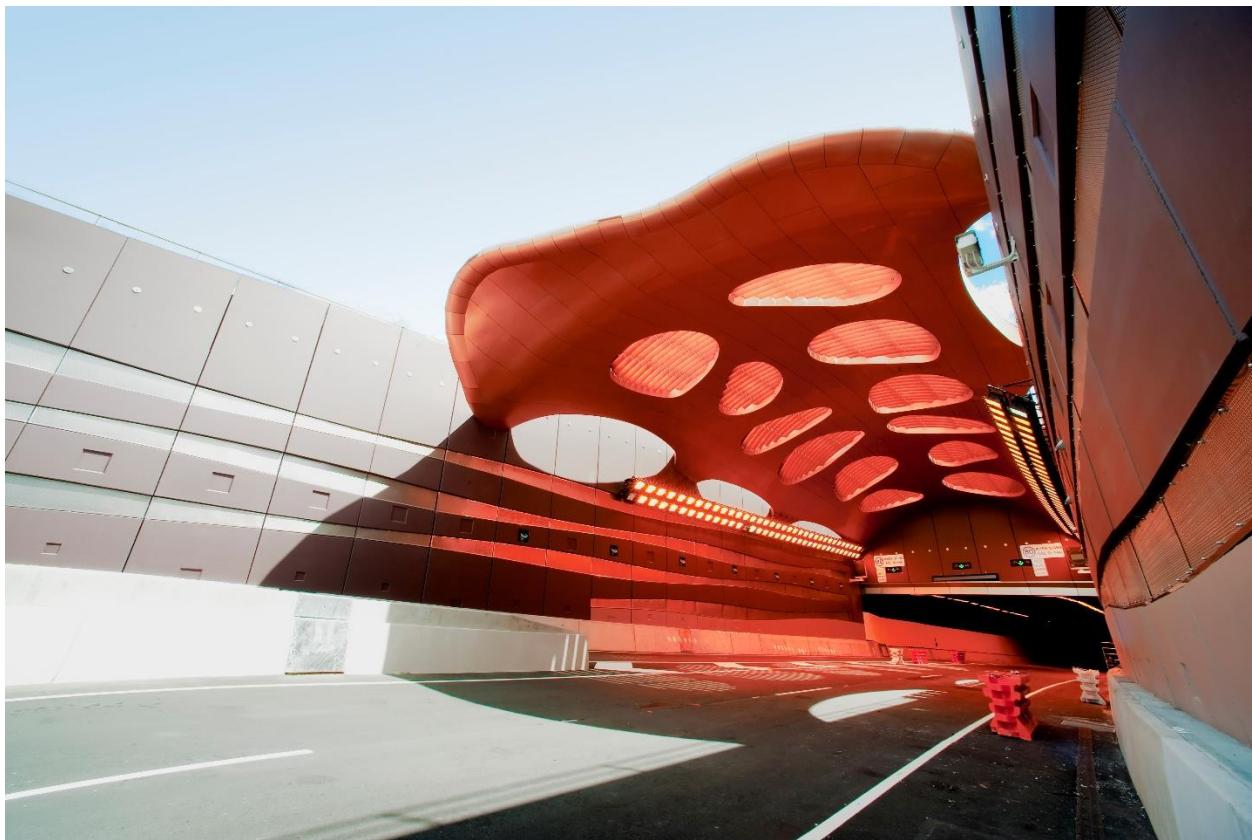


LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

FEBRUARY 2020

March 19, 2020



WSP



**AMBIENT AIR
QUALITY MONTHLY
REPORT
FEBRUARY 2020
LAFARGE CANADA INC.**

PROJECT NO.: 171-00556-00
DATE: MARCH 19, 2020

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March 19, 2020

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

Attention: Janet Brygger

Dear Ms. Brygger

Subject: Ambient Air Quality Monthly Report – February 2020

The operational uptime for the precipitation monitor was 99.6% due to three hours of power outage on February 4th from 3:00 – 5:00. The temperature and wind monitor both recorded 98.9% data completeness due to four hours of power outage on February 4th from 2:00 – 5:00, three hours of routine maintenance on February 6th from 12:00 – 14:00, and further, one-hour of equipment malfunction on February 24th at 14:00. The PM monitor recorded 99.4% data completeness due to four hours of power outage on February 4th from 2:00 – 5:00. The NO_x & SO₂ channel recorded 99.4% data completeness due to three hours of power outage on February 4th from 3:00 – 5:00, and one-hour of equipment malfunction on February 24th at 14:00. There was one exceedance of the 24-hour TSP Alberta Ambient Air Quality Objective. Further, there was no exceedance of the 24-hour PM_{2.5} AAAQOs, nor the 1-hour PM_{2.5} AAAQG in January at the Lagoon monitoring location.

The Windridge station was taken out of operation beginning April 8th as a result of construction work for flood mitigation along Exshaw Creek. The monitor at this station is expected to be re-installed sometime in 2020, after the completion of the construction work.

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 all 3 monitors was as follows: 0% at the West GRIMM due to the monitor being removed for repair on January 24th at 16:00 due to laser failure, and remained decommissioned through February for maintenance, 100% at the Berm GRIMM, and 100% at the Entrance GRIMM. The Berm GRIMM had 18 exceedances of the 24-hour TSP guideline and 1 exceedance of the PM_{2.5} 24-hour guideline. Further, the Berm GRIMM had 1 hour of exceedance of the 1-hour PM_{2.5} guideline. The Entrance GRIMM monitor recorded 12 and 0 exceedances for the 24-hour TSP AAAQG and 24-hour PM_{2.5} AAAQG, respectively. High particulate levels and exceedances at the Berm and Entrance monitors are likely influenced by the flood mitigation work completed along Exshaw creek. The resulting exposed open soil is likely producing fugitive dust near the monitors. The MD of Bighorn is planning to hydroseed the area in mid 2020.

PM levels in the airshed are likely also influenced by FireSmart and Pine Beetle control work being conducted in the Exshaw / Bow Valley area. This work is planned to continue well into the spring of 2020.

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.

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WSP Canada Inc.

Sincerely,

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

SIGNATURES

PREPARED BY



March 19, 2020

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

Date

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



March 19, 2020

Tyler Abel, M.Sc.
Team Leader, Environmental Management,
Vancouver Region, Environment

Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. 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 February 1, 2020 and February 29, 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 1-1), the Windridge monitor was taken out of operation and removed from the site on April 8, 2019. The monitoring station will be re-installed after the completion of construction in 2020.

Dust created from the flood mitigation work has the potential to impact particulate matter concentrations at the remaining stations.



Figure 1-1 Photo of Flood Mitigation Construction at Exshaw Creek

2 FEBRUARY 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_{2.5} are those above the 1-hour PM_{2.5} Alberta Ambient Air Quality Guidelines (AAAQG).

2.1 LAGOON STATION

Table 2-1 Lagoon station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
NO ₂ (ppb)	99.4	27.6	0	13.1	-
SO ₂ (ppb)	99.4	6.0	0	1.2	0
PM _{2.5} (µg/m ³)	99.4	45.3	0 ¹	11.0	0
PM ₁₀ (µg/m ³)	99.4	290.6	-	91.1	-
TSP (µg/m ³)	99.4	450.9	-	146.6	1
Temperature (°C)	98.9	7.9	-	6.3	-
Wind Speed (km/hr) /Direction (Degrees)	98.9	50.4/W	-	38.8/WSW	-
Precipitation (mm)	99.6	2.5 ²	-	13.75 ³	-

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

² Maximum Daily Total Accumulation of Precipitation (mm)

³ Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQO.
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There was one exceedance of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- The precipitation monitor recorded 99.6% data completeness due to three hours of power outage on February 4th from 3:00 - 5:00. The temperature and wind speed monitor both recorded 98.9% data completeness due to four hours of power outage on February 4th from 2:00 – 5:00, three hours of routine maintenance on February 6th

from 12:00 – 2:00, and further, one-hour of equipment malfunction on February 24th at 14:00. The PM monitor recorded 99.4% data completeness due to four hours of power outage on February 4th from 2:00 – 5:00. The NO_x & SO₂ channel recorded 99.4% data completeness due to three hours of power outage on February 4th from 3:00 – 5:00, and one-hour of equipment malfunction on February 24th at 14:00.

2.2 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.

Calibration/Maintenance Notes:

- The analyzer was removed for repair on January 24th at 16:00 due to laser failure and remained decommissioned for the entirety of February 2020.

2.3 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 2-2 Berm station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	100	83.6	1*	40.4	1
PM ₁₀ (µg/m ³)	100	650.7	-	307.9	-
TSP (µg/m ³)	100	2279.0	-	1031.7	18

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

Data Quality Notes:

- There was 1 day exceeding the 24-hour PM_{2.5} AAAQG.
- There was 1 hour exceeding the 1-hour PM_{2.5} AAAQG.
- There were 18 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The PM channels all had 100% uptime for the month of February.

2.4 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 2-3 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} ($\mu\text{g}/\text{m}^3$)	100	38.8	0*	16.1	0
PM ₁₀ ($\mu\text{g}/\text{m}^3$)	100	324.8	-	131.2	-
TSP ($\mu\text{g}/\text{m}^3$)	100	1768.2	-	510.1	12

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

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQG
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There were 12 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The PM channels has 100% uptime for the month of February

3 LAGOON STATION

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

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-2) and tables and graphs illustrating the monitoring results for February 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
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on February 6 th . The monitor had 99.4% uptime in February due to four hours of power outage on February 4 th from 2:00 – 5:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on February 6 th . The monitor had 99.4% uptime in February due to four hours of power outage on February 4 th from 2:00 – 5:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on February 6 th . The monitor had 99.4% uptime in February due to four hours of power outage on February 4 th from 2:00 – 5:00
Oxides of Nitrogen	TEI 42C	Both monitors were calibrated on February 6 th . The monitors had 99.4% uptime in February due to three hours of power outage on February 4 th from 3:00 – 5:00, and one-hour of equipment malfunction on February 24 th at 14:00.
Sulphur Dioxide	Teledyne API 102A	
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 99.6% uptime in February due to three hours of power outage on February 4 th from 3:00 – 5:00.

Wind Speed		
Wind Direction	MetOne Wind Sensor	The monitor recorded 98.9% data completeness due to four hours of power outage on February 4 th from 2:00 – 5:00, three hours of routine maintenance on February 6 th from 12:00 – 2:00, and further, one-hour of equipment malfunction on February 24 th at 14:00.
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor recorded 98.9% data completeness due to four hours of power outage on February 4 th from 2:00 – 5:00, three hours of routine maintenance on February 6 th from 12:00 – 2:00, and further, one-hour of equipment malfunction on February 24 th at 14:00



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 February 2020. The wind rose indicates that the winds predominantly came from the west, west-northwest and west-south-west directions. Figure 3-3 illustrates the wind rose for the one day of TSP exceedance during the month of February. The wind rose indicates that the winds predominantly came from the west direction.

Table 3-2 summarizes the hourly, daily, and monthly concentrations recorded in February 2020. Table 3-3 summarizes the one day of TSP exceedance during the month of February.

Figure 3-4 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-10 shows daily average concentrations recorded during February 2020 for the pollutants listed in Table 3-2. Additionally, Figure 3-5 to Figure 3-9 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

Dust created from the flood mitigation work (section 1.1) has the potential to impact the monitored particulate matter concentrations in the airshed, including at the Lagoon station. There was one exceedance of the 24-hour TSP ($100 \mu\text{g}/\text{m}^3$) AAAQO. There were no exceedances of the 24-hour PM_{2.5} ($29 \mu\text{g}/\text{m}^3$) AAAQO, nor the 1-hour PM_{2.5} AAAQG. PM levels at the Lagoon monitor are also likely influenced by the FireSmart and Pine Beetle control work occurring in the area.

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

Table 3-2 Summary of February 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 ₂ (ppb)	159	-	Lagoon	0	-	0.6	6.5	27.6	15	7	11.5	70.2	13.1	18	99.4
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	0.2	6.0	19	13	29.1	298.7	1.2	11	99.4
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	4.8	45.3	27	13	38.0	271.9	11.0	18	99.4
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	22.2	290.6	20	9	31.8	291.6	91.1	20	99.4
TSP (µg/m ³)	-	100	Lagoon	-	1	0.0	34.0	450.9	20	9	31.8	291.6	146.6	20	99.4
Temperature (°C)	-	-	Lagoon	-	-	-15.3	-2.5	7.9	1	1	14.1	268.5	6.3	28	98.9
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	3.1	21.7	50.4/W	4	17	50.4	257.4	38.8/WSW	21	98.9
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	2.5	6	21	17.7	258.0	13.8		99.6

Table 3-3 Days exceeding the Guideline for TSP or PM_{2.5} at the Lagoon Monitor

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
2020-02-20	146.5	-	272.3	33.9	37.0	High wind event; Dust, possibly from flood mitigation work
Total # of Exceedances	1	0				
Maximum # of Exceedances (February)	2 (2018)	0 (2010 ~ 2019)				
Average # of Exceedances (February)	0	0				
Minimum # of Exceedances (February)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2017, 2019)	0 (2010 ~ 2019)				

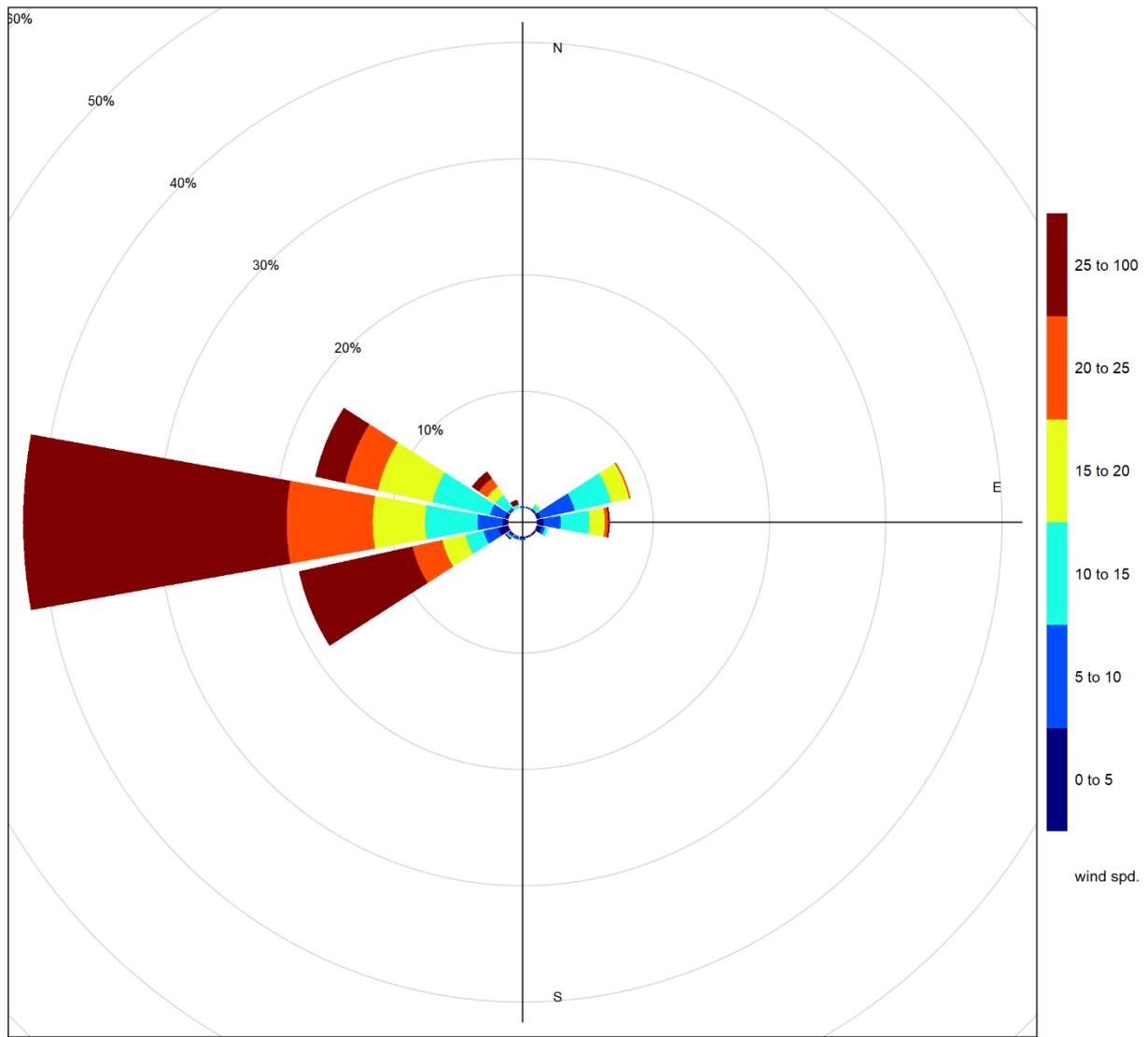


Figure 3-2 February 2020 wind rose from the Lagoon Station

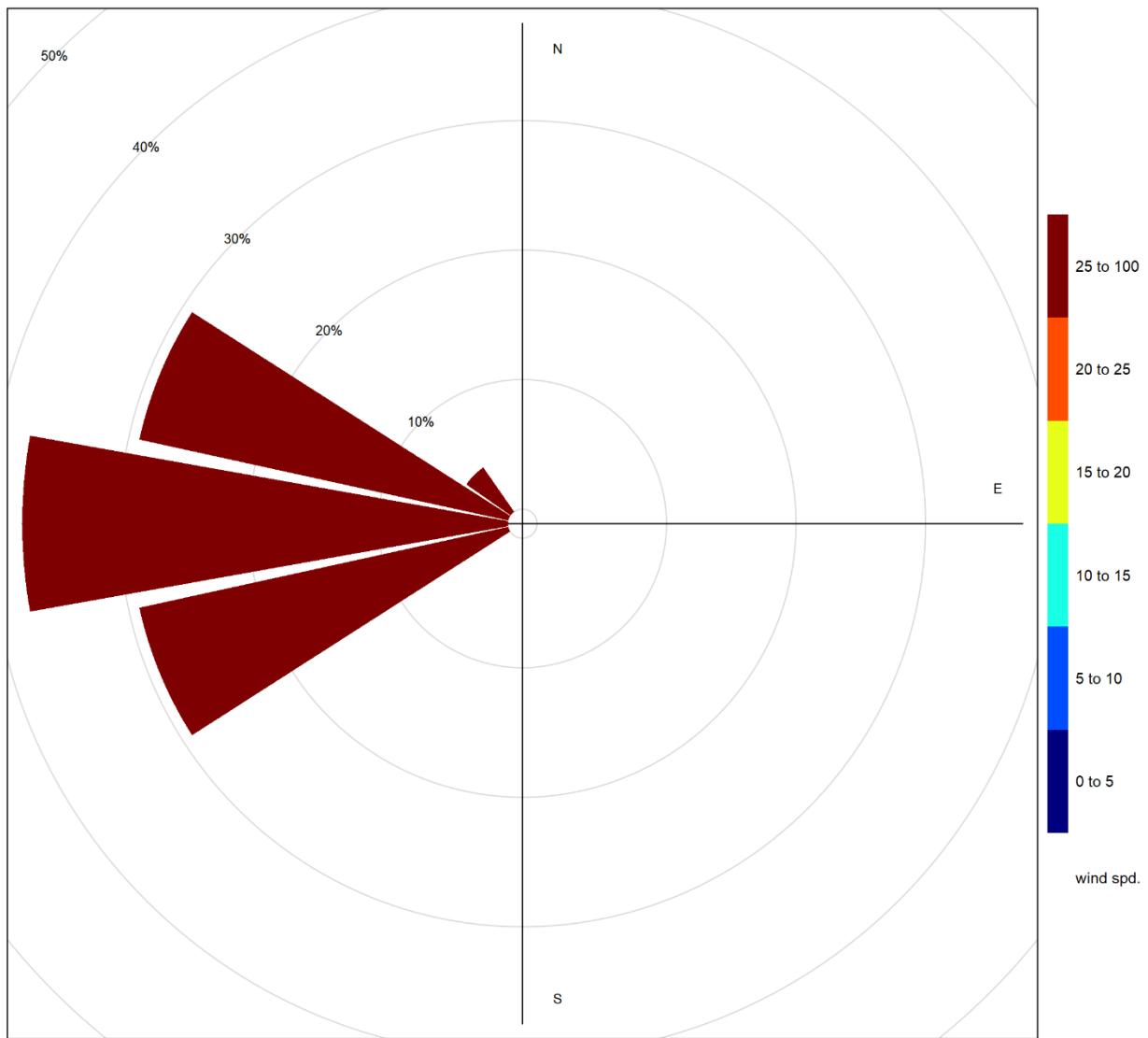


Figure 3-3 Wind rose for TSP exceedance day recorded at Lagoon

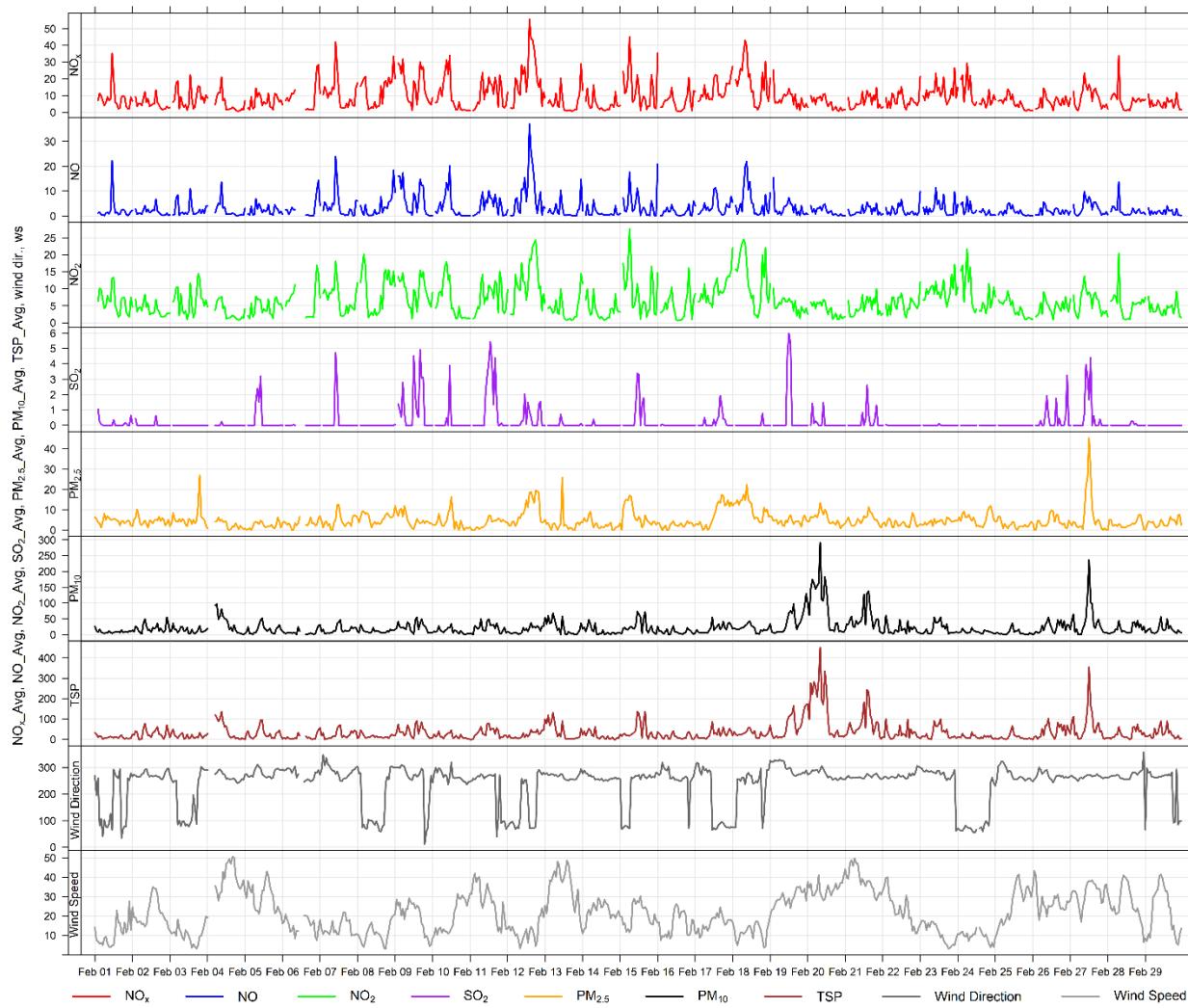


Figure 3-4 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

Histogram of Hourly NO₂ Readings

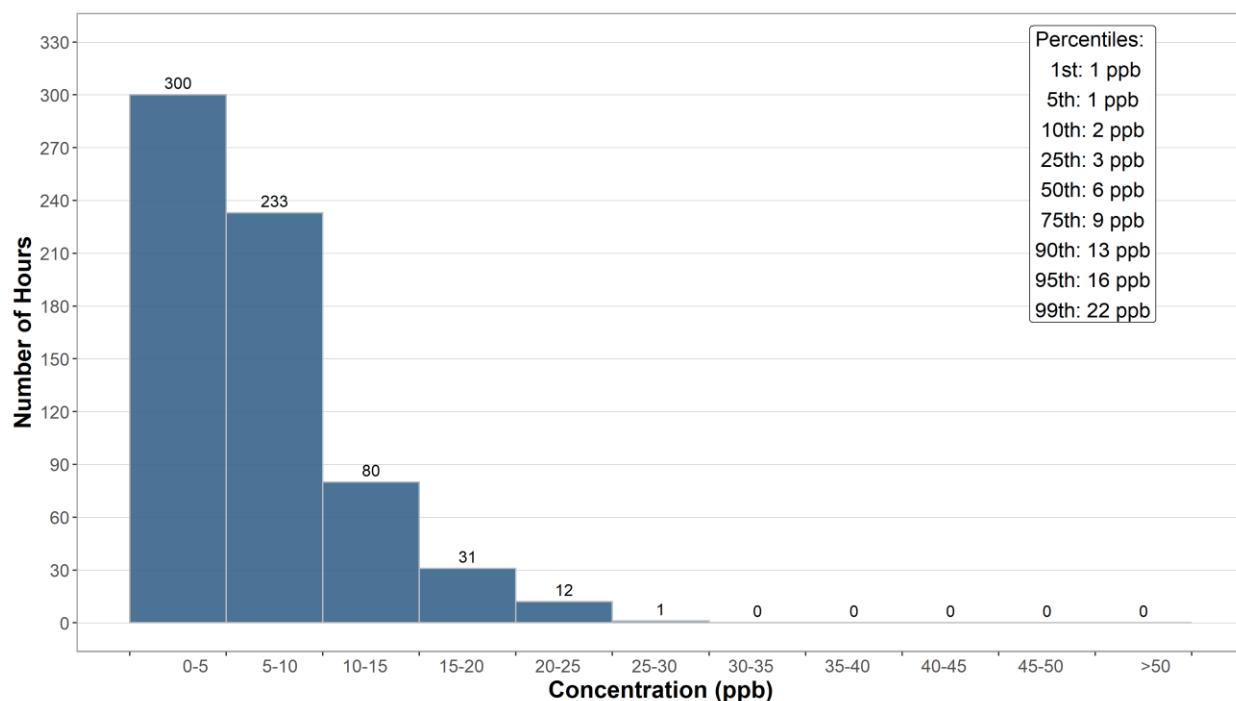


Figure 3-5 Histogram of hourly NO₂ concentrations at the Lagoon station

Histogram of Hourly SO₂ Readings

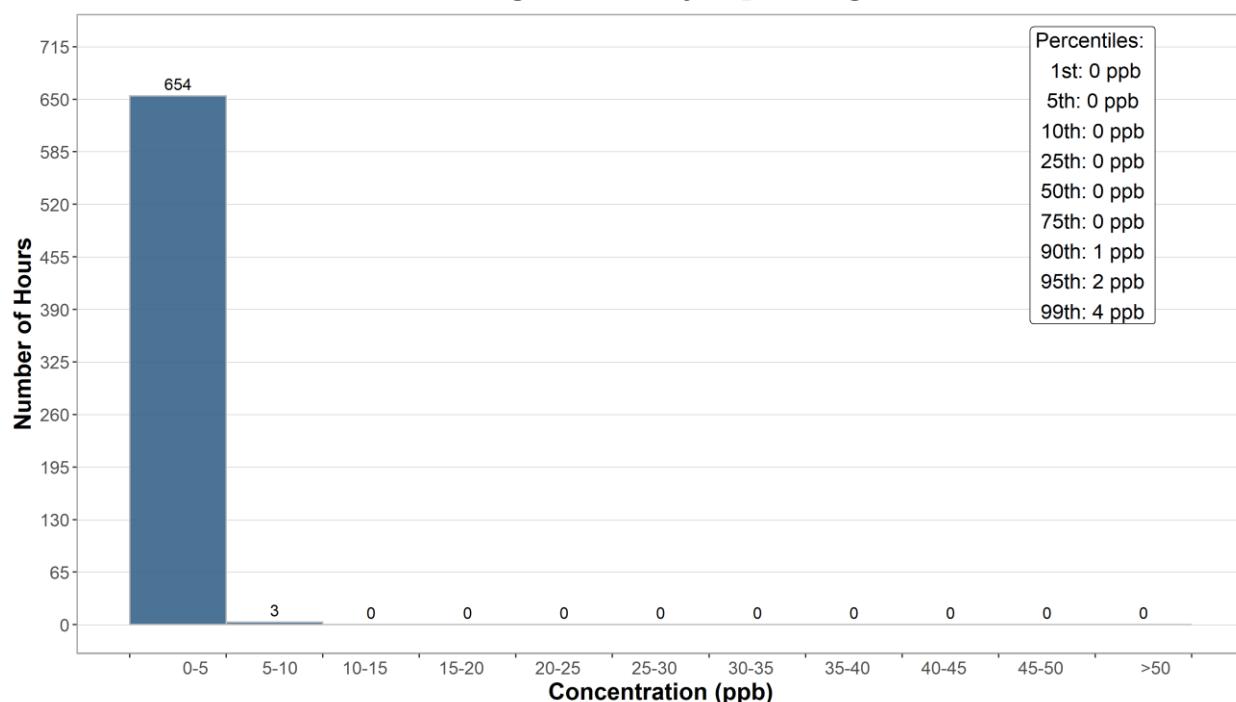


Figure 3-6 Histogram of hourly SO₂ concentrations at the Lagoon station

Histogram of Hourly PM_{2.5} Readings

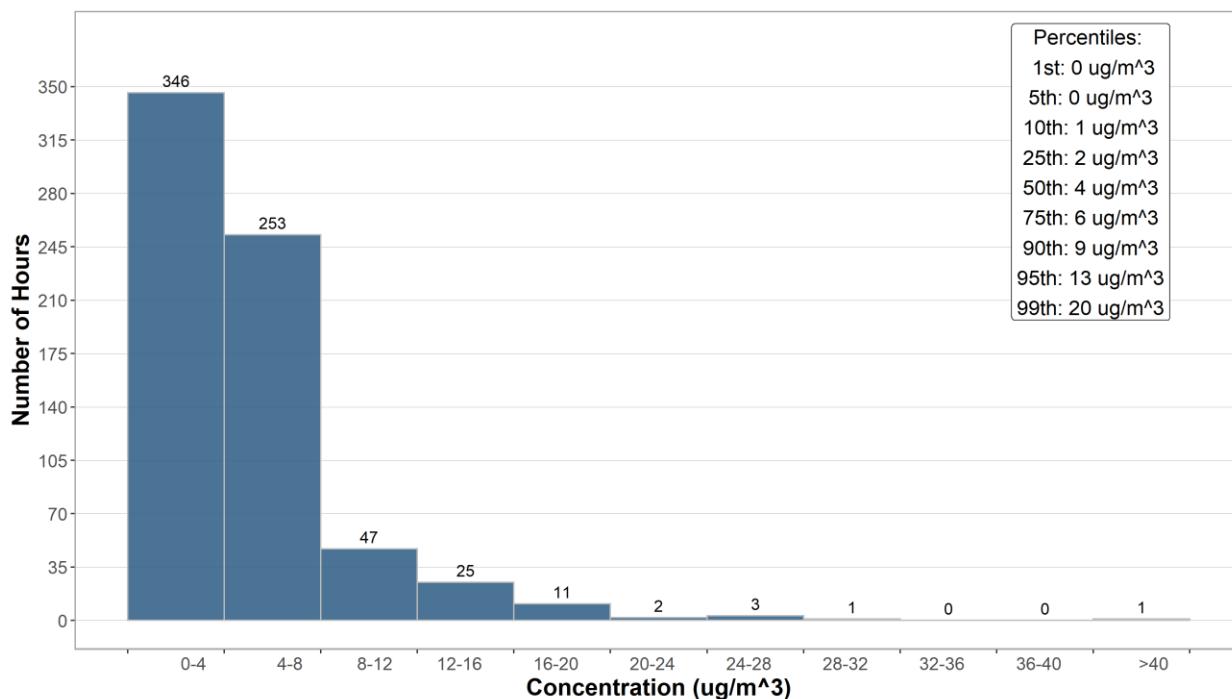


Figure 3-7 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

Histogram of Hourly PM₁₀ Readings

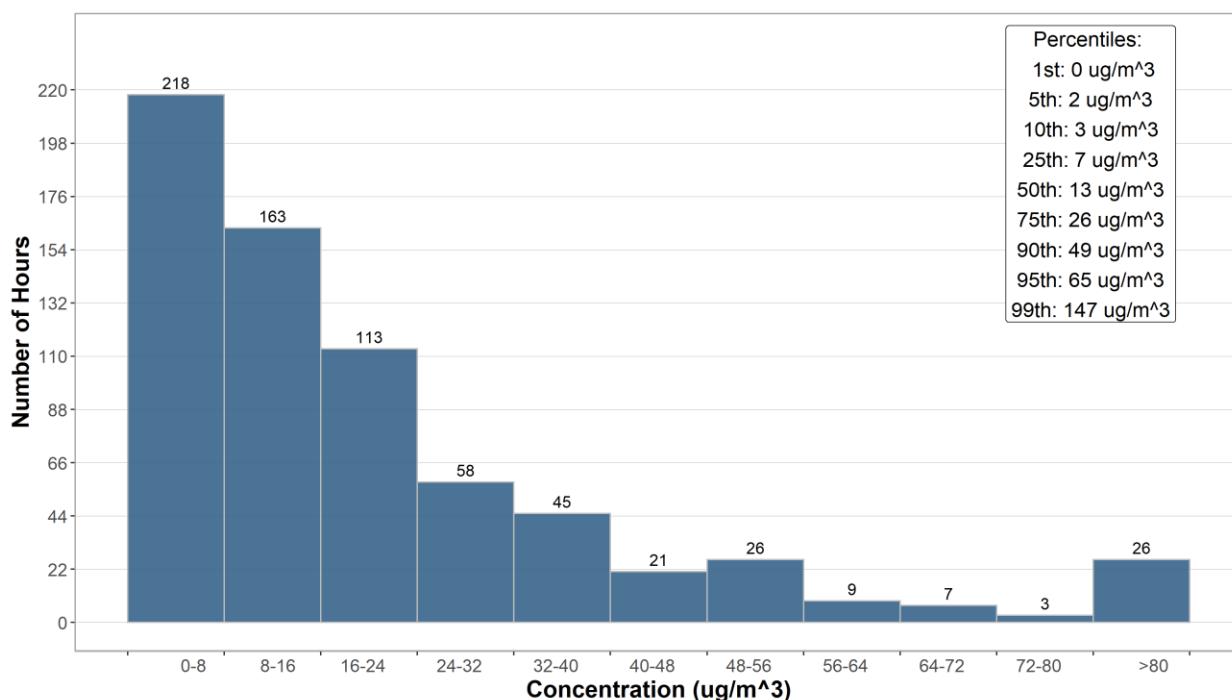


Figure 3-8 Histogram of hourly PM₁₀ concentrations at the Lagoon station

Histogram of Hourly TSP Readings

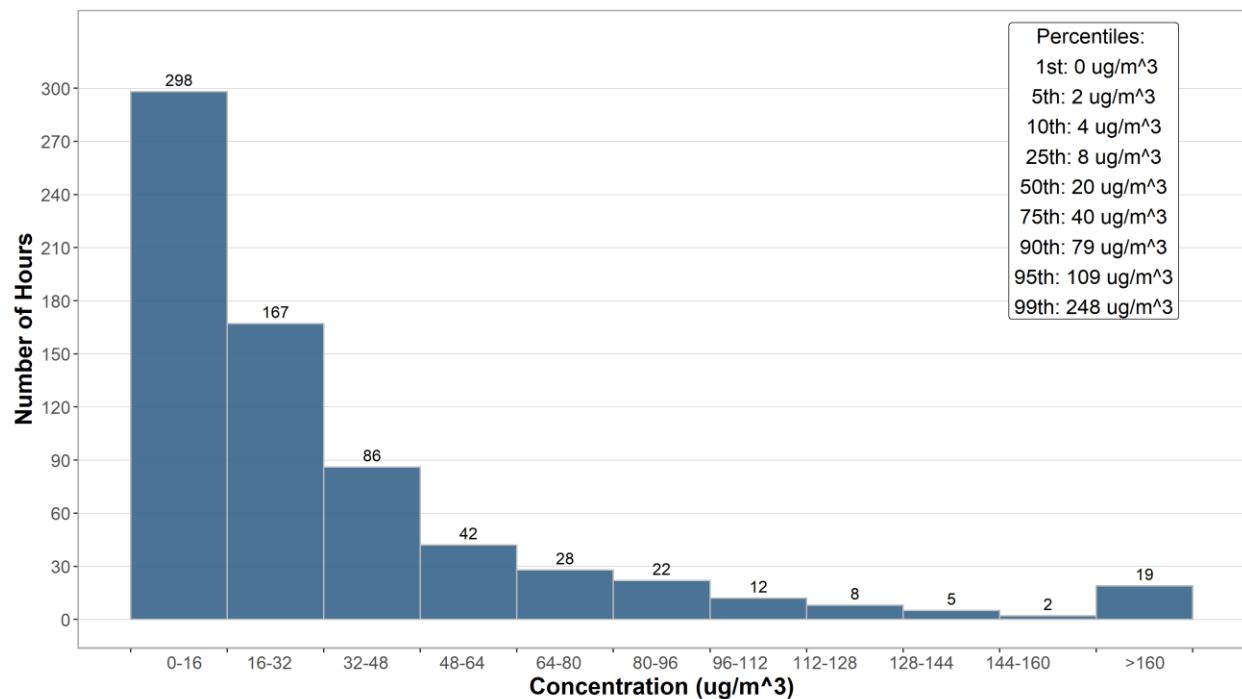


Figure 3-9 Histogram of hourly TSP concentrations at the Lagoon station

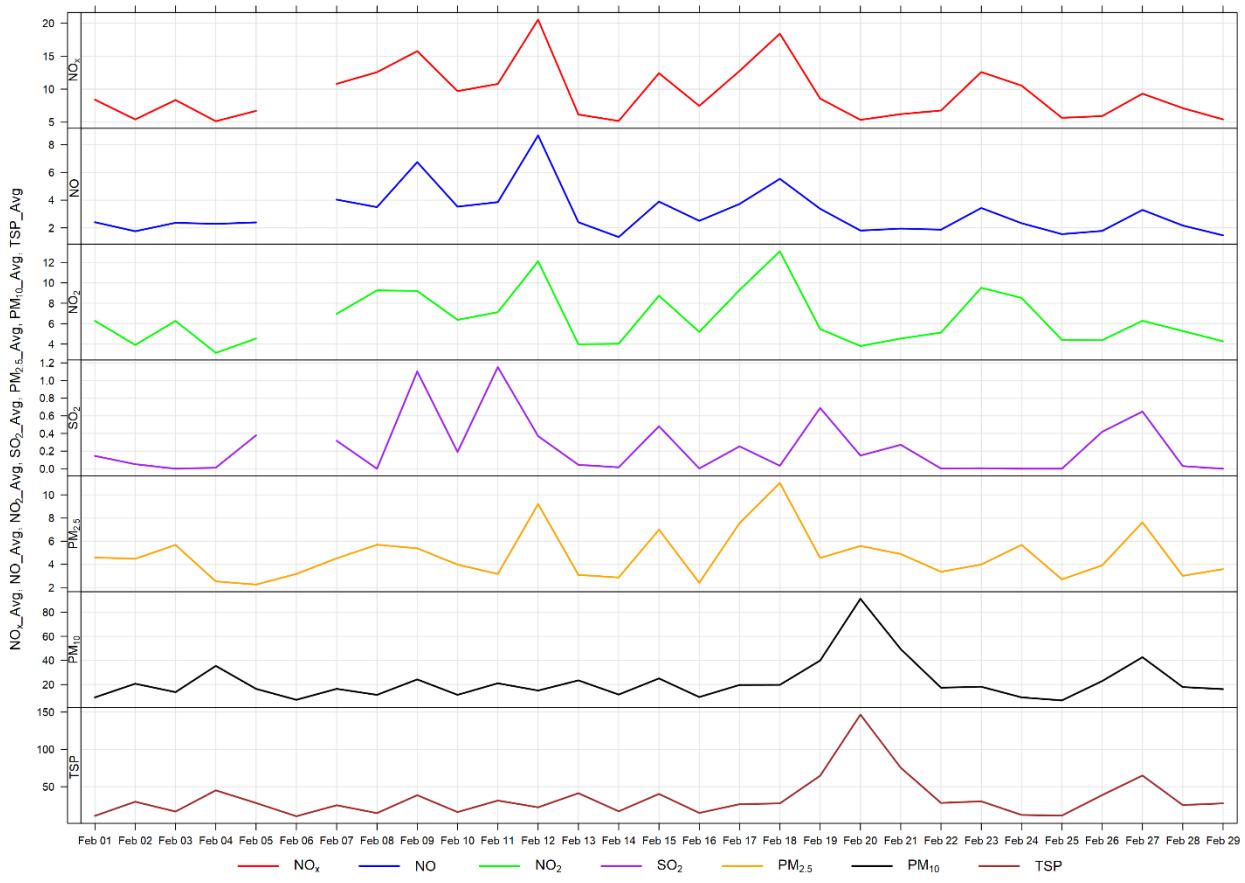


Figure 3-10 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

Figure 3-11 through Figure 3-13 show the variation in concentrations over various time averaging periods for PM, SO₂ and NO_x. The particulate matter plot in Figure 3-11 shows that PM₁₀ 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. This month also saw higher PM concentrations during the evening and night time hours that could be related to wood smoke.

Figure 3-12 shows the variation of SO₂ over various time periods. SO₂ concentrations patterns are dependent on the timing of the highest SO₂ concentrations recorded in the month because in general SO₂ concentrations are very low. Figure 3-13 shows the variation of NO_x, NO and NO₂, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

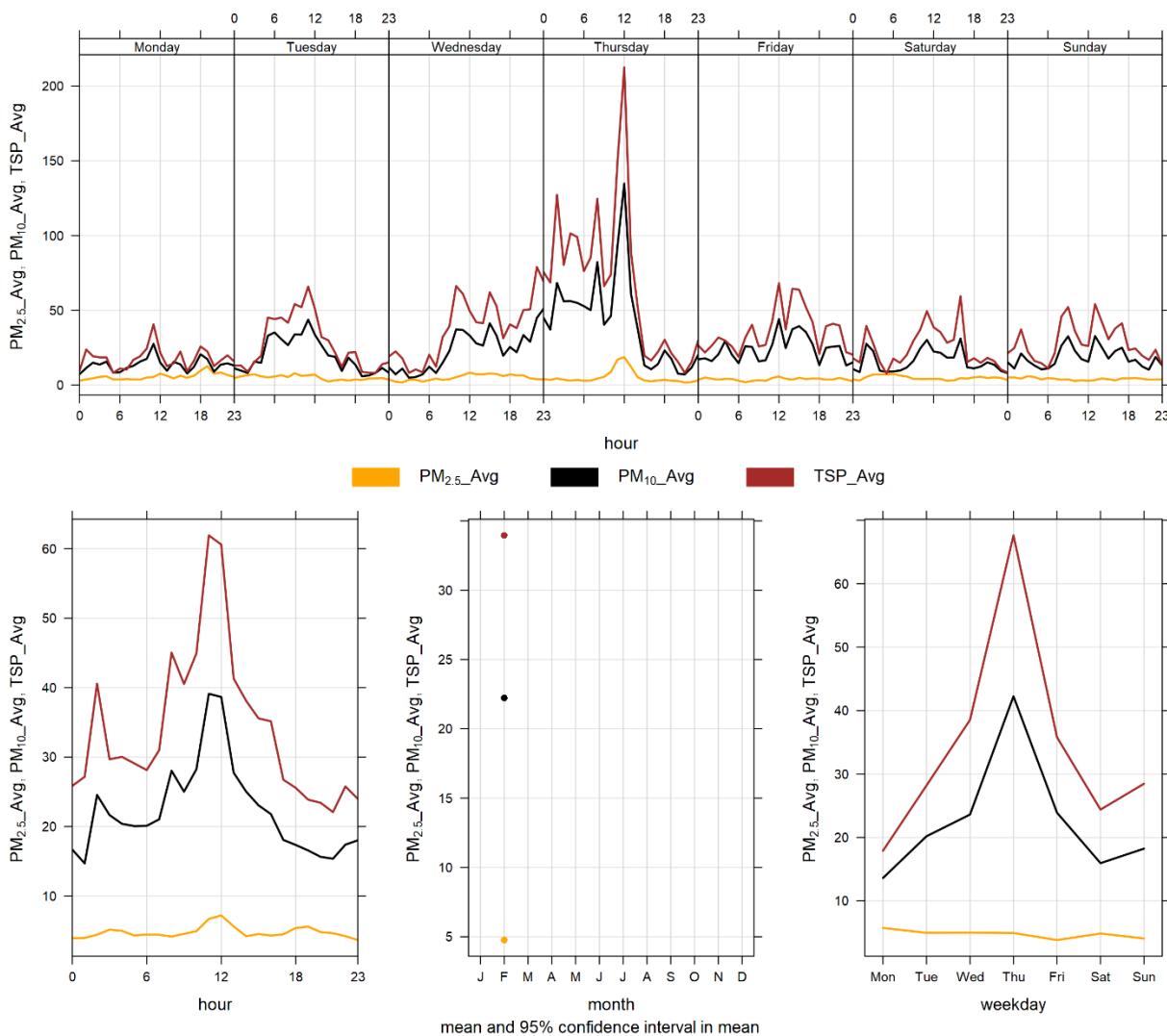


Figure 3-11 Lagoon monitor particulate matter time variation

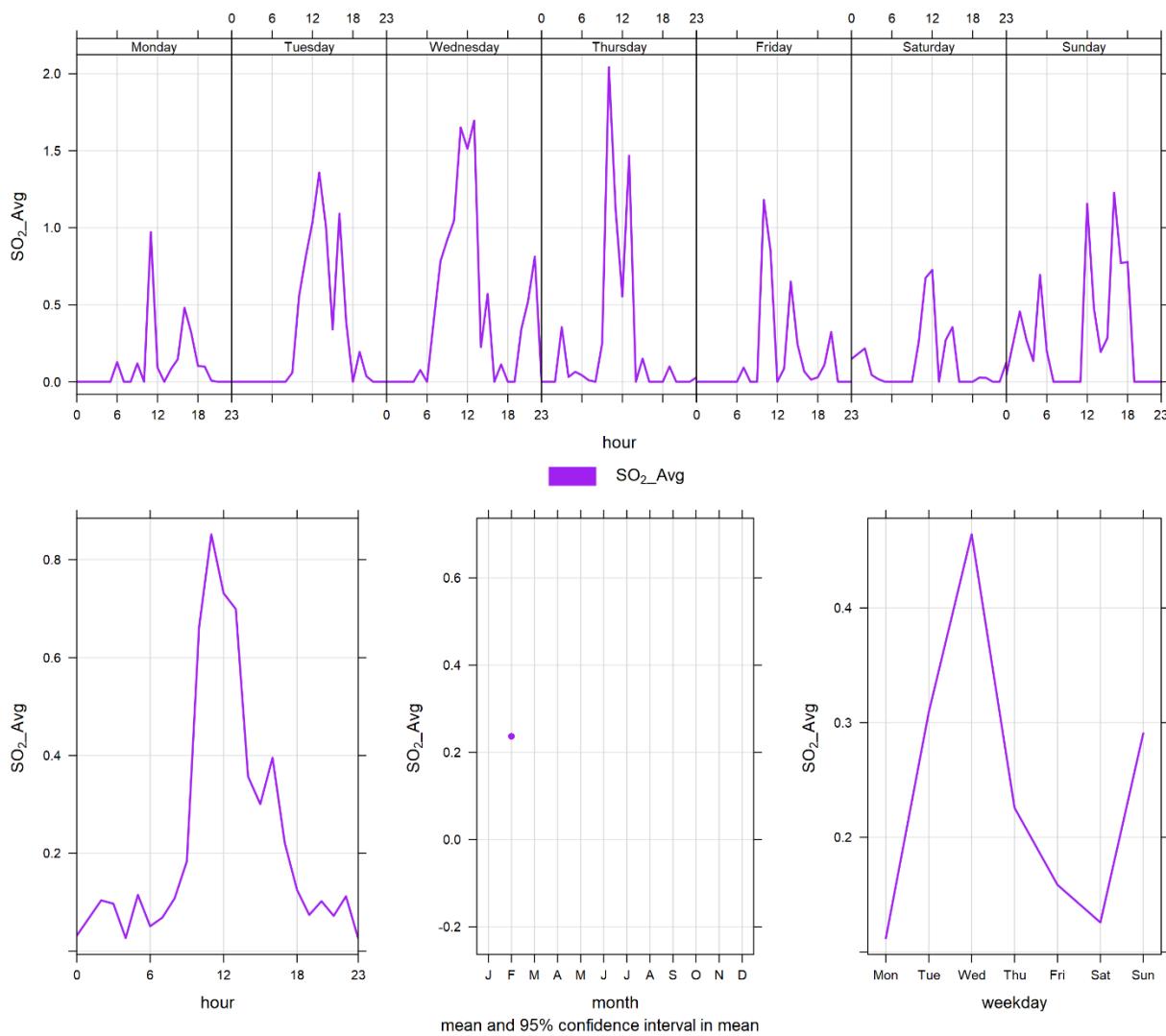


Figure 3-12 Lagoon monitor SO₂ time variation

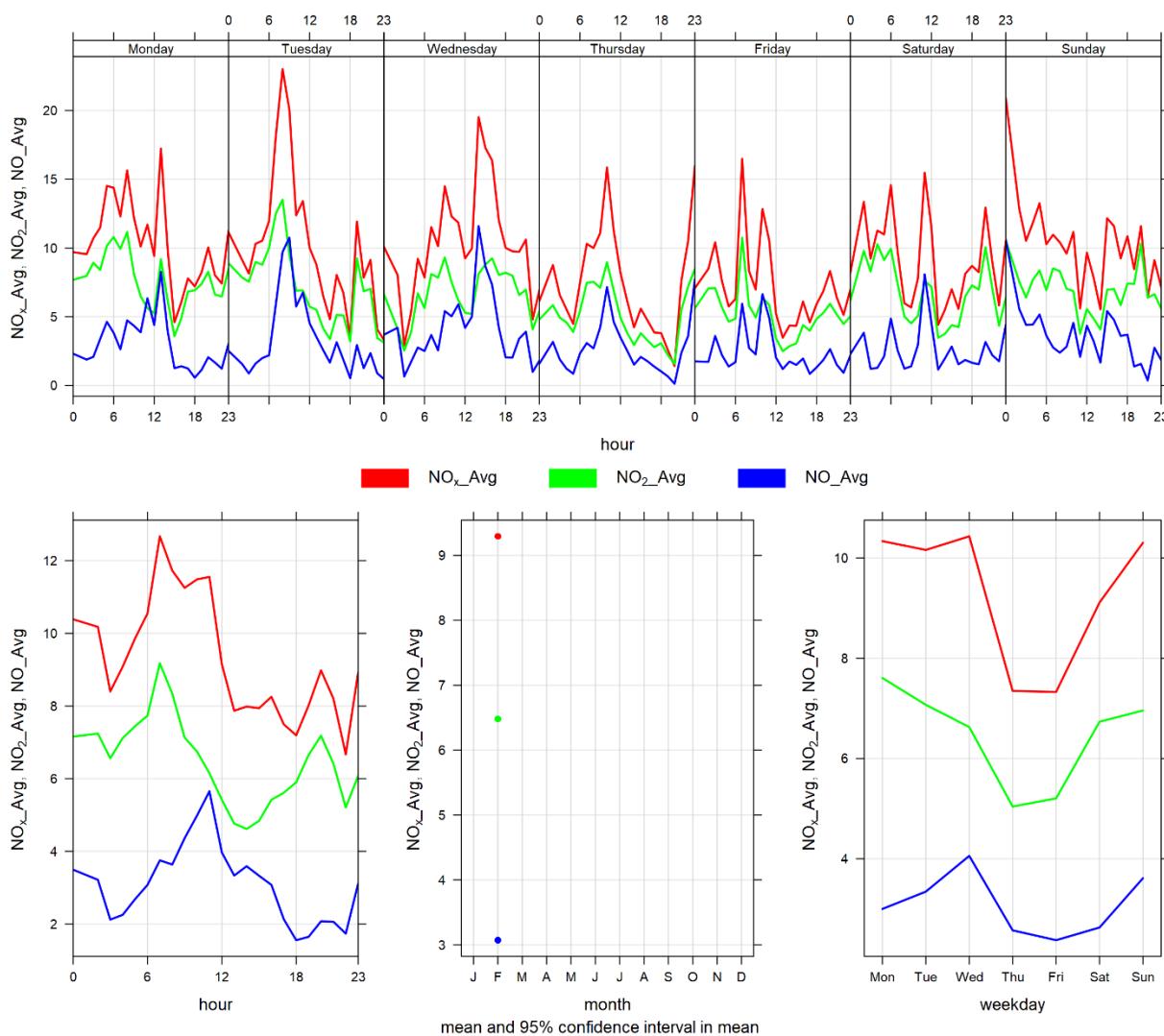


Figure 3-13 Lagoon monitor NO_x time variation

4 WEST INDUSTRIAL GRIMM

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 West monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The monitors had 0% uptime in February due to the GRIMM monitor being removed for repair January 24 th at 16:00 through to the end of February.

5 BERM 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 Berm monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The monitors had 100% uptime in February.

5.2 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 5-1 and Figure 5-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Figure 5-3 and Figure 5-4 show the wind roses for the PM_{2.5} and TSP days of exceedance. Table 5-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 5-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

There were 18 and 1 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) guidelines, respectively. There was 1 hour exceeding the 1-hour PM_{2.5} AAAQG.

Historically during the month of February, the Berm monitor records an average of 16 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during February occurred in 2013 where there were 24 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in February occurred in 2011, 2015, 2016 and 2018 where there was 1 day that exceeded the guideline.

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

The 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.

High particulate levels and exceedances at the Berm monitor are likely influenced by flood mitigation work along Exshaw creek which is producing fugitive dust near the monitors. FireSmart and Pine Beetle control work is likely to have increased levels of PM_{2.5} as well.

Table 5-2 Summary of February 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	
PM _{2.5} (µg/m ³)	80	29	Berm	1	1	0.2	10.7	83.6	21	11	36.3	262.4	40.4	21	100
PM ₁₀ (µg/m ³)	-	-	Berm	-	-	0.3	74.7	650.7	21	11	36.3	262.4	307.9	21	100
TSP (µg/m ³)	-	100	Berm	-	18	0.2	248.9	2279.0	20	8	41.1	280.9	1031.7	21	100

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
2020-02-02	344.0	-	270.7	21.8	37.5	High wind event; Dust, possibly from flood mitigation work
2020-02-04	674.1	-	263.0	38.7	50.3	High wind event; Dust, possibly from flood mitigation work
2020-02-05	435.5	-	276.0	29.9	58.4	High wind event; Dust, possibly from flood mitigation work
2020-02-09	208.2	-	284.1	20.1	55.0	High wind event; Dust, possibly from flood mitigation work
2020-02-10	140.6	-	261.7	18.6	54.3	TSP - Dust, possibly from flood mitigation work
2020-02-11	345.0	-	263.9	27.7	54.5	High wind event; Dust, possibly from flood mitigation work
2020-02-13	338.3	-	265.7	35.2	47.4	High wind event; Dust, possibly from flood mitigation work
2020-02-14	184.3	-	260.0	22.2	47.1	High wind event; Dust, possibly from flood mitigation work
2020-02-15	265.5	-	268.6	20.4	52.9	High wind event; Dust, possibly from flood mitigation work
2020-02-16	137.8	-	265.1	15.7	51.6	TSP - Dust, possibly from flood mitigation work
2020-02-19	378.9	-	298.0	28.9	47.5	High wind event; Dust, possibly from flood mitigation work

2020-02-20	683.0	-	272.3	33.9	37.0	High wind event; Dust, possibly from flood mitigation work
2020-02-21	1031.7	40.4	264.1	38.8	30.3	High wind event; Dust, possibly from flood mitigation work; PM2.5 levels potentially influenced by FireSmart and Pine Beetle Control Work
2020-02-22	269.0	-	266.1	23.7	40.6	High wind event; Dust, possibly from flood mitigation work
2020-02-25	187.8	-	268.2	25.7	58.0	High wind event; Dust, possibly from flood mitigation work
2020-02-26	358.2	-	266.6	27.1	48.3	High wind event; Dust, possibly from flood mitigation work
2020-02-27	422.7	-	265.3	31.8	38.9	High wind event; Dust, possibly from flood mitigation work
2020-02-29	162.1	-	268.4	21.8	63.0	High wind event; Dust, possibly from flood mitigation work
Total # of Exceedances	18	1				
Maximum # of Exceedances (February)	24 (2013)	1 (2011, 2015, 2016, 2018)				
Average # of Exceedances (February)	16	0				
Minimum # of Exceedances (February)	7 (2019)	0 (2010, 2012, 2013, 2014, 2017, 2019)				

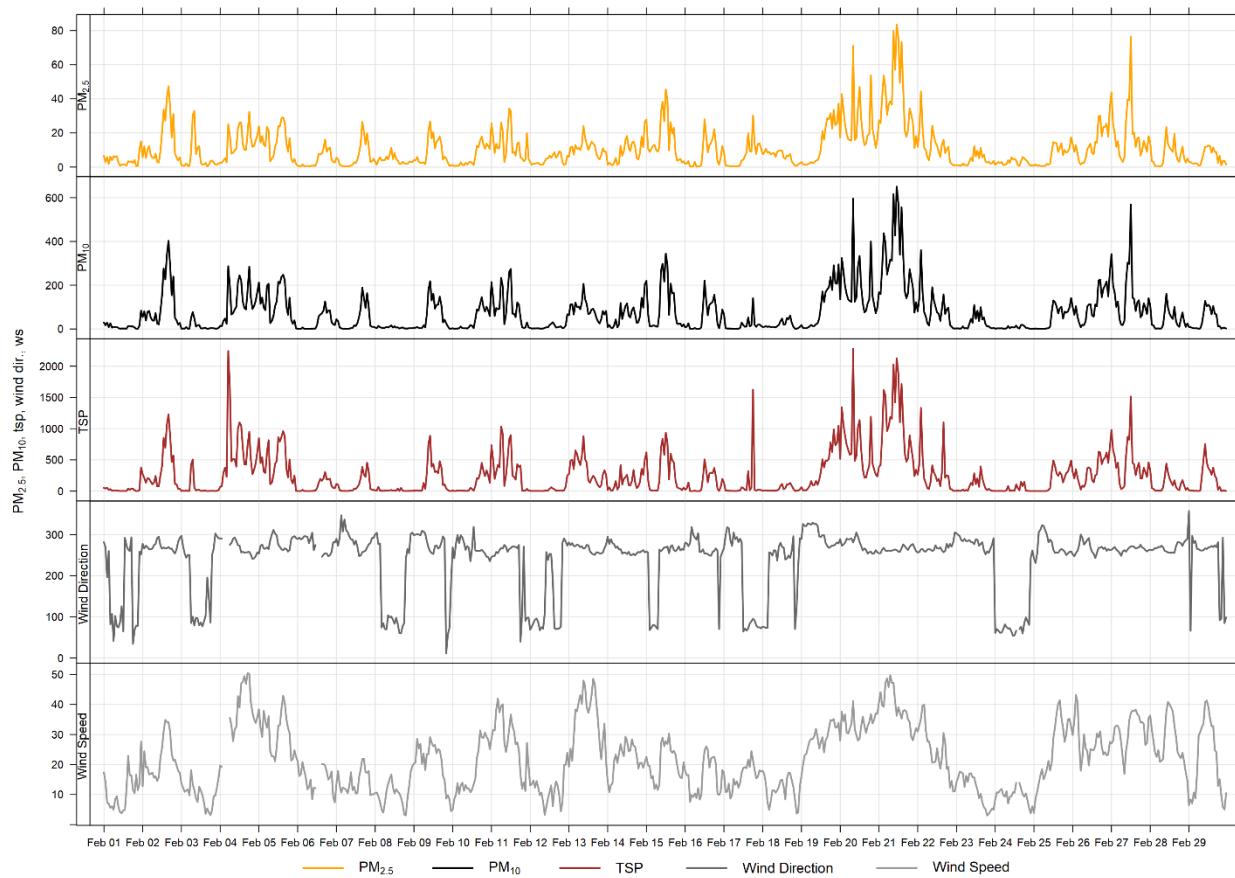


Figure 5-1 1-hour particulate matter concentrations recorded at the Berm monitor

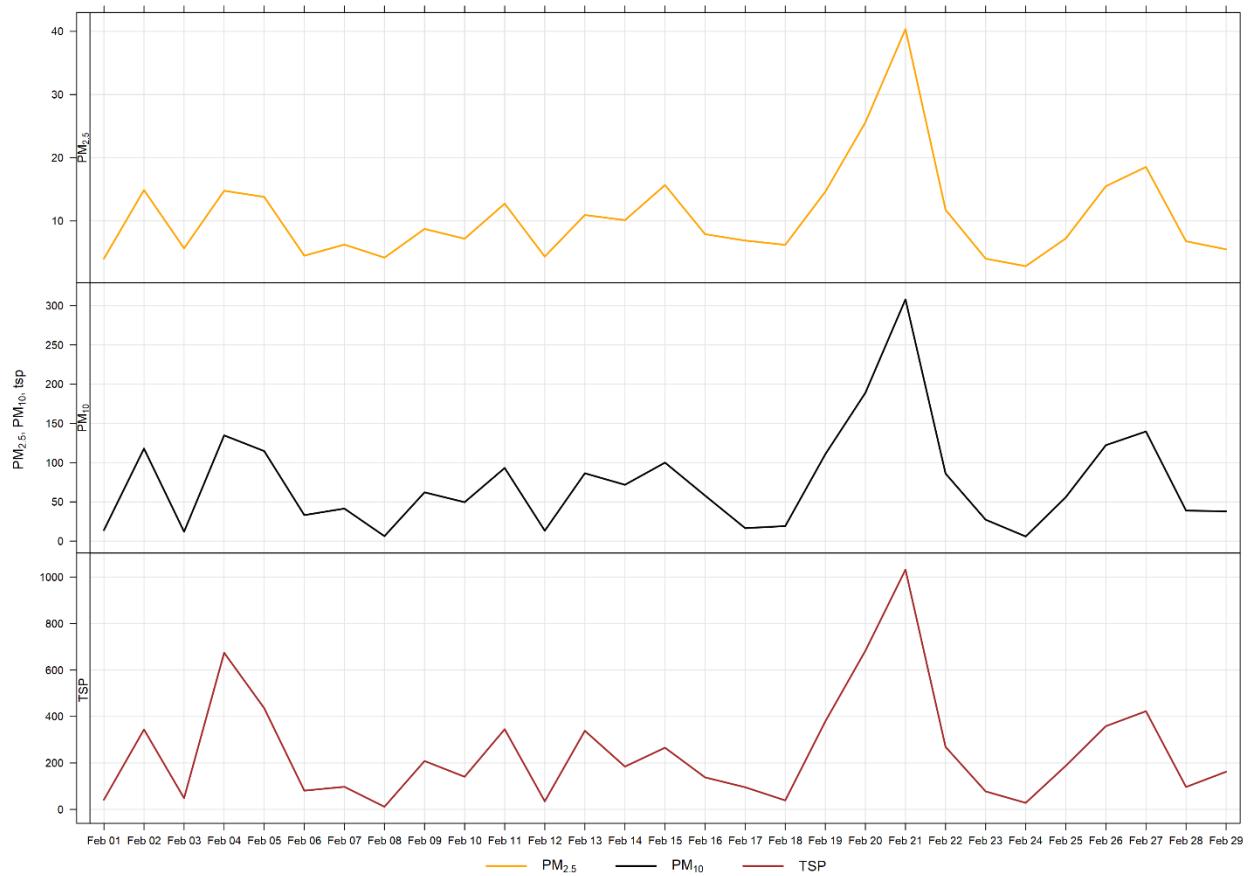


Figure 5-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 5-3 shows the wind rose for the 18 days of TSP exceedances recorded this month. The wind rose shows that the winds predominantly came from the west, west-southwest and west-northwest directions.

Figure 5-4 shows the wind rose for the 1 day of PM_{2.5} exceedances recorded this month. The winds predominately came from the west direction.

Figure 5-5 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from traffic and other activities in Exshaw, such as the flood mitigation work and FireSmart work that is currently underway.

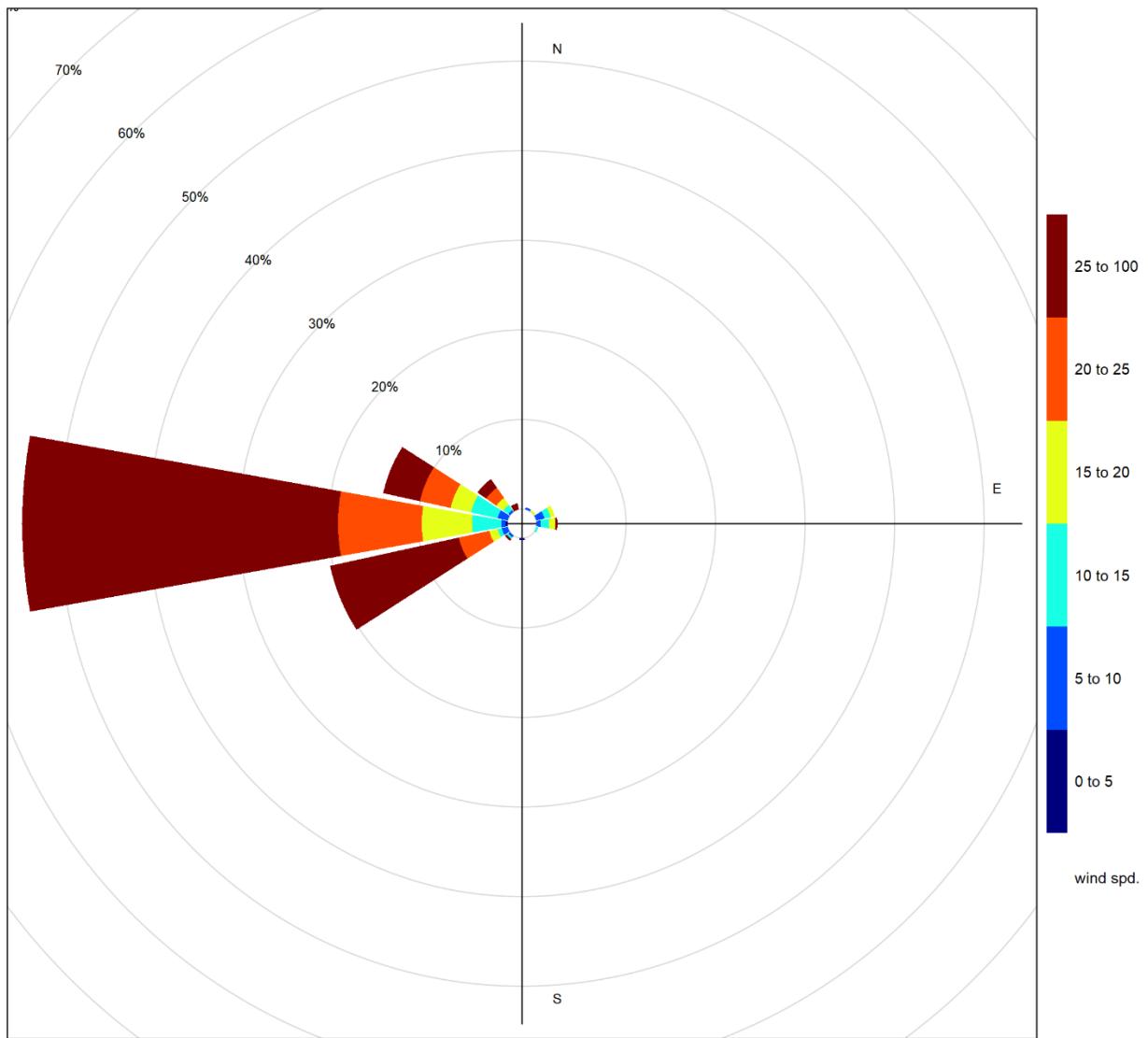


Figure 5-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

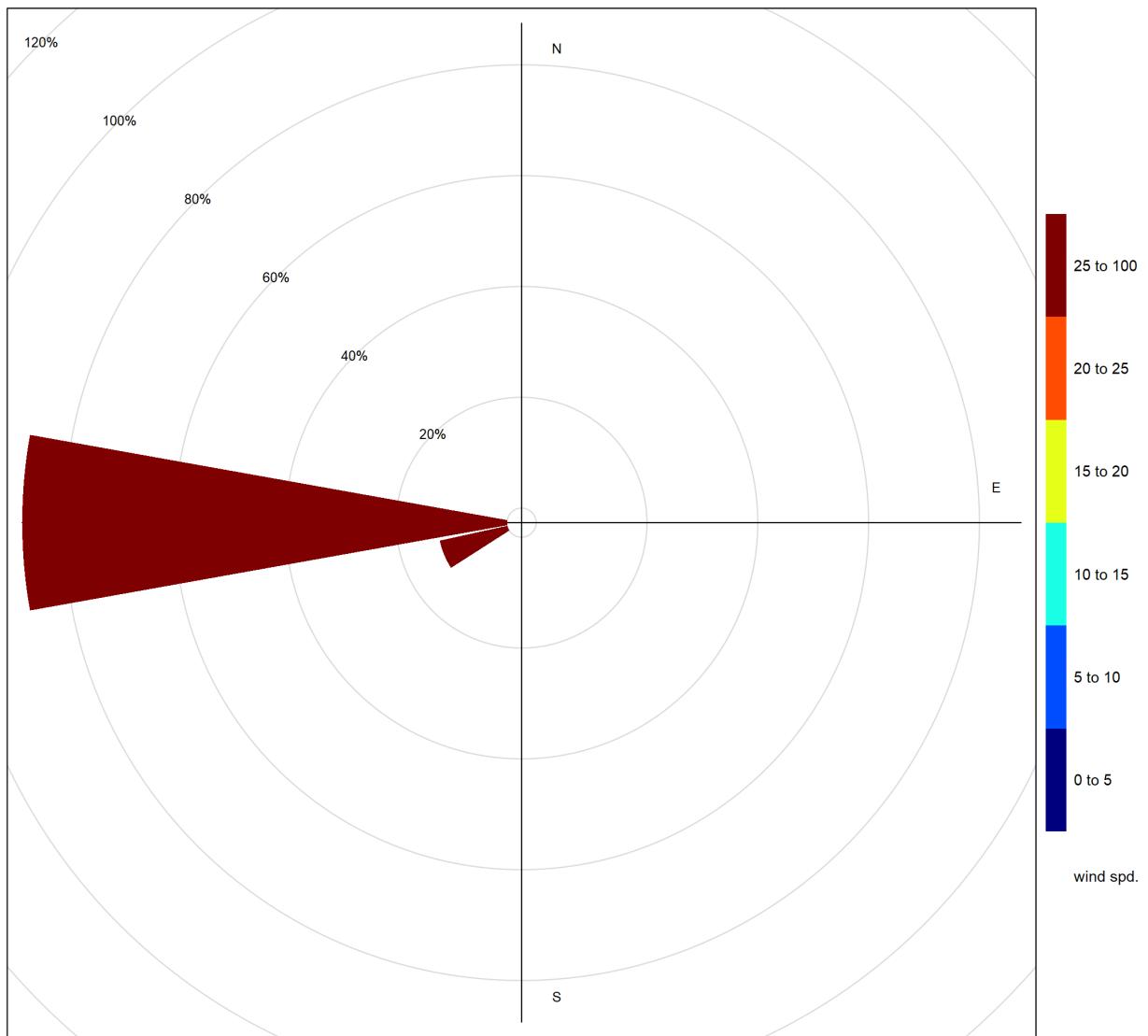


Figure 5-4 Wind rose for PM_{2.5} exceedance days recorded at the Berm GRIMM

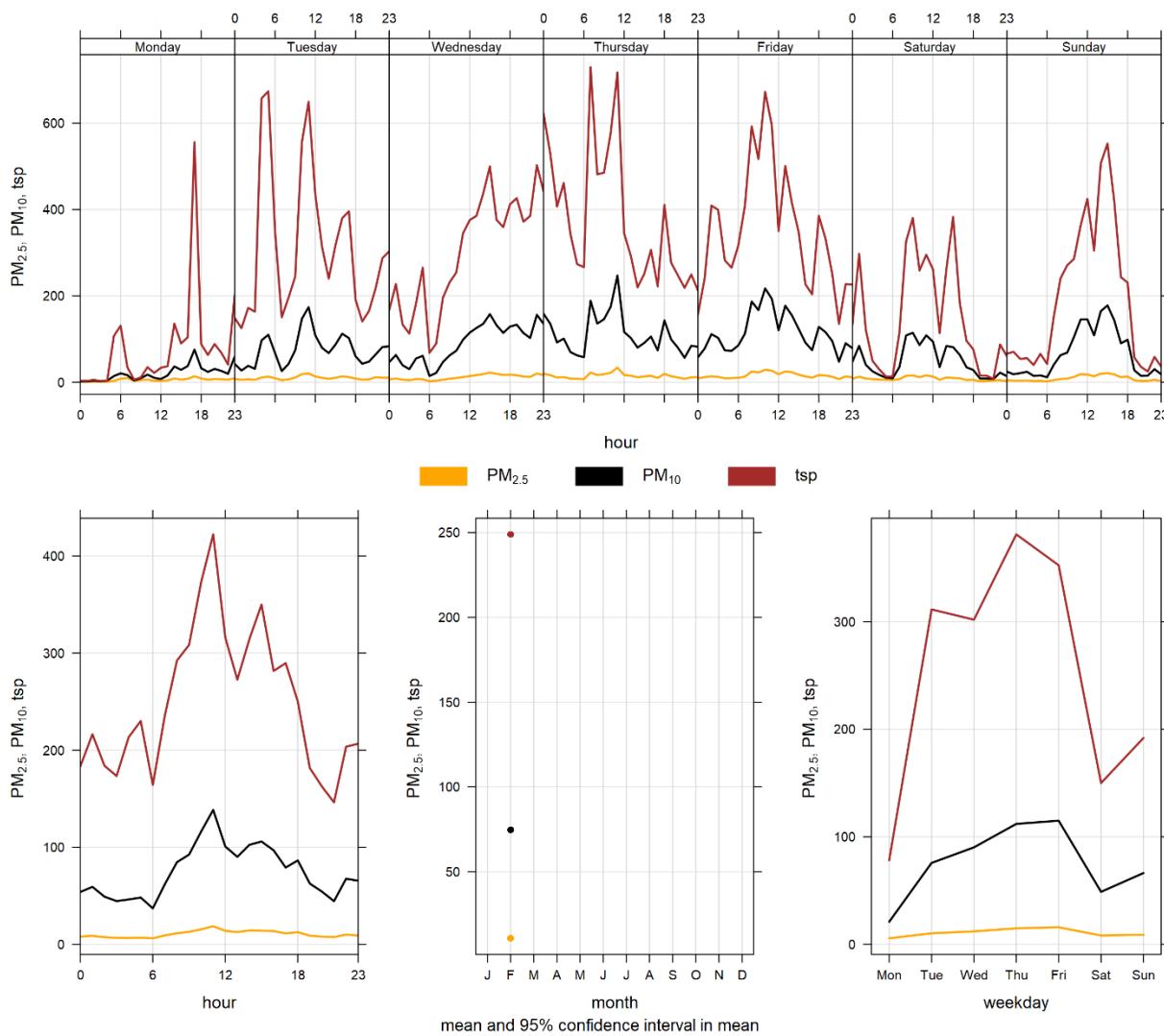


Figure 5-5 **Berm particulate matter time variation**

6 ENTRANCE 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 Entrance monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The GRIMM analyzer had 100% uptime for the month of February

6.2 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 6-1 and Figure 6-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 6-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour PM concentrations recorded during the month. 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.

During February, there were 12 and zero exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) guidelines, respectively. Dust created from the flood mitigation work (section 1.1) has the potential to impact particulate matter concentrations and may have contributed to particulate at the Entrance monitor.

Historically, the Entrance monitor records an average of 15 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of February. The maximum number of TSP exceedances recorded during February occurred in 2014 (25 days), while the minimum occurred in 2011 with 6 exceedances. On the other hand, the maximum number of PM_{2.5} exceedances in February was 2 days, occurring in 2015.

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

The Entrance monitor is impacted by fugitive dust from plant activities, and high wind events. Trucks also pass near to the Entrance monitor as they enter and exit the Lafarge facility for loading and deliveries. Additionally, the monitor is closely located to Highway 1A. Traffic, particularly large trucks, can create dust while crossing over the railway tracks. This can all lead to the monitor recording high TSP concentrations, which are typically associated with fugitive dust sources.

Figure 6-3 shows the wind rose for the 12 days that exceeded the TSP guideline. The wind rose indicates that the winds predominantly came from the west, west-southwest and west-northwest directions. High wind speeds and flood mitigation work could be attributed as the causation for the 12 TSP exceedances recorded during the month of February.

High particulate levels and exceedances at the Entrance monitor are likely influenced by flood mitigation work along Exshaw creek which is producing fugitive dust near the monitors. FireSmart and Pine Beetle control work is likely to have increased levels of PM_{2.5} as well.

Table 6-2 Summary of February 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 _{2.5} (µg/m ³)	80	29	Entrance	0	0	0.4	7.1	38.8	19	12	27.6	294.1	16.1	19	100
PM ₁₀ (µg/m ³)	-	-	Entrance	-	-	0.7	36.8	324.8	19	12	27.6	294.1	131.2	19	100
TSP (µg/m ³)	-	100	Entrance	-	12	0.5	134.1	1768.2	4	6	35.5	275.4	510.1	19	100

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
2020-02-04	365.7	-	263.0	38.7	50.3	High wind event; Dust, possibly from flood mitigation work
2020-02-07	131.4	-	281.2	13.9	51.8	TSP - Dust, possibly from flood mitigation work
2020-02-09	202.7	-	284.1	20.1	55.0	High wind event; Dust, possibly from flood mitigation work
2020-02-11	136.1	-	263.9	27.7	54.5	High wind event; Dust, possibly from flood mitigation work
2020-02-13	254.2	-	265.7	35.2	47.4	High wind event; Dust, possibly from flood mitigation work
2020-02-17	248.5	-	47.1	16.1	61.5	TSP - Dust, possibly from flood mitigation work
2020-02-18	109.4	-	264.1	11.7	64.1	TSP - Dust, possibly from flood mitigation work
2020-02-19	510.1	-	298.0	28.9	47.5	High wind event; Dust, possibly from flood mitigation work
2020-02-20	349.7	-	272.3	33.9	37.0	High wind event; Dust, possibly from flood mitigation work

2020-02-21	399.0	-	264.1	38.8	30.3	High wind event; Dust, possibly from flood mitigation work
2020-02-23	109.1	-	284.6	11.2	63.9	TSP - Dust, possibly from flood mitigation work
2020-02-27	125.7	-	265.3	31.8	38.9	High wind event; Dust, possibly from flood mitigation work
Total # of Exceedances	12	0				
Maximum # of Exceedances (February)	25 (2014)	2 (2015)				
Average # of Exceedances (February)	15	0				
Minimum # of Exceedances (February)	6 (2011)	0 (2010, 2011, 2013, 2016, 2017, 2018, 2019)				

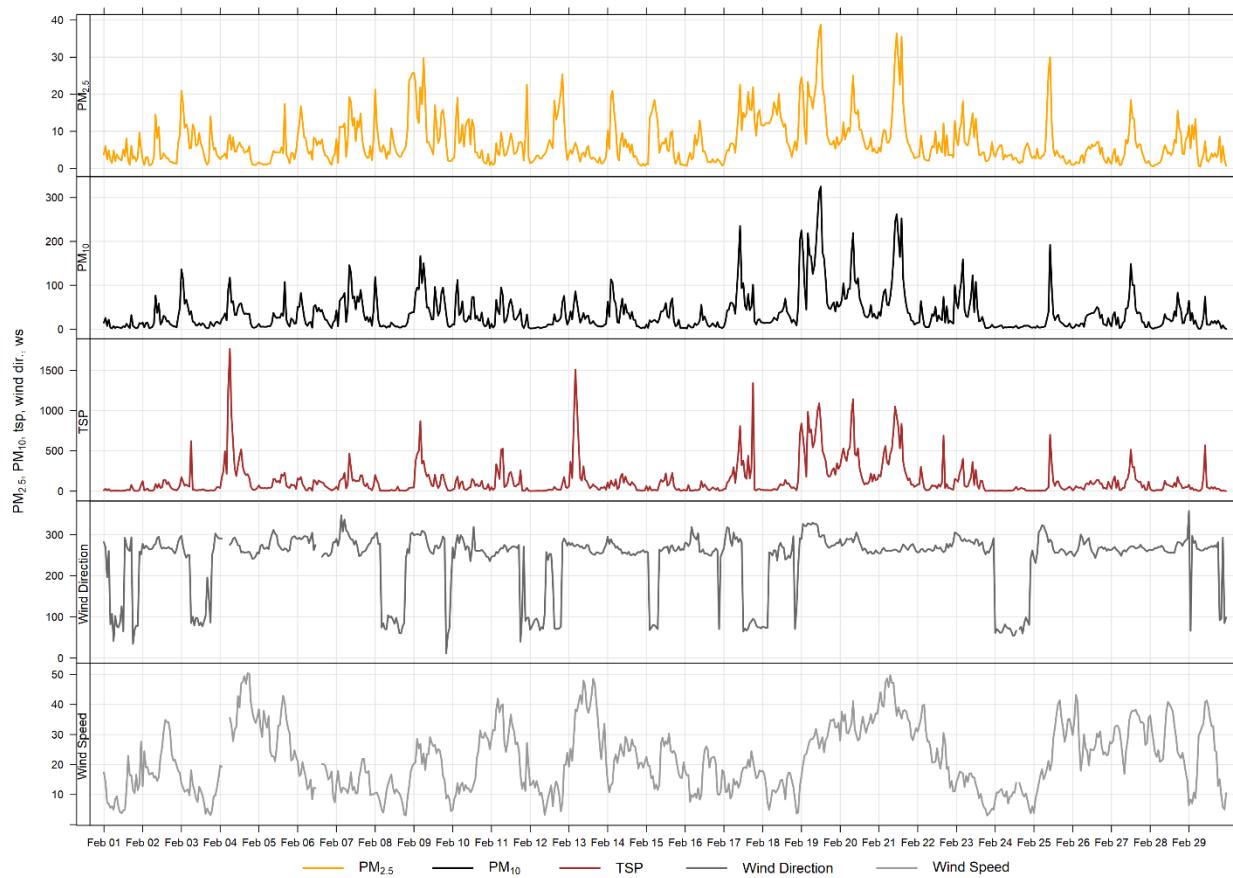


Figure 6-1 1-hour particulate matter concentrations recorded at the Entrance monitor

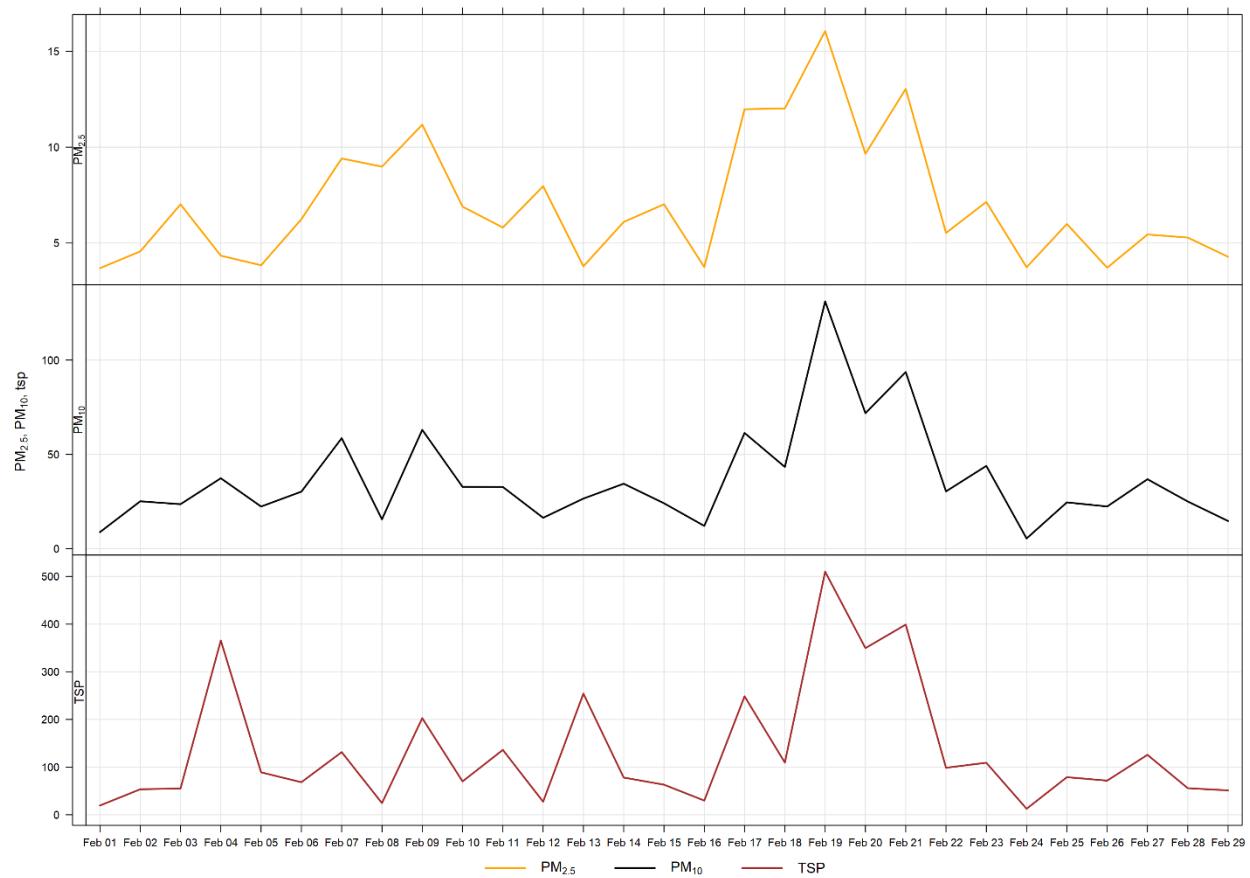


Figure 6-2 24-hour particulate matter concentrations at the Entrance monitor

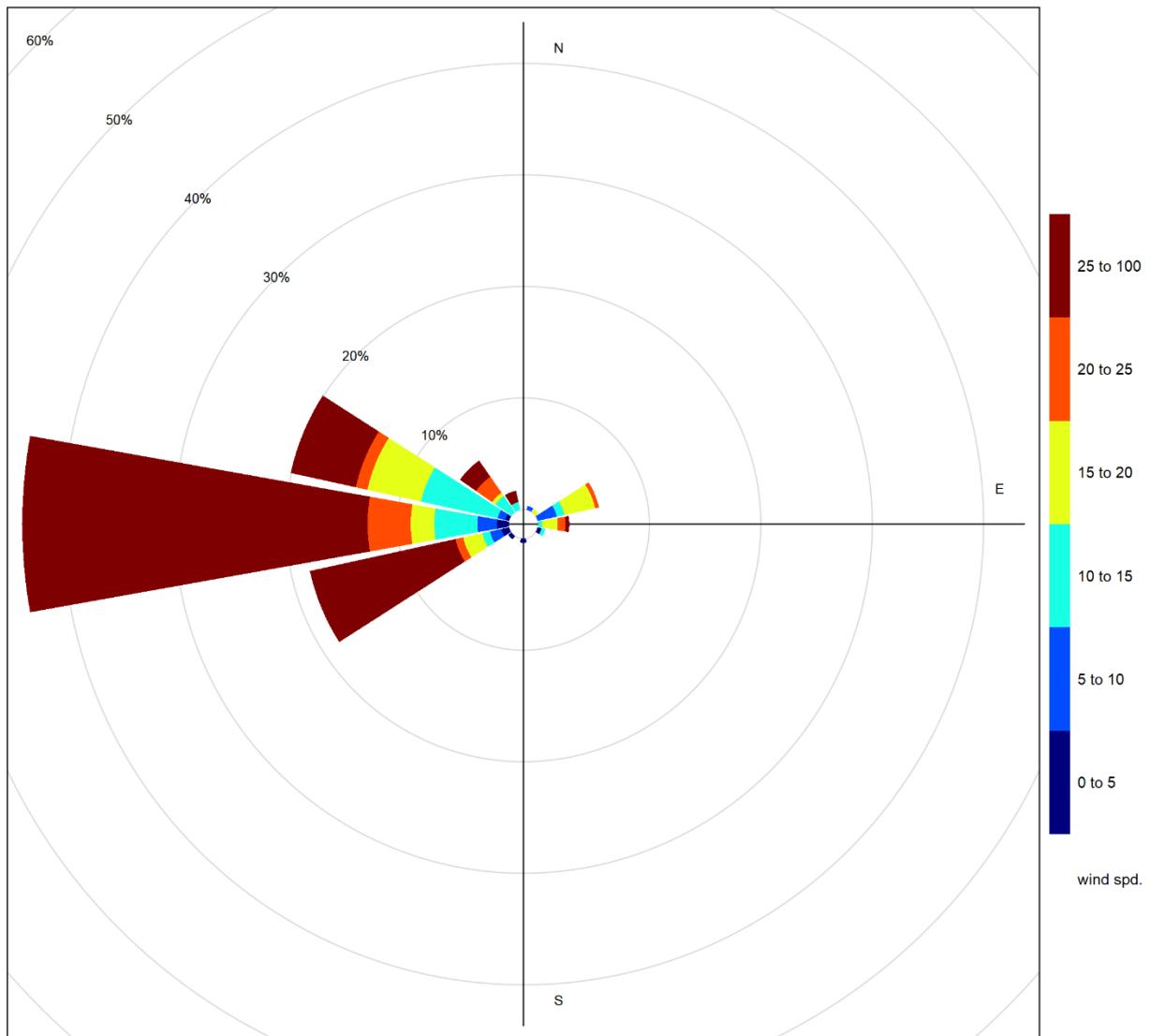


Figure 6-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 6-4 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 6-4 is based on data collected during February 2020. The diurnal pattern is 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, but can also be influenced by the flood mitigation work currently underway, as well as industry and rail sources.

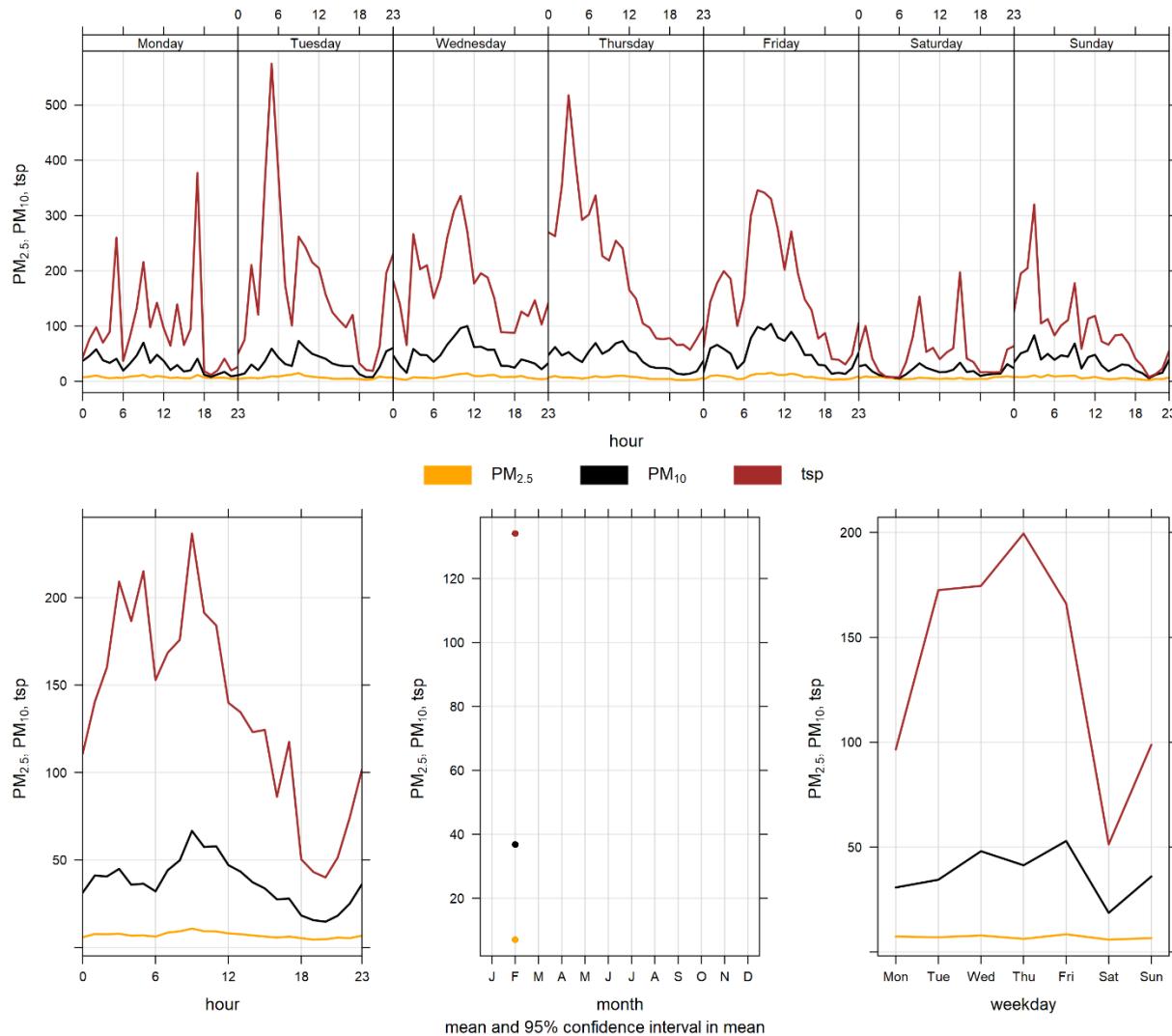


Figure 6-4 Entrance particulate matter time variation

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APPENDIX

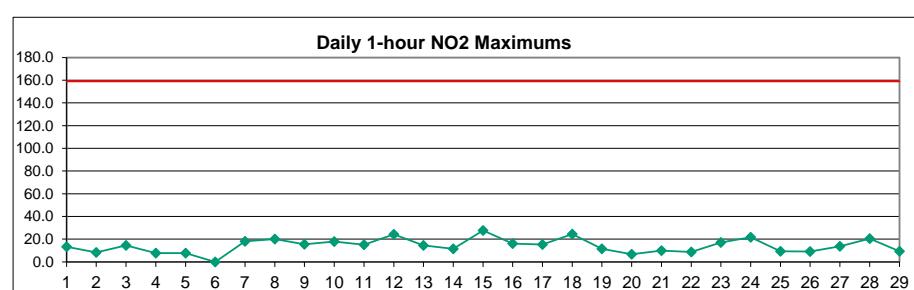
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – February 2020

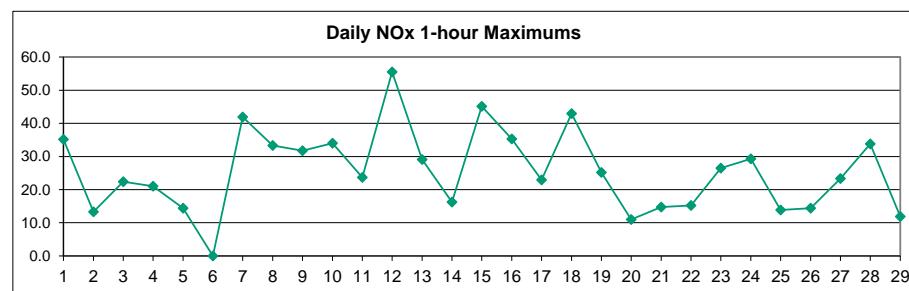
Day	Hour																									Mean	Max
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		5.8	S	6.3	10.1	9.7	6.8	4.3	4.8	7.9	6.6	6.2	13.2	13.3	5.0	3.7	1.8	2.2	7.1	7.4	7.3	3.2	2.3	1.8	7.4	6.3	13.3
2		4.8	S	6.9	3.3	4.4	4.6	3.5	6.1	8.3	4.6	5.7	2.4	2.7	2.7	3.1	6.8	4.0	3.4	2.0	1.7	1.9	1.9	2.7	2.7	3.9	8.3
3		2.9	S	6.1	7.1	10.4	10.5	2.1	8.5	3.6	2.7	3.4	1.0	2.7	11.7	5.1	1.5	2.9	8.8	14.4	13.1	7.2	6.9	5.0	6.6	6.3	14.4
4		4.8	S	P	P	3.7	6.2	7.1	7.3	7.7	4.2	4.8	1.1	1.3	1.4	1.7	2.2	2.0	1.4	1.0	0.8	0.9	1.7	1.4	3.1	7.7	
5		4.1	S	2.0	1.2	5.7	1.8	2.6	7.8	6.8	6.9	6.6	3.0	4.1	3.6	3.4	7.0	2.7	2.4	1.3	6.8	7.6	5.9	5.4	5.6	4.5	7.8
6		4.0	S	4.9	6.5	6.3	7.4	8.3	8.8	11.1	C	C	C	C	C	C	1.6	1.9	1.7	1.7	1.8	1.6	10.7	17.0	14.4	-	-
7		7.3	S	8.6	9.8	8.6	6.6	8.6	8.6	10.1	9.5	18.0	13.0	7.8	2.2	1.9	2.0	2.5	5.1	2.8	5.2	5.0	4.2	3.8	8.7	7.0	18.0
8		11.8	S	11.8	16.4	20.1	17.0	7.1	1.6	2.3	3.0	2.2	4.0	2.2	2.8	2.9	8.0	4.1	14.4	15.5	12.6	15.5	11.3	11.3	15.1	9.3	20.1
9		10.8	S	13.6	12.2	12.4	14.6	10.6	10.3	6.2	4.6	4.5	1.2	9.7	9.0	3.1	7.7	15.4	13.4	15.0	10.9	9.0	7.2	5.7	4.7	9.2	15.4
10		9.0	S	4.3	5.3	8.6	9.3	7.9	13.3	16.7	17.9	12.7	14.0	4.3	4.3	2.9	1.2	1.4	4.8	1.7	1.3	1.5	1.5	1.2	1.4	6.4	17.9
11		1.2	S	1.2	1.5	3.1	4.6	4.1	11.7	14.2	5.5	7.5	6.8	11.0	10.2	9.7	7.3	12.3	11.4	3.0	15.1	12.3	3.6	2.7	4.1	7.1	15.1
12		9.8	S	2.5	2.4	2.6	14.1	11.4	10.1	9.5	17.5	12.2	11.8	6.7	10.0	18.8	18.5	22.4	23.4	24.3	17.6	10.1	10.6	3.6	8.5	12.1	24.3
13		5.7	S	4.3	4.8	4.0	2.8	3.4	6.7	2.9	2.6	10.0	5.9	1.6	0.9	0.8	1.0	1.2	0.8	1.0	1.7	1.8	5.4	7.7	14.4		
14		11.5	S	6.8	9.9	4.4	2.3	2.9	9.9	4.5	3.2	1.8	1.3	1.8	1.1	0.7	1.1	1.5	1.4	4.1	4.3	2.8	8.5	3.7	3.3	4.0	11.5
15		3.2	S	17.5	9.7	10.9	16.4	27.6	19.6	4.4	4.9	7.0	11.5	7.8	1.1	4.5	6.3	6.0	1.7	3.5	3.8	16.5	12.2	2.7	2.3	8.7	27.6
16		14.7	S	3.0	3.3	4.0	5.9	4.0	7.0	7.8	10.5	5.2	3.0	0.8	0.6	0.8	0.7	1.3	2.0	5.9	8.4	16.1	6.4	1.0	6.9	5.2	16.1
17		8.5	S	6.2	6.4	8.5	7.0	11.5	6.0	8.1	5.8	5.7	4.5	10.0	11.6	13.2	8.2	9.4	8.7	8.9	10.2	12.9	13.7	13.6	15.4	9.3	15.4
18		22.0	S	15.6	15.2	18.0	21.3	23.3	24.5	23.2	17.4	10.8	9.5	7.2	8.1	2.4	2.3	1.4	3.1	6.5	19.9	13.3	22.0	8.0	5.9	13.1	24.5
19		11.5	S	10.1	4.3	4.2	5.1	6.0	5.5	7.3	7.2	6.1	6.1	7.1	6.3	6.2	3.5	6.5	2.0	3.8	1.3	4.7	3.7	2.9	4.3	5.5	11.5
20		2.6	S	6.1	5.0	6.1	4.2	5.9	5.7	6.1	5.0	6.8	6.5	4.1	2.4	3.8	4.4	1.1	1.7	2.8	1.1	0.9	2.4	1.3	1.6	3.8	6.8
21		1.8	S	6.4	1.9	1.7	1.8	2.2	4.0	3.4	3.9	4.4	8.3	3.2	5.4	7.8	6.0	7.5	4.0	7.0	5.7	10.0	2.5	3.5	2.2	4.5	10.0
22		2.7	S	5.6	2.0	5.2	2.4	7.6	7.5	4.8	4.1	7.5	7.3	8.7	6.3	2.6	1.5	4.2	4.0	7.3	6.5	5.7	5.0	4.2	5.1	8.7	
23		12.0	S	6.7	6.8	10.0	8.4	9.6	10.7	10.9	8.5	12.1	8.4	9.0	7.1	9.3	12.6	7.3	4.6	6.7	8.5	14.2	10.0	17.1	8.1	9.5	17.1
24		10.4	S	15.3	16.9	6.1	13.8	21.7	12.0	16.3	6.0	4.1	2.9	4.0	X	3.5	3.5	5.9	5.1	2.7	4.9	11.5	4.4	6.0	10.5	8.5	21.7
25		7.6	S	6.7	5.9	5.9	5.5	6.4	6.7	9.4	7.4	5.2	6.5	3.6	2.4	3.1	2.2	4.7	3.9	2.1	1.1	1.6	1.4	1.1	4.4	9.4	
26		1.1	S	1.8	2.3	2.9	5.9	2.5	9.1	7.7	5.6	5.1	3.8	3.2	0.9	4.1	6.2	5.4	4.3	3.4	6.2	4.0	7.6	4.4	3.2	4.4	9.1
27		6.9	S	8.1	3.4	2.0	1.2	3.9	8.7	10.0	13.8	10.1	8.3	9.0	8.1	4.2	8.1	8.9	7.0	6.7	4.3	2.0	3.4	2.8	3.5	6.3	13.8
28		1.8	S	6.4	6.8	8.1	7.8	5.7	20.4	5.4	3.3	1.3	0.9	0.9	1.3	1.0	3.2	6.0	5.5	5.8	6.0	5.5	6.9	6.0	5.3	20.4	
29		7.4	S	7.8	3.2	5.5	3.2	3.2	3.5	5.6	4.1	2.5	2.1	3.9	2.2	5.0	4.4	4.8	5.3	2.6	4.7	9.3	4.7	1.8	1.6	4.3	9.3
NO.		29	-	28	28	28	29	29	29	29	28	28	28	28	27	28	29	29	29	29	29	29	29	29	29	657	99%
MEAN				7.2	-	7.2	6.6	7.1	7.4	7.7	9.2	8.3	7.1	6.7	6.1	5.4	4.8	4.6	4.8	5.4	5.6	5.9	6.6	7.2	6.4	5.2	6.1
MAX				22.0	-	17.5	16.9	20.1	21.3	27.6	24.5	23.2	17.9	18.0	14.0	13.3	11.7	18.8	18.5	22.4	23.4	24.3	19.9	16.5	22.0	17.1	15.4



Number of 1HR Exceedences	0
Number of Non-Zero Readings	657
Maximum 1-HR Average	27.6 PPB
Maximum 24-HR Average	13.1 PPB
Monthly Calibration Standard Deviation	4.7
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	6.5 PPB

Lagoon NOx (ppb) – February 2020

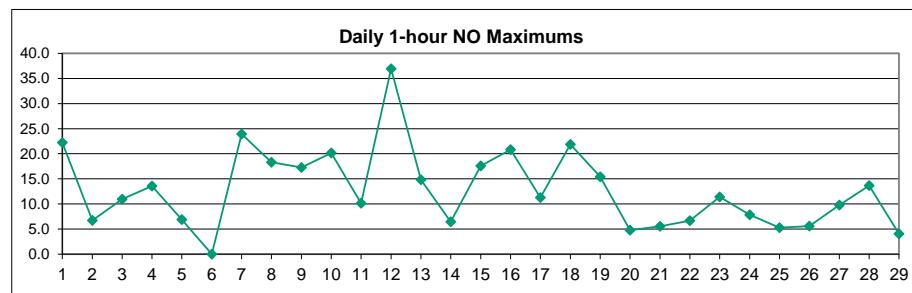
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.6	S	7.2	11.3	9.8	6.8	4.1	5.6	9.1	7.2	8.1	35.2	18.9	6.0	5.1	2.1	2.6	9.2	9.8	9.3	3.5	2.2	2.3	9.0	8.4	35.2
2	6.8	S	9.4	3.7	5.2	5.4	4.0	8.2	12.2	6.0	8.0	3.5	4.2	4.9	5.1	13.3	5.9	4.5	2.5	1.7	1.9	2.0	3.6	2.6	5.4	13.3
3	2.9	S	6.3	7.4	17.4	18.7	2.1	9.4	4.7	3.1	4.5	1.3	4.3	22.4	8.6	2.1	3.3	9.6	15.5	15.4	7.8	9.2	5.7	10.3	8.4	22.4
4	8.5	S	P	P	4.7	9.5	11.9	11.6	21.0	7.0	8.1	1.5	1.9	1.8	2.2	3.0	2.5	1.3	0.8	0.8	1.0	2.1	1.5	5.1	21.0	
5	6.9	S	2.5	1.4	9.4	2.0	2.9	14.4	9.4	11.6	9.8	4.0	6.4	5.3	5.4	11.4	3.3	2.8	1.5	11.1	10.7	8.3	6.3	7.3	6.7	14.4
6	4.6	S	7.1	8.6	6.6	8.7	11.4	11.1	13.4	C	C	C	C	C	C	1.7	2.1	1.6	1.6	1.7	1.4	16.0	27.4	28.5	-	-
7	11.3	S	10.6	15.2	12.8	8.5	11.9	10.7	15.0	13.9	41.9	26.8	13.0	3.3	2.5	2.6	2.6	5.3	2.9	7.7	7.2	4.1	3.8	14.7	10.8	41.9
8	17.6	S	15.7	17.8	20.2	21.4	7.8	1.6	2.4	3.0	2.4	6.3	2.7	3.7	3.9	15.7	5.2	17.8	18.8	15.4	20.9	17.1	18.4	33.3	12.6	33.3
9	20.0	S	29.4	28.0	23.0	31.7	17.7	15.4	7.7	5.9	6.0	1.3	18.7	16.4	4.5	13.7	30.1	25.6	27.1	13.4	9.5	7.4	5.5	4.6	15.8	31.7
10	8.8	S	5.8	6.3	11.8	14.7	9.7	18.3	24.5	31.2	22.9	34.0	7.0	6.8	4.1	1.4	1.6	6.1	1.7	1.3	1.4	1.4	1.1	1.3	9.7	34.0
11	1.0	S	1.1	1.7	3.6	6.0	5.2	17.7	23.7	7.7	13.7	11.9	21.0	17.3	16.5	10.9	20.8	16.1	3.2	22.1	16.5	3.5	2.7	4.3	10.8	23.7
12	12.0	S	2.5	2.3	2.7	20.5	18.5	11.7	10.4	28.2	22.7	27.1	12.2	22.7	55.6	44.0	43.2	38.0	29.3	18.3	15.1	20.0	3.6	12.0	20.5	55.6
13	8.7	S	5.5	7.4	5.0	3.4	5.3	11.4	4.0	3.1	20.2	9.4	1.8	1.0	0.9	1.2	1.4	0.8	0.9	1.6	1.5	7.5	10.4	29.1	6.1	29.1
14	13.3	S	6.7	14.3	4.6	2.5	3.0	16.2	7.0	4.7	2.5	1.8	2.6	1.6	0.9	1.3	1.9	1.6	4.7	4.6	3.0	12.5	4.1	3.6	5.2	16.2
15	4.0	S	24.5	11.4	12.5	20.8	45.2	27.3	6.1	7.2	12.4	22.4	14.6	1.0	6.6	9.6	8.1	1.8	3.7	3.8	22.5	15.4	2.6	2.3	12.4	45.2
16	35.3	S	2.9	3.2	5.8	7.4	7.2	8.3	9.2	14.7	7.5	4.8	0.9	0.6	0.7	0.6	1.5	2.3	7.3	10.4	20.8	6.4	0.9	12.7	7.5	35.3
17	12.4	S	6.5	7.0	10.3	9.4	16.5	8.1	11.3	7.6	8.1	7.4	20.4	22.5	21.8	10.2	10.8	8.9	9.0	10.8	17.4	17.1	16.9	23.0	12.8	23.0
18	27.4	S	19.5	15.6	20.2	26.1	24.9	35.8	43.0	39.2	21.1	23.0	12.2	12.7	3.1	3.3	1.5	3.5	7.2	23.8	13.2	30.4	10.2	6.6	18.4	43.0
19	20.5	S	25.2	5.6	6.1	5.5	7.5	5.6	8.7	10.8	9.8	10.7	14.2	10.8	10.6	4.7	10.9	2.1	5.3	1.3	8.6	4.4	3.2	5.0	8.6	25.2
20	2.9	S	9.9	6.3	8.7	4.7	8.7	8.5	9.6	6.9	10.7	11.0	6.1	3.4	5.2	6.3	1.3	2.0	3.4	1.0	0.8	2.9	1.2	1.4	5.3	11.0
21	1.6	S	8.8	1.9	1.6	2.1	2.6	5.2	4.6	4.9	5.4	12.5	4.3	7.5	13.0	9.4	11.1	4.5	10.0	7.3	14.8	2.6	4.9	2.4	6.2	14.8
22	3.2	S	8.7	2.4	6.6	2.4	11.2	10.0	5.1	5.0	12.5	10.9	15.2	8.7	3.3	1.6	5.3	4.4	8.6	8.0	5.9	5.8	4.1	6.4	6.8	15.2
23	21.5	S	9.7	7.2	13.3	8.5	12.3	11.9	12.5	11.8	23.2	12.7	14.9	9.4	11.8	21.0	8.9	4.6	6.5	8.4	14.2	9.9	26.5	8.7	12.6	26.5
24	14.7	S	19.6	22.2	6.3	15.3	29.3	13.4	22.0	7.1	5.0	4.1	6.0	X	5.1	4.7	8.4	6.5	2.6	5.3	13.5	4.4	5.9	10.5	29.3	
25	7.6	S	6.8	7.2	7.2	5.3	8.3	7.3	13.8	12.3	7.7	10.7	5.3	3.4	4.7	2.9	6.8	4.7	2.3	1.0	0.8	1.7	1.4	0.9	5.7	13.8
26	0.9	S	2.0	2.4	3.0	8.8	2.5	14.4	12.1	7.4	6.9	5.6	4.3	1.0	6.5	9.1	8.0	5.0	4.0	8.4	4.5	9.7	6.2	3.5	5.9	14.4
27	8.5	S	12.5	4.0	1.9	1.1	4.5	10.3	13.0	23.3	16.7	13.3	16.5	14.0	6.6	13.2	14.2	11.1	9.4	6.1	2.0	4.0	3.1	4.9	9.3	23.3
28	2.0	S	7.8	10.3	11.5	10.0	7.8	33.8	6.8	4.4	1.5	1.1	1.1	1.6	1.1	4.0	8.9	6.9	6.1	7.7	8.4	6.4	7.8	7.1	33.8	
29	7.6	S	10.7	3.2	7.2	3.5	4.5	4.0	7.2	5.9	3.5	2.6	6.1	2.6	8.8	6.2	6.5	7.5	2.6	4.7	11.9	4.6	1.7	1.5	5.4	11.9
NO.	29	-	28	28	28	29	29	29	29	28	28	28	28	27	28	29	29	29	29	29	29	29	29	29	657	99%
MEAN	10.4	-	10.2	8.4	9.1	9.9	10.5	12.7	11.7	11.3	11.5	11.6	9.2	7.9	8.0	7.9	8.3	7.5	7.2	8.0	9.0	8.2	6.7	8.9		
MAX	35.3	-	29.4	28.0	23.0	31.7	45.2	35.8	43.0	39.2	41.9	35.2	21.0	22.7	55.6	44.0	43.2	38.0	29.3	23.8	22.5	30.4	27.4	33.3		



Number of Non-Zero Readings	657
Maximum 1-HR Average	55.6 PPB
Maximum 24-HR Average	20.5 PPB
Monthly Calibration Standard Deviation	8.066
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	9.3 PPB

Lagoon NO (ppb) – February 2020

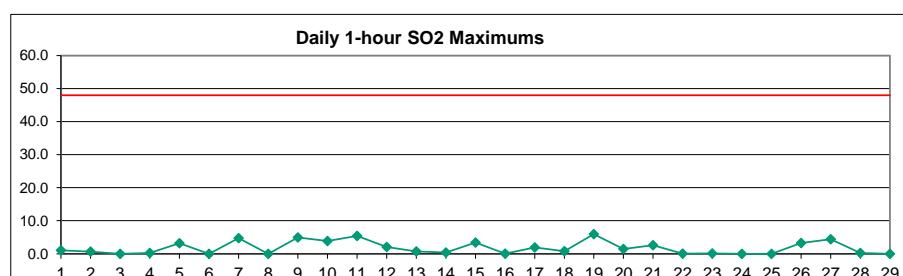
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	3.0	S	1.2	1.5	0.5	0.4	0.2	1.1	1.5	0.9	2.2	22.2	5.9	1.2	1.6	0.6	0.7	2.4	2.6	2.2	0.6	0.2	0.7	1.8	2.4	22.2	
2	2.3	S	2.8	0.7	1.1	1.1	0.7	2.5	4.2	1.6	2.7	1.3	1.7	2.4	2.2	6.7	2.0	1.3	0.7	0.3	0.3	0.4	1.2	0.3	1.8	6.7	
3	0.3	S	0.5	0.6	7.3	8.4	0.3	1.2	1.4	0.6	1.3	0.7	1.8	11.0	3.7	0.8	0.7	1.1	1.4	2.6	1.0	2.6	1.1	3.9	2.4	11.0	
4	4.0	S	P	P	P	1.3	3.5	5.1	4.7	13.6	3.2	3.6	0.7	0.8	0.7	0.8	0.7	0.8	0.9	0.3	0.1	0.3	0.3	0.6	0.4	2.3	13.6
5	3.0	S	0.8	0.4	3.9	0.6	6.6	2.9	5.0	3.4	1.3	2.4	1.8	2.2	4.6	0.8	0.7	4.5	3.3	2.6	1.1	1.8	2.4	6.9	-	-	
6	0.7	S	2.5	2.4	0.6	1.7	3.4	2.6	2.6	C	C	C	C	C	C	0.3	0.5	0.2	0.1	0.2	0.0	5.5	10.6	14.3	-	-	
7	4.3	S	2.2	5.6	4.5	2.1	3.4	2.3	5.1	4.6	23.9	14.0	5.4	1.1	0.7	0.8	0.2	0.5	0.3	2.7	2.4	0.2	0.2	6.3	4.0	23.9	
8	6.0	S	4.1	1.7	0.4	4.6	1.0	0.2	0.3	0.2	0.4	2.5	0.7	1.1	1.1	7.8	1.3	3.5	3.4	3.0	5.6	6.1	7.4	18.3	3.5	18.3	
9	9.5	S	15.9	16.0	10.9	17.3	7.2	5.3	1.7	1.5	1.6	0.3	9.1	7.6	1.5	6.1	14.8	12.3	12.2	2.7	0.8	0.4	0.1	0.1	6.7	17.3	
10	0.1	S	1.7	1.2	3.5	5.7	2.0	5.2	8.0	13.4	10.4	20.1	2.9	2.6	1.4	0.4	0.4	1.5	0.3	0.2	0.1	0.1	0.0	0.1	3.5	20.1	
11	0.1	S	0.1	0.4	0.7	1.5	1.3	6.2	9.6	2.3	6.4	5.3	10.1	7.2	7.0	3.9	8.7	4.9	0.4	7.3	4.5	0.2	0.3	0.4	3.9	10.1	
12	2.4	S	0.2	0.1	0.3	6.6	7.3	1.8	1.1	10.8	10.7	15.5	5.8	12.9	36.9	25.6	21.0	14.8	5.3	1.1	5.4	9.7	0.4	3.8	8.7	36.9	
13	3.2	S	1.4	2.9	1.2	0.8	2.1	4.9	1.3	0.8	10.4	3.8	0.5	0.3	0.3	0.5	0.4	0.2	0.2	0.1	0.0	2.3	2.9	14.8	2.4	14.8	
14	2.1	S	0.3	4.7	0.5	0.4	0.3	6.4	2.7	1.7	0.9	0.7	1.0	0.6	0.3	0.4	0.6	0.3	0.8	0.5	0.4	4.1	0.7	0.5	1.3	6.4	
15	1.0	S	7.3	2.0	1.9	4.6	17.6	7.9	1.9	2.6	5.7	11.2	7.0	0.2	2.3	3.5	2.4	0.3	0.4	0.2	6.1	3.4	0.2	0.2	3.9	17.6	
16	20.8	S	0.2	0.2	2.0	1.7	3.5	1.7	1.7	4.5	2.5	2.1	0.4	0.2	0.2	0.1	0.4	0.5	1.6	2.2	4.8	0.3	0.1	6.1	2.5	20.8	
17	4.1	S	0.7	1.0	2.1	2.6	5.2	2.4	3.5	2.0	2.6	3.1	10.7	11.3	8.8	2.3	1.7	0.5	0.4	1.0	4.7	3.7	3.5	7.8	3.7	11.3	
18	5.6	S	4.1	0.6	2.4	5.0	1.8	11.4	19.8	21.9	10.6	13.8	5.4	4.9	0.8	1.1	0.3	0.6	1.0	4.1	0.2	8.6	2.5	1.0	5.5	21.9	
19	9.3	S	15.4	1.6	2.1	0.7	1.8	0.5	1.6	3.8	4.0	4.9	7.4	4.9	4.6	1.3	4.6	0.4	1.7	0.2	4.1	1.0	0.6	1.1	3.4	15.4	
20	0.7	S	4.1	1.6	2.9	0.9	3.0	3.0	3.7	2.2	4.2	4.8	2.2	1.1	1.7	2.1	0.5	0.6	0.9	0.3	0.2	0.8	0.2	0.1	1.8	4.8	
21	0.1	S	2.7	0.3	0.2	0.6	0.6	1.4	1.5	1.3	1.2	4.5	1.2	2.4	5.5	3.7	3.9	0.8	3.3	1.9	5.1	0.5	1.6	0.4	1.9	5.5	
22	0.8	S	3.4	0.6	1.6	0.3	3.8	2.7	0.6	1.2	5.2	3.8	6.6	2.6	0.9	0.3	1.4	0.7	1.5	1.9	0.5	1.1	0.3	1.5	1.9	6.6	
23	9.8	S	3.4	0.8	3.7	0.6	3.1	1.6	1.9	3.6	11.4	4.6	6.1	2.6	2.7	8.7	1.9	0.3	0.3	0.4	0.4	0.4	9.7	0.9	3.4	11.4	
24	4.7	S	4.6	5.6	0.6	1.8	7.8	1.8	6.0	1.4	1.2	1.4	2.3	X	1.8	1.5	2.8	1.8	0.2	0.7	2.4	0.3	0.3	0.4	2.3	7.8	
25	0.3	S	0.5	1.6	1.7	0.2	2.2	0.9	4.8	5.2	2.9	4.4	1.9	1.2	1.8	0.9	2.4	1.0	0.4	0.2	0.1	0.3	0.2	0.1	1.5	5.2	
26	0.1	S	0.4	0.4	0.5	3.2	0.3	5.6	4.7	2.0	2.0	1.9	1.3	0.3	2.6	3.1	2.9	1.0	0.8	2.4	0.8	2.4	2.0	0.5	1.8	5.6	
27	1.8	S	4.6	0.8	0.2	0.1	0.8	1.8	3.2	9.8	6.8	5.3	7.7	6.2	2.6	5.4	5.6	4.4	2.9	2.1	0.3	1.0	0.6	1.7	3.3	9.8	
28	0.5	S	1.7	3.8	3.7	2.5	2.4	13.6	1.6	1.4	0.6	0.5	0.5	0.7	0.4	1.1	3.1	1.8	1.0	2.2	2.7	1.3	1.2	1.5	2.2	13.6	
29	0.6	S	3.2	0.3	2.0	0.7	1.7	0.8	1.9	2.1	1.2	0.7	2.5	0.6	4.0	2.1	2.0	2.5	0.3	0.4	2.9	0.3	0.2	1.5	4.0		
NO.	29	-	28	28	28	29	29	29	29	28	28	28	28	27	28	29	29	29	29	29	29	29	29	29	657	99%	
MEAN	3.5	-	3.2	2.1	2.3	2.7	3.1	3.8	3.6	4.4	5.0	5.7	4.0	3.3	3.6	3.3	3.1	2.1	1.6	1.6	2.1	1.7	3.1	-	-		
MAX	20.8	-	15.9	16.0	10.9	17.3	17.6	13.6	19.8	21.9	23.9	22.2	10.7	12.9	36.9	25.6	21.0	14.8	12.2	7.3	6.1	9.7	10.6	18.3	-	-	



Number of Non-Zero Readings	657
Maximum 1-HR Average	36.9 PPB
Maximum 24-HR Average	8.7 PPB
Monthly Calibration Standard Deviation	4.051
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	3.1 PPB

Lagoon SO₂ (ppb) – February 2020

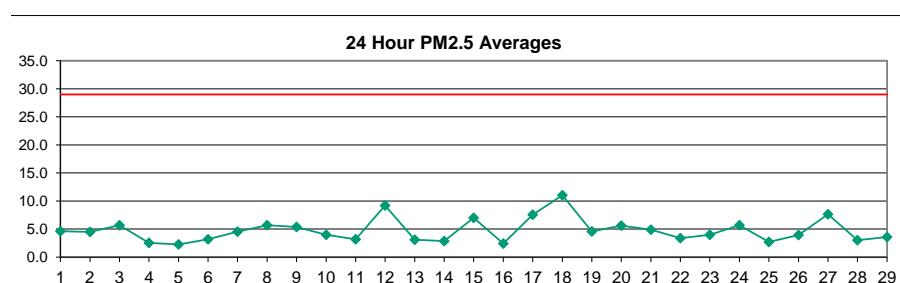
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0.7	S	1.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.1	1.0		
2	0.1	S	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6		
3	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	S	P	P	P	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	0.2	
5	0.0	S	0.0	0.0	0.0	0.0	0.0	1.6	2.4	1.5	3.2	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	0.4	3.2	
6	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	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	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	2.6	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	0.3	4.7	
8	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.1	S	1.4	1.0	0.5	2.8	0.8	0.0	0.0	0.0	0.0	0.0	4.5	1.9	0.8	0.5	4.9	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.9	
10	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	3.9	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	0.2	3.9	
11	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.2	4.1	5.4	4.0	1.4	4.4	1.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.2	5.4	
12	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	2.0	0.1	1.5	0.9	0.5	0.0	0.0	0.0	0.0	1.4	1.5	0.0	0.0	0.4	2.0		
13	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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	0.7	
14	0.0	S	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	0.4	
15	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.4	3.3	0.0	1.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.4	
16	0.0	S	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
17	0.0	S	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.6	1.9	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.3	1.9	
18	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
19	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	6.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	6.0	
20	0.0	S	0.0	1.4	0.1	0.3	0.2	0.0	0.0	0.0	1.5	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	0.1	1.5	
21	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.2	0.6	0.7	0.0	0.0	0.0	0.4	1.3	0.0	0.0	0.0	0.0	0.3	2.6	
22	0.0	S	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
23	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
24	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	0.0	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	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	S	0.0	0.0	0.0	0.3	0.0	0.0	0.7	1.9	0.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.5	0.0	0.0	0.6	3.3	0.0	0.4	3.3		
27	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.0	3.2	1.7	4.4	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.4	
28	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
29	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NO.	29	-	28	28	28	29	29	29	29	28	28	28	28	27	28	29	29	29	29	29	29	29	29	29	29	657	99%	
MEAN	0.0	-	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.7	0.9	0.7	0.7	0.4	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0			
MAX	0.7	-	1.4	1.4	0.5	2.8	0.8	1.6	2.4	1.9	4.7	4.6	6.0	5.4	4.0	1.8	4.9	3.1	3.1	0.8	1.4	1.5	3.3	0.6	0.0	0.0		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	111
Maximum 1-HR Average	6.0 PPB
Maximum 24-HR Average	1.2 PPB
Monthly Calibration Standard Deviation	0.807
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	0.2 PPB

Lagoon PM_{2.5} ($\mu\text{g}/\text{m}^3$) – February 2020

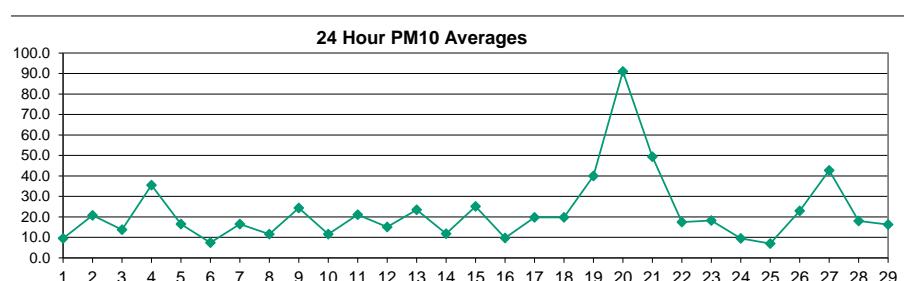
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.3	5.5	3.8	3.3	1.2	4.0	8.0	5.1	6.9	6.1	5.1	5.1	5.5	5.5	4.8	4.4	2.2	4.4	4.4	3.3	4.0	4.8	4.4	2.2	4.6	8.0
2	1.9	5.1	6.2	10.1	7.0	2.8	2.6	3.4	4.8	3.0	1.2	4.8	4.4	3.3	4.8	5.1	4.8	6.6	4.4	5.8	5.1	2.2	3.3	5.1	4.5	10.1
3	1.9	3.3	8.4	5.5	4.0	4.0	5.5	4.0	5.5	4.7	2.6	1.9	5.5	5.1	3.0	5.1	3.3	4.4	11.9	27.0	6.5	5.8	5.1	2.1	5.7	27.0
4	0.8	P	P	P	P	4.0	4.4	6.2	4.4	5.1	4.0	4.0	4.0	0.4	0.0	0.4	1.9	1.5	3.3	1.9	0.4	2.0	1.2	0.4	2.5	6.2
5	0.8	0.1	0.4	0.8	0.0	1.5	3.7	4.0	3.7	3.0	4.6	4.0	2.2	1.4	1.5	1.9	1.9	2.6	1.2	0.8	2.6	6.2	4.0	1.2	2.3	6.2
6	3.3	4.1	3.7	2.6	3.3	2.2	0.0	0.1	3.3	2.2	3.3	6.5	C	C	C	2.7	2.2	3.7	6.2	3.3	3.3	2.2	2.6	5.8	3.2	6.5
7	6.9	4.4	1.2	3.7	4.4	2.2	3.0	0.1	0.0	3.7	5.1	12.3	12.7	7.3	4.0	3.0	1.9	3.0	3.7	3.3	1.9	6.9	7.3	6.9	4.5	12.7
8	5.8	3.7	6.5	9.1	9.1	8.0	8.3	7.6	4.0	1.2	3.0	4.0	3.0	3.7	3.0	3.3	5.1	5.8	7.6	8.4	7.3	6.2	6.2	6.9	5.7	9.1
9	11.9	9.1	6.9	9.8	10.5	6.5	11.9	8.7	4.8	3.3	1.9	0.8	0.5	3.0	5.5	4.0	3.3	3.7	4.8	3.3	4.4	4.0	3.3	3.3	5.4	11.9
10	2.6	2.6	4.0	8.0	4.8	2.2	1.9	3.3	4.4	8.3	10.5	16.2	8.3	0.4	4.0	1.5	0.0	4.8	2.2	0.0	0.8	1.2	0.8	4.0	16.2	
11	1.5	0.0	0.0	0.0	1.3	1.2	0.4	1.2	1.2	1.9	2.7	4.4	6.9	7.3	4.0	4.4	4.8	4.8	5.8	5.1	4.0	5.1	4.4	3.8	3.2	7.3
12	3.7	2.2	2.2	4.0	4.0	1.9	3.3	6.2	5.8	8.0	8.0	10.1	14.8	11.2	18.4	18.8	15.9	13.3	19.5	19.1	18.4	4.4	3.7	4.0	9.2	19.5
13	5.1	3.0	3.3	1.5	0.1	3.0	3.3	1.8	0.1	1.9	3.0	25.9	1.9	2.6	1.7	0.4	1.2	0.8	0.0	0.0	3.3	3.7	2.6	4.0	3.1	25.9
14	3.7	5.8	4.4	4.4	7.6	9.1	4.4	1.2	3.0	3.3	1.2	0.8	1.7	1.2	1.5	2.6	1.9	3.0	3.7	0.1	0.0	1.2	1.5	1.8	2.9	9.1
15	3.3	0.1	10.6	14.1	15.2	14.5	17.0	16.6	11.6	6.9	5.1	4.8	6.5	5.1	1.2	2.6	7.3	5.1	4.0	3.3	2.6	4.0	4.0	2.6	7.0	17.0
16	3.7	3.3	1.5	0.0	1.2	2.2	0.0	0.1	2.6	3.3	4.4	2.6	2.2	1.9	2.5	3.3	1.9	1.5	3.0	4.4	3.3	3.7	3.3	1.9	2.4	4.4
17	2.6	3.0	2.6	4.0	2.2	0.0	0.8	2.6	0.1	0.8	3.0	4.8	6.9	9.1	12.7	14.1	13.4	17.3	17.0	11.9	12.7	14.8	11.6	13.7	7.6	17.3
18	11.9	13.0	13.4	14.8	12.3	14.5	14.8	17.3	14.7	22.3	15.2	13.7	13.0	7.6	5.5	6.2	5.9	4.0	3.7	4.0	11.1	9.1	10.2	6.5	11.0	22.3
19	6.9	6.5	4.4	4.8	5.1	3.0	4.0	4.8	2.2	1.9	4.8	3.7	6.2	7.3	4.8	3.0	4.0	4.4	4.4	3.3	1.5	5.9	7.3	5.1	4.5	7.3
20	4.0	4.4	6.6	6.2	6.5	7.4	6.2	8.4	13.4	9.8	7.6	9.9	8.8	5.1	3.3	3.3	4.0	3.4	2.6	4.8	3.3	0.8	1.9	2.6	5.6	13.4
21	3.3	4.8	6.2	4.0	2.2	2.2	2.2	3.3	5.5	4.8	3.3	4.5	6.9	6.2	6.5	11.2	8.7	8.4	6.2	5.1	5.1	3.7	1.9	1.2	4.9	11.2
22	3.2	3.7	1.9	4.4	5.8	4.8	1.5	1.2	4.8	3.7	1.9	2.2	3.2	4.0	3.3	1.5	1.9	1.2	4.4	8.3	6.9	3.2	1.5	2.2	3.4	8.3
23	3.0	2.6	2.6	3.7	2.6	3.3	4.0	4.8	1.9	5.5	3.3	4.4	4.0	5.1	4.8	3.0	2.6	6.2	5.8	5.1	4.0	4.4	4.4	4.8	4.0	6.2
24	4.8	6.2	4.4	8.2	9.1	6.3	6.2	7.6	5.8	4.4	6.2	4.4	1.8	2.2	1.8	1.9	1.2	3.0	4.8	9.1	11.1	11.9	9.1	5.1	5.7	11.9
25	4.0	4.4	6.5	6.5	3.7	0.8	3.0	1.9	0.8	2.2	2.6	4.0	3.7	0.8	0.0	1.5	1.9	1.9	1.8	2.6	1.7	1.5	3.0	4.0	2.7	6.5
26	3.3	0.1	0.0	4.4	4.8	3.0	1.9	2.2	1.9	2.6	3.7	8.7	9.8	9.1	4.0	7.3	7.6	3.7	3.3	2.6	3.3	1.2	0.8	4.8	3.9	9.8
27	3.3	2.2	4.0	3.7	1.9	1.2	1.9	1.8	0.4	8.1	21.3	25.9	45.3	28.8	10.5	5.7	2.6	4.4	5.1	3.3	0.8	0.0	0.8	0.0	7.6	45.3
28	0.0	5.0	5.1	2.2	2.2	2.6	1.9	3.0	2.6	1.2	1.5	1.2	1.5	2.2	2.2	2.6	3.3	3.0	3.7	5.8	7.6	7.3	4.0	0.4	3.0	7.6
29	0.0	2.2	4.4	4.0	3.7	4.0	2.2	1.1	1.5	2.6	5.1	4.0	2.2	2.2	1.9	3.7	6.5	5.1	5.1	4.4	2.6	7.3	7.6	2.5	3.6	7.6
NO.	29	28	28	28	28	29	29	29	29	29	29	29	28	28	28	29	29	29	29	29	29	29	29	29	689	99%
MEAN	3.9	3.9	4.4	5.1	5.0	4.3	4.4	4.4	4.2	4.5	4.9	6.7	7.2	5.6	4.2	4.5	4.3	4.5	5.4	5.6	4.8	4.6	4.2	3.7		
MAX	11.9	13.0	13.4	14.8	15.2	14.5	17.0	17.3	14.7	22.3	21.3	25.9	45.3	28.8	18.4	18.8	15.9	17.3	19.5	27.0	18.4	14.8	11.6	13.7		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	668
Maximum 1-HR Average	45.3 UG/M3
Maximum 24-HR Average	11.0 UG/M3
Monthly Calibration Standard Deviation	4.285
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	4.8 UG/M3

Lagoon PM₁₀ ($\mu\text{g}/\text{m}^3$) – February 2020

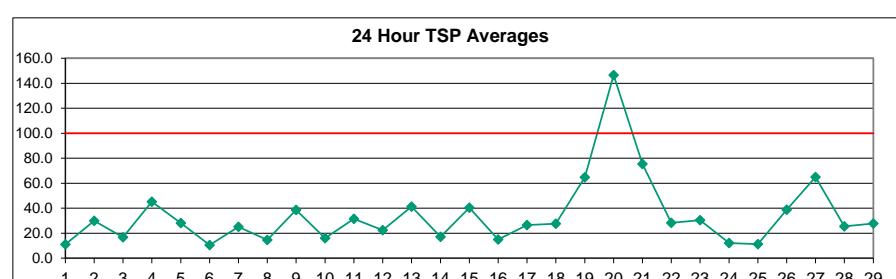
Day	HOUR																								MEAN	MAX				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1	26.3	12.8	8.0	16.8	8.0	5.3	4.6	5.3	6.0	11.2	6.7	4.6	7.5	8.0	8.7	10.1	6.7	14.8	7.4	8.0	9.4	7.4	12.1	10.1	9.4	26.3				
2	13.9	9.2	26.3	22.9	10.8	6.0	2.7	35.9	49.4	26.3	14.1	16.0	7.7	22.3	18.9	22.3	35.8	12.1	19.6	12.8	7.4	14.8	55.2	35.1	20.7	55.2				
3	9.5	12.1	35.1	16.2	16.2	6.7	12.8	25.0	24.3	10.8	12.8	22.3	2.6	3.3	16.2	5.3	4.1	7.4	15.5	28.4	8.7	9.6	10.8	14.7	13.8	35.1	35.1			
4	18.9	P	P	P	P	92.8	49.4	58.2	81.0	57.5	51.3	48.7	39.9	16.2	23.6	10.8	30.4	14.8	6.7	5.3	4.7	2.3	1.3	35.5	96.2	35.5	96.2			
5	3.3	8.7	24.3	3.3	3.3	1.3	7.4	7.4	16.9	32.4	46.0	51.4	23.6	18.2	11.4	14.1	19.6	6.3	4.0	2.6	18.2	23.6	31.1	16.8	16.5	51.4	51.4			
6	10.1	6.4	3.7	6.0	6.0	6.7	4.7	6.0	5.3	0.6	24.3	10.8	C	C	1.3	1.3	3.3	5.3	2.6	1.9	2.6	17.5	29.0	7.4	29.0	7.4	29.0			
7	31.1	10.1	16.2	4.0	4.7	5.3	4.7	6.0	7.4	12.8	12.8	35.1	39.9	46.0	10.8	9.4	13.5	11.5	10.8	14.8	25.0	20.2	21.6	22.3	16.5	46.0	16.5	46.0		
8	11.0	6.7	31.8	20.9	10.9	10.1	9.4	7.4	5.3	8.0	21.6	10.1	12.8	11.4	9.4	6.0	6.0	5.3	6.7	12.1	8.7	16.9	13.5	14.1	11.5	31.8	31.8	31.8		
9	16.2	20.3	41.2	25.0	21.4	23.6	19.6	17.5	39.9	33.8	12.8	6.7	1.9	47.2	54.8	16.9	35.1	49.4	32.4	27.7	20.2	6.7	6.0	6.7	24.3	54.8	24.3	54.8		
10	6.7	10.8	8.6	12.3	27.0	14.1	10.8	6.7	13.6	16.2	22.3	21.6	34.5	5.3	13.5	12.8	6.7	3.3	12.8	7.4	1.9	1.3	2.6	3.6	11.5	34.5	11.5	34.5		
11	4.7	2.6	1.3	28.4	24.3	18.2	22.3	50.1	15.5	12.8	12.8	44.6	48.7	29.7	29.7	31.8	20.2	35.8	22.3	4.0	4.0	13.5	22.9	6.0	21.1	50.1	50.1			
12	9.4	7.4	4.1	4.7	5.3	7.3	4.6	1.9	2.6	6.0	21.6	13.4	18.9	10.1	22.2	37.2	23.0	25.0	22.1	27.0	23.5	12.1	26.3	26.3	15.1	37.2	15.1	37.2		
13	53.4	33.8	59.5	35.8	37.9	67.7	50.7	30.4	13.5	20.2	0.5	58.1	23.0	0.6	0.6	9.4	5.3	4.0	3.3	0.6	0.0	6.0	12.8	36.7	23.5	67.7	67.7	67.7		
14	18.2	23.6	10.1	25.0	47.4	32.4	14.6	10.1	37.2	1.9	0.0	4.0	3.3	14.4	0.6	3.3	6.7	3.3	0.7	6.7	6.0	1.9	5.3	5.3	11.7	47.4	11.7	47.4		
15	5.3	3.8	20.2	21.6	16.9	15.4	22.3	25.7	20.9	18.4	29.0	72.5	65.0	55.5	4.7	52.1	71.7	13.5	6.7	17.5	27.7	8.7	5.3	2.0	25.1	72.5	25.1	72.5		
16	26.3	11.4	12.1	7.4	2.6	10.1	18.2	0.0	0.0	14.8	27.0	8.0	8.7	6.0	3.3	2.6	1.9	5.3	7.4	21.6	16.3	12.8	6.7	1.9	9.7	27.0	9.7	27.0		
17	5.3	15.6	8.0	6.7	6.1	5.3	6.0	6.6	6.0	14.1	21.6	54.8	14.8	20.9	25.7	33.8	16.9	22.5	41.9	21.6	15.5	35.8	35.8	37.9	29.7	19.7	54.8	19.7	54.8	
18	18.5	19.7	18.2	16.9	17.2	19.6	22.3	23.4	28.6	31.8	39.9	42.6	28.4	25.7	20.9	3.3	3.3	2.0	14.8	11.4	16.2	14.1	14.8	21.6	19.8	42.6	19.8	42.6		
19	34.5	9.4	6.0	4.7	7.9	9.8	8.0	9.4	9.3	12.8	25.9	48.7	69.1	75.1	68.0	96.4	44.0	16.9	29.7	36.5	49.4	67.0	90.5	129.9	39.9	129.9	39.9	129.9		
20	99.5	61.6	145.6	174.1	162.5	144.3	154.4	162.6	290.6	110.2	107.0	182.2	144.9	79.9	14.8	14.8	10.1	35.8	37.2	10.0	11.4	9.4	8.0	9.1	290.6	91.1	290.6	91.1	290.6	
21	14.8	33.8	32.4	46.0	57.5	26.3	23.6	44.0	33.8	39.2	41.9	58.9	127.3	31.8	130.7	137.5	83.2	54.8	18.2	33.8	48.7	50.1	10.6	6.8	49.4	137.5	49.4	137.5	49.4	137.5
22	4.0	8.0	60.9	35.2	5.3	8.0	4.7	4.0	15.5	12.1	8.7	47.3	13.5	16.9	18.9	3.3	43.3	8.7	23.6	16.2	25.3	20.9	8.0	6.7	17.5	60.9	17.5	60.9	17.5	60.9
23	4.7	3.4	4.7	9.4	17.4	2.6	3.3	3.3	16.2	55.4	37.9	38.5	44.0	55.5	24.3	29.0	18.2	33.1	3.3	5.3	6.0	6.7	7.4	8.0	18.2	55.5	18.2	55.5	18.2	55.5
24	7.4	7.4	8.0	19.6	13.5	7.4	4.7	7.4	7.4	21.6	13.5	11.4	8.0	8.7	6.7	3.3	3.3	14.8	12.1	12.1	9.4	8.0	6.6	4.0	9.4	21.6	9.4	21.6	9.4	21.6
25	2.6	6.7	4.7	1.9	3.0	1.3	0.0	0.0	4.3	10.1	25.0	36.5	8.7	10.8	12.1	16.9	3.3	4.7	2.7	1.4	0.0	0.0	5.4	4.0	6.9	36.5	6.9	36.5	6.9	36.5
26	0.0	3.3	9.6	6.7	5.1	10.1	29.0	13.5	31.1	39.9	55.5	33.8	20.9	8.0	4.0	17.5	46.0	30.4	46.0	21.6	42.6	13.2	31.8	31.1	22.9	55.5	22.9	55.5	22.9	55.5
27	16.9	46.7	64.3	8.0	18.2	1.2	1.3	1.3	19.6	30.4	52.8	122.5	236.4	102.9	96.8	27.0	20.9	38.5	48.0	29.7	18.2	8.7	6.7	7.4	42.7	236.4	42.7	236.4	42.7	236.4
28	4.7	4.0	5.3	7.4	8.0	17.5	15.5	44.0	23.6	9.4	11.4	10.1	6.0	6.7	7.4	7.4	38.6	39.9	23.6	44.6	23.0	32.4	14.8	26.3	18.0	44.6	18.0	44.6	18.0	44.6
29	6.8	12.1	16.8	19.6	6.7	5.3	4.7	6.0	10.8	31.1	56.1	16.4	13.5	16.2	50.1	20.2	27.7	16.9	11.4	8.0	4.7	14.1	8.4	6.7	16.3	56.1	16.3	56.1	16.3	56.1
NO.	29	28	28	28	28	29	29	29	29	29	29	29	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
MEAN	16.7	14.7	24.5	21.6	20.4	20.1	20.1	21.0	28.0	25.0	28.2	39.1	38.7	27.7	25.0	23.1	21.8	18.1	17.3	16.5	15.6	15.4	17.4	18.0	689	99%				
MAX	99.5	61.6	145.6	174.1	162.5	144.3	154.4	162.6	290.6	110.2	107.0	182.2	236.4	102.9	130.7	137.5	83.2	54.8	48.0	44.6	49.4	67.0	90.5	129.9						



Number of Non-Zero Readings	680
Maximum 1-HR Average	290.6 UG/M3
Maximum 24-HR Average	91.1 UG/M3
Monthly Calibration	3
Standard Deviation	28.46
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	22.2 UG/M3

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

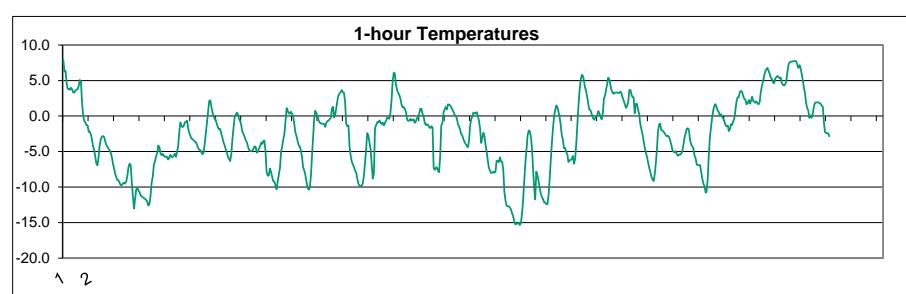
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	33.4	25.1	11.3	16.9	14.0	1.6	5.8	8.5	8.5	10.5	14.0	9.9	8.1	12.6	9.9	7.1	15.4	21.0	7.1	3.0	5.7	4.4	4.4	5.7	11.0	33.4	
2	25.1	20.9	40.3	34.7	0.2	0.2	3.0	54.1	77.6	40.3	19.6	20.9	9.9	32.0	36.2	48.5	61.0	25.1	25.4	14.0	1.3	19.6	70.1	37.5	29.9	77.6	
3	9.9	33.4	50.0	19.6	14.0	5.7	18.2	26.5	32.0	1.6	5.7	25.1	4.4	5.7	22.9	8.5	5.4	12.7	8.5	33.4	16.9	5.7	16.8	19.6	16.8	50.0	
4	27.9	P	P	P	P	120.5	105.3	88.7	101.1	135.7	87.3	61.0	65.2	36.2	14.0	8.5	9.7	16.8	4.4	8.5	3.1	0.0	5.7	3.1	45.1	135.7	
5	0.0	30.4	41.7	12.7	8.1	3.0	11.3	16.8	41.7	61.0	95.6	93.7	34.8	20.9	14.0	15.4	27.5	7.1	5.5	7.1	32.0	34.8	44.4	16.8	28.2	95.6	
6	3.0	8.3	3.0	11.3	5.7	1.6	3.0	3.0	5.7	4.4	33.4	18.2	C	14.0	7.1	9.8	4.4	0.2	1.6	3.0	32.0	47.2	10.5	47.2	10.5		
7	56.5	18.4	30.6	0.0	1.6	4.4	5.7	5.7	14.0	16.8	16.8	54.2	65.2	70.7	9.9	18.2	14.0	8.5	15.4	20.9	41.7	32.0	43.1	40.3	25.2	70.7	
8	5.8	11.3	44.4	33.4	19.6	8.5	8.5	11.3	11.3	16.8	20.9	9.9	15.7	10.3	11.3	9.9	8.5	8.5	11.3	11.3	5.8	15.8	23.7	18.2	14.7	44.4	
9	19.6	34.8	73.5	36.2	34.8	34.5	18.2	27.9	70.7	51.4	20.9	7.9	4.4	79.0	90.1	26.5	55.5	84.5	51.4	48.6	30.0	14.0	7.1	7.1	38.7	90.1	
10	8.5	25.1	12.8	20.9	38.9	12.7	13.0	4.4	18.2	23.7	30.6	32.0	44.4	7.1	8.5	18.2	8.5	4.4	23.7	10.6	5.7	7.0	4.4	1.6	16.0	44.4	
11	0.2	0.0	1.6	19.6	23.7	33.4	44.5	62.4	27.9	23.7	19.6	77.6	79.0	45.8	51.4	52.7	26.5	55.5	44.4	4.4	11.3	11.3	20.5	18.4	31.5	79.0	
12	8.5	20.9	7.1	8.5	7.1	9.8	5.7	4.4	7.6	11.3	30.6	9.9	23.7	12.7	23.7	47.2	34.3	36.2	33.4	48.0	25.1	30.6	45.8	45.8	22.4	48.0	
13	98.4	79.0	117.7	67.9	84.5	130.2	90.1	42.4	14.0	29.2	12.7	88.9	37.5	3.0	3.0	1.6	4.4	3.0	4.4	5.7	8.5	9.9	52.7	41.3	130.2		
14	22.6	38.9	18.2	34.5	52.7	44.4	19.6	15.9	62.4	11.3	5.7	3.0	12.7	15.4	4.4	3.0	16.8	1.6	3.0	9.9	0.2	0.0	8.5	5.7	17.1	62.4	
15	25.1	15.4	25.1	27.9	19.6	18.2	16.8	23.7	27.9	34.6	43.1	137.0	126.0	87.3	7.8	90.1	135.7	19.6	3.0	27.9	34.8	9.9	8.5	3.0	40.3	137.0	
16	36.2	29.2	20.9	5.7	3.0	19.6	20.9	3.0	3.0	26.5	40.3	14.0	14.0	5.7	5.7	4.4	1.6	7.1	5.7	29.2	37.5	22.3	1.6	0.2	14.9	40.3	
17	9.9	25.3	5.7	5.7	5.7	5.7	3.0	11.3	16.8	43.1	85.9	27.9	32.0	22.3	53.0	16.8	29.2	59.7	29.2	16.8	34.8	52.7	40.3	26.6	85.9		
18	18.2	37.5	23.7	19.6	23.7	22.3	25.1	29.2	32.0	38.9	58.3	58.3	37.2	29.2	41.7	8.5	5.1	5.7	35.2	19.6	16.8	16.8	23.7	37.5	27.7	58.3	
19	68.1	27.3	7.1	8.5	16.8	7.1	12.7	8.5	12.7	15.4	37.6	93.3	112.2	119.1	126.0	164.7	66.6	23.7	50.0	55.5	73.5	119.1	157.8	170.2	64.7	170.2	
20	173.0	98.4	276.7	221.4	282.2	260.1	209.0	290.3	450.9	191.0	170.2	334.7	246.2	97.0	22.3	27.9	20.8	10.5	32.0	43.1	15.4	15.4	16.8	12.7	146.6	450.9	
21	19.6	22.8	53.3	83.0	53.3	32.0	28.0	44.5	50.0	56.9	72.1	103.9	182.0	56.9	243.5	231.0	119.7	97.0	25.1	53.5	84.5	83.0	14.0	1.6	75.5	243.5	
22	11.3	9.9	99.7	38.9	16.8	3.0	3.0	7.1	23.7	22.3	18.4	69.3	18.2	26.5	23.8	12.7	97.0	7.1	50.0	27.9	37.5	32.0	12.7	9.8	28.3	99.7	
23	4.4	14.0	14.0	12.9	26.5	4.4	3.0	0.2	32.0	90.5	63.8	65.2	76.2	99.7	37.5	43.1	33.4	48.6	11.3	5.7	9.9	11.3	15.4	7.1	30.4	99.7	
24	9.9	11.3	8.5	27.9	15.4	8.5	7.1	7.5	5.7	34.8	18.2	19.6	9.9	5.7	4.4	9.9	5.7	18.2	11.3	16.8	11.3	18.2	5.7	1.6	12.2	34.8	
25	5.7	1.6	1.6	7.1	11.3	4.4	1.6	0.2	5.7	18.2	43.1	66.6	22.3	16.8	12.7	16.8	7.1	8.5	4.4	3.0	1.6	4.4	5.7	1.6	11.3	66.6	
26	0.0	11.3	15.4	3.0	9.9	14.0	51.4	19.6	66.6	69.3	101.1	47.2	27.9	15.4	1.6	20.9	83.1	58.3	73.5	41.7	69.7	18.2	67.9	44.4	38.8	101.1	
27	27.9	88.7	111.6	20.9	33.4	4.4	3.0	5.7	27.9	40.3	79.0	157.8	354.1	167.5	130.1	34.8	65.2	81.8	37.5	38.9	5.7	3.0	7.1	65.0	354.1		
28	7.1	7.1	3.2	9.9	11.3	22.3	22.3	61.0	34.8	18.3	12.6	9.9	12.6	5.7	0.0	3.0	58.3	61.3	39.6	72.9	37.5	44.4	22.3	33.4	25.4	72.9	
29	14.0	14.0	16.9	22.6	7.1	7.1	54.1	23.7	29.2	63.8	88.7	20.9	25.3	40.3	88.7	31.6	40.3	20.7	18.2	4.4	7.1	18.2	3.0	5.0	27.7	88.7	
NO.	29	28	28	28	28	29	29	29	29	29	29	29	28	28	28	29	29	29	29	29	29	29	29	29	29	689	99%
MEAN	25.8	27.2	40.6	29.7	30.0	29.1	28.1	31.0	45.0	40.5	44.9	61.9	60.6	41.3	38.1	35.6	35.1	26.7	25.6	23.9	23.4	22.1	25.8	24.0			
MAX	173.0	98.4	276.7	221.4	282.2	260.1	209.0	290.3	450.9	191.0	170.2	334.7	354.1	167.5	243.5	231.0	135.7	97.0	81.8	72.9	84.5	119.1	157.8	170.2			



Number of 24HR Exceedences	1
Number of Non-Zero Readings	682
Maximum 1-HR Average	450.9 ug/m³
Maximum 24-HR Average	146.6 ug/m³
Monthly Calibration Standard Deviation	46.6
Operational Time	692 HRS
Operational Uptime	99.4 %
Monthly Average	34.0 ug/m³

Lagoon Temperature (°C) – February 2020

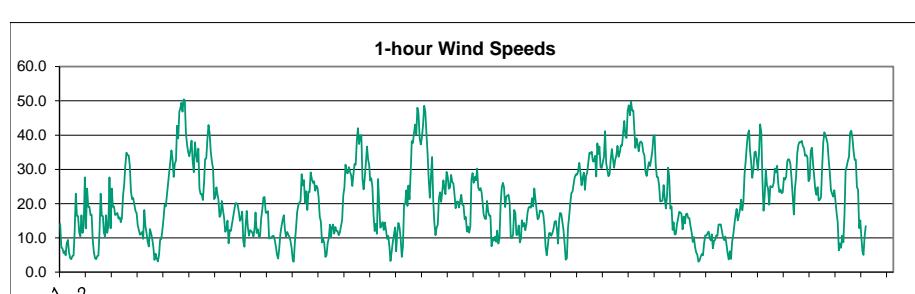
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7.9	6.3	6.4	4.6	3.9	3.8	3.7	4.0	3.8	3.4	3.3	3.6	3.7	3.8	4.2	5.1	4.8	1.9	0.0	-0.7	-0.9	-1.3	-1.3	-2.2	3.0	7.9	
2	-2.2	-2.6	-3.4	-4.2	-4.7	-4.9	-5.4	-5.7	-6.7	-6.9	-5.8	-4.1	-3.3	-2.9	-2.8	-3.0	-3.6	-4.1	-4.3	-4.6	-4.8	-5.2	-5.8	-6.8	-4.5	-2.2	
3	-7.4	-8.2	-8.6	-9.0	-9.0	-9.4	-9.7	-9.8	-9.5	-9.4	-9.5	-9.2	-8.5	-7.2	-6.7	-6.9	-9.3	-11.4	-13.0	-11.6	-10.3	-10.1	-10.5	-10.7	-9.4	-6.7	
4	-11.2	P	P	P	P	-11.8	-12.1	-12.6	-12.4	-11.2	-9.4	-8.5	-6.8	-6.4	-5.7	-5.2	-4.1	-4.5	-5.2	-5.5	-5.3	-5.6	-5.7	-5.7	-7.8	-4.1	
5	-5.7	-6.1	-5.8	-5.5	-5.8	-5.6	-5.3	-5.8	-5.0	-4.2	-2.2	-0.9	-1.4	-1.6	-1.4	-0.9	-0.8	-0.6	-1.8	-2.4	-2.7	-3.2	-3.2	-3.2	-3.5	-0.6	
6	-3.4	-3.6	-3.7	-4.0	-4.5	-4.7	-4.8	-5.2	-5.4	-5.2	-3.9	Y	Y	Y	2.1	2.2	1.3	0.5	-0.1	-0.4	-0.5	-1.1	-1.6	-1.9	-2.3	2.2	
7	-1.8	-2.5	-3.0	-3.7	-4.1	-4.7	-5.2	-5.7	-6.1	-6.3	-5.4	-3.2	-1.7	-0.2	0.2	0.5	0.2	-0.4	-0.7	-1.2	-2.2	-2.5	-2.9	-3.4	-2.7	0.5	
8	-3.7	-4.2	-4.7	-4.9	-5.0	-4.9	-4.6	-4.3	-4.3	-5.2	-5.0	-4.6	-4.2	-3.7	-3.9	-3.5	-3.5	-4.8	-7.8	-8.4	-8.4	-7.4	-7.9	-8.5	-5.3	-3.5	
9	-9.2	-9.2	-9.8	-10.3	-9.2	-8.3	-7.3	-5.0	-4.3	-3.3	-2.5	-0.7	1.1	0.7	0.4	0.3	0.6	0.3	0.1	-1.0	-2.3	-2.8	-3.5	-4.1	-3.7	1.1	
10	-4.3	-4.9	-5.8	-7.3	-7.7	-8.3	-9.3	-10.1	-10.4	-10.1	-8.3	-5.4	-2.8	-0.6	0.7	0.4	0.1	-0.6	-0.9	-1.1	-1.1	-1.1	-1.1	-1.5	-4.2	0.7	
11	-0.9	-0.7	-0.6	-0.4	-0.2	1.1	1.3	-0.2	0.3	1.2	2.3	2.8	3.2	3.4	3.7	3.3	3.3	2.0	-1.1	-1.4	-1.3	-4.3	-5.6	-6.4	0.2	3.7	
12	-6.8	-7.2	-7.7	-8.0	-8.9	-9.5	-9.8	-9.9	-9.8	-9.5	-8.5	-6.7	-4.8	-2.4	-2.7	-3.7	-4.6	-6.7	-8.8	-8.1	-1.7	-1.3	-0.9	-0.9	-6.2	-0.9	
13	-0.6	-0.9	-1.1	-0.9	-1.3	-0.9	-0.6	-0.2	-0.3	-0.4	0.4	2.2	4.8	6.1	6.0	4.4	3.6	3.3	3.0	2.4	1.6	1.2	1.2	1.0	1.4	6.1	
14	0.5	-0.5	-0.7	-0.7	-0.4	-0.6	-0.6	-0.5	-0.9	-0.8	-0.3	-0.3	0.3	1.0	1.0	0.3	0.0	-0.9	-1.3	-1.2	-1.2	-1.6	-1.7	-1.4	-0.5	1.0	
15	-1.6	-7.3	-7.6	-7.3	-7.2	-7.6	-7.9	-5.8	-1.3	-1.0	0.4	0.9	1.3	0.9	1.7	1.6	1.5	1.2	0.9	0.6	0.1	0.1	-0.3	-1.2	-1.9	1.7	
16	-1.5	-1.9	-2.5	-2.7	-3.2	-3.7	-3.9	-4.2	-4.4	-3.6	-1.5	-0.5	-0.1	0.5	0.4	0.4	0.6	0.0	-0.7	-1.7	-3.8	-3.1	-2.3	-2.9	-1.9	0.6	
17	-3.9	-5.0	-6.1	-7.2	-7.6	-8.0	-8.0	-7.9	-8.0	-7.9	-6.3	-6.3	-6.5	-5.8	-6.4	-6.5	-7.6	-10.7	-11.9	-12.7	-12.7	-12.7	-12.9	-13.1	-8.4	-3.9	
18	-13.7	-14.1	-14.8	-15.2	-15.1	-15.2	-15.0	-15.3	-15.1	-13.7	-11.8	-9.1	-6.6	-4.7	-2.7	-2.0	-2.2	-3.0	-4.7	-7.8	-10.3	-11.7	-7.8	-8.4	-10.0	-2.0	
19	-9.2	-10.1	-10.9	-11.4	-11.7	-12.2	-12.2	-12.2	-12.4	-12.4	-11.1	-8.8	-6.1	-3.7	-1.6	0.0	0.9	1.5	1.2	0.5	-0.1	-1.1	-2.7	-3.3	-4.5	-5.9	1.5
20	-4.5	-5.1	-5.4	-6.5	-6.2	-6.2	-6.1	-5.6	-6.7	-6.0	-3.9	-1.2	1.5	3.6	5.1	5.8	5.7	5.1	4.1	3.6	2.7	1.7	0.9	0.8	-0.9	5.8	
21	0.3	-0.2	-0.5	-0.3	-0.1	0.1	0.7	0.4	-0.1	-0.5	0.4	2.4	2.9	3.8	4.6	5.4	5.2	4.4	3.6	3.3	3.1	3.3	3.3	3.3	2.0	5.4	
22	3.2	3.3	3.5	3.2	2.6	2.1	1.7	1.1	1.4	2.0	3.7	3.7	3.0	2.7	2.7	0.4	1.7	1.7	0.9	0.2	-1.1	-1.9	-2.6	-3.5	1.5	3.7	
23	-4.5	-5.2	-5.7	-6.5	-7.3	-7.9	-8.5	-8.9	-9.1	-8.2	-6.5	-4.5	-2.3	-1.2	-1.1	-2.0	-2.0	-2.2	-2.4	-2.7	-2.9	-2.8	-3.0	-3.5	-4.6	-1.1	
24	-4.0	-4.8	-5.0	-5.2	-4.9	-5.3	-5.6	-5.4	-5.4	-5.3	-5.0	-4.1	-3.1	X	-1.8	-1.7	-1.9	-3.4	-4.0	-4.3	-4.6	-5.6	-6.0	-6.8	-4.5	-1.7	
25	-6.9	-6.9	-7.9	-8.8	-8.8	-9.5	-9.9	-10.8	-10.6	-9.0	-5.6	-3.0	-1.6	-0.2	0.8	1.4	1.7	1.2	0.8	0.6	0.0	0.3	-0.1	-0.3	-3.8	1.7	
26	-0.8	-1.3	-1.4	-1.4	-2.1	-1.8	-1.2	-1.3	-0.8	-0.4	0.8	2.0	2.6	2.6	3.3	3.5	3.4	2.8	2.4	2.3	1.6	1.8	2.3	1.8	0.9	3.5	
27	2.1	2.7	2.1	2.1	1.9	2.1	1.8	1.7	2.0	3.3	4.2	4.8	5.6	6.3	6.6	6.8	6.4	6.0	5.4	5.2	4.7	4.6	5.3	5.5	4.1	6.8	
28	5.6	5.5	5.3	5.4	4.6	4.4	4.3	4.4	4.8	6.1	7.2	7.6	7.6	7.7	7.7	7.8	7.7	7.2	6.8	7.2	6.7	5.8	4.9	6.3	7.8		
29	3.9	3.3	1.9	1.2	0.8	-0.3	0.1	-0.2	0.3	1.4	1.8	1.9	1.9	1.9	1.8	1.8	1.5	1.4	-0.9	-2.3	-2.4	-2.4	-2.5	-2.9	0.5	3.9	
NO.	29	28	28	28	28	29	29	29	29	29	28	28	28	27	29	29	29	29	29	29	29	29	29	29	688	99%	
MEAN	-2.9	-3.3	-3.7	-4.1	-4.3	-4.8	-4.8	-4.9	-4.7	-4.2	-3.0	-1.7	-0.6	0.2	0.6	0.6	0.4	-0.4	-1.4	-1.8	-2.1	-2.4	-2.5	-3.0			
MAX	7.9	6.3	6.4	5.4	4.6	4.4	4.3	4.4	4.8	6.1	7.2	7.6	7.6	7.7	7.7	7.8	7.7	7.2	6.8	7.2	6.7	5.8	5.5				



Number of Non-Zero Readings	688
Maximum 1-HR Average	7.9 C
Maximum 24-HR Average	6.3 C
Monthly Calibration Standard Deviation	4.871
Operational Time	688 HRS
Operational Uptime	98.9 %
Monthly Average	-2.5 C

Lagoon Wind Speed (km/hr) –February 2020

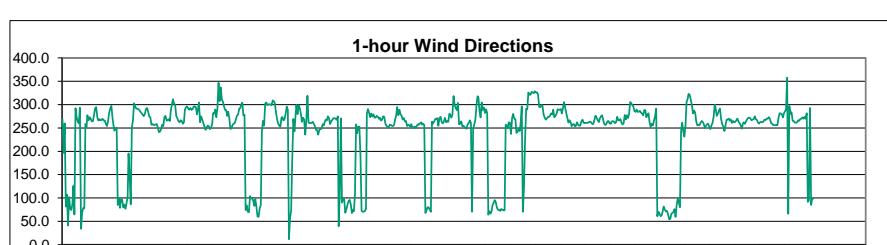
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	14.1	7.3	6.9	5.6	6.1	4.9	8.5	9.4	5.8	4.1	3.8	4.7	4.9	11.9	22.9	16.5	16.4	11.6	10.5	16.6	11.5	13.5	27.7	12.8	10.8	27.7
2	24.4	19.1	19.1	16.7	16.9	17.3	15.6	16.0	14.5	15.8	22.4	25.5	31.1	34.9	34.2	34.1	31.0	23.5	21.3	21.6	19.7	17.9	17.3	13.6	21.8	34.9
3	12.3	10.9	11.3	11.7	9.7	18.1	13.4	11.4	8.8	7.5	12.6	11.4	9.8	7.4	3.6	5.4	4.0	3.1	4.9	9.5	9.7	12.3	15.6	19.7	10.2	19.7
4	19.2	P	P	P	P	35.5	33.0	27.8	31.7	32.5	42.8	39.0	46.9	47.6	49.4	46.8	50.4	50.2	40.8	37.3	35.1	33.8	35.8	38.4	38.7	50.4
5	32.4	29.2	37.9	34.3	32.2	36.1	24.3	22.8	21.1	25.7	33.0	33.2	38.7	42.9	40.6	35.2	32.2	30.4	21.3	21.9	24.7	22.6	21.1	29.9	42.9	
6	16.2	16.8	20.8	18.1	15.8	11.8	12.4	15.0	8.4	12.4	12.1	Y	Y	Y	20.1	20.1	19.7	17.6	15.0	15.7	17.7	9.1	7.4	13.4	15.0	20.8
7	17.9	13.1	10.7	12.3	12.0	11.5	10.4	13.0	17.4	11.5	12.5	10.3	10.5	15.7	18.3	21.9	21.9	17.4	17.3	17.8	9.8	10.1	10.0	10.6	13.9	21.9
8	10.6	9.4	7.5	5.0	4.0	7.1	11.2	13.5	15.3	16.6	12.4	10.4	11.8	11.0	10.4	9.0	6.9	3.3	3.1	8.8	12.7	17.5	19.4	20.3	10.7	20.3
9	20.7	28.6	25.3	26.9	20.2	23.7	18.2	23.5	23.4	29.1	27.2	26.1	26.5	23.8	25.2	24.7	21.8	16.2	14.8	8.7	9.8	8.4	4.5	5.0	20.1	29.1
10	8.5	9.9	13.8	10.2	13.2	13.9	11.3	13.2	12.0	12.0	10.8	11.6	13.5	15.2	22.3	24.6	31.3	29.0	28.9	30.6	29.2	28.3	25.2	28.6	18.6	31.3
11	31.6	31.4	38.4	42.0	37.4	39.5	40.1	27.3	24.1	27.4	31.8	36.7	32.9	31.1	26.7	27.4	24.8	16.6	12.0	14.1	11.2	27.2	19.5	13.0	27.7	42.0
12	13.5	14.7	12.3	14.5	12.3	9.8	10.6	7.6	3.3	5.9	8.7	10.8	13.1	6.1	11.6	14.4	13.0	9.7	4.4	7.5	19.8	19.9	23.9	19.3	12.0	23.9
13	25.3	21.2	28.8	38.3	37.7	40.7	43.1	40.2	48.0	46.1	39.0	37.2	39.4	43.1	48.5	46.8	40.4	34.7	27.0	21.7	28.0	33.6	20.9	14.4	35.2	48.5
14	10.8	13.1	13.9	21.4	23.3	20.5	23.6	26.8	24.3	22.8	29.3	27.9	24.4	24.7	28.4	26.4	25.9	22.8	18.7	20.6	20.6	18.9	20.9	22.6	22.2	29.3
15	19.7	19.5	15.4	16.1	11.9	13.3	11.5	13.2	27.1	28.9	26.1	27.8	26.8	30.3	24.7	23.9	24.6	23.3	19.9	16.9	15.7	15.5	20.8	17.8	20.4	30.3
16	16.5	16.5	7.6	9.8	9.2	10.4	8.9	12.2	8.3	9.9	19.9	24.7	26.1	24.8	19.0	22.0	22.4	22.6	20.3	10.1	9.9	11.0	18.1	17.4	15.7	26.1
17	10.9	11.0	13.7	8.7	9.8	15.2	13.3	14.4	12.3	13.9	17.3	18.9	19.1	18.8	21.6	19.2	24.4	21.3	18.2	15.4	15.9	18.0	17.7	17.9	16.1	24.4
18	16.7	13.5	7.4	4.9	7.8	11.4	11.5	10.6	11.4	12.7	14.7	15.0	12.6	8.4	15.3	17.3	17.1	14.8	12.5	8.4	3.7	4.1	12.9	16.2	11.7	17.3
19	20.0	23.1	23.5	25.8	27.8	28.5	28.5	29.5	31.9	29.1	25.4	27.6	29.1	24.0	28.1	29.1	32.0	34.9	34.6	35.1	32.4	32.3	33.9	28.0	28.9	35.1
20	37.6	34.5	36.6	30.6	30.4	32.0	33.6	41.1	31.8	29.9	28.0	28.6	32.9	36.0	32.9	30.5	32.9	34.1	36.8	33.7	34.9	37.0	36.9	40.7	33.9	41.1
21	44.1	39.7	39.2	47.1	48.7	45.8	49.7	47.2	47.2	41.0	36.3	39.1	37.3	35.3	37.9	38.1	37.6	35.0	34.2	29.2	28.1	30.2	32.1	31.0	38.8	49.7
22	33.0	35.3	39.6	40.0	31.5	27.8	27.7	25.3	20.6	20.8	20.9	25.4	21.6	18.6	22.2	30.5	27.4	18.6	19.2	12.3	14.6	11.0	11.1	14.1	23.7	40.0
23	15.6	17.6	17.4	17.0	12.6	16.2	14.2	16.9	17.1	15.8	15.7	13.4	11.6	8.8	10.2	7.4	5.8	5.1	3.1	3.5	4.5	5.3	4.9	8.4	11.2	17.6
24	10.7	10.7	11.4	11.9	9.8	9.3	11.1	7.0	9.2	9.4	10.8	10.6	13.9	X	13.9	12.0	10.1	9.3	10.4	8.1	5.5	3.8	6.1	3.9	9.5	13.9
25	8.9	10.9	13.8	16.5	18.5	15.1	16.6	18.5	21.2	18.1	20.6	28.7	32.4	37.0	40.4	41.4	35.6	32.3	27.6	30.0	35.0	35.2	32.7	29.8	25.7	41.4
26	34.7	43.1	40.7	27.1	17.9	22.2	30.1	25.5	24.5	19.7	25.2	24.9	24.9	26.1	30.3	29.1	31.0	25.9	23.4	24.1	23.1	23.4	27.6	27.0	27.1	43.1
27	27.9	32.4	32.9	32.9	31.3	27.2	22.2	16.9	24.5	27.9	34.7	37.1	38.0	37.9	38.3	36.8	36.2	34.0	34.2	33.5	26.5	27.2	35.5	36.3	31.8	38.3
28	31.6	27.9	23.9	22.6	24.8	20.9	21.2	21.9	30.3	37.7	40.8	40.0	39.0	37.6	32.9	29.2	24.0	22.9	22.1	23.9	20.9	17.4	14.7	6.4	26.4	40.8
29	8.4	7.1	10.7	8.7	16.8	29.7	30.9	32.5	33.7	40.7	41.3	39.3	35.4	32.8	32.8	24.8	24.1	12.9	15.1	9.8	5.9	5.0	10.4	13.4	21.8	41.3
NO.	29	28	28	28	28	29	29	29	29	29	29	28	28	27	29	29	29	29	29	29	29	29	29	29	688	99%
MEAN	20.5	20.3	20.7	20.6	19.6	21.2	20.9	20.7	21.1	21.4	23.1	24.5	24.9	25.5	26.4	25.9	25.1	21.9	20.0	18.8	18.4	19.0	20.2	19.3		
MAX	44.1	43.1	40.7	47.1	48.7	45.8	49.7	47.2	48.0	46.1	42.8	40.0	46.9	47.6	49.4	46.8	50.4	50.2	40.8	37.3	35.1	37.0	36.9	40.7		



Number of Non-Zero Readings	688
Maximum 1-HR Average	50.4 KM/HR
Maximum 24-HR Average	38.8 KM/HR
Monthly Calibration Standard Deviation	10.93
Operational Time	688 HRS
Operational Uptime	98.9 %
Monthly Average	21.7 KM/HR

Lagoon Wind Direction (°) – February 2020

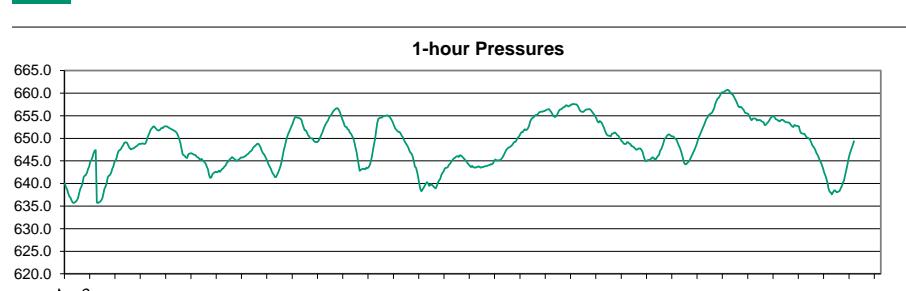
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	268.5	196.4	260.0	81.5	107.2	41.2	102.1	77.1	74.4	87.3	125.8	64.8	292.4	272.9	263.8	259.9	293.4	34.1	68.4	78.5	78.2	258.4	252.2	277.5	280.0	293.4		
2	266.3	273.1	269.6	264.2	264.6	266.0	274.5	277.4	291.9	294.8	273.3	265.9	268.7	266.6	267.1	270.0	265.7	266.1	258.9	254.2	264.8	282.8	292.0	297.0	270.7	297.0		
3	272.3	254.1	244.0	250.6	250.4	85.1	100.3	79.0	97.8	96.3	79.7	86.2	77.2	89.2	103.2	195.4	147.1	86.5	250.5	266.2	302.7	296.2	291.3	291.0	278.6	302.7		
4	290.4	P	P	P	P	275.4	279.9	289.9	293.1	285.2	274.4	273.2	256.9	258.4	256.1	256.9	257.4	258.3	251.4	241.1	242.4	247.6	257.0	253.9	263.0	293.1		
5	272.9	275.8	266.1	265.7	268.9	264.8	286.7	300.3	311.2	302.6	297.9	275.2	270.1	264.4	262.1	266.5	264.9	259.0	262.7	288.9	294.5	296.2	291.8	289.2	276.0	311.2		
6	292.7	288.6	290.5	296.0	296.0	294.6	279.3	291.4	304.5	262.0	274.7	Y	Y	Y	246.3	251.3	254.9	253.9	247.6	250.2	258.0	281.7	280.8	289.7	273.6	304.5		
7	272.8	292.8	346.9	307.8	336.8	311.3	306.2	295.7	288.7	288.1	275.8	285.1	270.7	248.2	248.9	257.1	259.0	261.0	268.7	276.3	279.1	291.5	292.3	300.6	281.2	346.9		
8	304.4	276.9	278.2	74.2	84.1	70.3	69.6	104.0	98.7	100.8	93.1	83.3	97.6	82.3	60.6	59.7	77.2	85.1	241.6	265.1	255.0	301.7	304.7	299.1	45.3	304.7		
9	300.0	301.1	300.4	298.3	309.1	307.6	302.6	283.9	268.7	259.4	255.2	253.0	271.9	273.5	266.0	269.3	281.0	295.7	288.6	11.6	57.5	73.3	184.1	269.1	284.1	309.1		
10	242.7	277.3	299.3	279.6	298.7	292.9	280.5	263.2	272.0	268.0	235.5	266.3	261.8	260.4	260.7	260.6	263.0	258.8	253.8	246.3	245.3	235.5	245.9	261.7	318.8			
11	247.5	248.6	258.0	255.1	262.3	267.7	266.2	274.9	270.6	258.3	264.7	267.4	271.2	270.5	270.2	267.3	274.8	39.9	108.4	270.8	90.0	97.8	98.1	68.7	263.9	274.9		
12	76.2	85.3	93.4	95.9	86.5	67.5	74.8	71.1	107.9	257.5	238.4	253.2	252.8	190.5	72.6	70.2	71.0	72.0	76.5	280.4	290.6	283.1	273.2	281.0	39.0	290.6		
13	274.5	279.4	272.3	272.1	275.8	274.2	269.6	271.7	266.1	267.6	274.9	274.0	259.7	254.7	252.3	250.9	257.2	256.5	254.6	254.0	256.5	267.2	275.9	294.8	265.7	294.8		
14	277.3	289.0	279.4	276.5	267.9	271.1	264.0	264.8	253.9	256.6	256.3	252.8	258.0	250.4	250.8	253.4	249.9	254.7	257.9	257.0	259.7	262.4	257.1	259.0				
15	256.3	67.8	73.4	80.1	79.6	75.3	70.2	263.6	259.5	264.0	269.2	268.8	271.2	254.8	271.5	274.2	262.6	259.6	264.0	271.7	262.0	264.6	263.2	280.6	268.6	280.6		
16	278.8	272.1	279.0	318.4	299.7	292.5	288.2	303.7	257.7	258.7	264.1	253.9	254.5	252.7	249.4	248.7	258.1	260.5	266.5	260.7	70.5	246.8	257.7	267.0	265.1	318.4		
17	297.3	318.0	315.6	286.3	272.4	304.8	288.9	293.9	282.0	289.9	281.5	64.3	71.7	66.5	71.9	84.0	91.4	95.3	91.4	79.4	74.5	74.7	72.1	76.5	47.1	318.0		
18	74.8	73.5	73.5	256.8	255.4	249.2	262.1	261.3	237.0	271.1	280.1	270.1	268.8	239.6	241.7	249.2	243.4	261.5	296.1	70.6	121.1	224.2	291.2	289.6	264.1	296.1		
19	325.8	321.0	321.0	327.4	326.0	324.4	328.9	326.0	326.3	321.7	296.0	294.1	298.7	298.5	279.5	272.5	267.8	270.4	273.6	273.4	276.4	281.0	278.7	289.3	298.0	328.9		
20	273.0	276.0	280.2	290.0	288.6	289.4	290.4	280.9	291.6	305.1	294.8	282.1	272.5	261.5	266.5	262.8	253.8	257.3	258.6	253.2	254.5	262.1	257.1	254.8	272.3	305.1		
21	254.9	264.0	268.0	261.3	260.4	261.4	260.8	261.2	262.7	263.8	262.4	258.8	258.4	266.9	276.3	272.0	267.1	262.8	270.3	274.7	277.1	268.4	259.6	256.5	264.1	277.1		
22	258.2	264.2	265.1	259.6	259.0	263.9	264.6	263.6	260.2	262.7	274.1	266.8	265.9	269.1	261.9	257.4	260.2	277.6	268.2	277.2	270.9	281.5	305.6	266.1	305.6			
23	299.7	296.2	286.5	284.2	289.7	284.3	284.7	286.7	282.4	281.3	276.8	288.5	287.6	273.0	277.4	281.4	261.5	252.1	259.2	255.4	265.9	275.2	291.3	61.0	284.6	299.7		
24	70.4	66.4	61.3	61.8	70.2	81.6	75.2	71.4	72.5	64.6	54.3	55.2	66.3	X	70.5	75.9	59.6	85.0	98.6	89.7	80.5	243.1	261.4	242.4	70.8	261.4		
25	231.3	254.6	306.1	312.1	323.0	321.2	310.5	300.0	281.3	287.9	282.8	263.6	255.7	256.4	256.1	261.6	265.0	263.0	258.7	250.5	254.4	258.0	259.1	252.2	268.2	323.0		
26	247.5	255.4	260.9	274.5	300.2	292.1	275.9	280.7	287.4	291.5	268.6	258.1	253.4	243.2	255.5	267.9	268.2	270.4	265.5	268.5	260.6	264.8	262.4	263.2	266.6	300.2		
27	266.5	270.1	263.5	260.3	255.8	248.6	259.3	262.0	258.8	264.2	268.5	271.5	271.9	270.5	266.3	268.0	268.9	275.2	268.8	266.9	262.2	259.2	262.4	263.3	265.3	275.2		
28	262.1	263.7	267.6	267.1	270.1	269.6	273.0	269.3	260.4	259.1	256.6	256.1	255.9	256.2	256.0	272.1	281.7	281.3	279.0	272.7	281.8	286.2	289.8	357.6	267.1	357.6		
29	66.1	297.2	280.1	283.9	265.5	264.4	261.7	261.2	262.3	266.6	265.3	268.7	269.6	272.5	269.8	274.1	269.7	281.5	91.9	95.1	292.7	84.9	98.5	98.6	268.4	297.2		
NO.	29	28	28	28	28	29	29	29	29	29	29	29	29	28	28	27	29	29	29	29	29	29	29	29	29	29	688	99%
MEAN	245.6	246.4	252.1	244.3	247.3	238.4	239.7	245.8	244.2	249.5	245.3	232.9	242.4	239.4	229.3	234.8	234.2	218.6	227.7	224.4	223.5	243.4	251.6	250.8				
MAX	325.8	321.0	346.9	327.4	336.8	324.4	328.9	326.0	326.3	321.7	297.9	294.1	318.8	298.5	279.5	281.4	293.4	295.7	296.1	288.9	302.7	301.7	305.6	357.6				



Number of Non-Zero Readings	688
Maximum 1-HR Average	358 degrees
Maximum 24-HR Average	298 degrees
Operational Time	688 HRS
Operational Uptime	98.9 %
Monthly Average	239.6 degrees
Monthly Calibration Standard Deviation	74.43

Lagoon Pressure (mmHg) – February 2020

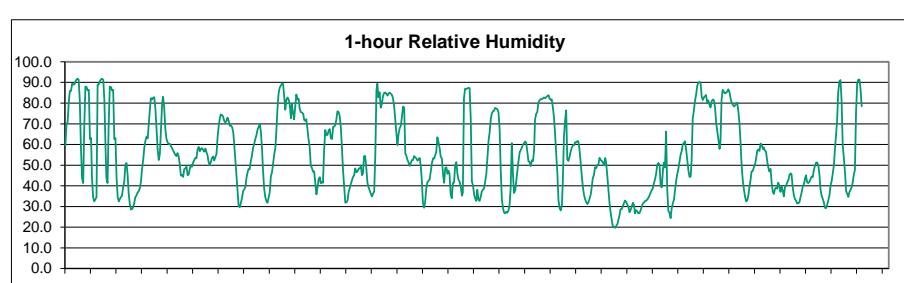
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	640.0	639.1	638.7	637.8	637.1	636.9	636.2	635.8	635.7	635.8	636.0	636.3	636.8	637.9	638.8	639.3	640.1	641.4	641.7	641.9	642.4	643.2	643.8	644.8	639.1	644.8
2	645.1	645.8	646.7	647.3	647.4	647.6	648.2	648.5	649.0	649.1	649.1	648.7	648.1	647.7	647.6	647.7	647.8	648.1	648.2	648.5	648.7	648.8	648.8	648.8	647.9	649.1
3	648.9	648.9	648.7	648.8	649.2	650.1	650.7	651.3	651.9	652.2	652.5	652.7	652.4	652.1	651.8	651.7	651.8	652.1	652.3	652.3	652.6	652.6	652.7	652.6	651.4	652.7
4	652.4	P	P	P	P	651.7	651.6	651.4	651.1	650.5	649.8	649.0	647.6	646.5	646.2	646.0	645.7	645.7	646.4	646.6	646.6	646.7	646.5	646.4	648.2	652.4
5	646.4	646.2	645.9	645.8	645.5	645.1	645.4	645.1	645.0	644.7	644.4	643.8	643.1	641.9	641.2	641.3	642.1	642.3	642.5	642.6	642.5	642.5	642.9	642.6	643.8	646.4
6	643.0	643.2	643.4	643.8	644.0	644.5	644.8	645.1	645.4	645.6	645.9	Y	Y	Y	645.0	645.1	645.3	645.5	645.8	645.8	645.8	646.0	646.0	646.3	645.0	646.3
7	646.5	646.6	647.0	647.1	647.4	647.9	648.2	648.4	648.6	648.8	648.7	648.3	648.0	647.3	646.7	646.4	646.0	645.4	644.9	644.2	643.8	643.3	642.6	642.1	646.4	648.8
8	641.9	641.4	641.5	642.0	642.5	643.2	643.9	644.9	646.3	647.5	648.5	649.6	650.4	651.0	651.5	652.1	652.7	653.3	654.1	654.6	654.7	654.6	654.6	654.5	648.8	654.7
9	654.4	654.0	653.2	652.4	651.8	651.8	651.2	650.7	650.4	650.0	650.0	650.0	649.5	649.2	649.2	649.1	649.3	649.6	650.2	650.8	651.3	652.0	652.7	653.2	651.1	654.4
10	653.6	653.9	654.5	655.0	655.2	655.6	656.0	656.3	656.5	656.7	656.6	656.2	655.7	654.9	654.2	653.6	652.8	652.6	652.5	652.0	651.9	651.3	651.0	650.5	654.1	656.7
11	650.0	649.2	648.0	648.9	646.9	645.4	643.9	642.8	643.0	643.2	643.2	643.2	643.1	643.5	643.4	643.6	643.4	644.9	646.1	647.6	648.7	650.0	651.9	653.5	646.4	654.3
12	654.5	654.6	654.6	654.8	654.9	655.0	655.1	655.1	655.0	654.8	654.5	654.0	653.6	652.9	652.2	651.9	651.7	651.4	651.4	651.0	650.6	650.3	649.8	649.2	653.0	655.1
13	648.8	648.4	648.0	647.3	646.8	646.6	645.9	644.9	643.7	643.5	642.7	641.5	640.1	638.8	638.3	638.7	639.1	639.5	639.9	640.3	640.0	639.5	639.8	642.6	648.8	
14	639.6	639.4	639.1	638.9	639.5	640.2	640.7	641.0	641.8	642.3	642.6	643.2	643.5	643.5	643.6	644.1	644.4	644.8	645.0	645.5	645.6	645.9	646.0	646.1	642.8	646.1
15	645.9	646.2	646.2	646.0	645.7	645.4	645.2	644.8	644.5	644.2	643.9	643.6	643.9	643.6	643.6	643.5	643.6	643.7	643.8	643.6	643.5	643.6	643.8	644.4	646.2	
16	643.8	643.8	644.0	644.0	644.1	644.3	644.2	644.4	645.0	645.3	645.2	645.1	645.1	645.2	645.2	645.3	645.5	645.9	646.3	646.8	647.4	647.7	647.9	648.1	648.2	
17	648.4	648.8	649.1	649.2	649.4	649.9	650.2	650.5	651.0	651.3	651.4	651.8	652.0	651.8	652.0	652.4	652.9	653.0	653.8	654.2	654.5	654.7	655.0	655.2	651.9	655.2
18	655.4	655.8	655.8	655.9	655.9	656.0	656.0	656.2	656.3	656.4	656.5	656.2	655.8	655.3	654.9	654.8	655.1	655.6	656.1	656.4	656.4	656.6	656.9	655.9	656.9	
19	656.9	657.3	657.3	657.1	657.1	657.3	657.5	657.5	657.6	657.5	657.5	657.2	657.6	656.7	656.2	655.9	655.9	655.9	656.1	656.3	656.4	656.4	656.5	656.8	657.6	
20	656.2	655.9	655.5	655.3	654.9	654.3	653.7	653.5	653.9	653.6	653.4	652.8	652.3	651.6	651.0	650.7	650.6	650.6	650.4	651.0	651.1	651.2	651.3	651.0	652.7	656.2
21	650.7	650.6	650.2	649.7	649.4	649.2	648.8	648.7	648.8	649.2	649.1	648.8	648.7	648.2	648.0	647.8	647.5	647.5	647.8	647.8	647.8	647.4	646.9	648.6	650.7	
22	646.1	645.3	644.9	645.1	645.2	645.2	645.3	645.6	645.8	645.7	645.2	645.4	645.8	646.1	646.3	647.2	647.6	648.3	649.0	649.9	650.1	650.5	650.8	647.0	650.9	
23	650.7	650.5	650.4	650.4	650.1	649.9	649.6	648.9	648.3	647.8	647.0	646.1	645.1	644.4	644.2	644.3	644.6	644.9	645.3	645.8	646.3	646.9	647.4	647.4	650.7	
24	648.7	649.5	650.3	650.8	651.3	651.9	652.4	653.0	653.7	653.7	654.3	654.7	655.1	655.3	X	655.7	656.2	656.7	657.5	658.1	658.7	659.8	659.3	660.2	654.9	660.2
25	660.2	660.2	660.5	660.6	660.7	660.4	660.1	659.8	659.6	659.2	658.7	658.3	657.7	657.1	656.9	656.9	656.8	656.5	656.5	656.3	655.7	655.6	655.6	655.4	658.3	660.7
26	654.9	654.3	654.0	654.3	654.4	654.3	654.0	654.0	654.0	654.0	653.8	653.7	653.5	652.9	653.0	653.4	653.6	654.0	654.4	654.6	654.9	654.9	654.6	654.1	654.9	
27	654.2	654.1	654.0	653.7	653.9	654.1	654.1	654.0	653.7	653.6	653.6	653.5	653.5	653.3	652.9	652.6	652.9	652.8	652.7	652.7	652.6	651.7	651.2	653.2	654.2	
28	651.0	651.0	651.0	650.6	650.2	650.1	650.0	649.7	649.2	648.5	648.1	647.9	647.4	646.8	646.3	645.8	645.1	644.7	644.0	643.3	642.4	641.8	641.0	640.1	646.9	651.0
29	638.9	638.2	638.0	637.6	638.0	638.5	638.5	638.1	638.1	638.2	638.4	638.9	639.5	640.1	640.6	641.7	642.9	644.0	645.3	646.4	647.1	647.8	648.5	649.4	641.4	649.4



Number of Non-Zero Readings	688
Maximum 1-HR Average	661 MMHg
Maximum 24-HR Average	658 MMHg
Monthly Calibration Standard Deviation	5.403
Operational Time	688 HRS
Operational Uptime	98.9 %
Monthly Average	649.0 MMHg

Lagoon Relative Humidity (%) – February 2020

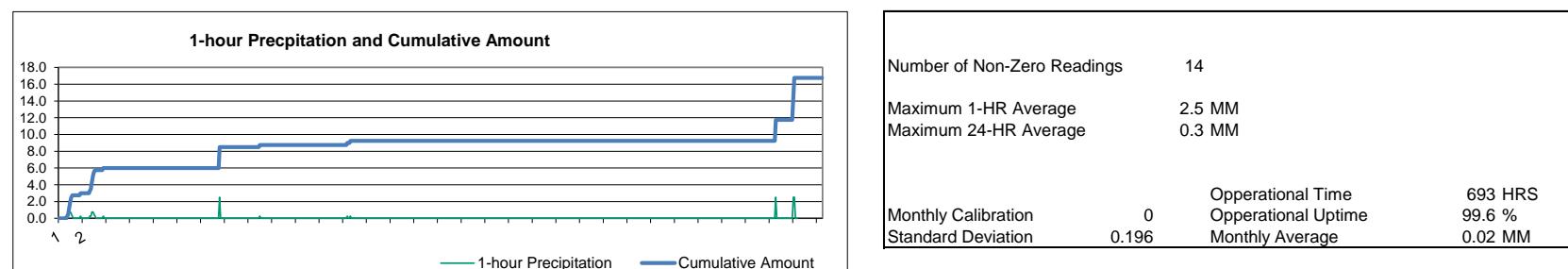
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	59.3	69.8	70.9	80.4	85.9	85.9	89.4	88.9	89.1	90.6	91.5	91.8	91.3	81.3	58.7	43.8	41.4	69.5	87.9	87.8	86.2	86.5	62.5	63.0	77.2	91.8
2	44.0	34.6	32.5	33.5	34.5	35.2	39.3	41.9	50.0	51.0	45.2	35.9	30.9	28.6	28.8	29.8	31.5	34.5	35.3	36.7	37.4	38.8	41.9	48.2	37.5	51.0
3	52.6	58.5	61.9	63.9	63.0	68.7	76.1	82.4	81.7	82.5	82.9	77.4	67.9	57.8	52.5	55.4	67.7	79.7	83.1	78.0	67.9	62.8	61.1	60.2	68.6	83.1
4	60.3	P	P	P	P	54.9	54.4	55.9	54.5	50.6	44.9	45.3	44.2	48.1	48.4	49.3	45.1	45.5	48.6	50.0	49.2	51.1	52.4	53.5	50.3	60.3
5	53.4	57.5	58.9	56.7	57.9	58.2	57.4	56.6	58.1	56.4	54.9	51.5	50.0	51.6	53.4	54.2	52.2	53.9	55.5	63.8	69.2	72.8	74.5	74.3	58.4	74.5
6	73.5	71.5	70.7	71.4	73.0	71.5	69.1	69.2	68.4	66.1	61.0	Y	Y	Y	30.6	29.6	31.7	34.1	37.6	38.3	39.4	44.0	46.7	48.1	54.5	73.5
7	48.0	51.9	54.6	58.3	60.2	62.7	64.5	67.2	68.6	69.9	66.0	57.4	48.0	39.0	34.7	32.7	31.8	34.3	36.9	44.6	46.6	50.8	55.2	58.4	51.8	69.9
8	67.9	76.8	84.5	87.4	88.4	89.5	89.3	83.4	76.9	81.7	82.8	81.8	79.0	72.6	79.4	75.5	72.1	78.3	84.2	81.8	82.2	77.2	75.6	75.4	80.1	89.5
9	74.9	71.8	71.5	72.3	67.7	62.6	58.7	49.9	48.7	46.9	46.9	41.4	35.9	39.5	43.4	44.2	41.2	41.8	41.4	57.1	67.0	64.5	64.6	66.8	55.0	74.9
10	67.4	63.0	62.7	68.6	68.6	69.3	71.8	76.1	75.7	73.7	68.4	58.5	47.3	39.6	31.9	32.0	33.0	36.6	38.8	40.6	42.5	44.3	45.1	48.4	54.3	76.1
11	46.6	47.0	48.3	48.5	49.5	45.1	45.9	54.4	54.5	48.7	41.6	39.4	37.7	36.2	34.9	36.3	37.2	55.1	86.1	89.4	82.7	85.2	77.8	79.6	54.5	89.4
12	83.4	84.9	85.2	84.6	83.7	84.7	85.1	84.5	84.1	82.6	78.8	72.6	66.1	59.7	65.1	67.8	68.9	73.5	78.4	77.8	55.6	54.8	52.6	51.4	73.6	85.2
13	49.6	51.0	52.4	52.5	54.5	53.8	53.3	52.1	52.9	53.4	49.9	43.0	32.0	29.5	32.4	38.8	41.8	42.5	43.2	47.2	51.0	53.3	53.2	54.7	47.4	54.7
14	56.1	63.5	61.1	58.4	54.0	53.4	45.8	41.4	48.7	49.0	45.8	47.3	45.8	35.9	34.0	41.3	41.6	49.9	51.5	45.9	42.9	42.0	39.4	35.2	47.1	63.5
15	36.8	82.4	87.0	86.8	87.1	87.5	87.2	72.7	42.2	40.3	35.9	33.8	32.7	38.2	33.5	32.7	34.6	37.2	38.2	38.8	42.1	45.7	53.5	61.8	52.9	87.5
16	66.2	72.5	74.8	76.0	76.3	77.7	77.3	77.1	75.7	67.6	47.5	33.5	29.3	27.0	26.7	27.4	27.0	28.2	30.5	39.0	60.7	46.0	36.6	37.8	51.6	77.7
17	42.5	47.5	52.1	56.3	57.0	58.4	59.8	60.5	61.4	60.8	56.3	51.8	51.6	49.5	52.3	52.0	57.4	72.0	74.9	75.6	80.3	81.3	82.0	81.8	61.5	82.0
18	82.2	82.7	82.4	82.9	83.5	83.8	82.4	81.5	81.9	78.1	73.1	64.9	55.3	46.1	33.1	29.1	28.1	30.5	41.3	63.2	71.3	76.5	52.8	64.1	83.8	
19	54.0	56.6	58.5	59.6	59.7	61.1	61.0	61.6	61.6	57.7	51.7	45.1	39.5	35.7	33.4	32.2	31.1	32.2	33.9	35.9	39.0	43.7	45.2	49.0	47.5	61.6
20	48.6	50.0	50.3	53.6	52.4	52.0	51.2	49.9	53.5	51.4	45.3	38.6	31.9	27.2	23.6	20.5	20.1	19.7	20.6	21.5	23.7	26.0	28.6	28.7	37.0	53.6
21	30.2	31.7	32.9	32.3	31.0	29.8	27.3	28.5	30.1	31.8	30.7	26.7	28.2	27.6	26.7	26.8	28.1	30.0	31.5	32.0	32.7	32.8	33.5	34.3	30.3	34.3
22	35.3	36.6	37.8	38.8	41.3	43.2	45.9	50.3	51.1	50.2	40.0	39.3	47.6	51.1	48.8	66.2	38.3	27.9	27.0	24.4	29.4	31.5	33.5	38.3	40.6	66.2
23	42.6	45.5	47.8	51.3	54.8	56.8	60.0	60.8	61.5	57.4	52.5	47.4	44.3	44.5	52.0	72.3	76.3	81.1	84.1	88.3	89.9	90.3	89.5	82.8	63.9	90.3
24	81.5	82.8	83.4	83.9	80.5	81.3	79.4	78.0	81.0	81.7	81.4	77.9	70.2	X	62.3	57.8	61.5	81.9	86.4	85.5	84.7	85.0	85.5	86.7	79.1	86.7
25	85.3	82.2	80.2	79.2	78.4	78.8	79.6	80.2	76.4	76.0	61.0	49.4	42.7	38.3	34.7	32.5	33.0	35.6	39.2	42.5	47.0	47.1	49.0	50.2	58.0	85.3
26	53.2	57.0	57.6	56.9	60.4	59.8	57.8	58.6	57.0	56.5	52.1	48.9	46.9	48.2	41.5	37.1	36.1	38.7	39.1	40.8	41.6	40.1	37.0	39.5	48.3	60.4
27	37.7	34.9	39.5	40.0	41.8	42.7	45.2	46.1	45.6	39.6	35.6	33.7	32.8	31.5	31.6	32.0	34.7	36.9	39.9	40.8	43.6	45.0	41.7	41.4	38.9	46.1
28	41.8	43.2	44.5	44.2	47.7	49.8	51.3	51.3	49.7	45.2	38.7	35.5	33.8	32.2	29.5	29.2	30.9	32.9	35.3	40.2	42.3	46.1	50.2	57.0	41.8	57.0
29	64.0	71.4	85.2	90.5	91.1	81.1	59.6	53.5	46.7	37.5	36.1	34.6	36.8	37.9	39.1	41.5	45.4	47.6	75.5	89.5	91.3	91.4	86.6	78.4	63.0	91.4
NO.	29	28	28	28	28	29	29	29	29	29	29	28	28	27	29	29	29	29	29	29	29	29	29	29	688	99%
MEAN	56.5	60.0	61.7	63.2	63.7	63.4	62.9	62.6	61.6	59.6	55.1	50.2	46.4	42.8	41.3	42.1	42.1	47.0	51.9	55.0	56.5	57.1	55.4	56.4		
MAX	85.3	84.9	87.0	90.5	91.1	89.5	89.4	88.9	89.1	90.6	91.5	91.8	91.3	81.3	79.4	75.5	76.3	81.9	87.9	89.5	91.3	91.4	89.5	86.7		



Number of Non-Zero Readings	688
Maximum 1-HR Average	91.8 %
Maximum 24-HR Average	80.1 %
Monthly Calibration Standard Deviation	18.28
Operational Time	688 HRS
Operational Uptime	98.9 %
Monthly Average	54.8 %

Lagoon Precipitation (mm) – February 2020

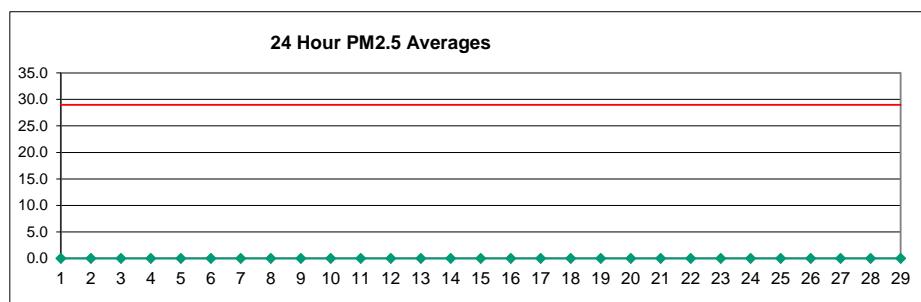
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.8
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	P	P	P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.5
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	0.3	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	0.3
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	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	0.0	0.0	0.0	2.5	2.5	0.0	0.0	0.0	0.3	2.5



West PM_{2.5} ($\mu\text{g}/\text{m}^3$) – February 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	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-

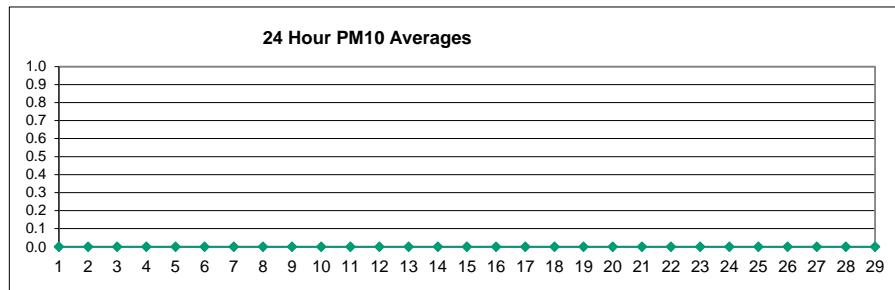
NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	#DIV/0!	#####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0%																		
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	0	
Maximum 1-HR Average	0.0 UG/M3	
Maximum 24-HR Average	0.0 UG/M3	
I2S Calibration Time		
Down Time	0	
Standard Deviation	#####	
Operational Time		
Operational Uptime		
Monthly Average		
		0 HRS
		0.0 %
		#DIV/0! UG/M3

West PM₁₀ ($\mu\text{g}/\text{m}^3$) – February 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	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
MEAN	#DIV/0!																									
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	



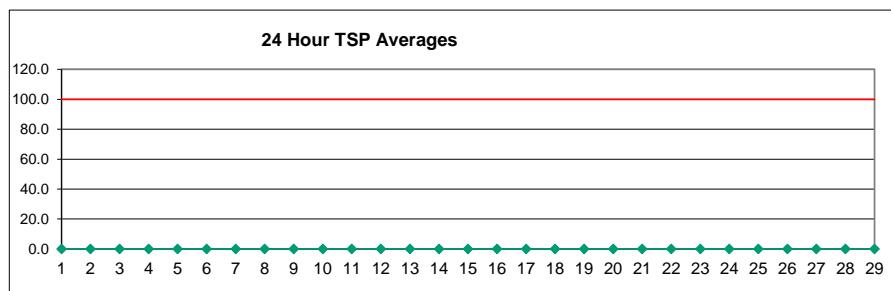
Number of Non-Zero Readings	0
Maximum 1-HR Average	0.0 UG/M3
Maximum 24-HR Average	0.0 UG/M3
Izs Calibration Time	
Down Time	0
Standard Deviation	#####
OpperatioEl Time	
OpperatioEl Uptime	
Monthly Average	
0 HRS	
0.0 %	
#DIV/0!	UG/M3

West TSP ($\mu\text{g}/\text{m}^3$) – February 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	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
9	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
10	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
16	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
18	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
19	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
20	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
21	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
22	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
23	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
24	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
25	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
27	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-
29	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	-	-

NO.
MEAN
MAX

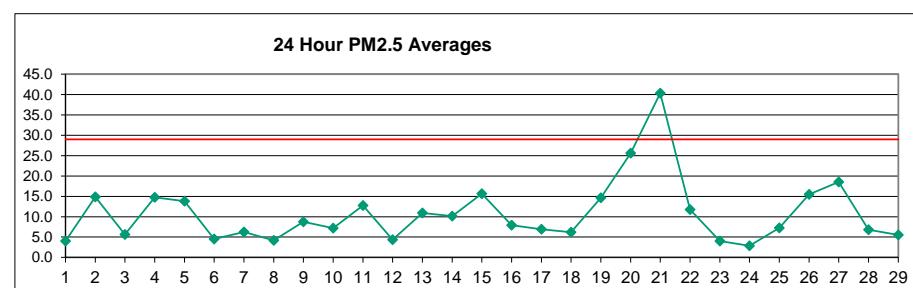
0
#DIV/0!
0.0 0.0



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

Berm PM_{2.5} ($\mu\text{g}/\text{m}^3$) – February 2020

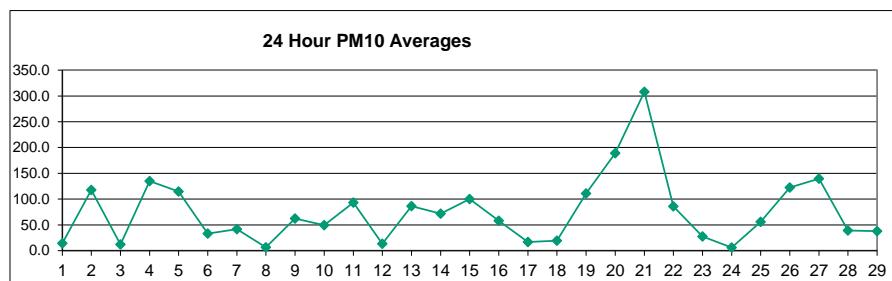
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	2.9	5.9	1.8	6.1	4.0	6.3	5.9	6.3	2.7	0.8	1.5	1.5	1.4	1.0	3.5	2.9	3.3	2.5	4.2	0.6	0.8	10.2	15.1	5.8	4.0	15.1	
2	12.2	5.3	10.0	12.4	6.9	5.5	5.2	7.8	2.9	2.7	9.3	20.4	33.6	27.2	40.6	47.4	35.4	17.3	31.0	8.1	5.6	3.9	5.7	0.9	14.9	47.4	
3	0.8	0.9	2.2	0.7	0.7	8.8	30.5	32.8	7.6	11.4	12.2	2.5	1.4	1.6	2.4	0.4	1.3	3.5	3.9	2.7	1.4	1.4	2.1	2.6	5.7	32.8	
4	2.7	3.8	5.2	2.8	25.0	18.4	7.9	8.4	9.5	11.0	22.7	25.9	26.1	13.4	10.1	10.1	19.8	32.4	17.0	11.9	12.4	15.6	18.4	23.9	14.8	32.4	
5	14.4	18.1	13.2	12.2	23.6	21.5	3.4	4.9	6.2	12.0	14.4	24.0	23.9	28.7	29.1	26.3	14.0	9.0	16.9	5.2	2.9	4.8	1.8	0.8	13.8	29.1	
6	0.5	0.4	1.6	0.5	0.6	0.7	0.6	0.6	0.9	0.8	0.8	3.2	7.7	7.5	7.9	10.9	16.1	9.0	10.7	11.5	4.4	3.0	2.7	5.5	4.5	16.1	
7	4.7	1.3	1.1	0.4	0.6	0.3	0.4	0.5	0.9	1.4	2.8	2.4	4.3	8.4	13.5	26.5	20.9	13.3	19.8	12.0	3.2	3.3	4.9	3.2	6.3	26.5	
8	1.4	4.2	5.6	3.9	4.0	4.2	6.1	4.6	7.7	11.2	4.7	8.3	4.7	3.9	1.9	1.8	3.1	2.3	2.0	1.8	3.1	3.1	2.9	4.1	4.2	11.2	
9	3.8	5.9	3.2	2.5	2.5	2.7	1.7	8.2	21.4	26.7	16.8	20.4	10.9	14.8	16.0	17.8	13.4	4.5	6.1	5.0	2.6	0.7	1.0	1.0	8.7	26.7	
10	0.6	0.8	0.7	1.0	2.8	1.3	1.1	2.4	1.6	2.8	3.2	2.3	1.2	6.2	12.4	11.6	15.6	17.9	13.6	10.7	13.7	12.3	10.7	25.8	7.2	25.8	
11	18.1	8.3	13.7	10.9	11.4	26.0	20.9	3.0	7.1	21.3	34.2	32.7	8.4	8.9	6.8	13.7	14.5	5.6	5.2	3.4	4.3	19.8	4.7	3.0	12.7	34.2	
12	1.3	1.9	2.0	2.4	2.4	1.5	1.3	1.6	3.3	5.0	5.1	6.7	5.3	7.1	8.7	5.4	6.6	9.3	8.6	2.8	1.2	2.0	6.7	6.1	4.4	9.3	
13	11.6	12.0	7.3	12.9	10.7	11.3	9.9	12.9	23.9	17.2	13.6	10.1	12.4	14.9	13.8	12.8	7.8	5.5	4.6	7.1	11.0	9.0	9.0	1.4	10.9	23.9	
14	2.6	1.5	1.1	2.6	5.4	1.3	2.5	12.5	6.7	9.2	15.8	18.3	11.2	9.4	14.1	15.0	11.9	5.3	4.5	8.3	17.7	11.6	26.6	27.8	10.1	27.8	
15	10.8	8.9	10.7	12.4	13.0	10.2	9.1	11.4	32.4	38.3	26.8	45.5	39.4	9.8	26.2	19.7	22.9	8.1	3.8	4.2	4.8	2.6	3.5	1.8	15.7	45.5	
16	2.1	3.5	0.3	0.3	0.5	3.0	0.2	0.4	0.5	1.2	11.6	28.0	18.3	8.6	12.7	14.2	16.9	22.2	13.6	3.2	1.4	5.7	12.3	9.0	7.9	28.0	
17	1.0	0.8	0.7	0.5	0.5	0.4	0.3	0.4	0.5	1.2	4.1	4.3	6.6	8.6	19.9	9.4	9.0	30.2	13.3	7.7	13.6	14.0	10.9	7.5	6.9	30.2	
18	8.5	10.7	8.4	9.0	7.5	8.1	8.2	5.9	9.1	9.6	9.6	9.7	5.5	4.8	6.8	6.4	7.6	3.3	2.0	0.8	0.8	1.7	2.2	3.0	6.2	10.7	
19	1.7	1.4	1.3	1.8	2.2	2.9	2.3	2.9	3.8	4.1	6.3	10.4	21.0	16.0	23.8	28.6	28.2	31.6	22.6	33.5	24.6	25.6	37.2	17.2	14.6	37.2	
20	42.8	33.8	24.8	19.3	16.3	15.7	15.6	71.0	15.9	17.3	34.8	46.9	28.1	18.5	12.8	14.0	18.6	19.5	53.9	22.3	17.6	11.2	16.3	27.4	25.6	71.0	
21	25.8	41.9	53.6	46.4	30.6	36.5	38.6	36.6	79.9	57.0	83.6	76.0	49.3	73.4	46.3	21.3	17.8	21.8	34.3	30.8	26.0	11.2	18.2	11.8	40.4	83.6	
22	21.0	44.3	23.3	11.4	10.0	5.8	4.1	10.2	24.3	18.3	14.5	12.5	9.0	6.0	13.2	16.0	8.3	10.2	12.0	2.9	1.9	1.1	1.2	1.0	11.8	44.3	
23	1.1	0.9	0.9	2.2	1.1	1.2	1.0	3.4	5.4	3.5	12.3	6.3	9.5	5.2	11.2	5.8	7.3	3.2	2.7	3.2	2.0	2.3	3.6	1.3	4.0	12.3	
24	2.4	2.9	2.4	3.0	1.2	1.4	1.7	4.0	2.5	5.7	4.6	4.8	3.9	1.1	0.8	3.3	5.9	5.2	4.1	3.2	1.6	0.8	1.0	0.9	2.8	5.9	
25	1.5	0.8	1.0	0.7	0.6	0.7	0.8	1.9	1.4	2.1	8.9	14.6	14.1	14.0	8.9	11.3	14.0	6.9	10.0	8.5	9.2	10.9	17.4	7.2	17.4		
26	9.0	12.8	7.8	2.8	1.5	2.4	2.5	4.9	10.5	12.0	13.7	8.1	7.7	14.8	14.4	29.7	30.1	18.1	23.4	23.4	25.4	17.9	35.3	43.8	15.5	43.8	
27	25.0	19.8	11.9	15.1	6.7	4.7	3.1	5.6	26.7	39.6	39.1	76.4	19.4	20.2	11.8	16.8	17.4	6.7	9.7	15.4	12.3	9.0	18.0	14.4	18.5	76.4	
28	3.5	3.1	0.7	0.6	0.7	0.5	0.6	2.7	12.8	23.4	13.6	11.4	10.3	8.9	19.4	7.2	4.1	3.1	8.1	12.1	5.2	2.6	5.0	3.2	6.8	23.4	
29	2.8	2.3	2.0	2.3	2.0	0.9	1.0	4.2	7.8	11.9	12.0	12.5	12.5	8.4	11.4	8.9	8.8	2.5	6.6	1.1	3.6	3.8	1.5	1.3	5.5	12.5	
NO.	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	696	100%
MEAN	8.1	8.9	7.5	6.9	6.7	7.0	6.4	9.4	11.6	13.1	15.6	18.8	14.0	12.8	14.5	14.3	13.8	11.4	12.7	9.1	8.1	7.6	10.2	9.3			
MAX	42.8	44.3	53.6	46.4	30.6	36.5	38.6	71.0	79.9	57.0	83.6	76.4	49.3	73.4	46.3	47.4	35.4	32.4	53.9	33.5	26.0	25.6	37.2	43.8			



Number of 24HR Exceedences	1	Proposed Guideline
Number of Non-Zero Readings	696	
Maximum 1-HR Average	83.6 UG/M3	
Maximum 24-HR Average	40.4 UG/M3	
Monthly Calibration Standard Deviation	11.8	Operational Time Operational Uptime Monthly Average
		696 HRS 100.0 % 10.7 UG/M3

Berm PM₁₀ ($\mu\text{g}/\text{m}^3$) – February 2020

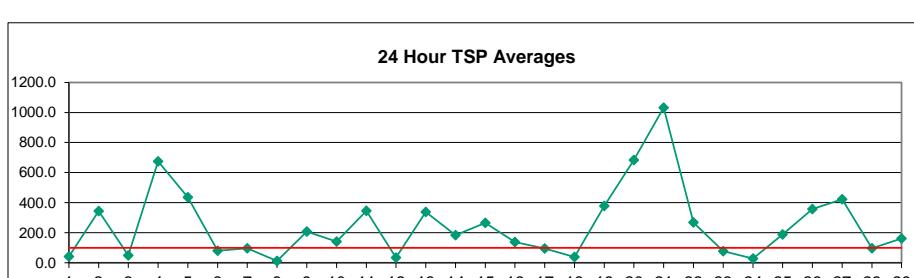
	HOUR																								MEAN	MAX
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	17.2	28.6	8.5	25.7	6.0	9.5	8.7	9.5	4.0	1.0	2.1	2.0	1.8	1.4	13.2	12.7	11.2	11.0	6.7	0.7	0.8	14.8	83.6	54.7	14.0	83.6
2	80.1	38.8	77.8	82.3	52.2	39.1	37.9	72.5	25.1	20.7	81.1	153.8	276.4	226.4	338.8	402.6	291.6	154.2	239.2	50.7	39.1	19.1	27.3	1.7	117.9	402.6
3	1.6	1.8	8.3	0.8	1.6	51.7	77.1	48.9	11.1	16.9	18.1	3.0	2.0	4.6	4.5	0.5	1.7	4.0	4.0	2.9	1.6	1.6	4.2	14.3	12.0	77.1
4	12.5	36.4	47.2	23.2	286.4	197.1	66.1	72.7	88.4	101.9	213.7	244.5	221.8	125.4	95.3	89.4	176.1	284.7	143.7	91.2	104.5	128.3	169.5	212.1	134.7	286.4
5	115.0	143.2	97.4	85.7	198.4	206.2	26.8	36.1	58.6	104.5	124.9	215.3	209.1	239.0	247.8	223.4	104.9	64.9	142.5	41.3	23.9	39.0	2.5	1.0	114.6	247.8
6	0.5	0.4	6.9	0.9	0.6	0.7	0.6	0.9	1.2	1.4	2.1	17.4	57.7	65.9	71.7	84.5	125.9	73.6	83.4	84.1	30.9	21.4	17.7	44.4	33.1	125.9
7	36.1	6.7	2.8	0.5	1.2	0.5	0.8	1.2	3.7	4.8	16.2	13.4	26.8	54.4	92.9	188.9	142.9	96.5	163.3	99.6	15.1	9.7	10.0	6.3	41.4	188.9
8	3.6	13.8	7.9	5.2	4.8	5.4	9.0	6.7	11.1	16.1	6.3	11.6	6.2	7.1	2.1	5.1	6.9	2.5	2.0	1.9	3.4	3.6	3.4	5.6	6.3	16.1
9	5.4	8.7	4.5	3.4	4.0	16.4	6.9	66.9	180.0	218.2	130.2	161.1	92.9	109.7	111.1	147.8	108.7	29.9	42.1	25.5	12.0	1.1	1.5	2.8	62.1	218.2
10	1.0	1.3	1.7	3.5	10.9	3.5	3.1	3.3	2.0	7.5	17.8	14.2	3.6	42.7	88.3	84.2	114.5	145.4	102.6	79.9	101.7	83.4	59.1	214.5	49.6	214.5
11	146.6	59.0	95.5	89.8	93.0	233.6	194.5	21.9	65.1	165.5	261.6	274.0	69.9	69.3	54.3	121.2	111.9	49.9	7.5	4.9	6.1	29.4	6.9	4.2	93.2	274.0
12	1.8	2.5	2.5	2.7	3.0	1.8	1.4	1.9	4.7	7.3	7.2	17.6	23.7	30.4	19.6	6.2	7.3	9.8	11.4	3.5	5.8	15.6	66.7	63.0	13.2	66.7
13	112.1	113.5	66.1	120.1	100.2	101.9	90.0	121.6	205.9	136.5	114.7	67.9	71.3	88.8	92.0	76.6	50.5	34.1	25.4	45.0	81.8	66.3	82.1	8.7	86.4	205.9
14	17.7	6.0	3.4	16.6	43.4	7.3	20.4	118.4	45.6	76.2	104.9	116.7	61.5	52.9	85.0	98.7	67.3	27.6	30.6	57.5	142.0	97.5	205.1	71.7	219.6	
15	68.9	13.3	11.6	15.4	15.3	11.0	10.7	69.9	266.2	297.8	216.2	344.2	291.7	64.4	206.8	162.8	163.9	58.2	24.1	22.3	24.9	11.6	20.9	7.0	100.0	344.2
16	10.9	25.6	0.4	0.3	0.7	4.5	0.3	0.4	0.6	7.1	98.3	220.7	129.9	62.5	109.7	117.7	122.9	155.9	101.5	23.0	3.1	38.9	88.0	68.3	58.0	220.7
17	3.5	1.9	2.0	1.5	1.0	0.5	1.2	1.0	4.6	28.8	17.3	9.9	11.4	52.2	12.1	16.1	139.9	18.7	9.7	19.0	19.7	14.5	8.7	16.5	139.9	
18	9.7	12.8	9.1	11.2	8.7	9.2	9.3	6.8	12.7	18.2	35.3	47.3	19.4	21.3	50.1	44.8	61.0	28.1	10.3	1.1	1.0	3.9	9.5	17.6	19.1	61.0
19	4.7	3.4	3.4	6.5	11.1	18.5	12.8	21.4	25.9	47.2	100.0	171.1	122.3	169.7	180.8	190.8	238.0	178.0	290.7	209.9	206.8	294.9	135.3	110.7	294.9	
20	324.3	263.3	196.1	158.8	134.3	127.5	123.8	595.4	124.7	143.5	287.0	333.8	193.7	181.6	75.9	83.4	116.7	134.1	399.7	151.1	111.4	71.9	98.0	167.7	188.9	595.4
21	158.9	284.3	437.7	392.4	249.0	282.6	317.4	312.5	616.3	427.7	650.7	574.1	339.4	556.4	340.8	172.2	140.7	163.6	273.5	231.8	191.1	74.9	121.7	81.0	307.9	650.7
22	140.8	360.8	171.5	77.4	56.9	26.1	15.7	67.0	190.5	131.2	102.5	75.6	69.9	36.7	93.4	157.6	68.7	90.3	96.6	18.3	10.4	2.4	2.1	2.3	86.0	360.8
23	2.6	1.6	2.3	11.4	2.4	4.3	1.8	23.5	45.9	28.6	109.7	46.4	83.1	36.1	99.3	43.9	52.1	21.4	11.5	11.7	5.4	2.7	4.8	1.3	27.2	109.7
24	2.5	3.0	2.5	3.4	1.3	1.6	2.5	13.3	3.3	8.2	6.6	7.0	14.9	5.1	2.0	18.4	18.5	13.5	5.3	4.1	1.8	0.8	1.1	0.9	5.9	18.5
25	1.9	0.9	1.0	0.8	0.7	0.8	1.0	2.6	3.4	10.4	78.2	129.9	122.9	103.5	70.6	93.8	101.4	47.2	78.8	74.8	80.0	97.4	141.3	99.7	56.0	141.3
26	64.9	103.7	54.8	26.9	7.9	18.9	17.4	35.3	102.7	111.4	113.2	61.3	56.4	111.6	103.9	221.4	225.2	145.2	184.0	198.2	216.6	149.1	261.2	342.1	122.2	342.1
27	197.7	165.0	100.4	124.9	44.8	18.9	17.9	37.5	212.2	302.8	297.2	569.1	143.6	136.8	82.0	120.6	131.1	53.5	64.2	117.3	97.3	68.1	140.1	108.4	139.6	569.1
28	19.1	16.4	2.1	1.8	2.5	1.4	2.5	19.0	82.2	160.3	97.5	69.5	54.8	45.7	100.5	34.0	16.0	9.9	46.3	75.0	33.7	9.2	25.0	9.0	38.9	160.3
29	7.6	5.3	2.9	3.3	2.9	1.2	2.3	23.5	70.4	127.4	104.1	110.5	100.7	66.6	104.6	69.5	65.9	11.9	13.1	1.3	5.2	5.4	2.0	1.5	37.9	127.4



Number of Non-Zero Readings	696
Maximum 1-HR Average	650.7 UG/M3
Maximum 24-HR Average	307.9 UG/M3
Monthly Calibration Standard Deviation	96.68
Operational Time	696 HRS
Operational Uptime	100.0 %
Monthly Average	74.7 UG/M3

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

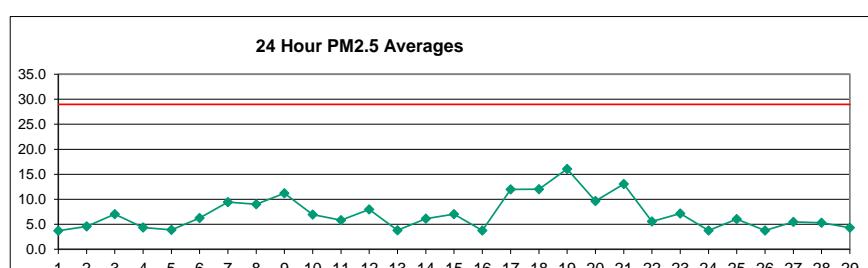
DAY	HOUR																								MEAN	MAX				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1	40.0	53.4	19.5	30.7	6.4	9.9	9.3	10.2	3.9	0.8	2.0	1.7	1.6	1.3	39.6	20.4	39.3	37.4	11.7	0.5	0.6	14.5	377.1	270.7	41.8	377.1				
2	209.3	133.6	207.5	196.1	151.3	109.7	133.4	241.6	73.4	78.0	254.2	399.5	853.8	694.8	1065.8	1226.7	898.2	467.6	567.9	114.8	107.0	34.3	35.1	1.5	344.0	1226.7	48.5	504.9		
3	4.5	1.4	8.8	0.6	3.6	422.2	504.9	55.4	10.7	18.4	20.3	2.4	2.0	7.8	4.8	0.4	1.2	2.8	2.6	2.0	1.1	3.3	14.9	67.5	674.1	2243.6	48.5	504.9		
4	75.8	294.8	372.2	228.6	2243.6	1653.8	476.9	512.1	508.1	392.1	1001.0	1098.6	1052.3	695.4	428.1	425.1	738.1	950.6	503.4	269.9	342.1	443.0	627.2	846.9	435.5	960.5	674.1	2243.6		
5	447.8	542.4	310.3	291.7	625.7	814.6	110.3	134.2	250.7	437.3	480.6	860.9	795.2	871.3	960.5	878.8	362.5	219.8	505.1	177.9	123.2	249.1	2.5	0.8	435.5	960.5	48.5	504.9		
6	0.4	0.3	19.4	1.0	0.4	0.5	0.4	0.8	1.5	4.9	6.6	45.1	132.1	195.4	165.8	203.0	304.9	185.9	186.1	196.8	79.7	50.7	45.2	114.4	80.9	304.9	80.9	304.9		
7	101.6	13.9	4.5	0.8	3.2	0.4	2.6	2.2	9.3	8.5	39.8	36.0	63.3	108.4	206.6	386.7	266.3	228.3	453.9	313.1	36.6	20.8	17.8	11.1	97.3	453.9	34.9	272.3		
8	8.8	67.4	6.9	3.9	3.3	4.4	8.6	6.4	11.0	16.5	5.3	10.9	5.2	40.9	1.5	51.2	5.5	1.6	1.3	1.2	2.4	2.8	2.5	5.2	11.4	67.4	208.2	887.2	11.4	67.4
9	5.4	9.8	4.5	3.3	5.8	130.7	33.3	295.5	757.4	887.2	390.3	435.3	304.8	317.4	287.1	477.6	379.8	96.0	107.6	40.7	17.3	0.7	1.3	8.1	208.2	887.2	11.4	67.4		
10	0.8	1.1	9.7	3.7	10.3	3.9	4.5	2.9	1.7	9.9	52.8	31.5	5.5	77.9	204.6	198.0	286.6	451.2	327.4	240.7	332.4	247.9	133.9	734.3	140.6	734.3	140.6	734.3		
11	511.1	195.3	310.2	417.4	380.3	1034.5	915.1	82.2	245.2	513.1	831.6	895.1	249.0	228.4	182.9	430.8	387.3	409.2	6.8	4.7	5.8	34.2	7.1	3.5	345.0	1034.5	34.9	272.3		
12	1.4	2.0	1.9	1.8	2.3	1.3	1.0	1.4	4.5	7.5	6.7	36.0	60.4	42.4	28.2	4.5	5.1	6.9	12.1	2.6	14.2	70.7	251.3	272.3	34.9	272.3	34.9	272.3		
13	487.6	503.5	350.1	648.8	596.3	483.9	417.5	559.7	878.9	511.1	455.8	173.7	133.8	196.0	243.4	213.0	143.7	91.4	61.0	95.4	262.1	333.7	261.6	17.2	338.3	878.9	11.4	67.4		
14	58.8	8.2	7.4	62.2	159.6	26.0	68.6	416.8	104.8	196.4	223.7	259.1	97.0	90.0	161.2	338.2	142.3	47.0	76.2	146.0	354.1	259.0	502.7	619.1	184.3	619.1	184.3	619.1		
15	181.0	26.7	8.0	11.0	10.6	7.2	8.7	160.4	695.7	835.0	577.8	933.9	774.8	187.4	597.6	494.0	456.4	169.7	61.0	44.2	39.8	14.1	54.8	23.6	265.5	933.9	11.4	67.4		
16	44.2	137.2	0.4	0.2	0.6	4.8	0.2	0.3	0.5	23.6	214.4	506.4	338.1	139.7	281.5	294.0	287.1	369.2	231.0	37.0	3.3	63.4	195.0	134.7	137.8	506.4	137.8	506.4		
17	7.1	8.0	3.4	3.6	1.4	2.1	0.9	1.1	9.6	8.6	60.7	46.7	20.5	15.6	321.9	14.9	50.4	1624.2	19.1	7.7	19.6	21.7	14.8	6.5	95.4	1624.2	11.4	67.4		
18	7.6	10.9	6.1	7.6	5.8	6.1	6.2	4.8	12.2	26.6	83.2	113.3	29.5	45.1	105.4	109.6	130.1	85.7	34.6	0.9	5.5	7.0	26.0	60.4	38.8	130.1	38.8	130.1		
19	10.8	14.8	11.1	41.0	77.6	159.7	94.7	95.5	162.7	102.0	177.9	307.2	507.5	378.4	489.4	486.1	517.5	779.3	626.1	987.0	734.0	769.5	1047.1	515.9	378.9	1047.1	378.9	1047.1		
20	1342.5	1058.9	889.2	741.6	656.2	579.8	601.7	2279.0	485.2	557.0	1026.9	1136.8	660.5	350.2	217.3	213.7	324.9	406.7	1190.6	442.0	346.0	264.4	235.3	384.7	683.0	2279.0	1031.7	2127.6		
21	419.6	907.8	1618.6	1527.8	960.4	1032.2	1185.9	1159.6	2027.2	1422.3	2127.6	1884.9	1101.8	1714.3	1118.5	603.9	470.6	524.9	891.9	695.6	520.8	241.7	340.1	263.4	1031.7	2127.6	34.9	272.3		
22	429.5	1332.4	570.7	199.8	126.5	45.3	33.7	152.3	411.5	297.7	247.6	162.3	195.0	78.8	298.0	1101.8	213.1	250.4	239.9	32.1	29.5	3.5	1.8	3.4	269.0	1332.4	11.4	67.4		
23	5.9	1.8	4.1	24.3	2.5	18.5	3.5	73.8	130.7	95.4	284.0	111.4	202.0	68.6	394.5	212.4	113.2	40.2	16.7	35.8	15.0	1.8	3.7	0.9	77.5	394.5	11.4	67.4		
24	1.6	2.0	1.6	2.4	0.8	1.1	13.9	80.7	2.7	7.8	6.4	6.4	107.0	48.1	11.6	147.1	79.0	145.6	4.3	3.1	1.2	0.5	0.7	0.6	28.2	147.1	11.4	67.4		
25	1.2	0.6	0.6	0.5	0.5	0.5	0.8	2.4	16.9	45.8	306.9	491.1	406.8	285.2	243.3	302.5	264.6	138.2	219.6	288.0	308.3	390.9	489.8	302.3	187.8	491.1	187.8	491.1		
26	204.7	351.2	211.8	116.4	24.9	86.0	67.5	126.7	364.8	378.8	351.8	175.6	139.2	249.6	268.0	630.0	619.0	431.8	505.4	537.8	616.4	450.7	709.8	979.1	358.2	979.1	358.2	979.1		
27	657.5	555.5	369.0	454.6	120.9	30.0	47.2	79.3	560.7	868.4	822.5	1513.8	453.6	427.6	253.0	374.8	452.2	204.2	205.4	374.0	303.7	225.7	455.9	334.2	422.7	1513.8	11.4	67.4		
28	49.4	35.1	5.9	6.7	6.0	3.2	7.5	59.3	229.4	440.7	299.4	200.8	138.8	90.8	171.6	62.4	28.6	14.8	120.3	174.4	91.2	19.3	49.1	12.4	96.5	440.7	11.4	67.4		
29	6.8	7.7	2.5	3.0	2.4	0.9	7.8	246.3	510.5	752.2	462.2	368.2	331.3	261.6	374.2	248.4	201.1	21.5	68.6	0.9	5.4	4.8	1.7	1.1	162.1	752.2	696	100%		



Number of 24HR Exceedences	18	Proposed Guideline
Number of Non-Zero Readings	696	
Maximum 1-HR Average	2279.0	UG/M3
Maximum 24-HR Average	1031.7	UG/M3
Izs Calibration Time	0	
Monthly Calibration	347.2	
Standard Deviation		
Operational Time	696 HRS	
Operational Uptime	100.0 %	
Monthly Average	248.9	UG/M3

Entrance PM_{2.5} ($\mu\text{g}/\text{m}^3$) – February 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	6.1	2.4	4.8	2.3	1.5	4.8	2.0	3.8	2.9	2.5	2.1	5.1	3.2	8.1	2.1	0.9	6.1	2.6	3.2	1.9	3.1	9.6	5.3	2.3	3.7	9.6	
2	0.9	3.0	3.1	0.9	0.9	1.4	3.2	14.5	8.2	11.2	2.5	2.7	4.0	3.4	2.8	2.6	1.8	1.8	1.3	1.4	1.2	7.0	9.0	20.9	4.6	20.9	
3	17.5	10.9	11.9	10.4	5.4	5.5	11.8	10.6	6.1	6.4	9.5	6.7	5.6	3.6	1.9	1.0	1.9	14.0	8.2	5.1	5.5	3.5	3.1	2.5	7.0	17.5	
4	3.2	3.3	4.0	2.6	7.8	9.0	5.0	8.4	4.5	4.6	6.1	7.0	5.9	5.6	4.2	4.6	4.5	6.0	2.3	1.1	0.9	0.9	1.3	1.7	4.3	9.0	
5	1.3	1.2	0.9	1.1	1.1	1.2	1.4	3.1	4.7	4.4	4.4	4.2	4.3	5.7	4.0	17.3	3.7	2.8	1.4	4.2	4.1	2.4	4.7	8.7	3.8	17.3	
6	11.9	16.7	12.7	8.4	8.1	5.1	3.9	4.6	2.3	8.3	7.9	6.2	7.3	6.5	7.8	5.0	3.5	3.4	2.6	1.5	0.9	3.2	3.9	7.9	6.2	16.7	
7	1.5	11.2	11.2	11.1	12.2	3.1	7.3	19.2	17.9	11.6	13.6	7.3	12.8	11.1	14.8	7.7	5.1	3.6	2.9	2.9	6.0	2.2	8.2	21.3	9.4	21.3	
8	11.8	7.8	4.8	4.4	6.2	5.1	2.6	4.5	3.9	10.8	8.1	5.9	4.4	3.6	3.2	3.2	4.3	4.9	6.0	10.4	23.7	24.5	25.7	25.8	9.0	25.8	
9	23.2	14.0	12.2	21.9	17.3	29.7	18.7	7.1	7.2	6.0	5.0	3.7	17.0	11.9	6.8	8.2	15.0	15.8	12.2	6.4	2.2	2.0	1.9	2.6	11.2	29.7	
10	2.9	12.9	19.1	6.9	7.5	11.8	5.8	11.3	12.7	13.3	6.4	13.1	11.4	4.3	4.3	2.8	2.9	4.9	1.9	1.4	1.3	3.9	0.9	1.7	6.9	19.1	
11	1.0	1.3	6.8	4.0	3.6	9.7	6.6	3.4	3.7	4.9	6.8	9.4	7.4	3.9	4.1	4.8	6.9	7.1	6.7	2.1	8.3	22.5	3.0	1.5	5.8	22.5	
12	1.5	2.0	2.6	3.5	3.4	2.6	2.7	3.4	3.8	4.6	6.2	7.7	6.4	5.4	18.3	13.2	14.5	17.4	20.8	25.4	13.8	6.0	2.3	3.9	8.0	25.4	
13	4.9	3.9	5.6	6.9	5.6	3.6	1.8	3.9	4.2	3.1	5.4	6.0	3.2	2.6	2.9	2.7	2.0	1.5	2.9	1.3	1.4	2.1	3.1	10.2	3.8	10.2	
14	5.2	19.3	20.9	15.3	11.1	3.7	2.1	7.4	9.5	5.9	7.9	5.6	6.7	4.2	6.5	3.0	3.4	2.6	1.4	1.0	0.7	1.2	0.7	1.2	6.1	20.9	
15	1.1	13.6	14.7	16.5	18.4	15.3	12.5	4.2	6.1	7.0	6.6	8.2	5.0	4.6	9.6	10.1	3.3	1.2	2.2	4.3	1.0	1.2	0.8	0.9	7.0	18.4	
16	0.7	2.6	4.2	2.5	3.0	9.0	6.3	8.0	12.9	9.4	4.5	4.6	3.4	1.7	1.7	1.6	2.5	1.6	1.7	2.5	2.1	1.4	0.7	1.3	3.7	12.9	
17	3.5	4.9	4.8	6.7	6.7	6.5	4.2	9.6	14.9	22.6	10.3	15.0	13.9	14.7	20.6	15.9	15.7	21.9	12.6	8.8	14.7	15.7	11.8	11.5	12.0	22.6	
18	11.6	12.2	12.2	12.1	12.9	14.3	17.8	16.2	14.4	20.2	14.1	12.6	11.2	12.0	7.1	6.4	5.1	3.1	5.1	7.3	4.9	9.0	22.1	24.6	12.0	24.6	
19	20.6	10.5	6.6	23.3	19.4	19.1	16.1	19.7	22.5	32.1	36.9	38.8	21.8	19.5	14.5	8.8	7.4	6.4	6.5	7.5	5.3	8.5	6.3	7.0	16.1	38.8	
20	7.6	12.4	7.8	9.5	10.9	9.9	18.2	25.0	15.2	14.7	15.7	10.4	10.4	8.5	6.7	5.3	5.2	6.2	8.2	4.5	5.3	4.3	4.2	5.6	9.7	25.0	
21	4.5	8.1	10.3	10.1	7.0	7.0	8.2	13.2	20.9	30.9	36.4	29.2	22.6	35.6	17.7	12.4	8.6	6.8	6.0	4.6	4.1	2.7	3.0	3.0	13.0	36.4	
22	3.3	8.9	5.3	2.5	2.3	2.1	2.1	4.6	6.0	5.7	9.9	4.1	7.0	5.5	4.3	12.1	3.4	9.0	3.6	3.5	3.7	3.0	12.8	7.9	5.5	12.8	
23	6.2	10.6	12.3	18.1	7.3	6.5	6.2	8.4	11.6	14.9	8.3	13.4	7.7	3.7	3.5	4.2	4.4	2.0	2.0	2.4	3.6	7.1	4.1	7.1	18.1		
24	4.5	5.5	6.2	6.3	2.3	3.7	3.1	3.5	3.5	3.8	2.3	2.8	2.8	1.8	1.3	1.9	1.7	4.8	5.9	6.8	5.5	3.6	2.8	3.3	3.7	6.8	
25	2.7	5.3	2.8	2.6	3.3	3.5	4.7	15.0	26.0	30.0	12.2	5.2	3.4	4.8	3.9	3.1	2.9	3.4	2.1	1.2	1.5	2.2	1.1	1.0	6.0	30.0	
26	1.1	1.7	1.6	1.3	3.1	3.6	1.5	4.3	5.2	5.9	5.3	6.5	5.9	6.3	7.0	7.1	3.8	5.6	2.9	1.9	1.4	3.0	1.8	1.2	3.7	7.1	
27	3.8	5.3	1.6	3.3	0.9	1.0	2.4	3.6	7.7	6.7	10.0	18.4	13.7	13.4	7.0	5.6	6.6	6.4	4.3	3.0	1.6	1.5	2.0	1.1	5.4	18.4	
28	0.7	0.5	1.0	1.0	1.4	1.5	2.4	4.3	6.3	5.3	4.0	4.3	3.6	4.5	7.7	6.9	15.6	10.7	9.5	4.0	3.8	7.8	8.4	11.6	5.3	15.6	
29	5.4	11.7	7.9	13.3	4.9	0.7	0.4	2.4	3.7	7.3	2.3	1.8	2.7	4.0	3.1	4.1	3.0	3.8	8.6	1.7	6.1	2.4	0.7	0.9	4.3	13.3	
NO.	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	696	100%
MEAN	5.9	7.7	7.6	7.9	6.8	6.9	6.2	8.5	9.3	10.8	9.3	9.2	8.1	7.6	6.9	6.3	5.7	6.3	5.3	4.5	4.7	5.7	5.4	6.8			
MAX	23.2	19.3	20.9	23.3	19.4	29.7	18.7	25.0	26.0	32.1	36.9	38.8	22.6	35.6	20.6	17.3	15.7	21.9	20.8	25.4	23.7	24.5	25.7	25.8			

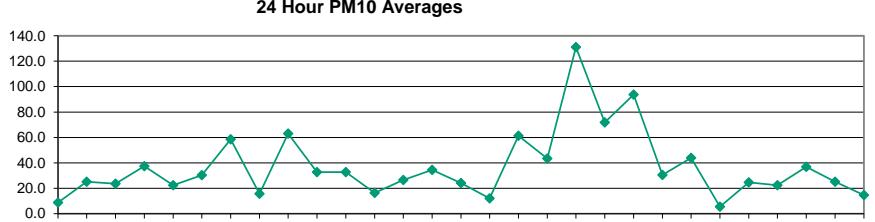


Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	696	
Maximum 1-HR Average	38.8 UG/M3	
Maximum 24-HR Average	16.1 UG/M3	
Monthly Calibration Standard Deviation	6.155	
Operational Time	0	696 HRS
Operational Uptime	100.0 %	
Monthly Average	7.1 UG/M3	

Entrance PM₁₀ ($\mu\text{g}/\text{m}^3$) – February 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	25.7	7.5	21.4	3.4	2.1	7.2	2.8	5.4	4.1	3.5	2.9	6.6	4.8	12.3	7.0	2.3	32.0	7.7	4.0	2.4	3.6	13.8	12.6	15.1	8.8	32.0
2	4.2	14.1	14.8	3.1	3.3	5.2	13.6	76.8	37.5	58.2	10.9	16.5	30.6	27.1	17.4	18.5	11.5	9.6	6.5	6.1	4.2	28.6	48.0	136.1	25.1	136.1
3	114.3	57.8	67.3	52.1	33.2	41.0	17.5	15.5	8.8	9.1	13.7	8.8	13.5	10.6	4.0	2.3	3.4	16.4	10.9	7.0	14.2	17.4	14.5	12.3	23.6	114.3
4	23.0	26.7	36.0	20.3	91.2	117.5	61.0	63.7	32.7	32.1	48.7	57.2	59.2	42.4	34.4	35.9	34.7	35.6	12.1	4.1	3.3	4.3	7.3	12.0	37.3	117.5
5	5.6	5.7	5.8	5.1	5.9	6.9	7.2	14.4	37.1	29.3	25.4	26.8	25.9	36.0	29.9	107.5	22.0	11.3	6.0	24.3	21.0	12.4	13.7	50.6	22.3	107.5
6	51.0	82.4	53.5	28.3	12.2	7.6	14.5	16.5	3.5	51.2	55.2	40.0	48.7	40.4	43.9	31.9	21.8	21.0	13.5	7.7	2.7	15.3	20.2	42.5	30.2	82.4
7	6.7	64.0	70.0	73.1	82.5	16.2	44.9	145.7	128.8	70.4	74.3	45.0	74.8	62.4	89.5	61.7	33.6	20.6	28.3	17.1	26.7	7.8	43.3	118.7	58.6	145.7
8	71.0	20.4	6.8	6.0	8.2	6.9	3.4	6.5	5.2	15.1	11.3	7.6	5.7	6.1	3.7	3.9	6.9	5.9	7.9	15.3	35.3	36.7	38.5	38.7	15.5	71.0
9	83.1	95.0	90.8	166.8	105.0	150.1	105.2	49.4	49.7	37.1	22.0	22.2	96.1	60.1	31.1	41.2	82.8	94.8	64.3	33.9	8.4	4.9	6.7	11.2	63.0	166.8
10	10.3	77.0	112.0	32.1	37.6	63.6	21.2	16.6	19.1	30.2	22.8	73.3	73.0	23.6	30.5	20.3	19.3	38.0	11.9	6.4	8.4	24.3	2.4	12.3	32.8	112.0
11	3.7	8.2	66.7	42.6	33.9	95.2	77.7	15.4	19.0	31.9	57.2	68.2	51.1	22.7	21.5	27.0	33.8	45.9	9.6	2.9	11.4	33.5	4.1	1.8	32.7	95.2
12	1.8	2.2	2.7	3.8	4.3	3.2	3.1	4.1	4.9	6.1	11.0	11.1	9.9	10.7	34.0	18.3	17.6	20.8	26.5	62.4	75.8	28.1	10.4	19.8	16.4	75.8
13	40.3	22.3	55.2	86.0	60.9	36.4	14.9	23.3	36.7	23.2	29.9	30.6	13.0	14.1	18.6	12.5	9.1	6.5	6.4	6.0	6.7	10.0	11.9	62.4	26.5	86.0
14	28.4	113.5	106.2	67.0	57.6	15.9	14.5	45.4	69.8	33.6	57.0	38.4	36.2	23.5	39.7	21.7	21.1	6.7	6.5	3.6	2.2	4.2	2.8	10.6	34.4	113.5
15	3.2	20.1	16.1	18.9	21.2	18.0	14.7	24.0	40.3	40.6	45.8	59.4	29.8	25.8	59.7	70.1	18.9	6.8	9.9	21.6	3.0	3.3	3.1	3.1	24.1	70.1
16	1.5	10.0	6.3	3.6	4.3	13.5	9.4	12.0	19.4	55.7	21.1	28.8	18.7	8.7	5.6	8.4	13.5	8.9	5.4	16.3	5.2	3.9	2.7	6.1	12.0	55.7
17	18.8	42.7	44.6	59.9	60.1	54.1	35.2	91.3	153.9	235.2	93.6	104.8	53.7	44.7	80.3	43.2	51.8	101.4	17.4	10.9	21.1	22.7	15.7	15.4	61.3	235.2
18	13.9	14.5	14.8	14.3	15.5	19.0	26.5	23.3	20.6	36.8	38.9	40.5	49.7	69.7	40.3	33.5	27.0	15.4	21.7	16.7	8.5	52.2	201.6	225.0	43.3	225.0
19	175.9	95.1	44.8	218.7	169.2	165.4	125.7	143.7	190.7	254.3	313.2	324.8	175.3	161.4	114.3	57.3	48.2	45.8	54.9	61.1	40.3	62.3	51.1	54.4	131.2	324.8
20	66.9	104.6	68.9	69.9	91.5	91.6	172.0	219.1	112.2	103.9	115.8	71.4	58.5	48.6	32.0	27.8	27.4	33.7	55.2	27.8	35.2	25.9	24.7	39.4	71.8	219.1
21	30.4	60.3	84.3	90.7	56.0	54.5	73.7	105.9	160.8	244.5	261.7	212.4	164.7	252.4	115.8	77.9	52.7	36.9	35.6	20.2	18.6	10.5	13.2	14.4	93.7	261.7
22	15.7	63.9	33.7	9.4	4.8	4.6	5.4	17.9	34.5	29.9	51.3	18.4	31.6	23.6	20.7	73.7	15.1	52.1	14.0	19.5	15.9	12.8	100.4	30.4	100.4	
23	47.5	83.5	109.6	159.2	44.7	30.0	27.7	50.0	72.3	122.5	38.7	107.7	46.5	18.2	19.4	28.0	14.7	2.7	2.6	3.2	5.0	10.2	5.4	3.5	43.9	159.2
24	5.0	6.2	7.8	8.3	2.6	4.7	3.7	4.6	4.6	5.1	3.5	5.5	7.8	3.0	3.0	5.2	5.7	8.1	7.6	8.2	7.0	4.1	3.5	4.4	5.4	8.3
25	3.2	7.6	3.8	3.6	4.9	5.1	6.9	22.5	39.0	192.0	96.8	33.5	20.9	28.2	32.8	18.5	14.6	12.5	7.8	6.0	7.3	13.3	5.1	2.6	24.5	192.0
26	4.6	10.5	9.0	6.5	13.0	13.3	5.4	26.1	32.1	33.8	35.1	37.0	37.1	42.9	50.3	46.4	25.5	33.3	11.6	10.7	7.7	25.6	12.4	6.4	22.3	50.3
27	31.8	38.8	9.8	26.8	3.1	3.7	14.0	17.8	47.0	48.2	73.7	148.7	100.8	100.2	46.1	35.7	38.4	36.1	15.8	15.7	4.9	4.7	16.4	5.2	36.8	148.7
28	2.3	1.1	3.6	3.5	4.8	6.1	8.5	14.1	34.2	25.1	23.2	21.7	17.6	19.9	41.0	29.7	83.4	56.3	43.9	13.6	14.7	31.3	35.9	64.8	25.0	83.4
29	19.9	37.2	11.8	19.9	7.3	0.9	0.9	9.0	27.2	74.0	11.2	9.8	10.0	18.2	13.9	18.9	19.7	13.3	2.0	8.9	3.1	0.7	1.1	14.7	74.0	
NO.	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	696	100%
MEAN	31.4	41.1	40.6	44.9	35.9	36.5	32.1	44.1	49.9	66.6	57.4	57.8	47.1	43.4	37.3	33.8	27.5	27.9	18.3	15.6	14.7	18.2	25.1	36.2		
MAX	175.9	113.5	112.0	218.7	169.2	165.4	172.0	219.1	190.7	254.3	313.2	324.8	175.3	252.4	115.8	107.5	83.4	101.4	64.3	62.4	75.8	62.3	201.6	225.0		

24 Hour PM₁₀ Averages



Number of Non-Zero Readings

696

Maximum 1-HR Average 324.8 UG/M3

Maximum 24-HR Average 131.2 UG/M3

Monthly Calibration Standard Deviation 44.62

Operational Time 0

Operational Uptime

Monthly Average

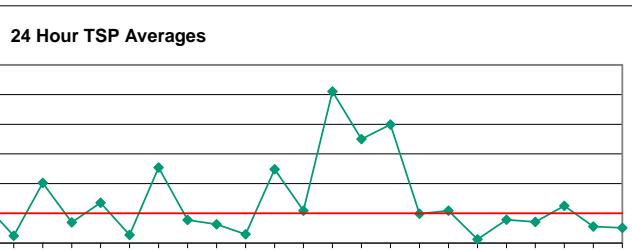
696 HRS

100.0 %

36.8 UG/M3

Entrance TSP ($\mu\text{g}/\text{m}^3$) – February 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	27.4	8.6	24.6	3.5	1.9	7.2	2.4	4.7	3.6	2.7	2.3	4.9	4.7	13.7	15.8	11.5	76.3	26.9	3.4	1.7	2.4	14.6	77.3	123.0	19.4	123.0		
2	10.7	18.4	31.4	4.3	6.3	6.0	14.8	87.7	40.9	88.8	37.5	50.4	140.5	139.5	86.4	110.9	59.0	32.2	20.9	15.0	10.4	29.0	68.9	173.6	53.5	173.6		
3	117.5	66.4	81.5	66.0	54.9	620.9	19.4	16.4	9.3	9.1	15.0	12.9	21.9	18.6	6.3	3.8	2.9	11.3	9.4	5.8	17.9	48.8	50.3	37.7	55.2	620.9		
4	169.3	247.4	494.2	215.3	1274.6	1768.2	942.7	597.8	282.0	186.7	317.2	432.4	518.4	305.2	229.4	197.8	209.3	165.8	54.7	21.4	14.7	22.3	39.2	70.0	365.7	1768.2	365.7	
5	38.2	37.0	34.4	38.4	32.8	43.2	39.7	51.8	149.4	146.1	109.3	127.1	103.8	206.9	186.1	227.8	67.3	47.4	39.9	83.0	69.8	73.6	26.7	156.0	89.0	227.8		
6	145.0	175.2	86.7	54.1	14.0	8.4	41.8	35.0	5.4	138.1	118.4	81.2	131.2	116.6	108.4	99.9	60.8	50.2	33.9	23.0	8.5	19.6	28.3	54.9	68.3	175.2		
7	19.7	124.5	145.5	159.1	226.8	33.4	81.2	463.9	285.3	129.4	140.3	120.2	129.6	125.2	196.4	192.9	81.2	58.8	97.3	36.5	30.8	10.6	65.2	199.5	131.4	463.9		
8	135.0	92.3	5.8	4.7	5.7	5.1	3.0	6.4	4.6	15.9	9.1	6.1	15.8	55.9	4.8	11.1	6.6	4.1	7.3	15.1	39.9	42.5	44.7	44.9	24.4	135.0		
9	370.2	461.0	497.8	870.1	341.0	376.5	248.8	181.9	206.7	139.6	71.8	60.0	202.2	99.0	37.8	71.4	198.9	207.0	123.8	54.4	10.0	5.4	7.9	20.4	202.7	870.1	202.7	
10	25.6	128.7	178.9	32.5	104.4	119.8	26.9	18.1	20.9	41.9	46.6	150.7	129.4	65.3	87.8	61.8	67.4	127.0	40.1	26.4	32.9	86.7	9.9	48.7	69.9	178.9	69.9	
11	15.3	34.6	332.9	253.3	151.6	511.7	527.5	51.4	60.2	106.3	213.7	238.2	160.1	65.4	56.6	79.4	83.5	256.5	10.0	2.7	11.0	38.9	4.2	1.4	136.1	527.5	136.1	
12	1.4	1.5	1.7	2.7	3.7	2.4	2.3	3.0	4.0	5.1	15.4	18.6	15.1	19.5	52.7	26.6	19.7	18.7	19.1	96.9	175.1	51.4	38.8	61.8	27.4	175.1	27.4	
13	364.3	162.8	868.5	1509.3	1058.0	605.0	165.2	130.2	307.3	142.6	124.1	78.9	33.6	53.0	84.4	61.1	47.9	22.6	16.3	46.6	37.5	55.0	17.5	108.6	254.2	1509.3	254.2	
14	37.6	131.9	86.3	64.3	145.1	22.8	48.7	176.7	215.1	104.3	178.3	118.4	88.2	71.8	112.1	88.0	64.3	11.1	12.2	9.9	5.0	8.0	10.7	62.0	78.0	215.1	78.0	
15	7.6	56.9	10.9	12.7	14.3	12.5	10.2	90.8	140.2	116.4	133.4	218.9	68.4	84.8	141.8	225.3	63.9	25.4	14.1	28.7	4.4	5.5	15.2	11.6	63.1	225.3	63.1	
16	7.9	75.3	7.0	3.8	4.7	14.6	10.9	13.8	22.4	122.9	51.3	81.1	55.1	20.6	10.5	25.4	46.4	32.7	17.1	38.9	6.1	9.0	11.3	25.1	29.7	122.9	29.7	
17	27.0	106.6	125.2	174.9	196.8	295.4	99.3	284.2	492.1	808.1	321.9	378.1	180.6	153.7	438.4	158.2	277.5	1341.3	17.7	8.6	23.4	25.7	15.9	14.1	248.5	1341.3	248.5	
18	11.7	12.3	12.3	10.3	10.4	14.3	25.8	21.4	15.8	54.7	88.2	72.5	76.8	139.9	93.0	97.8	61.4	36.1	48.0	31.3	10.3	135.1	707.0	840.1	109.4	840.1		
19	661.7	459.9	179.4	983.7	728.6	764.4	542.2	608.2	785.6	1000.1	1090.2	847.8	502.9	445.1	373.4	209.1	178.5	193.0	258.6	284.4	202.9	346.5	276.7	319.2	510.1	1090.2	510.1	
20	437.7	530.1	421.7	373.7	508.0	542.1	963.4	1141.4	464.0	441.5	531.4	288.2	200.0	128.8	82.1	98.4	91.6	120.0	218.4	120.1	204.6	135.0	145.8	204.0	349.7	1141.4	349.7	
21	181.3	316.4	474.1	559.7	359.4	329.9	462.0	524.7	755.3	1050.7	925.0	797.8	531.4	836.3	367.0	257.4	194.2	135.6	157.2	79.2	81.1	52.7	65.9	82.4	399.0	1050.7	399.0	
22	86.1	302.0	151.9	45.1	12.3	12.1	15.4	40.0	74.6	62.8	67.5	34.0	82.3	54.7	106.2	689.3	36.8	87.9	36.4	36.1	24.4	19.7	150.9	139.0	98.6	689.3	98.6	
23	117.1	225.6	282.3	401.8	66.7	53.5	58.1	121.4	173.3	359.6	75.1	262.0	76.0	29.0	130.4	124.3	34.6	2.2	2.0	2.5	4.5	9.6	4.6	2.4	109.1	401.8	109.1	
24	3.2	4.1	5.8	6.6	1.8	3.6	2.6	4.0	4.1	4.4	8.9	27.2	53.0	20.4	24.6	39.6	32.0	29.1	6.2	5.8	5.3	2.8	2.6	4.2	12.6	53.0	12.6	
25	2.3	7.7	3.5	3.5	5.3	5.5	7.6	26.2	45.3	699.5	352.6	119.0	64.1	118.0	120.8	67.3	36.4	23.3	17.1	26.7	40.1	55.4	35.9	8.0	78.8	699.5	78.8	
26	28.0	60.4	47.3	40.5	46.6	29.9	17.7	84.2	97.2	81.6	126.6	89.3	86.2	110.6	139.5	137.7	90.1	93.7	33.5	40.7	24.5	115.0	69.1	29.2	71.6	139.5	71.6	
27	132.1	182.8	37.4	133.3	15.3	12.8	36.8	39.0	130.1	152.3	244.0	514.2	295.9	298.9	144.3	129.2	110.0	112.7	43.3	73.7	15.1	18.7	116.4	29.3	125.7	514.2	125.7	
28	10.0	2.3	4.3	14.7	10.6	14.5	10.9	32.4	127.6	81.6	77.6	67.6	58.6	51.6	102.6	54.9	176.6	103.7	82.8	35.0	39.3	51.0	50.5	78.2	55.8	176.6	55.8	
29	22.9	40.3	12.6	22.3	7.9	0.7	6.4	28.7	177.8	568.3	53.6	38.9	29.4	50.9	30.6	48.6	22.8	30.1	20.3	1.4	9.1	2.5	0.5	0.8	51.1	568.3	51.1	
NO.	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	696	100%	
MEAN	110.8	140.4	160.2	209.1	186.5	215.1	152.9	168.5	175.9	236.6	191.3	184.0	139.8	134.4	123.1	124.4	86.1	117.5	50.4	43.1	40.0	51.4	74.4	101.7				
MAX	661.7	530.1	868.5	1509.3	1274.6	1768.2	963.4	1141.4	785.6	1050.7	1090.2	847.8	531.4	836.3	438.4	689.3	277.5	1341.3	258.6	284.4	204.6	346.5	707.0	840.1				



Number of 24HR Exceedances		12 Proposed Guideline	
Number of Non-Zero Readings		696	
Maximum 1-HR Average		1768.2 UG/M3	
Maximum 24-HR Average		510.1 UG/M3	
Monthly Calibration Standard Deviation		0	
Operational Time		214.0	
Operational Uptime		696 HRS	
Monthly Average		100.0 %	
		134.1 UG/M3	