LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JULY 2019

AUGUST 26, 2019

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JULY 2019

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-00
DATE: AUGUST 26, 2019

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August 26, 2019

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

Attention: Janet Brygger

Dear Ms. Brygger

Subject: Ambient Air Quality Monthly Report - July 2019

The operational uptime for the meteorological systems and all analyzers at the Lagoon station was 100% in July. There were zero exceedances of the 24-hour TSP Alberta Ambient Air Quality Objectives (AAAQOs), the 24-hour $PM_{2.5}$ AAAQOs, and the 1-hour $PM_{2.5}$ AAAQG in July 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: 100% at the West GRIMM, 99.9% at the Berm GRIMM, and 100% at the Entrance GRIMM. The West GRIMM monitor recorded zero exceedances of the 24-hour TSP AAAQG and the 24-hour $PM_{2.5}$ AAAQG. The Berm GRIMM had 12 exceedances of the TSP guideline and zero exceedances of the $PM_{2.5}$ guideline. The Entrance GRIMM monitor recorded 17 and zero 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 flood mitigation work along Exshaw creek and the hauling of creek materials along Highway 1A which is producing fugitive dust near the monitors.

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

Sincerely,

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

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SIGNATURES

PREPARED BY

August 26, 2019

Rowena Seto, B.Sc.
Junior Air Quality Specialist, Environment

Date

APPROVED[1] BY *(must be reviewed for technical accuracy prior to approval)*

August 26, 2019

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

Date

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

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1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. The station is operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and is a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between July 1, 2019 and July 31, 2019.

This monthly report was prepared by Rowena Seto, 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 JULY 2019 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)	100.0	23.0	0	8.9	-
SO_2 (ppb)	100.0	8.5	0	2.1	0
$PM_{2.5}$ (µg/m^3)	100.0	23.1	0[1]	10.7	0
PM_{10} (µg/m^3)	100.0	231.6	-	37.5	-
TSP (µg/m^3)	100.0	350.2	-	61.6	0
Temperature (°C)	100.0	30.4	-	22.1	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	42.7/W	-	30.3/WSW	-
Precipitation (mm)	100.0	3.8[2]	-	76.5[3]	-

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- All analyzers and meteorological sensors had 100% uptime for the month of July.

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.

Table 2-2 West station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
$PM_{2.5}$ (µg/m^3)	100.0	37.4	0*	9.8	0
PM_{10} (µg/m^3)	100.0	322.9	-	40.7	-
TSP (µg/m^3)	100.0	459.6	-	58.0	0

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

Data Quality Notes:

- There 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 no exceedances of the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

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

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 2-3 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/m³)	99.9	93.1	1*	22.3	0
PM_{10} (µg/m³)	99.9	637.1	-	189.8	-
TSP (µg/m³)	99.9	2310.4	-	844.8	12

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- The analyzer had 99.9% uptime for the month of July due to one hour of operational maintenance on July 23, 2019.

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 2-4 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
$PM_{2.5}$ (µg/m³)	100.0	43.7	0*	17.5	0
PM_{10} (µg/m³)	100.0	410.6	-	105.7	-
TSP (µg/m³)	100.0	1369.0	-	243.2	17

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

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 17 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

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

3 LAGOON STATION

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

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-2) and tables and graphs illustrating the monitoring results for July 2019.

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

3.1 OPERATIONAL SUMMARY

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

Table 3-1 Instrumentation List at the Lagoon Station

Parameter Measured	Equipment Description	Notes
$PM_{2.5}$ Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The $PM_{2.5}$ monitor was calibrated on July 23rd. The monitor had 100% uptime in July.
PM_{10} Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM_{10} monitor was calibrated on July 23rd. The monitor had 100% uptime in July.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on July 23rd. The monitor had 100% uptime in July.
Oxides of Nitrogen	TEI 42C	Both monitors were calibrated on July 23rd. The monitors had 100% uptime in July.
Sulphur Dioxide	Teledyne API 102A	
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime in July.
Wind Speed	MetOne Wind Sensor	The monitors had 100% uptime in July.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime in July.

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 July 2019. The wind rose indicates that the winds predominantly came from the west-southwest and west directions.

Table 3-2 summarizes the hourly, daily, and monthly concentrations recorded in July 2019.

Figure 3-3 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-9 shows daily average concentrations recorded during July 2019 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO_2, SO_2, $PM_{2.5}$, PM_{10}, 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. However, there were no exceedances of the 24-hour TSP (100 µg/m^3) AAAQO, the 24-hour $PM_{2.5}$ (29 µg/m^3) AAAQO, and the 1-hour $PM_{2.5}$ AAAQG.

Historically in July, the average number of 24-hour TSP AAAQO exceedances and 24-hour $PM_{2.5}$ AAAQO exceedances are both zero. The maximum number of 24-hour AAAQO exceedances was 2 days in 2014 and 3 days in 2017 for TSP and $PM_{2.5}$, respectively.

Table 3-2 Summary of July 2019 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	-	0.1	5.7	23.0	2	12	6.4	208.8	8.9	26	100.0
SO_2 (ppb)	172	48	Lagoon	0	0	0.0	1.0	8.5	14	10	16.4	275.7	2.1	26	100.0
$PM_{2.5}$ ($\mu g/m^3$)	80	29	Lagoon	0	0	0.0	5.0	23.1	11	12	20.7	262.5	10.7	31	100.0
PM_{10} ($\mu g/m^3$)	-	-	Lagoon	-	-	0.0	16.9	231.6	27	14	28.6	248.4	37.5	30	100.0
TSP ($\mu g/m^3$)	-	100	Lagoon	-	0	0.0	26.6	350.2	27	14	28.6	248.4	61.6	30	100.0
Temperature (°C)	-	-	Lagoon	-	-	6.4	15.1	30.4	23	18	10.6	284.0	22.1	23	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.3	14.2	42.7/W	24	23	42.7	248.0	30.3/WSW	25	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.1	3.8	8	3	10.0	269.6	76.5	-	100.0

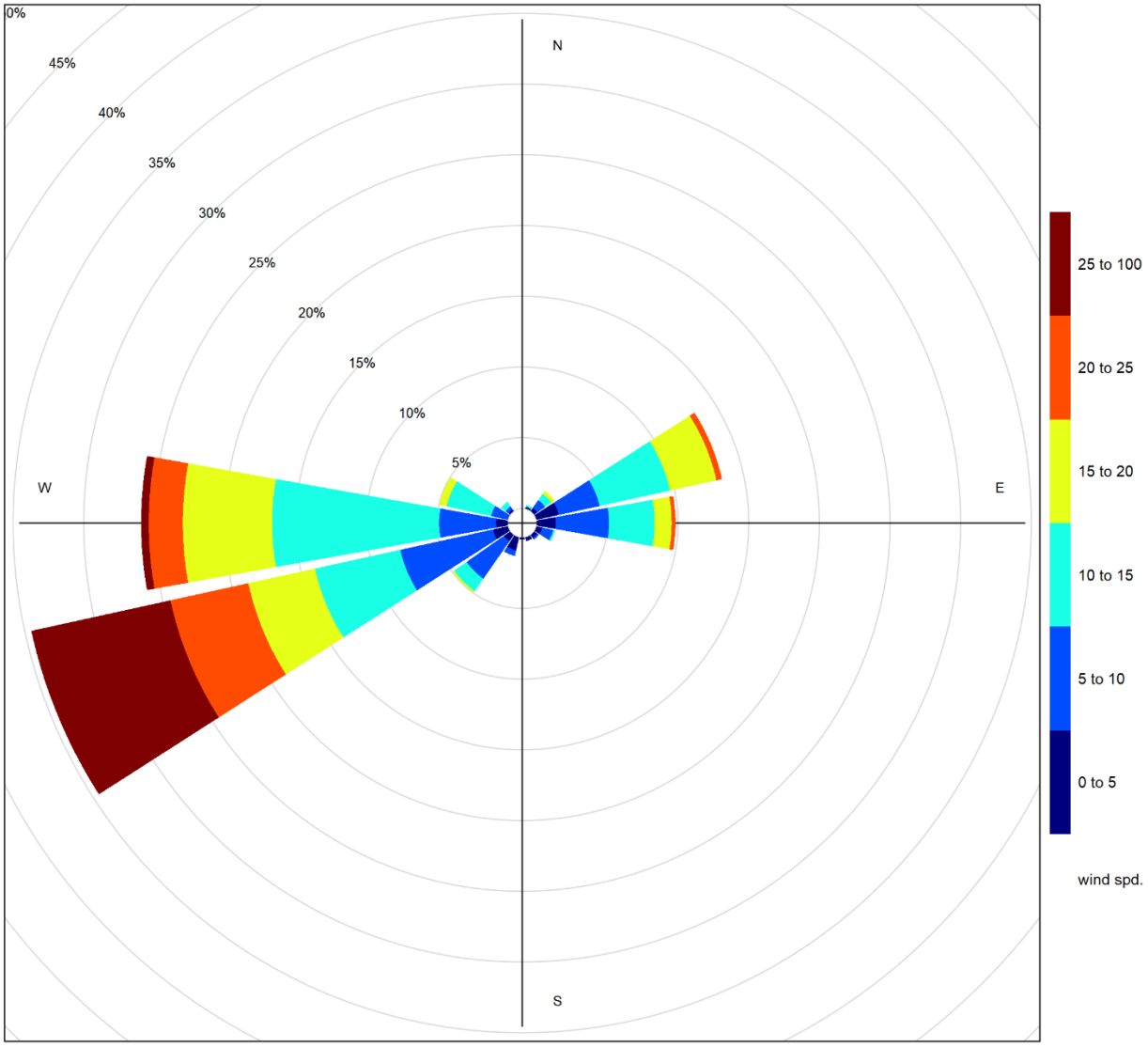

Figure 3-2 July 2019 wind rose from the Lagoon Station

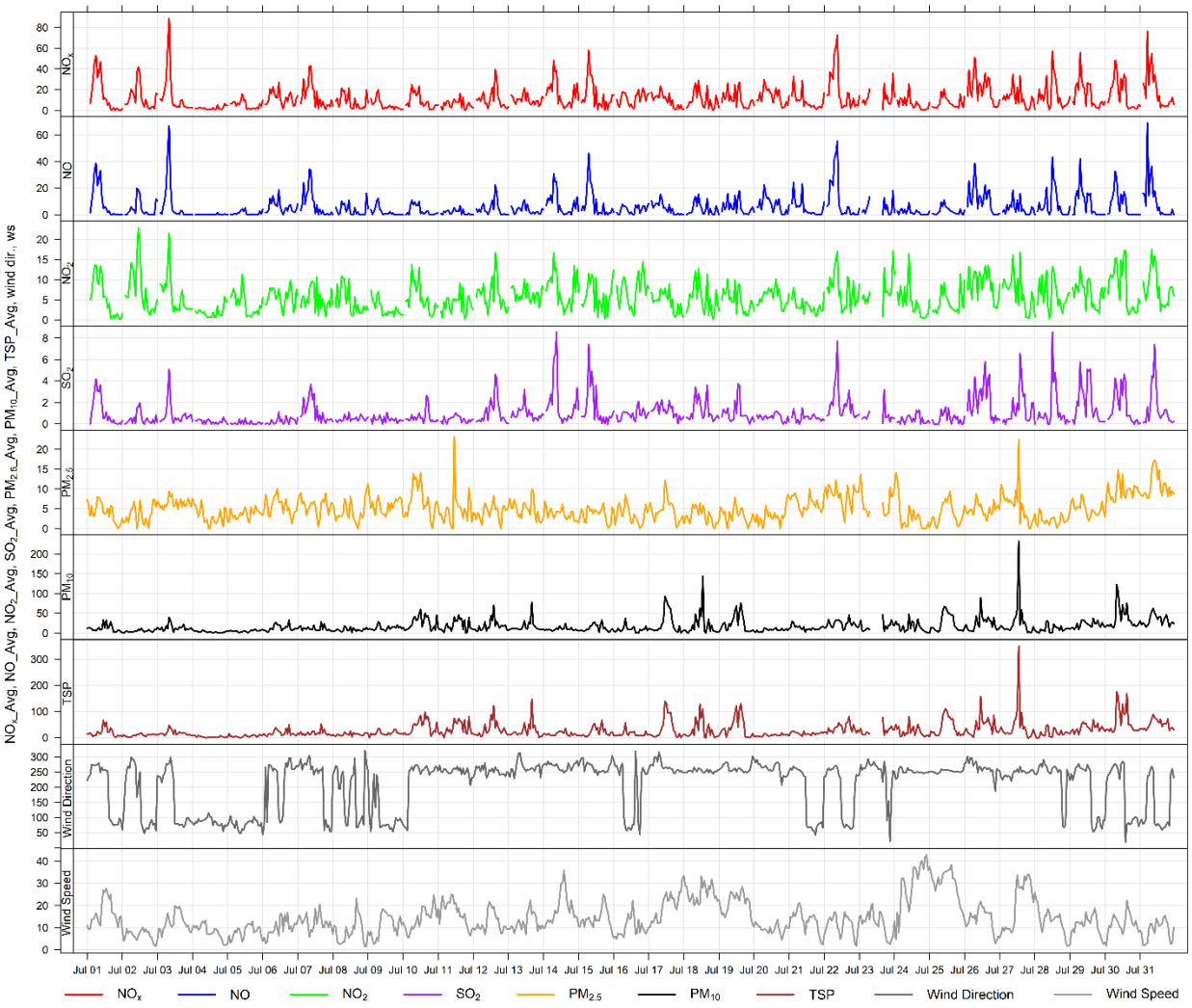

Figure 3-3 **1-hour concentrations of NO_x, SO_2, particulate matter, wind direction and wind speed at the Lagoon station**

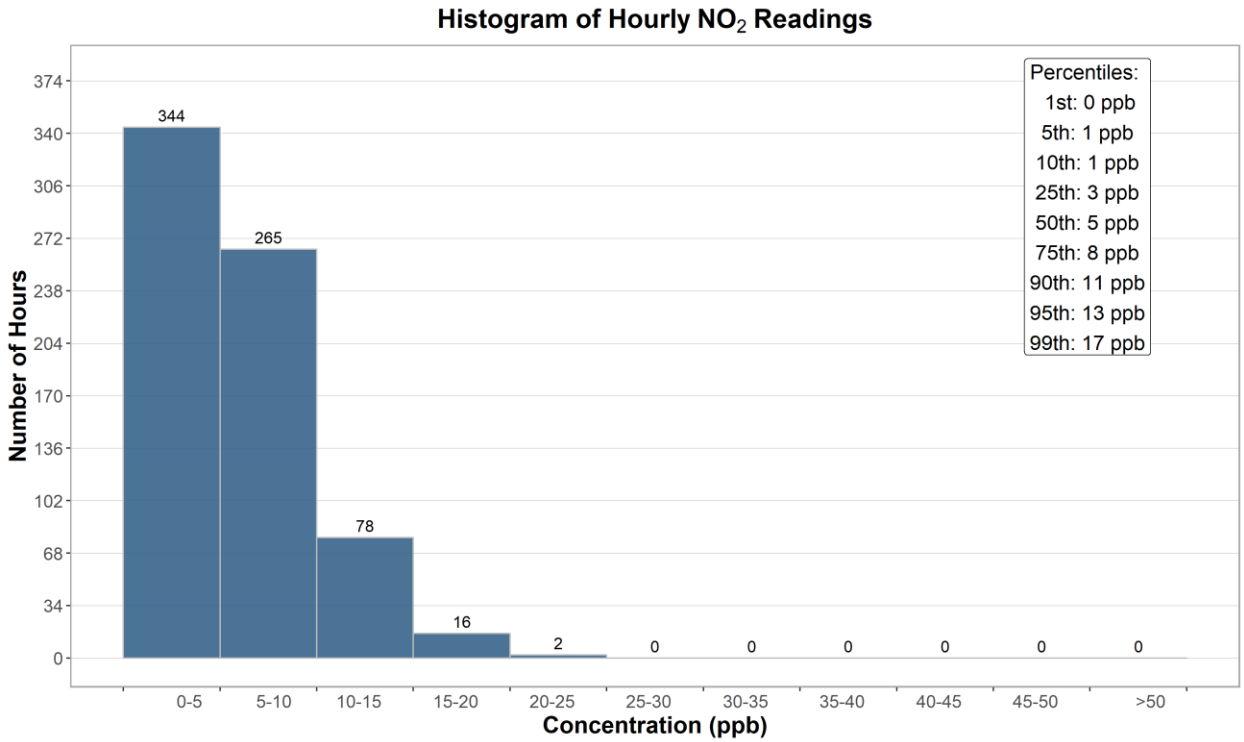

Figure 3-4 **Histogram of hourly NO_2 concentrations at the Lagoon station**

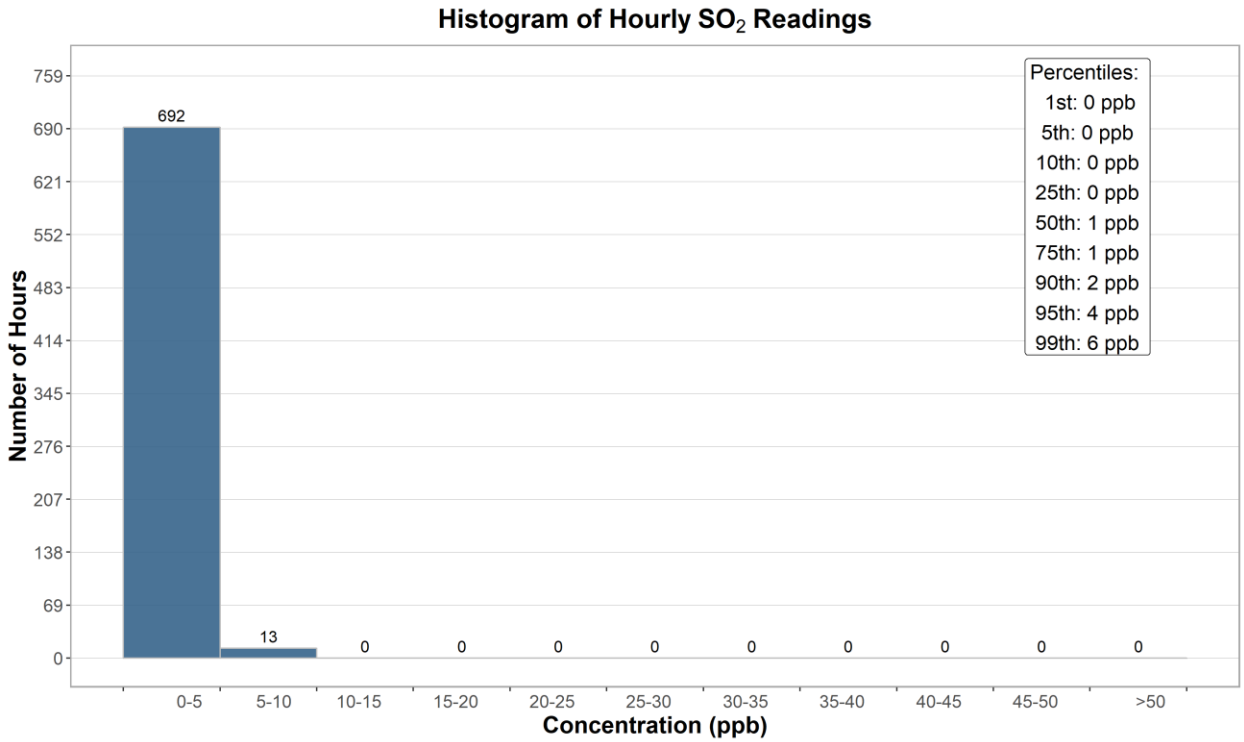

Figure 3-5 **Histogram of hourly SO_2 concentrations at the Lagoon station**

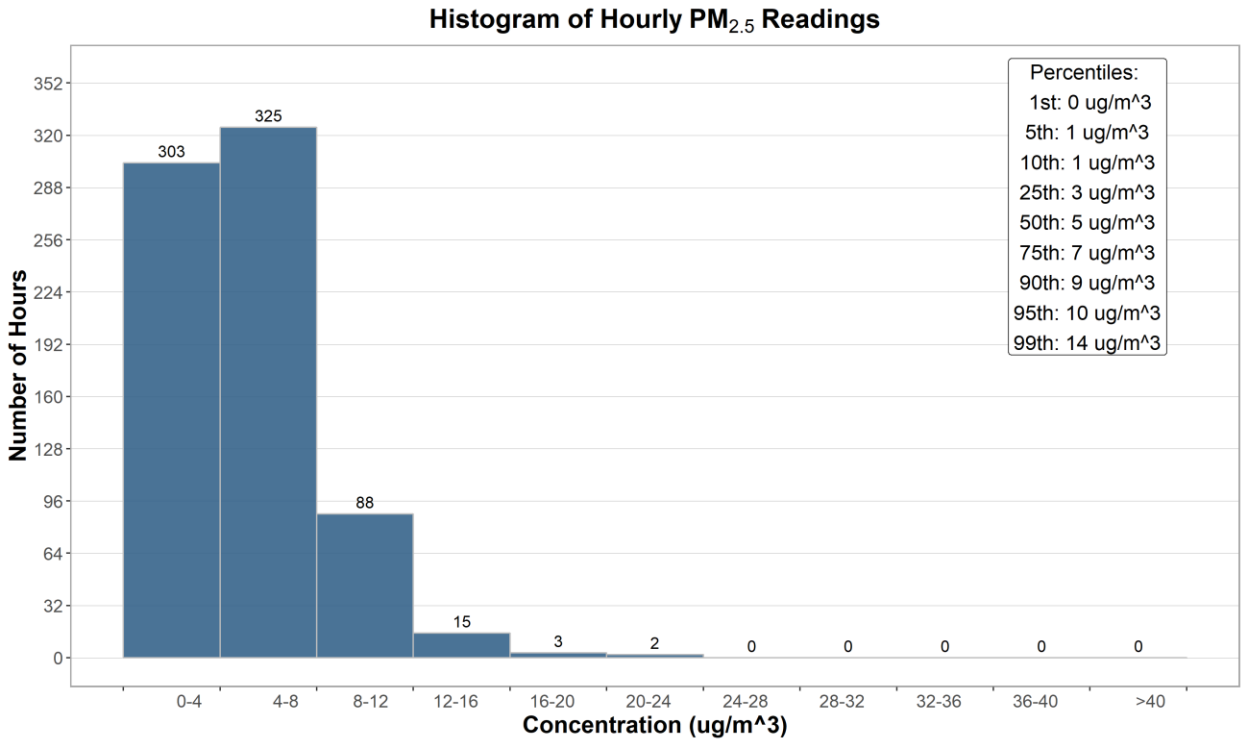

Figure 3-6 **Histogram of hourly $PM_{2.5}$ concentrations at the Lagoon station**

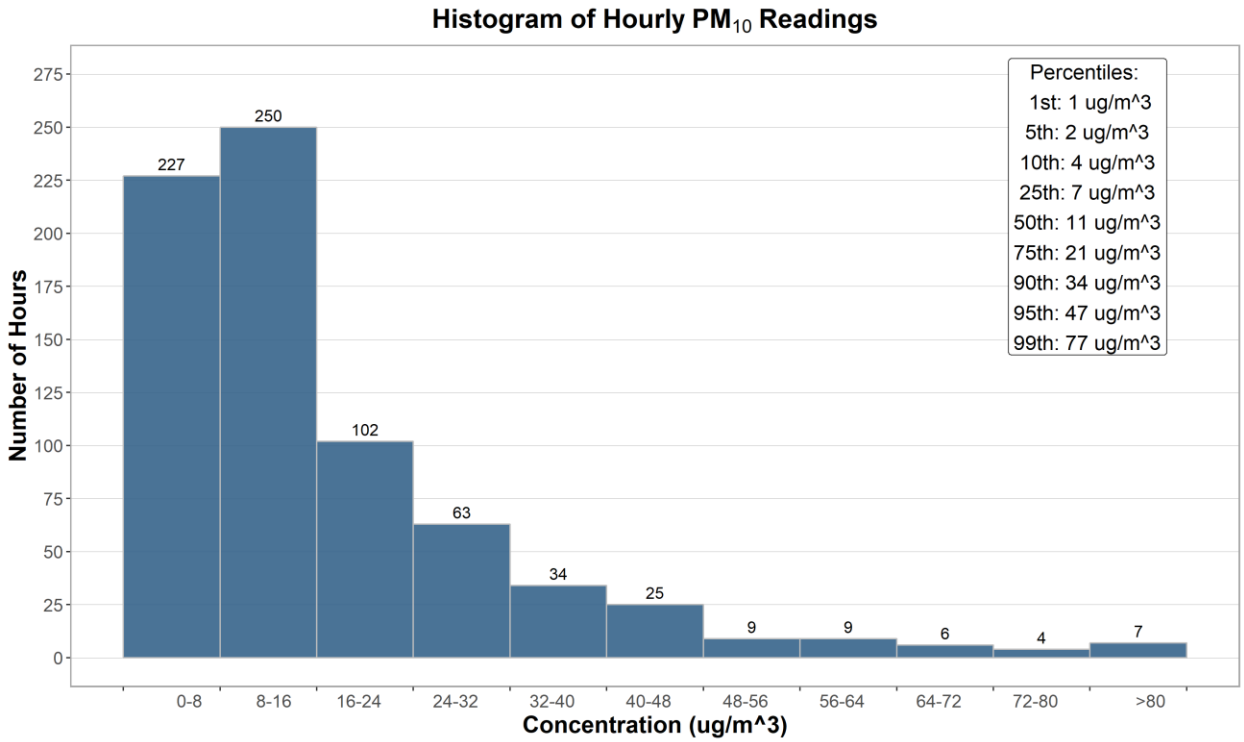

Figure 3-7 **Histogram of hourly PM_{10} concentrations at the Lagoon station**

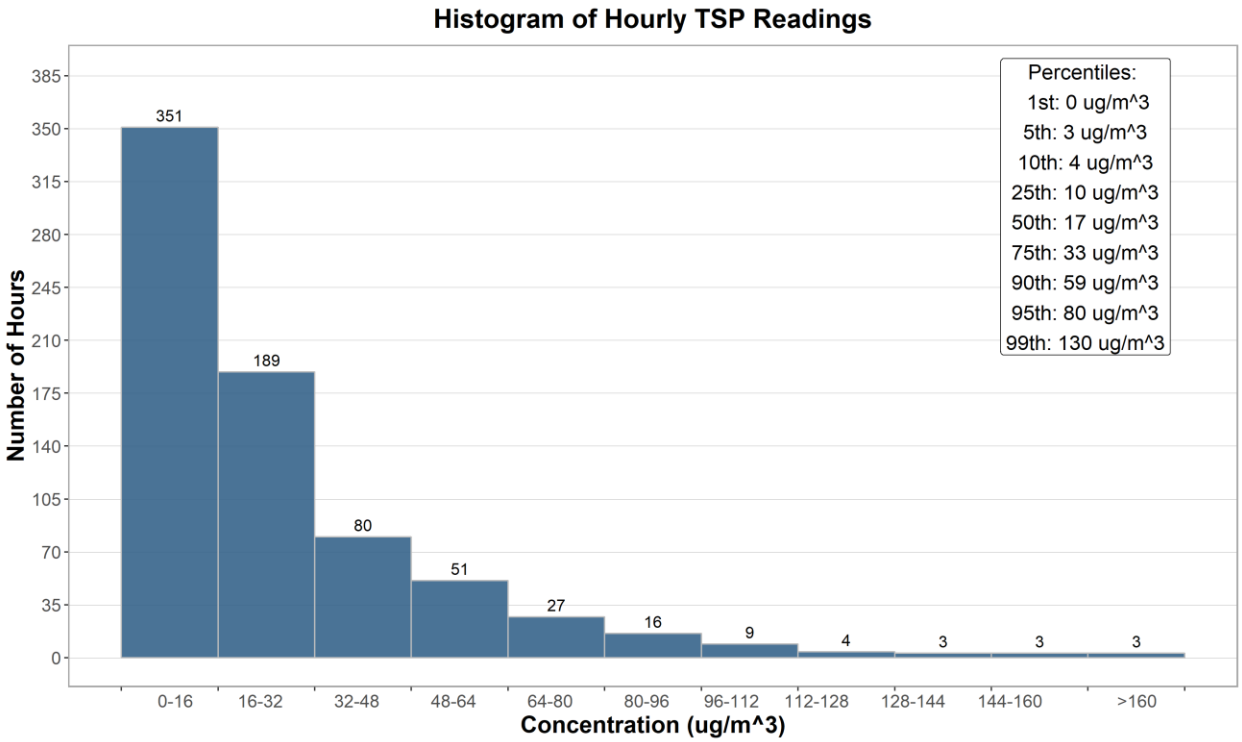

Figure 3-8 Histogram of hourly TSP concentrations at the Lagoon station

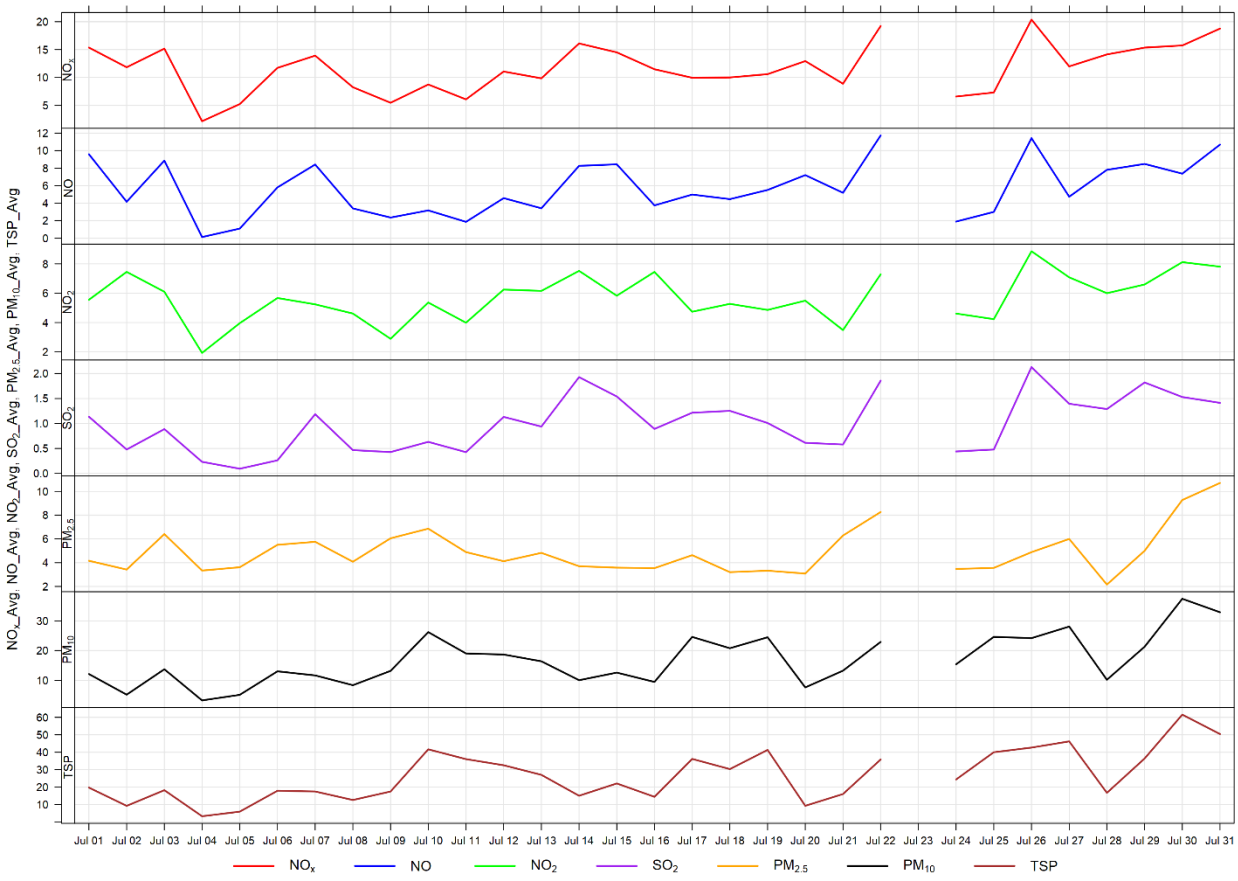

Figure 3-9 24-hour concentrations of NO_x, SO_2, and particulate matter at the Lagoon monitor

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO_2 and NO_x. The particulate matter plot in Figure 3-10 shows that PM_{10} and TSP concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

Figure 3-11 shows the variation of SO_2 over various time periods. SO_2 concentrations patterns are dependent on the timing of the highest SO_2 concentrations recorded in the month because in general SO_2 concentrations are very low. Figure 3-12 shows the variation of NO_x, NO and NO_2, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

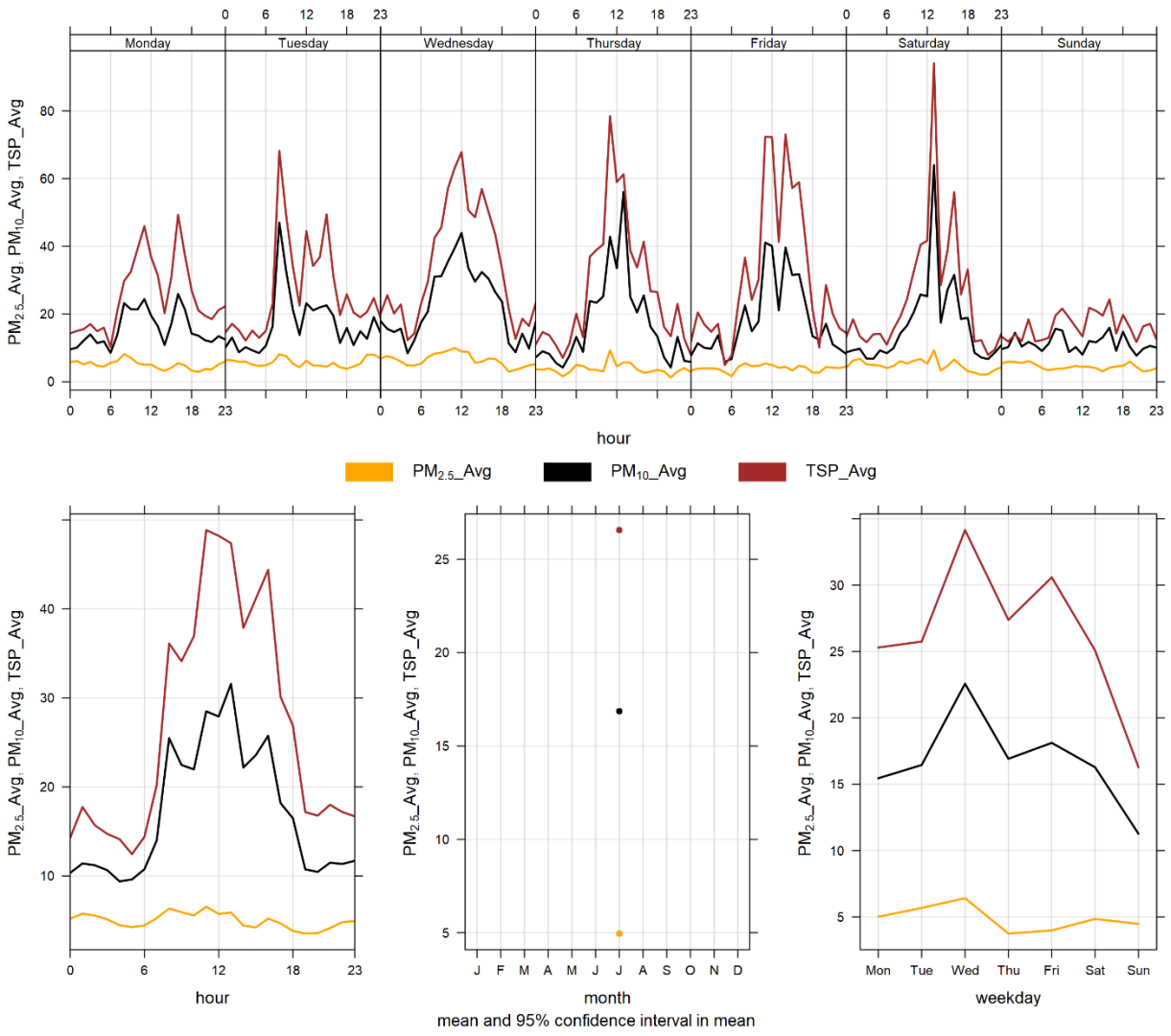

Figure 3-10 Lagoon monitor particulate matter time variation

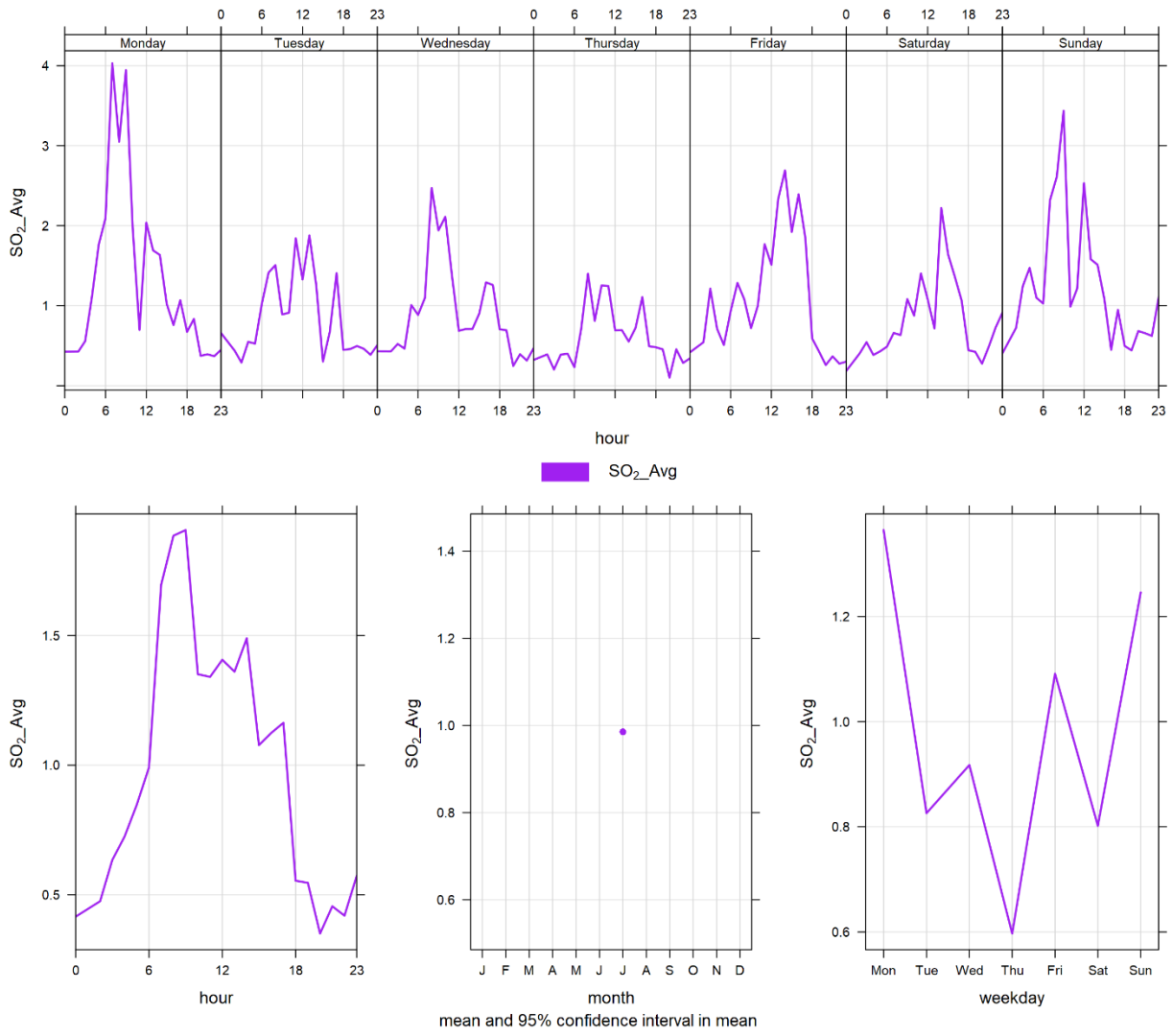

Figure 3-11 Lagoon monitor SO_2 time variation

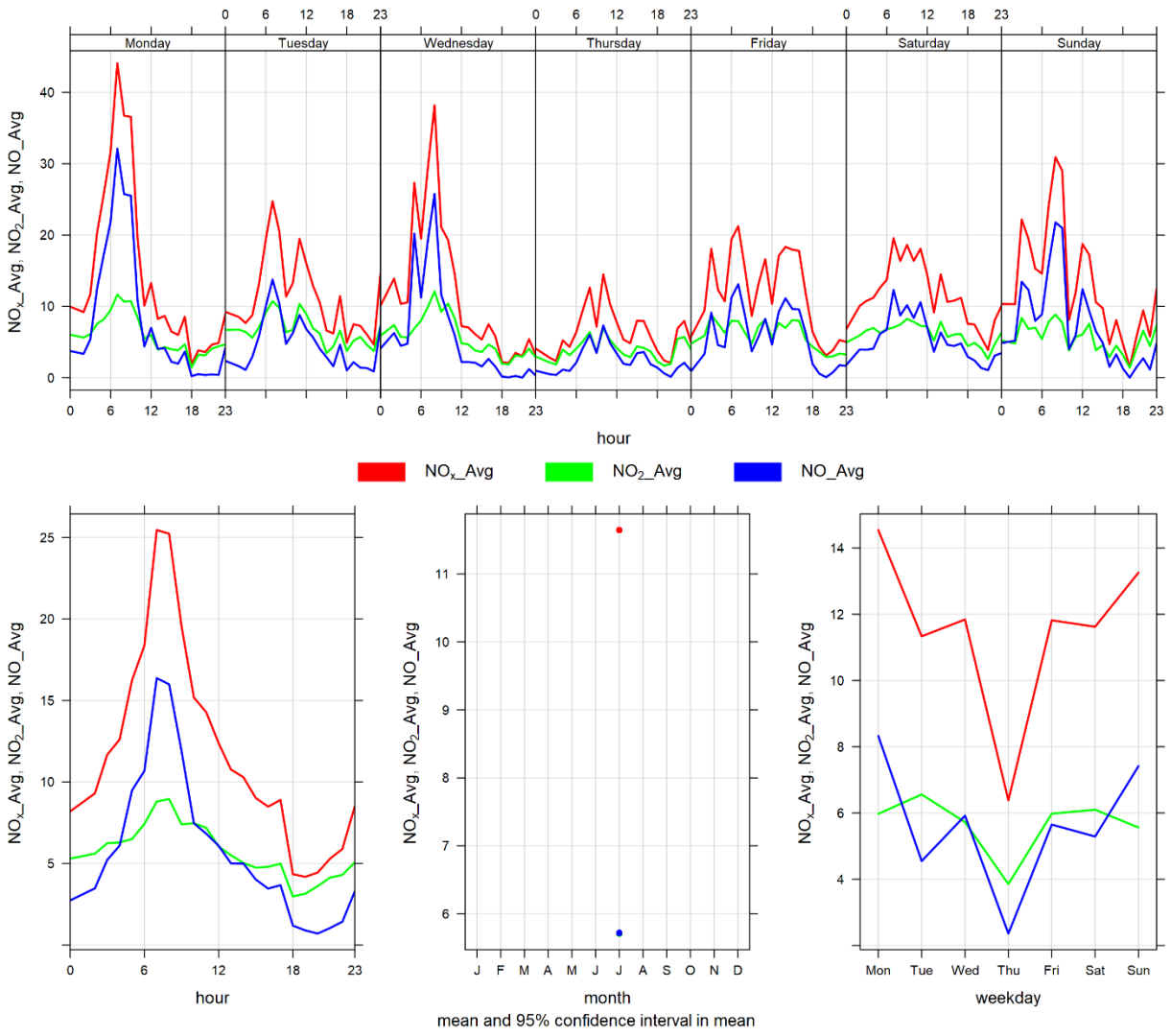

Figure 3-12 Lagoon monitor NO_x time variation

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
$PM_{2.5}$, PM_{10}, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The monitors had 100% uptime in July.

4.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in its current location in order to monitor "background" PM concentrations since the predominant wind pattern is from west to east in the valley. Table 4-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour concentrations recorded over the course of the month. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

Figure 4-1 and Figure 4-2 show the hourly and daily $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. There were no exceedances of the 24-hour TSP guideline (100 µg/m^3) nor the 24-hour $PM_{2.5}$ guideline (29µg/m^3).

Historically in July, the average number of 24-hour TSP AAAQG exceedances and 24-hour $PM_{2.5}$ AAAQG exceedances are zero and 1, respectively. The maximum number of 24-hour AAAQG exceedances was 1 day in 2010 and 2014, and 7 days in 2017 for TSP and $PM_{2.5}$, respectively.

Table 4-2 Summary of July 2019 data at the West GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	West	0	0	0.3	4.1	37.4	22	17	15.1	72.5	9.8	22	100.0
PM_{10} ($\mu g/m^3$)	-	-	West	-	-	0.4	7.4	322.9	22	17	15.1	72.5	40.7	22	100.0
TSP ($\mu g/m^3$)	-	100	West	-	0	0.3	9.2	459.6	22	17	15.1	72.5	58.0	22	100.0

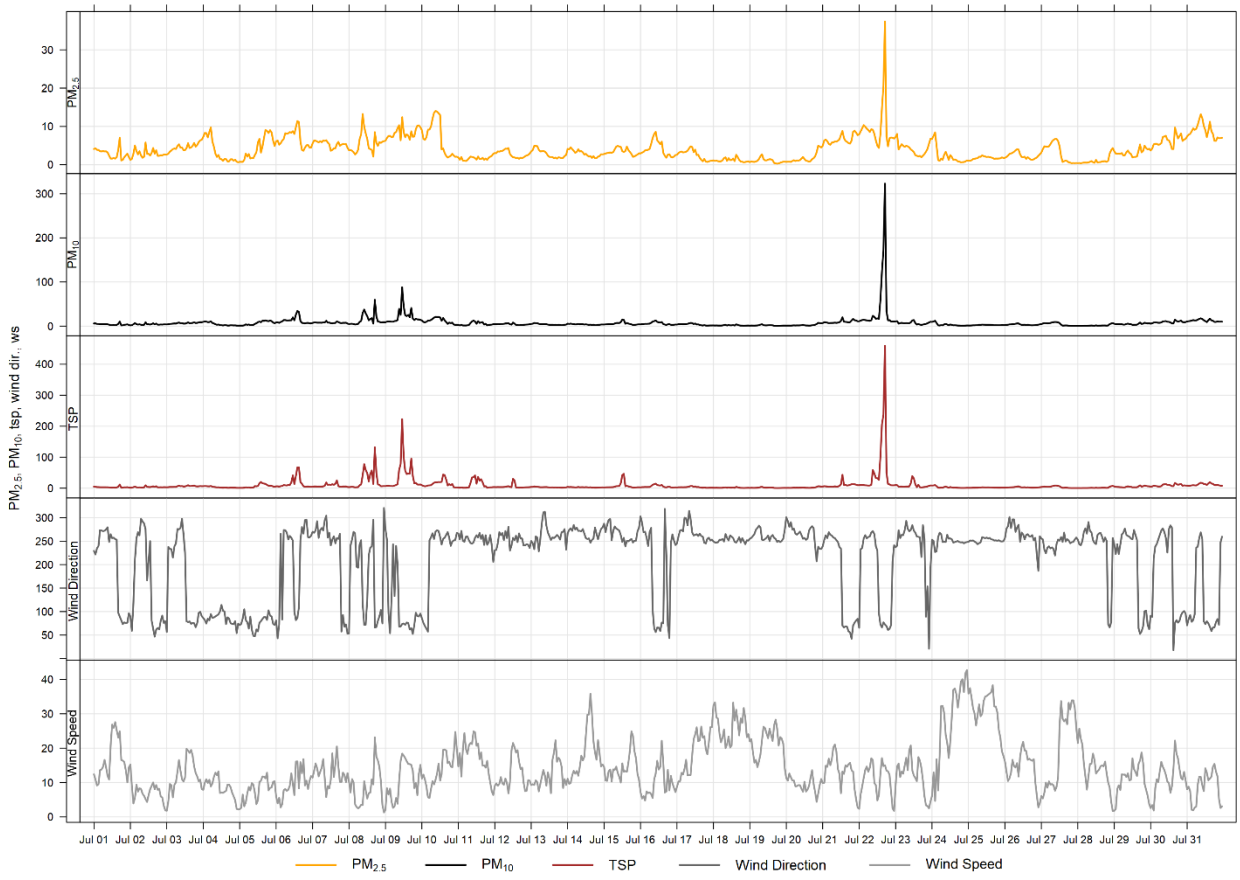

Figure 4-1 1-hour particulate matter concentrations at the West monitor

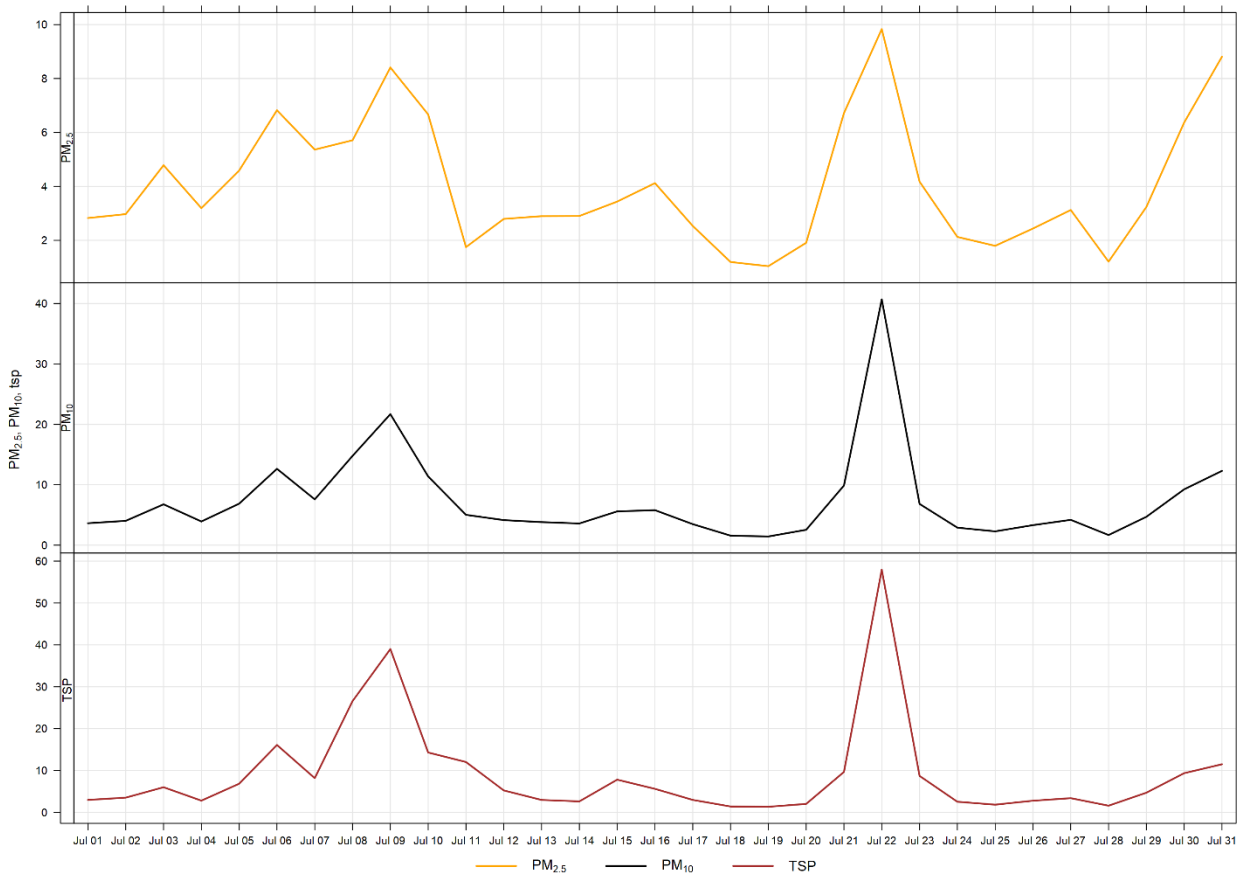

Figure 4-2 24-hour particulate matter concentrations at the West monitor

Figure 4-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-3 is based on data collected during July 2019 and indicates a diurnal relationship that could be due to the proximity of the West monitor to the highway. As the monitor is generally 'up-wind' of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.

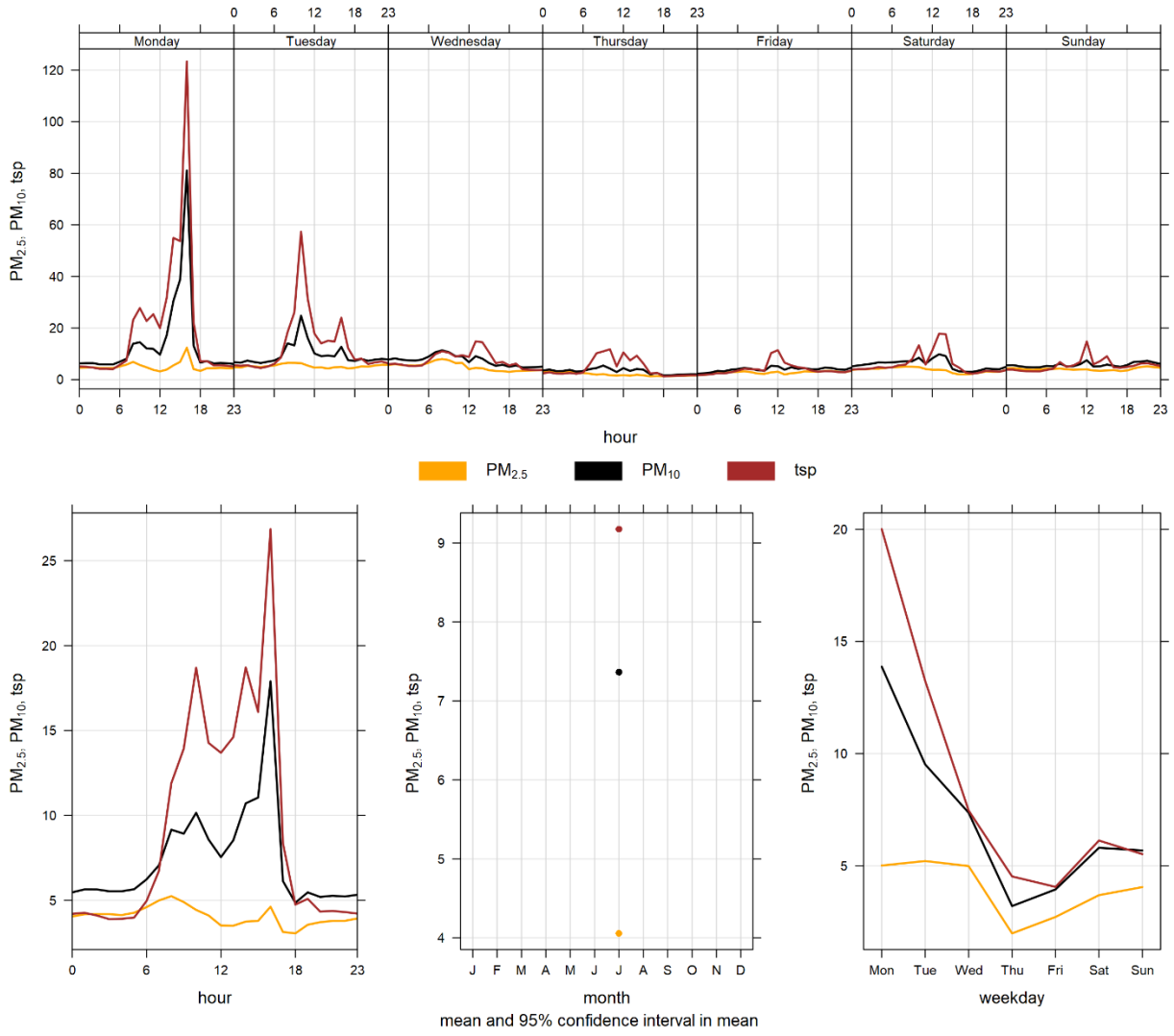

Figure 4-3 West particulate matter time variation

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 99.9% uptime in July due to one hour of operational maintenance on July 23rd.

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 $PM_{2.5}$, PM_{10} and TSP concentrations recorded over the month. 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 12 and zero exceedances of the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (29 µg/m^3) guidelines, respectively. Elevated TSP concentrations this month could be associated with Exshaw Creek flood mitigation construction activities.

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

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

The Berm monitor is located along a ridge at the edge of the Lafarge property and is in an area where on-site trucks drive through site, which can create fugitive dust. Quarry blasting also has the potential to impact short term PM immediately following a blast.

Table 5-2 Summary of July 2019 data at the Berm GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	Berm	1	0	0.4	7.8	93.1	19	11	24.3	257.3	22.3	25	99.9
PM_{10} ($\mu g/m^3$)	-	-	Berm	-	-	0.5	44.6	637.1	27	13	33.7	258.6	189.8	25	99.9
TSP ($\mu g/m^3$)	-	100	Berm	-	12	0.4	130.3	2310.4	25	1	37.5	251.3	844.8	25	99.9

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)
Berm						
2019-07-11	161.8	-	252.8	17.1	37.9	TSP - Dust, possibly from flood mitigation work
2019-07-12	139.5	-	252.6	12.4	42.8	TSP - Dust, possibly from flood mitigation work
2019-07-17	158.8	-	264.3	19.4	60.7	TSP - Dust, possibly from flood mitigation work
2019-07-18	296.2	-	252.1	25.9	44.1	high wind event
2019-07-19	318.0	-	259.6	21.2	55.0	high wind event
2019-07-23	112.0	-	264.6	11.9	48.6	TSP - Dust, possibly from flood mitigation work
2019-07-24	420.5	-	249.9	28.4	54.4	high wind event
2019-07-25	844.8	-	252.1	30.3	33.7	high wind event
2019-07-26	227.5	-	267.7	13.8	39.6	TSP - Dust, possibly from flood mitigation work
2019-07-27	344.9	-	249.5	20.0	47.0	high wind event
2019-07-28	154.2	-	258.1	13.4	43.4	TSP - Dust, possibly from flood mitigation work
2019-07-30	125.7	-	9.9	11.7	61.0	TSP - Dust, possibly from flood mitigation work

Total # of Exceedances	**12**	**0**				
Maximum # of Exceedances (July)	**22 (2010)**	**6 (2017)**				
Average # of Exceedances (July)	**11**	**0**				
Minimum # of Exceedances (July)	**3 (2013)**	**0 (2010 ~ 2013, 2015, 2016, 2018)**				

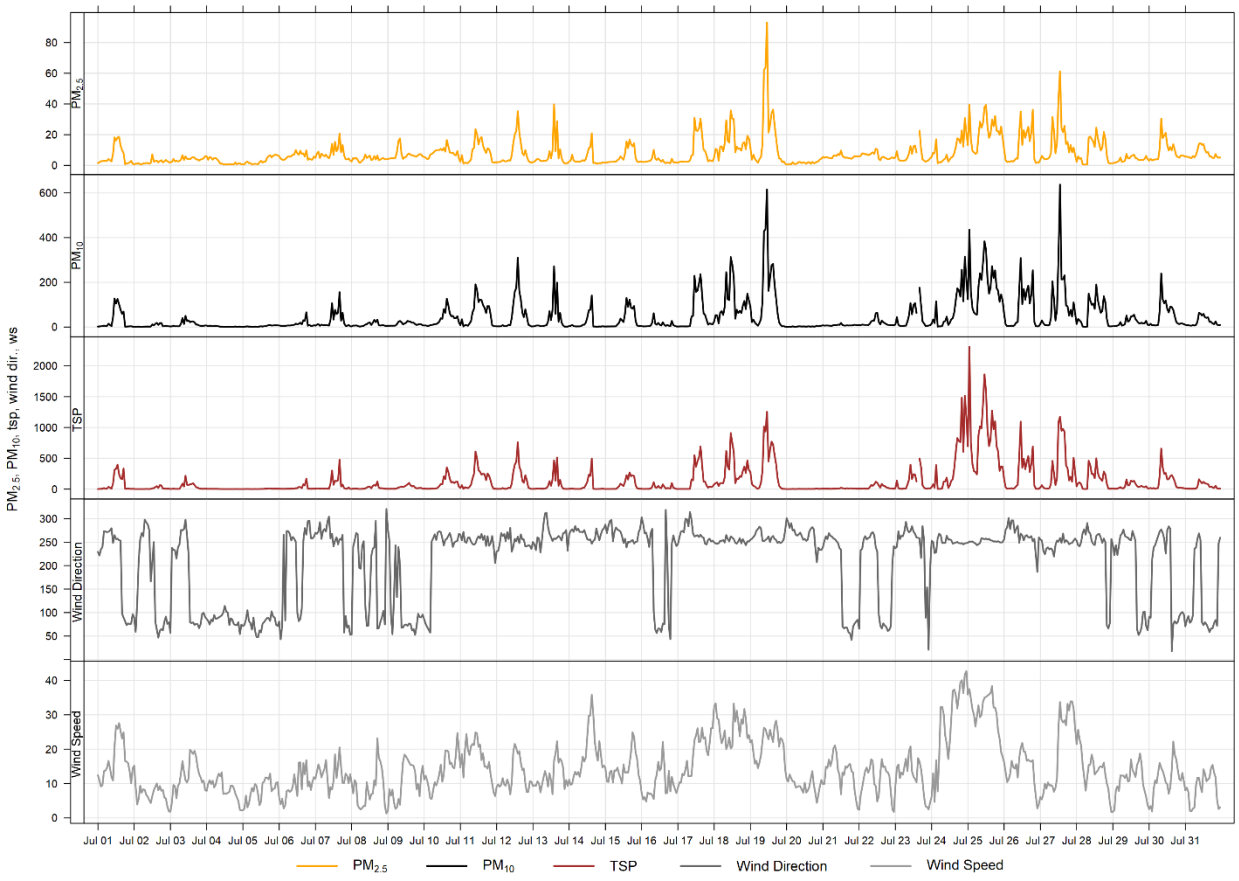

Figure 5-1 1-hour particulate matter concentrations recorded at the Berm monitor

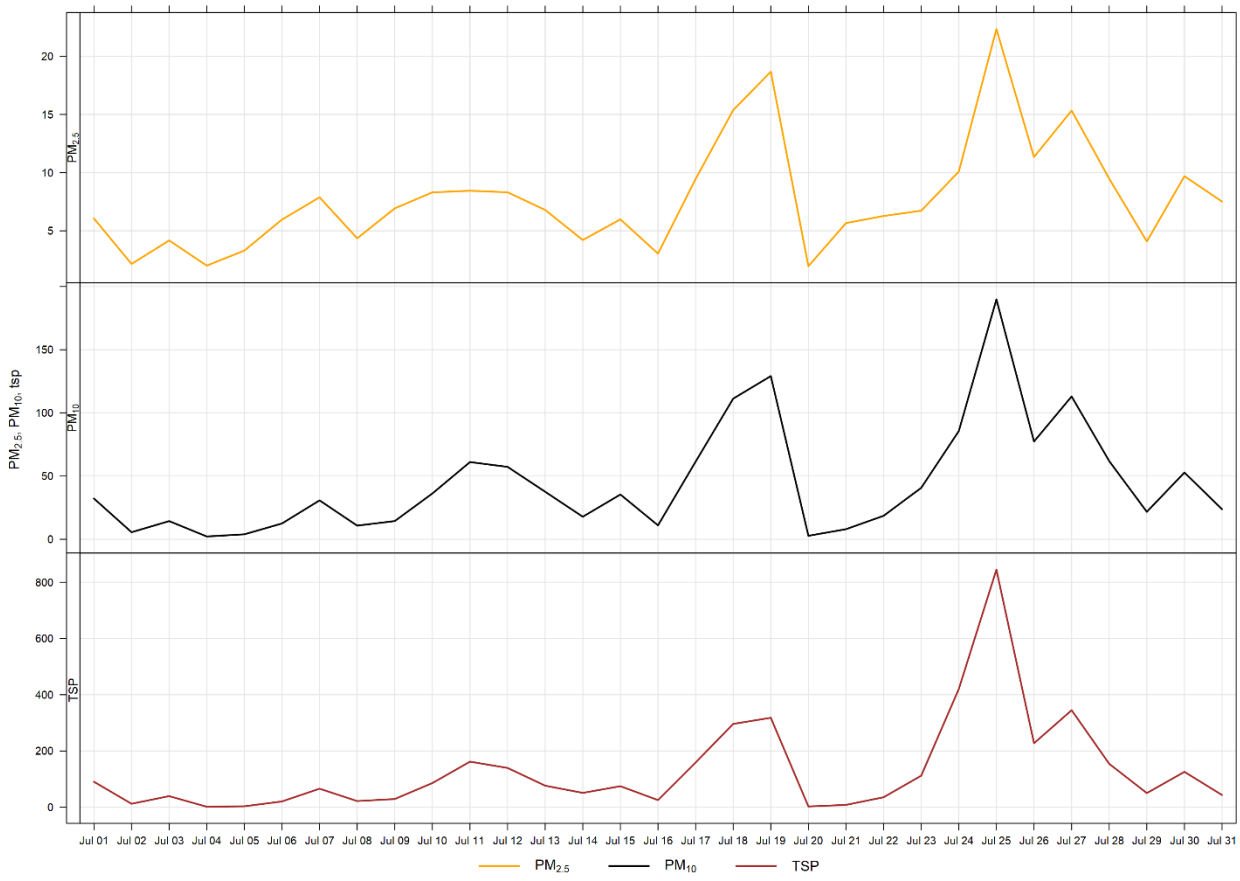

Figure 5-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 5-3 shows the wind rose for the 12 days of TSP exceedances recorded this month. The wind rose shows that the winds predominantly came from the west-southwest direction.

Figure 5-4 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from traffic and other activities in Exshaw, such as the flood mitigation work that is currently underway.

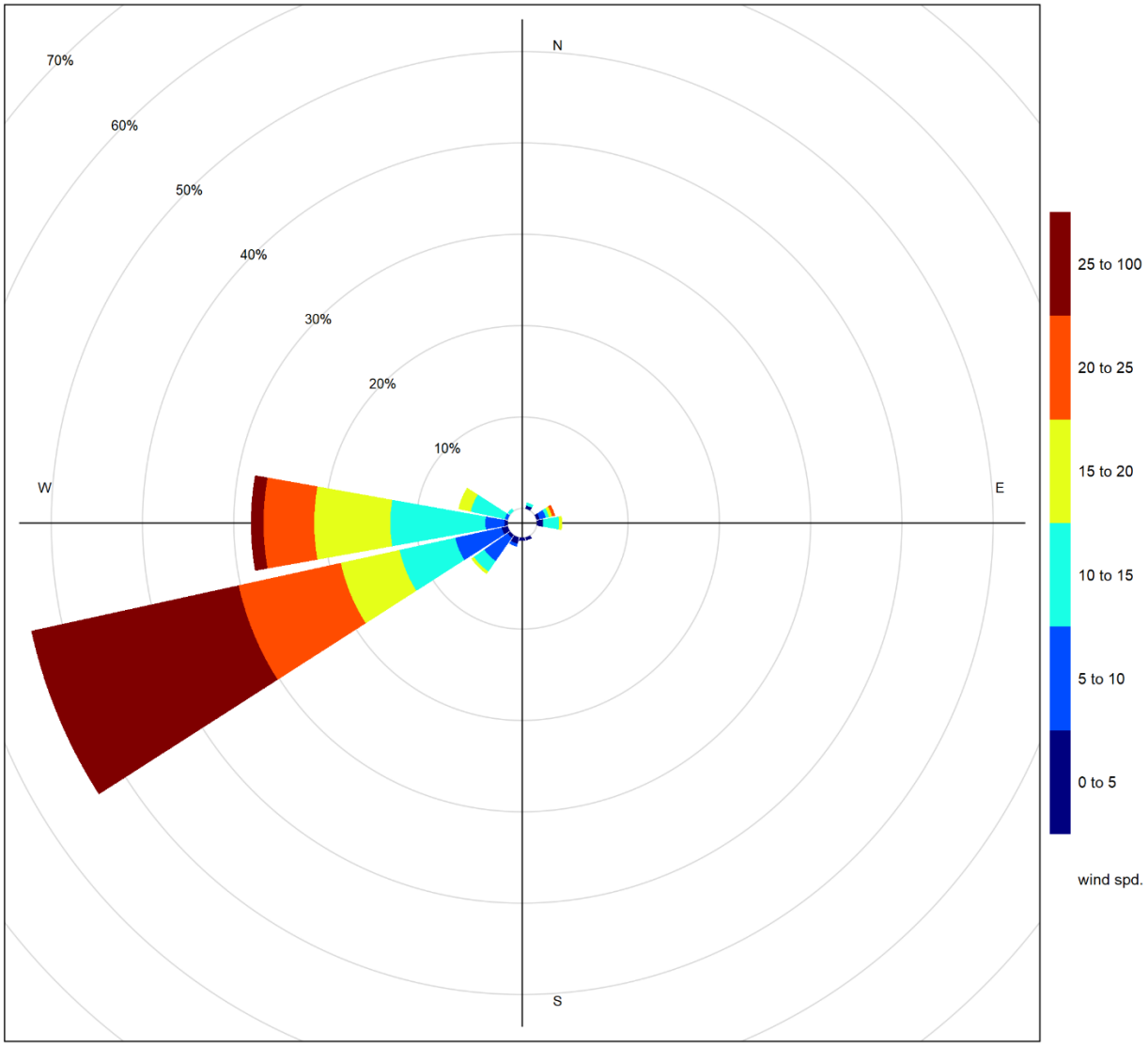

Figure 5-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

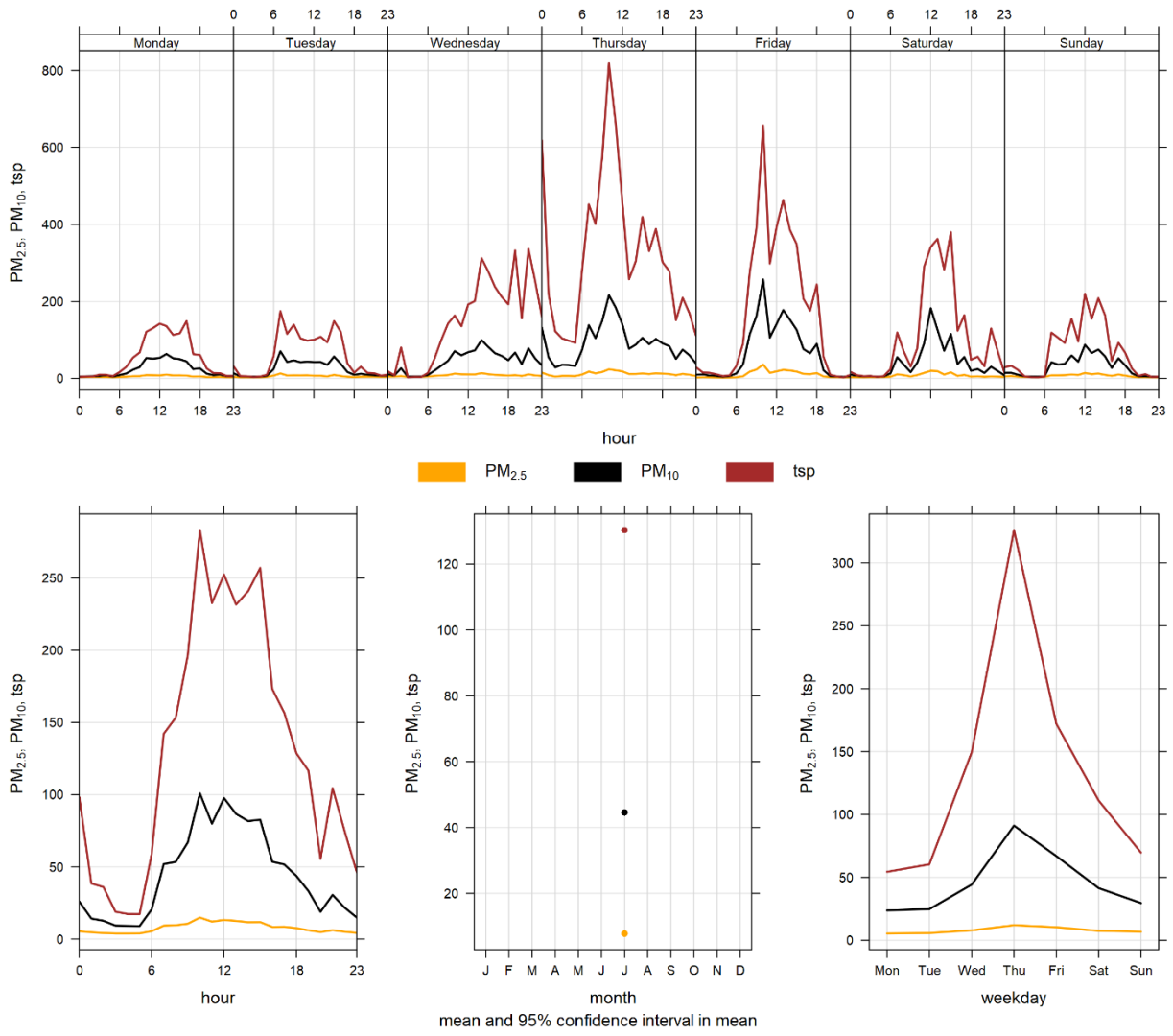

Figure 5-4 Berm particulate matter time variation

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 monitors had 100% uptime in July.

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 $PM_{2.5}$, PM_{10} 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 July, there were 17 and zero exceedances of the 24-hour TSP (100 µg/m^3) and $PM_{2.5}$ (29 µg/m^3) 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 17 and 2 exceedances of the 24-hour TSP and $PM_{2.5}$ guidelines respectively, during the month of July. The maximum number of TSP exceedances recorded during July occurred in 2014 (30 days), while the minimum number of TSP exceedances recorded during July occurred in 2011 (8 days). On the other hand, the maximum number of $PM_{2.5}$ exceedances in July was 11 days, occurring in 2014.

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

The Entrance monitor is impacted by fugitive dust from plant activities, and high wind events. Trucks also pass near to the Entrance monitor as they enter and exit the Lafarge facility for loading and deliveries. Additionally, the monitor is closely located to Highway 1A. Traffic, particularly large trucks, can create dust while crossing over the railway tracks. This can all lead to the monitor recording high TSP concentrations, which are typically associated with fugitive dust sources. The CPR rail crossing is in disrepair and may be contributing to PM concentrations at the Entrance monitor. Lafarge has been informed the crossing is scheduled to be repaired in the summer of 2019.

Figure 6-3 shows the wind rose for the 17 days that exceeded the TSP guideline. The wind rose indicates that the winds predominantly came from the west-southwest direction. High wind speeds were not a primary factor for the TSP exceedances in July at the Entrance station. It is likely that the flood mitigation work impacts particulate concentrations at the Entrance monitor. Other sources, such as industry, traffic and rail may have contributed to these exceedances.

Table 6-2 Summary of July 2019 data at the Entrance GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
$PM_{2.5}$ ($\mu g/m^3$)	80	29	Entrance	0	0	0.5	9.1	43.7	23	8	13.6	276.2	17.5	31	100.0
PM_{10} ($\mu g/m^3$)	-	-	Entrance	-	-	0.7	42.7	410.6	23	8	13.6	276.2	105.7	23	100.0
TSP ($\mu g/m^3$)	-	100	Entrance	-	17	0.5	97.8	1369.0	23	8	13.6	276.2	243.2	23	100.0

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						
2019-07-01	111.0	-	250.3	16.7	53.9	TSP - Dust, possibly from flood mitigation work
2019-07-08	106.1	-	98.4	8.1	72.0	TSP - Dust, possibly from flood mitigation work
2019-07-09	104.3	-	78.0	10.9	69.8	TSP - Dust, possibly from flood mitigation work
2019-07-10	103.2	-	260.4	13.8	60.1	TSP - Dust, possibly from flood mitigation work
2019-07-12	145.4	-	252.6	12.4	42.8	TSP - Dust, possibly from flood mitigation work
2019-07-13	102.3	-	263.8	12.3	49.2	TSP - Dust, possibly from flood mitigation work
2019-07-15	104.3	-	263.5	14.2	56.2	TSP - Dust, possibly from flood mitigation work
2019-07-19	115.1	-	259.6	21.2	55.0	high wind event
2019-07-22	171.7	-	267.1	11.1	60.2	TSP - Dust, possibly from flood mitigation work
2019-07-23	243.2	-	264.6	11.9	48.6	TSP - Dust, possibly from flood mitigation work
2019-07-24	117.2	-	249.9	28.4	54.4	high wind event

2019-07-25	136.2	-	252.1	30.3	33.7	high wind event
2019-07-26	142.5	-	267.7	13.8	39.6	TSP - Dust, possibly from flood mitigation work
2019-07-27	112.6	-	249.5	20.0	47.0	high wind event
2019-07-29	102.5	-	269.6	10.9	53.7	TSP - Dust, possibly from flood mitigation work
2019-07-30	138.1	-	9.9	11.7	61.0	TSP - Dust, possibly from flood mitigation work
2019-07-31	162.5	-	77.3	8.8	66.7	TSP - Dust, possibly from flood mitigation work
Total # of Exceedances	**17**	**0**				
Maximum # of Exceedances (July)	**30 (2014)**	**11 (2014)**				
Average # of Exceedances (July)	**17**	**2**				
Minimum # of Exceedances (July)	**8 (2011)**	**0 (2011, 2013, 2016, 2018)**				

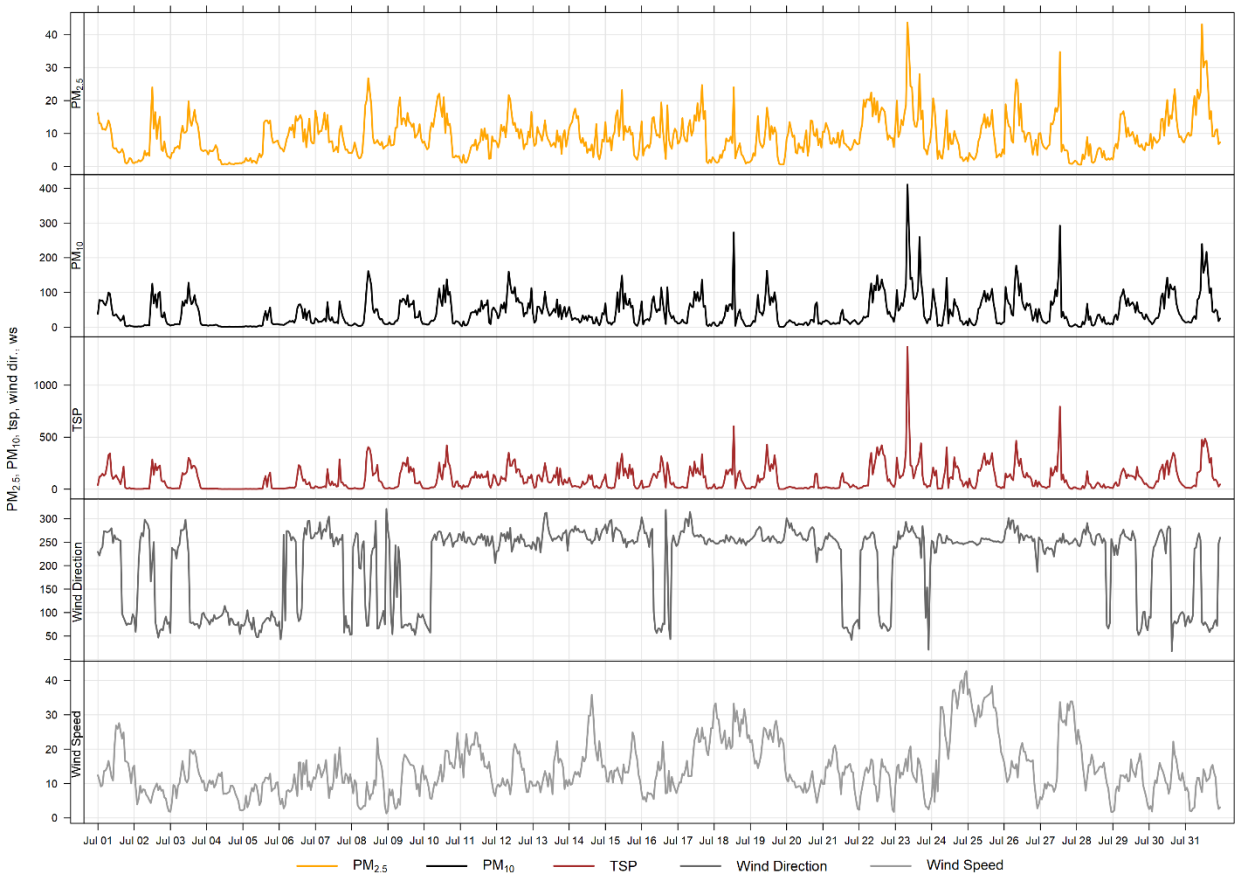

Figure 6-1 1-hour particulate matter concentrations recorded at the Entrance monitor

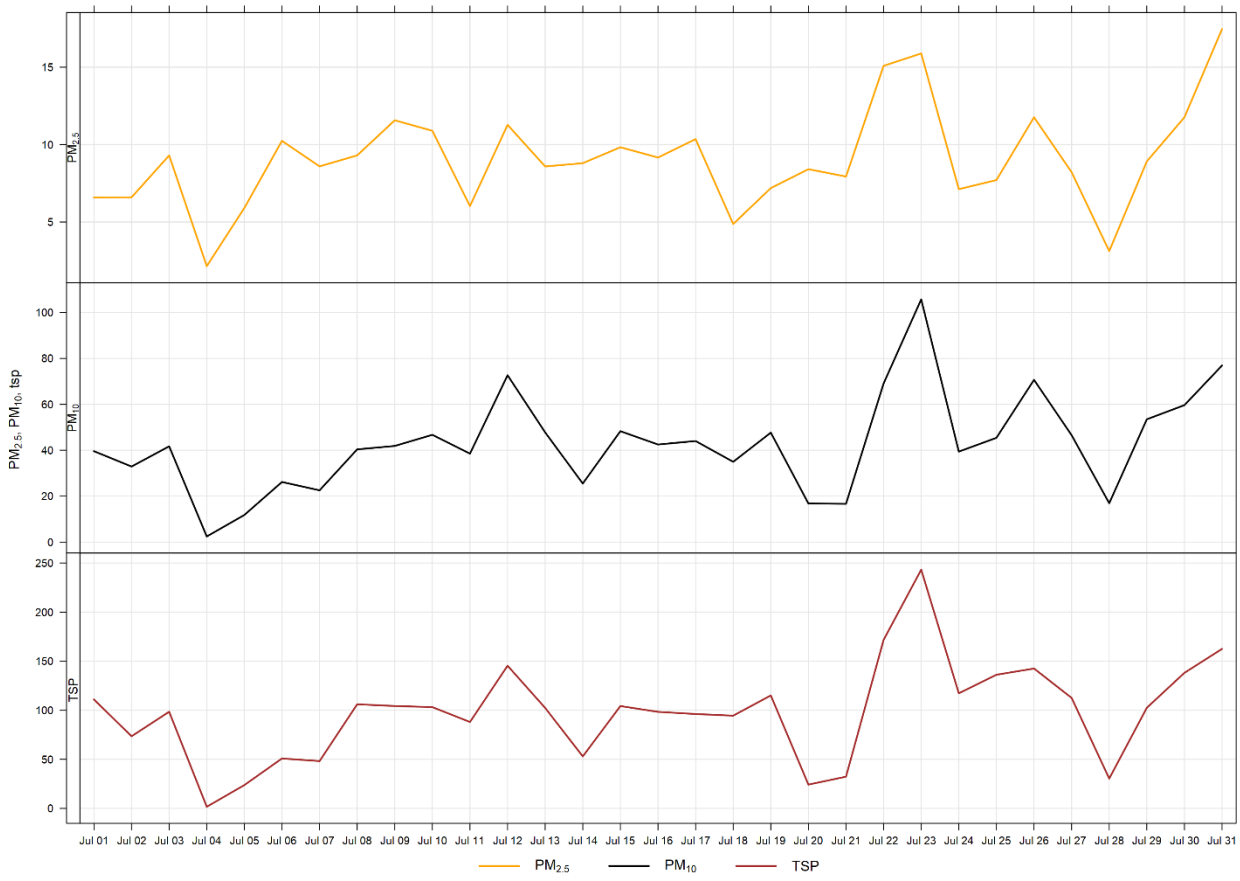

Figure 6-2 24-hour particulate matter concentrations at the Entrance monitor

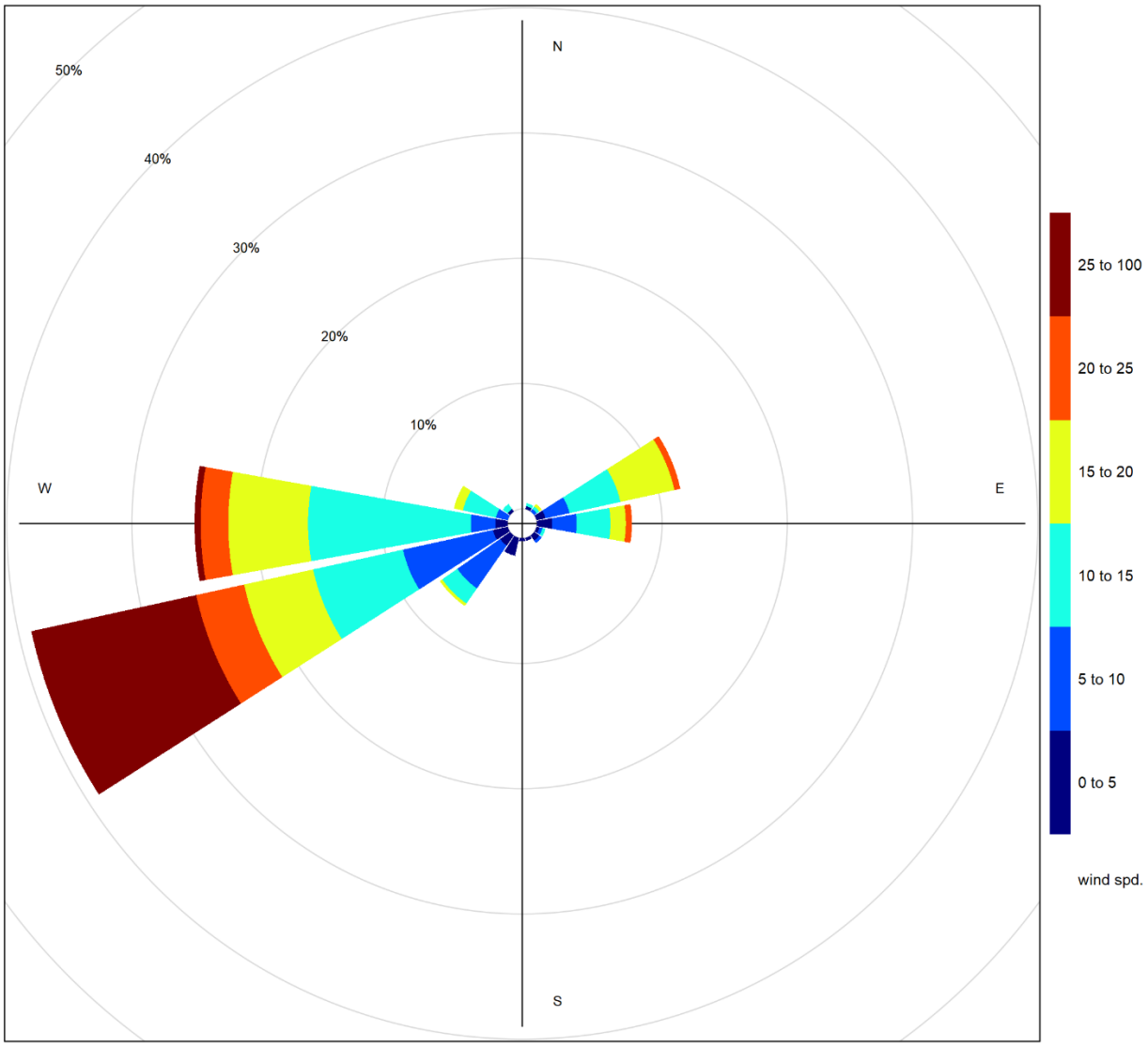

Figure 6-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

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 July 2019. 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.

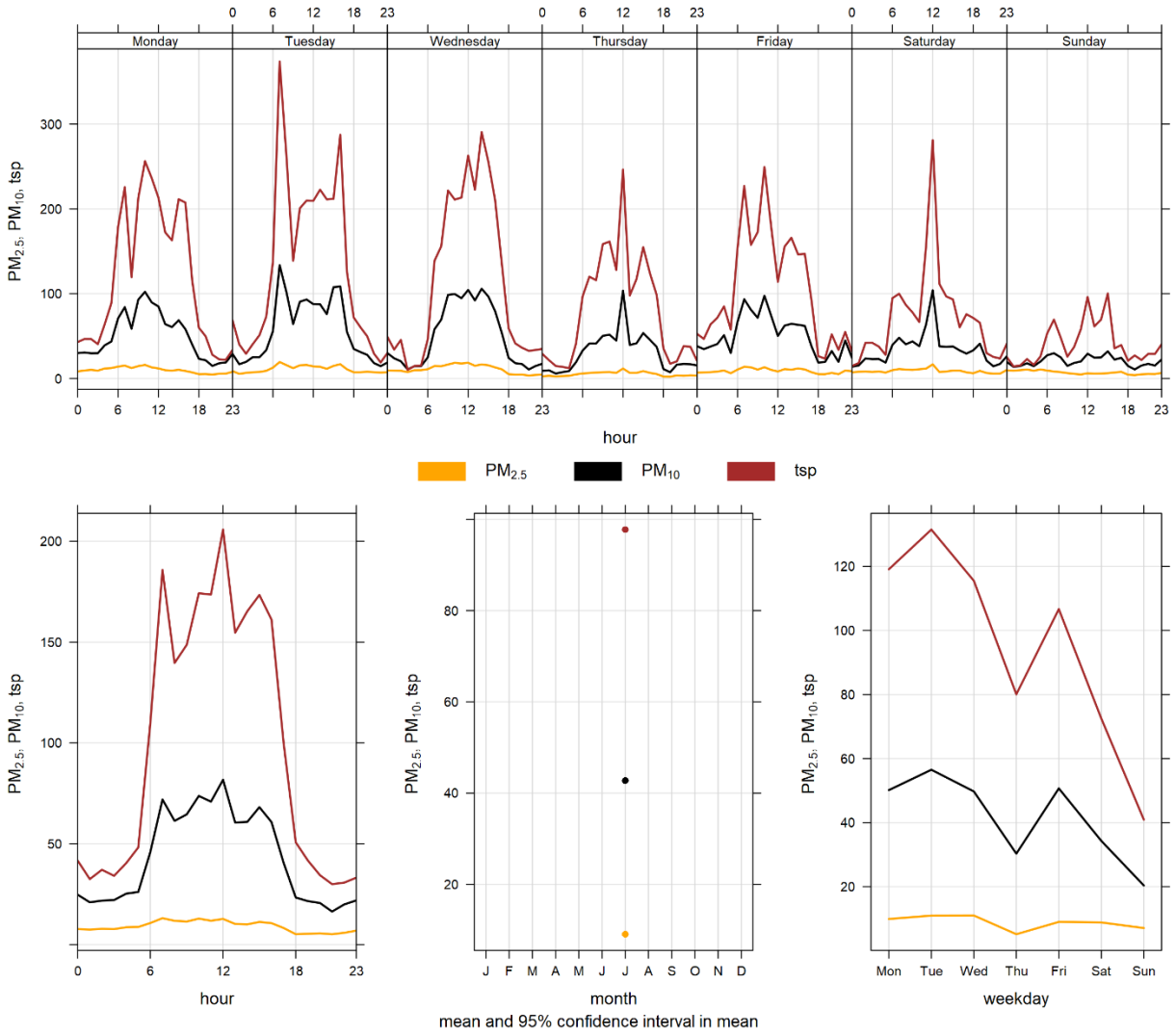

Figure 6-4 Entrance particulate matter time variation

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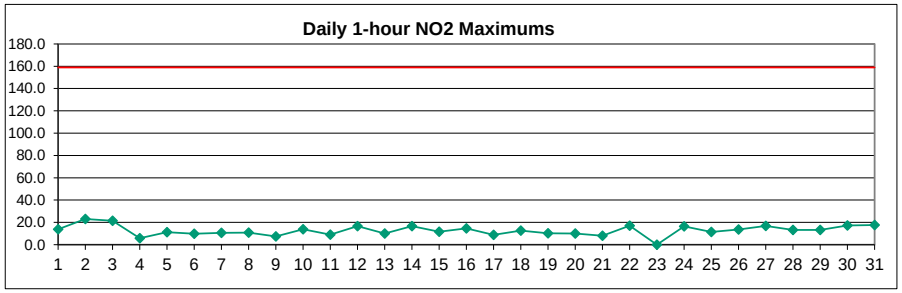
APPENDIX

A DATA & CALIBRATION REPORTS

APPENDIX

Lagoon NO_2 (ppb) – July 2019

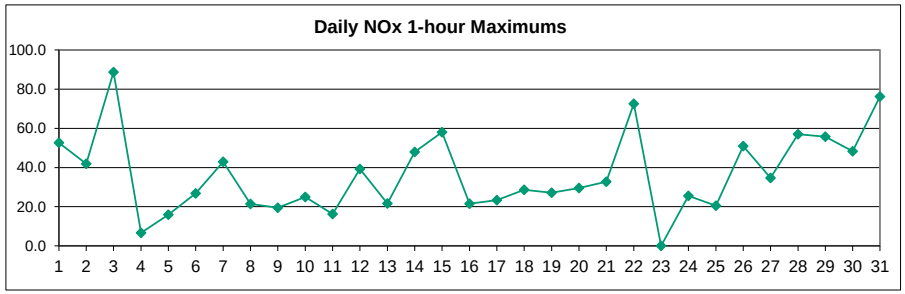
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.7	S	5.1	6.1	10.7	13.3	13.8	9.6	8.8	13.4	11.9	5.7	5.9	5.5	2.9	4.0	0.5	0.4	1.2	0.3	1.5	1.1	0.2	0.2	5.6	13.8
2	1.5	S	6.0	5.6	5.6	9.7	14.2	13.6	10.1	5.9	16.8	23.0	19.4	7.6	4.3	2.5	7.9	3.8	1.6	1.2	2.6	2.7	1.7	3.9	7.5	23.0
3	5.0	S	8.9	8.5	7.0	9.0	8.2	14.0	21.6	10.2	4.4	1.9	3.4	2.3	2.9	2.3	5.8	7.4	3.5	3.1	2.7	2.8	2.8	2.6	6.1	21.6
4	2.8	S	2.1	1.6	2.2	2.5	2.1	1.6	2.0	1.1	0.7	0.7	0.7	0.6	1.9	0.6	0.6	3.5	1.3	1.3	1.0	2.8	5.8	4.8	1.9	5.8
5	4.3	S	5.6	6.4	7.8	6.7	3.6	5.4	3.8	5.6	11.3	7.4	4.6	0.7	1.1	1.1	0.7	1.4	2.0	1.6	2.2	1.3	3.5	2.9	4.0	11.3
6	5.5	S	3.8	4.3	5.9	7.9	7.4	8.0	7.4	5.2	5.7	7.7	5.0	2.8	1.0	3.8	6.9	5.3	7.5	9.8	7.1	1.9	2.8	7.6	5.7	9.8
7	5.9	S	3.1	5.5	6.0	3.1	5.2	4.1	7.8	9.4	9.6	9.3	1.7	10.6	1.1	6.6	2.8	5.3	3.3	0.8	3.7	4.6	3.2	7.8	5.2	10.6
8	3.8	S	3.1	8.9	3.0	5.8	10.9	10.5	10.1	3.9	6.0	10.2	2.0	1.0	1.0	5.8	1.8	3.8	1.7	1.8	1.8	3.5	2.4	3.4	4.6	10.9
9	2.5	S	7.4	5.0	4.3	2.8	6.1	7.1	4.0	3.6	1.0	1.0	1.7	1.1	2.1	2.0	1.8	2.2	0.8	3.2	2.6	1.8	1.4	1.2	2.9	7.4
10	1.2	S	4.7	5.1	3.1	7.6	13.8	9.4	9.9	7.1	8.8	13.0	4.5	5.6	3.1	3.7	5.1	5.6	1.0	1.0	0.8	1.8	4.2	3.2	5.4	13.8
11	3.4	S	2.2	0.4	4.5	2.8	5.5	5.4	2.5	1.5	5.0	5.3	4.8	5.1	4.9	9.1	2.0	8.0	0.2	0.9	4.9	6.0	4.3	3.0	4.0	9.1
12	2.6	S	5.6	7.6	7.6	6.3	7.1	9.1	4.0	4.4	1.2	4.3	8.5	10.9	4.5	16.7	14.7	6.5	6.1	2.7	5.0	4.5	2.3	1.6	6.2	16.7
13	3.1	S	8.1	8.5	7.6	4.6	6.3	4.8	5.9	5.1	7.1	10.1	5.5	9.1	5.7	4.1	5.1	6.8	4.3	6.7	6.9	3.1	4.9	8.4	6.2	10.1
14	7.6	S	7.2	9.6	9.6	10.6	9.3	16.7	12.4	12.9	3.8	6.9	4.7	4.1	1.3	2.8	3.0	4.4	5.4	1.9	5.7	13.5	6.9	12.6	7.5	16.7
15	6.9	S	3.8	3.3	4.4	5.5	7.8	11.6	9.0	11.3	10.4	2.1	10.6	0.7	5.0	4.2	1.9	6.5	0.3	6.1	0.9	5.8	6.3	9.8	5.8	11.6
16	12.5	S	8.5	5.1	2.7	7.0	9.5	10.8	9.7	6.7	4.1	2.4	3.5	1.6	1.0	6.3	10.1	12.3	6.9	10.8	14.6	10.6	6.1	8.7	7.5	14.6
17	7.8	S	6.8	4.3	4.8	4.9	5.0	4.7	7.8	6.9	6.3	7.8	6.1	5.1	8.9	3.2	5.2	1.3	0.7	1.2	4.0	1.4	4.0	0.8	4.7	8.9
18	0.7	S	1.9	3.4	6.5	5.7	5.7	9.8	12.1	5.2	12.7	9.1	5.9	2.8	1.2	4.7	11.4	1.0	5.4	2.0	0.1	1.5	7.5	4.9	5.3	12.7
19	2.2	S	4.9	7.8	6.5	7.0	10.3	5.1	5.6	4.3	4.4	10.0	1.5	8.6	8.9	4.4	3.0	1.3	2.0	1.0	1.2	2.9	4.8	4.1	4.9	10.3
20	2.3	S	3.7	3.6	5.4	4.6	5.8	7.0	6.8	6.6	7.9	7.0	7.8	5.3	7.8	10.1	5.9	7.8	5.4	2.4	2.0	3.0	4.1	4.1	5.5	10.1
21	6.5	S	5.1	8.0	5.3	3.1	3.0	3.0	2.8	5.4	1.4	4.5	4.5	3.5	3.4	2.0	2.3	3.2	0.9	1.2	2.8	3.7	2.2	2.4	3.5	8.0
22	6.9	S	8.1	6.7	10.6	8.3	8.1	13.1	15.4	17.0	5.9	7.1	1.7	2.2	3.1	2.9	10.8	9.8	1.7	5.5	9.8	3.3	5.0	4.6	7.3	17.0
23	8.9	S	5.3	6.2	4.1	5.3	4.5	6.9	C	C	C	C	C	C	C	C	0.8	13.0	6.8	7.2	6.3	6.1	7.4	17.2	-	-
24	11.2	S	6.9	3.7	8.4	6.0	3.3	8.3	3.6	8.9	16.5	4.8	4.5	2.0	2.0	4.8	3.7	2.8	0.6	0.5	0.5	0.5	1.1	1.5	4.6	16.5
25	5.0	S	2.5	1.9	2.5	1.5	2.9	3.6	8.8	6.1	9.4	6.0	5.3	4.4	3.4	3.1	2.7	2.2	2.1	2.6	1.6	11.5	5.3	2.9	4.2	11.5
26	9.9	S	7.5	13.3	8.3	5.2	11.1	12.1	11.8	4.8	11.9	10.9	7.4	10.4	13.4	10.0	13.6	11.9	7.2	9.3	3.3	3.2	2.8	4.4	8.9	13.6
27	8.8	S	8.1	10.1	8.9	8.0	7.6	8.3	9.6	16.1	10.5	4.3	10.4	3.5	16.8	4.8	6.3	4.5	0.6	0.5	0.5	2.4	7.0	5.1	7.1	16.8
28	0.8	S	3.8	10.4	6.4	11.2	4.2	7.6	12.3	3.2	0.4	2.2	13.3	12.1	9.5	7.0	3.5	5.1	3.0	1.6	4.1	4.4	5.4	6.7	6.0	13.3
29	6.8	S	8.0	5.5	9.0	8.0	6.9	13.3	10.1	8.1	8.1	2.1	9.9	10.3	9.3	3.0	4.1	2.8	2.3	2.4	1.7	6.6	8.1	5.4	6.6	13.3
30	8.1	S	6.4	10.2	11.3	10.6	11.5	15.2	15.5	9.2	4.9	15.0	11.1	17.3	17.3	3.0	1.3	1.7	2.6	3.3	2.5	1.7	2.0	5.3	8.1	17.3
31	4.1	S	9.7	6.9	4.8	7.0	9.7	13.1	17.6	13.1	15.9	13.8	5.5	8.3	2.2	3.9	3.5	3.1	3.9	3.5	7.6	8.2	8.1	6.0	7.8	17.6
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	705	100%
MEAN	5.3	-	5.6	6.2	6.3	6.5	7.4	8.8	9.0	7.4	7.5	7.2	6.0	5.5	5.0	4.7	4.8	5.0	3.0	3.1	3.6	4.1	4.3	5.1		
MAX	12.5	-	9.7	13.3	11.3	13.3	14.2	16.7	21.6	17.0	16.8	23.0	19.4	17.3	17.3	16.7	14.7	13.0	7.5	10.8	14.6	13.5	8.1	17.2		



Number of 1HR Exceedences	0		
Number of Non-Zero Readings	705		
Maximum 1-HR Average	23.0 PPB		
Maximum 24-HR Average	8.9 PPB		
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	3.8	Monthly Average	5.7 PPB

Lagoon NOx (ppb) – July 2019

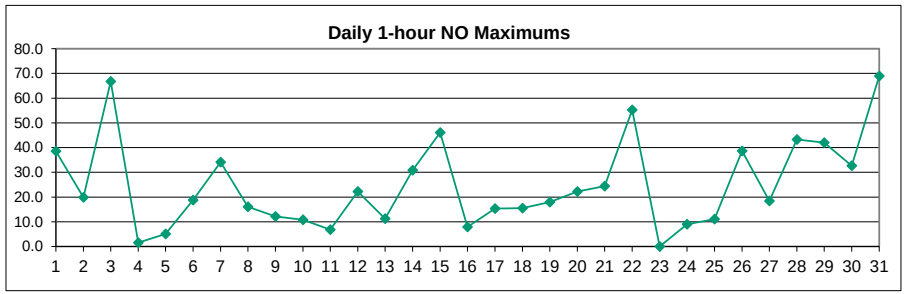
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.8	S	6.8	16.1	30.2	47.4	52.7	31.9	36.7	46.8	26.6	10.8	12.0	10.4	4.9	7.1	0.5	0.5	2.5	0.3	1.9	1.1	0.1	0.1	15.4	52.7
2	1.5	S	6.0	5.4	7.5	12.6	20.2	17.9	14.1	7.2	37.0	41.9	35.6	12.2	6.3	3.4	10.4	5.6	1.7	1.4	3.1	3.1	1.7	16.2	11.8	41.9
3	15.7	S	10.8	9.2	13.8	20.5	29.6	61.6	88.7	32.8	8.5	4.4	5.1	3.3	3.9	2.9	9.3	10.2	4.1	3.4	2.8	2.8	2.9	2.6	15.2	88.7
4	2.7	S	2.1	1.7	2.1	2.8	2.2	1.9	2.3	1.2	0.9	0.8	0.9	0.7	2.6	0.8	0.7	5.3	1.3	1.4	1.1	2.6	6.6	4.8	2.2	6.6
5	4.5	S	6.2	6.4	8.4	7.9	4.2	6.9	5.5	9.3	15.9	10.0	10.0	1.1	1.6	1.6	1.0	2.0	2.1	1.7	2.5	1.3	6.4	3.6	5.2	15.9
6	9.7	S	5.7	6.5	9.8	20.5	16.1	22.6	16.6	12.3	12.5	26.8	11.6	5.4	1.3	7.3	12.6	8.5	14.6	17.6	10.6	4.3	4.8	11.9	11.7	26.8
7	14.2	S	6.5	13.5	30.4	11.3	21.0	22.5	42.3	42.9	21.8	19.4	2.9	18.4	1.5	10.9	3.7	8.8	3.8	0.8	5.0	5.0	3.6	9.9	13.9	42.9
8	3.9	S	9.0	11.6	3.1	7.2	21.4	18.4	18.8	6.5	10.7	21.4	3.0	1.5	1.5	11.4	2.7	6.4	2.1	2.0	1.8	3.5	2.4	19.8	8.3	21.4
9	7.5	S	11.4	5.5	6.8	8.5	16.8	19.5	8.5	6.6	1.7	1.7	3.0	2.1	3.3	4.7	2.6	3.8	0.9	3.6	2.7	1.8	1.3	1.0	5.5	19.5
10	1.1	S	5.1	6.8	3.3	15.2	24.9	17.1	19.6	14.2	16.2	23.4	5.7	8.0	4.1	5.1	7.8	8.7	1.1	1.1	0.8	2.0	5.3	4.6	8.7	24.9
11	4.8	S	3.2	0.4	7.5	5.0	8.8	9.0	3.6	2.6	7.8	10.9	8.0	7.8	7.8	16.3	2.6	12.6	0.2	0.9	5.0	7.4	4.4	3.1	6.1	16.3
12	2.6	S	10.4	9.9	12.0	8.6	13.8	17.8	6.8	6.9	1.7	7.4	14.9	22.1	8.7	39.3	32.4	12.4	9.4	2.9	5.1	5.5	2.5	1.6	11.1	39.3
13	3.1	S	14.8	13.2	8.3	5.9	10.8	10.7	10.7	8.2	16.1	21.7	8.9	17.2	9.2	5.5	6.2	9.1	5.4	9.0	9.3	3.9	5.9	13.3	9.8	21.7
14	11.7	S	14.5	22.3	20.6	25.7	18.3	47.9	37.4	38.4	6.1	14.2	7.9	6.0	1.5	3.6	3.9	6.7	8.0	2.2	10.9	24.6	11.7	26.3	16.1	47.9
15	9.9	S	7.1	10.3	8.0	14.5	34.6	58.1	34.8	33.9	25.4	3.1	22.7	0.9	6.6	5.7	2.8	15.5	0.3	8.3	0.9	7.6	7.8	14.7	14.5	58.1
16	14.7	S	10.4	5.6	2.9	11.7	17.7	17.5	16.2	12.1	6.5	3.5	5.7	2.3	1.4	14.0	15.6	20.0	8.2	14.6	21.5	17.4	9.0	15.2	11.5	21.5
17	16.4	S	17.5	9.7	12.0	13.8	13.7	12.2	23.4	19.0	11.8	13.2	10.1	7.2	16.8	4.8	10.1	1.8	0.6	1.3	5.3	1.5	5.2	0.9	9.9	23.4
18	0.9	S	2.4	4.7	8.3	7.4	9.7	21.4	26.2	12.0	28.6	17.1	11.4	4.0	2.3	9.1	23.7	1.5	10.3	3.7	0.1	1.6	14.5	9.0	10.0	28.6
19	2.4	S	7.4	17.3	10.7	13.3	26.3	9.3	14.1	9.1	8.5	24.7	2.8	22.5	27.2	9.2	5.9	1.9	2.9	1.9	1.5	5.3	9.4	10.0	10.6	27.2
20	4.5	S	9.5	9.4	17.2	8.5	16.7	29.5	22.3	19.2	20.8	17.2	15.2	7.2	14.3	21.7	13.5	20.0	9.6	2.7	2.2	3.4	8.2	4.8	12.9	29.5
21	14.2	S	13.6	32.7	16.3	9.0	10.0	9.3	10.7	28.9	3.8	8.4	7.1	5.2	5.4	2.9	4.2	4.6	1.5	1.2	2.8	3.8	2.1	6.3	8.9	32.7
22	16.8	S	14.9	14.8	36.9	33.4	30.2	56.3	62.0	72.6	13.5	11.2	2.1	3.0	4.6	4.0	17.0	15.5	1.9	6.1	11.7	3.6	5.5	4.5	19.2	72.6
23	13.9	S	7.5	10.1	5.3	10.1	12.6	20.5	C	C	C	C	C	C	C	C	0.9	25.8	10.7	14.5	6.4	6.0	9.2	35.6	-	-
24	12.9	S	9.7	3.6	12.0	10.8	4.8	12.7	4.6	12.2	25.6	6.5	6.1	2.4	3.1	8.4	6.0	4.7	0.6	0.5	0.5	0.4	1.2	1.8	6.6	25.6
25	7.8	S	3.6	2.5	3.0	2.1	4.8	5.9	18.3	12.7	20.5	12.3	10.7	8.9	6.7	5.8	4.7	3.6	3.1	3.7	2.1	15.9	6.3	2.9	7.3	20.5
26	13.5	S	13.7	38.7	18.1	13.0	33.4	50.9	34.4	9.4	26.5	24.3	13.7	22.7	35.9	21.7	31.8	30.6	11.4	10.9	3.3	3.2	2.8	4.8	20.4	50.9
27	9.8	S	10.3	14.0	9.4	15.5	11.3	15.4	15.7	34.7	16.1	6.5	21.9	6.7	33.2	8.0	10.9	7.2	0.6	0.5	0.5	4.0	13.4	10.1	12.0	34.7
28	1.1	S	6.6	20.2	10.5	15.1	9.1	16.9	33.4	5.9	0.5	5.8	57.0	39.3	33.8	21.5	6.9	12.2	5.6	1.9	4.1	4.2	5.7	7.5	14.1	57.0
29	13.4	S	8.1	5.7	23.4	26.5	19.3	55.8	31.5	23.1	21.4	4.0	26.5	25.3	25.7	4.2	6.8	4.9	2.5	2.5	1.7	7.3	8.4	5.2	15.4	55.8
30	8.6	S	7.2	11.6	21.2	23.1	29.8	48.3	43.2	19.4	7.8	30.7	19.7	34.8	31.1	4.3	1.5	1.9	2.9	3.4	2.5	1.7	2.0	5.3	15.7	48.3
31	4.3	S	26.2	22.4	11.7	76.2	24.3	43.3	54.6	27.1	34.4	24.7	8.9	14.3	2.7	5.4	4.2	3.6	4.4	4.0	7.9	8.4	12.4	6.0	18.8	76.2
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	705	100%
MEAN	8.2	-	9.3	11.7	12.6	16.2	18.4	25.5	25.2	19.6	15.2	14.3	12.4	10.8	10.3	9.0	8.5	8.9	4.3	4.2	4.4	5.3	5.9	8.5		
MAX	16.8	-	26.2	38.7	36.9	76.2	52.7	61.6	88.7	72.6	37.0	41.9	57.0	39.3	35.9	39.3	32.4	30.6	14.6	17.6	21.5	24.6	14.5	35.6		



Number of Non-Zero Readings	705		
Maximum 1-HR Average	88.7 PPB		
Maximum 24-HR Average	20.4 PPB		
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	11.65	Monthly Average	11.6 PPB

Lagoon NO (ppb) – July 2019

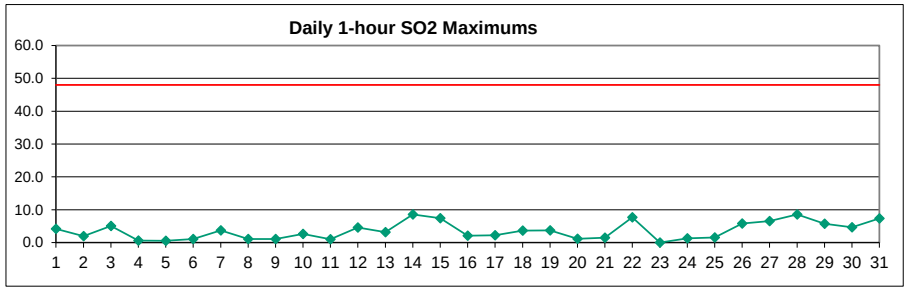
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.0	S	1.4	9.7	19.2	33.6	38.6	21.9	27.5	33.1	14.3	4.9	5.9	4.7	1.8	2.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	9.6	38.6
2	0.0	S	0.0	0.0	1.7	2.6	5.7	4.0	3.8	1.1	19.9	18.5	15.9	4.3	1.7	0.6	2.2	1.5	0.0	0.0	0.2	0.1	0.0	11.9	4.2	19.9
3	10.4	S	1.7	0.6	6.6	11.4	21.2	47.2	66.8	22.3	3.9	2.1	1.5	0.8	0.8	0.4	3.2	2.6	0.4	0.0	0.0	0.0	0.0	0.0	8.9	66.8
4	0.0	S	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.7	0.0	0.1	1.6
5	0.0	S	0.5	0.0	0.5	1.0	0.4	1.3	1.6	3.5	4.4	2.4	5.1	0.2	0.3	0.2	0.1	0.5	0.0	0.0	0.1	0.0	2.7	0.5	1.1	5.1
6	4.0	S	1.7	1.9	3.6	12.3	8.5	14.4	9.0	6.9	6.6	18.8	6.4	2.3	0.0	3.2	5.3	2.9	6.8	7.5	3.2	2.2	1.8	4.1	5.8	18.8
7	8.1	S	3.1	7.7	24.0	7.9	15.5	18.1	34.1	33.3	11.9	9.9	1.0	7.5	0.2	4.1	0.7	3.1	0.2	0.0	1.0	0.1	0.1	1.9	8.4	34.1
8	0.0	S	5.6	2.4	0.0	1.2	10.2	7.5	8.5	2.2	4.5	10.9	0.6	0.2	0.2	5.3	0.6	2.2	0.1	0.0	0.0	0.0	0.0	16.1	3.4	16.1
9	4.7	S	3.8	0.3	2.3	5.4	10.5	12.2	4.2	2.8	0.4	0.5	1.1	0.6	1.0	2.4	0.5	1.3	0.0	0.2	0.0	0.0	0.0	0.0	2.4	12.2
10	0.0	S	0.2	1.4	0.0	7.3	10.8	7.5	9.4	6.9	7.2	10.0	0.9	2.1	0.8	1.1	2.4	2.8	0.0	0.0	0.0	0.0	1.0	1.1	3.2	10.8
11	1.2	S	0.7	0.0	2.6	1.8	3.0	3.3	0.8	0.8	2.6	5.4	2.9	2.4	2.7	6.8	0.3	4.3	0.0	0.0	0.0	1.2	0.0	0.0	1.9	6.8
12	0.0	S	4.5	2.0	4.1	2.1	6.5	8.5	2.6	2.2	0.2	2.8	6.0	10.9	3.8	22.2	17.4	5.5	3.0	0.0	0.0	0.8	0.0	0.0	4.6	22.2
13	0.0	S	6.4	4.3	0.4	1.1	4.1	5.5	4.5	2.9	8.7	11.3	3.2	7.8	3.1	1.2	0.9	2.1	0.9	2.0	2.2	0.6	0.7	4.6	3.4	11.3
14	3.8	S	6.9	12.4	10.7	14.7	8.7	30.8	24.6	25.1	2.0	6.9	2.9	1.7	0.0	0.6	0.6	2.0	2.3	0.0	4.9	10.7	4.4	13.3	8.3	30.8
15	2.7	S	3.1	6.7	3.4	8.7	26.5	46.1	25.5	22.3	14.8	0.7	11.8	0.0	1.3	1.3	0.7	8.7	0.0	2.0	0.0	1.7	1.4	4.6	8.4	46.1
16	1.9	S	1.7	0.3	0.0	4.5	7.9	6.4	6.3	5.1	2.2	0.8	1.9	0.4	0.1	7.4	5.3	7.5	1.1	3.5	6.7	6.5	2.6	6.2	3.7	7.9
17	8.4	S	10.5	5.2	6.9	8.7	8.5	7.2	15.3	11.9	5.3	5.1	3.8	1.9	7.6	1.5	4.7	0.3	0.0	0.0	1.1	0.0	0.8	0.0	5.0	15.3
18	0.0	S	0.2	1.0	1.5	1.4	3.6	11.2	13.7	6.5	15.5	7.8	5.3	0.8	0.9	4.1	12.1	0.3	4.7	1.5	0.0	0.0	6.7	3.8	4.5	15.5
19	0.0	S	2.3	9.2	3.9	6.2	15.9	4.0	8.2	4.6	3.8	14.5	1.2	13.6	18.0	4.6	2.7	0.4	0.6	0.7	0.1	2.1	4.3	5.7	5.5	18.0
20	2.0	S	5.6	5.6	11.6	3.7	10.7	22.2	15.3	12.3	12.7	10.0	7.2	1.7	6.2	11.3	7.3	11.8	3.9	0.1	0.0	0.1	3.8	0.5	7.2	22.2
21	7.5	S	8.2	24.4	10.7	5.7	6.8	6.0	7.6	23.2	2.1	3.8	2.4	1.4	1.8	0.7	1.7	1.3	0.4	0.0	0.0	0.0	0.0	3.7	5.2	24.4
22	9.7	S	6.6	7.9	26.0	24.8	21.9	42.9	46.3	55.3	7.4	3.9	0.2	0.6	1.3	0.9	6.0	5.4	0.1	0.5	1.7	0.1	0.4	0.0	11.7	55.3
23	4.8	S	2.0	3.7	1.0	4.6	7.9	13.4	C	C	C	C	C	C	C	C	0.0	12.7	3.9	7.2	0.2	0.0	1.8	18.2	-	-
24	1.7	S	2.8	0.0	3.5	4.6	1.3	4.2	0.8	3.2	9.0	1.6	1.5	0.4	0.9	3.5	2.3	1.8	0.0	0.0	0.0	0.0	0.1	0.3	1.9	9.0
25	2.7	S	1.1	0.5	0.3	0.4	1.8	2.3	9.4	6.6	11.1	6.2	5.3	4.5	3.1	2.7	2.0	1.3	1.0	1.0	0.4	4.4	1.0	0.0	3.0	11.1
26	3.5	S	6.1	25.3	9.8	7.7	22.2	38.7	22.4	4.5	14.5	13.3	6.2	12.2	22.3	11.6	18.1	18.6	4.1	1.5	0.0	0.0	0.0	0.4	11.4	38.7
27	1.1	S	2.2	3.8	0.6	7.5	3.6	7.1	6.0	18.5	5.5	2.1	11.2	2.8	15.9	2.8	4.2	2.4	0.0	0.0	0.0	1.2	6.0	4.5	4.7	18.5
28	0.0	S	2.4	9.4	3.7	3.5	4.5	8.9	20.6	2.4	0.0	3.3	43.3	26.8	23.9	14.2	3.1	6.7	2.2	0.0	0.0	0.0	0.0	0.5	7.8	43.3
29	6.3	S	0.0	0.0	14.0	18.1	12.0	42.0	20.9	14.7	12.9	1.5	16.3	14.7	16.0	0.9	2.4	1.8	0.0	0.0	0.0	0.5	0.1	0.0	8.5	42.0
30	0.3	S	0.5	1.1	9.6	12.2	17.9	32.7	27.3	9.9	2.5	15.4	8.3	17.2	13.4	1.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	7.4	32.7
31	0.0	S	16.2	15.2	6.7	68.9	14.4	29.8	36.5	13.6	18.1	10.6	3.2	5.7	0.2	1.3	0.5	0.2	0.3	0.2	0.1	0.0	4.1	0.0	10.7	68.9
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	705	100%
MEAN	2.7	-	3.5	5.2	6.1	9.5	10.7	16.4	16.0	11.9	7.5	6.8	6.1	5.0	5.0	4.0	3.5	3.7	1.2	0.9	0.7	1.0	1.4	3.3		
MAX	10.4	-	16.2	25.3	26.0	68.9	38.6	47.2	66.8	55.3	19.9	18.8	43.3	26.8	23.9	22.2	18.1	18.6	6.8	7.5	6.7	10.7	6.7	18.2		



Number of Non-Zero Readings	587		
Maximum 1-HR Average	68.9 PPB		
Maximum 24-HR Average	11.7 PPB		
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	8.616	Monthly Average	5.7 PPB

Lagoon SO_2 (ppb) – July 2019

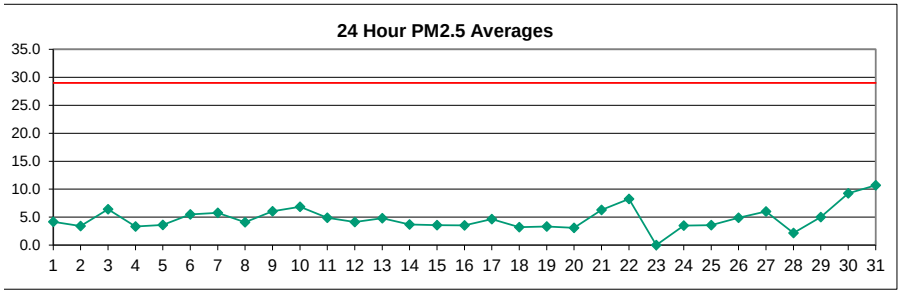
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.0	S	0.0	1.1	1.9	3.1	4.2	3.1	3.0	3.6	1.9	0.5	0.6	1.1	0.3	0.7	0.3	0.1	0.4	0.0	0.0	0.0	0.1	0.0	1.1	4.2
2	0.3	S	0.0	0.1	0.2	0.4	0.6	0.1	0.6	0.1	1.5	1.6	2.0	0.8	0.1	0.0	0.4	0.5	0.2	0.1	0.1	0.4	0.0	0.8	0.5	2.0
3	0.2	S	0.2	0.4	0.4	0.5	1.0	2.8	5.1	2.1	0.5	0.1	0.6	0.4	0.6	0.3	0.2	0.7	0.8	1.0	0.5	0.7	0.7	0.9	0.9	5.1
4	0.2	S	0.3	0.3	0.4	0.4	0.4	0.0	0.3	0.0	0.4	0.4	0.3	0.0	0.2	0.0	0.1	0.0	0.1	0.2	0.1	0.6	0.4	0.2	0.2	0.6
5	0.0	S	0.1	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.3	0.0	0.5	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.5
6	0.1	S	0.0	0.1	0.0	0.0	0.4	0.1	0.0	0.1	0.4	1.1	0.2	0.4	0.0	0.1	0.8	0.3	0.0	0.6	0.5	0.5	0.4	0.0	0.3	1.1
7	0.6	S	0.7	0.9	2.5	1.0	1.5	2.1	3.0	3.7	2.3	2.8	0.4	1.7	0.3	0.8	0.1	1.1	0.4	0.1	0.4	0.4	0.4	0.4	1.2	3.7
8	0.2	S	0.4	0.1	0.3	0.4	0.2	0.3	0.9	0.5	0.4	1.1	0.2	0.5	0.5	0.5	0.6	0.3	0.4	0.9	0.7	0.5	0.3	0.5	0.5	1.1
9	0.6	S	0.5	0.0	0.8	0.4	0.4	0.4	0.8	0.4	0.0	0.7	0.1	1.1	0.5	0.3	0.5	0.4	0.3	0.5	0.1	0.3	0.4	0.3	0.4	1.1
10	0.3	S	0.4	0.5	0.3	0.4	0.8	0.4	0.6	0.4	0.7	1.0	0.5	0.6	0.0	0.6	2.6	2.4	0.6	0.2	0.4	0.2	0.2	0.4	0.6	2.6
11	0.3	S	0.3	0.0	0.7	0.3	0.0	0.5	0.5	0.6	0.6	0.8	1.0	0.8	0.7	0.7	0.1	0.4	0.5	0.1	0.0	0.4	0.2	0.4	0.4	1.0
12	0.4	S	0.2	0.3	0.3	0.2	0.5	0.3	1.1	1.5	0.3	1.6	2.4	1.6	1.3	4.6	4.3	2.0	1.2	0.3	0.6	0.5	0.2	0.1	1.1	4.6
13	0.0	S	0.6	1.1	0.7	0.6	0.7	1.5	1.3	1.3	1.4	3.2	1.4	0.7	1.3	0.8	1.0	0.3	0.5	0.6	0.3	0.7	0.6	0.9	0.9	3.2
14	0.8	S	1.2	1.6	2.0	2.7	1.8	6.2	6.4	8.5	1.2	0.6	0.5	0.1	0.5	0.5	0.3	0.8	0.6	0.5	0.9	1.8	1.4	3.4	1.9	8.5
15	1.3	S	0.7	0.7	0.7	1.1	2.7	7.4	3.5	4.9	3.4	0.4	3.6	0.8	0.4	0.8	0.0	0.6	0.0	0.6	0.0	0.7	0.6	0.8	1.5	7.4
16	1.2	S	0.8	0.2	0.2	0.4	1.0	1.1	1.1	1.1	0.9	0.9	0.6	1.0	0.4	0.2	1.6	2.1	0.8	0.8	1.5	1.2	0.5	0.9	0.9	2.1
17	1.1	S	1.2	1.3	1.5	1.9	2.0	0.9	1.8	2.2	1.2	1.3	1.0	1.2	2.2	1.5	1.7	0.6	0.8	1.0	0.0	0.8	0.4	0.5	1.2	2.2
18	0.7	S	0.6	0.5	0.4	0.9	0.5	2.1	3.4	1.9	2.8	2.2	1.2	0.5	0.8	2.2	3.6	0.7	0.9	0.8	0.2	0.4	0.6	0.8	1.3	3.6
19	0.5	S	0.7	1.4	1.1	1.0	1.5	0.5	0.2	0.3	0.4	2.2	1.0	3.7	3.6	0.8	0.7	0.7	0.8	0.7	0.4	0.0	0.4	0.7	1.0	3.7
20	0.2	S	0.8	0.5	0.8	0.6	0.4	0.6	0.8	0.5	0.6	0.6	0.8	0.5	1.0	1.2	1.1	0.9	0.9	0.2	0.0	0.2	0.0	0.7	0.6	1.2
21	0.2	S	0.6	1.4	0.8	0.1	0.4	0.0	0.3	1.5	0.5	0.7	0.7	0.7	0.4	0.5	0.8	0.9	0.6	0.5	0.6	0.5	0.2	0.5	0.6	1.5
22	0.3	S	0.7	0.9	1.7	2.1	1.7	3.6	4.5	7.7	2.0	0.8	0.7	1.2	1.9	1.6	2.2	3.2	1.0	1.9	0.9	0.6	0.8	0.8	1.9	7.7
23	0.9	S	0.5	0.6	0.7	0.5	0.8	1.2	C	C	C	C	C	C	C	C	0.1	3.2	0.6	0.6	0.9	0.2	0.6	0.6	-	-
24	0.5	S	0.2	0.3	0.0	0.7	0.3	0.0	0.3	0.7	0.8	0.6	0.2	0.5	0.2	1.3	1.1	1.3	0.0	0.6	0.1	0.0	0.1	0.3	0.4	1.3
25	0.1	S	0.4	0.0	0.0	0.0	0.0	0.3	1.4	0.8	1.2	1.6	0.3	1.5	0.5	0.0	0.5	0.8	0.5	0.7	0.0	0.4	0.0	0.0	0.5	1.6
26	0.7	S	1.2	3.2	1.3	0.8	1.7	4.4	2.5	1.0	3.0	3.3	2.2	4.0	5.8	2.3	4.2	4.6	0.4	0.7	0.0	0.8	0.3	0.5	2.1	5.8
27	0.4	S	0.2	0.4	0.0	0.5	0.4	0.5	0.5	2.4	1.1	0.7	1.9	1.3	6.6	4.5	2.5	2.8	0.4	0.3	0.3	0.6	1.9	2.0	1.4	6.6
28	0.0	S	0.4	1.1	0.6	0.6	0.5	1.0	0.7	0.0	0.0	0.7	8.5	3.9	4.8	2.6	0.6	1.0	0.4	0.7	0.8	0.0	0.4	0.2	1.3	8.5
29	0.2	S	0.4	0.0	0.9	2.1	1.7	5.8	3.4	3.0	2.1	0.6	5.1	4.9	5.1	1.5	0.6	1.2	1.5	0.8	0.3	0.2	0.2	0.2	1.8	5.8
30	0.2	S	0.4	0.5	0.8	1.0	2.3	4.3	3.5	2.0	1.3	4.1	2.6	4.6	4.1	0.7	0.7	0.8	0.3	0.2	0.0	0.3	0.4	0.0	1.5	4.6
31	0.1	S	0.1	0.2	0.1	1.6	0.3	1.5	4.5	4.3	7.4	3.8	1.2	0.8	0.5	0.8	0.9	1.3	1.3	0.7	0.3	0.3	0.1	0.2	1.4	7.4
NO.	31	-	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	705	100%
MEAN	0.4	-	0.5	0.6	0.7	0.8	1.0	1.7	1.9	1.9	1.4	1.3	1.4	1.4	1.5	1.1	1.1	1.2	0.6	0.5	0.4	0.5	0.4	0.6		
MAX	1.3	-	1.2	3.2	2.5	3.1	4.2	7.4	6.4	8.5	7.4	4.1	8.5	4.9	6.6	4.6	4.3	4.6	1.5	1.9	1.5	1.8	1.9	3.4		



Number of 1HR Exceedences	0		
Number of Non-Zero Readings	653		
Maximum 1-HR Average	8.5	PPB	
Maximum 24-HR Average	2.1	PPB	
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	1.242	Monthly Average	1.0 PPB

Lagoon $PM_{2.5}$ ($\mu g/m^3$) – July 2019

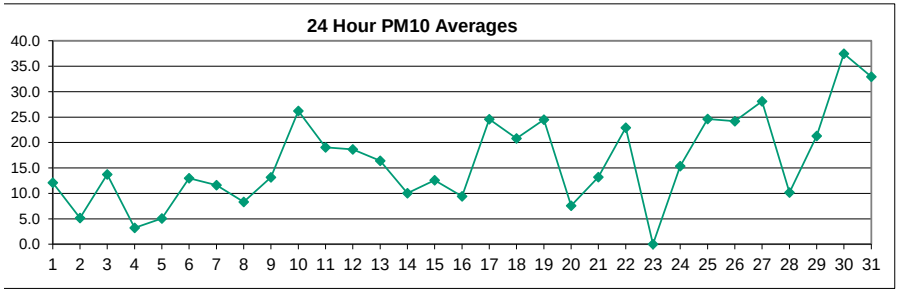
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	7.2	5.9	3.2	5.7	3.2	3.3	5.1	7.9	8.0	6.9	6.5	4.1	3.7	4.0	5.1	3.0	5.8	5.5	2.0	1.5	0.8	0.0	0.4	1.2	4.2	8.0
2	2.6	1.5	1.7	2.9	1.6	3.3	4.7	5.1	6.9	4.5	0.0	2.2	7.2	4.8	1.2	0.8	2.6	1.5	0.1	3.2	3.7	7.3	7.4	5.5	3.4	7.4
3	6.9	6.2	5.1	5.8	4.8	5.9	5.5	6.5	9.4	8.0	8.7	5.5	5.8	7.2	4.8	6.5	7.5	5.5	6.9	5.5	6.2	7.6	6.6	5.5	6.4	9.4
4	7.6	6.2	5.8	4.8	3.0	4.0	7.2	5.1	1.6	1.8	2.2	0.0	0.1	2.9	3.0	1.6	1.2	1.9	2.9	4.7	1.9	0.5	5.4	4.8	3.3	7.6
5	1.6	1.9	5.0	3.7	2.6	3.3	2.3	2.6	3.3	4.0	3.3	4.4	5.4	4.1	1.9	1.5	5.4	4.1	3.7	5.8	4.8	4.4	4.0	3.7	3.6	5.8
6	3.3	4.7	8.6	6.9	3.0	3.0	5.4	6.9	8.3	8.3	10.1	6.6	6.5	6.9	3.7	6.1	7.4	4.5	5.1	3.3	1.2	3.3	4.3	4.4	5.5	10.1
7	6.8	8.3	9.0	6.3	6.9	5.9	3.3	4.7	5.5	6.5	6.2	6.9	5.8	3.0	0.4	2.2	6.4	7.2	6.6	9.0	5.9	3.4	5.4	6.5	5.8	9.0
8	6.2	4.4	1.9	2.9	3.3	3.0	3.1	3.7	7.5	6.6	3.4	2.6	8.1	5.9	2.7	1.9	1.2	0.0	1.8	4.0	2.6	3.3	8.1	9.7	4.1	9.7
9	11.2	8.1	5.2	6.9	4.8	3.3	6.8	8.3	6.2	4.1	3.7	3.7	3.0	4.0	6.5	4.4	6.5	5.1	6.5	7.4	6.9	7.4	8.0	7.3	6.1	11.2
10	3.1	3.0	4.0	3.1	6.1	6.5	8.6	13.9	12.3	13.0	9.5	11.2	14.0	9.9	4.9	5.8	5.8	7.9	5.2	1.2	0.0	2.8	6.1	6.9	6.9	14.0
11	5.5	3.4	3.7	2.3	1.2	4.0	5.4	5.0	1.9	0.1	0.0	23.1	7.7	6.2	5.5	5.5	4.4	2.6	5.0	4.1	1.9	10.3	7.0	1.7	4.9	23.1
12	4.0	3.7	2.3	4.0	3.3	1.9	0.8	4.9	6.5	5.5	4.4	3.0	4.4	5.8	8.3	4.8	5.1	4.4	1.2	0.0	5.3	5.8	4.8	4.7	4.1	8.3
13	5.4	7.6	5.2	5.1	7.2	6.2	4.1	3.0	3.6	2.6	6.1	6.5	5.5	5.1	4.4	3.3	10.0	9.4	4.2	1.6	4.3	1.9	1.5	1.9	4.8	10.0
14	2.9	6.8	5.5	2.7	4.0	5.1	4.1	2.6	3.3	4.3	4.3	4.0	4.4	6.1	3.7	2.6	2.2	3.2	2.6	4.3	4.4	1.8	1.9	1.9	3.7	6.8
15	1.5	2.9	5.0	4.1	1.6	1.5	5.7	5.5	4.4	4.7	3.7	4.7	4.4	4.0	3.7	4.3	5.1	6.5	3.7	1.8	0.1	0.4	1.1	5.4	3.6	6.5
16	4.8	0.9	2.9	5.8	6.5	4.1	3.0	4.4	8.5	6.9	5.5	3.4	1.2	1.5	3.6	3.0	2.2	1.1	0.0	0.4	1.1	4.0	6.1	4.1	3.5	8.5
17	5.0	6.5	4.8	3.0	1.6	4.0	3.7	4.4	4.4	4.7	4.7	12.1	10.5	7.3	5.9	6.5	6.2	5.1	2.7	0.1	0.8	1.8	2.2	3.2	4.6	12.1
18	1.2	2.9	3.3	2.3	1.2	3.1	6.1	5.1	6.1	5.5	3.4	6.5	3.8	5.8	4.8	1.6	0.8	4.3	3.3	2.6	0.5	0.0	1.5	1.2	3.2	6.5
19	1.9	5.4	4.8	3.7	4.4	1.3	0.0	4.2	3.2	1.9	5.4	7.9	5.2	3.2	3.7	5.1	5.1	3.2	2.3	1.2	0.0	1.5	1.9	3.6	3.3	7.9
20	3.0	1.6	3.6	0.5	2.5	2.2	0.0	1.4	5.7	4.4	3.0	4.0	2.6	2.6	4.0	2.6	3.3	2.3	0.0	3.2	2.6	3.6	6.5	8.6	3.1	8.6
21	8.0	7.3	8.3	8.2	9.0	7.7	6.9	4.8	4.1	3.0	5.4	5.1	4.8	5.4	10.0	7.3	6.9	6.2	5.5	7.2	5.5	5.1	4.1	5.0	6.3	10.0
22	8.9	10.5	7.7	11.1	10.5	9.1	8.4	8.3	12.2	9.1	7.7	9.0	6.6	3.7	1.6	6.7	10.9	8.1	5.5	3.7	11.0	9.8	9.1	9.1	8.3	12.2
23	10.5	13.6	8.1	4.8	5.0	4.4	3.0	4.3	C	C	C	C	C	C	C	C	6.5	3.2	3.2	3.7	4.0	10.4	8.0	8.3	-	-
24	10.5	14.0	12.7	8.7	2.7	0.0	1.1	1.5	0.3	0.4	5.7	4.4	1.9	4.7	2.6	2.2	3.6	3.3	1.2	0.0	0.0	0.0	0.0	1.5	3.5	14.0
25	0.3	1.5	2.9	2.6	0.8	0.0	1.1	3.3	4.4	6.5	6.5	7.6	6.6	8.0	9.4	5.8	4.1	3.0	2.6	0.8	0.4	1.5	2.2	3.7	3.6	9.4
26	5.8	4.4	3.7	4.4	4.7	4.8	3.3	5.7	8.7	6.9	5.5	6.2	4.8	3.3	3.7	1.8	3.3	5.4	3.7	3.7	7.4	4.8	5.5	5.8	4.9	8.7
27	4.8	11.1	9.8	7.7	6.9	7.6	6.6	7.3	6.5	6.2	5.5	9.7	6.6	22.4	1.1	6.5	5.5	2.6	3.3	2.6	0.0	0.0	1.5	2.2	6.0	22.4
28	3.7	1.3	0.5	5.0	4.4	1.9	1.9	1.2	2.2	1.5	0.8	2.6	2.6	2.9	1.9	0.1	0.8	1.5	4.0	3.3	1.5	1.7	1.9	2.6	2.2	5.0
29	4.7	6.9	7.6	5.5	4.8	5.5	5.5	5.1	8.6	8.0	5.9	4.8	2.6	1.9	2.9	4.7	4.4	4.0	3.3	3.3	4.0	4.7	6.9	4.4	5.0	8.6
30	3.0	7.6	11.5	9.1	7.3	8.0	6.6	6.5	10.8	14.7	12.3	7.7	13.6	8.8	7.6	9.4	10.0	10.1	9.4	7.6	10.8	10.5	10.5	9.1	9.3	14.7
31	8.7	8.3	8.2	9.0	8.7	7.6	7.6	9.7	15.1	16.6	17.2	16.6	12.4	14.7	9.9	8.4	11.2	11.6	10.5	8.0	10.4	8.4	9.4	8.7	10.7	17.2
NO.	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	736	100%
MEAN	5.2	5.7	5.5	5.1	4.4	4.2	4.4	5.3	6.3	5.9	5.6	6.5	5.7	5.9	4.4	4.2	5.2	4.7	3.8	3.5	3.6	4.1	4.8	4.9		
MAX	11.2	14.0	12.7	11.1	10.5	9.1	8.6	13.9	15.1	16.6	17.2	23.1	14.0	22.4	10.0	9.4	11.2	11.6	10.5	9.0	11.0	10.5	10.5	9.7		



Number of 24HR Exceedences	0		
Number of Non-Zero Readings	715		
Maximum 1-HR Average	23.1	UG/M3	
Maximum 24-HR Average	10.7	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	3.124	Monthly Average	5.0 UG/M3

Lagoon PM_{10} ($\mu g/m^3$) – July 2019

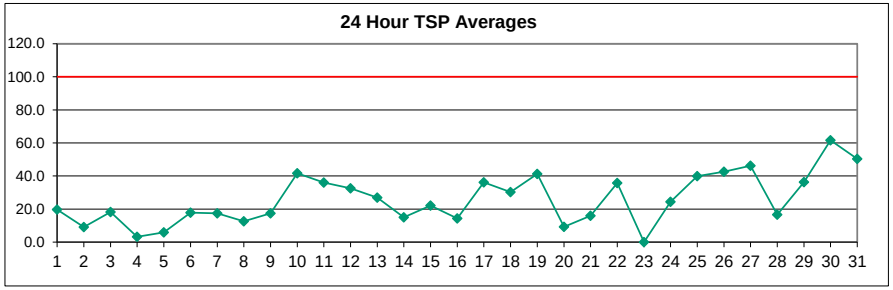
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	12.1	13.4	12.8	10.7	7.3	8.0	6.0	10.7	13.4	8.0	9.4	33.0	13.5	32.4	11.5	15.5	29.0	16.8	2.6	2.6	3.3	7.4	7.4	3.3	12.1	33.0
2	1.3	0.6	2.6	6.0	2.6	2.6	3.2	3.3	4.0	4.7	5.3	8.7	7.4	12.3	7.3	3.4	4.7	4.7	8.6	6.1	3.3	3.3	8.7	8.7	5.1	12.3
3	14.1	10.1	9.4	14.8	4.7	8.1	18.6	11.0	39.8	31.0	16.8	2.0	11.4	10.7	8.7	15.5	13.5	16.2	21.5	7.4	10.9	8.7	11.4	12.8	13.7	39.8
4	8.7	6.0	5.3	5.3	2.6	2.6	4.0	7.4	5.3	4.0	1.8	1.9	4.0	2.0	0.6	1.9	2.6	1.3	0.6	0.0	0.5	1.9	2.0	4.7	3.2	8.7
5	4.7	5.3	6.7	4.7	4.0	5.3	6.0	3.2	0.6	2.6	3.3	5.3	6.0	2.6	0.6	4.0	7.2	6.0	8.0	10.1	6.0	6.0	6.0	8.0	5.1	10.1
6	8.7	6.9	6.0	3.3	2.9	11.4	10.7	9.5	23.6	27.2	20.9	20.9	19.5	6.1	10.7	12.1	16.8	15.6	32.3	8.7	7.3	8.7	10.8	11.4	13.0	32.3
7	10.8	16.6	17.5	6.1	12.8	10.7	10.1	15.5	10.9	8.6	8.8	20.2	8.0	7.4	8.0	6.8	28.2	9.5	23.5	12.1	6.7	8.7	7.4	4.7	11.6	28.2
8	5.3	4.7	6.7	10.1	8.0	4.6	3.3	4.7	18.6	14.6	6.1	6.7	16.7	1.3	13.4	8.7	5.3	8.6	6.7	6.0	5.3	10.7	9.4	14.1	8.3	18.6
9	9.4	10.7	10.1	10.1	6.7	8.8	15.6	29.0	24.2	8.7	9.4	8.0	4.7	10.8	17.9	10.1	13.5	15.8	16.6	12.8	20.9	13.5	16.8	12.0	13.2	29.0
10	14.1	7.4	8.1	10.0	11.5	16.9	19.0	35.9	41.8	32.5	33.9	48.7	59.9	16.2	27.9	50.6	40.6	43.2	28.2	4.7	8.8	16.8	7.7	45.5	26.2	59.9
11	13.4	9.4	10.0	5.3	1.4	15.6	24.9	12.8	14.7	5.4	17.0	40.4	30.3	29.8	45.9	34.5	37.6	9.6	33.4	0.0	2.9	39.0	12.8	10.7	19.0	45.9
12	9.4	10.0	5.3	4.1	18.1	6.7	8.7	14.2	28.2	5.4	14.1	12.4	44.3	31.3	70.0	18.3	29.6	21.5	12.8	18.9	18.9	18.2	19.8	8.0	18.7	70.0
13	7.4	9.4	10.7	11.4	12.1	10.9	10.7	10.1	8.6	9.4	18.3	31.6	12.1	10.2	27.6	24.0	77.4	22.2	18.1	12.8	10.7	10.1	8.8	8.7	16.4	77.4
14	9.4	7.4	8.7	8.0	8.7	8.0	4.7	6.7	8.9	12.7	8.8	18.1	12.1	9.4	11.5	24.2	10.0	8.9	8.8	14.1	8.0	7.4	9.4	6.7	10.0	24.2
15	6.0	6.1	7.3	5.3	5.3	7.4	10.1	9.5	18.1	18.9	26.3	27.6	18.9	20.7	2.1	21.7	32.2	11.5	14.1	8.0	4.6	2.0	7.5	10.7	12.6	32.2
16	5.7	3.3	4.7	12.1	7.3	4.0	8.1	14.8	37.6	13.4	8.7	8.6	8.7	13.7	16.0	1.2	0.6	0.0	9.3	6.0	9.4	9.5	17.4	6.1	9.4	37.6
17	12.1	10.0	8.7	8.0	6.0	8.0	6.7	10.9	10.9	22.2	28.8	92.6	83.8	72.3	65.6	60.1	31.6	14.7	8.0	3.9	2.2	18.0	0.0	5.3	24.6	92.6
18	6.7	6.6	3.3	0.0	6.0	7.5	20.8	8.4	47.8	28.9	15.9	63.3	42.2	143.1	5.3	0.1	16.4	35.5	4.8	19.4	6.0	5.3	3.3	2.6	20.8	143.1
19	2.7	8.8	16.9	24.3	26.8	6.0	8.2	23.6	18.3	28.5	38.0	57.6	68.1	19.9	53.6	76.0	49.8	30.8	4.0	5.3	4.0	4.0	4.7	8.0	24.5	76.0
20	4.6	2.0	7.3	2.6	1.9	4.0	3.4	12.8	11.4	9.4	6.7	10.0	8.0	8.1	10.8	13.4	7.4	8.0	7.4	11.4	6.7	7.4	10.7	6.7	7.6	13.4
21	11.4	13.0	29.7	26.9	15.5	17.5	14.9	18.1	12.1	9.5	15.3	2.0	10.0	8.6	10.7	7.4	12.8	11.4	8.1	10.0	8.8	12.1	14.8	16.8	13.2	29.7
22	14.1	13.4	19.7	34.3	22.9	14.8	14.3	27.1	33.1	32.4	33.7	29.0	25.4	6.7	9.6	24.3	25.4	45.7	24.2	19.0	27.6	22.9	16.8	14.2	22.9	45.7
23	19.0	32.1	5.8	5.3	7.4	12.1	12.1	8.9	C	C	C	C	C	C	C	C	46.5	4.5	18.0	10.2	19.4	20.2	33.6	21.8	-	-
24	18.9	29.6	21.7	22.9	4.2	9.3	18.8	2.2	7.3	8.0	47.5	11.2	30.1	27.7	3.9	16.0	35.5	19.1	13.8	8.7	6.7	3.3	2.2	0.6	15.4	47.5
25	0.0	13.9	14.1	11.5	6.7	5.3	3.3	6.6	27.4	55.1	66.1	65.6	57.6	49.4	48.7	45.3	45.3	18.5	14.8	9.4	7.4	6.7	6.7	5.3	24.6	66.1
26	14.0	21.2	10.9	6.1	6.0	5.3	4.0	18.0	42.9	23.2	15.7	89.1	41.8	30.5	34.4	27.8	40.4	33.2	29.1	15.0	39.6	15.8	8.1	8.7	24.2	89.1
27	14.1	18.8	14.9	10.1	10.1	10.7	8.7	7.3	13.4	20.1	36.3	40.5	61.4	231.6	20.7	59.0	24.7	28.3	17.6	1.4	3.9	0.6	3.9	16.4	28.1	231.6
28	6.8	4.0	2.0	0.6	9.9	6.7	6.7	4.7	30.7	29.7	2.1	0.6	1.8	22.7	16.2	14.1	12.8	6.7	18.7	5.5	7.3	10.7	10.7	12.1	10.2	30.7
29	10.1	12.8	14.1	9.4	13.4	24.9	8.9	17.4	32.9	33.1	31.1	25.7	23.0	20.9	17.5	15.5	37.8	24.4	23.6	32.4	20.4	15.8	26.2	20.0	21.3	37.8
30	14.9	18.6	20.2	17.6	22.2	14.8	14.1	25.5	122.2	104.4	62.0	30.0	71.9	47.6	46.6	75.4	32.2	32.2	26.9	18.9	21.5	16.9	18.8	23.6	37.5	122.2
31	30.3	21.0	25.6	22.7	15.6	18.8	24.2	43.7	55.3	62.1	50.8	43.1	34.5	41.1	41.9	19.8	30.9	39.1	46.6	31.9	15.0	24.2	27.6	24.3	32.9	62.1
NO.	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	736	100%
MEAN	10.3	11.4	11.2	10.6	9.4	9.6	10.7	14.0	25.5	22.5	22.0	28.5	27.9	31.6	22.2	23.6	25.7	18.2	16.5	10.7	10.4	11.5	11.3	11.7		
MAX	30.3	32.1	29.7	34.3	26.8	24.9	24.9	43.7	122.2	104.4	66.1	92.6	83.8	231.6	70.0	76.0	77.4	45.7	46.6	32.4	39.6	39.0	33.6	45.5		



Number of Non-Zero Readings	730		
Maximum 1-HR Average	231.6 UG/M3		
Maximum 24-HR Average	37.5 UG/M3		
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	17.93	Monthly Average	16.9 UG/M3

Lagoon TSP (µg/m^3) – July 2019

Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	14.0	13.5	18.6	11.4	4.5	9.8	8.5	23.4	18.3	14.1	23.4	65.8	42.1	59.3	20.3	20.9	37.2	28.0	8.8	3.1	3.0	9.8	5.8	8.4	19.7	65.8
2	4.4	10.7	5.8	4.4	1.6	2.9	1.6	7.0	8.5	7.1	13.3	12.7	15.4	18.1	10.0	8.5	4.4	11.0	12.6	12.6	11.3	14.0	12.7	9.9	9.2	18.1
3	11.2	12.6	15.4	16.8	14.1	8.6	15.3	24.1	46.8	37.7	28.0	12.9	30.3	11.6	15.3	22.2	18.2	18.2	16.9	18.1	11.4	9.9	12.6	8.6	18.2	46.8
4	7.1	9.8	7.2	1.7	8.4	5.8	4.4	3.0	1.3	0.2	0.2	1.6	0.2	1.6	2.9	1.6	0.2	1.6	1.6	8.1	4.4	3.0	0.3	1.6	3.2	9.8
5	2.9	15.2	4.6	4.4	1.6	5.5	4.4	3.0	0.3	0.0	1.5	7.0	12.5	5.9	4.4	3.0	7.0	8.5	11.3	8.6	3.1	5.7	12.5	8.6	5.9	15.2
6	9.9	15.3	7.3	5.8	13.9	14.1	12.7	13.5	30.3	38.7	29.4	23.8	22.3	8.7	11.1	13.9	35.7	14.4	49.2	9.3	15.3	15.4	10.0	8.5	17.9	49.2
7	16.6	12.7	22.1	10.1	15.3	8.6	13.9	20.8	11.4	14.0	24.6	25.1	11.5	14.0	19.4	14.1	51.9	18.9	32.8	17.1	10.0	13.9	11.3	8.6	17.5	51.9
8	11.2	7.2	5.8	12.5	11.3	7.2	7.1	9.8	20.7	15.5	12.7	9.9	24.8	3.4	19.0	14.1	15.4	15.4	11.3	9.9	8.5	9.8	19.4	19.6	12.6	24.8
9	15.5	0.0	16.2	11.4	14.0	11.4	20.7	35.8	33.4	15.8	15.4	10.0	12.6	9.9	19.4	12.8	16.6	20.8	31.8	30.6	17.1	16.8	14.1	16.6	17.4	35.8
10	12.7	19.4	11.2	12.6	12.6	16.7	24.0	50.8	52.7	46.4	52.6	73.0	84.3	46.6	52.6	97.4	71.2	80.1	56.0	5.4	15.2	26.2	21.0	58.8	41.6	97.4
11	21.7	12.8	20.9	14.2	0.0	17.8	37.1	24.0	30.4	15.7	34.3	74.0	59.9	54.2	73.0	64.0	61.1	20.4	68.2	17.9	14.1	80.3	34.4	14.1	36.0	80.3
12	14.0	12.7	11.3	7.2	17.9	6.0	5.7	22.0	52.1	17.5	22.2	30.4	86.0	67.0	122.0	36.6	64.4	40.8	28.1	17.2	24.9	37.2	24.0	12.9	32.5	122.0
13	11.3	12.6	12.6	16.7	22.2	21.0	10.1	16.6	15.4	14.2	31.6	57.7	24.4	8.8	51.7	33.8	146.9	37.2	48.3	20.2	23.6	0.7	4.3	5.7	27.0	146.9
14	15.2	15.4	10.0	13.9	14.0	8.6	9.9	9.9	8.5	18.0	20.9	25.0	25.1	21.0	16.9	35.7	13.1	8.6	5.8	20.6	8.8	13.9	14.0	7.3	15.0	35.7
15	8.5	7.1	7.1	11.2	7.2	3.1	5.7	8.4	18.8	31.7	48.2	54.0	31.1	37.3	11.8	39.6	65.9	22.3	34.4	14.5	11.3	8.6	19.3	22.3	22.1	65.9
16	7.5	7.1	9.8	7.2	11.2	8.6	11.2	22.1	56.1	16.3	8.6	20.6	22.3	21.0	23.6	8.8	8.5	7.1	9.8	7.2	7.1	8.5	24.7	10.2	14.4	56.1
17	11.2	12.6	8.6	5.7	3.0	4.3	8.4	9.8	22.0	39.9	49.7	139.0	130.4	95.0	95.5	96.9	56.4	28.5	21.1	0.7	3.7	15.2	0.0	9.6	36.1	139.0
18	11.2	11.3	7.2	5.8	9.8	13.6	31.6	9.0	78.7	57.4	28.5	127.8	74.7	110.0	1.4	0.0	32.2	52.2	9.6	31.4	14.4	0.0	3.5	5.7	30.3	127.8
19	7.1	17.9	29.0	33.3	36.1	1.0	19.1	38.5	29.5	46.8	64.7	94.9	122.6	40.8	107.7	129.6	86.9	58.9	2.9	1.6	1.6	0.2	4.3	16.5	41.3	129.6
20	3.8	5.8	7.1	5.8	4.4	3.6	4.3	16.6	14.1	10.0	5.9	7.1	11.2	8.6	13.4	11.3	8.6	9.8	8.6	17.9	10.1	12.6	9.9	11.2	9.2	17.9
21	7.2	19.3	23.6	23.7	22.4	19.0	18.2	14.2	10.0	5.9	25.3	11.6	13.9	14.0	12.7	8.6	19.3	16.8	11.4	16.6	14.1	16.7	22.2	16.9	16.0	25.3
22	22.2	22.3	15.6	37.0	24.0	26.4	18.4	35.7	40.1	41.6	57.8	46.1	45.8	18.8	20.9	56.0	59.5	81.2	39.9	22.7	49.3	31.1	18.5	29.0	35.8	81.2
23	21.3	35.8	11.9	12.6	12.6	20.7	19.3	14.1	C	C	C	C	C	C	C	C	76.1	9.5	28.9	18.3	31.8	34.7	44.3	29.4	-	-
24	30.6	49.7	33.5	42.9	3.5	7.1	23.3	7.3	18.0	15.4	80.8	17.9	30.4	43.3	9.0	26.2	51.0	36.3	18.4	11.3	5.8	4.4	9.8	8.5	24.3	80.8
25	4.1	24.8	19.6	21.3	10.0	8.5	7.1	16.6	37.2	82.4	99.5	110.5	101.1	79.4	77.6	69.4	72.0	32.6	26.5	7.4	20.7	8.7	12.6	9.9	40.0	110.5
26	23.5	36.0	22.5	14.2	12.7	7.2	1.7	28.8	64.8	32.5	32.0	157.3	67.9	51.5	58.1	59.6	77.3	55.8	43.2	13.1	84.8	36.9	22.5	19.6	42.6	157.3
27	27.7	40.1	26.7	18.3	15.5	18.1	16.6	15.4	16.9	34.5	63.3	73.3	108.8	350.2	38.0	95.9	33.0	41.5	26.7	0.0	0.2	2.9	13.9	31.7	46.2	350.2
28	14.3	0.0	0.1	0.2	22.0	11.4	7.2	7.1	48.3	48.6	5.0	3.0	3.0	38.3	34.8	19.7	12.7	12.6	29.0	10.2	13.9	20.8	20.9	16.9	16.7	48.6
29	15.4	24.9	30.5	12.9	27.6	33.3	11.6	27.6	51.0	59.5	54.2	54.1	40.5	38.2	29.4	23.8	68.6	40.7	40.4	55.2	25.3	33.2	42.9	32.1	36.4	68.6
30	23.8	31.9	32.4	25.2	36.0	21.2	22.3	35.9	174.8	158.0	99.3	46.6	127.8	87.9	94.1	167.6	50.5	49.9	45.9	33.6	27.9	29.2	27.8	27.8	61.6	174.8
31	34.6	33.4	32.0	36.1	28.0	34.7	44.3	55.3	73.2	88.4	75.1	73.5	63.9	57.0	70.4	42.1	53.9	54.1	54.1	71.8	27.2	37.3	38.9	30.7	50.4	88.4
NO.	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	736	100%
MEAN	14.3	17.7	15.7	14.7	14.1	12.4	14.4	20.2	36.1	34.1	36.9	48.9	48.2	47.4	37.9	41.1	44.4	30.1	26.9	17.2	16.8	18.0	17.2	16.7		
MAX	34.6	49.7	33.5	42.9	36.1	34.7	44.3	55.3	174.8	158.0	99.5	157.3	130.4	350.2	122.0	167.6	146.9	81.2	68.2	71.8	84.8	80.3	44.3	58.8		

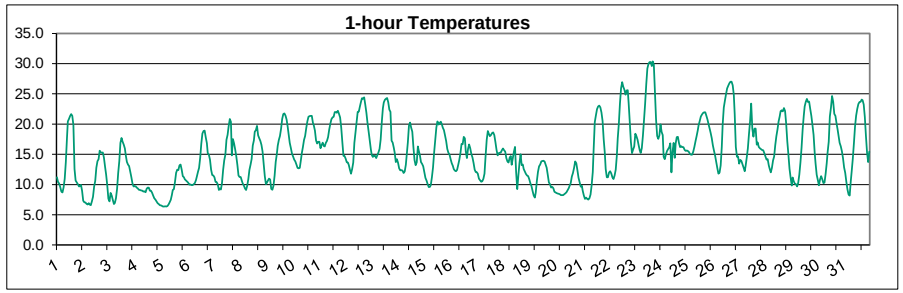


Number of 24HR Exceedences	0		
Number of Non-Zero Readings	728		
Maximum 1-HR Average	350.2	UG/M3	
Maximum 24-HR Average	61.6	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	8	Opperational Uptime	100.0 %
Standard Deviation	28.9	Monthly Average	26.6 UG/M3

Lagoon Temperature (°C) – July 2019

	HOUR																							
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	11.2	10.4	10.2	9.6	8.8	8.7	9.6	10.9	13.7	17.6	20.4	20.8	21.3	21.7	21.3	19.9	12.6	10.7	10.4	10.1	9.7	9.7	9.9	9.0
2	7.3	7.1	7.0	6.8	6.7	6.9	6.7	6.6	7.2	8.0	9.6	10.6	12.8	13.9	14.2	15.6	15.3	15.3	15.3	14.4	13.0	11.6	9.8	7.7
3	7.2	8.6	8.2	7.4	6.8	7.0	7.7	9.3	11.9	13.8	16.9	17.7	17.1	16.6	16.0	14.8	13.8	13.3	13.0	12.2	11.2	10.2	9.7	9.7
4	9.7	9.5	9.4	9.1	9.1	9.0	9.0	8.8	8.9	8.7	9.3	9.5	9.5	9.0	9.0	8.6	8.2	7.7	7.5	7.2	6.9	6.8	6.6	6.6
5	6.5	6.4	6.4	6.4	6.4	6.5	6.7	7.1	7.5	8.3	9.1	9.3	10.5	11.9	12.5	12.4	13.1	13.3	12.5	11.4	11.2	10.9	10.7	10.5
6	10.3	10.0	10.0	9.9	9.9	10.0	10.3	10.7	11.3	12.1	12.7	14.4	16.8	18.4	18.8	18.9	17.8	16.8	15.2	15.0	14.1	12.5	11.6	11.5
7	11.2	10.4	10.4	10.0	9.1	9.4	9.2	10.3	12.4	14.0	14.9	17.4	18.2	19.7	20.8	20.4	14.8	17.5	16.8	15.8	14.7	13.2	11.5	11.2
8	11.3	10.6	10.2	9.8	9.4	9.1	9.8	10.9	12.4	13.3	14.2	16.4	17.3	18.8	19.0	19.7	18.2	17.7	17.2	16.6	15.5	13.4	11.4	10.1
9	10.3	10.7	11.0	10.8	9.3	9.2	9.8	11.5	13.8	15.0	16.4	17.4	18.0	19.2	20.9	21.6	21.7	21.4	20.7	19.5	18.0	16.9	16.0	15.1
10	14.6	14.1	13.8	13.3	12.7	12.7	12.8	14.1	15.2	16.2	17.4	18.0	19.3	20.5	21.2	21.3	21.4	21.4	20.2	19.8	18.9	17.3	16.8	17.1
11	17.1	16.0	16.5	16.9	16.4	16.3	16.9	17.2	17.8	19.1	20.0	20.8	21.1	21.2	22.0	22.0	21.9	22.2	21.7	21.1	19.5	17.0	14.7	14.7
12	14.3	13.7	13.7	13.2	12.5	11.8	12.6	13.6	16.9	18.6	20.3	22.0	22.1	22.8	23.6	24.3	24.2	24.4	23.2	21.9	20.2	18.8	17.3	15.8
13	14.9	14.6	14.8	14.8	14.4	14.9	15.3	15.9	17.4	20.3	22.6	23.6	24.0	24.2	24.3	23.6	22.4	22.0	17.2	16.9	16.1	15.3	13.7	14.2
14	13.6	12.7	12.3	12.4	12.3	11.9	12.2	13.3	14.9	17.0	19.7	20.3	19.4	18.7	16.2	14.1	13.2	13.7	16.3	15.6	14.9	13.7	13.4	13.0
15	12.1	11.1	10.7	10.1	9.6	9.6	9.9	11.2	12.8	15.3	17.4	19.4	20.5	19.9	20.2	20.4	20.0	19.4	19.0	18.1	17.2	15.9	15.3	15.0
16	14.2	13.5	13.1	12.6	12.3	12.2	12.4	13.2	14.1	15.2	16.7	16.7	17.9	17.6	15.5	14.4	15.9	16.6	16.0	15.0	14.5	13.6	12.5	12.1
17	12.1	11.8	11.0	10.7	10.5	10.5	11.0	11.8	14.7	17.4	18.9	18.4	18.0	18.2	18.5	18.6	18.2	17.0	15.7	14.8	15.2	15.3	15.3	15.7
18	16.0	15.7	15.4	14.4	13.8	13.7	14.5	14.7	13.3	14.4	15.4	16.2	12.0	9.2	11.4	13.6	15.0	13.2	13.3	12.6	12.2	11.7	11.5	11.4
19	10.9	10.2	9.7	8.9	8.2	7.8	8.7	10.6	12.1	13.0	13.3	13.8	13.9	13.9	13.8	13.2	12.8	11.6	10.4	10.1	9.5	9.6	9.4	8.8
20	8.7	8.6	8.5	8.5	8.4	8.3	8.2	8.2	8.4	8.5	8.7	9.1	9.4	9.9	10.2	11.3	11.9	12.8	13.8	13.5	12.4	11.1	10.4	9.7
21	9.8	8.9	8.2	7.6	7.9	7.6	7.5	7.7	8.4	9.9	12.0	15.9	20.3	21.4	22.5	22.9	23.0	22.7	21.9	20.5	17.5	15.2	12.6	11.2
22	11.2	12.0	12.2	11.8	11.2	10.9	11.5	12.5	14.8	17.6	20.1	23.4	25.9	27.0	26.2	25.7	24.9	25.6	25.6	23.5	20.4	17.1	15.2	15.8
23	16.3	18.4	18.0	17.4	16.5	15.6	15.2	16.0	18.1	20.7	23.4	26.6	29.2	30.0	30.3	30.3	29.6	30.4	29.8	25.3	20.8	18.0	17.5	18.1
24	19.9	18.7	18.2	14.6	14.2	14.9	15.5	15.9	16.2	16.8	12.0	15.5	16.9	14.4	16.8	17.9	17.9	16.9	16.2	16.3	16.2	16.2	15.7	15.6
25	15.6	15.5	15.4	15.1	14.9	14.9	15.4	16.2	17.2	18.0	18.9	19.8	20.5	21.2	21.6	21.8	22.0	21.9	21.4	20.7	19.9	19.2	18.5	17.7
26	16.5	15.6	14.8	13.8	12.7	11.8	12.0	13.2	16.2	19.9	22.7	23.9	24.9	25.9	26.4	26.7	27.0	27.0	26.4	24.8	21.6	16.2	14.6	14.6
27	13.5	14.1	13.9	13.3	12.8	12.2	13.1	14.4	16.0	18.3	20.5	23.4	19.3	17.9	19.3	19.3	16.6	17.0	16.2	16.0	15.9	15.7	15.7	15.2
28	14.6	14.1	14.2	13.1	12.6	12.0	12.7	14.0	14.6	16.5	18.0	19.1	20.4	21.3	22.1	22.3	22.1	22.6	22.2	20.1	17.2	15.0	12.6	11.1
29	9.8	11.2	10.5	10.1	10.1	9.7	10.3	11.6	13.6	16.1	19.2	21.4	22.9	23.7	24.2	23.6	23.7	22.5	21.4	19.9	18.2	15.3	13.4	11.6
30	10.8	9.9	10.8	11.4	10.9	10.3	10.3	11.7	13.5	15.4	17.1	21.3	22.7	24.7	23.7	21.7	21.4	20.2	19.1	17.9	16.9	16.3	15.5	14.4
31	12.8	11.9	10.5	9.2	8.3	8.2	10.6	12.2	14.3	16.8	19.6	21.4	22.5	23.3	23.7	23.7	24.1	23.9	23.3	21.2	18.0	15.3	13.7	15.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MEAN	12.4	12.1	11.9	11.4	10.9	10.8	11.2	12.1	13.5	15.2	16.7	18.2	18.9	19.2	19.5	19.5	18.9	18.7	18.0	17.0	15.7	14.3	13.3	12.9
MAX	19.9	18.7	18.2	17.4	16.5	16.3	16.9	17.2	18.1	20.7	23.4	26.6	29.2	30.0	30.3	30.3	29.6	30.4	29.8	25.3	21.6	19.2	18.5	18.1

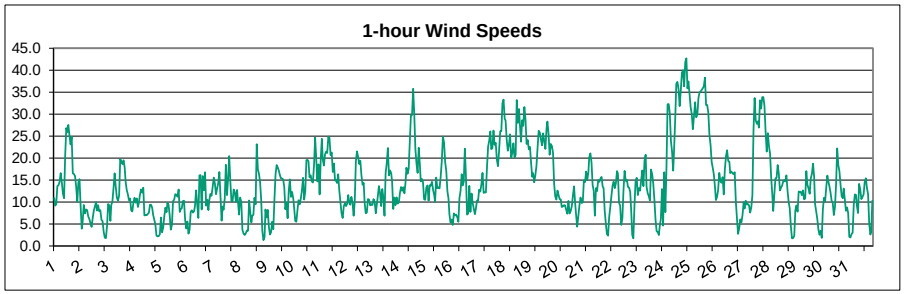
MEAN	MAX
13.3	21.7
10.4	15.6
11.7	17.7
8.5	9.7
9.5	13.3
13.3	18.9
13.9	20.8
13.8	19.7
15.6	21.7
17.1	21.4
18.8	22.2
18.4	24.4
18.2	24.3
14.8	20.3
15.4	20.5
14.5	17.9
15.0	18.9
13.5	16.2
11.0	13.9
9.9	13.8
14.3	23.0
18.4	27.0
22.1	30.4
16.2	19.9
18.5	22.0
19.6	27.0
16.2	23.4
16.9	22.6
16.4	24.2
16.2	24.7
16.8	24.1
744	100%



Number of Non-Zero Readings	744		
Maximum 1-HR Average	30.4 C		
Maximum 24-HR Average	22.1 C		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	4.944	Monthly Average	15.1 C

Lagoon Wind Speed (km/hr) – July 2019

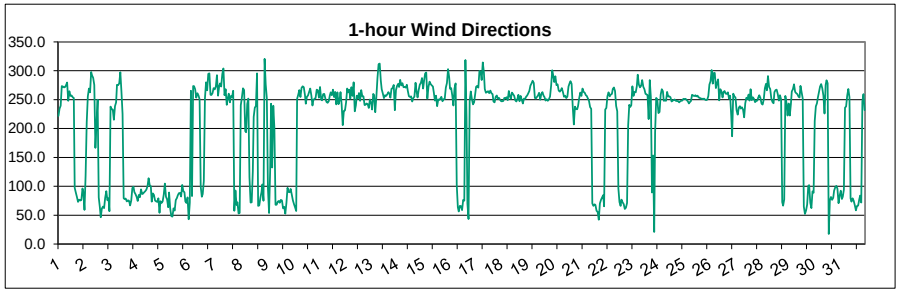
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	10.9	9.2	9.5	13.6	13.8	14.6	16.6	14.4	11.9	10.9	20.6	26.8	25.9	27.6	25.2	23.1	24.9	16.6	16.4	15.9	13.6	10.1	14.4	15.2	16.7	27.6
2	9.1	3.9	5.5	9.4	7.4	8.3	8.2	6.7	6.2	5.2	4.4	6.4	8.0	9.0	10.0	8.1	9.3	7.9	8.2	6.0	5.6	3.3	1.9	1.8	6.7	10.0
3	4.6	9.6	9.2	5.7	9.3	10.1	13.2	16.5	13.5	11.0	10.3	11.5	19.8	19.3	18.6	19.5	17.8	14.7	12.8	11.8	10.4	10.8	8.1	7.9	12.3	19.8
4	9.9	11.0	9.9	10.8	8.9	9.7	11.6	12.9	12.2	13.2	7.0	7.1	7.0	7.3	7.6	9.4	9.4	8.7	7.1	6.0	4.9	2.4	2.2	2.2	8.3	13.2
5	2.6	6.5	3.1	4.2	6.9	8.7	7.7	9.9	9.4	7.0	3.7	4.8	10.2	10.5	11.8	11.7	11.2	12.9	7.8	8.4	8.6	10.2	10.3	6.0	8.1	12.9
6	4.0	5.6	2.8	3.7	7.8	8.1	7.6	7.9	9.1	12.7	9.5	6.4	16.1	16.1	8.3	15.9	12.7	16.8	9.2	10.5	8.2	10.5	11.9	11.4	9.7	16.8
7	13.4	15.6	14.2	11.8	13.1	14.3	16.8	11.3	5.8	9.0	8.3	10.8	18.5	11.6	15.3	20.5	14.7	10.2	10.2	12.9	12.2	10.1	12.7	10.2	12.6	20.5
8	7.1	11.0	10.0	3.7	2.9	2.5	2.9	3.5	3.5	10.4	7.7	5.4	6.9	7.1	11.0	9.5	23.1	17.5	16.4	14.6	10.4	3.5	1.3	2.0	8.1	23.1
9	8.3	6.5	8.2	4.5	2.6	3.1	5.5	3.9	10.5	16.3	18.4	17.9	17.1	16.2	15.4	15.4	15.1	13.5	8.4	9.9	6.3	12.5	15.1	11.2	10.9	18.4
10	12.3	10.9	8.8	5.7	5.5	8.2	10.4	9.5	10.8	12.7	15.5	10.6	12.5	19.5	19.6	19.3	15.6	16.1	14.7	14.4	18.4	24.7	19.8	14.7	13.8	24.7
11	18.6	11.8	19.7	24.4	19.8	18.3	20.8	21.5	21.2	24.9	24.6	20.7	21.3	16.8	18.8	14.9	15.0	14.4	16.3	12.6	10.0	7.5	6.4	9.0	17.1	24.9
12	9.8	9.1	9.6	11.6	9.8	9.4	11.2	9.9	6.9	10.2	19.3	21.5	20.3	18.7	19.4	16.0	13.9	14.3	10.0	7.5	7.6	10.7	10.5	9.3	12.4	21.5
13	9.5	9.3	10.6	10.1	7.4	9.6	11.7	13.6	12.1	9.1	13.0	11.0	6.9	16.6	18.8	22.3	16.1	17.2	16.6	14.6	8.4	11.0	9.3	11.1	12.3	22.3
14	9.6	9.9	12.1	13.4	12.6	13.4	12.0	14.5	17.8	16.4	17.5	23.7	29.7	29.8	35.8	30.0	22.1	18.7	16.6	22.3	18.6	14.7	15.3	14.5	18.4	35.8
15	10.6	10.5	13.3	13.8	10.3	13.8	13.7	14.6	12.8	11.7	10.0	15.6	13.2	13.4	13.1	15.8	19.3	24.9	23.6	19.1	17.1	12.5	10.8	7.2	14.2	24.9
16	5.4	6.1	4.8	7.4	6.9	7.1	6.6	5.5	10.9	12.6	16.3	13.8	14.5	22.1	15.7	7.1	7.4	13.7	7.7	12.0	9.8	8.5	7.2	8.7	9.9	22.1
17	10.3	10.3	12.8	12.4	14.1	16.6	12.1	12.2	12.2	18.0	22.6	24.0	26.1	22.0	22.3	26.3	23.0	23.5	19.7	18.2	21.6	26.1	26.1	32.4	19.4	32.4
18	33.3	29.0	28.6	24.3	21.7	23.0	25.4	20.0	21.2	23.4	20.2	20.8	33.2	28.0	31.2	27.8	23.7	28.6	27.4	31.7	28.8	23.2	24.1	22.0	25.9	33.3
19	22.6	18.9	15.8	16.6	14.5	16.1	18.2	22.4	26.2	25.8	24.3	22.9	25.6	23.8	22.1	26.7	28.3	25.5	20.7	23.2	22.8	21.3	14.2	11.3	21.2	28.3
20	10.6	12.6	11.6	10.6	10.6	8.9	9.0	9.3	9.2	8.2	7.4	10.2	7.4	8.0	9.0	11.5	13.6	9.7	7.2	4.4	6.8	9.2	11.0	9.8	9.4	13.6
21	9.9	14.9	14.6	16.9	15.1	16.8	20.2	21.1	19.0	13.9	12.5	6.9	13.2	12.5	15.0	14.6	15.3	15.7	13.5	13.2	8.1	5.1	2.7	2.4	13.0	21.1
22	6.6	8.9	11.4	13.7	14.7	13.1	14.3	17.1	16.6	9.9	9.3	4.8	6.3	12.8	17.1	14.8	15.1	13.5	13.3	12.3	7.5	2.5	1.8	9.2	11.1	17.1
23	14.7	15.5	11.6	13.2	12.6	15.0	17.2	13.6	19.4	20.8	13.5	12.0	11.3	10.4	17.4	16.4	14.2	10.6	6.1	3.4	3.2	2.5	4.5	6.2	11.9	20.8
24	13.0	4.7	16.8	7.7	17.7	32.3	32.3	30.2	23.9	21.5	17.1	21.8	28.7	37.0	37.3	35.7	31.8	35.4	39.4	40.0	36.3	41.8	42.7	35.9	28.4	42.7
25	37.5	34.7	31.6	30.1	26.6	29.6	32.7	29.3	29.9	33.7	35.0	35.2	35.6	35.9	36.3	38.3	32.1	32.1	30.4	25.3	23.1	19.1	17.8	16.2	30.3	38.3
26	13.3	10.5	11.2	12.8	16.6	14.8	14.4	15.6	11.7	17.4	20.4	21.8	19.3	19.2	16.6	16.9	16.6	16.3	16.8	10.2	6.3	2.8	4.0	6.1	13.8	21.8
27	5.4	7.1	10.0	8.5	10.3	9.4	9.6	9.2	7.6	8.7	11.5	26.4	33.7	28.6	27.8	28.4	27.0	33.2	31.3	33.9	33.9	31.8	26.1	21.5	20.0	33.9
28	25.7	22.8	21.0	15.5	11.8	8.0	11.7	15.4	15.5	18.4	16.5	12.6	13.3	13.8	14.7	15.0	14.7	16.1	12.7	10.0	8.5	4.5	1.7	1.8	13.4	25.7
29	2.3	8.1	9.2	7.8	12.4	12.3	12.3	11.6	12.7	10.6	10.8	17.0	13.9	13.1	11.9	15.4	16.4	18.7	15.7	9.6	7.9	6.2	3.8	2.6	10.9	18.7
30	3.5	1.9	8.4	11.0	10.1	13.3	16.0	14.6	13.6	12.3	10.3	9.8	7.0	8.9	14.0	22.2	18.4	17.0	13.9	11.3	10.9	13.1	10.6	8.0	11.7	22.2
31	8.8	7.5	2.1	1.9	2.7	3.0	9.4	11.7	11.6	9.2	7.5	14.1	12.9	10.7	11.2	11.7	14.6	15.4	13.2	11.8	5.2	2.6	3.1	10.3	8.8	15.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	11.7	11.4	11.9	11.5	11.5	12.6	13.9	13.9	13.7	14.4	14.4	15.3	17.3	17.6	18.3	18.7	17.8	17.7	15.6	14.7	12.9	12.1	11.3	10.9		
MAX	37.5	34.7	31.6	30.1	26.6	32.3	32.7	30.2	29.9	33.7	35.0	35.2	35.6	37.0	37.3	38.3	32.1	35.4	39.4	40.0	36.3	41.8	42.7	35.9		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	42.7	KM/HR	
Maximum 24-HR Average	30.3	KM/HR	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	7.834	Monthly Average	14.2 KM/HR

Lagoon Wind Direction (°) – July 2019

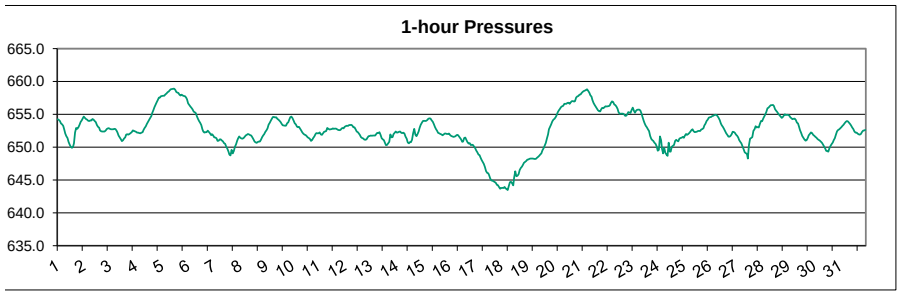
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	221.6	234.6	239.6	273.4	272.5	271.3	272.1	275.1	279.5	248.2	264.6	256.4	257.2	254.2	253.0	97.6	89.2	81.4	73.3	76.8	75.4	76.4	96.4	89.5	250.3	279.5
2	59.1	118.5	211.1	255.9	269.1	262.5	297.8	292.0	287.7	275.3	166.4	208.8	249.9	80.9	63.7	46.7	61.5	64.9	62.2	80.6	91.5	75.9	79.3	56.8	40.1	297.8
3	237.9	233.5	232.8	215.2	238.8	245.2	275.8	275.2	278.0	297.6	263.9	225.2	79.2	77.7	79.0	73.9	75.9	75.1	66.8	75.4	97.1	99.4	90.2	86.5	86.5	297.6
4	82.1	74.5	85.0	81.4	94.7	86.8	87.5	89.7	91.7	94.2	100.1	114.1	101.7	100.0	73.4	87.7	85.0	75.3	73.8	73.1	79.5	54.1	74.4	71.2	86.5	114.1
5	73.8	85.4	104.8	82.1	77.2	63.8	89.2	61.3	48.4	47.5	61.9	58.0	76.1	79.6	84.4	88.2	88.4	82.3	102.6	91.4	89.6	74.0	71.4	81.0	77.9	104.8
6	43.1	72.1	265.5	83.3	273.6	273.4	268.0	253.5	261.0	257.2	250.8	99.9	81.8	86.5	109.1	252.4	279.9	266.0	294.8	295.4	258.5	258.0	261.2	269.8	267.0	295.4
7	267.8	272.8	292.4	257.0	273.4	277.9	272.7	294.2	304.1	257.7	267.9	241.0	253.0	260.4	245.3	256.4	254.8	265.5	57.5	92.7	67.6	72.4	52.9	53.6	273.5	304.1
8	240.4	253.6	269.6	266.6	195.5	193.4	242.7	251.9	116.0	71.8	72.2	125.3	220.4	236.0	238.9	295.3	66.1	67.0	79.9	89.6	103.4	74.9	320.6	276.1	98.4	320.6
9	252.6	96.2	54.0	127.7	243.1	132.7	239.6	200.7	68.1	68.2	73.5	74.7	71.7	76.6	75.6	61.9	64.8	52.5	71.1	97.5	90.3	89.6	95.7	85.8	78.0	252.6
10	75.8	69.1	63.5	57.3	251.6	258.3	266.6	254.6	270.4	273.2	271.5	258.7	242.9	254.9	257.3	263.3	269.3	257.4	240.0	249.0	251.5	252.7	267.4	266.1	260.4	273.2
11	253.4	271.8	250.6	248.7	259.5	259.8	251.7	246.1	244.6	247.3	257.1	262.5	257.8	267.3	254.7	263.3	241.9	262.5	242.2	247.6	262.9	241.6	205.8	230.6	252.8	271.8
12	231.3	245.5	269.2	262.8	267.1	252.0	271.4	256.6	280.2	229.7	240.4	256.9	252.2	261.5	247.8	266.5	255.7	255.5	240.7	241.2	243.4	242.2	235.5	250.1	252.6	280.2
13	245.2	233.0	260.0	257.6	228.3	255.0	287.9	311.2	312.4	282.9	268.0	260.6	252.4	257.8	256.6	259.3	263.1	259.9	253.2	268.8	270.1	275.5	231.9	266.7	263.8	312.4
14	274.0	277.3	271.8	284.3	274.8	278.5	271.7	272.0	270.9	275.7	265.8	256.3	254.5	255.6	246.7	252.5	255.4	279.1	265.7	253.9	266.5	275.9	279.2	287.2	265.1	287.2
15	269.4	284.7	295.1	297.1	251.7	271.9	281.1	276.9	274.8	272.5	262.6	248.4	257.0	238.8	250.4	249.6	252.3	254.8	247.1	250.7	251.0	270.8	278.7	302.8	263.5	302.8
16	289.0	268.9	270.0	257.3	239.8	269.5	278.2	102.9	64.0	56.4	66.0	65.7	58.6	76.5	75.2	318.6	219.2	70.2	43.5	246.8	264.2	251.5	241.8	245.2	38.8	318.6
17	259.9	272.5	273.9	270.9	299.7	298.7	283.7	314.3	297.4	268.6	262.0	263.5	264.7	260.9	265.7	260.9	259.7	246.7	245.1	255.1	257.1	251.4	253.2	249.5	264.3	314.3
18	247.2	247.1	247.5	252.8	252.8	254.2	249.2	265.0	256.8	251.4	262.3	259.6	256.6	248.6	246.9	251.7	258.5	247.3	256.4	250.0	243.5	251.7	251.1	255.2	252.1	265.0
19	257.0	260.8	265.1	274.4	278.0	282.9	278.9	253.0	252.0	254.6	257.3	262.0	250.1	259.9	263.0	256.9	254.7	248.2	250.9	247.9	250.6	255.2	274.1	300.8	259.6	300.8
20	292.7	280.4	290.5	274.9	276.5	265.9	263.9	266.6	270.2	263.0	255.1	256.8	252.8	255.4	272.7	278.4	281.8	277.5	238.4	207.2	238.1	233.7	233.2	239.0	264.3	292.7
21	252.7	262.4	256.5	269.0	263.5	261.8	257.7	256.3	252.1	248.2	237.2	234.0	70.2	66.2	68.8	67.7	57.8	55.8	42.1	70.2	76.5	80.9	84.6	65.5	281.8	269.0
22	232.8	235.5	256.0	262.6	255.8	258.8	259.9	268.5	271.3	265.0	239.1	229.7	96.7	72.6	66.3	76.9	72.5	69.1	60.8	63.2	71.1	205.4	241.2	237.1	267.1	271.3
23	240.2	273.1	256.5	263.3	262.7	273.4	293.1	276.2	271.1	273.7	283.9	272.2	267.9	259.8	259.1	258.0	216.2	284.0	253.5	89.2	153.4	20.9	193.0	253.0	264.6	293.1
24	250.2	226.8	228.5	258.5	267.9	264.8	247.9	248.6	248.1	263.5	255.4	255.6	254.1	247.0	248.0	249.3	250.2	248.0	247.4	247.7	245.4	247.3	248.0	248.4	249.9	267.9
25	251.3	250.9	251.4	249.1	247.0	243.5	245.6	247.6	258.4	257.3	256.2	257.5	255.6	256.9	253.7	253.3	251.3	251.7	250.8	251.9	249.8	249.2	249.9	256.2	252.1	258.4
26	276.2	281.8	301.2	277.7	296.3	296.2	269.8	278.8	284.9	248.7	268.2	264.2	253.9	263.0	264.8	260.3	260.1	262.7	251.8	256.9	222.1	186.6	260.4	255.6	267.7	301.2
27	253.6	231.3	224.1	236.2	238.8	234.6	236.7	233.1	219.5	243.6	253.4	251.0	258.6	248.4	268.1	249.3	254.1	251.5	245.6	247.7	248.3	253.4	257.5	253.1	249.5	268.1
28	243.3	241.2	250.1	269.7	277.3	266.0	290.7	272.1	268.6	252.2	246.0	243.8	263.1	266.5	267.4	259.5	248.5	257.6	250.2	72.5	66.4	77.4	256.6	244.5	258.1	290.7
29	222.5	243.4	222.6	242.5	264.0	267.9	276.6	263.3	260.9	259.4	255.5	253.9	273.8	263.0	252.4	64.8	52.4	57.9	68.4	100.7	101.9	71.6	62.5	91.1	269.6	276.6
30	89.0	213.2	238.5	243.7	253.6	263.2	272.8	277.0	269.6	256.8	225.8	275.4	283.5	278.5	17.7	75.8	81.8	76.6	80.2	92.5	98.4	101.1	96.1	70.8	9.9	283.5
31	84.1	92.5	78.3	81.9	94.5	236.1	238.2	257.2	268.5	254.3	79.1	73.3	79.3	74.9	67.5	58.5	66.0	66.5	77.5	84.1	71.8	246.9	259.5	231.9	77.3	268.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	211.9	216.3	228.2	226.9	243.2	245.8	255.4	248.1	238.7	229.5	219.0	215.0	204.8	199.6	190.1	195.3	183.5	179.7	168.8	169.9	172.8	174.8	196.9	199.1		
MAX	292.7	284.7	301.2	297.1	299.7	298.7	297.8	314.3	312.4	297.6	283.9	275.4	283.5	278.5	272.7	318.6	281.8	284.0	294.8	295.4	270.1	275.9	320.6	302.8		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	321 degrees		
Maximum 24-HR Average	282 degrees		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	82.23	Monthly Average	208.9 degrees

Lagoon Pressure (mmHg) – July 2019

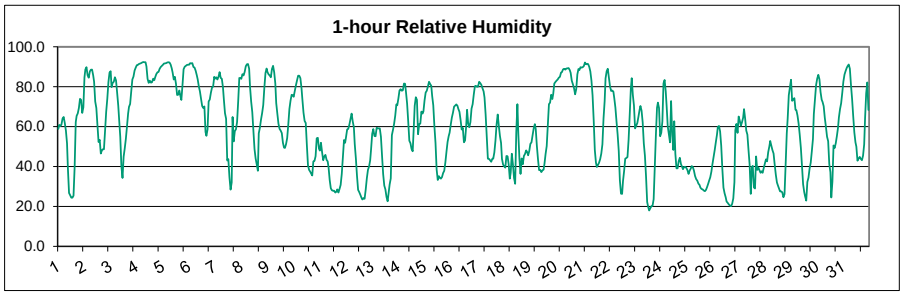
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	654.3	654.2	654.0	653.6	653.5	653.3	652.6	652.1	651.7	651.4	650.8	650.4	650.0	649.9	650.1	650.6	652.3	652.9	652.8	653.1	653.4	653.9	654.1	654.4	652.5	654.4
2	654.7	654.5	654.3	654.2	654.0	654.0	654.1	654.1	654.3	654.2	654.0	653.8	653.4	653.1	653.0	652.6	652.4	652.4	652.4	652.4	652.5	652.8	652.9	652.9	653.5	654.7
3	652.8	652.7	652.7	652.7	652.8	652.8	652.5	652.3	651.8	651.5	651.2	650.9	651.1	651.3	651.5	651.9	652.0	651.9	652.0	652.2	652.3	652.6	652.5	652.4	652.1	652.8
4	652.4	652.2	652.2	652.2	652.1	652.2	652.3	652.6	652.9	653.2	653.6	653.9	654.2	654.5	654.8	655.2	655.6	656.1	656.5	656.8	657.2	657.6	657.6	657.8	654.4	657.8
5	657.8	657.8	657.9	658.0	658.2	658.4	658.5	658.7	658.8	658.9	658.9	658.9	658.8	658.4	658.3	658.3	658.0	657.9	658.0	657.9	657.8	657.8	657.6	657.3	658.2	658.9
6	656.7	656.4	656.2	656.0	655.8	655.4	655.3	655.2	654.7	654.3	654.0	653.7	653.4	652.7	652.4	652.2	652.3	652.3	652.5	652.3	652.1	651.9	652.0	651.8	653.8	656.7
7	651.5	651.5	651.4	651.0	651.0	651.2	651.2	651.1	650.9	650.6	650.5	650.1	649.8	649.3	648.9	648.8	649.6	649.0	649.4	650.1	650.4	651.0	651.3	651.6	650.5	651.6
8	651.4	651.4	651.3	651.4	651.6	651.8	651.9	652.0	651.9	651.9	651.8	651.5	651.2	650.9	650.8	650.7	650.8	650.9	650.9	651.2	651.5	651.8	652.0	652.3	651.4	652.3
9	652.6	652.9	653.4	653.7	654.1	654.4	654.6	654.6	654.6	654.6	654.3	654.2	654.0	653.8	653.6	653.3	653.3	653.3	653.3	653.7	653.8	654.2	654.6	654.7	653.9	654.7
10	654.4	654.1	653.7	653.5	653.2	653.0	653.1	652.8	652.6	652.3	652.0	651.9	651.9	651.7	651.5	651.4	651.3	651.0	651.1	651.4	651.7	652.0	652.1	652.1	652.3	654.4
11	652.1	652.2	651.9	651.9	652.1	652.3	652.4	652.5	652.9	652.8	652.7	652.7	652.8	652.9	652.8	652.8	652.8	652.7	652.6	652.6	652.6	652.8	652.9	652.9	652.6	652.9
12	653.1	653.2	653.3	653.3	653.4	653.4	653.4	653.3	653.0	653.0	652.7	652.4	652.3	652.1	651.9	651.5	651.4	651.3	651.2	651.1	651.2	651.5	651.7	651.7	652.4	653.4
13	651.8	651.7	651.8	651.8	651.8	652.0	652.2	652.2	652.3	651.9	651.4	651.2	651.1	650.7	650.3	650.4	650.6	650.8	652.0	651.5	651.5	652.0	652.2	652.4	651.6	652.4
14	652.2	652.2	652.4	652.4	652.2	652.1	652.2	652.1	651.6	651.3	650.7	650.6	650.8	650.8	651.1	652.1	652.8	651.9	651.7	652.0	652.4	652.9	653.4	653.7	652.0	653.7
15	654.0	654.0	654.0	654.0	654.2	654.3	654.4	654.4	654.1	653.9	653.5	653.1	652.7	652.5	652.2	652.1	652.0	651.9	651.8	652.0	652.1	652.1	652.0	652.0	653.1	654.4
16	652.1	651.9	651.7	651.6	651.6	651.6	651.7	651.8	651.9	651.7	651.4	651.2	650.8	650.9	651.4	651.5	651.1	650.8	650.6	650.6	650.3	650.4	650.3	650.1	651.2	652.1
17	649.9	649.5	649.2	648.9	648.8	648.4	648.1	647.8	647.5	647.0	646.4	646.1	646.0	645.7	645.2	644.9	644.9	644.8	644.7	644.6	644.3	644.2	644.0	643.7	646.4	649.9
18	643.8	643.8	643.8	644.0	643.7	643.6	643.5	644.1	644.7	644.7	644.5	644.2	645.4	646.3	645.6	645.7	645.9	646.6	646.8	647.1	647.3	647.6	647.8	647.9	645.3	647.9
19	648.1	648.1	648.2	648.3	648.3	648.3	648.3	648.2	648.2	648.4	648.5	648.7	648.9	649.1	649.5	649.8	650.2	650.7	651.4	651.9	652.7	653.1	653.5	653.9	649.8	653.9
20	654.2	654.3	654.6	654.9	655.3	655.6	655.8	656.1	656.2	656.3	656.6	656.6	656.6	656.8	656.8	656.6	656.9	657.0	657.0	657.0	657.0	657.6	657.7	657.8	656.3	657.8
21	658.0	658.0	658.3	658.4	658.5	658.6	658.7	658.8	658.6	658.3	657.9	657.7	657.2	656.8	656.4	656.2	655.9	655.6	655.5	655.5	655.8	656.0	655.9	656.1	657.2	658.8
22	656.2	656.2	656.2	656.3	656.4	656.7	657.0	656.9	656.5	656.4	656.2	655.8	655.3	655.1	655.1	655.1	655.1	655.0	654.8	654.8	655.0	655.3	655.3	655.2	655.8	657.0
23	655.7	656.0	655.6	655.3	655.5	655.7	655.7	655.7	655.6	655.2	654.6	654.0	653.6	653.3	653.0	652.7	652.5	651.7	651.3	651.1	651.0	650.7	650.5	650.2	653.6	656.0
24	649.5	649.6	651.7	651.1	649.8	649.1	649.9	649.2	648.9	648.7	650.7	649.3	649.3	650.1	650.2	650.3	651.0	651.1	651.0	650.9	651.3	651.4	651.5	651.6	650.3	651.7
25	651.4	651.8	652.0	651.9	652.0	652.2	652.4	652.6	652.7	652.4	652.3	652.3	652.4	652.5	652.5	652.5	652.7	652.8	652.9	653.3	653.6	654.0	654.2	654.5	652.7	654.5
26	654.6	654.6	654.8	654.8	654.9	655.0	654.9	654.8	654.5	654.1	653.6	653.4	653.1	652.8	652.5	652.1	651.9	651.6	651.6	651.7	651.9	652.4	652.3	652.2	653.3	655.0
27	651.9	651.8	651.5	651.1	650.8	650.6	650.2	649.7	649.2	649.1	649.0	648.3	650.3	651.3	651.4	651.5	652.5	652.7	653.2	653.0	653.1	653.0	653.5	654.0	651.4	654.0
28	654.0	654.4	654.7	655.0	655.4	655.9	656.0	656.2	656.4	656.4	656.4	656.3	655.8	655.6	655.3	655.1	654.9	654.7	654.5	654.6	654.8	655.0	654.9	655.0	655.3	656.4
29	654.9	654.8	654.6	654.4	654.3	654.3	654.4	654.2	653.8	653.6	653.1	652.6	652.2	651.7	651.4	651.2	651.0	651.1	651.5	651.8	652.0	652.3	652.2	651.9	652.9	654.9
30	651.7	651.6	651.5	651.3	651.1	651.0	650.9	650.7	650.4	650.1	649.8	649.5	649.4	649.3	649.9	650.2	650.5	650.7	651.1	651.4	651.9	652.4	652.6	652.8	650.9	652.8
31	652.9	653.1	653.2	653.4	653.7	653.9	654.0	653.9	653.7	653.5	653.3	653.0	652.8	652.4	652.2	652.2	652.0	652.0	651.9	652.0	652.3	652.5	652.6	652.6	652.9	654.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	652.9	652.9	653.0	652.9	652.9	652.9	653.0	652.9	652.8	652.6	652.5	652.2	652.1	652.1	652.0	652.0	652.1	652.1	652.2	652.3	652.5	652.7	652.8	652.9		
MAX	658.0	658.0	658.3	658.4	658.5	658.6	658.7	658.8	658.8	658.9	658.9	658.9	658.8	658.4	658.3	658.3	658.0	657.9	658.0	657.9	657.8	657.8	657.7	657.8		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	659	MMHg	
Maximum 24-HR Average	658	MMHg	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	2.848	Monthly Average	652.6 MMHg

Lagoon Relative Humidity (%) – July 2019

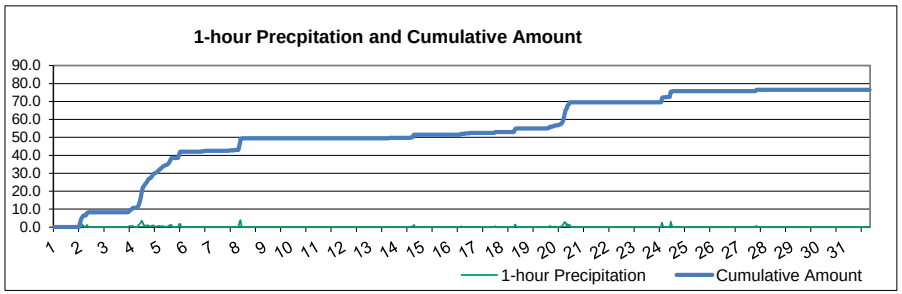
	HOUR																									
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	58.8	60.9	60.3	61.1	64.0	64.8	61.8	58.0	51.6	38.8	26.8	25.7	24.4	24.4	25.4	39.7	62.3	65.3	66.7	69.3	73.9	73.3	66.8	69.6	53.9	73.9
2	84.7	88.7	89.8	85.8	84.5	87.7	88.5	88.6	85.6	82.5	72.6	69.3	60.6	52.2	53.4	46.5	48.1	48.6	48.6	57.8	67.4	73.9	82.2	87.1	72.3	89.8
3	87.8	79.8	81.9	82.4	84.7	83.1	76.9	70.4	61.7	54.8	40.1	34.3	44.9	49.1	54.0	60.1	66.5	69.9	71.3	77.6	83.6	85.1	88.1	89.6	69.9	89.6
4	90.8	90.9	91.3	91.6	91.8	92.2	92.3	92.3	92.2	90.1	83.9	81.9	83.0	82.1	82.3	84.1	83.3	84.7	86.3	87.1	87.4	89.0	89.9	90.4	88.0	92.3
5	91.0	91.6	91.7	91.8	92.2	92.2	92.1	91.1	89.2	87.1	83.6	84.9	81.5	75.8	75.9	78.1	75.1	73.3	80.7	88.8	90.0	90.5	90.9	91.0	86.3	92.2
6	91.0	91.8	91.7	91.8	89.9	89.5	88.0	85.7	83.7	80.2	77.6	73.9	70.3	69.3	70.1	57.3	55.5	58.6	72.6	73.6	77.0	79.6	80.1	84.9	78.5	91.8
7	84.0	84.8	83.6	85.0	87.3	84.4	83.9	79.7	73.6	66.7	63.9	43.0	43.7	34.6	28.5	32.0	64.8	52.6	57.7	58.7	62.2	72.6	84.3	84.3	66.5	87.3
8	83.9	86.3	85.6	87.5	90.2	91.3	91.3	88.9	79.8	72.6	67.3	57.9	48.8	44.1	41.0	37.9	56.6	59.4	63.5	66.7	70.8	79.6	86.8	89.1	72.0	91.3
9	87.3	86.2	85.7	84.7	88.9	90.5	87.2	81.6	71.8	66.5	61.5	58.9	58.0	56.8	52.0	49.4	49.3	51.2	54.3	61.1	68.8	73.0	76.0	75.7	69.8	90.5
10	75.0	77.8	80.7	83.2	85.5	85.5	84.3	79.4	73.6	67.0	62.8	61.8	50.6	40.5	38.3	37.4	36.6	35.5	42.5	42.8	45.1	54.1	54.4	49.0	60.1	85.5
11	48.0	51.9	47.2	43.2	45.0	45.9	43.3	42.6	39.6	33.3	29.1	28.1	27.9	27.9	27.0	27.5	28.6	27.0	28.8	30.8	36.3	44.7	53.2	51.9	37.9	53.2
12	54.8	58.6	58.9	61.0	63.8	66.5	62.6	59.8	51.2	44.1	35.4	28.4	27.2	25.8	24.4	23.5	24.2	23.8	28.5	34.1	38.3	40.0	43.2	48.7	42.8	66.5
13	56.5	58.7	55.2	55.2	59.5	59.1	59.1	59.2	54.9	45.4	36.2	30.5	28.6	24.7	22.6	26.4	31.0	34.1	55.8	58.5	61.4	65.5	71.1	70.6	49.2	71.1
14	74.0	78.1	78.8	77.9	78.2	81.6	81.5	77.3	71.6	62.6	52.9	51.7	48.8	47.6	59.9	70.5	74.7	73.4	56.2	61.3	61.5	67.5	66.5	67.6	67.6	81.6
15	73.1	77.1	78.0	80.1	82.4	81.4	80.4	75.4	70.6	60.2	51.8	38.6	33.3	35.1	34.2	33.9	34.7	36.8	37.9	42.1	47.4	52.3	55.2	57.0	56.2	82.4
16	60.8	64.5	67.0	70.0	70.6	71.1	70.5	68.9	67.4	63.4	58.6	59.3	52.2	53.1	60.1	68.4	61.5	59.7	62.3	69.0	71.3	76.1	80.2	80.5	66.1	80.5
17	80.0	80.0	82.4	81.8	80.8	79.2	77.6	74.7	66.1	55.1	43.9	43.8	43.2	42.4	43.9	43.9	47.1	53.1	61.1	66.1	60.4	55.3	51.8	43.8	60.7	82.4
18	41.0	40.1	39.5	45.3	45.1	41.2	33.9	36.9	46.4	41.1	34.3	31.4	57.3	71.3	56.8	44.0	36.3	44.0	41.1	45.3	46.2	48.1	47.4	45.6	44.1	71.3
19	47.7	51.3	52.1	55.8	59.2	61.2	58.8	50.4	43.8	38.2	38.3	37.2	38.1	38.5	41.4	46.3	50.2	60.8	71.2	72.1	75.9	73.8	76.3	81.5	55.0	81.5
20	82.4	83.1	83.6	84.5	85.0	87.0	87.3	88.7	89.0	88.6	89.1	89.2	89.4	88.4	87.0	83.0	81.2	79.3	76.2	78.8	86.1	88.8	88.3	89.8	85.6	89.8
21	89.6	89.7	90.3	92.2	91.3	91.4	91.3	90.0	87.6	83.0	75.6	63.3	48.4	42.1	39.7	40.8	41.9	43.7	46.5	51.1	64.2	72.8	84.2	87.7	70.8	92.2
22	88.9	84.5	80.1	77.9	78.1	77.5	74.3	69.5	62.6	56.0	47.7	33.1	26.5	26.3	32.7	37.7	44.0	44.2	44.7	53.4	65.9	78.9	84.3	75.9	60.2	88.9
23	70.6	59.1	60.4	61.8	64.9	68.3	70.4	68.0	62.1	51.6	45.4	34.9	22.3	19.5	18.0	19.1	20.1	20.3	23.6	39.6	55.7	69.4	72.0	69.3	48.6	72.0
24	55.1	56.8	62.6	81.7	83.4	77.6	70.3	60.1	56.2	52.1	72.9	55.6	48.3	62.7	46.4	39.1	39.1	42.7	44.4	41.2	39.9	38.6	39.8	39.9	54.4	83.4
25	39.3	38.2	36.3	38.0	39.0	40.2	39.7	38.0	35.2	33.8	32.9	31.5	30.7	29.4	28.8	28.5	28.0	27.6	28.4	29.7	31.4	32.9	34.6	37.4	33.7	40.2
26	41.3	44.8	48.3	52.3	56.0	59.9	60.4	57.6	50.4	38.9	29.4	26.6	24.6	22.4	21.8	21.0	20.5	20.1	21.4	24.0	32.2	58.1	61.4	56.9	39.6	61.4
27	65.1	62.9	60.4	62.2	64.5	68.7	63.9	58.0	55.9	48.2	40.9	26.3	39.7	40.3	29.6	29.0	45.0	38.3	39.6	38.1	36.9	37.6	36.9	39.2	47.0	68.7
28	41.4	43.7	42.6	47.2	50.0	52.8	50.5	48.2	46.5	41.0	35.9	32.0	30.3	29.1	27.6	27.5	27.1	24.6	26.2	41.2	56.6	63.9	75.7	79.6	43.4	79.6
29	83.4	72.9	73.6	74.2	68.4	68.2	65.5	61.4	55.8	49.4	40.3	31.1	27.2	25.1	23.0	32.3	34.4	39.0	41.9	47.6	53.8	66.4	73.6	80.8	53.7	83.4
30	84.0	86.0	83.7	77.3	73.5	72.4	70.3	64.4	59.9	54.9	52.7	41.2	37.2	24.5	32.5	50.6	49.4	51.7	55.3	59.5	64.6	68.8	71.6	76.9	61.0	86.0
31	82.6	86.1	87.9	89.4	90.3	91.2	89.0	80.7	73.8	65.1	57.1	52.1	50.0	42.9	43.9	44.8	43.9	43.1	45.5	51.2	64.3	76.7	82.1	68.3	66.7	91.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	70.8	71.2	71.3	72.7	73.8	74.3	72.5	69.2	64.8	58.5	52.9	47.0	45.1	43.5	42.6	43.9	47.1	48.0	51.0	55.4	60.5	66.0	69.3	69.7		
MAX	91.0	91.8	91.7	92.2	92.2	92.2	92.3	92.3	92.2	90.1	89.1	89.2	89.4	88.4	87.0	84.1	83.3	84.7	86.3	88.8	90.0	90.5	90.9	91.0		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	92.3 %		
Maximum 24-HR Average	88.0 %		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	20.39	Monthly Average	60.0 %

Lagoon Precipitation (mm) – July 2019

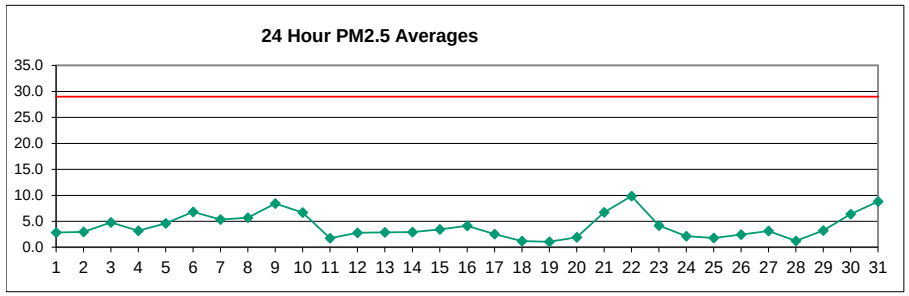
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2.8	2.0	1.0	0.8	0.0	0.0	1.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.8
3	0.0	0.0	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	0.8	0.5	0.3	0.1	0.8
4	0.8	0.0	0.0	0.0	0.0	1.3	1.8	2.5	3.5	2.5	0.8	1.0	0.5	1.0	1.0	0.5	0.3	0.8	1.0	0.8	0.3	0.3	0.5	0.5	0.9	3.5
5	0.8	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0	0.0	0.4	1.8
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
8	0.0	2.5	3.8	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	0.3	3.8
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.5	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3
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	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5
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	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.5
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.0	0.3	0.1	0.8
20	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.8	1.5	2.8	2.8	0.8	1.8	0.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.8
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	2.5	0.3	0.0	0.0	0.3	0.0	0.0	0.0	3.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.0
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	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	0.1	0.2	0.3	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0		
MAX	2.8	2.5	3.8	0.8	0.5	1.3	1.8	2.5	3.5	2.8	3.0	1.3	1.8	1.0	1.3	0.5	1.3	0.8	1.8	1.8	0.8	0.8	0.5	0.5		



Number of Non-Zero Readings	82		
Maximum 1-HR Average	3.8 MM		
Maximum 24-HR Average	0.9 MM		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	0.406	Monthly Average	0.10 MM

West $PM_{2.5}$ (µg/m^3) – July 2019

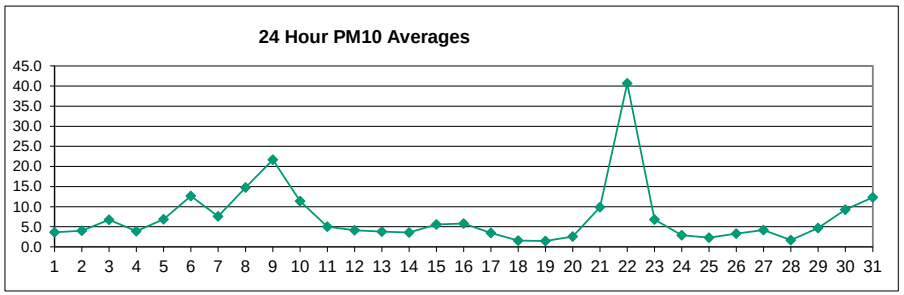
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.3	3.9	3.9	3.5	3.5	3.6	3.5	3.5	3.2	2.4	1.6	1.6	1.8	1.6	2.0	3.9	7.1	1.1	1.3	2.0	2.5	2.9	2.0	1.3	2.8	7.1
2	1.6	2.9	5.0	3.6	2.7	3.5	2.4	1.8	2.1	5.8	2.8	2.9	2.4	3.1	4.4	2.9	3.8	2.3	2.3	2.5	2.5	2.7	2.7	2.7	3.0	5.8
3	2.9	3.4	3.7	4.1	4.2	4.1	4.9	5.3	4.5	4.5	3.8	3.8	4.4	5.6	4.4	4.5	4.9	5.7	4.7	5.2	5.9	6.4	6.5	7.3	4.8	7.3
4	8.3	8.3	7.1	8.6	9.7	6.1	4.7	2.9	2.0	2.6	1.5	1.4	1.0	1.5	1.5	0.9	0.9	1.4	1.4	1.1	1.3	0.8	0.7	0.8	3.2	9.7
5	0.7	0.8	1.3	2.9	2.1	2.8	1.6	1.8	1.7	2.5	3.3	5.8	6.7	3.2	4.7	7.0	9.1	8.8	8.3	9.0	8.5	6.3	4.9	6.1	4.6	9.1
6	6.3	5.3	5.6	6.3	6.8	8.2	8.1	8.2	8.5	8.4	8.8	8.0	9.8	11.4	11.1	6.1	3.9	3.7	4.5	5.1	5.2	4.5	4.5	5.6	6.8	11.4
7	6.3	6.3	6.1	5.9	6.1	5.9	6.3	6.2	6.4	5.8	5.4	3.7	3.9	4.2	4.3	5.4	6.0	5.0	5.2	5.4	5.4	5.4	4.4	3.8	5.4	6.4
8	3.9	3.7	3.3	2.7	3.1	3.9	6.7	8.0	13.3	9.9	8.2	6.8	4.3	4.1	3.9	2.1	8.5	5.7	4.9	5.9	5.7	6.0	6.2	6.3	5.7	13.3
9	7.0	7.5	7.5	7.2	7.3	8.3	8.5	9.6	10.3	6.4	12.4	8.5	7.2	7.9	7.6	6.5	8.7	7.3	7.4	9.3	10.2	10.3	9.8	9.0	8.4	12.4
10	6.8	6.5	7.2	9.2	9.2	10.0	12.0	13.6	14.0	13.9	13.5	13.0	4.0	4.2	3.1	2.3	1.9	2.1	2.3	2.9	2.4	2.1	2.1	1.9	6.7	14.0
11	1.3	2.0	1.1	1.0	1.0	1.2	1.7	2.1	2.1	1.9	1.7	1.3	2.1	1.5	1.5	1.8	1.3	1.6	1.3	1.8	2.1	2.3	2.9	3.1	1.7	3.1
12	3.0	3.5	3.4	3.6	3.6	3.9	4.2	4.2	4.4	2.8	2.3	2.0	1.9	1.7	1.8	1.6	1.9	1.7	1.9	2.2	2.4	2.6	2.9	3.5	2.8	4.4
13	3.8	4.9	4.9	4.9	3.9	3.5	3.5	3.6	3.4	3.0	2.4	2.1	2.0	2.0	1.7	1.9	1.6	1.9	1.9	1.7	1.8	2.3	2.5	4.2	2.9	4.9
14	4.0	4.6	4.1	3.6	3.1	3.4	4.0	3.5	3.6	3.2	2.7	2.9	2.4	2.1	2.3	1.8	2.3	1.7	1.7	2.1	2.3	2.8	2.7	2.8	2.9	4.6
15	2.9	3.1	3.1	3.2	3.1	3.3	4.0	4.7	4.9	4.8	4.7	3.6	3.3	3.6	4.7	3.8	3.3	2.8	2.1	2.2	2.4	2.7	3.0	3.0	3.4	4.9
16	3.2	3.4	3.8	3.8	3.9	4.2	5.4	7.0	8.0	8.6	6.4	5.9	5.3	6.0	3.1	2.3	1.8	2.7	2.8	2.1	1.9	2.1	2.5	2.6	4.1	8.6
17	3.1	3.3	3.5	3.2	3.3	3.4	3.7	4.3	4.8	4.6	3.3	3.9	2.5	2.6	1.8	1.3	0.9	1.5	0.8	0.7	0.9	1.0	1.1	1.2	2.5	4.8
18	1.0	1.1	0.9	0.9	0.9	1.2	1.8	1.9	1.0	1.7	1.2	1.3	1.6	1.0	2.6	2.0	1.2	0.9	0.8	0.6	0.7	0.8	0.9	0.7	1.2	2.6
19	0.9	0.8	0.7	0.9	1.0	1.5	2.2	2.8	1.5	1.2	1.2	1.3	1.5	1.4	1.2	0.5	0.4	0.3	0.4	0.5	0.7	0.8	0.8	0.8	1.0	2.8
20	0.8	0.8	0.8	1.0	1.2	1.0	1.2	1.1	1.2	1.6	2.0	1.5	1.1	1.0	0.8	1.0	1.5	1.7	2.2	3.3	5.0	4.8	4.5	5.0	1.9	5.0
21	6.4	6.6	6.2	5.5	5.2	5.8	5.8	6.1	6.0	6.3	6.6	7.8	8.8	7.0	6.2	6.0	5.6	5.5	6.3	8.6	8.9	8.4	7.7	7.9	6.7	8.9
22	8.7	9.5	10.3	10.0	9.4	9.1	8.6	9.3	9.1	8.0	6.3	5.0	4.4	8.0	14.7	20.7	37.4	7.4	4.8	6.9	7.1	7.0	6.8	7.3	9.8	37.4
23	8.0	4.0	4.7	5.4	5.0	4.7	5.0	4.8	4.5	4.0	3.7	3.3	2.5	2.3	2.2	2.3	2.0	2.4	2.8	3.4	4.1	5.5	6.8	6.8	4.2	8.0
24	7.5	8.4	4.9	1.2	1.0	1.6	1.3	2.6	3.4	2.4	1.3	2.5	2.0	1.3	1.4	1.2	0.9	0.8	0.6	0.7	0.7	0.9	1.1	1.1	2.1	8.4
25	1.0	1.2	1.5	1.6	1.7	1.7	2.1	2.1	2.5	2.3	2.2	2.0	2.1	2.0	1.9	1.8	1.6	1.6	1.6	1.6	1.7	1.9	1.8	1.8	1.8	2.5
26	2.0	2.4	2.8	2.9	3.1	3.4	3.8	4.1	4.0	2.7	2.0	2.0	2.1	1.6	2.0	1.7	1.4	1.3	1.4	1.7	1.9	2.3	2.7	3.2	2.4	4.1
27	4.1	4.8	4.8	4.7	4.8	5.4	6.1	6.5	6.7	6.7	6.2	4.8	2.2	0.7	0.9	1.1	1.0	0.6	0.5	0.4	0.5	0.4	0.5	0.4	3.1	6.7
28	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.8	1.0	0.7	0.5	1.3	0.6	0.7	0.7	0.9	0.9	0.9	0.8	1.1	2.9	3.8	4.4	3.5	1.2	4.4
29	2.9	2.9	2.9	2.9	3.0	2.4	2.5	3.3	3.7	3.1	2.8	1.9	2.0	2.1	2.2	3.7	5.3	3.2	3.6	5.0	4.4	4.0	4.2	3.7	3.2	5.3
30	4.2	5.3	5.5	5.5	5.2	5.3	5.6	7.3	7.4	7.6	6.5	6.4	5.5	4.1	4.1	9.7	8.2	6.9	7.4	8.2	6.2	6.6	6.7	7.4	6.4	9.7
31	7.8	8.1	8.7	9.5	9.1	9.4	10.4	11.9	13.2	12.2	10.1	9.0	7.2	8.9	11.2	8.8	8.0	6.2	6.2	7.1	6.9	6.9	7.0	7.4	8.8	13.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	4.0	4.2	4.2	4.2	4.1	4.3	4.6	5.0	5.2	4.9	4.4	4.1	3.5	3.5	3.7	3.8	4.6	3.1	3.0	3.6	3.7	3.8	3.8	3.9		
MAX	8.7	9.5	10.3	10.0	9.7	10.0	12.0	13.6	14.0	13.9	13.5	13.0	9.8	11.4	14.7	20.7	37.4	8.8	8.3	9.3	10.2	10.3	9.8	9.0		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	37.4	UG/M3	
Maximum 24-HR Average	9.8	UG/M3	
IZS Calibration Time		Opperational Time	744 HRS
Down Time	0	Opperational Uptime	100.0 %
Standard Deviation	3.102	Monthly Average	4.1 UG/M3

West PM_{10} ($\mu g/m^3$) – July 2019

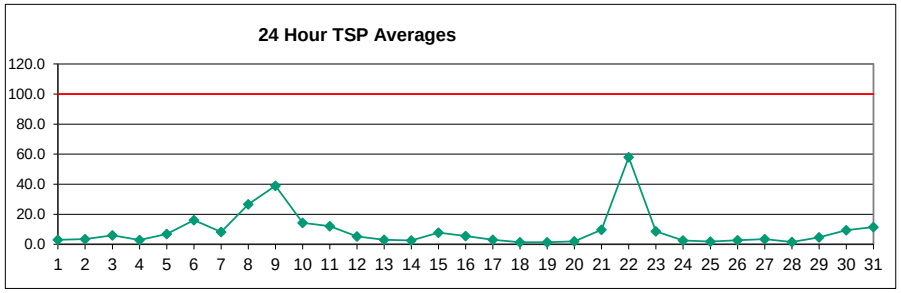
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	5.9	4.9	4.8	4.3	4.2	4.3	4.2	4.2	4.0	3.1	2.1	2.1	2.3	2.0	2.6	4.8	10.1	1.6	1.8	2.8	3.3	3.8	2.5	1.5	3.6	10.1
2	2.0	4.0	6.8	4.2	3.3	4.0	3.0	2.3	2.7	8.6	4.1	4.0	3.4	4.4	6.1	4.1	5.5	3.1	3.1	3.6	3.4	3.8	3.7	3.6	4.0	8.6
3	4.0	4.8	5.1	5.5	5.7	5.6	7.0	7.8	6.5	6.6	5.4	5.5	6.5	8.4	6.4	6.6	7.2	8.4	6.9	7.2	8.2	8.9	8.8	9.4	6.8	9.4
4	10.2	10.0	8.9	9.1	10.7	7.1	5.9	4.1	2.9	3.5	2.1	2.0	1.4	2.1	2.0	1.2	1.2	1.9	1.8	1.5	1.6	1.0	0.9	1.0	3.9	10.7
5	1.0	1.0	1.7	3.8	2.7	3.5	2.1	2.3	2.5	5.0	6.2	8.9	10.0	8.8	12.0	11.6	12.8	11.6	11.0	12.4	11.3	8.0	6.3	8.3	6.9	12.8
6	8.4	7.2	9.2	10.7	13.6	13.5	12.7	12.7	13.0	13.2	19.5	13.1	25.7	34.2	31.8	11.3	7.3	6.6	6.1	6.9	7.2	6.2	6.0	7.1	12.6	34.2
7	8.0	8.1	7.6	7.6	7.6	7.4	8.2	8.1	11.9	7.7	7.9	6.5	6.1	6.8	7.0	10.5	8.9	7.3	6.6	7.3	7.2	7.5	5.6	4.6	7.6	11.9
8	5.1	5.2	4.6	3.5	4.0	4.9	9.4	11.5	29.7	37.4	28.7	22.5	13.1	15.9	17.9	5.7	59.6	22.3	10.1	9.6	8.1	8.6	8.8	8.8	14.8	59.6
9	9.9	10.5	10.1	9.7	9.7	11.4	11.6	13.7	38.8	25.5	87.8	44.6	24.4	22.6	25.2	20.0	41.0	17.1	13.6	16.4	15.1	15.0	14.2	12.5	21.7	87.8
10	9.2	8.6	9.6	12.5	12.5	13.7	16.3	19.1	20.7	20.5	20.5	19.4	12.0	18.2	13.0	8.9	4.9	7.7	6.6	7.7	3.4	2.7	2.8	2.5	11.4	20.7
11	1.6	2.7	1.4	1.3	1.3	1.7	2.5	6.8	10.4	12.6	10.4	5.2	11.3	7.2	8.1	8.9	3.4	5.2	1.7	2.6	3.0	3.2	4.0	4.2	5.0	12.6
12	4.1	4.7	4.5	4.7	4.7	5.1	5.7	5.9	6.4	4.0	3.2	7.8	5.7	2.3	2.4	2.0	2.4	2.3	2.7	3.1	3.3	3.5	4.1	4.8	4.1	7.8
13	5.3	6.9	6.6	6.5	5.1	4.3	4.2	4.4	4.4	4.1	3.3	2.8	2.7	2.8	2.3	2.7	2.2	2.7	2.4	2.1	2.3	2.9	3.3	5.4	3.8	6.9
14	4.8	5.5	4.8	4.4	3.7	3.9	5.0	4.0	4.3	4.1	3.4	3.9	3.3	2.7	3.2	2.3	2.9	2.1	2.2	2.6	2.8	3.4	3.5	3.4	3.6	5.5
15	3.7	3.9	4.1	4.2	4.2	4.5	5.7	6.8	7.0	6.8	9.0	14.6	13.9	5.3	6.9	5.6	4.8	3.8	2.5	2.6	3.1	3.6	3.8	3.7	5.6	14.6
16	4.3	4.5	5.0	5.0	5.2	5.4	7.5	10.1	11.2	12.6	9.4	8.6	7.9	9.0	4.5	3.3	2.6	3.9	4.1	2.9	2.5	2.9	3.4	3.3	5.8	12.6
17	4.0	4.3	4.5	4.2	4.4	4.5	5.0	6.1	7.0	6.7	4.5	5.6	3.5	3.7	2.5	1.8	1.2	2.2	1.2	1.0	1.2	1.4	1.4	1.4	3.5	7.0
18	1.2	1.4	1.2	1.1	1.1	1.4	2.3	2.7	1.3	2.5	1.6	1.7	2.3	1.3	3.8	2.8	1.6	1.0	0.9	0.7	0.9	1.0	1.2	0.8	1.6	3.8
19	1.2	1.0	1.0	1.2	1.4	2.1	3.3	4.0	2.1	1.6	1.6	1.9	2.1	2.0	1.7	0.6	0.5	0.4	0.5	0.6	0.8	1.0	1.0	1.0	1.4	4.0
20	1.0	1.0	0.9	1.3	1.6	1.3	1.5	1.5	1.6	2.0	2.5	1.8	1.3	1.2	1.0	1.2	1.8	2.1	2.9	4.6	7.1	6.8	6.2	6.8	2.5	7.1
21	8.6	8.4	7.6	6.6	6.9	7.0	7.2	7.6	7.2	7.7	8.7	11.8	19.8	9.7	9.4	9.1	8.3	9.0	12.8	16.1	13.3	12.5	10.9	10.9	9.9	19.8
22	12.3	13.6	14.3	13.5	12.9	12.4	11.9	13.1	23.3	20.6	16.4	17.4	16.0	59.8	122.2	172.6	322.9	33.3	13.0	13.3	10.4	10.3	10.2	10.7	40.7	322.9
23	11.3	5.6	6.6	7.2	6.5	6.4	6.7	6.6	6.4	8.3	12.8	13.5	6.7	3.3	4.5	3.2	2.7	3.3	4.1	5.0	6.1	8.2	9.7	9.3	6.8	13.5
24	10.5	11.8	6.9	1.7	1.3	2.1	1.7	3.8	4.9	3.4	1.7	3.6	2.7	1.7	1.9	1.6	1.2	1.1	0.8	0.8	0.8	1.0	1.3	1.2	2.9	11.8
25	1.2	1.4	1.7	1.8	2.0	2.0	2.7	2.6	3.3	3.0	2.9	2.8	2.8	2.7	2.6	2.4	2.0	2.1	2.0	2.0	2.0	2.4	2.2	2.2	2.3	3.3
26	2.6	3.0	3.6	3.8	4.1	4.5	5.2	5.7	5.8	3.8	2.7	2.8	3.0	2.2	2.8	2.3	1.9	1.7	1.9	2.2	2.5	3.1	3.8	4.5	3.3	5.8
27	5.7	6.7	6.5	6.1	6.3	7.0	8.1	8.9	9.3	9.1	8.5	6.7	3.1	1.0	1.2	1.4	1.3	0.7	0.6	0.5	0.5	0.5	0.6	0.5	4.2	9.3
28	0.5	0.5	0.6	0.6	0.7	0.6	0.8	1.0	1.2	0.9	0.7	1.6	0.8	0.9	1.0	1.2	1.3	1.3	1.0	1.4	4.4	5.7	6.5	5.3	1.7	6.5
29	4.3	4.2	4.2	4.0	4.1	3.2	3.4	4.7	5.5	4.5	4.1	2.7	2.9	2.9	3.1	5.4	7.9	4.8	5.4	7.4	6.5	5.9	6.2	5.4	4.7	7.9
30	6.1	8.0	8.1	8.0	7.3	7.4	8.1	10.5	11.0	11.3	9.6	9.5	8.2	6.0	6.0	14.5	11.5	10.2	11.1	12.1	9.1	8.8	9.0	10.4	9.2	14.5
31	11.1	11.4	12.4	13.5	12.7	12.8	14.5	16.2	17.5	16.0	13.1	11.1	8.9	13.2	16.7	13.1	12.0	9.3	9.3	10.5	9.7	9.8	9.9	10.3	12.3	17.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	5.5	5.6	5.6	5.5	5.5	5.7	6.2	7.1	9.2	8.9	10.2	8.6	7.5	8.5	10.7	11.1	17.9	6.1	4.9	5.5	5.2	5.3	5.2	5.3		
MAX	12.3	13.6	14.3	13.5	13.6	13.7	16.3	19.1	38.8	37.4	87.8	44.6	25.7	59.8	122.2	172.6	322.9	33.3	13.6	16.4	15.1	15.0	14.2	12.5		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	322.9 UG/M3		
Maximum 24-HR Average	40.7 UG/M3		
IZS Calibration Time		OpperatioEl Time	744 HRS
Down Time	0	OpperatioEl Uptime	100.0 %
Standard Deviation	15.4	Monthly Average	7.4 UG/M3

West TSP (µg/m^3) – July 2019

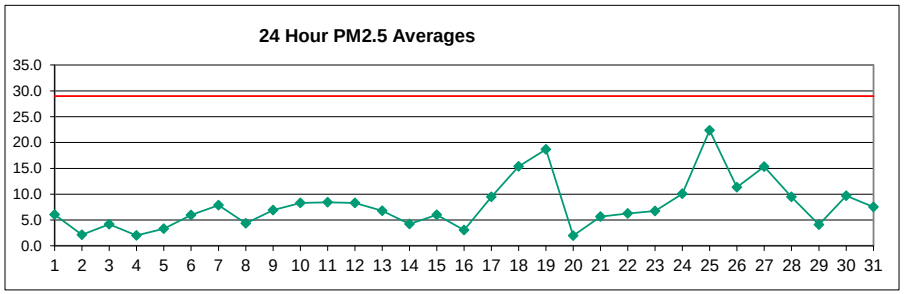
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	4.5	3.4	3.3	3.0	2.9	2.9	2.9	2.9	2.8	2.4	1.8	1.8	2.0	1.6	2.1	5.0	11.6	1.5	1.7	2.8	2.6	3.1	2.0	1.2	3.0	11.6
2	1.6	3.2	4.9	2.8	2.2	2.6	2.0	1.8	2.3	9.2	4.1	3.7	3.3	4.7	5.8	4.0	6.2	2.7	2.7	3.0	2.7	3.1	3.0	2.8	3.5	9.2
3	3.1	3.8	3.8	3.8	4.1	3.9	6.3	8.0	6.3	6.8	5.4	5.7	7.2	9.6	6.6	6.9	7.3	8.5	6.2	5.7	6.0	6.7	6.3	6.4	6.0	9.6
4	6.8	6.6	6.0	5.9	7.0	4.7	4.0	3.3	2.5	2.9	1.9	1.8	1.2	1.9	1.7	1.0	0.9	1.5	1.3	1.2	1.2	0.8	0.7	0.8	2.8	7.0
5	0.8	0.8	1.3	2.7	2.0	2.5	1.5	1.8	1.9	6.7	6.0	6.8	15.6	20.0	15.5	14.8	13.7	10.5	7.8	8.1	7.5	5.6	4.5	6.0	6.8	20.0
6	6.0	5.1	6.3	7.2	9.9	9.2	8.6	10.6	9.8	18.7	41.0	13.4	39.1	66.7	66.5	19.6	14.0	6.3	4.3	5.0	5.3	4.6	4.4	4.7	16.1	66.7
7	5.4	5.5	5.0	5.1	5.1	5.1	5.8	7.5	18.3	10.5	11.4	10.5	12.6	10.7	14.0	24.9	6.4	4.9	4.5	5.3	5.3	5.5	3.8	3.2	8.2	24.9
8	3.8	4.7	3.6	2.6	3.0	3.4	9.4	12.1	41.8	77.4	58.6	48.4	21.7	45.6	57.1	13.6	131.8	50.8	12.4	10.6	6.2	6.4	6.7	6.5	26.6	131.8
9	7.6	7.7	6.9	6.7	6.6	8.5	10.0	13.1	58.6	77.8	222.6	101.4	56.1	45.5	47.1	46.8	95.6	40.3	15.5	17.0	12.0	11.2	11.9	9.5	39.0	222.6
10	7.1	6.0	6.7	8.8	9.0	9.6	13.7	17.4	18.9	18.9	19.9	19.5	20.4	43.9	42.0	27.5	8.7	12.7	9.8	13.4	3.0	2.2	2.3	1.9	14.3	43.9
11	1.2	2.5	1.0	1.1	1.1	1.7	2.6	16.4	34.2	35.6	41.0	14.5	36.1	24.3	28.8	18.8	5.6	6.4	1.4	2.4	2.7	2.8	3.4	3.4	12.0	41.0
12	3.2	3.5	3.3	3.4	3.3	3.6	4.5	5.4	6.4	4.0	3.2	30.0	24.8	1.9	2.1	1.6	2.0	1.8	2.3	2.7	2.8	2.9	3.2	3.8	5.2	30.0
13	4.2	5.4	4.8	4.6	3.7	3.0	2.9	3.2	3.3	3.4	2.8	2.4	2.4	2.6	2.1	2.5	2.0	2.4	1.9	1.5	1.7	2.0	2.4	4.1	3.0	5.4
14	3.3	3.7	3.2	3.0	2.5	2.6	3.9	2.7	3.1	3.2	2.6	3.3	2.8	2.3	3.0	1.6	2.1	1.5	1.6	1.9	2.0	2.4	2.6	2.4	2.6	3.9
15	2.6	2.8	2.9	2.9	3.1	3.3	4.9	6.2	6.6	6.7	16.1	41.9	46.2	6.0	7.3	5.8	4.7	3.2	1.7	1.9	2.3	2.8	2.9	2.6	7.8	46.2
16	3.3	3.3	3.7	3.5	3.6	3.8	6.6	10.9	12.8	14.3	10.1	9.0	8.5	10.3	4.9	3.2	2.5	4.3	4.6	2.5	2.0	2.3	2.6	2.3	5.6	14.3
17	2.9	2.9	3.1	2.9	3.1	3.2	3.9	5.2	6.8	6.8	4.2	5.6	3.4	3.7	2.6	1.7	1.1	2.1	1.0	0.9	1.0	1.1	1.1	1.1	3.0	6.8
18	0.9	1.1	0.9	0.9	0.8	1.1	2.1	2.5	1.2	2.6	1.6	1.6	2.2	1.1	4.1	2.7	1.3	0.8	0.7	0.5	0.6	0.8	1.0	0.6	1.4	4.1
19	1.0	0.8	0.8	0.9	1.2	1.9	3.5	4.4	2.1	1.5	1.5	1.8	2.1	2.1	1.7	0.6	0.4	0.3	0.4	0.5	0.6	0.7	0.8	0.7	1.3	4.4
20	0.8	0.7	0.7	1.0	1.3	1.1	1.2	1.1	1.2	1.4	1.8	1.3	0.9	0.9	0.7	0.9	1.3	1.5	2.4	4.0	6.2	5.9	4.9	5.3	2.0	6.2
21	6.3	5.9	5.2	4.4	4.8	4.5	4.7	5.9	4.8	5.2	7.3	12.3	43.0	9.9	10.8	8.5	9.2	10.6	12.8	12.9	12.6	11.1	9.5	9.6	9.7	43.0
22	9.9	10.0	9.8	9.2	9.0	8.4	8.6	10.9	58.4	47.4	32.6	32.0	26.9	102.4	205.2	238.0	459.6	50.2	13.5	12.0	9.2	9.1	9.1	9.9	58.0	459.6
23	9.6	4.7	5.0	5.1	4.5	4.8	5.2	5.2	5.6	15.7	38.9	31.7	12.0	3.2	10.9	3.0	2.3	3.0	3.7	4.5	5.7	7.4	8.8	8.5	8.7	38.9
24	8.8	9.9	6.2	1.4	1.0	1.7	1.4	3.7	5.1	3.3	1.5	3.6	2.4	1.6	1.8	1.4	1.0	0.8	0.6	0.6	0.6	0.7	1.0	0.9	2.5	9.9
25	0.9	0.9	1.2	1.2	1.4	1.5	2.2	2.1	2.8	2.6	2.5	2.5	2.6	2.5	2.3	2.0	1.7	1.7	1.5	1.4	1.5	1.8	1.6	1.6	1.8	2.8
26	1.9	2.2	2.6	2.7	2.9	3.2	4.3	5.2	5.8	3.7	2.5	2.6	3.0	2.1	2.7	2.2	1.6	1.4	1.6	1.7	1.9	2.4	3.0	3.6	2.8	5.8
27	4.5	5.1	4.6	4.4	4.5	4.9	6.2	7.3	8.6	8.3	7.5	6.0	2.9	0.8	1.1	1.2	1.1	0.5	0.4	0.3	0.4	0.3	0.4	0.3	3.4	8.6
28	0.4	0.3	0.4	0.4	0.4	0.5	0.6	0.7	1.0	0.7	0.5	1.1	0.6	0.8	0.8	1.1	1.1	1.1	0.7	1.1	4.8	6.4	7.2	5.6	1.6	7.2
29	4.4	3.9	3.6	3.1	3.0	2.3	2.6	4.6	5.9	4.7	4.3	2.7	2.9	2.8	2.9	6.0	9.0	5.2	6.1	8.4	7.1	6.2	6.0	4.9	4.7	9.0
30	5.7	7.7	7.2	6.3	5.4	5.4	6.4	11.6	12.5	13.0	10.7	10.8	9.1	6.5	6.3	16.8	13.3	10.9	12.2	13.5	7.8	9.0	8.5	8.2	9.4	16.8
31	7.9	8.0	9.0	9.5	9.0	8.7	11.4	14.9	17.5	16.4	13.6	12.9	10.4	15.2	19.4	15.0	13.7	10.1	9.8	10.3	9.2	8.1	7.8	8.2	11.5	19.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	4.2	4.3	4.1	3.9	3.9	4.0	5.0	6.7	11.9	13.9	18.7	14.3	13.7	14.6	18.7	16.1	26.9	8.4	4.7	5.1	4.3	4.4	4.3	4.2		
MAX	9.9	10.0	9.8	9.5	9.9	9.6	13.7	17.4	58.6	77.8	222.6	101.4	56.1	102.4	205.2	238.0	459.6	50.8	15.5	17.0	12.6	11.2	11.9	9.9		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	459.6	UG/M3	
Maximum 24-HR Average	58.0	UG/M3	
IZS Calibration Time		Opperational Time	744 HRS
Down Time	0	Opperational Uptime	100.0 %
Standard Deviation	24.89	Monthly Average	9.2 UG/M3

Berm $PM_{2.5}$ (µg/m^3) – July 2019

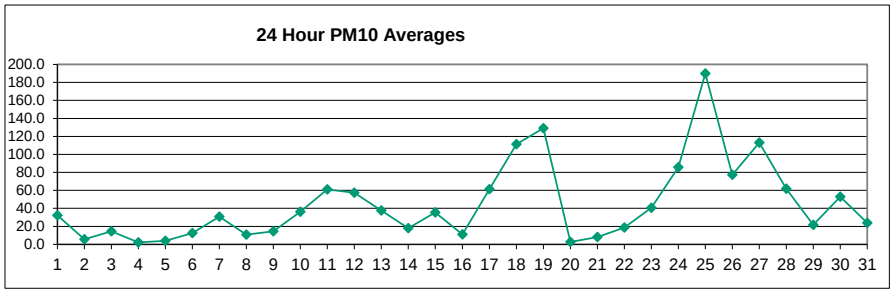
DAY \ HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	2.0	2.7	2.7	2.9	2.9	2.9	4.1	3.3	2.6	7.5	18.2	16.2	18.1	18.6	12.9	9.8	7.9	0.8	1.2	1.4	1.9	2.9	1.1	0.6	6.1	18.6
2	1.1	1.0	1.5	0.6	0.7	1.2	1.4	1.5	1.5	1.1	1.7	7.1	2.5	2.7	3.1	1.9	2.8	3.3	2.0	2.6	3.4	2.8	2.0	2.0	2.2	7.1
3	2.2	4.1	2.6	3.0	2.5	2.8	3.8	6.6	3.5	5.8	4.2	4.3	4.0	4.9	5.3	5.0	3.9	3.8	3.2	3.8	4.1	4.6	6.0	5.9	4.2	6.6
4	3.7	5.5	5.0	3.7	4.8	4.7	3.9	2.7	1.1	1.2	0.6	0.6	0.4	0.9	0.8	0.7	0.7	0.7	1.9	0.7	1.2	1.3	0.6	0.7	2.0	5.5
5	0.7	2.0	2.4	1.4	1.5	0.5	0.9	1.0	0.9	0.8	2.0	2.9	1.8	2.5	2.5	4.9	6.0	6.7	5.2	6.2	6.8	6.9	6.5	6.0	3.3	6.9
6	4.4	3.7	3.6	3.9	5.1	5.8	5.6	5.9	6.9	7.1	10.0	7.8	6.9	9.5	7.4	7.8	5.7	9.7	3.5	4.5	3.8	3.8	5.7	4.9	6.0	10.0
7	7.7	8.9	4.8	7.6	6.5	6.0	6.9	5.4	4.6	7.3	14.0	6.9	15.3	9.1	11.0	20.7	8.5	13.3	6.5	4.0	3.9	4.5	3.2	2.6	7.9	20.7
8	4.8	4.3	4.9	3.6	1.9	2.0	3.2	4.1	7.0	4.8	5.6	6.3	3.5	3.9	6.0	3.8	6.3	3.4	3.8	4.4	4.8	3.9	4.0	4.2	4.4	7.0
9	4.4	4.6	4.7	4.6	4.9	8.9	15.9	17.5	7.4	4.2	5.1	5.5	7.0	7.7	6.8	6.6	6.3	5.9	5.7	6.7	7.3	7.2	5.8	5.4	6.9	17.5
10	5.0	4.1	4.3	6.8	7.5	8.2	9.3	9.7	10.0	10.0	10.7	9.8	11.3	9.0	16.5	12.5	8.4	8.1	8.3	7.0	6.5	9.3	4.6	2.2	8.3	16.5
11	6.7	1.2	1.7	1.6	1.5	2.5	3.7	10.5	11.3	23.5	20.6	13.7	17.4	18.4	12.8	10.1	8.1	11.1	10.5	7.6	2.2	1.8	2.1	2.0	8.4	23.5
12	2.1	2.1	2.6	3.4	2.8	2.6	2.8	3.4	3.1	6.5	14.5	20.1	22.4	35.3	21.5	14.7	8.1	6.5	9.9	5.9	3.0	2.1	2.0	2.1	8.3	35.3
13	2.4	3.4	4.2	3.9	3.0	2.8	2.8	3.0	3.1	4.2	9.2	4.6	9.6	39.7	9.3	28.8	4.5	10.5	4.8	2.4	1.2	1.5	1.4	2.6	6.8	39.7
14	3.0	6.9	3.1	2.5	2.3	2.5	2.5	2.7	3.4	2.9	4.1	7.4	11.1	11.9	20.8	1.5	1.7	1.2	1.2	1.5	1.4	1.9	1.8	1.7	4.2	20.8
15	2.0	2.1	2.2	2.3	2.3	2.3	2.5	3.3	4.1	5.8	4.8	3.7	7.7	15.5	11.2	16.8	13.7	12.4	14.3	4.8	2.5	2.1	2.5	2.4	6.0	16.8
16	2.1	2.2	2.4	2.6	2.8	3.2	5.1	10.1	4.4	3.5	4.7	3.4	2.5	3.6	1.9	1.5	1.9	1.6	1.4	4.3	2.1	1.9	2.0	1.8	3.0	10.1
17	2.2	2.4	2.5	2.3	2.3	2.3	2.5	3.1	6.4	6.9	31.0	22.8	22.4	24.2	30.5	20.2	10.3	9.3	6.6	2.6	3.4	3.0	2.7	5.2	9.5	31.0
18	10.7	10.1	3.1	12.3	12.3	9.1	14.2	29.3	16.0	14.8	35.8	30.5	30.1	8.5	12.2	10.7	11.0	9.6	14.4	15.2	10.5	19.2	17.6	11.7	15.4	35.8
19	3.7	7.0	4.2	2.9	1.7	4.0	5.4	13.6	62.1	63.7	93.1	21.4	26.1	33.7	36.3	26.5	17.9	9.8	4.5	4.3	2.1	2.6	1.1	0.5	18.7	93.1
20	0.6	1.0	0.6	2.1	1.0	0.8	1.3	2.2	2.1	1.5	2.0	1.7	1.1	2.0	2.1	1.1	2.2	1.5	1.6	2.3	2.7	3.8	4.4	5.5	2.0	5.5
21	5.0	5.3	5.2	4.8	4.8	4.5	6.3	6.4	6.1	7.4	6.7	9.7	6.1	5.3	4.9	5.0	4.8	4.5	4.3	5.2	6.0	5.9	5.8	6.0	5.7	9.7
22	6.1	7.8	7.7	7.2	7.3	6.7	6.9	7.8	8.5	7.6	10.8	10.3	4.3	3.3	5.3	5.6	5.0	4.5	4.0	4.1	4.7	5.2	4.6	5.3	6.3	10.8
23	9.2	4.0	3.0	3.2	3.0	3.2	3.4	5.1	7.8	12.5	7.6	12.4	12.9	8.4	Y	22.6	10.8	4.0	3.1	2.4	2.8	3.4	4.5	5.5	6.7	22.6
24	8.3	7.8	17.0	1.4	2.1	2.0	2.7	3.7	4.4	6.8	2.4	3.9	5.2	5.6	8.0	11.8	17.6	16.9	14.5	22.7	12.2	30.8	21.0	13.2	10.1	30.8
25	39.4	17.3	9.5	8.5	7.5	8.1	19.0	28.4	24.4	27.6	37.9	39.3	25.1	17.9	20.3	29.8	25.4	32.2	22.6	22.3	19.9	25.2	18.0	10.3	22.3	39.4
26	3.4	2.1	2.6	2.4	2.9	2.5	3.4	4.5	4.3	21.5	35.0	13.3	22.9	17.9	21.9	25.1	15.7	21.6	36.3	4.0	1.6	1.8	1.9	3.7	11.3	36.3
27	6.2	4.8	3.9	4.1	4.3	5.2	7.9	31.5	22.2	7.8	14.4	43.3	61.3	24.0	21.6	25.7	13.9	15.2	8.5	13.3	8.5	11.5	6.6	2.2	15.3	61.3
28	5.8	4.3	4.6	0.7	0.5	0.5	0.6	18.2	18.7	17.1	15.4	12.0	24.5	17.9	13.8	9.8	11.5	21.7	17.4	6.5	1.7	1.3	1.4	1.5	9.5	24.5
29	1.6	2.0	2.2	2.9	5.1	2.2	2.5	2.9	7.5	4.5	4.5	5.9	6.4	6.9	4.8	4.5	3.6	3.4	3.6	3.4	4.2	6.2	4.1	3.0	4.1	7.5
30	4.2	3.3	3.6	3.9	3.9	4.0	11.0	30.4	17.8	19.5	21.1	13.2	9.7	12.0	9.8	13.7	10.0	6.2	5.5	5.0	6.4	6.5	6.1	5.9	9.7	30.4
31	5.6	5.5	4.9	4.8	6.1	5.2	6.7	9.9	14.0	14.4	13.3	13.8	10.0	8.2	8.6	6.0	5.8	4.9	4.8	7.4	5.5	5.0	5.1	4.7	7.5	14.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	743	100%
MEAN	5.4	4.6	4.1	3.8	3.8	3.8	5.4	9.3	9.6	10.6	14.9	12.1	13.2	12.6	11.7	11.8	8.4	8.5	7.6	6.1	4.8	6.1	5.0	4.2		
MAX	39.4	17.3	17.0	12.3	12.3	9.1	19.0	31.5	62.1	63.7	93.1	43.3	61.3	39.7	36.3	29.8	25.4	32.2	36.3	22.7	19.9	30.8	21.0	13.2		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	743		
Maximum 1-HR Average	93.1	UG/M3	
Maximum 24-HR Average	22.3	UG/M3	
		Operational Time	743 HRS
Monthly Calibration	0	Operational Uptime	99.9 %
Standard Deviation	8.7	Monthly Average	7.8 UG/M3

Berm PM_{10} ($\mu g/m^3$) – July 2019

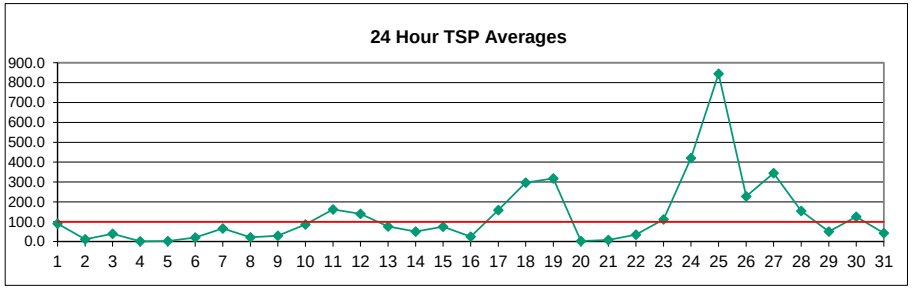
DAY \ HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	2.4	3.6	3.8	6.1	4.5	4.5	14.4	8.6	4.0	43.4	127.2	105.2	125.0	101.6	76.9	58.5	68.7	1.5	2.0	2.5	3.0	3.4	1.7	0.8	32.2	127.2
2	1.3	1.2	1.7	0.7	0.8	1.3	1.5	2.0	2.0	1.4	2.3	11.4	7.2	14.0	18.3	9.4	17.1	17.9	3.3	3.9	5.3	4.0	3.3	2.6	5.6	18.3
3	2.9	5.9	3.3	3.8	3.2	3.8	15.0	39.7	13.5	49.6	26.6	28.9	21.5	24.7	25.0	20.5	10.9	10.6	6.6	5.4	5.0	5.4	6.8	6.5	14.4	49.6
4	4.1	5.7	5.1	3.8	4.9	4.9	4.4	3.1	1.3	1.4	0.9	0.8	0.5	1.2	1.0	0.9	1.0	0.9	2.2	0.8	1.3	1.5	0.7	0.9	2.2	5.7
5	0.9	2.3	2.7	1.6	1.6	0.6	1.0	1.4	1.1	0.9	2.3	3.3	2.2	3.5	3.9	6.0	7.9	8.8	6.2	7.0	7.4	7.6	7.2	6.8	3.9	8.8
6	5.5	4.8	4.8	5.1	6.2	6.8	6.5	7.2	9.2	9.7	14.6	12.5	14.2	19.2	12.0	30.3	27.4	65.5	5.7	9.3	4.8	5.0	7.7	5.9	12.5	65.5
7	10.3	12.6	5.5	10.5	8.5	7.8	9.6	7.2	6.3	32.0	106.2	33.2	76.5	57.9	63.9	155.8	27.8	64.0	16.9	5.4	5.2	9.1	3.4	2.8	30.8	155.8
8	6.5	6.1	7.1	5.0	2.4	2.4	4.1	5.5	10.4	12.2	18.0	20.0	9.2	19.0	31.6	21.6	32.4	8.0	6.3	7.7	7.7	5.6	5.2	5.3	10.8	32.4
9	5.6	5.8	5.7	5.8	6.2	12.8	23.9	26.9	21.3	11.8	15.5	18.9	27.0	25.0	23.1	18.9	19.2	13.1	9.0	11.3	12.7	12.5	7.4	6.5	14.4	27.0
10	7.0	5.1	5.0	8.0	9.3	10.5	12.9	13.3	17.0	24.0	38.8	36.7	79.0	63.7	126.4	98.5	60.3	48.1	49.7	39.3	40.2	48.2	20.9	7.9	36.2	126.4
11	34.4	2.4	8.0	7.9	5.6	15.4	25.1	65.1	81.6	190.5	167.6	111.5	123.3	120.2	97.7	86.2	62.5	93.7	92.8	55.7	8.6	3.8	3.6	3.0	61.1	190.5
12	3.2	3.0	3.6	8.2	4.2	3.6	5.5	10.1	8.0	40.7	102.0	158.2	175.2	309.7	161.6	122.8	63.9	44.4	79.0	45.9	10.5	6.2	2.7	2.8	57.3	309.7
13	3.4	6.2	6.8	6.5	4.0	4.0	4.5	6.5	7.4	24.2	70.5	30.4	76.5	271.7	59.1	198.7	23.1	62.7	20.1	6.9	1.6	1.8	1.7	4.2	37.6	271.7
14	5.2	9.6	3.9	3.0	2.7	2.8	2.9	4.1	10.0	10.2	19.1	42.0	74.3	77.5	140.8	2.5	2.2	1.4	1.6	2.4	1.7	3.6	2.4	2.3	17.8	140.8
15	2.4	2.5	2.6	2.7	2.9	2.8	3.3	11.2	18.0	37.4	29.6	22.1	61.0	130.1	90.4	122.2	85.5	82.9	93.7	27.2	6.7	4.6	4.6	4.1	35.4	130.1
16	2.7	2.9	3.2	3.7	4.1	6.3	20.0	61.2	15.0	10.3	18.5	10.0	6.4	21.3	10.3	4.6	9.5	5.7	3.8	27.1	8.0	5.0	2.6	2.2	11.0	61.2
17	2.6	2.9	3.0	2.7	2.7	2.7	3.0	4.2	46.6	49.6	229.1	157.4	162.7	195.7	236.8	147.2	61.1	53.9	32.1	10.6	15.9	13.8	12.3	24.9	61.4	236.8
18	53.1	51.6	17.0	64.5	70.9	53.7	90.9	245.3	124.6	120.2	312.9	278.9	223.9	37.4	77.1	62.9	72.5	62.4	95.1	116.3	80.1	148.7	119.3	91.7	111.3	312.9
19	21.8	32.2	20.0	12.5	5.8	18.1	35.7	113.8	428.5	437.3	615.3	161.7	217.7	275.5	282.2	190.8	128.0	62.9	20.7	9.9	3.1	3.9	1.6	0.6	129.1	615.3
20	0.7	1.4	0.8	3.0	1.3	1.1	1.9	3.2	2.9	2.1	2.6	2.4	1.4	2.7	2.9	1.4	3.1	1.9	2.5	5.5	3.4	5.0	5.7	7.5	2.8	7.5
21	6.0	6.7	6.8	6.1	5.7	5.2	8.4	8.8	8.3	10.4	9.6	18.1	9.0	6.4	6.3	7.4	6.7	6.9	6.9	7.8	10.2	8.6	7.9	7.9	8.0	18.1
22	7.9	10.6	10.0	9.0	9.7	8.4	13.8	25.1	28.7	29.2	61.5	63.2	23.1	11.5	28.4	21.4	17.2	12.4	9.6	9.0	8.9	8.5	7.2	11.5	18.6	63.2
23	43.9	10.1	4.8	4.4	4.1	5.7	5.9	24.0	52.1	106.2	56.7	98.0	106.8	62.8	Y	175.5	96.3	24.7	15.4	5.0	5.2	6.2	8.0	14.3	40.7	175.5
24	33.7	17.4	115.0	1.9	3.1	2.8	4.7	23.3	26.4	46.3	9.1	18.8	33.9	39.4	66.2	119.8	172.8	164.6	135.7	255.7	115.2	314.9	210.6	124.3	85.6	314.9
25	435.0	158.0	84.7	65.3	57.9	55.2	178.3	240.0	210.6	286.2	383.2	346.4	214.8	149.4	175.2	272.1	219.4	253.2	174.2	162.4	112.9	145.3	117.8	58.7	189.8	435.0
26	12.0	4.0	4.7	4.4	6.0	3.5	9.2	19.8	22.5	169.4	308.4	101.9	169.8	122.3	162.3	185.2	105.6	145.3	253.4	22.8	3.8	2.9	3.6	14.3	77.4	308.4
27	29.3	16.3	8.7	8.9	6.7	9.6	40.0	203.8	122.5	29.2	76.9	317.4	637.1	212.8	214.0	230.9	96.2	92.4	51.1	76.4	47.1	109.8	61.7	13.6	113.0	637.1
28	36.1	29.2	22.1	2.4	0.8	1.0	1.7	149.1	119.6	99.4	104.4	81.0	189.9	122.2	89.6	63.5	72.3	137.1	111.1	36.8	5.2	2.7	3.1	3.7	61.8	189.9
29	3.8	4.8	5.9	9.2	22.3	6.1	8.2	13.2	51.0	24.2	28.8	46.9	48.6	54.9	35.1	26.6	18.1	16.2	19.2	15.6	16.8	27.4	10.5	8.0	21.7	54.9
30	14.0	7.2	9.3	6.5	7.6	9.4	71.8	239.2	123.5	106.0	118.2	80.8	65.3	90.9	89.1	76.3	48.0	21.9	15.4	13.1	16.0	15.3	12.8	9.7	52.8	239.2
31	8.0	7.6	6.4	6.0	8.3	6.5	9.1	23.3	62.9	60.3	51.2	58.6	43.1	41.1	43.4	23.1	22.9	15.9	12.7	24.6	10.4	8.4	9.0	7.6	23.8	62.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	743	100%
MEAN	26.0	14.2	12.6	9.3	9.2	9.0	20.6	51.9	53.4	67.0	100.9	79.9	97.6	86.6	81.7	82.6	53.5	51.6	43.7	33.2	18.8	30.6	21.7	14.9		
MAX	435.0	158.0	115.0	65.3	70.9	55.2	178.3	245.3	428.5	437.3	615.3	346.4	637.1	309.7	282.2	272.1	219.4	253.2	253.4	255.7	115.2	314.9	210.6	124.3		



Number of Non-Zero Readings	743		
Maximum 1-HR Average	637.1 UG/M3		
Maximum 24-HR Average	189.8 UG/M3		
		Operational Time	743 HRS
Monthly Calibration	0	Operational Uptime	99.9 %
Standard Deviation	74.3	Monthly Average	44.6 UG/M3

Berm TSP (µg/m^3) – July 2019

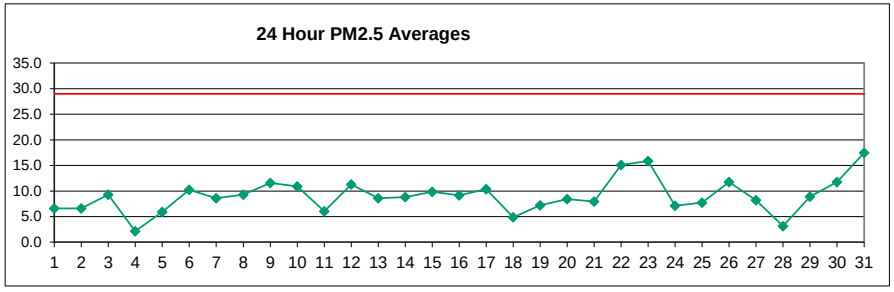
DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	1.6	4.0	3.9	16.7	5.2	7.2	36.0	21.6	6.0	88.8	312.4	328.8	394.8	243.7	173.5	161.5	333.4	5.0	4.9	7.8	3.5	2.4	4.0	1.6	90.3	394.8
2	0.9	0.8	1.1	0.5	0.5	0.8	1.0	1.8	1.7	1.1	2.1	11.8	15.8	31.9	47.3	18.2	62.4	58.5	8.3	5.8	6.9	4.0	5.1	1.8	12.1	62.4
3	2.2	5.7	2.3	2.5	2.2	2.8	41.1	89.1	41.0	215.5	71.1	64.2	77.1	82.0	92.8	65.1	31.8	23.2	11.1	5.1	3.4	3.5	4.4	4.2	39.3	215.5
4	2.7	3.7	3.3	2.5	3.2	3.2	2.9	2.0	0.9	1.0	0.7	0.7	0.4	1.0	0.7	0.7	0.8	0.6	1.4	0.5	0.9	0.9	0.5	0.6	1.5	3.7
5	0.6	1.5	1.8	1.0	1.1	0.4	0.8	1.2	0.9	0.6	1.6	2.2	1.6	3.0	5.9	4.3	9.7	10.9	4.2	4.5	4.8	4.9	4.7	4.4	3.2	10.9
6	3.6	3.2	3.2	3.4	4.1	4.5	4.3	4.9	6.7	7.7	14.9	14.2	34.0	31.6	14.7	78.0	58.9	167.6	3.8	7.8	3.5	3.6	6.7	4.2	20.4	167.6
7	8.7	11.4	3.7	9.3	6.9	6.2	8.2	5.9	5.4	88.1	300.1	70.0	134.4	128.5	143.0	474.9	40.7	73.3	16.4	6.0	5.3	27.3	2.2	1.8	65.7	474.9
8	6.1	5.2	6.2	4.3	1.6	1.6	3.1	4.5	10.4	24.3	38.9	39.4	13.1	50.7	66.7	52.5	122.2	20.7	13.6	14.4	9.8	5.4	3.4	3.5	21.7	122.2
9	3.7	3.8	3.8	3.9	4.1	12.0	26.4	30.9	41.3	33.6	42.4	57.7	77.2	100.8	61.2	42.2	52.6	24.3	12.2	15.2	17.2	18.2	7.1	4.7	29.0	100.8
10	6.2	3.5	3.4	5.2	6.6	7.7	9.9	10.4	22.0	47.1	83.2	76.0	205.3	160.4	351.1	282.1	164.9	106.2	115.9	97.8	117.0	121.4	37.8	17.3	85.8	351.1
11	62.0	4.1	29.5	24.0	15.0	34.3	68.8	168.2	247.6	608.9	501.5	306.2	279.7	235.4	247.7	241.4	144.9	251.3	217.7	138.0	46.3	4.4	4.6	2.6	161.8	608.9
12	3.3	2.0	3.3	17.1	4.3	2.9	6.8	23.3	17.6	87.8	277.8	396.6	442.7	759.5	365.7	299.7	132.3	102.6	224.0	140.4	24.6	9.3	1.8	3.5	139.5	759.5
13	2.3	4.8	7.9	8.4	5.3	4.6	4.1	11.4	15.9	49.3	129.1	52.9	158.1	467.2	137.4	512.3	52.3	148.4	45.2	8.2	2.2	3.1	1.1	3.8	76.5	512.3
14	4.7	8.2	3.0	2.1	1.8	1.9	2.0	4.9	20.4	24.0	66.6	115.8	231.9	213.3	494.9	4.6	1.6	1.1	1.7	1.9	2.5	6.3	2.2	1.5	50.8	494.9
15	1.6	1.7	1.7	1.8	1.9	1.9	2.6	21.4	44.9	87.8	68.5	49.0	120.5	226.1	155.7	269.9	210.6	220.7	211.8	61.7	15.0	6.2	4.7	3.2	74.6	269.9
16	1.8	1.9	2.6	2.5	2.8	8.1	36.3	110.2	29.4	23.3	51.4	22.6	15.2	75.9	38.8	7.4	16.7	14.0	9.5	98.3	18.9	13.0	2.1	1.5	25.2	110.2
17	1.8	1.9	2.0	1.8	1.7	1.8	2.1	3.3	156.1	141.9	550.7	363.5	452.4	516.4	693.8	404.7	122.9	120.7	57.2	23.4	42.0	31.7	42.5	75.4	158.8	693.8
18	96.2	107.9	50.0	97.4	98.4	94.1	191.1	618.4	368.2	315.4	910.7	750.4	602.1	96.0	170.2	162.9	205.9	198.8	293.2	364.4	262.9	464.1	311.8	277.9	296.2	910.7
19	81.9	52.4	41.2	15.8	4.3	24.7	103.6	293.2	1013.2	935.1	1253.8	449.8	633.5	769.2	729.0	553.6	410.0	179.5	55.6	23.6	3.0	3.7	1.5	0.4	318.0	1253.8
20	0.5	1.2	0.6	3.0	1.0	0.9	1.7	3.0	2.4	1.8	2.1	2.0	1.1	2.5	3.0	1.1	2.9	1.5	4.4	10.7	2.2	3.3	3.8	5.7	2.6	10.7
21	3.9	4.8	4.8	4.2	3.7	3.4	6.1	6.3	6.3	9.3	9.0	21.6	13.9	10.4	5.6	14.2	8.6	11.9	11.9	6.6	11.3	6.4	5.4	5.2	8.1	21.6
22	5.3	7.8	7.1	6.1	6.7	5.6	26.9	66.2	52.3	75.1	119.4	101.4	59.4	25.3	84.2	53.7	48.0	28.3	20.2	12.8	11.1	7.5	5.5	12.4	35.3	119.4
23	136.6	16.1	4.7	3.5	4.7	9.1	8.7	73.5	152.9	394.8	163.7	241.4	234.6	125.3	Y	496.0	354.9	62.0	23.8	8.4	7.9	13.5	9.3	30.7	112.0	496.0
24	77.2	23.3	389.5	1.6	2.8	2.5	11.1	121.2	124.3	186.5	18.3	57.0	134.4	159.3	343.1	601.8	828.0	781.8	761.1	1482.2	604.8	1518.0	1168.8	694.6	420.5	1518.0
25	2310.4	756.3	407.2	292.6	276.3	238.6	866.9	1019.2	987.9	1372.7	1861.6	1595.2	952.7	698.3	798.9	1272.8	970.8	1101.1	694.9	611.6	296.0	368.7	361.3	163.1	844.8	2310.4
26	29.8	6.2	11.8	9.0	14.5	3.5	18.1	45.0	70.8	537.9	1094.8	345.1	493.0	322.9	442.4	536.6	277.3	410.8	692.5	57.3	5.0	3.3	3.5	28.1	227.5	1094.8
27	62.3	25.1	11.3	10.9	5.8	15.1	86.7	458.2	251.5	65.0	168.9	1090.9	1172.5	947.5	976.7	927.6	382.4	339.8	140.7	199.2	118.8	509.6	267.6	43.1	344.9	1172.5
28	98.1	107.2	77.0	5.0	0.7	0.9	3.5	459.3	391.3	246.3	245.0	176.4	499.8	268.0	190.5	162.4	131.3	284.5	237.4	88.6	8.5	4.2	4.8	9.8	154.2	499.8
29	4.7	4.1	7.1	19.2	31.4	13.8	13.2	35.8	155.1	60.0	66.5	136.0	123.7	133.8	85.6	48.9	31.5	41.4	53.4	33.5	30.9	46.5	14.1	11.1	50.1	155.1
30	17.2	8.6	16.5	7.1	13.0	18.3	218.9	656.6	352.5	245.8	260.9	158.8	159.8	207.8	227.9	182.2	119.2	36.8	22.1	23.6	21.3	18.1	14.3	9.4	125.7	656.6
31	6.0	5.4	4.3	4.0	6.0	4.3	7.0	36.3	158.0	122.4	94.1	116.8	91.4	86.9	80.9	35.5	41.1	27.7	17.6	53.6	12.2	7.4	8.3	10.4	43.2	158.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	743	100%
MEAN	98.2	38.5	36.0	18.9	17.4	17.3	58.7	142.2	153.4	196.7	283.3	232.7	252.5	231.6	241.0	257.1	173.2	156.6	128.6	116.6	55.5	104.5	74.7	46.4		
MAX	2310.4	756.3	407.2	292.6	276.3	238.6	866.9	1019.2	1013.2	1372.7	1861.6	1595.2	1172.5	947.5	976.7	1272.8	970.8	1101.1	761.1	1482.2	604.8	1518.0	1168.8	694.6		



Number of 24HR Exceedences	12	Proposed Guideline	
Number of Non-Zero Readings	743		
Maximum 1-HR Average	2310.4	UG/M3	
Maximum 24-HR Average	844.8	UG/M3	
IZS Calibration Time		Operational Time	743 HRS
Monthly Calibration	0	Operational Uptime	99.9 %
Standard Deviation	257.9	Monthly Average	130.3 UG/M3

Entrance $PM_{2.5}$ (µg/m^3) – July 2019

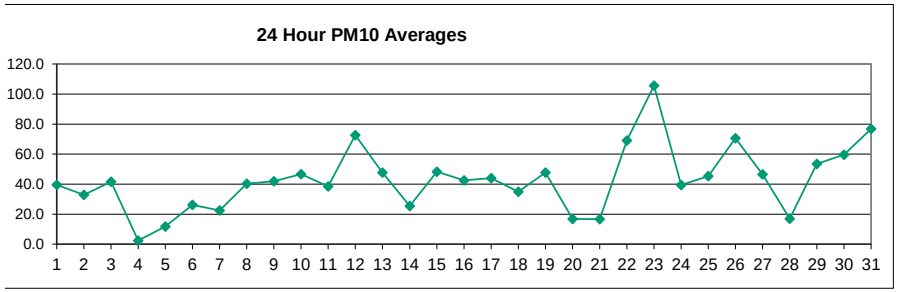
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	13.1	13.0	11.3	11.4	11.1	12.2	14.0	12.7	9.8	5.8	5.4	5.5	4.5	4.2	4.4	5.3	4.1	1.3	0.8	1.4	2.6	2.2	1.1	1.0	6.6	14.0
2	1.3	1.3	1.9	1.5	1.8	2.4	4.8	3.3	4.1	3.2	14.2	24.0	11.5	16.5	8.4	12.7	15.1	5.2	4.7	7.6	4.6	3.1	2.9	2.4	6.6	24.0
3	4.1	4.2	5.6	5.7	6.2	5.4	9.8	12.3	10.2	10.3	10.9	19.8	14.0	12.4	14.4	17.2	13.7	12.7	9.8	5.3	4.8	4.7	4.9	4.7	9.3	19.8
4	3.6	4.9	4.7	4.6	5.3	6.4	5.4	2.1	2.0	0.7	0.6	0.8	0.7	0.7	1.1	0.7	0.8	0.6	0.9	0.9	0.9	1.0	0.9	1.3	2.1	6.4
5	1.3	2.6	1.7	1.7	2.5	1.1	1.8	1.5	0.9	2.5	3.9	2.8	3.7	13.3	13.9	14.0	13.0	13.9	9.2	7.2	7.3	7.7	7.8	6.4	5.9	14.0
6	5.5	5.3	4.5	6.2	8.4	9.6	11.9	11.0	12.6	8.8	15.2	13.9	14.5	15.6	14.3	7.6	11.3	5.8	10.6	14.5	7.9	7.1	7.0	16.9	10.2	16.9
7	14.7	9.8	10.7	10.8	12.9	16.3	11.2	15.7	7.3	7.6	7.7	4.5	5.1	6.0	4.3	11.0	12.4	9.1	6.8	5.0	5.2	4.1	4.1	4.0	8.6	16.3
8	5.0	7.2	5.3	3.3	2.4	2.7	4.1	9.9	18.5	20.3	26.8	22.8	18.7	9.0	7.0	7.2	8.0	7.0	6.4	7.5	5.4	5.9	6.3	6.5	9.3	26.8
9	9.2	6.4	6.4	6.7	11.7	11.9	18.0	21.0	12.8	14.7	14.5	12.4	16.2	13.6	13.1	12.0	13.0	8.7	9.4	10.3	12.8	8.5	7.2	7.6	11.6	21.0
10	6.2	5.2	5.8	11.0	13.3	12.0	15.2	18.3	21.4	22.1	17.7	15.1	21.0	10.1	16.1	12.5	13.0	9.0	2.8	2.7	3.3	2.9	3.1	1.7	10.9	22.1
11	1.1	3.5	1.2	1.2	2.2	4.0	5.8	6.5	6.3	8.1	5.0	6.9	7.5	11.3	8.0	11.6	8.2	9.6	2.3	2.4	9.1	7.6	7.9	7.3	6.0	11.6
12	5.8	7.7	12.6	10.7	12.1	8.9	14.2	21.7	20.3	15.7	12.6	13.2	10.7	11.4	8.5	11.2	9.4	5.3	6.9	6.7	10.6	8.8	16.5	9.3	11.3	21.7
13	6.3	6.9	12.0	10.3	9.5	7.7	10.4	14.0	9.8	8.2	7.5	6.1	6.6	7.2	5.8	10.9	7.5	9.2	3.8	9.4	11.0	6.0	8.6	11.5	8.6	14.0
14	12.8	13.5	16.2	17.5	14.7	15.2	8.7	7.1	8.7	6.2	7.4	4.1	5.3	4.8	6.7	2.8	7.6	12.9	3.6	2.1	4.2	8.1	7.5	13.5	8.8	17.5
15	7.5	7.5	8.8	4.8	9.2	10.3	15.4	17.0	9.2	14.7	23.2	8.1	12.3	10.6	10.5	12.1	9.6	10.2	3.4	2.7	2.0	4.0	9.0	13.7	9.8	23.2
16	3.3	5.3	5.8	6.5	5.6	7.4	14.6	15.0	11.6	9.4	9.6	8.8	19.4	11.6	6.7	2.3	18.6	8.4	6.3	5.4	9.6	11.4	10.6	6.9	9.2	19.4
17	7.4	9.2	14.7	9.3	7.9	7.6	12.1	14.1	9.3	10.7	15.5	13.9	19.2	13.8	17.2	24.7	14.4	16.9	1.5	1.0	2.0	1.2	2.8	2.1	10.4	24.7
18	1.4	1.1	1.5	3.5	2.6	4.8	5.0	8.5	7.7	7.7	9.0	7.1	24.0	2.4	4.2	5.6	7.0	3.7	3.2	2.1	0.8	1.3	1.2	1.5	4.9	24.0
19	2.1	4.0	3.2	8.6	15.3	7.7	6.4	5.7	6.8	11.3	17.8	14.1	8.1	12.2	9.8	11.8	10.3	3.0	0.8	0.6	0.6	0.6	3.2	8.4	7.2	17.8
20	10.0	13.5	11.2	9.0	9.4	4.3	3.9	7.0	5.5	5.9	4.3	8.1	10.9	3.2	6.5	14.0	13.8	9.6	9.2	11.4	6.4	8.5	5.7	10.6	8.4	14.0
21	10.5	13.2	12.0	10.5	7.0	6.8	8.7	7.1	7.2	10.3	5.8	9.0	10.9	7.0	6.9	6.1	5.8	4.9	5.3	6.6	8.1	7.1	6.7	7.0	7.9	13.2
22	10.5	12.8	20.2	18.0	20.4	20.4	20.0	22.4	15.1	20.7	15.7	19.8	13.4	16.4	17.9	17.3	16.5	11.8	8.1	9.5	8.6	8.6	5.9	12.0	15.1	22.4
23	20.0	9.0	10.3	14.1	12.5	16.1	18.6	43.7	36.1	24.4	24.0	14.5	12.2	12.0	14.7	28.0	14.3	17.0	5.5	5.0	3.6	6.2	7.5	12.0	15.9	43.7
24	20.7	17.6	10.3	2.3	4.8	2.8	2.3	5.7	11.0	17.0	5.1	10.0	6.8	6.9	10.8	9.1	7.8	6.5	2.7	2.8	1.6	2.1	2.8	1.5	7.1	20.7
25	4.1	3.1	2.7	2.0	2.6	4.2	7.7	9.0	12.3	13.2	15.9	11.7	14.9	12.1	13.1	17.2	10.7	7.0	2.7	3.2	3.8	3.0	5.2	3.8	7.7	17.2
26	18.9	14.7	12.4	11.8	7.9	7.2	19.7	26.5	24.7	12.4	19.1	10.6	10.7	7.5	9.4	10.2	10.1	7.4	3.6	6.0	8.1	3.4	10.0	10.1	11.8	26.5
27	7.3	6.1	5.6	5.3	6.1	6.6	13.1	12.8	14.2	17.8	16.6	18.5	34.8	4.5	6.6	4.9	5.0	4.7	1.1	0.8	0.8	1.2	1.7	1.4	8.2	34.8
28	0.6	0.5	0.5	3.6	2.2	4.4	8.9	3.3	6.8	1.4	1.1	1.5	3.2	5.1	5.7	5.3	2.7	4.7	2.3	2.0	2.5	2.0	2.5	2.1	3.1	8.9
29	5.5	6.9	5.5	9.0	15.9	15.9	16.8	14.3	9.0	11.8	9.2	9.5	10.5	8.9	6.9	9.4	6.3	5.9	6.7	5.3	4.9	7.2	6.5	6.5	8.9	16.8
30	9.9	5.5	8.8	8.0	7.2	7.6	8.4	14.3	14.5	9.4	15.7	20.2	12.4	15.4	14.5	19.5	23.5	15.0	11.1	8.8	9.1	7.9	7.3	8.4	11.8	23.5
31	9.5	10.3	9.2	9.5	16.9	21.4	15.6	23.3	20.6	22.4	43.2	30.1	31.7	32.1	24.5	14.4	16.8	9.1	9.1	11.0	11.3	6.8	7.3	13.1	17.5	43.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	7.7	7.5	7.8	7.7	8.6	8.8	10.7	13.1	11.8	11.4	12.9	11.8	12.8	10.2	10.1	11.2	10.6	8.3	5.2	5.4	5.6	5.2	5.9	6.9		
MAX	20.7	17.6	20.2	18.0	20.4	21.4	20.0	43.7	36.1	24.4	43.2	30.1	34.8	32.1	24.5	28.0	23.5	17.0	11.1	14.5	12.8	11.4	16.5	16.9		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	43.7	UG/M3	
Maximum 24-HR Average	17.5	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	6.053	Monthly Average	9.1 UG/M3

Entrance PM_{10} ($\mu g/m^3$) – July 2019

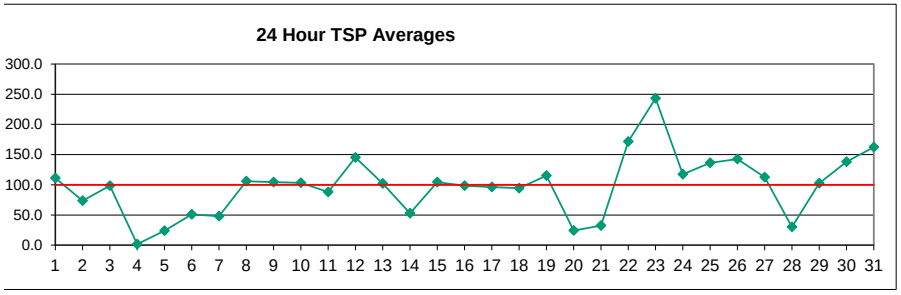
Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	78.3	76.4	76.7	68.3	62.8	75.5	99.6	95.8	60.1	34.4	33.5	37.2	30.5	24.6	18.7	22.4	32.7	5.4	2.0	3.5	5.0	3.0	2.3	1.6	39.6	99.6
2	1.6	1.5	2.2	1.7	2.1	3.0	6.9	4.8	5.9	4.7	71.3	125.2	68.1	94.7	56.5	96.7	101.3	31.3	27.9	42.5	18.4	9.2	7.6	4.3	32.9	125.2
3	6.2	6.1	8.3	8.4	9.1	7.8	28.2	73.3	61.6	77.8	69.4	128.1	84.4	65.8	72.9	92.1	66.8	58.3	42.8	10.8	6.1	5.6	5.6	5.3	41.7	128.1
4	4.0	5.3	4.9	5.0	5.6	7.2	5.9	2.4	2.3	0.9	0.8	1.1	0.9	1.0	1.4	1.0	1.0	0.8	1.1	1.0	1.1	1.2	1.1	1.5	2.4	7.2
5	1.7	2.9	1.9	1.9	2.8	1.3	2.1	1.8	1.1	2.9	4.8	3.4	4.7	30.1	46.4	20.8	41.3	56.4	13.1	8.3	8.2	8.8	9.0	7.5	11.8	56.4
6	7.1	7.0	6.1	8.7	11.8	13.9	17.6	16.0	18.3	12.5	24.2	53.8	64.8	65.4	53.7	25.6	52.4	20.5	40.7	47.4	14.5	10.5	10.3	25.4	26.2	65.4
7	22.1	14.4	16.0	15.8	19.4	24.5	16.6	72.5	24.7	18.2	28.4	14.6	12.4	15.0	11.4	74.3	49.2	31.7	21.1	11.8	12.2	5.5	4.7	4.4	22.5	74.3
8	7.0	10.6	7.8	4.3	3.2	3.5	5.7	14.7	58.7	118.3	161.3	143.1	119.9	53.5	41.2	52.4	50.7	28.8	21.9	23.8	12.3	8.8	8.6	9.0	40.4	161.3
9	13.7	8.9	8.7	9.2	17.1	17.7	26.9	77.8	72.7	82.2	78.0	65.3	91.9	58.1	65.8	65.7	76.2	26.7	29.4	28.6	45.9	19.3	9.5	9.6	41.9	91.9
10	8.4	7.2	7.7	14.6	19.1	17.7	22.7	37.0	78.5	111.1	76.7	60.7	120.7	71.6	137.8	92.7	101.4	60.2	11.3	9.8	17.2	16.4	13.8	7.0	46.7	137.8
11	2.3	16.8	4.8	4.9	11.6	25.5	40.8	43.3	42.5	48.2	35.1	52.4	44.6	76.2	52.2	63.5	62.6	77.7	13.4	8.9	49.9	56.5	49.4	41.3	38.5	77.7
12	25.2	35.9	65.0	53.1	70.7	42.0	102.1	160.0	123.5	98.9	97.5	115.3	73.7	83.6	70.6	70.7	67.5	31.1	41.5	39.5	68.6	54.3	112.6	40.9	72.7	160.0
13	12.5	19.1	59.0	58.8	50.0	38.6	59.7	102.3	61.4	45.8	32.8	37.5	44.9	52.9	42.1	80.0	29.4	64.0	22.9	43.8	58.5	29.9	42.6	57.9	47.8	102.3
14	39.1	20.3	24.2	26.3	22.0	22.9	13.0	17.1	33.7	22.3	31.0	18.9	33.2	27.9	29.5	10.5	11.5	28.5	13.7	4.9	16.0	40.4	36.5	68.4	25.5	68.4
15	19.6	11.2	13.1	6.9	13.7	15.4	46.4	100.3	43.7	109.1	148.3	52.8	97.0	65.3	64.0	81.3	56.7	62.0	13.5	7.2	3.6	13.6	40.6	74.0	48.3	148.3
16	7.9	18.5	21.4	23.2	18.8	31.9	77.0	88.4	55.9	43.0	51.6	48.3	113.7	73.0	38.8	9.0	115.0	48.3	35.2	25.1	32.3	17.2	15.9	10.2	42.5	115.0
17	11.1	13.8	22.0	14.0	11.8	11.3	46.1	68.1	59.8	57.4	102.5	76.8	100.6	74.8	82.6	136.3	58.8	61.1	7.7	2.5	8.2	3.5	12.2	13.5	44.0	136.3
18	5.2	2.8	5.3	15.4	10.7	21.8	32.4	62.9	45.5	65.0	65.9	51.7	272.7	3.8	22.8	39.4	50.1	25.0	18.5	9.1	2.4	2.7	4.4	3.4	35.0	272.7
19	10.0	18.1	14.7	44.0	93.0	43.8	41.7	34.1	49.6	93.7	162.5	104.0	63.6	86.2	72.1	100.3	72.5	18.6	2.0	0.8	0.7	0.8	4.8	12.6	47.7	162.5
20	15.0	20.2	16.7	13.5	14.1	6.4	5.8	9.8	8.3	8.7	6.4	12.1	14.3	4.7	9.6	20.9	20.6	14.4	64.6	71.0	9.5	12.5	8.2	15.7	16.8	71.0
21	15.6	19.7	17.9	14.6	8.9	9.5	12.7	9.5	9.9	12.7	10.0	39.0	50.0	20.5	22.5	18.6	13.7	8.6	14.0	17.4	20.5	15.1	9.2	9.4	16.6	50.0
22	15.3	19.0	30.2	27.0	30.5	30.6	93.9	125.9	70.3	120.2	106.4	149.2	105.9	113.9	137.5	116.1	105.1	63.8	37.6	44.9	30.9	27.1	15.4	41.0	69.1	149.2
23	106.9	47.2	52.5	69.5	61.0	87.4	124.4	410.6	278.4	138.4	142.3	84.5	80.1	88.9	108.2	259.5	133.4	97.6	31.3	22.2	11.2	23.6	21.8	56.1	105.7	410.6
24	110.3	76.8	50.1	3.3	7.0	4.1	4.3	34.0	62.6	141.7	10.4	51.2	38.9	31.6	80.6	63.4	58.3	42.8	18.0	17.1	7.0	10.4	17.3	4.6	39.4	141.7
25	24.8	13.8	8.5	4.7	7.6	21.8	52.9	56.8	75.0	87.5	104.8	73.8	96.2	77.3	89.8	110.5	68.6	45.4	11.6	10.5	12.2	8.1	12.6	15.3	45.4	110.5
26	115.7	81.6	69.1	63.6	37.8	33.2	120.7	177.7	150.2	90.8	125.7	73.6	58.9	49.6	69.0	61.5	67.2	45.1	18.7	29.4	52.0	14.9	52.7	37.0	70.7	177.7
27	21.2	15.1	12.8	10.4	16.0	16.3	74.9	64.2	73.6	108.0	88.9	150.4	292.2	28.8	44.0	24.8	30.1	18.6	4.4	2.1	2.0	4.8	7.7	5.9	46.5	292.2
28	1.3	0.8	0.9	15.3	8.0	23.2	67.4	20.3	31.6	6.4	4.0	8.0	21.4	34.9	36.3	24.9	14.6	28.7	10.4	8.7	12.5	8.2	10.7	7.7	16.9	67.4
29	29.5	36.1	20.9	42.6	85.1	93.4	109.1	84.2	60.8	83.2	61.9	66.5	71.4	63.1	42.1	71.4	45.7	40.9	41.1	28.3	22.5	37.1	27.7	18.8	53.5	109.1
30	14.8	8.1	13.1	22.1	26.5	27.0	44.1	86.9	97.2	52.7	109.7	142.6	84.6	123.0	110.4	108.0	116.9	70.2	50.7	37.5	31.7	21.8	18.0	13.8	59.6	142.6
31	14.1	15.4	13.6	13.8	25.3	32.0	23.4	78.5	84.7	105.1	239.4	156.7	177.8	216.8	155.7	98.7	111.7	45.4	42.3	50.4	46.5	17.4	24.8	56.5	76.9	239.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	24.7	21.0	21.8	22.1	25.3	26.1	46.0	72.0	61.4	64.6	73.7	70.9	81.7	60.5	60.8	68.2	60.8	40.6	23.4	21.6	20.6	16.4	19.9	21.9		
MAX	115.7	81.6	76.7	69.5	93.0	93.4	124.4	410.6	278.4	141.7	239.4	156.7	292.2	216.8	155.7	259.5	133.4	97.6	64.6	71.0	68.6	56.5	112.6	74.0		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	410.6 UG/M3		
Maximum 24-HR Average	105.7 UG/M3		
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	43.85	Monthly Average	42.7 UG/M3

Entrance TSP (μg/m^3) – July 2019

Day	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	118.4	126.9	148.0	128.0	146.1	222.5	326.6	343.4	141.5	96.8	114.0	134.0	105.2	81.0	48.3	114.3	216.6	17.4	5.5	6.7	11.9	2.6	5.5	2.7	111.0	343.4
2	1.2	1.0	1.5	1.1	1.5	2.0	6.8	4.6	5.5	4.3	138.0	284.6	137.1	244.7	180.0	212.3	226.8	83.7	72.6	78.1	38.1	16.8	10.0	11.3	73.5	284.6
3	5.9	5.6	7.5	7.6	8.9	7.4	64.7	154.8	141.3	148.7	169.1	301.2	277.1	199.1	222.0	221.2	195.3	121.9	74.6	13.8	4.2	3.7	3.7	3.4	98.5	301.2
4	2.6	3.4	3.2	3.2	3.6	4.7	3.9	1.6	1.6	0.6	0.6	1.0	0.7	0.8	1.1	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	1.0	1.7	4.7
5	1.2	1.9	1.3	1.2	1.8	0.9	1.5	1.3	0.8	2.0	3.6	2.3	3.6	78.9	125.8	23.0	120.9	158.8	12.1	5.4	5.3	5.7	5.9	5.0	23.8	158.8
6	5.0	4.8	4.3	7.0	9.0	10.6	15.9	13.2	15.4	10.7	28.5	130.8	230.5	214.4	128.8	77.6	93.5	45.4	46.7	66.5	14.0	10.7	9.2	28.0	50.9	230.5
7	23.7	13.6	16.4	15.9	20.9	27.5	17.1	193.9	63.0	35.8	73.1	37.6	50.1	23.9	27.9	285.7	65.3	61.9	33.7	38.2	19.6	5.4	3.1	2.9	48.2	285.7
8	6.4	10.7	7.1	3.2	2.2	2.5	4.5	15.3	111.1	354.1	404.5	385.0	311.0	131.4	148.5	158.3	232.9	79.8	74.9	60.4	19.7	7.3	7.0	7.4	106.1	404.5
9	13.0	6.5	6.5	6.9	17.1	18.5	30.4	148.3	188.1	255.1	247.3	220.6	304.4	159.2	214.0	169.7	196.8	57.8	57.4	55.3	73.7	38.5	10.2	7.6	104.3	304.4
10	7.3	5.7	5.9	12.6	18.3	16.6	21.4	51.8	129.2	254.6	136.5	93.0	235.4	216.3	420.1	257.3	223.5	121.6	25.8	19.5	68.5	76.7	27.6	30.9	103.2	420.1
11	3.4	37.5	20.9	28.2	24.2	54.9	103.1	119.0	108.9	167.8	108.5	136.7	105.7	143.8	110.5	121.4	116.2	170.1	42.4	13.1	53.3	137.8	119.7	65.5	88.0	170.1
12	35.8	51.4	119.9	97.7	103.7	79.3	256.4	349.6	223.4	225.5	275.2	287.6	158.8	193.2	186.7	118.8	126.0	51.1	63.6	60.2	118.0	104.5	138.2	64.4	145.4	349.6
13	11.9	22.2	126.8	136.8	101.2	71.0	153.8	249.4	159.0	72.6	62.1	66.2	87.6	136.3	109.7	206.5	38.5	197.2	78.5	43.0	93.7	62.0	60.2	110.0	102.3	249.4
14	58.4	22.9	27.3	29.9	25.1	25.7	12.8	24.2	74.0	43.1	56.1	70.6	136.5	94.7	134.2	33.5	14.1	34.0	16.1	8.9	21.1	71.5	93.5	142.9	53.0	142.9
15	30.3	12.2	14.1	6.4	14.4	16.4	104.7	253.6	100.5	252.1	339.5	130.1	198.9	154.5	104.9	235.5	140.9	196.5	40.6	13.0	3.7	12.3	43.8	83.3	104.3	339.5
16	8.6	20.0	19.7	25.6	26.2	69.7	114.4	148.5	132.9	107.2	166.3	168.0	316.3	254.0	129.2	15.1	254.5	171.3	60.1	42.4	61.4	19.8	18.2	11.0	98.4	316.3
17	12.1	15.3	25.1	15.5	12.8	12.7	112.8	220.1	164.6	124.6	264.9	153.6	202.5	150.8	137.9	335.8	110.2	125.9	18.6	3.5	13.5	7.2	20.2	47.2	96.1	335.8
18	8.2	4.7	16.3	16.9	11.6	34.8	98.6	184.1	142.1	180.3	193.6	140.1	604.8	9.1	80.2	151.0	176.2	90.5	63.3	34.8	6.9	5.9	8.6	4.3	94.5	604.8
19	23.1	20.4	12.3	43.3	132.9	64.7	100.6	92.4	114.1	240.4	427.2	251.3	173.3	240.2	195.2	325.4	220.4	61.6	1.9	0.6	0.5	0.6	5.2	14.4	115.1	427.2
20	17.3	23.3	19.3	15.5	16.1	6.9	6.1	8.9	8.5	9.1	6.4	13.3	13.4	4.6	10.0	24.0	23.4	16.4	144.7	148.8	10.1	12.1	7.0	16.8	24.3	148.8
21	15.5	19.8	17.2	14.9	9.9	8.2	11.5	7.1	8.2	9.8	12.8	108.9	153.9	65.1	64.2	57.5	46.2	16.3	22.9	42.4	25.5	24.7	6.4	6.7	32.3	153.9
22	13.8	17.1	32.5	29.7	34.6	33.7	260.7	347.9	140.9	219.6	297.8	403.5	325.6	378.1	421.0	335.7	316.5	169.3	76.1	96.4	55.9	37.2	19.2	57.6	171.7	421.0
23	303.6	164.8	104.9	124.7	132.8	203.4	368.3	1369.0	753.0	228.7	219.8	102.0	152.0	217.2	239.7	313.9	440.2	129.0	43.7	46.3	16.5	31.4	26.9	105.4	243.2	1369.0
24	207.7	130.0	178.1	3.1	7.2	3.8	8.7	108.6	180.8	401.2	10.6	107.2	114.5	97.1	306.0	209.1	221.0	187.5	90.8	77.3	25.4	50.9	71.6	15.6	117.2	401.2
25	102.1	40.9	18.7	6.7	9.3	68.8	182.5	175.5	211.3	285.6	343.1	234.3	274.7	237.7	277.6	346.6	203.0	132.1	35.2	21.0	20.3	8.2	21.0	12.0	136.2	346.6
26	150.6	112.8	122.1	144.2	101.8	85.7	254.9	464.8	292.2	222.8	292.1	175.9	120.5	110.4	156.3	118.3	121.1	94.5	27.8	27.5	84.6	24.4	70.3	44.0	142.5	464.8
27	24.9	22.6	17.6	9.4	24.1	23.1	202.9	128.6	164.5	219.3	169.5	410.5	793.0	90.1	138.9	65.0	86.3	44.5	16.0	4.8	2.0	17.1	17.9	9.2	112.6	793.0
28	3.3	0.9	0.8	31.1	8.5	42.4	171.5	52.6	48.2	14.4	7.0	15.7	44.2	62.3	51.7	24.4	16.7	45.7	11.1	19.3	21.1	14.6	12.8	9.4	30.4	171.5
29	46.0	66.2	30.9	35.3	121.4	169.0	197.5	168.4	103.9	142.2	126.0	128.9	124.4	116.5	92.2	213.6	130.4	117.1	102.4	72.9	48.8	54.0	35.0	17.2	102.5	213.6
30	16.5	8.1	13.4	44.2	77.9	70.9	169.4	199.4	236.0	99.0	232.4	274.4	138.2	238.7	293.6	348.6	319.3	184.3	126.1	80.0	59.4	40.8	29.4	14.7	138.1	348.6
31	13.0	14.0	11.1	11.9	26.4	35.5	25.3	159.0	164.1	179.7	474.4	411.9	484.9	450.5	367.4	254.4	302.3	118.4	86.4	92.6	69.8	24.6	45.1	77.1	162.5	484.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	41.6	32.5	37.1	34.1	40.4	48.2	110.0	185.8	139.6	148.6	174.2	173.6	205.8	154.7	165.3	173.4	161.1	100.1	50.7	41.7	34.4	30.0	30.7	33.2		
MAX	303.6	164.8	178.1	144.2	146.1	222.5	368.3	1369.0	753.0	401.2	474.4	411.9	793.0	450.5	421.0	348.6	440.2	197.2	144.7	148.8	118.0	137.8	138.2	142.9		



Number of 24HR Exceedences	17	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	1369.0	UG/M3	
Maximum 24-HR Average	243.2	UG/M3	
		Opperational Time	744 HRS
Monthly Calibration	0	Opperational Uptime	100.0 %
Standard Deviation	117.5	Monthly Average	97.8 UG/M3