LAFARGE CANADA INC.

# AMBIENT AIR QUALITY MONTHLY REPORT

## JULY 2021

AUGUST 06, 2021

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## JULY 2021

### LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: AUGUST 06, 2021

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August 06, 2021

LAFARGE CANADA INC.
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Exshaw, AB T0L 2C0

**Attention: Nikolaos Veriotes P. Eng.**

Dear Mr. Veriotes,

**Subject: Ambient Air Quality Monthly Report – July 2021**

The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Lagoon Station for July 2021. **The high number of exceedances recorded this month were primarily due to regional wildfire activity.**

| Lagoon | Data Completeness (%) | 1-Hour Average | 24-hour Average |
|---|---|---|---|
| | | Exceedances of AAAQO or AAAQG | Exceedances of AAAQO |
| **TSP** | 99.9% | - | 5 |
| **$PM_{2.5}$** | 99.7% | 53 | 16 |
| **$PM_{10}$** | 99.9% | - | - |
| **NO** | 99.3% | - | - |
| **$NO_2$** | 99.3% | 0 | - |
| **$NO_x$** | 99.3% | - | - |
| **$SO_2$** | 99.9% | 0 | 0 |
| **Met Parameters** | 99.9% | - | - |

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The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Windridge Station for July 2021. **The high number of exceedances recorded this month were primarily due to regional wildfire activity.**

| Windridge | Data Completeness (%) | 1-Hour Average | 24-hour Average | |
|---|---|---|---|---|
| | | Exceedances of AAAQG | Exceedances of $PM_{2.5}$ AAAQO | Exceedances of TSP AAAQO |
| **TSP** | 100% | - | - | 4 |
| **$PM_{2.5}$** | 100% | 53 | 16 | - |
| **$PM_{10}$** | 99.9% | - | - | - |

The GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw's Fugitive Dust Control Best Management Practices – Program; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and reported exceedances of the Guidelines at the GRIMM Monitors for July 2021. **The high number of exceedances recorded this month were primarily due to regional wildfire activity.**

| 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** | 100% | 49 | 16 | 0 |
| **Berm** | 100% | 16 | 9 | 6 |
| **Entrance** | 53.5% | 39 | 12 | 6 |

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements.

Sincerely,

Tyler Abel, M.Sc.
Team Leader, Environmental Management, Vancouver Office

# SIGNATURES

PREPARED BY

August 06, 2021

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Date

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August 06, 2021

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Date



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

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A DATA & CALIBRATION REPORTS

# 1 INTRODUCTION

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

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

## 1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1), the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in Summer 2020. The Windridge station was reinstalled on September 1, 2020 and is included in this report.

**Figure 1 Photo of Completed Flood Mitigation Work at Exshaw Creek**

## 1.2 FUGITIVE DUST CONTRIBUTIONS FROM LAC DES ARCS

In the past, Lafarge environmental staff have noted the potential contributions of fugitive dust in the airshed from the exposed lake bed of Lac Des Arcs, immediately southwest of the Lafarge plant site. In some months of the year, low water levels have left more of the lake shore/bed exposed. During high wind events, the sediments from the exposed lake bed can be re-suspended, dispersed in air and become a significant source of fugitive dust impacting the community. This additional source of fugitive dust in the airshed would have an impact on ambient concentration of particulate matter at the monitor and exacerbate any dust originating from the plant site itself.

In July 2021, Lafarge environmental staff noted that water levels were high enough that the lake bed was not exposed (Figure 2), thus mitigating this as a potential source this month.

**Figure 2 Photo of Lac Des Arcs (May 27, 2021)**

## 1.3 WILDFIRE IMPACT ON BOW VALLEY AIRSHED

During the month of July regional wildfire activity, including smoke impacts from BC and Alberta, had a drastic impact on air quality in the Bow Valley airshed. Wildfires produce a large amount of suspend particulate matter which can affect air quality and result in AAAQO and AAAQG exceedances. The majority of TSP and $PM_{2.5}$ exceedances during the month of July can be attributed to smoke from a regional wildfire, and not specific industrial operations from Lafarge Exshaw.

# 2 JULY 2021 REPORT SUMMARY

This summary section provides the pertinent details on data collected and maintenance/calibration activities at each of the monitoring locations. The monitoring results for the stations are described in further detail in their corresponding sections. Maximum hourly concentrations are shown for all particulate matter size fractions, but there are no Alberta Ambient Air Quality Objectives (AAAQO) for 1-hour PM concentrations. The exceedances reported for 1-hour $PM_{2.5}$ are those above the 1-hour $PM_{2.5}$ Alberta Ambient Air Quality Guidelines (AAAQG).

## 2.1 LAGOON STATION

**Table 2-1 Lagoon station data summary**

| Parameter | Data Completeness (%) | 1-Hour Average | | 24-hour Average | |
|---|---|---|---|---|---|
| | | Maximum Concentration | Exceedances of AAAQO or AAAQG | Maximum Concentration | Exceedances of AAAQO |
| **$NO_2$ (ppb)** | 99.3 | 33.0 | 0 | 15.3 | - |
| **$SO_2$ (ppb)** | 99.9 | 12.1 | 0 | 4.5 | 0 |
| **$PM_{2.5}$ (µg/m$^3$)** | 99.7 | 137.7 | 53[1] | 90.8 | 16 |
| **$PM_{10}$ (µg/m$^3$)** | 99.9 | 366.9 | - | 118.3 | - |
| **TSP (µg/m$^3$)** | 99.9 | 575.4 | - | 165.1 | 5 |
| **Temperature (°C)** | 99.9 | 36.7 | - | 25.6 | - |
| **Wind Speed (km/hr) /Direction (Degrees)** | 99.9 | 34.8/W | - | 22.4/WSW | - |
| **Precipitation (mm)** | 99.9 | 5.5[2] | - | 26.25[3] | - |

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

**Data Quality Notes:**

- There was 16 days exceeding the 24-hour $PM_{2.5}$ AAAQO.
- There were 53 exceedances the 1-hour $PM_{2.5}$ AAAQG.
- There was 5 days exceeding the 24-hour TSP AAAQO.

**Calibration/Maintenance Notes:**

- At the Lagoon station, meteorological sensors, $SO_2$, TSP and $PM_{10}$ had 99.9% uptime for the month of July due to one hour of power failure occurring on July 21st at 10:00.
- $PM_{2.5}$ recorded 99.7% uptime due to 1 hour of power failure occurring on July 21st at 10:00 and one hour of equipment malfunction occurring on July 27th at 2:00.
- $NO_2$ recorded 99.3% uptime due to 4 hours of non routine maintenance occurring on July 19th at 12:00 – 15:00 and one hour of power failure occurring on July 21st at 10:00.

## 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 | 132.0 | 53* | 85.9 | 16 |
| **$PM_{10}$ (µg/m$^3$)** | 99.9 | 485.0 | - | 181.3 | - |
| **TSP (µg/m$^3$)** | 100.0 | 931.0 | - | 262.8 | 4 |

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

**Data Quality Notes:**

- There was 16 days exceeding the 24-hour $PM_{2.5}$ AAAQO.
- There was 53 exceedances of the 1-hour $PM_{2.5}$ AAAQG.
- There was 4 days exceeding the 24-hour TSP AAAQO.

**Calibration/Maintenance Notes:**

- TSP and $PM_{2.5}$ recorded 100% uptime for the month of July.
- The $PM_{10}$ monitor recorded 99.9% uptime for the month of July due to one hour of equipment malfunction on July 6th at 5:00.

## 2.3 WEST GRIMM

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

**Table 2-3 West station data summary**

| Parameter | Data Completeness (%) | 1-Hour Average | | 24-hour Average | |
|---|---|---|---|---|---|
| | | Maximum Concentration | Exceedances of Guidelines | Maximum Concentration | Exceedances of Guidelines |
| **$PM_{2.5}$ (µg/m$^3$)** | 100.0 | 136.9 | 49* | 83.7 | 16 |
| **$PM_{10}$ (µg/m$^3$)** | 100.0 | 171.5 | - | 100.3 | - |
| **TSP (µg/m$^3$)** | 100.0 | 238.7 | - | 74.9 | 0 |

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

### Data Quality Notes:

- There was 16 exceedances of the 24-hour $PM_{2.5}$ Guidelines.
- There was 49 exceedances of the 1-hour $PM_{2.5}$ Guidelines.
- There were no exceedances of the 24-hour TSP Guidelines.

### Calibration/Maintenance Notes:

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

## 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$^3$)** | 100.0 | 161.2 | 16* | 68.3 | 9 |
| **$PM_{10}$ (µg/m$^3$)** | 100.0 | 845.1 | - | 248.5 | - |
| **TSP (µg/m$^3$)** | 100.0 | 2513.0 | - | 643.6 | 6 |

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

### Data Quality Notes:

- There was 9 exceedances of the 24-hour $PM_{2.5}$ Guidelines.
- There was 16 exceedances of the 1-hour $PM_{2.5}$ Guidelines.

- There were 6 days exceeding the 24-hour TSP Guidelines.

**Calibration/Maintenance Notes:**

- The analyzer had 100% uptime during the month of July.

## 2.5 ENTRANCE GRIMM

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

**Table 2-5 Entrance station data summary**

| Parameter | Data Completeness (%) | 1-Hour Average | | 24-hour Average | |
|---|---|---|---|---|---|
| | | Maximum Concentration | Exceedances of Guidelines | Maximum Concentration | Exceedances of Guidelines |
| **$PM_{2.5}$ (µg/m$^3$)** | 53.5 | 119.4 | 39* | 70.2 | 12 |
| **$PM_{10}$ (µg/m$^3$)** | 53.5 | 271.6 | - | 131.6 | - |
| **TSP (µg/m$^3$)** | 53.5 | 533.1 | - | 232.6 | 6 |

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

**Data Quality Notes:**

- There was 12 exceedances of the 24-hour $PM_{2.5}$ Guidelines.
- There was 39 exceedances of the 1-hour $PM_{2.5}$ Guidelines.
- There were 6 days exceeding the 24-hour TSP Guidelines.

**Calibration/Maintenance Notes:**

- The analyzer had 53.5% uptime for the month of July due to equipment malfunction occurring between July 2nd at 1:00 to July 13th at 11:00, and from July 14th at 1:00 to July 16th at 22:00. There was one hour of non routine maintenance on July 13th at 12:00.

# 3 LAGOON STATION

The Lagoon trailer contains $NO_x$, $SO_2$, TSP, $PM_{10}$, and $PM_{2.5}$ analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-9) & (Figure 3-10) and tables and graphs illustrating the monitoring results for July 2021.

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

## 3.1 OPERATIONAL SUMMARY

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

**Table 3-1 Instrumentation List at the Lagoon Station**

| Parameter Measured | Equipment Description | Notes |
|---|---|---|
| **$PM_{2.5}$ Concentrations** | MetOne BAM-1020 FRM Continuous Particulate Monitor | The $PM_{2.5}$ monitor was calibrated on July 26th. The monitor had 99.7% uptime due to 1 hour of power failure occurring on July 21st at 10:00. And further, one hour of equipment malfunction occurring on July 27th at 2:00. |
| **$PM_{10}$ Concentrations** | MetOne BAM-1020 Continuous Particulate Monitor | The $PM_{10}$ monitor was calibrated on July 26th. The monitor had 99.9% uptime due to 1 hour of power failure occurring on July 21st at 10:00. |
| **TSP Concentrations** | MetOne BAM-1020 Continuous Particulate Monitor | The TSP monitor was calibrated on July 26th. The monitor had 99.9% uptime due to 1 hour of power failure occurring on July 21st at 10:00. |
| **Oxides of Nitrogen** | TEI 42C | The $NO_x$ monitor was calibrated on July 5th. The monitor had 99.3% uptime in July due to 4 hours of routine maintenance occurring on July 19th at 12:00 – 15:00. And further, one hour of power failure occurring on July 21st at 10:00. |
| **Sulphur Dioxide** | Teledyne API 102A | The $SO_2$ monitor was calibrated on July 5th. The monitor had 99.9% uptime due to one hour of power failure occurring on July 21st at 10:00. |
| **Precipitation** | MetOne 130 Rain/Snow Gauge | The monitor had 99.9% uptime for the month of July due to one hour of power failure occurring on July 21st at 10:00. |

| | | |
|---|---|---|
| **Wind Speed** | MetOne Wind Sensor | The monitor had 99.9% uptime for the month of July due to one hour of power failure occurring on July 21st at 10:00. |
| **Wind Direction** | | |
| **Ambient Temperature** | MetOne Ambient Temperature Sensor | The monitor had 99.9% uptime for the month of July due to one hour of power failure occurring on July 21st at 10:00. |

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

## 3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in July 2021. Table 3-3 summarizes the recorded exceedances at the Lagoon station. 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 July 2021 for the pollutants listed in Table 3-2. Additionally, Figure 3-3 to Figure 3-7 show the histograms of the hourly concentrations of $NO_2$, $SO_2$, $PM_{2.5}$, $PM_{10}$, and TSP measured at the Lagoon station.

There were 5 exceedances of the 24-hour TSP (100 µg/m$^3$) AAAQO. There was 16 exceedances of the 24-hour $PM_{2.5}$ (29 µg/m$^3$) AAAQO. Further, there was 53 exceedances of the 1-hour $PM_{2.5}$ AAAQG (80 µg/m$^3$). As discussed in Section 1.3, the Bow Valley airshed was heavily impacted from regional wildfire activity in July. All of the exceedances were primarily attributable to wildfire activity and smoke in the airshed from fires in BC and Alberta.

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

Further, strong wind gusting that typically occurs in the area 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 3-2 Summary of July 2021 data at Lagoon

| Parameter | Guideline / Objectives | | Station | Exceedances | | Monthly | | 1-hour | | | | | 24-hour | | Operational Time (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-hr | 24-hr | | 1-hr | 24-hr | Minimum | Average | Maximum Concentration/ Meteorological Variable | Day | Hour | Wind Speed (km/hr) | Wind Direction (degrees) | Maximum Concentration/ Meteorological Variable | Day | |
| **$NO_2$ (ppb)** | 159 | - | Lagoon | 0 | - | 0.7 | 7.9 | 33.0 | 29 | 18 | 17.2 | 70.7 | 15.3 | 29 | 99.3 |
| **$SO_2$ (ppb)** | 172 | 48 | Lagoon | 0 | 0 | 0.0 | 1.0 | 12.1 | 23 | 11 | 23.9 | 277.2 | 4.5 | 23 | 99.9 |
| **$PM_{2.5}$ (µg/m$^3$)** | 80 | 29 | Lagoon | 53 | 16 | 0.0 | 31.6 | 137.7 | 19 | 8 | 8.8 | 78.8 | 90.8 | 19 | 99.7 |
| **$PM_{10}$ (µg/m$^3$)** | - | - | Lagoon | - | - | 1.1 | 50.7 | 366.9 | 22 | 24 | 30.5 | 265.7 | 118.3 | 22 | 99.9 |
| **TSP (µg/m$^3$)** | - | 100 | Lagoon | - | 5 | 4.6 | 67.1 | 575.4 | 22 | 24 | 30.5 | 265.7 | 165.1 | 22 | 99.9 |
| **Temperature (°C)** | - | - | Lagoon | - | - | 10.4 | 19.6 | 36.7 | 1 | 14 | 4.9 | 159.5 | 25.6 | 1 | 99.9 |
| **Wind Speed (km/hr)/Direction (degrees)** | - | - | Lagoon | - | - | 1.5 | 13.0 | 34.8/W | 22 | 23 | 34.8 | 272.8 | 22.4/WSW | 23 | 99.9 |
| **Precipitation (mm)** | - | - | Lagoon | - | - | 0.0 | 0.0 | 5.5 | 4 | 14 | 6.9 | 320.5 | 26.3 | - | 99.9 |

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

| Date | TSP ($ug/m^3$) | $PM_{2.5}$ ($ug/m^3$) | Average Wind Direction (degrees) | Average Wind Speed (km/hr) | Average RH (%) | Root Cause (Provided by Lafarge) |
|---|---|---|---|---|---|---|
| **Lagoon** | | | | | | |
| **2021-07-14** | - | 34 | 268 | 11.4 | 46 | Regional wildfire activity |
| **2021-07-15** | - | 45 | 304 | 12.9 | 41 | Regional wildfire activity |
| **2021-07-16** | - | 54 | 69 | 13.6 | 54 | Regional wildfire activity |
| **2021-07-17** | - | 30 | 74 | 15.3 | 62 | Regional wildfire activity |
| **2021-07-18** | - | 77 | 86 | 15.8 | 76 | Regional wildfire activity |
| **2021-07-19** | 121 | 91 | 82 | 14.8 | 72 | Regional wildfire activity |
| **2021-07-20** | - | 36 | 79 | 14.0 | 74 | Regional wildfire activity |
| **2021-07-22** | 165 | 65 | 278 | 19.8 | 36 | Regional wildfire activity |
| **2021-07-23** | 138 | 52 | 266 | 22.4 | 22 | Regional wildfire activity |
| **2021-07-24** | - | 48 | 271 | 12.8 | 34 | Regional wildfire activity |
| **2021-07-25** | - | 39 | 80 | 12.7 | 52 | Regional wildfire activity |
| **2021-07-27** | - | 30 | 88 | 14.2 | 57 | Regional wildfire activity |
| **2021-07-28** | - | 30 | 70 | 9.0 | 61 | Regional wildfire activity |
| **2021-07-29** | 144 | 86 | 338 | 12.0 | 43 | Regional wildfire activity |
| **2021-07-30** | 110 | 55 | 69 | 10.4 | 57 | Regional wildfire activity |
| **2021-07-31** | - | 37 | 329 | 10.0 | 59 | Regional wildfire activity |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total # of Exceedances** | **5** | **16** | | | | |
| **Maximum # of Exceedances (July)** | **2 (2014)** | **3 (2017)** | | | | |
| **Average # of Exceedances (July)** | **0** | **0** | | | | |
| **Minimum # of Exceedances (July)** | **0 (2010, 2012, 2015, 2016, 2017, 2018, 2019, 2020)** | **0 (2010, 2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)** | | | | |

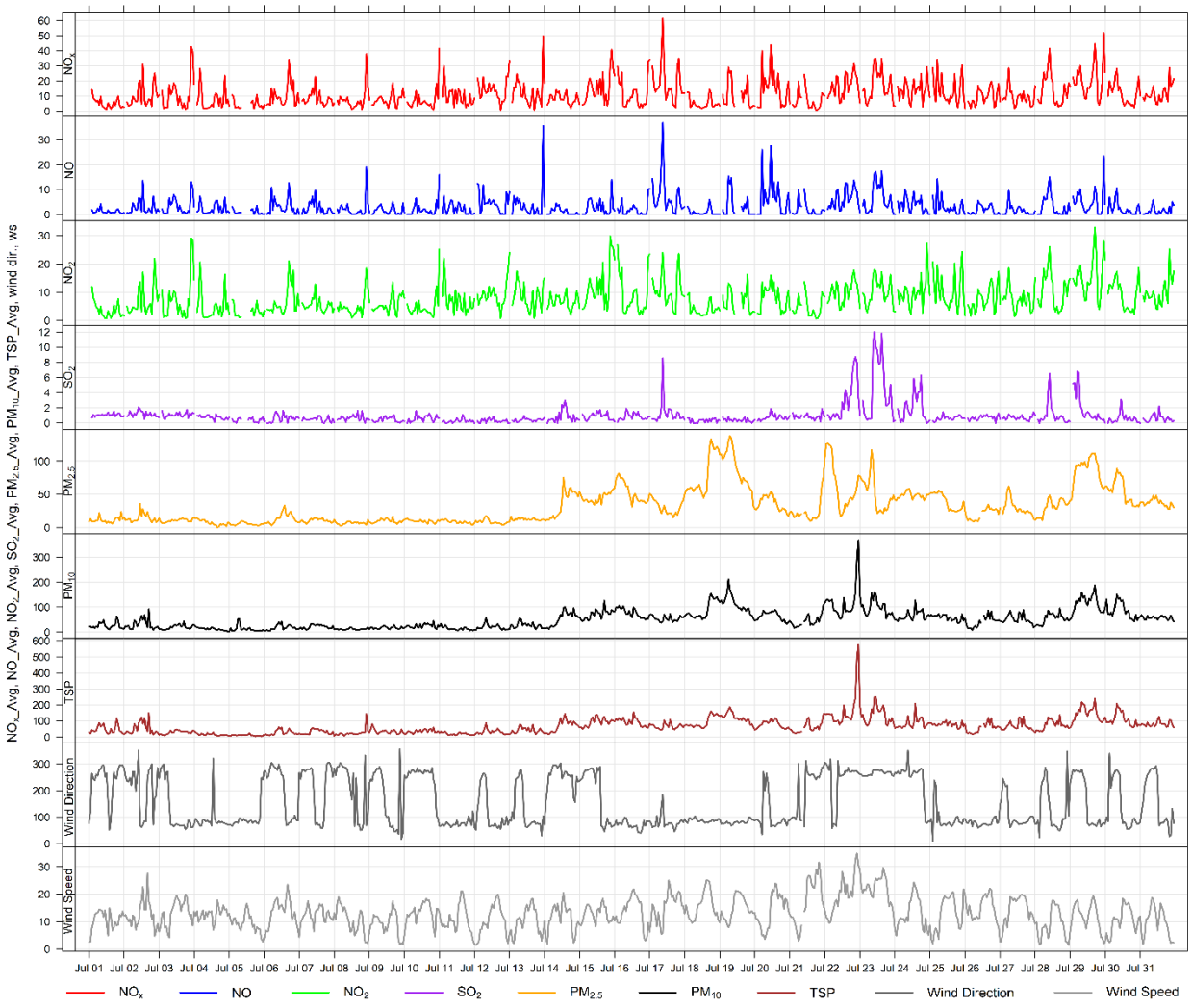


**Figure 3-2 1-hour concentrations of $NO_x$, $SO_2$, particulate matter, wind direction and wind speed at the Lagoon station**

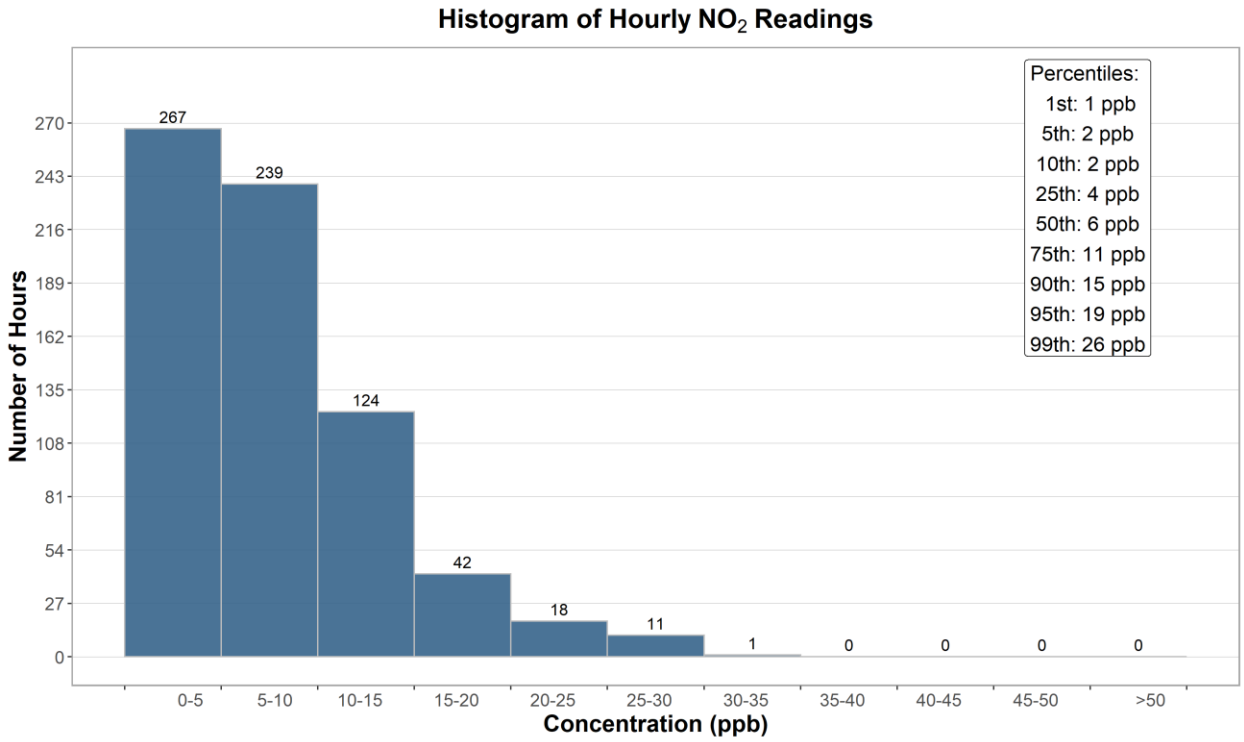


**Figure 3-3** **Histogram of hourly $NO_2$ concentrations at the Lagoon station**

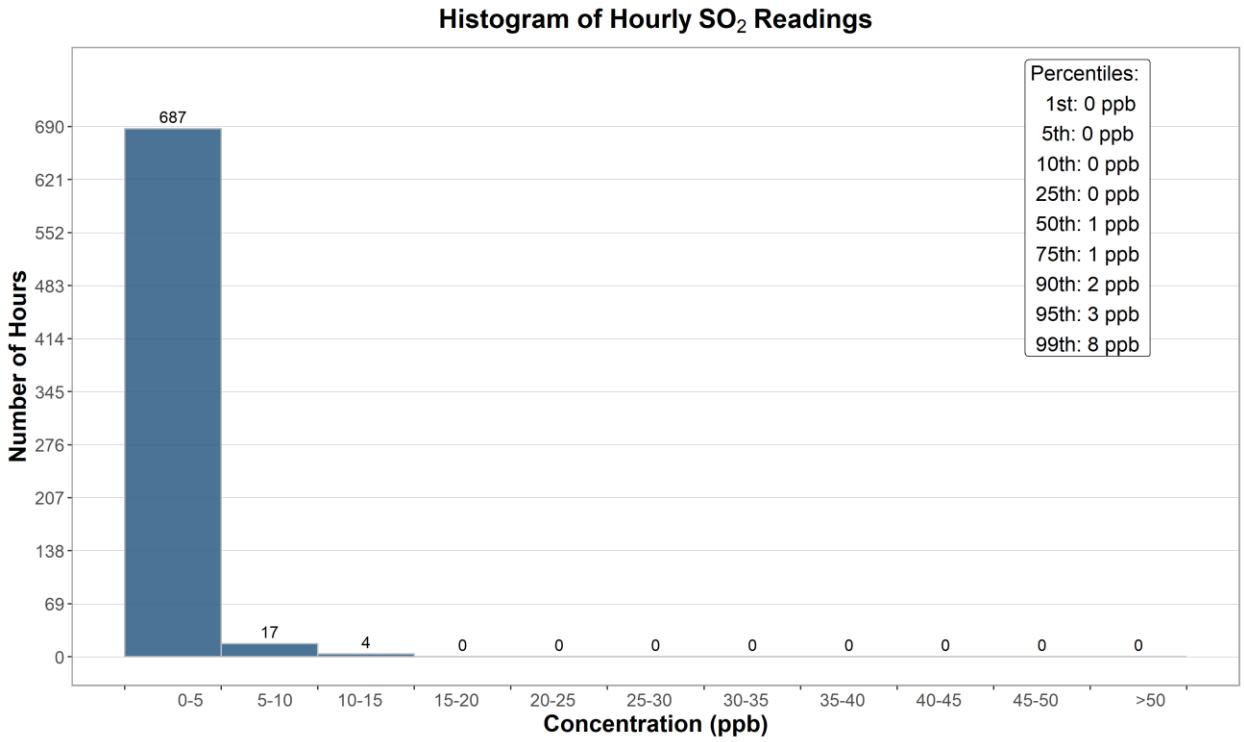


**Figure 3-4** **Histogram of hourly $SO_2$ concentrations at the Lagoon station**

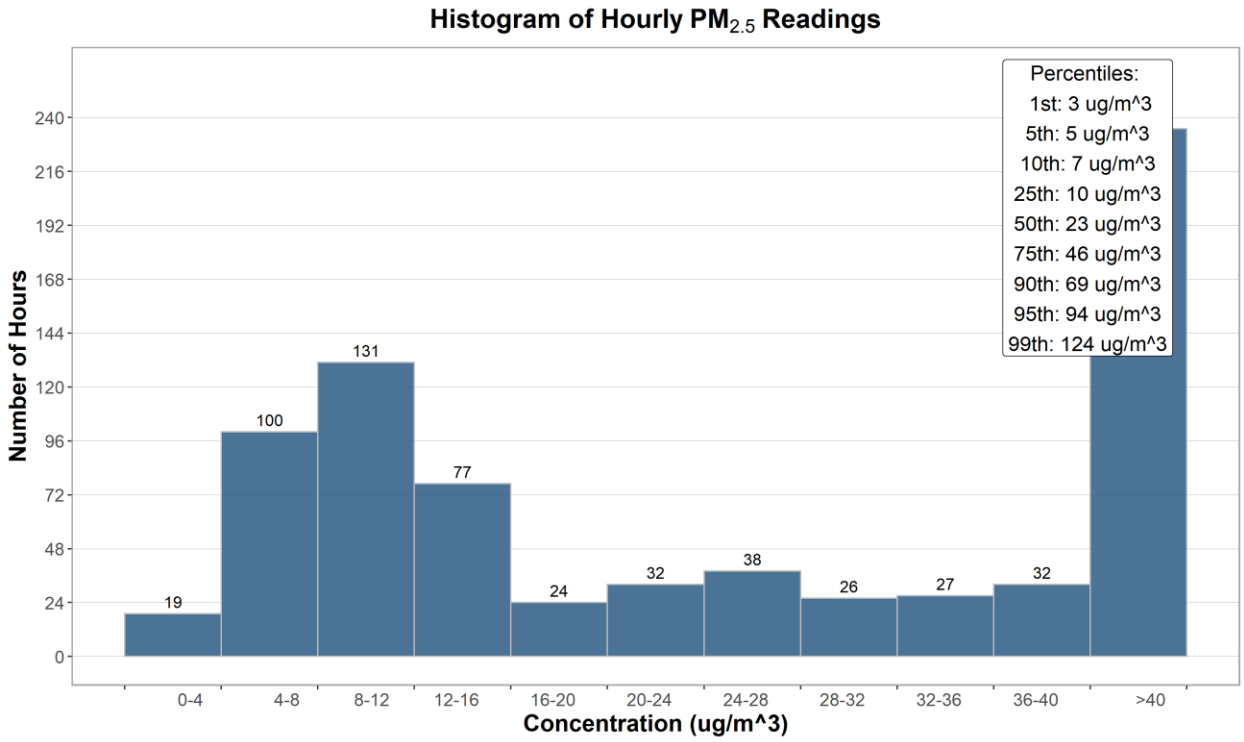


**Figure 3-5** **Histogram of hourly $PM_{2.5}$ concentrations at the Lagoon station**

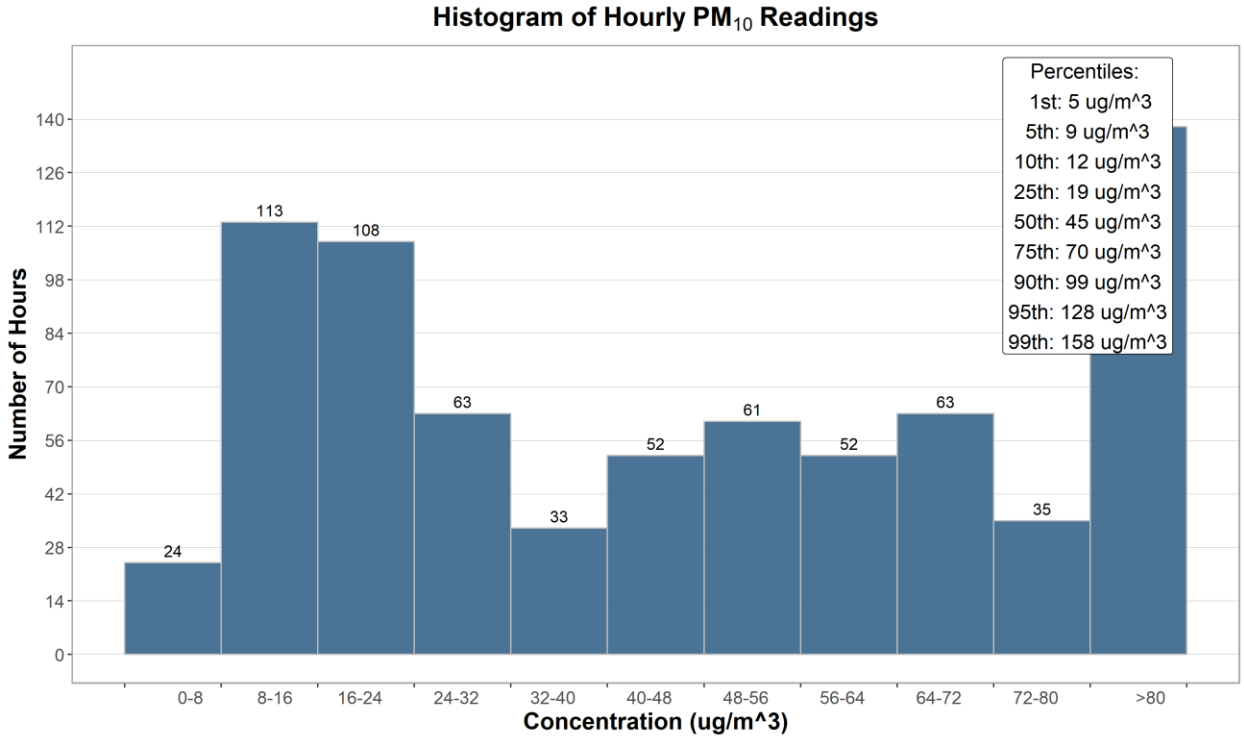


**Figure 3-6** **Histogram of hourly $PM_{10}$ concentrations at the Lagoon station**

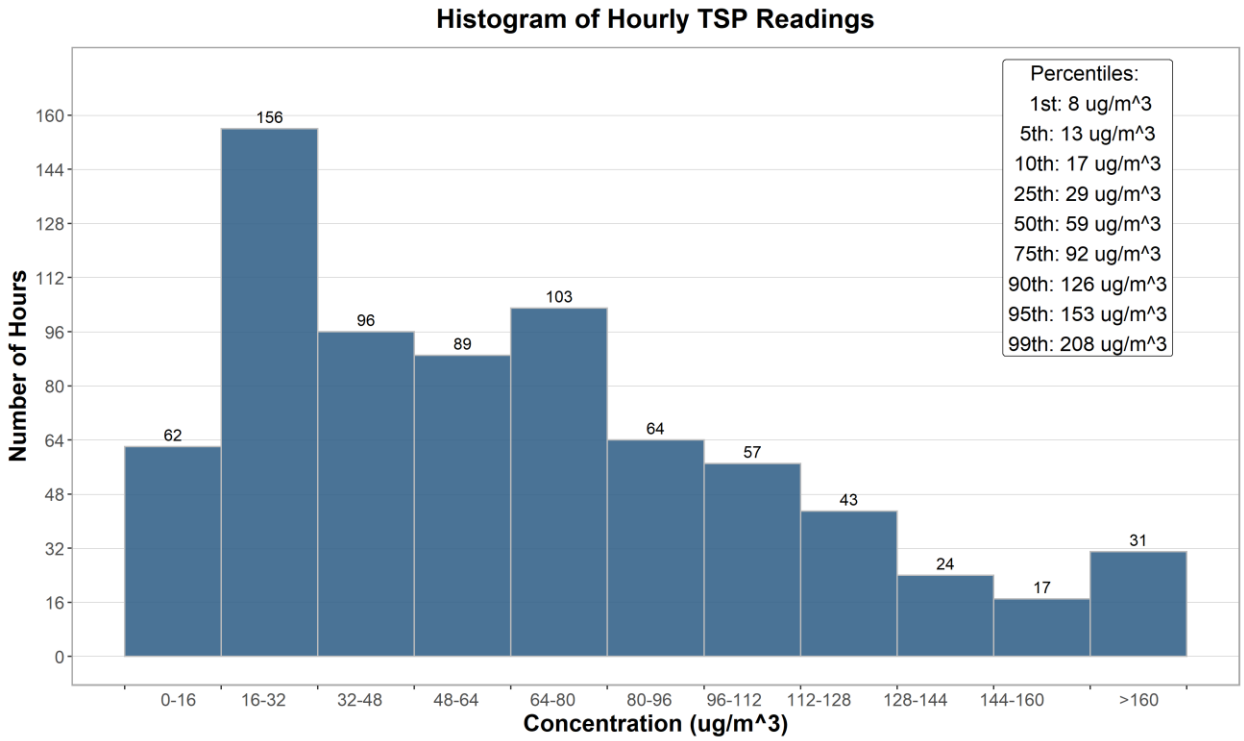


**Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station**

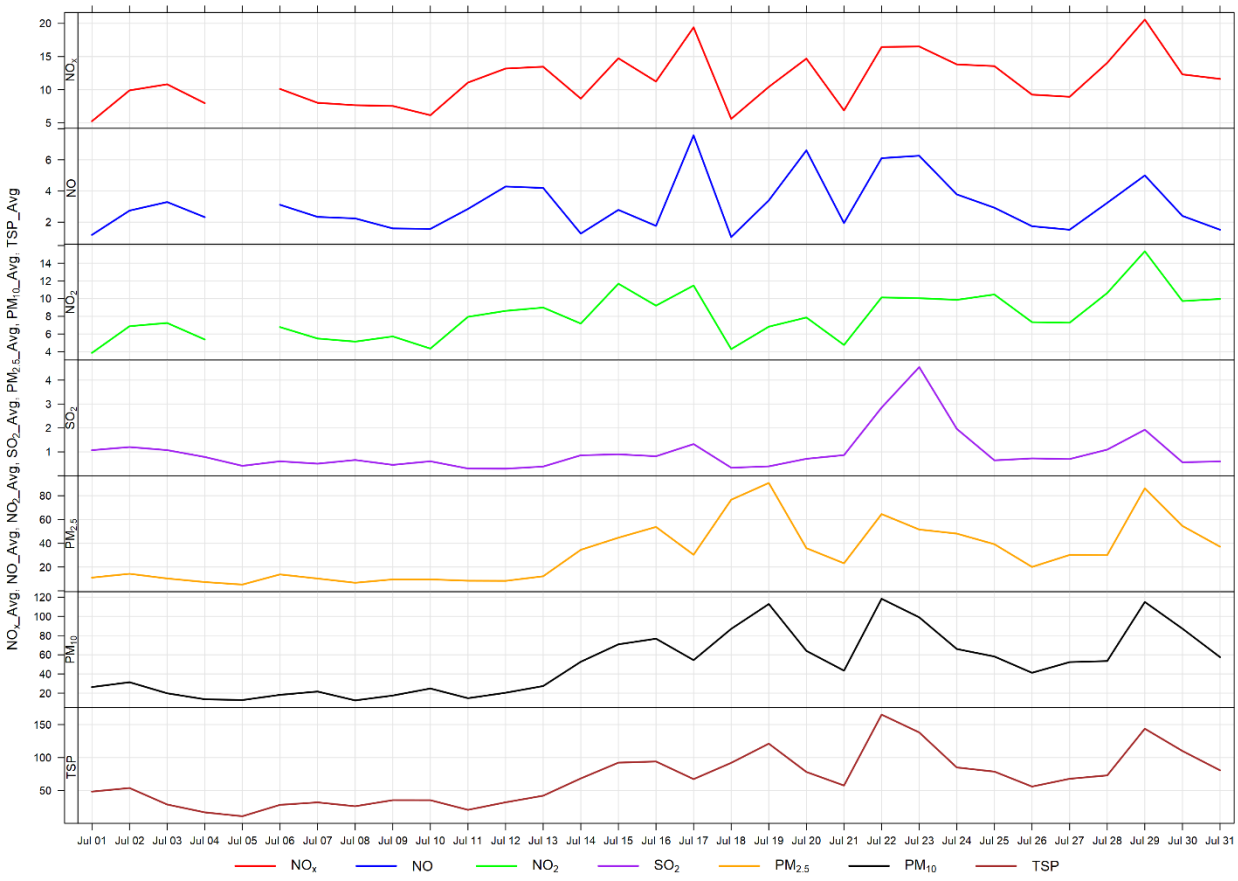


**Figure 3-8 24-hour concentrations of $NO_x$, $SO_2$, and particulate matter at the Lagoon monitor**

The following wind rose (Figure 3-9) shows the wind rose for the 5 day of TSP exceedances. Figure 3-10 shows the wind rose for the 16 days of $PM_{2.5}$ exceedances. The variation in wind conditions producing exceedances shows that, this month, the TSP exceedances were largely driven by wildfire activity rather than windblown fugitive dust, as has been typical.

Figure 3-11 through Figure 3-13 show the variation in concentrations over various time averaging periods for PM, $SO_2$ and $NO_x$. The particulate matter plot in Figure 3-11 typically shows that $PM_{10}$ and TSP concentrations have a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other airshed activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours. Due to the wildfire impacts during the month of July the diurnal trend this month is less pronounced.

Figure 3-12 shows the variation of $SO_2$ over various time periods. $SO_2$ concentrations patterns are dependent on the timing of the highest $SO_2$ concentrations recorded in the month because in general $SO_2$ concentrations are very low. Figure 3-13 shows the variation of $NO_x$, NO and $NO_2$, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

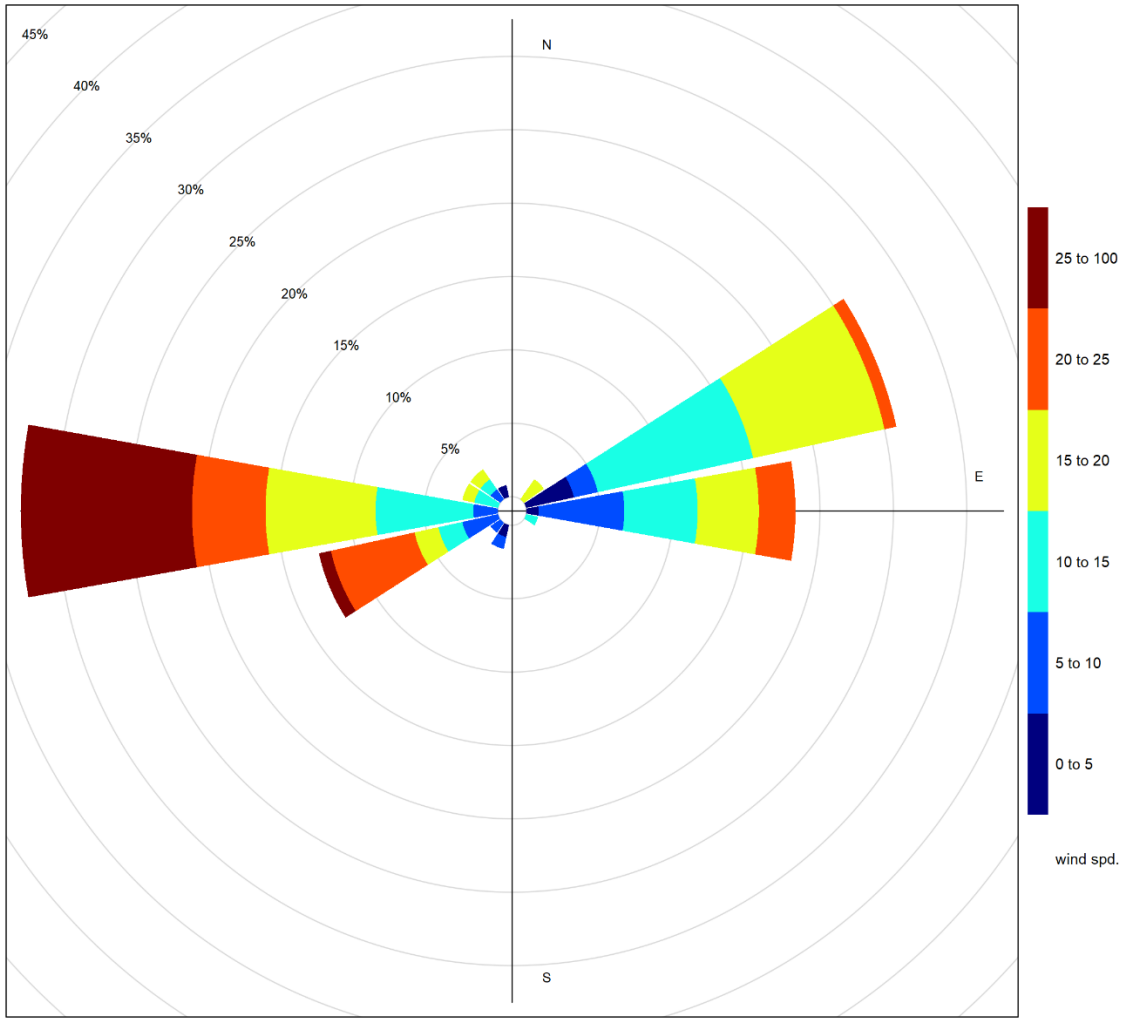


**Figure 3-9 Wind rose for TSP exceedance days recorded at the Lagoon Station**

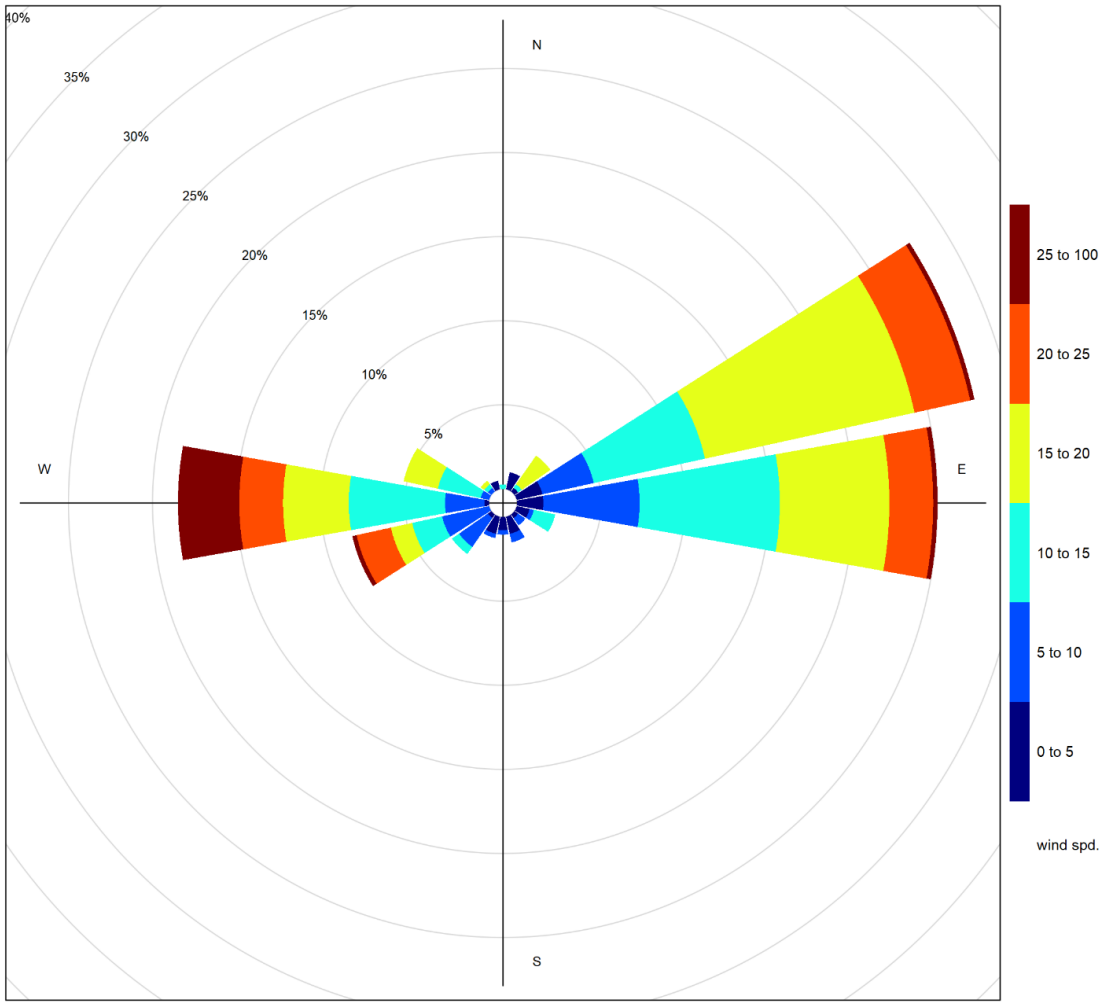


**Figure 3-10 Wind rose for $PM_{2.5}$ exceedance days recorded at the Lagoon Station**

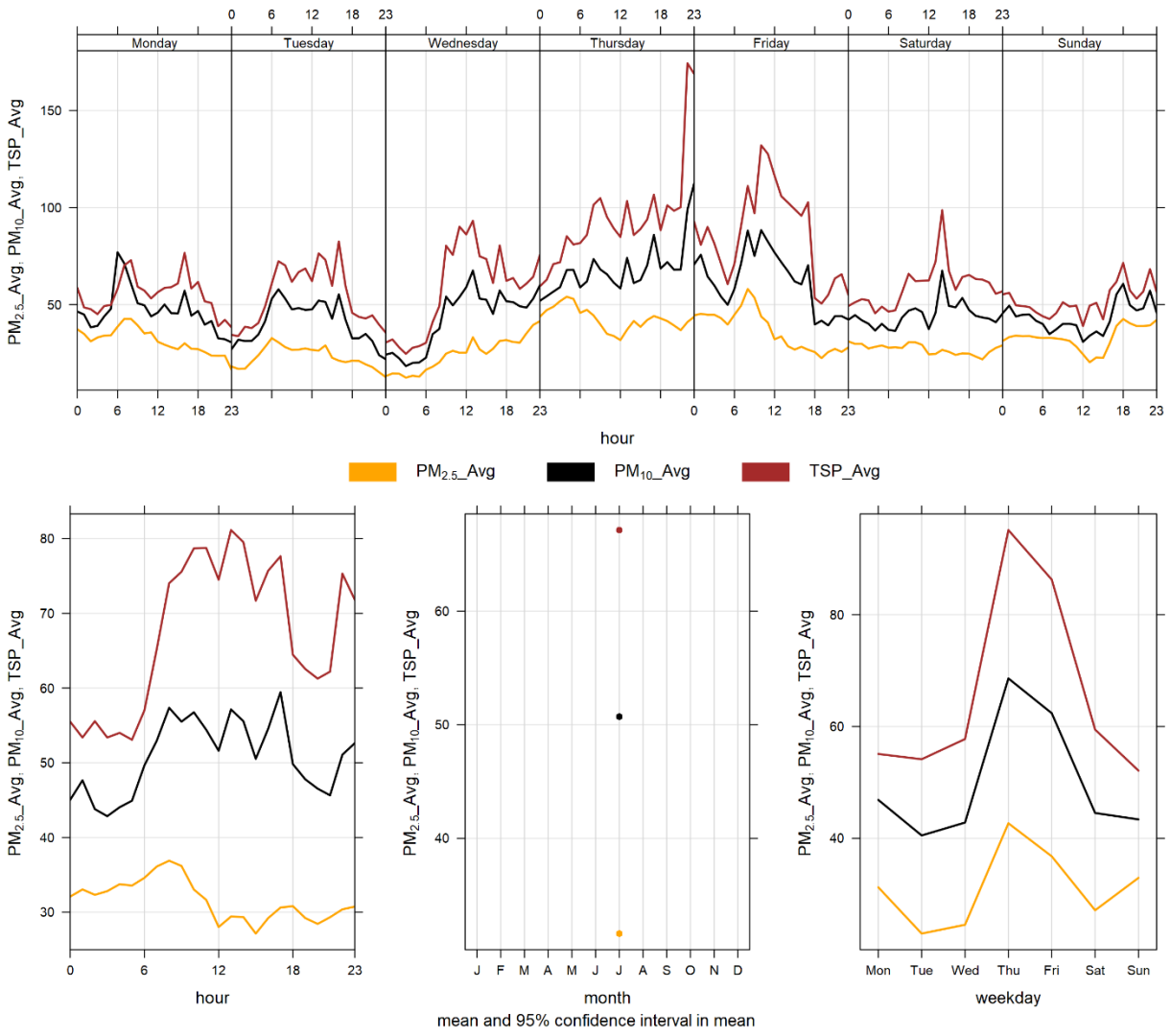


**Figure 3-11 Lagoon monitor particulate matter time variation**

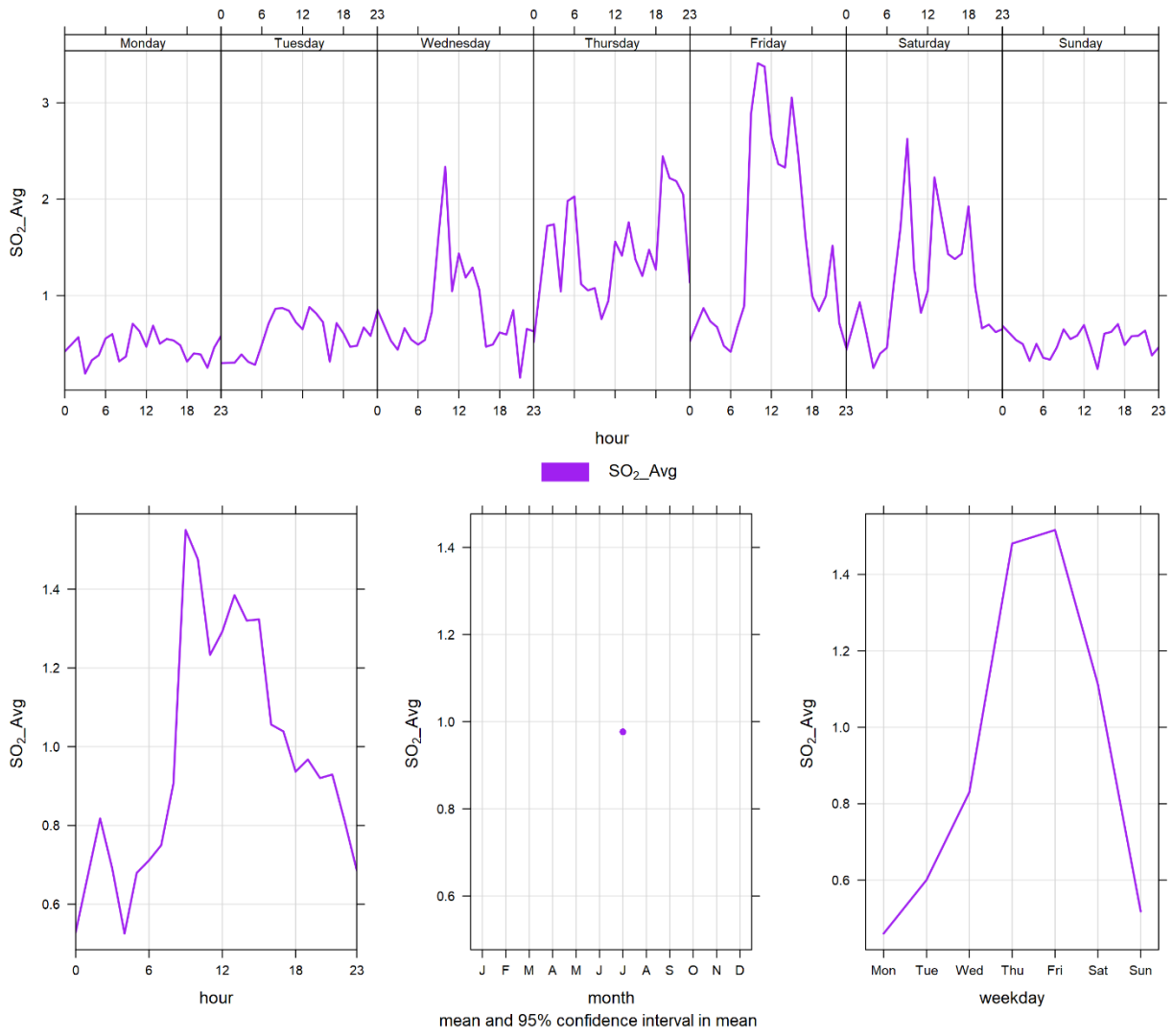


**Figure 3-12 Lagoon monitor $SO_2$ time variation**

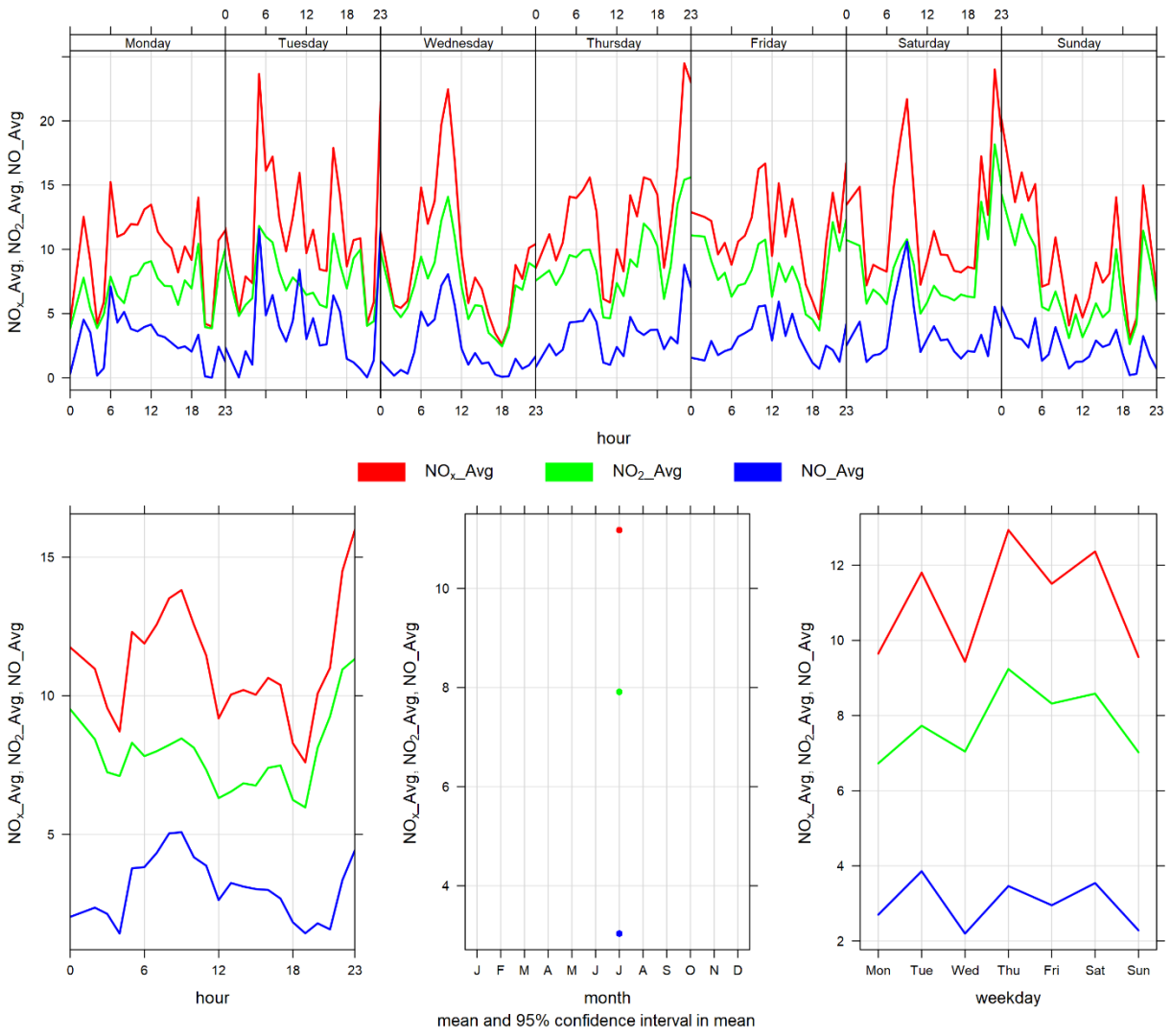


**Figure 3-13 Lagoon monitor $NO_x$ time variation**

# 4 WINDRIDGE STATION

The Windridge station contains TSP, $PM_{10}$, 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 July 2021.

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

## 4.1 OPERATIONAL SUMMARY

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

**Table 4-1 Instrumentation List at the Windridge monitoring location**

| Parameter Measured | Equipment Description | Notes |
|---|---|---|
| **$PM_{2.5}$ Concentrations** | MetOne BAM-1020 FRM Continuous Particulate Monitor | The $PM_{2.5}$ monitor was calibrated on July 26th. The monitor recorded 100% uptime for the month of July. |
| **$PM_{10}$ Concentrations** | MetOne BAM-1020 Continuous Particulate Monitor | The $PM_{10}$ monitor was calibrated on July 26th. The monitor recorded 99.9% uptime for the month of July due to one hour of equipment malfunction on July 6th at 5:00. |
| **TSP Concentrations** | MetOne BAM-1020 Continuous Particulate Monitor | The TSP monitor was calibrated on July 26th. The monitor recorded 100% uptime for the month of July. |

## 4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in July 2021, and Table 4-3 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrate the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP and while Figure 4-7 displays the $PM_{2.5}$ exceedance days, and Figure 4-8 illustrates the time series for hourly PM over different time periods.

There were 16 exceedances of the 24-hour $PM_{2.5}$ AAAQO, 53 exceedance of the 1-hour $PM_{2.5}$ AAAQG, and 4 exceedances of the 24-hour TSP AAAQO. As discussed in Section 1.3, the Bow Valley airshed was heavily impacted from regional wildfire activity in July. All of the exceedances were primarily attributable to wildfire activity and smoke in the airshed from fires in BC and Alberta.

Since the Windridge station was installed in 2017 wildfire impacts have not occurred in July, and therefore, AAQO exceedances have not typically been recorded.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The

Windridge station was reinstalled for September 1st, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge monitor that may contribute to an increase in TSP levels. Further, the strong wind gusting that occurred in July 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 July 2021 data at the Windridge Station**

| Parameter | Guideline | | Station | Exceedances | | Monthly | | Maximum 1-hour | | | | | Maximum 24-hour | | Operational Time (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-hr | 24-hr | | 1-hr | 24-hr | Minimum | Average | Maximum Concentration | Day | Hour | Wind Speed (km/hr) | Wind Direction (degrees) | Maximum Concentration | Day | |
| **$PM_{2.5}$ ($\mu g/m^3$)** | 80 | 29 | Windridge | 53 | 16 | 0.0 | 30.8 | 132.0 | 18 | 18 | 24.5 | 83.1 | 85.9 | 19 | 100.0 |
| **$PM_{10}$ ($\mu g/m^3$)** | - | - | Windridge | - | - | 1.0 | 54.4 | 485.0 | 22 | 23 | 34.8 | 272.8 | 181.3 | 23 | 99.9 |
| **TSP ($\mu g/m^3$)** | - | 100 | Windridge | - | 4 | 4.0 | 69.0 | 931.0 | 22 | 23 | 34.8 | 272.8 | 262.8 | 23 | 100.0 |

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

| Date | TSP ($ug/m^3$) | $PM_{2.5}$ ($ug/m^3$) | Average Wind Direction (degrees) | Average Wind Speed (km/hr) | Average RH (%) | Root Cause (Provided by Lafarge) |
|---|---|---|---|---|---|---|
| **Windridge** | | | | | | |
| **2021-07-14** | - | 32.5 | 268.4 | 11.4 | 46.2 | Regional wildfire activity |
| **2021-07-15** | - | 40.7 | 304.3 | 12.9 | 41.0 | Regional wildfire activity |
| **2021-07-16** | - | 51.3 | 68.8 | 13.6 | 53.9 | Regional wildfire activity |
| **2021-07-17** | - | 31.8 | 74.3 | 15.3 | 62.4 | Regional wildfire activity |
| **2021-07-18** | - | 75.2 | 86.4 | 15.8 | 76.2 | Regional wildfire activity |
| **2021-07-19** | 115.6 | 85.9 | 81.7 | 14.8 | 71.8 | Regional wildfire activity |
| **2021-07-20** | - | 36.7 | 78.7 | 14.0 | 74.0 | Regional wildfire activity |
| **2021-07-22** | 240.4 | 60.4 | 278.5 | 19.8 | 36.0 | Regional wildfire activity |
| **2021-07-23** | 262.8 | 51.6 | 266.4 | 22.4 | 22.5 | Regional wildfire activity |
| **2021-07-24** | - | 45.5 | 271.3 | 12.8 | 34.4 | Regional wildfire activity |
| **2021-07-25** | - | 37.2 | 79.6 | 12.7 | 51.8 | Regional wildfire activity |
| **2021-07-27** | - | 35.5 | 87.8 | 14.2 | 56.8 | Regional wildfire activity |
| **2021-07-28** | - | 30.6 | 69.6 | 9.0 | 60.5 | Regional wildfire activity |
| **2021-07-29** | 130.7 | 78.3 | 338.4 | 12.0 | 43.4 | Regional wildfire activity |
| **2021-07-30** | - | 54.0 | 69.3 | 10.4 | 57.1 | Regional wildfire activity |
| **2021-07-31** | - | 33.5 | 329.2 | 10.0 | 59.2 | Regional wildfire activity |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total # of Exceedances** | **4** | **16** | | | | |
| **Maximum # of Exceedances (July)** | **0 (2018)** | **0 (2018)** | | | | |
| **Average # of Exceedances (July)** | **0** | **0** | | | | |
| **Minimum # of Exceedances (July)** | **0 (2018)** | **0 (2018)** | | | | |

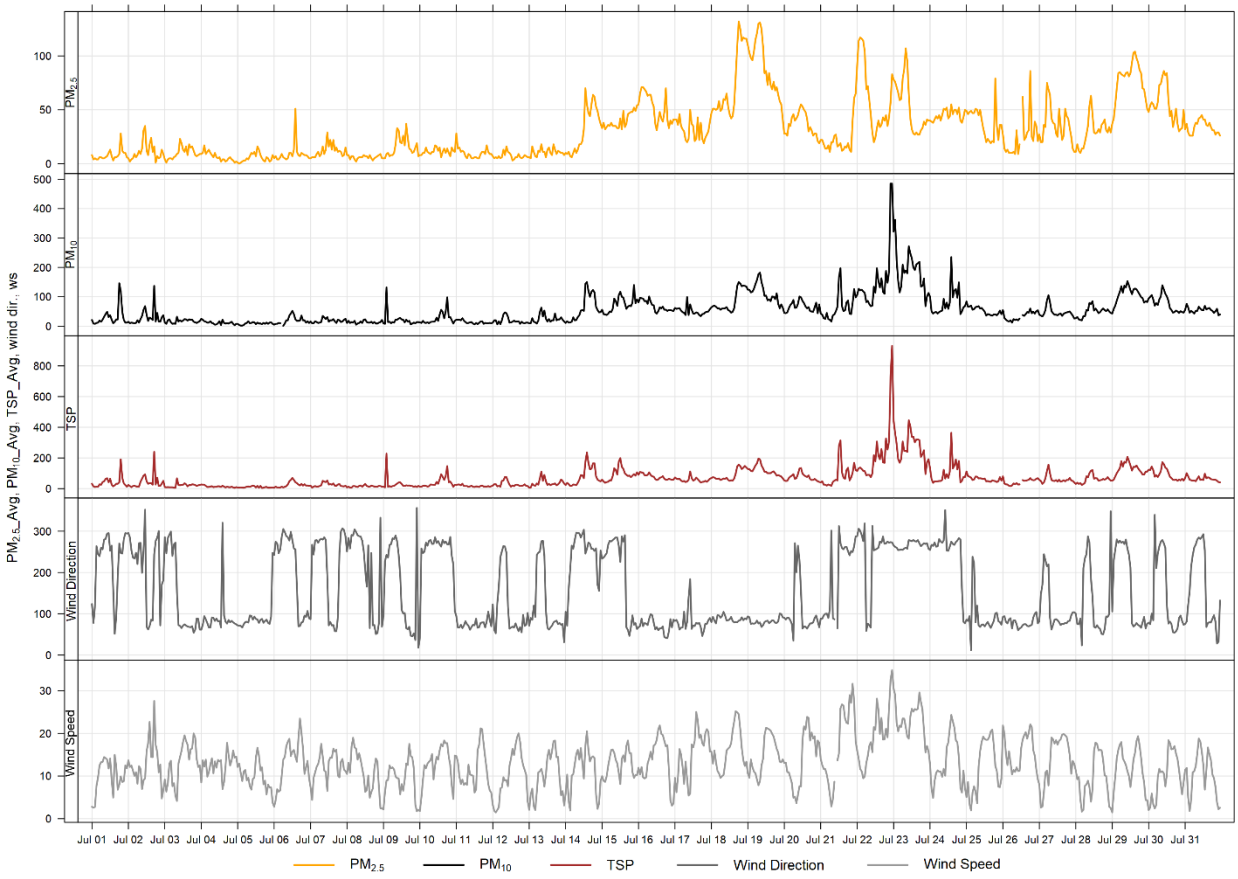


**Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor**

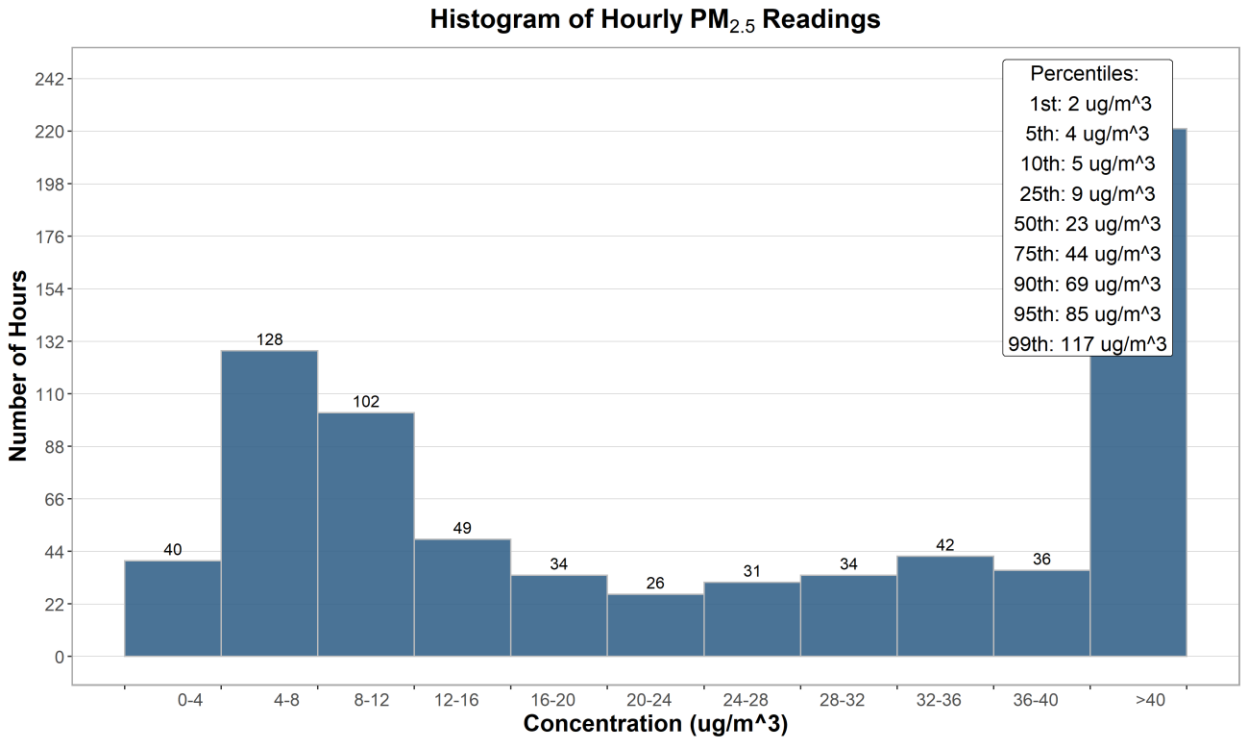


**Figure 4-2** **Histogram of hourly $PM_{2.5}$ concentrations at the Windridge station**

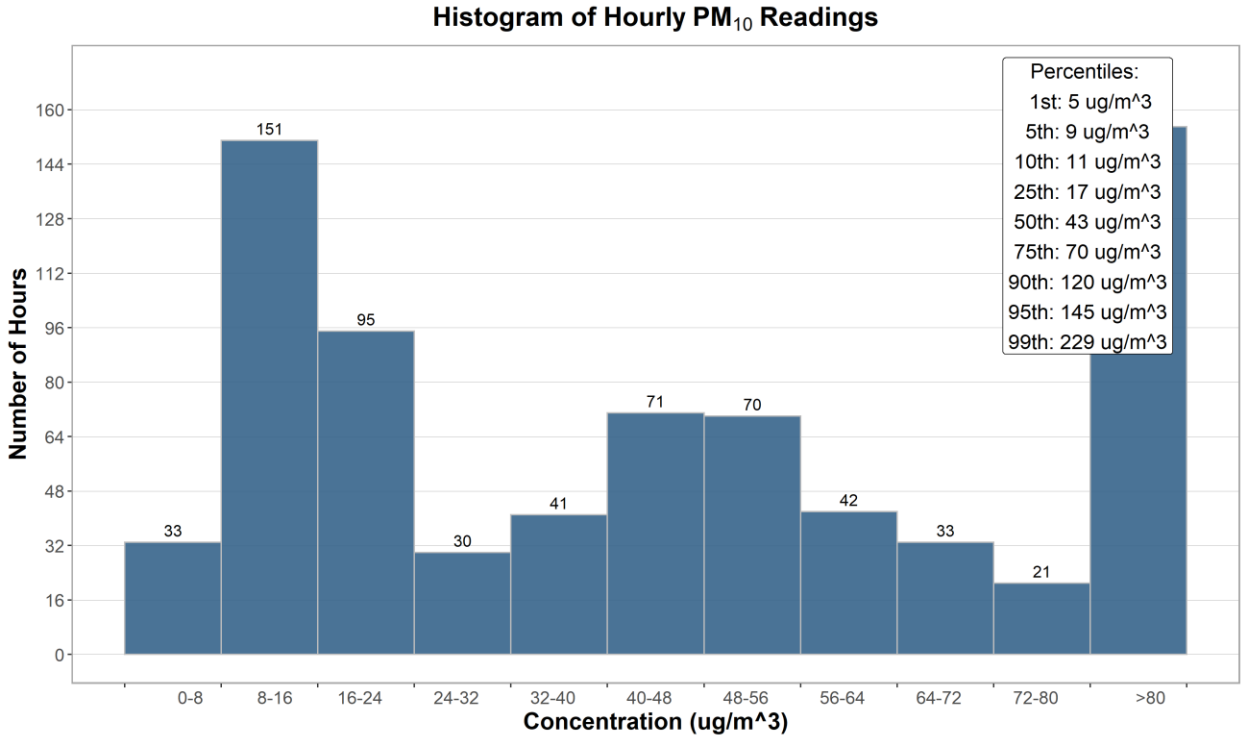


**Figure 4-3** **Histogram of hourly $PM_{10}$ concentrations at the Windridge station**

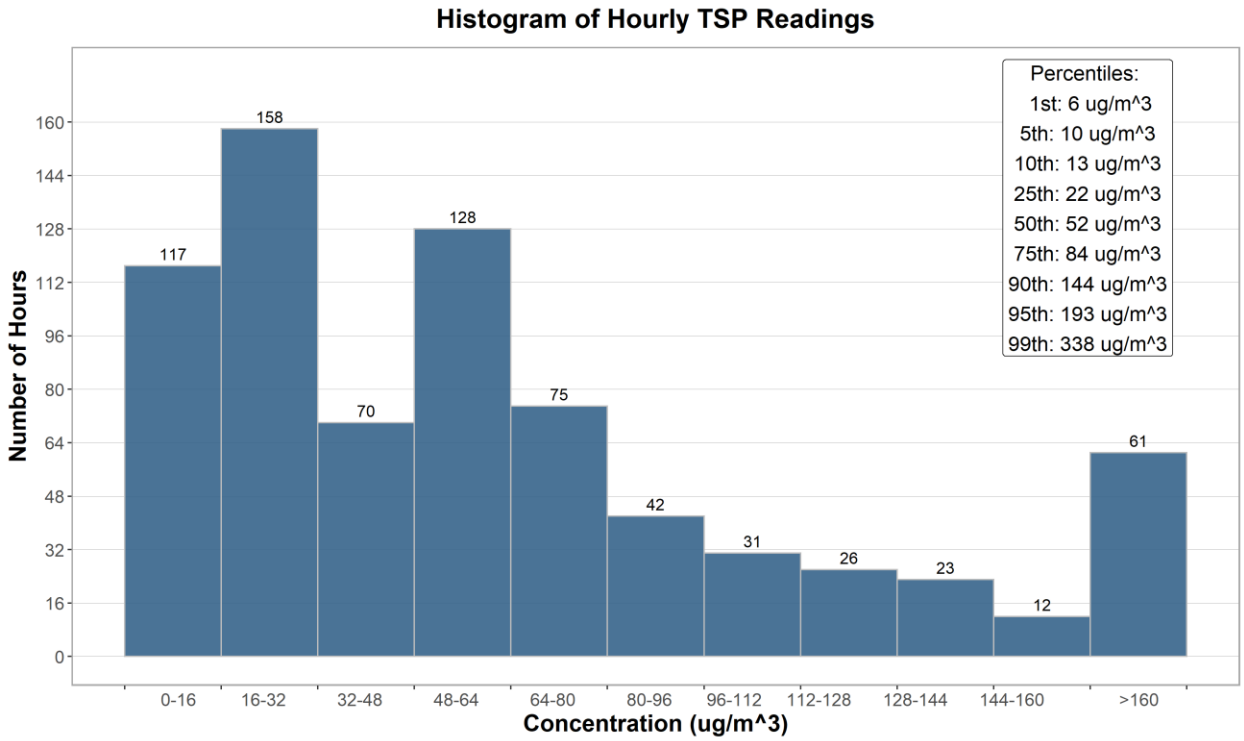


**Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station**

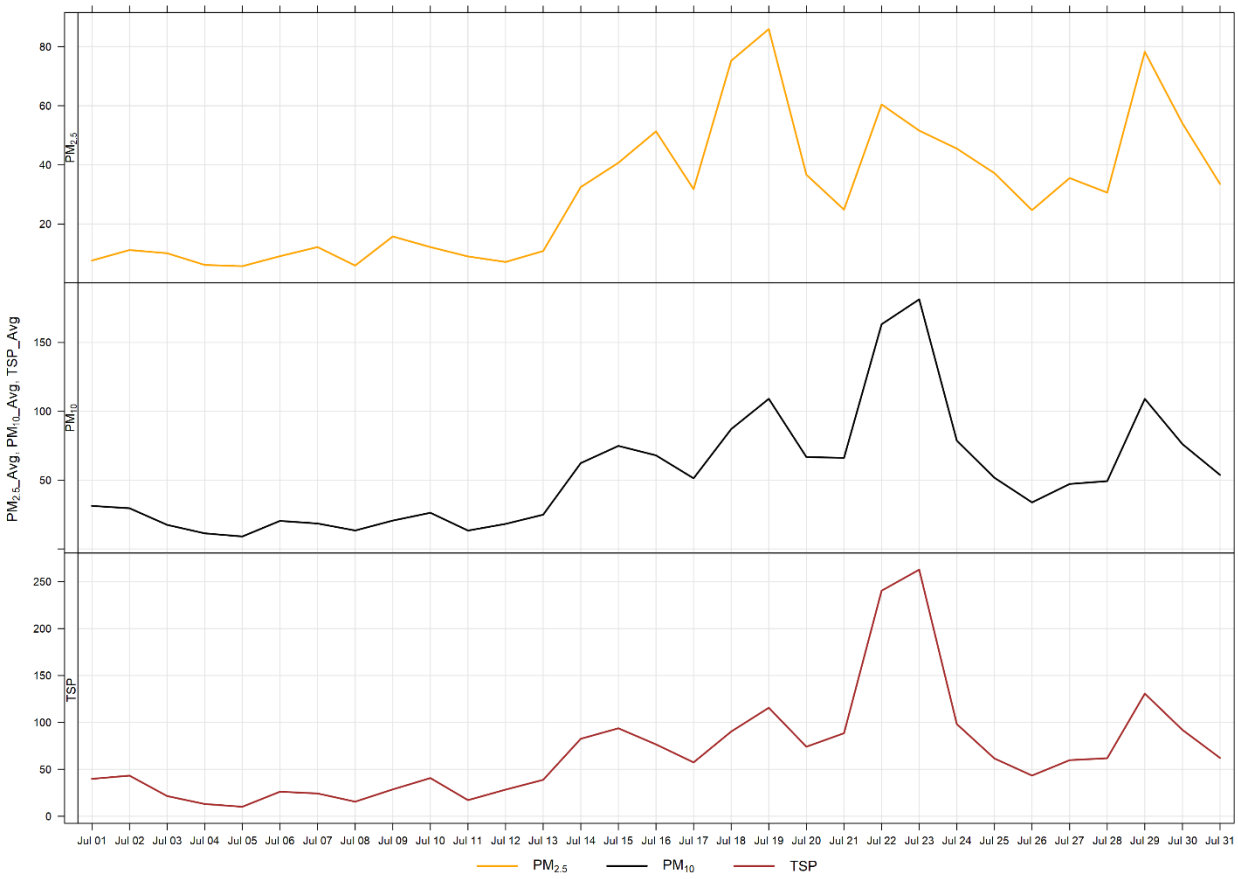


**Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor**

Figure 4-6 shows the wind rose for the 4 days of TSP exceedances. Figure 4-7 shows the wind rose for the 16 days of $PM_{2.5}$ exceedances. The variation in wind conditions producing exceedances shows that, this month, the TSP exceedances were largely driven by wildfire activity rather than windblown fugitive dust, as has been typical.

Figure 4-8 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 4-8 is based on data collected during July 2021 and similar to the Lagoon station shows a more muted diurnal pattern associated with Lafarge operations, daytime emissions from traffic and wildfire smoke impacts in July. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

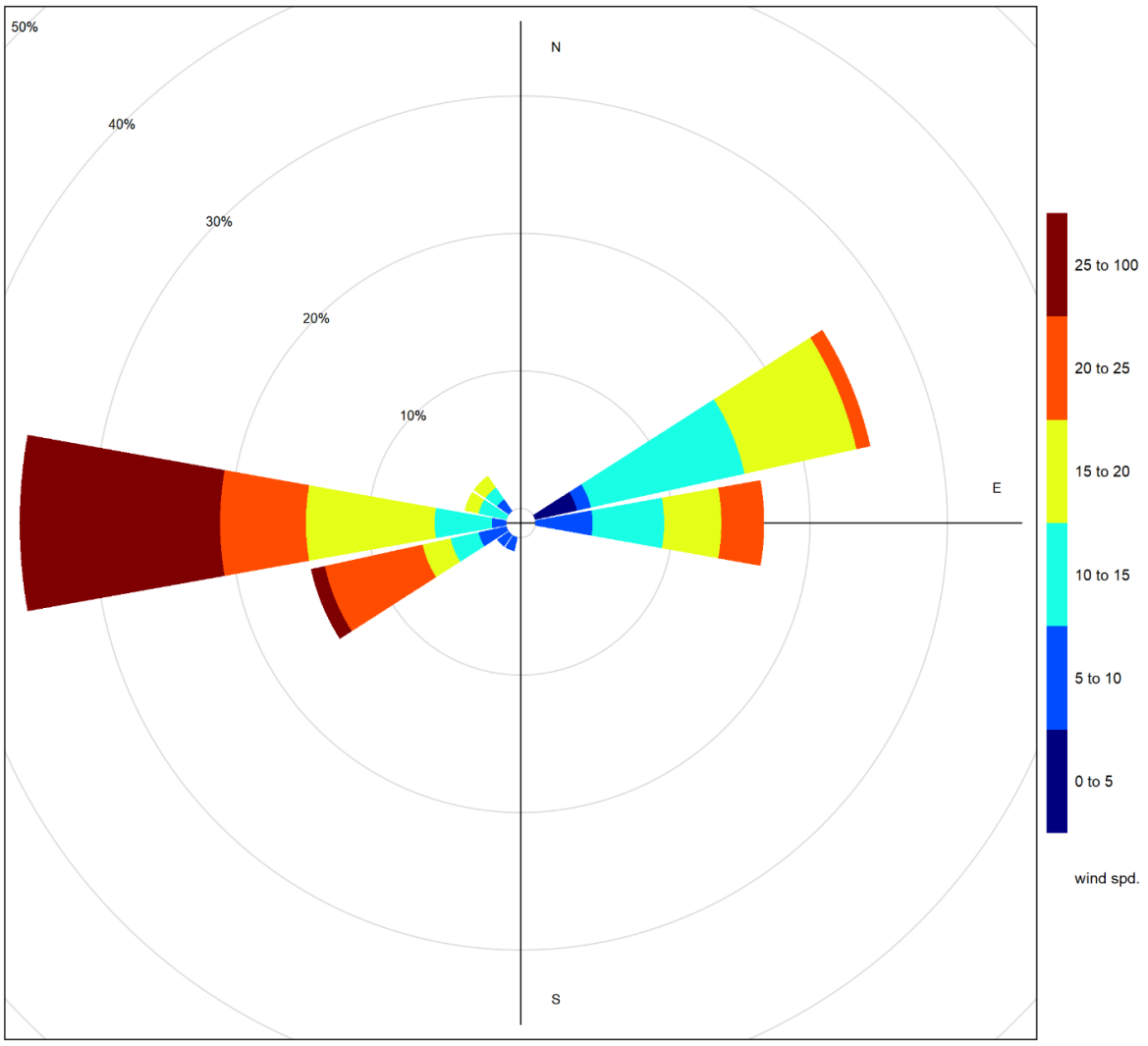


**Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station**

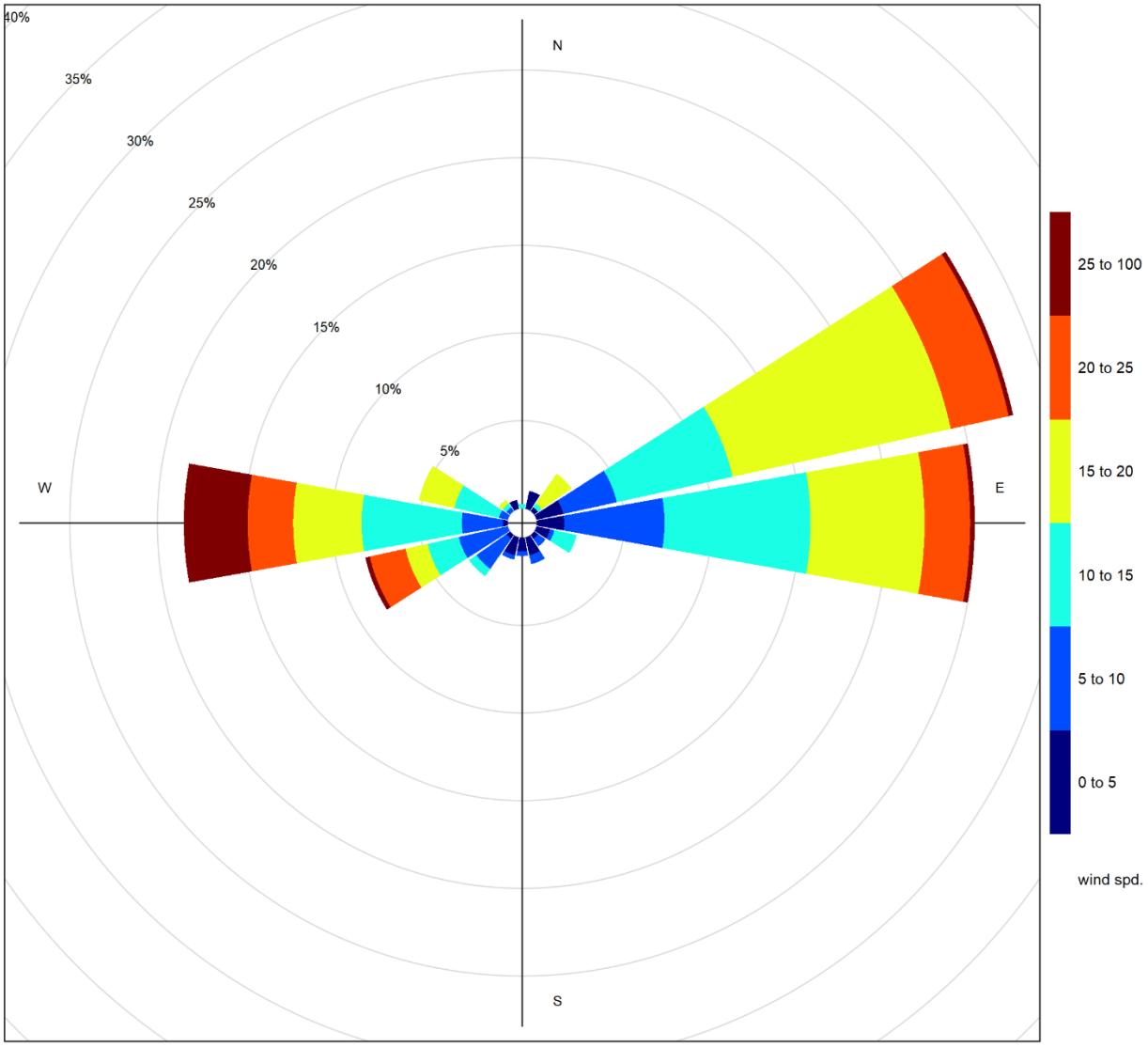


**Figure 4-7 Wind rose for $PM_{2.5}$ exceedance days recorded at the Windridge Station**

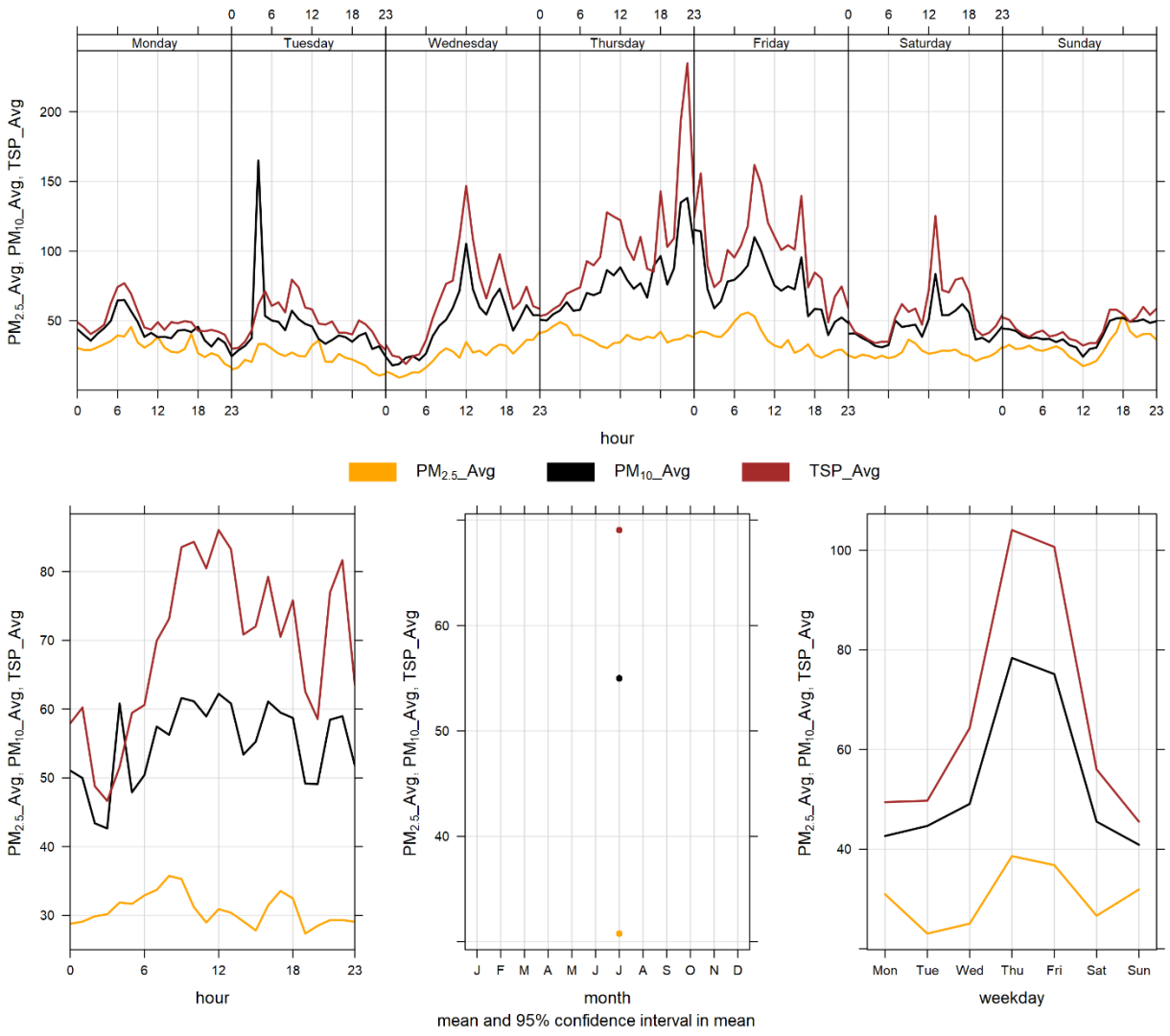


**Figure 4-8 Windridge particulate matter time variation**

# 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 100% uptime for the month of July. |

## 5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in its current location in order to monitor "background" PM concentrations since the predominant wind pattern is from west to east in the valley. Table 5-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month. While Table 5-3 summarizes the recorded exceedances 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 $PM_{2.5}$, $PM_{10}$ and TSP concentrations recorded over the month.

There were zero exceedances of the 24-hour TSP Guideline (100 µg/$m^3$) and 16 exceedances of the 24-hour $PM_{2.5}$ (29µg/$m^3$) Guideline. Further, there were 49 hours exceeding the 1-hour $PM_{2.5}$ Guideline.

As discussed in Section 1.3, the Bow Valley airshed was heavily impacted from regional wildfire activity in July. All of the exceedances were primarily attributable to wildfire activity and smoke in the airshed from fires in BC and Alberta.

Historically in July there has been zero exceedances of the 24-hour TSP Guideline, and one exceedance of the 24-hour $PM_{2.5}$ Guideline.

**Table 5-2 Summary of July 2021 data at the West GRIMM**

| Parameter | Guideline | | Station | Exceedances | | Monthly | | Maximum 1-hour | | | | | Maximum 24-hour | | Operational Time (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-hr | 24-hr | | 1-hr | 24-hr | Minimum | Average | Maximum Concentration | Day | Hour | Wind Speed (km/hr) | Wind Direction (degrees) | Maximum Concentration | Day | |
| **$PM_{2.5}$ ($\mu g/m^3$)** | 80 | 29 | West | 49 | 16 | 3.2 | 32.0 | 136.9 | 19 | 7 | 7.8 | 76.4 | 83.7 | 19 | 100.0 |
| **$PM_{10}$ ($\mu g/m^3$)** | - | - | West | - | - | 4.4 | 40.1 | 171.5 | 19 | 7 | 7.8 | 76.4 | 100.3 | 19 | 100.0 |
| **TSP ($\mu g/m^3$)** | - | 100 | West | - | 0 | 3.2 | 32.2 | 238.7 | 21 | 10 | N/A | N/A | 74.9 | 19 | 100.0 |

**Table 5-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ at the West Monitor**

| Date | TSP ($ug/m^3$) | $PM_{2.5}$ ($ug/m^3$) | Average Wind Direction (degrees) | Average Wind Speed (km/hr) | Average RH (%) | Root Cause (Provided by Lafarge) |
|---|---|---|---|---|---|---|
| **West** | | | | | | |
| **2021-07-14** | - | 31.4 | 268.4 | 11.4 | 46.2 | Regional wildfire activity |
| **2021-07-15** | - | 43.1 | 304.3 | 12.9 | 41.0 | Regional wildfire activity |
| **2021-07-16** | - | 54.3 | 68.8 | 13.6 | 53.9 | Regional wildfire activity |
| **2021-07-17** | - | 34.5 | 74.3 | 15.3 | 62.4 | Regional wildfire activity |
| **2021-07-18** | - | 76.7 | 86.4 | 15.8 | 76.2 | Regional wildfire activity |
| **2021-07-19** | - | 83.7 | 81.7 | 14.8 | 71.8 | Regional wildfire activity |
| **2021-07-20** | - | 40.3 | 78.7 | 14.0 | 74.0 | Regional wildfire activity |
| **2021-07-22** | - | 68.0 | 278.5 | 19.8 | 36.0 | Regional wildfire activity |
| **2021-07-23** | - | 54.6 | 266.4 | 22.4 | 22.5 | Regional wildfire activity |
| **2021-07-24** | - | 47.9 | 271.3 | 12.8 | 34.4 | Regional wildfire activity |
| **2021-07-25** | - | 43.5 | 79.6 | 12.7 | 51.8 | Regional wildfire activity |
| **2021-07-27** | - | 36.4 | 87.8 | 14.2 | 56.8 | Regional wildfire activity |
| **2021-07-28** | - | 33.7 | 69.6 | 9.0 | 60.5 | Regional wildfire activity |
| **2021-07-29** | - | 70.7 | 338.4 | 12.0 | 43.4 | Regional wildfire activity |
| **2021-07-30** | - | 49.9 | 69.3 | 10.4 | 57.1 | Regional wildfire activity |
| **2021-07-31** | - | 36.1 | 329.2 | 10.0 | 59.2 | Regional wildfire activity |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total # of Exceedances** | **0** | **16** | | | | |
| **Maximum # of Exceedances (July)** | **1 (2010, 2014)** | **7 (2017)** | | | | |
| **Average # of Exceedances (July)** | **0** | **1** | | | | |
| **Minimum # of Exceedances (July)** | **0 (2011, 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2020)** | **0 (2010, 2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)** | | | | |

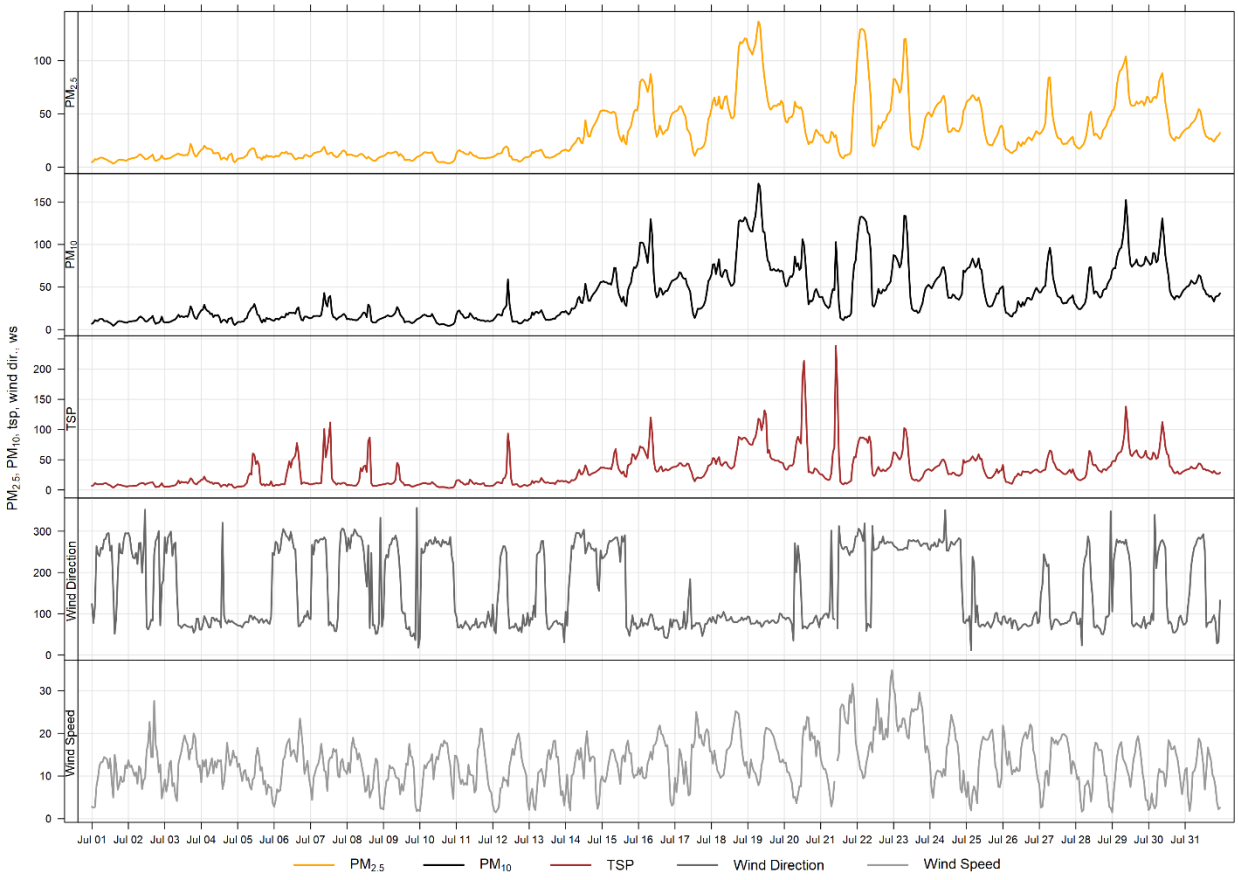


**Figure 5-1 1-hour particulate matter concentrations at the West monitor**

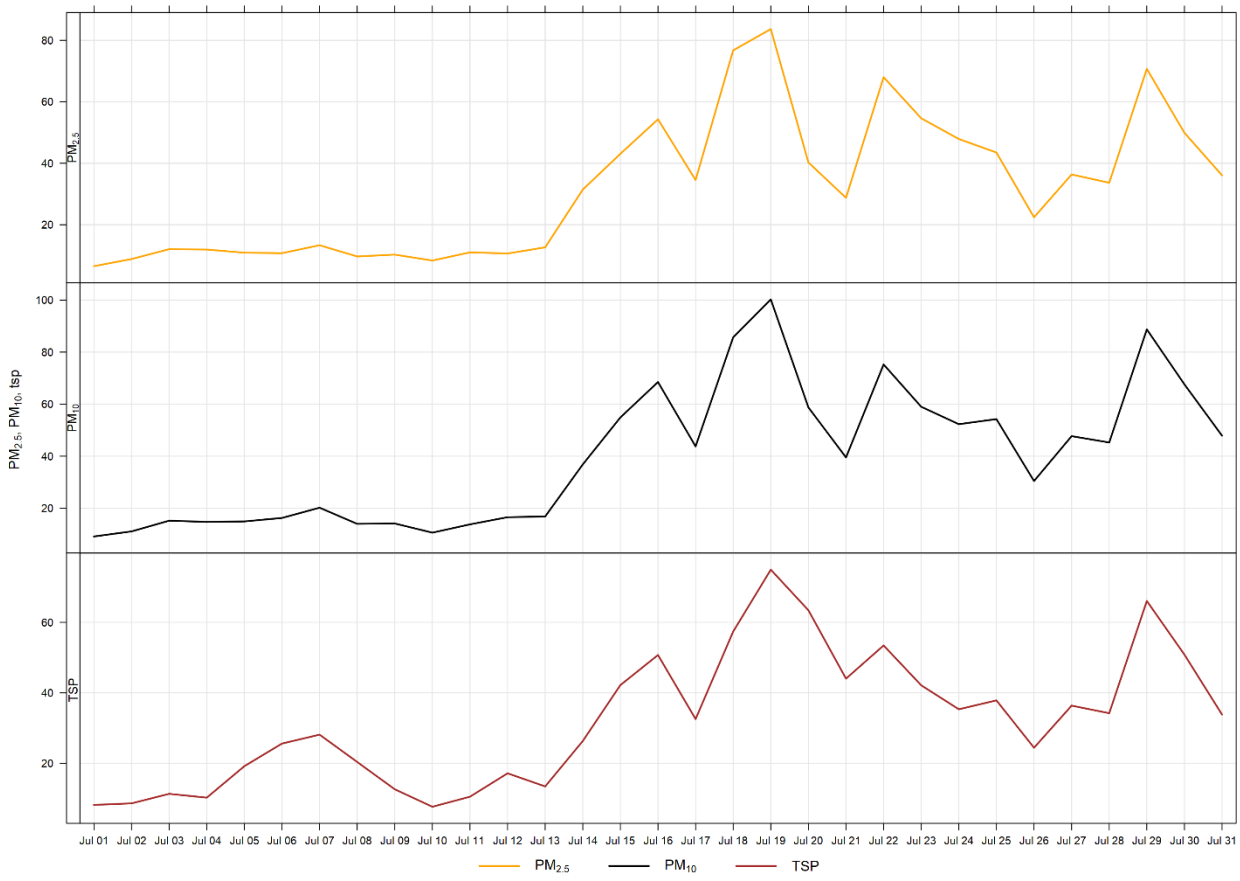


**Figure 5-2 24-hour particulate matter concentrations at the West monitor**

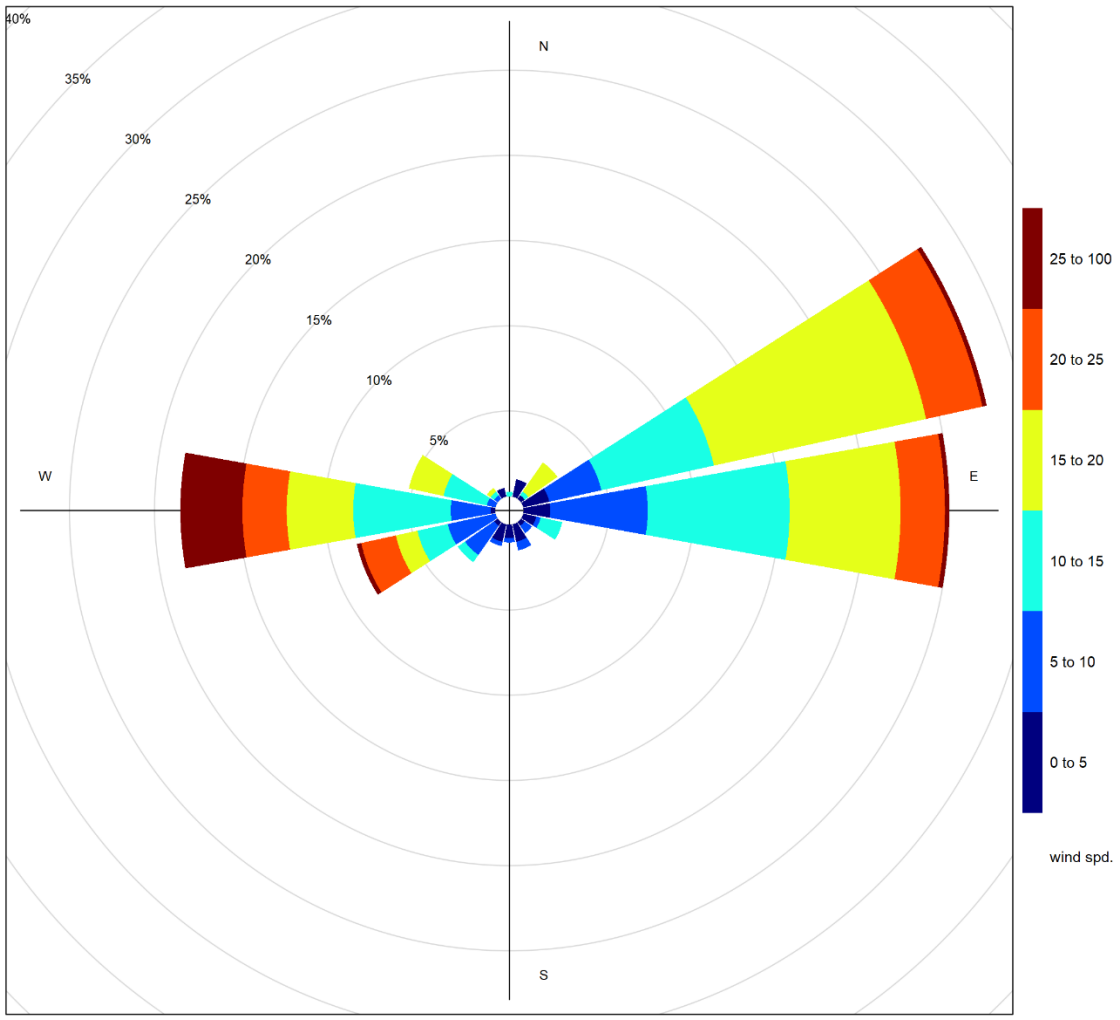


**Figure 5-3 Wind rose for $PM_{2.5}$ exceedance days recorded at the West GRIMM**

Figure 5-3 shows the wind rose for the 16 days of $PM_{2.5}$ exceedances. The variation in wind conditions producing exceedances shows that wildfire activity rather than windblown fugitive dust was the primary air quality issue this month.

Figure 5-4 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during July 2021. As the monitor is generally 'up-wind' of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.

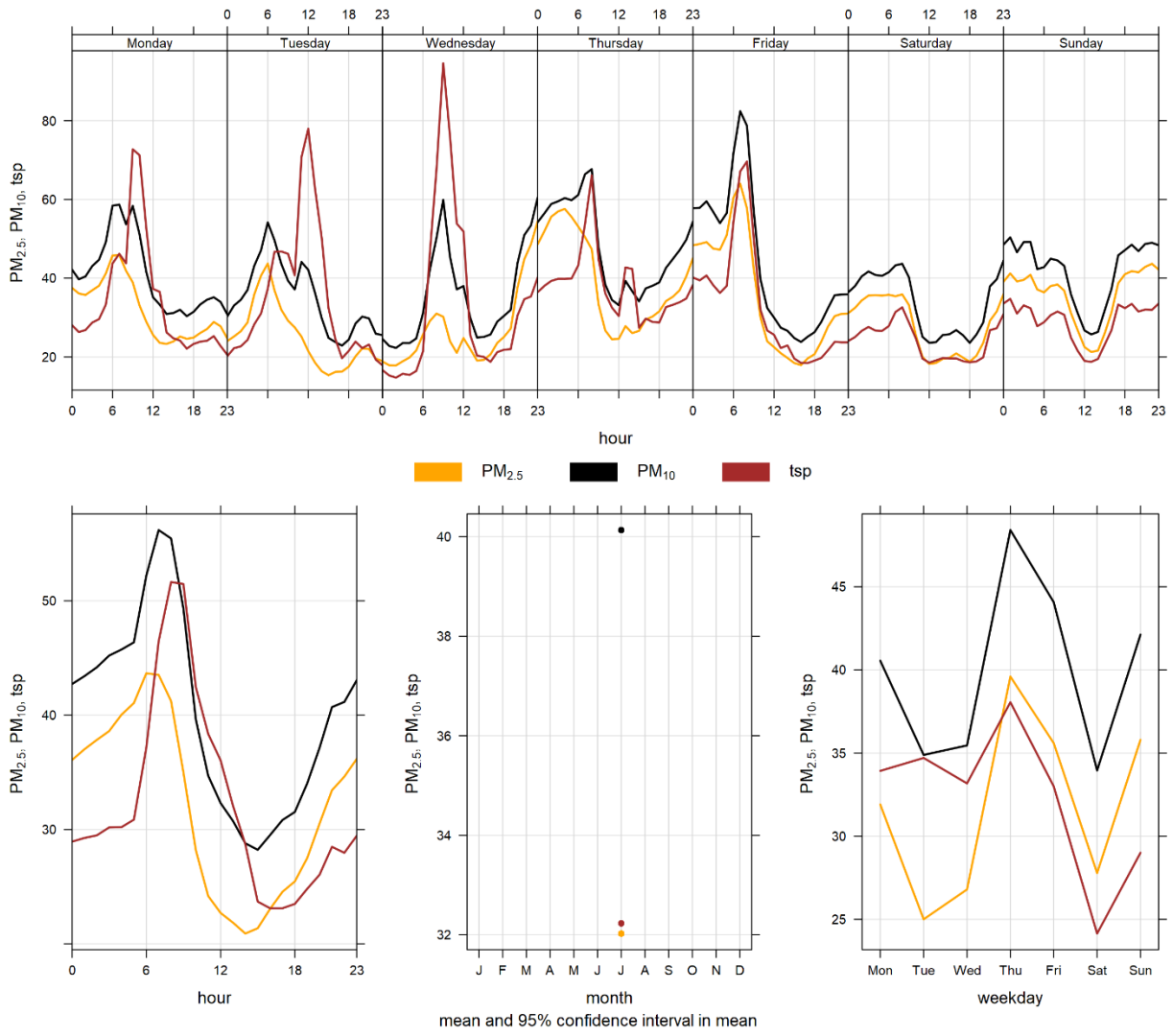


**Figure 5-4 West particulate matter time variation**

# 6 BERM INDUSTRIAL GRIMM

## 6.1 OPERATIONAL SUMMARY

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

**Table 6-1 Instrumentation List at the Berm monitoring location**

| Parameter Measured | Equipment Description | Notes |
|---|---|---|
| **$PM_{2.5}$, $PM_{10}$, TSP Concentrations** | GRIMM 365 Continuous Particulate Monitor | The analyzer had 100% uptime during the month of July. |

## 6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility in 2009. Figure 6-1 and Figure 6-2 show the hourly and daily $PM_{2.5}$, $PM_{10}$ and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, 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 6 and 9 exceedances of the 24-hour TSP (100 µg/m$^3$) and $PM_{2.5}$ (29 µg/m$^3$) Guidelines, respectively. There were 16 hours exceeding the 1-hour $PM_{2.5}$ Guideline.

As discussed in Section 1.3, the Bow Valley airshed was heavily impacted from regional wildfire activity in July. All of the exceedances were primarily attributable to wildfire activity and smoke in the airshed from fires in BC and Alberta.

Historically during the month of July, the Berm monitor records an average of 11 and 1 exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines, respectively. The maximum number of TSP exceedances recorded during July occurred in 2010 where there were 22 days that exceeded the guideline. On the other hand, the maximum number of $PM_{2.5}$ exceedances in July was 6 days in 2017.

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 July 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 July 2021 data at the Berm GRIMM**

| Parameter | Guideline | | Station | Exceedances | | Monthly | | Maximum 1-hour | | | | | Maximum 24-hour | | Operational Time (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-hr | 24-hr | | 1-hr | 24-hr | Minimum | Average | Maximum Concentration | Day | Hour | Wind Speed (km/hr) | Wind Direction (degrees) | Maximum Concentration | Day | |
| **$PM_{2.5}$ ($\mu g/m^3$)** | 80 | 29 | Berm | 16 | 9 | 2.3 | 24.1 | 161.2 | 22 | 23 | 34.8 | 272.8 | 68.3 | 22 | 100.0 |
| **$PM_{10}$ ($\mu g/m^3$)** | - | - | Berm | - | - | 2.5 | 47.0 | 845.1 | 22 | 23 | 34.8 | 272.8 | 248.5 | 23 | 100.0 |
| **TSP ($\mu g/m^3$)** | - | 100 | Berm | - | 6 | 1.6 | 81.3 | 2513.0 | 22 | 23 | 34.8 | 272.8 | 643.6 | 23 | 100.0 |

## Table 6-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ at the Berm Monitor

| Date | TSP ($ug/m^3$) | $PM_{2.5}$ ($ug/m^3$) | Average Wind Direction (degrees) | Average Wind Speed (km/hr) | Average RH (%) | Root Cause (Provided by Lafarge) |
|---|---|---|---|---|---|---|
| **Berm** | | | | | | |
| **2021-07-14** | 117.7 | - | 268.4 | 11.4 | 46.2 | Regional wildfire activity |
| **2021-07-15** | 107.0 | 34.0 | 304.3 | 12.9 | 41.0 | Regional wildfire activity |
| **2021-07-16** | - | 38.5 | 68.8 | 13.6 | 53.9 | Regional wildfire activity |
| **2021-07-18** | - | 50.5 | 86.4 | 15.8 | 76.2 | Regional wildfire activity |
| **2021-07-19** | - | 52.5 | 81.7 | 14.8 | 71.8 | Regional wildfire activity |
| **2021-07-21** | 191.0 | - | 259.7 | 17.5 | 53.8 | Regional wildfire activity |
| **2021-07-22** | 551.8 | 68.3 | 278.5 | 19.8 | 36.0 | Regional wildfire activity |
| **2021-07-23** | 643.6 | 66.6 | 266.4 | 22.4 | 22.5 | Regional wildfire activity |
| **2021-07-24** | 114.4 | 39.9 | 271.3 | 12.8 | 34.4 | Regional wildfire activity |
| **2021-07-29** | - | 54.8 | 338.4 | 12.0 | 43.4 | Regional wildfire activity |
| **2021-07-30** | - | 35.0 | 69.3 | 10.4 | 57.1 | Regional wildfire activity |
| **Total # of Exceedances** | **6** | **9** | | | | |
| **Maximum # of Exceedances (July)** | **22 (2010)** | **6 (2017)** | | | | |
| **Average # of Exceedances (July)** | **11** | **1** | | | | |
| **Minimum # of Exceedances (July)** | **3 (2013)** | **0 (2010, 2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)** | | | | |

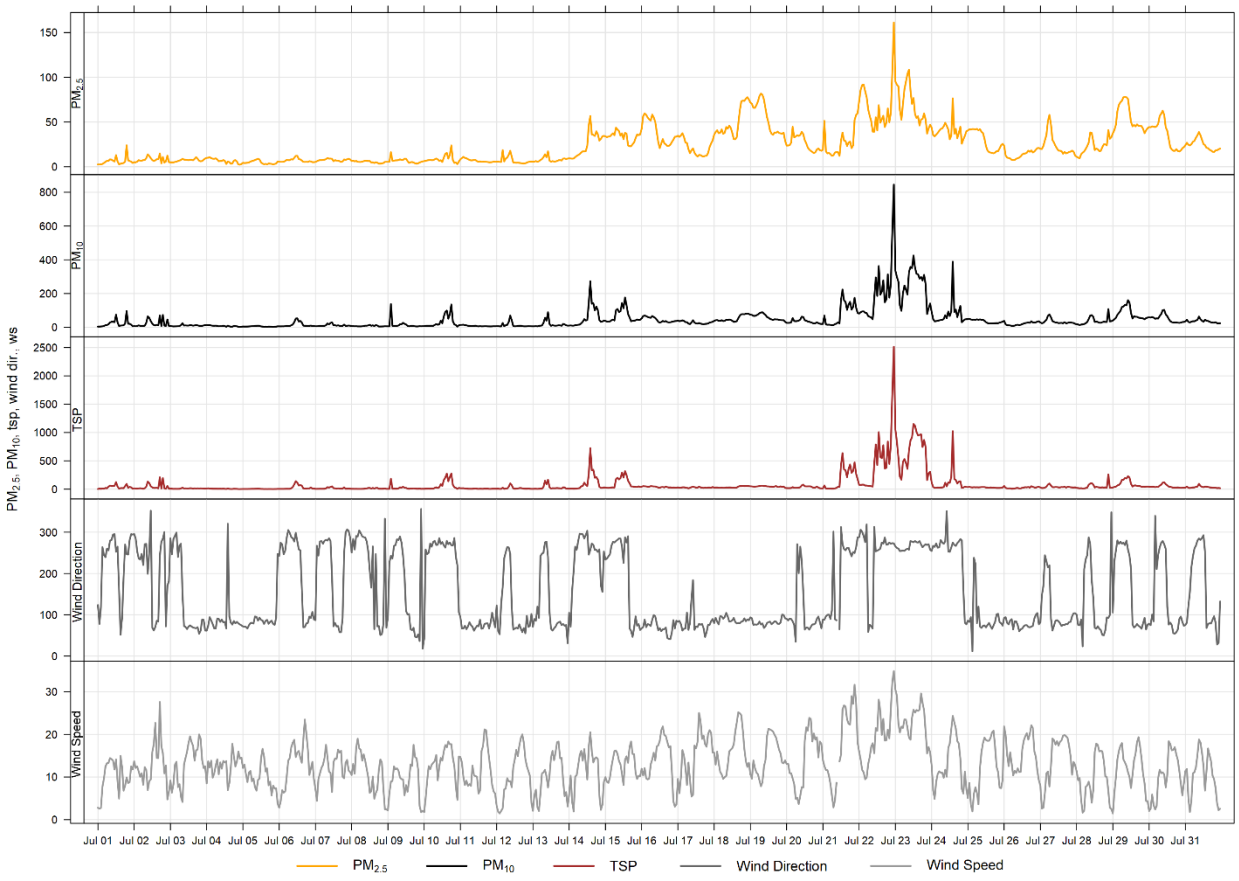


**Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor**

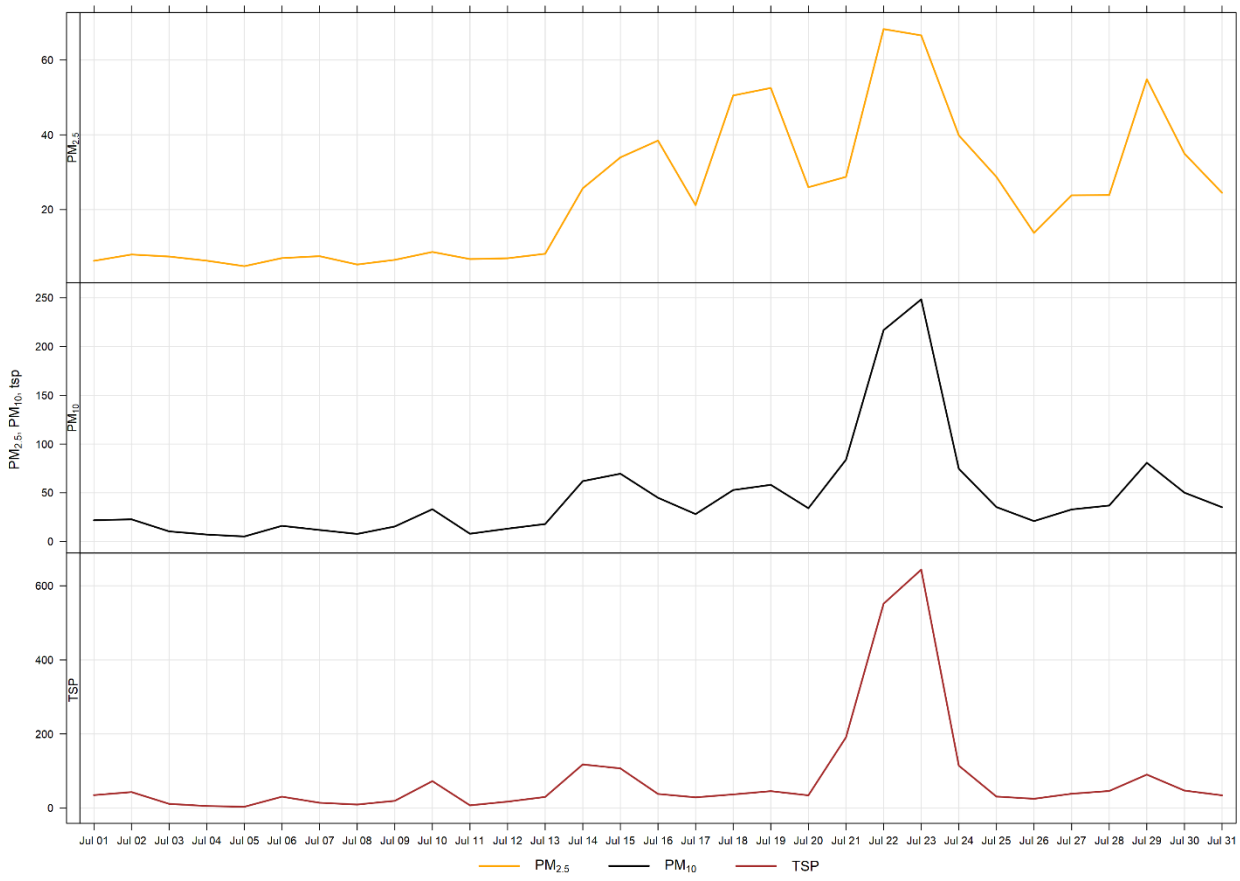


**Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor**

Figure 6-3 shows the wind rose for the 6 days of TSP exceedances. Figure 6-4 shows the wind rose for the 9 days of $PM_{2.5}$ exceedances. The variation in wind conditions producing exceedances shows that wildfire activity rather than windblown fugitive dust was the primary air quality issue this month.

Figure 6-5 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from other activities and sources in Exshaw.

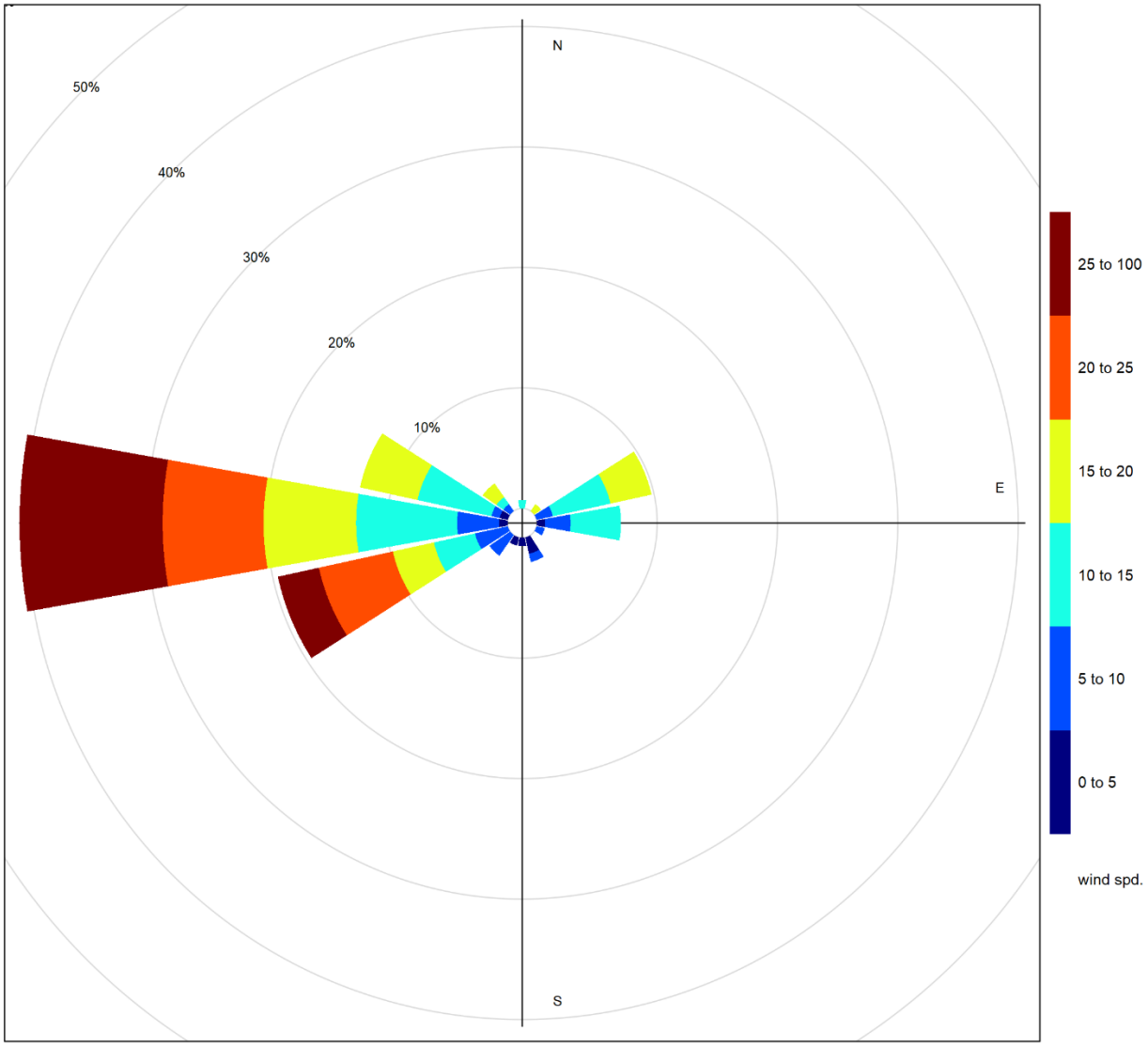


**Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM**

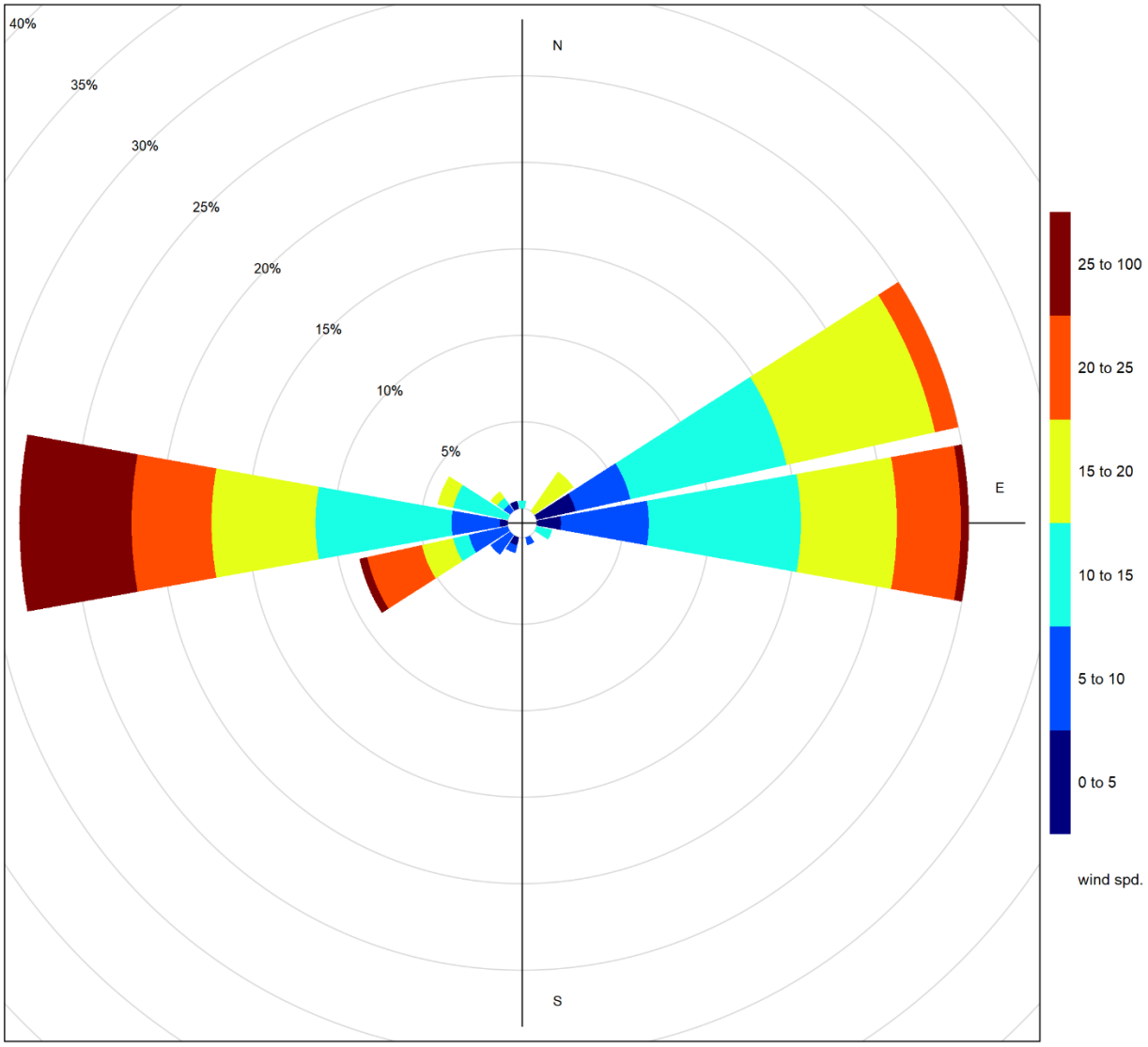


**Figure 6-4 Wind rose for $PM_{2.5}$ exceedance days recorded at the Berm GRIMM**

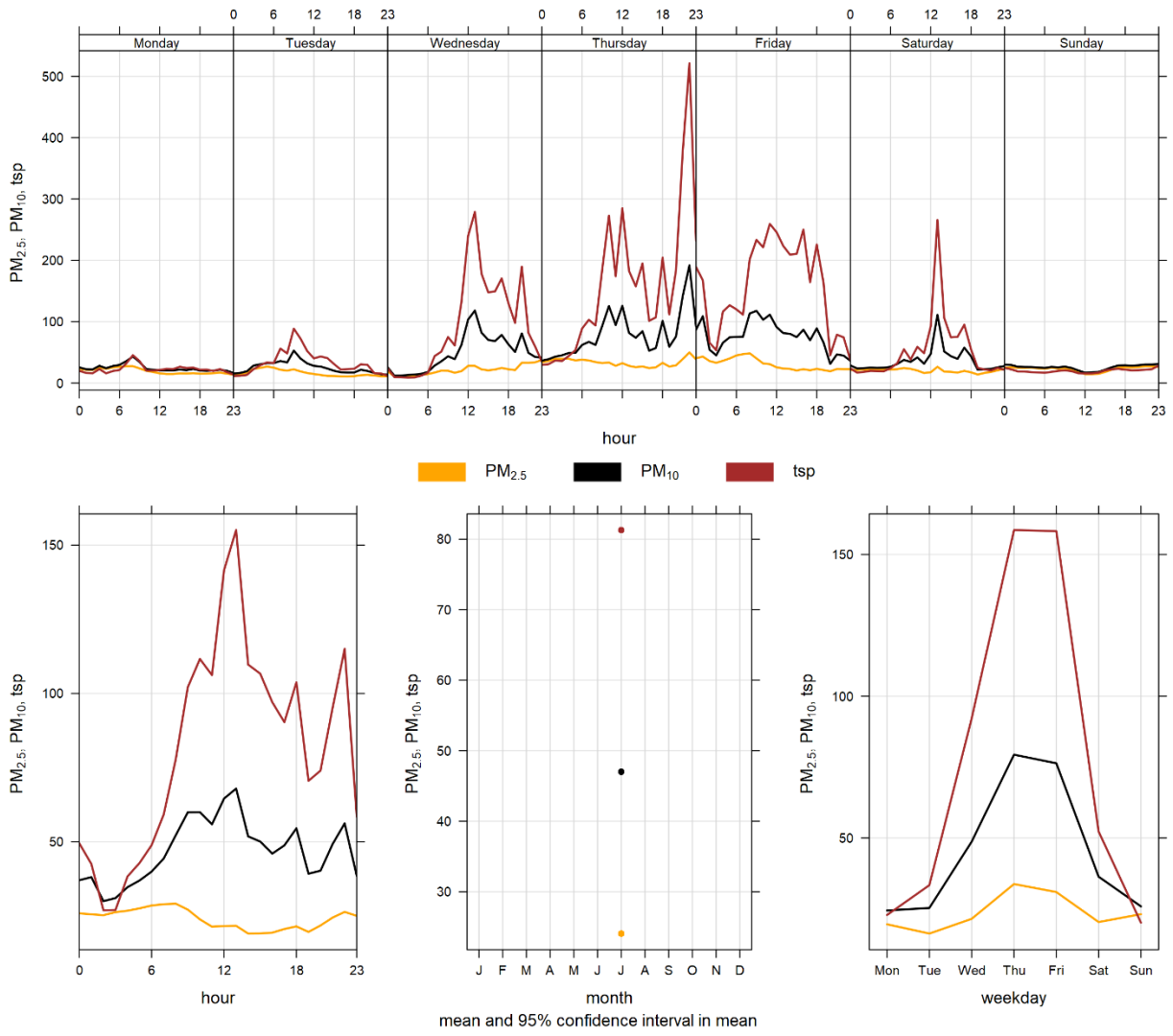


**Figure 6-5 Berm particulate matter time variation**

# 7 ENTRANCE INDUSTRIAL GRIMM

## 7.1 OPERATIONAL SUMMARY

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

**Table 7-1 Instrumentation List at the Entrance monitoring location**

| Parameter Measured | Equipment Description | Notes |
|---|---|---|
| **$PM_{2.5}$, $PM_{10}$, TSP Concentrations** | GRIMM 365 Continuous Particulate Monitor | The analyzer had 53.5% uptime for the month of July due to 357 hours of equipment malfunction occurring between July 2nd at 1:00 to July 13th at 11:00. Further, from July 14th at 1:00 to July 16th at 22:00. There was one hour of non routine maintenance occurring on July 13th at 12:00. |

## 7.2 MONITORING RESULTS AND TRENDS

The Entrance monitor was placed at its current location as a result of dispersion modelling conducted in 2009. This area was indicated as being the area where the maximum PM concentrations were expected. Figure 7-1 and Figure 7-2 show the hourly and daily $PM_{2.5}$, $PM_{10}$ and TSP concentrations recorded over the month. Table 7-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. Table 7-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

During the month of July, there were 6 and 12 exceedances of the 24-hour TSP (100 µg/m$^3$) and $PM_{2.5}$ (29 µg/m$^3$) Guidelines, respectively. There was 39 hours exceeding the 1-hour $PM_{2.5}$ Guideline.

As discussed in Section 1.3, the Bow Valley airshed was heavily impacted from regional wildfire activity in July. All but one of the exceedances were primarily attributable to wildfire activity and smoke in the airshed from fires in BC and Alberta.

Historically, the Entrance monitor records an average of 17 and 2 exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines respectively, during the month of July. The maximum number of TSP exceedances recorded during July occurred in 2014, which had 30 days that exceeded the guideline. The minimum number of TSP exceedances recorded during July occurred in 2011, which had 8 days that exceeded the guideline. The maximum number of $PM_{2.5}$ exceedances recorded during July occurred in 2014, which had 11 days that exceeded the guideline.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The $PM_{2.5}$ size fraction has been shown to match other regulatory approved $PM_{2.5}$ monitors, but the TSP concentrations recorded by the GRIMM tend to be higher than regulatory approved monitors (Levelton, 2015).

The Entrance monitor is impacted by fugitive dust from plant activities, and high wind events. Trucks also pass near to the Entrance monitor as they enter and exit the Lafarge facility for loading and deliveries. Additionally, the

monitor is closely located to Highway 1A. Traffic, particularly large trucks, can create dust while crossing over the railway tracks. This can all lead to the monitor recording high TSP concentrations, which are typically associated with fugitive dust sources.

The strong wind gusting that occurred in July 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.

Figure 7-3 shows the wind rose for the 6 days that exceeded the TSP Guideline. Figure 7-4 shows the wind rose for the 12 days that exceeded the $PM_{2.5}$ Guideline. The variation in wind conditions producing exceedances shows that wildfire activity rather than windblown fugitive dust was the primary air quality issue this month.

**Table 7-2 Summary of July 2021 data at the Entrance GRIMM**

| Parameter | Guideline | | Station | Exceedances | | Monthly | | Maximum 1-hour | | | | | Maximum 24-hour | | Operational Time (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-hr | 24-hr | | 1-hr | 24-hr | Minimum | Average | Maximum Concentration | Day | Hour | Wind Speed (km/hr) | Wind Direction (degrees) | Maximum Concentration | Day | |
| **$PM_{2.5}$ ($\mu g/m^3$)** | 80 | 29 | Entrance | 39 | 12 | 3.6 | 41.2 | 119.4 | 22 | 2 | 11.7 | 300.9 | 70.2 | 29 | 53.5 |
| **$PM_{10}$ ($\mu g/m^3$)** | - | - | Entrance | - | - | 8.4 | 75.3 | 271.6 | 1 | 22 | 12.5 | 295.2 | 131.6 | 29 | 53.5 |
| **TSP ($\mu g/m^3$)** | - | 100 | Entrance | - | 6 | 9.0 | 108.5 | 533.1 | 22 | 22 | 32.5 | 273.6 | 232.6 | 22 | 53.5 |

## Table 7-3 Days exceeding the Guideline for TSP or $PM_{2.5}$ at the Entrance Monitor

| Date | TSP ($ug/m^3$) | $PM_{2.5}$ ($ug/m^3$) | Average Wind Direction (degrees) | Average Wind Speed (km/hr) | Average RH (%) | Root Cause (Provided by Lafarge) |
|---|---|---|---|---|---|---|
| **Entrance** | | | | | | |
| **2021-07-01** | 142.1 | - | 270.4 | 10.5 | 38.1 | Winds predominately from the west |
| **2021-07-18** | - | 65.4 | 86.4 | 15.8 | 76.2 | Regional wildfire activity |
| **2021-07-19** | - | 69.4 | 81.7 | 14.8 | 71.8 | Regional wildfire activity |
| **2021-07-20** | - | 35.6 | 78.7 | 14.0 | 74.0 | Regional wildfire activity |
| **2021-07-22** | 232.6 | 63.1 | 278.5 | 19.8 | 36.0 | Regional wildfire activity |
| **2021-07-23** | 207.6 | 49.6 | 266.4 | 22.4 | 22.5 | Regional wildfire activity |
| **2021-07-24** | 139.0 | 49.0 | 271.3 | 12.8 | 34.4 | Regional wildfire activity |
| **2021-07-25** | - | 35.9 | 79.6 | 12.7 | 51.8 | Regional wildfire activity |
| **2021-07-27** | - | 30.9 | 87.8 | 14.2 | 56.8 | Regional wildfire activity |
| **2021-07-28** | - | 30.5 | 69.6 | 9.0 | 60.5 | Regional wildfire activity |
| **2021-07-29** | 187.5 | 70.2 | 338.4 | 12.0 | 43.4 | Regional wildfire activity |
| **2021-07-30** | - | 46.9 | 69.3 | 10.4 | 57.1 | Regional wildfire activity |
| **2021-07-31** | 118.2 | 38.2 | 329.2 | 10.0 | 59.2 | |
| **Total # of Exceedances** | **6** | **12** | | | | |
| **Maximum # of Exceedances (July)** | **30 (2014)** | **11 (2014)** | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Average # of Exceedances (July)** | **17** | **2** | | | | |
| **Minimum # of Exceedances (July)** | **8 (2011)** | **0 (2011, 2013, 2016, 2019, 2020)** | | | | |

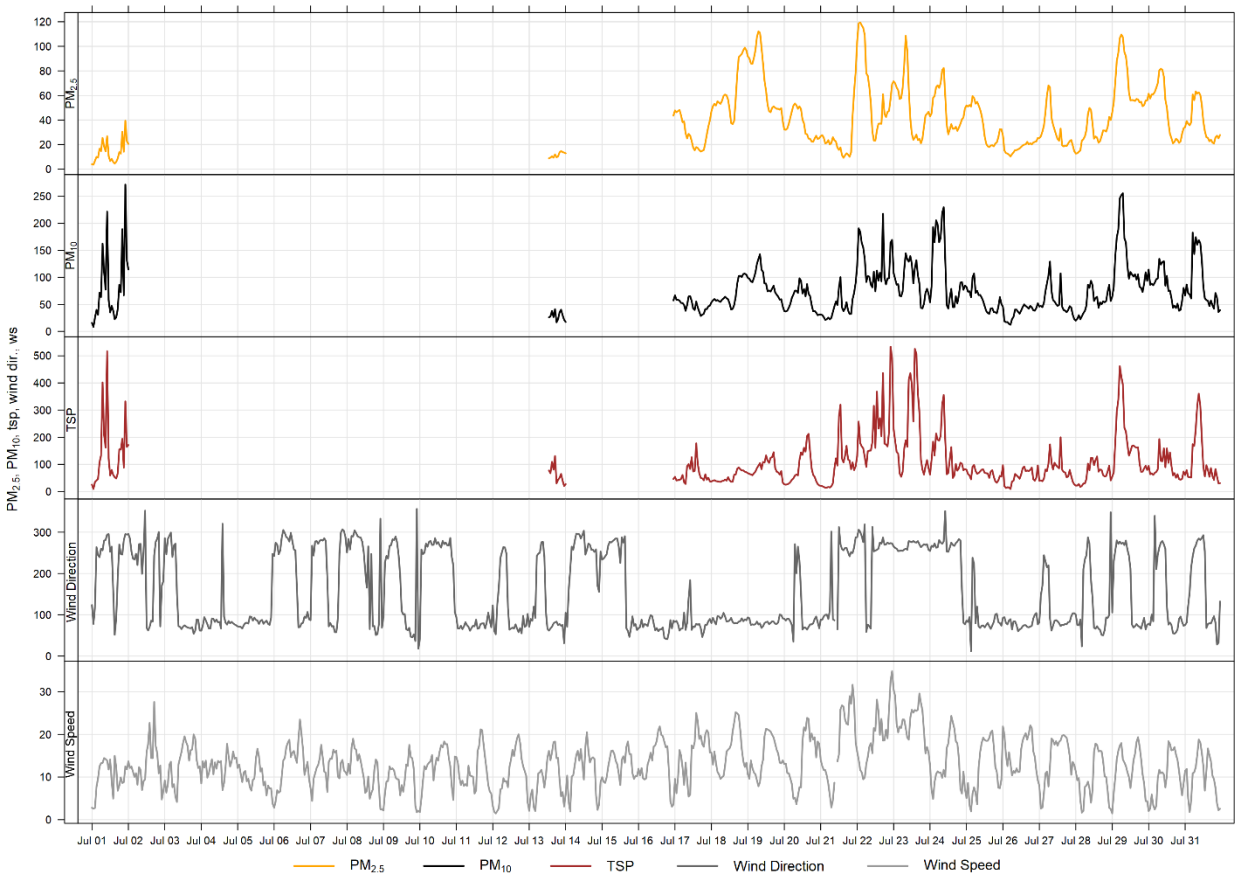


**Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor**

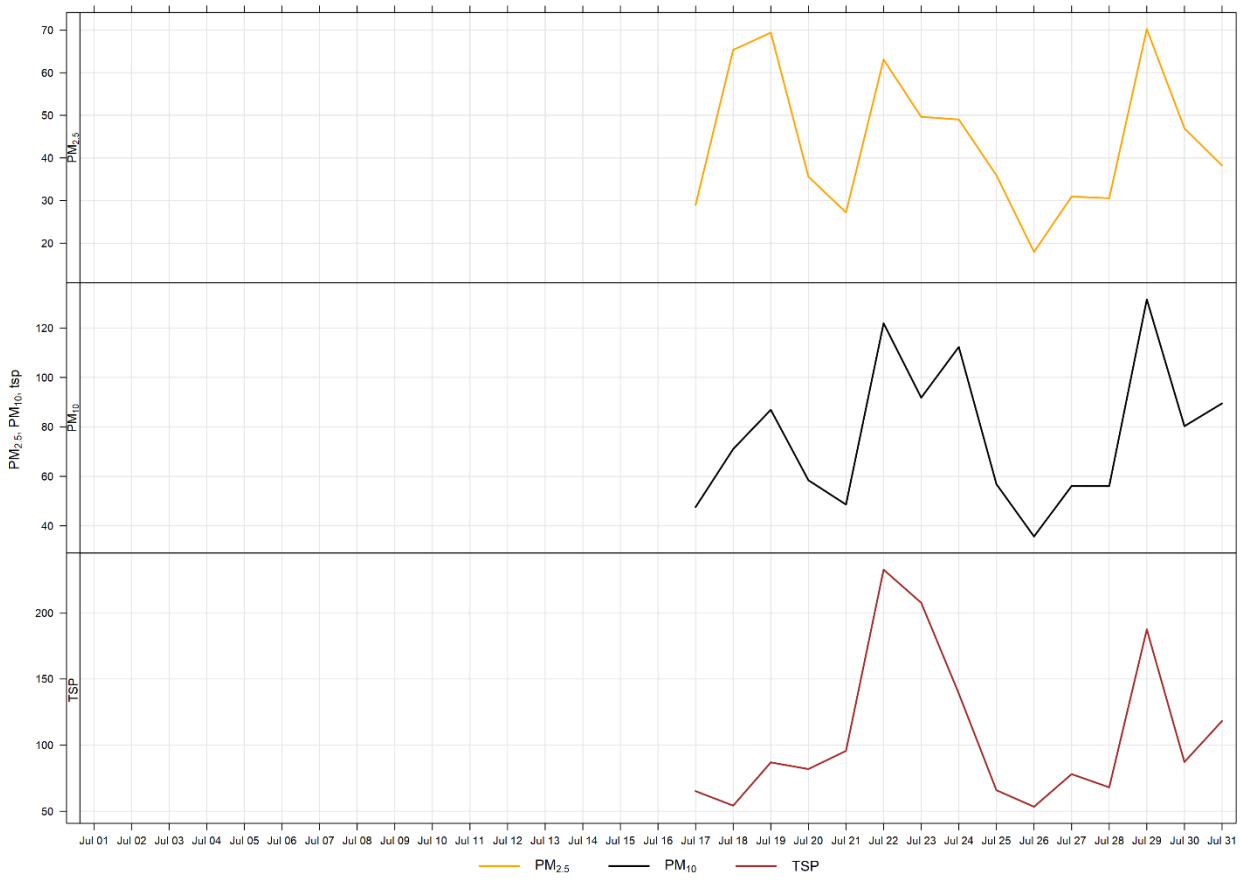


**Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor**

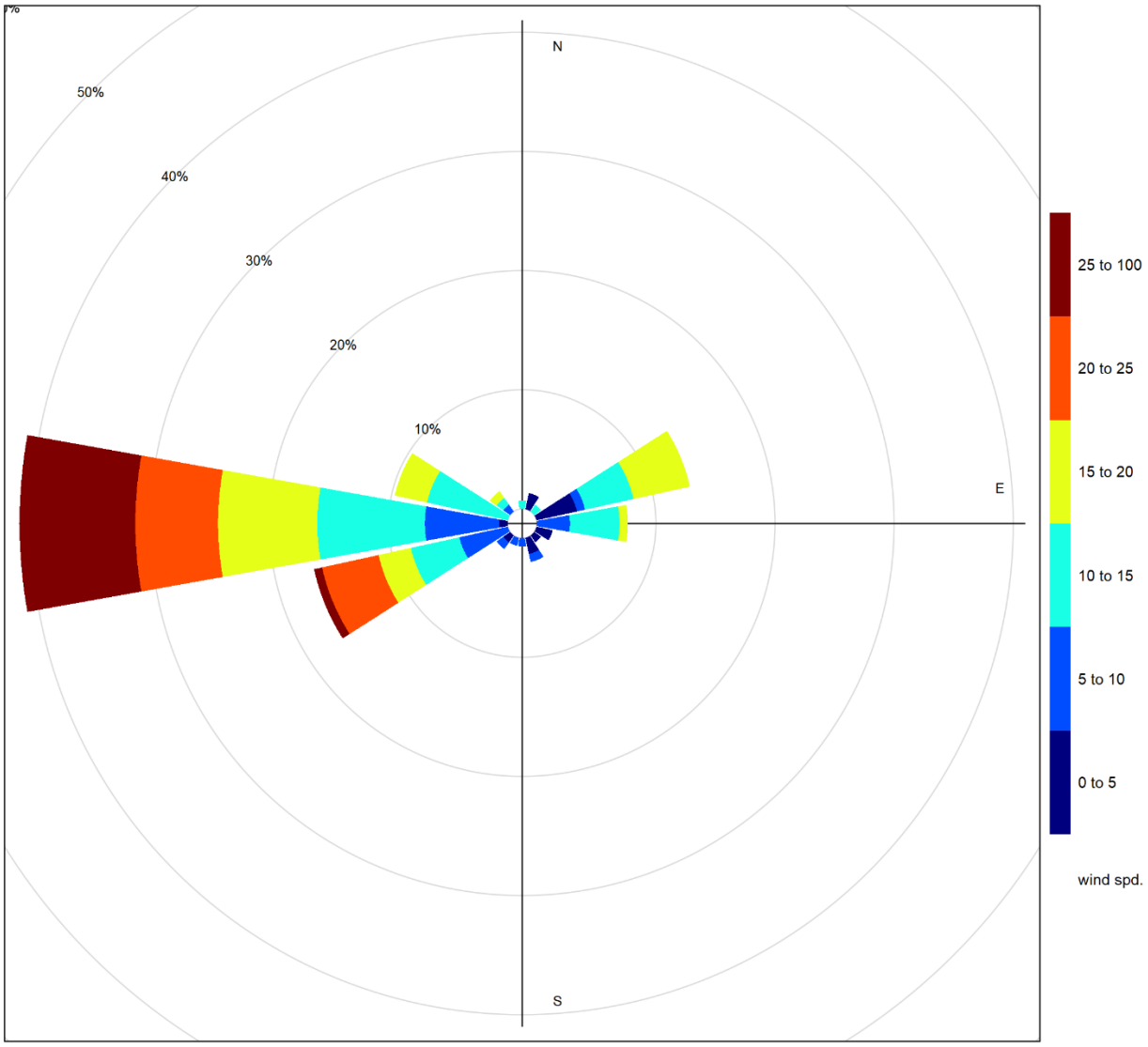


**Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM**

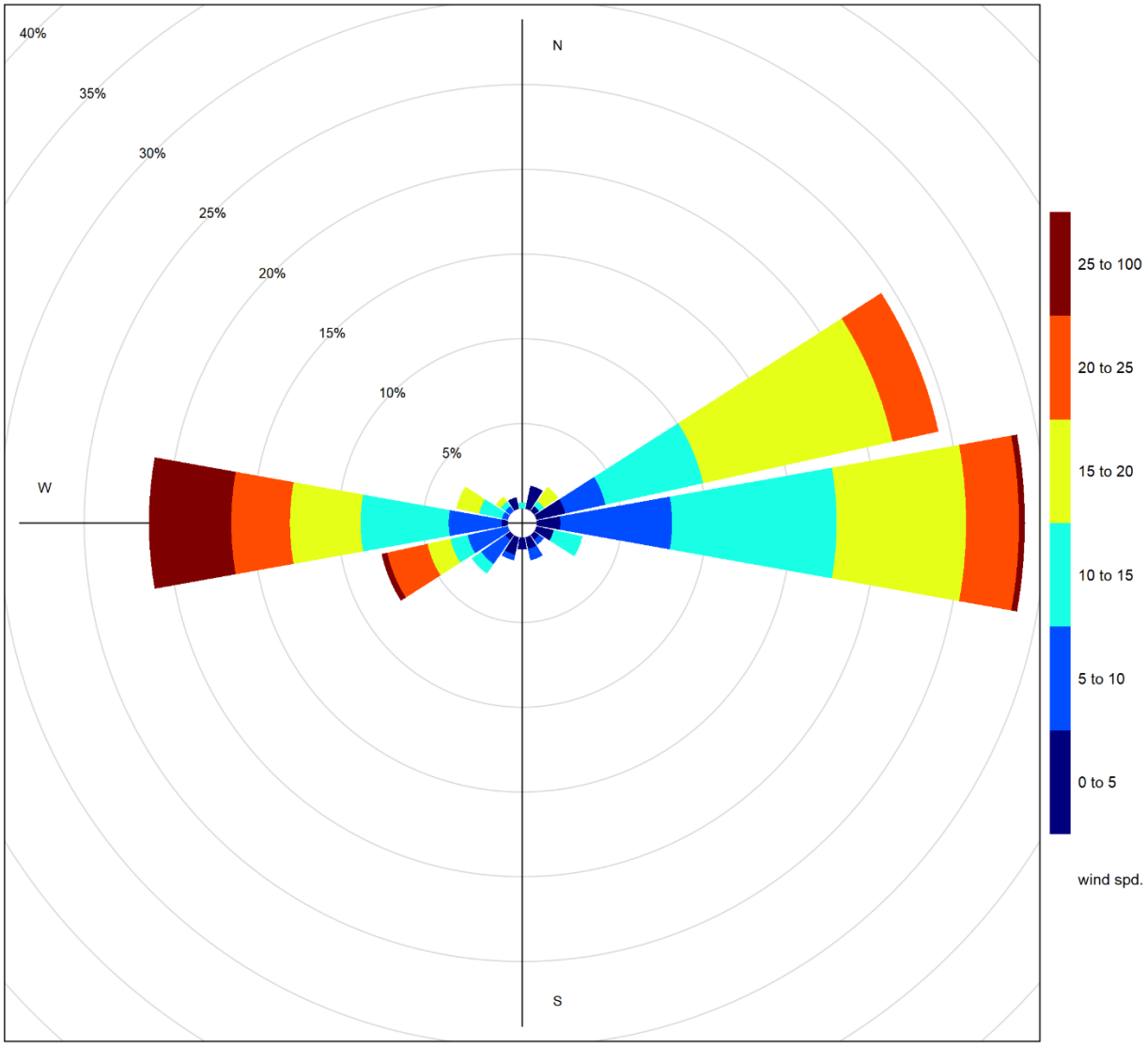


**Figure 7-4 Wind rose for $PM_{2.5}$ exceedance days recorded at the Entrance GRIMM**

Figure 7-5 illustrates the hourly PM concentrations recorded at the Entrance monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 7-5 is based on data collected during July 2021. The diurnal pattern differs from the Windridge, Lagoon and Berm stations and are likely more influenced by daytime traffic emission (from vehicles serving Lafarge as well as regular highway traffic) given its location near the highway entrance to Lafarge.

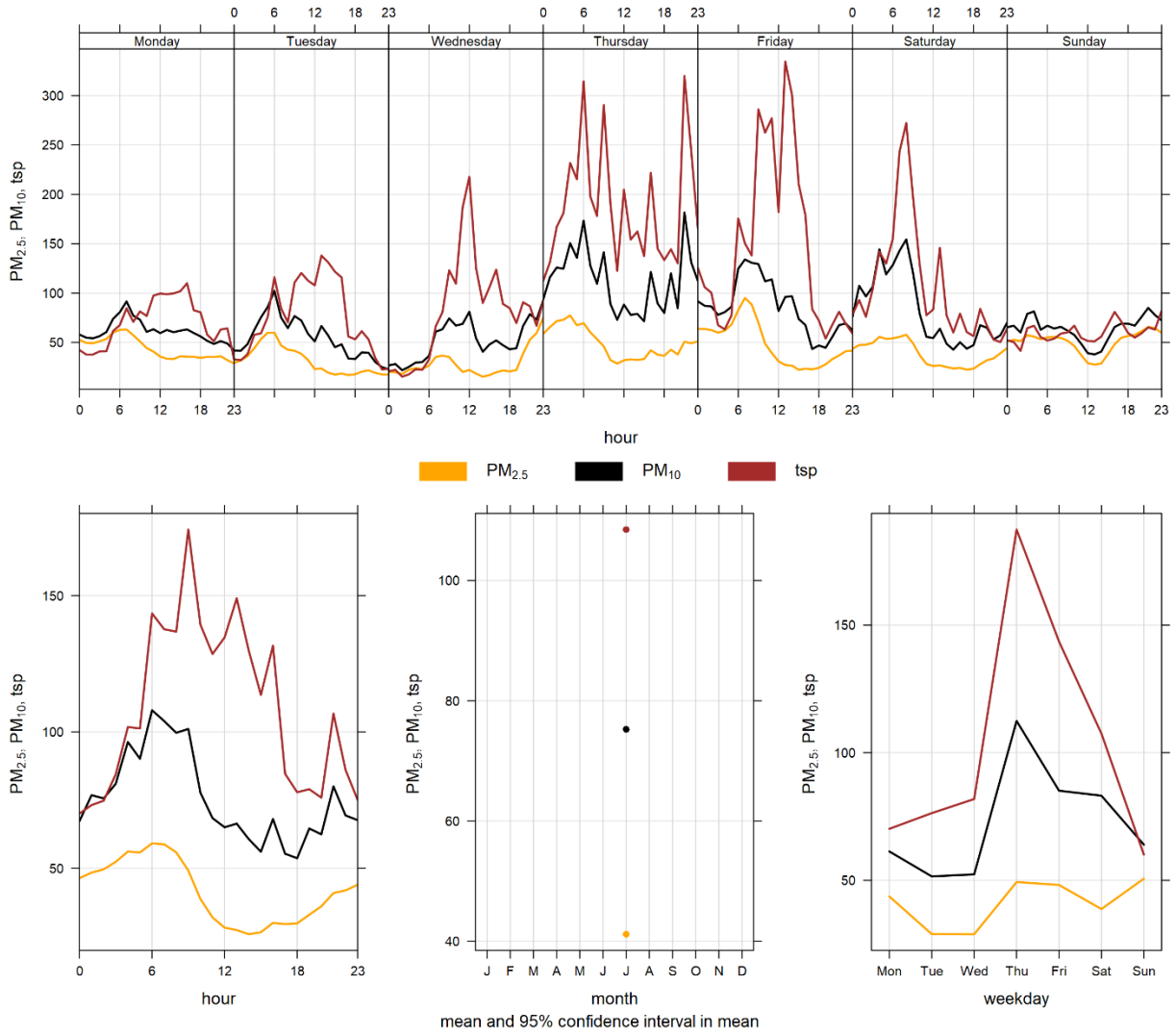


**Figure 7-5 Entrance particulate matter time variation**

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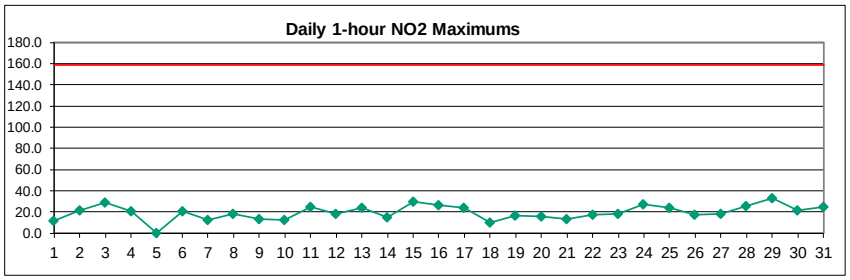
# APPENDIX

# A DATA & CALIBRATION REPORTS

# APPENDIX

# Lagoon $NO_2$ (ppb) – July 2021

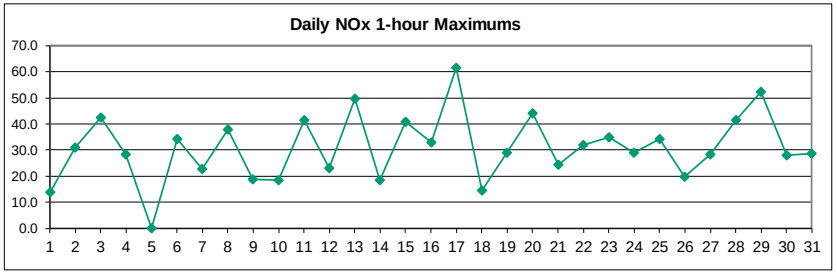
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.9 | S | 11.9 | 8.0 | 6.7 | 4.8 | 4.3 | 2.4 | 5.0 | 2.0 | 1.5 | 0.8 | 0.7 | 3.4 | 2.2 | 0.9 | 1.9 | 5.5 | 2.6 | 4.6 | 7.6 | 2.6 | 1.3 | 2.2 | 3.9 | 11.9 |
| 2 | 1.7 | S | 5.0 | 2.8 | 2.7 | 3.4 | 4.8 | 4.5 | 4.0 | 4.0 | 12.0 | 13.7 | 3.2 | 17.1 | 5.7 | 2.3 | 4.0 | 5.1 | 5.9 | 2.3 | 12.6 | 21.9 | 12.7 | 6.9 | 6.9 | 21.9 |
| 3 | 9.1 | S | 11.0 | 1.2 | 1.8 | 1.5 | 1.6 | 10.5 | 6.8 | 7.5 | 10.4 | 9.8 | 6.6 | 2.3 | 5.7 | 3.6 | 1.2 | 3.6 | 0.8 | 1.0 | 7.7 | 5.4 | 29.1 | 28.4 | 7.2 | 29.1 |
| 4 | 14.5 | S | 3.0 | 6.9 | 20.6 | 12.3 | 1.3 | 1.0 | 1.1 | 1.2 | 1.3 | 1.6 | 2.0 | 1.9 | 5.6 | 6.2 | 4.6 | 2.1 | 5.1 | 1.4 | 3.8 | 16.3 | 4.0 | 6.1 | 5.4 | 20.6 |
| 5 | 2.2 | S | 7.4 | 7.1 | 1.6 | 1.7 | 1.9 | 1.1 | 1.2 | C | C | C | C | C | C | 3.4 | 4.5 | 1.6 | 3.8 | 7.0 | 3.5 | 2.6 | 2.8 | 1.3 | - | - |
| 6 | 3.5 | S | 4.0 | 3.8 | 3.6 | 3.9 | 2.9 | 6.9 | 5.5 | 4.6 | 4.9 | 4.9 | 2.9 | 2.2 | 3.5 | 5.6 | 11.7 | 21.1 | 14.5 | 12.0 | 17.8 | 3.4 | 3.5 | 9.4 | 6.8 | 21.1 |
| 7 | 5.3 | S | 6.3 | 5.2 | 4.1 | 4.7 | 4.5 | 5.4 | 5.6 | 8.0 | 7.7 | 12.8 | 3.5 | 5.5 | 8.4 | 4.1 | 3.1 | 2.6 | 3.6 | 4.5 | 6.7 | 5.4 | 6.4 | 2.9 | 5.5 | 12.8 |
| 8 | 4.2 | S | 4.7 | 3.3 | 6.4 | 4.0 | 4.3 | 5.0 | 4.3 | 4.6 | 3.3 | 2.9 | 0.9 | 1.5 | 2.6 | 2.9 | 5.2 | 3.6 | 5.0 | 1.1 | 5.4 | 12.1 | 18.5 | 12.4 | 5.1 | 18.5 |
| 9 | 6.4 | S | 4.0 | 3.3 | 4.1 | 4.3 | 4.7 | 5.4 | 5.4 | 5.4 | 4.0 | 5.3 | 4.1 | 1.6 | 5.2 | 8.1 | 13.5 | 7.4 | 1.9 | 1.2 | 8.1 | 9.4 | 8.6 | 10.3 | 5.7 | 13.5 |
| 10 | 7.9 | S | 5.8 | 3.7 | 2.9 | 2.1 | 3.6 | 3.6 | 6.5 | 2.6 | 7.0 | 3.3 | 3.3 | 3.8 | 4.2 | 3.7 | 3.0 | 3.0 | 2.7 | 1.6 | 1.1 | 7.2 | 12.2 | 5.2 | 4.4 | 12.2 |
| 11 | 25.2 | S | 8.6 | 22.1 | 15.8 | 5.6 | 4.0 | 9.1 | 7.0 | 8.2 | 1.8 | 10.8 | 3.8 | 9.5 | 8.5 | 4.0 | 3.3 | 9.6 | 1.8 | 4.0 | 3.1 | 8.2 | 4.2 | 4.3 | 7.9 | 25.2 |
| 12 | 7.8 | S | 9.3 | 5.5 | 7.8 | 8.0 | 10.6 | 9.8 | 7.1 | 8.1 | 12.1 | 8.6 | 10.0 | 11.7 | 8.6 | 9.2 | 5.3 | 6.2 | 0.8 | 5.7 | 6.1 | 7.9 | 13.9 | 18.1 | 8.6 | 18.1 |
| 13 | 24.0 | S | 5.4 | 8.0 | 11.2 | 17.5 | 14.4 | 13.3 | 7.5 | 7.0 | 13.6 | 6.1 | 5.8 | 3.3 | 1.9 | 4.7 | 10.7 | 0.9 | 6.0 | 11.9 | 10.0 | 6.8 | 2.9 | 13.8 | 9.0 | 24.0 |
| 14 | 15.1 | S | 4.2 | 5.7 | 10.3 | 7.7 | 5.3 | 5.3 | 9.1 | 8.4 | 8.9 | 5.9 | 6.2 | 6.4 | 9.1 | 11.5 | 4.6 | 3.7 | 2.0 | 4.4 | 6.2 | 6.0 | 10.7 | 8.4 | 7.2 | 15.1 |
| 15 | 4.4 | S | 4.0 | 4.3 | 5.5 | 8.2 | 11.9 | 14.9 | 12.1 | 10.8 | 7.9 | 8.5 | 15.3 | 9.2 | 14.7 | 9.0 | 20.6 | 3.9 | 9.4 | 3.4 | 8.8 | 29.8 | 26.4 | 25.8 | 11.7 | 29.8 |
| 16 | 21.6 | S | 26.8 | 17.6 | 14.7 | 18.7 | 3.2 | 2.6 | 2.7 | 5.2 | 4.9 | 6.5 | 6.5 | 10.1 | 11.0 | 11.1 | 3.8 | 2.1 | 3.6 | 2.3 | 4.6 | 4.1 | 5.8 | 22.4 | 9.2 | 26.8 |
| 17 | 23.5 | S | 15.0 | 11.5 | 9.4 | 10.7 | 8.7 | 8.4 | 16.2 | 24.0 | 14.8 | 5.4 | 6.3 | 8.7 | 9.2 | 9.5 | 3.3 | 2.5 | 2.3 | 19.9 | 23.7 | 13.1 | 9.2 | 8.8 | 11.5 | 24.0 |
| 18 | 8.5 | S | 9.0 | 9.9 | 2.5 | 3.3 | 5.5 | 3.6 | 2.7 | 2.5 | 2.6 | 1.9 | 1.7 | 2.0 | 2.1 | 2.2 | 4.2 | 8.1 | 8.4 | 2.9 | 2.8 | 4.1 | 3.9 | 4.7 | 4.3 | 9.9 |
| 19 | 3.6 | S | 8.9 | 4.6 | 4.5 | 4.1 | 13.2 | 12.6 | 11.4 | 4.4 | 2.4 | NRM | NRM | NRM | NRM | 9.8 | 4.5 | 9.4 | 8.4 | 16.3 | 3.9 | 1.9 | 2.9 | 3.3 | 6.8 | 16.3 |
| 20 | 3.0 | S | 2.6 | 2.3 | 2.4 | 13.7 | 8.1 | 12.0 | 10.7 | 10.5 | 11.3 | 16.0 | 10.3 | 13.8 | 9.0 | 6.2 | 11.7 | 6.9 | 2.0 | 3.5 | 2.7 | 3.3 | 8.2 | 10.8 | 7.9 | 16.0 |
| 21 | 3.8 | S | 3.5 | 2.6 | 2.8 | 4.9 | 9.6 | 5.7 | 5.5 | P | 13.7 | 10.2 | 5.5 | 1.6 | 1.8 | 1.7 | 3.7 | 2.5 | 0.7 | 0.8 | 1.7 | 3.3 | 10.1 | 9.1 | 4.8 | 13.7 |
| 22 | 8.4 | S | 6.2 | 7.2 | 9.8 | 12.9 | 10.3 | 7.6 | 13.8 | 12.2 | 3.7 | 3.8 | 6.4 | 4.9 | 13.3 | 12.5 | 7.5 | 11.4 | 11.1 | 15.9 | 17.7 | 14.0 | 13.0 | 9.5 | 10.1 | 17.7 |
| 23 | 4.4 | S | 9.6 | 9.0 | 4.3 | 2.9 | 5.4 | 7.5 | 7.3 | 16.2 | 18.0 | 17.5 | 12.1 | 12.9 | 11.6 | 17.2 | 11.5 | 6.7 | 8.3 | 8.5 | 11.3 | 16.2 | 9.4 | 3.4 | 10.0 | 18.0 |
| 24 | 3.2 | S | 11.0 | 5.7 | 9.5 | 8.4 | 6.9 | 12.2 | 11.5 | 9.3 | 3.9 | 2.3 | 9.3 | 11.9 | 7.3 | 9.6 | 10.8 | 9.1 | 16.9 | 2.7 | 10.7 | 12.1 | 27.3 | 15.1 | 9.9 | 27.3 |
| 25 | 8.9 | S | 20.7 | 12.1 | 6.1 | 19.7 | 11.3 | 7.2 | 16.1 | 8.5 | 6.6 | 5.6 | 5.1 | 3.8 | 7.1 | 6.5 | 8.8 | 20.3 | 7.1 | 2.2 | 7.1 | 17.2 | 24.3 | 8.6 | 10.5 | 24.3 |
| 26 | 1.8 | S | 5.5 | 4.3 | 1.6 | 6.0 | 5.8 | 2.1 | 3.5 | 11.1 | 9.6 | 9.2 | 8.2 | 3.8 | 5.7 | 6.1 | 8.5 | 13.1 | 14.9 | 12.8 | 2.3 | 3.0 | 12.8 | 17.3 | 7.3 | 17.3 |
| 27 | 5.9 | S | 7.3 | 8.5 | 7.5 | 12.2 | 18.6 | 10.0 | 9.2 | 5.1 | 1.4 | 2.1 | 6.9 | 7.2 | 8.4 | 5.3 | 10.8 | 6.3 | 5.3 | 9.8 | 9.4 | 2.7 | 3.0 | 4.5 | 7.3 | 18.6 |
| 28 | 15.1 | S | 7.6 | 5.4 | 4.8 | 11.3 | 18.4 | 14.5 | 15.7 | 20.3 | 26.0 | 14.9 | 13.4 | 4.8 | 3.2 | 4.9 | 2.5 | 3.2 | 3.5 | 5.7 | 14.2 | 12.6 | 8.5 | 13.9 | 10.6 | 26.0 |
| 29 | 14.9 | S | 14.9 | 13.3 | 12.3 | 17.9 | 16.1 | 19.6 | 14.7 | 11.8 | 7.2 | 7.2 | 13.6 | 12.8 | 13.3 | 17.9 | 24.9 | 33.0 | 23.2 | 5.6 | 3.9 | 9.1 | 17.9 | 28.1 | 15.3 | 33.0 |
| 30 | 21.5 | S | 9.5 | 12.8 | 12.3 | 11.5 | 13.6 | 16.0 | 17.3 | 11.3 | 13.1 | 10.9 | 5.6 | 3.1 | 3.9 | 4.6 | 4.0 | 3.3 | 2.9 | 4.1 | 2.2 | 9.0 | 12.7 | 18.7 | 9.7 | 21.5 |
| 31 | 9.9 | S | 8.7 | 6.7 | 10.7 | 9.4 | 7.9 | 8.1 | 8.4 | 10.5 | 8.2 | 4.3 | 3.9 | 9.0 | 5.8 | 5.0 | 11.9 | 14.2 | 8.9 | 6.1 | 25.3 | 16.0 | 13.0 | 17.4 | 10.0 | 25.3 |
| NO. | 31 | - | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 30 | 29 | 29 | 29 | 29 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 702 | 99.3% |
| MEAN | 9.5 | - | 8.4 | 7.2 | 7.1 | 8.3 | 7.8 | 8.0 | 8.2 | 8.5 | 8.1 | 7.3 | 6.3 | 6.5 | 6.8 | 6.8 | 7.4 | 7.5 | 6.2 | 6.0 | 8.1 | 9.3 | 10.9 | 11.3 | | |
| MAX | 25.2 | - | 26.8 | 22.1 | 20.6 | 19.7 | 18.6 | 19.6 | 17.3 | 24.0 | 26.0 | 17.5 | 15.3 | 17.1 | 14.7 | 17.9 | 24.9 | 33.0 | 23.2 | 19.9 | 25.3 | 29.8 | 29.1 | 28.4 | | |




| | | | |
|---|---|---|---|
| Number of 1HR Exceedences | 0 | | |
| Number of Non-Zero Readings | 702 | | |
| Maximum 1-HR Average | 33.0 PPB | | |
| Maximum 24-HR Average | 15.3 PPB | | |
| | | Opperational Time | 739 HRS |
| Monthly Calibration | 6 | Opperational Uptime | 99.3 % |
| Standard Deviation | 5.6 | Monthly Average | 7.9 PPB |

# Lagoon NOx (ppb) – July 2021

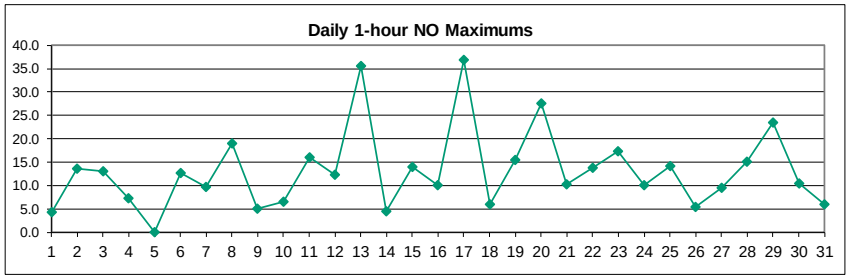
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.7 | S | 14.0 | 8.6 | 7.5 | 6.1 | 7.0 | 4.0 | 9.5 | 3.3 | 2.5 | 1.6 | 1.4 | 5.3 | 3.4 | 1.5 | 3.0 | 6.5 | 3.6 | 6.9 | 9.9 | 3.7 | 2.1 | 2.9 | 5.3 | 14.0 |
| 2 | 2.6 | S | 5.9 | 3.4 | 3.8 | 4.4 | 9.7 | 8.1 | 6.1 | 6.2 | 18.8 | 20.4 | 4.6 | 31.1 | 7.4 | 3.4 | 5.3 | 7.9 | 7.4 | 3.2 | 20.2 | 25.1 | 13.6 | 9.2 | 9.9 | 31.1 |
| 3 | 10.7 | S | 13.4 | 1.8 | 2.5 | 2.3 | 2.6 | 17.4 | 11.0 | 12.5 | 18.5 | 17.0 | 11.7 | 3.9 | 9.6 | 5.8 | 2.0 | 5.0 | 1.5 | 1.7 | 9.5 | 6.5 | 42.5 | 39.6 | 10.8 | 42.5 |
| 4 | 17.9 | S | 4.2 | 8.6 | 28.3 | 16.9 | 2.1 | 1.7 | 1.8 | 2.1 | 2.2 | 2.8 | 4.1 | 2.8 | 10.2 | 12.0 | 10.4 | 3.3 | 8.8 | 2.2 | 5.1 | 23.4 | 5.0 | 7.7 | 8.0 | 28.3 |
| 5 | 3.2 | S | 10.7 | 9.3 | 2.2 | 2.5 | 2.7 | 1.9 | 2.2 | C | C | C | C | C | C | 5.4 | 6.9 | 1.6 | 5.1 | 10.7 | 3.9 | 2.8 | 3.6 | 1.5 | - | - |
| 6 | 3.9 | S | 4.1 | 4.8 | 3.9 | 15.0 | 5.0 | 14.5 | 10.4 | 8.1 | 9.1 | 8.5 | 4.4 | 3.9 | 4.8 | 7.9 | 18.1 | 34.1 | 19.2 | 13.2 | 20.6 | 3.5 | 3.8 | 11.9 | 10.1 | 34.1 |
| 7 | 5.4 | S | 6.6 | 7.8 | 4.7 | 5.6 | 6.6 | 10.8 | 10.0 | 15.4 | 10.9 | 22.8 | 4.3 | 7.9 | 13.8 | 5.2 | 5.8 | 2.9 | 4.1 | 5.1 | 9.4 | 8.3 | 7.8 | 3.5 | 8.0 | 22.8 |
| 8 | 5.0 | S | 7.0 | 4.2 | 9.6 | 8.2 | 6.8 | 7.6 | 6.5 | 9.2 | 4.9 | 4.1 | 1.1 | 1.8 | 3.1 | 3.4 | 6.4 | 4.7 | 7.0 | 1.3 | 5.6 | 13.2 | 37.9 | 17.6 | 7.7 | 37.9 |
| 9 | 7.3 | S | 4.0 | 4.0 | 6.2 | 6.5 | 8.0 | 9.2 | 9.7 | 7.8 | 5.2 | 6.6 | 4.8 | 1.8 | 6.5 | 10.6 | 18.8 | 10.6 | 2.4 | 1.5 | 8.8 | 9.4 | 8.8 | 15.2 | 7.5 | 18.8 |
| 10 | 8.8 | S | 6.0 | 4.0 | 3.0 | 2.4 | 5.8 | 7.3 | 13.4 | 3.4 | 10.8 | 4.5 | 4.8 | 6.1 | 6.7 | 5.2 | 4.2 | 3.7 | 4.6 | 1.8 | 1.0 | 7.8 | 18.3 | 8.0 | 6.2 | 18.3 |
| 11 | 41.5 | S | 9.4 | 30.0 | 18.2 | 5.7 | 5.8 | 13.4 | 13.1 | 14.0 | 2.4 | 13.8 | 4.9 | 14.7 | 13.0 | 5.8 | 4.9 | 13.9 | 2.2 | 4.6 | 3.2 | 11.2 | 4.2 | 4.8 | 11.1 | 41.5 |
| 12 | 8.4 | S | 22.0 | 17.6 | 8.3 | 9.8 | 22.7 | 14.2 | 12.0 | 12.8 | 18.5 | 12.9 | 15.3 | 17.9 | 12.9 | 13.6 | 8.9 | 8.2 | 0.8 | 6.3 | 6.2 | 8.1 | 23.3 | 22.7 | 13.2 | 23.3 |
| 13 | 33.5 | S | 5.6 | 15.8 | 15.5 | 24.6 | 19.2 | 19.8 | 9.9 | 9.2 | 18.5 | 8.5 | 7.4 | 4.2 | 2.2 | 7.3 | 15.3 | 0.9 | 7.4 | 14.9 | 10.4 | 6.9 | 2.9 | 49.8 | 13.5 | 49.8 |
| 14 | 18.5 | S | 4.2 | 5.9 | 10.9 | 10.4 | 7.3 | 7.2 | 14.0 | 12.1 | 13.0 | 7.7 | 7.7 | 7.3 | 11.2 | 14.0 | 5.0 | 4.0 | 1.9 | 4.3 | 6.1 | 6.1 | 11.9 | 8.4 | 8.7 | 18.5 |
| 15 | 4.4 | S | 4.1 | 4.4 | 5.9 | 9.7 | 18.3 | 21.7 | 18.9 | 14.4 | 9.6 | 10.1 | 20.3 | 11.3 | 21.4 | 10.6 | 25.9 | 4.0 | 11.1 | 3.6 | 8.8 | 31.2 | 40.8 | 28.6 | 14.7 | 40.8 |
| 16 | 23.4 | S | 29.5 | 18.7 | 17.2 | 25.7 | 3.4 | 2.7 | 3.0 | 7.2 | 6.4 | 9.2 | 9.0 | 14.2 | 14.0 | 14.0 | 4.2 | 2.1 | 4.6 | 2.4 | 4.7 | 4.2 | 6.1 | 32.9 | 11.2 | 32.9 |
| 17 | 34.3 | S | 29.7 | 16.7 | 12.6 | 14.5 | 15.4 | 17.4 | 36.8 | 61.6 | 29.1 | 7.3 | 10.1 | 15.1 | 14.2 | 15.4 | 4.3 | 3.3 | 2.5 | 29.8 | 35.0 | 17.9 | 11.8 | 11.7 | 19.4 | 61.6 |
| 18 | 12.0 | S | 12.5 | 12.3 | 2.5 | 3.6 | 7.1 | 4.5 | 3.4 | 3.1 | 3.2 | 2.2 | 1.9 | 2.5 | 2.8 | 3.2 | 6.7 | 14.4 | 11.9 | 3.1 | 2.8 | 4.4 | 4.0 | 4.9 | 5.6 | 14.4 |
| 19 | 3.6 | S | 11.0 | 4.7 | 4.7 | 4.2 | 29.0 | 25.3 | 26.4 | 6.3 | 3.2 | NRM | NRM | NRM | NRM | 13.1 | 5.9 | 13.8 | 11.1 | 23.6 | 4.2 | 1.8 | 2.9 | 3.4 | 10.4 | 29.0 |
| 20 | 3.3 | S | 2.7 | 2.3 | 2.5 | 40.0 | 11.9 | 22.0 | 16.4 | 14.9 | 20.6 | 44.0 | 17.4 | 27.3 | 15.5 | 11.6 | 25.0 | 14.0 | 2.4 | 4.1 | 2.9 | 3.6 | 13.8 | 19.8 | 14.7 | 44.0 |
| 21 | 4.8 | S | 4.2 | 2.6 | 3.4 | 6.1 | 19.7 | 9.3 | 9.0 | P | 24.3 | 14.6 | 7.4 | 2.0 | 2.3 | 2.1 | 6.1 | 3.2 | 0.7 | 0.9 | 1.8 | 3.6 | 12.1 | 11.0 | 6.9 | 24.3 |
| 22 | 10.1 | S | 8.4 | 10.9 | 12.4 | 19.4 | 13.9 | 9.8 | 23.3 | 22.6 | 5.2 | 5.5 | 11.6 | 8.1 | 26.2 | 25.1 | 12.4 | 17.3 | 18.0 | 25.4 | 31.8 | 24.8 | 22.2 | 13.7 | 16.4 | 31.8 |
| 23 | 5.4 | S | 13.3 | 15.1 | 5.3 | 3.4 | 6.6 | 9.4 | 8.5 | 27.8 | 34.8 | 35.0 | 22.6 | 25.0 | 22.4 | 34.9 | 20.5 | 10.6 | 11.9 | 11.4 | 16.2 | 24.3 | 12.1 | 3.4 | 16.5 | 35.0 |
| 24 | 3.3 | S | 16.5 | 6.7 | 14.4 | 13.5 | 8.3 | 22.5 | 19.4 | 14.4 | 4.9 | 2.8 | 15.0 | 21.3 | 11.1 | 14.8 | 16.5 | 13.4 | 24.9 | 2.8 | 12.0 | 14.8 | 29.2 | 15.3 | 13.8 | 29.2 |
| 25 | 9.1 | S | 28.6 | 13.1 | 6.1 | 34.2 | 13.4 | 9.6 | 25.5 | 11.6 | 8.4 | 7.0 | 7.8 | 4.9 | 10.0 | 8.6 | 10.5 | 24.6 | 7.7 | 2.3 | 7.3 | 20.9 | 30.5 | 10.1 | 13.6 | 34.2 |
| 26 | 1.9 | S | 6.4 | 4.7 | 1.7 | 7.1 | 6.5 | 2.4 | 4.3 | 16.8 | 14.1 | 13.3 | 11.6 | 4.9 | 8.3 | 8.3 | 11.1 | 17.3 | 19.7 | 15.5 | 2.5 | 3.2 | 13.1 | 18.3 | 9.3 | 19.7 |
| 27 | 6.1 | S | 7.5 | 8.7 | 7.6 | 15.0 | 28.4 | 12.6 | 12.9 | 7.1 | 1.8 | 2.9 | 9.6 | 10.7 | 11.2 | 6.5 | 13.2 | 7.5 | 5.7 | 10.7 | 9.5 | 2.7 | 3.1 | 4.5 | 8.9 | 28.4 |
| 28 | 16.7 | S | 7.7 | 5.4 | 5.0 | 15.3 | 25.7 | 20.6 | 22.0 | 31.6 | 41.6 | 22.3 | 19.1 | 6.0 | 3.9 | 6.3 | 2.8 | 3.7 | 3.7 | 5.9 | 17.9 | 12.8 | 8.6 | 18.8 | 14.1 | 41.6 |
| 29 | 16.6 | S | 22.4 | 17.6 | 17.3 | 27.1 | 24.1 | 30.1 | 19.8 | 15.0 | 8.4 | 8.0 | 15.7 | 14.9 | 17.1 | 22.2 | 30.3 | 44.6 | 31.7 | 5.7 | 4.0 | 9.3 | 19.5 | 52.2 | 20.6 | 52.2 |
| 30 | 25.7 | S | 9.9 | 20.0 | 15.5 | 12.4 | 16.4 | 23.6 | 28.1 | 13.5 | 16.1 | 12.3 | 6.4 | 3.5 | 4.7 | 6.9 | 5.1 | 5.0 | 3.4 | 4.2 | 2.3 | 9.2 | 15.9 | 22.9 | 12.3 | 28.1 |
| 31 | 10.2 | S | 8.8 | 6.8 | 11.5 | 9.9 | 9.3 | 8.9 | 11.9 | 16.6 | 9.9 | 4.6 | 4.2 | 10.6 | 6.3 | 6.5 | 14.7 | 15.7 | 9.8 | 6.4 | 28.8 | 16.5 | 18.2 | 21.3 | 11.6 | 28.8 |
| NO. | 31 | - | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 30 | 29 | 29 | 29 | 29 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 702 | 99.3% |
| MEAN | 11.7 | - | 11.0 | 9.6 | 8.7 | 12.3 | 11.9 | 12.6 | 13.5 | 13.8 | 12.6 | 11.5 | 9.2 | 10.0 | 10.2 | 10.0 | 10.6 | 10.4 | 8.3 | 7.6 | 10.1 | 11.0 | 14.5 | 16.0 | | |
| MAX | 41.5 | - | 29.7 | 30.0 | 28.3 | 40.0 | 29.0 | 30.1 | 36.8 | 61.6 | 41.6 | 44.0 | 22.6 | 31.1 | 26.2 | 34.9 | 30.3 | 44.6 | 31.7 | 29.8 | 35.0 | 31.2 | 42.5 | 52.2 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 702 | | |
| Maximum 1-HR Average | 61.6 PPB | | |
| Maximum 24-HR Average | 20.6 PPB | | |
| | | Opperational Time | 739 HRS |
| Monthly Calibration | 6 | Opperational Uptime | 99.3 % |
| Standard Deviation | 8.866 | Monthly Average | 11.2 PPB |

# Lagoon NO (ppb) – July 2021

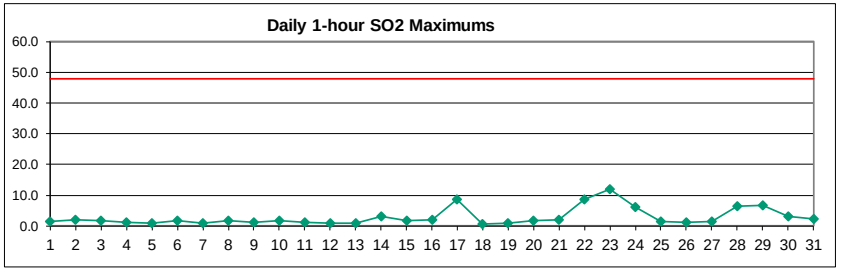
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.6 | S | 1.8 | 0.5 | 0.7 | 1.1 | 2.4 | 1.3 | 4.3 | 1.0 | 0.7 | 0.7 | 0.5 | 1.7 | 1.0 | 0.5 | 0.9 | 0.8 | 0.7 | 1.9 | 2.1 | 0.9 | 0.5 | 0.5 | 1.2 | 4.3 |
| 2 | 0.7 | S | 0.7 | 0.3 | 0.9 | 0.8 | 4.6 | 3.4 | 1.7 | 1.9 | 6.5 | 6.3 | 1.1 | 13.6 | 1.5 | 0.7 | 1.0 | 2.5 | 1.2 | 0.6 | 7.3 | 2.9 | 0.7 | 2.1 | 2.7 | 13.6 |
| 3 | 1.3 | S | 2.1 | 0.4 | 0.5 | 0.6 | 0.6 | 6.6 | 3.9 | 4.6 | 7.8 | 6.9 | 4.8 | 1.3 | 3.6 | 1.9 | 0.6 | 1.1 | 0.4 | 0.4 | 1.5 | 0.8 | 13.0 | 10.8 | 3.3 | 13.0 |
| 4 | 3.1 | S | 1.0 | 1.4 | 7.3 | 4.3 | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | 0.9 | 1.7 | 0.6 | 4.4 | 5.5 | 5.5 | 0.9 | 3.3 | 0.6 | 1.1 | 6.8 | 0.8 | 1.4 | 2.3 | 7.3 |
| 5 | 0.8 | S | 3.1 | 2.0 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 | C | C | C | C | C | C | 1.8 | 2.2 | 0.0 | 1.1 | 3.5 | 0.2 | 0.0 | 0.6 | 0.0 | - | - |
| 6 | 0.2 | S | 0.0 | 0.7 | 0.1 | 10.8 | 1.8 | 7.3 | 4.6 | 3.3 | 4.0 | 3.3 | 1.3 | 1.4 | 1.1 | 2.1 | 6.2 | 12.7 | 4.4 | 1.1 | 2.6 | 0.0 | 0.1 | 2.3 | 3.1 | 12.7 |
| 7 | 0.0 | S | 0.1 | 2.4 | 0.4 | 0.7 | 1.9 | 5.2 | 4.2 | 7.2 | 3.1 | 9.7 | 0.7 | 2.2 | 5.2 | 0.9 | 2.4 | 0.0 | 0.3 | 0.4 | 2.4 | 2.6 | 1.3 | 0.4 | 2.3 | 9.7 |
| 8 | 0.5 | S | 2.0 | 0.6 | 2.9 | 3.9 | 2.1 | 2.3 | 1.9 | 4.3 | 1.3 | 0.8 | 0.0 | 0.0 | 0.2 | 0.2 | 1.0 | 0.9 | 1.8 | 0.0 | 0.0 | 0.9 | 19.0 | 4.8 | 2.2 | 19.0 |
| 9 | 0.8 | S | 0.0 | 0.4 | 1.9 | 1.9 | 3.0 | 3.6 | 4.1 | 2.1 | 0.9 | 1.0 | 0.5 | 0.0 | 1.0 | 2.2 | 5.0 | 2.9 | 0.2 | 0.1 | 0.5 | 0.0 | 0.0 | 4.6 | 1.6 | 5.0 |
| 10 | 0.7 | S | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 3.4 | 6.6 | 0.6 | 3.6 | 1.0 | 1.3 | 2.0 | 2.2 | 1.2 | 0.9 | 0.4 | 1.6 | 0.0 | 0.0 | 0.4 | 5.8 | 2.5 | 1.6 | 6.6 |
| 11 | 16.0 | S | 0.5 | 7.6 | 2.1 | 0.0 | 1.6 | 4.0 | 5.7 | 5.4 | 0.2 | 2.7 | 0.8 | 4.9 | 4.1 | 1.5 | 1.3 | 4.0 | 0.1 | 0.3 | 0.0 | 2.6 | 0.0 | 0.1 | 2.8 | 16.0 |
| 12 | 0.4 | S | 12.4 | 11.8 | 0.3 | 1.5 | 11.8 | 4.1 | 4.5 | 4.5 | 6.0 | 4.0 | 5.0 | 5.8 | 3.9 | 4.0 | 3.3 | 1.6 | 0.0 | 0.3 | 0.0 | 0.0 | 9.0 | 4.2 | 4.3 | 12.4 |
| 13 | 9.1 | S | 0.0 | 7.4 | 4.0 | 6.7 | 4.5 | 6.2 | 2.0 | 1.9 | 4.5 | 2.1 | 1.3 | 0.6 | 0.1 | 2.2 | 4.3 | 0.0 | 1.1 | 2.7 | 0.1 | 0.0 | 0.0 | 35.6 | 4.2 | 35.6 |
| 14 | 3.1 | S | 0.0 | 0.0 | 0.4 | 2.4 | 1.7 | 1.5 | 4.5 | 3.4 | 3.8 | 1.5 | 1.2 | 0.6 | 1.8 | 2.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 1.3 | 4.5 |
| 15 | 0.0 | S | 0.0 | 0.0 | 0.1 | 1.3 | 6.0 | 6.4 | 6.4 | 3.3 | 1.4 | 1.4 | 4.7 | 1.8 | 6.4 | 1.3 | 4.9 | 0.0 | 1.4 | 0.0 | 0.0 | 1.0 | 14.0 | 2.3 | 2.8 | 14.0 |
| 16 | 1.5 | S | 2.4 | 0.8 | 2.3 | 6.6 | 0.0 | 0.0 | 0.0 | 1.6 | 1.2 | 2.4 | 2.1 | 3.8 | 2.7 | 2.5 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 1.8 | 10.0 |
| 17 | 10.3 | S | 14.3 | 4.8 | 2.9 | 3.5 | 6.3 | 8.7 | 20.1 | 36.9 | 14.0 | 1.6 | 3.5 | 6.1 | 4.6 | 5.5 | 0.7 | 0.5 | 0.0 | 9.5 | 10.9 | 4.4 | 2.2 | 2.6 | 7.6 | 36.9 |
| 18 | 3.1 | S | 3.2 | 2.1 | 0.0 | 0.0 | 1.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.0 | 0.0 | 0.2 | 0.4 | 0.7 | 2.1 | 6.0 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 6.0 |
| 19 | 0.0 | S | 1.8 | 0.0 | 0.0 | 0.0 | 15.4 | 12.3 | 14.6 | 1.5 | 0.4 | NRM | NRM | NRM | NRM | 3.1 | 1.3 | 4.1 | 2.5 | 7.1 | 0.2 | 0.0 | 0.0 | 0.0 | 3.4 | 15.4 |
| 20 | 0.1 | S | 0.0 | 0.0 | 0.0 | 26.0 | 3.6 | 9.8 | 5.5 | 4.2 | 9.1 | 27.6 | 6.9 | 13.2 | 6.2 | 5.1 | 13.0 | 6.9 | 0.2 | 0.4 | 0.0 | 0.1 | 5.4 | 8.7 | 6.6 | 27.6 |
| 21 | 0.8 | S | 0.5 | 0.0 | 0.4 | 1.0 | 9.9 | 3.5 | 3.3 | P | 10.3 | 4.2 | 1.7 | 0.2 | 0.3 | 0.2 | 2.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.8 | 1.8 | 1.9 | 10.3 |
| 22 | 1.6 | S | 2.0 | 3.6 | 2.4 | 6.3 | 3.4 | 2.0 | 9.3 | 10.1 | 1.4 | 1.5 | 5.0 | 3.0 | 12.6 | 12.4 | 4.8 | 5.7 | 6.7 | 9.2 | 13.8 | 10.6 | 9.0 | 4.1 | 6.1 | 13.8 |
| 23 | 0.8 | S | 3.5 | 5.9 | 0.9 | 0.3 | 1.0 | 1.8 | 1.0 | 11.3 | 16.4 | 17.2 | 10.2 | 11.9 | 10.5 | 17.4 | 8.8 | 3.7 | 3.4 | 2.8 | 4.7 | 7.9 | 2.5 | 0.0 | 6.3 | 17.4 |
| 24 | 0.0 | S | 5.3 | 0.9 | 4.7 | 4.9 | 1.4 | 10.1 | 7.7 | 4.9 | 0.8 | 0.3 | 5.6 | 9.2 | 3.6 | 5.1 | 5.5 | 4.2 | 7.7 | 0.0 | 1.1 | 2.4 | 1.6 | 0.0 | 3.8 | 10.1 |
| 25 | 0.1 | S | 7.7 | 0.9 | 0.0 | 14.3 | 1.9 | 2.3 | 9.2 | 3.0 | 1.7 | 1.3 | 2.5 | 0.9 | 2.7 | 1.9 | 1.5 | 4.1 | 0.4 | 0.0 | 0.1 | 3.6 | 5.9 | 1.3 | 2.9 | 14.3 |
| 26 | 0.0 | S | 0.7 | 0.3 | 0.0 | 0.9 | 0.6 | 0.1 | 0.6 | 5.5 | 4.3 | 3.9 | 3.3 | 0.9 | 2.4 | 2.0 | 2.4 | 4.1 | 4.5 | 2.5 | 0.1 | 0.0 | 0.1 | 0.8 | 1.7 | 5.5 |
| 27 | 0.0 | S | 0.1 | 0.1 | 0.0 | 2.7 | 9.5 | 2.4 | 3.6 | 1.9 | 0.1 | 0.6 | 2.5 | 3.3 | 2.6 | 1.0 | 2.2 | 1.0 | 0.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 9.5 |
| 28 | 1.3 | S | 0.0 | 0.0 | 0.1 | 3.8 | 7.1 | 5.9 | 6.2 | 11.0 | 15.1 | 7.1 | 5.5 | 1.0 | 0.5 | 1.2 | 0.1 | 0.4 | 0.0 | 0.1 | 3.5 | 0.1 | 0.0 | 4.6 | 3.2 | 15.1 |
| 29 | 1.5 | S | 7.3 | 4.0 | 4.8 | 8.9 | 7.8 | 10.1 | 4.9 | 3.0 | 1.0 | 0.7 | 1.9 | 1.9 | 3.5 | 4.0 | 5.1 | 11.2 | 8.2 | 0.0 | 0.0 | 0.1 | 1.4 | 23.6 | 5.0 | 23.6 |
| 30 | 4.0 | S | 0.2 | 6.9 | 3.0 | 0.8 | 2.6 | 7.3 | 10.6 | 2.0 | 2.8 | 1.2 | 0.6 | 0.3 | 0.6 | 2.1 | 0.9 | 1.6 | 0.3 | 0.0 | 0.0 | 0.1 | 3.1 | 4.1 | 2.4 | 10.6 |
| 31 | 0.2 | S | 0.1 | 0.0 | 0.6 | 0.3 | 1.3 | 0.7 | 3.3 | 6.0 | 1.6 | 0.2 | 0.1 | 1.4 | 0.4 | 1.4 | 2.6 | 1.4 | 0.7 | 0.2 | 3.3 | 0.3 | 5.0 | 3.7 | 1.5 | 6.0 |
| NO. | 31 | - | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 30 | 29 | 29 | 29 | 29 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 702 | 99.3% |
| MEAN | 2.0 | - | 2.4 | 2.1 | 1.4 | 3.8 | 3.8 | 4.3 | 5.0 | 5.1 | 4.2 | 3.9 | 2.6 | 3.2 | 3.1 | 3.0 | 3.0 | 2.7 | 1.8 | 1.4 | 1.8 | 1.6 | 3.3 | 4.4 | | |
| MAX | 16.0 | - | 14.3 | 11.8 | 7.3 | 26.0 | 15.4 | 12.3 | 20.1 | 36.9 | 16.4 | 27.6 | 10.2 | 13.6 | 12.6 | 17.4 | 13.0 | 12.7 | 8.2 | 9.5 | 13.8 | 10.6 | 19.0 | 35.6 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 611 | | |
| Maximum 1-HR Average | 36.9 PPB | | |
| Maximum 24-HR Average | 7.6 PPB | | |
| | | Opperational Time | 739 HRS |
| Monthly Calibration | 6 | Opperational Uptime | 99.3 % |
| Standard Deviation | 4.157 | Monthly Average | 3.0 PPB |

# Lagoon $SO_2$ (ppb) – July 2021

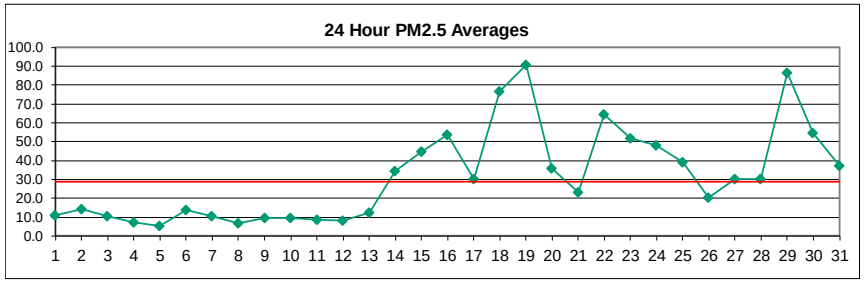
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.0 | S | 0.7 | 1.1 | 0.8 | 1.0 | 1.1 | 1.0 | 1.0 | 1.2 | 1.0 | 1.1 | 1.1 | 1.4 | 1.0 | 1.1 | 1.1 | 1.6 | 0.9 | 1.1 | 1.3 | 1.3 | 0.8 | 0.8 | 1.1 | 1.6 |
| 2 | 0.9 | S | 0.9 | 1.0 | 1.6 | 1.2 | 0.8 | 1.3 | 1.1 | 1.4 | 2.1 | 1.8 | 1.6 | 1.5 | 0.6 | 1.5 | 1.0 | 1.1 | 1.4 | 0.9 | 1.0 | 1.3 | 0.9 | 0.9 | 1.2 | 2.1 |
| 3 | 0.7 | S | 1.6 | 0.7 | 0.5 | 0.9 | 0.9 | 1.3 | 0.9 | 1.1 | 0.9 | 1.0 | 1.4 | 1.0 | 1.5 | 0.9 | 0.8 | 1.0 | 1.2 | 1.8 | 0.6 | 1.3 | 1.1 | 1.4 | 1.1 | 1.8 |
| 4 | 1.3 | S | 1.0 | 0.9 | 1.1 | 0.7 | 0.8 | 0.7 | 0.9 | 1.1 | 1.1 | 0.7 | 0.8 | 0.6 | 0.1 | 1.2 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.5 | 0.8 | 1.3 |
| 5 | 0.7 | S | 0.6 | 0.1 | 0.2 | 0.0 | 0.6 | 0.7 | 0.5 | C | C | C | C | 0.4 | 0.7 | 0.5 | 0.8 | 0.1 | 0.1 | 0.1 | 0.0 | 0.5 | 0.5 | 0.8 | 0.4 | 0.8 |
| 6 | 0.2 | S | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 1.0 | 1.6 | 1.3 | 0.9 | 0.1 | 0.2 | 1.7 | 0.7 | 1.0 | 0.0 | 0.9 | 0.9 | 0.5 | 0.7 | 0.4 | 0.7 | 0.8 | 0.6 | 1.7 |
| 7 | 0.6 | S | 0.3 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 | 0.4 | 1.0 | 1.0 | 0.8 | 0.1 | 0.0 | 0.3 | 0.5 | 1.0 | 0.2 | 0.0 | 0.6 | 0.5 | 1.0 |
| 8 | 0.1 | S | 0.5 | 0.5 | 0.5 | 0.9 | 0.8 | 0.6 | 0.1 | 0.8 | 0.6 | 0.8 | 0.8 | 1.2 | 0.8 | 0.7 | 1.6 | 0.3 | 0.4 | 1.6 | 0.5 | 0.0 | 0.6 | 0.6 | 0.7 | 1.6 |
| 9 | 0.4 | S | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.7 | 0.7 | 0.2 | 0.9 | 0.9 | 0.5 | 0.6 | 0.8 | 0.7 | 0.9 | 1.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.2 | 0.3 | 0.5 | 1.1 |
| 10 | 0.2 | S | 0.0 | 0.6 | 0.0 | 0.2 | 0.3 | 0.4 | 1.6 | 0.5 | 1.0 | 0.6 | 0.6 | 0.1 | 0.8 | 1.0 | 0.9 | 1.3 | 1.0 | 0.4 | 0.0 | 0.5 | 1.1 | 0.7 | 0.6 | 1.6 |
| 11 | 0.7 | S | 0.2 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.1 | 0.3 | 0.7 | 0.3 | 0.1 | 0.3 | 1.1 | 0.6 | 0.1 | 0.3 | 0.2 | 0.4 | 0.2 | 0.3 | 0.3 | 1.1 |
| 12 | 0.0 | S | 0.3 | 0.0 | 0.0 | 0.5 | 0.3 | 0.6 | 0.0 | 0.4 | 0.8 | 0.3 | 0.5 | 0.9 | 0.1 | 0.3 | 0.1 | 0.2 | 0.1 | 0.2 | 0.4 | 0.3 | 0.5 | 0.0 | 0.3 | 0.9 |
| 13 | 0.0 | S | 0.3 | 0.2 | 0.5 | 0.1 | 0.1 | 0.3 | 0.4 | 0.5 | 1.0 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.1 | 0.3 | 0.2 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 1.0 |
| 14 | 0.7 | S | 0.0 | 0.5 | 0.4 | 0.5 | 0.5 | 0.1 | 0.8 | 0.0 | 1.5 | 0.4 | 2.4 | 2.0 | 3.0 | 2.2 | 0.6 | 0.9 | 0.5 | 0.1 | 1.1 | 0.2 | 0.6 | 0.5 | 0.9 | 3.0 |
| 15 | 0.5 | S | 1.2 | 0.9 | 0.4 | 0.2 | 0.5 | 0.9 | 1.0 | 1.4 | 1.0 | 0.9 | 1.6 | 1.3 | 1.7 | 0.8 | 0.9 | 1.1 | 1.0 | 1.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 1.7 |
| 16 | 0.2 | S | 0.1 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 | 1.9 | 1.5 | 0.9 | 1.0 | 0.6 | 1.5 | 1.3 | 0.9 | 1.5 | 0.9 | 0.8 | 0.5 | 0.5 | 0.6 | 0.5 | 0.8 | 0.8 | 1.9 |
| 17 | 0.8 | S | 0.5 | 0.5 | 0.5 | 0.2 | 0.7 | 0.7 | 2.1 | 8.6 | 1.8 | 1.2 | 0.8 | 1.9 | 1.8 | 1.6 | 0.5 | 0.7 | 0.6 | 1.5 | 1.3 | 0.6 | 0.7 | 0.8 | 1.3 | 8.6 |
| 18 | 0.4 | S | 0.7 | 0.7 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 0.5 | 0.5 | 0.0 | 0.5 | 0.1 | 0.6 | 0.2 | 0.6 | 0.6 | 0.7 | 0.0 | 0.4 | 0.3 | 0.7 |
| 19 | 0.4 | S | 0.8 | 0.4 | 0.6 | 0.1 | 0.9 | 0.3 | 0.4 | 0.2 | 0.6 | 0.5 | 0.2 | 0.4 | 0.3 | 0.2 | 0.5 | 0.8 | 0.1 | 0.7 | 0.3 | 0.2 | 0.0 | 0.2 | 0.4 | 0.9 |
| 20 | 0.5 | S | 0.3 | 0.6 | 0.2 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.8 | 1.8 | 1.0 | 0.8 | 1.3 | 0.4 | 0.6 | 1.1 | 1.0 | 0.6 | 0.5 | 0.8 | 0.5 | 0.6 | 0.7 | 1.8 |
| 21 | 1.0 | S | 1.4 | 0.5 | 1.1 | 0.8 | 0.6 | 0.6 | 1.0 | P | 0.8 | 1.1 | 1.4 | 0.7 | 0.9 | 0.6 | 0.7 | 0.3 | 0.7 | 0.9 | 0.9 | 0.1 | 1.9 | 1.1 | 0.9 | 1.9 |
| 22 | 0.9 | S | 1.1 | 0.9 | 0.4 | 0.9 | 1.2 | 0.8 | 1.3 | 1.1 | 0.5 | 0.5 | 2.8 | 1.9 | 4.4 | 3.5 | 1.7 | 3.5 | 3.7 | 6.6 | 8.1 | 8.7 | 8.0 | 3.3 | 2.9 | 8.7 |
| 23 | 1.0 | S | 2.9 | 1.3 | 0.7 | 0.4 | 0.6 | 0.6 | 0.6 | 10.5 | 12.1 | 10.0 | 9.6 | 7.7 | 7.9 | 11.8 | 8.0 | 4.3 | 2.3 | 2.4 | 2.7 | 5.1 | 2.0 | 0.2 | 4.5 | 12.1 |
| 24 | 0.3 | S | 1.9 | 0.8 | 0.1 | 0.5 | 0.2 | 2.7 | 2.9 | 1.8 | 1.3 | 1.0 | 2.0 | 5.9 | 4.2 | 2.8 | 4.1 | 4.1 | 6.3 | 0.9 | 0.9 | 0.5 | 0.0 | 0.1 | 2.0 | 6.3 |
| 25 | 0.4 | S | 0.3 | 0.1 | 0.2 | 0.7 | 0.5 | 0.4 | 0.6 | 1.5 | 0.6 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.8 | 0.9 | 1.1 | 1.0 | 0.6 | 0.7 | 0.6 | 1.5 |
| 26 | 0.6 | S | 0.6 | 0.2 | 0.6 | 0.8 | 0.5 | 0.7 | 0.3 | 0.4 | 0.8 | 1.1 | 0.7 | 1.0 | 0.9 | 1.2 | 0.8 | 0.9 | 0.9 | 0.6 | 0.9 | 0.0 | 0.9 | 1.3 | 0.7 | 1.3 |
| 27 | 0.5 | S | 0.6 | 0.8 | 0.4 | 0.6 | 1.2 | 0.9 | 0.7 | 1.0 | 0.7 | 0.4 | 0.7 | 0.6 | 0.8 | 1.1 | 0.6 | 0.6 | 0.3 | 0.3 | 0.2 | 0.9 | 0.8 | 1.5 | 0.7 | 1.5 |
| 28 | 1.1 | S | 0.5 | 0.0 | 0.6 | 0.4 | 0.5 | 1.0 | 0.9 | 4.3 | 6.5 | 2.0 | 1.6 | 1.1 | 0.3 | 0.8 | 0.5 | 0.8 | 1.0 | 0.8 | 0.3 | 0.1 | 0.1 | 0.3 | 1.1 | 6.5 |
| 29 | 0.2 | S | 5.2 | 5.3 | 3.2 | 6.8 | 6.6 | 2.3 | 1.9 | 1.0 | 0.7 | 1.3 | 1.5 | 1.3 | 0.9 | 0.7 | 0.7 | 0.9 | 0.4 | 1.2 | 0.7 | 0.5 | 0.4 | 0.5 | 1.9 | 6.8 |
| 30 | 0.0 | S | 0.0 | 0.6 | 0.4 | 0.0 | 0.2 | 0.3 | 0.2 | 0.8 | 1.1 | 3.1 | 1.0 | 0.5 | 1.1 | 0.3 | 0.6 | 0.7 | 0.3 | 0.3 | 0.7 | 0.6 | 0.1 | 0.1 | 0.6 | 3.1 |
| 31 | 0.0 | S | 0.6 | 0.4 | 0.2 | 0.1 | 0.2 | 0.6 | 1.0 | 1.2 | 1.5 | 0.3 | 0.4 | 2.2 | 0.8 | 0.9 | 0.6 | 0.1 | 0.5 | 0.8 | 0.4 | 0.5 | 0.2 | 0.3 | 0.6 | 2.2 |
| NO. | 31 | - | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 30 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 708 | 99.9% |
| MEAN | 0.5 | - | 0.8 | 0.7 | 0.5 | 0.7 | 0.7 | 0.7 | 0.9 | 1.6 | 1.5 | 1.2 | 1.3 | 1.4 | 1.3 | 1.3 | 1.1 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | | |
| MAX | 1.3 | - | 5.2 | 5.3 | 3.2 | 6.8 | 6.6 | 2.7 | 2.9 | 10.5 | 12.1 | 10.0 | 9.6 | 7.7 | 7.9 | 11.8 | 8.0 | 4.3 | 6.3 | 6.6 | 8.1 | 8.7 | 8.0 | 3.3 | | |




| | | | |
|---|---|---|---|
| Number of 1HR Exceedences | 0 | | |
| Number of Non-Zero Readings | 682 | | |
| Maximum 1-HR Average | 12.1 PPB | | |
| Maximum 24-HR Average | 4.5 PPB | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 4 | Opperational Uptime | 99.9 % |
| Standard Deviation | 1.408 | Monthly Average | 1.0 PPB |

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

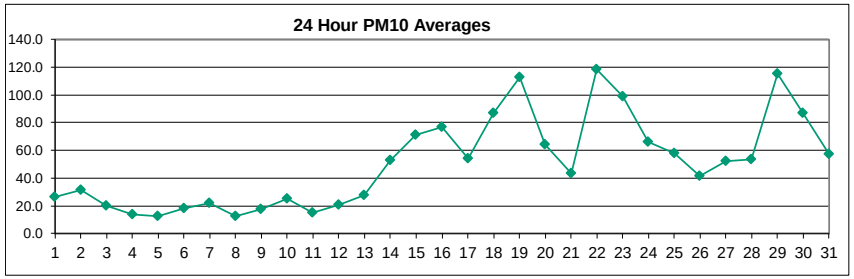
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.4 | 13.1 | 9.4 | 9.1 | 9.2 | 10.8 | 10.7 | 22.3 | 11.4 | 9.4 | 8.8 | 9.9 | 6.7 | 8.9 | 6.9 | 7.5 | 5.7 | 8.7 | 13.5 | 15.2 | 14.8 | 10.1 | 23.7 | 12.9 | 11.1 | 23.7 |
| 2 | 15.9 | 10.9 | 11.3 | 12.7 | 12.9 | 7.4 | 8.8 | 10.5 | 10.1 | 10.3 | 13.7 | 35.9 | 16.4 | 27.6 | 21.0 | 17.8 | 23.6 | 15.6 | 11.6 | 7.5 | 10.8 | 13.9 | 8.1 | 9.4 | 14.3 | 35.9 |
| 3 | 13.7 | 8.2 | 6.6 | 6.9 | 6.6 | 7.7 | 8.8 | 9.7 | 9.2 | 11.5 | 10.2 | 11.1 | 9.8 | 11.0 | 12.6 | 12.4 | 14.0 | 13.0 | 13.0 | 12.0 | 8.7 | 9.3 | 8.7 | 14.2 | 10.4 | 14.2 |
| 4 | 15.0 | 13.4 | 13.7 | 12.9 | 10.4 | 9.9 | 12.0 | 12.0 | 8.1 | 8.8 | 6.1 | 4.6 | 7.8 | 5.3 | 3.7 | 3.7 | 0.0 | 1.4 | 5.3 | 4.1 | 5.0 | 3.9 | 1.9 | 7.3 | 7.3 | 15.0 |
| 5 | 7.0 | 4.0 | 3.7 | 3.9 | 2.7 | 4.1 | 5.5 | 6.7 | 9.1 | 9.7 | 9.0 | 7.3 | 7.1 | 4.7 | 4.7 | 5.1 | 4.3 | 3.4 | 4.0 | 3.3 | 2.9 | 3.5 | 5.4 | 4.9 | 5.2 | 9.7 |
| 6 | 6.6 | 6.8 | 6.0 | 8.5 | 5.6 | 3.1 | 4.9 | 7.5 | 11.4 | 14.7 | 13.4 | 15.0 | 22.6 | 27.4 | 33.5 | 18.9 | 16.9 | 21.2 | 23.8 | 18.9 | 15.3 | 11.7 | 9.0 | 7.9 | 13.8 | 33.5 |
| 7 | 7.2 | 9.6 | 11.0 | 8.3 | 7.4 | 5.2 | 7.1 | 10.4 | 13.5 | 11.4 | 13.7 | 13.8 | 14.6 | 11.7 | 13.0 | 12.5 | 14.8 | 9.7 | 9.5 | 11.0 | 8.5 | 9.6 | 6.9 | 7.3 | 10.3 | 14.8 |
| 8 | 12.0 | 7.5 | 5.4 | 5.3 | 2.9 | 2.7 | 4.8 | 5.2 | 6.4 | 8.7 | 9.4 | 9.2 | 6.2 | 6.6 | 7.9 | 7.0 | 7.8 | 5.6 | 7.0 | 6.6 | 7.2 | 5.7 | 3.9 | 11.3 | 6.8 | 12.0 |
| 9 | 8.2 | 6.8 | 5.6 | 6.6 | 7.3 | 8.5 | 10.4 | 10.0 | 13.7 | 12.8 | 10.4 | 13.5 | 14.7 | 12.8 | 9.3 | 8.6 | 17.0 | 7.3 | 7.1 | 5.3 | 7.4 | 9.6 | 7.1 | 10.2 | 9.6 | 17.0 |
| 10 | 11.6 | 12.7 | 13.5 | 11.2 | 10.9 | 10.8 | 9.7 | 9.0 | 8.7 | 9.3 | 8.7 | 12.1 | 9.4 | 7.9 | 10.0 | 7.4 | 5.2 | 11.8 | 9.8 | 9.5 | 6.4 | 5.3 | 8.2 | 11.1 | 9.6 | 13.5 |
| 11 | 9.2 | 11.3 | 12.1 | 10.4 | 12.6 | 12.1 | 9.0 | 7.9 | 7.5 | 10.4 | 9.8 | 9.9 | 6.5 | 6.0 | 8.9 | 6.8 | 6.4 | 9.6 | 7.9 | 6.6 | 6.9 | 7.4 | 4.3 | 3.5 | 8.5 | 12.6 |
| 12 | 6.8 | 9.9 | 7.4 | 9.5 | 9.9 | 7.4 | 10.1 | 15.3 | 17.4 | 15.8 | 10.8 | 5.8 | 5.9 | 6.9 | 7.3 | 7.2 | 6.2 | 6.1 | 5.7 | 4.0 | 4.1 | 5.4 | 7.0 | 8.3 | 8.4 | 17.4 |
| 13 | 8.3 | 16.9 | 11.1 | 10.0 | 12.9 | 11.5 | 15.3 | 12.7 | 13.5 | 15.2 | 11.4 | 13.5 | 11.0 | 12.6 | 11.6 | 11.7 | 13.4 | 14.1 | 10.9 | 11.2 | 10.8 | 9.9 | 11.9 | 12.2 | 12.2 | 16.9 |
| 14 | 11.4 | 10.3 | 12.2 | 11.4 | 14.4 | 14.0 | 18.0 | 12.9 | 16.4 | 18.5 | 20.8 | 23.5 | 41.8 | 75.2 | 56.8 | 47.3 | 45.5 | 58.7 | 59.9 | 53.3 | 54.2 | 53.5 | 51.6 | 46.2 | 34.5 | 75.2 |
| 15 | 53.5 | 48.1 | 42.6 | 39.7 | 41.4 | 41.5 | 37.8 | 39.0 | 40.8 | 38.3 | 34.0 | 41.5 | 36.5 | 39.3 | 49.2 | 34.5 | 48.4 | 51.9 | 49.6 | 49.2 | 52.6 | 50.3 | 55.2 | 57.9 | 44.7 | 57.9 |
| 16 | 59.4 | 73.3 | 78.2 | 81.4 | 74.7 | 74.9 | 72.7 | 68.8 | 61.6 | 62.5 | 51.2 | 42.9 | 31.0 | 46.7 | 50.7 | 45.0 | 40.5 | 39.3 | 40.9 | 39.6 | 40.0 | 36.7 | 37.6 | 40.3 | 53.7 | 81.4 |
| 17 | 50.6 | 49.0 | 45.7 | 41.3 | 40.5 | 38.0 | 35.1 | 28.3 | 21.3 | 26.8 | 32.9 | 25.2 | 19.9 | 21.6 | 21.0 | 21.8 | 14.7 | 19.1 | 22.7 | 18.5 | 25.1 | 31.4 | 37.2 | 40.6 | 30.3 | 50.6 |
| 18 | 49.8 | 55.9 | 58.3 | 58.4 | 60.3 | 59.0 | 54.5 | 58.1 | 60.7 | 61.0 | 64.2 | 56.3 | 49.9 | 44.7 | 50.7 | 53.5 | 88.8 | 120.2 | 133.1 | 125.8 | 117.8 | 118.1 | 121.6 | 118.6 | 76.6 | 133.1 |
| 19 | 110.0 | 110.4 | 102.6 | 105.7 | 111.9 | 115.2 | 129.9 | 137.7 | 134.3 | 122.1 | 106.9 | 93.9 | 85.5 | 80.1 | 74.1 | 66.1 | 74.9 | 71.4 | 69.6 | 68.2 | 61.5 | 57.5 | 55.8 | 32.8 | 90.8 | 137.7 |
| 20 | 28.3 | 26.8 | 29.7 | 32.8 | 43.4 | 41.9 | 48.8 | 47.9 | 48.9 | 44.2 | 49.2 | 53.3 | 49.1 | 37.5 | 43.4 | 36.2 | 29.2 | 24.5 | 25.1 | 28.8 | 28.3 | 26.5 | 20.0 | 17.2 | 35.9 | 53.3 |
| 21 | 22.8 | 24.2 | 20.5 | 15.5 | 16.3 | 21.6 | 16.1 | 18.8 | 20.3 | P | 22.1 | 23.6 | 15.6 | 12.4 | 9.5 | 10.5 | 15.1 | 14.4 | 13.2 | 15.3 | 19.6 | 43.3 | 66.0 | 75.6 | 23.2 | 75.6 |
| 22 | 104.3 | 125.5 | 126.3 | 124.2 | 123.0 | 117.3 | 80.7 | 77.9 | 65.4 | 48.2 | 23.3 | 16.4 | 19.4 | 25.0 | 36.0 | 32.0 | 36.8 | 43.0 | 45.0 | 41.7 | 46.7 | 51.5 | 61.9 | 77.9 | 64.5 | 126.3 |
| 23 | 77.3 | 73.1 | 69.7 | 68.6 | 62.3 | 55.3 | 64.8 | 83.7 | 116.5 | 100.7 | 61.3 | 33.3 | 21.8 | 24.0 | 26.4 | 23.3 | 21.8 | 29.6 | 25.6 | 27.3 | 37.2 | 43.7 | 41.9 | 48.4 | 51.6 | 116.5 |
| 24 | 41.6 | 40.6 | 44.9 | 44.5 | 48.3 | 50.2 | 48.4 | 51.7 | 57.5 | 57.6 | 58.1 | 50.1 | 41.3 | 45.9 | 49.0 | 50.0 | 50.9 | 48.6 | 44.8 | 47.7 | 40.8 | 43.8 | 49.6 | 49.0 | 48.1 | 58.1 |
| 25 | 50.8 | 52.4 | 51.9 | 53.1 | 51.7 | 51.4 | 55.6 | 53.5 | 53.9 | 48.0 | 45.2 | 42.5 | 33.2 | 25.0 | 27.7 | 25.9 | 25.2 | 24.8 | 23.8 | 24.9 | 25.9 | 26.4 | 29.2 | 38.9 | 39.2 | 55.6 |
| 26 | 25.2 | 15.2 | 10.5 | 12.9 | 11.5 | 9.7 | 8.8 | 10.8 | 9.7 | 9.4 | 13.7 | C | 24.8 | 25.6 | 26.0 | 29.6 | 34.8 | 27.9 | 28.8 | 26.6 | 26.3 | 28.1 | 26.6 | 19.9 | 20.1 | 34.8 |
| 27 | 29.2 | X | 20.9 | 30.7 | 33.6 | 56.2 | 61.7 | 53.9 | 38.4 | 32.5 | 33.1 | 27.8 | 23.7 | 27.7 | 27.4 | 23.5 | 24.9 | 21.5 | 24.5 | 25.0 | 22.4 | 22.9 | 19.7 | 13.2 | 30.2 | 61.7 |
| 28 | 11.0 | 13.8 | 13.7 | 14.2 | 15.1 | 10.7 | 24.5 | 29.9 | 30.8 | 44.2 | 48.0 | 39.8 | 28.8 | 33.1 | 28.4 | 28.2 | 33.4 | 42.2 | 44.2 | 43.2 | 39.2 | 34.5 | 33.7 | 36.6 | 30.0 | 48.0 |
| 29 | 40.6 | 41.6 | 60.7 | 80.4 | 93.7 | 92.2 | 94.6 | 92.0 | 97.8 | 94.5 | 99.0 | 92.0 | 89.5 | 105.4 | 107.7 | 111.7 | 111.4 | 111.2 | 99.3 | 94.8 | 74.9 | 66.4 | 60.2 | 58.4 | 86.3 | 111.7 |
| 30 | 61.5 | 62.0 | 59.0 | 54.6 | 57.8 | 52.4 | 66.6 | 74.0 | 88.2 | 81.3 | 82.7 | 78.0 | 76.7 | 57.0 | 35.2 | 39.4 | 38.4 | 41.8 | 42.4 | 32.4 | 32.3 | 31.8 | 33.6 | 31.1 | 54.6 | 88.2 |
| 31 | 37.5 | 38.1 | 38.1 | 32.9 | 34.8 | 38.0 | 36.8 | 41.3 | 41.2 | 47.8 | 42.8 | 47.7 | 41.3 | 36.3 | 40.7 | 36.6 | 35.4 | 31.8 | 33.5 | 28.3 | 27.7 | 37.6 | 34.6 | 30.2 | 37.1 | 47.8 |
| NO. | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 741 | 99.7% |
| MEAN | 32.1 | 33.0 | 32.3 | 32.8 | 33.7 | 33.6 | 34.6 | 36.1 | 36.9 | 36.2 | 33.0 | 31.7 | 28.0 | 29.4 | 29.4 | 27.1 | 29.2 | 30.6 | 30.8 | 29.2 | 28.4 | 29.3 | 30.4 | 30.8 | | |
| MAX | 110.0 | 125.5 | 126.3 | 124.2 | 123.0 | 117.3 | 129.9 | 137.7 | 134.3 | 122.1 | 106.9 | 93.9 | 89.5 | 105.4 | 107.7 | 111.7 | 111.4 | 120.2 | 133.1 | 125.8 | 117.8 | 118.1 | 121.6 | 118.6 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 16 | | |
| Number of Non-Zero Readings | 740 | | |
| Maximum 1-HR Average | 137.7 UG/M3 | | |
| Maximum 24-HR Average | 90.8 UG/M3 | | |
| | | Opperational Time | 742 HRS |
| Monthly Calibration | 1 | Opperational Uptime | 99.7 % |
| Standard Deviation | 28.12 | Monthly Average | 31.6 UG/M3 |

# Lagoon $PM_{10}$ ($\mu g/m^3$) – July 2021

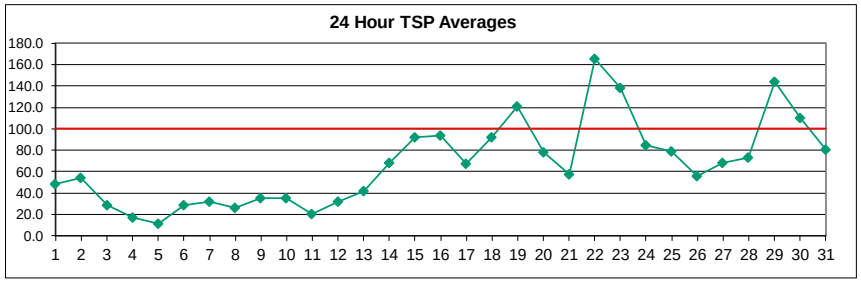
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 23.0 | 22.7 | 18.5 | 21.8 | 16.7 | 23.9 | 19.8 | 40.2 | 35.8 | 37.4 | 48.2 | 24.0 | 19.1 | 12.6 | 10.7 | 19.9 | 24.9 | 24.5 | 29.6 | 63.2 | 46.6 | 17.5 | 17.3 | 14.0 | 26.3 | 63.2 |
| 2 | 13.6 | 24.2 | 23.2 | 26.6 | 12.7 | 11.3 | 12.1 | 47.7 | 41.8 | 23.5 | 32.1 | 47.2 | 66.2 | 48.3 | 68.3 | 38.7 | 19.3 | 91.8 | 17.3 | 20.6 | 8.6 | 16.0 | 19.8 | 22.2 | 31.4 | 91.8 |
| 3 | 12.8 | 12.6 | 10.0 | 8.8 | 9.5 | 10.9 | 12.7 | 12.8 | 22.5 | 17.5 | 26.5 | 29.1 | 26.5 | 29.4 | 34.3 | 22.9 | 24.4 | 42.2 | 18.7 | 16.3 | 17.1 | 12.4 | 17.6 | 28.4 | 19.8 | 42.2 |
| 4 | 29.3 | 23.3 | 18.8 | 17.5 | 16.9 | 17.4 | 15.5 | 15.1 | 10.5 | 16.4 | 10.8 | 12.1 | 20.1 | 16.6 | 13.8 | 9.5 | 7.8 | 13.3 | 9.7 | 9.9 | 7.3 | 6.7 | 6.4 | 1.8 | 13.6 | 29.3 |
| 5 | 1.1 | 16.1 | 4.6 | 4.9 | 8.2 | 13.5 | 52.3 | 51.9 | 12.1 | 9.8 | 14.8 | 13.7 | 7.9 | 15.0 | 17.6 | 9.4 | 9.3 | 7.2 | 5.3 | 4.7 | 6.1 | 7.2 | 4.9 | 8.5 | 12.8 | 52.3 |
| 6 | 6.1 | 7.5 | 9.1 | 4.6 | 5.3 | 13.3 | 11.4 | 11.4 | 21.6 | 31.0 | 38.7 | 30.7 | 41.6 | 10.4 | 15.5 | 16.7 | 24.1 | 30.2 | 27.3 | 21.3 | 17.0 | 18.9 | 10.9 | 12.8 | 18.2 | 41.6 |
| 7 | 13.8 | 18.3 | 11.3 | 19.8 | 13.1 | 8.9 | 12.5 | 18.5 | 32.5 | 32.9 | 30.5 | 26.6 | 29.9 | 31.0 | 26.5 | 29.4 | 25.6 | 25.3 | 21.7 | 22.3 | 14.2 | 14.7 | 15.0 | 25.3 | 21.7 | 32.9 |
| 8 | 10.9 | 12.8 | 12.5 | 9.6 | 12.9 | 13.7 | 8.1 | 8.8 | 10.2 | 12.2 | 13.9 | 19.4 | 17.7 | 11.0 | 12.5 | 8.8 | 10.0 | 9.4 | 11.6 | 13.5 | 12.8 | 12.8 | 13.8 | 19.0 | 12.4 | 19.4 |
| 9 | 12.6 | 19.7 | 20.2 | 11.2 | 17.3 | 14.6 | 12.1 | 13.2 | 19.0 | 22.0 | 27.3 | 22.1 | 19.8 | 13.2 | 10.7 | 19.4 | 17.7 | 28.9 | 17.9 | 14.7 | 12.8 | 14.1 | 22.5 | 17.0 | 17.5 | 28.9 |
| 10 | 17.2 | 21.3 | 26.3 | 25.2 | 18.9 | 19.3 | 15.5 | 17.4 | 32.8 | 19.9 | 17.3 | 31.9 | 17.0 | 29.1 | 37.5 | 30.7 | 34.8 | 30.4 | 30.3 | 21.4 | 44.6 | 17.0 | 11.4 | 28.4 | 24.8 | 44.6 |
| 11 | 21.2 | 34.0 | 18.9 | 20.0 | 28.5 | 20.9 | 11.4 | 10.9 | 14.0 | 11.5 | 12.7 | 10.6 | 7.3 | 7.1 | 13.6 | 15.0 | 9.4 | 18.9 | 19.0 | 12.1 | 12.4 | 6.9 | 9.8 | 6.9 | 14.7 | 34.0 |
| 12 | 9.3 | 8.1 | 18.7 | 16.1 | 14.8 | 16.0 | 23.8 | 36.8 | 58.2 | 32.3 | 20.6 | 16.8 | 24.8 | 22.2 | 21.8 | 24.8 | 31.9 | 23.5 | 13.1 | 9.2 | 15.1 | 10.1 | 10.7 | 10.7 | 20.4 | 58.2 |
| 13 | 11.9 | 28.4 | 27.5 | 16.3 | 17.7 | 21.6 | 41.0 | 56.5 | 50.9 | 26.8 | 33.4 | 34.8 | 25.6 | 32.7 | 26.0 | 22.9 | 40.0 | 22.0 | 10.7 | 20.2 | 28.4 | 30.0 | 16.2 | 15.8 | 27.4 | 56.5 |
| 14 | 14.9 | 16.3 | 17.7 | 12.1 | 21.3 | 26.6 | 20.7 | 25.9 | 29.9 | 42.5 | 52.1 | 70.2 | 62.0 | 95.9 | 101.4 | 81.5 | 68.6 | 73.1 | 80.9 | 61.6 | 96.1 | 67.5 | 65.9 | 60.2 | 52.7 | 101.4 |
| 15 | 59.5 | 49.5 | 43.5 | 47.5 | 59.0 | 56.0 | 44.9 | 50.8 | 79.6 | 78.5 | 66.2 | 92.9 | 85.3 | 77.0 | 74.0 | 52.1 | 77.5 | 125.4 | 81.3 | 82.5 | 72.8 | 71.6 | 89.0 | 84.3 | 70.9 | 125.4 |
| 16 | 81.3 | 100.5 | 97.4 | 105.4 | 94.6 | 94.2 | 104.5 | 88.2 | 72.9 | 71.5 | 86.0 | 67.5 | 59.1 | 98.9 | 90.4 | 77.0 | 65.5 | 63.6 | 55.5 | 56.2 | 56.3 | 49.6 | 52.7 | 53.3 | 76.8 | 105.4 |
| 17 | 69.9 | 71.6 | 69.6 | 59.0 | 51.4 | 51.3 | 49.4 | 40.3 | 37.3 | 42.1 | 71.3 | 56.3 | 49.6 | 46.7 | 73.5 | 51.2 | 40.1 | 47.9 | 47.0 | 43.3 | 53.7 | 66.3 | 58.2 | 58.6 | 54.4 | 73.5 |
| 18 | 65.3 | 70.6 | 74.6 | 75.3 | 69.2 | 62.0 | 59.2 | 56.1 | 64.0 | 61.3 | 67.1 | 64.9 | 50.5 | 56.7 | 56.1 | 66.4 | 98.9 | 138.0 | 154.1 | 141.0 | 132.7 | 135.2 | 140.6 | 128.0 | 87.0 | 154.1 |
| 19 | 120.4 | 126.9 | 113.6 | 118.3 | 135.7 | 154.0 | 211.6 | 170.2 | 155.3 | 136.0 | 115.8 | 108.1 | 105.0 | 96.1 | 94.8 | 87.6 | 100.4 | 94.7 | 84.8 | 94.2 | 94.9 | 68.6 | 67.4 | 54.8 | 112.9 | 211.6 |
| 20 | 46.1 | 48.1 | 50.1 | 61.0 | 63.8 | 69.0 | 87.2 | 77.6 | 74.6 | 75.3 | 77.9 | 80.1 | 84.5 | 83.7 | 89.5 | 81.5 | 68.2 | 65.8 | 50.1 | 42.5 | 50.5 | 38.1 | 32.8 | 39.0 | 64.0 | 89.5 |
| 21 | 44.7 | 36.7 | 30.1 | 17.0 | 19.1 | 22.9 | 22.6 | 27.8 | 29.9 | P | 43.4 | 47.3 | 67.1 | 74.3 | 27.5 | 34.0 | 28.8 | 35.4 | 40.1 | 60.6 | 40.8 | 63.0 | 76.1 | 109.4 | 43.4 | 109.4 |
| 22 | 116.5 | 128.2 | 131.4 | 123.3 | 125.8 | 129.9 | 87.8 | 86.4 | 83.4 | 75.0 | 54.7 | 53.3 | 61.8 | 136.1 | 81.6 | 86.3 | 81.9 | 82.0 | 83.8 | 93.7 | 118.0 | 158.4 | 294.2 | 366.9 | 118.3 | 366.9 |
| 23 | 149.5 | 102.1 | 109.3 | 85.3 | 67.4 | 64.3 | 76.2 | 95.9 | 156.0 | 125.7 | 159.0 | 152.0 | 110.6 | 104.1 | 93.1 | 90.9 | 113.3 | 112.7 | 53.8 | 70.1 | 75.3 | 71.0 | 78.3 | 60.7 | 99.0 | 159.0 |
| 24 | 49.3 | 48.8 | 43.0 | 58.5 | 54.0 | 52.7 | 52.3 | 56.1 | 65.5 | 90.5 | 68.7 | 54.7 | 45.0 | 65.1 | 127.9 | 73.8 | 83.8 | 82.1 | 86.0 | 93.0 | 48.1 | 50.4 | 65.2 | 69.4 | 66.0 | 127.9 |
| 25 | 65.9 | 69.8 | 63.1 | 66.2 | 65.0 | 66.2 | 73.8 | 57.0 | 60.3 | 70.9 | 69.8 | 69.9 | 45.3 | 55.3 | 61.0 | 44.2 | 48.8 | 50.8 | 59.8 | 35.8 | 35.5 | 43.4 | 71.8 | 46.1 | 58.2 | 73.8 |
| 26 | 54.9 | 28.1 | 16.2 | 16.9 | 16.8 | 7.4 | 20.0 | 25.7 | 17.4 | 24.6 | 47.2 | 37.1 | C | 66.8 | 48.1 | 59.7 | 87.0 | 51.7 | 83.6 | 50.5 | 50.0 | 44.6 | 45.3 | 48.0 | 41.2 | 87.0 |
| 27 | 43.9 | 43.5 | 38.2 | 43.1 | 51.4 | 61.5 | 72.1 | 85.8 | 65.1 | 56.9 | 42.7 | 43.3 | 38.3 | 81.3 | 74.4 | 49.7 | 88.6 | 50.7 | 42.2 | 46.5 | 43.5 | 37.8 | 36.0 | 19.8 | 52.3 | 88.6 |
| 28 | 23.3 | 29.1 | 30.0 | 24.4 | 26.0 | 22.3 | 34.8 | 66.8 | 57.6 | 86.8 | 72.3 | 71.4 | 76.6 | 68.7 | 56.8 | 64.9 | 57.7 | 95.2 | 64.1 | 60.4 | 45.5 | 48.5 | 55.3 | 44.9 | 53.5 | 95.2 |
| 29 | 49.8 | 58.1 | 77.4 | 92.4 | 124.7 | 115.8 | 133.7 | 123.2 | 158.2 | 137.5 | 144.9 | 116.9 | 107.5 | 133.4 | 126.6 | 146.1 | 156.8 | 188.0 | 136.6 | 106.4 | 89.6 | 79.8 | 79.6 | 77.6 | 115.0 | 188.0 |
| 30 | 96.3 | 131.7 | 72.2 | 71.0 | 78.7 | 64.9 | 84.9 | 110.6 | 150.9 | 132.4 | 137.1 | 123.3 | 128.3 | 94.5 | 73.1 | 83.6 | 86.3 | 54.1 | 54.3 | 46.9 | 43.2 | 69.3 | 46.8 | 58.3 | 87.2 | 150.9 |
| 31 | 61.4 | 68.5 | 60.7 | 49.2 | 49.3 | 66.1 | 54.9 | 55.7 | 58.0 | 64.3 | 56.3 | 58.7 | 48.6 | 57.9 | 63.9 | 67.9 | 59.9 | 64.2 | 54.2 | 47.0 | 53.2 | 67.5 | 52.0 | 41.6 | 57.5 | 68.5 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 742 | 99.9% |
| MEAN | 45.0 | 47.7 | 43.8 | 42.9 | 44.0 | 44.9 | 49.6 | 52.9 | 57.4 | 55.5 | 56.8 | 54.4 | 51.6 | 57.1 | 55.6 | 50.5 | 54.5 | 59.5 | 49.8 | 47.8 | 46.5 | 45.6 | 51.1 | 52.6 | | |
| MAX | 149.5 | 131.7 | 131.4 | 123.3 | 135.7 | 154.0 | 211.6 | 170.2 | 158.2 | 137.5 | 159.0 | 152.0 | 128.3 | 136.1 | 127.9 | 146.1 | 156.8 | 188.0 | 154.1 | 141.0 | 132.7 | 158.4 | 294.2 | 366.9 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 742 | | |
| Maximum 1-HR Average | 366.9 UG/M3 | | |
| Maximum 24-HR Average | 118.3 UG/M3 | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 1 | Opperational Uptime | 99.9 % |
| Standard Deviation | 39.34 | Monthly Average | 50.7 UG/M3 |

# Lagoon TSP (µg/m$^3$) – July 2021

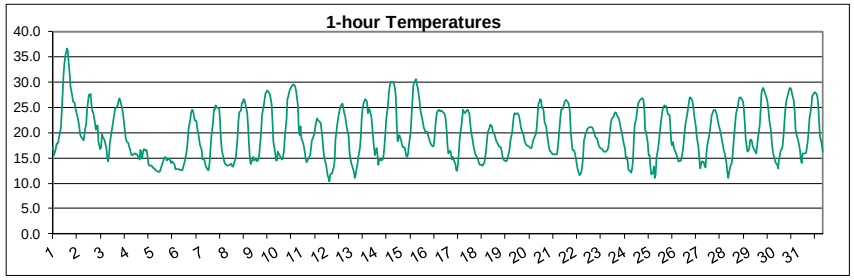
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 28.6 | 22.5 | 42.7 | 37.3 | 34.9 | 39.4 | 66.9 | 88.2 | 64.2 | 71.9 | 85.8 | 47.3 | 29.9 | 20.8 | 21.8 | 51.1 | 29.0 | 28.5 | 59.9 | 116.5 | 79.9 | 37.4 | 35.2 | 22.1 | 48.4 | 116.5 |
| 2 | 19.7 | 23.3 | 35.7 | 30.2 | 24.8 | 21.2 | 29.0 | 80.7 | 65.4 | 37.1 | 88.2 | 102.8 | 122.7 | 83.2 | 117.6 | 58.6 | 35.8 | 150.5 | 21.2 | 41.1 | 15.9 | 23.3 | 35.7 | 28.2 | 53.8 | 150.5 |
| 3 | 14.4 | 20.4 | 12.6 | 12.4 | 9.1 | 16.9 | 20.1 | 28.8 | 40.6 | 26.6 | 28.9 | 43.6 | 46.8 | 41.7 | 42.4 | 33.3 | 32.9 | 33.5 | 34.8 | 35.4 | 25.3 | 27.5 | 24.8 | 40.1 | 28.9 | 46.8 |
| 4 | 37.0 | 30.1 | 23.1 | 15.1 | 12.0 | 22.1 | 19.1 | 12.4 | 11.1 | 27.2 | 18.1 | 16.9 | 20.3 | 29.5 | 14.2 | 13.6 | 8.4 | 7.4 | 11.4 | 11.4 | 11.3 | 11.4 | 13.6 | 9.9 | 16.9 | 37.0 |
| 5 | 9.6 | 6.3 | 13.7 | 11.5 | 13.7 | 10.0 | 11.4 | 12.6 | 11.5 | 11.5 | 12.5 | 11.3 | 12.8 | 16.2 | 25.3 | 10.0 | 11.2 | 8.2 | 4.7 | 9.8 | 8.6 | 9.5 | 4.6 | 8.9 | 11.1 | 25.3 |
| 6 | 14.5 | 17.9 | 13.8 | 11.2 | 10.5 | 17.9 | 14.0 | 15.7 | 39.2 | 44.4 | 61.5 | 50.8 | 59.4 | 19.6 | 21.1 | 24.2 | 34.8 | 53.1 | 39.5 | 29.2 | 28.6 | 19.7 | 21.9 | 17.3 | 28.3 | 61.5 |
| 7 | 23.2 | 16.9 | 18.3 | 19.6 | 20.7 | 18.1 | 16.6 | 16.3 | 47.3 | 57.8 | 51.2 | 48.9 | 47.4 | 49.1 | 38.0 | 44.2 | 41.3 | 35.5 | 27.5 | 40.2 | 20.7 | 18.2 | 19.3 | 32.9 | 32.0 | 57.8 |
| 8 | 7.8 | 16.7 | 15.2 | 13.6 | 25.8 | 21.8 | 14.8 | 7.8 | 17.5 | 23.3 | 19.9 | 25.2 | 26.0 | 19.6 | 20.7 | 18.1 | 17.4 | 23.7 | 24.0 | 29.1 | 27.4 | 30.1 | 145.7 | 37.9 | 26.2 | 145.7 |
| 9 | 26.5 | 48.3 | 80.3 | 59.8 | 42.0 | 27.2 | 19.0 | 30.7 | 32.4 | 37.4 | 36.6 | 42.3 | 32.7 | 23.4 | 21.0 | 39.8 | 34.2 | 45.1 | 35.0 | 19.5 | 19.6 | 22.9 | 47.6 | 27.4 | 35.4 | 80.3 |
| 10 | 20.8 | 20.3 | 31.1 | 37.0 | 30.4 | 27.1 | 17.5 | 29.0 | 43.5 | 30.8 | 34.1 | 45.2 | 28.9 | 43.5 | 49.8 | 47.2 | 29.7 | 46.2 | 50.1 | 35.3 | 58.7 | 27.8 | 28.5 | 36.7 | 35.4 | 58.7 |
| 11 | 25.6 | 32.9 | 26.7 | 29.7 | 35.4 | 24.2 | 12.8 | 14.3 | 16.6 | 14.4 | 19.0 | 11.3 | 12.1 | 24.3 | 31.2 | 21.0 | 22.4 | 24.0 | 27.1 | 16.9 | 17.9 | 13.9 | 11.4 | 12.7 | 20.7 | 35.4 |
| 12 | 14.5 | 21.6 | 29.8 | 19.9 | 24.6 | 18.9 | 30.8 | 55.1 | 86.9 | 43.7 | 33.8 | 22.5 | 38.2 | 29.7 | 36.4 | 41.3 | 53.2 | 40.8 | 29.3 | 29.8 | 19.3 | 15.6 | 18.2 | 18.1 | 32.2 | 86.9 |
| 13 | 17.2 | 23.6 | 40.8 | 28.0 | 22.7 | 29.2 | 49.4 | 78.8 | 74.2 | 47.7 | 55.6 | 56.2 | 40.3 | 57.7 | 32.3 | 39.2 | 77.4 | 36.1 | 17.7 | 31.1 | 38.6 | 52.9 | 36.9 | 28.7 | 42.2 | 78.8 |
| 14 | 22.6 | 26.2 | 21.9 | 17.5 | 28.3 | 34.5 | 30.4 | 28.5 | 39.0 | 59.6 | 80.5 | 117.6 | 82.6 | 115.8 | 144.3 | 110.1 | 83.7 | 92.1 | 99.2 | 73.7 | 96.2 | 86.5 | 78.5 | 71.2 | 68.4 | 144.3 |
| 15 | 60.2 | 61.8 | 49.9 | 58.6 | 72.8 | 63.2 | 56.8 | 77.2 | 110.3 | 122.1 | 93.2 | 137.4 | 140.9 | 117.5 | 95.3 | 76.4 | 117.1 | 126.7 | 99.5 | 95.6 | 78.8 | 96.4 | 106.2 | 100.8 | 92.3 | 140.9 |
| 16 | 98.0 | 112.7 | 103.6 | 119.5 | 106.3 | 103.9 | 122.7 | 96.7 | 77.4 | 78.5 | 107.9 | 87.7 | 80.5 | 155.1 | 119.2 | 120.3 | 99.0 | 88.3 | 64.9 | 61.4 | 66.9 | 71.1 | 58.0 | 57.4 | 94.0 | 155.1 |
| 17 | 82.5 | 75.1 | 78.5 | 69.8 | 58.1 | 55.6 | 56.2 | 46.9 | 43.5 | 53.2 | 104.8 | 79.8 | 72.3 | 60.4 | 107.2 | 77.2 | 52.2 | 46.4 | 54.4 | 59.1 | 71.4 | 80.9 | 69.9 | 60.5 | 67.3 | 107.2 |
| 18 | 72.2 | 74.7 | 73.1 | 69.8 | 75.7 | 68.7 | 61.4 | 67.1 | 74.5 | 70.7 | 70.3 | 64.4 | 54.0 | 53.4 | 62.7 | 71.2 | 117.8 | 139.9 | 159.8 | 149.6 | 133.3 | 140.3 | 146.9 | 136.5 | 92.0 | 159.8 |
| 19 | 130.6 | 136.1 | 123.0 | 121.2 | 134.1 | 153.3 | 170.1 | 186.6 | 165.4 | 153.6 | 116.0 | 115.2 | 118.1 | 105.8 | 112.7 | 103.7 | 120.9 | 107.2 | 96.4 | 109.5 | 109.5 | 74.0 | 80.6 | 62.5 | 121.1 | 186.6 |
| 20 | 45.9 | 47.7 | 56.2 | 66.0 | 73.7 | 79.1 | 99.3 | 94.4 | 96.2 | 87.3 | 90.5 | 114.8 | 94.8 | 103.5 | 118.5 | 110.6 | 89.1 | 75.3 | 62.1 | 55.4 | 53.7 | 48.9 | 54.5 | 58.9 | 78.2 | 118.5 |
| 21 | 48.3 | 43.5 | 30.4 | 26.3 | 24.0 | 27.8 | 28.0 | 30.7 | 32.5 | P | 59.4 | 77.3 | 111.8 | 122.0 | 49.4 | 41.6 | 41.4 | 56.5 | 52.5 | 66.3 | 46.7 | 78.2 | 88.5 | 142.5 | 57.6 | 142.5 |
| 22 | 142.4 | 141.5 | 146.4 | 142.4 | 141.4 | 142.1 | 98.2 | 96.9 | 97.5 | 103.2 | 77.0 | 88.6 | 96.3 | 196.4 | 122.4 | 129.7 | 124.0 | 115.6 | 107.3 | 140.0 | 202.1 | 241.7 | 493.3 | 575.4 | 165.1 | 575.4 |
| 23 | 196.7 | 127.0 | 140.0 | 105.0 | 82.1 | 68.7 | 80.5 | 106.0 | 173.3 | 148.5 | 249.3 | 249.4 | 179.8 | 160.4 | 161.4 | 176.0 | 196.7 | 156.3 | 78.2 | 70.7 | 108.2 | 94.8 | 119.6 | 86.4 | 138.1 | 249.4 |
| 24 | 55.7 | 59.8 | 62.7 | 66.4 | 64.3 | 54.8 | 65.1 | 66.3 | 81.7 | 132.8 | 76.9 | 66.9 | 54.4 | 87.0 | 207.9 | 97.6 | 94.2 | 114.2 | 124.5 | 119.6 | 53.5 | 65.9 | 78.3 | 88.4 | 85.0 | 207.9 |
| 25 | 86.0 | 86.4 | 75.4 | 82.3 | 71.8 | 68.9 | 82.6 | 76.4 | 79.9 | 92.4 | 88.6 | 105.3 | 69.4 | 90.5 | 95.4 | 63.7 | 81.2 | 75.7 | 87.4 | 51.2 | 49.6 | 61.3 | 101.2 | 66.4 | 78.7 | 105.3 |
| 26 | 79.5 | 30.1 | 23.9 | 27.6 | 24.5 | 17.0 | 20.0 | 26.6 | 27.6 | 27.9 | 66.3 | 63.8 | C | 82.6 | 61.4 | 88.5 | 121.0 | 76.6 | 116.1 | 57.5 | 65.8 | 56.1 | 65.0 | 63.6 | 56.0 | 121.0 |
| 27 | 60.0 | 45.7 | 43.5 | 46.4 | 55.1 | 69.9 | 80.5 | 100.3 | 71.0 | 67.3 | 59.1 | 52.4 | 53.7 | 124.5 | 120.1 | 64.6 | 128.9 | 74.1 | 63.5 | 59.0 | 50.4 | 56.1 | 45.3 | 37.4 | 67.9 | 128.9 |
| 28 | 27.5 | 41.7 | 41.2 | 35.0 | 37.8 | 34.0 | 46.2 | 88.6 | 78.2 | 123.6 | 111.1 | 116.7 | 102.7 | 85.8 | 67.7 | 97.9 | 78.2 | 137.8 | 69.7 | 74.5 | 68.6 | 60.5 | 70.9 | 55.6 | 73.0 | 137.8 |
| 29 | 58.2 | 71.4 | 100.0 | 107.1 | 151.1 | 138.1 | 171.7 | 159.2 | 217.5 | 203.5 | 199.6 | 148.0 | 131.0 | 162.4 | 168.8 | 169.4 | 181.6 | 238.5 | 150.9 | 124.4 | 103.3 | 95.3 | 91.1 | 107.8 | 143.7 | 238.5 |
| 30 | 122.4 | 92.6 | 90.2 | 93.5 | 100.9 | 81.7 | 103.2 | 137.9 | 207.0 | 183.6 | 178.1 | 155.9 | 165.9 | 107.0 | 93.3 | 100.8 | 113.0 | 73.1 | 67.3 | 59.7 | 64.2 | 105.2 | 67.2 | 75.9 | 110.0 | 207.0 |
| 31 | 72.6 | 80.2 | 78.8 | 75.3 | 65.6 | 90.2 | 72.8 | 64.2 | 71.8 | 85.8 | 65.7 | 75.8 | 109.5 | 127.1 | 85.6 | 81.6 | 79.2 | 80.4 | 62.5 | 66.6 | 105.3 | 104.6 | 76.3 | 58.4 | 80.7 | 127.1 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 742 | 99.9% |
| MEAN | 55.5 | 53.4 | 55.6 | 53.4 | 54.0 | 53.1 | 57.0 | 65.2 | 74.0 | 75.6 | 78.7 | 78.7 | 74.5 | 81.1 | 79.5 | 71.7 | 75.7 | 77.6 | 64.5 | 62.5 | 61.3 | 62.2 | 75.3 | 71.8 | | |
| MAX | 196.7 | 141.5 | 146.4 | 142.4 | 151.1 | 153.3 | 171.7 | 186.6 | 217.5 | 203.5 | 249.3 | 249.4 | 179.8 | 196.4 | 207.9 | 176.0 | 196.7 | 238.5 | 159.8 | 149.6 | 202.1 | 241.7 | 493.3 | 575.4 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 5 | | |
| Number of Non-Zero Readings | 742 | | |
| Maximum 1-HR Average | 575.4 UG/M3 | | |
| Maximum 24-HR Average | 165.1 UG/M3 | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 1 | Opperational Uptime | 99.9 % |
| Standard Deviation | 51.3 | Monthly Average | 67.1 UG/M3 |

# Lagoon Temperature (°C) – July 2021

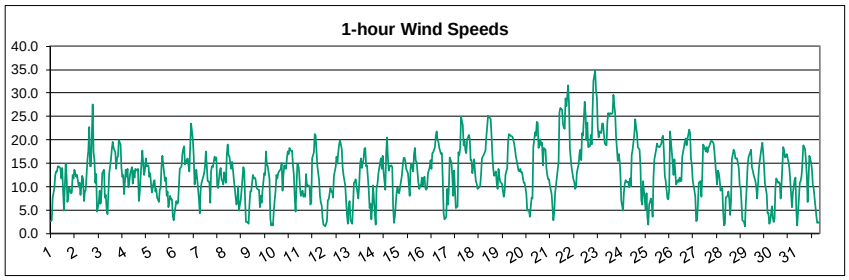
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.1 | 15.5 | 16.6 | 17.8 | 17.7 | 18.1 | 19.2 | 20.9 | 24.0 | 27.6 | 31.2 | 33.5 | 35.0 | 36.7 | 36.1 | 33.8 | 31.9 | 29.3 | 27.2 | 26.2 | 26.1 | 25.7 | 24.6 | 23.1 | 25.6 | 36.7 |
| 2 | 22.3 | 21.2 | 19.7 | 19.2 | 19.0 | 18.5 | 19.8 | 20.9 | 21.7 | 24.5 | 27.4 | 27.4 | 27.7 | 25.5 | 24.2 | 24.0 | 22.0 | 20.5 | 21.3 | 21.4 | 18.1 | 16.8 | 17.0 | 19.8 | 21.7 | 27.7 |
| 3 | 19.1 | 18.9 | 18.4 | 16.9 | 15.3 | 14.3 | 15.4 | 17.9 | 20.2 | 21.3 | 22.4 | 23.5 | 24.6 | 24.9 | 25.4 | 26.3 | 26.7 | 26.2 | 25.5 | 23.8 | 22.3 | 20.8 | 19.2 | 18.3 | 21.1 | 26.7 |
| 4 | 18.0 | 17.3 | 16.7 | 16.1 | 15.6 | 15.5 | 15.9 | 15.9 | 15.7 | 15.7 | 15.3 | 14.7 | 16.5 | 15.6 | 14.9 | 16.2 | 16.7 | 16.4 | 16.5 | 15.6 | 14.0 | 13.5 | 13.5 | 13.4 | 15.6 | 18.0 |
| 5 | 13.2 | 13.0 | 12.9 | 12.7 | 12.4 | 12.3 | 12.2 | 12.2 | 12.8 | 13.7 | 14.3 | 14.8 | 15.2 | 15.1 | 14.5 | 14.8 | 14.9 | 14.6 | 14.0 | 14.3 | 14.0 | 13.6 | 12.8 | 12.7 | 13.6 | 15.2 |
| 6 | 12.7 | 12.8 | 12.7 | 12.5 | 12.7 | 12.7 | 13.2 | 14.5 | 15.6 | 16.6 | 18.4 | 20.8 | 22.7 | 23.9 | 24.5 | 24.3 | 23.4 | 22.5 | 22.3 | 20.8 | 20.0 | 18.8 | 17.7 | 16.5 | 18.0 | 24.5 |
| 7 | 14.7 | 14.8 | 14.7 | 13.9 | 13.3 | 12.7 | 12.6 | 14.1 | 16.6 | 19.2 | 22.0 | 24.5 | 24.5 | 25.3 | 25.1 | 24.9 | 24.9 | 22.2 | 18.7 | 16.6 | 15.7 | 14.2 | 13.8 | 13.7 | 18.0 | 25.3 |
| 8 | 13.5 | 13.5 | 13.7 | 13.7 | 13.8 | 13.3 | 13.4 | 14.1 | 15.1 | 17.0 | 19.0 | 22.3 | 24.1 | 24.4 | 26.0 | 26.0 | 26.5 | 26.4 | 25.5 | 24.0 | 21.4 | 18.0 | 15.2 | 13.8 | 18.9 | 26.5 |
| 9 | 14.7 | 15.1 | 14.6 | 14.9 | 14.8 | 14.3 | 14.6 | 16.1 | 18.1 | 20.2 | 23.5 | 25.5 | 26.6 | 27.8 | 28.1 | 28.4 | 28.2 | 27.7 | 26.6 | 25.5 | 22.2 | 18.2 | 16.0 | 14.6 | 20.7 | 28.4 |
| 10 | 14.5 | 16.3 | 15.9 | 15.5 | 14.9 | 14.7 | 15.2 | 16.3 | 19.0 | 22.7 | 26.6 | 27.1 | 28.0 | 28.6 | 29.2 | 29.3 | 29.6 | 29.3 | 29.0 | 28.2 | 25.4 | 20.8 | 19.6 | 21.2 | 22.4 | 29.6 |
| 11 | 18.9 | 18.0 | 17.0 | 16.1 | 14.7 | 14.2 | 14.5 | 15.1 | 15.6 | 16.9 | 18.4 | 18.8 | 19.8 | 21.2 | 22.1 | 22.8 | 22.5 | 22.2 | 22.0 | 20.5 | 19.0 | 16.9 | 15.2 | 13.9 | 18.2 | 22.8 |
| 12 | 12.8 | 11.6 | 11.0 | 10.4 | 11.8 | 12.0 | 12.6 | 13.0 | 14.4 | 18.7 | 21.7 | 22.9 | 23.8 | 24.8 | 25.2 | 25.7 | 24.8 | 23.9 | 23.4 | 22.1 | 20.8 | 19.3 | 16.1 | 14.9 | 18.2 | 25.7 |
| 13 | 14.0 | 13.4 | 12.2 | 11.1 | 11.5 | 12.8 | 13.7 | 14.9 | 17.2 | 19.4 | 22.9 | 24.7 | 25.8 | 26.7 | 26.5 | 26.0 | 23.9 | 24.8 | 24.5 | 23.2 | 21.0 | 19.0 | 17.1 | 15.6 | 19.2 | 26.7 |
| 14 | 16.9 | 15.5 | 13.6 | 14.8 | 14.7 | 14.6 | 14.7 | 15.6 | 17.5 | 19.8 | 22.6 | 25.4 | 27.9 | 29.3 | 30.1 | 29.8 | 30.1 | 29.5 | 28.8 | 26.9 | 21.8 | 18.4 | 19.5 | 19.0 | 21.5 | 30.1 |
| 15 | 18.5 | 17.6 | 17.1 | 17.1 | 16.3 | 15.4 | 15.2 | 15.9 | 17.6 | 20.2 | 23.4 | 26.4 | 29.4 | 29.9 | 30.6 | 29.5 | 28.9 | 27.6 | 26.4 | 24.5 | 22.8 | 21.9 | 20.9 | 20.5 | 22.2 | 30.6 |
| 16 | 19.9 | 20.3 | 19.4 | 18.7 | 18.2 | 17.8 | 17.4 | 17.3 | 18.5 | 20.8 | 22.8 | 24.0 | 24.5 | 24.4 | 24.2 | 24.3 | 24.2 | 23.9 | 23.4 | 22.6 | 20.6 | 17.6 | 15.9 | 16.4 | 20.7 | 24.5 |
| 17 | 15.8 | 14.7 | 15.1 | 14.7 | 13.8 | 12.6 | 12.5 | 13.8 | 16.1 | 18.9 | 21.4 | 23.1 | 24.5 | 24.1 | 23.8 | 24.3 | 24.6 | 24.3 | 23.9 | 22.0 | 20.1 | 18.3 | 17.1 | 16.4 | 19.0 | 24.6 |
| 18 | 15.8 | 15.4 | 14.6 | 13.9 | 13.6 | 13.6 | 13.6 | 13.5 | 14.0 | 15.1 | 16.3 | 18.2 | 20.0 | 20.9 | 21.6 | 21.5 | 21.0 | 20.2 | 19.5 | 18.7 | 18.3 | 18.0 | 17.6 | 17.2 | 17.2 | 21.6 |
| 19 | 17.1 | 16.4 | 15.1 | 14.7 | 14.4 | 14.3 | 14.5 | 15.1 | 15.8 | 16.7 | 18.5 | 20.1 | 21.9 | 23.5 | 23.9 | 23.7 | 23.8 | 23.6 | 23.1 | 22.1 | 20.9 | 20.4 | 19.5 | 18.5 | 19.1 | 23.9 |
| 20 | 17.9 | 17.6 | 17.4 | 17.2 | 17.0 | 16.9 | 17.0 | 17.6 | 18.4 | 19.3 | 19.7 | 21.0 | 23.2 | 25.5 | 26.5 | 26.5 | 24.9 | 25.1 | 24.2 | 22.2 | 21.0 | 19.6 | 18.4 | 17.1 | 20.5 | 26.5 |
| 21 | 16.4 | 16.0 | 15.7 | 15.7 | 15.7 | 15.7 | 15.7 | 16.8 | 18.7 | P | 22.8 | 24.6 | 24.6 | 25.4 | 26.0 | 26.4 | 26.4 | 25.9 | 25.4 | 24.0 | 20.1 | 18.2 | 16.5 | 16.4 | 20.4 | 26.4 |
| 22 | 15.7 | 14.7 | 13.6 | 12.6 | 11.6 | 11.9 | 12.1 | 13.3 | 14.9 | 18.4 | 19.8 | 20.2 | 20.7 | 20.8 | 21.1 | 21.1 | 21.0 | 20.8 | 20.4 | 19.9 | 19.2 | 18.8 | 18.2 | 17.5 | 17.4 | 21.1 |
| 23 | 17.1 | 17.0 | 16.8 | 16.4 | 16.3 | 16.3 | 16.3 | 16.7 | 17.2 | 18.8 | 20.7 | 22.2 | 22.9 | 23.2 | 23.8 | 24.0 | 23.8 | 23.3 | 22.8 | 21.9 | 21.0 | 20.4 | 19.4 | 18.3 | 19.9 | 24.0 |
| 24 | 16.7 | 14.8 | 15.2 | 14.3 | 12.6 | 12.4 | 12.1 | 12.8 | 14.3 | 18.2 | 21.4 | 23.0 | 24.6 | 25.7 | 26.0 | 26.5 | 26.7 | 26.7 | 26.4 | 25.1 | 20.6 | 20.3 | 18.0 | 15.6 | 19.6 | 26.7 |
| 25 | 15.5 | 13.3 | 11.7 | 12.0 | 13.3 | 11.0 | 11.8 | 14.9 | 17.0 | 18.6 | 20.4 | 21.9 | 23.4 | 24.6 | 25.4 | 25.2 | 25.3 | 24.5 | 23.6 | 23.4 | 20.6 | 18.0 | 17.4 | 18.1 | 18.8 | 25.4 |
| 26 | 16.9 | 16.0 | 15.5 | 15.0 | 14.4 | 14.3 | 14.5 | 15.3 | 16.4 | 18.0 | 19.9 | 21.7 | 23.4 | 24.7 | 25.9 | 26.9 | 26.9 | 26.2 | 25.2 | 23.5 | 22.3 | 21.2 | 19.2 | 17.0 | 20.0 | 26.9 |
| 27 | 14.7 | 13.0 | 13.8 | 14.3 | 14.1 | 13.5 | 13.1 | 15.7 | 17.5 | 19.1 | 20.5 | 21.8 | 23.2 | 23.8 | 24.4 | 24.5 | 24.0 | 23.5 | 22.5 | 21.6 | 20.3 | 19.4 | 18.2 | 17.5 | 18.9 | 24.5 |
| 28 | 16.5 | 15.9 | 14.0 | 12.1 | 11.0 | 12.0 | 13.2 | 14.0 | 15.6 | 17.8 | 19.9 | 21.9 | 23.9 | 25.3 | 26.4 | 26.9 | 26.9 | 26.7 | 26.1 | 24.3 | 22.0 | 18.7 | 17.5 | 16.2 | 19.4 | 26.9 |
| 29 | 16.8 | 18.4 | 18.6 | 18.2 | 17.2 | 16.6 | 16.2 | 15.9 | 17.2 | 19.0 | 21.5 | 24.4 | 27.9 | 28.6 | 28.8 | 28.3 | 27.3 | 26.8 | 25.8 | 24.3 | 22.4 | 20.1 | 17.6 | 16.3 | 21.4 | 28.8 |
| 30 | 15.4 | 14.9 | 14.2 | 13.7 | 12.9 | 14.6 | 15.5 | 16.4 | 17.1 | 19.0 | 21.3 | 24.0 | 25.8 | 26.7 | 28.0 | 28.8 | 28.9 | 28.5 | 27.6 | 26.2 | 24.2 | 20.6 | 19.6 | 19.0 | 20.9 | 28.9 |
| 31 | 18.4 | 16.6 | 14.6 | 13.9 | 15.8 | 15.8 | 15.9 | 16.1 | 17.1 | 18.5 | 20.5 | 22.9 | 25.1 | 27.2 | 27.5 | 27.9 | 27.9 | 27.7 | 27.0 | 25.3 | 21.8 | 19.2 | 17.5 | 16.3 | 20.7 | 27.9 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 99.9% |
| MEAN | 16.4 | 15.8 | 15.2 | 14.8 | 14.5 | 14.3 | 14.6 | 15.6 | 17.0 | 19.0 | 21.2 | 22.8 | 24.2 | 25.0 | 25.3 | 25.4 | 25.1 | 24.5 | 23.8 | 22.6 | 20.6 | 18.9 | 17.6 | 16.9 | | |
| MAX | 22.3 | 21.2 | 19.7 | 19.2 | 19.0 | 18.5 | 19.8 | 20.9 | 24.0 | 27.6 | 31.2 | 33.5 | 35.0 | 36.7 | 36.1 | 33.8 | 31.9 | 29.5 | 29.0 | 28.2 | 26.1 | 25.7 | 24.6 | 23.1 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 36.7 C | | |
| Maximum 24-HR Average | 25.6 C | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 4.962 | Monthly Average | 19.6 C |

# Lagoon Wind Speed (km/hr) – July 2021

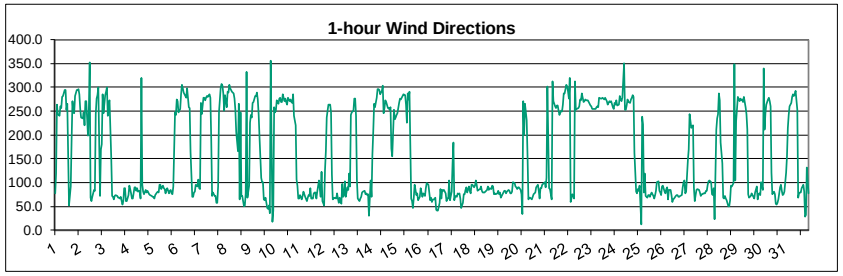
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.6 | 2.8 | 7.7 | 9.7 | 12.5 | 13.2 | 13.3 | 14.4 | 14.2 | 13.9 | 11.8 | 14.1 | 9.1 | 4.9 | 14.9 | 12.3 | 6.8 | 8.0 | 9.9 | 8.6 | 8.8 | 12.5 | 11.8 | 13.7 | 10.5 | 14.9 |
| 2 | 12.1 | 12.5 | 11.3 | 10.0 | 10.9 | 8.2 | 12.3 | 11.7 | 7.0 | 9.0 | 9.4 | 15.9 | 17.7 | 22.7 | 14.4 | 14.4 | 27.6 | 17.3 | 15.6 | 10.9 | 12.7 | 4.7 | 6.6 | 9.2 | 12.7 | 27.6 |
| 3 | 6.4 | 8.3 | 12.9 | 13.6 | 7.6 | 8.3 | 5.3 | 4.2 | 12.9 | 14.5 | 15.9 | 18.0 | 19.5 | 18.2 | 17.3 | 13.8 | 16.2 | 16.5 | 20.0 | 19.0 | 14.0 | 12.1 | 12.5 | 8.5 | 13.1 | 20.0 |
| 4 | 13.7 | 12.2 | 13.8 | 9.8 | 10.8 | 12.7 | 14.2 | 10.6 | 13.4 | 12.0 | 13.8 | 13.4 | 13.7 | 6.9 | 8.6 | 12.2 | 17.8 | 14.9 | 12.5 | 13.6 | 16.0 | 14.3 | 14.6 | 12.1 | 12.8 | 17.8 |
| 5 | 12.9 | 10.7 | 8.8 | 11.1 | 11.4 | 9.0 | 9.6 | 7.6 | 6.8 | 9.3 | 9.7 | 14.4 | 16.6 | 14.8 | 11.3 | 12.0 | 8.1 | 8.9 | 5.7 | 8.0 | 7.3 | 7.3 | 3.8 | 2.8 | 9.5 | 16.6 |
| 6 | 4.3 | 6.9 | 6.3 | 6.6 | 10.1 | 13.9 | 14.4 | 17.0 | 18.0 | 18.7 | 14.7 | 15.7 | 16.1 | 14.5 | 13.3 | 18.8 | 23.5 | 20.1 | 16.5 | 10.5 | 12.0 | 13.5 | 9.5 | 7.3 | 13.4 | 23.5 |
| 7 | 4.4 | 9.5 | 10.8 | 12.2 | 12.8 | 14.4 | 17.5 | 14.6 | 11.3 | 11.0 | 6.5 | 13.5 | 14.3 | 14.2 | 16.4 | 15.7 | 16.2 | 10.1 | 9.7 | 13.4 | 14.0 | 11.5 | 11.2 | 10.5 | 12.3 | 17.5 |
| 8 | 13.1 | 10.8 | 16.9 | 19.0 | 16.7 | 16.4 | 13.8 | 15.3 | 13.8 | 11.8 | 9.9 | 6.3 | 6.7 | 10.1 | 4.9 | 6.2 | 7.1 | 11.7 | 14.1 | 13.4 | 7.4 | 2.5 | 2.4 | 2.2 | 10.5 | 19.0 |
| 9 | 6.2 | 8.9 | 9.1 | 12.5 | 11.8 | 12.0 | 11.5 | 9.9 | 9.5 | 9.4 | 5.7 | 8.1 | 6.5 | 9.1 | 12.9 | 12.6 | 17.5 | 14.7 | 14.4 | 11.8 | 3.2 | 1.7 | 2.1 | 1.8 | 9.3 | 17.5 |
| 10 | 5.0 | 9.1 | 12.6 | 11.8 | 12.9 | 13.3 | 13.7 | 15.2 | 9.2 | 12.4 | 14.5 | 13.8 | 16.0 | 17.5 | 16.9 | 18.3 | 17.7 | 17.7 | 14.5 | 12.5 | 7.7 | 4.6 | 14.8 | 14.7 | 13.2 | 18.3 |
| 11 | 13.4 | 9.9 | 8.1 | 9.1 | 7.9 | 8.3 | 7.9 | 12.6 | 10.4 | 10.2 | 10.0 | 6.1 | 6.8 | 16.1 | 17.3 | 21.2 | 21.0 | 17.5 | 14.4 | 11.5 | 8.1 | 6.6 | 6.1 | 3.3 | 11.0 | 21.2 |
| 12 | 1.8 | 1.5 | 2.1 | 2.7 | 7.1 | 7.3 | 9.7 | 9.0 | 9.0 | 7.6 | 12.4 | 14.1 | 16.4 | 14.9 | 17.3 | 19.1 | 20.0 | 18.0 | 14.3 | 12.5 | 11.4 | 10.3 | 4.0 | 2.1 | 10.2 | 20.0 |
| 13 | 5.7 | 7.0 | 2.9 | 2.0 | 6.2 | 10.8 | 11.1 | 11.7 | 10.1 | 7.5 | 10.3 | 14.6 | 16.1 | 13.9 | 15.8 | 18.2 | 18.3 | 14.4 | 14.5 | 9.3 | 5.5 | 6.5 | 3.1 | 5.9 | 10.1 | 18.3 |
| 14 | 10.3 | 4.2 | 1.9 | 10.1 | 10.4 | 12.8 | 15.2 | 16.1 | 13.8 | 16.5 | 13.2 | 9.4 | 17.1 | 20.5 | 16.0 | 13.4 | 14.3 | 14.6 | 14.2 | 5.7 | 2.3 | 3.5 | 8.8 | 10.0 | 11.4 | 20.5 |
| 15 | 8.9 | 8.6 | 9.9 | 12.4 | 14.3 | 16.1 | 16.2 | 15.4 | 13.8 | 12.9 | 10.7 | 8.1 | 14.1 | 14.8 | 13.3 | 17.1 | 18.3 | 15.4 | 15.4 | 10.9 | 9.5 | 10.3 | 10.2 | 11.9 | 12.9 | 18.3 |
| 16 | 10.4 | 12.1 | 9.7 | 9.4 | 9.7 | 12.9 | 14.1 | 15.7 | 13.9 | 17.1 | 17.4 | 18.5 | 21.0 | 21.8 | 19.9 | 19.6 | 18.2 | 17.0 | 17.2 | 11.5 | 4.3 | 3.1 | 3.6 | 9.6 | 13.6 | 21.8 |
| 17 | 6.2 | 9.8 | 16.3 | 15.1 | 12.2 | 8.1 | 13.4 | 9.3 | 5.4 | 5.8 | 17.4 | 16.7 | 18.2 | 25.0 | 23.1 | 18.9 | 19.7 | 17.7 | 17.1 | 20.1 | 21.0 | 20.3 | 15.8 | 15.7 | 15.3 | 25.0 |
| 18 | 12.9 | 15.9 | 13.3 | 11.2 | 10.6 | 9.6 | 10.0 | 10.2 | 12.7 | 16.0 | 16.4 | 16.8 | 17.7 | 20.7 | 22.8 | 25.2 | 24.9 | 24.5 | 21.0 | 16.6 | 13.7 | 12.4 | 13.3 | 10.6 | 15.8 | 25.2 |
| 19 | 9.6 | 13.9 | 12.1 | 11.1 | 10.7 | 9.2 | 7.8 | 8.8 | 12.5 | 14.0 | 19.6 | 21.3 | 21.1 | 20.9 | 20.7 | 19.9 | 19.2 | 17.8 | 16.4 | 15.5 | 13.4 | 13.2 | 13.9 | 13.0 | 14.8 | 21.3 |
| 20 | 13.1 | 10.9 | 10.9 | 9.6 | 8.3 | 4.9 | 5.1 | 3.7 | 5.6 | 7.6 | 7.6 | 18.5 | 21.6 | 20.9 | 23.9 | 23.6 | 18.3 | 20.2 | 18.8 | 19.3 | 14.6 | 18.3 | 17.8 | 14.0 | 14.0 | 23.9 |
| 21 | 12.6 | 11.7 | 11.6 | 10.3 | 8.4 | 5.6 | 2.9 | 4.5 | 8.7 | P | 13.6 | 15.3 | 25.9 | 26.8 | 26.5 | 23.5 | 22.5 | 22.3 | 29.0 | 27.2 | 31.6 | 27.4 | 18.1 | 15.9 | 17.5 | 31.6 |
| 22 | 14.1 | 11.7 | 11.1 | 9.5 | 9.9 | 13.0 | 14.7 | 17.1 | 17.9 | 15.6 | 21.5 | 20.8 | 28.1 | 25.5 | 19.9 | 23.6 | 18.6 | 18.6 | 21.1 | 19.1 | 26.0 | 32.5 | 34.8 | 30.5 | 19.8 | 34.8 |
| 23 | 29.0 | 22.5 | 20.5 | 21.8 | 21.5 | 23.5 | 23.4 | 21.5 | 19.2 | 18.8 | 23.9 | 25.8 | 25.1 | 25.7 | 25.5 | 25.8 | 29.6 | 27.4 | 25.6 | 20.7 | 15.5 | 17.0 | 15.8 | 12.8 | 22.4 | 29.6 |
| 24 | 6.9 | 4.9 | 8.8 | 10.7 | 11.3 | 11.0 | 11.0 | 9.8 | 11.7 | 10.1 | 16.8 | 17.8 | 21.2 | 24.3 | 22.8 | 21.4 | 18.4 | 17.9 | 14.3 | 7.2 | 6.1 | 11.3 | 7.1 | 5.1 | 12.8 | 24.3 |
| 25 | 8.6 | 3.4 | 1.9 | 6.1 | 7.6 | 6.3 | 3.6 | 12.2 | 15.9 | 18.0 | 19.2 | 18.7 | 18.5 | 18.5 | 19.2 | 20.5 | 20.9 | 17.1 | 12.4 | 11.2 | 7.5 | 7.4 | 9.4 | 21.8 | 12.7 | 21.8 |
| 26 | 19.8 | 15.2 | 12.6 | 15.8 | 13.2 | 10.4 | 11.4 | 10.9 | 12.0 | 11.1 | 11.2 | 16.5 | 18.5 | 19.5 | 20.3 | 18.8 | 20.1 | 22.1 | 21.5 | 16.0 | 14.7 | 11.5 | 9.2 | 7.9 | 15.0 | 22.1 |
| 27 | 2.6 | 2.8 | 6.2 | 10.8 | 11.3 | 7.8 | 12.6 | 19.0 | 18.6 | 17.6 | 18.4 | 17.4 | 18.2 | 18.6 | 19.7 | 19.8 | 19.6 | 19.2 | 17.4 | 14.9 | 10.5 | 13.5 | 12.8 | 11.3 | 14.2 | 19.8 |
| 28 | 9.2 | 9.8 | 4.6 | 1.7 | 2.1 | 7.7 | 8.0 | 8.9 | 7.4 | 4.0 | 6.8 | 15.9 | 17.9 | 17.5 | 16.0 | 16.1 | 16.0 | 13.7 | 10.1 | 10.0 | 6.7 | 2.8 | 2.5 | 1.5 | 9.0 | 17.9 |
| 29 | 6.3 | 9.9 | 14.2 | 16.1 | 17.3 | 17.9 | 14.1 | 13.4 | 12.6 | 11.1 | 10.0 | 7.4 | 10.5 | 13.9 | 15.4 | 18.2 | 19.3 | 17.2 | 14.3 | 10.7 | 8.5 | 4.4 | 4.3 | 2.0 | 12.0 | 19.3 |
| 30 | 2.6 | 5.9 | 3.4 | 2.4 | 3.2 | 9.8 | 11.7 | 10.9 | 11.1 | 10.6 | 7.6 | 10.4 | 18.4 | 17.7 | 16.2 | 16.4 | 17.0 | 15.3 | 14.0 | 11.4 | 8.4 | 5.7 | 8.5 | 11.4 | 10.4 | 18.4 |
| 31 | 11.9 | 5.0 | 1.8 | 4.5 | 10.9 | 11.1 | 12.3 | 15.2 | 18.8 | 18.1 | 15.7 | 12.5 | 6.8 | 11.4 | 16.7 | 15.2 | 13.7 | 10.3 | 9.5 | 7.4 | 3.8 | 2.2 | 2.6 | 2.3 | 10.0 | 18.8 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 99.9% |
| MEAN | 9.6 | 9.3 | 9.5 | 10.3 | 10.7 | 11.2 | 11.7 | 12.1 | 12.2 | 12.4 | 13.3 | 14.7 | 16.6 | 17.5 | 17.4 | 17.8 | 18.3 | 16.7 | 15.6 | 13.2 | 11.2 | 10.5 | 10.0 | 9.7 | | |
| MAX | 29.0 | 22.5 | 20.5 | 21.8 | 21.5 | 23.5 | 23.4 | 21.5 | 19.2 | 18.8 | 23.9 | 25.8 | 28.1 | 26.8 | 26.5 | 25.8 | 29.6 | 27.4 | 29.0 | 27.2 | 31.6 | 32.5 | 34.8 | 30.5 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 34.8 KM/HR | | |
| Maximum 24-HR Average | 22.4 KM/HR | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 5.789 | Monthly Average | 13.0 KM/HR |

# Lagoon Wind Direction (°) – July 2021

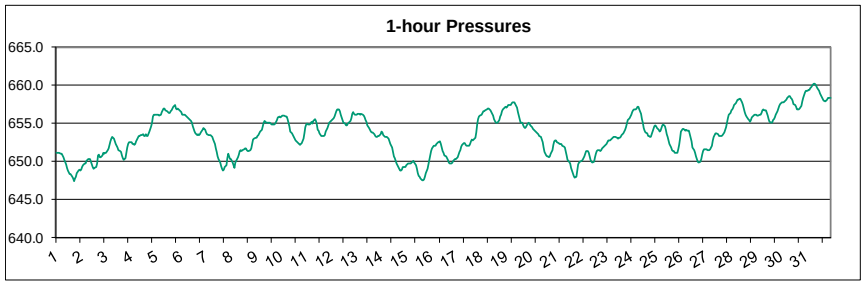
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 77.7 | 119.3 | 263.8 | 244.6 | 239.4 | 260.3 | 256.2 | 279.5 | 281.3 | 294.4 | 295.2 | 252.4 | 264.9 | 159.5 | 51.6 | 91.7 | 190.1 | 270.1 | 247.1 | 245.8 | 281.1 | 295.2 | 294.3 | 295.5 | 270.4 | 295.5 |
| 2 | 285.0 | 253.8 | 236.3 | 233.9 | 247.7 | 220.5 | 270.9 | 271.7 | 199.2 | 253.6 | 352.0 | 68.5 | 62.0 | 70.4 | 85.4 | 83.6 | 243.4 | 276.6 | 284.3 | 300.4 | 71.9 | 170.5 | 181.0 | 285.3 | 267.3 | 352.0 |
| 3 | 246.4 | 283.5 | 291.5 | 299.1 | 240.0 | 267.8 | 272.1 | 151.5 | 72.6 | 70.4 | 65.4 | 71.3 | 74.3 | 71.4 | 69.1 | 68.0 | 67.4 | 70.0 | 54.0 | 61.3 | 88.3 | 87.7 | 61.7 | 61.4 | 62.6 | 299.1 |
| 4 | 73.1 | 94.1 | 86.2 | 77.3 | 66.8 | 67.0 | 90.9 | 90.0 | 82.6 | 88.2 | 81.7 | 82.8 | 67.0 | 320.5 | 95.8 | 80.9 | 76.2 | 84.8 | 79.3 | 82.9 | 79.0 | 76.5 | 74.4 | 71.8 | 79.0 | 320.5 |
| 5 | 71.0 | 70.6 | 66.7 | 74.7 | 79.8 | 80.6 | 78.7 | 95.8 | 94.8 | 85.8 | 93.0 | 87.4 | 86.1 | 77.8 | 85.2 | 87.5 | 78.1 | 82.4 | 85.5 | 78.0 | 75.5 | 92.6 | 247.5 | 242.4 | 82.3 | 247.5 |
| 6 | 274.4 | 270.4 | 246.7 | 255.4 | 286.2 | 305.2 | 298.4 | 288.2 | 285.3 | 277.5 | 298.5 | 278.2 | 258.3 | 256.0 | 164.7 | 69.6 | 70.2 | 78.8 | 80.4 | 95.5 | 92.4 | 106.7 | 88.9 | 86.8 | 311.9 | 305.2 |
| 7 | 267.2 | 243.5 | 277.4 | 278.6 | 272.1 | 279.0 | 281.7 | 279.6 | 285.2 | 278.9 | 191.6 | 72.0 | 79.9 | 71.9 | 72.5 | 57.8 | 57.8 | 91.7 | 248.3 | 299.6 | 306.8 | 303.0 | 287.2 | 250.8 | 303.0 | 306.8 |
| 8 | 283.6 | 258.2 | 290.7 | 289.7 | 304.4 | 297.9 | 290.0 | 288.1 | 287.0 | 277.0 | 252.4 | 205.3 | 165.8 | 265.5 | 65.2 | 247.1 | 72.0 | 72.6 | 50.9 | 53.0 | 77.1 | 332.5 | 68.6 | 94.1 | 297.2 | 332.5 |
| 9 | 226.6 | 242.8 | 236.2 | 266.6 | 268.6 | 282.6 | 281.0 | 289.3 | 275.0 | 243.8 | 196.0 | 109.2 | 100.8 | 101.8 | 65.1 | 62.6 | 68.3 | 46.9 | 45.1 | 52.3 | 36.3 | 356.3 | 17.9 | 41.4 | 359.8 | 356.3 |
| 10 | 257.9 | 247.0 | 250.3 | 272.4 | 264.9 | 276.4 | 278.9 | 269.1 | 269.6 | 285.5 | 271.4 | 276.0 | 268.4 | 262.8 | 278.9 | 271.1 | 275.0 | 268.4 | 268.0 | 285.9 | 240.4 | 219.6 | 106.1 | 94.1 | 267.9 | 285.9 |
| 11 | 66.6 | 66.7 | 73.2 | 65.2 | 71.6 | 81.9 | 74.8 | 70.8 | 61.3 | 68.0 | 73.2 | 72.1 | 87.9 | 66.0 | 67.4 | 77.8 | 78.8 | 79.2 | 66.8 | 81.5 | 104.8 | 85.7 | 69.6 | 122.6 | 74.3 | 122.6 |
| 12 | 60.5 | 52.8 | 126.6 | 166.7 | 236.9 | 251.2 | 264.0 | 262.9 | 247.6 | 117.2 | 64.0 | 66.4 | 68.6 | 66.6 | 76.6 | 66.5 | 57.8 | 67.8 | 55.0 | 97.4 | 70.6 | 73.0 | 101.9 | 71.1 | 71.5 | 264.0 |
| 13 | 89.7 | 85.4 | 119.5 | 92.6 | 242.4 | 247.9 | 250.2 | 275.5 | 276.7 | 240.4 | 107.0 | 65.9 | 61.6 | 66.8 | 71.0 | 78.8 | 81.7 | 83.2 | 75.0 | 77.3 | 73.4 | 75.1 | 31.2 | 104.6 | 77.7 | 276.7 |
| 14 | 70.9 | 159.4 | 207.2 | 264.9 | 257.7 | 278.8 | 296.4 | 295.6 | 294.9 | 285.0 | 293.0 | 303.4 | 245.7 | 256.6 | 272.4 | 269.3 | 257.3 | 257.3 | 252.2 | 258.3 | 170.7 | 155.7 | 253.2 | 233.7 | 268.4 | 303.4 |
| 15 | 236.1 | 241.3 | 246.5 | 267.1 | 276.4 | 275.2 | 278.5 | 281.7 | 284.8 | 284.4 | 264.3 | 225.7 | 287.4 | 275.0 | 290.2 | 67.2 | 60.7 | 46.4 | 67.7 | 96.0 | 73.6 | 77.2 | 63.1 | 67.0 | 304.3 | 290.2 |
| 16 | 70.2 | 88.1 | 69.9 | 77.2 | 76.1 | 72.5 | 87.8 | 99.1 | 96.4 | 78.5 | 62.3 | 67.7 | 60.0 | 64.6 | 64.9 | 69.0 | 43.8 | 41.5 | 41.1 | 57.0 | 86.9 | 67.1 | 85.5 | 82.6 | 68.8 | 99.1 |
| 17 | 85.0 | 77.3 | 61.6 | 66.0 | 66.7 | 105.0 | 63.4 | 80.3 | 140.0 | 183.7 | 63.4 | 71.5 | 70.2 | 77.9 | 75.9 | 77.6 | 67.3 | 46.2 | 57.7 | 76.2 | 75.5 | 84.3 | 89.6 | 79.8 | 74.3 | 183.7 |
| 18 | 92.4 | 83.1 | 76.7 | 96.3 | 95.7 | 90.4 | 94.5 | 104.4 | 95.8 | 83.6 | 84.1 | 86.5 | 92.3 | 82.4 | 79.0 | 80.0 | 79.2 | 83.1 | 84.3 | 91.2 | 84.4 | 88.8 | 86.7 | 93.6 | 86.4 | 104.4 |
| 19 | 91.4 | 75.3 | 76.6 | 75.8 | 77.4 | 83.3 | 76.4 | 78.8 | 67.9 | 72.1 | 79.8 | 82.2 | 83.2 | 77.1 | 80.2 | 83.9 | 83.2 | 78.2 | 77.6 | 81.4 | 100.4 | 99.3 | 91.3 | 90.1 | 81.7 | 100.4 |
| 20 | 86.2 | 90.6 | 89.7 | 83.9 | 75.0 | 34.8 | 270.9 | 200.7 | 264.8 | 231.3 | 154.7 | 64.2 | 68.7 | 68.5 | 64.0 | 70.5 | 76.5 | 76.6 | 79.0 | 89.8 | 95.7 | 82.0 | 67.3 | 88.3 | 78.7 | 270.9 |
| 21 | 88.0 | 96.1 | 99.7 | 100.3 | 89.9 | 110.8 | 301.4 | 89.0 | 86.6 | P | 64.8 | 312.5 | 271.1 | 259.2 | 256.3 | 262.0 | 262.1 | 251.2 | 241.6 | 251.8 | 249.6 | 263.2 | 287.7 | 288.0 | 259.7 | 312.5 |
| 22 | 306.0 | 300.9 | 290.5 | 276.1 | 318.9 | 58.6 | 76.1 | 71.8 | 66.4 | 312.8 | 253.6 | 255.5 | 257.3 | 260.1 | 275.0 | 272.1 | 287.0 | 269.7 | 270.3 | 275.0 | 271.9 | 273.6 | 272.8 | 265.7 | 278.5 | 318.9 |
| 23 | 261.9 | 260.2 | 254.2 | 254.7 | 255.5 | 254.9 | 258.2 | 259.8 | 257.7 | 278.6 | 277.2 | 275.8 | 278.7 | 275.8 | 274.9 | 278.4 | 270.4 | 263.6 | 267.5 | 270.8 | 269.1 | 270.8 | 257.7 | 254.5 | 266.4 | 278.7 |
| 24 | 267.0 | 264.5 | 272.6 | 262.6 | 263.4 | 280.9 | 275.2 | 271.8 | 277.6 | 351.1 | 253.2 | 252.3 | 262.7 | 274.7 | 269.2 | 266.8 | 273.7 | 277.4 | 283.4 | 279.9 | 161.7 | 80.6 | 76.9 | 85.7 | 271.3 | 351.1 |
| 25 | 82.5 | 94.2 | 11.6 | 238.0 | 222.7 | 79.5 | 119.5 | 71.7 | 68.0 | 73.3 | 74.1 | 69.4 | 75.2 | 80.1 | 72.2 | 65.8 | 74.1 | 82.7 | 100.8 | 102.3 | 82.1 | 79.4 | 73.7 | 92.5 | 79.6 | 238.0 |
| 26 | 94.0 | 80.2 | 76.7 | 86.2 | 89.3 | 64.5 | 84.1 | 83.9 | 74.7 | 59.8 | 64.8 | 66.3 | 72.3 | 74.7 | 74.7 | 70.6 | 69.5 | 71.3 | 73.0 | 90.8 | 100.1 | 104.1 | 76.9 | 81.3 | 78.1 | 104.1 |
| 27 | 146.9 | 170.5 | 244.1 | 229.5 | 215.1 | 219.6 | 90.5 | 61.7 | 73.3 | 85.4 | 86.8 | 84.3 | 79.4 | 72.7 | 75.7 | 75.2 | 77.8 | 77.1 | 82.3 | 82.8 | 96.3 | 103.6 | 103.8 | 100.2 | 87.8 | 244.1 |
| 28 | 75.1 | 74.5 | 88.3 | 23.5 | 210.6 | 234.3 | 244.1 | 287.3 | 272.1 | 184.2 | 141.4 | 68.3 | 66.1 | 72.1 | 66.2 | 62.9 | 51.2 | 50.2 | 62.6 | 93.4 | 92.3 | 99.2 | 348.2 | 105.3 | 69.6 | 348.2 |
| 29 | 229.8 | 255.1 | 280.1 | 271.6 | 277.0 | 272.2 | 274.5 | 268.9 | 279.6 | 257.8 | 243.1 | 211.6 | 76.2 | 69.1 | 72.1 | 77.4 | 73.0 | 70.7 | 66.0 | 79.5 | 92.3 | 64.4 | 75.8 | 78.3 | 338.4 | 280.1 |
| 30 | 74.6 | 100.4 | 84.2 | 339.6 | 210.6 | 245.2 | 263.2 | 274.5 | 278.6 | 270.7 | 259.4 | 120.3 | 76.2 | 80.9 | 75.0 | 55.3 | 54.2 | 57.4 | 64.4 | 89.8 | 95.6 | 82.6 | 73.4 | 75.0 | 69.3 | 339.6 |
| 31 | 80.8 | 121.6 | 155.5 | 215.2 | 241.5 | 260.5 | 267.7 | 279.7 | 284.6 | 281.3 | 286.1 | 292.6 | 252.9 | 67.8 | 77.3 | 79.5 | 78.8 | 87.9 | 96.3 | 80.4 | 27.9 | 32.4 | 132.0 | 76.8 | 329.2 | 292.6 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 99.9% |
| MEAN | 152.2 | 158.8 | 169.4 | 188.6 | 198.1 | 191.6 | 206.8 | 195.9 | 193.0 | 198.5 | 172.5 | 149.0 | 139.4 | 140.2 | 121.4 | 117.0 | 118.0 | 121.3 | 126.0 | 137.3 | 123.3 | 141.4 | 133.7 | 131.0 | | |
| MAX | 306.0 | 300.9 | 291.5 | 339.6 | 318.9 | 305.2 | 301.4 | 295.6 | 294.9 | 351.1 | 352.0 | 312.5 | 287.4 | 320.5 | 290.2 | 278.4 | 287.0 | 277.4 | 284.3 | 300.4 | 306.8 | 356.3 | 348.2 | 295.5 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 356 degrees | | |
| Maximum 24-HR Average | 360 degrees | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 94.23 | Monthly Average | 155.1 degrees |

# Lagoon Pressure (mmHg) – July 2021

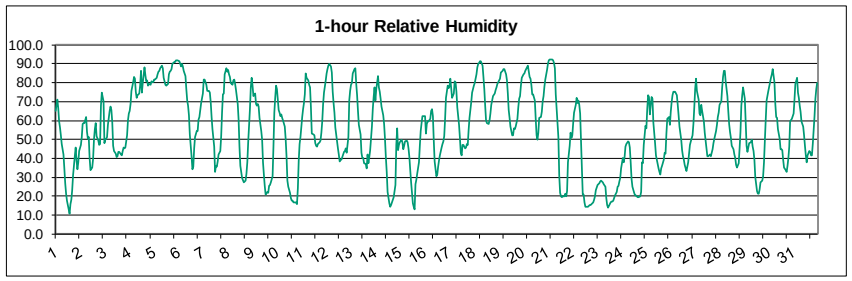
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 651.1 | 651.2 | 651.1 | 651.1 | 651.1 | 651.0 | 650.7 | 650.5 | 650.1 | 649.6 | 649.1 | 648.8 | 648.5 | 648.4 | 648.3 | 648.0 | 647.7 | 647.5 | 647.8 | 648.0 | 648.4 | 648.8 | 648.9 | 648.8 | 649.4 | 651.2 |
| 2 | 648.9 | 649.2 | 649.5 | 649.8 | 649.8 | 650.1 | 650.2 | 650.3 | 650.3 | 650.0 | 649.7 | 649.3 | 649.0 | 649.2 | 649.3 | 649.8 | 650.8 | 650.9 | 650.6 | 650.6 | 650.7 | 651.1 | 651.1 | 651.1 | 650.0 | 651.1 |
| 3 | 651.2 | 651.5 | 651.7 | 652.2 | 652.6 | 653.0 | 653.2 | 652.9 | 652.6 | 652.3 | 652.1 | 651.8 | 651.5 | 651.4 | 651.2 | 650.8 | 650.5 | 650.2 | 650.5 | 651.1 | 651.8 | 652.3 | 652.5 | 652.6 | 651.8 | 653.2 |
| 4 | 652.5 | 652.4 | 652.3 | 652.1 | 652.3 | 652.7 | 653.1 | 653.3 | 653.4 | 653.4 | 653.4 | 653.6 | 653.3 | 653.4 | 653.6 | 653.3 | 653.3 | 653.9 | 654.3 | 654.6 | 655.1 | 656.0 | 656.1 | 656.1 | 653.7 | 656.1 |
| 5 | 656.1 | 656.1 | 656.1 | 656.0 | 656.2 | 656.5 | 656.8 | 656.9 | 656.9 | 656.8 | 656.6 | 656.4 | 656.4 | 656.4 | 656.7 | 656.7 | 657.2 | 657.2 | 657.4 | 656.9 | 656.8 | 656.9 | 656.7 | 656.5 | 656.6 | 657.4 |
| 6 | 656.4 | 656.2 | 656.2 | 656.1 | 656.1 | 655.9 | 655.8 | 655.6 | 655.6 | 655.3 | 655.0 | 654.7 | 654.2 | 653.9 | 653.7 | 653.5 | 653.5 | 653.4 | 653.6 | 653.8 | 654.1 | 654.4 | 654.3 | 654.1 | 654.8 | 656.4 |
| 7 | 653.8 | 653.5 | 653.5 | 653.4 | 653.4 | 653.3 | 653.2 | 652.9 | 652.3 | 651.7 | 651.2 | 650.6 | 650.4 | 649.9 | 649.4 | 649.1 | 648.9 | 648.9 | 649.3 | 649.5 | 650.4 | 651.0 | 650.7 | 650.3 | 651.3 | 653.8 |
| 8 | 650.4 | 649.9 | 649.5 | 649.2 | 649.8 | 650.1 | 650.6 | 650.9 | 651.4 | 651.5 | 651.4 | 651.4 | 651.6 | 651.7 | 651.7 | 651.5 | 651.4 | 651.3 | 651.5 | 651.8 | 652.3 | 652.9 | 653.0 | 653.2 | 651.2 | 653.2 |
| 9 | 653.1 | 653.3 | 653.5 | 653.7 | 654.0 | 654.2 | 654.6 | 655.1 | 655.3 | 655.2 | 655.1 | 655.1 | 655.1 | 655.1 | 655.0 | 654.8 | 654.9 | 654.9 | 655.0 | 655.2 | 655.5 | 655.8 | 655.9 | 655.8 | 654.8 | 655.9 |
| 10 | 655.9 | 656.0 | 656.0 | 656.0 | 655.9 | 655.9 | 655.5 | 655.0 | 654.6 | 654.0 | 653.6 | 653.4 | 653.3 | 653.0 | 652.7 | 652.6 | 652.4 | 652.3 | 652.1 | 652.3 | 652.5 | 652.9 | 653.7 | 654.5 | 654.0 | 656.0 |
| 11 | 654.9 | 655.0 | 654.8 | 654.9 | 655.0 | 655.1 | 655.0 | 655.4 | 655.5 | 655.3 | 654.9 | 654.2 | 654.1 | 653.7 | 653.4 | 653.3 | 653.3 | 653.3 | 653.5 | 653.9 | 654.3 | 654.8 | 655.0 | 655.2 | 654.5 | 655.5 |
| 12 | 655.3 | 655.5 | 655.7 | 655.9 | 656.2 | 656.6 | 656.8 | 656.8 | 656.6 | 656.1 | 655.8 | 655.5 | 655.1 | 654.9 | 654.8 | 654.7 | 655.0 | 655.1 | 655.3 | 655.7 | 656.2 | 656.4 | 656.3 | 656.1 | 655.8 | 656.8 |
| 13 | 656.2 | 656.3 | 656.3 | 656.3 | 656.2 | 656.3 | 656.2 | 656.0 | 655.8 | 655.5 | 655.2 | 654.8 | 654.4 | 654.1 | 653.9 | 653.8 | 653.8 | 653.6 | 653.3 | 653.2 | 653.2 | 653.3 | 653.4 | 653.5 | 654.8 | 656.3 |
| 14 | 653.9 | 653.8 | 653.4 | 653.3 | 653.2 | 653.2 | 653.1 | 653.0 | 652.6 | 652.3 | 651.8 | 651.2 | 650.7 | 650.4 | 650.1 | 649.7 | 649.3 | 649.0 | 648.9 | 648.8 | 648.9 | 649.3 | 649.2 | 649.3 | 651.2 | 653.9 |
| 15 | 649.5 | 649.6 | 649.7 | 649.7 | 649.8 | 649.9 | 650.0 | 650.1 | 649.9 | 649.5 | 649.0 | 648.5 | 648.1 | 648.0 | 647.7 | 647.6 | 647.6 | 647.7 | 648.0 | 648.5 | 649.0 | 649.6 | 650.2 | 650.8 | 649.1 | 650.8 |
| 16 | 651.3 | 651.7 | 652.0 | 652.1 | 652.1 | 652.3 | 652.4 | 652.6 | 652.6 | 652.3 | 651.8 | 651.4 | 651.1 | 650.8 | 650.6 | 650.5 | 650.2 | 649.9 | 649.7 | 649.8 | 649.9 | 650.1 | 650.2 | 650.3 | 651.2 | 652.6 |
| 17 | 650.3 | 650.6 | 650.9 | 651.3 | 651.5 | 651.9 | 652.2 | 652.4 | 652.4 | 652.2 | 652.0 | 652.1 | 652.1 | 652.3 | 652.6 | 652.8 | 652.8 | 652.9 | 653.1 | 653.9 | 654.9 | 655.6 | 656.0 | 656.0 | 652.7 | 656.0 |
| 18 | 656.1 | 656.4 | 656.6 | 656.6 | 656.7 | 656.8 | 656.9 | 657.0 | 656.8 | 656.8 | 656.4 | 656.0 | 655.6 | 655.3 | 655.1 | 655.1 | 655.1 | 655.4 | 655.9 | 656.1 | 656.5 | 656.8 | 657.0 | 657.1 | 656.3 | 657.1 |
| 19 | 657.1 | 657.2 | 657.4 | 657.4 | 657.4 | 657.6 | 657.7 | 657.7 | 657.7 | 657.5 | 657.0 | 656.5 | 656.0 | 655.6 | 655.1 | 655.0 | 654.7 | 654.5 | 654.4 | 654.5 | 654.7 | 655.1 | 655.0 | 654.8 | 656.2 | 657.7 |
| 20 | 654.7 | 654.5 | 654.3 | 654.1 | 654.0 | 653.8 | 653.7 | 653.6 | 653.4 | 653.2 | 652.9 | 652.5 | 651.8 | 651.3 | 650.8 | 650.7 | 650.7 | 650.6 | 650.6 | 651.1 | 651.4 | 652.2 | 652.6 | 652.7 | 652.6 | 654.7 |
| 21 | 652.7 | 652.6 | 652.4 | 652.3 | 652.3 | 652.3 | 652.1 | 652.0 | 651.8 | P | 650.7 | 650.3 | 650.1 | 649.7 | 649.2 | 648.9 | 648.5 | 648.1 | 647.9 | 648.1 | 648.9 | 649.6 | 649.9 | 650.0 | 650.4 | 652.7 |
| 22 | 650.1 | 650.3 | 650.5 | 650.7 | 651.0 | 651.3 | 651.3 | 651.1 | 650.6 | 650.2 | 649.9 | 649.9 | 650.0 | 650.5 | 651.0 | 651.4 | 651.5 | 651.5 | 651.4 | 651.5 | 651.7 | 651.9 | 652.0 | 652.2 | 651.0 | 652.2 |
| 23 | 652.3 | 652.5 | 652.7 | 652.8 | 652.8 | 652.9 | 653.1 | 653.2 | 653.3 | 653.3 | 653.1 | 653.0 | 653.1 | 653.2 | 653.2 | 653.5 | 653.7 | 653.9 | 654.2 | 654.5 | 655.0 | 655.5 | 655.6 | 655.9 | 653.6 | 655.9 |
| 24 | 656.2 | 656.5 | 656.8 | 656.8 | 656.8 | 657.0 | 657.1 | 657.1 | 656.8 | 656.2 | 655.6 | 655.0 | 654.4 | 654.1 | 653.8 | 653.6 | 653.3 | 653.3 | 653.2 | 653.2 | 653.5 | 654.3 | 654.6 | 654.7 | 655.2 | 657.1 |
| 25 | 654.6 | 654.4 | 654.1 | 653.9 | 654.0 | 654.4 | 654.8 | 654.8 | 654.6 | 654.1 | 653.6 | 653.2 | 652.7 | 652.3 | 651.9 | 651.5 | 651.3 | 651.3 | 651.1 | 651.1 | 651.2 | 651.6 | 652.1 | 653.0 | 653.0 | 654.8 |
| 26 | 653.9 | 654.3 | 654.2 | 654.2 | 654.1 | 654.1 | 654.1 | 654.0 | 653.6 | 653.2 | 652.6 | 651.9 | 651.5 | 651.1 | 650.6 | 650.3 | 650.0 | 649.9 | 650.0 | 650.4 | 650.9 | 651.4 | 651.6 | 651.6 | 652.2 | 654.3 |
| 27 | 651.6 | 651.5 | 651.5 | 651.5 | 651.6 | 652.1 | 652.8 | 653.2 | 653.5 | 653.7 | 653.7 | 653.6 | 653.4 | 653.4 | 653.3 | 653.3 | 653.4 | 653.7 | 654.1 | 654.5 | 655.0 | 655.7 | 656.1 | 656.4 | 653.4 | 656.4 |
| 28 | 656.7 | 656.8 | 657.0 | 657.4 | 657.6 | 657.9 | 658.0 | 658.1 | 658.2 | 658.2 | 657.8 | 657.4 | 656.9 | 656.5 | 656.2 | 655.8 | 655.6 | 655.4 | 655.2 | 655.4 | 655.8 | 656.0 | 656.1 | 656.2 | 656.8 | 658.2 |
| 29 | 656.2 | 656.1 | 656.1 | 656.1 | 656.2 | 656.4 | 656.7 | 656.8 | 656.7 | 656.7 | 656.4 | 656.0 | 655.5 | 655.2 | 655.1 | 655.1 | 655.4 | 655.5 | 655.7 | 656.1 | 656.6 | 657.0 | 657.3 | 657.5 | 656.2 | 657.5 |
| 30 | 657.7 | 657.7 | 657.7 | 657.9 | 658.0 | 658.1 | 658.4 | 658.5 | 658.6 | 658.4 | 658.2 | 657.9 | 657.6 | 657.4 | 657.1 | 656.9 | 656.8 | 656.8 | 656.9 | 657.3 | 657.8 | 658.3 | 658.7 | 659.0 | 657.8 | 659.0 |
| 31 | 659.3 | 659.3 | 659.4 | 659.4 | 659.6 | 659.8 | 660.0 | 660.2 | 660.2 | 660.1 | 659.9 | 659.6 | 659.3 | 658.9 | 658.7 | 658.5 | 658.2 | 658.0 | 657.8 | 657.9 | 658.2 | 658.3 | 658.4 | 658.4 | 659.1 | 660.2 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 99.9% |
| MEAN | 653.9 | 653.9 | 654.0 | 654.0 | 654.1 | 654.3 | 654.4 | 654.4 | 654.3 | 654.1 | 653.7 | 653.4 | 653.1 | 652.9 | 652.8 | 652.6 | 652.6 | 652.6 | 652.7 | 652.9 | 653.3 | 653.7 | 653.9 | 654.0 | | |
| MAX | 659.3 | 659.3 | 659.4 | 659.4 | 659.6 | 659.8 | 660.0 | 660.2 | 660.2 | 660.1 | 659.9 | 659.6 | 659.3 | 658.9 | 658.7 | 658.5 | 658.2 | 658.0 | 657.8 | 657.9 | 658.2 | 658.3 | 658.7 | 659.0 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 660 MMHg | | |
| Maximum 24-HR Average | 659 MMHg | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 2.772 | Monthly Average | 653.6 MMHg |

# Lagoon Relative Humidity (%) – July 2021

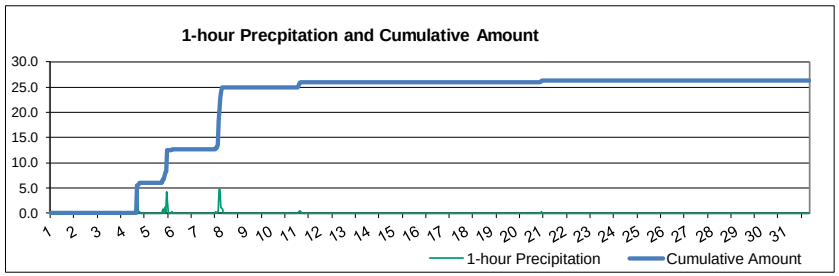
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 65.2 | 71.3 | 66.4 | 59.6 | 56.4 | 52.4 | 47.5 | 41.9 | 34.9 | 26.9 | 21.5 | 17.7 | 13.2 | 10.8 | 15.6 | 18.2 | 23.3 | 30.9 | 41.1 | 45.6 | 38.6 | 34.2 | 38.0 | 43.7 | 38.1 | 71.3 |
| 2 | 47.2 | 51.4 | 58.1 | 58.6 | 58.4 | 61.7 | 54.2 | 50.4 | 51.3 | 40.3 | 34.0 | 34.9 | 39.5 | 50.1 | 55.2 | 58.5 | 51.5 | 49.3 | 47.2 | 47.4 | 67.8 | 74.6 | 70.2 | 48.0 | 52.5 | 74.6 |
| 3 | 49.7 | 50.2 | 51.4 | 57.7 | 64.8 | 67.5 | 65.3 | 59.3 | 46.6 | 44.0 | 42.4 | 40.6 | 41.4 | 43.4 | 43.6 | 42.2 | 41.6 | 43.8 | 45.7 | 45.5 | 45.6 | 52.2 | 59.8 | 63.5 | 50.3 | 67.5 |
| 4 | 65.0 | 68.7 | 75.6 | 80.1 | 83.0 | 82.3 | 75.2 | 71.9 | 73.4 | 74.3 | 78.4 | 86.0 | 74.9 | 79.7 | 88.2 | 83.9 | 80.7 | 81.2 | 78.5 | 79.2 | 78.8 | 80.6 | 80.3 | 80.1 | 78.3 | 88.2 |
| 5 | 81.5 | 81.7 | 82.6 | 84.2 | 85.9 | 86.4 | 87.7 | 89.1 | 87.6 | 82.7 | 80.9 | 78.8 | 78.6 | 79.4 | 84.2 | 85.7 | 86.1 | 87.3 | 90.0 | 90.8 | 90.8 | 91.6 | 91.8 | 91.8 | 85.7 | 91.8 |
| 6 | 91.4 | 90.0 | 88.7 | 89.8 | 88.6 | 86.3 | 83.3 | 76.5 | 70.7 | 67.9 | 62.7 | 52.4 | 41.3 | 34.1 | 35.6 | 45.4 | 51.3 | 54.3 | 54.6 | 60.3 | 62.0 | 65.8 | 69.3 | 74.4 | 66.5 | 91.4 |
| 7 | 81.7 | 81.6 | 80.4 | 78.8 | 75.6 | 75.5 | 74.7 | 69.5 | 61.8 | 55.2 | 46.1 | 33.0 | 36.0 | 35.6 | 38.6 | 42.2 | 44.0 | 51.7 | 64.1 | 73.9 | 74.5 | 84.2 | 87.5 | 86.0 | 63.8 | 87.5 |
| 8 | 86.7 | 84.6 | 82.9 | 80.0 | 78.9 | 81.0 | 81.4 | 79.2 | 75.9 | 68.8 | 60.5 | 46.3 | 36.0 | 33.0 | 29.8 | 27.5 | 27.8 | 28.3 | 32.1 | 37.7 | 48.6 | 65.9 | 77.6 | 82.8 | 59.7 | 86.7 |
| 9 | 78.4 | 72.9 | 74.5 | 68.8 | 68.0 | 68.9 | 67.3 | 61.5 | 54.3 | 49.7 | 37.9 | 31.5 | 25.6 | 20.9 | 22.3 | 21.9 | 25.4 | 26.2 | 27.3 | 30.7 | 46.1 | 64.1 | 72.0 | 78.2 | 49.8 | 78.4 |
| 10 | 76.8 | 65.5 | 64.2 | 62.1 | 63.1 | 61.4 | 59.8 | 56.8 | 50.2 | 41.3 | 28.1 | 24.9 | 21.7 | 19.0 | 17.7 | 17.7 | 16.5 | 16.6 | 16.9 | 15.7 | 24.2 | 38.8 | 47.8 | 51.4 | 39.9 | 76.8 |
| 11 | 61.7 | 65.9 | 69.1 | 74.0 | 84.7 | 82.7 | 81.1 | 79.1 | 77.4 | 66.7 | 53.2 | 52.6 | 52.2 | 48.0 | 46.6 | 46.3 | 47.6 | 48.3 | 49.4 | 53.4 | 59.6 | 68.5 | 74.9 | 81.0 | 63.5 | 84.7 |
| 12 | 84.8 | 87.3 | 88.9 | 89.9 | 88.7 | 85.2 | 75.1 | 69.2 | 64.3 | 56.2 | 48.8 | 45.4 | 42.1 | 38.4 | 39.1 | 39.5 | 42.1 | 43.4 | 43.7 | 45.3 | 43.1 | 51.2 | 70.6 | 75.7 | 60.7 | 89.9 |
| 13 | 78.7 | 79.9 | 84.8 | 87.4 | 87.7 | 79.3 | 73.3 | 65.0 | 57.5 | 52.4 | 43.0 | 40.3 | 40.0 | 37.5 | 37.1 | 34.6 | 41.9 | 37.5 | 40.5 | 44.3 | 56.6 | 66.1 | 72.6 | 77.7 | 59.0 | 87.7 |
| 14 | 70.7 | 76.4 | 83.7 | 77.3 | 75.2 | 71.5 | 67.3 | 62.9 | 57.9 | 50.5 | 40.6 | 32.6 | 22.3 | 16.2 | 14.5 | 15.5 | 16.6 | 18.1 | 19.4 | 25.7 | 47.3 | 55.7 | 44.2 | 47.1 | 46.2 | 83.7 |
| 15 | 48.4 | 49.8 | 48.6 | 44.9 | 46.5 | 49.0 | 49.6 | 48.6 | 45.4 | 40.8 | 33.5 | 27.1 | 16.2 | 14.2 | 12.9 | 26.3 | 28.7 | 32.1 | 37.9 | 46.7 | 54.5 | 58.4 | 62.2 | 62.4 | 41.0 | 62.4 |
| 16 | 62.4 | 53.2 | 58.1 | 59.3 | 59.7 | 61.1 | 65.1 | 65.8 | 62.2 | 49.2 | 38.6 | 30.4 | 31.4 | 35.4 | 38.9 | 41.5 | 45.6 | 47.4 | 49.0 | 51.8 | 61.0 | 71.9 | 78.4 | 77.1 | 53.9 | 78.4 |
| 17 | 78.2 | 82.3 | 77.0 | 72.0 | 74.4 | 80.6 | 80.2 | 75.3 | 67.0 | 57.6 | 50.9 | 43.2 | 41.4 | 47.0 | 46.9 | 45.1 | 45.9 | 47.5 | 47.2 | 54.8 | 61.4 | 69.7 | 74.6 | 76.7 | 62.4 | 82.3 |
| 18 | 78.6 | 79.7 | 84.2 | 88.2 | 90.1 | 90.3 | 91.1 | 91.2 | 89.0 | 83.2 | 76.5 | 67.6 | 59.8 | 58.7 | 58.0 | 60.1 | 63.5 | 68.1 | 70.7 | 72.8 | 74.3 | 76.0 | 77.5 | 79.3 | 76.2 | 91.2 |
| 19 | 80.1 | 82.0 | 85.2 | 85.7 | 86.3 | 87.4 | 87.0 | 84.4 | 81.1 | 74.3 | 65.6 | 61.5 | 56.6 | 52.2 | 52.2 | 55.7 | 55.6 | 56.7 | 61.1 | 66.7 | 71.6 | 72.9 | 78.5 | 82.7 | 71.8 | 87.4 |
| 20 | 84.2 | 85.0 | 86.1 | 87.2 | 88.2 | 88.8 | 83.2 | 82.0 | 79.1 | 74.0 | 73.6 | 70.4 | 60.7 | 52.1 | 50.0 | 53.8 | 61.4 | 61.8 | 64.6 | 70.0 | 73.0 | 78.0 | 81.5 | 86.9 | 74.0 | 88.8 |
| 21 | 90.0 | 91.6 | 92.2 | 92.2 | 92.0 | 91.7 | 90.5 | 87.4 | 73.8 | P | 51.2 | 30.8 | 21.7 | 20.1 | 19.6 | 19.9 | 20.1 | 21.4 | 19.8 | 22.8 | 37.9 | 46.5 | 53.5 | 50.7 | 53.8 | 92.2 |
| 22 | 52.1 | 58.6 | 64.3 | 68.3 | 71.8 | 69.4 | 70.5 | 68.2 | 63.7 | 34.9 | 21.0 | 21.0 | 16.5 | 14.4 | 14.3 | 14.3 | 15.0 | 15.6 | 15.5 | 15.7 | 16.9 | 18.1 | 20.1 | 23.0 | 36.0 | 71.8 |
| 23 | 24.7 | 25.7 | 26.7 | 27.7 | 28.1 | 27.6 | 27.1 | 26.2 | 24.9 | 19.1 | 15.2 | 13.8 | 14.7 | 16.5 | 17.2 | 17.1 | 17.8 | 19.0 | 20.2 | 22.2 | 24.8 | 25.2 | 27.6 | 29.6 | 22.5 | 29.6 |
| 24 | 34.6 | 40.2 | 38.0 | 40.8 | 46.4 | 47.5 | 49.1 | 48.5 | 45.7 | 37.9 | 29.4 | 25.0 | 21.7 | 20.5 | 20.3 | 19.9 | 19.5 | 19.7 | 19.7 | 22.4 | 38.0 | 37.5 | 47.2 | 57.0 | 34.4 | 57.0 |
| 25 | 56.1 | 66.0 | 73.3 | 72.5 | 63.0 | 72.4 | 71.5 | 59.2 | 53.5 | 48.1 | 41.7 | 37.0 | 34.9 | 33.0 | 31.6 | 34.6 | 36.0 | 39.4 | 42.8 | 42.6 | 53.0 | 60.8 | 61.7 | 57.5 | 51.8 | 73.3 |
| 26 | 64.4 | 69.6 | 73.2 | 75.1 | 75.3 | 74.1 | 73.2 | 68.4 | 62.8 | 56.7 | 49.9 | 44.2 | 41.3 | 39.4 | 36.5 | 33.2 | 35.4 | 38.0 | 42.4 | 47.2 | 49.1 | 52.1 | 58.4 | 66.9 | 55.3 | 75.3 |
| 27 | 76.6 | 82.2 | 75.8 | 71.3 | 63.5 | 62.9 | 68.1 | 64.9 | 59.8 | 53.7 | 49.5 | 45.2 | 41.2 | 41.2 | 42.0 | 41.0 | 42.8 | 45.0 | 48.1 | 50.2 | 54.4 | 57.6 | 61.9 | 64.1 | 56.8 | 82.2 |
| 28 | 68.1 | 70.0 | 77.5 | 83.0 | 86.5 | 86.1 | 80.9 | 72.8 | 64.9 | 58.4 | 53.9 | 50.7 | 46.6 | 44.7 | 42.1 | 40.1 | 36.7 | 35.0 | 37.3 | 45.3 | 53.9 | 67.9 | 73.5 | 77.6 | 60.5 | 86.5 |
| 29 | 71.7 | 59.0 | 46.6 | 43.4 | 45.9 | 48.0 | 48.3 | 50.0 | 46.1 | 43.7 | 39.3 | 29.9 | 22.8 | 21.5 | 21.2 | 23.4 | 27.4 | 28.0 | 30.4 | 38.0 | 49.3 | 60.7 | 70.8 | 75.8 | 43.4 | 75.8 |
| 30 | 77.9 | 80.1 | 82.7 | 84.6 | 87.2 | 80.1 | 68.8 | 62.0 | 61.2 | 55.2 | 50.1 | 44.8 | 45.0 | 44.4 | 39.4 | 35.2 | 33.8 | 33.0 | 36.0 | 40.2 | 46.0 | 59.7 | 60.8 | 62.4 | 57.1 | 87.2 |
| 31 | 63.9 | 71.1 | 79.2 | 82.8 | 74.5 | 72.0 | 67.8 | 64.5 | 59.4 | 56.8 | 52.1 | 46.7 | 41.8 | 38.1 | 41.5 | 43.9 | 43.4 | 41.7 | 41.7 | 47.7 | 62.3 | 71.4 | 76.7 | 79.8 | 59.2 | 82.8 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 99.9% |
| MEAN | 68.8 | 70.1 | 71.6 | 71.9 | 72.2 | 72.0 | 69.9 | 66.2 | 61.4 | 54.0 | 47.4 | 42.1 | 38.0 | 36.8 | 37.2 | 38.2 | 39.5 | 40.8 | 43.1 | 46.9 | 53.7 | 60.6 | 65.2 | 67.5 | | |
| MAX | 91.4 | 91.6 | 92.2 | 92.2 | 92.0 | 91.7 | 91.1 | 91.2 | 89.0 | 83.2 | 80.9 | 86.0 | 78.6 | 79.7 | 88.2 | 85.7 | 86.1 | 87.3 | 90.0 | 90.8 | 90.8 | 91.6 | 91.8 | 91.8 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 92.2 % | | |
| Maximum 24-HR Average | 85.7 % | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 21.22 | Monthly Average | 55.6 % |

# Lagoon Precipitation (mm) – July 2021

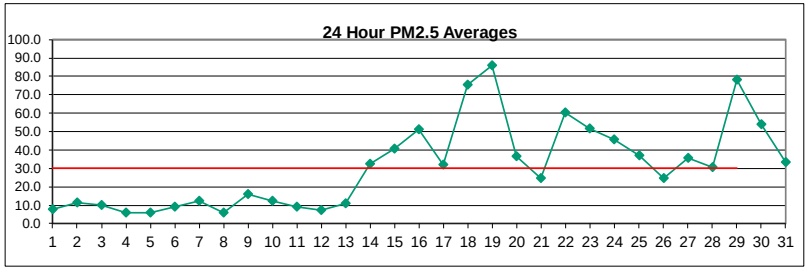
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 5.5 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 1.3 | 0.3 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 4.3 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.5 | 4.8 | 4.8 | 1.3 | 0.5 | 4.8 |
| 8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | P | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 100% |
| MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | | |
| MAX | 0.8 | 0.3 | 0.0 | 0.3 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.8 | 0.3 | 1.3 | 0.3 | 4.3 | 0.0 | 0.5 | 4.8 | 4.8 | 1.3 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 18 | | |
| Maximum 1-HR Average | 5.5 MM | | |
| Maximum 24-HR Average | 0.5 MM | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 99.9 % |
| Standard Deviation | 0.363 | Monthly Average | 0.04 MM |

# Windridge $PM_{2.5}$ (µg/m$^3$) – July 2021

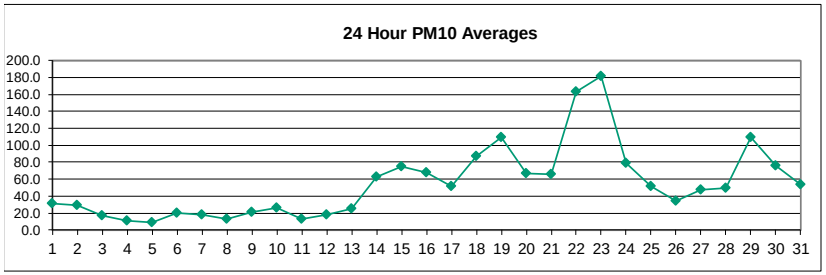
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.0 | 5.0 | 4.0 | 4.0 | 6.0 | 6.0 | 5.0 | 5.0 | 6.0 | 7.0 | 10.0 | 13.0 | 7.0 | 3.0 | 6.0 | 6.0 | 7.0 | 9.0 | 28.0 | 12.0 | 10.0 | 10.0 | 6.0 | 5.0 | 7.7 | 28.0 |
| 2 | 2.0 | 4.0 | 5.0 | 9.0 | 6.0 | 8.0 | 12.0 | 9.0 | 14.0 | 31.0 | 35.0 | 12.0 | 8.0 | 18.0 | 24.0 | 11.0 | 16.0 | 1.0 | 7.0 | 5.0 | 6.0 | 13.0 | 9.0 | 4.0 | 11.2 | 35.0 |
| 3 | 1.0 | 4.0 | 5.0 | 5.0 | 4.0 | 6.0 | 7.0 | 9.0 | 10.0 | 23.0 | 19.0 | 13.0 | 11.0 | 16.0 | 8.0 | 18.0 | 15.0 | 16.0 | 12.0 | 8.0 | 7.0 | 8.0 | 9.0 | 9.0 | 10.1 | 23.0 |
| 4 | 10.0 | 17.0 | 9.0 | 11.0 | 13.0 | 10.0 | 8.0 | 6.0 | 10.0 | 6.0 | 5.0 | 6.0 | 2.0 | 4.0 | 4.0 | 2.0 | 3.0 | 5.0 | 6.0 | 4.0 | 3.0 | 1.0 | 2.0 | 1.0 | 6.2 | 17.0 |
| 5 | 0.0 | 1.0 | 2.0 | 3.0 | 3.0 | 5.0 | 4.0 | 7.0 | 10.0 | 9.0 | 11.0 | 7.0 | 16.0 | 13.0 | 8.0 | 5.0 | 3.0 | 2.0 | 6.0 | 5.0 | 2.0 | 3.0 | 8.0 | 5.0 | 5.8 | 16.0 |
| 6 | 7.0 | 4.0 | 4.0 | 6.0 | 9.0 | 6.0 | 5.0 | 4.0 | 5.0 | 10.0 | 10.0 | 7.0 | 13.0 | 51.0 | 11.0 | 8.0 | 7.0 | 10.0 | 9.0 | 8.0 | 8.0 | 7.0 | 5.0 | 5.0 | 9.1 | 51.0 |
| 7 | 6.0 | 6.0 | 6.0 | 9.0 | 11.0 | 7.0 | 9.0 | 16.0 | 9.0 | 13.0 | 29.0 | 16.0 | 22.0 | 13.0 | 22.0 | 12.0 | 15.0 | 11.0 | 12.0 | 11.0 | 7.0 | 8.0 | 15.0 | 8.0 | 12.2 | 29.0 |
| 8 | 8.0 | 4.0 | 7.0 | 7.0 | 4.0 | 2.0 | 5.0 | 6.0 | 6.0 | 6.0 | 8.0 | 7.0 | 7.0 | 5.0 | 8.0 | 5.0 | 3.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 5.0 | 5.0 | 6.0 | 9.0 |
| 9 | 5.0 | 9.0 | 10.0 | 7.0 | 8.0 | 8.0 | 10.0 | 18.0 | 33.0 | 31.0 | 20.0 | 19.0 | 26.0 | 17.0 | 37.0 | 24.0 | 14.0 | 13.0 | 10.0 | 11.0 | 15.0 | 19.0 | 7.0 | 8.0 | 15.8 | 37.0 |
| 10 | 8.0 | 10.0 | 10.0 | 15.0 | 11.0 | 10.0 | 9.0 | 11.0 | 11.0 | 17.0 | 16.0 | 12.0 | 15.0 | 6.0 | 11.0 | 14.0 | 10.0 | 14.0 | 10.0 | 7.0 | 15.0 | 12.0 | 11.0 | 28.0 | 12.2 | 28.0 |
| 11 | 14.0 | 15.0 | 11.0 | 12.0 | 11.0 | 7.0 | 5.0 | 9.0 | 8.0 | 5.0 | 5.0 | 6.0 | 6.0 | 5.0 | 5.0 | 9.0 | 11.0 | 11.0 | 9.0 | 17.0 | 11.0 | 9.0 | 9.0 | 7.0 | 9.0 | 17.0 |
| 12 | 5.0 | 6.0 | 5.0 | 7.0 | 5.0 | 6.0 | 13.0 | 8.0 | 16.0 | 11.0 | 10.0 | 8.0 | 3.0 | 4.0 | 6.0 | 6.0 | 9.0 | 6.0 | 5.0 | 6.0 | 8.0 | 7.0 | 6.0 | 6.0 | 7.2 | 16.0 |
| 13 | 5.0 | 16.0 | 11.0 | 7.0 | 6.0 | 12.0 | 11.0 | 18.0 | 11.0 | 11.0 | 6.0 | 13.0 | 15.0 | 10.0 | 8.0 | 18.0 | 13.0 | 9.0 | 12.0 | 11.0 | 10.0 | 10.0 | 8.0 | 10.0 | 10.9 | 18.0 |
| 14 | 9.0 | 11.0 | 7.0 | 6.0 | 10.0 | 14.0 | 10.0 | 13.0 | 18.0 | 18.0 | 21.0 | 32.0 | 70.0 | 55.0 | 47.0 | 44.0 | 55.0 | 64.0 | 62.0 | 53.0 | 49.0 | 42.0 | 37.0 | 33.0 | 32.5 | 70.0 |
| 15 | 38.0 | 32.0 | 34.0 | 36.0 | 35.0 | 38.0 | 35.0 | 35.0 | 35.0 | 33.0 | 33.0 | 42.0 | 32.0 | 49.0 | 34.0 | 37.0 | 46.0 | 47.0 | 48.0 | 48.0 | 52.0 | 49.0 | 54.0 | 55.0 | 40.7 | 55.0 |
| 16 | 65.0 | 71.0 | 71.0 | 69.0 | 67.0 | 63.0 | 64.0 | 64.0 | 57.0 | 53.0 | 37.0 | 31.0 | 40.0 | 48.0 | 42.0 | 39.0 | 48.0 | 70.0 | 41.0 | 33.0 | 40.0 | 37.0 | 41.0 | 41.0 | 51.3 | 71.0 |
| 17 | 41.0 | 36.0 | 46.0 | 35.0 | 32.0 | 30.0 | 22.0 | 20.0 | 23.0 | 50.0 | 37.0 | 35.0 | 21.0 | 23.0 | 43.0 | 22.0 | 38.0 | 23.0 | 19.0 | 24.0 | 27.0 | 30.0 | 39.0 | 47.0 | 31.8 | 50.0 |
| 18 | 51.0 | 51.0 | 50.0 | 51.0 | 58.0 | 49.0 | 51.0 | 60.0 | 59.0 | 65.0 | 53.0 | 46.0 | 42.0 | 44.0 | 55.0 | 81.0 | 109.0 | 132.0 | 125.0 | 114.0 | 117.0 | 116.0 | 116.0 | 110.0 | 75.2 | 132.0 |
| 19 | 103.0 | 98.0 | 96.0 | 104.0 | 115.0 | 121.0 | 130.0 | 131.0 | 125.0 | 109.0 | 84.0 | 86.0 | 73.0 | 84.0 | 73.0 | 69.0 | 76.0 | 68.0 | 71.0 | 64.0 | 58.0 | 55.0 | 41.0 | 28.0 | 85.9 | 131.0 |
| 20 | 28.0 | 26.0 | 37.0 | 35.0 | 43.0 | 46.0 | 40.0 | 42.0 | 45.0 | 51.0 | 55.0 | 53.0 | 50.0 | 48.0 | 42.0 | 30.0 | 34.0 | 31.0 | 26.0 | 28.0 | 28.0 | 21.0 | 19.0 | 22.0 | 36.7 | 55.0 |
| 21 | 22.0 | 18.0 | 14.0 | 14.0 | 17.0 | 11.0 | 20.0 | 20.0 | 26.0 | 27.0 | 16.0 | 17.0 | 19.0 | 12.0 | 13.0 | 16.0 | 15.0 | 19.0 | 13.0 | 11.0 | 40.0 | 61.0 | 65.0 | 91.0 | 24.9 | 91.0 |
| 22 | 114.0 | 117.0 | 116.0 | 114.0 | 104.0 | 69.0 | 72.0 | 59.0 | 45.0 | 29.0 | 20.0 | 24.0 | 33.0 | 40.0 | 34.0 | 36.0 | 43.0 | 40.0 | 45.0 | 35.0 | 43.0 | 57.0 | 83.0 | 78.0 | 60.4 | 117.0 |
| 23 | 76.0 | 71.0 | 66.0 | 59.0 | 60.0 | 79.0 | 88.0 | 107.0 | 95.0 | 65.0 | 42.0 | 32.0 | 28.0 | 27.0 | 29.0 | 27.0 | 27.0 | 31.0 | 33.0 | 39.0 | 36.0 | 41.0 | 40.0 | 40.0 | 51.6 | 107.0 |
| 24 | 39.0 | 38.0 | 41.0 | 44.0 | 42.0 | 45.0 | 40.0 | 45.0 | 51.0 | 50.0 | 52.0 | 42.0 | 44.0 | 55.0 | 46.0 | 50.0 | 50.0 | 46.0 | 52.0 | 40.0 | 38.0 | 43.0 | 50.0 | 49.0 | 45.5 | 55.0 |
| 25 | 46.0 | 48.0 | 49.0 | 47.0 | 47.0 | 51.0 | 50.0 | 45.0 | 50.0 | 41.0 | 33.0 | 27.0 | 20.0 | 23.0 | 21.0 | 19.0 | 21.0 | 20.0 | 79.0 | 35.0 | 22.0 | 36.0 | 36.0 | 27.0 | 37.2 | 79.0 |
| 26 | 14.0 | 11.0 | 13.0 | 10.0 | 10.0 | 10.0 | 11.0 | 9.0 | 31.0 | 9.0 | 18.0 | C | 62.0 | 22.0 | 24.0 | 29.0 | 31.0 | 86.0 | 25.0 | 21.0 | 39.0 | 35.0 | 21.0 | 27.0 | 24.7 | 86.0 |
| 27 | 20.0 | 20.0 | 36.0 | 34.0 | 75.0 | 69.0 | 64.0 | 42.0 | 38.0 | 37.0 | 28.0 | 25.0 | 51.0 | 35.0 | 22.0 | 26.0 | 51.0 | 44.0 | 42.0 | 33.0 | 25.0 | 14.0 | 11.0 | 11.0 | 35.5 | 75.0 |
| 28 | 18.0 | 12.0 | 10.0 | 14.0 | 14.0 | 20.0 | 27.0 | 35.0 | 54.0 | 63.0 | 46.0 | 29.0 | 28.0 | 29.0 | 32.0 | 29.0 | 36.0 | 38.0 | 41.0 | 31.0 | 29.0 | 34.0 | 29.0 | 37.0 | 30.6 | 63.0 |
| 29 | 42.0 | 55.0 | 70.0 | 84.0 | 85.0 | 83.0 | 82.0 | 81.0 | 84.0 | 85.0 | 81.0 | 84.0 | 94.0 | 103.0 | 104.0 | 98.0 | 94.0 | 87.0 | 84.0 | 70.0 | 69.0 | 60.0 | 51.0 | 48.0 | 78.3 | 104.0 |
| 30 | 54.0 | 57.0 | 55.0 | 51.0 | 51.0 | 57.0 | 73.0 | 74.0 | 81.0 | 86.0 | 82.0 | 84.0 | 59.0 | 44.0 | 49.0 | 34.0 | 41.0 | 51.0 | 37.0 | 30.0 | 32.0 | 33.0 | 50.0 | 32.0 | 54.0 | 86.0 |
| 31 | 37.0 | 29.0 | 26.0 | 26.0 | 26.0 | 34.0 | 38.0 | 37.0 | 42.0 | 43.0 | 45.0 | 41.0 | 41.0 | 36.0 | 35.0 | 38.0 | 34.0 | 31.0 | 31.0 | 27.0 | 29.0 | 29.0 | 26.0 | 24.0 | 33.5 | 45.0 |
| 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 | 28.8 | 29.1 | 29.9 | 30.2 | 31.9 | 31.7 | 32.9 | 33.7 | 35.7 | 35.3 | 31.2 | 29.0 | 30.9 | 30.4 | 29.1 | 27.8 | 31.5 | 33.5 | 32.5 | 27.4 | 28.5 | 29.3 | 29.3 | 29.1 | 7.5 | |
| MAX | 114.0 | 117.0 | 116.0 | 114.0 | 115.0 | 121.0 | 130.0 | 131.0 | 125.0 | 109.0 | 84.0 | 86.0 | 94.0 | 103.0 | 104.0 | 98.0 | 109.0 | 132.0 | 125.0 | 114.0 | 117.0 | 116.0 | 116.0 | 110.0 | 17.4 | 70.0 |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 16 | Proposed Guideline | |
| Number of Non-Zero Readings | 742 | | |
| Maximum 1-HR Average | 132.0 UG/M3 | | |
| Maximum 24-HR Average | 85.9 UG/M3 | | |
| | | Opperational Time | 744 HRS |
| Monthly Calibration | 1 | Opperational Uptime | 100.0 % |
| Standard Deviation | 27.0 | Monthly Average | 30.8 UG/M3 |

# Windridge $PM_{10}$ (µg/m$^3$) – July 2021

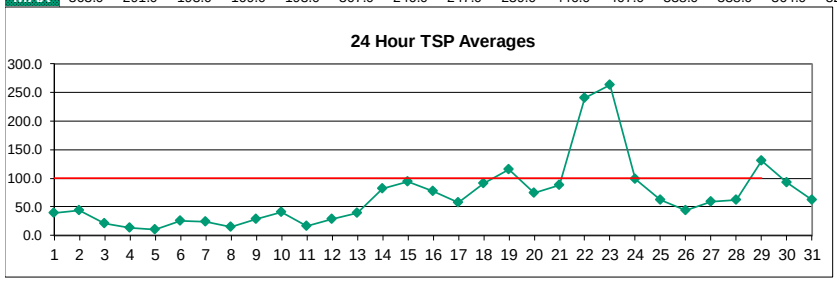
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.0 | 8.0 | 11.0 | 12.0 | 19.0 | 15.0 | 22.0 | 32.0 | 41.0 | 49.0 | 31.0 | 37.0 | 22.0 | 10.0 | 15.0 | 23.0 | 23.0 | 146.0 | 118.0 | 48.0 | 21.0 | 12.0 | 12.0 | 15.0 | 31.3 | 146.0 |
| 2 | 10.0 | 12.0 | 11.0 | 10.0 | 11.0 | 20.0 | 12.0 | 24.0 | 35.0 | 56.0 | 68.0 | 39.0 | 18.0 | 29.0 | 26.0 | 21.0 | 137.0 | 16.0 | 45.0 | 16.0 | 15.0 | 30.0 | 37.0 | 12.0 | 29.6 | 137.0 |
| 3 | 8.0 | 20.0 | 23.0 | 13.0 | 8.0 | 9.0 | 8.0 | 32.0 | 16.0 | 20.0 | 16.0 | 19.0 | 24.0 | 23.0 | 19.0 | 23.0 | 22.0 | 22.0 | 15.0 | 13.0 | 11.0 | 14.0 | 17.0 | 25.0 | 17.5 | 32.0 |
| 4 | 22.0 | 17.0 | 15.0 | 12.0 | 12.0 | 17.0 | 11.0 | 9.0 | 5.0 | 6.0 | 10.0 | 17.0 | 4.0 | 22.0 | 11.0 | 9.0 | 10.0 | 9.0 | 12.0 | 15.0 | 8.0 | 3.0 | 8.0 | 8.0 | 11.3 | 22.0 |
| 5 | 4.0 | 2.0 | 2.0 | 4.0 | 9.0 | 11.0 | 17.0 | 10.0 | 11.0 | 14.0 | 13.0 | 7.0 | 12.0 | 9.0 | 9.0 | 7.0 | 11.0 | 8.0 | 12.0 | 8.0 | 12.0 | 13.0 | 8.0 | 5.0 | 9.1 | 17.0 |
| 6 | 8.0 | 8.0 | 11.0 | 10.0 | X | 1.0 | 9.0 | 20.0 | 20.0 | 36.0 | 43.0 | 52.0 | 41.0 | 23.0 | 18.0 | 18.0 | 19.0 | 36.0 | 20.0 | 20.0 | 12.0 | 17.0 | 11.0 | 16.0 | 20.4 | 52.0 |
| 7 | 10.0 | 10.0 | 17.0 | 14.0 | 11.0 | 12.0 | 14.0 | 35.0 | 30.0 | 24.0 | 31.0 | 15.0 | 20.0 | 20.0 | 24.0 | 16.0 | 11.0 | 22.0 | 20.0 | 14.0 | 16.0 | 22.0 | 25.0 | 11.0 | 18.5 | 35.0 |
| 8 | 18.0 | 11.0 | 14.0 | 12.0 | 18.0 | 5.0 | 9.0 | 11.0 | 16.0 | 11.0 | 22.0 | 23.0 | 14.0 | 12.0 | 12.0 | 15.0 | 10.0 | 14.0 | 9.0 | 9.0 | 12.0 | 14.0 | 21.0 | 10.0 | 13.4 | 23.0 |
| 9 | 8.0 | 132.0 | 14.0 | 15.0 | 10.0 | 14.0 | 12.0 | 22.0 | 22.0 | 26.0 | 28.0 | 23.0 | 22.0 | 13.0 | 22.0 | 16.0 | 18.0 | 6.0 | 9.0 | 12.0 | 10.0 | 14.0 | 14.0 | 13.0 | 20.6 | 132.0 |
| 10 | 11.0 | 18.0 | 12.0 | 11.0 | 13.0 | 10.0 | 14.0 | 15.0 | 15.0 | 17.0 | 29.0 | 18.0 | 39.0 | 56.0 | 48.0 | 27.0 | 50.0 | 98.0 | 30.0 | 31.0 | 20.0 | 9.0 | 18.0 | 22.0 | 26.3 | 98.0 |
| 11 | 22.0 | 22.0 | 20.0 | 27.0 | 19.0 | 14.0 | 10.0 | 11.0 | 13.0 | 14.0 | 9.0 | 6.0 | 11.0 | 7.0 | 11.0 | 16.0 | 17.0 | 8.0 | 11.0 | 10.0 | 10.0 | 11.0 | 10.0 | 12.0 | 13.4 | 27.0 |
| 12 | 20.0 | 20.0 | 6.0 | 16.0 | 7.0 | 20.0 | 40.0 | 47.0 | 44.0 | 32.0 | 12.0 | 13.0 | 15.0 | 19.0 | 15.0 | 16.0 | 17.0 | 8.0 | 15.0 | 11.0 | 10.0 | 12.0 | 12.0 | 10.0 | 18.2 | 47.0 |
| 13 | 10.0 | 27.0 | 15.0 | 13.0 | 9.0 | 19.0 | 48.0 | 63.0 | 33.0 | 53.0 | 25.0 | 16.0 | 24.0 | 15.0 | 20.0 | 20.0 | 43.0 | 20.0 | 23.0 | 23.0 | 30.0 | 22.0 | 16.0 | 11.0 | 24.9 | 63.0 |
| 14 | 17.0 | 12.0 | 13.0 | 15.0 | 30.0 | 20.0 | 21.0 | 31.0 | 37.0 | 53.0 | 55.0 | 52.0 | 144.0 | 150.0 | 120.0 | 100.0 | 117.0 | 123.0 | 115.0 | 66.0 | 55.0 | 47.0 | 48.0 | 56.0 | 62.4 | 150.0 |
| 15 | 41.0 | 40.0 | 38.0 | 42.0 | 50.0 | 48.0 | 59.0 | 94.0 | 85.0 | 69.0 | 106.0 | 117.0 | 100.0 | 97.0 | 78.0 | 59.0 | 66.0 | 70.0 | 68.0 | 80.0 | 140.0 | 78.0 | 91.0 | 81.0 | 74.9 | 140.0 |
| 16 | 96.0 | 95.0 | 94.0 | 85.0 | 86.0 | 76.0 | 101.0 | 83.0 | 72.0 | 71.0 | 47.0 | 43.0 | 51.0 | 64.0 | 61.0 | 66.0 | 56.0 | 56.0 | 52.0 | 55.0 | 55.0 | 53.0 | 52.0 | 62.0 | 68.0 | 101.0 |
| 17 | 59.0 | 60.0 | 61.0 | 53.0 | 48.0 | 45.0 | 38.0 | 99.0 | 38.0 | 74.0 | 56.0 | 43.0 | 43.0 | 47.0 | 45.0 | 38.0 | 34.0 | 41.0 | 42.0 | 47.0 | 49.0 | 50.0 | 58.0 | 64.0 | 51.3 | 99.0 |
| 18 | 68.0 | 70.0 | 66.0 | 61.0 | 61.0 | 56.0 | 60.0 | 60.0 | 61.0 | 65.0 | 55.0 | 52.0 | 46.0 | 49.0 | 61.0 | 97.0 | 137.0 | 150.0 | 145.0 | 136.0 | 138.0 | 137.0 | 135.0 | 124.0 | 87.1 | 150.0 |
| 19 | 124.0 | 115.0 | 117.0 | 127.0 | 143.0 | 157.0 | 177.0 | 182.0 | 150.0 | 131.0 | 103.0 | 104.0 | 88.0 | 91.0 | 85.0 | 101.0 | 100.0 | 92.0 | 112.0 | 76.0 | 61.0 | 74.0 | 63.0 | 45.0 | 109.1 | 182.0 |
| 20 | 44.0 | 47.0 | 61.0 | 72.0 | 78.0 | 89.0 | 62.0 | 63.0 | 76.0 | 101.0 | 98.0 | 86.0 | 78.0 | 67.0 | 61.0 | 65.0 | 51.0 | 50.0 | 49.0 | 64.0 | 80.0 | 44.0 | 74.0 | 43.0 | 66.8 | 101.0 |
| 21 | 39.0 | 27.0 | 25.0 | 45.0 | 24.0 | 22.0 | 16.0 | 37.0 | 40.0 | 51.0 | 66.0 | 166.0 | 197.0 | 68.0 | 51.0 | 54.0 | 81.0 | 87.0 | 43.0 | 41.0 | 78.0 | 126.0 | 98.0 | 106.0 | 66.2 | 197.0 |
| 22 | 127.0 | 122.0 | 124.0 | 118.0 | 113.0 | 82.0 | 86.0 | 75.0 | 68.0 | 70.0 | 134.0 | 114.0 | 197.0 | 153.0 | 132.0 | 163.0 | 117.0 | 110.0 | 188.0 | 148.0 | 185.0 | 485.0 | 485.0 | 322.0 | 163.3 | 485.0 |
| 23 | 362.0 | 226.0 | 154.0 | 115.0 | 135.0 | 209.0 | 181.0 | 189.0 | 180.0 | 272.0 | 248.0 | 231.0 | 200.0 | 191.0 | 210.0 | 214.0 | 219.0 | 135.0 | 137.0 | 162.0 | 68.0 | 101.0 | 113.0 | 100.0 | 181.3 | 362.0 |
| 24 | 50.0 | 43.0 | 47.0 | 48.0 | 43.0 | 48.0 | 51.0 | 53.0 | 93.0 | 61.0 | 80.0 | 59.0 | 80.0 | 235.0 | 98.0 | 121.0 | 126.0 | 97.0 | 149.0 | 41.0 | 50.0 | 64.0 | 68.0 | 84.0 | 78.7 | 235.0 |
| 25 | 66.0 | 67.0 | 70.0 | 56.0 | 58.0 | 65.0 | 66.0 | 68.0 | 60.0 | 62.0 | 56.0 | 49.0 | 36.0 | 41.0 | 40.0 | 37.0 | 36.0 | 40.0 | 40.0 | 37.0 | 43.0 | 53.0 | 41.0 | 55.0 | 51.8 | 70.0 |
| 26 | 28.0 | 22.0 | 18.0 | 16.0 | 20.0 | 12.0 | 24.0 | 21.0 | 23.0 | 20.0 | 26.0 | C | 38.0 | 35.0 | 41.0 | 48.0 | 46.0 | 60.0 | 44.0 | 49.0 | 43.0 | 51.0 | 54.0 | 39.0 | 33.8 | 60.0 |
| 27 | 36.0 | 33.0 | 41.0 | 55.0 | 88.0 | 105.0 | 82.0 | 51.0 | 44.0 | 39.0 | 39.0 | 37.0 | 41.0 | 43.0 | 35.0 | 42.0 | 45.0 | 47.0 | 48.0 | 50.0 | 43.0 | 36.0 | 26.0 | 27.0 | 47.2 | 105.0 |
| 28 | 31.0 | 23.0 | 21.0 | 20.0 | 34.0 | 33.0 | 55.0 | 53.0 | 79.0 | 75.0 | 85.0 | 53.0 | 60.0 | 53.0 | 44.0 | 48.0 | 55.0 | 60.0 | 55.0 | 51.0 | 57.0 | 50.0 | 45.0 | 43.0 | 49.3 | 85.0 |
| 29 | 59.0 | 70.0 | 87.0 | 103.0 | 117.0 | 136.0 | 114.0 | 138.0 | 132.0 | 153.0 | 139.0 | 122.0 | 109.0 | 125.0 | 128.0 | 125.0 | 117.0 | 108.0 | 99.0 | 95.0 | 80.0 | 85.0 | 82.0 | 94.0 | 109.0 | 153.0 |
| 30 | 100.0 | 106.0 | 91.0 | 70.0 | 78.0 | 72.0 | 91.0 | 101.0 | 139.0 | 125.0 | 110.0 | 101.0 | 86.0 | 61.0 | 55.0 | 46.0 | 48.0 | 53.0 | 50.0 | 45.0 | 51.0 | 48.0 | 46.0 | 55.0 | 76.2 | 139.0 |
| 31 | 76.0 | 64.0 | 46.0 | 52.0 | 48.0 | 43.0 | 52.0 | 52.0 | 66.0 | 60.0 | 55.0 | 54.0 | 69.0 | 57.0 | 60.0 | 62.0 | 55.0 | 52.0 | 45.0 | 51.0 | 59.0 | 37.0 | 40.0 | 36.0 | 53.8 | 76.0 |
| NO. | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 742 | 99.9% |
| MEAN | 51.1 | 50.0 | 43.4 | 42.6 | 46.7 | 47.9 | 50.4 | 57.5 | 56.3 | 61.6 | 61.1 | 58.9 | 62.2 | 60.8 | 53.4 | 55.3 | 61.1 | 59.5 | 58.7 | 49.2 | 49.1 | 58.5 | 59.0 | 51.8 | 42.0 | |
| MAX | 362.0 | 226.0 | 154.0 | 127.0 | 143.0 | 209.0 | 181.0 | 189.0 | 180.0 | 272.0 | 248.0 | 231.0 | 200.0 | 235.0 | 210.0 | 214.0 | 219.0 | 150.0 | 188.0 | 162.0 | 185.0 | 485.0 | 485.0 | 322.0 | 91.1 | 433.3 |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 742 | | |
| Maximum 1-HR Average | 485.0 UG/M3 | | |
| Maximum 24-HR Average | 181.3 UG/M3 | | |
| | | Opperational Time | 743 HRS |
| Monthly Calibration | 1 | Opperational Uptime | 99.9 % |
| Standard Deviation | 52.61 | Monthly Average | 54.4 UG/M3 |

# Windridge TSP (µg/m$^3$) – July 2021

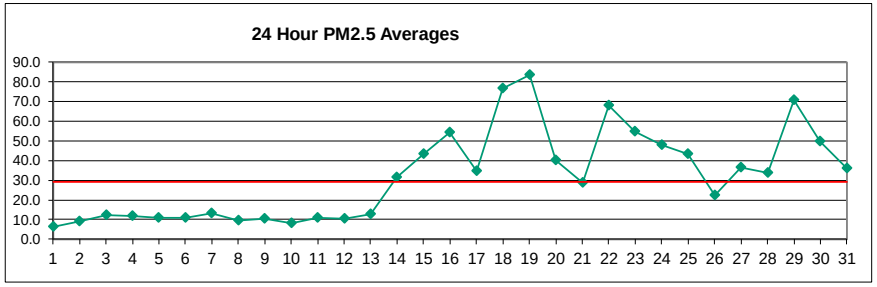
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.0 | 11.0 | 13.0 | 12.0 | 28.0 | 25.0 | 43.0 | 48.0 | 63.0 | 68.0 | 42.0 | 65.0 | 26.0 | 15.0 | 22.0 | 32.0 | 32.0 | 41.0 | 191.0 | 70.0 | 34.0 | 24.0 | 13.0 | 24.0 | 39.9 | 191.0 |
| 2 | 17.0 | 10.0 | 17.0 | 19.0 | 15.0 | 14.0 | 14.0 | 45.0 | 65.0 | 85.0 | 93.0 | 48.0 | 32.0 | 36.0 | 36.0 | 26.0 | 240.0 | 27.0 | 71.0 | 17.0 | 18.0 | 33.0 | 51.0 | 10.0 | 43.3 | 240.0 |
| 3 | 9.0 | 10.0 | 9.0 | 9.0 | 9.0 | 6.0 | 6.0 | 67.0 | 24.0 | 22.0 | 25.0 | 25.0 | 35.0 | 28.0 | 15.0 | 24.0 | 23.0 | 28.0 | 27.0 | 24.0 | 18.0 | 22.0 | 24.0 | 27.0 | 21.5 | 67.0 |
| 4 | 26.0 | 26.0 | 18.0 | 11.0 | 11.0 | 14.0 | 16.0 | 10.0 | 12.0 | 12.0 | 16.0 | 15.0 | 11.0 | 19.0 | 13.0 | 8.0 | 13.0 | 10.0 | 9.0 | 13.0 | 8.0 | 5.0 | 10.0 | 7.0 | 13.0 | 26.0 |
| 5 | 7.0 | 8.0 | 7.0 | 6.0 | 9.0 | 13.0 | 14.0 | 12.0 | 16.0 | 20.0 | 17.0 | 8.0 | 18.0 | 6.0 | 18.0 | 4.0 | 6.0 | 10.0 | 11.0 | 6.0 | 6.0 | 7.0 | 8.0 | 6.0 | 10.1 | 20.0 |
| 6 | 13.0 | 8.0 | 8.0 | 7.0 | 13.0 | 8.0 | 12.0 | 16.0 | 27.0 | 48.0 | 57.0 | 70.0 | 57.0 | 42.0 | 36.0 | 27.0 | 21.0 | 31.0 | 20.0 | 29.0 | 20.0 | 21.0 | 17.0 | 20.0 | 26.2 | 70.0 |
| 7 | 7.0 | 13.0 | 17.0 | 13.0 | 14.0 | 17.0 | 22.0 | 51.0 | 46.0 | 43.0 | 53.0 | 27.0 | 30.0 | 26.0 | 34.0 | 19.0 | 19.0 | 27.0 | 30.0 | 17.0 | 16.0 | 15.0 | 19.0 | 8.0 | 24.3 | 53.0 |
| 8 | 13.0 | 7.0 | 7.0 | 17.0 | 17.0 | 13.0 | 11.0 | 18.0 | 21.0 | 13.0 | 22.0 | 31.0 | 18.0 | 14.0 | 13.0 | 20.0 | 17.0 | 14.0 | 13.0 | 13.0 | 18.0 | 17.0 | 13.0 | 13.0 | 15.5 | 31.0 |
| 9 | 9.0 | 228.0 | 12.0 | 17.0 | 12.0 | 17.0 | 18.0 | 26.0 | 33.0 | 40.0 | 41.0 | 31.0 | 18.0 | 17.0 | 22.0 | 20.0 | 21.0 | 18.0 | 17.0 | 12.0 | 16.0 | 11.0 | 18.0 | 13.0 | 28.6 | 228.0 |
| 10 | 13.0 | 18.0 | 20.0 | 18.0 | 14.0 | 16.0 | 27.0 | 26.0 | 25.0 | 25.0 | 44.0 | 32.0 | 60.0 | 94.0 | 77.0 | 57.0 | 82.0 | 147.0 | 42.0 | 46.0 | 32.0 | 12.0 | 26.0 | 24.0 | 40.7 | 147.0 |
| 11 | 27.0 | 27.0 | 22.0 | 32.0 | 17.0 | 17.0 | 17.0 | 12.0 | 15.0 | 19.0 | 12.0 | 11.0 | 15.0 | 14.0 | 11.0 | 18.0 | 20.0 | 14.0 | 14.0 | 13.0 | 17.0 | 12.0 | 16.0 | 20.0 | 17.2 | 32.0 |
| 12 | 29.0 | 29.0 | 15.0 | 18.0 | 13.0 | 51.0 | 53.0 | 76.0 | 75.0 | 48.0 | 26.0 | 13.0 | 21.0 | 16.0 | 25.0 | 26.0 | 22.0 | 17.0 | 18.0 | 21.0 | 28.0 | 18.0 | 17.0 | 6.0 | 28.4 | 76.0 |
| 13 | 7.0 | 32.0 | 22.0 | 19.0 | 34.0 | 26.0 | 67.0 | 111.0 | 51.0 | 89.0 | 48.0 | 24.0 | 31.0 | 23.0 | 28.0 | 30.0 | 34.0 | 22.0 | 28.0 | 39.0 | 60.0 | 50.0 | 33.0 | 24.0 | 38.8 | 111.0 |
| 14 | 38.0 | 30.0 | 17.0 | 19.0 | 27.0 | 26.0 | 23.0 | 38.0 | 58.0 | 88.0 | 87.0 | 68.0 | 174.0 | 236.0 | 168.0 | 126.0 | 130.0 | 165.0 | 165.0 | 81.0 | 59.0 | 52.0 | 48.0 | 59.0 | 82.6 | 236.0 |
| 15 | 47.0 | 38.0 | 43.0 | 45.0 | 55.0 | 54.0 | 82.0 | 133.0 | 121.0 | 92.0 | 176.0 | 199.0 | 142.0 | 129.0 | 100.0 | 90.0 | 83.0 | 85.0 | 75.0 | 85.0 | 95.0 | 85.0 | 106.0 | 90.0 | 93.8 | 199.0 |
| 16 | 109.0 | 106.0 | 104.0 | 88.0 | 86.0 | 90.0 | 106.0 | 89.0 | 80.0 | 78.0 | 63.0 | 56.0 | 60.0 | 71.0 | 74.0 | 81.0 | 65.0 | 58.0 | 59.0 | 64.0 | 61.0 | 58.0 | 59.0 | 73.0 | 76.6 | 109.0 |
| 17 | 65.0 | 62.0 | 64.0 | 53.0 | 47.0 | 50.0 | 43.0 | 47.0 | 58.0 | 112.0 | 69.0 | 53.0 | 57.0 | 72.0 | 62.0 | 51.0 | 40.0 | 44.0 | 45.0 | 51.0 | 45.0 | 54.0 | 65.0 | 69.0 | 57.4 | 112.0 |
| 18 | 75.0 | 72.0 | 65.0 | 64.0 | 66.0 | 56.0 | 61.0 | 66.0 | 64.0 | 71.0 | 57.0 | 51.0 | 55.0 | 53.0 | 66.0 | 98.0 | 145.0 | 157.0 | 147.0 | 128.0 | 136.0 | 148.0 | 138.0 | 128.0 | 90.3 | 157.0 |
| 19 | 127.0 | 116.0 | 113.0 | 131.0 | 151.0 | 165.0 | 196.0 | 191.0 | 151.0 | 133.0 | 110.0 | 110.0 | 101.0 | 101.0 | 101.0 | 108.0 | 113.0 | 100.0 | 85.0 | 88.0 | 84.0 | 79.0 | 67.0 | 54.0 | 115.6 | 196.0 |
| 20 | 50.0 | 51.0 | 69.0 | 79.0 | 85.0 | 95.0 | 64.0 | 69.0 | 95.0 | 131.0 | 135.0 | 98.0 | 87.0 | 81.0 | 76.0 | 86.0 | 63.0 | 56.0 | 57.0 | 63.0 | 56.0 | 48.0 | 44.0 | 41.0 | 74.1 | 135.0 |
| 21 | 48.0 | 26.0 | 26.0 | 20.0 | 27.0 | 23.0 | 19.0 | 44.0 | 52.0 | 58.0 | 54.0 | 279.0 | 314.0 | 106.0 | 72.0 | 64.0 | 121.0 | 136.0 | 54.0 | 72.0 | 103.0 | 169.0 | 122.0 | 115.0 | 88.5 | 314.0 |
| 22 | 133.0 | 137.0 | 128.0 | 116.0 | 114.0 | 88.0 | 90.0 | 90.0 | 75.0 | 99.0 | 218.0 | 178.0 | 307.0 | 214.0 | 192.0 | 258.0 | 172.0 | 168.0 | 327.0 | 255.0 | 307.0 | 729.0 | 931.0 | 444.0 | 240.4 | 931.0 |
| 23 | 363.0 | 291.0 | 193.0 | 169.0 | 193.0 | 307.0 | 246.0 | 247.0 | 239.0 | 446.0 | 407.0 | 338.0 | 338.0 | 302.0 | 320.0 | 321.0 | 316.0 | 207.0 | 225.0 | 250.0 | 95.0 | 171.0 | 192.0 | 132.0 | 262.8 | 446.0 |
| 24 | 62.0 | 38.0 | 47.0 | 47.0 | 48.0 | 50.0 | 50.0 | 57.0 | 123.0 | 66.0 | 95.0 | 70.0 | 110.0 | 364.0 | 132.0 | 149.0 | 190.0 | 125.0 | 180.0 | 41.0 | 51.0 | 76.0 | 75.0 | 112.0 | 98.3 | 80.0 |
| 25 | 82.0 | 78.0 | 72.0 | 56.0 | 60.0 | 79.0 | 78.0 | 67.0 | 68.0 | 66.0 | 63.0 | 66.0 | 48.0 | 50.0 | 46.0 | 45.0 | 54.0 | 51.0 | 49.0 | 43.0 | 49.0 | 75.0 | 53.0 | 80.0 | 61.6 | 82.0 |
| 26 | 33.0 | 28.0 | 27.0 | 19.0 | 16.0 | 21.0 | 34.0 | 29.0 | 36.0 | 27.0 | 28.0 | C | 56.0 | 51.0 | 52.0 | 55.0 | 58.0 | 69.0 | 58.0 | 55.0 | 56.0 | 65.0 | 68.0 | 57.0 | 43.4 | 69.0 |
| 27 | 50.0 | 31.0 | 41.0 | 68.0 | 115.0 | 156.0 | 100.0 | 57.0 | 51.0 | 50.0 | 56.0 | 46.0 | 58.0 | 46.0 | 49.0 | 55.0 | 48.0 | 57.0 | 56.0 | 70.0 | 54.0 | 50.0 | 40.0 | 31.0 | 59.8 | 156.0 |
| 28 | 39.0 | 31.0 | 36.0 | 24.0 | 30.0 | 38.0 | 80.0 | 74.0 | 102.0 | 117.0 | 121.0 | 65.0 | 69.0 | 67.0 | 52.0 | 55.0 | 57.0 | 63.0 | 59.0 | 64.0 | 75.0 | 62.0 | 53.0 | 52.0 | 61.9 | 121.0 |
| 29 | 59.0 | 80.0 | 101.0 | 117.0 | 133.0 | 179.0 | 144.0 | 175.0 | 169.0 | 207.0 | 181.0 | 151.0 | 118.0 | 142.0 | 141.0 | 151.0 | 133.0 | 119.0 | 108.0 | 92.0 | 92.0 | 111.0 | 111.0 | 123.0 | 130.7 | 207.0 |
| 30 | 122.0 | 144.0 | 121.0 | 78.0 | 88.0 | 76.0 | 93.0 | 113.0 | 172.0 | 160.0 | 137.0 | 130.0 | 104.0 | 78.0 | 69.0 | 58.0 | 56.0 | 60.0 | 51.0 | 59.0 | 54.0 | 64.0 | 53.0 | 69.0 | 92.0 | 172.0 |
| 31 | 101.0 | 81.0 | 58.0 | 55.0 | 52.0 | 53.0 | 49.0 | 64.0 | 80.0 | 57.0 | 61.0 | 56.0 | 97.0 | 68.0 | 74.0 | 71.0 | 62.0 | 60.0 | 59.0 | 58.0 | 52.0 | 43.0 | 41.0 | 40.0 | 62.2 | 101.0 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 743 | 100.0% |
| MEAN | 57.9 | 60.2 | 48.8 | 46.6 | 51.6 | 59.5 | 60.6 | 69.9 | 73.1 | 83.5 | 84.3 | 80.5 | 86.0 | 83.3 | 70.8 | 72.0 | 79.2 | 70.5 | 75.8 | 62.5 | 58.5 | 77.0 | 81.6 | 63.6 | | |
| MAX | 363.0 | 291.0 | 193.0 | 169.0 | 193.0 | 307.0 | 246.0 | 247.0 | 239.0 | 446.0 | 407.0 | 338.0 | 338.0 | 364.0 | 320.0 | 321.0 | 316.0 | 207.0 | 327.0 | 255.0 | 307.0 | 729.0 | 931.0 | 444.0 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 4 | Proposed Guideline | |
| Number of Non-Zero Readings | 743 | | |
| Maximum 1-HR Average | 931.0 UG/M3 | | |
| Maximum 24-HR Average | 262.8 UG/M3 | | |
| IZS Calibration Time | | Opperational Time | 744 HRS |
| Down Time | 0 | Opperational Uptime | 100.0 % |
| Standard Deviation | 76.6 | Monthly Average | 69.0 UG/M3 |

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

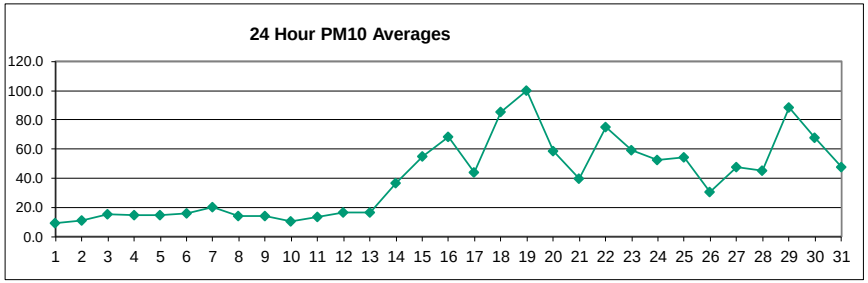
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.5 | 7.4 | 7.1 | 7.5 | 8.7 | 8.9 | 8.8 | 7.9 | 7.4 | 6.8 | 5.6 | 5.2 | 4.3 | 3.2 | 4.0 | 5.0 | 6.3 | 7.0 | 6.8 | 6.7 | 6.6 | 6.1 | 6.3 | 7.2 | 6.5 | 8.9 |
| 2 | 7.6 | 8.1 | 8.5 | 8.7 | 9.2 | 10.0 | 11.4 | 12.1 | 10.5 | 9.3 | 7.4 | 7.5 | 8.2 | 9.5 | 10.3 | 11.8 | 7.5 | 5.7 | 6.4 | 7.1 | 8.2 | 11.0 | 8.3 | 7.6 | 8.8 | 12.1 |
| 3 | 7.9 | 8.0 | 8.2 | 8.8 | 9.9 | 10.6 | 11.4 | 12.2 | 12.7 | 11.5 | 11.7 | 10.9 | 11.0 | 11.5 | 11.2 | 14.5 | 21.8 | 18.2 | 13.2 | 10.4 | 10.1 | 12.7 | 14.6 | 16.1 | 12.0 | 21.8 |
| 4 | 17.1 | 20.1 | 18.4 | 17.4 | 17.3 | 16.9 | 16.2 | 12.9 | 13.1 | 13.0 | 13.7 | 11.7 | 7.0 | 8.3 | 9.0 | 7.9 | 6.8 | 10.6 | 11.8 | 12.8 | 6.2 | 4.5 | 5.9 | 7.8 | 11.9 | 20.1 |
| 5 | 8.1 | 8.2 | 8.5 | 8.9 | 10.2 | 10.8 | 14.2 | 16.0 | 17.0 | 17.8 | 17.1 | 12.8 | 8.8 | 9.0 | 8.8 | 6.8 | 9.8 | 8.7 | 11.3 | 9.7 | 10.1 | 10.1 | 9.6 | 9.3 | 10.9 | 17.8 |
| 6 | 10.5 | 10.5 | 10.0 | 11.7 | 13.6 | 13.4 | 13.1 | 14.6 | 12.3 | 12.7 | 12.8 | 11.4 | 8.9 | 7.2 | 7.6 | 8.9 | 8.6 | 8.5 | 8.5 | 10.9 | 11.6 | 10.7 | 9.9 | 9.8 | 10.7 | 14.6 |
| 7 | 11.1 | 13.0 | 13.4 | 13.9 | 14.3 | 14.6 | 15.1 | 17.6 | 19.1 | 15.2 | 12.2 | 12.4 | 13.3 | 13.6 | 11.0 | 10.5 | 9.1 | 9.8 | 11.8 | 13.1 | 15.2 | 15.6 | 14.3 | 11.1 | 13.3 | 19.1 |
| 8 | 12.1 | 11.4 | 11.7 | 10.8 | 10.6 | 10.2 | 10.4 | 11.6 | 12.3 | 12.3 | 10.8 | 9.3 | 8.0 | 9.7 | 8.4 | 7.3 | 6.3 | 6.1 | 6.1 | 7.9 | 8.9 | 9.5 | 9.9 | 10.5 | 9.7 | 12.3 |
| 9 | 11.1 | 12.4 | 13.6 | 13.1 | 12.9 | 13.5 | 13.8 | 14.7 | 13.8 | 10.5 | 12.3 | 11.1 | 9.9 | 6.6 | 6.6 | 6.9 | 7.1 | 6.1 | 5.7 | 6.7 | 8.0 | 9.5 | 10.0 | 10.6 | 10.3 | 14.7 |
| 10 | 11.5 | 12.8 | 13.9 | 14.0 | 13.3 | 13.3 | 13.2 | 14.1 | 11.4 | 8.6 | 5.8 | 5.1 | 4.5 | 4.8 | 4.8 | 4.8 | 4.1 | 3.7 | 3.4 | 3.9 | 4.4 | 5.2 | 7.2 | 12.5 | 8.3 | 14.1 |
| 11 | 15.0 | 16.0 | 14.6 | 14.5 | 13.4 | 12.3 | 12.1 | 11.9 | 14.1 | 13.0 | 11.0 | 10.4 | 10.5 | 8.9 | 8.8 | 8.2 | 8.4 | 8.4 | 7.9 | 8.7 | 8.9 | 8.7 | 9.1 | 9.5 | 11.0 | 16.0 |
| 12 | 10.1 | 11.1 | 12.4 | 12.6 | 12.7 | 13.5 | 17.4 | 18.6 | 19.4 | 18.0 | 10.2 | 10.3 | 7.0 | 7.2 | 6.7 | 6.7 | 5.4 | 5.3 | 5.9 | 7.5 | 8.9 | 9.2 | 9.2 | 9.9 | 10.6 | 19.4 |
| 13 | 10.7 | 14.4 | 13.1 | 14.7 | 15.2 | 15.1 | 16.0 | 16.3 | 13.4 | 10.5 | 8.8 | 9.3 | 8.7 | 8.9 | 9.1 | 9.8 | 10.2 | 11.7 | 12.3 | 12.9 | 14.6 | 15.5 | 15.8 | 16.6 | 12.6 | 16.6 |
| 14 | 15.6 | 15.1 | 16.3 | 19.3 | 20.9 | 22.5 | 24.3 | 27.3 | 27.3 | 23.5 | 22.3 | 28.3 | 44.1 | 34.8 | 28.8 | 28.9 | 34.1 | 37.7 | 40.0 | 42.5 | 45.6 | 49.6 | 52.8 | 52.7 | 31.4 | 52.8 |
| 15 | 53.6 | 52.8 | 53.0 | 51.9 | 51.5 | 50.7 | 51.8 | 51.7 | 50.0 | 38.6 | 30.7 | 26.8 | 24.0 | 29.9 | 23.6 | 21.3 | 33.4 | 35.8 | 38.4 | 45.2 | 52.0 | 53.8 | 53.1 | 60.2 | 43.1 | 60.2 |
| 16 | 79.7 | 82.1 | 82.1 | 80.0 | 76.0 | 70.7 | 76.2 | 87.5 | 77.1 | 49.7 | 35.9 | 28.5 | 31.9 | 38.9 | 35.0 | 30.8 | 32.3 | 34.6 | 34.9 | 39.8 | 46.1 | 50.0 | 51.3 | 52.1 | 54.3 | 87.5 |
| 17 | 52.7 | 53.9 | 57.1 | 57.1 | 54.1 | 50.0 | 47.2 | 35.6 | 33.7 | 30.9 | 22.3 | 14.2 | 10.6 | 13.8 | 17.1 | 17.0 | 17.3 | 18.4 | 19.9 | 23.9 | 33.9 | 45.3 | 48.2 | 54.7 | 34.5 | 57.1 |
| 18 | 61.5 | 65.2 | 58.0 | 58.7 | 66.3 | 56.0 | 54.7 | 61.7 | 66.0 | 66.7 | 57.2 | 51.8 | 46.2 | 45.7 | 47.9 | 67.4 | 89.5 | 112.5 | 117.5 | 116.4 | 118.1 | 120.9 | 120.6 | 115.0 | 76.7 | 120.9 |
| 19 | 110.8 | 108.6 | 105.8 | 111.2 | 115.8 | 127.2 | 136.9 | 133.6 | 114.4 | 96.3 | 83.5 | 73.1 | 63.2 | 56.6 | 54.0 | 55.7 | 57.5 | 57.6 | 57.3 | 59.4 | 58.5 | 62.4 | 60.0 | 48.6 | 83.7 | 136.9 |
| 20 | 42.9 | 41.7 | 46.0 | 46.8 | 47.2 | 50.4 | 61.4 | 56.5 | 56.8 | 55.1 | 56.2 | 52.1 | 41.4 | 31.8 | 26.2 | 21.4 | 23.8 | 23.0 | 25.3 | 31.3 | 35.2 | 33.3 | 30.9 | 29.4 | 40.3 | 61.4 |
| 21 | 30.2 | 26.2 | 23.7 | 22.9 | 22.8 | 24.7 | 33.1 | 32.1 | 28.0 | 30.2 | 21.0 | 13.6 | 10.3 | 9.0 | 8.3 | 11.2 | 10.9 | 12.1 | 12.0 | 14.7 | 46.3 | 67.2 | 78.5 | 101.2 | 28.8 | 101.2 |
| 22 | 118.2 | 129.2 | 129.9 | 129.3 | 127.1 | 116.5 | 99.7 | 82.3 | 63.2 | 21.0 | 19.6 | 22.0 | 28.9 | 38.8 | 36.0 | 37.8 | 42.0 | 42.4 | 44.7 | 49.6 | 50.9 | 53.6 | 66.7 | 82.8 | 68.0 | 129.9 |
| 23 | 82.5 | 79.2 | 76.6 | 69.8 | 73.5 | 90.3 | 120.1 | 120.6 | 99.3 | 66.2 | 33.8 | 20.5 | 19.1 | 18.6 | 18.6 | 16.3 | 17.9 | 23.4 | 28.6 | 38.7 | 46.8 | 49.5 | 51.4 | 49.7 | 54.6 | 120.6 |
| 24 | 47.5 | 50.8 | 54.5 | 57.2 | 59.3 | 60.5 | 61.4 | 65.0 | 67.2 | 61.8 | 42.4 | 32.9 | 33.3 | 33.7 | 36.6 | 36.3 | 34.4 | 33.8 | 33.5 | 37.0 | 40.9 | 53.1 | 55.7 | 60.8 | 47.9 | 67.2 |
| 25 | 62.8 | 63.5 | 65.7 | 67.7 | 66.4 | 63.4 | 62.6 | 65.5 | 60.4 | 54.7 | 42.7 | 33.2 | 26.3 | 22.1 | 20.7 | 20.6 | 20.5 | 23.4 | 26.9 | 29.3 | 32.8 | 37.5 | 39.0 | 36.4 | 43.5 | 67.7 |
| 26 | 21.1 | 16.6 | 16.3 | 15.1 | 13.6 | 13.1 | 14.6 | 15.4 | 16.8 | 23.7 | 21.6 | 19.6 | 23.3 | 21.6 | 23.8 | 26.5 | 28.0 | 26.8 | 25.1 | 27.8 | 30.8 | 33.8 | 32.3 | 31.0 | 22.4 | 33.8 |
| 27 | 32.0 | 34.2 | 36.9 | 41.8 | 67.3 | 83.7 | 84.4 | 60.1 | 45.6 | 38.6 | 32.1 | 27.8 | 26.8 | 26.4 | 22.5 | 21.3 | 22.2 | 21.9 | 24.1 | 25.4 | 27.4 | 28.5 | 21.7 | 20.0 | 36.4 | 84.4 |
| 28 | 18.3 | 17.3 | 18.0 | 19.5 | 21.4 | 24.8 | 30.4 | 39.4 | 49.6 | 51.9 | 40.4 | 29.8 | 31.4 | 30.5 | 28.3 | 26.3 | 28.5 | 34.7 | 36.6 | 38.5 | 43.4 | 46.8 | 48.9 | 53.0 | 33.7 | 53.0 |
| 29 | 53.9 | 59.2 | 76.5 | 85.2 | 90.3 | 91.6 | 94.9 | 98.8 | 103.9 | 88.4 | 67.0 | 59.0 | 57.7 | 57.6 | 58.3 | 61.6 | 59.6 | 60.0 | 61.9 | 61.6 | 57.9 | 61.4 | 66.2 | 64.8 | 70.7 | 103.9 |
| 30 | 60.8 | 61.6 | 65.2 | 66.0 | 64.7 | 70.2 | 81.0 | 85.1 | 88.2 | 75.5 | 60.7 | 52.1 | 43.3 | 31.1 | 28.2 | 26.4 | 24.7 | 28.3 | 27.7 | 27.0 | 29.4 | 31.9 | 33.6 | 35.1 | 49.9 | 88.2 |
| 31 | 36.1 | 36.7 | 38.0 | 40.7 | 41.9 | 43.4 | 45.9 | 50.1 | 54.5 | 53.0 | 45.8 | 37.0 | 31.7 | 28.6 | 27.9 | 26.3 | 27.0 | 25.1 | 23.9 | 26.4 | 28.6 | 29.7 | 32.1 | 35.4 | 36.1 | 54.5 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 744 | 100% |
| MEAN | 36.1 | 37.0 | 37.8 | 38.6 | 40.0 | 41.1 | 43.7 | 43.5 | 41.2 | 35.0 | 28.2 | 24.2 | 22.7 | 21.9 | 20.9 | 21.4 | 23.1 | 24.6 | 25.5 | 27.5 | 30.5 | 33.4 | 34.6 | 36.2 | | |
| MAX | 118.2 | 129.2 | 129.9 | 129.3 | 127.1 | 127.2 | 136.9 | 133.6 | 114.4 | 96.3 | 83.5 | 73.1 | 63.2 | 57.6 | 58.3 | 67.4 | 89.5 | 112.5 | 117.5 | 116.4 | 118.1 | 120.9 | 120.6 | 115.0 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 16 | Proposed Guideline | |
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 136.9 | UG/M3 | |
| Maximum 24-HR Average | 83.7 | UG/M3 | |
| IZS Calibration Time | | Opperational Time | 744 HRS |
| Down Time | 0 | Opperational Uptime | 100.0 % |
| Standard Deviation | 27.31 | Monthly Average | 32.0 UG/M3 |

# West $PM_{10}$ ($\mu g/m^3$) – July 2021

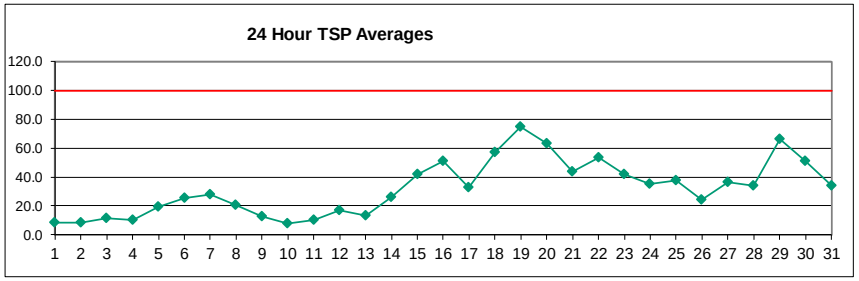
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.1 | 11.1 | 10.2 | 10.1 | 12.2 | 12.4 | 12.3 | 10.1 | 9.9 | 10.1 | 8.4 | 7.8 | 6.3 | 4.5 | 5.8 | 7.5 | 9.3 | 10.0 | 9.9 | 9.2 | 8.8 | 8.3 | 8.1 | 9.1 | 9.1 | 12.4 |
| 2 | 9.5 | 9.7 | 10.1 | 10.0 | 10.5 | 11.7 | 14.2 | 15.4 | 14.1 | 12.7 | 10.0 | 9.4 | 10.7 | 12.7 | 13.8 | 16.2 | 9.9 | 6.7 | 7.9 | 8.0 | 10.1 | 15.2 | 9.4 | 8.3 | 11.1 | 16.2 |
| 3 | 8.5 | 8.6 | 8.8 | 9.4 | 10.5 | 11.3 | 12.2 | 14.7 | 17.3 | 14.8 | 15.9 | 14.9 | 15.0 | 15.9 | 15.0 | 19.3 | 27.3 | 23.4 | 16.8 | 13.4 | 12.5 | 17.0 | 19.9 | 22.6 | 15.2 | 27.3 |
| 4 | 23.4 | 29.1 | 24.1 | 22.0 | 21.3 | 18.3 | 18.7 | 14.7 | 16.7 | 16.3 | 17.1 | 14.3 | 8.1 | 10.7 | 11.6 | 10.6 | 8.0 | 12.8 | 13.0 | 14.2 | 7.8 | 5.3 | 6.9 | 8.8 | 14.7 | 29.1 |
| 5 | 9.1 | 8.9 | 9.5 | 9.8 | 12.8 | 13.4 | 19.4 | 21.9 | 25.2 | 26.1 | 30.0 | 24.6 | 17.6 | 16.7 | 11.6 | 8.2 | 11.8 | 9.3 | 13.9 | 12.4 | 13.1 | 11.5 | 10.9 | 10.5 | 14.9 | 30.0 |
| 6 | 12.6 | 13.0 | 11.8 | 13.5 | 15.2 | 14.4 | 14.3 | 18.8 | 17.4 | 19.9 | 19.8 | 19.3 | 19.9 | 18.7 | 24.2 | 26.1 | 16.9 | 11.5 | 10.7 | 15.1 | 15.3 | 14.8 | 13.4 | 13.4 | 16.3 | 26.1 |
| 7 | 14.0 | 15.9 | 16.0 | 16.1 | 16.1 | 15.7 | 17.1 | 27.2 | 43.0 | 31.3 | 27.1 | 37.7 | 39.5 | 20.0 | 14.7 | 14.1 | 11.7 | 13.2 | 14.9 | 15.4 | 17.3 | 18.4 | 16.3 | 12.1 | 20.2 | 43.0 |
| 8 | 12.8 | 11.9 | 12.2 | 11.4 | 11.3 | 11.0 | 11.4 | 13.5 | 14.8 | 17.8 | 20.2 | 19.2 | 14.7 | 29.4 | 26.6 | 10.4 | 8.3 | 8.3 | 8.3 | 10.4 | 11.8 | 12.5 | 13.3 | 14.0 | 14.0 | 29.4 |
| 9 | 14.6 | 16.0 | 16.7 | 15.7 | 15.3 | 16.3 | 17.7 | 20.4 | 26.5 | 23.7 | 17.8 | 15.3 | 13.3 | 8.6 | 9.3 | 9.2 | 9.4 | 8.1 | 7.6 | 8.6 | 10.3 | 12.0 | 12.9 | 13.8 | 14.1 | 26.5 |
| 10 | 15.0 | 16.8 | 17.5 | 16.9 | 15.5 | 15.6 | 15.4 | 18.3 | 14.7 | 11.6 | 7.9 | 6.9 | 5.8 | 6.3 | 6.3 | 6.3 | 5.3 | 4.8 | 4.4 | 4.8 | 5.5 | 6.5 | 8.9 | 17.5 | 10.6 | 18.3 |
| 11 | 21.6 | 22.5 | 18.9 | 17.7 | 14.6 | 13.3 | 14.5 | 14.4 | 19.3 | 17.1 | 14.4 | 12.7 | 13.9 | 11.7 | 11.6 | 10.7 | 10.9 | 10.8 | 9.7 | 10.1 | 10.2 | 9.7 | 10.2 | 10.6 | 13.8 | 22.5 |
| 12 | 12.7 | 14.9 | 17.7 | 17.9 | 17.0 | 16.5 | 23.4 | 25.6 | 28.4 | 59.1 | 30.9 | 18.4 | 9.1 | 9.4 | 9.2 | 9.6 | 7.6 | 7.1 | 7.8 | 9.6 | 11.5 | 10.9 | 10.7 | 12.4 | 16.5 | 59.1 |
| 13 | 13.7 | 20.2 | 17.2 | 20.3 | 20.9 | 19.2 | 20.3 | 22.8 | 18.4 | 14.2 | 11.3 | 11.8 | 11.2 | 11.9 | 12.0 | 13.1 | 12.6 | 15.5 | 16.5 | 17.5 | 20.1 | 20.9 | 20.3 | 21.8 | 16.8 | 22.8 |
| 14 | 19.6 | 17.9 | 20.0 | 24.8 | 24.3 | 25.3 | 28.9 | 36.2 | 38.7 | 32.1 | 31.2 | 39.0 | 53.9 | 43.7 | 34.0 | 33.6 | 38.1 | 41.2 | 43.3 | 45.5 | 48.8 | 52.1 | 55.8 | 55.9 | 36.8 | 55.9 |
| 15 | 56.9 | 55.3 | 55.5 | 53.9 | 54.1 | 52.8 | 60.5 | 72.6 | 72.1 | 53.0 | 42.1 | 37.6 | 32.6 | 38.7 | 30.1 | 27.7 | 46.1 | 51.4 | 55.0 | 66.2 | 73.0 | 72.4 | 75.5 | 82.3 | 54.9 | 82.3 |
| 16 | 102.0 | 102.4 | 101.5 | 96.5 | 87.6 | 78.4 | 97.2 | 129.6 | 111.3 | 66.1 | 44.9 | 37.8 | 40.1 | 48.8 | 47.3 | 40.9 | 43.4 | 45.6 | 45.7 | 49.3 | 53.7 | 57.1 | 58.1 | 58.9 | 68.5 | 129.6 |
| 17 | 59.9 | 62.0 | 67.3 | 66.2 | 61.6 | 59.9 | 60.0 | 52.3 | 48.9 | 44.7 | 29.6 | 18.2 | 13.6 | 17.9 | 24.5 | 24.3 | 24.7 | 26.3 | 28.7 | 34.0 | 44.4 | 56.9 | 59.7 | 64.6 | 43.8 | 67.3 |
| 18 | 76.6 | 76.8 | 65.2 | 73.7 | 82.6 | 64.4 | 61.6 | 67.0 | 70.1 | 69.4 | 59.8 | 55.4 | 51.4 | 52.3 | 55.3 | 78.7 | 101.7 | 127.0 | 128.6 | 126.9 | 127.6 | 131.9 | 129.5 | 123.1 | 85.7 | 131.9 |
| 19 | 118.2 | 115.5 | 115.3 | 126.9 | 133.2 | 151.3 | 171.5 | 167.9 | 138.7 | 115.0 | 114.2 | 96.4 | 81.7 | 78.6 | 69.9 | 69.7 | 71.4 | 69.6 | 68.7 | 70.8 | 68.2 | 69.1 | 68.0 | 56.8 | 100.3 | 171.5 |
| 20 | 50.9 | 51.5 | 58.8 | 62.6 | 62.0 | 65.9 | 85.9 | 74.2 | 77.9 | 70.0 | 72.5 | 106.0 | 99.1 | 77.4 | 51.1 | 29.6 | 34.0 | 33.1 | 35.6 | 44.6 | 47.8 | 43.3 | 38.5 | 37.9 | 58.8 | 106.0 |
| 21 | 38.6 | 33.2 | 29.1 | 27.3 | 25.2 | 27.0 | 40.1 | 47.6 | 46.3 | 102.8 | 68.3 | 29.7 | 13.6 | 12.1 | 11.1 | 15.0 | 14.0 | 15.6 | 15.9 | 19.0 | 55.4 | 75.9 | 81.3 | 104.4 | 39.5 | 104.4 |
| 22 | 121.3 | 132.1 | 132.5 | 131.6 | 129.4 | 126.5 | 114.2 | 111.9 | 89.6 | 29.1 | 27.0 | 30.5 | 38.4 | 47.8 | 42.9 | 42.7 | 47.1 | 45.5 | 47.0 | 51.7 | 53.4 | 56.5 | 70.1 | 87.3 | 75.3 | 132.5 |
| 23 | 86.6 | 83.6 | 79.3 | 72.9 | 77.6 | 94.9 | 133.7 | 133.2 | 111.3 | 72.8 | 38.6 | 24.9 | 22.6 | 21.7 | 22.5 | 19.5 | 20.7 | 26.0 | 30.7 | 40.9 | 48.2 | 50.7 | 52.6 | 50.6 | 59.0 | 133.7 |
| 24 | 48.4 | 51.7 | 55.9 | 58.5 | 60.8 | 62.3 | 65.5 | 72.6 | 73.5 | 67.0 | 49.9 | 37.4 | 37.5 | 37.2 | 41.1 | 40.3 | 37.1 | 36.3 | 35.1 | 38.0 | 42.0 | 69.5 | 67.5 | 70.3 | 52.3 | 73.5 |
| 25 | 72.5 | 73.1 | 78.2 | 83.3 | 78.3 | 73.3 | 76.3 | 83.7 | 72.0 | 69.7 | 52.3 | 42.0 | 33.5 | 28.2 | 27.0 | 27.3 | 28.3 | 32.7 | 37.3 | 42.8 | 42.0 | 47.9 | 49.4 | 50.9 | 54.3 | 83.7 |
| 26 | 28.7 | 19.6 | 19.3 | 17.7 | 15.8 | 15.2 | 19.4 | 19.5 | 22.4 | 33.2 | 29.6 | 26.9 | 32.2 | 28.4 | 32.9 | 37.0 | 37.2 | 35.5 | 35.4 | 40.6 | 45.3 | 49.1 | 46.4 | 43.6 | 30.5 | 49.1 |
| 27 | 43.9 | 47.5 | 50.2 | 51.6 | 74.5 | 88.8 | 96.2 | 82.9 | 60.9 | 53.4 | 44.9 | 39.5 | 38.2 | 37.1 | 32.0 | 30.5 | 31.5 | 31.4 | 34.8 | 36.7 | 37.8 | 40.2 | 31.4 | 29.0 | 47.7 | 96.2 |
| 28 | 26.0 | 24.1 | 24.0 | 25.9 | 28.4 | 30.8 | 38.3 | 57.1 | 72.9 | 73.4 | 55.3 | 42.3 | 45.0 | 43.9 | 39.9 | 37.6 | 39.0 | 45.8 | 47.6 | 48.0 | 53.8 | 57.3 | 60.2 | 69.7 | 45.3 | 73.4 |
| 29 | 72.1 | 72.1 | 83.9 | 90.6 | 94.7 | 96.4 | 107.3 | 124.0 | 152.2 | 129.2 | 94.4 | 77.3 | 73.8 | 76.2 | 78.1 | 82.3 | 76.3 | 75.1 | 74.5 | 75.6 | 77.2 | 85.7 | 81.9 | 79.3 | 88.7 | 152.2 |
| 30 | 76.2 | 77.8 | 90.1 | 89.1 | 78.8 | 81.5 | 96.4 | 113.6 | 130.4 | 110.2 | 87.2 | 74.7 | 63.4 | 45.4 | 40.3 | 38.3 | 35.5 | 39.2 | 39.6 | 37.6 | 39.7 | 43.4 | 46.3 | 48.0 | 67.6 | 130.4 |
| 31 | 50.2 | 50.8 | 52.9 | 57.6 | 55.7 | 53.9 | 54.4 | 58.5 | 63.8 | 62.9 | 56.3 | 48.2 | 46.0 | 41.5 | 40.9 | 38.5 | 39.7 | 36.7 | 33.0 | 38.3 | 39.4 | 39.9 | 42.6 | 47.2 | 47.9 | 63.8 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 744 | 100% |
| MEAN | 42.7 | 43.4 | 44.2 | 45.2 | 45.7 | 46.4 | 52.2 | 56.2 | 55.4 | 49.3 | 39.6 | 34.7 | 32.3 | 30.8 | 28.8 | 28.2 | 29.5 | 30.8 | 31.5 | 34.0 | 37.2 | 40.7 | 41.2 | 43.1 | | |
| MAX | 121.3 | 132.1 | 132.5 | 131.6 | 133.2 | 151.3 | 171.5 | 167.9 | 152.2 | 129.2 | 114.2 | 106.0 | 99.1 | 78.6 | 78.1 | 82.3 | 101.7 | 127.0 | 128.6 | 126.9 | 127.6 | 131.9 | 129.5 | 123.1 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 171.5 UG/M3 | | |
| Maximum 24-HR Average | 100.3 UG/M3 | | |
| IZS Calibration Time | | OpperatioEl Time | 744 HRS |
| Down Time | 0 | OpperatioEl Uptime | 100.0 % |
| Standard Deviation | 31.8 | Monthly Average | 40.1 UG/M3 |

# West TSP (µg/m$^3$) – July 2021

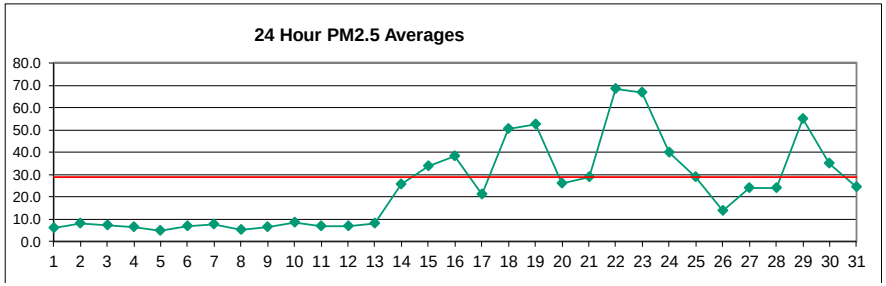
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.7 | 11.5 | 9.9 | 9.3 | 9.7 | 9.6 | 9.6 | 10.9 | 11.2 | 10.3 | 8.5 | 7.7 | 5.8 | 3.8 | 5.7 | 7.5 | 9.2 | 8.6 | 8.1 | 7.4 | 6.6 | 6.2 | 5.7 | 6.2 | 8.2 | 11.5 |
| 2 | 6.5 | 6.4 | 6.9 | 6.7 | 7.0 | 7.9 | 9.9 | 10.8 | 11.7 | 11.5 | 8.8 | 10.4 | 11.1 | 12.1 | 12.1 | 12.8 | 8.5 | 4.7 | 5.5 | 5.3 | 7.8 | 11.2 | 6.3 | 5.5 | 8.6 | 12.8 |
| 3 | 5.6 | 5.6 | 5.7 | 6.2 | 6.9 | 7.4 | 7.9 | 11.0 | 15.5 | 11.2 | 13.6 | 12.7 | 12.6 | 13.2 | 11.2 | 14.2 | 19.3 | 17.1 | 12.1 | 10.1 | 9.3 | 12.8 | 14.1 | 16.7 | 11.3 | 19.3 |
| 4 | 17.4 | 22.3 | 16.6 | 14.6 | 14.1 | 11.9 | 12.4 | 9.8 | 11.8 | 11.4 | 11.7 | 9.5 | 5.4 | 7.6 | 8.8 | 7.9 | 5.9 | 9.9 | 8.5 | 9.2 | 5.4 | 3.5 | 4.6 | 5.7 | 10.2 | 22.3 |
| 5 | 5.9 | 5.8 | 6.1 | 6.3 | 8.9 | 11.5 | 22.4 | 27.2 | 25.4 | 60.4 | 58.2 | 42.8 | 47.7 | 41.1 | 11.6 | 8.1 | 9.8 | 7.0 | 9.5 | 8.1 | 8.4 | 14.5 | 7.0 | 6.8 | 19.2 | 60.4 |
| 6 | 8.1 | 8.4 | 7.6 | 8.7 | 9.8 | 9.4 | 9.6 | 23.6 | 35.4 | 47.4 | 37.4 | 50.4 | 53.0 | 57.6 | 77.7 | 61.6 | 33.0 | 10.0 | 12.0 | 12.3 | 10.8 | 11.7 | 9.4 | 9.4 | 25.6 | 77.7 |
| 7 | 9.4 | 10.4 | 10.5 | 11.5 | 10.6 | 11.1 | 11.6 | 48.9 | 100.8 | 54.1 | 68.1 | 87.8 | 111.8 | 19.7 | 14.1 | 12.2 | 8.8 | 11.0 | 10.6 | 10.1 | 11.6 | 11.9 | 10.6 | 7.8 | 28.1 | 111.8 |
| 8 | 8.3 | 7.7 | 7.9 | 7.3 | 7.3 | 7.2 | 10.4 | 15.3 | 36.2 | 31.0 | 39.0 | 40.3 | 30.0 | 80.9 | 86.9 | 11.3 | 6.5 | 7.2 | 6.4 | 7.3 | 8.1 | 8.3 | 8.9 | 9.4 | 20.4 | 86.9 |
| 9 | 9.8 | 10.6 | 11.0 | 10.2 | 10.0 | 10.7 | 12.4 | 17.4 | 45.0 | 40.8 | 16.6 | 13.2 | 11.6 | 7.4 | 8.7 | 7.9 | 8.5 | 6.3 | 5.8 | 6.0 | 7.1 | 8.1 | 8.7 | 9.3 | 12.6 | 45.0 |
| 10 | 10.2 | 11.3 | 11.6 | 11.2 | 10.2 | 10.4 | 10.3 | 13.2 | 10.8 | 9.1 | 6.2 | 5.5 | 4.4 | 4.9 | 4.7 | 4.9 | 4.0 | 3.7 | 3.2 | 3.4 | 3.8 | 4.4 | 7.4 | 15.2 | 7.7 | 15.2 |
| 11 | 16.4 | 16.2 | 12.9 | 12.2 | 9.4 | 8.6 | 10.7 | 10.0 | 17.2 | 14.7 | 11.3 | 9.9 | 11.8 | 10.2 | 9.8 | 9.1 | 10.6 | 11.3 | 6.8 | 6.7 | 6.7 | 6.3 | 6.7 | 6.9 | 10.5 | 17.2 |
| 12 | 8.6 | 11.2 | 13.1 | 12.6 | 11.5 | 11.0 | 18.7 | 20.2 | 28.0 | 93.4 | 70.1 | 20.0 | 8.7 | 8.7 | 9.6 | 9.5 | 6.4 | 5.5 | 6.0 | 7.5 | 8.5 | 7.4 | 7.0 | 8.5 | 17.2 | 93.4 |
| 13 | 9.3 | 15.1 | 11.4 | 13.9 | 14.0 | 12.8 | 14.4 | 19.9 | 16.3 | 12.9 | 11.7 | 12.6 | 11.8 | 11.0 | 11.5 | 11.8 | 9.6 | 13.6 | 15.7 | 14.1 | 15.0 | 14.9 | 14.0 | 15.0 | 13.4 | 19.9 |
| 14 | 13.4 | 11.8 | 13.3 | 16.5 | 16.0 | 16.7 | 20.1 | 27.9 | 33.6 | 26.0 | 26.3 | 31.5 | 40.9 | 34.8 | 25.2 | 24.7 | 26.7 | 28.0 | 28.7 | 30.1 | 32.2 | 34.0 | 36.9 | 36.6 | 26.3 | 40.9 |
| 15 | 37.3 | 36.1 | 36.3 | 35.1 | 35.7 | 34.4 | 44.3 | 61.3 | 67.7 | 44.3 | 34.7 | 30.3 | 27.1 | 30.8 | 23.1 | 21.8 | 40.7 | 41.9 | 44.2 | 59.5 | 57.7 | 50.7 | 56.5 | 61.3 | 42.2 | 67.7 |
| 16 | 72.2 | 70.1 | 70.0 | 64.8 | 58.5 | 52.5 | 80.4 | 119.8 | 94.9 | 50.5 | 34.2 | 30.4 | 31.0 | 36.7 | 39.2 | 30.8 | 32.4 | 35.0 | 32.4 | 33.4 | 35.0 | 37.2 | 38.0 | 38.3 | 50.7 | 119.8 |
| 17 | 39.1 | 40.7 | 44.3 | 44.1 | 40.5 | 39.4 | 39.9 | 43.9 | 42.8 | 34.8 | 29.2 | 19.5 | 14.4 | 18.9 | 20.9 | 19.9 | 19.6 | 21.1 | 23.1 | 27.6 | 32.4 | 40.3 | 41.2 | 43.6 | 32.6 | 44.3 |
| 18 | 52.6 | 52.1 | 42.9 | 50.0 | 54.4 | 42.5 | 40.1 | 43.7 | 45.9 | 45.5 | 39.7 | 37.2 | 35.0 | 36.9 | 39.6 | 55.6 | 69.5 | 87.6 | 86.2 | 83.4 | 86.1 | 86.5 | 84.1 | 80.2 | 57.4 | 87.6 |
| 19 | 76.4 | 75.0 | 75.1 | 83.9 | 87.2 | 100.1 | 117.9 | 115.9 | 98.8 | 109.9 | 131.7 | 124.0 | 61.8 | 66.0 | 53.9 | 50.8 | 50.8 | 48.4 | 48.4 | 48.5 | 46.5 | 45.3 | 45.0 | 37.4 | 74.9 | 131.7 |
| 20 | 33.8 | 33.8 | 38.8 | 40.9 | 40.2 | 43.2 | 59.8 | 80.1 | 88.1 | 81.4 | 76.9 | 186.5 | 213.7 | 151.7 | 82.9 | 29.4 | 29.9 | 28.0 | 28.0 | 35.6 | 34.6 | 31.7 | 27.6 | 25.6 | 63.4 | 213.7 |
| 21 | 25.4 | 22.2 | 19.1 | 17.7 | 16.3 | 17.5 | 27.9 | 61.6 | 71.0 | 238.7 | 166.6 | 55.7 | 13.5 | 10.4 | 9.2 | 12.0 | 10.3 | 11.9 | 13.5 | 15.3 | 42.4 | 54.4 | 54.0 | 69.8 | 44.0 | 238.7 |
| 22 | 80.9 | 87.2 | 86.4 | 86.9 | 84.1 | 84.3 | 77.9 | 88.6 | 77.6 | 27.0 | 23.1 | 25.4 | 33.0 | 38.1 | 32.8 | 30.7 | 34.0 | 31.6 | 31.7 | 34.9 | 36.6 | 39.3 | 48.4 | 62.0 | 53.4 | 88.6 |
| 23 | 61.6 | 58.6 | 53.6 | 50.3 | 54.4 | 65.8 | 102.5 | 100.2 | 84.5 | 52.8 | 28.6 | 19.0 | 17.1 | 15.9 | 17.4 | 14.8 | 15.1 | 18.1 | 20.9 | 27.3 | 31.8 | 33.5 | 34.5 | 33.0 | 42.1 | 102.5 |
| 24 | 31.6 | 33.5 | 36.4 | 38.0 | 39.6 | 40.5 | 45.3 | 49.8 | 50.0 | 45.2 | 35.4 | 26.0 | 26.6 | 26.1 | 28.8 | 28.0 | 25.0 | 24.6 | 23.4 | 24.9 | 27.5 | 49.7 | 45.2 | 46.9 | 35.3 | 50.0 |
| 25 | 47.8 | 48.4 | 51.7 | 55.6 | 51.6 | 48.2 | 51.9 | 59.1 | 51.2 | 51.3 | 36.9 | 29.6 | 23.8 | 20.3 | 19.6 | 19.9 | 21.1 | 24.4 | 28.0 | 34.6 | 28.0 | 31.8 | 32.5 | 41.4 | 37.9 | 59.1 |
| 26 | 21.3 | 13.4 | 13.1 | 12.2 | 10.7 | 10.4 | 15.9 | 21.5 | 22.9 | 27.4 | 24.9 | 23.9 | 31.0 | 30.4 | 29.9 | 30.6 | 29.6 | 27.5 | 29.3 | 31.4 | 33.0 | 33.9 | 32.1 | 29.6 | 24.4 | 33.9 |
| 27 | 29.4 | 31.6 | 32.9 | 33.7 | 49.0 | 58.7 | 65.4 | 63.3 | 47.5 | 43.2 | 37.0 | 33.6 | 33.4 | 30.9 | 28.9 | 26.8 | 26.1 | 27.0 | 30.4 | 33.5 | 28.5 | 34.3 | 26.3 | 21.5 | 36.4 | 65.4 |
| 28 | 18.3 | 16.7 | 16.0 | 17.2 | 18.8 | 20.3 | 26.1 | 46.0 | 65.0 | 59.7 | 43.0 | 40.6 | 41.4 | 37.3 | 32.7 | 31.2 | 29.2 | 33.9 | 34.5 | 32.4 | 35.9 | 38.3 | 40.0 | 46.7 | 34.2 | 65.0 |
| 29 | 48.2 | 47.9 | 56.1 | 60.5 | 62.2 | 64.0 | 74.1 | 92.3 | 138.0 | 111.7 | 75.6 | 58.8 | 56.2 | 60.0 | 63.4 | 65.9 | 58.3 | 55.3 | 53.3 | 54.2 | 57.2 | 64.9 | 54.6 | 52.8 | 66.1 | 138.0 |
| 30 | 50.7 | 51.5 | 62.0 | 59.1 | 51.4 | 53.4 | 66.6 | 87.5 | 112.3 | 94.8 | 71.6 | 60.6 | 57.4 | 39.2 | 37.3 | 31.7 | 27.9 | 28.2 | 30.7 | 26.7 | 26.8 | 29.3 | 31.1 | 32.4 | 50.8 | 112.3 |
| 31 | 33.6 | 34.1 | 35.2 | 38.5 | 36.4 | 35.3 | 35.7 | 39.2 | 43.8 | 43.4 | 39.4 | 34.1 | 34.7 | 32.4 | 33.0 | 31.3 | 30.3 | 28.2 | 31.4 | 28.3 | 26.5 | 26.8 | 28.6 | 31.7 | 33.8 | 43.8 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 744 | 100% |
| MEAN | 28.9 | 29.3 | 29.5 | 30.2 | 30.2 | 30.9 | 37.2 | 46.4 | 51.6 | 51.5 | 42.5 | 38.4 | 36.0 | 32.1 | 28.7 | 23.7 | 23.1 | 23.1 | 23.5 | 24.8 | 26.1 | 28.5 | 28.0 | 29.5 | | |
| MAX | 80.9 | 87.2 | 86.4 | 86.9 | 87.2 | 100.1 | 117.9 | 119.8 | 138.0 | 238.7 | 166.6 | 186.5 | 213.7 | 151.7 | 86.9 | 65.9 | 69.5 | 87.6 | 86.2 | 83.4 | 86.1 | 86.5 | 84.1 | 80.2 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 0 Proposed Guideline | | |
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 238.7 UG/M3 | | |
| Maximum 24-HR Average | 74.9 UG/M3 | | |
| IZS Calibration Time | | Opperational Time | 744 HRS |
| Down Time | 0 | Opperational Uptime | 100.0 % |
| Standard Deviation | 27.68 | Monthly Average | 32.2 UG/M3 |

# Berm $PM_{2.5}$ (µg/m$^3$) – July 2021

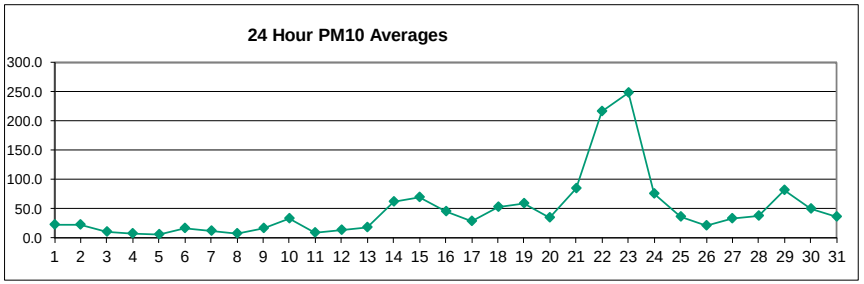
| DAY \ HOUR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.4 | 2.7 | 3.1 | 4.2 | 5.5 | 6.6 | 6.6 | 8.2 | 8.0 | 6.8 | 5.8 | 13.0 | 6.0 | 2.6 | 3.4 | 3.7 | 4.3 | 5.5 | 24.0 | 7.2 | 6.4 | 5.8 | 4.2 | 5.1 | 6.3 | 24.0 |
| 2 | 5.0 | 5.7 | 7.3 | 6.8 | 6.7 | 7.4 | 7.5 | 9.6 | 13.8 | 12.0 | 9.5 | 7.5 | 6.4 | 7.2 | 8.4 | 8.3 | 14.7 | 3.8 | 10.8 | 4.6 | 5.9 | 12.3 | 5.1 | 5.0 | 8.0 | 14.7 |
| 3 | 4.9 | 4.9 | 5.3 | 5.7 | 6.4 | 7.0 | 7.5 | 8.8 | 8.0 | 7.8 | 7.7 | 7.4 | 7.7 | 7.7 | 7.3 | 8.7 | 10.7 | 8.9 | 6.7 | 6.1 | 6.4 | 7.9 | 9.2 | 9.9 | 7.4 | 10.7 |
| 4 | 10.0 | 10.7 | 9.5 | 9.0 | 8.9 | 9.3 | 8.2 | 6.2 | 6.4 | 6.4 | 7.5 | 6.6 | 3.1 | 5.7 | 5.2 | 3.3 | 3.7 | 6.9 | 7.4 | 5.9 | 2.5 | 2.3 | 3.0 | 4.4 | 6.3 | 10.7 |
| 5 | 4.1 | 4.2 | 4.4 | 4.8 | 5.7 | 6.4 | 6.8 | 7.6 | 8.2 | 8.9 | 8.1 | 4.9 | 3.5 | 2.8 | 3.3 | 2.7 | 3.5 | 3.3 | 3.2 | 2.5 | 3.1 | 3.6 | 5.7 | 5.5 | 4.9 | 8.9 |
| 6 | 5.4 | 5.4 | 5.6 | 6.5 | 7.7 | 7.4 | 7.4 | 8.4 | 8.1 | 10.0 | 12.1 | 12.2 | 8.6 | 8.1 | 6.9 | 5.4 | 5.3 | 5.4 | 5.3 | 6.2 | 5.9 | 5.1 | 5.1 | 5.3 | 7.0 | 12.2 |
| 7 | 6.2 | 6.9 | 7.5 | 7.4 | 7.7 | 7.9 | 8.4 | 9.8 | 9.0 | 9.1 | 8.9 | 6.1 | 7.4 | 6.8 | 6.9 | 6.2 | 5.3 | 6.0 | 8.1 | 7.7 | 8.3 | 8.9 | 8.1 | 6.4 | 7.5 | 9.8 |
| 8 | 6.8 | 6.0 | 6.5 | 5.4 | 5.3 | 5.3 | 5.7 | 6.3 | 6.7 | 6.6 | 6.3 | 6.4 | 4.8 | 4.9 | 4.2 | 5.0 | 4.5 | 3.4 | 3.4 | 3.7 | 4.2 | 5.4 | 5.4 | 5.4 | 5.3 | 6.8 |
| 9 | 5.5 | 16.2 | 6.6 | 6.8 | 7.1 | 7.2 | 7.5 | 8.3 | 7.6 | 7.6 | 9.0 | 8.9 | 6.4 | 4.3 | 5.0 | 5.3 | 4.7 | 3.8 | 3.4 | 3.8 | 4.8 | 5.4 | 6.0 | 6.2 | 6.6 | 16.2 |
| 10 | 6.6 | 7.1 | 7.4 | 7.6 | 7.4 | 7.4 | 8.3 | 9.1 | 8.2 | 6.6 | 7.3 | 5.3 | 10.1 | 14.4 | 15.5 | 9.1 | 13.3 | 23.8 | 7.4 | 4.3 | 4.8 | 2.9 | 5.8 | 8.4 | 8.7 | 23.8 |
| 11 | 9.7 | 11.0 | 9.8 | 9.4 | 8.4 | 7.7 | 7.1 | 7.2 | 7.6 | 7.5 | 6.2 | 5.5 | 6.0 | 5.4 | 5.6 | 5.5 | 5.5 | 5.3 | 5.0 | 5.0 | 5.2 | 5.7 | 5.5 | 5.6 | 6.8 | 11.0 |
| 12 | 5.7 | 5.4 | 5.3 | 18.7 | 5.9 | 9.1 | 10.3 | 13.4 | 17.8 | 11.3 | 4.7 | 4.6 | 4.4 | 4.5 | 4.3 | 4.0 | 3.7 | 3.6 | 3.9 | 4.7 | 5.3 | 5.6 | 5.8 | 5.6 | 7.0 | 18.7 |
| 13 | 5.8 | 6.4 | 5.5 | 6.2 | 7.5 | 8.6 | 10.7 | 13.9 | 10.8 | 17.3 | 6.9 | 5.6 | 6.3 | 5.8 | 5.9 | 6.5 | 7.3 | 7.5 | 6.9 | 9.1 | 9.2 | 8.6 | 9.1 | 9.3 | 8.2 | 17.3 |
| 14 | 9.2 | 9.0 | 9.2 | 10.7 | 12.1 | 13.1 | 14.1 | 15.9 | 17.2 | 17.1 | 17.5 | 23.5 | 46.5 | 56.7 | 36.1 | 35.7 | 34.3 | 39.6 | 36.3 | 29.2 | 31.0 | 33.9 | 34.6 | 33.9 | 25.7 | 56.7 |
| 15 | 33.2 | 33.7 | 33.8 | 35.6 | 37.4 | 35.2 | 43.6 | 41.6 | 39.8 | 34.7 | 37.3 | 30.7 | 37.9 | 36.9 | 23.8 | 23.0 | 22.9 | 25.1 | 27.2 | 32.0 | 36.0 | 35.3 | 36.0 | 42.4 | 34.0 | 43.6 |
| 16 | 56.5 | 59.6 | 58.0 | 55.0 | 52.9 | 51.6 | 58.3 | 55.0 | 50.2 | 38.8 | 27.4 | 20.8 | 26.1 | 30.9 | 26.2 | 25.0 | 23.2 | 23.3 | 24.7 | 27.5 | 30.2 | 33.5 | 33.6 | 34.7 | 38.5 | 59.6 |
| 17 | 33.4 | 34.9 | 37.5 | 33.4 | 27.1 | 26.5 | 19.6 | 15.0 | 18.6 | 20.4 | 15.6 | 13.0 | 11.4 | 13.1 | 13.0 | 11.9 | 11.5 | 12.1 | 12.2 | 15.3 | 22.0 | 26.1 | 29.4 | 35.7 | 21.2 | 37.5 |
| 18 | 38.8 | 40.7 | 37.4 | 38.0 | 41.6 | 36.7 | 38.0 | 44.4 | 42.6 | 45.9 | 43.5 | 37.8 | 30.8 | 30.6 | 33.1 | 48.0 | 63.1 | 73.1 | 73.9 | 73.6 | 76.0 | 77.7 | 75.1 | 71.7 | 50.5 | 77.7 |
| 19 | 70.3 | 65.8 | 65.8 | 68.8 | 72.9 | 79.0 | 81.7 | 80.4 | 74.9 | 65.1 | 55.4 | 49.1 | 40.6 | 36.8 | 35.7 | 38.3 | 38.0 | 39.2 | 37.7 | 37.3 | 36.9 | 38.0 | 28.9 | 23.7 | 52.5 | 81.7 |
| 20 | 23.7 | 24.1 | 27.0 | 44.6 | 32.9 | 33.8 | 35.2 | 34.4 | 35.5 | 38.9 | 36.5 | 29.7 | 26.1 | 21.4 | 19.1 | 17.7 | 16.6 | 15.2 | 16.2 | 19.2 | 20.4 | 18.5 | 17.8 | 18.9 | 26.0 | 44.6 |
| 21 | 51.2 | 17.2 | 14.9 | 15.4 | 14.1 | 12.2 | 12.9 | 15.9 | 16.3 | 16.2 | 12.1 | 29.4 | 38.2 | 29.3 | 28.7 | 23.1 | 27.0 | 28.1 | 20.8 | 23.8 | 52.2 | 57.9 | 59.9 | 73.3 | 28.8 | 73.3 |
| 22 | 85.8 | 91.3 | 91.8 | 84.3 | 77.6 | 64.0 | 56.8 | 50.8 | 39.2 | 39.1 | 55.2 | 40.6 | 68.8 | 49.2 | 52.9 | 57.0 | 44.4 | 49.0 | 65.1 | 49.8 | 60.6 | 108.3 | 161.2 | 95.3 | 68.3 | 161.2 |
| 23 | 91.7 | 89.7 | 63.2 | 52.6 | 69.8 | 86.6 | 95.1 | 103.7 | 108.4 | 85.3 | 70.2 | 76.7 | 58.7 | 54.5 | 56.4 | 46.1 | 52.7 | 53.5 | 59.6 | 52.9 | 37.1 | 42.7 | 46.9 | 43.8 | 66.6 | 108.4 |
| 24 | 35.5 | 34.0 | 35.8 | 37.8 | 40.1 | 42.2 | 42.9 | 45.2 | 49.1 | 45.7 | 41.7 | 30.7 | 34.7 | 76.4 | 37.0 | 42.3 | 31.9 | 37.8 | 44.7 | 25.8 | 30.6 | 34.4 | 39.6 | 40.6 | 39.9 | 76.4 |
| 25 | 41.8 | 41.6 | 42.1 | 42.0 | 41.7 | 42.3 | 40.8 | 42.0 | 39.0 | 37.6 | 31.2 | 22.9 | 18.1 | 16.3 | 15.8 | 15.4 | 15.0 | 15.9 | 17.3 | 17.5 | 20.5 | 24.0 | 25.6 | 23.6 | 28.7 | 42.3 |
| 26 | 12.7 | 10.2 | 9.7 | 9.2 | 7.7 | 7.5 | 7.6 | 8.8 | 9.5 | 10.2 | 11.6 | 13.7 | 14.7 | 14.8 | 15.6 | 17.9 | 16.8 | 18.2 | 16.0 | 17.0 | 19.0 | 20.8 | 21.0 | 20.0 | 13.8 | 21.0 |
| 27 | 19.8 | 23.3 | 29.5 | 35.5 | 51.1 | 57.9 | 47.2 | 30.0 | 27.0 | 23.3 | 20.4 | 18.0 | 17.9 | 17.4 | 14.6 | 16.5 | 14.9 | 15.5 | 16.5 | 16.9 | 18.0 | 16.8 | 12.5 | 11.2 | 23.8 | 57.9 |
| 28 | 10.2 | 9.5 | 14.0 | 15.8 | 17.1 | 19.9 | 23.0 | 27.0 | 38.3 | 37.7 | 28.7 | 18.6 | 20.3 | 19.4 | 17.6 | 17.8 | 21.8 | 25.0 | 25.0 | 23.8 | 40.8 | 31.3 | 33.1 | 37.4 | 23.9 | 40.8 |
| 29 | 41.0 | 46.8 | 62.2 | 69.3 | 72.0 | 73.8 | 77.7 | 77.9 | 77.7 | 75.8 | 63.0 | 50.1 | 45.1 | 46.6 | 45.1 | 47.3 | 45.6 | 45.6 | 45.4 | 42.3 | 37.4 | 40.7 | 43.1 | 44.3 | 54.8 | 77.9 |
| 30 | 44.1 | 45.1 | 44.8 | 44.3 | 45.3 | 48.0 | 56.8 | 59.3 | 62.6 | 57.9 | 44.0 | 40.3 | 31.1 | 21.8 | 19.3 | 17.8 | 17.8 | 19.7 | 17.7 | 17.1 | 18.1 | 20.7 | 21.9 | 24.0 | 35.0 | 62.6 |
| 31 | 26.8 | 24.6 | 23.8 | 25.2 | 27.9 | 28.9 | 32.5 | 35.2 | 38.7 | 35.2 | 30.1 | 25.3 | 24.1 | 21.1 | 20.8 | 19.0 | 18.2 | 16.8 | 16.4 | 18.2 | 18.4 | 19.5 | 20.3 | 21.0 | 24.5 | 38.7 |
| 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% |
| MEAN | 25.9 | 25.6 | 25.3 | 26.3 | 26.8 | 27.6 | 28.6 | 29.0 | 29.2 | 27.2 | 23.9 | 21.4 | 21.7 | 21.7 | 19.1 | 19.1 | 19.4 | 20.7 | 21.5 | 19.7 | 21.9 | 24.5 | 26.4 | 25.1 | | |
| MAX | 91.7 | 91.3 | 91.8 | 84.3 | 77.6 | 86.6 | 95.1 | 103.7 | 108.4 | 85.3 | 70.2 | 76.7 | 68.8 | 76.4 | 56.4 | 57.0 | 63.1 | 73.1 | 73.9 | 73.6 | 76.0 | 108.3 | 161.2 | 95.3 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 9 Proposed Guideline | | |
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 161.2 UG/M3 | | |
| Maximum 24-HR Average | 68.3 UG/M3 | | |
| | | Operational Time | 744 HRS |
| Monthly Calibration | 0 | Operational Uptime | 100.0 % |
| Standard Deviation | 21.6 | Monthly Average | 24.1 UG/M3 |

# Berm $PM_{10}$ ($\mu g/m^3$) – July 2021

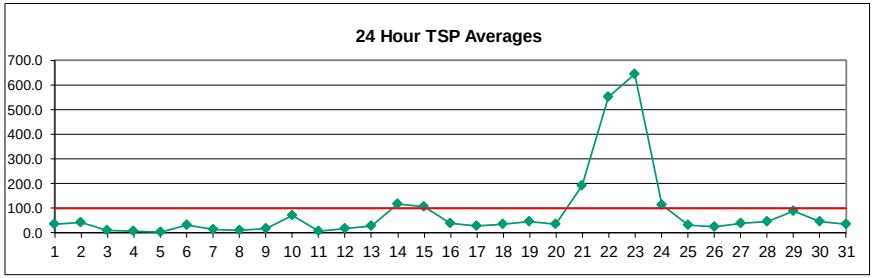
| DAY \ HOUR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.2 | 5.0 | 5.9 | 8.0 | 12.3 | 13.6 | 18.1 | 28.7 | 32.3 | 32.4 | 30.4 | 74.7 | 29.6 | 7.0 | 10.5 | 10.7 | 12.1 | 21.7 | 96.0 | 21.4 | 20.7 | 15.7 | 6.1 | 7.6 | 21.9 | 96.0 |
| 2 | 6.5 | 7.9 | 11.4 | 8.7 | 7.7 | 8.7 | 9.3 | 26.4 | 64.3 | 56.1 | 36.4 | 21.8 | 13.4 | 10.9 | 14.7 | 12.1 | 69.7 | 7.6 | 73.1 | 9.8 | 8.2 | 46.3 | 7.8 | 7.8 | 22.8 | 73.1 |
| 3 | 6.5 | 5.5 | 5.8 | 6.1 | 6.7 | 7.3 | 12.8 | 24.0 | 10.4 | 11.1 | 10.3 | 10.2 | 12.9 | 11.8 | 9.7 | 11.1 | 13.1 | 11.4 | 9.0 | 8.3 | 8.5 | 10.9 | 12.6 | 13.9 | 10.4 | 24.0 |
| 4 | 13.2 | 13.4 | 10.6 | 9.3 | 9.1 | 9.6 | 8.4 | 6.4 | 7.1 | 7.0 | 8.9 | 7.4 | 3.3 | 9.2 | 6.4 | 3.5 | 4.0 | 7.9 | 7.6 | 6.3 | 2.8 | 2.5 | 3.3 | 4.6 | 7.2 | 13.4 |
| 5 | 4.4 | 4.4 | 4.6 | 5.1 | 6.0 | 7.1 | 7.2 | 8.0 | 8.8 | 9.3 | 8.6 | 5.3 | 4.4 | 2.9 | 3.6 | 2.8 | 3.9 | 3.6 | 3.4 | 2.6 | 3.4 | 3.7 | 6.0 | 5.8 | 5.2 | 9.3 |
| 6 | 5.8 | 6.0 | 6.0 | 7.1 | 7.9 | 7.5 | 7.7 | 11.8 | 16.6 | 30.3 | 51.5 | 52.8 | 34.5 | 37.4 | 28.3 | 9.8 | 8.9 | 8.6 | 7.7 | 8.5 | 10.2 | 7.3 | 7.8 | 6.5 | 16.1 | 52.8 |
| 7 | 6.5 | 7.5 | 8.3 | 7.8 | 8.1 | 8.5 | 12.1 | 22.6 | 17.8 | 25.7 | 29.4 | 12.0 | 12.1 | 9.4 | 11.7 | 8.9 | 7.5 | 8.3 | 16.0 | 8.7 | 9.0 | 10.5 | 9.2 | 7.1 | 11.9 | 29.4 |
| 8 | 7.4 | 6.4 | 6.9 | 5.7 | 5.7 | 5.4 | 6.3 | 7.5 | 9.5 | 9.4 | 11.2 | 14.9 | 8.9 | 11.7 | 7.2 | 13.4 | 10.2 | 4.8 | 4.8 | 5.1 | 5.5 | 6.6 | 6.3 | 6.1 | 7.8 | 14.9 |
| 9 | 6.2 | 137.4 | 8.4 | 8.0 | 8.1 | 8.4 | 10.5 | 17.5 | 18.3 | 26.6 | 20.8 | 16.8 | 8.7 | 6.1 | 8.0 | 8.4 | 7.9 | 6.1 | 5.2 | 5.6 | 7.2 | 6.4 | 7.0 | 7.0 | 15.4 | 137.4 |
| 10 | 8.3 | 8.9 | 8.7 | 8.9 | 9.1 | 8.7 | 14.1 | 18.7 | 15.3 | 17.7 | 39.1 | 24.2 | 64.0 | 91.4 | 98.9 | 51.0 | 76.6 | 134.9 | 35.6 | 17.1 | 13.8 | 4.2 | 11.9 | 14.4 | 33.2 | 134.9 |
| 11 | 14.6 | 15.4 | 12.7 | 11.6 | 9.0 | 8.2 | 7.5 | 7.5 | 8.1 | 9.3 | 6.8 | 5.8 | 7.2 | 5.9 | 6.1 | 6.7 | 6.7 | 6.0 | 5.7 | 5.5 | 5.8 | 6.7 | 6.4 | 6.9 | 8.0 | 15.4 |
| 12 | 7.0 | 5.9 | 5.5 | 25.7 | 6.4 | 12.1 | 14.2 | 31.7 | 69.2 | 41.6 | 7.6 | 6.0 | 6.7 | 8.1 | 8.9 | 9.1 | 7.3 | 6.0 | 5.9 | 6.2 | 7.0 | 6.7 | 6.4 | 6.1 | 13.2 | 69.2 |
| 13 | 6.3 | 7.2 | 5.9 | 8.4 | 9.5 | 10.6 | 26.2 | 55.9 | 40.1 | 89.6 | 19.8 | 8.7 | 12.3 | 10.2 | 9.4 | 10.2 | 11.7 | 11.4 | 9.0 | 20.0 | 17.3 | 11.8 | 9.8 | 10.2 | 18.0 | 89.6 |
| 14 | 11.0 | 9.9 | 9.7 | 12.3 | 13.5 | 15.1 | 16.1 | 23.4 | 32.8 | 48.2 | 40.8 | 42.5 | 145.6 | 272.7 | 139.8 | 142.8 | 100.9 | 122.3 | 101.3 | 42.5 | 32.7 | 34.6 | 39.6 | 38.1 | 62.0 | 272.7 |
| 15 | 33.9 | 34.3 | 34.5 | 41.4 | 46.2 | 40.5 | 100.8 | 108.5 | 90.7 | 95.3 | 144.2 | 112.5 | 176.2 | 131.5 | 78.6 | 58.6 | 35.9 | 38.7 | 39.3 | 41.2 | 46.4 | 43.8 | 44.8 | 52.4 | 69.6 | 176.2 |
| 16 | 66.4 | 69.2 | 66.4 | 61.2 | 57.9 | 56.5 | 67.1 | 61.1 | 55.4 | 45.7 | 32.4 | 27.9 | 31.4 | 37.5 | 34.0 | 36.7 | 31.2 | 29.4 | 30.0 | 32.3 | 34.7 | 36.6 | 37.3 | 39.9 | 44.9 | 69.2 |
| 17 | 36.3 | 37.8 | 41.2 | 38.2 | 30.9 | 30.4 | 21.7 | 19.3 | 28.7 | 41.7 | 27.7 | 23.1 | 22.0 | 25.4 | 21.9 | 19.7 | 18.0 | 20.0 | 20.8 | 22.5 | 28.0 | 30.3 | 32.3 | 38.3 | 28.2 | 41.7 |
| 18 | 41.6 | 43.1 | 38.4 | 38.5 | 42.0 | 36.9 | 38.2 | 44.7 | 42.8 | 46.4 | 44.0 | 38.8 | 32.1 | 33.2 | 36.6 | 53.8 | 69.1 | 77.4 | 78.0 | 77.3 | 80.4 | 81.7 | 78.9 | 74.8 | 52.9 | 81.7 |
| 19 | 73.2 | 68.0 | 67.3 | 71.1 | 76.0 | 83.3 | 87.6 | 89.0 | 80.3 | 73.4 | 60.7 | 56.7 | 49.5 | 46.8 | 43.8 | 47.5 | 46.7 | 46.7 | 43.6 | 42.7 | 41.9 | 42.0 | 32.5 | 26.1 | 58.2 | 89.0 |
| 20 | 26.1 | 26.2 | 29.5 | 54.7 | 37.1 | 36.0 | 37.1 | 39.6 | 45.7 | 63.0 | 61.0 | 41.6 | 39.6 | 34.1 | 32.6 | 29.5 | 26.0 | 22.7 | 23.7 | 29.8 | 24.4 | 21.1 | 19.6 | 20.1 | 34.2 | 63.0 |
| 21 | 68.9 | 17.3 | 14.9 | 15.5 | 14.4 | 12.4 | 13.3 | 18.8 | 21.7 | 29.3 | 23.2 | 162.3 | 223.4 | 159.4 | 150.0 | 103.2 | 134.7 | 150.7 | 104.5 | 120.5 | 174.3 | 116.3 | 85.1 | 81.2 | 84.0 | 223.4 |
| 22 | 89.8 | 93.7 | 94.2 | 86.3 | 83.9 | 66.4 | 62.1 | 59.0 | 47.8 | 168.1 | 295.3 | 185.9 | 363.0 | 192.8 | 211.0 | 278.0 | 148.3 | 164.8 | 313.3 | 175.7 | 259.2 | 587.1 | 845.1 | 335.4 | 216.9 | 845.1 |
| 23 | 298.2 | 269.2 | 129.2 | 97.7 | 202.1 | 247.5 | 222.3 | 194.8 | 328.1 | 357.5 | 350.5 | 425.0 | 353.7 | 316.9 | 314.4 | 288.9 | 298.1 | 277.5 | 310.8 | 256.5 | 78.6 | 113.3 | 140.7 | 91.9 | 248.5 | 425.0 |
| 24 | 48.5 | 35.3 | 36.8 | 39.0 | 41.0 | 43.2 | 43.8 | 49.4 | 71.3 | 54.0 | 93.4 | 67.0 | 94.3 | 388.4 | 89.9 | 104.7 | 60.5 | 94.4 | 126.3 | 30.1 | 38.8 | 46.8 | 47.8 | 48.3 | 74.7 | 388.4 |
| 25 | 50.6 | 46.2 | 44.9 | 45.6 | 44.5 | 47.3 | 44.5 | 47.1 | 44.4 | 44.8 | 38.9 | 30.4 | 25.3 | 22.5 | 23.2 | 23.2 | 23.4 | 24.0 | 24.9 | 24.4 | 27.7 | 30.5 | 32.9 | 38.2 | 35.4 | 50.6 |
| 26 | 17.6 | 12.2 | 11.7 | 11.0 | 8.5 | 8.6 | 9.7 | 14.2 | 15.1 | 12.9 | 15.0 | 18.7 | 22.4 | 25.2 | 26.7 | 28.2 | 26.2 | 35.8 | 28.6 | 28.1 | 29.2 | 34.2 | 35.6 | 28.3 | 21.0 | 35.8 |
| 27 | 24.3 | 26.5 | 35.5 | 44.3 | 68.3 | 76.0 | 59.5 | 36.7 | 32.2 | 29.1 | 27.9 | 24.9 | 25.7 | 26.2 | 24.3 | 30.6 | 24.0 | 25.8 | 28.5 | 28.9 | 26.7 | 25.6 | 20.6 | 18.3 | 32.9 | 76.0 |
| 28 | 16.4 | 13.5 | 16.1 | 17.1 | 19.1 | 24.2 | 31.1 | 49.2 | 69.6 | 72.0 | 62.8 | 31.9 | 33.4 | 31.4 | 26.8 | 26.4 | 30.5 | 32.6 | 31.6 | 31.4 | 107.6 | 35.2 | 36.4 | 40.3 | 37.0 | 107.6 |
| 29 | 47.7 | 55.8 | 74.4 | 85.2 | 97.1 | 119.9 | 123.8 | 132.5 | 130.7 | 160.6 | 147.0 | 84.8 | 52.2 | 65.5 | 62.2 | 62.2 | 57.2 | 55.9 | 53.9 | 52.5 | 47.7 | 54.3 | 57.6 | 58.9 | 80.8 | 160.6 |
| 30 | 57.7 | 61.1 | 57.1 | 50.5 | 52.8 | 52.0 | 67.1 | 78.4 | 101.4 | 103.2 | 76.2 | 66.0 | 49.5 | 36.1 | 30.8 | 28.7 | 28.1 | 28.5 | 26.9 | 26.1 | 27.5 | 31.3 | 31.3 | 35.5 | 50.2 | 103.2 |
| 31 | 44.4 | 32.2 | 29.1 | 33.4 | 36.1 | 35.6 | 40.3 | 44.5 | 63.4 | 48.3 | 38.9 | 32.9 | 44.9 | 39.1 | 37.4 | 33.1 | 29.4 | 27.8 | 26.9 | 30.6 | 24.2 | 23.8 | 24.3 | 24.5 | 35.2 | 63.4 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 744 | 100% |
| MEAN | 37.1 | 38.1 | 30.0 | 31.1 | 34.7 | 37.0 | 40.0 | 44.4 | 52.3 | 60.0 | 60.0 | 55.9 | 64.6 | 68.0 | 51.9 | 50.1 | 46.1 | 48.8 | 54.6 | 39.3 | 40.3 | 49.3 | 56.2 | 38.5 | | |
| MAX | 298.2 | 269.2 | 129.2 | 97.7 | 202.1 | 247.5 | 222.3 | 194.8 | 328.1 | 357.5 | 350.5 | 425.0 | 363.0 | 388.4 | 314.4 | 288.9 | 298.1 | 277.5 | 313.3 | 256.5 | 259.2 | 587.1 | 845.1 | 335.4 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 845.1 UG/M3 | | |
| Maximum 24-HR Average | 248.5 UG/M3 | | |
| | | Operational Time | 744 HRS |
| Monthly Calibration | 0 | Operational Uptime | 100.0 % |
| Standard Deviation | 70.35 | Monthly Average | 47.0 UG/M3 |

# Berm TSP (µg/m$^3$) – July 2021

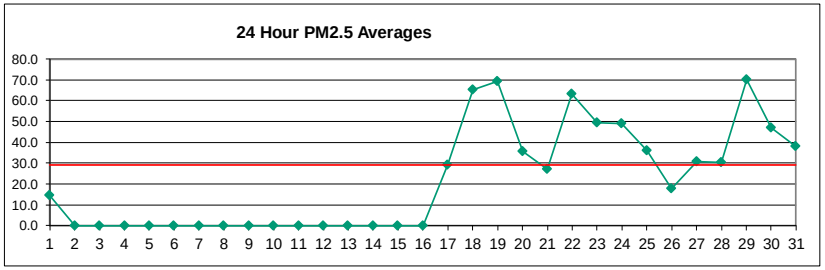
| DAY | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.4 | 5.2 | 10.9 | 8.5 | 20.6 | 15.0 | 43.0 | 62.4 | 55.1 | 55.4 | 59.2 | 124.3 | 45.4 | 8.2 | 17.9 | 18.5 | 17.1 | 52.4 | 93.0 | 23.2 | 39.9 | 31.6 | 7.7 | 13.9 | 34.8 | 124.3 |
| 2 | 10.0 | 9.9 | 12.7 | 16.1 | 12.3 | 6.7 | 15.6 | 42.7 | 133.1 | 106.3 | 50.7 | 31.0 | 21.6 | 22.1 | 24.3 | 14.1 | 207.8 | 11.4 | 194.1 | 14.5 | 6.7 | 55.9 | 7.1 | 7.9 | 43.1 | 207.8 |
| 3 | 6.2 | 4.2 | 4.7 | 4.3 | 4.3 | 4.7 | 12.7 | 25.7 | 12.0 | 14.2 | 12.4 | 12.3 | 16.6 | 15.3 | 8.7 | 14.9 | 11.3 | 14.5 | 11.7 | 14.3 | 12.6 | 10.7 | 9.5 | 11.5 | 11.2 | 25.7 |
| 4 | 15.2 | 10.1 | 8.6 | 6.1 | 5.9 | 6.3 | 5.7 | 5.4 | 6.0 | 5.2 | 6.4 | 4.9 | 2.2 | 10.3 | 4.2 | 2.3 | 2.6 | 5.5 | 4.9 | 4.1 | 1.8 | 1.6 | 2.2 | 3.0 | 5.4 | 15.2 |
| 5 | 2.8 | 2.9 | 3.0 | 3.3 | 3.9 | 4.6 | 4.7 | 5.2 | 5.8 | 6.1 | 5.6 | 3.6 | 3.3 | 1.9 | 2.4 | 1.8 | 2.5 | 2.4 | 2.2 | 1.7 | 2.3 | 2.4 | 3.9 | 3.8 | 3.4 | 6.1 |
| 6 | 3.8 | 3.9 | 3.9 | 4.7 | 5.2 | 4.9 | 5.0 | 14.5 | 36.5 | 84.3 | 141.6 | 115.7 | 64.3 | 71.6 | 61.9 | 12.6 | 10.5 | 9.8 | 13.7 | 12.9 | 29.6 | 9.9 | 8.8 | 4.5 | 30.6 | 141.6 |
| 7 | 4.3 | 4.9 | 5.4 | 5.1 | 5.4 | 5.8 | 13.4 | 35.1 | 28.9 | 37.8 | 49.4 | 17.7 | 14.4 | 9.0 | 14.2 | 9.7 | 8.5 | 8.7 | 31.2 | 6.0 | 6.7 | 7.7 | 6.1 | 4.7 | 14.2 | 49.4 |
| 8 | 4.8 | 4.1 | 4.6 | 3.7 | 3.7 | 3.5 | 4.2 | 5.2 | 9.5 | 13.1 | 20.3 | 21.3 | 9.8 | 21.2 | 10.6 | 20.5 | 21.9 | 6.5 | 5.8 | 5.8 | 6.4 | 10.7 | 4.3 | 4.3 | 9.4 | 21.9 |
| 9 | 4.9 | 182.2 | 6.1 | 7.1 | 7.0 | 6.9 | 13.0 | 31.3 | 25.5 | 42.1 | 24.3 | 22.4 | 9.5 | 5.5 | 10.1 | 9.2 | 13.0 | 10.4 | 6.2 | 5.8 | 7.8 | 4.7 | 5.3 | 5.0 | 19.4 | 182.2 |
| 10 | 7.1 | 7.9 | 8.9 | 7.3 | 8.8 | 8.3 | 22.7 | 31.9 | 20.9 | 33.1 | 87.5 | 57.3 | 159.6 | 203.9 | 273.3 | 139.6 | 214.7 | 275.6 | 75.9 | 33.7 | 22.6 | 4.7 | 21.6 | 15.9 | 72.6 | 275.6 |
| 11 | 15.6 | 16.7 | 11.0 | 9.1 | 5.8 | 5.4 | 4.9 | 5.3 | 9.0 | 11.3 | 6.2 | 3.9 | 6.1 | 5.1 | 4.6 | 8.1 | 6.2 | 7.7 | 4.0 | 3.9 | 5.8 | 6.2 | 6.3 | 6.1 | 7.3 | 16.7 |
| 12 | 6.7 | 4.0 | 3.5 | 26.1 | 4.2 | 10.5 | 11.4 | 42.3 | 100.7 | 69.2 | 13.1 | 5.9 | 9.3 | 10.9 | 18.4 | 19.7 | 13.4 | 8.4 | 6.8 | 5.9 | 9.7 | 5.5 | 4.3 | 4.2 | 17.3 | 100.7 |
| 13 | 5.4 | 5.4 | 3.8 | 5.6 | 6.8 | 7.7 | 37.6 | 148.7 | 88.8 | 167.1 | 32.7 | 10.2 | 16.9 | 15.8 | 16.2 | 19.6 | 16.5 | 15.2 | 11.3 | 31.6 | 29.8 | 10.0 | 7.8 | 8.1 | 29.9 | 167.1 |
| 14 | 8.0 | 8.8 | 6.4 | 8.4 | 9.6 | 14.9 | 19.1 | 49.9 | 56.5 | 113.7 | 77.9 | 52.9 | 268.8 | 723.9 | 334.7 | 343.5 | 201.6 | 211.2 | 170.1 | 41.4 | 22.4 | 22.9 | 30.3 | 27.8 | 117.7 | 723.9 |
| 15 | 24.0 | 22.6 | 24.8 | 30.0 | 31.6 | 29.7 | 176.1 | 202.0 | 171.8 | 194.8 | 291.9 | 206.0 | 317.1 | 249.8 | 147.6 | 104.9 | 48.1 | 47.1 | 41.7 | 39.7 | 37.5 | 49.5 | 36.0 | 44.0 | 107.0 | 317.1 |
| 16 | 52.4 | 50.3 | 48.5 | 42.3 | 42.8 | 52.9 | 50.7 | 47.8 | 47.6 | 38.9 | 29.4 | 26.4 | 35.7 | 37.9 | 31.0 | 44.9 | 35.3 | 29.4 | 31.1 | 26.0 | 28.3 | 27.0 | 26.4 | 30.4 | 38.1 | 52.9 |
| 17 | 25.2 | 26.2 | 32.1 | 33.5 | 27.1 | 23.3 | 14.6 | 23.4 | 35.8 | 41.5 | 36.0 | 28.1 | 27.0 | 43.7 | 30.9 | 25.7 | 21.9 | 27.3 | 23.1 | 28.2 | 28.0 | 24.5 | 37.9 | 25.9 | 28.8 | 43.7 |
| 18 | 28.7 | 28.9 | 25.1 | 24.8 | 27.2 | 23.9 | 24.7 | 29.0 | 27.8 | 30.1 | 28.5 | 25.7 | 26.3 | 24.2 | 28.7 | 46.3 | 53.5 | 54.4 | 56.9 | 54.0 | 55.2 | 55.1 | 53.0 | 50.1 | 36.8 | 56.9 |
| 19 | 48.6 | 44.9 | 44.0 | 47.1 | 49.8 | 54.5 | 58.8 | 60.4 | 54.4 | 55.4 | 48.7 | 48.1 | 44.3 | 44.8 | 38.2 | 46.8 | 54.8 | 38.1 | 37.2 | 49.3 | 39.4 | 45.9 | 22.6 | 17.9 | 45.6 | 60.4 |
| 20 | 17.9 | 17.8 | 19.7 | 35.9 | 24.3 | 23.7 | 24.9 | 27.3 | 34.3 | 66.2 | 79.0 | 51.0 | 48.9 | 49.3 | 49.9 | 48.7 | 32.6 | 26.2 | 28.8 | 45.0 | 28.0 | 16.2 | 13.7 | 13.3 | 34.3 | 79.0 |
| 21 | 64.5 | 11.2 | 9.6 | 10.1 | 9.3 | 8.1 | 8.8 | 13.7 | 22.2 | 40.9 | 37.6 | 426.2 | 635.6 | 348.2 | 333.2 | 210.7 | 354.5 | 435.0 | 289.4 | 320.2 | 471.4 | 270.5 | 176.0 | 77.4 | 191.0 | 635.6 |
| 22 | 73.0 | 78.7 | 78.6 | 63.2 | 63.1 | 57.4 | 56.0 | 51.1 | 45.3 | 433.3 | 788.2 | 425.7 | 1006.6 | 571.1 | 546.8 | 774.5 | 364.8 | 376.6 | 839.8 | 445.5 | 789.8 | 1747.8 | 2513.0 | 1052.4 | 551.8 | 2513.0 |
| 23 | 838.2 | 553.5 | 219.8 | 167.3 | 480.3 | 531.3 | 458.9 | 358.3 | 687.9 | 859.2 | 914.6 | 1149.3 | 1118.8 | 1010.4 | 948.6 | 957.4 | 967.4 | 743.6 | 867.6 | 745.7 | 161.1 | 281.4 | 307.6 | 119.1 | 643.6 | 1149.3 |
| 24 | 37.9 | 23.3 | 24.9 | 28.1 | 26.9 | 29.0 | 30.8 | 36.0 | 112.5 | 48.9 | 118.4 | 111.6 | 213.7 | 1022.8 | 180.0 | 160.6 | 100.0 | 132.7 | 139.4 | 22.9 | 29.6 | 42.7 | 37.9 | 35.4 | 114.4 | 1022.8 |
| 25 | 40.0 | 33.6 | 31.2 | 35.1 | 32.3 | 33.9 | 31.8 | 33.2 | 36.4 | 36.6 | 36.5 | 29.6 | 28.1 | 23.5 | 29.8 | 26.0 | 27.5 | 25.0 | 21.3 | 20.9 | 21.3 | 23.6 | 29.6 | 55.3 | 30.9 | 55.3 |
| 26 | 22.0 | 14.3 | 13.5 | 14.9 | 5.6 | 8.7 | 10.7 | 19.6 | 21.1 | 12.5 | 13.6 | 23.5 | 28.8 | 34.9 | 32.1 | 38.0 | 27.4 | 51.7 | 40.7 | 31.0 | 27.3 | 37.5 | 40.8 | 30.0 | 25.0 | 51.7 |
| 27 | 18.9 | 20.3 | 25.7 | 44.2 | 80.4 | 98.8 | 62.9 | 34.6 | 33.8 | 37.5 | 36.7 | 31.6 | 31.1 | 37.2 | 35.1 | 43.1 | 28.5 | 39.6 | 39.1 | 33.3 | 30.9 | 28.7 | 32.1 | 21.9 | 38.6 | 98.8 |
| 28 | 19.3 | 14.3 | 17.2 | 12.2 | 12.9 | 19.3 | 26.1 | 77.1 | 97.5 | 108.0 | 80.3 | 30.0 | 41.2 | 35.0 | 30.7 | 28.1 | 32.8 | 27.4 | 31.7 | 24.8 | 258.4 | 25.6 | 25.6 | 29.2 | 46.0 | 258.4 |
| 29 | 38.7 | 43.7 | 65.2 | 74.1 | 101.9 | 162.9 | 165.3 | 195.1 | 187.8 | 227.9 | 205.0 | 93.6 | 45.3 | 63.4 | 65.7 | 57.1 | 55.4 | 53.3 | 42.0 | 44.9 | 43.6 | 44.6 | 45.7 | 44.1 | 90.3 | 227.9 |
| 30 | 40.3 | 42.5 | 42.7 | 35.0 | 39.8 | 36.9 | 63.0 | 77.4 | 115.3 | 121.0 | 87.6 | 68.1 | 44.5 | 41.6 | 33.2 | 27.3 | 27.9 | 27.9 | 30.2 | 26.3 | 23.0 | 25.5 | 26.5 | 27.4 | 47.1 | 121.0 |
| 31 | 43.8 | 23.8 | 20.2 | 26.0 | 30.4 | 31.1 | 40.0 | 45.1 | 94.4 | 55.0 | 41.1 | 33.7 | 45.3 | 43.7 | 38.5 | 32.4 | 28.9 | 25.8 | 25.9 | 25.2 | 17.9 | 20.2 | 17.0 | 18.7 | 34.3 | 94.4 |
| NO. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 744 | 100% |
| MEAN | 49.5 | 42.6 | 27.0 | 27.1 | 38.4 | 42.9 | 48.9 | 59.2 | 77.9 | 102.2 | 111.6 | 106.2 | 141.5 | 155.0 | 109.7 | 106.7 | 97.1 | 90.3 | 103.8 | 70.6 | 74.0 | 95.2 | 115.0 | 58.5 | | |
| MAX | 838.2 | 553.5 | 219.8 | 167.3 | 480.3 | 531.3 | 458.9 | 358.3 | 687.9 | 859.2 | 914.6 | 1149.3 | 1118.8 | 1022.8 | 948.6 | 957.4 | 967.4 | 743.6 | 867.6 | 745.7 | 789.8 | 1747.8 | 2513.0 | 1052.4 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 6 Proposed Guideline | | |
| Number of Non-Zero Readings | 744 | | |
| Maximum 1-HR Average | 2513.0 UG/M3 | | |
| Maximum 24-HR Average | 643.6 UG/M3 | | |
| IZS Calibration Time | | Operational Time | 744 HRS |
| Monthly Calibration | 0 | Operational Uptime | 100.0 % |
| Standard Deviation | 197.2 | Monthly Average | 81.3 UG/M3 |

# Entrance $PM_{2.5}$ (µg/m$^3$) – July 2021

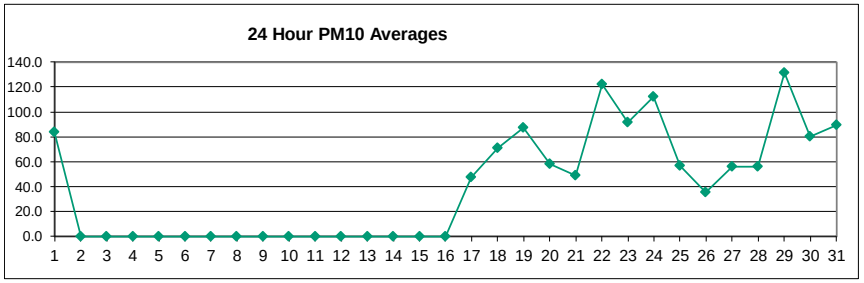
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.6 | 6.8 | 9.9 | 9.4 | 16.5 | 14.7 | 25.4 | 18.4 | 14.5 | 26.8 | 10.8 | 6.6 | 8.3 | 5.8 | 4.6 | 5.9 | 8.8 | 13.7 | 12.6 | 30.4 | 14.2 | 39.3 | 22.7 | 20.5 | 14.6 | 39.3 |
| 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 6 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 8 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 9 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 13 | X | X | X | X | X | X | X | X | X | X | X | NRM | 8.8 | 9.4 | 10.4 | 9.4 | 11.9 | 9.6 | 10.4 | 13.6 | 14.7 | 13.8 | 13.5 | 12.9 | - | - |
| 14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 15 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 43.6 | 47.8 | - | - |
| 17 | 46.3 | 47.3 | 48.2 | 43.8 | 38.3 | 38.8 | 29.2 | 25.0 | 28.7 | 27.3 | 22.9 | 17.5 | 15.3 | 17.9 | 17.2 | 15.5 | 14.3 | 14.9 | 15.6 | 21.4 | 28.3 | 34.8 | 39.8 | 47.1 | 29.0 | 48.2 |
| 18 | 51.2 | 53.1 | 51.9 | 55.3 | 54.1 | 53.2 | 55.7 | 59.6 | 60.7 | 60.0 | 56.5 | 48.4 | 37.5 | 36.7 | 39.4 | 56.9 | 76.9 | 91.2 | 92.4 | 93.8 | 96.8 | 98.9 | 96.7 | 91.7 | 65.4 | 98.9 |
| 19 | 90.3 | 86.1 | 85.8 | 90.6 | 96.9 | 107.8 | 112.1 | 111.0 | 99.3 | 85.9 | 71.9 | 63.6 | 52.4 | 47.1 | 46.3 | 50.0 | 51.1 | 50.0 | 49.1 | 49.1 | 48.4 | 49.6 | 38.9 | 32.3 | 69.4 | 112.1 |
| 20 | 32.0 | 33.1 | 37.0 | 42.1 | 47.1 | 51.6 | 53.4 | 51.9 | 49.1 | 51.1 | 48.9 | 40.2 | 37.2 | 28.8 | 28.4 | 24.9 | 24.7 | 22.5 | 22.2 | 24.9 | 27.2 | 24.6 | 25.1 | 26.9 | 35.6 | 53.4 |
| 21 | 27.7 | 25.6 | 20.9 | 21.5 | 23.6 | 20.0 | 21.3 | 26.0 | 23.6 | 22.5 | 17.5 | 15.7 | 17.6 | 11.4 | 9.2 | 11.1 | 12.9 | 11.9 | 10.0 | 13.7 | 43.3 | 63.3 | 79.0 | 104.0 | 27.2 | 104.0 |
| 22 | 118.6 | 119.4 | 117.1 | 115.0 | 109.1 | 78.1 | 76.0 | 67.1 | 53.6 | 30.8 | 23.3 | 23.3 | 31.5 | 36.9 | 37.1 | 36.9 | 60.9 | 44.9 | 42.4 | 46.5 | 47.5 | 57.3 | 69.2 | 71.4 | 63.1 | 119.4 |
| 23 | 69.9 | 66.5 | 64.3 | 57.1 | 57.9 | 66.4 | 85.1 | 108.5 | 96.2 | 65.1 | 41.2 | 28.7 | 24.0 | 25.6 | 28.0 | 23.7 | 24.6 | 21.0 | 24.9 | 34.4 | 43.7 | 45.0 | 46.6 | 43.0 | 49.6 | 108.5 |
| 24 | 45.3 | 58.0 | 59.5 | 66.8 | 68.2 | 66.2 | 70.1 | 80.5 | 82.3 | 60.1 | 36.2 | 28.4 | 32.3 | 36.6 | 32.9 | 32.9 | 34.4 | 31.2 | 33.8 | 36.9 | 40.5 | 42.1 | 49.6 | 51.8 | 49.0 | 82.3 |
| 25 | 51.0 | 52.2 | 51.0 | 59.4 | 57.9 | 53.3 | 54.8 | 51.9 | 48.5 | 43.7 | 36.4 | 26.5 | 20.7 | 18.6 | 18.0 | 19.2 | 19.5 | 18.6 | 20.8 | 21.8 | 26.0 | 32.5 | 32.5 | 27.5 | 35.9 | 59.4 |
| 26 | 15.1 | 13.0 | 12.7 | 11.8 | 10.4 | 12.1 | 13.6 | 15.4 | 15.5 | 16.2 | 16.8 | 18.1 | 19.2 | 20.0 | 20.1 | 22.2 | 20.2 | 21.0 | 20.1 | 21.6 | 22.2 | 22.6 | 25.4 | 25.3 | 17.9 | 25.4 |
| 27 | 26.7 | 30.5 | 35.3 | 46.3 | 60.0 | 68.1 | 66.6 | 42.0 | 36.3 | 32.2 | 28.1 | 24.4 | 23.1 | 33.0 | 19.3 | 18.5 | 19.1 | 18.8 | 20.9 | 22.9 | 23.7 | 19.3 | 14.5 | 12.7 | 30.9 | 68.1 |
| 28 | 12.9 | 14.1 | 15.2 | 23.2 | 24.4 | 26.7 | 31.8 | 44.9 | 49.8 | 48.2 | 37.2 | 24.8 | 26.6 | 25.7 | 21.5 | 22.9 | 26.8 | 31.5 | 31.4 | 30.6 | 34.3 | 42.4 | 40.0 | 46.1 | 30.5 | 49.8 |
| 29 | 54.5 | 70.8 | 88.1 | 94.7 | 106.7 | 109.6 | 107.4 | 95.3 | 91.8 | 80.6 | 62.5 | 56.1 | 56.3 | 56.1 | 55.5 | 57.1 | 56.7 | 54.4 | 54.9 | 51.3 | 52.1 | 55.8 | 55.9 | 61.4 | 70.2 | 109.6 |
| 30 | 57.5 | 60.8 | 61.0 | 62.8 | 66.2 | 70.0 | 80.3 | 81.7 | 80.9 | 75.3 | 56.5 | 50.0 | 37.8 | 28.8 | 25.2 | 21.0 | 22.3 | 24.7 | 23.7 | 21.4 | 22.6 | 28.8 | 33.2 | 34.1 | 46.9 | 81.7 |
| 31 | 39.1 | 37.0 | 35.6 | 38.2 | 60.7 | 56.2 | 63.2 | 61.6 | 62.5 | 60.4 | 52.5 | 39.0 | 31.0 | 26.1 | 25.4 | 22.7 | 23.9 | 21.7 | 20.9 | 25.8 | 27.2 | 25.1 | 27.8 | 34.3 | 38.2 | 63.2 |
| NO. | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 398 | 53% |
| MEAN | 46.4 | 48.4 | 49.6 | 52.4 | 56.1 | 55.8 | 59.1 | 58.8 | 55.8 | 49.1 | 38.7 | 32.0 | 28.2 | 27.3 | 25.8 | 26.5 | 29.9 | 29.5 | 29.8 | 32.9 | 36.0 | 40.9 | 41.9 | 43.9 | | |
| MAX | 118.6 | 119.4 | 117.1 | 115.0 | 109.1 | 109.6 | 112.1 | 111.0 | 99.3 | 85.9 | 71.9 | 63.6 | 56.3 | 56.1 | 55.5 | 57.1 | 76.9 | 91.2 | 92.4 | 93.8 | 96.8 | 98.9 | 96.7 | 104.0 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 12 | Proposed Guideline | |
| Number of Non-Zero Readings | 398 | | |
| Maximum 1-HR Average | 119.4 UG/M3 | | |
| Maximum 24-HR Average | 70.2 UG/M3 | | |
| | | Opperational Time | 398 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 53.5 % |
| Standard Deviation | 25.24 | Monthly Average | 41.2 UG/M3 |

# Entrance $PM_{10}$ (µg/m$^3$) – July 2021

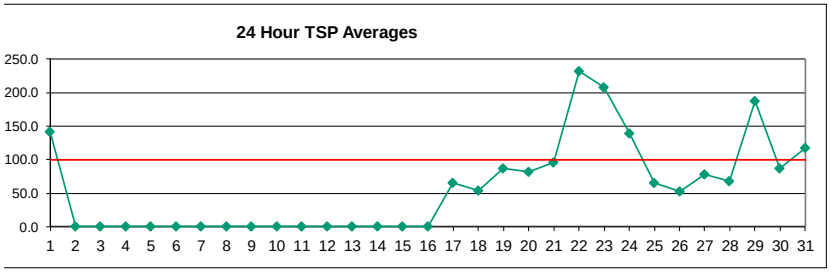
| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.4 | 25.4 | 39.9 | 31.0 | 71.6 | 63.6 | 162.3 | 110.0 | 77.4 | 221.5 | 58.6 | 35.2 | 47.2 | 38.4 | 22.7 | 25.9 | 41.4 | 86.1 | 72.4 | 189.1 | 66.9 | 271.6 | 131.1 | 114.5 | 83.8 | 271.6 |
| 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 6 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 8 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 9 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 13 | X | X | X | X | X | X | X | X | X | X | X | NRM | 25.9 | 28.0 | 38.1 | 26.5 | 41.0 | 16.8 | 22.6 | 35.4 | 40.1 | 29.9 | 21.5 | 17.5 | - | - |
| 14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 15 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 57.4 | 66.7 | - | - |
| 17 | 58.6 | 58.7 | 56.8 | 52.7 | 52.5 | 48.9 | 38.1 | 48.9 | 64.5 | 65.3 | 56.3 | 42.1 | 39.7 | 55.2 | 44.6 | 36.4 | 28.6 | 30.8 | 32.8 | 41.4 | 41.4 | 46.4 | 47.7 | 53.7 | 47.6 | 65.3 |
| 18 | 57.3 | 59.8 | 57.0 | 58.0 | 55.9 | 54.6 | 58.8 | 61.0 | 64.2 | 61.3 | 59.4 | 51.4 | 40.6 | 41.6 | 48.9 | 64.1 | 88.4 | 102.4 | 102.8 | 100.6 | 106.2 | 106.7 | 105.0 | 99.1 | 71.1 | 106.7 |
| 19 | 97.2 | 92.8 | 91.0 | 99.0 | 108.9 | 125.2 | 134.3 | 142.9 | 114.3 | 110.0 | 88.7 | 88.4 | 74.1 | 75.6 | 73.7 | 79.2 | 84.4 | 72.0 | 67.9 | 64.2 | 58.8 | 59.5 | 46.1 | 37.7 | 86.9 | 142.9 |
| 20 | 36.8 | 38.4 | 44.0 | 51.0 | 62.1 | 68.2 | 75.4 | 75.3 | 71.2 | 98.2 | 93.9 | 70.3 | 78.5 | 64.9 | 87.5 | 69.7 | 65.3 | 49.2 | 37.4 | 37.9 | 34.8 | 30.0 | 31.0 | 31.3 | 58.4 | 98.2 |
| 21 | 30.3 | 26.4 | 21.4 | 22.6 | 25.5 | 22.3 | 25.1 | 35.8 | 46.3 | 55.1 | 48.9 | 81.3 | 100.3 | 44.4 | 37.6 | 42.4 | 54.1 | 38.9 | 32.3 | 32.3 | 59.9 | 71.4 | 90.0 | 121.5 | 48.6 | 121.5 |
| 22 | 190.6 | 184.3 | 164.0 | 155.0 | 134.0 | 91.5 | 102.2 | 101.2 | 86.6 | 81.6 | 110.3 | 74.1 | 112.5 | 94.0 | 108.5 | 92.8 | 217.6 | 100.0 | 87.1 | 97.9 | 98.5 | 164.3 | 169.3 | 108.3 | 121.9 | 217.6 |
| 23 | 97.3 | 86.4 | 87.5 | 66.0 | 65.0 | 74.5 | 115.1 | 144.4 | 133.4 | 129.1 | 139.3 | 125.1 | 89.0 | 117.0 | 131.7 | 103.9 | 88.0 | 43.5 | 42.7 | 51.1 | 71.4 | 78.9 | 69.8 | 53.9 | 91.8 | 144.4 |
| 24 | 82.8 | 192.8 | 165.0 | 205.4 | 197.8 | 165.1 | 172.8 | 219.2 | 229.8 | 133.7 | 48.7 | 42.4 | 62.6 | 78.7 | 45.0 | 45.0 | 65.0 | 52.0 | 67.2 | 90.1 | 91.2 | 77.1 | 84.9 | 82.2 | 112.3 | 229.8 |
| 25 | 73.5 | 74.2 | 63.2 | 99.9 | 107.1 | 71.3 | 75.2 | 67.3 | 67.5 | 62.7 | 56.0 | 46.5 | 37.9 | 34.1 | 32.6 | 42.5 | 43.1 | 35.9 | 35.4 | 33.5 | 45.5 | 63.5 | 50.7 | 45.6 | 56.9 | 107.1 |
| 26 | 18.7 | 17.1 | 17.3 | 13.9 | 12.4 | 22.8 | 27.0 | 40.3 | 40.1 | 36.1 | 32.8 | 38.5 | 45.0 | 49.9 | 47.1 | 44.8 | 42.1 | 47.2 | 44.5 | 39.2 | 38.4 | 43.3 | 51.9 | 46.0 | 35.7 | 51.9 |
| 27 | 47.1 | 44.9 | 52.7 | 74.2 | 88.9 | 103.7 | 129.1 | 75.0 | 57.9 | 55.4 | 50.6 | 47.4 | 49.0 | 107.3 | 45.7 | 39.5 | 38.3 | 35.5 | 39.8 | 46.7 | 44.0 | 30.8 | 22.6 | 20.1 | 56.1 | 129.1 |
| 28 | 23.3 | 30.0 | 22.5 | 28.0 | 33.8 | 38.1 | 48.0 | 86.2 | 80.6 | 93.7 | 85.4 | 56.4 | 61.9 | 64.1 | 43.7 | 53.7 | 50.1 | 55.6 | 53.9 | 56.3 | 73.7 | 86.0 | 56.3 | 64.2 | 56.1 | 93.7 |
| 29 | 82.1 | 139.0 | 173.9 | 188.3 | 246.3 | 252.1 | 255.5 | 172.2 | 164.5 | 121.0 | 97.6 | 109.9 | 105.4 | 101.7 | 105.6 | 95.9 | 105.4 | 82.7 | 80.5 | 73.0 | 88.4 | 109.3 | 93.5 | 114.3 | 131.6 | 255.5 |
| 30 | 86.2 | 88.1 | 85.5 | 90.1 | 96.5 | 98.0 | 134.2 | 123.8 | 128.1 | 129.8 | 84.7 | 102.7 | 74.8 | 75.4 | 61.9 | 43.8 | 47.3 | 43.3 | 51.3 | 38.2 | 40.1 | 56.3 | 80.5 | 66.7 | 80.3 | 134.2 |
| 31 | 86.6 | 70.7 | 68.3 | 61.0 | 182.7 | 143.1 | 174.3 | 160.6 | 168.8 | 163.5 | 132.4 | 82.8 | 61.2 | 58.0 | 56.6 | 46.9 | 57.2 | 48.4 | 42.0 | 70.9 | 62.3 | 35.9 | 39.3 | 74.5 | 89.5 | 182.7 |
| NO. | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 398 | 53% |
| MEAN | 67.3 | 76.8 | 75.6 | 81.0 | 96.3 | 90.2 | 108.0 | 104.0 | 99.7 | 101.1 | 77.7 | 68.4 | 65.0 | 66.4 | 60.7 | 56.1 | 68.1 | 55.3 | 53.7 | 64.6 | 62.4 | 80.0 | 69.4 | 67.6 | | |
| MAX | 190.6 | 192.8 | 173.9 | 205.4 | 246.3 | 252.1 | 255.5 | 219.2 | 229.8 | 221.5 | 139.3 | 125.1 | 112.5 | 117.0 | 131.7 | 103.9 | 217.6 | 102.4 | 102.8 | 189.1 | 106.2 | 271.6 | 169.3 | 121.5 | | |




| | | | |
|---|---|---|---|
| Number of Non-Zero Readings | 398 | | |
| Maximum 1-HR Average | 271.6 UG/M3 | | |
| Maximum 24-HR Average | 131.6 UG/M3 | | |
| | | Opperational Time | 398 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 53.5 % |
| Standard Deviation | 45.26 | Monthly Average | 75.3 UG/M3 |

# Entrance TSP (μg/m$^3$) – July 2021

| Day | HOUR 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.2 | 35.1 | 40.6 | 46.1 | 107.8 | 132.6 | 401.5 | 208.4 | 162.1 | 516.7 | 122.7 | 59.2 | 79.2 | 61.2 | 52.7 | 47.9 | 67.3 | 154.8 | 154.9 | 194.0 | 88.1 | 331.8 | 164.1 | 171.2 | 142.1 | 516.7 |
| 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 6 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 8 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 9 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 13 | X | X | X | X | X | X | X | X | X | X | X | NRM | 77.3 | 67.3 | 109.2 | 80.7 | 130.4 | 30.0 | 43.0 | 50.6 | 64.5 | 39.7 | 20.3 | 27.1 | - | - |
| 14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 15 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | - | - |
| 16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 46.4 | 54.2 | - | - |
| 17 | 40.7 | 41.9 | 42.5 | 46.4 | 60.9 | 34.1 | 27.8 | 93.1 | 100.9 | 83.1 | 126.0 | 73.8 | 75.8 | 177.2 | 102.4 | 67.0 | 50.2 | 47.9 | 41.2 | 63.4 | 43.6 | 50.5 | 37.5 | 36.9 | 65.2 | 177.2 |
| 18 | 39.9 | 41.7 | 38.3 | 37.6 | 36.1 | 35.3 | 38.6 | 39.7 | 43.9 | 40.2 | 52.7 | 41.1 | 35.7 | 35.9 | 61.5 | 62.8 | 83.6 | 88.5 | 82.0 | 77.5 | 77.5 | 73.0 | 71.1 | 67.6 | 54.2 | 88.5 |
| 19 | 64.9 | 62.8 | 60.0 | 67.2 | 73.3 | 86.3 | 95.3 | 104.7 | 82.3 | 108.8 | 106.6 | 132.8 | 113.6 | 105.6 | 124.3 | 126.7 | 144.7 | 86.2 | 73.0 | 70.2 | 62.7 | 75.1 | 33.0 | 26.3 | 86.9 | 144.7 |
| 20 | 25.2 | 26.2 | 29.3 | 34.7 | 43.3 | 48.2 | 58.6 | 62.8 | 59.5 | 115.9 | 143.8 | 135.1 | 161.1 | 147.4 | 204.2 | 212.1 | 147.6 | 85.9 | 61.2 | 54.2 | 38.3 | 27.4 | 22.3 | 21.0 | 81.9 | 212.1 |
| 21 | 19.7 | 17.1 | 13.8 | 14.6 | 16.6 | 15.0 | 19.0 | 30.4 | 83.2 | 122.3 | 95.8 | 276.2 | 319.6 | 121.6 | 107.1 | 131.3 | 168.0 | 118.1 | 114.0 | 82.2 | 107.1 | 79.0 | 92.8 | 130.4 | 95.6 | 319.6 |
| 22 | 257.7 | 178.4 | 166.4 | 158.9 | 126.4 | 90.4 | 148.1 | 150.7 | 150.9 | 181.5 | 315.4 | 160.6 | 367.8 | 232.0 | 270.1 | 203.4 | 435.9 | 176.4 | 173.1 | 166.0 | 217.9 | 533.1 | 491.3 | 231.0 | 232.6 | 533.1 |
| 23 | 187.3 | 145.6 | 139.7 | 66.6 | 54.4 | 73.3 | 158.4 | 188.0 | 164.9 | 413.3 | 435.7 | 395.5 | 258.3 | 525.5 | 507.2 | 360.9 | 290.3 | 116.8 | 80.8 | 62.4 | 92.3 | 115.6 | 86.8 | 62.6 | 207.6 | 525.5 |
| 24 | 116.0 | 183.5 | 132.9 | 213.5 | 190.7 | 187.5 | 205.3 | 320.4 | 355.6 | 193.5 | 63.8 | 68.1 | 118.9 | 163.5 | 50.0 | 59.1 | 101.1 | 76.9 | 85.6 | 106.0 | 102.2 | 78.4 | 82.8 | 80.1 | 139.0 | 355.6 |
| 25 | 64.6 | 59.2 | 44.9 | 91.3 | 97.9 | 75.7 | 65.4 | 68.1 | 74.1 | 80.3 | 81.4 | 68.4 | 67.4 | 66.4 | 50.2 | 73.5 | 78.3 | 53.9 | 37.2 | 32.4 | 41.0 | 57.7 | 55.1 | 96.9 | 65.9 | 97.9 |
| 26 | 19.9 | 12.8 | 15.7 | 14.9 | 9.0 | 37.0 | 39.9 | 64.4 | 59.6 | 54.1 | 47.1 | 62.2 | 85.6 | 92.3 | 75.1 | 77.3 | 75.3 | 79.2 | 88.2 | 45.6 | 39.9 | 51.1 | 95.7 | 39.6 | 53.4 | 95.7 |
| 27 | 41.0 | 37.9 | 47.0 | 80.8 | 75.2 | 103.1 | 173.4 | 106.4 | 81.2 | 105.7 | 97.0 | 90.2 | 85.4 | 199.4 | 80.0 | 72.3 | 69.8 | 52.4 | 55.4 | 79.4 | 56.7 | 36.2 | 25.8 | 21.7 | 78.1 | 199.4 |
| 28 | 22.1 | 27.5 | 16.9 | 20.8 | 29.1 | 29.6 | 46.4 | 102.7 | 78.1 | 123.9 | 123.3 | 97.2 | 115.8 | 128.9 | 73.1 | 80.8 | 79.5 | 60.1 | 55.6 | 57.2 | 74.4 | 94.5 | 41.0 | 54.6 | 68.0 | 128.9 |
| 29 | 70.6 | 181.1 | 294.6 | 337.9 | 461.4 | 422.9 | 393.9 | 234.7 | 221.1 | 173.3 | 131.9 | 147.9 | 167.4 | 169.5 | 164.4 | 161.3 | 162.5 | 104.0 | 72.5 | 73.2 | 84.8 | 94.6 | 79.5 | 94.2 | 187.5 | 461.4 |
| 30 | 63.8 | 66.5 | 61.3 | 68.5 | 72.3 | 81.7 | 193.0 | 112.7 | 111.5 | 158.9 | 89.3 | 158.7 | 105.7 | 143.6 | 94.8 | 59.7 | 67.5 | 50.8 | 63.7 | 45.7 | 43.6 | 46.7 | 73.5 | 60.5 | 87.2 | 193.0 |
| 31 | 78.4 | 53.4 | 52.7 | 51.7 | 174.3 | 168.0 | 231.1 | 316.3 | 360.2 | 316.7 | 197.2 | 90.7 | 55.7 | 96.6 | 79.9 | 54.4 | 86.3 | 57.1 | 42.7 | 82.8 | 55.4 | 30.2 | 30.9 | 75.0 | 118.2 | 360.2 |
| NO. | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 398 | 53% |
| MEAN | 70.1 | 73.2 | 74.8 | 84.5 | 101.8 | 101.3 | 143.5 | 137.7 | 136.8 | 174.3 | 139.4 | 128.6 | 134.7 | 149.1 | 129.8 | 113.6 | 131.7 | 84.7 | 77.9 | 79.0 | 75.9 | 106.7 | 86.1 | 75.0 | | |
| MAX | 257.7 | 183.5 | 294.6 | 337.9 | 461.4 | 422.9 | 401.5 | 320.4 | 360.2 | 516.7 | 435.7 | 395.5 | 367.8 | 525.5 | 507.2 | 360.9 | 435.9 | 176.4 | 173.1 | 194.0 | 217.9 | 533.1 | 491.3 | 231.0 | | |




| | | | |
|---|---|---|---|
| Number of 24HR Exceedences | 6 Proposed Guideline | | |
| Number of Non-Zero Readings | 398 | | |
| Maximum 1-HR Average | 533.1 UG/M3 | | |
| Maximum 24-HR Average | 232.6 UG/M3 | | |
| | | Opperational Time | 398 HRS |
| Monthly Calibration | 0 | Opperational Uptime | 53.5 % |
| Standard Deviation | 93.4 | Monthly Average | 108.5 UG/M3 |