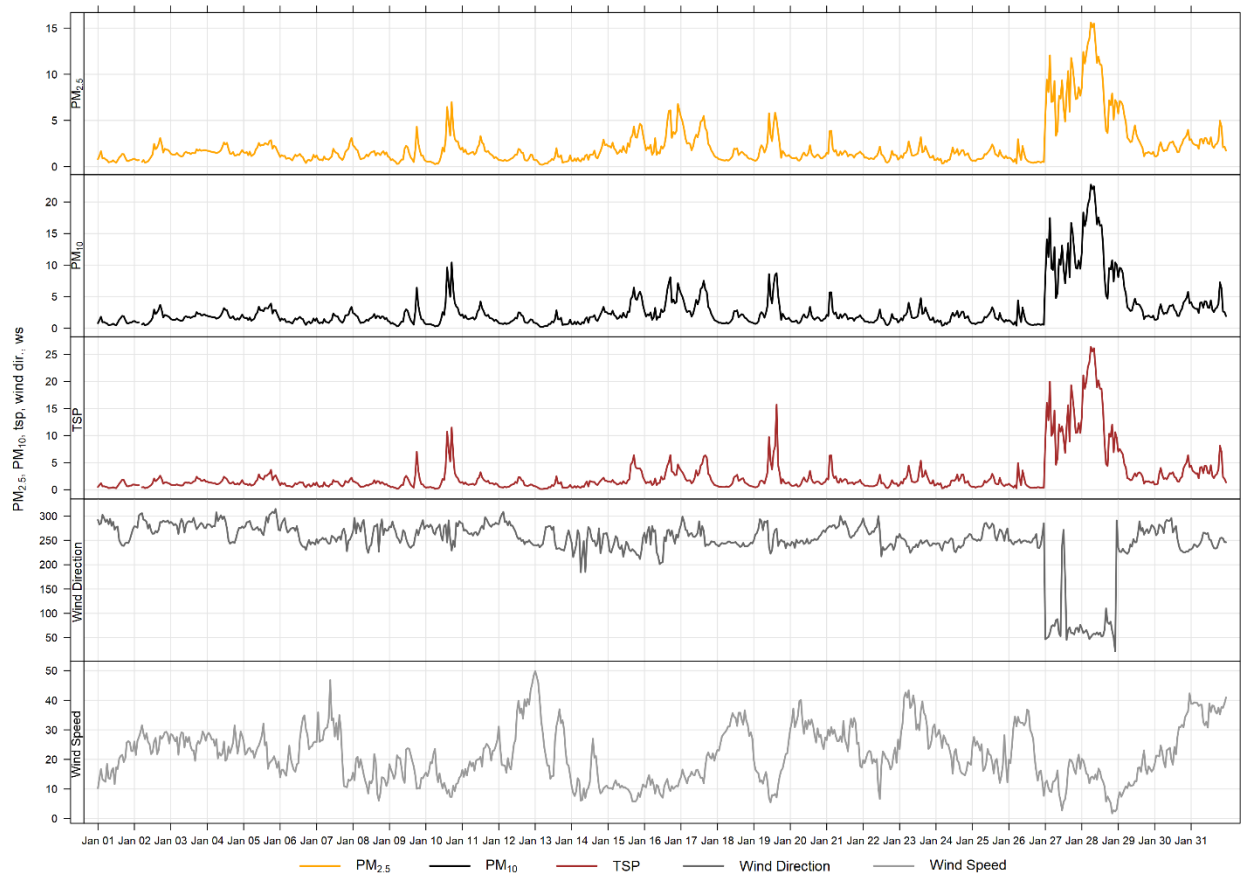


Figure 5-1 1-hour particulate matter concentrations at the West monitor

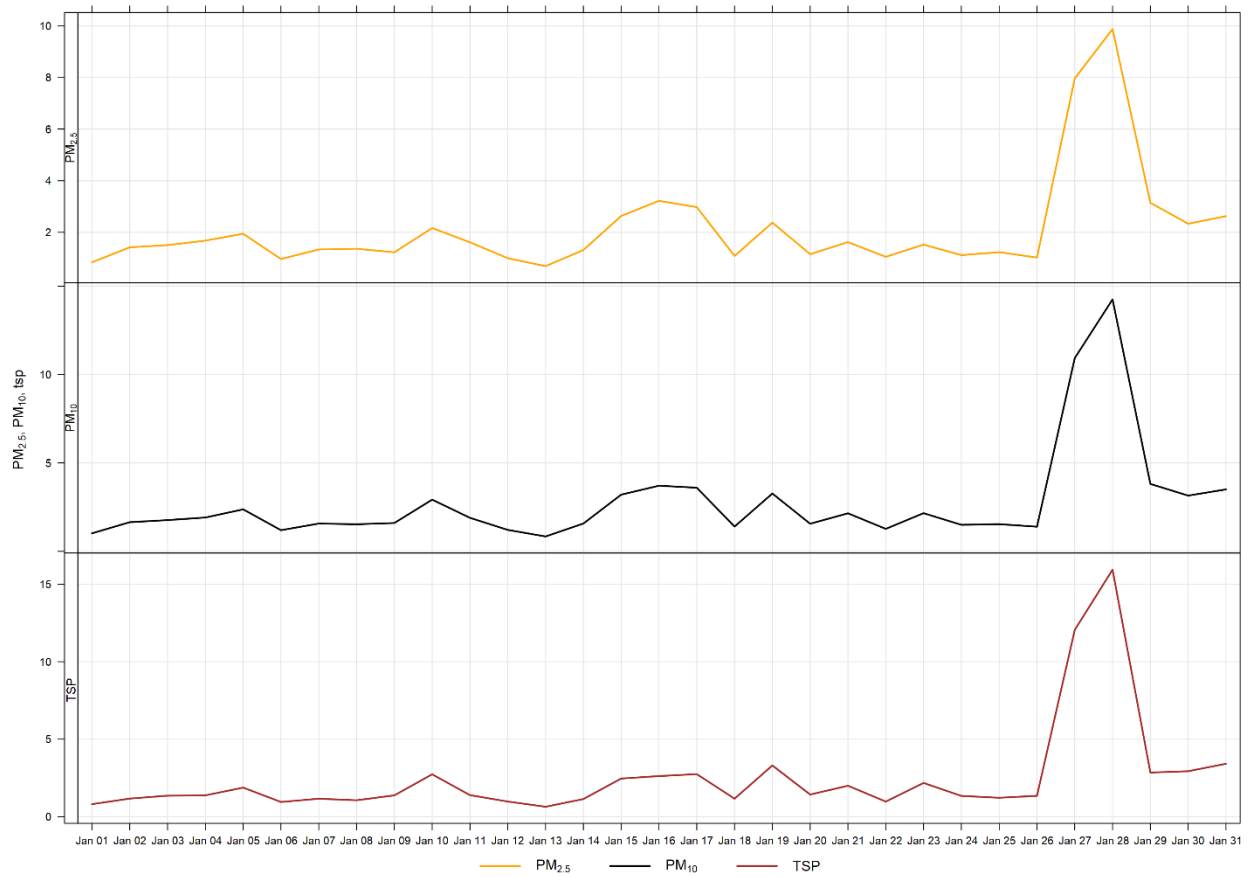


Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during January 2023. The diurnal pattern differs from the Windridge, Lagoon and Berm stations to the east of Lafarge and are likely more influenced by the switch into northeast wind (Figure 5-1) which results in a spike on January 26th to 28th (Figure 5-2). 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.

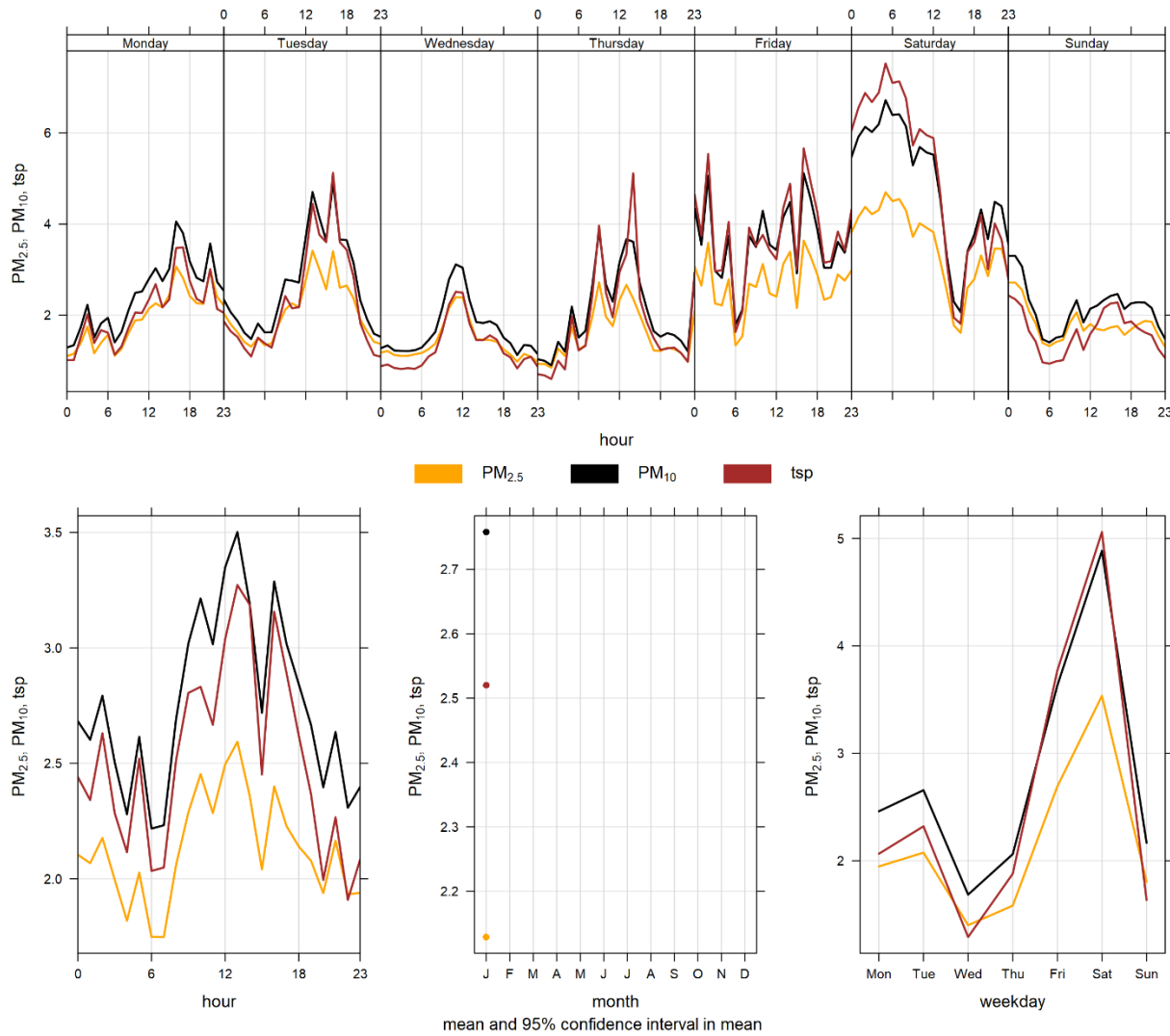


Figure 5-3 West monitor particulate matter time variation

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 99.9% uptime during the month of January due to one hour of power failure on January 2 nd at 4:00.

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 19 and 2 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were 2 hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of January, the Berm monitor records an average of 19 and 1 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during January occurred in 2013 where there were 26 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in January was 3 days in 2015, 2019 and 2021.

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 January 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 January 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	2	2	0.3	9.6	85.6	26	7	32.7	251.9	32.3	20	99.9
PM₁₀ (µg/m ³)	-	-	Berm	-	-	0.4	79.7	750.4	26	9	32.4	248.0	298.9	20	99.9
TSP (µg/m ³)	-	100	Berm	-	19	0.3	270.8	2647.8	31	7	38.5	251.4	1029.7	12	99.9

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						
2023-01-01	186.5	-	267.1	18.6	62.6	Winds predominately from the west
2023-01-03	141.7	-	282.4	26.1	66.9	High wind event
2023-01-04	199.2	-	275.0	24.9	63.4	High wind event
2023-01-06	406.4	-	255.2	22.9	48.9	High wind event
2023-01-07	325.4	-	252.5	25.5	55.3	High wind event
2023-01-11	169.1	-	276.5	20.9	72.8	High wind event
2023-01-12	1029.7	31.9	258.3	31.2	59.0	High wind event
2023-01-13	163.3	-	245.9	26.1	54.2	High wind event
2023-01-18	398.0	-	242.8	30.7	50.4	High wind event
2023-01-19	168.6	-	257.0	14.6	54.6	Winds predominately from the west
2023-01-20	982.6	32.3	251.2	31.1	39.2	High wind event
2023-01-21	408.8	-	276.3	27.4	57.4	High wind event
2023-01-23	828.9	-	242.5	34.2	41.7	High wind event
2023-01-24	179.3	-	244.3	21.5	44.1	High wind event

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)
Berm						
2023-01-25	150.2	-	263.2	20.1	51.6	High wind event
2023-01-26	504.3	-	248.7	25.3	41.7	High wind event
2023-01-29	116.6	-	258.5	14.1	60.9	Winds predominately from the west
2023-01-30	453.7	-	253.6	26.7	50.6	High wind event
2023-01-31	1025.5	-	247.0	37.1	48.3	High wind event
Total # of Exceedances	19	2				
Maximum # of Exceedances (January)	26 (2013)	3 (2015, 2019, 2021)				
Average # of Exceedances (January)	19	1				
Minimum # of Exceedances (January)	13 (2016)	0 (2011, 2014, 2016, 2017, 2018)				

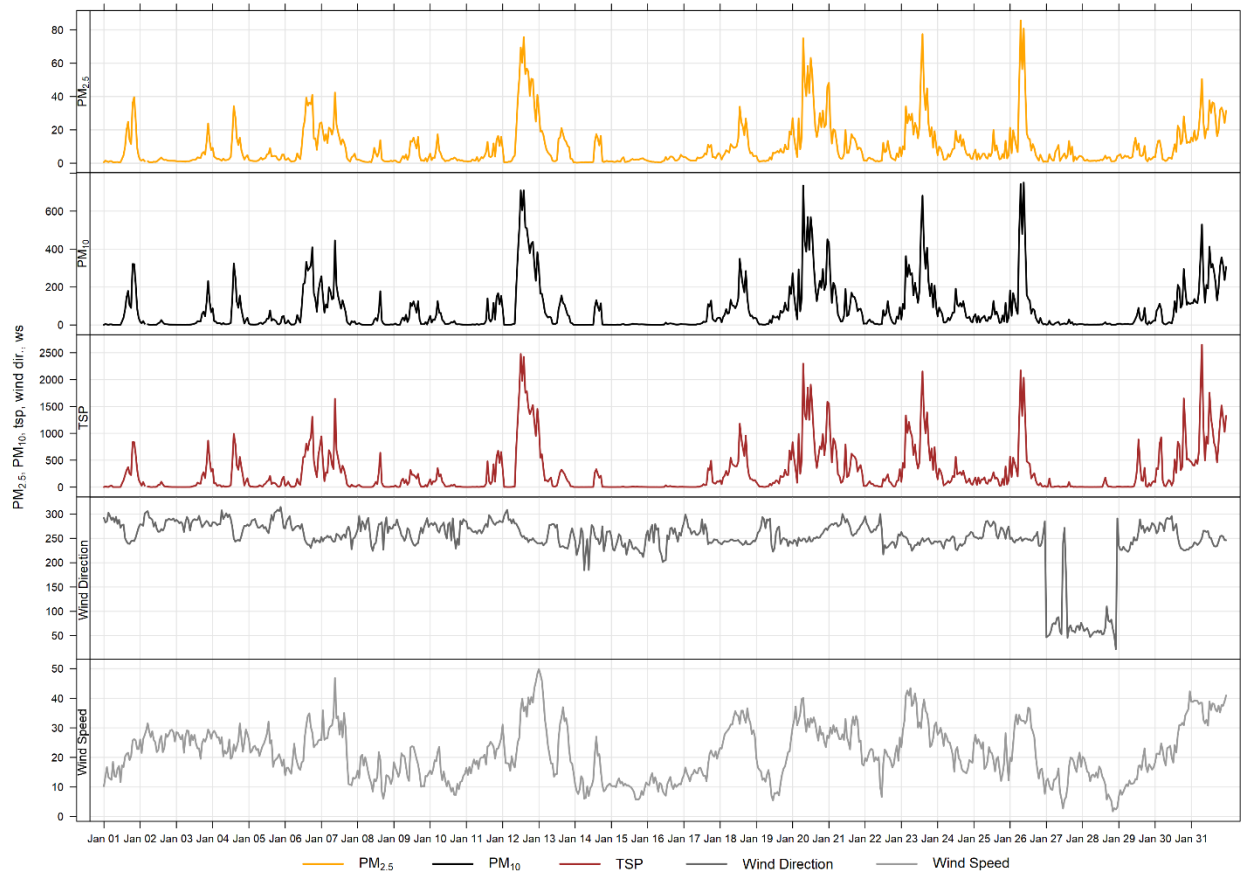


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

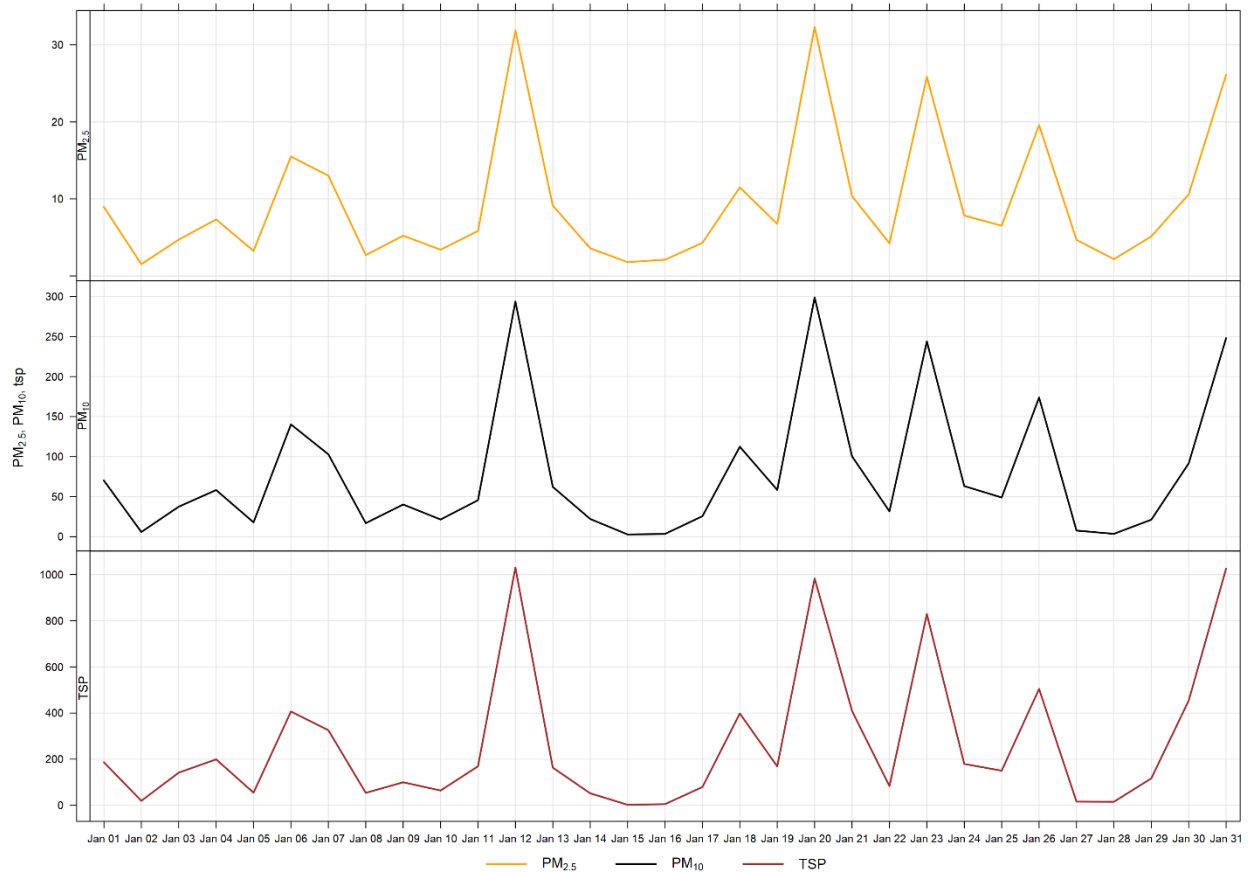


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 19 days of TSP exceedances. The wind roses show 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.

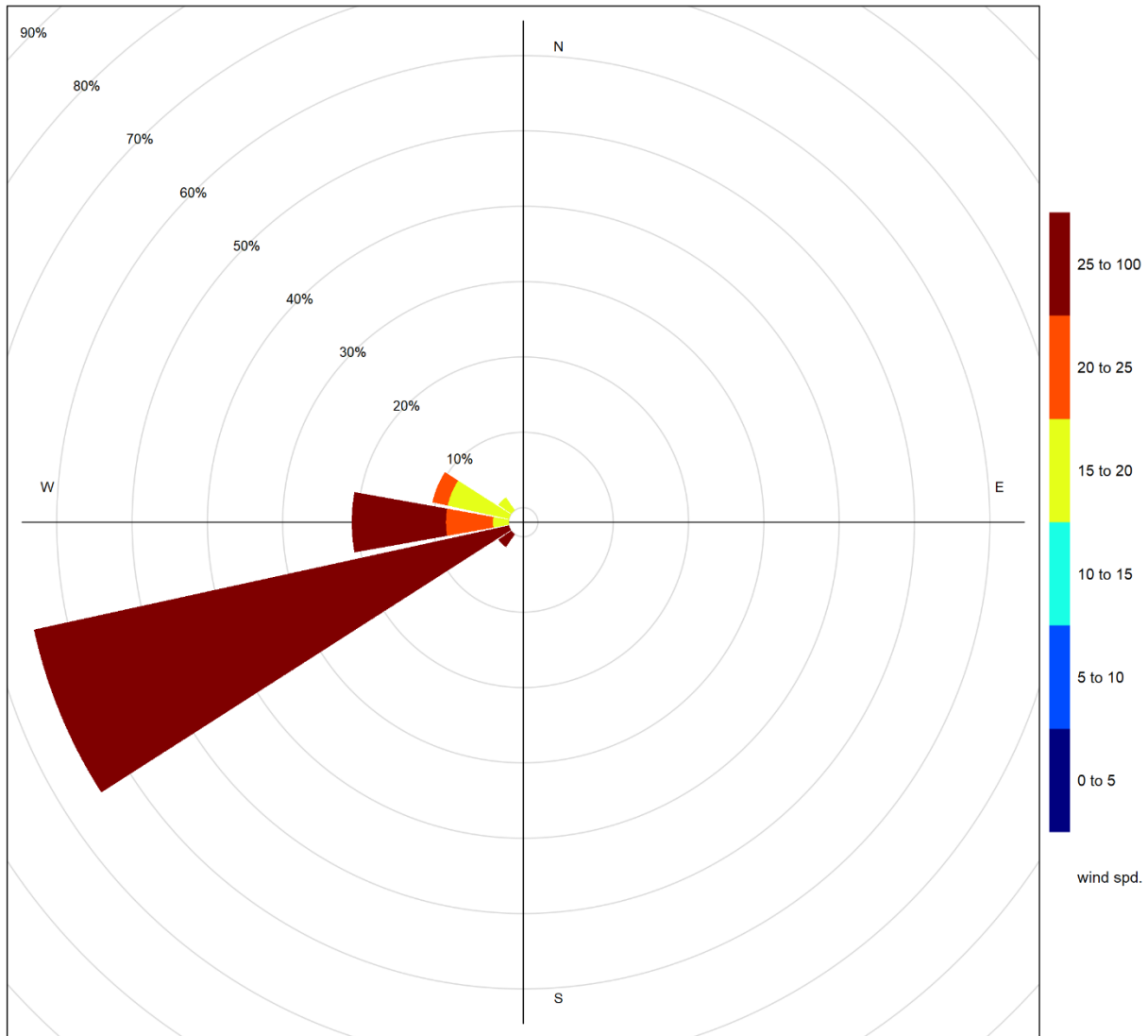


Figure 6-3 Windrose for TSP exceedance days recorded at the Berm GRIMM

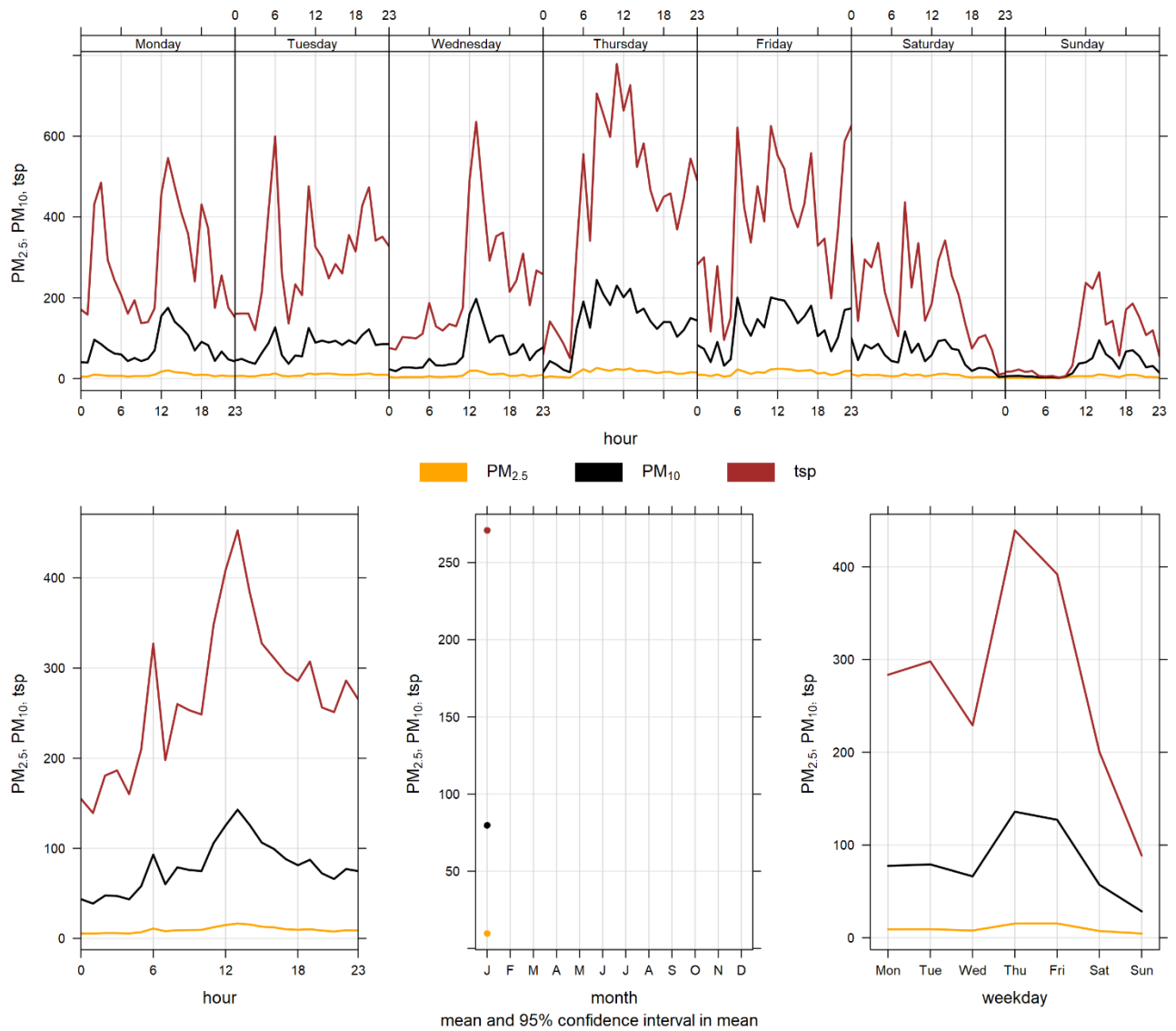


Figure 6-4 Berm particulate matter time variation

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APPENDIX

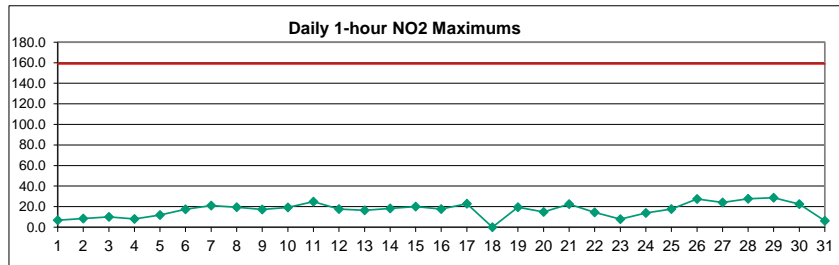
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – January 2023

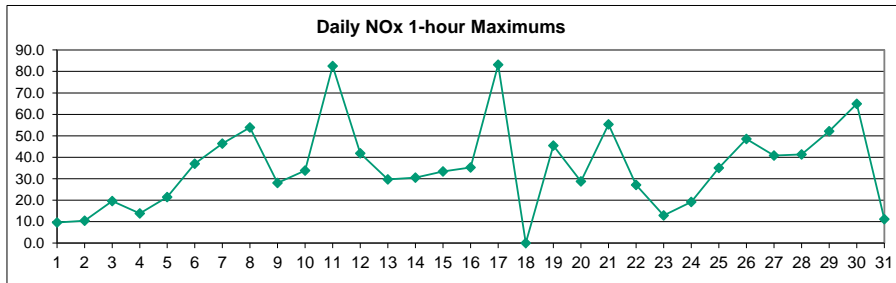
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.9	S	5.2	5.9	4.5	4.2	4.4	4.8	4.3	6.6	4.3	4.8	4.3	6.0	6.9	3.5	4.7	4.4	4.5	5.6	6.2	4.4	5.5	4.9	4.9	6.9
2	3.9	S	3.5	4.1	4.5	6.9	5.7	5.3	5.5	5.5	6.3	6.1	5.3	4.1	5.2	6.7	5.7	5.6	6.0	8.5	8.4	7.6	7.3	6.2	5.8	8.5
3	5.8	S	4.9	5.0	5.9	4.6	4.4	4.8	8.0	7.0	5.7	5.1	4.7	4.1	10.1	5.2	6.9	4.8	5.5	4.7	4.5	5.3	5.0	4.3	5.5	10.1
4	5.5	S	6.9	7.7	5.0	5.7	6.5	7.3	7.5	8.0	6.7	7.9	8.1	7.0	4.7	5.9	4.9	4.1	4.6	6.1	5.1	5.2	6.1	6.8	6.2	8.1
5	7.3	S	5.9	5.4	6.8	6.4	5.9	7.6	8.7	8.3	8.7	11.1	11.8	8.9	8.5	9.3	7.6	6.5	5.9	6.0	6.9	5.5	6.5	6.3	7.5	11.8
6	6.2	S	13.1	10.3	16.8	17.1	17.4	14.1	13.4	16.2	13.2	8.6	5.6	2.3	2.0	1.9	1.6	2.4	3.4	6.8	9.9	8.8	7.4	6.5	8.9	17.4
7	3.4	S	6.2	4.4	10.7	7.3	9.0	5.3	3.1	8.8	10.2	12.0	5.9	8.5	4.6	7.7	14.8	12.9	7.6	11.1	13.7	15.1	21.1	13.7	9.4	21.1
8	16.2	S	11.9	13.8	14.8	8.2	7.9	9.1	10.1	13.0	11.7	11.5	18.4	19.4	18.1	13.9	15.8	12.3	11.4	14.4	14.8	11.8	19.5	17.8	13.7	19.5
9	12.5	S	14.6	10.3	6.3	4.9	7.1	12.7	17.3	17.0	15.0	5.6	4.6	2.3	4.5	4.9	9.9	10.4	8.3	13.6	8.2	8.9	16.5	13.4	10.0	17.3
10	9.9	S	15.3	16.4	10.7	5.9	12.3	9.8	12.9	12.4	18.6	10.8	13.0	15.3	11.0	13.3	15.4	13.2	19.3	15.6	17.7	13.4	11.4	11.9	13.3	19.3
11	12.1	S	15.0	16.7	20.1	18.1	20.2	17.1	22.1	24.9	19.7	13.1	12.1	14.8	6.6	5.8	9.6	18.3	16.3	14.8	15.7	15.8	17.3	16.0	15.7	24.9
12	5.8	S	5.7	10.0	13.9	17.6	17.0	17.0	17.3	15.6	12.5	7.1	5.8	8.3	7.3	7.0	3.1	5.8	2.1	2.9	2.9	3.4	2.0	1.9	8.3	17.6
13	1.8	S	1.6	1.5	2.3	6.1	9.8	13.5	15.3	16.5	13.3	12.4	6.4	2.4	3.9	3.1	2.4	1.9	2.1	5.4	8.9	8.8	9.0	7.8	6.8	16.5
14	6.0	S	9.6	12.3	10.6	14.2	14.8	11.7	18.2	17.8	10.2	11.5	6.1	6.6	7.6	5.1	6.6	6.8	7.6	10.2	14.0	11.9	9.5	12.7	10.5	18.2
15	10.9	S	12.1	17.5	12.5	15.7	13.5	13.8	16.3	15.3	16.5	12.1	11.0	10.2	10.6	16.5	16.2	16.9	20.0	18.2	19.3	19.9	15.9	13.8	15.0	20.0
16	15.7	S	10.0	14.8	9.6	13.4	11.2	17.6	15.1	14.0	14.5	11.9	15.3	9.8	11.1	14.2	15.2	11.5	13.6	16.8	13.0	12.0	11.5	7.5	13.0	17.6
17	8.9	S	7.5	6.2	10.0	11.3	12.5	11.8	17.6	22.9	19.8	13.1	20.9	13.1	16.6	7.5	8.7	7.6	8.9	7.9	7.2	7.0	2.9	3.8	11.0	22.9
18	3.0	S	3.8	4.3	3.4	4.2	7.1	10.6	8.5	6.3	C	C	C	C	C	C	1.7	2.0	2.3	2.1	5.0	2.2	8.8	-	-	
19	6.6	S	9.4	7.7	11.5	12.9	8.9	9.3	19.5	15.3	X	X	15.8	17.9	18.5	18.9	12.6	9.3	17.9	7.2	6.5	5.4	8.2	6.7	11.7	19.5
20	7.8	S	7.0	7.2	9.1	7.7	11.6	11.6	11.3	9.5	X	5.7	5.7	6.2	5.5	5.6	7.8	3.3	4.8	6.6	12.8	14.9	12.2	10.7	8.4	14.9
21	14.4	S	22.5	18.1	16.2	17.4	16.1	14.1	7.1	9.1	13.2	8.4	12.9	9.3	7.1	4.5	15.1	7.4	9.0	9.5	10.6	18.6	15.7	16.3	12.7	22.5
22	14.5	S	10.8	8.6	6.0	6.8	5.8	9.8	12.0	12.9	11.8	7.6	1.5	1.5	1.6	1.3	4.2	6.8	9.6	2.1	3.2	6.5	5.2	5.8	6.8	14.5
23	4.7	S	4.4	3.0	1.9	2.2	1.6	1.9	2.8	4.1	4.6	4.0	6.6	7.8	4.3	4.8	5.7	6.3	6.0	3.6	7.4	4.7	6.3	4.3	4.5	7.8
24	3.6	S	2.1	1.5	3.4	5.7	7.4	10.0	10.3	C	C	C	1.7	2.1	4.7	4.3	6.8	5.4	13.8	6.6	6.1	12.0	9.2	5.6	6.1	13.8
25	6.4	S	5.3	4.2	7.1	3.4	10.1	16.4	11.6	13.5	14.9	13.7	13.9	17.7	9.6	7.2	9.4	11.3	8.6	8.2	4.7	7.7	13.0	5.1	9.7	17.7
26	6.3	S	2.8	7.7	4.3	6.2	11.5	6.5	6.7	12.6	5.6	3.8	4.6	4.3	5.8	8.7	10.9	14.1	7.1	2.8	7.8	8.5	15.3	27.5	8.3	27.5
27	24.2	S	10.1	6.2	6.0	1.8	0.9	0.9	9.1	17.5	21.5	21.2	16.9	23.5	12.1	2.6	3.6	10.0	9.4	18.7	7.0	11.1	10.9	3.9	10.8	24.2
28	12.3	S	4.2	10.7	7.5	15.6	7.0	5.6	10.5	3.8	2.3	2.9	3.1	2.1	5.6	2.5	4.4	7.4	10.7	8.0	11.5	16.0	23.4	27.6	8.9	27.6
29	27.0	S	28.2	27.5	28.8	25.8	24.3	24.8	22.7	17.2	14.6	15.9	16.9	10.9	20.1	13.1	6.7	6.3	7.0	8.9	10.7	15.0	12.4	8.9	17.1	28.8
30	6.0	S	17.1	15.7	17.5	18.3	9.4	6.9	6.8	6.8	5.9	22.5	9.4	5.8	4.4	3.3	2.4	2.0	1.8	1.7	1.7	1.6	1.6	1.5	7.4	22.5
31	1.6	S	2.2	1.8	2.2	3.6	4.8	5.6	5.7	5.3	3.4	6.2	4.8	3.2	1.9	2.4	3.1	3.0	4.4	4.5	3.1	2.4	3.1	2.7	3.5	6.2
NO.	31	-	31	31	31	31	31	31	31	30	27	28	30	30	30	30	30	31	31	31	31	31	31	31	700	99.6%
MEAN	8.8	-	9.0	9.2	9.3	9.7	9.9	10.2	11.5	12.1	11.3	9.9	9.1	8.5	8.0	7.0	8.1	7.7	8.3	8.4	8.8	9.5	10.1	9.4		
MAX	27.0	-	28.2	27.5	28.8	25.8	24.3	24.8	22.7	24.9	21.5	22.5	20.9	23.5	20.1	18.9	16.2	18.3	20.0	18.7	19.3	19.9	23.4	27.6		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	700
Maximum 1-HR Average	28.8 PPB
Maximum 24-HR Average	17.1 PPB
Monthly Calibration	10
Standard Deviation	5.5
Operational Time	741 HRS
Operational Uptime	99.6 %
Monthly Average	9.3 PPB

Lagoon NOx (ppb) – January 2023

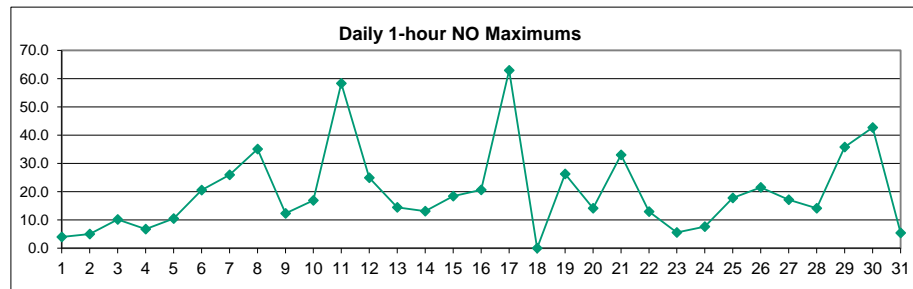
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.8	S	5.7	6.3	4.4	4.7	5.5	5.8	4.4	9.4	5.0	6.7	5.9	9.2	9.6	3.8	5.4	4.6	5.0	8.3	8.9	4.8	6.1	5.8	6.0	9.6
2	4.0	S	4.1	4.2	5.3	9.0	5.9	5.4	6.4	6.3	10.3	10.4	8.8	5.1	8.0	8.4	5.8	6.0	6.0	10.4	9.9	8.4	7.2	6.2	7.0	10.4
3	6.1	S	5.3	5.0	7.1	4.7	4.6	5.1	10.7	8.5	7.0	6.6	6.4	5.2	19.6	7.0	10.5	5.2	6.5	6.3	6.2	8.3	7.4	6.7	7.2	19.6
4	6.6	S	11.0	11.9	5.2	6.3	8.5	9.3	8.3	10.2	10.3	13.9	12.5	9.7	5.7	7.0	5.8	5.5	5.5	9.3	5.1	5.3	7.3	8.3	8.2	13.9
5	7.7	S	5.9	5.7	9.5	9.6	6.0	9.0	10.9	9.4	10.1	15.5	21.5	10.7	11.3	11.5	8.1	6.8	6.0	6.2	9.7	6.5	8.3	8.6	9.3	21.5
6	7.7	S	21.1	15.4	31.7	37.0	31.9	21.5	19.7	27.0	21.5	11.2	6.9	2.6	2.1	2.0	1.7	2.5	3.6	9.1	14.2	12.4	10.8	8.9	14.0	37.0
7	3.6	S	7.1	4.7	18.5	9.2	13.8	6.4	3.6	13.6	17.7	22.2	10.3	13.3	5.7	11.5	26.5	18.1	8.4	11.1	20.6	22.6	46.4	18.2	14.5	46.4
8	24.6	S	15.5	25.6	29.9	12.4	9.4	14.2	11.7	16.6	17.7	16.4	48.7	53.9	37.1	22.8	19.1	15.8	18.6	21.7	24.3	18.3	43.0	33.5	24.0	53.9
9	19.1	S	23.4	15.9	7.2	5.1	8.5	16.0	24.4	26.5	25.7	7.6	6.8	2.7	6.5	6.1	16.7	11.8	9.1	19.5	9.6	13.1	28.0	20.7	14.4	28.0
10	13.1	S	26.7	29.3	16.6	9.0	18.1	13.2	21.5	20.0	31.2	17.9	22.8	26.4	18.9	16.4	18.5	14.5	25.9	27.0	33.8	23.5	15.1	15.7	20.7	33.8
11	19.7	S	27.1	35.3	56.0	41.0	49.4	34.6	63.6	82.5	51.8	25.2	26.7	38.8	10.0	8.0	19.3	40.9	30.9	27.4	30.3	34.9	36.2	32.8	35.8	82.5
12	8.9	S	9.0	17.0	26.3	41.8	33.7	26.9	30.7	29.5	19.8	10.0	7.7	11.1	10.2	8.7	3.6	8.5	2.1	3.0	3.2	4.2	1.9	1.9	13.9	41.8
13	1.9	S	1.6	1.3	2.7	7.6	16.3	22.4	29.0	29.7	21.5	22.5	9.8	2.7	5.2	3.6	2.6	2.0	2.1	7.9	11.8	13.0	12.2	8.5	10.3	29.7
14	6.5	S	11.7	18.1	14.0	16.9	18.5	17.5	30.5	25.8	17.2	19.4	7.4	9.2	9.6	5.8	7.4	7.4	7.6	11.3	21.8	19.2	12.4	16.4	14.4	30.5
15	12.2	S	17.2	32.9	27.9	33.4	18.2	18.1	23.2	21.3	28.8	20.8	17.0	17.1	14.3	21.2	18.4	17.1	21.0	18.8	20.9	28.4	25.4	19.6	21.4	33.4
16	24.9	S	15.9	24.7	13.7	27.4	15.4	21.2	22.0	17.6	23.0	20.2	35.2	16.4	16.1	22.7	19.8	12.1	18.9	24.6	17.9	17.1	20.4	9.5	19.8	35.2
17	13.8	S	10.4	8.1	18.3	20.4	26.6	22.2	47.7	77.3	67.1	32.2	83.1	31.6	32.0	9.6	12.1	8.3	11.1	8.2	9.6	7.9	2.8	3.9	24.5	83.1
18	3.0	S	4.4	5.1	3.8	4.9	11.7	17.5	11.8	8.2	C	C	C	C	C	C	C	1.7	1.9	2.4	2.1	7.2	2.3	11.9	-	-
19	7.8	S	12.5	11.8	20.3	22.2	15.4	13.8	45.4	21.7	X	X	18.2	20.1	20.5	20.2	13.1	9.5	20.2	7.4	6.7	5.6	8.3	6.9	15.6	45.4
20	8.0	S	7.2	7.3	9.3	7.8	11.9	11.9	11.5	10.0	X	7.7	8.2	8.7	7.8	6.8	9.2	3.6	5.5	10.4	22.6	28.7	21.0	16.7	11.0	28.7
21	28.6	S	55.3	42.5	37.4	39.1	40.2	32.3	11.0	16.5	34.7	18.9	26.1	17.2	10.9	6.1	29.8	9.7	13.9	13.9	18.1	34.7	30.1	35.5	26.2	55.3
22	27.1	S	20.0	17.4	7.1	8.6	8.9	14.5	21.3	21.1	17.5	10.5	1.8	1.9	1.9	1.4	4.8	7.6	15.3	2.1	3.4	7.4	6.8	7.2	10.2	27.1
23	6.1	S	6.4	3.7	2.0	2.8	1.6	2.1	4.1	5.9	6.6	6.0	11.1	12.9	6.3	6.7	7.1	9.9	8.3	4.5	10.7	5.9	8.2	4.7	6.2	12.9
24	4.0	S	2.3	1.5	4.2	6.7	8.7	14.2	13.2	C	C	C	2.0	2.4	6.2	5.0	8.1	5.8	19.1	6.8	6.4	19.1	14.9	7.7	7.9	19.1
25	9.9	S	6.5	6.5	9.6	3.7	13.9	27.9	19.9	25.8	30.5	25.1	26.5	35.0	13.8	9.0	11.4	15.6	9.6	10.5	5.6	9.3	17.6	5.7	15.2	35.0
26	7.8	S	3.1	10.9	5.1	11.1	17.9	8.5	9.5	20.2	7.4	4.9	6.2	5.4	7.1	13.7	16.5	22.8	9.4	2.9	9.9	10.5	22.2	48.6	12.2	48.6
27	40.9	S	13.1	7.3	8.4	1.8	0.8	0.9	11.4	21.7	33.7	34.6	25.7	38.8	15.4	3.1	4.2	15.7	14.7	33.6	9.2	21.0	15.0	4.4	16.3	40.9
28	22.3	S	5.5	16.2	9.2	27.5	9.1	6.9	15.2	4.6	2.8	4.9	4.4	3.2	9.2	3.2	5.9	8.1	11.5	9.3	11.5	21.9	33.1	41.4	12.5	41.4
29	35.6	S	35.2	33.8	37.1	29.9	26.5	30.6	27.8	27.2	27.5	42.2	52.2	25.0	45.6	24.8	8.4	7.6	9.3	12.5	17.7	23.0	18.3	12.5	26.5	52.2
30	7.6	S	33.2	37.0	41.0	42.0	15.3	9.1	8.9	9.0	9.4	64.9	18.8	10.8	7.0	4.4	2.9	2.4	1.8	1.9	1.7	1.6	1.6	1.6	14.5	64.9
31	1.8	S	2.6	1.9	2.6	7.4	6.8	7.5	7.8	8.3	4.8	11.1	7.6	4.6	2.4	3.1	4.0	3.5	5.6	6.5	3.5	2.9	4.2	3.3	5.0	11.1
NO.	31	-	31	31	31	31	31	31	31	30	27	28	30	30	30	30	30	31	31	31	31	31	31	31	700	99.6%
MEAN	12.7	-	13.7	15.0	15.9	16.5	15.5	15.0	19.0	21.0	20.8	18.2	18.2	15.1	12.5	9.4	10.9	10.0	10.8	11.4	12.5	14.4	15.9	14.0		
MAX	40.9	-	55.3	42.5	56.0	42.0	49.4	34.6	63.6	82.5	67.1	64.9	83.1	53.9	45.6	24.8	29.8	40.9	30.9	33.6	33.8	34.9	46.4	48.6		



Number of Non-Zero Readings	700
Maximum 1-HR Average	83.1 PPB
Maximum 24-HR Average	35.8 PPB
Operational Time	741 HRS
Operational Uptime	99.6 %
Monthly Calibration	10
Standard Deviation	12
Monthly Average	14.7 PPB

Lagoon NO (ppb) – January 2023

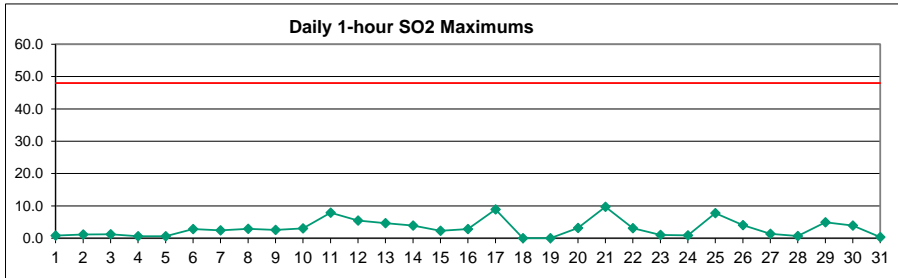
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.7	S	1.3	1.1	0.7	1.2	1.8	1.7	0.8	3.5	1.4	2.7	2.4	4.0	3.4	1.1	1.4	0.9	1.2	3.3	3.4	1.1	1.3	1.6	1.8	4.0	
2	0.8	S	1.3	0.8	1.5	2.8	0.9	0.9	1.6	1.5	4.8	5.0	4.3	1.8	3.5	2.4	0.8	1.1	0.8	2.7	2.2	1.6	0.7	0.7	1.9	5.0	
3	1.1	S	1.1	0.7	1.9	0.7	0.9	0.9	3.4	2.1	2.0	2.3	2.4	1.9	10.2	2.4	4.3	1.1	1.7	2.3	2.4	3.7	3.0	3.1	2.4	10.2	
4	1.7	S	4.8	4.9	0.9	1.4	2.7	2.7	1.6	2.9	4.4	6.7	5.2	3.5	1.7	1.8	1.5	2.1	1.6	3.9	0.8	0.8	2.0	2.1	2.7	6.7	
5	1.2	S	0.7	1.0	3.4	3.9	0.8	2.1	2.9	1.9	2.2	5.3	10.5	2.6	3.6	3.0	1.3	0.9	0.8	1.0	3.5	1.7	2.5	3.0	2.6	10.5	
6	2.2	S	8.9	5.9	15.6	20.5	15.1	8.1	7.1	11.5	9.0	3.4	2.0	1.0	0.8	0.8	0.7	0.8	0.9	2.9	5.1	4.3	4.1	3.1	5.8	20.5	
7	1.0	S	1.6	1.0	8.5	2.6	5.5	1.9	1.2	5.5	8.3	11.0	5.1	5.6	1.8	4.6	12.5	5.9	1.6	0.8	7.7	8.2	26.0	5.2	5.8	26.0	
8	9.0	S	4.4	12.5	15.8	4.9	2.3	5.8	2.4	4.4	6.8	5.7	30.9	35.1	19.7	9.6	4.1	4.2	8.0	8.0	10.3	7.3	24.2	16.5	11.0	35.1	
9	7.3	S	9.5	6.3	1.6	1.0	2.1	4.1	7.8	10.3	11.4	2.7	2.9	1.1	2.7	1.9	7.6	2.2	1.6	6.7	2.2	5.0	12.3	8.0	5.2	12.3	
10	4.0	S	12.2	13.7	6.7	3.9	6.7	4.2	9.4	8.4	13.4	8.0	10.6	11.9	8.7	3.9	3.8	2.1	7.4	12.2	16.9	10.9	4.5	4.6	8.2	16.9	
11	8.4	S	12.8	19.2	36.5	23.6	29.9	18.3	42.3	58.3	32.8	12.9	15.4	24.8	4.2	2.9	10.5	23.3	15.4	13.4	15.4	19.8	19.7	17.5	20.8	58.3	
12	3.8	S	4.1	7.8	13.2	24.9	17.4	10.7	14.1	14.7	8.1	3.7	2.7	3.7	3.7	2.5	1.2	3.5	0.8	0.9	1.1	1.5	0.7	0.7	6.3	24.9	
13	0.8	S	0.7	0.6	1.1	2.3	7.3	9.7	14.5	14.0	9.0	10.8	4.1	1.0	2.1	1.4	1.0	1.0	0.9	3.4	3.8	5.0	4.1	1.6	4.4	14.5	
14	1.4	S	3.0	6.6	4.4	3.6	4.6	6.7	13.1	8.9	7.9	8.8	2.2	3.4	2.9	1.6	1.7	1.5	0.9	1.9	8.7	8.2	3.9	4.6	4.8	13.1	
15	2.2	S	6.1	16.1	16.2	18.5	5.5	5.1	7.8	6.8	13.2	9.7	6.9	7.7	4.6	5.6	3.1	1.0	1.8	1.5	2.4	9.2	10.3	6.6	7.3	18.5	
16	10.0	S	6.7	10.7	4.9	14.7	5.0	4.4	7.7	4.3	9.2	9.1	20.7	7.5	5.9	9.4	5.5	1.5	6.2	8.6	5.7	6.0	9.8	2.8	7.7	20.7	
17	5.7	S	3.8	2.7	9.1	9.9	14.9	11.2	30.9	55.1	48.0	19.9	63.0	19.4	16.2	2.9	4.1	1.5	3.0	1.1	3.1	1.7	0.6	0.9	14.3	63.0	
18	0.8	S	1.3	1.5	1.1	1.5	5.5	7.7	4.2	2.8	C	C	C	C	C	C	C	C	0.5	0.5	0.7	0.6	2.7	0.6	3.6	-	-
19	1.7	S	3.6	4.5	9.2	9.7	7.0	5.0	26.3	6.8	X	X	2.9	2.6	2.5	1.7	0.9	0.7	2.8	0.7	0.7	0.6	0.7	0.7	4.3	26.3	
20	0.7	S	0.7	0.6	0.7	0.6	0.8	0.8	0.7	1.0	X	2.4	3.0	2.9	2.7	1.5	1.9	0.7	1.1	4.2	10.2	14.2	9.2	6.4	3.0	14.2	
21	14.6	S	33.0	24.7	21.4	22.0	24.4	18.6	4.3	7.8	21.9	11.0	13.6	8.3	4.2	2.0	15.1	2.7	5.3	4.9	8.0	16.4	14.8	19.6	13.9	33.0	
22	13.0	S	9.7	9.2	1.5	2.3	3.5	5.1	9.8	8.6	6.2	3.2	0.7	0.8	0.7	0.5	1.0	1.2	6.0	0.4	0.7	1.3	2.0	1.8	3.9	13.0	
23	1.8	S	2.4	1.1	0.6	1.0	0.5	0.6	1.6	2.2	2.5	2.4	5.0	5.5	2.4	2.2	1.9	4.0	2.7	1.3	3.7	1.6	2.2	0.8	2.2	5.5	
24	0.8	S	0.7	0.5	1.2	1.4	1.7	4.7	3.4	C	C	C	0.8	0.8	2.0	1.1	1.9	1.1	5.9	0.8	0.9	7.6	6.2	2.7	2.3	7.6	
25	4.0	S	1.7	2.8	3.1	0.8	4.3	12.1	8.8	12.9	16.1	11.9	13.1	17.8	4.8	2.3	2.5	4.9	1.6	2.9	1.4	2.2	5.1	1.1	6.0	17.8	
26	2.1	S	0.8	3.7	1.3	5.4	7.0	2.5	3.4	8.2	2.4	1.7	2.1	1.6	1.9	5.6	6.2	9.2	2.9	0.7	2.7	2.6	7.5	21.5	4.5	21.5	
27	17.1	S	3.6	1.8	3.1	0.6	0.5	0.6	2.9	4.7	12.6	13.8	9.4	15.8	3.7	1.0	1.1	6.3	5.9	15.4	2.8	10.3	4.6	1.0	6.0	17.1	
28	10.5	S	1.8	6.1	2.3	12.4	2.6	1.8	5.2	1.4	1.0	2.4	1.8	1.6	4.1	1.2	2.0	1.3	1.4	1.9	0.6	6.5	10.1	14.1	4.1	14.1	
29	9.0	S	7.4	6.8	8.7	4.6	2.7	6.3	5.7	10.6	13.4	26.8	35.8	14.7	25.9	12.2	2.2	1.8	2.8	4.1	7.4	8.5	6.4	4.2	9.9	35.8	
30	2.1	S	16.5	21.7	23.8	24.0	6.4	2.7	2.6	2.7	4.0	42.7	9.9	5.5	3.0	1.5	0.9	0.8	0.6	0.6	0.5	0.5	0.6	0.6	7.6	42.7	
31	0.7	S	0.9	0.6	0.8	4.3	2.5	2.4	2.7	3.5	1.8	5.4	3.3	1.9	1.0	1.1	1.4	1.0	1.6	2.4	0.8	1.0	1.6	1.1	1.9	5.4	
NO.	31	-	31	31	31	31	31	31	31	30	27	28	30	30	30	30	30	31	31	31	31	31	31	31	700	99.6%	
MEAN	4.5	-	5.4	6.4	7.1	7.5	6.2	5.5	8.1	9.6	10.1	9.0	9.8	7.2	5.2	3.1	3.5	2.9	3.1	3.7	4.4	5.5	6.5	5.2			
MAX	17.1	-	33.0	24.7	36.5	24.9	29.9	18.6	42.3	58.3	48.0	42.7	63.0	35.1	25.9	12.2	15.1	23.3	15.4	15.4	16.9	19.8	26.0	21.5			



Number of Non-Zero Readings	700		
Maximum 1-HR Average	63.0 PPB		
Maximum 24-HR Average	20.8 PPB		
Operational Time		741 HRS	
Monthly Calibration	10	Operational Uptime	99.6 %
Standard Deviation	7.494	Monthly Average	6.0 PPB

Lagoon SO₂ (ppb) – January 2023

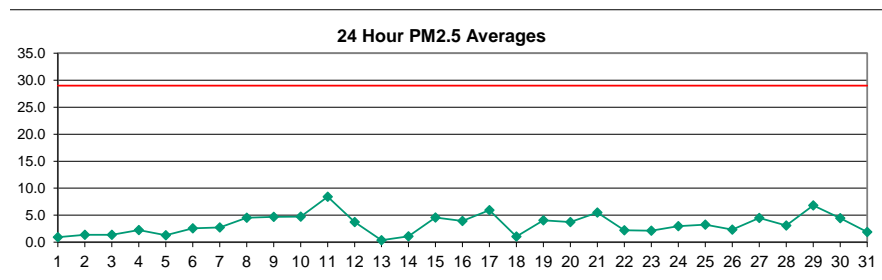
Day	HOURLY																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.6	S	0.4	0.8	0.1	0.4	0.0	0.1	0.7	0.4	0.5	0.2	0.0	0.3	0.5	0.3	0.4	0.5	0.1	0.0	0.0	0.3	0.2	0.2	0.3	0.8	
2	0.3	S	0.5	0.0	0.0	0.6	0.1	0.0	0.4	0.5	0.5	0.3	1.1	0.6	0.8	0.7	0.5	0.4	0.2	0.1	0.6	0.0	0.3	0.5	0.4	1.1	
3	0.7	S	0.1	0.3	0.0	0.7	0.5	0.4	0.3	0.2	0.0	0.7	0.9	0.3	0.6	0.6	0.4	0.0	0.1	0.2	0.0	0.4	1.3	0.9	0.4	1.3	
4	0.3	S	0.6	0.5	0.3	0.2	0.3	0.0	0.0	0.1	0.5	0.3	0.4	0.0	0.0	0.6	0.2	0.0	0.3	0.0	0.0	0.1	0.2	0.0	0.2	0.6	
5	0.6	S	0.0	0.0	0.0	0.4	0.6	0.4	0.1	0.5	0.0	0.2	0.0	0.2	0.2	0.2	0.0	0.6	0.0	0.1	0.2	0.1	0.0	0.0	0.2	0.6	
6	0.8	S	0.9	1.6	1.9	2.6	2.8	2.2	1.1	2.5	1.3	0.6	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	2.8	
7	0.5	S	0.4	0.1	0.2	0.0	0.0	0.0	0.4	0.6	0.0	0.5	0.0	0.3	0.2	0.0	0.0	1.1	0.3	0.3	0.1	0.6	2.4	0.8	0.4	2.4	
8	1.0	S	0.6	1.6	2.6	0.7	0.6	0.8	0.9	1.0	0.9	1.2	1.4	2.9	2.0	1.4	1.2	1.3	0.8	1.7	2.0	0.6	1.8	2.1	1.3	2.9	
9	1.3	S	1.8	1.6	1.0	0.5	1.0	0.9	1.1	0.8	0.6	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.8	1.6	0.8	0.8	2.0	2.6	1.0	2.6	
10	1.3	S	2.5	2.9	1.9	0.5	1.7	1.2	1.4	1.5	3.0	2.1	2.2	1.7	1.9	1.1	0.9	0.0	1.1	1.3	1.9	1.2	1.0	0.7	1.5	3.0	
11	1.7	S	2.5	1.4	2.7	2.1	2.4	1.3	5.0	7.9	5.8	2.4	3.1	4.5	1.1	0.7	1.8	4.2	2.9	3.1	2.9	2.4	3.5	4.2	3.0	7.9	
12	1.2	S	0.9	1.7	3.0	5.5	4.9	3.6	4.1	3.3	2.2	0.9	0.5	0.6	0.1	0.0	0.3	0.0	0.3	0.1	0.2	0.2	0.1	0.2	1.5	5.5	
13	0.8	S	0.5	0.0	0.0	0.6	2.8	1.6	2.4	4.6	2.9	3.6	0.7	1.1	0.9	0.6	0.8	0.3	0.7	0.6	0.9	0.8	1.3	1.0	1.3	4.6	
14	0.7	S	1.0	2.0	2.3	2.1	1.9	2.5	3.9	3.3	2.9	2.6	1.0	0.8	0.5	0.5	1.1	0.8	0.3	1.3	0.9	1.6	1.3	1.2	1.6	3.9	
15	1.5	S	1.1	1.6	2.1	2.3	1.2	0.5	0.6	0.4	0.6	0.4	1.2	1.1	0.7	1.1	0.7	0.7	1.1	0.9	0.3	2.1	1.5	2.3	1.1	2.3	
16	2.0	S	1.2	1.4	1.2	2.2	1.0	0.4	0.9	1.2	0.9	1.1	2.8	2.0	1.1	1.8	1.1	1.0	1.8	2.4	2.8	1.6	0.8	1.3	1.5	2.8	
17	1.3	S	1.1	0.3	1.8	2.0	2.3	2.2	4.3	7.6	6.4	2.8	8.9	3.2	1.0	0.4	0.9	0.4	0.4	0.4	0.6	0.9	0.3	0.1	2.2	8.9	
18	0.2	S	0.4	0.6	0.0	0.0	0.3	0.9	0.3	0.5	C	C	C	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	-	-	
19	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	C	C	C	C	0.5	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	-	-	
20	0.2	S	0.0	0.2	0.0	0.1	0.1	0.1	0.2	0.6	X	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.5	2.0	3.2	1.6	2.1	0.6	3.2	
21	3.5	S	9.7	6.5	5.7	5.6	5.4	3.9	1.1	1.9	5.6	4.3	4.4	3.1	1.0	0.7	1.0	0.7	1.4	2.0	2.8	4.7	4.0	4.5	3.6	9.7	
22	2.8	S	1.7	1.3	0.8	1.1	0.8	1.5	3.1	2.6	1.6	0.7	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.3	0.6	0.9	3.1	
23	0.4	S	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.8	1.0	0.3	0.3	0.3	0.6	0.8	0.3	0.3	0.4	0.3	0.2	0.4	1.0
24	0.3	S	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.3	0.5	0.1	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.9	0.3	0.2	0.3	0.3	0.9
25	0.2	S	0.0	0.1	0.2	0.1	0.7	2.7	2.4	3.5	4.1	3.7	3.2	7.8	0.8	0.5	0.5	0.6	0.9	1.0	0.4	0.9	1.9	0.7	1.6	7.8	
26	0.4	S	0.3	0.2	0.2	1.9	2.4	0.5	1.3	3.0	1.0	0.4	0.5	0.4	0.4	1.9	2.2	4.1	1.2	0.4	0.4	0.6	0.9	1.5	1.1	4.1	
27	1.1	S	0.5	0.6	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.6	1.4	1.2	0.8	0.3	0.3	0.4	0.5	0.9	0.7	0.9	0.8	0.6	0.6	1.4	
28	0.5	S	0.3	0.6	0.5	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.7	0.3	0.3	0.1	0.0	0.1	0.2	0.3	0.3	0.7	
29	0.2	S	0.0	0.2	0.2	0.0	0.0	0.3	0.2	0.1	0.4	2.1	4.9	1.0	3.0	1.5	0.4	0.5	0.6	0.5	1.1	2.3	2.2	1.4	1.0	4.9	
30	0.6	S	3.0	3.8	3.6	3.7	1.0	0.4	0.3	0.3	0.3	0.3	3.9	0.9	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	1.1	3.9	
31	0.4	S	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	
NO.	31	-	30	30	30	30	30	30	30	30	28	29	29	29	30	30	30	30	30	30	30	30	30	30	30	685	97.0%
MEAN	0.9	-	1.1	1.1	1.1	1.2	1.2	1.0	1.3	1.7	1.6	1.3	1.5	1.3	0.7	0.6	0.6	0.7	0.6	0.7	0.8	1.0	1.0	1.0			
MAX	3.5	-	9.7	6.5	5.7	5.6	5.4	3.9	5.0	7.9	6.4	4.3	8.9	7.8	3.0	1.9	2.2	4.2	2.9	3.1	2.9	4.7	4.0	4.5			



Number of 1HR Exceedences	0
Number of Non-Zero Readings	639
Maximum 1-HR Average	9.7 PPB
Maximum 24-HR Average	3.6 PPB
Monthly Calibration	7
Standard Deviation	1.304
Operational Time	722 HRS
Operational Uptime	97.0 %
Monthly Average	1.0 PPB

Lagoon PM_{2.5} (µg/m³) – January 2023

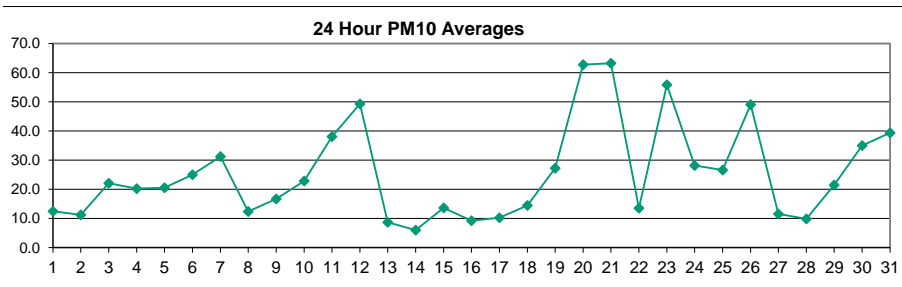
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	2.8	1.6	1.9	2.2	0.6	0.0	0.0	0.0	0.3	1.7	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.1	3.4	3.7	3.6	0.9	3.7
2	2.6	3.1	3.8	1.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.4	2.2	1.5	1.6	2.2	1.7	0.2	0.0	0.0	1.8	2.9	2.6	2.1	1.4	3.8
3	0.9	1.5	1.1	1.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.2	3.9	3.2	5.0	4.0	3.5	2.1	1.3	1.4	5.0
4	2.9	4.9	3.3	2.9	2.3	1.1	0.2	0.6	1.5	1.5	1.2	1.1	1.1	3.7	3.7	4.3	6.0	4.2	2.7	0.8	0.5	1.2	1.5	1.2	2.3	6.0
5	1.6	0.0	0.0	1.8	1.2	1.3	2.1	0.9	0.0	0.0	1.2	1.6	1.6	2.2	4.8	4.6	2.8	1.6	0.0	0.3	0.0	0.0	1.1	1.1	1.3	4.8
6	0.8	1.2	4.4	3.7	1.1	0.5	1.2	3.5	1.8	2.0	5.7	7.0	4.0	0.3	0.0	5.0	5.0	0.6	0.0	2.4	2.4	1.5	4.3	3.4	2.6	7.0
7	1.2	1.5	4.4	3.8	2.5	4.8	4.4	1.6	0.0	0.0	1.6	5.0	6.7	4.9	2.6	0.0	0.5	0.7	0.2	0.8	1.5	4.2	5.4	7.7	2.7	7.7
8	32.4	X	5.2	3.1	1.2	1.2	1.0	0.1	0.7	2.8	1.2	2.5	7.2	6.7	4.9	4.6	2.8	2.0	5.4	4.2	4.9	3.2	2.8	4.0	4.5	32.4
9	30.3	X	3.6	5.9	6.5	2.8	1.2	1.8	1.0	2.8	4.8	C	C	C	C	0.5	1.8	7.1	4.7	4.0	3.3	2.9	2.6	1.9	4.7	30.3
10	28.7	X	0.0	3.0	7.2	6.2	3.2	2.4	0.8	0.7	3.1	7.1	4.8	0.1	6.1	5.5	5.3	4.2	2.6	3.2	4.7	4.3	3.2	2.1	4.7	28.7
11	1.4	6.2	6.3	4.6	6.9	9.4	7.2	17.7	11.9	14.4	13.1	10.8	7.5	9.3	11.0	5.9	0.9	2.4	9.6	8.2	7.4	8.6	10.5	10.9	8.4	17.7
12	10.6	5.4	2.1	3.8	2.1	1.8	9.5	8.9	7.7	10.9	10.4	6.6	4.2	2.8	1.0	0.2	1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.7	10.9
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.9	1.5	1.2	1.2	1.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.8
14	0.4	2.5	1.8	0.7	0.0	0.0	0.0	0.0	0.0	0.5	3.4	1.5	1.5	3.8	2.0	0.5	0.7	0.0	0.0	0.8	0.9	1.9	1.6	2.0	1.1	3.8
15	2.9	2.0	0.0	1.2	7.7	11.5	7.8	3.6	5.6	5.0	4.4	3.9	2.6	3.9	5.6	3.9	2.7	3.3	3.2	2.2	4.4	5.0	9.9	7.7	4.6	11.5
16	4.9	3.2	5.2	3.2	2.0	3.0	2.8	1.0	0.0	1.6	5.5	5.7	4.7	3.1	4.3	3.4	4.0	6.6	4.1	4.9	6.0	4.7	4.6	5.6	3.9	6.6
17	4.0	3.3	3.2	4.7	4.2	2.8	4.6	6.6	7.5	11.1	21.1	12.7	8.0	13.6	9.2	7.0	4.3	3.3	2.9	2.6	2.2	1.9	1.9	0.0	5.9	21.1
18	0.0	1.6	1.7	0.2	1.0	0.0	0.0	0.8	0.4	0.3	1.9	1.8	2.9	2.0	0.3	0.0	0.0	3.6	2.9	1.8	0.8	0.0	0.2	1.0	1.0	3.6
19	1.6	5.4	4.8	4.6	2.8	1.4	3.1	4.5	5.5	8.1	6.0	4.2	3.0	4.2	8.5	9.9	7.6	5.4	2.0	0.5	1.1	0.8	0.9	1.4	4.1	9.9
20	0.6	0.0	0.2	1.4	3.8	4.5	2.5	2.2	4.6	5.8	3.4	7.1	4.9	0.8	3.4	4.7	7.1	5.9	6.2	6.3	3.8	1.9	2.8	5.7	3.7	7.1
21	7.3	6.9	7.8	12.0	9.4	9.4	9.2	7.6	7.2	6.0	5.4	10.5	7.2	3.0	0.6	1.4	0.7	0.2	1.3	2.2	2.0	3.1	5.1	6.4	5.5	12.0
22	5.0	4.1	4.7	4.0	3.4	3.4	1.5	1.7	3.4	4.3	6.3	4.0	1.1	0.8	1.3	2.2	1.4	0.0	0.0	0.2	0.5	0.0	0.0	0.0	2.2	6.3
23	0.1	X	1.9	4.7	3.6	0.0	0.0	1.3	0.0	0.0	0.9	1.0	0.0	2.3	5.7	4.2	3.1	7.1	5.9	3.0	0.2	1.0	2.1	1.1	2.1	7.1
24	0.8	0.7	0.0	0.0	1.5	1.4	2.9	2.3	0.0	2.5	7.8	6.2	2.7	1.1	2.9	2.3	3.1	5.3	4.0	6.4	5.8	5.3	3.9	3.0	3.0	7.8
25	3.0	3.3	2.8	1.7	3.3	2.6	0.2	1.6	5.0	4.2	5.7	4.8	3.8	2.3	3.3	6.6	6.9	3.5	2.2	1.5	1.2	1.4	3.1	4.0	3.2	6.9
26	3.8	4.2	1.7	0.0	1.1	0.7	0.5	7.0	4.5	2.7	3.6	3.5	4.8	3.3	0.0	0.0	0.0	5.0	3.8	0.1	0.0	0.0	3.2	2.4	2.3	7.0
27	6.7	5.2	3.2	2.1	1.0	0.0	0.0	0.0	0.0	0.0	3.7	12.6	8.7	7.3	15.7	10.1	3.6	0.4	0.7	3.1	4.4	4.3	7.0	7.6	4.5	15.7
28	4.8	4.8	4.1	1.9	1.8	1.6	2.1	4.0	3.5	2.0	2.4	1.0	0.0	0.8	3.6	2.5	1.8	1.2	1.4	3.8	4.4	5.4	15.5	3.1	15.5	
29	6.7	10.5	7.5	6.8	8.8	9.2	6.1	5.4	4.2	3.6	11.6	8.4	10.0	15.8	3.7	4.3	4.8	4.7	3.8	1.8	3.1	4.4	8.0	11.0	6.8	15.8
30	8.7	5.3	5.0	13.3	11.7	7.2	7.0	3.9	0.1	0.4	3.0	3.8	10.1	6.9	3.4	1.4	0.3	2.3	2.6	2.8	4.0	3.5	0.0	0.0	4.4	13.3
31	2.2	1.4	1.0	2.4	3.4	3.9	2.7	0.2	0.0	0.4	3.3	3.2	2.1	1.2	1.3	0.0	0.1	0.6	1.8	4.2	3.0	3.3	2.7	0.7	1.9	4.2
NO.	31	27	31	31	31	31	31	31	31	31	31	31	30	30	30	31	31	31	31	31	31	31	31	31	736	99.5%
MEAN	5.8	3.3	3.0	3.3	3.4	2.9	2.7	2.9	2.5	3.1	4.6	4.7	4.0	3.6	3.7	3.2	2.6	2.8	2.5	2.4	2.5	2.7	3.3	3.7		
MAX	32.4	10.5	7.8	13.3	11.7	11.5	9.5	17.7	11.9	14.4	21.1	12.7	10.1	15.8	15.7	10.1	7.6	7.1	9.6	8.2	7.4	8.6	10.5	15.5		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	627
Maximum 1-HR Average	32.4 UG/M3
Maximum 24-HR Average	8.4 UG/M3
Monthly Calibration	4
Standard Deviation	3.519
Operational Time	740 HRS
Operational Uptime	99.5 %
Monthly Average	3.3 UG/M3

Lagoon PM₁₀ (µg/m³) – January 2023

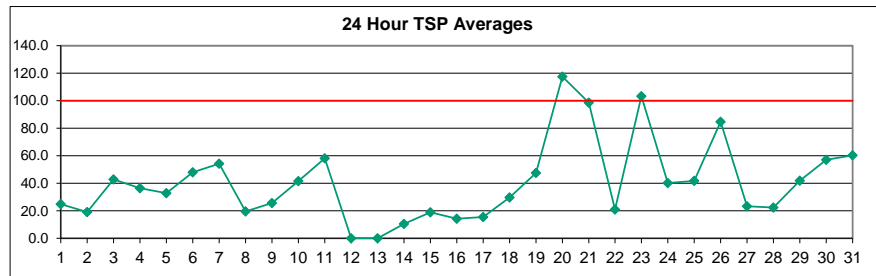
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7.2	6.0	5.7	3.0	0.7	1.9	1.7	0.0	0.4	3.2	2.2	5.3	13.0	36.1	30.5	9.2	6.5	5.1	3.2	7.3	9.9	36.4	43.9	61.1	12.5	61.1	
2	23.3	15.5	19.9	11.2	9.3	7.4	3.8	2.6	4.1	15.2	7.5	9.1	17.4	23.1	33.3	21.9	8.3	11.5	9.1	8.3	4.4	1.9	1.2	0.5	11.2	33.3	
3	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.6	3.0	10.4	8.1	12.9	8.3	11.5	17.9	20.3	21.6	37.9	42.3	29.6	40.8	99.8	98.1	64.9	22.1	99.8	
4	61.3	35.3	13.9	6.1	7.6	12.6	0.0	6.0	4.8	5.6	8.4	5.9	15.1	54.2	35.3	15.0	21.4	22.9	45.9	15.7	21.9	19.5	29.1	22.7	20.3	61.3	
5	9.1	6.0	5.1	4.0	14.1	8.4	12.3	18.7	15.9	7.6	22.8	38.2	42.2	54.7	89.1	20.9	20.6	23.5	19.6	2.8	4.8	6.1	14.6	32.7	20.6	89.1	
6	16.8	11.6	18.2	16.8	5.5	6.3	9.8	20.3	35.9	24.4	16.5	45.5	77.3	46.5	15.1	77.3	22.0	8.1	13.7	53.5	6.1	18.2	21.7	12.8	25.0	77.3	
7	28.2	14.8	9.6	21.8	23.4	21.7	20.9	14.6	20.3	123.8	106.1	59.0	42.0	31.3	40.0	47.6	11.6	16.8	5.2	6.6	28.0	29.3	18.5	9.8	31.3	123.8	
8	12.8	7.4	11.4	4.8	0.8	7.6	3.4	0.0	0.1	6.9	9.8	20.7	34.7	25.6	27.8	48.1	24.6	10.3	10.8	5.7	7.0	4.2	6.7	6.5	12.4	48.1	
9	6.5	14.3	2.5	7.8	13.6	29.0	16.4	15.2	33.7	22.3	31.7	C	C	C	C	2.7	7.6	63.4	15.4	9.0	11.9	7.3	5.3	19.1	16.7	63.4	
10	43.7	40.8	19.5	51.8	53.2	47.3	15.5	30.5	13.9	9.6	11.7	17.4	5.2	11.6	30.4	21.6	36.8	26.3	15.5	19.8	10.8	10.8	4.9	1.1	22.9	53.2	
11	5.8	9.7	11.8	9.3	14.6	16.6	14.5	56.9	18.1	26.0	55.1	43.5	25.9	55.9	99.9	24.4	18.6	21.3	59.4	32.5	51.0	75.1	72.3	96.8	38.1	99.9	
12	71.2	5.0	2.2	0.7	6.9	8.8	21.9	36.3	47.3	108.0	156.4	134.0	132.0	81.3	112.7	47.8	44.1	29.5	32.2	25.2	24.2	7.2	18.4	30.0	49.3	156.4	
13	19.8	5.7	8.4	5.6	1.4	0.0	17.4	31.6	22.4	7.1	13.8	4.8	6.9	16.2	0.0	1.0	3.9	2.3	0.0	0.0	4.0	11.0	17.0	8.2	8.7	31.6	
14	14.3	9.6	4.8	0.6	0.2	1.9	1.4	2.1	3.3	3.7	6.3	3.5	7.8	25.3	6.6	10.2	4.6	3.6	6.3	12.3	7.7	4.3	1.4	3.8	6.1	25.3	
15	12.7	6.5	10.9	21.5	14.7	12.7	1.4	8.0	10.3	16.5	11.5	16.7	9.7	13.1	24.6	10.3	12.3	15.9	13.4	13.4	18.0	13.8	34.2	4.6	13.6	34.2	
16	4.7	5.5	6.4	4.5	8.4	5.0	1.9	2.5	6.7	6.9	19.6	20.7	23.5	15.1	11.1	13.6	18.8	12.1	5.5	3.2	17.3	4.5	2.8	2.6	9.3	23.5	
17	2.4	9.7	5.8	4.2	5.4	0.3	0.0	3.3	3.9	15.5	31.5	23.2	21.2	31.9	15.6	11.2	13.3	6.1	6.7	7.7	14.2	1.5	11.6	0.0	10.3	31.9	
18	0.0	0.0	3.9	2.5	1.1	0.1	2.2	4.3	8.3	15.0	11.4	22.6	65.4	31.5	36.8	8.3	18.5	83.8	10.0	4.1	0.0	5.6	12.0	1.2	14.5	83.8	
19	12.3	27.8	32.7	16.6	2.8	0.0	0.0	1.1	7.7	30.5	19.9	17.0	20.9	47.7	49.9	53.8	88.0	67.6	40.5	51.4	12.1	8.3	26.5	20.2	27.3	88.0	
20	8.5	19.1	24.5	18.3	77.3	12.4	34.1	140.2	76.8	44.1	39.4	114.9	40.3	44.3	90.2	39.0	63.3	48.4	44.7	80.8	97.5	87.2	99.0	162.5	62.8	162.5	
21	169.4	140.0	118.9	91.1	107.6	78.7	35.4	26.1	24.0	26.1	24.4	70.9	39.8	30.7	51.3	64.3	42.0	49.6	102.6	66.3	66.5	42.2	39.8	10.6	63.3	169.4	
22	12.0	17.4	30.7	52.4	30.5	19.2	16.3	20.8	8.6	7.9	11.7	7.6	4.3	6.4	3.5	0.0	0.0	2.7	9.1	11.3	4.8	7.1	21.4	20.5	13.6	52.4	
23	30.7	53.4	82.7	191.7	51.4	42.3	55.7	7.1	7.1	21.3	17.6	13.0	20.3	76.9	159.0	70.8	49.1	120.1	118.7	39.3	17.3	20.2	54.3	20.9	55.9	191.7	
24	15.5	20.2	13.5	2.4	0.0	1.4	13.4	14.1	26.1	45.1	82.5	47.9	X	8.3	11.8	20.4	22.7	30.4	24.6	64.0	51.2	56.8	31.1	44.2	28.2	82.5	
25	18.4	19.1	10.2	11.9	15.7	16.1	7.5	31.3	31.8	21.4	25.6	27.4	36.5	35.6	33.7	72.7	34.9	26.4	24.6	11.6	24.7	28.1	28.7	45.1	26.6	72.7	
26	22.0	29.4	19.3	8.1	28.2	19.3	100.3	134.3	50.3	138.0	223.3	64.7	106.6	54.0	15.3	26.2	35.9	30.8	26.0	8.4	5.0	3.4	10.6	19.5	49.1	223.3	
27	12.5	10.9	12.7	1.3	1.1	0.0	0.5	6.0	5.0	1.3	3.8	19.7	25.4	24.1	33.3	27.2	11.5	11.7	7.9	8.0	16.4	2.1	14.4	19.9	11.5	33.3	
28	10.9	8.9	25.6	10.7	25.1	10.6	14.3	9.0	6.2	13.3	11.5	11.4	10.6	8.8	6.1	6.8	7.3	12.2	6.9	2.1	0.0	0.0	6.1	13.1	9.9	25.6	
29	20.9	14.6	11.7	7.7	8.3	15.2	6.6	0.9	8.3	11.6	24.0	26.6	25.4	42.7	26.7	23.9	27.1	77.7	28.8	5.1	13.8	13.2	29.8	44.9	21.5	77.7	
30	27.4	50.2	77.8	106.5	63.5	21.3	12.3	2.3	0.7	11.5	6.1	6.1	51.8	91.3	29.2	24.6	20.9	16.4	27.1	18.6	40.4	32.0	28.7	74.1	35.0	106.5	
31	54.1	43.3	49.2	47.8	45.4	46.2	51.7	40.4	66.2	62.0	43.5	48.9	27.6	21.2	25.2	37.2	36.1	27.1	22.8	33.4	50.4	33.6	10.7	22.1	39.4	66.2	
NO.	31	31	31	31	31	31	31	31	31	31	31	30	29	30	31	31	31	31	31	31	31	31	31	31	31	739	99.9%
MEAN	24.3	21.2	21.6	24.0	20.6	15.2	15.9	22.2	18.4	27.8	34.3	32.0	33.0	35.2	38.7	28.3	24.3	29.7	25.8	21.2	22.0	22.3	26.3	28.9			
MAX	169.4	140.0	118.9	191.7	107.6	78.7	100.3	140.2	76.8	138.0	223.3	134.0	132.0	91.3	159.0	77.3	88.0	120.1	118.7	80.8	97.5	99.8	99.0	162.5			



Number of Non-Zero Readings	714	Operational Time	743 HRS
Maximum 1-HR Average	223.3 UG/M3	Operational Uptime	99.9 %
Maximum 24-HR Average	63.3 UG/M3	Monthly Average	25.5 UG/M3
Monthly Calibration	4		
Standard Deviation	29.03		

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

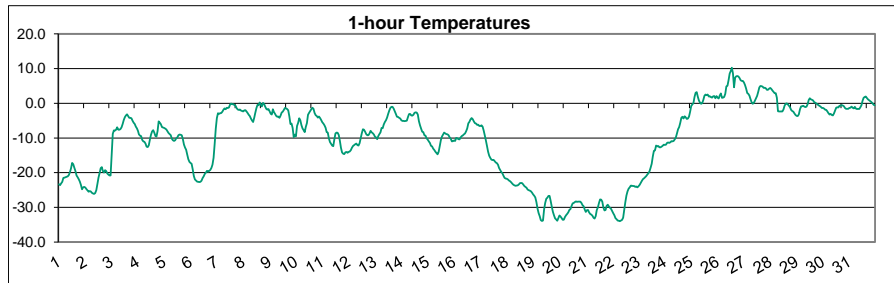
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.3	11.4	11.9	5.6	4.2	3.1	4.7	7.0	6.2	9.7	8.0	6.6	28.4	54.9	45.3	7.6	10.7	6.5	13.9	22.8	22.5	79.0	82.9	137.2	24.9	137.2
2	49.2	33.2	40.3	17.7	13.7	10.8	7.0	6.5	13.9	21.7	6.2	11.0	21.9	40.3	61.0	47.2	22.8	4.7	7.3	8.2	5.4	3.0	2.8	1.5	19.1	61.0
3	0.6	1.7	2.6	1.4	0.7	4.4	4.4	4.7	10.4	34.2	17.9	16.5	25.9	33.7	45.4	31.5	41.0	60.1	71.7	46.4	64.1	172.1	201.2	134.0	42.8	201.2
4	102.9	48.3	32.3	13.3	18.7	22.0	9.7	18.8	12.2	9.6	17.5	13.9	32.5	100.4	65.5	16.5	47.2	47.1	44.5	37.9	58.3	26.9	41.5	37.6	36.5	102.9
5	14.2	4.2	3.4	7.0	5.9	7.6	14.5	28.7	25.3	27.7	35.3	42.4	69.9	94.7	151.4	32.8	37.6	27.7	32.0	9.4	6.5	13.9	28.9	66.8	32.8	151.4
6	33.9	27.2	32.2	21.0	10.2	12.2	11.5	38.7	58.6	48.2	37.4	79.3	152.8	92.3	26.8	73.3	58.6	39.5	46.4	137.6	18.9	27.5	43.9	23.8	48.0	152.8
7	75.5	33.0	10.6	38.4	46.9	53.7	36.8	19.6	33.5	155.3	213.7	113.6	76.5	47.5	74.5	83.0	26.6	25.9	9.4	8.5	40.8	42.1	21.7	15.5	54.3	213.7
8	15.7	8.6	19.0	2.4	0.5	3.0	3.0	3.1	5.9	18.1	18.6	25.7	51.6	43.4	59.9	90.2	42.8	17.0	7.3	7.0	5.7	6.2	9.5	6.0	19.6	90.2
9	10.0	21.3	12.1	7.6	14.1	35.7	20.5	20.1	45.8	36.0	53.4	C	C	C	14.2	22.0	82.6	23.0	15.1	27.4	21.0	5.7	25.6	25.7	82.6	25.7
10	168.9	X	62.0	69.3	70.2	71.3	23.9	56.6	29.4	16.2	23.7	32.8	16.3	17.0	50.3	34.9	67.1	46.5	29.8	32.3	12.5	10.8	7.1	7.7	41.6	168.9
11	12.0	8.3	17.3	10.8	18.4	21.0	27.8	77.1	28.1	34.8	77.2	60.3	46.0	81.8	167.6	42.6	28.0	36.2	88.6	56.2	77.0	112.9	103.6	161.5	58.1	167.6
12	92.5	10.7	5.3	1.6	2.3	10.5	28.7	47.6	65.7	192.2	265.3	225.9	293.5	X	X	X	X	X	X	X	X	X	X	X	-	-
13	X	X	X	X	X	X	X	X	X	X	X	X	X	18.8	2.2	7.1	6.7	3.0	2.7	0.5	4.3	16.2	20.7	8.3	-	-
14	18.7	20.4	4.7	6.8	4.0	1.4	0.7	5.0	6.9	6.6	13.3	7.4	13.1	35.6	9.3	14.5	5.7	7.9	24.0	14.9	11.1	9.6	6.7	3.3	10.5	35.6
15	6.6	13.7	12.3	21.1	21.2	11.0	8.8	12.8	24.9	22.5	13.7	21.5	15.0	13.7	32.2	22.2	21.2	23.1	17.9	16.5	24.8	24.9	41.9	9.4	18.9	41.9
16	5.7	6.3	11.0	9.0	11.9	5.6	4.2	3.1	7.4	11.6	25.5	29.3	30.3	26.2	14.6	30.3	27.7	24.5	9.0	13.3	17.0	7.0	5.7	5.4	14.2	30.3
17	3.3	5.9	7.0	5.9	6.9	4.7	5.9	7.3	9.6	21.2	44.0	27.5	17.0	39.7	24.5	30.2	25.7	15.9	17.0	8.9	21.4	4.8	17.3	0.0	15.5	44.0
18	5.6	4.4	5.9	17.4	10.6	5.0	8.3	18.2	20.4	37.9	28.9	35.9	107.0	55.8	65.2	30.5	33.5	144.0	18.8	12.1	7.3	8.6	20.0	12.3	29.7	144.0
19	12.9	37.7	37.2	19.9	10.7	5.9	7.0	6.6	16.4	37.0	42.1	23.2	34.5	79.4	93.4	93.8	143.2	109.9	81.4	102.3	20.6	22.2	54.9	47.1	47.5	143.2
20	27.3	54.9	36.5	34.7	164.7	30.7	68.3	261.2	138.4	79.5	79.8	220.4	105.7	77.2	173.7	71.6	110.7	84.9	72.4	135.0	163.8	167.8	190.5	270.7	117.5	270.7
21	305.5	240.7	178.8	142.5	186.8	91.6	67.2	39.1	40.6	41.6	36.9	93.7	44.1	46.0	83.4	93.8	68.7	78.3	107.4	114.3	114.8	69.0	70.2	10.8	98.6	305.5
22	18.1	19.6	35.8	71.1	48.8	27.4	24.0	25.1	14.2	15.1	12.8	14.8	10.3	11.9	5.1	0.4	1.7	4.4	18.6	21.0	10.2	14.8	33.2	45.2	21.0	71.1
23	66.2	96.3	107.1	229.5	102.5	96.7	128.1	30.4	20.5	48.7	33.1	29.9	34.7	146.3	302.5	126.9	118.0	255.0	228.7	72.7	31.3	34.7	105.0	32.8	103.2	302.5
24	23.3	41.5	27.3	10.4	2.7	2.3	19.9	22.8	30.6	68.6	103.2	57.8	8.8	11.4	15.5	37.4	27.5	44.8	33.3	98.1	75.7	89.2	49.7	63.6	40.2	103.2
25	28.9	35.1	15.3	13.9	13.2	17.6	16.7	50.0	47.7	29.9	55.9	38.2	55.6	56.6	61.6	115.7	52.8	41.7	38.1	22.6	42.6	39.3	46.1	67.9	41.8	115.7
26	44.9	48.0	39.5	12.8	34.8	41.8	203.0	268.4	89.7	253.1	362.5	112.6	124.2	90.8	28.9	40.0	60.8	57.9	46.0	12.4	9.3	7.9	15.7	28.5	84.7	362.5
27	20.8	20.9	29.2	5.4	3.0	2.8	3.2	20.1	41.7	0.0	13.5	21.8	28.0	20.6	43.5	56.4	39.6	23.9	15.1	24.8	33.4	33.2	31.5	27.8	23.3	56.4
28	30.0	47.4	45.0	16.2	21.0	11.2	22.2	20.2	13.9	12.9	17.4	34.4	39.0	41.0	46.8	39.8	13.4	18.8	12.2	7.9	2.5	0.0	6.0	19.4	22.4	47.4
29	18.8	22.1	8.4	6.8	4.0	2.0	5.9	6.7	7.3	11.2	33.0	27.7	32.6	88.4	128.1	100.3	110.8	145.3	48.9	9.3	37.3	27.8	52.7	71.6	42.0	145.3
30	51.4	108.7	120.9	165.3	115.0	34.2	16.5	3.0	3.6	8.2	5.4	10.6	81.9	141.6	63.1	44.8	36.0	35.1	37.3	38.1	64.3	54.5	40.8	90.1	57.1	165.3
31	88.3	73.8	74.4	60.4	65.2	57.4	82.3	67.5	96.6	82.4	87.0	79.7	39.4	33.1	42.7	51.2	48.9	38.9	29.4	45.1	73.7	69.3	22.5	36.8	60.2	96.6
NO.	30	29	30	30	30	30	30	30	30	30	30	29	29	29	29	30	30	30	30	30	30	30	30	30	715	96.6%
MEAN	45.3	38.1	34.8	34.8	34.4	23.5	29.5	39.9	32.2	46.4	59.4	52.2	56.4	56.6	68.4	49.4	45.2	51.7	41.1	38.4	36.8	40.5	46.0	48.9		
MAX	305.5	240.7	178.8	229.5	186.8	96.7	203.0	268.4	138.4	253.1	362.5	225.9	293.5	146.3	302.5	126.9	143.2	255.0	228.7	137.6	163.8	172.1	201.2	270.7		



Number of 24HR Exceedences	2	Operational time	719 HRS
Number of Non-Zero Readings	712	Operational Uptime	96.6 %
Maximum 1-HR Average	362.5 UG/M3	Monthly Average	43.7 UG/M3
Maximum 24-HR Average	117.5 UG/M3		
Monthly Calibration	4		
Standard Deviation	50.4		

Lagoon Temperature (°C) – January 2023

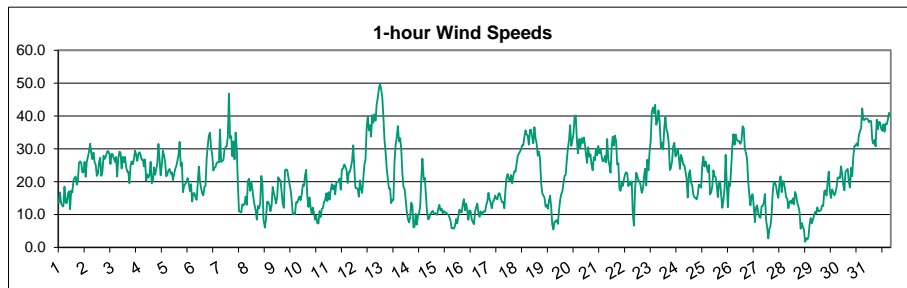
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	-23.3	-23.6	-23.1	-22.6	-21.5	-21.4	-21.3	-21.1	-21.1	-20.7	-19.9	-18.7	-17.2	-17.6	-18.6	-19.5	-20.8	-21.3	-21.9	-22.5	-23.5	-24.8	-24.2	-24.1	-21.4	-17.2
2	-24.3	-24.7	-25.1	-25.5	-25.3	-25.4	-25.8	-26.0	-26.1	-25.9	-25.0	-23.3	-21.4	-20.1	-18.7	-18.4	-19.5	-20.0	-19.3	-19.5	-20.2	-20.6	-20.8	-20.8	-22.6	-18.4
3	-14.9	-8.9	-7.8	-7.9	-7.6	-7.0	-7.6	-7.6	-7.5	-6.9	-6.0	-4.8	-4.0	-3.5	-3.2	-3.7	-4.2	-4.2	-4.3	-5.1	-5.6	-6.0	-6.7	-7.3	-6.3	-3.2
4	-8.0	-9.0	-9.3	-9.5	-10.5	-11.0	-11.1	-11.6	-12.5	-12.7	-12.1	-10.5	-9.1	-8.2	-7.7	-8.5	-9.4	-9.6	-8.0	-5.2	-5.6	-6.0	-6.8	-7.0	-9.1	-5.2
5	-7.1	-7.3	-7.6	-8.1	-8.6	-8.9	-9.2	-10.2	-10.7	-10.8	-10.7	-10.1	-9.8	-9.2	-9.0	-9.1	-9.2	-10.3	-11.8	-12.8	-13.4	-14.8	-16.1	-16.9	-10.5	-7.1
6	-17.2	-17.5	-19.0	-20.9	-21.9	-22.3	-22.5	-22.6	-22.7	-22.6	-22.3	-21.5	-21.1	-20.4	-20.0	-19.4	-19.7	-19.5	-19.2	-18.6	-17.7	-15.7	-11.7	-7.3	-19.3	-7.3
7	-4.3	-2.9	-3.1	-2.9	-2.8	-2.4	-1.9	-1.5	-1.8	-1.3	-1.3	-1.2	-0.4	-0.1	-0.3	-0.3	-0.5	-0.7	-1.4	-1.8	-1.9	-1.8	-2.1	-2.2	-1.7	-0.1
8	-2.4	-2.1	-2.0	-2.4	-2.8	-3.3	-3.7	-4.4	-4.9	-5.4	-4.2	-2.8	-1.4	-0.5	-0.6	0.2	-0.4	-0.9	0.1	-0.2	-1.0	-1.6	-1.9	-1.7	-2.1	0.2
9	-2.3	-3.0	-3.3	-1.7	-2.5	-3.1	-3.6	-3.9	-3.8	-4.2	-3.6	-2.7	-2.4	-1.9	-1.4	-1.5	-1.7	-2.1	-3.8	-6.0	-5.9	-7.1	-9.8	-9.0	-3.8	-1.4
10	-9.5	-6.6	-5.7	-4.4	-4.9	-6.3	-7.2	-7.8	-8.3	-6.8	-5.7	-3.4	-2.7	-2.2	-1.7	-1.3	-1.6	-2.8	-3.4	-3.7	-4.2	-3.8	-4.3	-4.8	-4.7	-1.3
11	-5.5	-5.9	-6.4	-7.0	-8.3	-8.4	-10.1	-11.2	-11.7	-12.2	-12.4	-10.4	-8.7	-8.4	-8.5	-9.1	-10.8	-12.8	-14.1	-14.5	-14.7	-14.1	-14.1	-14.3	-10.6	-5.5
12	-14.0	-13.9	-13.5	-12.8	-12.3	-12.0	-11.8	-11.6	-12.1	-12.2	-11.5	-10.0	-8.6	-7.5	-7.6	-8.2	-8.9	-9.2	-8.7	-7.9	-8.4	-8.6	-9.0	-10.4	-10.4	-7.5
13	-9.7	-9.9	-10.3	-9.5	-8.9	-8.4	-7.1	-7.2	-6.1	-5.4	-4.9	-4.1	-3.1	-2.1	-1.4	-1.0	-1.1	-1.6	-2.3	-3.1	-3.9	-4.0	-4.2	-4.4	-5.1	-1.0
14	-4.9	-5.1	-5.1	-5.1	-5.1	-5.0	-4.0	-3.1	-3.1	-3.5	-3.6	-3.3	-2.8	-2.6	-2.7	-3.3	-5.1	-6.4	-7.3	-8.2	-8.3	-9.2	-9.3	-10.1	-5.3	-2.6
15	-10.4	-11.0	-11.4	-12.2	-12.4	-13.0	-13.4	-14.0	-14.3	-14.7	-14.0	-12.3	-10.6	-9.6	-9.0	-8.5	-8.7	-8.9	-8.9	-9.2	-9.8	-10.2	-11.0	-10.9	-11.2	-8.5
16	-10.7	-10.9	-10.0	-10.1	-10.4	-10.4	-9.9	-9.5	-9.3	-8.9	-8.7	-8.1	-7.2	-5.8	-5.4	-4.6	-4.2	-4.6	-5.2	-5.8	-5.9	-6.3	-6.2	-6.5	-7.7	-4.2
17	-6.5	-6.4	-6.7	-7.9	-9.3	-10.7	-12.3	-13.9	-15.1	-15.7	-16.2	-16.4	-16.3	-16.7	-17.1	-17.2	-17.7	-18.7	-19.2	-19.8	-20.2	-20.8	-21.5	-21.7	-15.2	-6.4
18	-21.7	-21.9	-22.3	-22.5	-22.8	-23.1	-23.5	-23.6	-23.8	-23.7	-23.6	-23.4	-23.0	-22.9	-23.0	-23.4	-23.8	-24.1	-24.3	-24.8	-25.1	-25.2	-25.3	-25.7	-23.6	-21.7
19	-26.2	-26.6	-27.2	-28.4	-30.3	-31.6	-32.5	-33.6	-33.9	-33.8	-30.6	-28.7	-27.5	-27.2	-26.7	-26.7	-28.1	-29.8	-31.3	-32.2	-33.1	-33.5	-33.8	-33.1	-30.3	-26.2
20	-32.3	-32.6	-33.1	-33.6	-33.5	-32.8	-32.3	-31.8	-31.5	-30.7	-30.5	-29.6	-28.8	-28.7	-28.5	-28.3	-28.4	-28.3	-28.3	-28.3	-28.7	-29.3	-29.7	-30.6	-30.4	-28.3
21	-31.3	-30.8	-30.7	-31.4	-31.9	-32.1	-32.4	-33.0	-33.2	-32.5	-30.8	-30.0	-28.7	-27.7	-27.8	-28.4	-30.0	-30.9	-30.8	-29.6	-29.2	-29.7	-30.1	-30.4	-30.5	-27.7
22	-31.0	-31.7	-32.3	-33.1	-33.4	-33.7	-33.9	-34.0	-33.8	-33.6	-33.0	-30.7	-28.4	-26.6	-25.3	-24.6	-24.2	-23.7	-23.8	-23.8	-23.8	-24.1	-24.0	-24.2	-28.8	-23.7
23	-23.9	-23.5	-23.0	-22.3	-21.9	-21.6	-21.3	-21.0	-20.6	-20.1	-19.6	-18.6	-17.4	-15.3	-13.7	-13.6	-12.2	-12.4	-12.3	-12.7	-12.7	-12.5	-12.3	-12.0	-17.4	-12.0
24	-12.0	-11.9	-11.4	-11.3	-11.4	-11.3	-10.9	-11.0	-10.9	-10.4	-9.8	-8.7	-7.5	-6.9	-5.7	-4.2	-3.9	-4.4	-3.8	-4.1	-4.5	-4.4	-3.9	-2.5	-7.8	-2.5
25	-0.8	-0.4	0.1	1.8	3.0	3.2	1.9	0.8	0.1	-0.1	0.1	0.9	2.2	2.5	2.3	2.5	2.0	2.0	1.7	1.6	2.0	2.1	1.5	2.0	1.5	3.2
26	1.6	1.4	2.2	2.8	1.6	1.6	1.8	2.7	4.8	5.0	6.6	8.5	9.3	10.3	8.6	4.6	7.4	7.8	7.7	7.2	6.6	6.4	6.4	6.4	5.4	10.3
27	6.0	5.2	4.2	3.0	2.7	2.2	1.1	0.3	-0.2	0.1	0.7	1.4	2.1	3.2	4.5	5.0	4.9	4.8	4.4	4.5	4.3	3.9	3.9	4.2	3.2	6.0
28	4.4	4.1	3.6	3.3	2.9	2.9	1.5	-2.3	-2.4	-2.4	-2.4	-1.8	-0.7	-0.2	0.0	-0.3	-0.7	-1.2	-1.9	-2.2	-2.4	-2.9	-3.4	-0.3	4.4	
29	-3.6	-3.7	-3.2	-1.8	-0.9	-0.8	-0.7	-1.0	-1.1	-1.0	-0.3	0.9	1.4	1.1	1.0	0.8	0.3	0.2	-0.1	-0.4	-0.6	-0.8	-1.1	-1.3	-0.7	1.4
30	-1.3	-1.6	-1.9	-1.9	-2.4	-2.9	-3.2	-3.1	-3.4	-3.5	-3.0	-2.1	-1.3	-1.1	-1.2	-0.7	-0.7	-0.6	-0.6	-0.9	-1.3	-1.6	-1.6	-1.6	-1.8	-0.6
31	-1.4	-1.3	-1.0	-1.3	-1.5	-1.0	-1.5	-1.7	-1.6	-1.7	-1.2	-0.6	0.7	1.5	1.8	2.0	1.5	1.1	0.9	0.6	0.4	0.0	-0.4	-0.6	-0.3	2.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	-11.2	-11.1	-11.1	-11.2	-11.5	-11.6	-11.9	-12.2	-12.3	-12.2	-11.6	-10.5	-9.5	-8.9	-8.6	-8.7	-9.0	-9.4	-9.7	-10.0	-10.2	-10.5	-10.7	-10.7		
MAX	6.0	5.2	4.2	3.3	3.0	3.2	1.9	2.7	4.8	5.0	6.6	8.5	9.3	10.3	8.6	5.0	7.4	7.8	7.8	7.7	7.2	6.6	6.4	6.4		



Number of Non-Zero Readings	744
Maximum 1-HR Average	10.3 C
Maximum 24-HR Average	5.4 C
Monthly Calibration	0
Standard Deviation	10.76
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	-10.6 C

Lagoon Wind Speed (km/hr) – January 2023

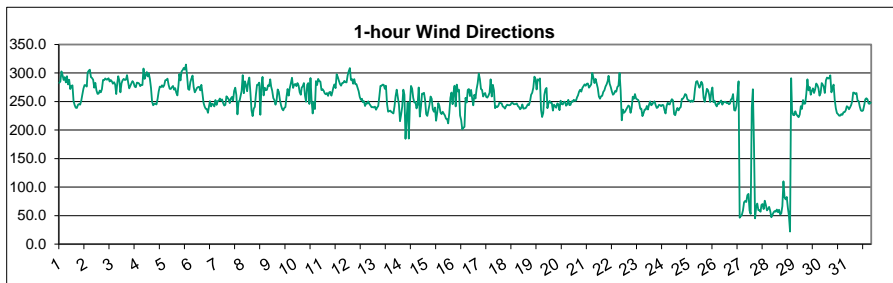
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.6	16.8	13.3	12.8	12.4	18.5	13.6	13.5	16.2	17.1	11.6	17.3	16.8	20.3	21.2	21.6	19.1	20.4	25.7	26.2	25.8	22.9	22.8	26.1	18.6	26.2
2	21.5	26.2	27.6	29.2	31.5	28.8	26.9	28.8	25.9	25.1	21.8	22.5	26.0	27.3	21.8	23.2	27.9	26.9	27.8	29.2	29.3	28.5	25.4	28.5	26.6	31.5
3	28.3	27.1	26.1	27.6	21.6	27.1	29.1	28.9	24.0	27.6	25.9	27.6	24.6	23.1	23.0	19.5	24.8	26.2	25.3	26.8	29.4	28.3	26.3	28.3	26.1	29.4
4	29.0	28.1	26.7	26.8	24.6	26.8	20.3	22.3	21.3	22.1	26.1	19.6	20.2	24.3	22.1	23.8	25.7	31.5	26.7	21.9	25.2	29.5	27.9	26.1	24.9	31.5
5	21.6	22.2	23.6	23.9	22.5	22.9	20.5	22.2	23.8	24.8	26.3	28.2	32.1	24.8	25.8	16.8	18.8	19.4	19.9	21.1	19.4	17.1	19.2	13.9	22.1	32.1
6	16.5	16.5	15.4	14.5	19.3	24.6	20.2	18.1	16.4	15.8	18.3	18.8	26.9	30.9	34.0	34.9	30.2	28.3	23.4	24.2	24.5	25.7	26.0	25.9	22.9	34.9
7	35.9	26.0	26.4	26.5	29.7	30.5	30.8	33.8	46.8	33.3	33.9	27.8	32.3	26.8	35.0	30.0	19.3	11.0	10.8	10.6	13.1	12.8	13.3	15.5	25.5	46.8
8	13.0	20.2	20.9	17.2	20.1	17.7	15.0	12.8	11.2	8.5	12.6	11.9	13.4	21.8	19.1	8.4	6.1	8.6	14.0	13.8	13.0	11.0	12.7	18.4	14.2	21.8
9	16.6	15.2	13.4	15.3	21.4	20.5	20.4	17.0	13.4	12.1	23.4	23.7	23.6	21.6	19.5	17.6	14.6	10.1	10.4	10.2	13.7	13.6	14.7	15.5	16.6	23.7
10	14.3	16.0	19.0	18.7	21.9	23.6	15.7	12.3	15.2	12.3	10.2	12.1	10.4	8.5	9.7	7.3	7.3	11.1	9.2	11.7	12.0	13.8	14.4	16.5	13.5	23.6
11	14.1	16.8	14.6	17.4	19.3	17.7	18.9	16.2	19.5	20.0	20.0	20.9	17.6	23.7	24.0	25.3	24.6	23.6	19.6	22.9	23.1	24.6	26.4	31.1	20.9	31.1
12	24.0	18.1	18.0	17.9	15.5	20.4	17.8	16.6	20.9	25.2	26.6	36.2	39.9	35.7	37.2	33.7	40.3	37.9	40.5	38.6	43.5	45.6	48.4	49.9	31.2	49.9
13	48.1	45.9	40.0	32.8	29.0	24.0	21.0	18.0	17.9	13.5	14.4	14.4	26.1	31.3	33.6	37.0	32.2	33.3	30.1	22.8	18.5	17.9	14.6	10.9	26.1	48.1
14	8.7	7.6	9.2	13.6	12.8	6.1	6.3	10.2	6.9	9.6	10.4	12.4	20.9	27.0	20.6	21.1	15.5	10.7	8.5	9.0	10.2	10.7	11.2	10.4	12.1	27.0
15	10.3	10.3	9.9	11.8	12.9	11.2	11.8	10.5	11.1	10.6	10.6	10.2	9.9	9.2	8.2	5.8	5.9	5.7	6.5	8.6	7.3	9.5	11.5	10.9	9.6	12.9
16	10.6	13.2	14.7	11.3	13.3	11.4	8.4	11.3	10.9	8.6	7.7	7.1	10.9	12.2	13.4	10.5	9.3	11.0	10.0	10.6	11.1	10.9	12.8	14.0	11.1	14.7
17	16.6	14.7	13.4	11.9	14.0	14.5	15.8	14.8	14.6	16.4	16.5	15.0	13.7	13.9	11.9	17.4	21.2	22.4	20.9	20.3	22.1	19.6	21.7	23.2	16.9	23.2
18	23.0	25.4	27.8	28.5	29.1	29.9	31.1	31.1	33.7	35.7	34.4	34.0	31.3	35.8	35.8	33.5	31.7	36.6	33.2	31.6	27.9	29.2	27.0	19.8	30.7	36.6
19	16.6	15.8	15.3	12.4	13.0	11.8	14.2	15.7	12.3	7.0	5.5	7.9	7.8	8.3	7.1	11.3	14.3	16.2	17.0	19.5	21.8	22.1	26.5	30.2	14.6	30.2
20	32.7	37.2	30.9	32.5	34.7	39.7	40.1	33.0	28.7	33.0	30.2	33.2	31.8	33.5	31.5	28.3	25.7	30.5	27.7	28.4	25.2	23.5	27.4	26.5	31.1	40.1
21	30.1	28.0	30.9	28.6	30.0	27.8	26.2	26.2	27.8	25.9	33.0	26.8	25.1	22.7	30.4	33.8	30.9	34.0	32.3	25.3	25.7	17.8	17.2	19.8	27.4	34.0
22	18.7	20.5	22.2	22.9	22.5	18.6	20.1	19.1	20.1	10.1	6.6	17.9	22.7	21.8	20.4	20.0	18.8	16.6	17.7	21.5	24.0	18.9	26.7	23.5	19.7	26.7
23	29.1	32.4	41.0	42.6	40.9	43.4	37.4	38.5	41.7	38.5	30.1	31.8	29.9	36.5	39.6	35.8	34.8	31.5	23.6	24.2	26.4	30.8	31.8	27.7	34.2	43.4
24	28.5	30.0	27.6	23.9	28.2	27.0	25.2	25.1	23.1	20.8	15.2	22.4	23.5	19.7	18.9	16.2	15.3	15.0	14.6	16.2	19.1	18.6	18.2	24.9	21.5	30.0
25	27.6	24.6	26.1	24.8	23.0	25.1	16.1	16.8	18.7	23.5	21.8	21.4	19.0	15.3	19.4	20.2	15.9	12.1	14.4	18.0	28.2	19.3	12.3	19.9	20.1	28.2
26	18.7	24.6	31.1	34.5	31.2	34.4	32.7	32.4	31.5	32.5	36.9	36.3	30.0	28.8	26.9	20.2	16.0	12.8	15.8	16.2	12.4	7.7	12.1	25.3	36.9	
27	12.8	10.5	9.2	9.0	12.4	12.7	13.5	16.3	8.4	6.0	2.7	5.6	6.6	10.1	16.9	20.0	19.7	18.7	16.4	15.1	19.4	21.6	16.8	20.2	13.4	21.6
28	19.6	17.7	15.3	14.8	11.9	13.9	14.2	13.4	14.9	13.2	16.9	15.9	13.6	12.5	10.8	5.8	7.5	6.4	5.3	1.7	2.8	2.4	3.2	6.9	10.9	19.6
29	8.9	7.4	8.4	9.8	10.9	10.3	12.2	11.0	11.4	12.7	12.6	17.1	17.3	15.8	19.9	23.0	16.9	15.0	17.7	16.9	15.9	16.6	18.3	14.1	23.0	
30	21.3	21.3	21.0	24.7	22.5	19.0	17.3	23.1	23.5	23.9	19.9	18.3	24.2	21.7	27.6	30.9	30.9	31.7	30.9	34.3	35.3	36.3	42.4	38.9	26.7	42.4
31	38.8	39.3	39.2	39.1	38.1	38.5	38.5	32.7	31.6	32.8	30.8	38.9	36.0	38.2	38.1	36.2	35.5	37.5	35.2	37.7	37.5	39.0	40.9	40.0	37.1	40.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	21.6	21.8	21.9	21.9	22.3	22.5	21.0	20.7	20.8	19.9	19.6	20.9	22.3	22.8	23.3	22.3	21.5	21.2	20.2	20.5	21.5	21.0	21.4	22.4		
MAX	48.1	45.9	41.0	42.6	40.9	43.4	40.1	38.5	46.8	38.5	34.4	38.9	39.9	38.2	39.6	37.0	40.3	37.9	40.5	38.6	43.5	45.6	48.4	49.9		



Number of Non-Zero Readings	744
Maximum 1-HR Average	49.9 KM/HR
Maximum 24-HR Average	37.1 KM/HR
Operational Time	744 HRS
Monthly Calibration	0
Operational Uptime	100.0 %
Standard Deviation	9.11
Monthly Average	21.5 KM/HR

Lagoon Wind Direction (°) – January 2023

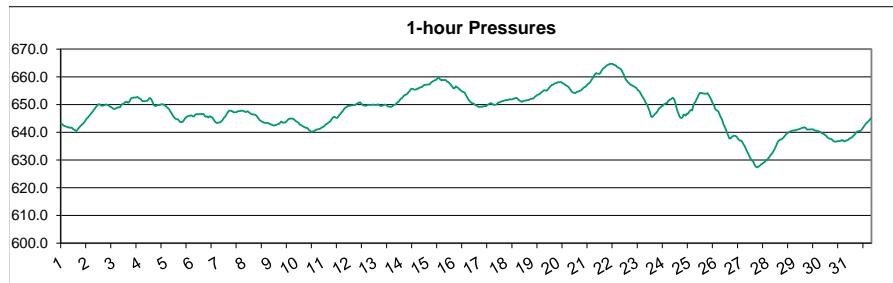
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	282.9	285.1	302.7	296.1	287.9	292.8	283.5	294.2	280.0	288.1	272.0	277.1	278.3	250.5	243.7	239.3	238.7	244.2	245.7	244.4	251.6	262.3	272.8	278.9	267.1	302.7
2	278.3	276.1	301.0	304.1	306.0	292.7	291.4	288.1	274.3	282.8	269.7	263.5	264.0	269.4	266.1	272.0	287.6	287.2	290.5	288.6	288.5	290.9	285.2	287.9	284.5	306.0
3	285.3	281.1	283.8	280.0	263.1	283.2	294.2	287.0	266.1	282.1	287.5	289.6	287.7	288.2	296.4	283.9	272.9	277.2	282.1	285.9	282.8	276.0	275.2	283.0	282.4	296.4
4	282.8	281.6	276.9	279.4	279.0	307.7	289.6	295.5	301.5	293.9	299.2	289.8	273.7	249.6	243.3	245.9	246.5	244.8	254.7	267.6	276.0	275.2	278.6	275.5	275.0	307.7
5	278.4	287.2	287.7	289.9	279.3	272.2	271.9	274.9	277.5	270.8	273.4	265.4	260.6	278.8	298.3	286.9	302.8	305.2	308.9	306.0	314.6	295.2	271.8	270.4	283.3	314.6
6	284.3	290.6	295.5	275.4	266.0	269.6	273.9	275.4	275.7	269.6	279.4	263.9	247.5	240.9	237.0	236.8	230.4	242.2	250.8	241.6	246.2	245.0	241.4	252.7	255.2	295.5
7	244.0	250.6	251.6	255.4	251.9	253.9	247.1	243.1	244.1	259.3	257.0	253.8	247.2	255.4	257.9	251.3	268.5	274.3	261.6	227.7	249.4	251.8	259.2	268.3	252.5	274.3
8	296.3	264.4	285.6	279.0	268.2	285.2	292.1	264.9	234.3	224.4	237.7	240.7	262.1	279.1	279.6	283.3	268.8	276.5	293.1	260.9	274.3	269.9	270.5	278.3	271.1	296.3
9	276.9	288.8	276.5	268.9	256.0	252.5	244.7	252.3	271.0	267.0	253.2	243.9	237.3	234.6	238.7	240.4	258.6	271.9	260.5	273.7	282.2	291.5	273.7	279.6	259.2	291.5
10	280.9	276.9	282.3	278.0	266.2	261.9	274.2	277.1	282.5	260.2	249.5	279.3	282.4	245.8	291.2	252.4	229.1	249.6	236.8	285.9	278.8	289.5	285.9	285.0	272.4	291.2
11	270.0	271.7	269.0	264.3	262.8	265.0	259.9	266.0	266.9	260.4	265.8	274.7	280.1	273.4	297.8	293.3	286.5	280.9	277.9	282.4	282.7	286.1	284.0	283.5	276.5	297.8
12	296.0	303.2	308.7	287.7	289.3	281.0	289.3	280.5	280.3	274.1	267.9	257.9	252.9	254.9	248.8	250.7	242.2	247.4	246.4	250.3	245.7	242.8	240.0	240.3	258.3	308.7
13	239.6	241.2	235.7	239.4	242.2	258.8	277.5	277.6	279.7	279.1	272.3	277.9	245.8	232.3	233.4	233.9	231.2	230.6	228.9	241.8	259.7	270.7	257.5	245.0	245.9	279.7
14	215.6	227.2	240.9	270.9	262.0	184.6	222.0	248.5	185.0	247.4	277.4	272.8	256.4	248.3	249.7	238.1	244.6	274.8	223.7	240.1	263.9	263.7	265.2	252.7	249.0	277.4
15	228.0	224.8	234.6	244.6	258.7	254.8	236.4	232.2	239.6	216.5	230.4	247.2	242.1	230.5	227.8	232.0	228.7	225.5	220.0	219.5	211.8	229.7	256.3	265.7	236.5	265.7
16	245.2	268.2	277.7	241.3	279.5	267.5	270.9	225.6	217.3	201.3	204.1	205.4	256.6	248.2	270.4	271.8	259.7	270.2	255.4	243.3	262.0	255.3	271.7	282.0	255.6	282.0
17	298.8	289.2	272.1	270.2	258.7	263.4	265.1	258.0	257.0	260.2	265.3	289.1	258.9	279.3	269.5	238.2	241.8	240.2	242.5	248.0	247.2	246.7	241.6	240.3	257.5	298.8
18	237.5	241.9	244.6	243.7	243.5	244.3	247.5	245.1	245.2	245.7	246.5	242.2	240.2	236.5	238.6	244.8	237.7	238.0	238.3	241.3	245.3	243.8	243.8	250.3	242.8	250.3
19	261.9	265.2	274.2	293.7	289.5	271.0	288.9	286.8	290.6	235.8	222.8	229.7	261.5	271.2	274.0	238.5	246.9	251.1	247.7	247.7	233.9	244.4	241.8	239.1	257.8	293.7
20	246.7	244.8	234.7	251.5	245.5	244.8	249.7	249.4	242.5	244.8	253.2	243.9	244.3	250.4	249.7	253.1	250.9	251.9	257.7	260.7	267.1	270.7	267.1	273.8	251.2	273.8
21	276.9	279.9	277.8	281.0	281.6	274.4	276.9	280.1	300.1	291.9	282.4	289.6	281.5	273.3	258.9	255.0	259.2	260.1	266.9	269.5	276.2	280.1	285.8	295.2	276.3	300.1
22	281.2	275.4	267.6	262.0	263.7	268.5	267.2	275.3	277.7	300.0	268.9	217.1	236.1	230.1	232.2	236.0	239.5	243.0	241.4	230.4	239.3	258.4	263.1	263.1	254.1	300.0
23	255.3	253.7	252.5	248.5	237.5	237.4	224.5	229.5	236.2	235.9	242.1	236.1	244.5	250.4	243.5	245.4	248.9	250.2	243.6	238.6	239.7	244.2	243.6	242.0	242.5	255.3
24	244.3	243.7	235.3	229.2	242.3	248.0	245.4	244.9	250.6	254.3	251.7	227.8	225.8	233.8	238.7	234.4	238.2	240.1	254.4	255.0	257.9	263.0	262.0	254.0	244.3	263.0
25	252.2	251.5	249.0	251.8	249.4	253.5	272.5	284.6	285.9	279.6	274.4	277.9	284.6	280.5	256.3	249.5	261.1	272.5	270.1	262.2	249.2	266.5	274.6	248.8	263.2	285.9
26	251.4	244.6	241.4	247.1	246.2	249.5	251.9	244.4	248.0	249.7	249.5	247.1	248.0	245.2	246.3	253.5	255.4	263.2	234.9	234.2	241.7	261.4	285.3	46.6	248.7	285.3
27	49.1	51.4	59.4	73.4	75.8	73.7	85.8	88.1	58.7	53.1	238.8	271.6	175.2	45.5	65.9	71.0	59.5	59.5	56.8	68.9	70.3	61.4	76.3	68.9	67.1	271.6
28	59.4	62.0	65.5	58.0	47.1	51.4	55.8	58.2	56.9	60.8	56.3	60.3	52.3	53.8	66.4	110.1	81.8	78.4	82.8	64.0	49.5	22.1	290.9	234.7	59.8	290.9
29	226.5	226.1	232.9	227.5	224.9	222.4	227.0	241.9	237.2	252.5	246.0	246.4	263.9	289.0	269.6	275.4	261.7	268.9	273.1	264.9	271.1	281.6	278.9	273.6	258.5	289.0
30	260.4	264.9	282.4	280.0	276.3	265.0	287.0	292.1	290.3	290.5	295.8	266.1	273.3	279.5	253.5	238.3	229.8	228.1	225.4	225.1	227.8	226.8	231.5	231.5	253.6	295.8
31	234.6	242.0	240.1	236.5	239.7	244.0	251.4	265.7	265.4	263.0	265.0	251.6	250.8	241.2	234.4	233.2	234.3	243.3	253.7	255.6	253.9	246.5	246.2	248.4	247.0	265.7
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	249.1	250.2	252.9	251.9	249.7	248.2	252.1	252.6	249.0	248.2	253.4	251.7	249.0	243.3	244.4	241.4	239.0	244.9	242.8	242.7	246.3	248.9	258.5	249.6		
MAX	298.8	303.2	308.7	304.1	306.0	307.7	294.2	295.5	301.5	300.0	299.2	289.8	287.7	289.0	298.3	293.3	302.8	305.2	308.9	306.0	314.6	295.2	290.9	295.2		



Number of Non-Zero Readings	744
Maximum 1-HR Average	315 degrees
Maximum 24-HR Average	285 degrees
Monthly Calibration	0
Standard Deviation	51
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	248.3 degrees

Lagoon Pressure (mmHg) – January 2023

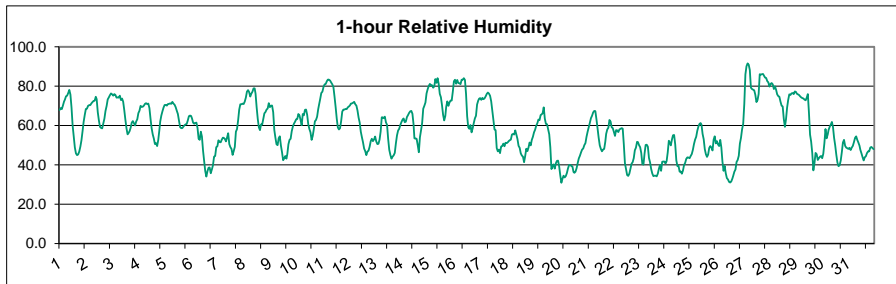
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	643.3	643.0	642.5	642.4	642.3	642.0	641.9	641.9	641.7	641.7	641.6	641.1	641.0	640.7	640.5	641.0	641.5	642.0	642.5	642.8	643.2	643.6	644.1	644.8	642.2	644.8
2	645.2	645.6	646.1	646.6	647.1	647.5	648.1	648.6	649.2	649.7	650.1	650.2	649.9	649.6	649.6	649.7	649.9	650.1	650.0	649.8	649.6	649.3	649.1	648.7	648.7	650.2
3	648.5	648.5	648.6	648.8	649.1	649.0	649.1	649.9	650.2	650.2	650.7	650.9	651.2	650.8	650.8	651.4	652.2	652.4	652.6	652.6	652.6	652.6	652.8	652.4	650.7	652.8
4	652.3	652.0	651.5	651.2	651.3	651.2	651.3	651.5	651.8	652.5	652.3	651.6	650.7	649.9	649.5	649.6	649.9	649.9	649.8	650.0	650.2	650.1	650.1	649.7	650.8	652.5
5	649.5	649.1	648.8	648.4	647.6	647.1	646.3	645.8	645.2	644.9	644.8	644.7	644.3	643.7	643.7	644.1	644.7	645.2	645.5	645.8	646.0	646.0	646.1	645.9	649.5	649.5
6	646.0	645.7	645.8	646.4	646.6	646.5	646.6	646.6	646.6	646.6	646.7	646.4	645.7	645.7	645.7	645.4	645.8	645.8	645.5	645.2	644.5	643.9	643.5	643.4	645.7	646.7
7	643.5	643.6	643.6	644.0	644.4	645.0	645.5	646.0	646.8	647.3	647.8	647.9	647.7	647.7	647.3	647.3	647.3	647.3	647.3	647.7	647.6	647.8	647.9	647.7	646.5	647.9
8	647.6	647.3	647.5	647.7	647.3	647.0	646.8	646.6	646.5	646.5	646.3	646.1	645.6	645.0	644.5	644.1	644.0	643.8	643.6	643.4	643.4	643.4	643.1	645.4	647.7	647.7
9	643.0	642.8	642.6	642.5	642.6	642.7	642.8	643.0	643.1	643.6	643.9	643.6	643.5	643.5	643.8	644.0	644.5	644.9	645.0	645.0	645.0	644.9	644.6	644.2	643.7	645.0
10	643.9	643.7	643.2	642.8	642.7	642.4	642.1	642.0	641.7	641.7	641.5	641.0	640.6	640.4	640.1	640.4	640.4	640.7	641.0	641.0	641.2	641.2	641.3	641.8	641.6	643.9
11	642.0	642.1	642.6	642.9	643.1	643.5	643.8	644.0	644.7	645.3	645.6	645.6	645.3	645.2	645.6	646.2	646.6	647.1	647.6	648.1	648.6	649.0	649.2	649.5	645.6	649.5
12	649.5	649.6	649.7	649.7	649.8	649.9	650.0	650.2	650.5	650.7	650.9	650.5	650.1	649.8	649.7	649.6	649.6	649.9	649.9	649.9	650.0	649.9	650.0	650.0	650.0	650.0
13	650.0	649.9	650.0	650.1	649.8	649.6	649.6	649.7	649.9	650.0	650.0	649.7	649.4	649.3	649.2	649.2	649.5	649.8	650.0	650.2	650.6	651.0	651.2	651.9	650.0	651.9
14	652.3	652.5	653.1	653.5	653.6	653.8	654.1	654.6	655.0	655.6	655.8	655.6	655.4	655.4	655.5	655.8	655.9	656.2	656.3	656.4	656.8	657.1	657.2	657.2	655.2	657.2
15	657.2	657.2	657.3	657.8	658.2	658.5	658.7	658.9	659.0	659.4	659.8	659.5	659.1	658.8	658.9	658.8	658.9	658.8	658.4	658.2	657.8	657.5	657.5	656.9	658.3	659.8
16	655.9	656.0	656.6	656.4	656.1	655.7	655.4	655.0	654.7	654.5	654.4	653.7	653.0	652.2	651.6	651.2	650.8	650.5	650.5	650.2	649.9	649.7	649.4	649.3	653.0	656.6
17	649.2	649.2	649.3	649.4	649.4	649.5	649.5	649.9	650.1	650.3	650.6	650.4	650.1	650.0	649.9	650.0	650.4	650.7	650.8	651.0	651.2	651.3	651.4	651.6	650.2	651.6
18	651.7	651.6	651.7	651.9	651.9	651.9	652.1	652.3	652.4	652.4	652.4	652.0	651.6	651.4	651.1	651.1	651.3	651.5	651.4	651.6	651.7	651.7	651.9	652.1	651.8	652.4
19	652.2	652.2	652.5	653.0	653.2	653.5	653.7	653.8	654.2	654.6	654.9	655.2	655.2	655.0	655.3	655.8	656.2	656.7	657.1	657.2	657.5	657.7	657.7	658.0	655.1	658.0
20	658.1	658.1	658.1	658.1	657.7	657.5	657.3	657.0	656.8	656.6	656.2	655.6	655.0	654.6	654.3	654.2	654.3	654.6	654.7	654.8	655.0	655.2	655.6	656.0	656.1	658.1
21	656.3	656.4	657.0	657.3	657.6	658.0	658.6	659.2	659.8	660.6	661.2	661.4	661.2	661.2	661.2	661.5	661.5	662.3	662.9	663.3	663.5	664.0	664.3	664.6	660.7	664.6
22	664.7	664.7	664.7	664.4	664.3	664.0	663.6	663.4	663.2	663.0	662.5	661.7	660.9	659.9	659.1	658.6	658.2	657.8	657.4	657.2	657.0	656.7	656.4	656.3	660.8	664.7
23	655.9	655.3	655.0	654.5	653.7	653.1	652.5	651.9	650.9	650.3	649.5	648.5	647.5	646.0	645.5	645.8	646.3	646.8	647.0	647.7	648.3	648.8	649.0	649.5	650.0	655.9
24	649.6	650.1	650.3	650.5	650.5	651.3	651.6	651.9	652.1	652.5	652.2	651.4	649.9	648.2	647.2	646.0	645.4	645.2	645.4	646.5	646.3	646.1	646.8	646.7	648.9	652.5
25	647.4	647.9	648.2	647.9	649.5	650.6	651.0	652.0	652.7	653.6	654.3	654.2	654.1	654.0	654.0	653.9	654.0	654.2	653.6	654.0	652.2	651.2	650.3	649.7	651.8	654.3
26	648.5	648.1	648.2	647.5	646.5	645.5	644.8	643.8	642.7	641.9	641.0	639.8	638.9	637.9	637.7	638.2	638.5	638.8	638.8	638.7	638.3	637.8	637.2	637.0	641.5	648.5
27	637.0	636.5	635.6	635.1	634.2	633.3	632.5	631.8	630.8	630.3	629.7	629.4	628.5	627.9	627.5	627.4	627.7	628.0	628.4	628.6	628.9	629.1	629.5	629.9	630.7	637.0
28	630.2	630.7	631.3	631.9	632.2	632.9	633.5	634.4	635.2	636.2	636.9	637.3	637.4	637.6	637.9	638.3	638.9	639.3	639.6	639.9	640.2	640.3	640.4	640.6	636.4	640.6
29	640.7	640.8	640.8	641.0	641.1	641.2	641.3	641.4	641.7	641.7	641.9	641.6	641.2	641.0	641.1	641.0	641.1	641.1	641.0	640.7	640.7	640.6	640.5	640.4	641.1	641.9
30	640.3	640.0	639.7	639.6	639.4	639.0	638.8	638.2	638.0	637.7	637.7	637.5	637.1	636.8	636.6	636.7	636.8	636.9	636.9	637.0	637.1	637.2	636.8	636.8	637.9	640.3
31	637.1	637.1	637.3	637.7	637.9	638.0	638.4	638.8	639.2	639.6	640.2	640.4	640.5	640.4	640.7	641.2	641.9	642.4	643.0	643.3	643.7	644.2	644.6	645.2	640.5	645.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	648.0	648.0	648.0	648.1	648.1	648.1	648.1	648.2	648.3	648.4	648.5	648.2	647.8	647.4	647.3	647.3	647.5	647.8	647.9	647.9	648.0	648.0	648.0	648.1		
MAX	664.7	664.7	664.7	664.4	664.3	664.0	663.6	663.4	663.2	663.0	662.5	661.7	661.2	661.2	661.2	661.5	662.3	662.9	663.3	663.5	664.0	664.3	664.4	664.6		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	665 MMHg		
Maximum 24-HR Average	661 MMHg		
Operational Time	744 HRS		
Operational Uptime	100.0 %		
Monthly Calibration	0		
Standard Deviation	7.206	Monthly Average	648.0 MMHg

Lagoon Relative Humidity (%) – January 2023

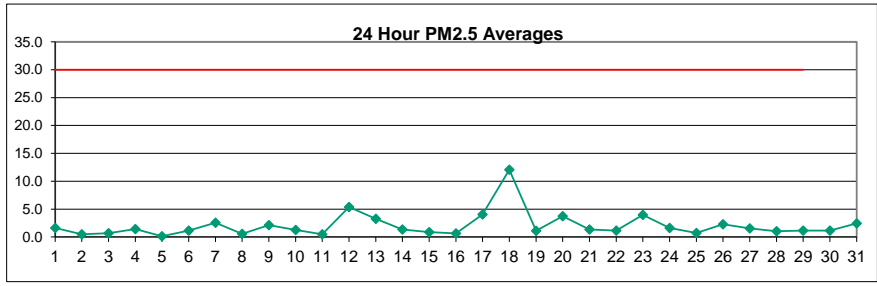
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	67.8	68.9	68.3	70.2	72.1	73.2	74.8	75.2	76.5	78.1	75.8	69.1	60.0	54.5	48.8	45.9	44.9	45.3	46.7	49.2	52.4	57.1	61.9	65.4	62.6	78.1
2	68.5	68.5	70.0	70.4	70.3	71.3	71.9	72.5	72.6	74.6	73.3	66.8	62.6	59.3	58.8	58.6	61.1	63.5	67.5	69.9	73.2	74.2	75.4	76.3	68.8	76.3
3	75.9	75.1	76.0	75.5	74.2	74.3	74.2	75.1	72.9	73.7	72.1	67.9	63.1	58.6	55.5	56.1	57.1	58.9	61.5	62.3	61.1	60.0	62.0	63.1	66.9	76.0
4	66.3	67.6	70.0	69.4	69.5	70.1	71.0	71.4	70.9	71.1	68.9	63.4	58.6	55.5	53.3	50.6	51.0	49.6	52.6	57.5	62.0	65.0	67.1	69.2	63.4	71.4
5	70.4	70.5	70.1	70.9	71.1	71.2	71.0	72.0	71.1	70.6	69.4	67.5	65.9	62.5	59.2	58.7	58.6	59.5	60.1	60.6	60.8	62.6	64.7	65.0	66.0	72.0
6	64.8	63.6	61.4	60.9	61.2	61.5	58.8	53.3	52.7	56.9	54.4	47.4	42.1	36.9	34.0	36.8	38.6	38.6	35.8	37.6	39.7	44.2	44.5	49.0	48.9	64.8
7	49.4	52.4	51.6	51.4	52.9	53.8	53.7	53.1	51.9	53.9	56.1	50.6	49.0	48.1	45.0	47.0	49.2	56.9	58.2	62.5	68.0	70.8	70.8	71.1	55.3	71.1
8	70.9	72.1	74.2	77.2	77.9	77.0	74.7	76.2	77.2	78.9	78.9	76.1	69.2	63.4	59.1	57.7	60.6	60.5	63.3	66.2	66.9	68.1	68.6	71.3	70.3	78.9
9	69.3	70.1	70.1	66.7	57.8	53.8	50.4	50.0	53.6	54.5	49.8	46.4	42.4	43.2	44.5	43.2	45.5	50.5	52.7	53.3	57.0	59.4	60.9	61.9	54.5	70.1
10	63.1	63.2	65.9	65.2	62.9	60.1	65.8	65.2	67.9	68.1	65.4	60.6	58.3	56.5	52.7	54.6	58.1	62.1	62.8	64.5	68.3	70.6	73.4	76.6	63.8	76.6
11	77.2	79.5	80.8	81.1	82.5	83.4	83.2	82.8	81.8	80.9	79.4	74.6	69.4	63.5	59.0	58.0	58.6	62.3	67.1	68.1	68.1	68.4	68.3	69.3	72.8	83.4
12	69.7	70.3	71.2	71.2	71.6	72.0	70.7	70.1	67.6	64.1	61.5	56.9	54.1	51.5	48.4	47.0	45.0	46.8	47.2	49.3	52.0	53.2	52.0	53.0	59.0	72.0
13	54.4	51.9	50.6	50.7	52.8	56.9	64.2	64.1	63.7	64.5	61.6	60.3	53.2	47.7	45.0	43.1	44.1	44.9	46.1	50.9	55.0	57.4	58.3	60.3	54.2	64.5
14	61.7	62.9	63.6	61.7	61.9	64.3	65.3	66.4	67.1	67.4	65.9	60.7	53.5	53.4	53.3	50.0	46.4	54.1	57.5	61.2	68.5	70.0	71.7	76.2	61.9	76.2
15	78.5	80.1	81.1	80.6	80.5	79.2	79.9	83.5	81.7	84.1	81.1	76.1	74.4	70.3	65.4	62.5	64.8	69.5	72.3	70.0	71.7	72.7	72.7	77.2	75.4	84.1
16	82.4	83.3	81.2	83.2	81.5	81.4	81.1	83.3	83.3	84.0	83.1	76.0	64.7	59.1	58.3	60.2	56.5	58.5	61.2	63.6	64.9	70.6	72.5	73.6	72.8	84.0
17	73.9	73.1	74.0	73.4	73.9	74.9	76.1	76.7	76.1	75.0	72.3	67.6	62.8	58.0	57.7	48.5	46.8	47.8	46.0	49.4	49.5	50.8	49.4	51.2	62.7	76.7
18	51.0	51.4	52.1	52.6	52.9	55.4	55.8	55.4	57.5	55.4	53.2	49.7	48.6	45.9	44.8	44.2	41.4	44.5	48.2	46.9	48.8	51.4	49.9	52.7	50.4	57.5
19	54.3	56.6	57.8	59.9	61.2	63.0	62.6	65.3	65.7	66.2	69.2	63.5	60.8	60.7	58.1	55.5	48.8	37.8	39.1	40.2	38.1	40.8	42.1	42.1	54.6	69.2
20	39.2	34.7	30.9	33.0	34.5	33.6	34.3	35.8	38.2	39.9	40.0	39.5	39.2	36.4	36.0	36.5	38.3	40.9	43.2	44.6	46.3	47.8	48.3	50.0	39.2	50.0
21	51.1	54.3	56.8	59.1	61.4	63.7	64.9	66.6	67.5	67.3	63.1	58.6	53.8	49.9	48.1	46.9	47.7	48.1	51.6	55.8	58.0	58.8	62.8	62.0	57.4	67.5
22	59.1	58.7	56.8	54.7	57.7	57.5	56.6	58.0	58.3	58.7	58.4	50.4	40.9	37.9	34.8	34.4	35.5	38.0	40.6	41.3	43.4	47.4	48.7	51.7	49.1	59.1
23	51.6	50.0	49.0	46.1	40.4	40.1	45.8	50.2	50.2	49.2	43.5	41.2	37.9	35.6	34.3	34.5	34.5	34.2	35.5	37.9	40.0	37.0	41.6	41.7	41.7	51.6
24	41.6	40.7	41.9	46.3	52.3	51.4	49.9	52.8	55.0	55.2	50.3	42.2	39.4	39.4	36.5	36.6	35.5	37.1	39.8	41.1	43.0	43.8	43.7	43.3	44.1	55.2
25	44.5	45.5	47.6	50.6	52.8	54.3	57.3	59.5	60.8	61.2	60.5	55.7	53.1	48.0	45.4	44.0	45.1	48.5	49.5	48.8	47.4	52.9	54.5	50.9	51.6	61.2
26	52.0	50.4	49.6	52.7	48.9	41.7	37.0	39.4	35.8	33.2	32.6	31.3	31.0	31.6	33.1	34.5	36.6	37.6	41.5	42.4	44.6	50.8	53.7	58.0	41.7	58.0
27	60.8	71.0	86.0	90.2	91.5	90.9	88.2	79.2	78.5	78.3	77.9	75.7	71.9	73.0	76.0	86.1	85.8	86.1	86.2	85.2	84.3	84.2	82.5	81.9	81.3	91.5
28	79.8	81.1	81.5	80.9	78.6	79.9	78.3	75.8	75.0	74.6	72.2	70.1	69.6	63.4	59.4	63.2	69.1	73.0	75.9	75.5	76.3	76.5	76.0	77.4	74.3	81.5
29	77.0	76.2	75.8	75.5	74.8	74.2	73.9	73.7	73.1	72.9	74.2	75.9	66.5	55.3	51.8	46.1	37.2	40.8	46.1	45.4	42.5	43.4	44.2	44.5	60.9	77.0
30	43.4	45.7	51.0	58.3	53.5	55.4	57.8	59.4	60.4	61.8	59.2	53.7	49.9	45.1	41.3	39.3	39.8	42.1	46.4	51.4	52.7	49.7	48.8	48.5	50.6	61.8
31	48.1	48.7	47.5	48.8	49.6	51.6	53.7	54.6	52.7	51.4	49.8	47.6	45.8	44.0	42.2	43.9	44.4	46.0	46.9	46.9	48.7	49.1	48.5	48.0	48.3	54.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	61.9	62.5	63.4	64.1	64.0	64.2	64.6	65.0	65.1	65.3	63.6	59.5	55.2	51.9	49.7	49.2	49.2	51.1	53.2	54.8	56.6	58.4	59.3	60.7		
MAX	82.4	83.3	86.0	90.2	91.5	90.9	88.2	83.5	83.3	84.1	83.1	76.1	74.4	73.0	76.0	86.1	85.8	86.1	86.2	85.2	84.3	84.2	82.5	81.9		



Number of Non-Zero Readings	744
Maximum 1-HR Average	91.5 %
Maximum 24-HR Average	81.3 %
Monthly Calibration	0
Standard Deviation	13.38
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	58.9 %

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

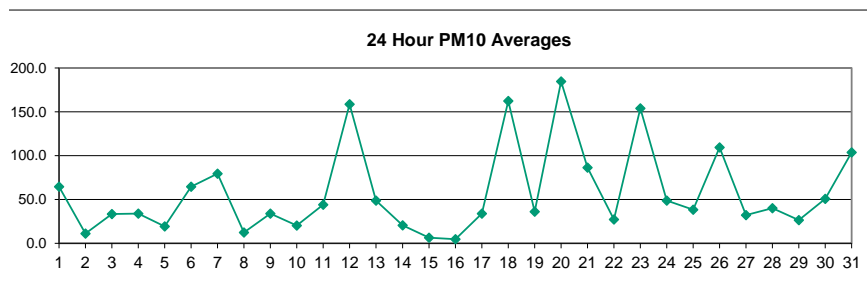
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	3.0	3.0	3.0	5.0	6.0	6.0	3.0	2.0	4.0	1.0	0.0	1.6	6.0
2	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	1.0	0.0	1.0	1.0	0.0	0.5	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	2.0	3.0	1.0	3.0	4.0	2.0	1.0	0.0	0.7	4.0
4	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	1.0	2.0	4.0	5.0	4.0	2.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	1.4	5.0
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	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0	2.0	3.0	5.0	4.0	2.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	1.2	5.0
7	0.0	3.0	5.0	4.0	1.0	1.0	1.0	1.0	12.0	8.0	9.0	6.0	2.0	0.0	1.0	3.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	0.0	2.5	12.0
8	0.0	1.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	1.0	3.0	1.0	0.0	0.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.0
9	0.0	0.0	0.0	0.0	1.0	3.0	2.0	0.0	0.0	0.0	5.0	8.0	8.0	C	9.0	9.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	9.0
10	0.0	0.0	0.0	2.0	6.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	5.0	5.0	2.0	0.0	0.0	2.0	2.0	0.0	1.3	6.0
11	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.0	0.5	5.0
12	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	5.0	7.0	8.0	6.0	4.0	11.0	22.0	12.0	8.0	4.0	3.0	7.0	9.0	7.0	8.0	7.0	5.4	22.0
13	8.0	6.0	3.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	13.0	17.0	10.0	6.0	1.0	2.0	3.0	2.0	0.0	0.0	0.0	3.3	17.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	7.0	4.0	2.0	7.0	4.0	0.0	0.0	2.0	2.0	2.0	1.3	7.0
15	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.0	0.0	4.0	4.0	1.0	0.0	1.0	0.9	4.0
16	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0	4.0	3.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.6	4.0
17	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	6.0	6.0	6.0	10.0	13.0	8.0	4.0	4.0	15.0	18.0	4.0	18.0
18	7.0	7.0	17.0	13.0	10.0	11.0	14.0	8.0	14.0	8.0	6.0	16.0	24.0	16.0	22.0	19.0	7.0	13.0	11.0	15.0	11.0	11.0	6.0	4.0	12.1	24.0
19	5.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	0.0	0.0	1.0	2.0	4.0	4.0	3.0	3.0	1.1	5.0
20	1.0	1.0	3.0	4.0	3.0	2.0	12.0	6.0	5.0	6.0	6.0	8.0	5.0	3.0	2.0	2.0	0.0	0.0	1.0	4.0	5.0	3.0	3.0	5.0	3.8	12.0
21	8.0	6.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	4.0	3.0	1.0	1.0	1.0	1.0	1.3	8.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	3.0	1.0	5.0	7.0	2.0	0.0	1.0	0.0	0.0	1.0	0.0	1.2	7.0
23	0.0	0.0	7.0	5.0	3.0	3.0	2.0	3.0	4.0	2.0	3.0	6.0	14.0	10.0	6.0	10.0	7.0	1.0	0.0	0.0	2.0	4.0	1.0	1.0	4.0	14.0
24	0.0	0.0	4.0	3.0	2.0	0.0	0.0	0.0	0.0	1.0	1.0	3.0	2.0	8.0	7.0	3.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.6	8.0
25	1.0	1.0	0.0	1.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	2.0	3.0	1.0	0.0	0.0	0.7	3.0
26	0.0	1.0	2.0	0.0	0.0	4.0	10.0	9.0	10.0	7.0	4.0	2.0	1.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	10.0
27	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	4.0	5.0	3.0	7.0	7.0	2.0	0.0	1.0	0.0	1.0	2.0	2.0	1.0	1.5	7.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	4.0	2.0	2.0	1.0	6.0	3.0	1.0	6.0
29	3.0	3.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	2.0	4.0	3.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	1.0	1.0	3.0	2.0	1.2	4.0
30	1.0	7.0	7.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	1.2	7.0
31	0.0	3.0	2.0	1.0	2.0	0.0	0.0	3.0	2.0	0.0	2.0	3.0	4.0	4.0	1.0	0.0	5.0	3.0	1.0	4.0	6.0	5.0	2.0	6.0	2.5	6.0
NO.	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	743	100.0%
MEAN	1.3	1.5	1.7	1.3	1.0	1.2	1.5	1.2	1.8	1.5	1.8	2.5	2.5	3.7	4.3	3.3	3.0	2.4	1.9	2.2	1.9	1.8	2.2	1.8	7.5	
MAX	8.0	7.0	17.0	13.0	10.0	11.0	14.0	9.0	14.0	8.0	9.0	16.0	24.0	16.0	22.0	19.0	10.0	13.0	13.0	15.0	11.0	11.0	15.0	18.0	17.4	70.0



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	371		
Maximum 1-HR Average	24.0 UG/M3		
Maximum 24-HR Average	12.1 UG/M3		
Monthly Calibration	1	Operational Time	744 HRS
Standard Deviation	3.4	Operational Uptime	100.0 %
		Monthly Average	2.0 UG/M3

Windridge PM₁₀ (µg/m³) – January 2023

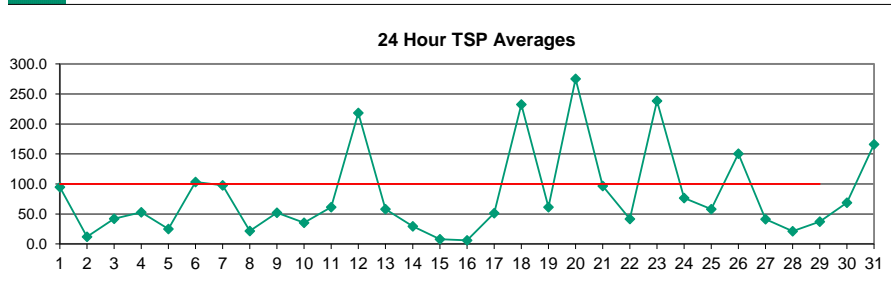
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	6.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	2.0	16.0	36.0	116.0	111.0	120.0	130.0	99.0	224.0	223.0	180.0	113.0	138.0	26.0	64.6	224.0
2	30.0	20.0	38.0	30.0	32.0	4.0	3.0	3.0	3.0	2.0	3.0	6.0	9.0	27.0	14.0	13.0	8.0	6.0	4.0	3.0	4.0	2.0	1.0	6.0	11.3	38.0	
3	4.0	0.0	1.0	0.0	0.0	2.0	1.0	1.0	10.0	9.0	13.0	12.0	11.0	28.0	18.0	14.0	41.0	45.0	36.0	60.0	193.0	130.0	82.0	94.0	33.5	193.0	
4	38.0	28.0	9.0	10.0	7.0	8.0	7.0	5.0	3.0	10.0	16.0	8.0	81.0	124.0	77.0	77.0	58.0	74.0	45.0	30.0	10.0	39.0	39.0	13.0	34.0	124.0	
5	10.0	15.0	8.0	5.0	4.0	4.0	6.0	11.0	10.0	12.0	22.0	30.0	43.0	77.0	30.0	30.0	18.0	19.0	6.0	3.0	2.0	21.0	64.0	14.0	19.3	77.0	
6	17.0	34.0	13.0	7.0	1.0	6.0	17.0	49.0	32.0	15.0	60.0	125.0	89.0	93.0	135.0	115.0	130.0	189.0	133.0	58.0	35.0	66.0	24.0	110.0	64.7	189.0	
7	90.0	60.0	103.0	95.0	87.0	113.0	66.0	76.0	372.0	259.0	125.0	69.0	52.0	104.0	86.0	58.0	20.0	2.0	0.0	22.0	15.0	27.0	6.0	5.0	79.7	372.0	
8	9.0	7.0	5.0	3.0	1.0	0.0	0.0	0.0	0.0	4.0	46.0	44.0	15.0	43.0	82.0	16.0	8.0	6.0	3.0	4.0	1.0	0.0	0.0	0.0	12.4	82.0	
9	8.0	5.0	1.0	0.0	22.0	30.0	43.0	33.0	10.0	18.0	83.0	99.0	84.0	C	99.0	116.0	29.0	8.0	10.0	6.0	16.0	7.0	12.0	44.0	34.0	116.0	
10	11.0	38.0	30.0	61.0	95.0	49.0	52.0	30.0	19.0	7.0	9.0	7.0	7.0	21.0	6.0	15.0	7.0	6.0	7.0	5.0	3.0	1.0	1.0	1.0	20.3	95.0	
11	0.0	2.0	2.0	13.0	9.0	4.0	30.0	3.0	4.0	35.0	19.0	22.0	38.0	122.0	50.0	29.0	13.0	83.0	32.0	80.0	119.0	91.0	158.0	104.0	44.3	158.0	
12	0.0	1.0	3.0	1.0	2.0	10.0	31.0	48.0	176.0	256.0	279.0	364.0	264.0	379.0	365.0	269.0	207.0	174.0	201.0	242.0	134.0	129.0	147.0	126.0	158.7	379.0	
13	103.0	85.0	81.0	61.0	44.0	44.0	47.0	31.0	9.0	11.0	7.0	6.0	80.0	107.0	137.0	87.0	59.0	28.0	42.0	67.0	21.0	9.0	5.0	0.0	48.8	137.0	
14	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	79.0	178.0	69.0	55.0	98.0	4.0	1.0	2.0	3.0	1.0	0.0	1.0	20.7	178.0
15	2.0	1.0	1.0	4.0	3.0	0.0	6.0	51.0	1.0	1.0	2.0	6.0	4.0	4.0	8.0	8.0	11.0	8.0	7.0	12.0	7.0	4.0	2.0	1.0	6.4	51.0	
16	0.0	0.0	0.0	2.0	2.0	1.0	3.0	1.0	0.0	8.0	6.0	11.0	8.0	6.0	9.0	12.0	10.0	7.0	4.0	4.0	4.0	8.0	5.0	3.0	4.8	12.0	
17	2.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	5.0	8.0	8.0	9.0	11.0	15.0	22.0	76.0	67.0	104.0	96.0	54.0	37.0	73.0	101.0	125.0	34.1	125.0	
18	66.0	109.0	129.0	131.0	126.0	120.0	175.0	121.0	219.0	171.0	202.0	217.0	485.0	308.0	191.0	207.0	250.0	173.0	98.0	83.0	90.0	94.0	77.0	60.0	162.6	485.0	
19	28.0	20.0	7.0	4.0	5.0	3.0	0.0	2.0	26.0	12.0	21.0	23.0	22.0	26.0	27.0	56.0	47.0	38.0	58.0	47.0	49.0	109.0	95.0	146.0	36.3	146.0	
20	99.0	125.0	58.0	376.0	76.0	120.0	366.0	194.0	244.0	299.0	193.0	294.0	226.0	179.0	79.0	84.0	69.0	113.0	123.0	212.0	137.0	205.0	203.0	363.0	184.9	376.0	
21	280.0	178.0	162.0	196.0	97.0	37.0	23.0	38.0	74.0	33.0	118.0	60.0	28.0	62.0	112.0	87.0	89.0	99.0	77.0	81.0	69.0	50.0	14.0	13.0	86.5	280.0	
22	13.0	27.0	43.0	24.0	32.0	16.0	4.0	2.0	1.0	9.0	6.0	55.0	22.0	23.0	37.0	48.0	79.0	31.0	25.0	26.0	28.0	24.0	57.0	26.0	27.4	79.0	
23	77.0	72.0	375.0	198.0	181.0	175.0	82.0	94.0	143.0	103.0	79.0	108.0	231.0	485.0	250.0	166.0	266.0	156.0	72.0	111.0	51.0	124.0	61.0	36.0	154.0	485.0	
24	47.0	53.0	84.0	46.0	36.0	21.0	35.0	31.0	43.0	62.0	48.0	69.0	50.0	103.0	80.0	88.0	74.0	49.0	27.0	20.0	36.0	12.0	12.0	44.0	48.8	103.0	
25	42.0	24.0	51.0	18.0	43.0	57.0	35.0	24.0	24.0	43.0	24.0	36.0	41.0	30.0	64.0	67.0	25.0	11.0	10.0	15.0	80.0	20.0	46.0	91.0	38.4	91.0	
26	36.0	123.0	61.0	61.0	38.0	295.0	485.0	278.0	451.0	228.0	91.0	80.0	75.0	81.0	61.0	33.0	21.0	11.0	7.0	53.0	33.0	18.0	7.0	4.0	109.6	485.0	
27	1.0	20.0	9.0	5.0	1.0	0.0	5.0	37.0	1.0	7.0	13.0	15.0	9.0	19.0	91.0	91.0	87.0	48.0	19.0	49.0	54.0	84.0	61.0	48.0	32.3	91.0	
28	33.0	119.0	72.0	64.0	30.0	75.0	61.0	35.0	58.0	50.0	79.0	30.0	53.0	39.0	32.0	24.0	49.0	17.0	9.0	5.0	5.0	5.0	11.0	7.0	40.1	119.0	
29	9.0	14.0	9.0	7.0	6.0	21.0	8.0	4.0	4.0	21.0	50.0	77.0	43.0	63.0	29.0	25.0	80.0	25.0	7.0	27.0	18.0	31.0	36.0	22.0	26.5	80.0	
30	65.0	131.0	134.0	91.0	17.0	8.0	10.0	28.0	34.0	23.0	11.0	41.0	123.0	49.0	96.0	49.0	26.0	29.0	48.0	52.0	50.0	44.0	32.0	29.0	50.8	134.0	
31	32.0	79.0	34.0	30.0	38.0	55.0	106.0	128.0	117.0	146.0	151.0	159.0	111.0	69.0	76.0	38.0	78.0	83.0	228.0	191.0	182.0	107.0	136.0	117.0	103.8	228.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	743	100.0%
MEAN	37.4	45.1	49.2	49.8	33.4	41.3	55.1	43.8	67.6	60.2	57.6	67.8	78.4	99.3	82.0	70.1	69.5	56.3	53.5	59.6	53.7	53.2	52.7	54.2	42.0	42.0	
MAX	280.0	178.0	375.0	376.0	181.0	295.0	485.0	278.0	451.0	299.0	279.0	364.0	485.0	485.0	365.0	269.0	266.0	189.0	228.0	242.0	193.0	205.0	203.0	363.0	91.1	433.3	



Number of Non-Zero Readings	700
Maximum 1-HR Average	485.0 UG/M3
Maximum 24-HR Average	184.9 UG/M3
Monthly Calibration	1
Standard Deviation	75.39
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	57.9 UG/M3

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

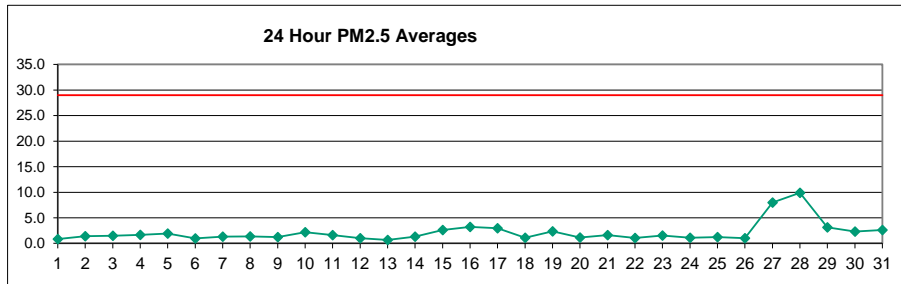
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	10.0	5.0	0.0	0.0	1.0	3.0	2.0	1.0	2.0	2.0	3.0	23.0	49.0	173.0	171.0	187.0	188.0	149.0	368.0	358.0	275.0	155.0	109.0	43.0	94.9	368.0	
2	21.0	34.0	25.0	16.0	15.0	0.0	1.0	2.0	8.0	6.0	6.0	15.0	23.0	44.0	27.0	12.0	10.0	7.0	3.0	1.0	5.0	4.0	2.0	12.0	44.0		
3	4.0	3.0	0.0	0.0	3.0	2.0	4.0	8.0	13.0	9.0	7.0	8.0	11.0	34.0	22.0	21.0	61.0	66.0	57.0	92.0	204.0	154.0	113.0	116.0	42.2	204.0	
4	44.0	29.0	11.0	17.0	9.0	10.0	11.0	7.0	8.0	6.0	8.0	12.0	123.0	195.0	141.0	127.0	103.0	160.0	79.0	53.0	19.0	42.0	42.0	11.0	52.8	195.0	
5	8.0	3.0	0.0	0.0	0.0	2.0	7.0	16.0	12.0	19.0	28.0	44.0	55.0	105.0	26.0	41.0	29.0	35.0	6.0	1.0	0.0	42.0	92.0	26.0	24.9	105.0	
6	28.0	51.0	27.0	4.0	5.0	5.0	34.0	64.0	40.0	26.0	96.0	199.0	134.0	143.0	237.0	203.0	180.0	264.0	256.0	99.0	57.0	97.0	49.0	183.0	103.4	264.0	
7	132.0	69.0	120.0	109.0	133.0	148.0	107.0	86.0	452.0	238.0	154.0	93.0	76.0	106.0	123.0	70.0	23.0	5.0	5.0	36.0	15.0	25.0	5.0	13.0	97.6	452.0	
8	22.0	9.0	5.0	2.0	3.0	3.0	2.0	1.0	0.0	13.0	64.0	67.0	39.0	81.0	142.0	26.0	14.0	7.0	3.0	2.0	0.0	3.0	3.0	8.0	21.6	142.0	
9	18.0	9.0	4.0	2.0	43.0	48.0	61.0	53.0	23.0	33.0	133.0	139.0	122.0	C	136.0	176.0	44.0	10.0	9.0	18.0	15.0	4.0	26.0	71.0	52.0	176.0	
10	29.0	165.0	45.0	80.0	132.0	73.0	81.0	43.0	31.0	13.0	7.0	6.0	12.0	34.0	18.0	27.0	13.0	10.0	17.0	2.0	2.0	1.0	6.0	3.0	35.4	165.0	
11	0.0	4.0	6.0	8.0	8.0	5.0	47.0	6.0	8.0	49.0	28.0	25.0	75.0	198.0	45.0	23.0	30.0	128.0	52.0	119.0	160.0	119.0	209.0	119.0	61.3	209.0	
12	0.0	0.0	2.0	2.0	1.0	17.0	50.0	70.0	237.0	315.0	368.0	473.0	444.0	512.0	488.0	372.0	294.0	254.0	302.0	311.0	186.0	182.0	196.0	170.0	218.6	512.0	
13	132.0	116.0	99.0	71.0	51.0	51.0	50.0	40.0	8.0	11.0	8.0	14.0	90.0	122.0	169.0	103.0	75.0	31.0	46.0	21.0	21.0	8.0	4.0	5.0	58.2	169.0	
14	3.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	1.0	0.0	117.0	227.0	94.0	88.0	143.0	9.0	4.0	2.0	3.0	2.0	0.0	4.0	29.3	227.0	
15	3.0	0.0	0.0	2.0	2.0	3.0	5.0	73.0	5.0	3.0	0.0	8.0	6.0	7.0	13.0	10.0	13.0	10.0	5.0	6.0	8.0	5.0	4.0	1.0	8.0	73.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	17.0	11.0	18.0	8.0	9.0	15.0	16.0	14.0	8.0	6.0	7.0	3.0	4.0	4.0	6.0	18.0	
17	7.0	5.0	2.0	1.0	1.0	3.0	2.0	1.0	18.0	18.0	13.0	14.0	20.0	26.0	24.0	123.0	112.0	165.0	136.0	75.0	48.0	105.0	139.0	171.0	51.2	171.0	
18	82.0	161.0	186.0	191.0	179.0	188.0	267.0	183.0	430.0	245.0	328.0	349.0	471.0	388.0	278.0	292.0	390.0	261.0	151.0	127.0	115.0	129.0	113.0	82.0	232.8	471.0	
19	44.0	21.0	9.0	6.0	3.0	1.0	7.0	10.0	35.0	19.0	38.0	37.0	32.0	40.0	44.0	86.0	80.0	60.0	96.0	74.0	105.0	197.0	165.0	268.0	61.5	268.0	
20	175.0	212.0	98.0	389.0	135.0	227.0	666.0	304.0	402.0	493.0	269.0	541.0	359.0	268.0	127.0	116.0	117.0	189.0	172.0	283.0	170.0	174.0	300.0	418.0	275.2	666.0	
21	252.0	165.0	163.0	172.0	115.0	60.0	36.0	30.0	39.0	34.0	118.0	48.0	44.0	84.0	156.0	129.0	135.0	158.0	102.0	97.0	76.0	79.0	12.0	17.0	96.7	252.0	
22	9.0	33.0	56.0	35.0	39.0	21.0	6.0	9.0	5.0	6.0	5.0	83.0	35.0	40.0	50.0	69.0	121.0	47.0	37.0	46.0	56.0	37.0	110.0	44.0	41.6	121.0	
23	132.0	114.0	497.0	315.0	375.0	401.0	147.0	142.0	227.0	159.0	132.0	172.0	305.0	617.0	428.0	241.0	352.0	239.0	115.0	173.0	87.0	183.0	112.0	62.0	238.6	617.0	
24	86.0	105.0	132.0	66.0	55.0	32.0	49.0	43.0	63.0	98.0	86.0	109.0	81.0	151.0	114.0	132.0	111.0	82.0	42.0	34.0	55.0	17.0	24.0	72.0	76.6	138.0	
25	65.0	43.0	75.0	25.0	69.0	86.0	62.0	38.0	30.0	55.0	47.0	57.0	59.0	45.0	84.0	92.0	33.0	16.0	17.0	18.0	123.0	39.0	75.0	138.0	58.0	138.0	
26	55.0	189.0	106.0	86.0	64.0	355.0	584.0	413.0	583.0	342.0	128.0	121.0	132.0	104.0	84.0	53.0	36.0	23.0	14.0	64.0	45.0	14.0	15.0	4.0	150.6	584.0	
27	5.0	15.0	8.0	6.0	24.0	6.0	25.0	66.0	2.0	6.0	27.0	25.0	12.0	20.0	113.0	132.0	85.0	52.0	31.0	47.0	52.0	133.0	49.0	52.0	41.4	133.0	
28	31.0	73.0	25.0	28.0	13.0	31.0	26.0	19.0	24.0	20.0	24.0	39.0	21.0	15.0	6.0	15.0	12.0	27.0	9.0	7.0	8.0	6.0	15.0	16.0	21.3	73.0	
29	14.0	20.0	13.0	9.0	6.0	43.0	22.0	4.0	10.0	32.0	98.0	74.0	81.0	78.0	34.0	116.0	24.0	7.0	40.0	18.0	33.0	53.0	31.0	31.0	37.3	116.0	
30	92.0	162.0	144.0	95.0	20.0	8.0	5.0	15.0	18.0	20.0	10.0	64.0	168.0	71.0	163.0	85.0	41.0	46.0	89.0	95.0	85.0	48.0	47.0	60.0	68.8	168.0	
31	57.0	105.0	60.0	54.0	59.0	114.0	197.0	185.0	164.0	236.0	226.0	274.0	213.0	129.0	126.0	63.0	132.0	152.0	282.0	271.0	292.0	157.0	231.0	204.0	166.0	292.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100.0%
MEAN	50.3	61.9	61.9	57.8	50.5	62.8	82.7	62.3	93.5	82.1	79.7	101.6	110.2	135.5	119.3	102.1	100.2	86.9	81.2	84.8	74.3	70.9	75.0	78.0			
MAX	252.0	212.0	497.0	389.0	375.0	401.0	666.0	413.0	583.0	493.0	368.0	541.0	471.0	617.0	488.0	372.0	390.0	264.0	368.0	358.0	292.0	197.0	300.0	418.0			



Number of 24HR Exceedences	7	Proposed Guideline
Number of Non-Zero Readings	710	
Maximum 1-HR Average	666.0 UG/M3	
Maximum 24-HR Average	275.2 UG/M3	
IZS Calibration Time		Operational Time 744 HRS
Down Time	0	Operational Uptime 100.0 %
Standard Deviation	105.8	Monthly Average 81.8 UG/M3

West PM_{2.5} (µg/m³) – January 2023

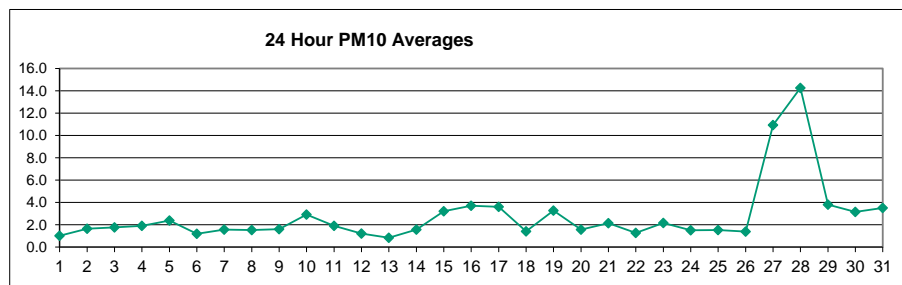
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	1.2	1.7	0.9	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.5	0.4	0.7	1.0	1.1	1.4	1.3	1.0	0.6	0.6	0.7	0.7	0.8	0.9	0.8	1.7	
2	0.7	0.7	0.7	P	0.5	0.7	0.4	0.5	0.6	0.8	1.0	1.3	2.5	1.9	2.1	2.5	3.1	2.5	1.5	1.9	1.8	1.8	1.7	1.4	1.4	3.1	
3	1.3	1.3	1.3	1.5	1.3	1.2	1.1	1.2	1.5	1.6	1.5	1.5	1.4	1.5	1.5	1.4	1.9	1.7	1.8	1.7	1.7	1.8	1.8	1.7	1.5	1.9	
4	1.7	1.6	1.6	1.6	1.5	1.4	1.5	1.6	1.8	2.2	2.6	2.4	2.6	1.9	1.4	1.4	1.6	1.2	1.2	1.3	1.3	1.5	1.8	1.5	1.7	2.6	
5	1.5	1.6	1.2	1.6	1.1	1.3	1.4	1.9	2.1	2.6	2.3	2.3	2.3	2.5	2.5	2.4	2.8	2.9	1.9	2.3	2.1	1.8	1.4	1.0	1.9	2.9	
6	1.2	1.1	1.2	0.8	0.9	0.9	0.8	0.7	1.0	1.3	1.1	1.2	1.4	1.1	1.0	0.6	0.4	0.7	0.7	0.6	0.8	1.3	1.0	1.2	1.0	1.4	
7	0.9	0.7	0.8	0.7	1.1	0.8	0.8	0.8	0.9	1.1	1.9	1.6	1.5	1.4	1.0	0.9	0.7	1.0	1.6	1.8	1.9	2.7	3.1	2.3	1.3	3.1	
8	2.1	1.9	1.8	1.2	0.8	0.9	0.9	1.1	1.3	1.1	1.4	1.6	1.6	1.7	1.2	1.5	1.4	1.2	1.5	1.7	1.3	1.5	1.1	1.0	1.4	2.1	
9	0.7	0.8	0.6	0.5	0.3	0.3	0.5	0.8	0.8	1.9	2.3	2.1	1.4	1.0	0.8	0.5	1.8	4.3	2.5	1.8	1.2	1.2	0.7	0.6	1.2	4.3	
10	0.5	0.5	0.6	0.4	0.4	0.3	0.3	0.3	0.6	1.1	2.0	1.6	2.9	6.5	4.8	3.4	7.0	4.2	3.0	2.7	2.8	2.1	1.9	2.1	2.2	7.0	
11	1.6	1.8	1.4	1.3	1.4	1.5	1.6	1.3	1.5	2.1	2.3	3.3	2.6	2.4	1.7	1.6	1.7	1.4	1.3	1.2	0.9	1.0	0.9	0.7	1.6	3.3	
12	0.7	0.7	0.6	0.8	0.6	0.7	0.7	0.9	0.9	1.1	1.3	1.3	1.9	1.8	1.5	1.5	0.8	0.7	0.7	0.9	1.3	1.3	0.8	0.7	1.0	1.9	
13	0.7	0.5	0.3	0.2	0.2	0.3	0.4	0.3	0.6	0.6	0.8	0.7	1.1	2.0	1.1	1.0	1.2	0.4	0.5	0.5	0.6	0.6	1.2	0.6	0.7	2.0	
14	0.6	0.9	0.6	0.9	0.7	0.6	0.9	0.7	1.2	1.3	0.7	1.3	1.3	1.3	1.7	1.0	0.9	1.3	1.7	2.2	2.9	2.3	2.4	2.2	1.3	2.9	
15	2.2	2.1	2.6	2.0	1.8	1.4	1.5	1.8	1.6	2.2	1.8	1.5	2.5	2.1	3.1	3.4	4.3	3.2	3.1	3.9	4.6	4.5	3.5	2.6	2.6	4.6	
16	1.8	2.1	1.9	2.4	1.3	1.6	3.1	1.3	1.6	1.4	2.2	2.0	2.2	3.2	4.9	6.0	6.1	3.1	3.7	3.5	3.9	6.8	6.0	5.4	3.2	6.8	
17	4.9	4.1	3.1	2.5	2.6	2.5	1.8	2.2	3.0	3.4	3.2	3.9	4.9	5.0	5.5	4.2	3.9	2.5	2.2	1.8	1.5	1.2	1.0	1.0	3.0	5.5	
18	0.8	0.8	0.7	0.7	0.6	0.7	0.6	0.7	0.9	1.1	1.9	1.9	2.0	1.2	1.5	1.6	1.5	1.3	1.2	1.0	0.8	0.9	0.8	0.7	1.1	2.0	
19	0.6	0.7	1.0	1.9	2.3	2.1	1.5	1.9	2.6	5.8	3.4	2.8	4.5	5.8	5.0	3.7	2.5	1.0	1.7	1.5	1.2	1.1	1.3	1.1	2.4	5.8	
20	0.9	0.9	0.9	1.0	0.7	0.6	0.8	1.3	1.5	1.2	1.2	1.5	2.3	1.4	1.1	1.0	1.2	1.3	1.2	0.9	0.9	1.1	1.1	1.5	1.2	2.3	
21	1.4	3.8	3.9	1.9	1.6	1.8	1.2	1.2	1.6	1.3	1.5	1.7	1.5	1.1	1.3	1.3	1.2	1.0	1.3	1.4	1.5	1.6	1.4	1.3	1.6	3.9	
22	1.0	1.0	0.9	0.8	0.9	0.9	0.8	1.0	1.1	1.5	2.2	1.3	1.2	0.9	0.5	0.4	0.6	1.0	1.7	1.2	1.3	1.2	0.8	0.9	1.0	2.2	
23	1.2	0.9	1.4	1.5	1.8	2.7	2.0	1.2	1.2	1.2	1.3	1.4	2.3	3.2	1.6	1.7	2.2	1.8	1.4	1.0	1.0	1.2	0.7	0.7	1.5	3.2	
24	0.9	0.7	0.9	0.3	0.4	0.6	0.5	0.7	0.8	1.4	2.1	1.4	1.5	1.9	1.2	1.5	1.8	1.8	1.2	1.3	1.4	1.0	0.7	0.6	1.1	2.1	
25	0.7	0.6	0.8	0.8	0.8	0.9	0.9	1.3	1.3	1.5	1.7	2.0	2.4	2.1	1.4	1.2	1.1	1.8	1.3	1.1	0.9	1.2	0.9	1.0	1.2	2.4	
26	0.9	0.7	0.5	0.8	0.4	3.0	1.4	0.7	2.2	1.5	0.9	0.7	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	5.5	1.0	5.5	
27	9.4	8.1	12.0	7.0	7.1	9.3	3.3	3.9	7.7	7.4	9.3	6.5	4.9	8.0	10.3	6.0	11.8	10.7	9.2	7.3	7.4	8.6	7.7	8.5	8.0	12.0	
28	12.4	11.2	12.3	13.4	13.9	15.6	15.1	15.5	13.4	11.2	11.9	11.1	11.0	9.0	6.1	3.9	3.6	7.2	6.6	7.9	5.1	7.2	6.9	5.8	9.9	15.6	
29	7.1	7.0	6.6	5.6	4.8	3.1	2.9	2.6	2.7	3.7	4.5	3.5	3.0	2.7	2.4	2.0	1.1	1.5	1.5	1.6	1.5	1.4	1.6	1.1	3.1	7.1	
30	1.1	1.2	2.2	2.6	2.0	1.7	1.8	1.8	2.2	2.6	2.6	2.7	2.3	2.0	1.6	1.6	2.2	2.5	3.0	3.1	3.4	4.0	2.9	3.0	2.3	4.0	
31	2.6	2.4	2.3	2.3	1.9	3.0	3.0	2.5	3.1	3.1	2.5	2.4	3.2	2.3	2.0	2.4	2.5	2.9	5.0	4.3	2.1	2.2	1.7	1.5	2.6	5.0	
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	2.1	2.1	2.2	2.0	1.8	2.0	1.7	1.7	2.1	2.3	2.5	2.3	2.5	2.6	2.4	2.0	2.4	2.2	2.1	2.1	1.9	2.2	1.9	1.9			
MAX	12.4	11.2	12.3	13.4	13.9	15.6	15.1	15.5	13.4	11.2	11.9	11.1	11.0	9.0	10.3	6.0	11.8	10.7	9.2	7.9	7.4	8.6	7.7	8.5			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	743	
Maximum 1-HR Average	15.6 UG/M3	
Maximum 24-HR Average	9.9 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	2.243	Monthly Average
		743 HRS
		99.9 %
		2.1 UG/M3

West PM₁₀ (µg/m³) – January 2023

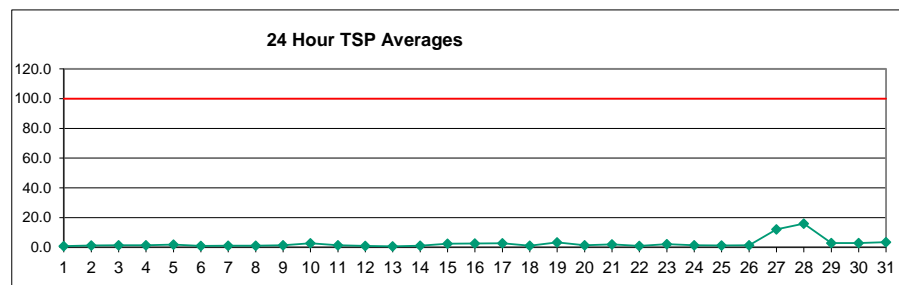
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.3	1.8	0.9	1.0	0.8	0.7	0.5	0.5	0.6	0.7	0.6	0.5	0.9	1.3	1.6	1.9	1.9	1.3	0.8	0.8	0.9	0.9	1.1	1.1	1.0	1.9
2	1.0	0.9	0.9	P	0.6	0.8	0.5	0.6	0.7	0.9	1.2	1.6	2.9	2.3	2.5	3.0	3.7	2.9	1.7	2.1	2.0	1.9	1.8	1.5	1.6	3.7
3	1.4	1.3	1.3	1.5	1.3	1.2	1.2	1.3	1.7	1.9	1.7	1.8	1.6	1.8	1.9	1.9	2.5	2.3	2.3	2.1	2.1	2.2	2.0	2.0	1.8	2.5
4	1.9	1.8	1.8	1.7	1.7	1.5	1.6	1.7	2.0	2.5	3.2	2.9	2.8	2.1	1.6	1.7	1.9	1.4	1.4	1.6	1.4	1.7	2.2	1.7	1.9	3.2
5	1.6	1.6	1.3	1.7	1.2	1.3	1.5	2.2	2.5	3.4	2.8	2.8	2.7	3.2	3.2	3.1	3.6	3.9	2.3	2.9	2.9	2.3	1.7	1.2	2.4	3.9
6	1.5	1.3	1.4	1.0	1.0	1.0	0.9	0.7	1.2	1.5	1.4	1.6	1.8	1.5	1.4	0.9	0.5	0.9	1.0	0.8	0.9	1.5	1.2	1.6	1.2	1.8
7	1.0	0.8	0.9	0.8	1.4	1.0	0.9	0.8	1.2	1.3	2.3	2.0	1.9	1.8	1.3	1.1	0.8	1.2	2.0	2.1	2.1	2.9	3.4	2.4	1.6	3.4
8	2.3	2.0	1.9	1.3	0.8	0.9	0.9	1.1	1.4	1.2	1.5	1.6	1.8	2.2	1.6	1.9	1.9	1.6	1.8	1.8	1.4	1.6	1.1	1.1	1.5	2.3
9	0.7	0.9	0.7	0.5	0.3	0.4	0.7	1.1	1.0	2.6	3.0	2.8	1.9	1.2	0.9	0.6	2.6	6.4	3.7	2.3	1.4	1.4	0.8	0.6	1.6	6.4
10	0.6	0.6	0.7	0.5	0.5	0.3	0.4	0.4	0.7	1.4	2.5	2.1	4.1	9.6	7.0	5.0	10.4	6.2	4.0	3.4	3.2	2.3	2.0	2.2	2.9	10.4
11	1.6	2.0	1.5	1.4	1.5	1.6	1.7	1.4	1.7	2.6	3.0	4.2	3.2	2.7	2.1	1.9	2.1	1.6	1.6	1.5	1.1	1.3	1.1	0.8	1.9	4.2
12	0.7	0.7	0.7	0.8	0.7	0.7	0.8	1.0	1.2	1.3	1.7	1.5	2.5	2.5	2.0	1.9	1.0	0.9	0.8	1.1	1.4	1.4	0.9	0.8	1.2	2.5
13	0.8	0.5	0.3	0.2	0.2	0.3	0.4	0.4	0.7	0.7	1.0	0.9	1.4	2.8	1.4	1.4	1.7	0.5	0.6	0.6	0.6	0.7	1.4	0.7	0.8	2.8
14	0.7	1.0	0.6	1.0	0.7	0.6	1.0	0.8	1.4	1.7	0.9	1.8	1.8	1.8	2.1	1.3	1.1	1.7	2.2	2.7	3.4	2.6	2.5	2.3	1.6	3.4
15	2.3	2.2	2.8	2.1	1.9	1.5	1.6	2.0	1.7	2.4	1.9	1.7	2.6	2.6	4.6	5.0	6.4	4.7	4.5	5.3	5.8	5.1	3.6	2.7	3.2	6.4
16	1.8	2.2	2.0	2.5	1.3	1.7	3.2	1.3	1.8	1.7	3.0	2.5	2.8	4.2	6.1	7.2	8.1	4.1	4.5	4.0	4.2	7.1	6.2	5.5	3.7	8.1
17	5.0	4.1	3.1	2.5	2.7	2.7	1.8	2.3	3.3	4.5	3.8	4.6	6.2	6.5	7.5	6.2	5.7	3.4	3.0	2.2	1.8	1.3	1.1	1.1	3.6	7.5
18	0.8	0.9	0.8	0.8	0.7	0.9	0.7	0.9	1.1	1.5	2.7	2.7	2.8	1.7	2.0	2.2	2.1	1.7	1.6	1.2	1.0	1.0	0.9	0.8	1.4	2.8
19	0.7	0.8	1.1	2.1	2.5	2.3	1.7	2.4	3.6	8.6	5.0	3.9	6.8	8.4	8.7	5.2	3.4	1.3	2.3	1.8	1.5	1.5	1.7	1.3	3.3	8.7
20	1.0	1.0	1.1	1.2	0.8	0.8	1.1	1.8	2.2	1.7	1.7	2.1	3.4	2.0	1.6	1.3	1.6	1.7	1.6	1.2	1.2	1.4	1.5	2.1	1.6	3.4
21	1.9	5.7	5.7	2.7	2.2	2.5	1.6	1.5	2.2	1.7	2.0	2.3	2.0	1.4	1.6	1.6	1.6	1.2	1.6	1.7	1.8	2.1	1.6	1.5	2.2	5.7
22	1.1	1.1	1.0	0.9	1.0	0.9	0.9	1.2	1.3	1.9	3.0	1.6	1.6	1.2	0.6	0.5	0.7	1.2	2.3	1.6	1.5	1.5	0.9	1.2	1.3	3.0
23	1.6	1.2	2.0	2.1	2.6	4.0	2.9	1.7	1.6	1.6	1.7	1.9	3.4	4.8	2.3	2.4	3.3	2.5	1.9	1.3	1.3	1.7	0.9	1.0	2.2	4.8
24	1.3	1.0	1.2	0.4	0.5	0.9	0.6	1.0	1.0	1.9	2.4	1.9	2.2	2.8	1.7	2.1	2.6	2.6	1.6	1.7	1.9	1.2	0.9	0.7	1.5	2.8
25	0.8	0.6	0.8	0.9	0.9	0.9	1.1	1.8	1.7	1.9	2.3	2.6	3.3	2.8	1.7	1.5	1.3	2.4	1.6	1.3	1.0	1.3	1.1	1.3	1.5	3.3
26	1.1	0.9	0.6	1.0	0.4	4.4	2.0	1.0	3.3	2.1	1.2	0.9	0.7	0.6	0.5	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.6	8.2	1.4	8.2
27	14.1	11.3	17.5	9.5	9.2	12.8	4.8	5.6	10.9	10.0	13.1	9.6	7.1	10.2	13.5	8.1	16.7	15.1	12.3	9.6	9.4	10.7	9.4	12.0	10.9	17.5
28	18.3	16.2	17.3	19.6	20.4	22.8	22.0	22.5	19.7	16.5	17.5	16.2	16.4	13.2	8.1	5.2	4.7	9.5	9.3	10.8	7.4	10.4	10.0	8.1	14.3	22.8
29	9.6	9.4	8.7	6.5	5.5	3.3	3.1	2.7	2.8	3.8	4.7	3.8	3.8	3.7	3.3	2.7	1.4	1.9	1.9	2.0	1.8	1.7	2.0	1.3	3.8	9.6
30	1.4	1.5	3.0	3.8	2.8	2.2	2.4	2.4	3.0	3.6	3.5	3.7	3.0	2.7	2.0	1.9	2.7	3.1	4.1	4.4	4.8	5.8	4.0	4.1	3.2	5.8
31	3.5	3.2	3.1	3.1	2.4	4.0	4.1	3.2	4.3	4.2	3.3	3.2	4.4	2.9	2.6	3.1	3.3	3.9	7.3	6.3	2.6	2.6	1.9	1.7	3.5	7.3
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	2.7	2.6	2.8	2.5	2.3	2.6	2.2	2.2	2.7	3.0	3.2	3.0	3.3	3.5	3.2	2.7	3.3	3.0	2.8	2.7	2.4	2.6	2.3	2.4		
MAX	18.3	16.2	17.5	19.6	20.4	22.8	22.0	22.5	19.7	16.5	17.5	16.2	16.4	13.2	13.5	8.1	16.7	15.1	12.3	10.8	9.4	10.7	10.0	12.0		



Number of Non-Zero Readings	743		
Maximum 1-HR Average	22.8 UG/M3		
Maximum 24-HR Average	14.3 UG/M3		
IZS Calibration Time		OperatioEI Time	743 HRS
Down Time	0	OperatioEI Uptime	99.9 %
Standard Deviation	3.2	Monthly Average	2.8 UG/M3

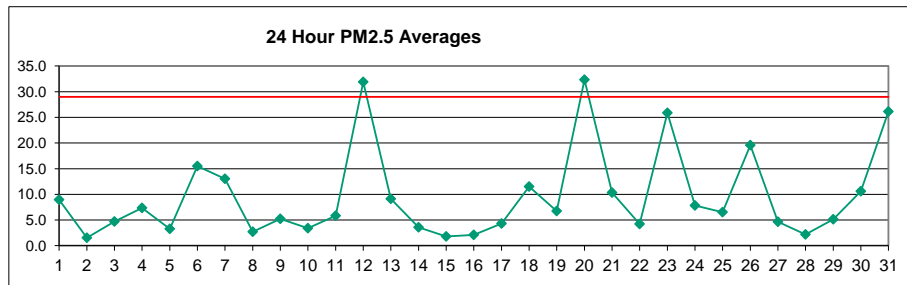
West TSP ($\mu\text{g}/\text{m}^3$) – January 2023

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	0.9	1.2	0.6	0.7	0.6	0.5	0.3	0.3	0.4	0.5	0.4	0.3	0.7	1.1	1.5	1.9	1.8	1.2	0.7	0.6	0.8	0.8	1.0	1.0	0.8	1.9
2	0.9	0.8	0.9	P	0.5	0.5	0.3	0.4	0.5	0.7	0.8	1.2	2.1	1.6	1.8	2.1	2.6	2.0	1.1	1.4	1.4	1.3	1.2	0.9	1.2	2.6
3	0.9	0.9	0.9	1.0	0.9	0.8	0.8	0.8	1.3	1.4	1.3	1.3	1.2	1.3	1.6	1.6	2.4	2.1	2.0	1.7	1.7	1.9	1.5	1.5	1.4	2.4
4	1.3	1.3	1.3	1.2	1.3	1.0	1.1	1.2	1.4	1.7	2.4	2.2	1.9	1.4	1.1	1.2	1.4	1.1	1.0	1.2	1.0	1.3	1.8	1.2	1.4	2.4
5	1.1	1.1	0.8	1.1	0.8	0.9	1.0	1.5	1.8	2.8	2.2	2.1	1.9	2.6	2.6	2.9	3.0	3.7	1.8	2.4	2.7	2.1	1.5	0.8	1.9	3.7
6	1.3	1.0	1.2	0.7	0.7	0.7	0.6	0.5	0.8	1.2	1.0	1.2	1.4	1.3	1.3	0.7	0.5	0.9	1.0	0.6	0.7	1.2	0.8	1.3	1.0	1.4
7	0.7	0.5	0.7	0.6	1.4	0.8	0.7	0.6	1.0	1.0	1.8	1.5	1.5	1.5	1.1	0.8	0.6	0.9	1.6	1.4	1.4	1.9	2.2	1.6	1.2	2.2
8	1.5	1.3	1.2	0.8	0.5	0.6	0.6	0.7	0.9	0.8	1.0	1.1	1.2	1.8	1.2	1.6	1.6	1.1	1.4	1.2	0.9	1.1	0.7	0.7	1.1	1.8
9	0.5	0.6	0.4	0.4	0.2	0.2	0.6	0.9	0.9	2.2	2.6	2.2	1.5	0.9	0.6	0.4	2.7	7.0	3.5	1.9	1.0	1.0	0.6	0.4	1.4	7.0
10	0.5	0.5	0.5	0.4	0.4	0.2	0.3	0.3	0.5	1.1	2.0	1.8	4.2	10.7	7.3	5.2	11.5	6.4	3.1	2.5	2.2	1.5	1.3	1.4	2.7	11.5
11	1.1	1.3	1.0	0.9	1.0	1.0	1.1	0.9	1.1	2.0	2.3	3.2	2.3	1.9	1.6	1.5	1.7	1.2	1.2	1.2	0.9	1.2	1.0	0.6	1.4	3.2
12	0.5	0.5	0.4	0.6	0.5	0.5	0.6	0.8	1.0	1.1	1.5	1.2	2.3	2.3	1.8	1.6	0.8	0.8	0.7	0.8	1.0	0.9	0.7	0.7	1.0	2.3
13	0.5	0.4	0.2	0.1	0.1	0.2	0.3	0.2	0.5	0.5	0.9	0.7	1.2	2.5	1.2	1.2	1.4	0.4	0.4	0.4	0.4	0.5	0.9	0.5	0.6	2.5
14	0.4	0.7	0.4	0.7	0.5	0.4	0.7	0.5	1.1	1.5	0.6	1.6	1.5	1.4	1.4	1.0	0.9	1.3	1.6	2.0	2.2	1.7	1.6	1.5	1.1	2.2
15	1.5	1.4	1.8	1.4	1.2	1.0	1.1	1.3	1.1	1.6	1.3	1.1	1.7	1.9	4.7	5.1	6.4	4.2	4.0	3.9	3.9	3.5	2.3	1.7	2.5	6.4
16	1.2	1.4	1.3	1.6	0.9	1.1	2.1	0.9	1.3	1.3	2.4	1.9	2.0	3.3	4.4	5.1	6.4	3.4	3.2	2.7	2.8	4.7	4.0	3.6	2.6	6.4
17	3.2	2.7	2.0	1.6	1.7	1.8	1.2	1.5	2.2	3.6	2.6	3.1	4.5	4.8	6.1	6.4	5.9	2.9	2.6	1.7	1.3	0.9	0.8	0.7	2.7	6.4
18	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.9	1.3	2.4	2.5	2.8	1.6	1.8	2.1	2.1	1.4	1.2	1.0	0.8	0.7	0.6	0.5	1.2	2.8
19	0.5	0.5	0.7	1.5	1.7	1.5	1.1	2.1	3.3	9.7	5.3	3.7	7.0	8.0	15.7	4.5	3.1	1.2	2.0	1.4	1.1	1.3	1.4	0.9	3.3	15.7
20	0.7	0.7	0.8	1.0	0.6	0.6	1.0	1.8	2.3	1.7	1.5	2.1	3.5	2.0	1.4	1.2	1.5	1.5	1.4	1.1	1.0	1.3	1.5	2.1	1.4	3.5
21	1.9	6.3	6.3	2.8	2.1	2.5	1.4	1.3	2.1	1.4	1.8	2.0	1.9	1.1	1.3	1.3	1.3	1.0	1.3	1.4	1.5	1.8	1.2	1.1	2.0	6.3
22	0.7	0.8	0.8	0.6	0.7	0.6	0.7	0.8	0.9	1.6	2.8	1.2	1.3	1.0	0.4	0.3	0.5	1.0	1.8	1.2	1.1	1.2	0.7	0.9	1.0	2.8
23	1.5	1.1	2.0	2.1	2.7	4.5	3.0	1.6	1.4	1.4	1.5	1.7	3.7	5.4	2.4	2.6	3.6	2.6	1.9	1.2	1.1	1.8	0.8	0.9	2.2	5.4
24	1.2	0.9	1.2	0.3	0.3	0.6	0.5	0.8	0.8	1.7	1.8	1.6	2.0	2.8	1.7	2.1	2.8	2.8	1.3	1.4	1.6	0.9	0.6	0.5	1.3	2.8
25	0.6	0.4	0.5	0.6	0.6	0.6	0.9	1.7	1.3	1.6	1.9	2.1	2.9	2.3	1.2	1.0	1.0	2.2	1.2	0.9	0.7	1.0	0.9	1.1	1.2	2.9
26	0.8	0.7	0.4	0.8	0.3	4.9	2.1	0.8	3.6	2.2	1.1	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	9.3	1.3	9.3
27	16.1	12.8	20.0	10.0	10.5	14.6	4.6	5.8	12.1	10.7	11.7	9.6	6.8	11.6	15.6	8.9	19.3	16.9	14.2	10.5	10.6	12.3	10.5	13.3	12.1	20.0
28	21.1	18.7	20.0	22.7	23.6	26.4	25.6	26.1	22.9	18.9	20.2	18.7	18.7	14.7	8.7	4.7	4.4	10.3	9.8	12.0	6.9	10.6	9.6	7.1	15.9	26.4
29	7.5	7.0	6.6	4.8	4.1	2.1	2.0	1.8	1.8	2.5	3.0	2.5	3.1	3.2	3.0	2.4	1.1	1.6	1.5	1.6	1.4	1.3	1.5	1.0	2.9	7.5
30	1.0	1.1	2.9	4.0	2.7	2.0	2.2	1.9	2.5	3.1	3.0	3.2	2.4	2.2	1.6	1.5	2.1	2.4	4.0	4.6	5.0	6.4	4.2	4.4	2.9	6.4
31	3.5	3.3	3.0	3.1	2.1	4.1	4.2	3.1	4.4	4.4	3.1	3.0	4.5	2.6	2.2	2.7	2.9	3.8	8.1	7.0	2.4	2.0	1.4	1.2	3.4	8.1
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	2.4	2.3	2.6	2.3	2.1	2.5	2.0	2.0	2.5	2.8	2.8	2.7	3.0	3.3	3.2	2.5	3.2	2.9	2.6	2.4	2.0	2.3	1.9	2.1		
MAX	21.1	18.7	20.0	22.7	23.6	26.4	25.6	26.1	22.9	18.9	20.2	18.7	18.7	14.7	15.7	8.9	19.3	16.9	14.2	12.0	10.6	12.3	10.5	13.3		



Berm PM_{2.5} (µg/m³) – January 2023

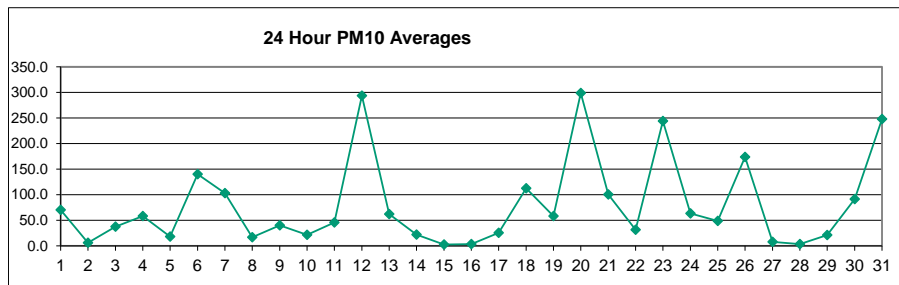
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.5	1.1	0.7	1.3	1.3	0.6	0.6	0.7	0.8	0.5	0.7	2.6	4.8	9.9	20.1	24.8	13.8	11.5	36.0	39.6	26.6	9.4	4.2	2.0	9.0	39.6
2	1.7	2.3	1.2	P	1.2	0.6	0.5	0.5	0.9	0.7	1.1	1.9	2.6	3.4	2.5	1.9	2.0	1.7	1.5	1.5	1.5	1.4	1.4	1.2	1.5	3.4
3	1.1	1.2	1.2	1.1	1.1	1.0	1.2	1.1	1.3	1.7	2.0	2.0	2.4	3.5	3.3	3.1	5.9	6.7	5.2	12.9	23.8	13.4	7.9	9.3	4.7	23.8
4	3.9	3.3	2.5	2.6	2.1	1.5	2.8	1.8	1.9	2.0	2.6	3.8	16.6	34.2	27.7	15.0	10.9	15.3	7.9	4.6	2.2	3.8	4.8	2.1	7.3	34.2
5	1.6	1.5	1.3	1.3	1.2	1.6	2.2	3.3	2.2	2.7	3.2	5.4	5.6	9.0	4.1	4.3	4.4	4.1	2.5	1.8	2.5	5.1	5.2	2.1	3.3	9.0
6	2.2	3.0	1.9	1.0	1.2	1.2	1.9	5.9	3.6	2.5	10.2	21.3	25.7	39.3	34.4	36.4	35.4	41.0	14.8	14.9	8.0	17.7	23.9	24.5	15.5	41.0
7	19.1	13.4	17.4	12.1	21.3	20.5	17.1	21.3	42.3	23.2	18.8	15.0	11.2	14.4	12.5	9.1	2.9	1.7	1.0	3.5	4.2	5.7	2.4	2.1	13.0	42.3
8	2.0	1.6	1.3	1.0	0.8	0.8	0.7	0.9	0.6	3.5	9.2	6.0	3.9	6.5	13.8	2.5	1.5	1.1	1.1	1.0	1.1	1.5	1.2	1.5	2.7	13.8
9	1.6	0.9	0.6	0.6	2.5	4.3	2.8	5.2	2.0	4.6	13.3	12.9	15.3	11.9	8.8	15.8	4.2	1.6	1.8	1.3	3.0	1.0	3.4	5.7	5.2	15.8
10	1.9	3.3	3.2	8.8	17.3	7.7	5.8	3.1	2.2	1.2	1.6	1.4	1.9	2.7	2.6	3.4	2.9	1.6	2.1	1.6	1.8	1.2	1.2	1.2	3.4	17.3
11	1.0	1.2	1.1	2.3	1.7	1.6	3.7	1.2	2.2	3.7	3.0	4.3	6.6	12.8	4.2	3.6	4.4	11.8	4.0	14.1	16.4	10.3	15.8	9.1	5.8	16.4
12	0.6	0.7	0.6	0.9	0.9	1.5	3.5	4.6	19.8	38.2	50.3	69.4	60.3	75.6	53.4	56.8	54.9	40.4	50.6	50.2	34.5	25.0	41.0	31.5	31.9	75.6
13	19.1	19.4	16.9	11.8	8.2	6.4	5.4	4.4	1.5	1.2	1.3	1.9	14.6	15.5	21.1	17.4	14.1	12.9	10.4	9.6	2.7	2.5	0.5	0.4	9.1	21.1
14	0.3	0.4	0.4	0.5	0.5	0.4	0.7	0.5	0.6	0.7	0.6	0.8	12.7	17.4	14.9	10.6	16.3	1.3	0.7	1.1	1.4	1.0	1.1	1.2	3.6	17.4
15	0.9	0.8	0.9	1.4	1.0	1.0	2.7	3.6	0.7	0.8	1.1	1.3	2.1	2.5	2.0	2.1	2.3	2.1	2.5	2.8	2.9	2.1	1.8	1.5	1.8	3.6
16	1.2	1.0	0.8	0.8	0.6	0.8	0.6	0.4	0.7	1.2	1.5	3.7	2.1	2.7	4.0	4.0	3.4	1.8	1.6	1.9	2.9	5.1	4.1	3.6	2.1	5.1
17	3.6	2.9	2.2	1.8	1.5	1.6	1.6	1.6	3.5	2.9	3.3	3.4	4.3	6.0	5.3	11.1	9.5	10.9	3.7	3.7	2.9	4.7	6.1	5.0	4.3	11.1
18	2.2	4.4	5.5	7.8	7.2	6.4	11.4	10.2	9.2	9.4	10.2	14.9	33.9	24.8	21.9	16.8	26.8	18.5	9.2	6.0	6.3	4.2	4.4	4.4	11.5	33.9
19	1.9	0.9	1.2	1.3	1.4	1.2	1.6	1.7	3.5	2.2	6.2	6.0	6.5	7.3	6.4	8.5	6.6	6.4	11.1	8.6	8.4	19.0	17.1	27.0	6.8	27.0
20	15.4	9.0	3.8	26.9	8.4	15.4	74.9	48.6	40.2	58.4	42.1	63.2	53.1	36.1	21.7	15.6	20.8	30.0	21.6	31.6	21.6	23.2	46.0	48.2	32.3	74.9
21	23.2	11.8	20.4	19.7	13.6	6.5	3.5	2.7	2.9	5.3	19.9	6.2	6.2	10.5	17.4	15.4	14.8	12.4	8.2	9.3	8.9	6.2	1.8	1.7	10.4	23.2
22	1.4	2.9	3.4	2.4	2.5	1.7	1.1	1.4	1.0	1.3	1.5	12.3	6.6	7.2	13.4	7.9	3.7	2.7	2.3	1.7	5.9	3.7	9.5	4.2	4.2	13.4
23	10.2	8.2	34.1	24.0	29.3	25.8	29.7	17.1	24.2	21.6	15.0	22.5	56.2	77.4	43.3	32.0	44.9	23.7	16.0	21.5	9.3	19.2	10.6	4.8	25.9	77.4
24	9.9	8.9	6.2	2.2	2.3	2.5	5.5	3.9	6.0	8.5	8.8	19.5	13.5	12.4	17.1	10.3	14.5	8.9	5.8	4.7	5.5	2.9	2.5	5.9	7.8	19.5
25	8.1	2.0	5.7	2.4	4.1	5.7	5.6	3.4	2.8	5.7	4.2	6.5	19.9	7.6	10.7	6.2	2.3	2.7	5.5	3.1	13.4	2.9	4.7	21.3	6.5	21.3
26	6.0	19.7	15.2	10.2	6.7	47.5	85.6	56.4	80.7	46.5	18.0	15.0	14.4	7.6	11.4	9.1	4.9	3.1	1.5	5.1	2.8	0.8	1.1	0.9	19.6	85.6
27	1.0	5.4	3.0	1.8	1.7	6.9	8.5	10.9	1.3	3.0	4.4	5.9	2.9	4.5	13.3	5.4	9.9	1.1	4.0	2.1	3.4	4.4	4.1	3.5	4.7	13.3
28	1.8	1.5	2.1	1.4	1.3	1.4	1.4	1.6	1.3	1.7	1.6	2.1	1.8	2.7	4.5	2.7	3.5	3.5	1.1	1.2	1.2	1.7	4.4	4.7	2.2	4.7
29	5.4	2.9	3.3	4.6	3.8	4.2	3.1	3.2	3.8	10.8	15.2	8.1	11.8	4.6	4.3	4.9	10.3	2.2	1.1	3.1	2.2	2.8	3.9	3.6	5.1	15.2
30	9.3	13.4	13.6	8.8	2.3	1.9	1.3	2.0	3.3	3.2	2.6	7.0	11.4	6.9	22.5	20.5	11.4	13.5	28.1	18.8	12.1	12.7	12.3	15.4	10.6	28.1
31	13.3	19.7	13.8	15.0	21.4	33.9	50.5	24.6	14.9	20.4	20.1	37.7	30.1	36.5	35.8	27.2	16.2	19.6	31.9	33.4	30.4	24.2	31.4	25.4	26.1	50.5
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	5.6	5.4	6.0	5.9	5.5	6.9	10.9	8.0	9.1	9.3	9.5	12.4	14.9	16.6	15.4	13.1	12.2	10.2	9.5	10.2	8.7	7.7	9.0	8.9		
MAX	23.2	19.7	34.1	26.9	29.3	47.5	85.6	56.4	80.7	58.4	50.3	69.4	60.3	77.4	53.4	56.8	54.9	41.0	50.6	50.2	34.5	25.0	46.0	48.2		



Number of 24HR Exceedences	2	Proposed Guideline
Number of Non-Zero Readings	743	
Maximum 1-HR Average	85.6 UG/M3	
Maximum 24-HR Average	32.3 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	12.9	Operational Uptime
		Monthly Average
		743 HRS
		99.9 %
		9.6 UG/M3

Berm PM₁₀ (µg/m³) – January 2023

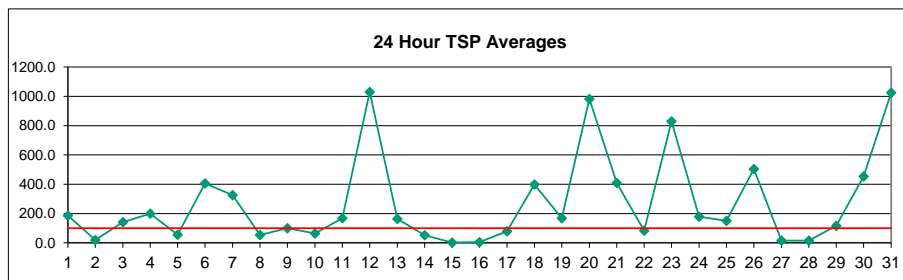
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.4	2.6	0.9	3.3	3.3	0.6	0.7	0.8	0.9	0.6	1.1	19.0	38.6	80.5	145.5	179.3	103.4	90.2	321.5	320.6	221.3	86.5	37.3	17.4	70.1	321.5
2	8.9	20.5	6.3	P	3.6	1.3	0.6	0.6	1.5	0.9	2.3	9.1	12.8	26.1	13.9	5.7	4.4	3.7	2.3	1.8	1.7	1.6	1.5	1.3	5.8	26.1
3	1.2	1.3	1.2	1.1	1.2	1.0	1.4	1.2	1.6	2.7	4.6	6.7	9.9	19.5	18.7	18.9	58.8	70.1	46.2	121.6	231.2	123.3	67.0	87.4	37.4	231.2
4	20.6	17.7	8.4	9.9	8.7	2.8	10.7	3.9	3.5	4.2	6.4	11.0	137.9	324.7	252.3	122.9	90.5	155.2	84.2	43.4	7.5	25.8	37.5	7.4	58.2	324.7
5	2.5	2.4	1.7	1.9	2.6	3.5	9.9	12.1	4.0	12.1	16.7	33.4	33.7	76.2	22.1	30.8	26.0	20.2	4.9	2.9	11.1	43.3	47.1	7.4	17.8	76.2
6	11.7	24.2	10.3	1.8	2.5	2.5	11.1	52.6	28.3	12.5	98.9	215.2	222.4	332.3	286.7	298.5	313.8	409.2	166.9	135.6	69.8	178.3	222.9	256.5	140.2	409.2
7	152.1	65.1	107.9	91.8	198.7	176.3	135.6	140.5	445.0	207.1	154.6	120.1	86.0	130.4	100.9	68.2	16.3	6.3	1.3	19.8	14.4	19.0	4.3	6.3	102.8	445.0
8	9.3	4.1	1.4	1.0	0.9	0.8	0.7	0.9	0.6	5.0	26.5	36.6	21.3	70.4	177.5	23.5	7.7	2.3	1.8	1.6	1.5	3.0	2.3	3.1	16.8	177.5
9	7.7	1.5	0.7	1.5	25.5	39.1	22.3	53.9	16.0	35.3	116.2	100.7	124.1	96.0	65.5	125.1	29.6	4.4	4.2	4.1	15.0	2.4	25.2	47.8	40.1	125.1
10	12.9	27.7	26.7	51.8	125.7	63.7	63.4	27.8	17.9	4.8	4.5	5.9	7.6	15.5	12.9	21.1	6.4	3.2	4.5	3.1	2.3	1.4	1.4	1.3	21.4	125.7
11	1.0	1.4	1.3	3.2	2.3	2.0	5.0	1.4	3.0	5.4	4.2	7.6	23.3	139.5	33.5	17.3	31.2	116.4	28.6	148.3	167.2	108.7	153.2	87.1	45.5	167.2
12	0.7	1.1	0.7	1.1	1.1	2.1	5.2	6.7	196.3	367.5	505.3	709.3	605.1	709.1	515.0	509.2	441.9	379.2	428.5	437.8	315.9	233.0	383.3	294.1	293.7	709.3
13	165.1	164.1	119.9	66.0	50.4	39.2	43.3	39.2	7.0	4.8	5.9	11.4	81.3	116.6	155.1	115.4	106.6	79.5	52.6	46.0	12.1	8.7	1.0	1.0	62.2	165.1
14	0.5	0.6	0.5	0.6	0.7	0.5	0.9	0.9	0.9	1.1	0.8	1.6	91.7	130.8	98.7	73.8	114.0	2.9	1.2	1.7	1.7	1.1	1.2	1.2	22.1	130.8
15	1.0	0.9	0.9	1.8	1.2	1.2	3.8	5.1	0.8	0.9	1.2	2.3	3.5	6.0	4.8	4.6	4.7	3.3	3.3	3.8	3.3	2.7	2.1	1.6	2.7	6.0
16	1.3	1.1	0.8	0.8	0.6	0.8	0.6	0.4	0.8	1.7	2.4	12.3	5.4	6.7	8.4	7.2	6.1	3.2	2.1	2.2	3.3	5.2	4.3	3.7	3.4	12.3
17	3.7	3.0	2.3	1.9	1.7	1.8	1.7	1.7	4.6	4.0	6.3	9.6	17.3	15.7	18.3	109.3	97.3	128.3	32.7	22.8	18.8	34.3	39.1	36.6	25.5	128.3
18	14.4	41.9	54.1	83.4	59.1	64.8	132.4	103.7	100.7	88.4	105.2	139.8	348.9	270.4	211.6	172.2	284.2	143.4	73.7	47.9	49.4	34.4	37.9	33.9	112.3	348.9
19	13.6	2.7	3.6	2.1	1.6	1.6	5.7	5.2	26.4	10.8	48.3	40.0	39.2	45.3	29.7	74.5	63.5	73.0	117.8	82.0	74.7	202.5	163.8	271.8	58.3	271.8
20	152.6	84.3	29.6	293.0	72.0	140.4	734.6	437.3	386.6	568.9	396.0	568.4	478.0	315.8	202.8	125.7	181.6	232.5	195.9	294.3	185.3	214.1	451.2	433.7	298.9	734.6
21	248.4	116.6	222.8	203.5	143.2	55.7	36.2	17.5	20.2	46.7	189.6	47.6	53.6	104.0	170.0	150.0	146.2	120.8	72.7	83.3	85.8	59.3	6.5	7.8	100.3	248.4
22	6.7	21.2	28.1	15.5	17.4	6.8	5.5	6.2	2.5	3.5	4.4	78.0	48.4	61.9	125.2	63.5	34.6	15.8	6.6	6.9	44.1	32.9	92.5	29.3	31.6	125.2
23	110.7	84.7	362.8	255.2	317.1	264.6	272.9	155.6	222.7	167.4	116.8	185.3	508.2	681.3	405.5	296.8	407.0	228.2	151.8	218.2	92.9	207.0	97.1	44.9	243.9	681.3
24	91.4	75.2	57.8	13.6	12.9	18.0	37.9	24.7	41.8	65.0	66.4	191.0	108.2	98.4	115.3	95.8	125.1	80.2	39.6	36.0	43.9	20.2	13.8	43.9	63.2	191.0
25	56.4	12.9	46.6	14.4	34.3	40.1	48.0	22.4	20.7	42.8	33.2	56.8	126.7	55.1	70.4	46.7	10.8	13.2	49.8	19.1	116.9	14.4	39.0	181.5	48.8	181.5
26	48.6	167.4	132.6	83.6	58.3	490.3	742.2	479.2	750.4	443.5	158.5	138.6	127.7	59.5	85.2	78.8	37.7	20.3	9.6	36.8	12.8	2.8	5.6	1.8	173.8	750.4
27	3.3	21.9	4.3	2.1	2.5	10.3	12.6	16.3	1.7	3.6	6.3	8.5	3.8	7.9	28.4	7.8	14.5	1.2	5.1	2.2	3.6	4.8	4.7	4.3	7.6	28.4
28	2.2	1.8	2.7	1.7	1.6	1.6	1.8	2.0	1.6	2.2	1.9	2.9	2.5	7.5	14.0	4.4	6.5	7.4	1.3	1.3	1.3	1.8	5.5	6.4	3.5	14.0
29	6.8	3.6	4.0	5.4	4.5	5.6	3.6	3.8	4.9	15.7	32.8	51.5	89.8	35.5	21.4	31.9	89.8	10.2	2.1	18.3	7.0	15.3	22.6	21.7	21.2	89.8
30	74.9	89.6	111.4	84.3	13.0	4.9	2.7	7.2	13.6	12.4	7.8	41.9	125.0	67.2	211.2	194.3	90.9	110.5	295.0	186.6	107.3	118.6	110.5	115.1	91.5	295.0
31	114.7	136.7	120.6	115.4	176.5	354.4	529.3	233.5	117.7	210.4	192.6	412.9	302.6	321.6	282.3	223.4	129.5	193.2	310.7	356.2	314.3	237.5	306.2	259.2	248.0	529.3
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	43.6	38.7	47.5	47.1	43.4	58.0	93.0	60.1	78.9	75.9	74.8	105.6	125.3	142.8	125.9	106.3	99.4	88.0	81.2	87.3	72.2	65.9	77.0	74.7		
MAX	248.4	167.4	362.8	293.0	317.1	490.3	742.2	479.2	750.4	568.9	505.3	709.3	605.1	709.1	515.0	509.2	441.9	409.2	428.5	437.8	315.9	237.5	451.2	433.7		



Number of Non-Zero Readings	743
Maximum 1-HR Average	750.4 UG/M3
Maximum 24-HR Average	298.9 UG/M3
Monthly Calibration	0
Standard Deviation	124.2
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	79.7 UG/M3

Berm TSP ($\mu\text{g}/\text{m}^3$) – January 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	10.3	3.5	1.1	18.3	27.7	0.4	0.5	0.7	0.8	0.4	1.6	68.7	127.2	221.3	312.3	370.6	249.8	223.5	836.3	835.6	620.7	324.7	141.7	79.2	186.5	836.3
2	25.9	92.8	27.9	P	8.0	5.0	0.4	0.4	3.1	0.6	8.0	39.9	44.3	100.2	51.9	14.4	8.8	7.4	3.1	2.5	1.2	1.1	1.0	0.9	19.5	100.2
3	0.8	0.8	0.8	0.7	0.8	0.7	1.0	0.9	1.2	5.2	15.8	21.9	31.7	82.0	67.3	63.0	216.3	277.3	167.1	443.6	862.7	508.8	292.3	337.9	141.7	862.7
4	69.4	71.7	21.0	36.3	34.1	4.3	20.7	7.0	7.4	11.9	15.4	36.9	439.0	992.1	802.5	400.0	322.8	560.9	373.6	211.7	30.8	107.2	163.7	41.0	199.2	992.1
5	5.7	9.2	3.5	2.4	3.1	7.9	33.8	20.5	6.6	46.6	66.2	107.7	124.5	206.4	55.7	80.2	76.8	54.7	13.5	2.8	27.3	146.7	191.1	21.9	54.8	206.4
6	44.0	102.6	39.8	2.2	5.5	4.3	32.7	153.3	68.6	43.3	287.5	556.3	566.3	805.6	682.1	851.9	919.6	1307.4	494.8	309.8	183.6	590.7	757.8	943.6	406.4	1307.4
7	472.4	110.2	274.1	263.7	686.0	617.9	415.3	337.5	1642.2	687.3	544.3	385.4	264.0	397.1	328.1	206.1	46.8	16.0	1.4	44.3	19.4	14.9	4.7	31.5	325.4	1642.2
8	39.8	14.7	1.0	0.7	0.6	0.5	0.5	0.6	0.4	5.4	40.0	95.4	55.0	276.0	637.8	77.7	18.3	3.5	2.5	1.9	1.6	5.3	9.4	8.5	54.0	637.8
9	30.4	3.8	0.4	4.9	120.3	156.5	72.7	135.0	43.3	90.8	316.4	229.2	228.3	200.3	158.7	245.9	71.0	6.8	6.0	7.7	39.4	6.4	77.3	145.0	99.9	316.4
10	47.6	106.6	97.8	132.7	352.7	196.2	234.1	104.6	65.2	14.7	11.1	16.7	16.2	38.0	26.5	48.5	9.1	4.3	7.9	5.8	2.4	1.1	1.2	0.9	64.2	352.7
11	0.7	1.1	1.0	3.0	2.0	1.6	4.7	1.0	3.0	5.8	4.0	14.4	63.0	477.7	109.5	54.3	103.0	424.9	100.2	568.1	675.0	450.8	652.0	337.2	169.1	675.0
12	0.5	3.4	0.5	0.9	0.9	1.9	5.4	7.2	719.4	1267.0	1769.2	2477.2	1978.8	2424.1	1757.3	1781.4	1483.7	1357.8	1430.9	1526.7	1208.5	951.4	1454.4	1103.3	1029.7	2477.2
13	549.1	608.5	343.6	121.3	129.3	100.0	144.1	176.8	20.2	8.5	11.7	31.7	151.9	272.5	324.3	282.3	241.8	170.4	113.5	86.7	15.8	14.3	0.8	0.9	163.3	608.5
14	0.8	0.4	0.3	0.6	0.5	0.3	0.7	0.7	1.0	0.7	1.1	2.3	267.4	331.9	242.9	173.0	212.5	3.9	3.0	1.7	1.8	0.7	0.8	0.8	52.1	331.9
15	0.6	0.6	0.6	1.5	0.8	0.9	3.9	5.5	0.5	0.6	0.9	2.2	3.4	6.7	5.1	3.4	5.7	3.6	2.9	3.6	2.4	2.2	1.7	1.1	2.5	6.7
16	0.9	0.7	0.5	0.5	0.4	0.5	0.4	0.3	0.5	1.4	2.0	32.2	11.9	13.0	19.1	9.1	5.8	5.0	3.4	1.4	4.1	3.7	4.5	2.4	5.2	32.2
17	2.4	1.9	1.5	1.2	1.1	1.2	1.2	1.1	4.5	3.6	14.4	24.1	54.5	34.5	44.9	347.9	315.8	489.4	96.1	70.5	64.7	104.8	97.8	125.8	79.4	489.4
18	54.0	178.2	212.2	300.9	219.5	298.1	542.6	430.9	404.4	385.5	388.1	469.9	1178.2	917.4	732.8	579.7	957.8	431.3	233.8	150.2	147.2	119.7	130.2	89.9	398.0	1178.2
19	47.4	9.0	10.9	6.0	1.4	1.7	14.2	12.9	62.5	31.8	80.8	75.1	123.0	113.2	65.1	209.2	186.0	196.0	321.5	230.2	222.7	681.7	509.6	834.8	168.6	834.8
20	527.6	328.4	81.3	988.2	246.7	491.6	2296.3	1352.6	1258.4	1850.3	1252.0	1905.4	1487.3	986.3	584.5	356.0	555.1	753.9	703.6	988.1	593.6	852.9	1587.5	1555.3	982.6	2296.3
21	917.1	458.4	903.7	836.0	656.7	238.5	204.6	80.0	102.3	212.2	794.7	183.7	208.3	361.1	620.7	587.8	564.1	514.2	290.6	357.6	408.7	267.2	25.1	18.0	408.8	917.1
22	27.9	68.9	106.8	58.1	62.8	26.3	19.2	23.5	7.4	8.7	5.9	151.8	114.4	173.0	236.3	103.0	83.4	34.3	8.8	18.4	112.4	123.6	333.0	97.1	83.5	333.0
23	445.8	359.3	1331.8	1008.7	1210.4	1031.2	946.6	597.6	792.4	489.6	343.6	468.6	1490.6	2151.6	1307.4	1001.2	1389.1	803.1	494.7	718.3	319.0	741.7	306.3	144.0	828.9	2151.6
24	341.9	295.7	197.9	30.3	50.2	75.0	114.5	78.4	115.5	204.9	184.7	561.3	238.6	254.7	278.6	224.8	302.8	188.6	80.1	104.7	157.8	65.8	41.1	115.4	179.3	561.3
25	177.4	37.9	177.2	66.3	142.3	140.3	179.5	78.7	61.0	137.1	110.8	178.6	276.2	155.4	177.5	135.0	26.4	29.3	152.4	40.1	384.9	49.1	124.8	565.5	150.2	565.5
26	187.4	544.9	447.0	340.7	197.4	1259.7	2169.7	1324.2	2034.5	1267.6	477.7	455.4	427.0	161.0	217.3	257.6	122.7	50.5	33.8	74.5	18.4	9.1	23.3	2.7	504.3	2169.7
27	8.9	160.6	3.7	1.4	2.3	10.7	13.1	17.1	1.4	3.0	5.9	7.5	2.9	12.7	93.1	8.7	15.8	0.8	4.7	1.4	2.3	3.1	3.2	2.9	16.1	160.6
28	1.6	1.2	1.8	1.2	1.1	1.1	1.3	1.5	1.2	1.6	1.5	2.4	2.3	81.2	175.7	52.2	9.5	13.2	3.6	0.8	0.8	1.2	8.1	5.3	15.5	175.7
29	4.9	2.6	2.8	4.0	3.2	5.2	2.8	2.7	4.5	17.4	113.1	318.7	884.9	435.7	125.3	113.6	357.8	20.2	2.7	70.4	21.2	82.9	111.5	91.1	116.6	884.9
30	351.5	335.9	800.5	926.0	129.0	27.9	14.4	70.9	130.6	104.5	29.8	101.7	512.4	264.7	845.3	779.5	315.7	381.6	1648.4	1127.1	511.8	523.8	489.7	465.0	453.7	1648.4
31	408.0	401.2	506.8	433.8	665.7	1795.5	2647.8	1113.2	496.8	938.4	807.3	1756.1	1290.3	1088.9	823.0	734.1	458.2	816.1	1221.9	1518.0	1280.6	1028.2	1323.6	1057.9	1025.5	2647.8
NO.	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100%
MEAN	154.9	139.2	180.6	186.4	160.1	209.8	327.1	198.0	260.0	253.1	248.6	347.7	408.5	452.8	384.1	327.5	311.4	295.2	285.7	307.2	256.2	251.1	286.1	265.4		
MAX	917.1	608.5	1331.8	1008.7	1210.4	1795.5	2647.8	1352.6	2034.5	1850.3	1769.2	2477.2	1978.8	2424.1	1757.3	1781.4	1483.7	1357.8	1648.4	1526.7	1280.6	1028.2	1587.5	1555.3		



Number of 24HR Exceedences	19	Proposed Guideline
Number of Non-Zero Readings	743	
Maximum 1-HR Average	2647.8 UG/M3	
Maximum 24-HR Average	1029.7 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	430.6	Monthly Average
		743 HRS
		99.9 %
		270.8 UG/M3