

LAFARGE CANADA INC.

# AMBIENT AIR QUALITY MONTHLY REPORT

## OCTOBER 2020

NOVEMBER 29, 2020



WSP



# AMBIENT AIR QUALITY MONTHLY REPORT OCTOBER 2020

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-04  
DATE: NOVEMBER 29, 2020

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November 29, 2020

LAFARGE CANADA INC.  
Highway 1A  
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**Attention: Janet Brygger**

Dear Ms. Brygger

**Subject: Ambient Air Quality Monthly Report – October 2020**

The operational uptime for the meteorological systems and all analyzers at the Lagoon station was 100% in October, except for PM<sub>10</sub> which recorded 99.9% uptime due to one hour of equipment malfunction on October 27<sup>th</sup> at 7:00. There were zero exceedances of the 24-hour TSP Alberta Ambient Air Quality Objectives (AAAQOs), zero exceedances of the 24-hour PM<sub>2.5</sub> AAAQOs, and zero exceedances of the 1-hour PM<sub>2.5</sub> AAAQG in October at the Lagoon monitoring location.

At the Windridge Station, PM<sub>10</sub> had 100% uptime for the month of October. PM<sub>2.5</sub> recorded 99.9% uptime for the month due to one hour of equipment malfunction on October 22<sup>nd</sup> at 2:00. TSP recorded 96.9% uptime for the month due to 23 hours of equipment malfunction, occurring between October 20<sup>th</sup> at 17:00 – October 21<sup>st</sup> at 14:00. And further, one additional hour of equipment malfunction on October 22<sup>nd</sup> at 2:00. There were 2 exceedances of the 24-hour TSP AAAQO, zero exceedances of the 24-hour PM<sub>2.5</sub> AAAQO, and zero exceedances of the 1-hour PM<sub>2.5</sub> AAAQG. TSP exceedances primarily occurred on days with high westerly wind speeds.

Data collected at all of 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. The operational uptime at the 3 monitors was as follows: 99.6% at the West monitor due to three hours of collection error on October 3<sup>rd</sup> at 24:00 and October 31<sup>st</sup> at 23:00 & 24:00; 80% at the Berm monitor due to 158 hours of GRIMM annual calibration maintenance from October 15<sup>th</sup> at 13:00 – October 21<sup>st</sup> at 14:00 and three hours of collection error on October 3<sup>rd</sup> at 24:00 and October 31<sup>st</sup> at 23:00 & 24:00; and 75.4% at the Entrance monitor due to 181 hours of GRIMM annual calibration maintenance from October 1<sup>st</sup> at 1:00 to October 8<sup>th</sup> at 13:00 and two hours of collection error on October 31<sup>st</sup> at 23:00 & 24:00.

The Berm and Entrance GRIMM monitors both received annual calibration maintenance during the month of October, resulting in a low overall data completion percentage. The following is the data completion percentage outside of the annual calibration maintenance. The Berm GRIMM had a 99.6% data completeness for the month of October due to three hours of collection error. The Entrance GRIMM recorded a 99.7% data completeness for the month of October due to 2 hours of collection error.

The West GRIMM monitor recorded zero exceedances of the 24-hour TSP AAAQG and zero exceedances of the 24-hour PM<sub>2.5</sub> AAAQG. The Berm GRIMM had 11 exceedances of the TSP AAAQG and zero exceedances of the PM<sub>2.5</sub> AAAQG. The Entrance GRIMM monitor exceeded the 24-hour TSP AAAQG for 4 days, and did not exceed the 24-hour PM<sub>2.5</sub> AAAQG.

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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,

A handwritten signature in blue ink, appearing to read "Tyler Abel".

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

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# SIGNATURES

PREPARED BY



November 29, 2020

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Dylan Weyell, B.A.  
Junior Air Quality Specialist, Environment

Date

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APPROVED<sup>1</sup> BY (*must be reviewed for technical accuracy prior to approval*)



November 29, 2020

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Tyler Abel, M.Sc.  
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Date

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### A DATA & CALIBRATION REPORTS

# 1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between October 1, 2020 and October 31, 2020.

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

# 2 OCTOBER 2020 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<sub>2.5</sub> are those above the 1-hour PM<sub>2.5</sub> 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 <sub>2</sub> (ppb)	100.0	21.5	0	12.8	-
SO <sub>2</sub> (ppb)	100.0	16.4	0	4.4	0
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	100.0	45.0	0*	11.6	0
PM <sub>10</sub> (µg/m <sup>3</sup> )	99.9	207.8	-	55.8	-
TSP (µg/m <sup>3</sup> )	100.0	332.8	-	95.3	0
Temperature (°C)	100.0	24.5	-	15.2	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	43.0/W	-	33.1/WSW	-
Precipitation (mm)	100.0	4*	-	17.75*	-

<sup>1</sup> Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80 µg/m<sup>3</sup>.

<sup>2</sup> Maximum Daily Total Accumulation of Precipitation (mm)

<sup>3</sup> Monthly Total Accumulation of Precipitation (mm)

### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQO.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 24-hour TSP AAAQO.

#### **Calibration/Maintenance Notes:**

- At the Lagoon station, all analyzer and meteorological sensors recorded 100% uptime during the month of October, except for PM<sub>10</sub> which recorded 99.9% uptime in October due to one hour of equipment malfunction on October 27<sup>th</sup> at 7:00.

## **2.2 WINDRIDGE STATION**

**Table 2-2 Windridge station data summary**

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	99.9	50.0	0*	12.5	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	100.0	485.0	-	131.9	-
TSP ( $\mu\text{g}/\text{m}^3$ )	96.9	575.0	-	162.0	2

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

#### **Data Quality Notes:**

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQO.
- There were no exceedance of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 2 days exceeding the 24-hour TSP AAAQO.

#### **Calibration/Maintenance Notes:**

- At the Windridge Station, PM<sub>10</sub> had 100% uptime for the month of October. PM<sub>2.5</sub> recorded 99.9% uptime for the month due to one hour of equipment malfunction on October 22<sup>nd</sup> at 2:00. TSP recorded 96.9% uptime for the month due to 23 hours of equipment malfunction, occurring between October 20<sup>th</sup> at 17:00 – October 21<sup>st</sup> at 14:00. And further, one additional hour of equipment malfunction on October 22<sup>nd</sup> at 2:00.

## **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 <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	99.6	27.1	0*	12.4	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	99.6	29.9	-	14.4	-
TSP ( $\mu\text{g}/\text{m}^3$ )	99.6	1240.4	-	97.6	0

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

#### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 24-hour TSP AAAQG.

#### Calibration/Maintenance Notes:

- The analyzer had 99.6% uptime for the month of October due to 3 hours of collection error occurring on October 3<sup>rd</sup> at 24:00. And October 21<sup>st</sup> at 23:00 & 24:00.

## 2.4 BERM GRIMM

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

**Table 2-4** Berm station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	80.0	65.0	0*	19.9	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	80.0	538.6	-	148.7	-
TSP ( $\mu\text{g}/\text{m}^3$ )	80.0	1730.1	-	525.6	11

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

#### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.

- There were 11 days exceeding the 24-hour TSP AAAQG.

#### **Calibration/Maintenance Notes:**

- The analyzer had 80% uptime during the month of October due to 158 hours of GRIMM annual calibration maintenance from October 15<sup>th</sup> at 13:00 – October 21<sup>st</sup> at 14:00; and three hours of collection error on October 3<sup>rd</sup> at 24:00, and October 31<sup>st</sup> at 23:00 & 24:00
- The analyzer had 99.6% uptime outside of the GRIMM annual calibration maintenance

## 2.5 ENTRANCE GRIMM

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

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

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	75.4	61.0	0*	24.1	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	75.4	379.6	-	109.2	-
TSP ( $\mu\text{g}/\text{m}^3$ )	75.4	1227.4	-	330.5	4

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

#### **Data Quality Notes:**

- There were no exceedance of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 4 days exceeding the 24-hour TSP AAAQG.

#### **Calibration/Maintenance Notes:**

- The analyzer had 75.4% uptime for the month of October monitor due to 181 hours of GRIMM annual calibration maintenance from October 1<sup>st</sup> at 1:00 to October 8<sup>th</sup> at 13:00, and two hours of collection error on October 31<sup>st</sup> at 23:00 & 24:00.
- The analyzer had 99.7% uptime outside of the GRIMM annual calibration maintenance

# 3 LAGOON STATION

The Lagoon trailer contains NO<sub>x</sub>, SO<sub>2</sub>, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-2) and tables and graphs illustrating the monitoring results for October 2020.

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
<b>PM<sub>2.5</sub> Concentrations</b>	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM <sub>2.5</sub> monitor was calibrated on October 21 <sup>st</sup> . The monitor had 100% uptime in October.
<b>PM<sub>10</sub> Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The PM <sub>10</sub> monitor was calibrated on October 21 <sup>st</sup> . The monitor had 99.9% uptime in October.
<b>TSP Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on October 21 <sup>st</sup> . The monitor had 100% uptime in October.
<b>Oxides of Nitrogen</b>	TEI 42C	The NO <sub>x</sub> monitor was calibrated on October 15 <sup>th</sup> . The monitor had 100% uptime for the month of October.
<b>Sulphur Dioxide</b>	Teledyne API 102A	The SO <sub>2</sub> monitor was calibrated on October 15 <sup>th</sup> . The monitor had 100% uptime for the month of October.
<b>Precipitation</b>	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of October.
<b>Wind Speed</b>	MetOne Wind Sensor	The monitor had 100% uptime for the month of October.
<b>Wind Direction</b>		
<b>Ambient Temperature</b>	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of October.



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

## 3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-2) illustrates the frequency of wind speed by wind direction for the month of October 2020. The wind rose indicates that the winds predominantly came from the west and west-southwest and east directions, which is typical for the airshed.

Table 3-2 summarizes the hourly and daily concentrations recorded in October 2020.

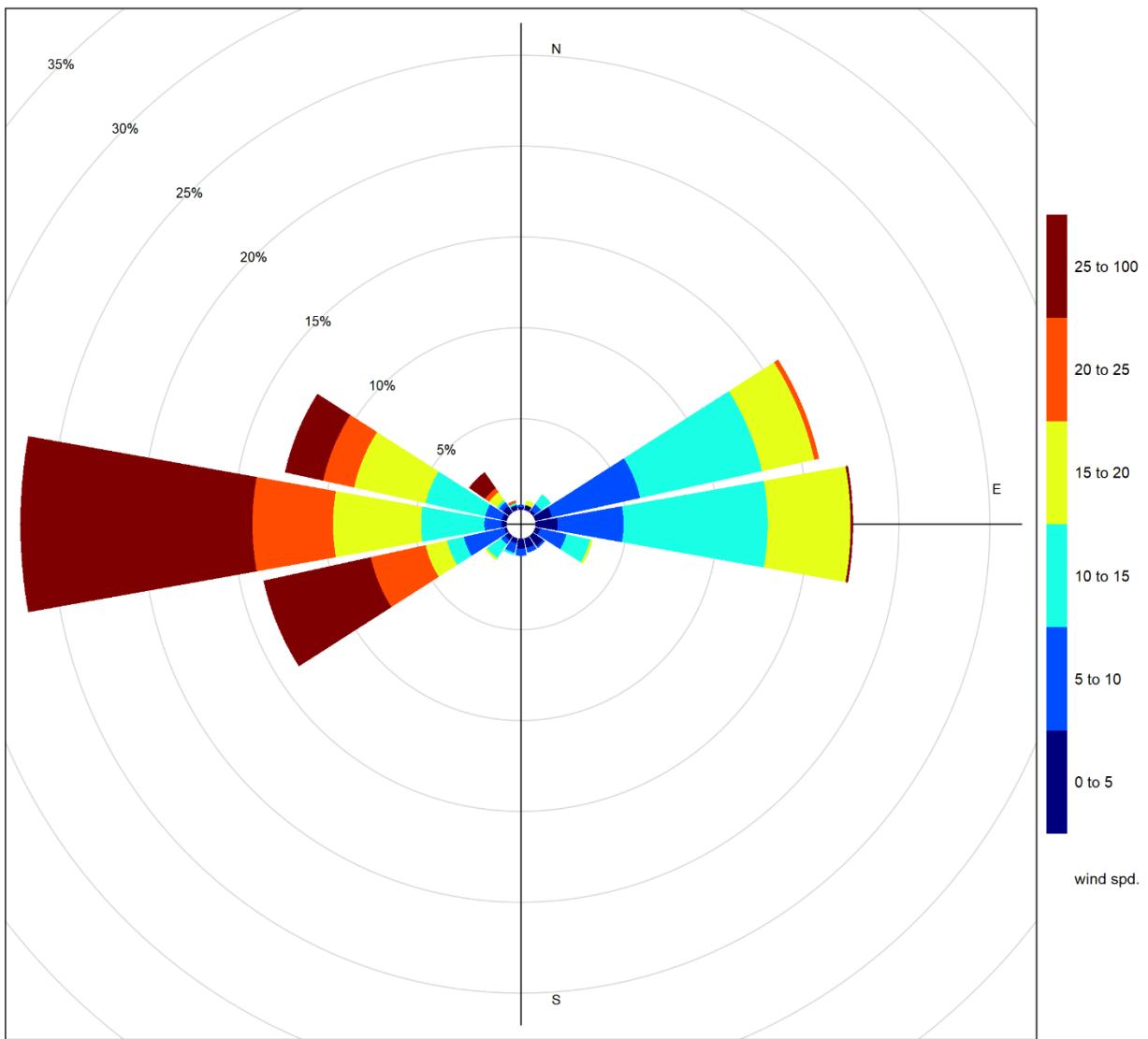
Figure 3-3 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-9 shows daily average concentrations recorded during October 2020 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and TSP measured at the Lagoon station.

There were no exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) AAAQO. Further, there were no exceedances of the 24-hour PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) AAAQO. There was no exceedance of the 1-hour PM<sub>2.5</sub> AAAQG (80 µg/m<sup>3</sup>).

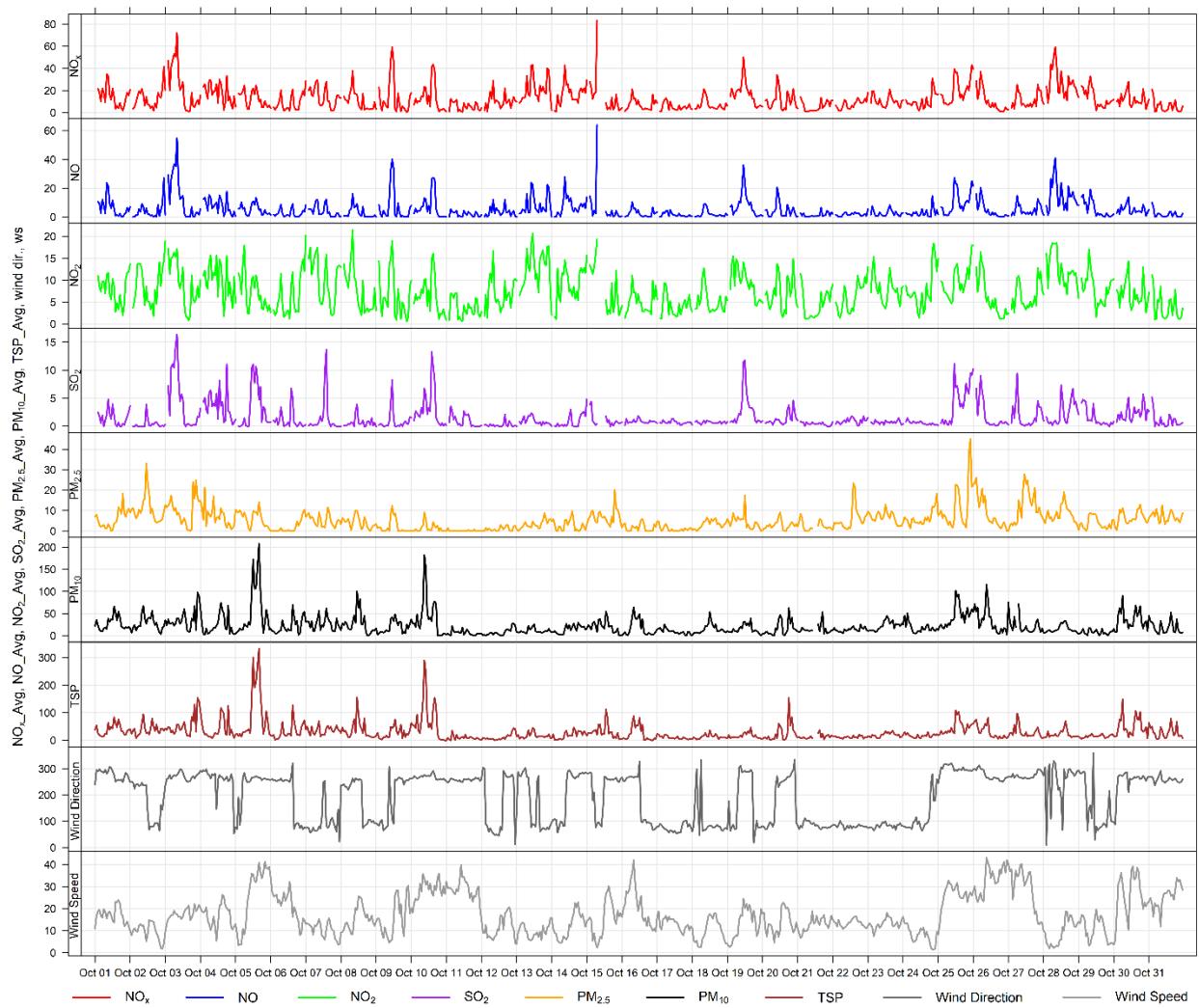
Historically in October, the average number of 24-hour TSP AAQO exceedances and 24-hour PM<sub>2.5</sub> AAQO exceedances are both zero.

**Table 3-2      Summary of October 2020 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 <sub>2</sub> (ppb)	159	-	Lagoon	0	-	0.5	7.4	21.5	8	9	8.5	263.6	12.8	13	100.0
SO <sub>2</sub> (ppb)	172	48	Lagoon	0	0	0.0	1.6	16.4	3	9	17.4	276.6	4.4	3	100.0
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Lagoon	0	0	0.0	5.2	45.0	25	23	27.3	294.0	11.6	25	100.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Lagoon	-	-	0.0	22.3	207.8	5	17	40.8	265.9	55.8	5	99.9
TSP (µg/m <sup>3</sup> )	-	100	Lagoon	-	0	0.0	30.3	332.8	5	17	40.8	265.9	95.3	5	100.0
Temperature (°C)	-	-	Lagoon	-	-	-19.0	3.4	24.5	3	17	21.5	251.7	15.2	6	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.4	17.2	43.0/W	26	10	43.0	265.7	33.1/WSW	26	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	4.0	10	18	28.3	259.6	17.8	-	100.0



**Figure 3-2      October 2020 wind rose from the Lagoon Station**



**Figure 3-3 1-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, particulate matter, wind direction and wind speed at the Lagoon station**

### Histogram of Hourly NO<sub>2</sub> Readings

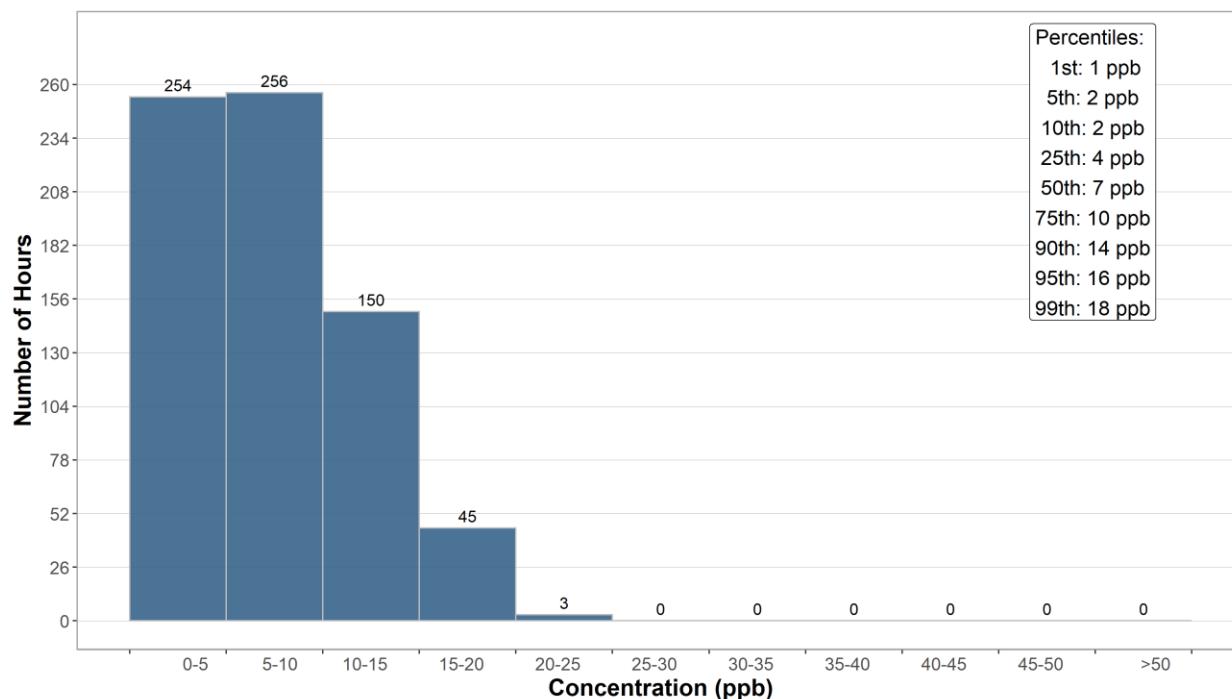


Figure 3-4      Histogram of hourly NO<sub>2</sub> concentrations at the Lagoon station

### Histogram of Hourly SO<sub>2</sub> Readings

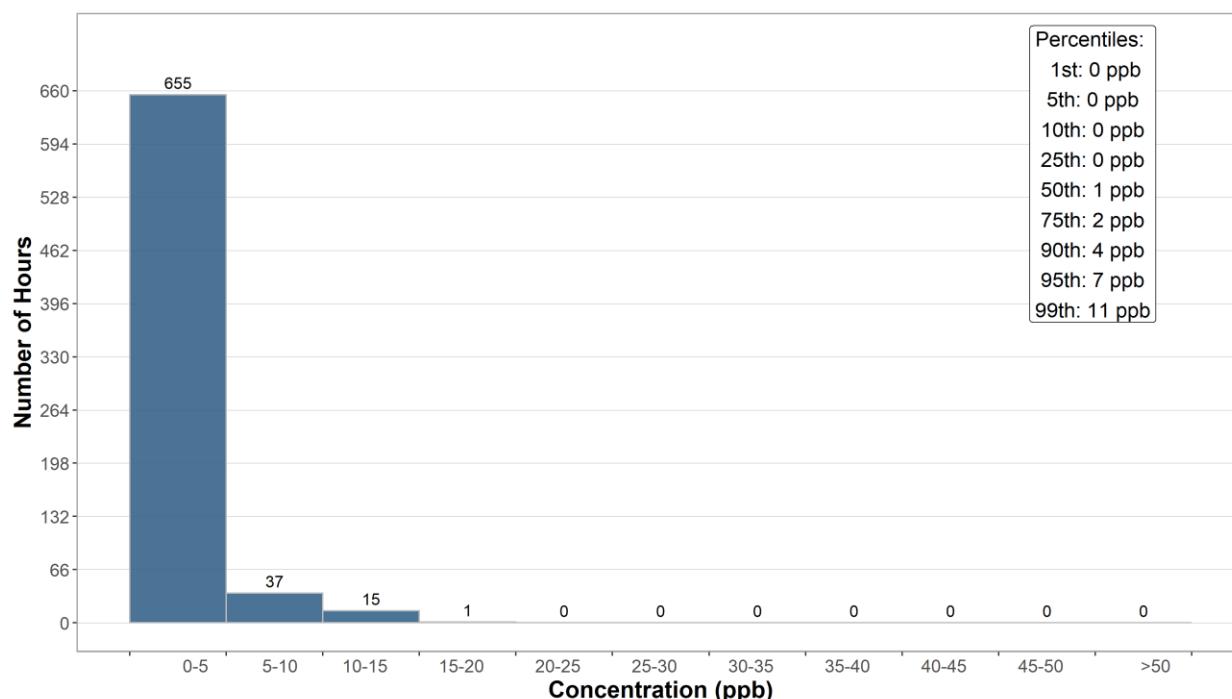


Figure 3-5      Histogram of hourly SO<sub>2</sub> concentrations at the Lagoon station

### Histogram of Hourly PM<sub>2.5</sub> Readings

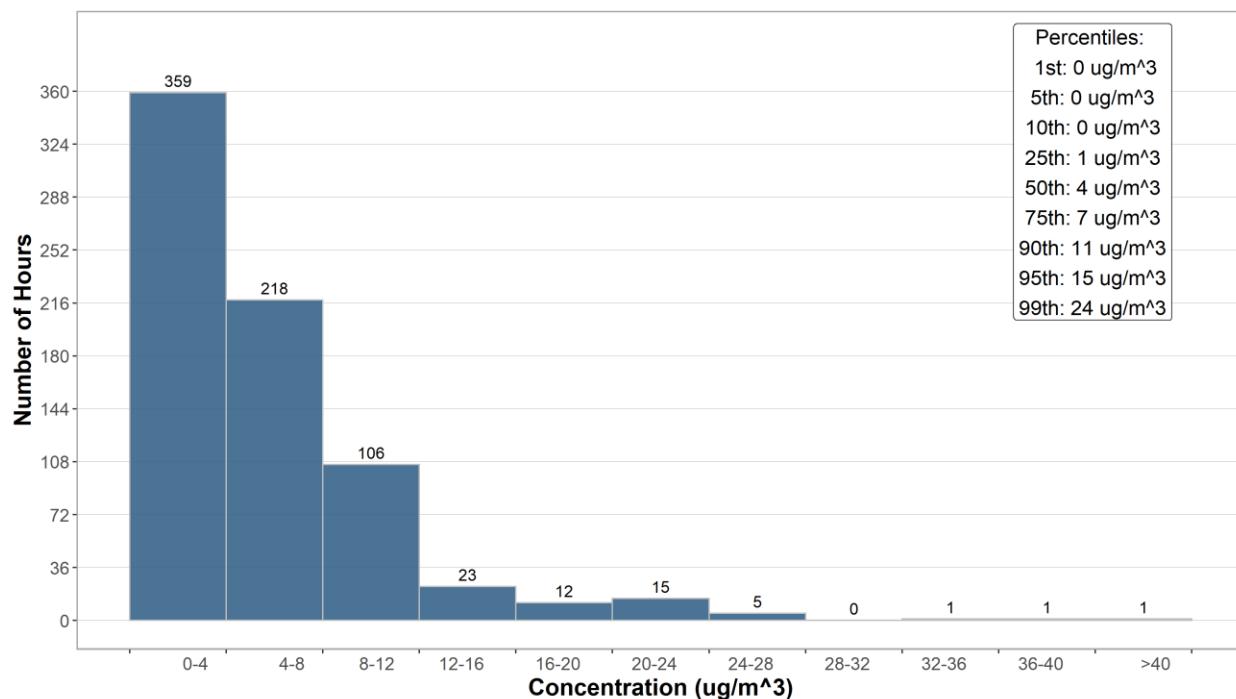


Figure 3-6 Histogram of hourly PM<sub>2.5</sub> concentrations at the Lagoon station

### Histogram of Hourly PM<sub>10</sub> Readings

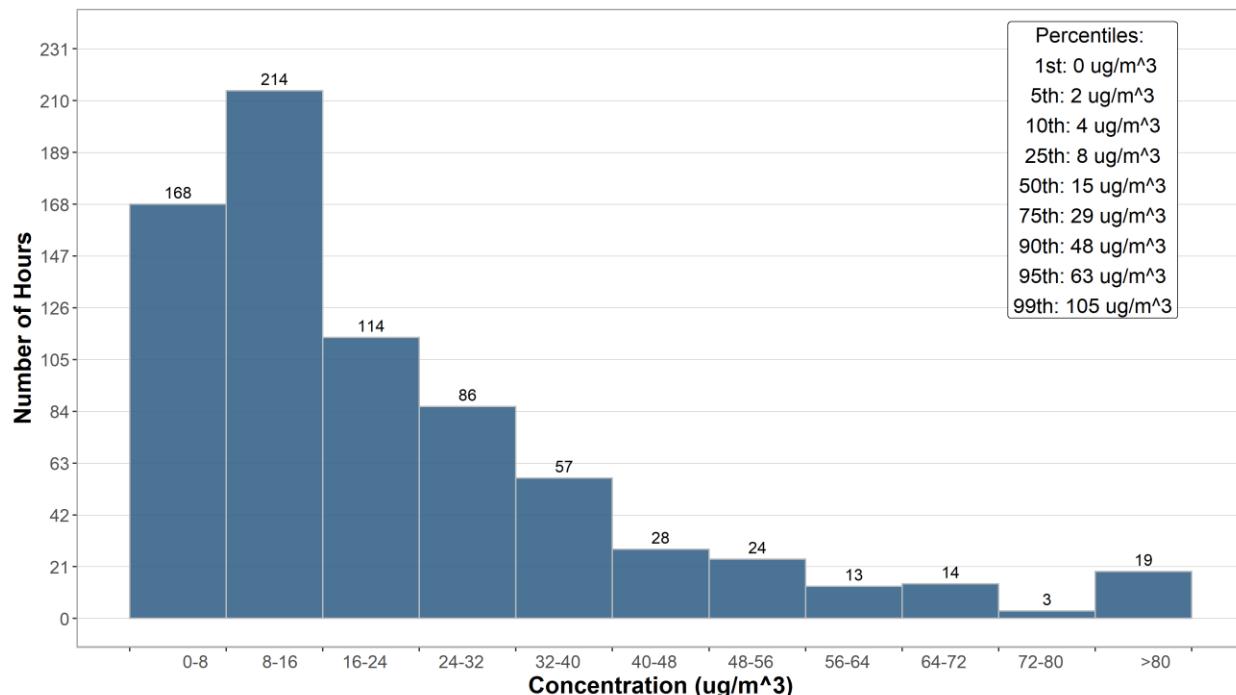


Figure 3-7 Histogram of hourly PM<sub>10</sub> concentrations at the Lagoon station

### Histogram of Hourly TSP Readings

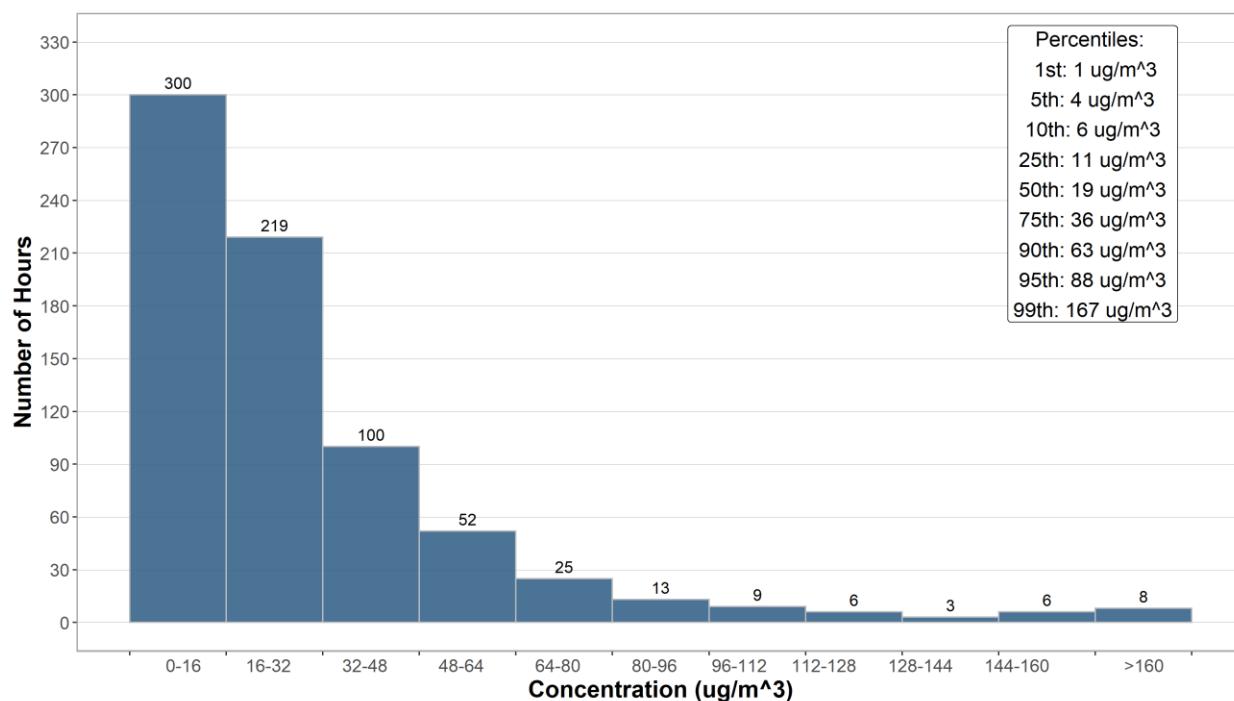
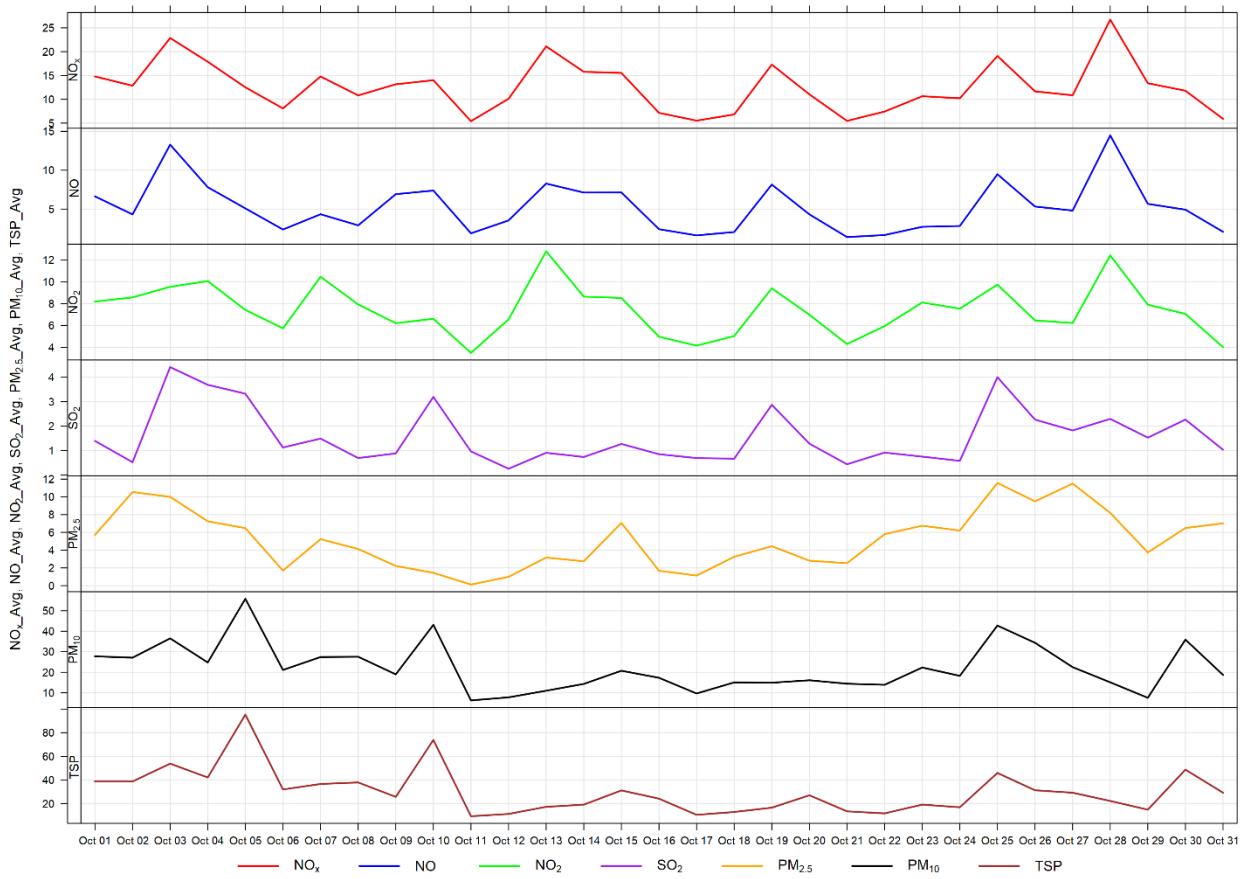


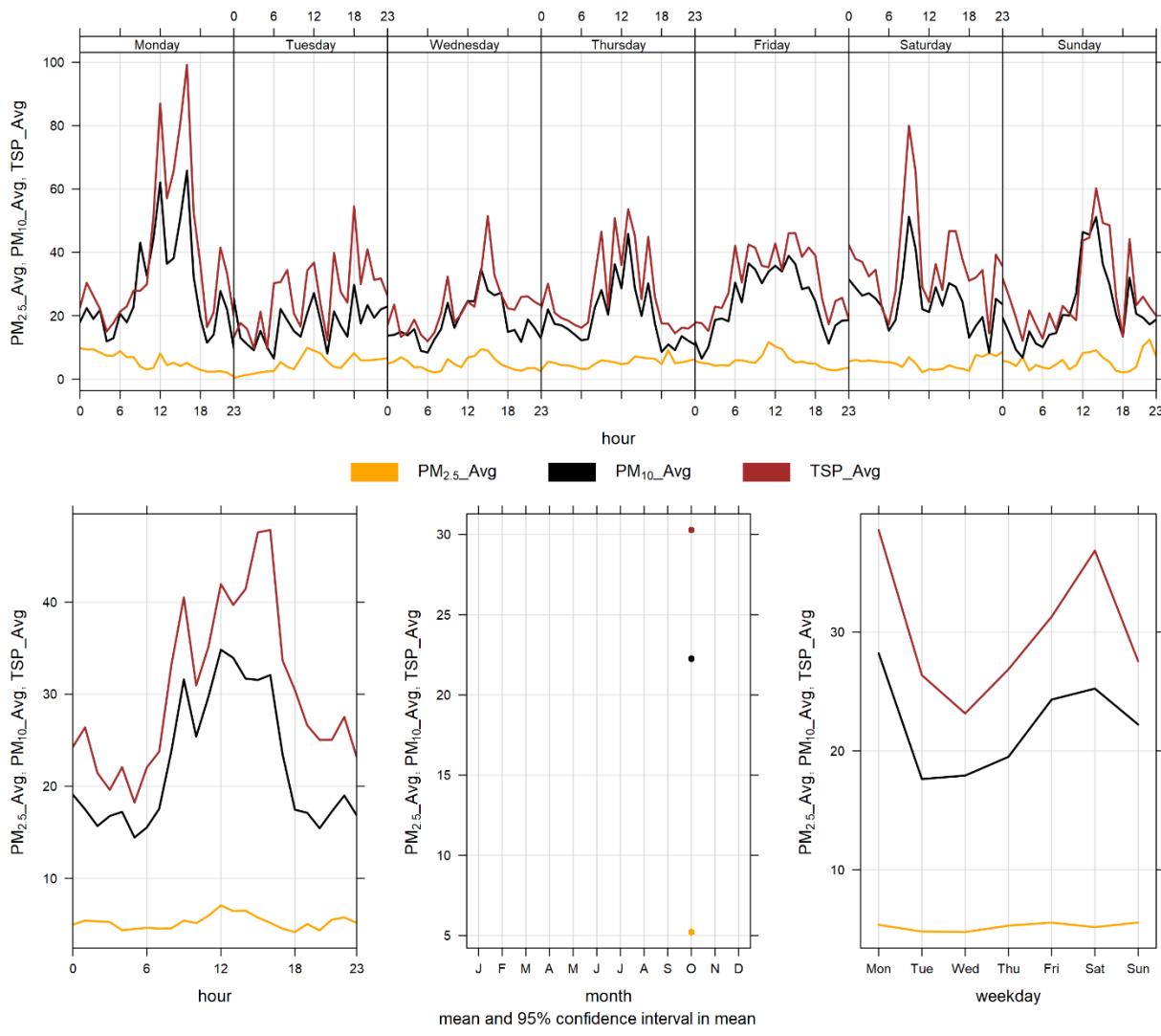
Figure 3-8     Histogram of hourly TSP concentrations at the Lagoon station



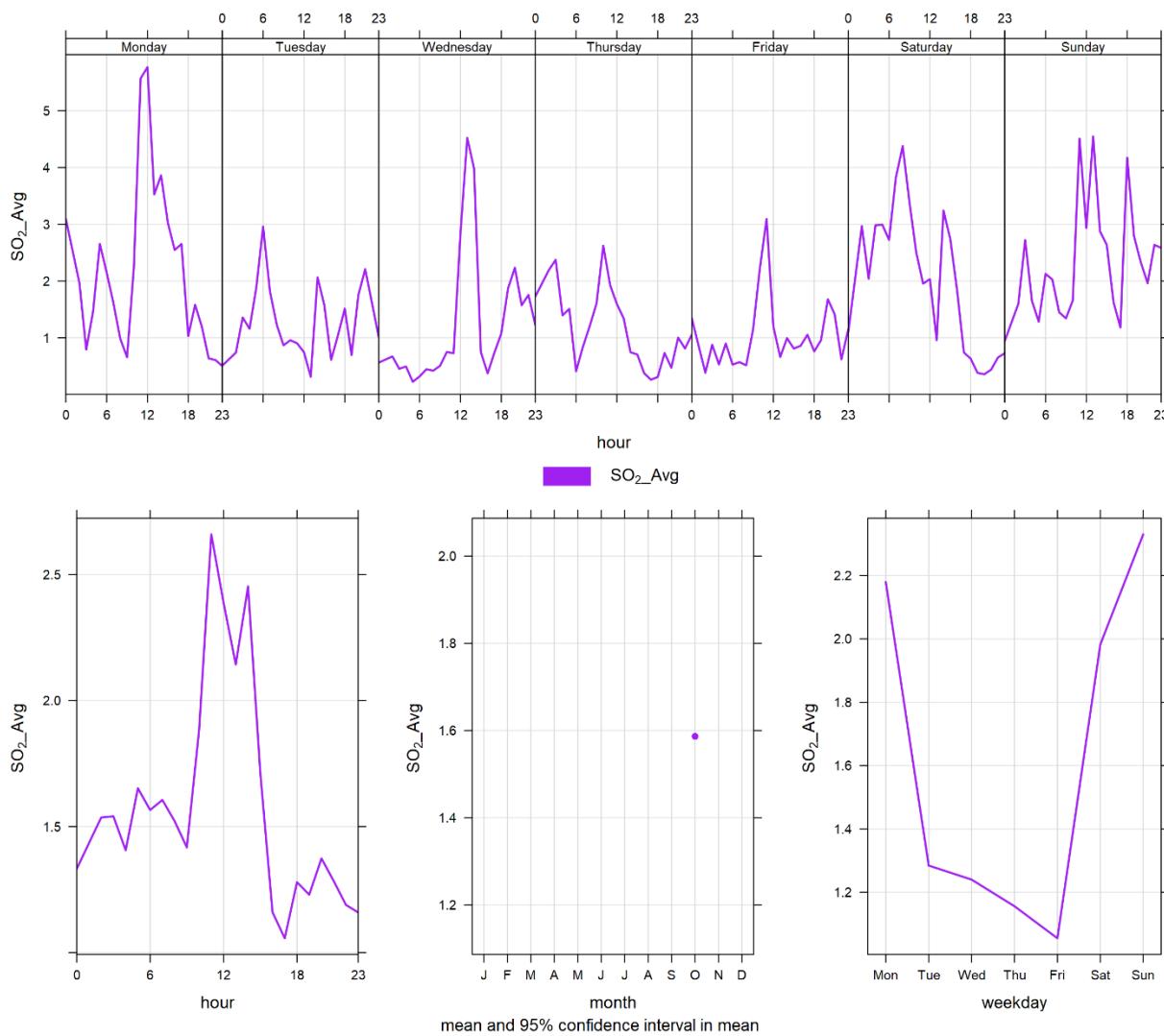
**Figure 3-9      24-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, and particulate matter at the Lagoon monitor**

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO<sub>2</sub> and NO<sub>x</sub>. The particulate matter plot in Figure 3-10 shows that PM<sub>10</sub> and TSP concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

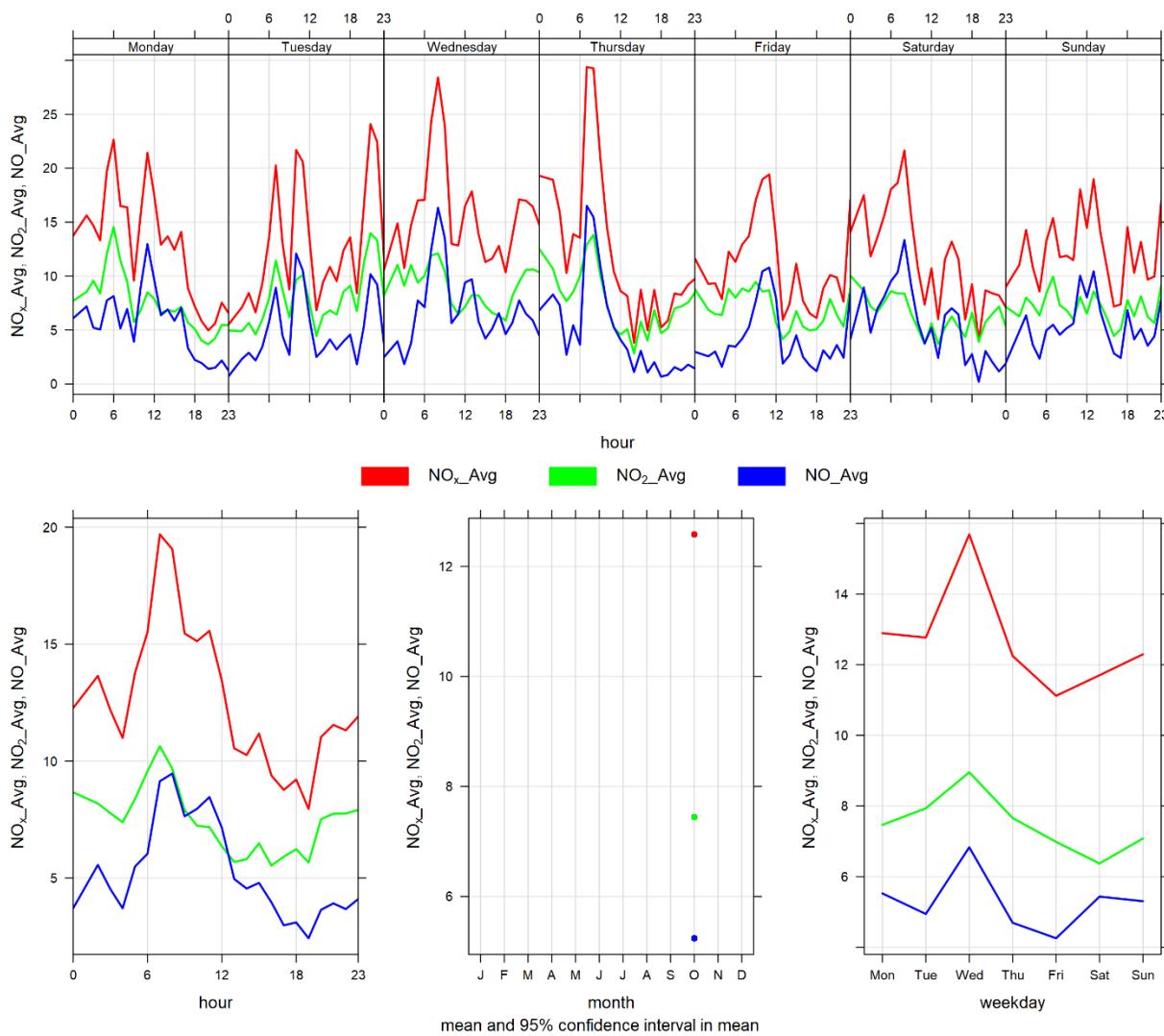
Figure 3-11 shows the variation of SO<sub>2</sub> over various time periods. SO<sub>2</sub> concentrations patterns are dependent on the timing of the highest SO<sub>2</sub> concentrations recorded in the month because in general SO<sub>2</sub> concentrations are very low. Figure 3-12 shows the variation of NO<sub>x</sub>, NO and NO<sub>2</sub>, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.



**Figure 3-10      Lagoon monitor particulate matter time variation**



**Figure 3-11 Lagoon monitor  $\text{SO}_2$  time variation**



**Figure 3-12      Lagoon monitor NO<sub>x</sub> time variation**

# 4 WINDRIDGE STATION

The Windridge station contains TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> 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 October 2020.

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
<b>PM<sub>2.5</sub> Concentrations</b>	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM <sub>2.5</sub> monitor was calibrated on October 21 <sup>st</sup> . The monitor had 99.9% uptime due to 1 hour of equipment malfunction occurring on October 22 <sup>nd</sup> at 2:00.
<b>PM<sub>10</sub> Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The PM <sub>10</sub> monitor was calibrated on October 21 <sup>st</sup> . The monitor had 100% uptime in October.
<b>TSP Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on October 21 <sup>st</sup> . The monitor had 96.9% uptime due to 23 hours of equipment malfunction, occurring between October 20 <sup>th</sup> at 17:00 to October 21 <sup>st</sup> at 14:00.

## 4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in October 2020, and Table 4-2 summarizes the recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrate the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP exceedance days, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM<sub>2.5</sub> AAAQO, zero exceedances of the 1-hour PM<sub>2.5</sub> AAAQG, and two exceedances of the 24-hour TSP AAAQO. TSP exceedances occurred primarily on days with high westerly wind speeds.

Historically in October, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM<sub>2.5</sub> AAAQO exceedances are both zero.

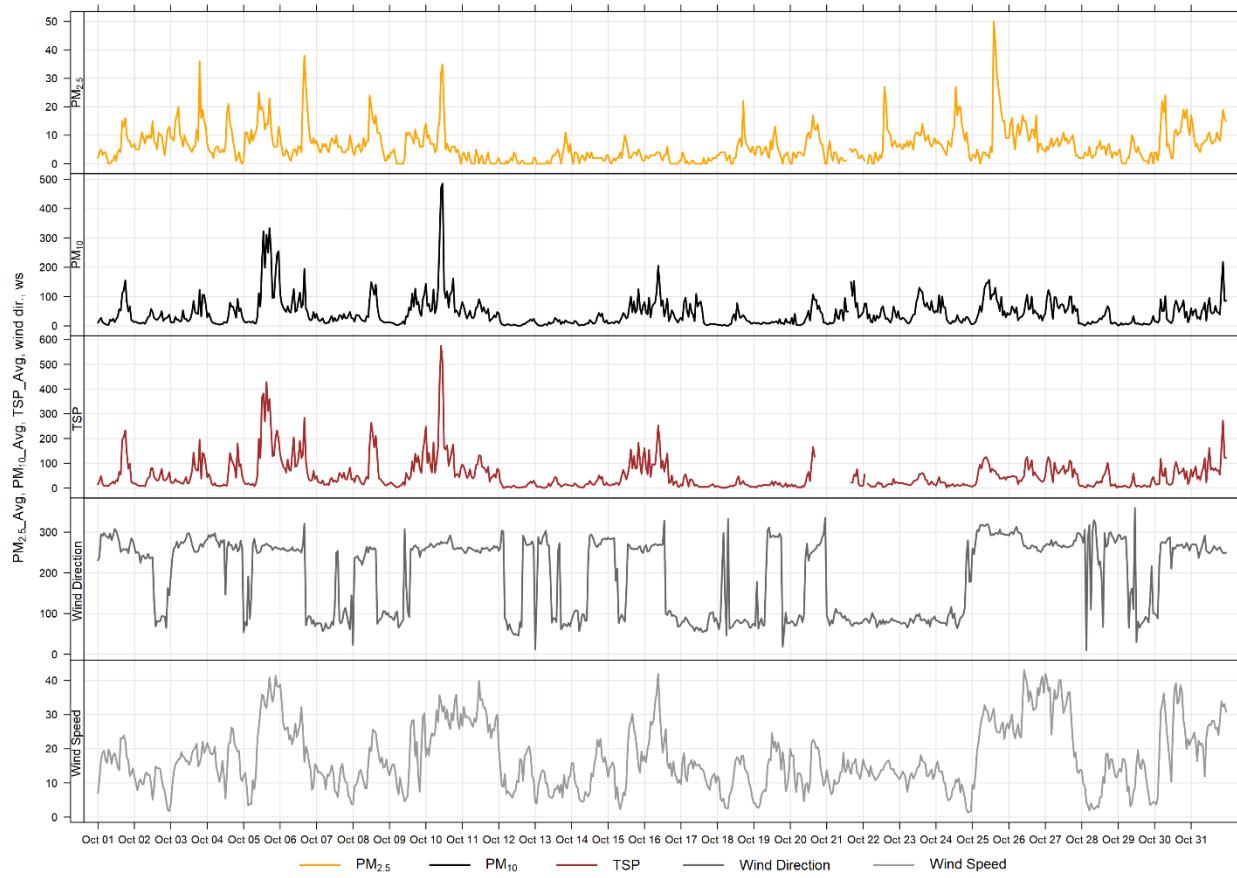
Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The Windridge station was reinstalled for September 1<sup>st</sup>, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge station that has resulted in higher TSP concentrations since re-installation. This is the second month of reporting the Windridge station, since it has been reinstalled. There was a reduction in exceedances from September, which recorded eight 24-hour TSP AAAQO exceedances, zero exceedances of the 1-hour PM<sub>2.5</sub> AAAQG, and two 24-hour PM<sub>2.5</sub> AAAQO exceedances.

**Table 4-2      Summary of October 2020 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 <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Windridge	0	0	0.0	6.3	50.0	25	14	31.7	292.6	12.5	5	99.9
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Windridge	-	-	0.0	43.7	485.0	10	11	30.9	272.7	131.9	5	100.0
TSP (µg/m <sup>3</sup> )	-	100	Windridge	-	2	0.0	51.6	575.0	10	10	33.7	276.8	162.0	5	96.9

**Table 4-3 Days exceeding the TSP AAAQO or PM<sub>2.5</sub> AAAQO at the Windridge Station**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Windridge</b>						
<b>2020-10-05</b>	162.0	-	262.0	25.8	49.2	High wind event
<b>2020-10-10</b>	158.4	-	268.7	28.3	44.1	High wind event
<b>Total # of Exceedances</b>	<b>2</b>	<b>0</b>				
<b>Maximum # of Exceedances (October)</b>	<b>3 (2018)</b>	<b>0 (2010- 2019)</b>				
<b>Average # of Exceedances (October)</b>	<b>0</b>	<b>0</b>				
<b>Minimum # of Exceedances (October)</b>	<b>0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019)</b>	<b>0 (2010-2019)</b>				



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

### Histogram of Hourly PM<sub>2.5</sub> Readings

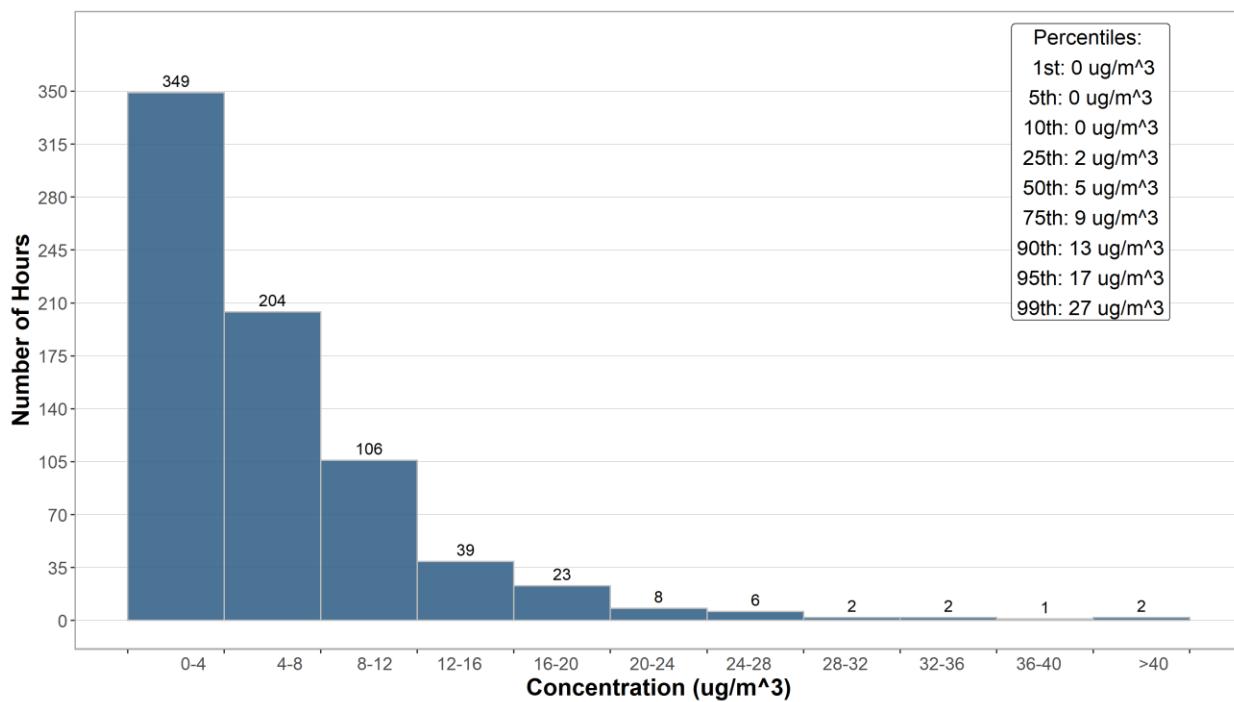


Figure 4-2 Histogram of hourly PM<sub>2.5</sub> concentrations at the Windridge station

### Histogram of Hourly PM<sub>10</sub> Readings

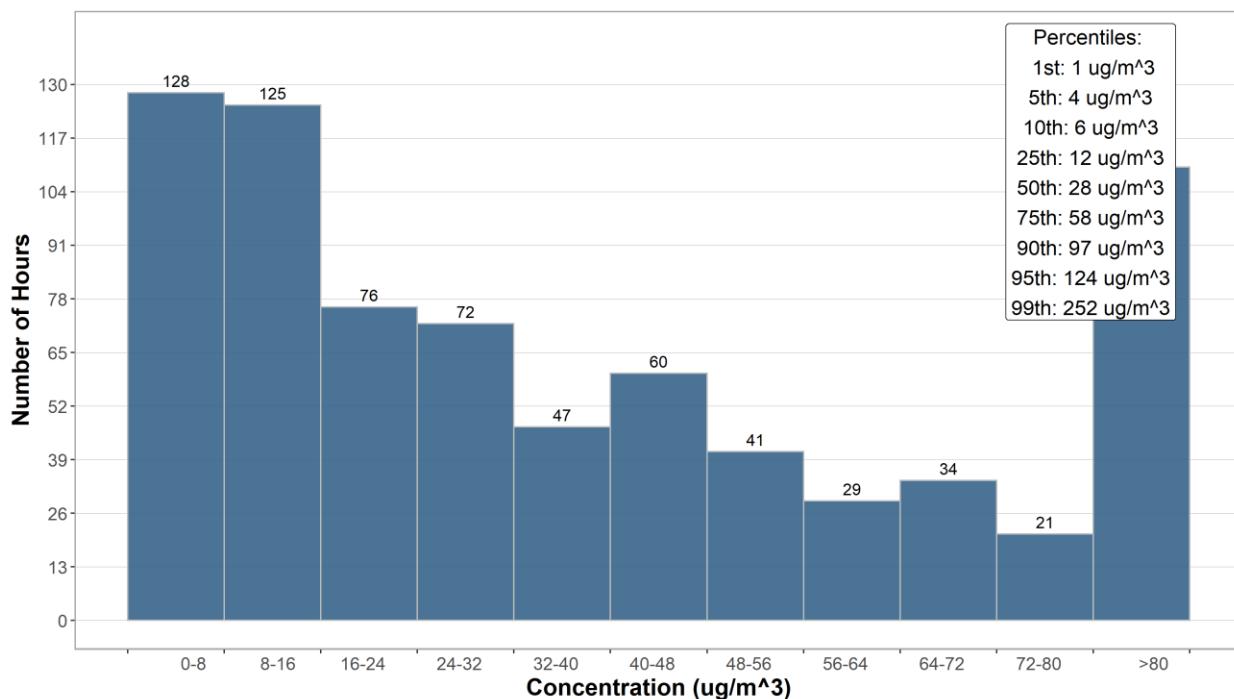


Figure 4-3 Histogram of hourly PM<sub>10</sub> concentrations at the Windridge station

### Histogram of Hourly TSP Readings

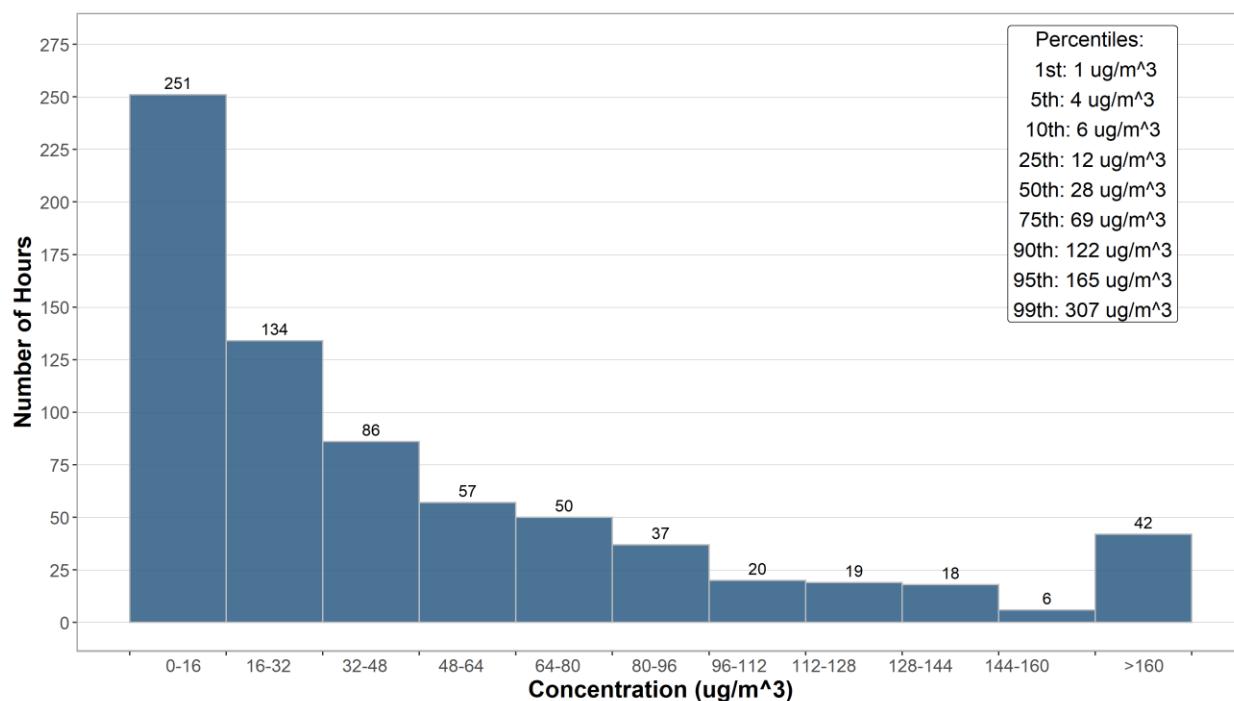
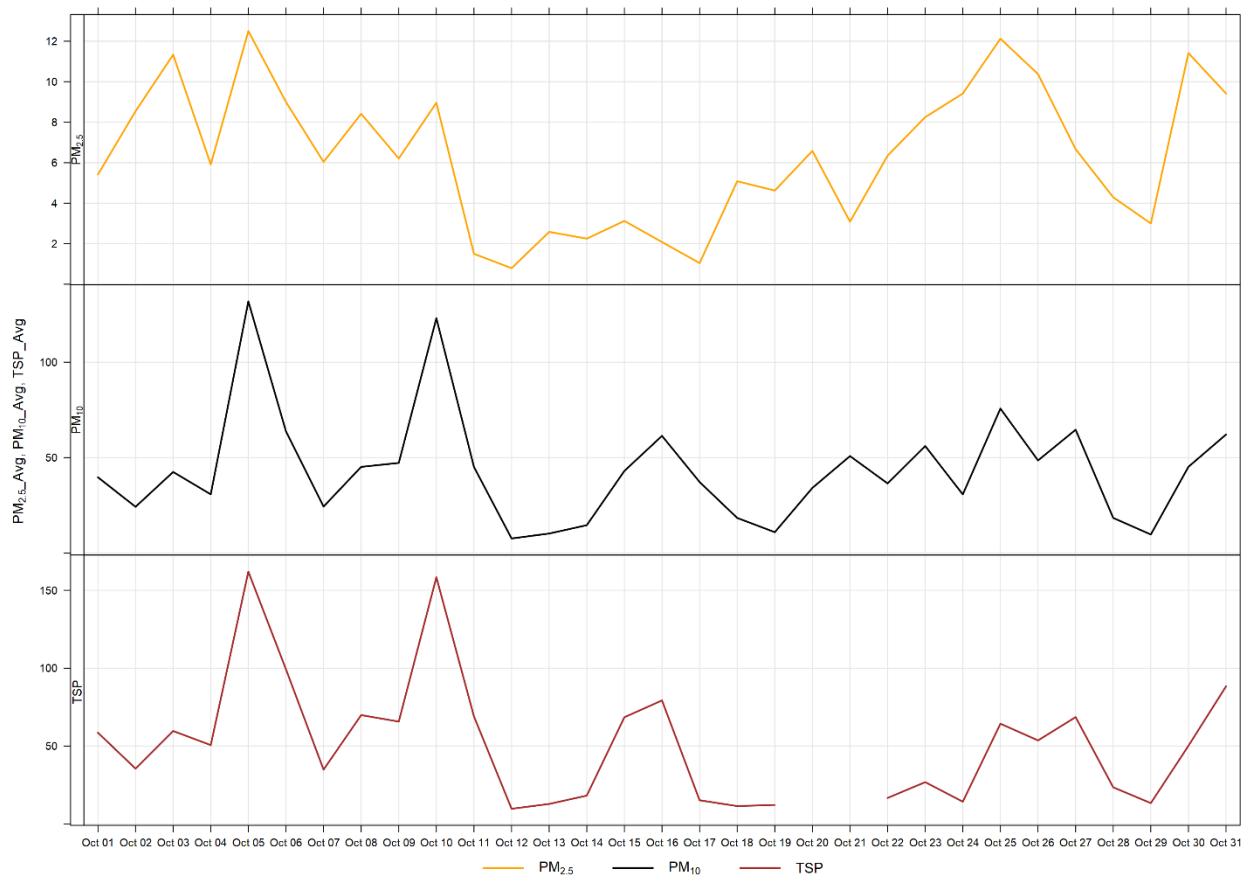


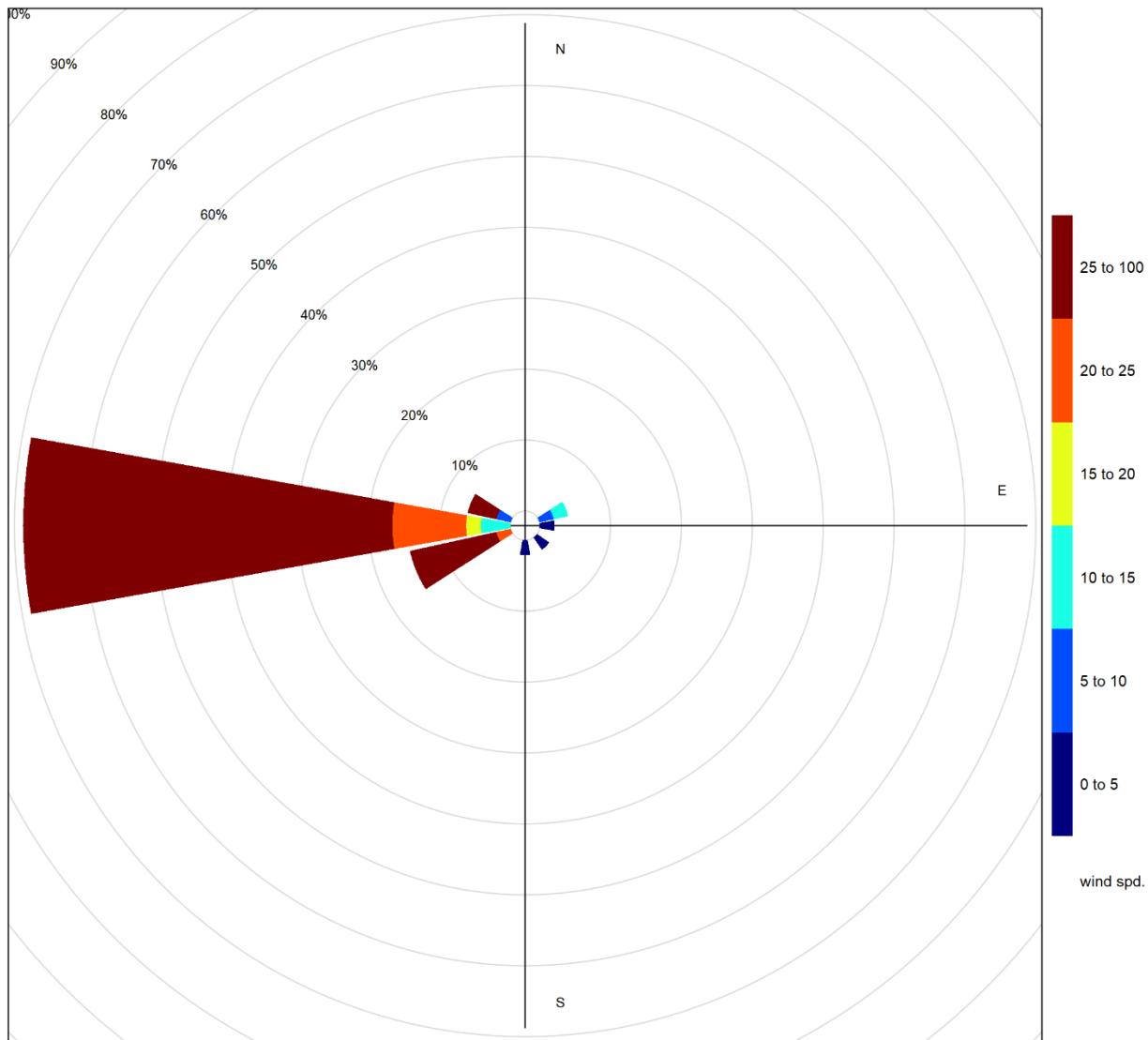
Figure 4-4      Histogram of hourly TSP concentrations at the Windridge station



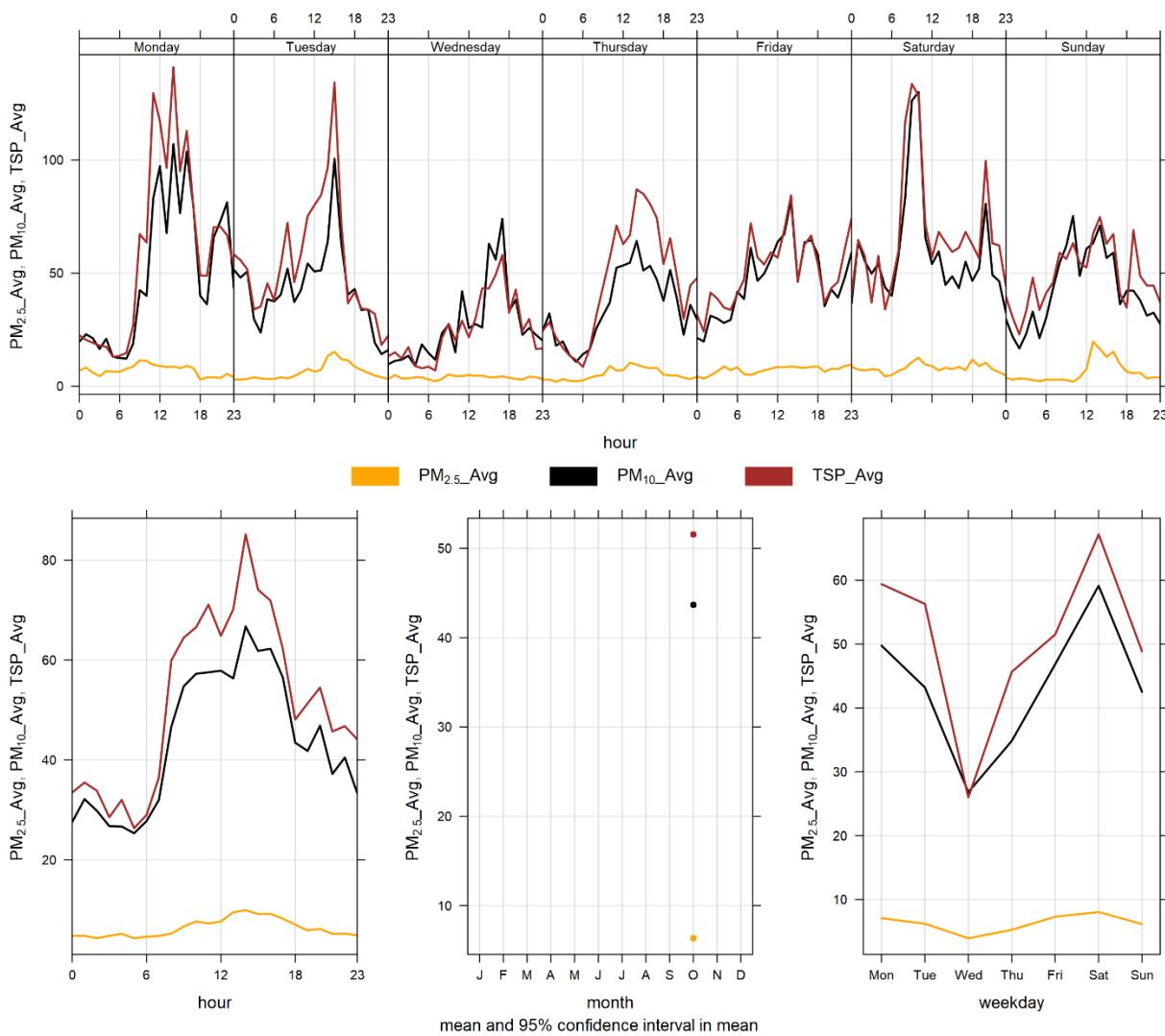
**Figure 4-5      24-hour particulate matter concentrations at the Windridge monitor**

Figure 4-6 shows the wind rose for the 2 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west direction, and were predominately over 20 km/hr.

Figure 4-7 illustrates the hourly PM concentrations recorded at the Windridge monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-7 is based on data collected during October 2020 and similar to the Lagoon station shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.



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



**Figure 4-7      Windridge particulate matter time variation**

# 5 WEST INDUSTRIAL GRIMM

## 5.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 5-1.

**Table 5-1      Instrumentation List at the West monitoring location**

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The analyzer had 99.6% uptime for the month of October due to 3 hours of collection error on October 3 <sup>rd</sup> at 24:00. And further, on October 31 <sup>st</sup> at 23:00 & 24:00.

## 5.2 MONITORING RESULTS AND TRENDS

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

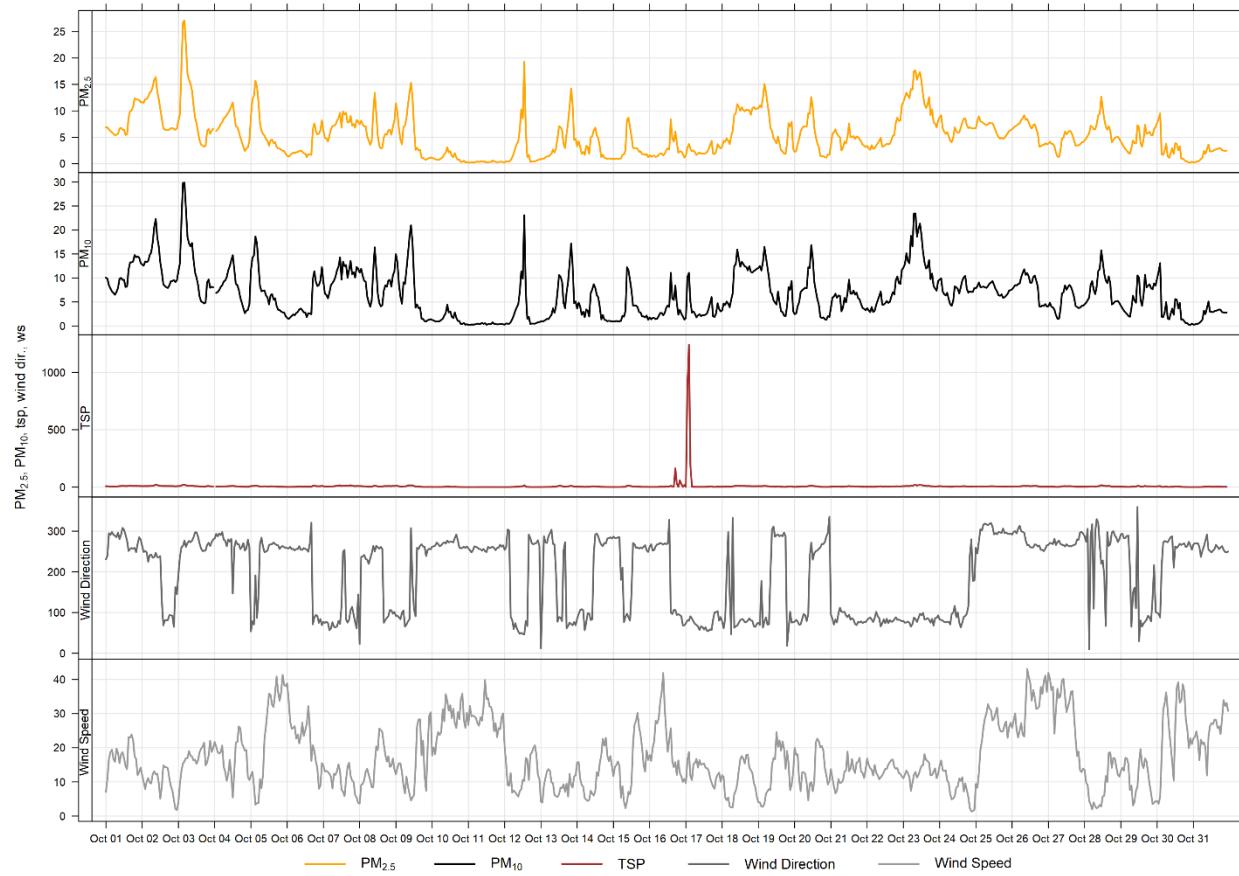
Figure 5-1 and Figure 5-2 show the hourly and daily PM<sub>2.5</sub>, PM<sub>10</sub> and TSP concentrations recorded over the month.

There were zero exceedances of the 24-hour TSP guideline (100 µg/m<sup>3</sup>) and zero exceedances of the PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) guideline.

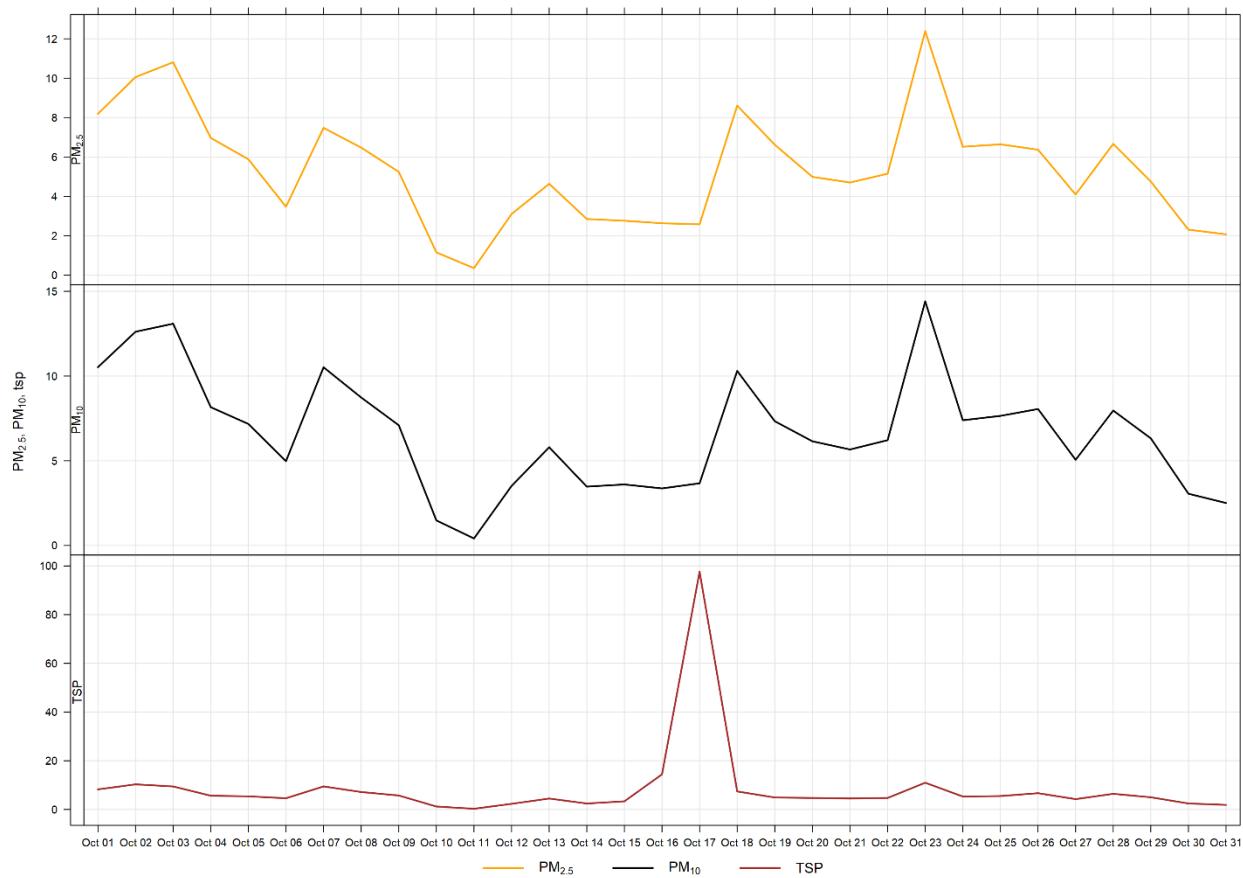
Historically in October, the average number of 24-hour TSP guideline exceedances and 24-hour PM<sub>2.5</sub> guideline exceedances is zero. The maximum number of 24-hour TSP guidelines exceedances was 1 day in 2013 for TSP, and 0 days from 2010 - 2019 for PM<sub>2.5</sub>.

**Table 5-2      Summary of October 2020 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 <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	West	0	0	0.2	5.4	27.1	3	4	16.0	276.5	12.4	23	99.6
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	West	-	-	0.2	6.7	29.9	3	4	16.0	276.5	14.4	23	99.6
TSP (µg/m <sup>3</sup> )	-	100	West	-	0	0.2	8.6	1240.4	17	2	18.8	80.0	97.6	17	99.6

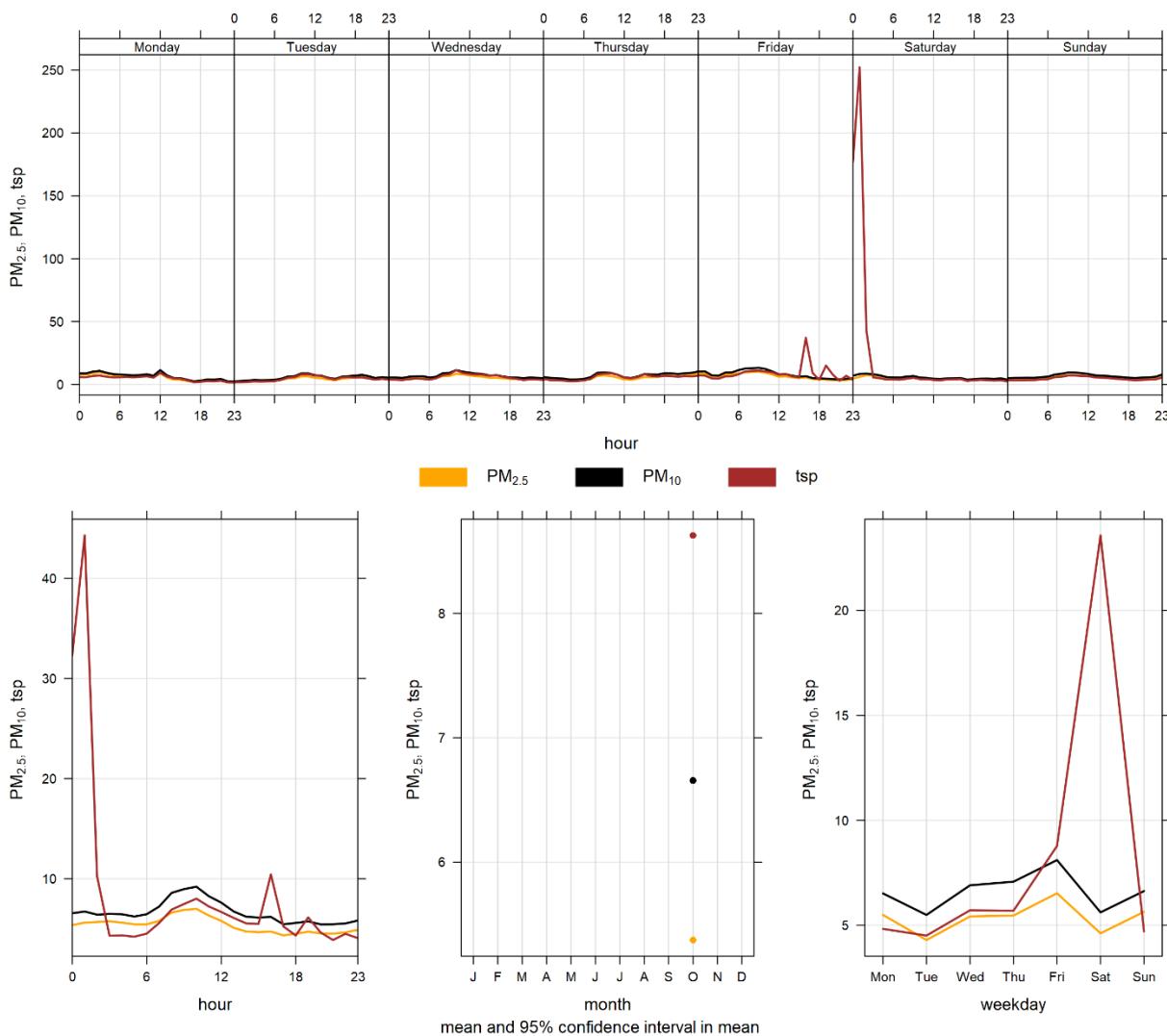


**Figure 5-1      1-hour particulate matter concentrations at the West monitor**



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

Figure 5- 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- is based on data collected during October 2020 and is skewed because of the high TSP values on October 17. As the monitor is generally ‘up-wind’ of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.



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

# 6 BERM INDUSTRIAL GRIMM

## 6.1 OPERATIONAL SUMMARY

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

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

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The analyzer had 80% uptime for the month of October due to 158 hours of GRIMM annual calibration maintenance, occurring between October 15 <sup>th</sup> at 13:00 to October 21 <sup>st</sup> at 14:00. Further, three hours of collection error on September 3 <sup>rd</sup> at 24:00, and September 31 <sup>st</sup> at 23:00 & 24:00.

## 6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility in 2009. Figure 6-1 and Figure 6-2 show the hourly and daily PM<sub>2.5</sub>, PM<sub>10</sub> and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 6-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO. The Berm GRIMM was removed for annual calibration and maintenance on October 15<sup>th</sup>, and was reinstalled October 21<sup>st</sup> at 14:00.

There were 11 and 0 exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) guidelines, respectively. There were zero hours exceeding the 1-hour PM<sub>2.5</sub> AAAQG.

Historically during the month of October, the Berm monitor records an average of 15 and 0 exceedances of the 24-hour TSP and PM<sub>2.5</sub> guidelines, respectively. The maximum number of TSP exceedances recorded during October occurred in 2014 where there were 21 days that exceeded the guideline. On the other hand, the maximum number of PM<sub>2.5</sub> exceedances in October was 1 day in 2012.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM<sub>2.5</sub> size fraction has been shown to match other regulatory approved PM<sub>2.5</sub> 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.

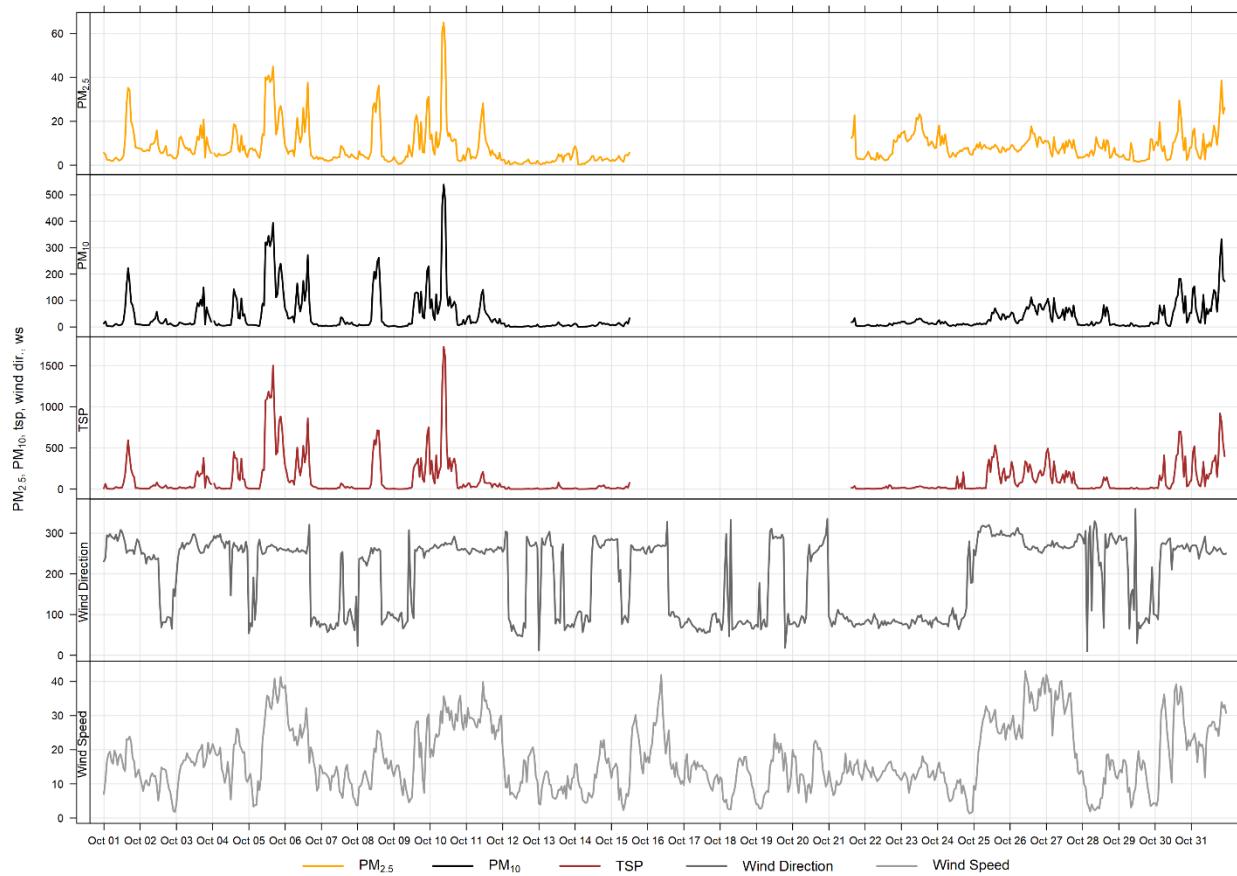
**Table 6-2      Summary of October 2020 data at the Berm GRIMM**

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	
<b>PM<sub>2.5</sub> (µg/m<sup>3</sup>)</b>	80	29	Berm	0	0	0.2	8.4	65.0	10	9	35.7	269.6	19.9	5	80.0
<b>PM<sub>10</sub> (µg/m<sup>3</sup>)</b>	-	-	Berm	-	-	0.3	40.7	538.6	10	9	35.7	269.6	148.7	5	80.0
<b>TSP (µg/m<sup>3</sup>)</b>	-	100	Berm	-	11	0.2	116.8	1730.1	10	9	35.7	269.6	525.6	5	80.0

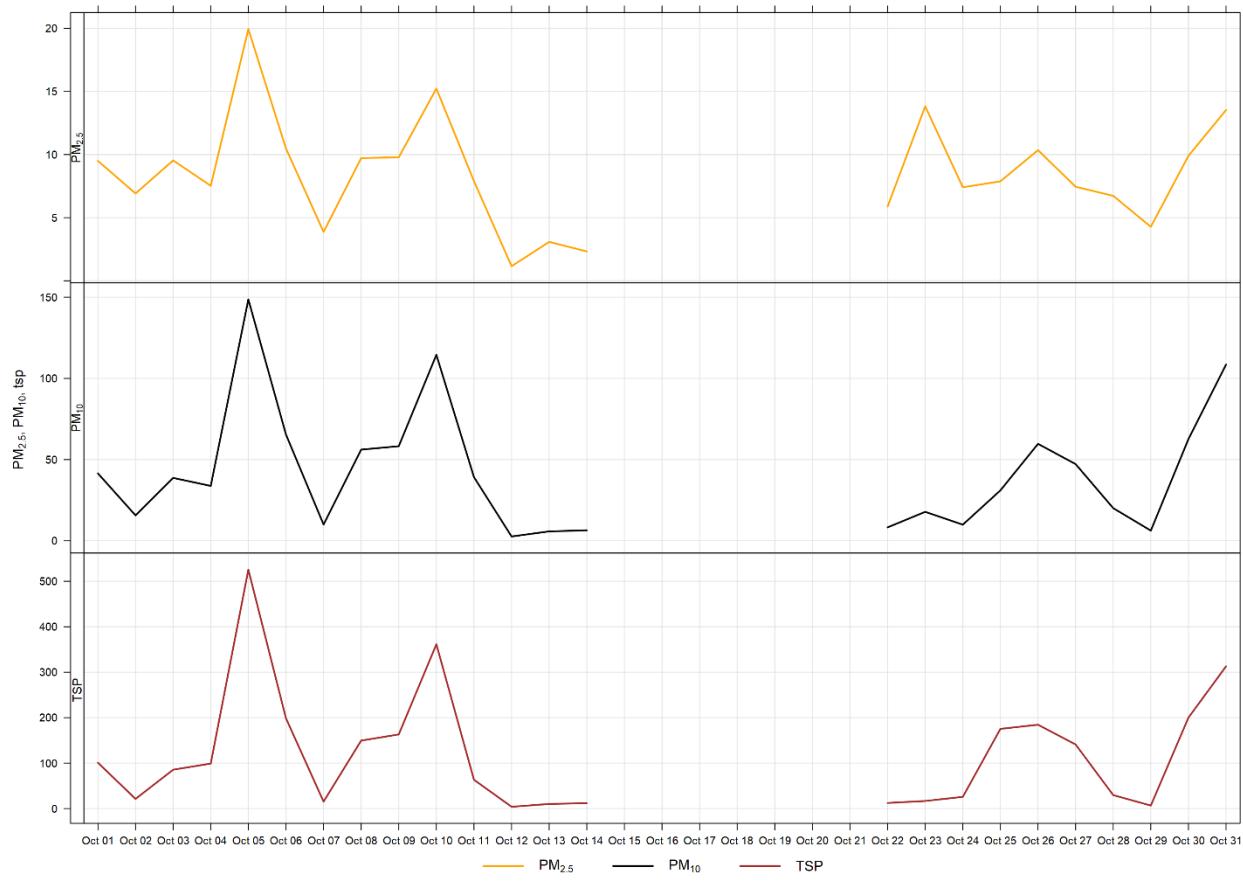
**Table 6-3 Days exceeding the Guideline for TSP or PM<sub>2.5</sub> at the Berm Monitor**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Berm</b>						
<b>2020-10-01</b>	100.8	-	277.5	17.2	48.4	Winds predominately from the west
<b>2020-10-05</b>	525.6	-	262.0	25.8	49.2	High wind event
<b>2020-10-06</b>	198.6	-	258.2	21.9	53.4	High wind event
<b>2020-10-08</b>	149.5	-	217.6	15.4	64.1	Winds predominately from the west
<b>2020-10-09</b>	163.1	-	249.3	15.4	64.3	Winds predominately from the west
<b>2020-10-10</b>	361.4	-	268.7	28.3	44.1	High wind event
<b>2020-10-25</b>	175.3	-	302.1	25.8	57.7	High wind event
<b>2020-10-26</b>	184.4	-	272.0	33.1	51.5	High wind event
<b>2020-10-27</b>	140.9	-	270.5	29.3	52.8	High wind event
<b>2020-10-30</b>	200.0	-	266.6	25.6	53.5	High wind event
<b>2020-10-31</b>	312.8	-	257.9	25.3	30.8	High wind event
<b>Total # of Exceedances</b>	<b>11</b>	<b>0</b>				
<b>Maximum # of Exceedances (October)</b>	<b>21 (2014)</b>	<b>1 (2012)</b>				
<b>Average # of Exceedances (October)</b>	<b>15</b>	<b>0</b>				

<b>Minimum # of Exceedances (October)</b>	<b>9 (2016)</b>	<b>0 (2010, 2011, 2013-2019)</b>			
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**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 11 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west direction, and were predominately over 20 km/hr.

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

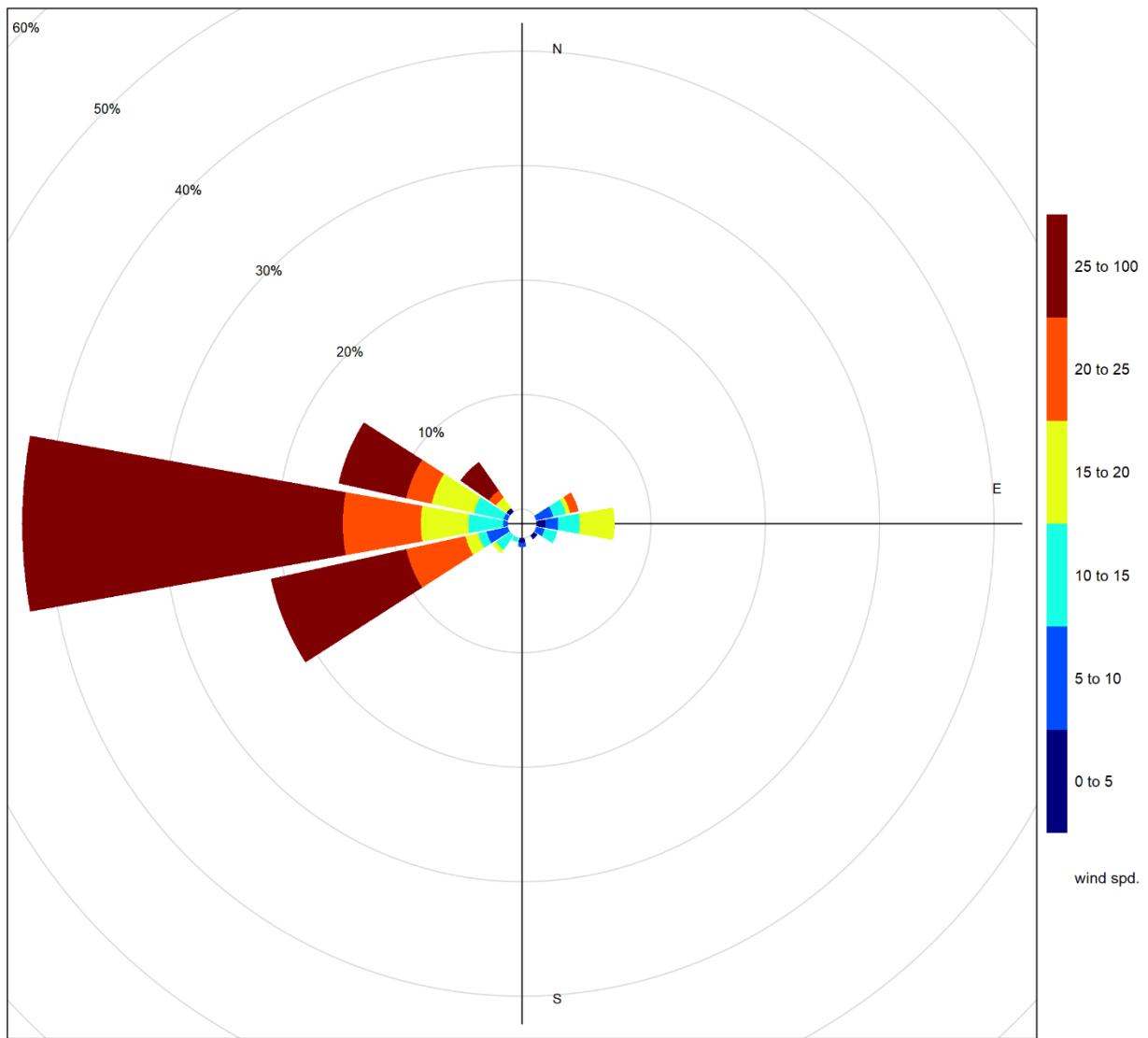
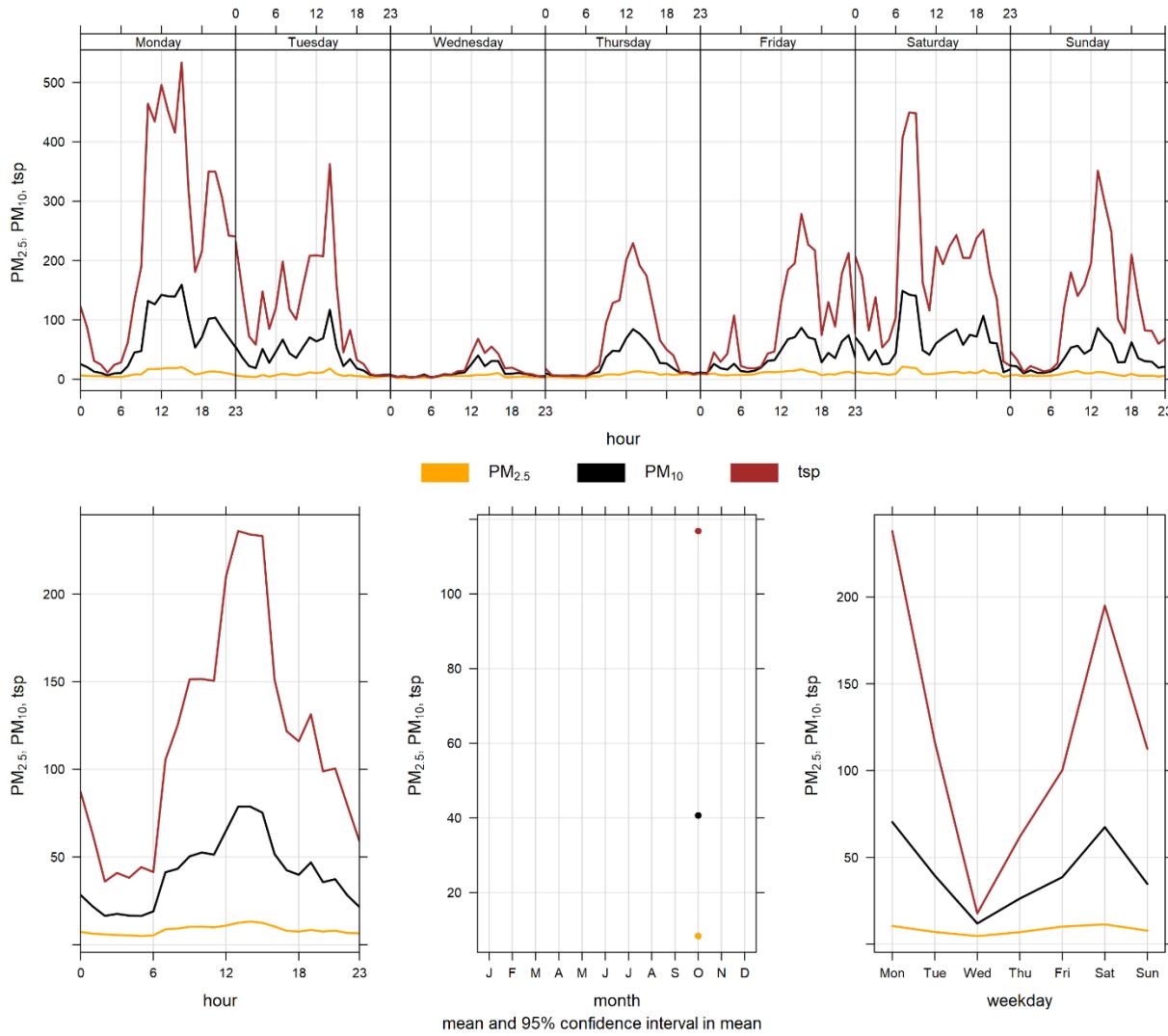


Figure 6-3      Wind rose for TSP exceedance days recorded at the Berm GRIMM



**Figure 6-4      Berm particulate matter time variation**

# 7 ENTRANCE INDUSTRIAL GRIMM

## 7.1 OPERATIONAL SUMMARY

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

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

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The analyzer had 75.4% uptime for the month of October due to 181 hours of GRIMM annual calibration maintenance from October 1 <sup>st</sup> at 1:00 to October 8 <sup>th</sup> at 13:00. Further, there were two hours of collection error on October 31 <sup>st</sup> at 23:00 & 24:00.

## 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<sub>2.5</sub>, PM<sub>10</sub> 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. The Entrance GRIMM was removed on September 29<sup>th</sup> for annual calibration and maintenance, it was reinstalled October 8<sup>th</sup> at 13:00.

During the month of October, there were 4 and zero exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) guidelines, respectively.

Historically, the Entrance monitor records an average of 14 and zero exceedances of the 24-hour TSP and PM<sub>2.5</sub> guidelines respectively, during the month of October. The maximum number of TSP exceedances recorded during October occurred in 2014, which had 26 days that exceeded the guideline. The minimum number of TSP exceedances recorded during October occurred in 2019, which had four days that exceeded the guideline. On the other hand, the maximum number of PM<sub>2.5</sub> exceedances recorded during the month of October was 2 days in 2010 & 2012.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM<sub>2.5</sub> size fraction has been shown to match other regulatory approved PM<sub>2.5</sub> 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.

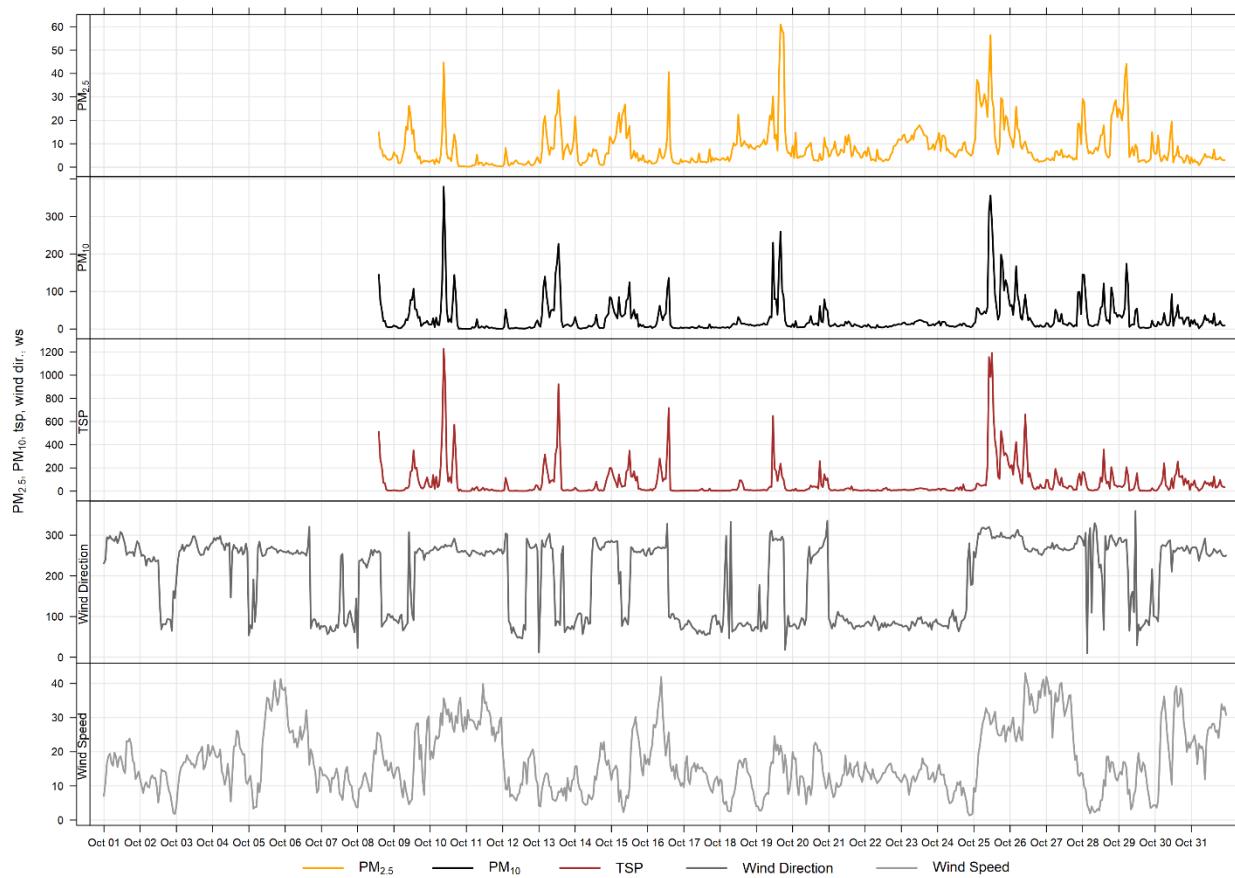
Figure 7-3 shows the wind rose for the 4 days that exceeded the TSP Guideline. The wind rose indicates that the winds predominantly came from the west and west-northwest directions, and were predominately over 20 km/hr.

**Table 7-2      Summary of October 2020 data at the Entrance GRIMM**

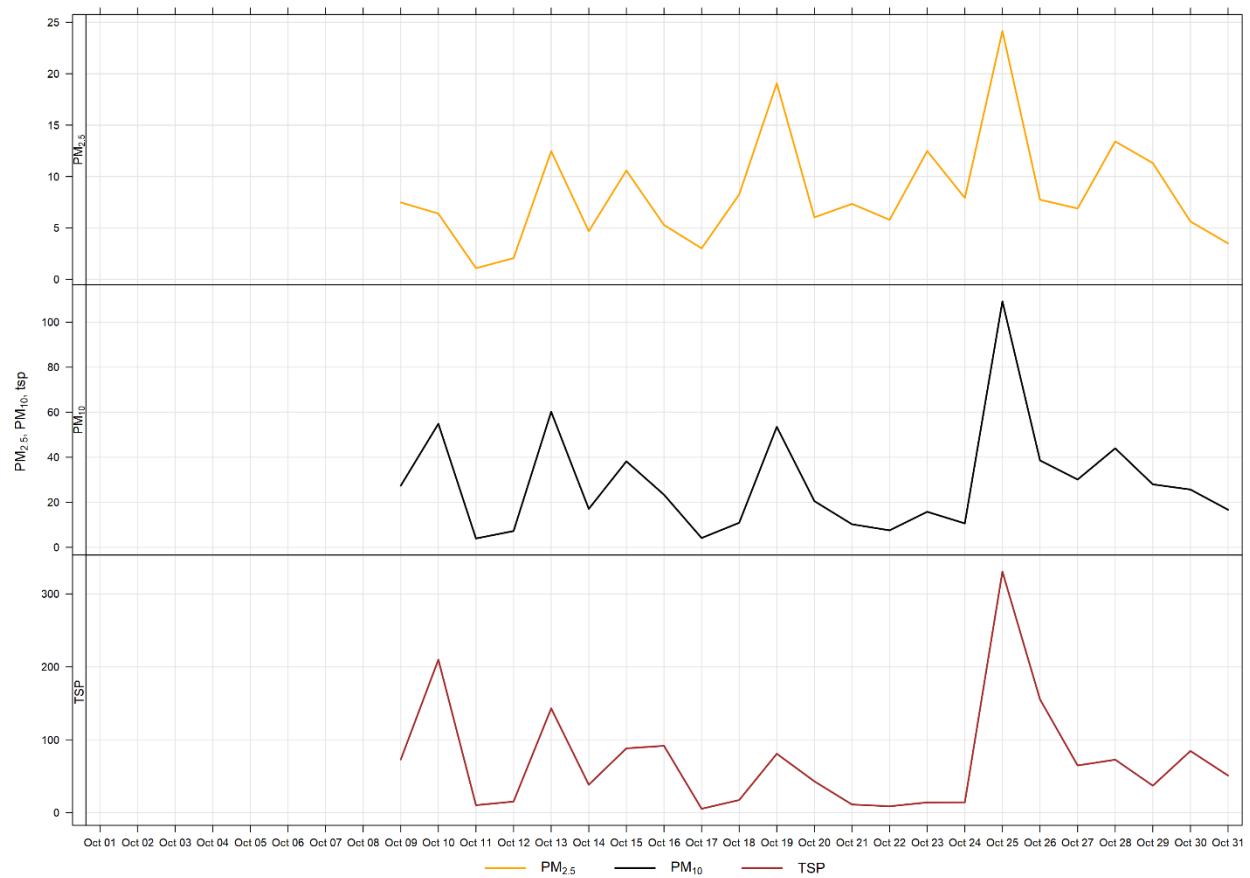
Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour				Maximum 24-hour		Operational Time (Percent)	
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Entrance	0	0	0.2	8.3	61.0	19	16	21.8	287.7	24.1	25	75.4
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Entrance	-	-	0.3	28.7	379.6	10	9	35.7	269.6	109.2	25	75.4
TSP (µg/m <sup>3</sup> )	-	100	Entrance	-	4	0.3	73.0	1227.4	10	9	35.7	269.6	330.5	25	75.4

**Table 7-3 Days exceeding the Guideline for TSP or PM<sub>2.5</sub> at the Entrance Monitor**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Entrance</b>						
<b>2020-10-10</b>	209.8	-	268.7	28.3	44.1	High wind event
<b>2020-10-13</b>	143.0	-	18.3	9.4	72.5	Winds predominantly from the west
<b>2020-10-25</b>	330.5	-	302.1	25.8	57.7	High wind event
<b>2020-10-26</b>	155.4	-	272.0	33.1	51.5	High wind event
<b>Total # of Exceedances</b>	<b>4</b>	<b>0</b>				
<b>Maximum # of Exceedances (October)</b>	<b>26 (2014)</b>	<b>2 (2010, 2012)</b>				
<b>Average # of Exceedances (October)</b>	<b>14</b>	<b>0</b>				
<b>Minimum # of Exceedances (October)</b>	<b>4 (2019)</b>	<b>0 (2011, 2013, 2014, 2015, 2016, 2018, 2019)</b>				



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



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

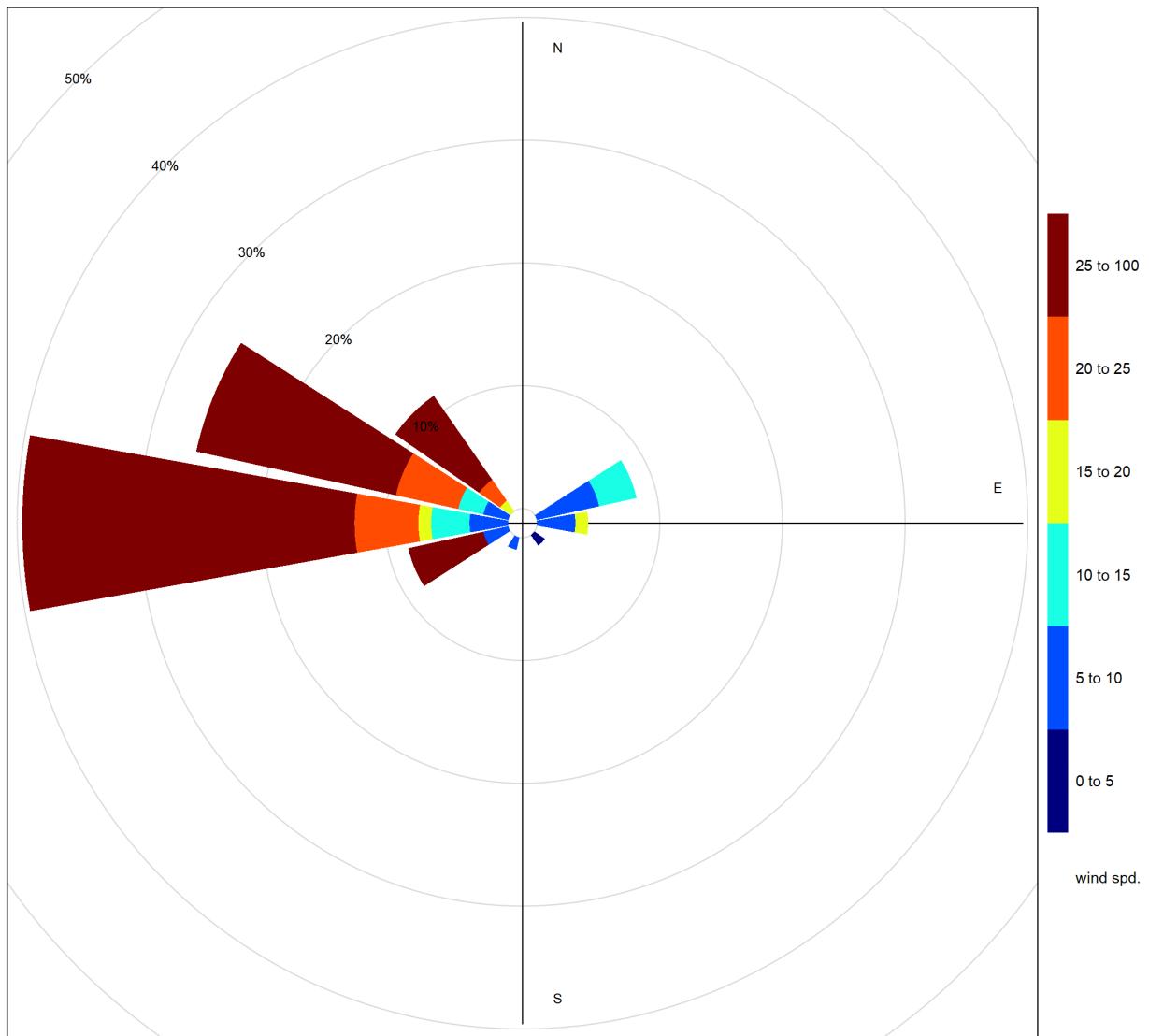
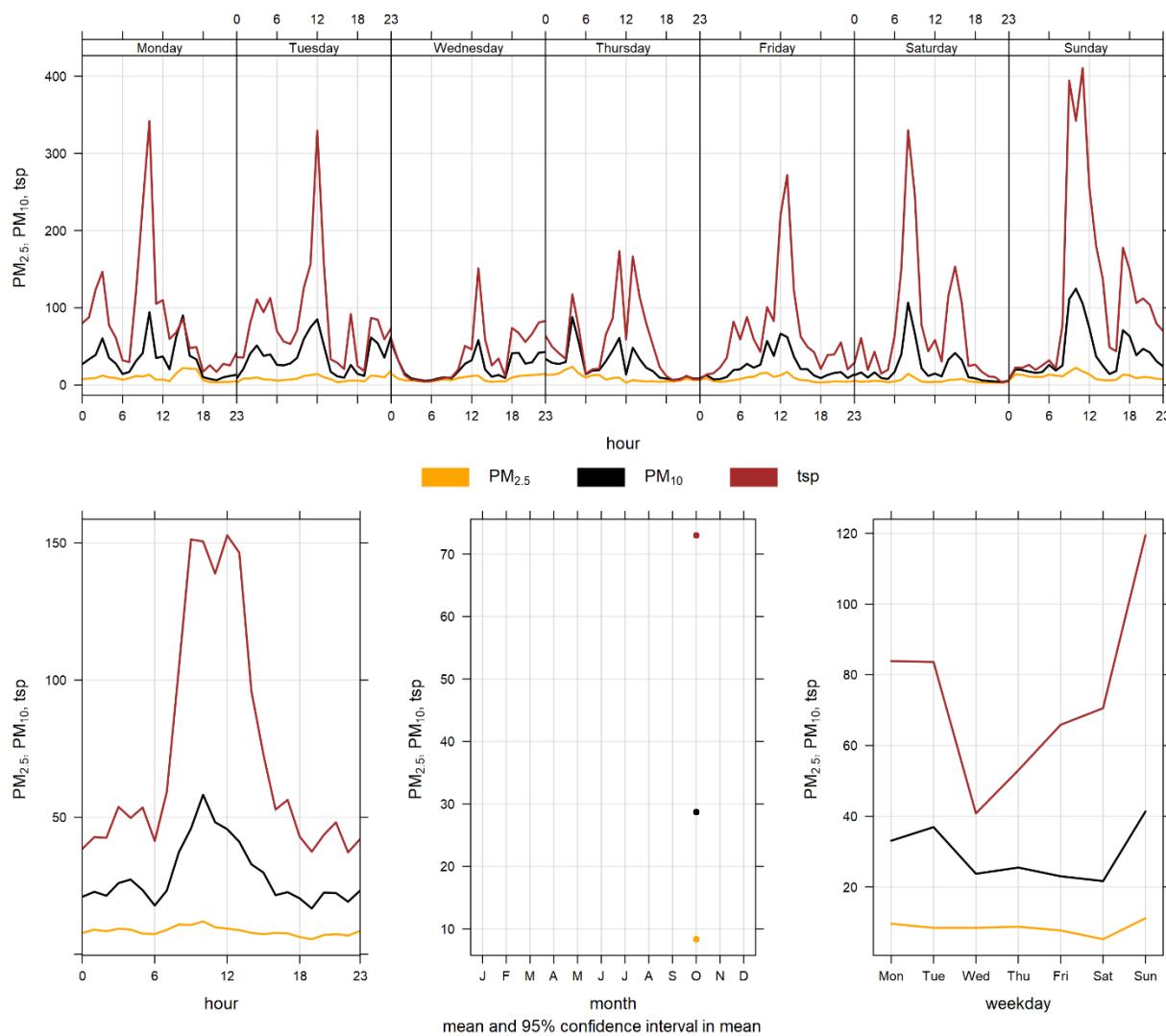


Figure 7-3      Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 7-4 illustrates the hourly PM concentrations recorded at the Entrance monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 7-4 is based on data collected during October 2020. The diurnal pattern differs from the Windridge, Lagoon and Berm stations and are likely more influenced by daytime traffic emission (from vehicles serving Lafarge as well as regular highway traffic) given its location near the highway entrance to Lafarge.



**Figure 7-4      Entrance particulate matter time variation**

# BIBLIOGRAPHY

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- Carslaw, D.C. and K. Ropkins, (2012). Openair — an R package for air quality data analysis. Environmental Modelling & Software. Volume 27–28, 52–61.
- Levelton Consultants Ltd. (2015, June 15). Comparison of GRIMM and E-BAM Data. Alberta, Can

# APPENDIX

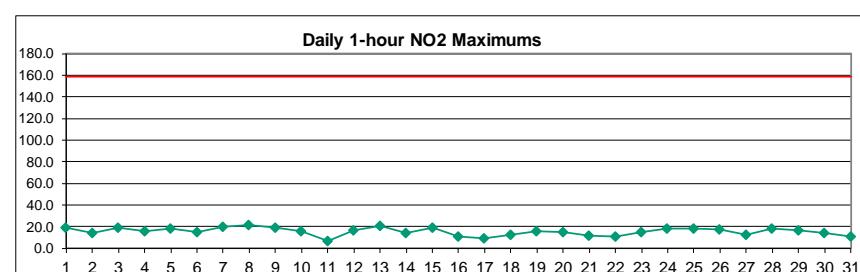
## A DATA & CALIBRATION REPORTS

# APPENDIX



# Lagoon NO<sub>2</sub> (ppb) – October 2020

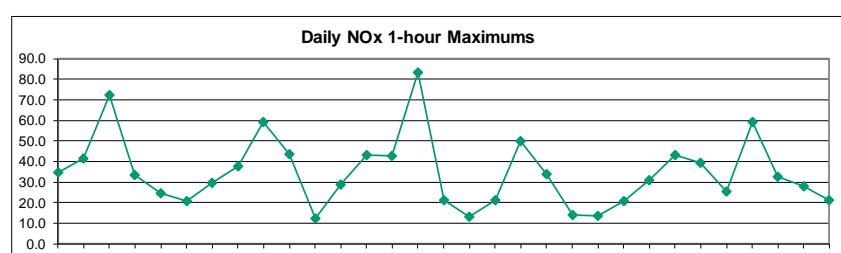
Day	Hour																									Mean	Max
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	19.0	S	10.9	8.6	7.4	9.7	9.6	6.9	11.3	11.7	6.8	5.6	10.3	8.5	2.7	4.8	3.4	6.7	4.0	2.0	4.6	10.3	11.7	11.9	8.2	19.0	
2	13.7	S	3.7	5.3	8.1	13.7	13.7	12.4	8.6	4.2	8.5	5.0	5.1	3.3	4.6	1.8	7.7	4.6	9.7	14.1	8.7	12.7	14.3	8.6	14.3		
3	19.0	S	17.3	11.4	14.9	15.3	16.3	15.3	17.1	9.7	8.2	9.7	12.9	4.6	1.7	1.5	0.8	1.8	11.1	5.7	4.9	5.7	8.5	6.0	9.5	19.0	
4	10.0	S	11.0	12.2	8.7	8.0	14.1	15.6	10.1	11.6	11.1	15.6	6.2	14.7	13.7	9.0	1.8	6.0	15.5	6.4	9.5	6.1	3.6	10.8	10.1	15.6	
5	4.8	S	11.5	10.5	6.8	13.9	17.9	9.4	2.5	2.3	5.8	10.1	10.8	8.1	11.1	9.1	5.5	6.5	3.5	3.2	5.7	4.3	2.9	4.2	7.4	17.9	
6	2.6	S	3.2	1.9	2.7	4.9	6.3	11.5	4.4	1.6	1.9	2.9	3.1	1.2	8.8	11.8	4.5	2.7	3.0	2.7	10.3	13.1	14.8	12.1	5.7	14.8	
7	20.2	S	14.9	17.5	11.2	12.9	15.5	16.7	17.4	6.7	4.6	4.4	5.7	11.5	15.8	8.2	6.7	2.3	1.9	2.2	5.3	12.3	13.2	13.3	10.5	20.2	
8	13.0	S	13.7	10.9	9.8	8.2	11.9	16.0	21.5	10.7	9.9	7.1	4.2	3.1	2.0	9.9	2.4	3.0	3.6	2.8	3.3	3.2	3.5	8.3	7.9	21.5	
9	3.0	S	14.4	5.4	1.7	5.9	6.0	4.9	3.8	13.4	15.1	19.0	11.9	1.6	0.9	8.0	4.9	1.1	4.9	4.2	2.1	0.5	1.6	8.6	6.2	19.0	
10	9.9	S	4.6	6.8	5.5	6.2	5.8	7.9	7.0	10.1	10.2	4.1	7.7	2.9	14.9	16.1	12.2	6.0	3.4	1.1	2.3	2.2	3.4	1.8	6.6	16.1	
11	0.9	S	0.9	7.0	6.7	5.9	6.9	7.1	1.0	1.6	0.9	0.6	4.2	2.9	2.2	4.7	3.6	3.7	2.2	2.1	5.9	5.6	2.2	1.6	3.5	7.1	
12	2.7	S	1.8	6.7	1.4	9.2	11.6	9.4	16.7	6.4	4.9	5.6	5.0	2.6	3.7	3.9	10.0	5.4	6.7	7.2	3.7	6.2	9.9	10.3	6.6	16.7	
13	9.9	S	6.5	7.5	8.4	9.0	10.6	17.2	13.0	12.1	18.3	20.7	14.4	10.2	11.5	7.2	15.0	15.9	16.9	13.9	13.4	17.7	17.8	7.4	12.8	20.7	
14	2.0	S	1.6	1.1	12.7	6.1	5.0	11.6	11.3	14.6	12.2	11.0	7.4	7.9	6.3	8.5	5.7	7.4	5.4	11.9	12.8	11.7	12.7	11.6	8.6	14.6	
15	15.6	S	13.5	12.5	11.4	13.0	15.8	19.4	C	C	C	C	5.5	2.1	3.2	2.3	9.4	2.6	4.5	4.5	12.1	5.7	1.9	2.9	8.5	19.4	
16	4.2	S	1.3	2.5	3.2	5.5	6.3	11.1	7.1	7.2	4.6	6.9	4.9	4.9	2.9	2.8	3.3	3.1	3.0	3.0	2.1	9.9	5.7	8.8	5.0	11.1	
17	5.6	S	1.3	1.2	5.3	9.3	9.2	6.6	2.1	5.2	3.3	2.1	2.1	1.7	1.8	4.6	2.1	3.3	4.6	5.5	3.6	5.0	6.7	3.4	4.2	9.3	
18	2.8	S	3.4	3.5	6.6	4.3	5.8	11.1	12.7	9.4	6.7	3.7	2.6	3.0	3.3	2.9	3.2	3.4	4.7	6.4	4.2	2.9	2.7	6.3	5.0	12.7	
19	5.4	S	7.9	13.8	15.5	8.7	14.8	14.1	10.9	9.3	10.3	14.1	12.3	10.3	9.0	7.9	10.1	8.5	9.0	4.4	4.1	5.0	5.6	5.2	9.4	15.5	
20	4.9	S	6.6	7.5	4.6	3.3	4.2	6.2	8.2	6.4	13.7	12.9	9.2	2.2	1.5	3.1	2.3	11.0	10.1	6.3	8.1	14.9	8.7	4.8	7.0	14.9	
21	3.8	S	11.5	9.7	5.5	1.3	1.1	1.1	1.4	1.9	1.7	1.3	1.8	1.7	2.1	2.9	7.3	3.8	4.8	6.5	7.6	7.0	5.0	8.0	4.3	11.5	
22	9.0	S	4.9	4.0	1.9	1.4	2.7	5.1	8.7	7.2	2.7	2.3	2.3	3.6	2.9	5.4	7.2	11.0	9.3	8.1	8.3	8.5	10.8	9.2	5.9	11.0	
23	12.9	S	7.1	12.2	15.4	10.3	8.0	6.9	9.4	6.3	4.5	4.1	3.5	5.2	9.1	12.8	9.9	8.1	7.8	7.2	8.1	5.2	4.0	8.1	8.1	15.4	
24	8.6	S	8.7	6.6	6.6	6.0	6.2	7.1	7.3	5.7	2.5	1.4	3.9	7.1	2.3	3.4	9.3	6.5	6.0	5.1	16.6	18.4	15.9	12.0	7.5	18.4	
25	14.9	S	9.8	9.3	7.3	7.1	6.7	6.0	5.4	4.7	5.2	12.4	13.0	13.7	10.3	7.6	9.2	7.2	8.6	10.2	12.9	10.3	14.2	18.0	9.7	18.0	
26	17.9	S	13.0	7.3	9.9	16.4	13.9	12.8	7.8	5.1	6.2	4.2	3.4	5.4	3.6	5.9	3.1	2.4	1.3	1.2	1.2	1.3	3.5	2.1	6.5	17.9	
27	2.4	S	3.4	5.8	2.6	6.7	10.6	11.0	9.1	4.7	4.7	4.0	3.2	4.2	3.8	5.1	3.9	4.6	6.4	4.2	12.8	10.3	12.0	7.8	6.2	12.8	
28	6.7	S	16.1	8.1	14.6	17.2	18.5	18.3	18.3	18.5	11.3	9.1	13.8	11.8	8.6	9.3	6.7	11.9	11.3	12.0	12.2	11.2	11.6	8.5	12.4	18.5	
29	5.9	S	10.4	7.4	7.9	10.4	10.0	17.1	13.7	10.9	9.9	5.9	1.6	4.7	4.3	5.6	4.8	4.2	4.0	8.4	6.8	8.2	9.9	10.0	7.9	17.1	
30	10.2	S	7.8	6.9	3.7	8.7	6.0	7.7	10.1	11.8	14.3	4.9	3.2	4.1	8.1	5.5	6.6	4.7	5.2	5.2	12.9	7.8	2.6	4.5	7.1	14.3	
31	7.1	S	11.2	9.9	1.1	1.1	5.5	5.0	8.5	1.9	1.4	1.2	1.4	2.1	5.5	5.7	1.9	4.3	7.8	2.2	1.3	1.1	1.4	3.6	4.0	11.2	
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	708	100.0%	
MEAN	8.7	-	8.2	7.8	7.4	8.4	9.6	10.6	9.7	7.9	7.2	6.4	5.7	5.8	6.5	5.5	5.9	6.2	5.7	7.5	7.8	7.8	7.9	7.9			
MAX	20.2	-	17.3	17.5	15.5	17.2	18.5	19.4	21.5	18.5	18.3	20.7	14.4	14.7	15.8	16.1	15.0	15.9	16.9	13.9	16.6	18.4	17.8	18.0			



Number of 1HR Exceedences	0
Number of Non-Zero Readings	708
Maximum 1-HR Average	21.5 PPB
Maximum 24-HR Average	12.8 PPB
Operational Time	744 HRS
Monthly Calibration Standard Deviation	4.5
Operational Uptime	100.0 %
Monthly Average	7.4 PPB

# Lagoon NOx (ppb) – October 2020

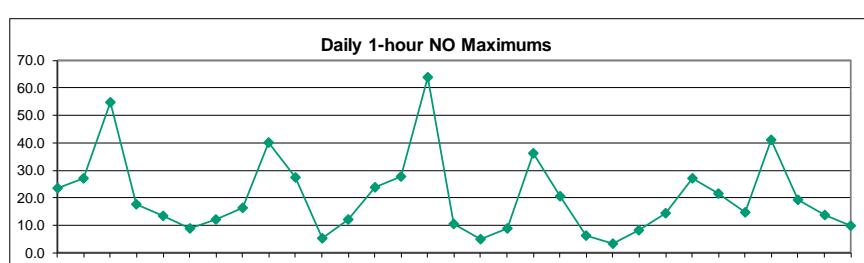
Day	Hour																									Mean	Max
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	29.0	S	21.6	17.9	10.0	21.9	17.8	9.2	34.9	32.9	15.9	11.6	21.9	14.3	3.5	6.1	4.0	8.9	4.0	2.0	6.2	13.1	18.0	15.7	14.8	34.9	
2	20.7	S	3.5	5.1	9.5	14.8	19.2	17.3	21.5	15.7	6.4	14.4	7.1	6.9	4.1	5.7	1.7	8.4	4.4	18.1	14.6	13.5	21.5	41.4	12.9	41.4	
3	20.5	S	46.7	20.1	41.5	47.3	53.2	50.6	72.2	33.4	20.4	22.8	27.7	7.1	1.9	1.8	0.8	1.8	18.1	5.8	5.0	8.5	11.4	7.5	22.9	72.2	
4	15.5	S	23.4	25.6	18.0	12.3	29.4	29.3	15.9	18.5	19.9	25.8	8.8	29.9	26.2	17.2	2.2	9.4	33.3	10.7	14.5	7.3	3.4	14.8	17.9	33.3	
5	5.3	S	17.3	16.2	17.0	19.6	24.5	11.3	3.5	3.0	9.5	19.4	21.7	16.5	24.5	18.1	10.2	12.0	4.9	4.8	10.6	6.6	4.9	6.7	12.5	24.5	
6	4.0	S	4.7	2.6	4.7	7.1	11.2	20.2	6.7	1.8	2.3	4.3	4.4	1.5	14.7	20.8	5.7	2.6	3.0	2.6	11.1	15.0	19.3	15.6	8.1	20.8	
7	28.6	S	20.3	23.1	16.1	15.0	23.1	28.3	29.5	8.5	6.5	6.5	8.6	21.9	28.0	10.5	10.1	2.1	1.7	2.1	5.2	14.9	15.8	13.5	14.8	29.5	
8	13.4	S	14.6	11.7	10.7	8.6	16.9	21.5	37.9	17.5	16.9	16.2	7.0	4.3	2.6	17.0	2.8	3.2	4.0	3.0	3.1	3.1	3.6	9.4	10.8	37.9	
9	3.0	S	22.8	7.2	1.6	10.4	8.4	5.6	4.4	26.3	48.0	59.4	45.6	2.6	1.1	17.6	8.1	1.2	5.6	4.4	2.1	0.3	1.9	14.8	13.1	59.4	
10	17.9	S	7.1	12.6	8.8	10.4	9.9	14.9	14.3	23.3	22.5	7.7	15.3	5.3	41.4	43.4	38.6	11.5	5.5	1.1	2.5	2.4	3.7	2.2	14.0	43.4	
11	0.9	S	0.9	12.5	10.2	9.1	10.2	11.5	1.2	2.5	0.9	0.7	8.6	5.2	3.5	8.3	6.3	5.3	2.6	2.2	9.5	8.1	2.4	1.6	5.4	12.5	
12	4.0	S	1.8	8.6	1.2	10.2	19.0	12.5	29.0	8.8	11.2	10.4	8.6	3.6	5.8	7.5	22.1	8.3	10.0	11.9	4.1	9.0	14.2	10.6	10.1	29.0	
13	9.9	S	8.7	10.1	13.6	13.6	13.7	33.3	16.3	15.0	42.3	43.3	26.9	15.9	15.8	10.2	24.5	19.4	23.5	18.8	17.0	40.1	38.6	14.8	21.1	43.3	
14	2.1	S	1.6	0.9	16.0	8.3	5.3	16.4	23.3	42.7	25.0	25.9	18.0	21.2	11.7	12.1	11.9	11.8	8.7	19.4	22.0	18.7	22.0	17.6	15.8	42.7	
15	29.3	S	28.0	22.5	12.2	17.2	18.1	83.4	C	C	C	C	8.7	2.8	4.6	2.9	13.7	2.8	4.9	16.2	7.3	1.9	3.0	15.5	83.4		
16	4.4	S	1.3	2.9	3.7	8.2	10.5	21.3	12.6	12.9	7.2	11.4	6.4	5.4	3.0	3.0	3.9	3.3	3.0	3.0	2.2	16.4	7.6	11.3	7.2	21.3	
17	8.7	S	1.2	1.4	8.3	11.6	13.0	10.7	2.3	9.9	5.5	3.1	3.1	2.2	2.3	6.7	2.6	3.5	5.2	5.6	3.5	5.2	7.7	3.6	5.5	13.0	
18	3.0	S	3.3	3.6	7.0	4.3	5.9	13.8	21.3	18.1	13.8	6.3	4.3	4.6	4.7	3.9	3.7	3.6	5.4	7.6	4.4	3.3	2.7	8.4	6.8	21.3	
19	6.2	S	14.6	21.8	16.7	12.4	18.7	20.4	21.2	18.8	30.7	50.1	35.2	22.9	19.4	15.7	20.2	12.6	12.7	5.5	4.1	5.3	6.3	6.1	17.3	50.1	
20	5.3	S	10.9	12.0	4.7	3.2	4.3	9.1	11.5	11.5	34.0	28.1	16.9	2.7	1.8	4.0	2.8	19.3	15.4	6.8	11.8	21.3	11.6	4.9	11.0	34.0	
21	3.8	S	13.9	10.2	7.9	1.2	1.1	1.0	1.5	2.1	2.0	1.5	2.0	2.0	2.7	3.7	13.5	4.1	5.6	7.5	11.6	10.5	5.4	11.1	5.5	13.9	
22	11.1	S	6.3	4.8	1.9	1.4	2.6	6.7	11.5	10.4	3.9	3.6	3.6	6.2	4.7	8.5	9.6	13.5	11.5	8.6	8.7	9.6	12.6	9.6	7.4	13.5	
23	18.1	S	8.5	19.6	19.2	11.0	8.2	7.4	12.5	7.8	5.2	4.9	4.2	7.1	14.4	20.9	14.6	11.3	8.7	10.7	10.1	5.8	4.1	10.5	10.6	20.9	
24	11.2	S	11.4	8.1	8.3	7.5	6.5	9.9	9.4	9.1	3.7	1.8	5.8	12.6	3.4	5.0	13.9	6.8	6.1	5.0	31.1	24.9	16.8	16.7	10.2	31.1	
25	16.5	S	16.5	15.4	8.2	8.6	7.5	7.0	8.7	8.5	11.3	39.5	36.2	36.3	21.8	13.4	16.6	11.2	16.7	20.7	24.2	20.0	31.3	43.0	19.1	43.0	
26	39.4	S	28.8	12.2	18.3	36.8	28.4	21.8	11.9	7.7	11.3	5.8	4.5	8.7	5.0	8.5	3.8	2.6	1.3	1.1	1.2	1.4	4.8	2.9	11.7	39.4	
27	2.8	S	4.1	9.0	3.6	13.3	25.1	18.4	17.5	6.6	8.1	6.7	5.1	7.2	5.5	8.4	5.2	8.2	12.4	5.5	25.3	19.9	20.3	11.2	10.8	25.3	
28	7.8	S	23.7	8.8	18.8	43.6	38.8	51.7	59.3	42.3	18.5	17.5	37.4	26.3	13.1	18.8	10.9	33.1	25.4	26.0	29.5	24.0	22.6	16.7	26.7	59.3	
29	13.7	S	24.1	22.8	16.6	20.4	12.3	26.0	32.8	23.3	21.3	10.4	2.0	7.3	5.6	7.5	5.5	4.3	3.9	10.9	7.7	8.2	9.9	11.0	13.4	32.8	
30	12.0	S	10.2	12.0	5.4	16.9	10.4	13.0	17.6	22.5	28.0	7.0	4.8	7.7	14.3	8.6	10.2	8.5	8.9	8.1	21.4	13.4	3.0	7.5	11.8	28.0	
31	12.1	S	21.0	17.0	1.0	1.1	7.6	7.0	10.0	2.2	1.5	1.4	1.6	2.9	8.8	9.0	2.1	6.3	11.4	2.3	1.3	1.1	1.4	5.7	5.9	21.0	
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	708	100.0%	
MEAN	12.3	-	13.6	12.2	11.0	13.8	15.5	19.7	19.1	15.5	15.1	15.6	13.4	10.5	10.3	11.2	9.4	8.8	9.2	8.0	11.0	11.5	11.3	11.9			
MAX	39.4	-	46.7	25.6	41.5	47.3	53.2	83.4	72.2	42.7	48.0	59.4	45.6	36.3	41.4	43.4	38.6	33.1	33.3	26.0	31.1	40.1	38.6	43.0			



Number of Non-Zero Readings	708
Maximum 1-HR Average	83.4 PPB
Maximum 24-HR Average	26.7 PPB
Monthly Calibration Standard Deviation	10.78
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	12.6 PPB

# Lagoon NO (ppb) – October 2020

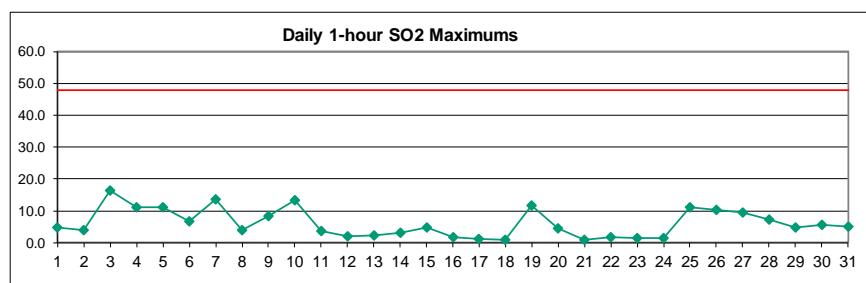
Day	HOUR																									MEAN	MAX		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1		9.9	S	10.6	9.2	2.7	12.1	8.2	2.3	23.5	21.3	9.1	6.1	11.6	5.8	0.8	1.4	0.6	2.3	0.2	0.0	1.7	2.9	6.4	3.8	6.6	23.5		
2		7.0	S	0.0	0.0	1.4	1.1	5.4	3.6	9.1	7.1	2.2	5.9	2.1	1.9	0.9	1.2	0.0	0.7	0.0	8.3	0.5	4.9	8.8	27.0	4.3	27.0		
3		1.5	S	29.2	8.7	26.3	31.8	36.7	35.2	54.9	23.6	12.2	13.1	14.7	2.4	0.2	0.3	0.0	0.0	7.0	0.1	0.1	2.9	2.9	1.5	13.3	54.9	13.3	54.9
4		5.6	S	12.4	13.4	9.2	4.3	15.2	13.5	5.8	6.9	8.8	10.1	2.6	15.1	12.4	8.1	0.4	3.5	17.7	4.4	5.0	1.2	0.0	4.0	7.8	17.7	7.8	17.7
5		0.4	S	5.7	5.8	10.2	5.6	6.4	1.9	0.9	0.7	3.8	9.2	10.9	8.4	13.4	9.0	4.8	5.5	1.4	1.6	4.8	2.4	2.0	2.5	5.1	13.4	5.1	13.4
6		1.4	S	1.6	0.7	2.0	2.2	4.9	8.7	2.3	0.3	0.5	1.4	1.3	0.4	6.0	9.0	1.2	0.0	0.0	0.0	0.9	1.9	4.5	3.5	2.4	9.0	2.4	9.0
7		8.3	S	5.4	5.6	4.8	2.1	7.5	11.6	12.0	1.8	1.8	2.1	2.8	10.4	12.2	2.4	3.4	0.0	0.0	0.0	0.0	2.5	2.6	0.3	4.3	12.2	4.3	12.2
8		0.4	S	0.9	0.8	1.0	0.4	4.9	5.4	16.2	6.7	7.0	9.0	2.8	1.2	0.6	7.1	0.4	0.2	0.3	0.1	0.0	0.0	0.1	1.2	2.9	16.2	2.9	16.2
9		0.0	S	8.4	1.8	0.0	4.4	2.4	0.7	0.6	12.8	32.6	40.1	33.6	1.1	0.2	9.6	3.2	0.1	0.7	0.2	0.1	0.0	0.3	6.2	6.9	40.1	6.9	40.1
10		8.0	S	2.5	5.8	3.3	4.3	4.0	7.0	7.3	13.1	12.3	3.6	7.7	2.4	26.4	27.3	26.3	5.5	2.0	0.0	0.2	0.2	0.4	0.3	7.4	27.3	7.4	27.3
11		0.0	S	0.1	5.4	3.5	3.2	3.2	4.4	0.1	0.9	0.0	0.0	4.4	2.3	1.3	3.6	2.6	1.6	0.4	0.1	3.5	2.4	0.2	0.0	1.9	5.4	1.9	5.4
12		1.2	S	0.1	1.9	0.0	1.0	7.4	3.0	12.1	2.4	6.3	4.8	3.6	1.0	2.1	3.6	12.1	2.9	3.4	4.6	0.4	2.8	4.2	0.4	3.5	12.1	3.5	12.1
13		0.1	S	2.3	2.7	5.2	4.5	3.2	16.1	3.2	2.9	23.9	22.4	12.5	5.7	4.3	3.0	9.5	3.5	6.6	5.0	3.6	22.3	20.7	7.3	8.3	23.9	8.3	23.9
14		0.0	S	0.0	0.0	3.3	2.2	0.3	4.8	12.0	27.9	12.7	14.8	10.6	13.3	5.4	3.6	6.2	4.4	3.3	7.4	9.2	7.0	9.3	5.9	7.1	27.9	7.1	27.9
15		13.6	S	14.5	10.0	0.8	4.3	2.3	63.9	C	C	C	C	3.5	0.8	1.6	0.8	4.6	0.3	0.6	4.3	1.8	0.2	0.4	7.1	63.9	7.1	63.9	
16		0.5	S	0.2	0.5	0.7	2.9	4.3	10.4	5.7	5.9	2.8	4.8	1.7	0.7	0.3	0.4	0.7	0.4	0.3	0.2	0.3	6.7	2.2	2.8	2.4	10.4	2.4	10.4
17		3.4	S	0.2	0.4	3.2	2.5	4.1	4.3	0.5	4.9	2.4	1.2	1.2	0.8	0.8	2.3	0.7	0.5	0.8	0.4	0.2	0.5	1.3	0.5	1.6	4.9	1.6	4.9
18		0.5	S	0.2	0.4	0.7	0.3	0.4	2.9	8.8	8.9	7.3	2.8	1.9	1.8	1.5	1.2	0.7	0.4	1.0	1.5	0.6	0.7	0.3	2.4	2.0	8.9	2.0	8.9
19		1.2	S	7.1	8.2	1.5	3.9	4.2	6.6	10.6	9.8	20.5	36.1	23.0	12.8	10.7	8.1	10.4	4.5	4.0	1.4	0.2	0.5	1.0	1.2	8.2	36.1	8.2	36.1
20		0.8	S	4.6	4.7	0.4	0.2	0.4	3.2	3.6	5.4	20.4	15.4	8.1	0.8	0.6	1.1	0.7	8.5	5.5	0.8	3.9	6.7	3.2	0.3	4.3	20.4	4.3	20.4
21		0.3	S	2.7	0.8	2.6	0.2	0.3	0.1	0.4	0.5	0.6	0.4	0.5	0.5	0.8	1.0	6.4	0.5	1.0	1.1	4.2	3.6	0.6	3.2	1.4	6.4	1.4	6.4
22		2.2	S	1.6	0.9	0.2	0.2	0.2	1.8	2.9	3.4	1.3	1.3	1.4	2.7	1.9	3.2	2.6	2.7	2.4	0.7	0.6	1.3	2.1	0.6	1.7	3.4	1.7	3.4
23		5.4	S	1.5	7.5	4.0	0.9	0.5	0.7	3.3	1.7	0.8	0.9	0.8	2.1	5.5	8.2	4.8	3.3	1.1	3.7	2.1	0.7	0.3	2.5	2.7	8.2	2.7	8.2
24		2.8	S	2.8	1.7	1.9	1.6	0.5	3.0	2.3	3.6	1.3	0.6	2.0	5.6	1.1	1.6	4.8	0.5	0.3	0.2	14.6	6.5	1.0	4.8	2.8	14.6	2.8	14.6
25		1.8	S	6.9	6.2	1.0	1.6	1.0	1.1	3.4	3.9	6.2	27.2	23.2	22.6	11.7	6.0	7.6	4.2	8.3	10.6	11.4	9.9	17.2	25.0	9.5	27.2	9.5	27.2
26		21.5	S	15.9	5.0	8.5	20.4	14.6	9.1	4.2	2.8	5.2	1.8	1.2	3.3	1.5	2.8	0.9	0.4	0.2	0.1	0.2	0.3	1.5	0.9	5.3	21.5	5.3	21.5
27		0.6	S	0.9	3.4	1.1	6.8	14.7	7.7	8.7	2.2	3.5	2.9	2.1	3.1	1.8	3.4	1.4	3.8	6.2	1.5	12.7	9.8	8.5	3.7	4.8	14.7	4.8	14.7
28		1.3	S	7.8	1.0	4.3	26.5	20.4	33.4	41.0	23.9	7.4	8.7	23.7	14.7	4.7	9.8	4.4	21.4	14.2	14.2	17.5	12.9	11.2	8.4	14.5	41.0	5.7	19.2
29		8.1	S	13.9	15.6	8.9	10.2	2.7	9.1	19.2	12.6	11.5	4.7	0.6	2.8	1.4	2.1	1.0	0.3	0.2	2.7	1.2	0.3	0.3	1.2	5.7	19.2	5.7	19.2
30		2.1	S	2.7	5.2	1.8	8.4	4.6	5.5	7.7	10.9	13.8	2.3	1.8	3.8	6.4	3.2	3.8	4.0	3.9	3.1	8.7	5.8	0.6	3.1	4.9	13.8	4.9	13.8
31		5.1	S	10.0	7.2	0.1	0.2	2.3	2.2	1.7	0.4	0.3	0.4	0.4	0.9	3.5	3.5	0.3	2.2	3.7	0.3	0.2	0.2	2.3	2.1	10.0	2.1	10.0	
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	708	100.0%		
MEAN	3.7	-	5.6	4.5	3.7	5.5	6.0	9.1	9.5	7.6	8.0	8.5	7.2	5.0	4.6	4.8	4.0	3.0	3.1	2.4	3.6	3.9	3.7	4.1					
MAX	21.5	-	29.2	15.6	26.3	31.8	36.7	63.9	54.9	27.9	32.6	40.1	33.6	22.6	26.4	27.3	26.3	21.4	17.7	14.2	17.5	22.3	20.7	27.0					



Number of Non-Zero Readings	684
Maximum 1-HR Average	63.9 PPB
Maximum 24-HR Average	14.5 PPB
Monthly Calibration Standard Deviation	7.142
Operational Time	5
Operational Uptime	744 HRS
Monthly Average	5.2 PPB
100.0 %	

# Lagoon SO<sub>2</sub> (ppb) – October 2020

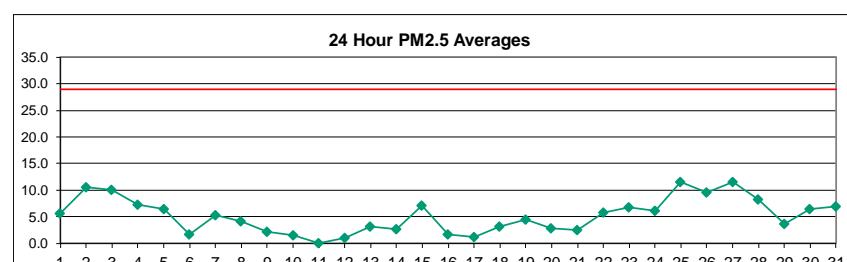
Day	Hour																									Mean	Max
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		0.9	S	2.5	1.8	0.6	1.9	0.0	1.1	2.1	4.8	2.2	1.3	4.0	1.9	0.3	0.0	0.7	0.0	0.0	0.5	0.2	1.1	1.8	2.6	1.4	4.8
2		3.6	S	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.9	1.5	0.1	0.0	0.4	0.3	0.7	0.7	0.4	0.0	0.0	0.1	0.0	0.5	3.9
3		0.3	S	7.2	1.9	10.5	11.0	10.4	14.3	16.4	8.8	4.4	5.7	5.0	0.4	0.0	0.4	0.4	0.2	0.0	0.3	0.2	0.3	1.7	1.6	4.4	16.4
4		3.2	S	4.3	5.1	3.0	2.3	6.1	6.4	3.5	4.0	3.6	5.8	1.3	8.2	3.6	4.4	0.7	1.0	11.1	2.7	2.5	1.3	0.3	0.7	3.7	11.1
5		1.2	S	0.0	0.0	0.1	0.3	1.4	0.1	0.0	0.0	3.8	10.3	11.0	7.7	10.6	8.4	4.7	7.0	0.8	3.4	3.1	0.9	0.7	0.7	3.3	11.0
6		0.8	S	1.0	0.8	1.4	0.2	1.1	3.4	1.7	0.0	0.1	0.3	0.7	0.0	6.8	5.1	0.6	0.4	0.0	0.2	0.8	0.3	0.0	0.1	1.1	6.8
7		0.3	S	0.1	0.4	0.3	0.1	0.3	0.3	0.9	1.8	0.9	1.9	9.8	13.7	1.7	0.6	0.0	0.4	0.4	0.1	0.0	0.0	0.0	0.0	1.5	13.7
8		0.0	S	0.1	0.1	0.2	0.4	0.3	0.7	0.6	0.0	2.8	3.9	0.5	0.4	0.5	1.0	0.0	0.0	0.9	0.9	0.3	1.5	0.1	0.6	0.7	3.9
9		0.0	S	0.2	0.5	0.3	0.0	0.0	0.1	0.1	0.8	4.3	8.2	1.2	0.0	0.0	0.1	0.0	0.4	0.0	0.6	0.9	0.5	0.4	1.7	0.9	8.2
10		1.5	S	1.0	2.7	2.3	1.9	1.7	3.3	2.3	6.7	5.5	2.1	3.3	2.6	13.3	10.7	8.3	1.6	0.8	0.5	0.2	0.5	0.1	0.4	3.2	13.3
11		0.2	S	0.7	3.6	2.7	1.2	1.7	0.9	0.3	0.4	0.0	0.2	2.7	2.1	2.0	2.2	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	1.0	3.6
12		0.2	S	0.3	0.3	0.1	0.0	0.4	0.1	0.3	0.0	0.1	0.2	0.0	0.0	0.0	0.2	2.1	0.1	0.0	1.0	0.5	0.0	0.0	0.2	0.3	2.1
13		0.0	S	0.8	0.4	1.1	1.8	0.6	1.1	1.9	1.8	2.3	2.1	1.2	0.6	0.6	0.5	0.8	0.1	0.8	0.4	0.7	0.6	0.5	0.3	0.9	2.3
14		0.0	S	0.0	0.0	0.5	0.0	0.1	0.3	0.0	0.3	0.0	0.5	1.8	3.0	0.1	0.0	0.0	0.0	1.4	2.2	2.4	2.6	1.8	0.7	3.0	
15		4.8	S	3.8	4.4	0.9	0.6	0.2	0.4	C	C	C	C	C	1.8	0.7	1.1	0.0	0.6	0.1	0.6	1.0	0.7	0.5	0.6	1.3	4.8
16		0.7	S	0.2	1.3	0.5	0.8	0.7	0.7	1.2	0.7	0.9	1.9	1.5	0.9	0.8	0.6	0.6	0.6	0.6	1.0	0.8	0.9	0.8	0.8	0.9	1.9
17		0.5	S	0.7	0.6	1.1	0.7	0.6	0.6	0.9	0.5	1.3	1.3	0.9	0.9	0.4	0.6	0.2	0.3	0.5	0.6	0.6	0.7	0.7	0.7	0.7	1.3
18		0.2	S	0.8	1.0	0.6	0.6	0.3	0.6	1.0	0.6	1.0	0.9	0.8	0.8	0.5	0.6	0.6	0.5	0.7	0.9	0.4	0.7	0.9	0.5	0.7	1.0
19		0.8	S	0.8	1.0	0.7	1.3	0.6	1.5	2.2	2.0	4.5	11.5	11.8	6.2	4.4	3.4	3.3	3.2	2.7	1.0	0.6	1.1	0.9	0.7	2.9	11.8
20		1.0	S	0.6	0.7	0.7	0.9	0.7	0.3	0.8	1.3	1.1	1.2	0.8	0.5	0.3	0.5	0.7	3.0	3.8	1.4	1.0	4.6	2.5	1.3	1.3	4.6
21		1.0	S	0.8	0.7	0.7	0.0	0.7	0.5	0.3	0.4	0.7	0.5	0.4	0.5	0.5	0.6	0.4	0.7	0.3	0.2	0.0	0.0	0.0	0.2	0.4	1.0
22		0.8	S	0.4	0.8	0.7	0.3	0.5	0.9	1.1	0.7	1.5	0.8	1.4	1.8	1.6	1.1	0.8	0.0	0.2	1.1	0.6	1.8	1.0	1.1	0.9	1.8
23		1.6	S	0.7	0.5	0.4	1.1	0.7	0.8	0.3	0.7	0.8	0.2	1.1	0.7	0.8	0.6	0.9	0.6	0.8	0.6	1.0	1.5	0.8	0.3	0.8	1.6
24		0.4	S	0.8	1.4	0.9	0.6	0.5	0.8	0.7	0.5	0.7	0.6	0.9	0.7	0.4	0.5	0.3	0.2	0.5	0.3	0.6	0.3	0.2	0.3	0.6	1.4
25		0.2	S	0.6	1.2	0.4	1.1	0.4	0.2	1.0	0.3	2.0	11.2	6.9	7.2	5.4	3.5	4.1	3.2	4.8	7.6	6.4	5.8	9.4	9.2	4.0	11.2
26		10.2	S	6.8	1.9	5.0	9.0	6.2	4.7	1.4	0.6	0.7	0.3	0.3	0.2	0.5	0.1	0.1	0.2	0.6	0.9	0.5	0.6	0.8	0.5	2.3	10.2
27		0.3	S	0.5	3.6	1.4	4.6	9.4	2.5	0.6	0.3	0.2	0.0	0.3	0.2	0.6	0.2	0.4	0.7	1.4	0.8	4.6	3.4	3.5	2.4	1.8	9.4
28		0.9	S	1.7	0.7	0.5	0.8	0.2	0.7	1.0	0.5	0.4	1.0	7.3	4.8	1.7	0.7	0.5	2.2	3.6	5.4	6.7	3.9	4.4	3.0	2.3	7.3
29		2.1	S	4.2	4.7	4.5	4.3	1.0	1.1	1.1	0.9	4.0	1.7	0.5	0.7	0.6	0.3	0.4	0.7	0.4	0.6	0.3	0.0	0.7	0.4	1.5	4.7
30		0.8	S	0.8	2.1	1.2	2.6	1.2	1.2	1.0	3.4	5.1	1.3	0.7	1.6	3.4	2.3	2.5	3.0	1.7	2.3	5.7	4.2	1.0	3.0	2.3	5.7
31		2.7	S	5.2	3.6	0.0	0.7	0.4	0.1	1.7	0.3	0.6	0.0	0.0	0.2	2.1	1.5	0.1	1.4	1.3	0.3	0.3	0.5	0.6	1.0	5.2	
NO		31	-	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	708	100.0%
MEAN		1.3	-	1.5	1.5	1.4	1.7	1.6	1.6	1.5	1.4	1.9	2.7	2.4	2.1	2.5	1.7	1.2	1.1	1.3	1.2	1.4	1.3	1.2	1.2		
MAX		10.2	-	7.2	5.1	10.5	11.0	10.4	14.3	16.4	8.8	5.5	11.5	11.8	9.8	13.7	10.7	8.3	7.0	11.1	7.6	6.7	5.8	9.4	9.2		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	646
Maximum 1-HR Average	16.4 PPB
Maximum 24-HR Average	4.4 PPB
Monthly Calibration Standard Deviation	2.34
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	1.6 PPB

# Lagoon PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

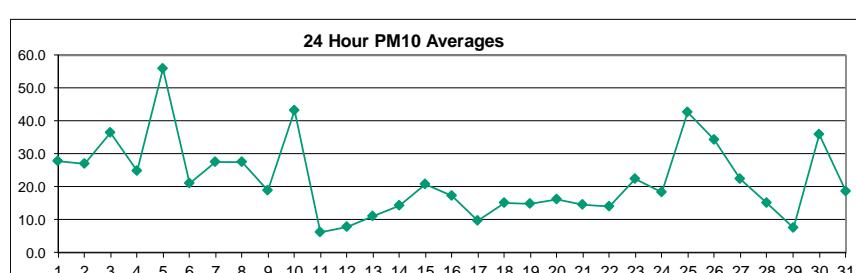
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	7.0	8.0	5.5	3.0	1.9	2.6	3.0	1.3	1.2	3.3	2.1	0.0	0.4	3.7	4.0	5.1	11.6	10.5	8.3	18.4	8.7	6.9	9.8	10.8	5.7	18.4
2	9.0	10.5	11.2	8.7	6.2	7.3	10.5	8.7	10.5	14.8	15.9	33.1	23.4	18.0	8.7	10.8	7.6	4.8	4.0	4.4	4.7	5.1	5.8	9.4	10.5	33.1
3	12.6	11.5	12.3	13.7	17.3	12.3	9.8	11.2	8.0	9.0	6.9	3.3	4.7	6.2	4.0	0.4	0.4	0.1	0.8	24.1	15.9	24.8	16.2	14.4	10.0	24.8
4	14.8	10.9	5.5	21.3	2.3	9.4	8.0	6.9	9.1	17.0	4.0	6.4	6.9	5.8	11.2	9.1	8.7	3.3	1.5	4.0	3.3	0.8	1.4	2.6	7.2	21.3
5	10.5	9.4	9.1	10.1	8.7	6.9	9.0	7.0	4.4	1.2	0.0	3.7	9.8	9.4	9.1	8.0	14.1	8.7	5.5	3.3	2.2	2.6	2.2	0.8	6.5	14.1
6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	1.5	4.7	2.6	4.0	5.8	9.1	10.5	1.7	10.5
7	6.9	7.7	8.7	6.2	6.9	6.2	4.0	2.8	2.2	9.1	6.2	1.9	2.2	1.5	6.2	11.5	9.4	4.8	3.3	2.2	1.2	4.0	5.5	5.1	5.2	11.5
8	3.3	6.2	5.5	4.4	4.7	5.8	3.3	0.4	3.7	7.3	10.1	9.8	7.3	3.7	0.8	1.5	6.9	4.8	1.9	0.8	0.0	1.4	2.6	3.0	4.1	10.1
9	3.3	1.4	1.9	1.9	0.0	0.0	0.0	0.4	1.4	0.0	8.7	12.3	7.7	8.7	5.1	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0	2.2	12.3
10	0.0	0.0	0.0	0.8	0.1	0.0	0.0	1.9	2.6	9.0	5.8	0.5	0.8	0.4	0.4	4.4	2.6	1.5	2.6	0.0	1.4	0.0	0.0	0.0	1.5	9.0
11	0.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.1	1.5
12	0.0	0.0	0.0	1.5	0.4	1.2	0.8	0.0	0.4	0.8	0.0	0.0	0.4	2.9	1.9	0.8	1.5	3.0	3.0	0.5	0.0	0.0	2.2	2.6	1.0	3.0
13	0.8	0.1	0.4	1.5	1.9	3.3	4.4	2.6	2.2	2.2	1.5	4.7	3.3	2.6	2.6	1.2	1.5	4.0	5.1	8.7	6.2	3.7	5.5	5.8	3.2	8.7
14	4.8	5.8	3.3	0.0	0.0	2.2	1.9	0.0	0.0	5.3	5.5	3.0	4.7	6.5	9.8	4.8	0.0	0.8	0.0	0.0	1.2	3.7	2.3	0.5	2.7	9.8
15	3.3	5.8	6.9	9.0	10.1	6.6	4.4	4.0	8.7	9.4	6.9	6.5	7.0	5.8	4.1	3.3	1.9	7.0	4.0	20.1	11.3	10.5	8.4	4.4	7.1	20.1
16	1.5	3.3	3.7	0.5	0.0	0.0	0.0	2.6	1.9	1.5	2.2	0.1	2.6	5.5	5.8	3.7	0.1	0.0	0.1	0.0	0.0	0.1	3.3	1.9	1.7	5.8
17	4.7	4.8	1.5	0.1	0.8	2.6	3.4	1.9	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.1	1.4	0.8	0.4	1.2	1.5	1.1	4.8
18	0.4	0.8	0.0	0.0	0.4	1.5	1.9	3.3	4.7	4.8	6.5	5.4	3.3	5.8	4.8	5.8	6.3	3.3	3.7	3.3	1.5	2.2	3.3	4.0	3.3	6.5
19	5.8	4.4	2.3	4.7	8.7	6.2	4.8	6.9	5.8	5.5	5.8	5.8	17.4	1.6	3.3	1.5	0.8	0.8	1.5	4.4	4.1	3.0	1.5	0.0	4.4	17.4
20	0.4	1.2	1.2	2.6	2.2	3.3	1.5	2.2	2.9	4.0	4.0	7.2	9.0	5.1	0.5	0.0	0.0	1.5	1.9	3.3	4.4	3.3	2.2	3.3	2.8	9.0
21	2.2	4.7	8.3	6.6	1.6	0.0	0.0	0.0	0.4	1.5	1.2	C	C	C	2.6	5.8	5.4	2.9	1.9	1.9	1.2	1.9	1.9	1.1	2.5	8.3
22	0.5	4.0	3.7	4.0	3.7	4.0	4.0	2.2	1.5	1.2	0.8	1.9	1.3	7.2	23.4	21.8	10.8	8.3	7.2	5.4	3.7	4.1	6.9	7.7	5.8	23.4
23	9.4	8.7	7.2	5.5	5.5	4.8	8.0	9.4	8.7	5.8	5.9	7.7	13.0	9.4	7.2	6.2	9.4	9.0	6.8	4.4	2.6	2.3	2.6	2.6	6.8	13.0
24	4.1	6.8	5.8	5.3	2.9	1.2	5.8	6.2	4.0	4.0	4.0	3.7	4.7	3.3	3.4	6.5	5.1	6.9	4.4	6.3	11.9	11.6	12.7	18.2	6.2	18.2
25	7.6	8.4	10.1	6.2	8.0	6.9	4.7	3.0	4.7	2.6	1.6	5.7	22.7	22.3	20.4	11.8	6.5	3.7	3.3	1.6	10.6	38.6	45.0	11.6	45.0	
26	22.7	23.5	26.1	17.2	11.6	15.2	20.8	13.8	17.2	8.3	6.2	4.7	4.7	3.7	6.4	6.2	4.0	2.9	1.9	1.2	3.0	4.4	2.2	0.0	9.5	26.1
27	0.0	2.6	3.7	2.6	4.4	3.0	3.8	15.1	10.1	6.4	20.7	27.7	23.1	24.8	19.0	14.4	12.3	16.3	21.1	9.1	9.1	11.5	8.3	6.9	11.5	27.7
28	5.4	3.7	7.3	10.1	6.2	6.9	4.8	5.5	7.3	9.4	6.2	6.3	13.4	13.8	19.0	14.0	10.8	10.1	9.8	8.0	7.1	4.4	4.4	2.9	8.2	19.0
29	0.5	3.3	4.0	1.5	1.1	0.1	1.3	8.3	8.7	8.3	8.3	7.6	4.7	3.3	2.6	1.5	1.5	2.2	0.8	1.5	3.5	1.2	5.5	3.7	8.7	
30	5.4	1.5	0.5	4.5	10.5	9.1	11.2	8.3	4.8	3.5	4.0	5.1	4.7	5.8	5.8	5.5	10.5	10.9	13.0	9.0	7.6	6.2	4.4	4.1	6.5	13.0
31	6.4	7.3	8.4	9.4	7.0	10.8	7.7	3.5	4.5	12.6	7.2	3.3	5.1	4.7	8.0	10.5	9.4	6.9	5.1	6.2	5.5	4.1	6.2	8.7	7.0	12.6
NO.	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	741	100.0%
MEAN	5.0	5.4	5.3	5.3	4.4	4.5	4.6	4.5	4.6	5.4	5.1	5.9	7.1	6.4	6.5	5.7	5.2	4.5	4.2	5.0	4.3	5.5	5.7	5.2		
MAX	22.7	23.5	26.1	21.3	17.3	15.2	20.8	15.1	17.2	17.0	20.7	33.1	23.4	24.8	23.4	21.8	14.1	16.3	21.1	24.1	15.9	38.6	45.0	21.6		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	652
Maximum 1-HR Average	45.0 UG/M3
Maximum 24-HR Average	11.6 UG/M3
Monthly Calibration Standard Deviation	3
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	5.2 UG/M3

# Lagoon PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

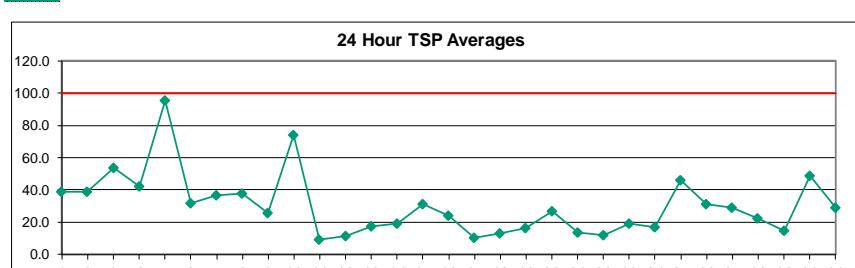
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	22.2	35.4	23.3	13.1	10.1	9.4	16.6	18.2	14.9	38.5	31.3	36.8	35.8	66.1	52.5	34.4	54.2	41.6	20.8	18.2	16.2	19.4	17.6	19.5	27.8	66.1
2	16.3	6.9	17.9	24.1	11.8	18.7	21.5	21.6	54.5	67.1	38.9	26.7	38.8	40.6	38.6	56.3	33.1	23.9	28.9	15.9	6.9	3.4	17.8	20.8	27.1	67.1
3	34.7	23.3	36.5	26.6	27.8	29.7	22.5	26.9	39.5	39.2	26.7	31.6	46.9	59.8	36.5	11.5	8.8	9.4	38.3	33.3	66.9	12.7	97.6	89.9	36.5	97.6
4	61.7	26.5	3.6	2.0	16.4	4.3	5.9	10.6	12.3	17.4	17.5	22.8	28.8	53.0	74.2	57.3	50.2	15.8	14.1	68.1	4.5	18.4	5.7	3.4	24.8	74.2
5	4.6	8.3	10.7	16.7	12.9	13.6	26.4	22.4	19.6	30.7	24.5	100.0	172.0	106.2	107.5	157.1	207.8	101.9	48.8	5.9	27.7	58.6	42.4	13.6	55.8	207.8
6	15.5	10.2	9.4	5.4	4.7	7.9	10.6	12.1	34.5	20.6	13.9	10.2	15.3	11.6	11.4	69.3	44.0	25.5	33.5	1.5	5.2	31.6	49.5	53.3	21.1	69.3
7	31.1	32.4	31.8	18.6	32.7	10.7	10.7	26.5	38.2	56.3	12.7	23.9	20.3	33.4	61.4	41.0	32.6	29.8	11.3	9.4	10.7	39.0	24.8	19.0	27.4	61.4
8	12.6	27.9	23.8	31.5	26.5	16.5	14.2	14.1	29.9	45.7	28.9	100.1	64.0	82.4	25.3	26.2	45.4	9.1	0.0	0.0	3.7	9.9	12.7	11.1	27.6	100.1
9	16.7	2.4	4.6	8.3	8.7	6.7	8.7	12.0	10.8	10.1	38.3	41.8	32.7	23.4	31.9	31.1	4.8	8.6	5.4	25.0	16.4	26.0	19.0	48.2	19.0	
10	36.8	27.9	27.7	19.8	47.8	22.3	16.3	42.5	70.9	182.2	152.6	49.7	36.8	40.4	32.6	70.6	77.6	71.7	0.0	0.0	0.0	4.5	4.0	43.1	182.2	43.1
11	2.7	4.6	2.0	0.0	21.6	9.8	7.4	8.0	9.3	6.1	6.7	18.5	1.8	7.2	13.9	10.2	3.5	3.0	0.7	0.0	0.0	4.5	4.6	4.6	6.3	21.6
12	4.0	1.3	1.9	0.0	2.5	3.3	6.6	6.0	2.1	6.5	6.7	4.7	2.0	0.0	0.0	1.2	9.2	13.5	14.1	12.2	10.8	27.2	27.7	23.1	7.8	27.7
13	7.8	7.4	7.4	10.0	8.5	8.0	5.4	5.3	22.4	14.0	15.4	22.1	25.6	9.9	8.1	8.0	8.7	6.7	7.3	9.3	11.1	10.8	15.4	9.6	11.0	25.6
14	7.4	8.0	10.0	6.8	4.0	2.7	2.0	1.8	2.6	15.8	24.0	12.5	19.4	27.4	17.8	10.9	29.2	24.5	20.6	18.9	20.9	13.7	14.3	29.2	14.3	
15	16.6	24.1	19.7	13.6	27.9	31.6	22.3	8.4	36.2	37.8	22.7	19.6	16.3	55.0	43.6	20.2	21.5	21.6	6.0	7.3	8.7	16.4	0.0	0.5	20.7	55.0
16	0.6	3.9	7.9	2.0	1.3	7.8	22.5	44.0	64.4	39.9	37.2	42.4	48.5	15.8	37.2	6.9	3.4	2.0	5.9	5.3	2.0	1.9	3.9	8.6	17.3	64.4
17	14.6	15.5	17.5	12.3	8.2	25.1	18.4	14.9	9.5	9.4	10.1	11.1	6.8	6.7	7.3	3.4	5.9	7.3	8.0	1.5	0.0	8.5	8.1	1.5	9.6	25.1
18	0.6	5.8	6.7	7.3	6.0	5.3	8.0	10.0	12.0	22.0	21.6	26.9	53.3	33.7	23.2	18.3	26.1	9.9	10.0	11.4	14.7	12.8	8.2	7.4	15.1	53.3
19	10.0	8.7	8.7	7.4	15.3	10.9	10.1	8.1	15.9	19.6	16.3	30.6	31.1	23.2	28.2	21.8	39.1	9.0	10.0	12.0	10.8	8.1	2.8	0.0	14.9	39.1
20	3.9	4.6	7.3	9.3	4.8	5.3	3.4	0.0	0.0	17.0	12.9	37.1	46.4	40.1	3.1	0.0	5.8	11.3	62.7	27.4	40.8	16.3	14.8	12.2	16.1	62.7
21	9.5	8.7	9.4	18.6	13.6	12.8	12.8	11.5	10.8	11.4	11.4	26.0	9.7	30.1	53.3	4.8	16.0	5.3	6.0	8.8	12.1	14.4	53.3	14.4	53.3	
22	12.8	17.4	11.4	8.7	9.4	7.4	5.4	14.5	10.9	12.1	15.4	13.5	18.7	21.5	14.4	14.1	10.8	10.1	25.2	17.1	16.2	20.8	13.7	13.9	25.2	13.9
23	10.8	11.4	11.4	11.4	11.4	8.8	9.4	14.7	16.8	20.8	20.7	33.4	37.1	44.4	38.7	26.7	30.3	34.8	16.7	26.6	25.0	25.6	21.7	26.9	22.3	44.4
24	25.7	45.4	19.7	50.4	30.4	27.1	15.2	5.9	5.3	5.3	9.9	10.7	8.1	20.5	14.1	14.1	22.7	25.6	11.8	12.1	18.7	13.0	10.8	15.4	18.2	50.4
25	12.9	21.3	24.9	17.7	16.2	25.4	19.1	27.4	24.4	35.5	34.5	39.7	101.7	88.5	93.2	59.2	39.8	52.3	29.1	48.4	63.2	41.9	50.4	59.9	42.8	101.7
26	53.4	71.2	54.6	63.3	16.9	24.0	39.4	35.1	53.6	115.2	83.0	42.4	43.2	16.2	16.8	22.8	7.2	4.7	4.6	15.8	7.0	17.2	14.9	2.3	34.4	115.2
27	74.9	29.8	19.8	11.7	42.9	19.0	X	71.2	17.4	9.0	11.3	14.1	21.4	11.6	9.5	8.1	8.7	10.0	15.3	31.9	36.4	18.7	8.3	16.6	22.5	74.9
28	7.0	6.7	8.6	11.3	12.7	9.5	8.1	10.1	11.4	12.7	13.9	22.7	29.5	27.7	32.3	33.7	25.2	15.1	14.2	12.2	10.2	11.4	10.1	6.1	15.1	33.7
29	4.0	5.3	8.7	15.3	5.6	3.4	0.7	17.0	16.9	7.6	6.7	9.3	13.7	6.9	0.8	4.5	15.8	4.3	5.9	4.0	0.0	5.8	9.3	9.4	7.5	17.0
30	15.3	7.6	8.7	47.5	62.5	49.1	90.1	28.8	36.2	35.2	16.1	25.3	21.7	20.9	47.2	68.4	43.4	53.1	66.6	29.5	16.5	28.7	32.5	10.7	35.9	90.1
31	45.6	32.2	30.4	26.4	13.1	9.5	4.1	3.3	33.5	20.0	6.1	7.3	7.4	17.2	25.4	51.9	30.4	8.0	7.4	36.9	12.2	7.5	5.7	7.3	18.7	51.9
NO.	31	31	31	31	31	31	30	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	740	99.9%
MEAN	19.1	17.5	15.7	16.8	17.2	14.4	15.5	17.5	23.9	31.6	25.4	29.8	34.8	33.9	31.7	31.5	32.1	23.5	17.5	17.1	15.4	17.3	19.0	16.8		
MAX	74.9	71.2	54.6	63.3	62.5	49.1	90.1	71.2	70.9	182.2	152.6	100.1	172.0	106.2	107.5	157.1	207.8	101.9	66.6	68.1	66.9	58.6	97.6	89.9		



Number of Non-Zero Readings	722
Maximum 1-HR Average	207.8 UG/M3
Maximum 24-HR Average	55.8 UG/M3
Monthly Calibration Standard Deviation	3 22.82
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	22.3 UG/M3

# Lagoon TSP ( $\mu\text{g}/\text{m}^3$ ) – October 2020

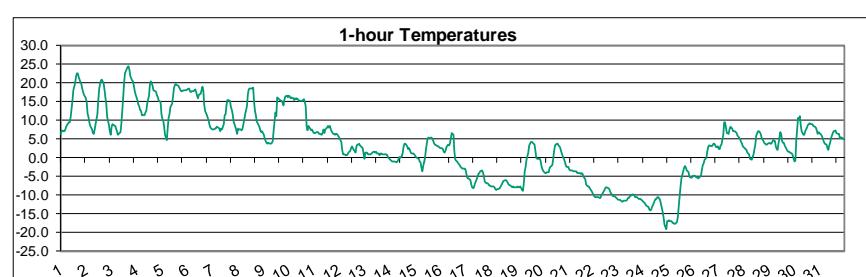
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	38.5	53.7	25.9	18.4	15.5	12.7	15.3	24.8	23.7	64.0	38.3	48.3	42.9	83.3	63.0	47.6	76.5	57.4	34.0	32.0	21.2	19.6	34.3	38.8	38.7	83.3
2	40.2	24.2	35.8	41.5	8.1	15.2	20.8	27.7	62.8	94.7	44.5	25.6	29.1	21.2	42.5	79.3	49.5	33.8	57.5	31.4	25.2	42.5	41.7	35.0	38.7	94.7
3	42.8	37.7	48.3	45.9	28.4	35.2	22.7	30.4	57.5	56.9	36.7	40.2	52.3	67.5	31.6	15.8	18.1	14.1	85.1	68.4	129.5	30.8	154.0	142.3	53.8	154.0
4	104.9	62.2	32.8	21.3	22.3	15.6	12.7	13.0	8.6	15.2	27.5	23.8	22.3	46.5	117.0	107.0	95.8	24.4	19.6	125.6	20.0	39.6	23.6	8.9	42.1	125.6
5	20.6	23.6	15.6	23.5	13.0	28.8	29.2	33.3	35.5	40.2	25.5	151.2	300.0	191.4	212.3	268.0	332.8	174.8	97.6	23.0	49.1	105.0	70.3	23.6	95.3	332.8
6	18.3	15.5	19.4	2.1	4.3	4.3	11.1	26.0	66.7	23.6	15.6	16.6	24.8	22.4	16.9	126.9	72.3	41.1	20.1	19.6	18.2	49.1	60.7	71.8	32.0	126.9
7	39.8	49.6	29.8	17.1	50.4	25.8	20.7	31.7	45.4	70.0	14.3	20.7	20.9	20.9	45.1	52.5	42.0	49.7	33.8	30.1	40.0	53.7	39.3	35.4	36.6	70.0
8	26.7	46.6	32.4	34.7	24.1	11.6	11.3	22.0	50.5	76.9	26.6	155.3	92.0	52.4	41.9	26.1	80.1	17.3	16.8	16.1	14.1	11.3	9.9	12.6	37.9	155.3
9	15.3	27.5	7.7	4.4	3.0	11.0	9.9	16.6	11.4	11.3	48.9	44.6	49.8	75.5	33.2	21.2	35.7	56.3	7.2	35.0	12.0	23.5	21.1	34.3	25.7	75.5
10	62.9	55.7	52.8	44.6	92.8	33.7	26.6	73.4	140.6	290.2	246.5	78.2	46.6	60.6	40.9	116.7	153.9	122.8	22.5	6.1	3.0	1.0	1.6	0.0	73.9	290.2
11	0.0	9.5	3.2	0.0	35.0	16.0	0.6	20.3	7.5	5.8	9.8	12.5	7.3	20.1	7.5	7.1	12.5	12.6	7.3	5.8	4.4	9.7	5.3	3.0	9.3	35.0
12	1.6	9.6	7.2	5.8	7.6	4.5	4.4	5.7	4.4	0.3	0.7	2.9	4.3	3.0	7.0	10.2	4.5	13.7	19.4	15.5	16.8	34.8	44.2	41.7	11.2	44.2
13	14.8	19.4	6.1	12.4	11.3	5.9	9.8	13.9	36.8	16.0	26.1	44.4	40.4	14.8	11.4	15.3	15.4	15.4	15.4	10.0	15.2	12.9	22.1	8.9	17.3	44.4
14	8.5	21.9	2.2	0.8	1.6	5.0	4.4	3.0	5.7	28.6	34.6	14.6	18.1	16.8	16.8	46.3	37.8	14.7	34.2	33.4	31.7	18.6	32.9	26.7	19.1	46.3
15	17.1	26.2	26.5	25.1	31.8	36.0	37.3	20.1	57.1	56.9	19.3	24.9	22.4	112.2	85.4	24.1	30.4	29.3	7.8	13.8	8.7	27.3	3.7	4.3	31.1	112.2
16	4.4	8.4	5.8	4.4	7.5	21.9	22.3	62.6	88.0	45.7	55.2	52.8	80.9	33.4	56.2	0.5	1.5	8.3	4.5	3.1	0.3	0.2	6.9	5.8	24.2	88.0
17	23.2	21.0	14.2	15.4	7.8	19.2	19.6	18.2	8.8	8.5	7.2	8.5	5.8	9.7	13.9	4.6	4.4	4.4	11.1	7.8	5.8	3.0	4.3	5.0	10.5	23.2
18	4.4	11.1	7.2	3.1	4.3	5.0	11.1	15.3	16.8	26.2	14.4	12.7	36.8	18.7	12.8	15.3	23.5	15.6	4.7	11.1	9.9	9.9	9.9	9.8	12.9	36.8
19	7.2	19.2	7.4	11.1	12.6	11.3	9.9	9.8	12.6	18.0	11.5	26.0	30.5	21.2	33.0	26.7	46.6	16.3	12.7	19.3	11.5	8.6	8.5	5.8	16.6	46.6
20	5.7	9.8	9.9	5.9	13.8	1.9	2.9	4.3	5.0	22.1	7.6	59.5	53.0	42.0	2.8	1.6	5.6	23.2	153.7	53.1	83.5	36.2	29.9	15.8	27.0	153.7
21	10.0	12.6	8.6	8.5	11.2	7.2	5.8	7.1	8.5	15.2	7.3	C	C	C	26.6	37.1	10.1	24.7	3.2	14.1	18.3	19.4	9.9	16.8	13.4	37.1
22	15.4	15.4	14.1	9.9	11.2	8.6	7.1	5.8	12.4	10.0	15.2	11.4	7.2	7.1	17.8	10.0	12.6	8.6	20.6	15.6	18.1	6.1	11.1	9.9	11.7	20.6
23	13.9	15.4	9.9	20.0	16.9	16.8	8.7	8.5	7.5	19.2	19.6	23.6	33.1	25.3	30.4	22.6	29.0	34.6	22.7	19.6	18.2	20.9	10.5	12.6	19.1	34.6
24	19.3	30.3	19.9	27.6	18.4	15.5	12.7	10.0	7.2	8.5	20.6	10.2	7.2	16.5	15.5	16.7	15.4	30.2	13.1	10.0	17.9	22.3	18.3	22.2	16.9	30.3
25	18.3	20.9	34.4	24.0	25.0	31.8	26.6	34.5	29.4	45.3	31.1	25.2	108.3	93.3	103.6	67.6	62.5	50.3	21.8	34.4	58.9	44.9	52.5	58.1	45.9	108.3
26	60.9	69.1	74.7	48.0	27.1	26.5	41.6	43.0	59.1	52.9	81.9	26.8	13.1	12.6	10.0	18.0	12.8	5.9	15.1	7.7	7.1	17.8	10.1	8.5	31.3	81.9
27	13.9	26.1	27.8	18.5	55.7	26.0	97.3	78.2	29.3	21.1	16.9	16.8	28.9	14.5	18.0	15.5	16.7	16.8	28.9	37.3	46.9	27.1	14.4	8.7	29.2	97.3
28	9.7	9.9	12.6	32.8	11.9	18.0	16.8	16.8	23.5	15.7	15.4	26.1	34.3	30.7	46.7	70.0	41.2	17.5	18.2	10.0	13.9	12.7	15.3	14.1	22.2	70.0
29	14.0	8.7	5.8	8.4	9.8	16.6	10.1	16.6	18.1	24.9	14.3	14.0	15.4	12.7	18.0	18.2	24.9	17.0	8.7	9.8	10.2	16.6	20.8	22.3	14.8	24.9
30	16.0	12.7	16.7	44.1	76.6	70.9	148.7	36.8	42.8	36.3	10.7	30.0	21.2	16.9	67.7	106.8	77.2	74.9	103.0	38.2	30.8	36.0	48.2	7.0	48.8	148.7
31	63.4	45.0	49.8	28.5	25.2	6.3	5.0	7.1	47.3	35.7	16.0	7.9	9.8	27.3	38.6	79.5	41.5	17.5	23.5	67.9	15.7	15.4	18.1	8.8	29.2	79.5
NO.	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	741	100.0%
MEAN	24.3	26.4	21.4	19.6	22.1	18.2	22.0	23.8	33.2	40.5	31.0	35.2	42.0	39.7	41.4	47.6	47.8	33.7	30.4	26.6	25.0	25.0	27.5	23.2		
MAX	104.9	69.1	74.7	48.0	92.8	70.9	148.7	78.2	140.6	290.2	246.5	155.3	300.0	191.4	212.3	268.0	332.8	174.8	153.7	125.6	129.5	105.0	154.0	142.3		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	738
Maximum 1-HR Average	332.8 UG/M3
Maximum 24-HR Average	95.3 UG/M3
Monthly Calibration Standard Deviation	35.3
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	30.3 UG/M3

# Lagoon Temperature (°C) – October 2020

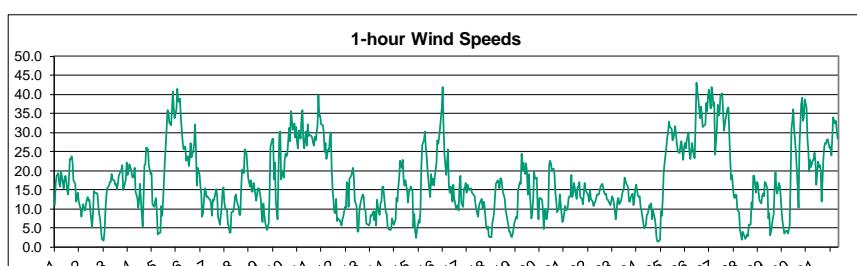
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.5	7.3	7.1	7.1	7.5	8.4	8.8	9.4	9.6	10.8	13.1	15.3	18.0	20.0	21.5	22.6	22.5	21.7	20.2	19.6	18.6	17.4	16.8	15.8	14.4	22.6
2	14.9	11.9	10.8	9.4	8.5	7.6	6.7	6.3	7.5	8.9	11.5	15.1	18.2	19.6	20.5	20.8	19.9	18.3	16.0	14.4	11.0	8.8	7.0	6.1	12.5	20.8
3	8.3	9.0	8.8	8.4	7.8	7.1	6.2	6.4	6.9	9.2	12.6	16.2	19.8	22.4	23.6	24.2	24.5	23.4	21.7	20.7	20.3	19.3	17.9	16.7	15.1	24.5
4	15.5	14.3	13.6	12.8	12.5	11.4	11.3	12.0	12.5	14.4	16.7	20.4	19.8	19.1	18.0	17.8	17.6	16.6	16.1	15.2	14.9	11.6	11.6	11.6	15.2	20.4
5	10.4	10.0	8.2	6.1	4.8	7.7	10.6	11.6	13.5	14.5	16.3	18.5	19.3	19.7	19.5	19.2	18.8	18.3	17.7	17.7	17.9	17.9	17.9	17.9	14.8	19.7
6	18.1	18.4	17.7	17.6	17.8	17.8	17.9	18.2	17.5	16.5	15.9	16.9	17.2	17.9	19.0	18.0	14.1	12.6	11.4	10.7	10.0	8.7	7.9	7.6	15.2	19.0
7	7.5	7.5	7.7	7.9	8.2	8.1	7.8	7.1	7.7	7.7	8.9	11.4	11.7	13.9	15.4	15.4	15.1	13.5	12.8	11.6	9.7	8.2	7.4	6.4	9.9	15.4
8	7.7	7.5	7.5	7.4	7.8	8.9	10.0	11.6	13.6	16.7	18.2	18.4	18.6	18.5	18.6	14.9	12.5	11.4	9.6	8.7	8.2	7.3	6.7	6.9	11.6	18.6
9	6.2	5.1	4.4	4.1	3.8	4.0	3.8	3.7	3.9	4.5	7.4	12.0	11.2	16.1	15.9	15.5	15.3	15.1	14.7	14.0	15.5	16.4	16.5	16.1	10.2	16.5
10	16.5	16.3	15.9	16.2	15.8	15.4	15.8	15.6	15.8	15.4	15.3	15.1	15.2	15.2	15.5	14.9	13.8	8.5	7.2	8.6	7.8	7.3	7.5	7.1	13.2	16.5
11	6.7	6.7	6.8	6.8	6.7	6.5	6.3	6.2	6.6	7.5	6.6	7.6	8.0	8.5	8.1	8.4	7.9	7.0	6.3	6.3	6.2	6.3	6.2	5.8	6.9	8.5
12	5.2	4.6	4.3	2.0	0.9	0.8	0.7	0.7	0.9	1.3	1.9	2.5	3.0	2.5	2.1	1.4	3.0	3.6	3.4	3.8	3.3	2.9	2.6	1.2	2.4	5.2
13	-0.2	1.3	1.5	0.9	1.0	1.0	1.0	1.0	1.5	1.7	1.4	1.7	1.2	1.1	0.7	1.1	1.1	0.9	0.9	0.9	0.8	0.8	0.5	-0.2	1.0	1.7
14	-0.7	-0.8	-0.9	-1.1	-1.1	-1.1	-1.2	-1.1	-0.5	0.1	-0.1	0.4	1.3	3.0	3.7	3.7	3.1	2.4	2.5	2.0	1.4	1.2	1.1	0.8	0.8	3.7
15	0.4	0.1	-0.1	-0.3	-1.1	-1.3	-2.6	-3.7	-2.2	0.0	2.1	3.8	5.1	5.5	5.2	5.4	4.6	4.1	3.6	3.2	3.0	2.9	2.8	1.9	1.9	5.5
16	2.5	2.6	2.4	1.6	1.4	1.9	2.7	3.4	3.2	3.7	5.1	6.6	6.1	1.5	-0.5	-0.7	-1.0	-1.7	-2.0	-2.4	-2.7	-2.8	-3.0	-3.0	1.0	6.6
17	-3.5	-5.1	-5.5	-5.6	-6.0	-7.1	-7.8	-8.2	-7.9	-7.0	-5.9	-5.1	-4.4	-4.1	-3.6	-3.4	-3.8	-4.9	-6.4	-6.7	-6.7	-7.1	-7.4	-7.4	-5.9	-3.4
18	-7.7	-7.8	-7.7	-7.9	-8.5	-8.7	-8.5	-8.4	-8.2	-7.8	-7.1	-6.6	-6.3	-6.1	-6.0	-6.2	-6.7	-7.2	-7.5	-7.6	-7.8	-7.8	-8.0	-7.5	-6.0	
19	-7.9	-7.7	-8.0	-8.0	-7.7	-8.6	-8.9	-6.7	-3.5	-2.5	-0.6	1.4	3.4	3.6	4.1	4.2	3.7	3.5	1.9	0.0	-0.2	-0.2	-1.0	-1.9	-4.2	
20	-2.3	-3.1	-3.5	-4.0	-4.1	-3.9	-3.9	-3.8	-2.8	-2.3	-1.9	-0.4	1.8	3.3	3.8	3.8	3.3	2.9	2.5	1.6	0.3	-0.4	-1.1	-2.0	-0.7	3.8
21	-2.4	-2.4	-3.1	-3.3	-3.4	-3.5	-3.6	-3.7	-3.7	-3.6	-4.1	-4.1	-4.1	-4.3	-4.1	-4.4	-5.1	-5.8	-7.1	-7.4	-7.6	-7.7	-8.1	-8.9	-4.8	-2.4
22	-9.4	-9.8	-10.2	-10.4	-10.5	-10.6	-10.6	-10.7	-10.7	-10.1	-9.5	-8.9	-8.3	-7.9	-7.9	-8.1	-8.5	-9.0	-9.5	-9.9	-10.3	-10.3	-10.5	-9.7	-7.9	
23	-11.0	-11.2	-11.4	-11.5	-11.8	-11.6	-11.4	-11.6	-11.5	-11.2	-10.9	-10.7	-10.2	-10.1	-9.9	-9.9	-10.0	-10.4	-10.6	-10.8	-10.9	-11.0	-11.2	-10.9	-9.9	
24	-11.7	-12.0	-12.3	-12.6	-12.9	-13.1	-13.8	-14.2	-13.8	-13.2	-12.6	-11.5	-11.0	-11.0	-10.5	-10.6	-11.1	-12.5	-13.3	-14.6	-15.9	-17.8	-19.0	-16.9	-13.3	-10.5
25	-16.9	-16.8	-16.8	-17.0	-17.4	-17.3	-17.7	-17.7	-17.3	-15.7	-12.9	-10.2	-7.7	-5.5	-3.7	-2.8	-2.1	-2.6	-3.5	-3.9	-5.0	-5.3	-5.2	-5.3	-10.3	-2.1
26	-4.9	-4.9	-5.1	-5.2	-5.2	-5.4	-5.1	-4.7	-3.2	-2.0	-1.5	-0.7	0.0	1.5	2.8	3.2	3.2	2.9	3.2	3.8	3.7	3.2	2.8	2.9	-0.6	3.8
27	2.3	2.4	3.2	3.6	6.1	9.5	9.5	8.0	6.5	6.5	7.4	8.4	7.9	7.7	7.1	6.9	6.7	6.0	5.5	5.0	4.3	3.8	3.1	6.0	9.5	
28	2.7	2.5	2.1	1.4	1.1	0.9	-0.4	-0.6	0.1	1.0	2.3	3.5	6.0	7.0	7.1	6.9	6.4	5.3	4.5	4.0	3.8	3.4	3.6	3.8	3.3	7.1
29	3.9	3.8	3.9	4.1	4.7	4.6	3.0	2.3	2.1	3.7	6.9	6.5	4.5	3.9	3.9	3.2	2.3	1.9	1.7	1.6	1.4	1.2	0.7	-0.2	3.1	6.9
30	-1.0	-0.7	4.7	10.6	10.4	11.0	8.7	7.2	6.1	6.1	7.1	7.6	8.0	8.8	9.3	8.9	9.0	8.9	8.4	8.3	8.1	7.3	6.5	6.8	7.3	11.0
31	6.6	6.2	5.7	5.0	4.3	3.8	3.4	2.5	2.0	3.2	4.1	5.2	6.5	7.0	7.0	7.2	6.6	6.4	5.2	5.4	5.4	4.9	4.9	5.2	7.2	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	2.0	1.8	1.7	1.5	1.3	1.4	1.3	1.2	1.7	2.5	3.6	4.9	5.8	6.4	6.7	6.6	6.1	5.3	4.5	4.1	3.6	3.1	2.7	2.2		
MAX	18.1	18.4	17.7	17.6	17.8	17.8	18.2	17.5	16.7	18.2	18.5	19.8	22.4	23.6	24.2	24.5	23.4	21.7	20.7	20.3	19.3	17.9	17.9			



Number of Non-Zero Readings	744
Maximum 1-HR Average	24.5 C
Maximum 24-HR Average	15.2 C
Monthly Calibration Standard Deviation	9.134
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	3.4 C

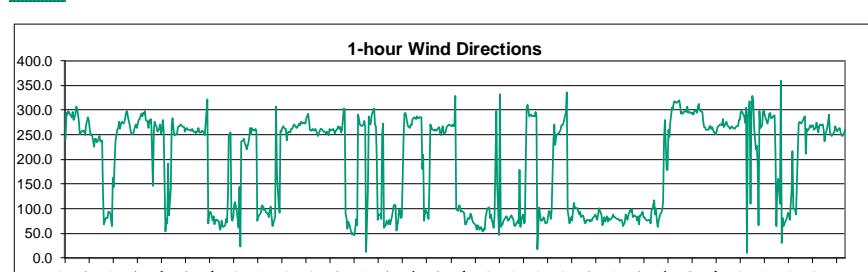
# Lagoon Wind Speed (km/hr) – October 2020

Day	Hour																								Mean	Max
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	11.0	16.7	18.7	19.4	16.7	15.9	19.7	18.5	15.5	18.0	18.7	17.0	14.6	13.7	23.1	23.0	23.9	22.3	17.5	16.6	12.0	13.0	14.2	11.9	17.2	23.9
2	10.0	7.9	10.1	11.1	9.8	9.6	12.3	13.1	12.2	12.4	9.7	5.1	8.6	14.8	14.4	14.3	14.0	11.0	8.7	7.5	4.7	2.1	1.8	4.1	9.6	14.8
3	9.5	13.3	15.4	16.0	17.0	19.0	17.7	17.4	16.3	16.5	15.3	16.3	18.7	19.7	20.3	21.5	14.9	15.7	17.7	22.0	18.8	19.9	21.7	17.4	22.0	
4	20.3	18.8	18.3	18.7	20.6	14.4	12.9	10.3	12.4	16.5	12.1	5.4	13.1	21.5	21.7	26.2	25.7	21.2	20.3	19.2	19.3	11.3	10.6	11.9	16.8	26.2
5	12.9	8.9	3.4	3.8	3.8	10.8	8.2	12.0	22.7	26.5	31.1	35.8	35.4	32.6	31.9	36.0	40.8	36.4	33.7	36.1	41.3	38.4	38.0	38.8	25.8	41.3
6	33.9	27.7	25.6	25.8	26.3	22.7	23.8	21.3	23.4	27.3	23.5	25.1	27.1	32.2	25.9	16.2	20.7	19.1	16.1	14.0	8.0	8.9	15.5	14.8	21.9	33.9
7	13.1	13.2	12.9	12.3	11.5	8.1	12.4	12.1	13.2	15.1	13.1	7.7	7.1	5.8	10.7	14.5	15.6	11.8	10.4	9.9	6.2	5.5	3.9	3.7	10.4	15.6
8	9.1	9.4	10.6	13.0	13.8	12.1	10.5	8.5	8.5	15.5	20.4	19.3	25.6	25.2	24.5	24.5	21.0	18.0	15.9	17.5	14.4	14.7	16.8	13.7	12.2	25.6
9	14.1	15.4	15.4	12.8	8.9	6.6	11.5	8.6	6.5	4.6	5.4	6.2	14.5	26.2	28.3	28.3	17.8	22.1	12.0	7.4	19.6	29.3	30.3	17.7	15.4	30.3
10	20.1	18.1	22.6	24.6	23.8	24.6	31.3	27.8	35.7	33.7	30.9	32.4	28.7	31.4	27.2	25.8	30.4	28.3	34.1	35.8	28.3	25.8	30.2	26.7	28.3	35.8
11	32.2	29.2	29.4	29.1	28.7	27.2	26.5	28.9	27.9	31.8	39.8	34.3	34.5	32.1	31.9	30.1	24.9	27.2	23.1	25.7	25.4	29.0	30.1	20.3	29.1	39.8
12	15.2	9.1	8.9	12.6	6.8	7.5	7.0	6.3	5.7	7.3	7.9	10.6	10.3	17.0	16.6	10.6	17.9	18.6	19.9	20.7	18.0	12.1	10.8	4.3	11.7	20.7
13	4.0	9.0	11.1	13.1	13.7	13.2	9.9	9.6	6.2	5.8	5.6	6.4	8.3	8.2	9.3	7.1	9.5	5.7	12.4	9.1	8.3	11.6	11.9	15.7	9.4	15.7
14	15.8	10.9	9.1	8.6	5.3	4.8	4.4	4.8	7.4	6.6	6.0	7.3	12.8	11.8	15.5	17.9	22.6	20.6	22.9	17.7	16.1	17.6	14.7	11.7	12.2	22.9
15	14.4	14.9	16.0	14.7	5.4	8.7	4.3	2.4	4.2	7.1	6.4	9.5	21.2	26.8	27.9	30.2	26.0	23.7	20.0	14.9	13.0	19.2	16.5	17.9	15.2	30.2
16	16.2	20.0	21.9	27.9	27.1	28.5	33.5	36.3	41.9	31.4	24.5	18.8	22.3	25.7	16.1	14.3	15.8	12.0	16.3	12.6	11.6	10.0	10.9	9.6	21.0	41.9
17	16.4	18.8	11.7	10.5	15.2	15.6	16.8	14.2	16.4	15.1	15.2	15.4	14.2	14.0	13.4	11.2	9.8	8.6	8.0	11.1	12.1	12.7	10.1	12.0	13.3	18.8
18	11.3	5.4	4.7	5.5	2.8	2.5	2.6	6.4	7.4	9.4	13.3	16.6	17.6	16.8	15.4	17.9	18.0	14.2	13.4	12.7	9.7	8.3	5.6	4.0	10.1	18.0
19	4.0	2.8	2.7	3.6	6.5	7.3	7.9	7.6	14.9	17.0	16.7	24.5	20.3	22.1	19.2	21.8	19.6	13.8	19.1	15.2	7.6	9.1	12.7	19.9	13.2	24.5
20	17.9	18.1	10.5	7.3	12.8	12.9	12.3	9.6	4.6	9.4	10.0	7.3	10.2	21.5	22.7	22.0	20.1	20.5	19.1	14.1	11.9	9.2	10.2	13.7	13.7	22.7
21	11.1	8.7	6.7	7.4	10.9	9.7	9.9	10.4	13.0	13.3	18.9	13.1	13.9	16.7	13.8	12.6	15.6	15.8	17.1	13.0	12.6	11.1	13.7	16.8	12.7	18.9
22	15.0	14.0	13.6	11.9	15.0	12.7	11.9	10.8	11.4	11.9	12.8	13.8	13.8	15.1	15.8	16.4	16.6	14.3	13.9	14.1	12.6	12.4	11.6	11.1	13.4	16.6
23	12.1	13.3	12.5	11.4	7.4	9.7	12.1	12.9	11.3	12.1	13.5	14.7	14.9	18.1	16.5	16.1	15.6	12.0	12.0	13.0	13.9	11.1	12.3	14.9	13.1	18.1
24	16.3	13.5	13.2	13.4	10.5	9.7	6.4	4.9	5.1	5.8	8.4	8.7	11.0	10.3	11.4	7.2	9.5	7.6	5.6	2.3	1.4	1.5	1.8	9.4	8.1	16.3
25	8.3	12.7	19.4	22.0	26.0	28.7	30.1	32.7	31.5	31.0	28.0	28.5	30.1	31.7	26.8	25.1	24.7	24.8	26.7	27.7	22.9	26.0	27.3	25.9	25.8	32.7
26	27.9	30.0	25.0	23.0	25.1	27.2	23.9	23.2	33.1	43.0	40.8	38.9	33.8	36.9	34.7	31.4	31.6	32.2	37.8	35.7	39.5	41.1	36.3	41.9	33.1	43.0
27	40.3	36.9	37.9	24.1	31.2	37.3	34.6	35.1	39.7	40.2	35.1	30.5	32.1	33.8	36.4	36.6	29.4	22.8	17.6	18.8	13.3	12.9	13.9	13.5	29.3	40.3
28	9.8	9.1	4.5	3.4	1.9	4.0	2.8	2.3	2.7	3.3	2.8	5.8	5.9	11.7	10.0	18.6	18.6	14.1	17.0	16.9	14.3	12.0	11.6	13.2	9.0	18.6
29	14.1	13.3	17.0	16.9	15.2	7.6	8.9	3.1	4.1	7.4	8.6	15.6	19.6	15.2	14.1	16.8	16.0	12.8	9.2	6.7	3.5	3.9	4.4	4.3	10.8	19.6
30	3.6	5.7	17.6	31.1	33.1	36.2	31.1	24.9	20.6	15.8	10.4	26.4	37.5	39.1	33.1	33.9	38.6	36.5	28.4	25.3	19.9	22.8	21.1	22.7	25.6	39.1
31	23.1	24.8	22.3	16.4	22.3	21.1	21.6	19.9	11.9	23.3	26.3	27.2	26.9	28.3	28.1	25.9	26.2	24.0	28.6	33.9	32.3	33.1	30.8	28.4	25.3	33.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	15.6	15.2	15.1	15.2	15.3	15.3	15.5	14.7	15.8	17.2	17.2	17.5	19.4	21.8	21.2	20.9	21.1	18.9	18.5	17.4	16.0	16.0	16.0	16.0	29.3	40.3
MAX	40.3	36.9	37.9	31.1	33.1	37.3	34.6	36.3	41.9	43.0	40.8	38.9	37.5	39.1	36.4	36.6	40.8	36.5	37.8	36.1	41.3	38.0	41.9	25.3	33.9	



# Lagoon Wind Direction (°) – October 2020

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	239.6	295.0	291.0	297.9	291.2	288.7	285.4	296.7	280.6	290.9	307.9	303.5	290.8	276.6	251.5	255.8	258.5	257.2	258.8	248.6	269.0	284.8	279.3	263.7	277.5	307.9	
2	248.8	251.4	248.0	225.1	241.1	242.2	234.9	236.3	246.8	236.2	236.3	238.5	130.3	68.6	81.3	80.9	81.6	93.7	93.3	92.2	64.9	162.4	145.1	193.4	190.3	251.4	
3	237.1	260.2	264.0	276.5	261.5	270.7	276.0	273.0	276.8	284.8	297.1	297.2	286.2	269.7	257.4	251.4	251.7	252.8	266.5	271.3	263.6	272.8	279.6	282.2	270.3	297.2	
4	293.0	287.6	294.1	290.5	297.8	279.3	276.5	263.0	279.7	274.7	281.1	147.0	259.4	276.3	268.3	267.9	256.0	261.1	270.6	252.5	257.7	279.3	259.9	53.8	274.3	297.8	
5	78.5	70.7	191.1	86.7	140.2	269.1	284.1	262.1	248.4	249.9	252.4	265.8	267.6	268.2	271.8	268.7	265.9	265.2	256.3	261.6	263.5	260.4	259.7	258.2	262.0	284.1	
6	257.8	261.4	255.8	256.5	252.8	256.2	256.0	263.0	254.4	253.9	258.4	256.6	254.4	249.6	270.1	320.7	71.1	87.8	94.1	91.5	74.8	84.0	69.0	76.9	258.2	320.7	
7	74.8	77.3	74.2	56.7	61.4	76.1	65.1	63.6	66.1	79.4	72.1	117.3	249.2	254.0	83.3	75.4	82.6	105.7	113.9	94.9	76.6	61.3	144.5	22.9	78.5	254.0	
8	236.6	237.9	241.5	231.9	229.9	219.6	233.1	245.7	263.6	250.2	264.1	259.7	257.4	261.2	256.5	74.9	82.0	86.9	91.3	106.0	105.5	97.3	101.4	92.1	217.6	264.1	
9	92.3	88.0	83.5	99.8	104.9	65.4	70.7	78.3	83.6	307.5	171.4	108.0	91.0	259.1	262.6	264.4	267.6	262.5	261.5	238.9	253.7	256.6	255.4	262.0	249.3	307.5	
10	262.7	264.6	268.3	262.9	265.1	269.9	272.3	269.6	276.8	272.7	273.9	272.5	283.1	291.8	277.4	259.6	258.1	258.8	261.8	258.9	262.3	257.7	268.7	291.8	268.7	291.8	
11	253.2	247.9	253.2	262.7	261.6	259.5	256.2	256.0	252.1	256.3	250.9	248.8	261.4	258.4	259.7	262.0	258.4	253.5	258.8	259.5	266.6	262.0	265.0	253.9	257.3	266.6	
12	260.8	304.0	301.4	89.2	81.8	59.6	73.9	62.1	53.6	47.9	50.1	47.5	46.0	79.3	66.8	291.5	282.6	270.1	267.7	269.9	270.9	277.7	263.6	12.2	320.2	304.0	
13	137.5	287.7	272.9	271.1	287.4	294.9	303.6	268.8	267.3	196.7	77.7	88.9	87.6	79.1	251.6	272.9	61.1	67.2	75.4	71.8	68.9	76.7	68.9	85.1	18.3	303.6	
14	96.4	106.0	108.4	105.7	56.6	75.2	98.4	97.6	81.8	83.5	244.4	291.8	284.1	286.9	274.2	266.7	263.2	271.1	269.9	282.0	282.9	284.7	281.9	286.5	278.2	294.1	
15	283.3	283.2	284.6	285.4	180.7	210.1	76.3	89.7	97.2	88.2	80.1	148.7	270.8	267.8	259.4	260.0	257.5	259.7	257.8	262.0	265.5	253.0	249.0	261.8	260.7	285.4	
16	268.0	252.2	253.8	263.0	267.6	268.4	271.1	269.3	267.0	270.2	268.2	270.0	328.0	100.0	96.4	106.4	94.1	95.8	93.9	90.6	68.1	68.8	73.7	267.0	328.0	323.4	311.4
17	80.7	80.0	90.7	85.6	77.9	72.2	69.3	65.9	57.1	65.9	64.6	58.3	63.7	54.9	54.8	58.9	57.2	82.7	100.6	101.2	103.5	80.2	88.8	78.2	73.3	103.5	
18	61.7	84.4	194.8	298.4	148.8	46.8	332.9	62.8	66.1	68.1	74.8	81.2	84.1	82.6	76.1	76.6	80.3	85.8	80.4	79.8	66.4	64.8	72.3	75.3	76.3	332.9	
19	69.6	177.8	63.3	78.1	87.8	70.6	71.3	195.3	303.8	311.4	286.5	290.1	291.6	287.6	289.8	287.7	296.7	287.0	18.1	60.2	102.0	75.5	76.2	77.5	323.4	311.4	
20	82.1	77.9	70.1	71.3	84.5	96.2	93.4	79.3	96.2	236.8	271.6	230.2	245.4	250.6	252.5	252.6	257.6	260.0	268.3	273.4	287.0	295.8	335.3	95.3	263.7	335.3	
21	84.7	70.6	82.8	75.8	97.7	111.9	102.1	101.1	101.8	92.9	88.8	94.5	82.7	86.1	82.4	72.2	69.3	76.9	75.8	78.2	74.3	76.6	76.4	81.8	84.4	111.9	
22	85.5	88.0	83.2	76.9	86.6	101.7	91.1	86.3	66.2	73.6	83.2	73.8	84.6	73.7	81.4	77.6	78.1	83.5	88.4	82.2	82.5	81.0	78.7	79.4	82.0	101.7	
23	75.1	75.8	77.7	75.0	65.3	72.0	87.5	84.2	77.0	86.5	96.9	93.9	99.1	83.2	83.9	86.2	82.8	75.1	84.4	68.1	86.3	93.1	83.0	83.2	99.1		
24	82.0	80.1	77.3	76.0	77.4	76.9	70.9	96.7	100.0	116.5	88.7	100.3	75.3	63.8	75.3	89.5	91.7	97.4	115.0	239.5	279.9	177.9	178.9	259.3	85.5	279.9	
25	245.4	275.4	304.9	301.4	316.3	318.7	316.6	314.8	317.9	320.2	311.3	292.3	295.5	292.6	297.8	297.3	295.5	306.5	295.0	296.9	293.9	293.0	294.0	291.7	302.1	320.2	
26	298.2	300.2	294.6	306.3	313.2	300.2	298.0	296.3	277.2	265.7	266.2	260.1	260.2	267.5	262.5	264.6	254.0	254.1	251.1	256.9	265.4	266.5	272.0	313.2	272.0	313.2	
27	271.2	270.2	268.3	281.0	266.1	273.5	277.0	268.6	266.6	265.9	262.3	267.8	263.0	264.5	264.5	266.5	267.3	279.6	279.6	291.1	294.1	287.2	270.5	298.1	270.5	298.1	
28	274.1	305.8	9.9	287.1	317.4	109.7	298.1	329.5	320.6	266.3	219.8	228.1	190.8	67.1	297.8	263.8	268.5	296.9	300.0	289.4	284.0	273.3	280.3	292.1	285.0	329.5	
29	293.7	283.1	283.4	288.4	289.0	211.1	65.1	148.7	161.2	110.8	359.5	29.9	80.5	65.4	73.2	77.6	82.3	92.0	88.0	78.3	136.1	216.6	101.3	99.3	54.4	359.5	
30	96.9	88.0	214.3	271.9	275.9	274.4	272.9	279.3	285.5	287.2	210.6	262.5	258.6	263.3	269.1	266.3	268.8	269.6	260.9	263.3	273.9	265.7	254.5	267.1	266.6	287.2	
31	270.6	270.0	270.4	260.9	236.9	251.9	263.1	276.8	291.7	254.8	251.3	247.7	252.3	256.2	261.4	255.9	260.0	263.1	254.3	248.9	247.9	250.0	260.1	257.9	291.7	291.7	



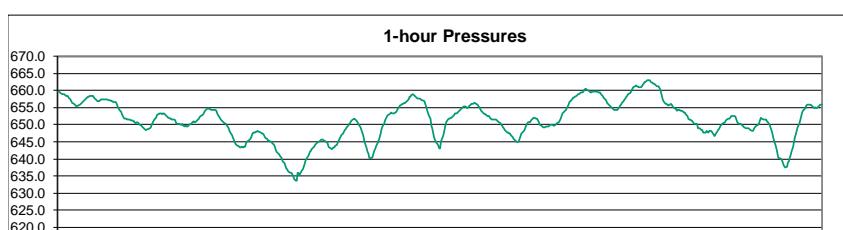
Number of Non-Zero Readings	744
Maximum 1-HR Average	360 degrees
Maximum 24-HR Average	323 degrees
Monthly Calibration Standard Deviation	93.73
Opperational Time	744 HRS
Opperational Uptime	100.0 %
Monthly Average	193.7 degrees

# Lagoon Pressure (mmHg) – October 2020

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	659.8	659.6	659.3	659.1	659.0	659.0	658.9	658.7	658.4	658.3	658.0	657.7	657.4	657.0	656.4	656.1	655.8	655.6	655.4	655.5	655.6	655.9	656.0	656.3	657.4	659.8	
2	656.6	657.0	657.1	657.5	657.8	658.1	658.4	658.5	658.3	657.8	657.6	657.3	656.9	656.8	656.9	657.2	657.4	657.5	657.5	657.5	657.5	657.5	657.5	657.5	657.6	658.5	
3	657.4	657.2	657.1	657.0	656.9	656.7	656.6	656.5	656.1	655.4	654.8	654.4	653.8	653.1	652.5	652.5	652.1	651.8	651.7	651.6	651.5	651.5	651.5	651.3	654.4	657.4	
4	651.2	651.1	650.9	650.5	650.6	650.7	650.4	650.1	650.0	649.8	649.4	649.0	648.8	648.5	648.4	648.6	648.8	649.0	649.2	649.9	650.5	651.0	651.5	652.1	650.0	652.1	
5	652.7	652.9	653.2	653.3	653.4	653.1	653.4	653.0	652.7	652.4	652.1	651.9	651.9	651.6	651.5	651.5	651.2	650.6	650.1	650.2	650.1	649.9	650.1	650.2	653.5	654.0	
6	649.9	650.2	649.8	649.6	649.7	649.5	649.4	649.8	650.0	650.3	650.5	650.7	650.9	650.6	650.8	651.2	651.4	651.7	652.3	652.6	652.7	652.9	653.5	654.0	651.0	654.0	
7	654.4	654.5	654.7	654.7	654.6	654.3	654.2	654.3	654.4	654.4	653.9	653.3	652.7	652.0	651.6	651.2	651.0	650.7	650.4	650.2	649.8	649.5	648.9	648.3	652.4	654.7	
8	647.7	646.9	646.1	645.5	645.0	644.5	643.8	643.7	643.5	643.4	643.4	643.5	643.5	643.6	643.5	643.7	644.7	645.1	645.1	645.7	646.0	646.4	647.2	647.6	647.8	645.1	647.8
9	648.0	648.0	648.1	647.9	647.9	647.6	647.3	647.3	647.2	647.6	646.2	645.8	645.4	645.4	645.2	645.1	644.8	644.4	644.1	643.5	642.5	641.9	641.7	641.2	645.5	648.1	
10	640.8	640.4	640.0	639.2	638.6	638.0	637.3	636.9	636.4	636.2	636.0	635.9	635.4	634.8	634.1	633.6	633.7	635.8	636.0	635.5	635.7	636.6	636.9	637.8	636.7	640.8	
11	638.5	639.5	640.1	640.7	641.3	642.0	642.3	642.9	643.2	643.5	644.0	644.3	644.5	644.9	645.1	645.4	645.6	645.6	645.5	645.3	645.0	644.9	644.8	643.8	643.4	645.6	
12	643.2	643.0	642.9	643.0	643.2	643.3	643.7	644.2	644.8	645.4	646.0	646.4	646.9	647.5	647.9	648.5	648.7	649.2	649.7	650.1	650.6	651.1	651.3	651.5	646.8	651.5	
13	651.7	651.5	651.2	651.0	650.5	649.9	649.1	648.4	647.6	646.9	645.7	645.4	643.1	642.0	641.5	640.3	640.1	640.2	640.8	641.7	642.4	643.2	643.9	644.8	645.5	651.7	
14	645.7	646.4	647.5	648.7	649.5	650.3	651.1	651.7	652.2	652.7	653.0	653.4	653.4	653.3	653.4	653.6	653.6	653.9	654.3	654.9	655.2	655.5	655.9	656.0	652.3	656.0	
15	656.2	656.4	656.5	656.8	657.1	657.5	658.1	658.2	658.7	658.9	658.7	658.4	658.3	658.0	657.7	657.5	657.7	657.4	657.2	656.8	656.0	655.2	654.4	657.3	658.9	648.4	653.6
16	653.6	652.7	651.6	649.8	648.8	647.6	646.3	645.5	644.7	644.4	643.7	643.0	643.0	645.0	646.4	647.2	648.4	649.7	650.7	651.5	651.7	651.8	651.9	652.0	652.4	656.3	
17	652.4	652.8	653.2	653.2	653.4	653.5	653.9	654.2	654.6	654.9	655.1	655.3	655.3	655.1	654.9	655.1	655.4	655.7	656.0	656.2	656.3	656.3	656.1	654.8	656.3		
18	655.7	655.4	655.1	654.5	654.0	653.6	653.4	653.0	653.0	653.0	652.7	652.6	652.4	652.1	651.8	651.6	651.6	651.6	651.5	651.4	651.2	650.9	650.0	650.0	652.5	655.7	
19	649.6	649.3	649.0	648.5	648.0	647.8	647.7	647.5	647.3	647.0	646.4	645.9	645.5	645.3	645.1	645.0	645.2	645.8	646.7	647.3	647.7	648.2	648.6	649.5	647.3	649.6	
20	650.0	650.5	650.6	650.8	651.3	651.6	651.8	651.9	652.0	651.7	651.7	651.3	650.7	650.1	649.6	649.3	649.3	649.3	649.4	649.4	649.5	649.6	649.9	650.4	652.0	650.4	
21	650.0	649.9	649.8	649.8	649.9	650.1	650.5	650.7	651.2	651.8	652.6	653.3	653.6	654.0	654.4	654.8	655.4	656.0	656.7	657.1	657.5	657.8	657.9	658.1	658.8	662.9	
22	658.5	658.8	659.0	659.0	659.2	659.3	659.5	659.8	660.1	660.4	660.4	660.2	660.0	659.7	659.5	659.5	659.7	659.7	659.8	659.7	659.6	659.3	659.3	659.6	660.4	660.4	
23	659.0	658.8	658.5	657.9	657.5	657.0	656.4	656.1	655.8	655.5	655.1	654.8	654.6	654.4	654.2	654.3	654.5	654.9	655.2	655.5	655.6	655.9	657.3	657.5	652.5	655.7	
24	657.7	658.1	658.5	658.9	659.2	659.5	660.0	660.0	661.0	661.3	661.4	661.1	661.0	661.7	661.1	661.6	662.1	662.4	662.6	662.9	663.1	663.1	660.9	663.1	663.1		
25	662.9	662.6	662.3	661.9	661.9	661.6	661.5	661.3	661.1	660.7	660.1	659.2	658.2	657.2	656.5	656.1	656.1	655.8	655.9	656.0	656.2	655.3	655.2	658.8	662.9		
26	654.8	654.5	654.2	654.3	654.3	654.2	654.2	654.1	653.7	653.5	653.5	653.1	652.5	651.8	651.6	651.4	651.2	650.6	650.3	650.2	650.1	649.0	652.4	654.8			
27	648.9	648.6	648.5	648.4	647.7	647.8	647.8	648.2	648.0	647.8	647.8	648.1	648.1	647.8	647.4	647.1	646.8	647.2	647.9	648.4	648.7	649.2	649.8	650.1	648.3	650.4	
28	650.6	650.9	651.3	651.5	651.7	651.8	652.0	652.4	652.6	652.6	652.5	652.1	651.6	650.8	650.5	650.3	650.1	650.0	649.8	649.5	649.2	649.0	648.9	650.9	652.6		
29	648.9	648.6	648.4	648.1	648.2	648.7	649.3	649.6	650.1	650.5	651.2	652.0	651.7	651.5	651.4	651.6	651.6	651.6	651.6	650.6	650.0	649.1	648.4	647.5	649.9	652.0	
30	646.4	645.3	643.8	642.7	641.5	640.3	640.0	639.7	639.1	638.3	637.7	637.4	637.6	638.9	639.3	640.3	641.1	642.1	643.6	645.2	646.3	647.2	648.3	641.8	648.3		
31	649.3	650.2	651.3	652.3	653.2	654.1	654.5	654.9	655.6	655.8	655.9	655.9	655.6	655.2	655.0	654.8	655.2	654.7	655.1	655.3	655.6	655.9	655.9	654.5	655.9		

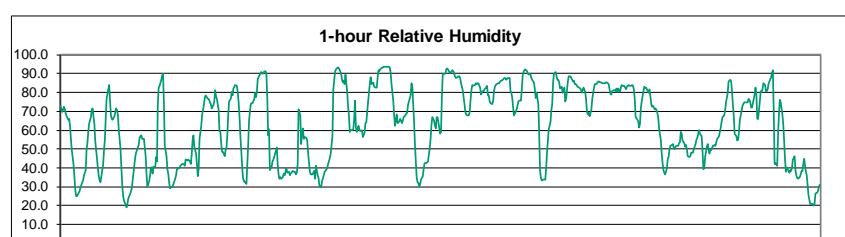
NO.	MEAN	MAX	744	100.0%
	31	31	31	31
	651.7	651.6	651.5	651.4
	662.9	662.6	662.3	661.9



Number of Non-Zero Readings	744
Maximum 1-HR Average	663 MMHg
Maximum 24-HR Average	661 MMHg
Monthly Calibration Standard Deviation	5.816
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	651.2 MMHg

# Lagoon Relative Humidity (%) – October 2020

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	72.9	69.5	71.2	72.2	71.2	68.8	67.2	65.5	65.8	61.8	55.0	49.3	41.6	35.3	28.4	24.9	24.9	25.8	27.9	29.6	31.0	32.6	33.1	35.9	48.4	72.9
2	38.8	49.9	53.4	59.6	63.8	67.1	71.0	71.3	67.0	63.2	54.0	44.7	39.8	35.6	33.3	32.4	35.7	41.6	49.0	54.4	66.1	76.6	81.5	84.1	55.6	84.1
3	75.7	67.9	65.8	65.5	67.4	69.1	71.6	70.7	68.1	60.5	50.2	40.8	31.2	25.4	22.5	20.3	19.1	21.0	23.7	25.1	26.0	29.1	33.3	37.5	45.3	75.7
4	41.4	45.6	48.0	51.0	52.0	55.9	56.8	57.4	55.6	55.5	50.6	46.4	36.4	29.9	32.6	35.5	40.1	40.1	37.2	40.8	40.0	45.9	43.4	73.9	46.3	73.9
5	82.8	83.6	86.8	88.8	89.9	74.2	51.9	46.3	39.2	37.2	32.5	29.3	29.6	30.2	31.5	32.9	34.3	36.0	39.1	39.6	40.2	41.0	41.5	42.2	49.2	89.9
6	42.0	41.3	44.3	44.4	43.7	44.3	43.6	42.0	47.0	54.3	57.3	51.4	47.4	42.1	35.5	39.3	55.6	62.4	68.2	70.6	73.4	77.2	78.2	77.1	53.4	78.2
7	76.4	76.3	74.8	74.0	71.5	73.2	75.1	81.0	77.8	76.6	70.7	59.6	59.0	52.6	48.4	48.5	46.3	49.2	50.7	57.3	67.6	75.2	76.5	80.2	66.6	81.0
8	78.3	82.1	83.1	84.1	83.5	80.1	74.8	67.4	57.3	41.7	34.7	33.4	32.3	32.4	31.4	52.0	65.0	69.8	74.0	74.1	74.5	76.4	79.6	77.3	64.1	84.1
9	80.1	87.4	89.0	90.0	90.9	90.1	91.1	91.4	89.6	77.1	57.2	60.3	38.8	40.8	43.3	44.4	45.6	47.8	50.7	41.7	36.5	34.1	35.3	64.3	91.4	
10	34.3	35.3	36.8	35.9	37.7	39.5	37.2	37.9	36.2	36.9	37.3	38.4	38.1	37.9	36.7	37.5	41.9	71.1	67.8	52.6	58.3	60.9	55.3	56.3	44.1	71.1
11	56.1	54.3	47.9	42.7	38.1	36.6	36.4	37.2	38.3	34.4	41.3	36.3	34.8	30.5	30.3	29.6	32.8	36.2	38.0	38.3	39.2	39.6	42.2	45.1	39.0	56.1
12	47.7	52.3	57.0	81.7	90.6	92.1	92.7	92.9	93.0	92.2	90.1	86.8	85.3	86.2	84.3	89.5	80.5	72.2	67.8	59.2	60.1	59.9	60.4	65.5	76.7	93.0
13	75.8	61.3	59.2	62.5	60.3	59.8	59.6	60.2	56.1	58.4	63.8	64.1	69.5	74.6	84.6	88.1	84.2	85.0	85.2	83.1	82.6	82.7	87.8	91.8	72.5	91.8
14	91.5	92.1	92.9	93.3	93.5	93.6	93.7	93.7	93.8	93.2	90.4	84.2	75.8	68.2	62.2	65.2	68.4	63.6	64.8	65.8	64.9	63.8	64.9	80.3	93.8	
15	67.0	67.9	68.6	69.3	73.2	75.4	78.4	84.8	82.9	73.4	63.9	52.4	34.7	32.4	31.9	30.0	31.7	33.6	35.4	39.1	42.7	42.3	42.7	43.2	54.0	84.8
16	46.9	50.2	55.6	62.9	67.1	65.0	62.4	60.9	66.8	67.0	64.2	58.3	58.9	78.0	89.3	89.9	90.1	92.1	92.7	92.0	91.3	90.3	90.9	91.6	73.9	92.7
17	91.4	90.2	88.7	87.6	88.3	88.7	88.4	87.5	85.1	81.3	77.4	73.7	69.7	68.4	67.6	67.7	69.7	76.3	81.1	84.0	83.6	84.0	84.7	84.6	81.2	91.4
18	84.9	85.0	82.5	78.8	79.9	80.6	80.9	81.8	82.5	83.4	78.5	78.5	75.2	74.1	73.8	75.8	80.6	82.9	83.8	84.3	84.9	84.9	85.6	86.2	81.2	86.2
19	86.2	87.0	87.6	87.6	86.6	87.2	87.9	87.4	80.6	79.8	77.0	72.2	67.6	69.5	71.1	72.7	75.0	75.7	75.6	81.7	89.2	90.8	91.8	92.4	81.7	92.4
20	91.3	89.9	89.7	89.8	89.6	87.4	85.9	85.1	81.8	77.1	79.7	73.6	58.3	38.5	34.6	33.5	33.6	33.5	33.9	39.6	48.1	54.6	60.4	64.1	64.7	91.3
21	70.7	73.6	85.4	89.7	90.7	88.7	86.6	86.9	85.4	82.0	82.9	79.6	81.0	82.4	75.1	76.7	85.8	88.7	88.7	87.8	85.9	86.4	84.4	83.9	90.7	
22	84.5	83.8	83.2	82.6	81.9	81.5	79.8	81.3	82.5	80.4	75.9	69.9	68.4	69.1	67.4	70.5	76.3	79.1	82.1	84.2	84.2	85.2	85.8	79.4	85.8	
23	85.3	85.2	84.9	84.7	84.9	85.2	85.3	84.4	81.8	79.3	78.7	80.7	81.0	81.2	80.6	82.0	80.0	82.0	80.4	84.1	83.5	83.5	82.8	85.3		
24	83.3	81.7	82.9	83.3	83.9	83.5	83.7	83.9	83.3	81.6	76.5	66.8	64.4	61.4	63.1	71.4	75.3	80.5	82.8	82.8	82.4	81.4	79.9	77.7	83.9	
25	81.8	78.0	73.9	72.3	72.7	71.1	71.7	70.8	69.4	66.8	60.9	55.1	48.1	42.4	38.9	37.7	36.5	39.8	44.9	45.5	49.9	51.8	52.3	57.7	81.8	
26	50.2	49.9	51.2	51.8	51.5	53.1	53.8	59.3	58.1	54.3	53.1	51.3	52.2	49.8	46.3	45.6	46.4	48.2	47.9	48.2	50.0	52.5	54.8	56.0	51.5	59.3
27	58.0	59.8	58.2	56.9	49.6	39.3	40.0	45.7	51.3	52.8	50.1	47.7	49.2	49.6	51.8	51.5	52.1	51.9	54.1	55.4	56.9	59.2	61.4	64.5	52.8	64.5
28	66.8	67.8	70.0	74.7	76.9	79.6	85.8	86.5	85.8	80.1	73.4	67.4	56.7	54.7	54.8	59.1	65.4	69.7	72.9	73.7	74.9	74.7	74.6	71.0	86.5	
29	75.0	76.7	76.3	74.5	71.8	72.1	76.4	79.0	82.7	79.2	66.2	66.0	75.4	80.9	80.4	81.7	84.7	83.7	80.6	81.6	84.2	85.8	88.2	78.5	88.2	
30	90.3	91.9	69.9	42.2	42.5	41.3	58.2	68.1	76.0	74.6	68.3	62.7	54.1	44.5	38.0	40.3	38.6	37.4	38.6	38.2	40.3	44.3	46.0	38.6	53.5	91.9
31	35.8	34.9	34.2	35.1	36.5	38.2	38.5	42.1	44.6	37.8	36.0	31.0	25.5	23.3	20.8	20.9	20.8	20.2	21.0	26.5	26.8	28.0	30.1	30.9	30.8	44.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	69.1	69.4	69.4	70.0	70.4	69.7	69.8	70.7	70.0	67.4	63.6	58.5	55.2	52.7	51.4	52.6	55.0	57.7	59.1	60.1	62.0	63.8	64.8	66.7		
MAX	91.5	92.1	92.9	93.3	93.5	93.6	93.7	93.7	93.8	93.2	90.4	85.3	86.2	89.3	89.9	90.1	92.1	92.7	92.0	91.3	90.8	91.8	92.4			



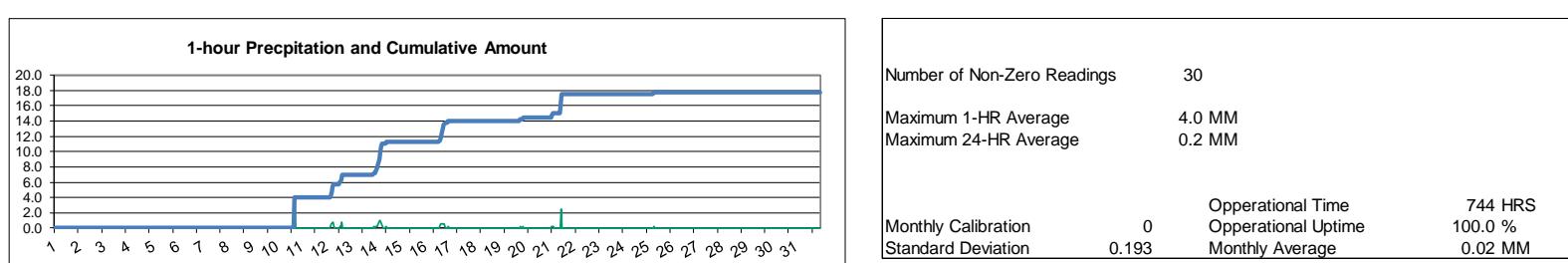
Number of Non-Zero Readings	744
Maximum 1-HR Average	93.8 %
Maximum 24-HR Average	83.9 %
Monthly Calibration Standard Deviation	19.99
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	63.3 %

# Lagoon Precipitation (mm) – October 2020

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.3	0.5	0.8	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.8	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	0.3	0.0	0.0
14	0.3	0.3	0.5	0.8	1.0	0.8	0.3	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
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	0.3	0.5	0.5	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.3	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	0.3	0.0	0.0	0.3	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.3	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
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

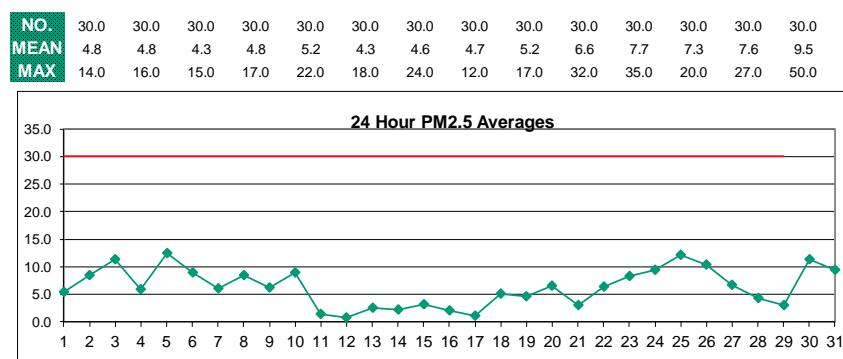
  

NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.3	0.3	0.5	0.8	1.0	0.8	0.8	0.3	0.0	0.0	0.3	0.0	2.5	0.3	0.3	0.8	0.5	4.0	0.5	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0



# Windridge PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

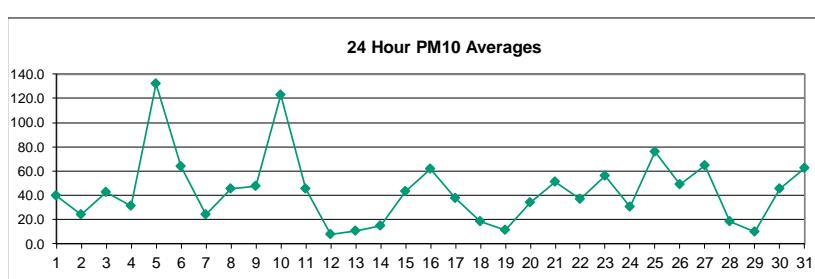
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	4.0	5.0	3.0	4.0	4.0	2.0	0.0	0.0	1.0	1.0	3.0	1.0	4.0	5.0	4.0	15.0	13.0	16.0	10.0	8.0	8.0	6.0	6.0	7.0
2	5.0	5.0	8.0	11.0	9.0	7.0	10.0	9.0	10.0	9.0	15.0	8.0	7.0	5.0	11.0	10.0	10.0	6.0	3.0	8.0	12.0	13.0	9.0	
3	9.0	8.0	15.0	17.0	20.0	10.0	9.0	6.0	10.0	8.0	7.0	6.0	5.0	4.0	6.0	6.0	12.0	8.0	36.0	16.0	19.0	15.0	13.0	7.0
4	5.0	4.0	4.0	2.0	5.0	6.0	6.0	4.0	4.0	5.0	6.0	18.0	21.0	14.0	12.0	8.0	5.0	1.0	2.0	4.0	1.0	0.0	1.0	
5	11.0	11.0	9.0	7.0	12.0	8.0	10.0	11.0	14.0	25.0	19.0	20.0	18.0	12.0	14.0	14.0	23.0	13.0	8.0	6.0	6.0	6.0	13.0	10.0
6	6.0	3.0	3.0	5.0	4.0	2.0	1.0	3.0	5.0	5.0	3.0	6.0	6.0	4.0	25.0	38.0	27.0	19.0	12.0	8.0	7.0	9.0	7.0	8.0
7	6.0	4.0	4.0	7.0	6.0	7.0	5.0	4.0	7.0	9.0	8.0	7.0	10.0	6.0	6.0	6.0	4.0	4.0	4.0	5.0	5.0	10.0	7.0	4.0
8	3.0	6.0	6.0	7.0	4.0	5.0	9.0	6.0	8.0	8.0	24.0	20.0	16.0	14.0	17.0	11.0	11.0	10.0	6.0	4.0	1.0	1.0	3.0	2.0
9	4.0	4.0	5.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	11.0	10.0	11.0	10.0	9.0	7.0	12.0	9.0	9.0	6.0	6.0	12.0	14.0	
10	9.0	10.0	7.0	7.0	4.0	5.0	12.0	15.0	32.0	35.0	18.0	5.0	7.0	5.0	4.0	6.0	6.0	6.0	4.0	5.0	3.0	0.0	3.0	
11	4.0	2.0	1.0	4.0	2.0	0.0	0.0	0.0	5.0	3.0	0.0	2.0	3.0	0.0	0.0	2.0	4.0	1.0	0.0	0.0	0.0	0.0	1.0	2.0
12	0.0	0.0	0.0	0.0	1.0	0.0	1.0	2.0	1.0	4.0	3.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	3.0	3.0	4.0	5.0	3.0	0.0	3.0	6.0	11.0	7.0	4.0	7.0	3.0	
14	0.0	4.0	4.0	3.0	0.0	2.0	3.0	2.0	1.0	4.0	3.0	2.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	3.0	3.0	3.0
15	1.0	0.0	1.0	2.0	1.0	2.0	2.0	4.0	2.0	6.0	10.0	8.0	5.0	2.0	2.0	3.0	4.0	4.0	3.0	5.0	4.0	2.0	1.0	1.0
16	3.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0	2.0	1.0	3.0	3.0	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
17	4.0	3.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	1.0	2.0	2.0	2.0	3.0	
18	3.0	4.0	4.0	4.0	1.0	2.0	3.0	0.0	0.0	0.0	2.0	2.0	6.0	8.0	9.0	6.0	22.0	10.0	7.0	6.0	5.0	4.0	6.0	4.0
19	3.0	6.0	6.0	6.0	3.0	4.0	5.0	6.0	3.0	2.0	8.0	5.0	10.0	13.0	8.0	5.0	4.0	2.0	0.0	3.0	3.0	4.0	2.0	0.0
20	0.0	4.0	3.0	2.0	4.0	4.0	3.0	3.0	6.0	10.0	11.0	9.0	12.0	17.0	12.0	12.0	14.0	10.0	7.0	7.0	4.0	0.0	0.0	
21	5.0	8.0	3.0	1.0	4.0	4.0	2.0	0.0	2.0	2.0	1.0	1.0	1.0	C	5.0	5.0	4.0	5.0	5.0	4.0	2.0	2.0	3.0	2.0
22	1.0	X	0.0	3.0	3.0	0.0	0.0	4.0	2.0	1.0	3.0	2.0	5.0	27.0	22.0	12.0	11.0	10.0	6.0	7.0	8.0	6.0	6.0	7.0
23	6.0	5.0	7.0	6.0	8.0	6.0	8.0	7.0	5.0	10.0	11.0	11.0	10.0	10.0	14.0	11.0	8.0	9.0	10.0	7.0	6.0	7.0	9.0	7.0
24	8.0	7.0	7.0	6.0	5.0	4.0	3.0	8.0	7.0	6.0	11.0	13.0	27.0	17.0	20.0	14.0	11.0	8.0	11.0	7.0	2.0	1.0	3.0	
25	3.0	2.0	5.0	3.0	0.0	2.0	4.0	4.0	3.0	3.0	2.0	6.0	4.0	50.0	43.0	32.0	27.0	23.0	18.0	15.0	15.0	9.0	9.0	9.0
26	14.0	16.0	9.0	5.0	11.0	14.0	10.0	12.0	17.0	15.0	15.0	12.0	8.0	9.0	12.0	12.0	9.0	17.0	4.0	7.0	7.0	5.0	5.0	4.0
27	6.0	5.0	7.0	9.0	6.0	7.0	8.0	9.0	6.0	7.0	9.0	11.0	8.0	9.0	7.0	8.0	9.0	10.0	7.0	3.0	3.0	2.0	2.0	2.0
28	2.0	4.0	3.0	3.0	6.0	3.0	2.0	3.0	3.0	6.0	6.0	8.0	5.0	6.0	6.0	3.0	6.0	7.0	4.0	2.0	4.0	4.0	3.0	4.0
29	5.0	1.0	0.0	0.0	2.0	2.0	2.0	5.0	10.0	9.0	5.0	4.0	6.0	4.0	3.0	2.0	1.0	1.0	0.0	3.0	4.0	0.0	4.0	
30	4.0	1.0	5.0	14.0	22.0	18.0	24.0	6.0	7.0	5.0	2.0	2.0	11.0	12.0	10.0	11.0	11.0	15.0	19.0	16.0	19.0	13.0	10.0	17.0
31	14.0	9.0	6.0	7.0	5.0	4.0	7.0	7.0	8.0	8.0	10.0	11.0	8.0	7.0	8.0	8.0	11.0	9.0	8.0	13.0	19.0	16.0	15.0	8.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	663	
Maximum 1-HR Average	50.0 UG/M3	
Maximum 24-HR Average	12.5 UG/M3	
Monthly Calibration Standard Deviation	1	Opperational Time
	6.0	Opperational Uptime
		Monthly Average
		743 HRS
		99.9 %
		6.3 UG/M3

# Windridge PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

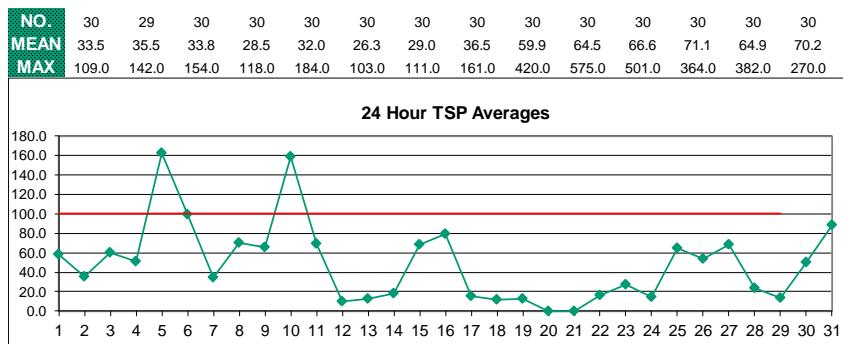
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	19.0	27.0	13.0	9.0	6.0	4.0	3.0	21.0	17.0	24.0	13.0	23.0	31.0	56.0	52.0	111.0	121.0	155.0	83.0	49.0	67.0	20.0	16.0	13.0
2	14.0	11.0	9.0	8.0	10.0	11.0	7.0	18.0	30.0	33.0	58.0	46.0	27.0	22.0	21.0	26.0	34.0	50.0	17.0	23.0	27.0	30.0	38.0	12.0
3	12.0	12.0	31.0	21.0	15.0	17.0	53.0	24.0	25.0	16.0	17.0	26.0	47.0	85.0	47.0	42.0	41.0	123.0	32.0	106.0	104.0	74.0	29.0	111.0
4	43.0	29.0	14.0	10.0	8.0	7.0	6.0	4.0	6.0	6.0	13.0	11.0	11.0	35.0	79.0	66.0	65.0	48.0	28.0	92.0	50.0	59.0	31.0	18.0
5	12.0	12.0	14.0	14.0	11.0	16.0	9.0	8.0	31.0	111.0	66.0	211.0	322.0	198.0	311.0	250.0	333.0	253.0	95.0	97.0	181.0	245.0	254.0	111.0
6	77.0	63.0	54.0	48.0	67.0	49.0	45.0	85.0	126.0	48.0	53.0	84.0	114.0	63.0	73.0	194.0	59.0	48.0	25.0	19.0	22.0	47.0	27.0	41.0
7	22.0	16.0	20.0	26.0	12.0	8.0	11.0	11.0	24.0	34.0	15.0	27.0	17.0	20.0	36.0	35.0	23.0	41.0	26.0	26.0	36.0	47.0	27.0	25.0
8	15.0	37.0	37.0	35.0	25.0	19.0	17.0	15.0	34.0	30.0	94.0	149.0	129.0	106.0	141.0	68.0	35.0	20.0	18.0	13.0	11.0	12.0	12.0	12.0
9	11.0	10.0	8.0	4.0	3.0	3.0	7.0	8.0	16.0	6.0	33.0	31.0	63.0	53.0	110.0	66.0	127.0	73.0	82.0	45.0	34.0	90.0	108.0	143.0
10	68.0	75.0	49.0	54.0	124.0	43.0	64.0	124.0	290.0	471.0	485.0	127.0	95.0	118.0	62.0	109.0	115.0	162.0	46.0	53.0	45.0	33.0	60.0	81.0
11	65.0	43.0	25.0	36.0	52.0	30.0	26.0	33.0	62.0	65.0	91.0	75.0	49.0	64.0	48.0	42.0	58.0	16.0	22.0	26.0	36.0	29.0	47.0	43.0
12	16.0	5.0	4.0	1.0	4.0	6.0	3.0	2.0	2.0	5.0	3.0	1.0	0.0	0.0	2.0	6.0	6.0	11.0	14.0	17.0	22.0	17.0	24.0	13.0
13	7.0	2.0	1.0	1.0	1.0	5.0	5.0	3.0	13.0	7.0	10.0	12.0	27.0	23.0	15.0	20.0	6.0	14.0	10.0	19.0	14.0	11.0	11.0	9.0
14	8.0	17.0	14.0	7.0	1.0	3.0	4.0	2.0	6.0	8.0	20.0	15.0	8.0	8.0	15.0	32.0	44.0	33.0	42.0	17.0	12.0	19.0	8.0	8.0
15	9.0	11.0	11.0	9.0	15.0	15.0	9.0	19.0	28.0	44.0	37.0	25.0	31.0	65.0	100.0	47.0	83.0	44.0	55.0	125.0	62.0	40.0	68.0	81.0
16	45.0	39.0	96.0	29.0	66.0	74.0	80.0	116.0	205.0	140.0	68.0	86.0	32.0	55.0	93.0	16.0	30.0	53.0	43.0	27.0	20.0	11.0	22.0	28.0
17	19.0	79.0	96.0	49.0	31.0	76.0	46.0	38.0	16.0	109.0	66.0	77.0	83.0	54.0	11.0	5.0	2.0	3.0	6.0	7.0	6.0	6.0	5.0	4.0
18	3.0	3.0	1.0	3.0	4.0	0.0	0.0	5.0	6.0	30.0	40.0	19.0	77.0	47.0	27.0	31.0	37.0	30.0	20.0	16.0	16.0	8.0	8.0	11.0
19	10.0	8.0	10.0	7.0	6.0	11.0	11.0	8.0	8.0	8.0	10.0	14.0	11.0	14.0	15.0	8.0	23.0	8.0	10.0	6.0	24.0	12.0	13.0	8.0
20	27.0	5.0	41.0	4.0	3.0	2.0	3.0	6.0	10.0	23.0	33.0	52.0	18.0	66.0	107.0	88.0	89.0	57.0	68.0	47.0	42.0	11.0	11.0	7.0
21	5.0	11.0	8.0	9.0	15.0	57.0	29.0	23.0	53.0	54.0	18.0	95.0	49.0	49.0	C	150.0	102.0	153.0	64.0	78.0	28.0	33.0	39.0	47.0
22	76.0	76.0	25.0	40.0	15.0	11.0	36.0	17.0	35.0	26.0	32.0	58.0	67.0	40.0	23.0	26.0	18.0	11.0	27.0	66.0	47.0	28.0	50.0	26.0
23	22.0	28.0	25.0	18.0	11.0	8.0	14.0	27.0	38.0	40.0	81.0	98.0	130.0	120.0	115.0	75.0	66.0	79.0	62.0	54.0	85.0	53.0	45.0	52.0
24	47.0	104.0	44.0	100.0	65.0	63.0	22.0	14.0	8.0	8.0	17.0	13.0	19.0	37.0	21.0	14.0	10.0	24.0	19.0	31.0	28.0	18.0	7.0	5.0
25	8.0	13.0	27.0	43.0	68.0	48.0	89.0	130.0	144.0	147.0	157.0	90.0	106.0	107.0	130.0	88.0	76.0	51.0	99.0	35.0	50.0	29.0	44.0	38.0
26	41.0	67.0	57.0	44.0	63.0	19.0	27.0	31.0	34.0	46.0	81.0	106.0	56.0	59.0	100.0	42.0	53.0	43.0	41.0	25.0	36.0	18.0	34.0	42.0
27	95.0	122.0	107.0	66.0	24.0	98.0	97.0	68.0	59.0	71.0	74.0	69.0	44.0	53.0	61.0	100.0	43.0	69.0	50.0	58.0	8.0	8.0	7.0	7.0
28	4.0	1.0	5.0	12.0	8.0	6.0	15.0	11.0	11.0	13.0	19.0	26.0	22.0	33.0	34.0	52.0	67.0	58.0	10.0	7.0	10.0	11.0	6.0	1.0
29	3.0	10.0	4.0	6.0	8.0	5.0	6.0	9.0	14.0	33.0	9.0	7.0	9.0	6.0	5.0	4.0	9.0	6.0	6.0	4.0	7.0	14.0	34.0	16.0
30	15.0	11.0	18.0	91.0	50.0	51.0	101.0	24.0	17.0	14.0	9.0	20.0	67.0	86.0	72.0	48.0	61.0	68.0	87.0	28.0	48.0	12.0	27.0	60.0
31	36.0	50.0	56.0	25.0	30.0	22.0	51.0	59.0	79.0	18.0	66.0	95.0	47.0	42.0	45.0	68.0	48.0	45.0	39.0	137.0	218.0	85.0	86.0	44.0



Number of Non-Zero Readings	739
Maximum 1-HR Average	485.0 UG/M3
Maximum 24-HR Average	131.9 UG/M3
Monthly Calibration Standard Deviation	1
Operational Time	49.87
Operational Uptime	744 HRS
Monthly Average	43.7 UG/M3
100.0 %	743
74.0	42.0
91.1	433.3

# Windridge TSP ( $\mu\text{g}/\text{m}^3$ ) – October 2020

Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	27.0	48.0	18.0	9.0	8.0	11.0	8.0	16.0	20.0	26.0	18.0	32.0	28.0	65.0	55.0	196.0	206.0	233.0	142.0	78.0	99.0	26.0	19.0	18.0
2	17.0	12.0	9.0	10.0	8.0	9.0	7.0	26.0	41.0	44.0	81.0	80.0	46.0	36.0	30.0	33.0	55.0	78.0	34.0	31.0	34.0	44.0	64.0	23.0
3	20.0	24.0	36.0	27.0	27.0	22.0	20.0	17.0	29.0	44.0	19.0	21.0	42.0	69.0	143.0	83.0	71.0	195.0	38.0	142.0	134.0	95.0	43.0	
4	57.0	41.0	17.0	11.0	20.0	8.0	10.0	7.0	9.0	9.0	15.0	10.0	10.0	68.0	141.0	115.0	100.0	85.0	42.0	180.0	88.0	96.0	49.0	27.0
5	17.0	16.0	19.0	15.0	12.0	18.0	7.0	17.0	50.0	199.0	121.0	364.0	382.0	270.0	428.0	312.0	360.0	249.0	129.0	133.0	205.0	233.0	195.0	136.0
6	109.0	87.0	80.0	63.0	115.0	75.0	70.0	139.0	205.0	86.0	90.0	117.0	191.0	122.0	135.0	284.0	107.0	58.0	34.0	30.0	32.0	69.0	37.0	48.0
7	25.0	22.0	19.0	31.0	14.0	13.0	17.0	12.0	34.0	41.0	25.0	31.0	24.0	29.0	61.0	53.0	41.0	62.0	35.0	35.0	58.0	82.0	35.0	38.0
8	24.0	48.0	50.0	41.0	24.0	17.0	14.0	30.0	46.0	38.0	179.0	263.0	217.0	165.0	211.0	129.0	40.0	36.0	28.0	21.0	12.0	10.0	17.0	17.0
9	23.0	17.0	11.0	6.0	3.0	5.0	9.0	13.0	24.0	11.0	61.0	45.0	34.0	47.0	108.0	67.0	139.0	104.0	129.0	77.0	61.0	147.0	188.0	248.0
10	101.0	142.0	87.0	63.0	184.0	62.0	105.0	161.0	420.0	575.0	501.0	163.0	156.0	172.0	90.0	118.0	149.0	176.0	45.0	55.0	57.0	44.0	80.0	95.0
11	86.0	65.0	41.0	48.0	76.0	46.0	39.0	48.0	92.0	96.0	132.0	131.0	86.0	84.0	75.0	62.0	86.0	26.0	44.0	45.0	56.0	42.0	78.0	72.0
12	24.0	15.0	0.0	1.0	6.0	5.0	5.0	2.0	7.0	10.0	5.0	2.0	2.0	2.0	3.0	4.0	5.0	6.0	16.0	20.0	26.0	20.0	30.0	18.0
13	5.0	5.0	6.0	4.0	1.0	0.0	3.0	6.0	19.0	7.0	19.0	28.0	44.0	42.0	16.0	15.0	6.0	9.0	13.0	16.0	13.0	11.0	11.0	9.0
14	8.0	19.0	15.0	7.0	5.0	3.0	3.0	3.0	13.0	16.0	16.0	29.0	19.0	14.0	14.0	25.0	32.0	51.0	38.0	46.0	14.0	13.0	22.0	12.0
15	11.0	11.0	16.0	13.0	21.0	21.0	12.0	25.0	51.0	73.0	56.0	35.0	55.0	91.0	156.0	80.0	129.0	79.0	80.0	183.0	107.0	57.0	121.0	161.0
16	83.0	56.0	154.0	45.0	96.0	95.0	95.0	160.0	253.0	186.0	80.0	110.0	66.0	102.0	139.0	21.0	22.0	51.0	12.0	24.0	27.0	6.0	5.0	15.0
17	9.0	45.0	56.0	33.0	6.0	34.0	35.0	25.0	9.0	14.0	9.0	5.0	4.0	5.0	4.0	6.0	4.0	5.0	8.0	12.0	16.0	7.0	6.0	8.0
18	6.0	3.0	1.0	1.0	1.0	2.0	5.0	6.0	10.0	7.0	10.0	13.0	36.0	47.0	14.0	20.0	29.0	15.0	14.0	12.0	7.0	6.0	5.0	5.0
19	4.0	3.0	10.0	10.0	7.0	13.0	12.0	12.0	12.0	11.0	15.0	27.0	10.0	26.0	20.0	13.0	22.0	9.0	6.0	8.0	19.0	4.0	13.0	7.0
20	15.0	6.0	12.0	6.0	2.0	4.0	2.0	8.0	6.0	20.0	48.0	65.0	28.0	102.0	166.0	127.0	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X	X	X	X	X	C	22.0	22.0	54.0	49.0	76.0	17.0	9.0	8.0	10.0		
22	55.0	X	18.0	12.0	7.0	5.0	7.0	6.0	17.0	24.0	16.0	19.0	4.0	5.0	8.0	14.0	16.0	16.0	14.0	37.0	20.0	24.0	21.0	19.0
23	21.0	20.0	17.0	15.0	15.0	12.0	12.0	16.0	25.0	31.0	32.0	36.0	57.0	56.0	61.0	55.0	33.0	32.0	14.0	15.0	27.0	18.0	14.0	10.0
24	25.0	44.0	21.0	24.0	24.0	20.0	2.0	13.0	7.0	12.0	17.0	7.0	9.0	14.0	10.0	9.0	12.0	18.0	11.0	13.0	10.0	8.0	7.0	6.0
25	10.0	13.0	33.0	72.0	95.0	79.0	111.0	122.0	125.0	113.0	96.0	64.0	78.0	71.0	69.0	55.0	54.0	38.0	39.0	39.0	44.0	34.0	46.0	44.0
26	45.0	48.0	48.0	46.0	45.0	16.0	30.0	28.0	38.0	49.0	113.0	125.0	74.0	88.0	113.0	51.0	64.0	51.0	45.0	34.0	31.0	25.0	29.0	51.0
27	104.0	125.0	109.0	63.0	23.0	103.0	77.0	61.0	59.0	71.0	77.0	91.0	57.0	72.0	70.0	111.0	105.0	43.0	78.0	57.0	57.0	16.0	7.0	10.0
28	7.0	4.0	3.0	14.0	8.0	8.0	6.0	6.0	17.0	26.0	20.0	27.0	22.0	47.0	55.0	73.0	102.0	65.0	8.0	14.0	9.0	15.0	1.0	7.0
29	6.0	6.0	6.0	10.0	8.0	4.0	2.0	6.0	23.0	59.0	15.0	6.0	10.0	8.0	5.0	6.0	12.0	8.0	6.0	8.0	6.0	32.0	45.0	24.0
30	14.0	16.0	16.0	118.0	52.0	48.0	81.0	21.0	17.0	13.0	15.0	25.0	81.0	105.0	84.0	57.0	64.0	68.0	81.0	38.0	68.0	16.0	32.0	74.0
31	46.0	68.0	87.0	38.0	47.0	32.0	63.0	83.0	120.0	23.0	96.0	162.0	74.0	81.0	71.0	54.0	165.0	273.0	123.0	69.0				

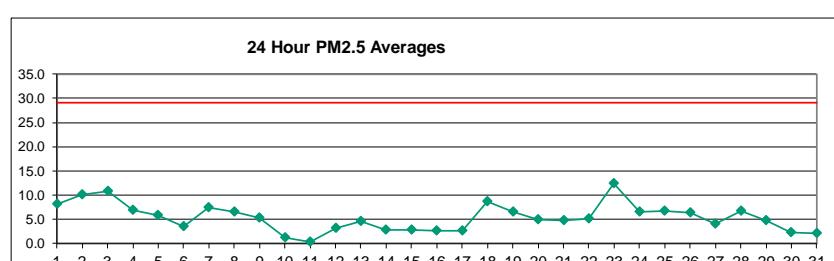


Number of 24HR Exceedences	2	Proposed Guideline
Number of Non-Zero Readings	718	
Maximum 1-HR Average	575.0 UG/M3	
Maximum 24-HR Average	162.0 UG/M3	
Izs Calibration Time		
Down Time	0	
Standard Deviation	64.0	
Operational Time		
Opperational Uptime		
Monthly Average		
		721 HRS
		96.9 %
		51.6 UG/M3

MEAN	MAX
58.6	233.0
35.5	81.0
59.7	195.0
50.6	180.0
162.0	428.0
99.3	284.0
34.9	82.0
69.9	263.0
65.7	248.0
158.4	575.0
69.0	132.0
9.8	30.0
12.8	44.0
18.2	51.0
68.5	183.0
79.3	253.0
15.2	56.0
11.5	47.0
12.2	27.0
16.7	55.0
26.8	61.0
14.3	44.0
64.3	125.0
53.6	125.0
68.6	125.0
23.5	102.0
13.4	59.0
50.2	118.0
88.3	273.0

# West PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

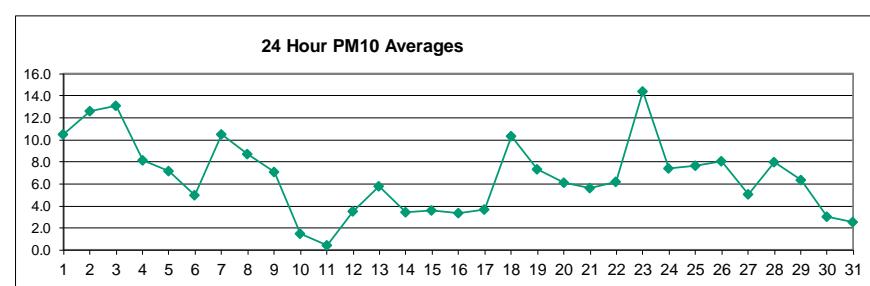
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.8	6.5	6.2	5.9	5.7	5.4	5.5	5.6	6.7	6.8	6.5	6.4	5.5	5.6	8.7	9.9	10.1	10.8	12.4	12.2	12.1	12.1	11.6	11.7	8.2	12.4
2	11.5	12.2	12.2	12.7	13.5	13.7	14.6	15.9	16.4	13.6	12.2	10.3	8.6	6.7	6.5	6.4	6.3	6.5	6.7	6.8	6.6	6.4	6.7	8.1	10.1	16.4
3	9.4	18.3	26.7	27.1	22.4	17.1	15.8	15.1	13.8	11.1	8.7	7.6	6.0	4.4	3.6	3.4	3.3	3.4	6.2	6.6	5.7	6.2	6.6	K	10.8	27.1
4	6.2	6.5	6.9	7.5	7.9	8.6	8.8	9.3	9.6	10.2	10.9	11.6	9.2	7.1	6.9	6.1	5.0	4.1	3.2	2.4	2.9	3.1	4.3	9.0	7.0	11.6
5	12.2	12.9	15.6	14.6	11.7	7.8	6.2	5.6	5.3	4.7	4.4	3.4	4.4	4.6	3.9	4.1	3.2	2.9	2.9	2.7	2.5	2.4	1.9	1.5	5.9	15.6
6	1.3	1.6	1.9	2.1	2.0	2.2	2.2	2.4	2.5	2.3	2.0	1.9	1.3	1.8	1.8	1.7	6.5	7.6	6.2	5.6	5.7	6.3	8.2	6.2	3.5	8.2
7	4.9	4.8	4.2	5.3	6.6	7.1	7.2	7.4	8.1	8.6	9.6	6.8	9.9	9.3	9.6	7.8	7.9	9.1	7.2	7.5	6.8	8.3	8.0	7.5	7.5	9.9
8	8.1	7.4	7.1	7.1	5.2	4.4	3.6	4.4	9.8	13.4	9.3	5.4	3.4	2.9	3.0	5.0	5.7	5.5	6.3	6.4	5.5	7.0	8.1	11.4	6.5	13.4
9	9.6	6.6	4.6	3.7	7.0	7.2	8.7	11.2	13.4	15.3	12.5	7.0	2.6	3.0	2.5	2.6	1.1	1.1	0.8	0.8	1.0	1.1	1.2	1.1	5.2	15.3
10	1.0	0.9	0.8	0.7	0.8	1.0	1.3	1.8	2.1	3.1	2.2	2.4	1.5	1.3	2.0	1.2	0.8	0.8	0.3	0.4	0.6	0.3	0.4	0.2	1.2	3.1
11	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.2	0.3	0.4	0.3	0.6	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.6
12	0.5	0.4	0.4	0.7	1.2	1.9	2.9	3.7	4.2	6.5	10.3	8.6	19.3	6.2	1.3	1.7	0.4	0.5	0.5	0.6	0.7	0.8	0.9	3.1	19.3	3.1
13	0.9	1.0	1.2	1.4	1.4	1.7	1.9	2.7	2.1	2.9	4.8	7.1	6.9	6.4	3.8	3.0	5.7	7.8	10.7	14.2	11.2	4.5	4.7	3.3	4.6	14.2
14	4.2	3.2	1.9	2.2	1.7	3.4	3.1	1.9	5.0	5.3	6.3	6.8	5.4	4.8	3.2	1.2	1.7	1.1	1.0	0.9	1.0	1.0	0.9	0.9	2.8	6.8
15	0.9	1.0	0.9	1.0	1.0	1.7	1.7	2.6	8.3	8.7	6.8	5.1	3.0	3.0	3.0	2.8	2.3	2.3	1.8	1.8	1.7	1.9	1.2	1.6	2.8	8.7
16	1.3	1.5	1.3	1.4	1.7	2.0	1.9	1.6	1.9	2.6	2.9	2.7	8.4	4.8	4.2	6.1	4.0	2.1	2.4	2.3	1.9	1.2	1.6	2.6	8.4	2.6
17	3.0	3.7	2.8	2.3	2.5	2.2	1.7	1.9	2.1	1.9	2.0	1.9	2.0	2.2	2.7	3.5	4.3	1.9	1.8	2.3	3.7	3.2	2.9	3.2	2.6	4.3
18	4.3	4.1	4.8	4.4	3.7	5.2	6.3	9.3	9.5	11.3	10.8	10.0	10.7	10.2	9.9	10.2	10.1	10.1	9.3	10.5	10.7	10.3	10.4	10.5	8.6	11.3
19	11.0	10.7	12.4	15.1	13.5	11.4	9.4	6.8	6.2	4.8	4.4	3.9	5.2	3.8	2.6	2.3	1.9	1.9	3.9	7.7	7.1	7.9	2.9	2.2	6.6	15.1
20	2.4	3.7	4.8	6.1	6.7	7.1	7.0	7.1	9.5	9.4	12.6	10.7	6.8	5.1	3.9	3.1	1.5	1.4	1.4	1.2	1.2	1.8	1.7	3.4	5.0	12.6
21	5.7	5.9	6.5	5.7	5.3	5.0	2.5	3.0	4.2	3.8	5.1	7.6	5.0	5.0	5.2	4.7	5.1	5.0	4.6	4.2	3.6	3.4	3.2	3.4	4.7	7.6
22	2.9	2.7	3.5	2.8	2.9	3.5	3.9	4.3	4.9	3.3	3.3	3.6	3.8	3.7	3.8	4.4	5.3	5.5	7.8	8.7	8.1	8.2	11.2	11.7	5.1	11.7
23	12.6	13.4	12.9	12.4	14.1	14.0	17.5	17.6	15.9	16.7	17.3	15.6	13.0	11.2	10.6	11.2	12.6	9.2	10.2	7.9	7.6	6.9	8.2	8.8	12.4	17.6
24	9.2	6.7	6.1	5.6	6.0	5.2	4.3	4.1	4.9	6.9	6.1	5.9	6.0	6.8	7.8	8.5	8.6	7.3	6.7	6.9	6.8	6.7	6.7	6.5	6.5	9.2
25	8.1	9.0	8.0	7.9	7.7	7.5	7.3	7.5	7.7	7.7	7.1	6.3	5.6	5.0	4.8	4.9	4.7	4.9	5.3	5.7	6.2	6.3	6.5	6.6	6.6	9.0
26	6.8	7.1	7.2	7.5	7.6	8.3	8.6	9.2	8.3	8.5	7.9	7.0	6.7	7.3	7.5	6.6	5.7	3.3	3.3	3.5	3.6	3.9	3.7	3.8	6.4	9.2
27	4.2	3.8	3.8	3.3	2.1	1.4	1.3	2.5	4.8	4.9	6.1	5.6	5.9	6.2	6.1	5.4	4.4	3.4	3.5	3.5	3.7	4.0	4.1	4.4	4.1	6.2
28	4.8	5.3	5.7	7.2	7.0	6.5	6.5	7.5	9.2	9.4	12.7	10.5	8.4	7.1	6.5	7.1	6.2	4.1	4.5	4.9	5.0	5.1	4.7	4.2	6.7	12.7
29	3.7	3.2	2.8	2.5	2.1	1.9	3.0	4.4	3.9	3.8	7.3	6.9	4.0	3.2	4.5	7.3	5.7	5.8	6.1	5.4	5.4	6.6	7.0	7.8	4.8	7.8
30	8.5	9.5	1.8	1.7	2.5	3.8	1.4	1.1	2.1	3.0	1.9	3.9	3.8	2.6	3.3	1.0	1.0	0.7	0.4	0.4	0.2	0.2	0.4	0.3	2.3	9.5
31	0.3	0.4	0.4	0.6	0.9	1.2	2.4	1.9	2.7	3.6	2.3	2.4	2.4	2.6	2.7	2.8	3.0	2.9	2.6	2.5	2.4	2.5	K	K	2.1	3.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	29	741	100%
MEAN	5.4	5.6	5.7	5.8	5.6	5.5	5.5	5.8	6.6	6.9	7.0	6.3	5.8	5.1	4.7	4.7	4.7	4.4	4.5	4.7	4.6	4.5	4.6	4.9		
MAX	12.6	18.3	26.7	27.1	22.4	17.1	17.5	17.6	16.4	16.7	17.3	15.6	19.3	11.2	10.6	11.2	12.6	10.8	12.4	14.2	12.1	12.1	11.6	11.7		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	741	
Maximum 1-HR Average	27.1 UG/M3	
Maximum 24-HR Average	12.4 UG/M3	
I2S Calibration Time		
Down Time	0	
Standard Deviation	3.944	
Opperational Time		
Opperational Uptime		
Monthly Average		
	741 HRS	
	99.6 %	
	5.4 UG/M3	

# West PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	9.8	8.5	7.8	7.2	6.9	6.5	7.1	7.9	9.8	10.0	9.6	9.6	8.1	8.2	11.7	13.2	13.3	13.4	14.8	14.3	14.5	14.2	13.1	12.8	10.5	14.8	
2	12.6	13.4	13.3	13.6	14.8	15.4	17.5	20.7	22.3	18.4	16.6	13.2	11.3	8.7	8.3	8.1	7.9	8.5	9.3	9.4	9.6	9.2	9.5	11.4	12.6	22.3	
3	13.0	21.9	29.8	29.9	24.3	18.5	17.2	16.6	17.3	13.9	11.2	10.1	8.6	6.2	5.1	4.9	4.7	4.9	9.1	9.7	8.0	8.2	8.1	K	13.1	29.9	
4	6.9	7.1	7.5	8.1	8.5	9.3	9.5	10.2	11.6	12.4	13.7	14.7	11.8	8.8	8.5	7.5	5.9	4.8	3.7	2.7	3.2	3.4	4.6	11.6	8.2	14.7	
5	14.2	14.7	18.6	17.3	12.6	8.4	7.2	7.3	7.4	6.4	5.9	4.5	6.4	6.6	5.5	5.8	4.2	3.4	3.3	3.0	2.8	2.8	2.1	1.7	7.2	18.6	
6	1.5	1.8	2.1	2.4	2.2	2.7	2.9	3.4	3.6	3.3	2.8	2.8	1.9	2.7	2.6	2.4	9.8	11.4	9.2	8.3	8.5	9.4	12.3	9.2	5.0	12.3	
7	6.7	6.4	5.8	7.0	8.5	9.0	9.5	10.3	11.6	12.4	14.3	9.7	13.4	12.5	12.7	10.1	11.7	13.6	10.8	11.2	10.1	12.3	12.0	11.1	10.5	14.3	
8	11.9	10.5	9.4	9.2	6.2	4.9	4.0	5.4	11.7	16.4	11.8	6.8	4.8	4.1	4.4	7.4	8.5	8.2	9.5	9.6	8.2	10.5	11.4	14.9	8.7	16.4	
9	13.2	8.7	6.1	4.6	9.1	8.8	11.8	15.0	18.6	21.0	17.4	10.0	3.8	4.5	3.7	3.8	1.5	1.4	1.0	0.9	1.2	1.3	1.4	1.3	7.1	21.0	
10	1.2	1.0	0.9	0.9	1.0	1.3	1.5	2.2	2.7	4.4	2.8	3.0	1.9	1.6	2.8	1.7	1.1	1.0	0.4	0.4	0.6	0.3	0.4	0.2	1.5	4.4	
11	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.7	0.5	0.6	0.3	0.4	0.4	0.4	0.8	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.8	
12	0.5	0.5	0.5	0.8	1.4	2.2	3.1	3.9	4.5	7.1	11.4	9.8	23.1	7.1	1.5	1.9	0.4	0.5	0.5	0.5	0.6	0.8	0.8	1.0	3.5	23.1	
13	1.0	1.0	1.3	1.5	1.4	1.9	2.3	3.7	2.7	4.1	7.1	10.6	10.3	9.2	4.8	3.7	6.9	9.2	13.0	17.2	12.7	4.8	5.1	3.7	5.8	17.2	
14	4.9	4.1	2.3	3.0	1.8	3.5	3.2	2.0	6.8	7.6	8.7	7.9	6.4	6.0	3.9	1.4	2.3	1.4	1.2	1.0	1.1	1.0	1.0	1.0	3.5	8.7	
15	1.0	1.1	1.0	1.0	1.1	2.1	1.9	3.1	12.2	11.6	9.5	7.3	4.3	4.3	4.3	3.9	2.9	2.8	2.0	2.0	1.8	2.2	1.3	1.8	3.6	12.2	
16	1.4	1.7	1.7	1.4	1.5	2.1	2.7	2.7	2.2	2.7	3.8	4.3	4.0	11.1	5.7	5.4	8.4	4.7	2.4	3.4	2.6	2.0	1.3	1.7	3.4	11.1	
17	10.2	11.1	5.0	2.8	3.0	2.5	1.8	2.2	2.5	2.1	2.3	2.2	2.4	2.6	3.5	4.8	6.0	2.0	1.9	2.6	4.7	3.5	3.0	3.3	3.7	11.1	
18	4.7	4.4	5.1	4.7	3.9	5.5	6.8	12.5	12.8	15.9	14.1	12.4	13.4	12.9	12.4	12.3	11.6	12.4	11.3	11.1	11.5	11.7	11.9	12.1	10.3	15.9	
19	12.5	11.6	13.3	16.5	14.4	12.2	10.1	7.1	6.7	5.4	4.9	4.5	7.2	5.0	3.1	2.9	2.2	2.0	4.1	8.1	7.6	9.4	3.1	2.5	7.3	16.5	
20	2.6	4.1	5.0	7.1	7.5	7.7	8.0	7.9	12.2	12.1	16.8	14.2	9.2	7.3	5.7	4.5	1.9	1.6	1.8	1.4	1.3	2.0	1.9	3.8	6.1	16.8	
21	5.9	6.1	6.7	5.9	6.3	6.3	3.1	3.8	5.8	4.9	6.9	9.6	6.8	6.7	7.4	6.6	6.9	5.9	5.5	4.6	3.8	3.6	3.3	3.7	5.7	9.6	
22	3.3	2.9	3.9	2.9	3.2	4.4	5.3	6.2	7.2	4.5	4.5	4.8	5.2	4.8	5.0	6.1	7.0	6.6	9.6	10.3	9.0	8.7	11.7	12.1	6.2	12.1	
23	12.9	15.1	13.5	13.1	18.8	16.6	23.4	23.4	18.6	20.3	21.3	18.8	15.5	13.2	12.0	12.3	13.7	9.8	10.9	8.3	7.8	7.4	9.4	9.7	14.4	23.4	
24	9.9	7.2	6.6	6.4	6.9	5.6	4.5	4.2	5.2	8.2	8.1	7.7	6.8	8.1	9.5	10.1	10.4	7.7	7.0	7.2	7.1	7.9	7.8	7.4	7.6	10.4	
25	8.3	9.1	8.1	8.2	8.1	8.0	8.3	8.9	9.0	9.3	8.6	7.7	7.2	6.4	6.3	6.6	5.9	6.0	6.3	6.7	7.4	7.5	7.7	7.6	9.3		
26	8.1	8.5	8.7	8.9	10.2	11.1	11.8	10.7	11.0	10.3	9.0	9.0	10.2	10.5	9.4	8.2	4.1	4.0	4.3	4.2	4.5	4.1	4.1	8.1	11.8		
27	4.9	4.0	3.9	3.4	2.3	1.5	1.5	3.4	6.8	7.0	8.5	7.6	8.1	8.5	8.1	7.2	6.0	4.2	4.0	3.7	3.8	4.2	4.2	4.5	5.1	8.5	
28	4.8	5.4	5.9	8.6	9.4	7.6	6.6	8.2	11.5	11.9	15.8	13.4	10.9	9.5	8.9	10.3	8.8	4.5	4.7	5.1	5.1	5.2	4.8	4.2	8.0	15.8	
29	3.7	3.2	2.8	2.5	2.1	1.9	3.7	6.3	5.3	4.9	10.5	10.1	5.5	4.2	6.3	10.7	8.0	8.4	8.7	7.9	7.7	8.9	8.4	9.9	6.3	10.7	
30	11.3	13.1	1.9	1.9	2.8	5.0	1.6	1.4	2.6	3.6	2.3	5.6	5.5	3.7	4.8	1.3	1.4	1.0	0.6	0.6	0.3	0.2	0.5	0.3	3.1	13.1	
31	0.3	0.5	0.4	0.7	0.9	1.4	3.2	2.5	3.8	5.1	3.0	2.9	2.9	3.1	3.2	3.3	3.4	3.4	2.9	2.8	2.7	2.8	K	K	2.5	5.1	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	29	741	100%		
MEAN	6.6	6.7	6.4	6.5	6.5	6.2	6.5	7.2	8.6	9.0	9.2	8.3	7.6	6.7	6.2	6.1	6.2	5.5	5.6	5.8	5.5	5.5	5.8				
MAX	14.2	21.9	29.8	29.9	24.3	18.5	23.4	23.4	22.3	21.0	21.3	18.8	23.1	13.2	12.7	13.2	13.7	13.6	14.8	17.2	14.5	14.2	13.1	14.9			



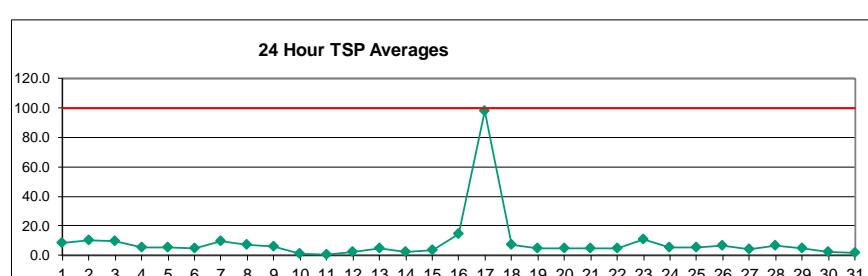
Number of Non-Zero Readings		741
Maximum 1-HR Average	29.9	UG/M3
Maximum 24-HR Average	14.4	UG/M3
IHZ Calibration Time		
Down Time	0	
Operational Uptime		
Standard Deviation	4.8	Monthly Average
		741 HRS
		99.6 %
		6.7 UG/M3

# West TSP ( $\mu\text{g}/\text{m}^3$ ) – October 2020

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7.2	5.7	5.1	4.7	4.6	4.4	5.1	5.9	8.6	9.3	9.8	10.4	8.6	8.7	11.1	12.2	10.5	9.7	10.3	9.8	9.8	9.5	8.8	8.3	8.3	12.2	
2	8.2	8.9	8.7	8.8	9.6	10.2	11.4	14.8	21.1	17.7	13.6	10.9	10.2	9.0	9.3	9.2	8.9	8.8	8.4	9.1	7.5	6.8	7.2	9.0	10.3	21.1	
3	9.0	14.4	19.4	20.1	15.8	12.0	11.2	10.9	12.0	9.7	8.1	7.8	7.6	5.1	4.5	4.5	4.4	4.3	8.9	9.5	7.0	6.0	5.5	K	9.4	20.1	
4	4.6	4.6	4.9	5.3	5.5	6.1	6.2	6.7	7.9	8.5	9.4	10.4	8.9	6.4	6.4	5.5	4.2	3.4	2.6	1.8	2.2	3.0	2.2	3.0	8.7	5.6	10.4
5	9.4	9.5	12.1	11.2	8.2	5.5	4.9	5.8	6.6	5.7	5.5	3.9	6.5	6.9	5.4	5.5	3.5	2.4	2.4	2.1	2.0	2.1	1.4	1.1	5.4	12.1	
6	1.0	1.2	1.4	1.7	1.5	2.1	2.6	3.4	3.7	3.1	2.7	2.9	1.9	2.8	2.8	2.5	11.1	12.8	8.9	7.6	7.2	7.7	10.5	7.1	4.6	12.8	
7	4.6	4.4	4.1	4.8	5.8	6.0	6.6	9.6	11.9	12.5	14.8	9.1	12.0	11.7	12.8	10.6	13.0	15.5	11.8	10.6	7.4	9.3	9.5	8.5	9.5	15.5	
8	8.8	6.9	6.2	6.0	4.0	3.2	2.6	3.7	8.5	12.4	9.8	5.4	4.6	3.9	4.3	8.2	8.9	8.2	9.1	8.9	7.6	10.4	9.2	10.9	7.2	12.4	
9	11.2	6.2	4.3	3.2	6.4	5.7	8.5	14.1	14.8	15.1	14.4	9.8	4.0	4.8	3.8	4.0	1.2	1.1	0.7	0.7	0.9	1.0	1.0	0.9	5.7	15.1	
10	0.8	0.7	0.6	0.7	0.8	0.9	1.1	1.6	2.1	4.4	2.3	2.4	1.6	1.3	2.7	1.6	1.0	0.8	0.3	0.3	0.4	0.2	0.2	0.2	1.2	4.4	
11	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.2	0.3	0.3	0.3	0.5	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.5	
12	0.3	0.3	0.3	0.6	0.9	1.4	2.0	2.5	2.9	4.6	7.4	6.4	15.5	4.8	1.0	1.2	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	2.3	15.5	
13	0.6	0.7	0.8	1.0	0.9	1.3	1.7	2.8	2.0	3.8	7.4	11.8	10.6	8.3	3.6	2.6	4.6	6.2	8.6	11.1	8.2	3.1	3.3	2.7	4.5	11.8	
14	3.4	2.9	1.6	2.1	1.2	2.2	2.1	1.3	4.8	6.1	6.4	5.3	4.3	4.3	2.8	0.9	1.9	1.0	0.8	0.7	0.7	0.6	0.6	0.6	2.5	6.4	
15	0.6	0.7	0.6	0.7	0.7	1.5	1.3	2.2	12.1	13.2	10.2	7.8	4.2	4.3	4.2	3.7	2.3	2.1	1.4	1.3	1.2	1.7	0.9	1.2	3.3	13.2	
16	0.9	1.2	1.1	1.0	1.0	1.6	2.4	2.4	1.9	2.5	3.8	4.4	4.2	11.6	4.2	4.2	163.3	28.0	1.5	59.0	25.6	1.3	17.8	1.1	14.4	163.3	
17	867.4	1240.4	189.2	1.9	2.2	1.7	1.2	1.5	1.7	1.5	1.6	1.7	1.8	2.0	3.1	4.6	5.8	1.3	1.2	1.8	3.4	2.3	2.0	2.1	97.6	1240.4	
18	3.3	2.8	3.3	3.0	2.5	3.6	4.4	10.2	9.4	12.0	10.8	9.6	10.7	10.1	9.4	9.4	8.2	9.0	7.7	7.3	7.4	7.6	7.8	7.9	7.4	12.0	
19	8.2	7.5	8.9	10.7	9.3	7.9	6.5	4.6	4.4	3.6	3.3	3.2	6.6	3.9	2.1	2.0	1.4	1.3	2.7	5.4	4.9	6.1	2.0	1.7	4.9	10.7	
20	1.7	2.7	3.2	4.6	4.9	5.0	5.2	5.2	8.8	9.6	13.5	11.0	8.0	7.9	6.0	4.5	1.6	1.3	1.5	1.0	0.9	1.4	1.2	2.5	4.7	13.5	
21	3.8	4.1	4.4	3.8	5.1	4.5	2.1	2.8	4.9	4.4	6.9	8.6	6.5	6.4	6.7	5.4	6.3	4.7	4.5	3.2	2.5	2.3	2.1	2.5	4.5	8.6	
22	2.2	1.9	2.8	1.9	2.1	3.3	4.2	5.4	7.2	3.7	3.8	4.1	4.8	4.1	4.4	5.7	5.9	4.9	6.9	6.9	5.9	5.7	7.6	7.8	4.7	7.8	
23	8.3	10.0	8.8	8.5	12.6	10.8	16.7	19.6	13.9	16.9	18.4	16.9	14.4	12.3	9.7	9.3	10.7	6.8	7.3	5.7	5.1	5.4	7.9	7.5	11.0	19.6	
24	7.5	5.7	5.0	4.8	5.1	3.6	2.9	2.7	3.4	6.0	6.4	6.6	4.9	6.2	7.3	7.4	7.8	5.0	4.5	4.7	4.6	4.6	5.3	5.1	5.3	7.8	
25	5.4	5.9	5.3	5.4	5.7	5.6	5.8	5.8	6.5	7.5	7.5	6.6	6.3	5.8	4.9	4.9	5.2	4.1	4.1	4.3	4.5	5.0	5.0	5.2	5.5	7.5	
26	5.4	5.8	5.6	5.8	6.1	7.5	9.5	11.0	8.7	10.2	9.7	8.1	8.1	9.8	11.0	9.4	8.1	3.0	2.8	3.2	2.9	3.3	2.7	2.7	6.7	11.0	
27	3.5	2.6	2.5	2.2	1.5	1.1	1.1	3.3	7.2	7.2	8.8	7.0	7.5	8.0	7.3	6.2	5.2	3.2	2.7	2.5	2.5	2.7	2.7	2.9	4.2	8.8	
28	3.1	3.5	3.8	5.7	6.4	4.9	4.3	5.5	8.3	9.2	17.0	13.5	10.5	9.6	8.6	8.6	10.6	8.0	2.9	3.0	3.3	3.3	3.1	2.7	6.4	17.0	
29	2.4	2.1	1.8	1.6	1.4	1.2	2.7	4.8	3.8	4.1	10.8	10.2	4.7	3.2	5.3	10.3	6.3	6.8	6.7	6.0	5.7	6.0	5.6	6.5	5.0	10.8	
30	7.5	8.7	1.3	1.3	2.1	4.5	1.1	1.1	1.8	2.5	1.7	6.1	5.7	3.6	5.0	1.2	1.2	0.9	0.4	0.5	0.2	0.2	0.4	0.2	2.5	8.7	
31	0.2	0.3	0.3	0.4	0.6	1.0	2.6	1.9	3.3	4.9	2.4	2.2	2.0	2.1	2.2	2.3	2.4	2.4	2.0	1.9	1.9	1.9	K	K	1.9	4.9	

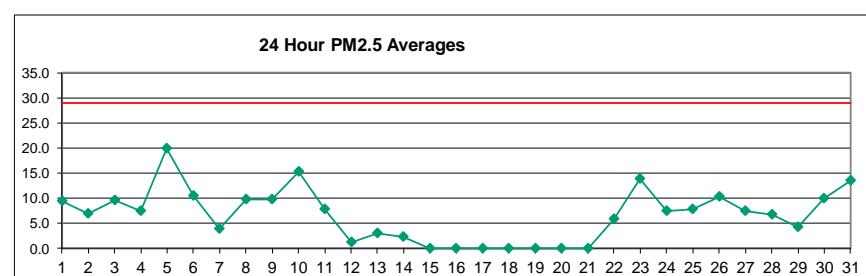
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	29	741	100%
MEAN	32.3	44.3	10.3	4.3	4.4	4.2	4.5	5.6	6.9	7.5	8.0	7.2	6.7	6.1	5.6	5.5	10.4	5.3	4.3	6.1	4.6	3.9	4.5	4.1			
MAX	867.4	1240.4	189.2	20.1	15.8	12.0	16.7	19.6	21.1	17.7	18.4	16.9	15.5	12.3	12.8	12.2	163.3	28.0	11.8	59.0	25.6	10.4	17.8	10.9			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	741	
Maximum 1-HR Average	1240.4 UG/M3	
Maximum 24-HR Average	97.6 UG/M3	
IZS Calibration Time		
Down Time	0	
Standard Deviation	56.16	
Operational Time		
Monthly Average		
		741 HRS
		99.6 %
		8.6 UG/M3

# Berm PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

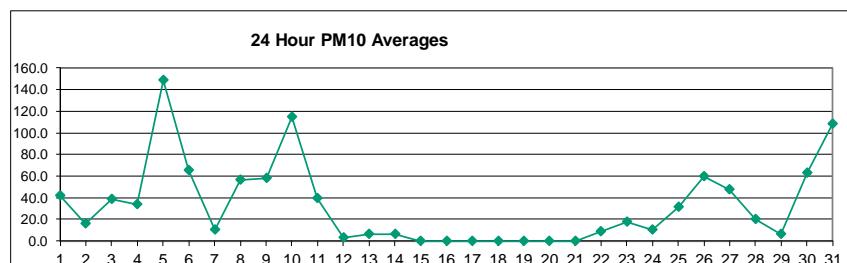
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	4.9	2.5	2.4	2.3	1.9	1.9	2.8	3.5	2.8	2.1	2.4	3.0	4.4	11.3	27.6	35.3	34.1	19.7	17.8	13.8	8.0	8.0	7.7	7.6	9.5	35.3	
2	7.4	6.3	6.4	6.6	7.0	6.5	9.5	9.6	10.0	11.5	15.9	8.8	6.3	5.4	5.6	6.8	8.7	4.6	4.5	4.8	4.2	3.3	3.0	3.3	6.9	15.9	
3	5.0	12.2	13.1	11.1	8.9	7.7	8.0	6.8	7.5	5.7	5.0	5.2	9.1	13.0	11.6	18.2	12.3	20.8	3.5	12.7	9.2	7.0	5.5	K	9.5	20.8	
4	5.5	4.3	4.0	5.3	4.6	4.6	4.5	4.7	5.0	5.6	5.8	6.3	10.7	18.7	18.1	15.1	7.3	6.1	13.5	6.8	8.8	5.0	3.7	6.7	7.5	18.7	
5	7.6	7.7	6.8	7.2	5.9	4.3	3.3	7.3	14.1	13.6	40.1	39.0	40.9	37.9	39.1	44.9	28.7	14.0	16.9	24.9	27.0	23.8	14.9	8.7	19.9	44.9	
6	7.5	5.2	6.4	6.4	6.9	4.1	12.5	21.6	14.3	10.3	13.2	26.1	15.1	22.8	37.6	14.1	4.6	4.0	2.9	3.2	3.9	2.6	3.5	2.9	10.5	37.6	
7	3.1	2.2	2.4	1.9	1.9	2.3	2.3	3.6	3.6	3.3	3.6	3.7	8.9	7.9	6.8	4.6	4.7	3.6	3.7	5.1	4.1	3.5	3.1	2.9	3.9	8.9	
8	6.4	4.7	4.8	4.3	3.6	3.4	2.7	4.3	6.4	26.1	28.3	24.1	32.9	36.3	20.8	4.1	4.0	2.4	2.3	1.6	1.6	2.0	2.3	3.8	9.7	36.3	
9	2.3	1.5	0.5	0.7	0.8	1.8	2.2	4.2	3.7	9.2	6.0	3.9	10.4	20.2	22.9	18.3	7.2	19.7	6.0	5.7	15.1	29.6	31.1	11.9	9.8	31.1	
10	14.0	7.0	4.8	15.1	8.1	9.9	16.1	60.9	65.0	53.8	17.0	13.2	14.6	11.2	10.9	11.9	11.6	2.5	2.1	1.8	2.2	4.6	2.2	5.1	15.2	65.0	
11	7.8	7.2	2.9	3.9	3.5	3.1	4.6	8.2	16.9	22.6	28.2	15.3	10.9	9.1	7.4	4.4	6.8	4.9	4.9	3.3	2.9	5.7	2.2	2.5	7.9	28.2	
12	2.5	0.6	1.0	2.0	0.3	0.5	0.9	1.5	1.1	0.7	0.6	0.6	0.5	1.3	1.6	1.9	2.7	1.2	0.7	0.8	1.1	0.8	2.1	0.8	1.2	2.7	
13	0.4	0.5	1.0	0.7	1.5	1.3	1.1	1.3	1.9	1.6	2.0	3.1	5.0	3.9	4.8	1.5	4.4	4.5	5.4	5.4	2.4	4.0	7.5	8.7	3.1	8.7	
14	6.9	0.5	0.3	0.2	0.8	0.5	1.1	1.4	2.1	2.6	4.0	4.3	2.1	2.2	2.5	3.5	3.8	2.0	2.5	2.8	3.1	2.6	2.1	1.9	2.3	6.9	
15	2.6	1.9	2.5	3.1	4.3	2.9	2.1	1.5	4.4	4.7	4.5	5.8	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
16	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
17	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
18	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
19	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
20	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
21	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	12.4	13.7	22.7	4.1	2.8	3.0	2.9	2.6	2.7	3.7	-	-
22	4.6	6.2	4.7	2.7	3.3	2.6	2.3	5.7	2.8	4.6	3.7	2.9	2.2	2.4	2.5	3.8	4.8	5.1	11.5	10.6	10.9	13.8	12.6	14.7	5.9	14.7	
23	14.8	15.6	12.1	10.8	11.5	11.9	13.6	14.0	16.0	21.6	20.8	23.3	21.8	16.1	13.9	12.5	12.7	8.9	9.5	10.9	9.6	7.8	7.9	14.3	13.8	23.3	
24	18.0	9.1	13.3	9.7	14.0	9.3	5.4	3.7	3.8	5.7	4.7	3.8	5.6	5.8	6.9	6.3	7.2	7.8	7.5	8.0	5.5	4.8	4.8	7.2	7.4	18.0	
25	7.2	9.6	8.0	10.4	7.4	8.5	9.3	8.1	7.9	7.7	7.2	8.3	8.1	9.4	8.6	7.5	5.9	5.8	8.3	7.5	6.2	7.4	7.2	7.8	7.9	10.4	
26	9.3	8.8	7.4	6.8	6.1	6.8	7.0	8.6	8.8	9.8	10.5	11.3	12.2	17.7	14.5	14.5	11.6	8.3	12.8	12.8	10.7	10.0	11.3	10.7	10.3	17.7	
27	11.0	9.4	5.4	4.0	12.8	7.5	6.2	5.1	7.0	7.7	10.1	5.5	11.0	8.3	11.5	10.3	7.7	11.6	7.6	5.2	3.2	3.7	3.4	3.5	7.5	12.8	
28	3.9	4.4	4.9	3.9	6.0	6.8	4.4	6.7	12.8	10.0	8.3	7.9	7.5	11.5	6.6	11.4	10.7	3.3	3.9	5.6	8.0	4.8	4.8	3.8	6.7	12.8	
29	3.8	3.9	4.8	3.1	2.6	2.6	2.5	10.2	6.7	1.8	2.0	1.7	1.6	1.6	2.1	2.0	2.4	2.9	2.8	11.8	11.9	6.8	9.1	4.3	11.9		
30	10.7	9.0	19.6	8.6	6.3	8.7	3.2	2.2	2.6	2.7	5.5	10.2	10.8	13.1	15.3	29.5	23.9	14.0	6.7	12.5	2.3	4.1	8.0	8.0	9.9	29.5	
31	15.2	16.7	7.7	5.9	3.6	2.9	6.2	14.3	2.6	9.4	8.2	10.4	8.5	12.8	18.0	14.6	9.2	16.4	26.9	38.6	23.4	26.2	K	K	13.5	38.6	
NO.	25	25	25	25	25	25	25	25	25	25	25	25	24	24	25	25	25	25	25	25	25	25	24	23	595	100%	
MEAN	7.3	6.3	5.9	5.5	5.4	4.9	5.4	8.8	9.2	10.2	10.3	9.9	10.9	12.5	13.2	12.4	10.4	7.9	7.5	8.4	7.5	8.0	6.7	6.5			
MAX	18.0	16.7	19.6	15.1	14.0	11.9	16.1	60.9	65.0	53.8	40.1	39.0	40.9	37.9	39.1	44.9	34.1	20.8	26.9	38.6	27.0	29.6	31.1	14.7			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	595	
Maximum 1-HR Average	65.0 UG/M3	
Maximum 24-HR Average	19.9 UG/M3	
Monthly Calibration Standard Deviation	146 8.1	Operational Time Operational Uptime Monthly Average
		741 HRS 99.6 % 8.4 UG/M3

# Berm PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

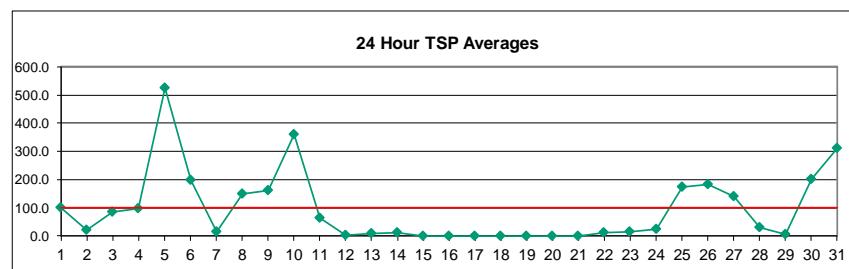
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	20.9	3.9	3.6	2.8	2.2	2.4	8.0	11.7	8.3	5.7	7.4	10.7	24.4	68.6	155.5	222.2	170.5	93.0	81.7	53.2	10.1	10.9	9.2	9.0	41.5	222.2	
2	8.3	6.6	6.6	6.8	7.5	7.6	18.9	20.1	27.4	32.0	57.5	25.1	17.1	12.7	13.8	21.1	31.0	9.8	9.8	13.5	9.0	4.9	4.1	4.5	15.7	57.5	
3	7.3	16.8	15.6	12.8	10.9	9.1	11.0	10.3	14.4	8.9	9.7	14.1	58.4	90.9	78.0	103.1	79.8	149.7	9.6	74.5	51.1	35.9	19.4	K	38.7	149.7	
4	21.9	8.7	5.3	12.1	6.5	5.2	4.7	4.9	5.5	7.8	6.6	7.5	46.4	142.6	121.3	105.8	34.0	31.5	107.9	42.4	48.6	17.7	8.6	7.6	33.8	142.6	
5	7.8	8.2	7.2	7.8	6.2	4.5	4.1	38.0	88.4	81.0	319.7	310.5	345.0	305.5	331.8	393.3	241.2	111.8	125.4	216.5	239.5	188.7	118.5	67.6	148.7	393.3	
6	57.1	31.7	32.1	35.6	39.6	17.8	90.6	164.6	88.0	58.1	87.9	174.4	99.0	143.9	272.0	98.2	21.7	14.8	9.3	10.7	11.1	4.1	5.1	4.0	65.5	272.0	
7	4.4	3.3	5.4	3.3	2.9	3.5	3.3	5.3	5.1	4.6	8.7	8.5	36.7	32.5	19.7	10.7	17.9	11.7	11.7	17.1	8.8	7.2	4.8	3.7	10.0	36.7	
8	9.4	6.7	6.7	5.8	6.4	8.1	6.3	11.6	25.4	153.6	209.0	182.8	246.4	261.7	143.3	20.6	16.4	6.9	5.4	2.0	2.1	2.8	3.1	4.9	56.2	261.7	
9	3.0	1.7	0.6	0.7	0.8	2.1	2.4	4.7	4.2	13.3	10.6	13.7	78.5	127.2	130.9	127.1	53.5	134.2	39.5	32.2	105.0	212.7	229.2	70.6	58.3	229.2	
10	104.7	44.1	26.2	123.8	48.8	69.7	103.6	459.3	538.6	476.5	131.3	80.1	114.6	73.2	81.0	95.6	81.0	9.0	6.0	9.8	27.0	10.7	24.1	114.5	538.6		
11	39.1	42.6	13.5	18.8	16.3	15.4	21.5	41.2	77.7	123.7	140.5	67.2	52.4	45.2	37.3	25.8	17.8	27.7	30.1	17.7	13.6	30.8	12.2	12.8	39.2	140.5	
12	13.4	1.3	2.9	6.9	0.4	0.7	0.9	1.5	1.1	0.8	0.6	0.6	0.5	1.7	2.1	2.7	4.0	1.6	1.0	2.3	3.1	3.1	9.1	1.9	2.7	13.4	
13	0.6	0.7	2.3	1.4	4.0	3.5	3.3	3.6	6.5	4.9	6.2	10.9	18.4	9.5	7.1	2.0	4.9	5.1	6.1	6.9	2.7	5.3	10.5	12.6	5.8	18.4	
14	9.8	0.5	0.3	0.3	0.8	0.5	1.5	1.6	2.8	3.7	5.9	6.0	2.7	4.9	9.1	17.4	16.6	11.3	13.5	10.9	11.6	11.0	6.8	6.3	6.5	17.4	
15	8.6	6.2	6.9	11.9	15.6	10.0	5.7	2.1	13.7	19.0	12.2	32.7	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
16	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
17	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
18	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
19	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
20	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
21	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
22	6.3	8.7	6.2	3.2	4.2	3.3	2.9	8.2	3.9	6.5	5.0	4.9	3.6	4.5	5.1	12.8	10.7	6.1	14.9	13.1	13.3	16.5	14.9	19.8	8.3	19.8	
23	19.0	20.4	14.2	11.9	12.3	12.7	15.4	17.6	20.6	29.2	28.0	32.0	30.4	22.5	19.1	16.2	16.6	11.1	12.0	14.7	12.6	10.1	10.2	19.6	17.8	32.0	
24	25.6	11.8	18.9	13.5	19.9	13.0	6.6	4.1	4.3	6.8	5.6	4.3	10.6	8.1	10.0	7.8	13.1	9.5	9.1	10.3	6.1	4.9	5.2	9.3	9.9	25.6	
25	8.7	12.8	10.2	14.2	9.3	11.4	12.5	10.9	21.3	28.0	22.2	54.4	51.2	71.0	55.5	48.0	33.3	27.1	48.9	45.8	28.6	39.9	37.3	43.5	31.1	71.0	
26	55.1	51.3	28.0	17.1	13.0	24.2	26.3	26.5	45.4	60.6	75.4	67.8	80.7	112.0	83.7	81.3	59.7	46.4	85.8	86.6	68.6	64.8	80.8	91.8	59.7	112.0	
27	106.6	77.5	32.2	19.3	109.4	61.9	45.8	32.2	36.2	44.8	66.5	26.3	73.9	53.8	71.7	60.4	39.5	81.6	39.1	26.2	7.3	9.0	6.1	6.2	47.2	109.4	
28	6.8	8.5	9.8	5.4	9.7	19.6	4.8	8.4	17.5	14.5	15.1	19.8	36.4	82.4	40.8	74.9	54.1	7.5	8.2	10.3	11.3	6.1	6.1	4.7	20.1	82.4	
29	4.7	5.1	6.7	4.1	3.3	6.1	3.1	15.1	9.9	2.6	6.3	5.1	2.1	1.7	2.5	2.5	2.2	2.8	3.5	3.4	17.6	9.6	13.1	6.3	17.6		
30	15.3	12.2	81.8	54.8	44.2	81.6	18.2	7.5	3.6	3.9	27.9	57.5	72.8	107.8	119.2	182.2	181.0	114.7	52.6	116.8	15.6	26.7	52.6	52.4	62.6	182.2	
31	144.1	153.5	67.3	44.9	19.9	15.1	53.5	121.7	12.4	69.5	48.4	66.6	58.6	105.1	139.8	129.7	57.6	131.1	262.5	332.2	180.6	173.1	K	K	108.5	332.2	
NO.	25	25	25	25	25	25	25	25	25	25	25	25	24	24	25	25	25	25	25	25	25	24	23	595	100%		
MEAN	28.3	21.8	16.4	17.6	16.6	16.3	19.0	41.3	43.3	50.4	52.6	51.3	65.0	78.7	78.7	75.3	51.7	42.4	39.9	46.9	35.6	37.4	28.2	21.5			
MAX	144.1	153.5	81.8	123.8	109.4	81.6	103.6	459.3	538.6	476.5	319.7	310.5	345.0	305.5	331.8	393.3	241.2	149.7	262.5	332.2	239.5	212.7	229.2	91.8			



Number of Non-Zero Readings	595
Maximum 1-HR Average	538.6 $\mu\text{g}/\text{m}^3$
Maximum 24-HR Average	148.7 $\mu\text{g}/\text{m}^3$
Monthly Calibration Standard Deviation	66.03
Operational Time	741 HRS
Operational Uptime	99.6 %
Monthly Average	40.7 $\mu\text{g}/\text{m}^3$

# Berm TSP ( $\mu\text{g}/\text{m}^3$ ) – October 2020

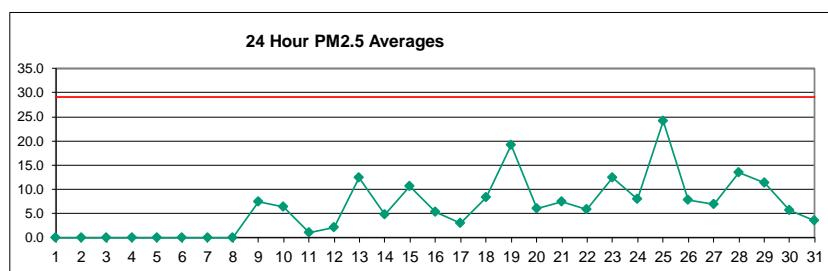
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	64.1	5.7	4.2	2.0	1.6	1.9	12.2	25.7	19.0	13.1	18.3	18.9	74.4	172.0	384.2	593.3	401.9	241.3	176.9	144.8	11.9	14.7	9.9	7.6	100.8	593.3	
2	5.9	5.1	4.4	4.4	4.9	6.4	25.6	33.6	47.9	38.4	80.2	46.6	28.6	18.9	15.5	28.5	45.0	12.4	11.8	19.6	13.6	4.7	3.2	4.0	21.2	80.2	
3	9.3	24.6	19.5	12.0	15.8	8.6	15.1	17.4	32.3	14.8	18.9	27.7	171.4	215.3	153.6	185.8	188.7	379.4	17.6	160.3	138.4	79.8	59.9	K	85.5	379.4	
4	67.6	15.9	5.5	21.0	13.0	3.9	3.1	3.3	5.4	8.8	5.1	6.5	126.8	450.2	377.7	371.5	129.8	106.4	370.8	121.9	118.6	23.4	13.0	6.1	99.0	450.2	
5	5.0	5.4	4.7	5.1	4.0	3.0	5.2	98.8	235.8	229.6	1077.9	1096.3	1186.2	1110.4	1117.5	1501.8	885.7	420.6	453.7	820.9	883.2	737.2	447.1	278.2	525.6	1501.8	
6	204.2	102.1	77.8	103.7	102.0	53.1	268.0	504.8	264.9	165.7	276.7	526.7	323.0	444.9	861.8	308.6	59.9	37.8	27.6	24.9	16.9	4.2	4.4	3.3	198.6	861.8	
7	3.4	3.6	10.5	3.4	3.3	2.7	3.1	5.0	4.3	3.8	17.7	15.7	69.0	55.6	30.6	14.4	31.1	20.0	17.2	26.9	12.6	6.1	3.6	2.7	15.3	69.0	
8	8.6	5.4	5.7	5.0	6.2	5.5	5.3	12.5	65.4	419.0	595.2	537.7	714.6	709.2	368.1	54.1	38.4	13.6	6.6	1.5	1.6	2.3	2.5	3.9	149.5	714.6	
9	2.4	1.1	0.4	0.5	0.5	1.4	1.6	3.1	2.9	13.1	11.3	26.4	248.1	293.1	317.4	369.1	148.8	377.4	126.5	86.5	296.8	655.6	749.4	181.1	163.1	749.4	
10	346.6	134.3	66.2	410.8	128.7	214.9	268.5	1273.5	1730.1	1594.1	502.7	245.9	377.0	216.8	326.1	371.2	276.7	18.6	6.2	28.1	17.2	56.7	25.4	36.6	361.4	1730.1	
11	65.6	70.7	20.7	30.6	31.6	23.8	31.8	65.7	93.7	170.9	208.7	78.8	75.0	72.3	75.1	72.2	20.4	60.2	63.2	39.0	27.1	68.3	29.0	23.6	63.2	208.7	
12	28.8	0.9	22.9	0.2	0.4	0.6	1.0	0.7	0.5	0.4	0.4	0.3	1.3	1.7	1.9	3.8	1.4	0.8	2.3	2.7	5.2	11.7	1.3	3.9	28.8	-	
13	0.4	0.7	1.7	2.0	3.1	3.1	6.1	8.6	14.2	10.0	10.6	14.4	79.4	31.0	14.9	1.5	3.4	3.5	4.2	4.7	1.8	3.8	8.1	11.4	10.1	79.4	
14	8.4	0.3	0.2	0.2	0.6	0.4	1.2	1.0	2.3	3.8	5.9	4.9	2.1	6.6	27.5	41.3	30.5	36.8	47.7	18.1	12.0	20.1	8.5	4.7	11.9	47.7	-
15	7.6	8.2	6.6	17.8	11.6	12.0	5.9	1.9	17.1	33.7	17.4	75.8	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
16	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
17	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
18	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
19	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
20	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
21	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	15.1	18.7	36.7	3.8	2.6	2.8	2.5	2.1	3.7	-	-
22	5.3	7.4	4.9	2.1	3.1	2.2	2.4	8.4	3.7	5.6	4.1	16.4	13.5	34.1	10.6	48.9	40.1	4.7	13.1	11.3	10.4	12.8	11.4	18.1	12.3	48.9	
23	16.2	19.1	11.1	8.2	8.1	8.4	11.2	14.8	18.8	28.9	28.2	34.0	33.1	24.3	20.2	15.0	15.8	9.4	10.7	14.9	12.2	8.9	8.8	19.9	16.7	34.0	
24	28.5	11.4	20.5	14.1	20.6	11.7	5.2	2.8	2.9	5.1	4.2	3.5	152.6	10.2	70.5	6.5	204.6	7.0	6.9	9.3	4.6	3.2	3.6	8.6	25.8	204.6	
25	7.2	12.5	9.8	14.8	8.7	11.2	12.8	11.3	264.7	360.4	206.9	390.8	386.8	531.8	443.4	301.7	151.7	66.5	196.3	251.9	100.2	152.8	137.7	174.9	175.3	531.8	
26	331.7	251.2	84.6	46.1	29.6	69.0	79.6	85.2	164.5	337.6	313.5	205.7	300.7	240.9	127.2	97.4	75.7	120.0	192.0	226.2	163.4	175.1	266.3	442.4	184.4	442.4	
27	492.4	346.3	137.5	69.1	338.7	198.3	88.0	81.5	74.5	125.9	181.1	83.1	223.8	145.5	210.5	167.4	71.8	207.0	65.8	47.3	7.4	9.2	5.0	4.9	140.9	492.4	
28	5.0	6.3	7.2	4.3	8.1	14.5	3.3	7.5	16.5	14.9	16.8	23.1	57.5	142.3	103.6	145.0	73.0	12.0	11.0	10.7	11.7	5.3	5.4	4.2	29.6	145.0	
29	4.2	4.7	6.7	3.7	3.0	4.7	2.6	16.6	10.7	2.6	7.3	16.7	1.9	1.2	1.9	1.9	1.5	2.1	2.6	2.4	19.9	18.5	8.2	13.3	6.6	19.9	
30	15.4	10.5	165.2	104.2	158.0	412.8	51.0	23.0	3.1	4.0	52.9	80.0	208.4	400.9	427.9	700.3	697.8	469.1	148.2	398.5	31.8	43.0	88.9	104.2	200.0	700.3	
31	442.7	521.2	221.7	115.0	48.8	31.8	126.8	331.5	31.7	178.9	125.4	186.9	191.0	333.3	345.5	408.3	147.8	411.9	920.1	809.2	552.4	400.2	K	K	312.8	920.1	



Number of 24HR Exceedences	11	Proposed Guideline
Number of Non-Zero Readings	595	
Maximum 1-HR Average	1730.1 UG/M3	
Maximum 24-HR Average	525.6 UG/M3	
Izs Calibration Time		
Monthly Calibration	146	
Standard Deviation	220.5	
Operational Time		
Operational Uptime		
Monthly Average	116.8 UG/M3	

# Entrance PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

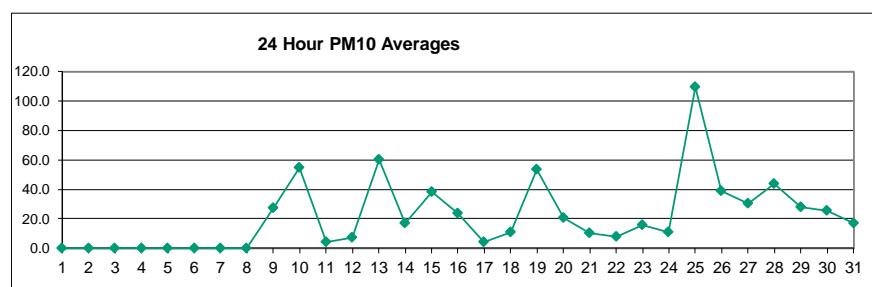
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
2	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
6	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
8	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-
9	5.0	4.8	1.8	1.7	2.7	5.7	8.3	17.3	15.9	26.2	22.2	14.2	15.9	6.7	6.2	3.7	4.7	1.6	2.2	2.8	2.5	2.8	2.1	2.5	7.5	26.2
10	2.8	3.1	1.3	3.5	2.4	1.8	5.0	14.3	44.6	21.3	6.0	3.6	3.9	2.6	8.5	14.0	10.4	2.4	0.3	0.4	0.4	0.4	0.3	0.2	6.4	44.6
11	0.2	0.2	0.3	0.8	0.7	1.1	5.3	1.2	1.9	2.0	0.8	0.9	1.9	1.4	1.1	1.2	1.4	0.8	0.8	0.4	0.6	0.4	0.3	0.4	1.1	5.3
12	1.3	8.2	3.5	0.7	1.0	1.9	1.3	2.5	2.9	1.9	1.4	1.4	1.3	1.0	1.0	1.5	2.6	1.5	0.7	0.9	1.3	3.0	4.3	2.6	2.1	8.2
13	1.7	6.7	18.7	21.8	14.5	9.4	5.3	8.5	7.7	8.1	21.6	23.2	32.8	22.1	14.5	3.4	7.2	8.5	10.0	7.2	5.5	7.3	11.7	21.7	12.5	32.8
14	10.8	2.4	1.2	0.7	1.9	1.8	2.4	3.1	6.0	4.8	4.6	7.7	7.0	7.3	4.4	1.4	1.0	0.9	1.1	5.1	5.9	5.8	13.0	11.7	4.7	13.0
15	10.0	11.3	13.3	18.8	23.1	14.8	21.8	24.0	26.7	12.2	14.2	17.6	3.6	4.5	7.0	4.2	6.1	2.5	3.7	2.9	5.1	2.2	2.5	1.8	10.6	26.7
16	2.9	2.4	1.4	1.6	1.7	2.3	4.5	8.0	4.7	3.7	4.5	7.4	12.8	40.6	8.2	3.7	2.0	1.9	1.6	1.4	1.4	3.4	2.1	2.5	5.3	40.6
17	2.6	2.4	2.2	1.8	3.9	3.2	2.3	2.0	2.3	5.9	2.2	2.4	2.3	1.9	2.4	7.7	2.3	4.0	2.9	3.9	3.3	3.2	3.0	3.0	3.0	7.7
18	3.6	3.9	3.1	3.2	4.4	2.5	4.2	7.6	10.3	9.3	9.8	22.4	14.2	8.9	9.7	11.2	9.7	9.7	8.1	9.7	8.4	8.0	7.6	8.8	8.3	22.4
19	9.1	8.6	9.7	10.2	11.8	9.6	10.3	16.1	22.1	20.2	30.2	12.3	13.9	7.1	40.2	61.0	58.5	57.2	15.9	7.9	6.1	6.1	4.7	9.2	19.1	61.0
20	3.9	14.8	3.9	4.0	4.8	4.4	4.8	5.2	8.1	8.6	9.4	10.4	5.2	3.0	3.1	2.8	2.6	5.7	3.0	3.3	12.6	8.7	7.9	4.5	6.0	14.8
21	5.1	7.3	7.9	11.0	6.5	4.9	5.6	7.6	7.0	6.2	13.1	9.6	13.8	10.7	4.5	5.5	9.1	7.6	6.2	5.9	4.2	4.1	6.1	6.8	7.3	13.8
22	4.7	8.5	5.8	2.9	3.4	3.0	2.6	7.5	3.5	3.7	3.0	2.5	3.0	3.4	2.8	3.5	5.4	6.3	9.1	9.2	10.1	11.9	11.7	11.6	5.8	11.9
23	13.4	14.0	11.2	10.4	11.3	11.7	13.7	11.8	15.6	16.2	17.0	17.9	16.7	15.5	13.7	13.5	12.9	7.6	7.9	8.0	9.9	7.4	10.4	11.9	12.5	17.9
24	14.6	6.8	13.3	13.6	12.6	7.2	7.7	6.3	5.8	5.8	4.7	4.3	5.9	7.3	7.5	7.1	10.1	10.7	6.9	6.2	5.6	4.8	5.7	9.6	7.9	14.6
25	12.1	37.3	36.0	28.8	25.8	27.6	31.2	27.8	21.4	39.8	56.3	29.4	25.5	12.4	8.3	5.5	8.5	29.5	28.7	15.9	21.9	20.9	16.0	12.9	24.1	56.3
26	11.8	8.4	13.5	25.9	16.3	15.6	9.0	7.7	9.9	11.0	8.3	6.1	6.3	6.2	4.4	3.2	2.8	3.4	2.3	2.5	2.4	2.6	2.8	3.6	7.7	25.9
27	3.7	3.2	2.9	3.9	2.9	6.6	6.9	5.1	5.2	7.6	4.1	4.8	4.6	4.2	5.2	4.3	4.1	3.1	3.9	3.4	18.6	18.3	9.8	29.1	6.9	29.1
28	27.8	15.2	8.8	5.8	6.8	5.8	5.8	7.5	8.3	7.0	9.5	13.6	13.8	17.8	6.9	4.9	4.0	5.0	21.8	23.5	27.0	28.6	21.4	25.0	13.4	28.6
29	23.7	19.9	25.3	38.4	44.1	25.8	4.3	6.5	8.6	5.0	9.6	8.3	2.2	2.5	2.9	3.0	3.0	2.0	2.4	2.8	3.6	15.0	7.2	5.6	11.3	44.1
30	6.0	13.5	5.3	2.4	3.4	5.1	4.0	2.9	6.2	13.8	19.5	2.0	4.7	5.0	9.0	4.4	4.3	3.8	1.8	2.8	5.1	4.5	1.5	4.2	5.6	19.5
31	2.0	3.2	2.1	2.3	0.9	1.6	3.1	3.9	5.7	4.3	4.4	4.4	2.6	3.6	7.6	3.2	3.4	3.5	4.3	3.3	3.0	3.0	K	K	3.5	7.6
NO.	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	23	23	561	100%
MEAN	7.8	9.0	8.4	9.3	9.0	7.5	7.4	8.9	10.9	10.6	12.0	9.8	9.4	8.8	7.8	7.3	7.8	7.6	6.3	5.5	7.0	7.3	6.8	8.5		
MAX	27.8	37.3	36.0	38.4	44.1	27.6	31.2	27.8	44.6	39.8	56.3	29.4	32.8	40.6	40.2	61.0	58.5	57.2	28.7	23.5	27.0	28.6	21.4	29.1		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	561	
Maximum 1-HR Average	61.0 UG/M3	
Maximum 24-HR Average	24.1 UG/M3	
Monthly Calibration Standard Deviation	8.68	Operational Time Operational Uptime Monthly Average
		742 HRS 99.7 % 8.3 UG/M3

# Entrance PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – October 2020

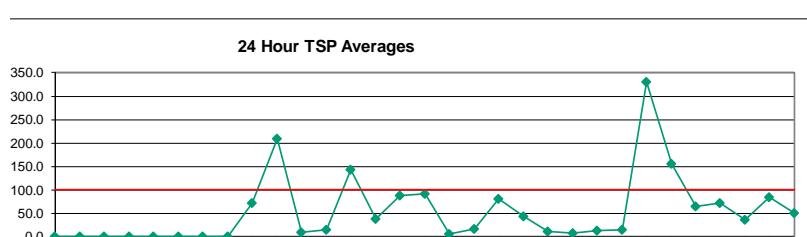
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
2	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
6	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	
8	C	C	C	C	C	C	C	C	C	C	C	C	C	144.6	75.3	50.3	21.2	21.6	7.0	4.8	4.5	4.8	5.9	9.2	-	-
9	6.9	6.0	2.1	1.8	3.5	8.1	12.1	25.8	23.6	39.2	77.7	77.6	107.1	53.3	51.7	29.2	32.1	7.9	11.2	16.6	16.9	21.7	12.7	12.0	27.4	107.1
10	12.3	28.5	5.0	30.3	11.2	10.3	44.8	130.4	379.6	229.1	50.8	18.9	26.2	17.7	74.1	143.9	89.1	11.2	0.4	1.4	0.5	0.6	0.4	0.3	54.9	379.6
11	0.3	0.3	0.4	5.1	3.1	6.3	25.9	3.7	3.4	6.6	5.7	2.4	7.7	6.0	2.6	3.6	3.9	1.8	2.0	0.7	0.9	0.6	0.5	0.6	3.9	25.9
12	5.8	52.2	22.7	1.9	1.1	2.3	1.4	2.9	3.5	2.0	1.5	1.5	1.4	1.0	1.2	2.0	3.8	4.8	1.9	3.5	4.8	16.4	22.9	10.7	7.2	52.2
13	5.9	35.4	112.0	139.6	92.4	62.8	31.2	49.7	51.3	48.9	147.2	176.4	226.9	131.3	21.5	4.8	8.9	10.6	12.7	9.3	7.3	10.1	16.5	31.9	60.2	226.9
14	15.3	3.2	1.4	0.9	2.1	2.1	3.0	4.0	8.8	7.1	6.4	11.0	15.4	37.8	10.4	3.1	2.6	2.3	3.4	28.4	34.5	40.3	85.1	81.0	17.1	85.1
15	59.3	43.8	35.7	28.2	85.0	38.1	32.7	36.0	40.3	76.5	81.0	124.3	28.2	38.0	51.0	28.2	39.8	5.9	12.1	7.4	10.3	4.6	4.9	4.6	38.2	124.3
16	5.9	7.6	2.5	5.0	6.5	14.4	37.3	61.8	37.8	23.6	35.6	40.8	107.2	136.1	11.8	5.3	2.8	2.5	2.1	1.8	1.8	4.4	2.7	3.3	23.4	136.1
17	3.7	3.5	3.2	2.4	5.6	4.5	3.2	2.8	3.3	8.3	4.0	4.5	3.0	2.5	2.5	3.1	12.8	2.9	4.9	3.4	4.4	3.6	3.6	3.1	4.1	12.8
18	3.9	4.4	3.5	3.5	5.5	2.7	5.5	10.8	14.2	12.6	12.6	31.6	24.9	14.0	13.9	14.1	12.4	12.5	10.0	12.1	9.5	8.9	8.2	10.0	10.9	31.6
19	11.0	9.9	11.7	11.9	15.4	11.4	11.2	23.1	33.2	30.6	230.0	80.0	79.8	38.0	172.5	259.3	104.1	85.8	22.4	9.7	7.0	7.4	5.4	13.1	53.5	259.3
20	4.9	20.9	4.0	4.2	5.1	4.5	5.0	5.7	13.0	16.0	17.4	34.8	16.4	11.4	13.9	13.9	9.2	60.9	19.9	17.7	78.9	53.2	50.0	11.5	20.5	78.9
21	6.7	8.8	10.0	13.8	8.8	6.8	7.8	10.9	10.1	8.7	19.2	14.5	20.4	15.5	7.9	7.5	13.0	10.3	8.8	7.8	5.3	5.1	8.3	9.5	10.2	20.4
22	6.4	12.0	7.9	3.5	4.4	3.9	3.2	10.9	4.9	5.1	3.9	4.1	5.8	7.6	4.8	6.9	6.6	7.9	11.0	10.4	11.1	13.2	12.8	12.7	7.5	13.2
23	15.8	17.3	13.0	11.7	12.8	12.6	15.3	12.7	19.3	20.5	22.1	24.0	22.9	21.7	18.8	18.3	17.6	9.0	9.7	10.6	13.1	9.5	14.0	16.2	15.8	24.0
24	20.5	8.6	18.9	19.4	17.8	9.5	9.3	7.0	6.9	7.3	5.6	6.0	8.5	10.1	13.2	8.9	15.1	13.3	8.2	7.6	6.4	5.0	7.3	14.1	10.6	20.5
25	17.6	55.9	53.9	43.2	38.7	41.4	46.8	41.7	58.3	314.6	355.7	282.2	188.7	91.3	58.2	24.8	38.2	198.3	177.4	102.8	130.2	116.7	83.9	61.3	109.2	355.7
26	64.2	37.6	82.5	167.3	88.5	69.4	30.2	24.6	56.1	90.9	51.3	23.1	29.6	21.7	14.7	8.6	5.7	8.7	5.9	10.3	6.5	5.8	6.8	15.7	38.6	167.3
27	14.5	6.5	5.5	9.6	15.6	51.5	41.8	21.0	19.7	40.4	14.1	13.3	11.7	9.4	16.0	15.0	10.2	6.2	10.6	8.1	98.3	98.9	39.7	145.0	30.1	145.0
28	144.1	87.4	33.9	11.0	9.8	7.6	7.5	10.6	11.2	10.4	26.9	56.7	60.6	121.0	41.9	21.6	23.3	14.5	110.8	88.5	43.1	42.9	32.0	37.5	44.0	144.1
29	35.5	29.9	38.0	57.6	173.9	119.0	5.6	9.4	12.7	11.2	49.6	54.4	6.9	2.9	3.5	4.0	3.7	2.2	2.9	3.6	4.5	22.4	10.4	7.1	27.9	173.9
30	7.7	19.5	12.0	11.8	18.8	42.1	17.2	9.3	9.2	21.6	92.8	8.2	28.7	36.9	64.2	29.2	29.3	29.8	12.6	22.9	30.4	31.1	6.7	23.5	25.7	92.8
31	13.8	24.5	11.2	13.5	1.5	6.4	10.9	19.6	36.6	23.4	26.9	17.4	21.3	14.3	41.3	9.5	12.1	12.7	20.9	11.3	8.7	9.1	K	K	16.7	41.3



Number of Non-Zero Readings	561
Maximum 1-HR Average	379.6 ug/m <sup>3</sup>
Maximum 24-HR Average	109.2 ug/m <sup>3</sup>
Monthly Calibration Standard Deviation	45.8
Operational Time	742 HRS
Operational Uptime	99.7 %
Monthly Average	28.7 ug/m <sup>3</sup>

# Entrance TSP ( $\mu\text{g}/\text{m}^3$ ) – October 2020

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
2	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
6	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-		
8	C	C	C	C	C	C	C	C	C	C	C	C	C	511.2	276.8	210.2	72.5	68.0	12.9	4.5	4.3	4.5	5.1	8.0	72.9	350.3	
9	5.8	4.3	1.4	1.2	2.8	7.1	10.4	26.6	23.6	43.1	165.0	177.0	350.3	195.4	202.1	103.5	57.5	29.6	21.7	35.6	79.6	118.9	55.1	33.1	72.9	350.3	
10	35.9	138.9	18.6	123.7	33.1	51.5	221.6	544.9	1227.4	913.4	225.4	81.9	120.0	70.4	294.1	572.2	311.3	35.4	0.3	14.0	0.4	0.9	0.5	0.3	209.8	1227.4	
11	0.3	0.5	1.6	25.3	8.9	26.3	36.6	5.8	5.4	15.5	30.3	8.2	19.0	14.9	6.6	9.3	15.0	5.4	6.2	0.5	2.6	0.6	0.6	3.1	10.3	36.6	
12	7.3	114.4	62.3	8.8	0.7	1.6	0.9	2.0	2.4	1.3	1.0	1.0	0.9	0.7	0.8	1.6	3.7	10.9	6.0	11.4	16.4	50.1	47.1	14.9	15.3	114.4	
13	9.6	59.5	220.2	315.7	214.7	144.5	69.0	87.5	95.0	80.1	317.4	382.4	921.7	403.1	20.0	4.7	6.6	7.6	9.4	6.8	5.9	8.3	13.3	29.9	143.0	921.7	
14	15.0	2.6	1.0	0.6	1.4	1.4	2.3	3.0	9.5	7.5	5.6	10.6	31.2	80.3	17.4	4.3	9.2	3.8	7.7	56.6	110.3	145.2	199.1	38.4	199.1		
15	145.1	103.3	73.5	32.6	144.1	70.1	37.4	41.7	46.0	170.7	185.0	348.2	126.4	123.4	170.3	90.9	125.3	17.1	22.1	9.9	11.9	8.4	6.8	7.9	88.3	348.2	
16	7.1	17.1	4.5	19.5	24.0	71.7	165.1	280.2	187.5	84.8	106.6	105.7	378.1	716.6	11.2	4.5	2.2	1.9	1.7	1.6	1.7	3.6	2.2	2.9	91.7	716.6	
17	3.6	3.7	3.5	2.5	5.2	4.2	2.9	2.8	3.3	7.1	11.0	21.8	7.0	1.7	6.2	3.7	22.0	2.4	3.9	2.4	3.1	2.4	2.4	2.0	5.5	22.0	
18	2.7	2.9	2.3	2.6	4.9	2.0	5.1	11.0	12.0	11.3	10.0	31.0	92.6	91.9	62.2	11.1	10.1	10.0	7.4	9.3	7.0	6.3	5.6	7.0	17.4	92.6	
19	7.8	6.7	7.9	8.1	11.2	7.9	7.4	24.3	38.4	35.9	647.7	192.9	174.0	86.1	163.9	236.3	124.6	99.7	24.0	8.3	5.3	5.6	3.8	12.7	80.9	647.7	
20	3.8	21.5	2.6	2.7	3.4	2.9	3.2	3.9	13.4	16.0	20.7	48.2	36.4	40.1	37.5	36.6	21.3	258.4	50.1	33.4	145.5	93.9	111.5	25.5	43.0	258.4	
21	8.2	6.7	7.5	10.5	7.2	5.6	7.3	9.3	8.9	8.1	20.6	23.3	24.8	15.4	41.2	6.3	12.9	9.3	8.1	6.0	4.0	4.0	7.1	8.4	11.3	41.2	
22	5.0	10.4	5.9	2.4	3.2	3.3	2.3	11.1	4.7	4.8	3.3	18.7	21.2	29.5	9.3	14.9	4.9	6.0	8.7	7.4	7.8	9.5	9.0	8.9	8.8	29.5	
23	11.6	14.8	9.7	8.3	8.7	8.4	8.4	11.5	9.2	17.2	19.1	21.5	24.2	24.4	23.0	19.4	17.7	17.0	7.1	7.7	9.5	12.0	8.6	13.1	16.2	14.2	24.4
24	22.5	7.8	20.6	19.8	19.0	8.8	6.4	4.8	4.9	5.8	4.3	24.0	30.6	13.1	35.6	7.4	57.1	10.0	6.1	6.2	4.8	3.3	6.2	14.1	57.1	1192.2	
25	18.4	64.8	62.7	50.2	44.9	48.0	54.3	48.5	215.8	1155.7	986.2	1192.2	656.2	434.7	343.6	125.9	106.1	518.0	433.9	308.9	326.4	304.7	232.3	199.1	330.5	660.6	
26	225.4	141.8	301.1	422.8	219.1	173.7	87.6	62.8	320.3	660.6	376.8	121.4	154.9	92.1	39.9	18.9	15.3	36.7	21.7	57.0	29.1	26.6	25.0	98.6	155.4	660.6	
27	94.6	25.6	16.5	14.6	64.6	190.8	136.8	77.6	51.0	115.7	39.7	38.8	30.5	22.0	42.5	44.7	33.9	9.5	14.5	13.4	109.1	151.7	52.6	164.9	64.8	190.8	
28	156.5	89.9	30.2	9.6	9.5	5.9	5.6	9.4	9.1	14.1	34.4	117.9	82.3	357.8	119.0	65.2	80.6	20.8	205.9	139.3	52.7	49.6	36.8	43.2	72.7	357.8	
29	41.0	34.5	43.8	66.9	205.3	140.0	4.5	8.1	12.7	21.7	70.4	153.2	29.0	2.1	2.6	3.3	2.7	1.5	2.0	2.8	3.2	25.2	9.3	5.0	37.1	205.3	
30	5.5	18.6	44.9	61.8	105.4	241.0	48.8	35.8	9.4	24.5	110.3	24.0	127.6	153.3	255.3	125.2	121.2	131.2	51.6	108.1	65.2	89.5	10.3	63.0	84.7	255.3	
31	51.2	92.2	34.9	26.2	1.8	14.0	23.6	52.4	83.9	62.3	70.7	46.7	75.2	37.0	125.9	29.4	33.5	50.8	95.3	45.0	36.6	33.6	K	K	51.0	125.9	
NO.	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	23	23	23	561	100%	
MEAN	38.4	42.7	42.5	53.8	49.7	53.5	41.3	59.2	104.4	151.3	150.6	138.8	152.8	146.5	96.0	72.8	52.8	56.3	42.9	37.4	43.5	48.1	37.2	42.0			
MAX	225.4	141.8	301.1	422.8	219.1	241.0	221.6	544.9	1227.4	1155.7	986.2	1192.2	921.7	716.6	343.6	572.2	311.3	518.0	433.9	308.9	326.4	304.7	232.3	199.1			



Number of 24HR Exceedences	4	Proposed Guideline
Number of Non-Zero Readings	561	
Maximum 1-HR Average	1227.4 UG/M3	
Maximum 24-HR Average	330.5 UG/M3	
Monthly Calibration Standard Deviation	147.1	
Operational Time	181	742 HRS
Operational Uptime	48.1	99.7 %
Monthly Average	73.0 UG/M3	