

10 September 2019

Julie Thomas
Environmental Superintendent
Muswellbrook Coal Company Ltd

Dear Julie,

Ambient Air Monitoring - Muscle Creek Rd - August 2019

1.0 Introduction

AECOM Australia Pty Ltd (AECOM) was appointed by Muswellbrook Coal Company Ltd (MCC) to provide static real time atmospheric monitoring for Hydrogen Sulfide (H₂S) and Sulfur Dioxide (SO₂) at one location on Muscle Creek Road, Muswellbrook.

Monitoring is conducted using a GrayWolf TG-501 Toxic Gas Probe with Hydrogen Sulfide and Sulfur Dioxide sensors capable of reading in the parts per billion range. Data is recorded as 5 minute average concentrations on a tablet computer with live data then transmitted to an online account at regular intervals where it can be viewed and downloaded for further analysis by MCC and AECOM staff.

Meteorology data is obtained from the onsite MCC weather station, located approximately 6km to the northwest of the monitoring location. Wind data will be analysed each month with the aim of identifying any trends or relationships between the wind data and monitoring results. Results are reported on a monthly basis with this report presenting results for the period 1 August to 31 August 2019.

2.0 Site Location

The monitoring location on Muscle Creek Rd was chosen due to it being downwind of the mine site during the prevailing north westerly winds. Siting was performed in accordance with AS 3580.1.1 2016.



Figure 1 Muscle Creek Rd Monitoring Location

3.0 Assessment Criteria

The gaseous ambient air quality criteria in **Table 1** and **Table 2** are reproduced from the MCC Development Consent (DA 205/2002, Condition 28).

Table 1 H₂S Assessment Criteria

Analyte Averaging Period	Criteria	Unit
H ₂ S 1 Hour Average	500	ppb
H ₂ S 24 Hour Average	100	ppb

Table 2 SO₂ Assessment Criteria

Analyte Averaging Period	Criteria	Unit
SO ₂ 1 Hour Average	200	ppb
SO ₂ 24 Hour Average	80	ppb

4.0 Methodology

Monitoring is performed by a GrayWolf TG-501 Toxic Gas Probe fitted with H₂S and SO₂ sensors. The unit is enclosed in a weatherproof case with the sensor at a height of approximately 1.8m above the ground. While the sensor is designed as a passive sampler, a small fan has been installed to generate airflow past the sensor ensuring adequate air movement to provide a representative atmosphere for gas analysis.

The GrayWolf monitor measures gasses in parts per million (ppm) with the following limits of detection (LOD).

- H₂S: 0.01 ppm; and
- SO₂: 0.01 ppm.

Readings are logged in parts per million (ppm) and are converted to parts per billion (ppb) for reporting purposes, with the LOD's being 10 ppb for both H₂S and SO₂. For the calculation of 1hr and 24hr averages, where the instrument returns a zero reading, half the instrument LOD value is used (5 ppb).

5.0 Results

A summary of the H₂S and SO₂ results for August 2019 is presented in **Table 3**. **Table 4** provides a summary of 24hr (midnight to midnight) averages along with maximum 1hr averages for each day. Data is shown graphically against the relevant criteria in **Figure 2** and **Figure 3** with 1 hour data attached in **Tables 5** and **6**. It should be noted that the plots present 1 hour rolling averages calculated from raw data.

Table 3 Gaseous Monitoring Results – August 2019

Parameter	Units	Hydrogen Sulfide (H ₂ S)	Sulfur Dioxide (SO ₂)
Maximum 1 Hour Average	ppb	34.2	97.5
Maximum 24 Hour Average	ppb	9.2	23.6
Number of Exceedances – 1 Hour	-	0	0
Number of Exceedances – 24 Hour	-	0	0

There were no exceedances of the applicable criteria for either H₂S or SO₂ for the August 2019 monitoring period. The data capture rates for August 2019 were 80.57% for H₂S and 80.53% for SO₂.

Table 4 24hr Averages (Midnight to Midnight) and Maximum 1hr Averages – August 2019

Date	Hydrogen Sulfide (H ₂ S) (ppb)		Sulfur Dioxide (SO ₂) (ppb)	
	24hr Average	Maximum 1hr Average	24hr Average	Maximum 1hr Average
1/08/2019	7.8	31.8	5.9	26.3
2/08/2019	8.3	15.4	5	5.4
3/08/2019	9.2	20.0	5*	5*
4/08/2019	Insufficient Data	9.6	Insufficient Data	5*
5/08/2019	No Data	No Data	No Data	No Data
6/08/2019	Insufficient Data	5*	Insufficient Data	5*
7/08/2019	5*	5*	6.9	29.6
8/08/2019	5.3	11.3	5.3	12.1
9/08/2019	5.0	5.4	8.9	50.8
10/08/2019	5*	5*	5*	5*
11/08/2019	5.0	5.8	5.2	7.9
12/08/2019	5.0	5.4	5.2	7.1
13/08/2019	8.4	34.2	13.1	75.8
14/08/2019	Insufficient Data	22.9	Insufficient Data	74.2
15/08/2019	Insufficient Data	5*	Insufficient Data	47.5
16/08/2019	5*	5*	22.5	68.0
17/08/2019	5*	5*	9.5	77.5
18/08/2019	5*	5*	6.6	22.5
19/08/2019	5*	5*	20.5	97.5
20/08/2019	5*	5*	23.6	90.8
21/08/2019	5.2	7.5	7.4	20.4
22/08/2019	5*	5*	6.1	14.6
23/08/2019	5.0	5.4	20.2	64.2
24/08/2019	5*	5*	16.0	68.3
25/08/2019	5*	5*	6.7	37.5
26/08/2019	5*	5*	6.0	12.5
27/08/2019	5*	5*	6.5	11.7
28/08/2019	5*	5*	11.4	35.8
29/08/2019	5.2	8.3	21.1	46.7
30/08/2019	No Data	No Data	No Data	No Data
31/08/2019	No Data	No Data	No Data	No Data
Criteria	100	500	80	200
Capture Rate	80.57%		80.53%	

* All raw data returned less than the instrument limit of detection. Half of the LOD value reported. Refer **Section 4.0**.

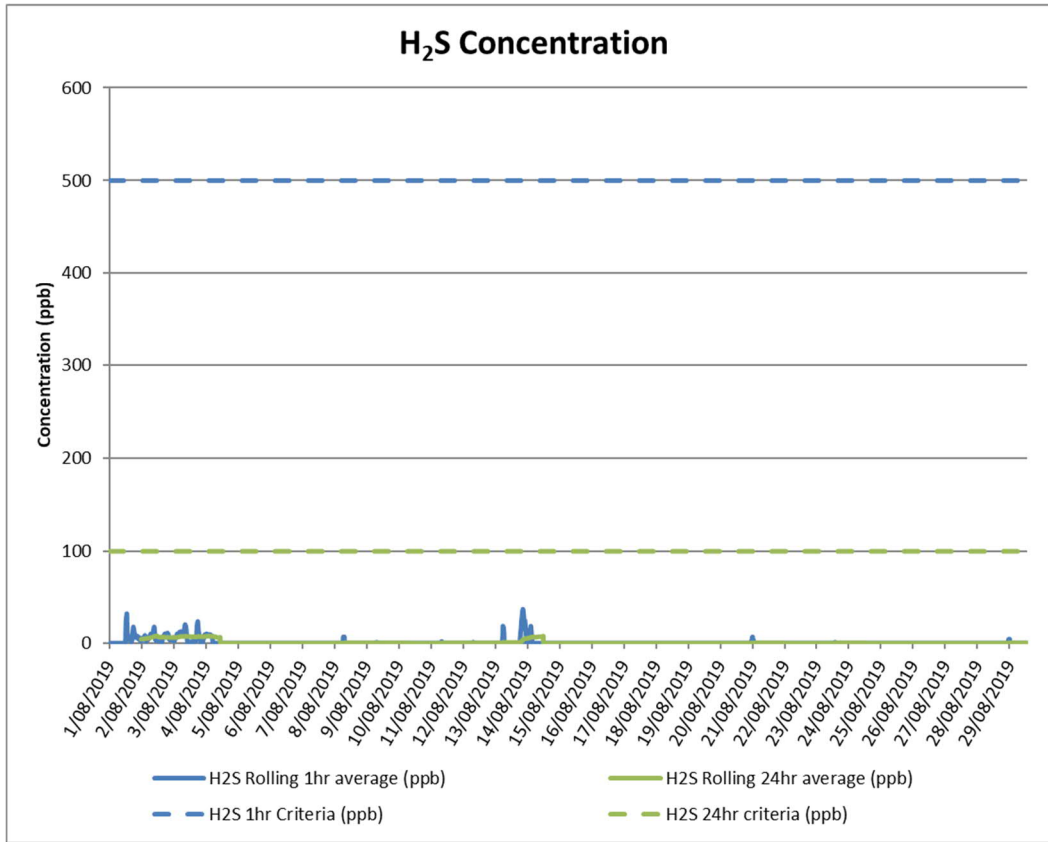


Figure 2 H₂S Concentrations – August 2019

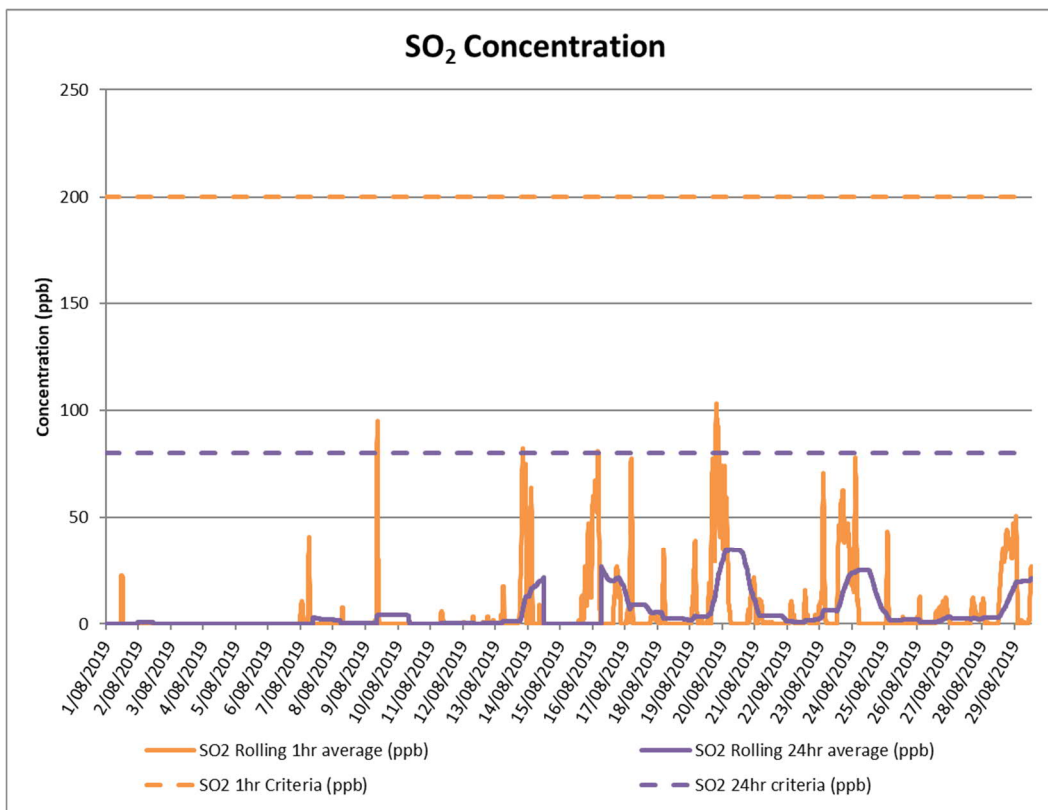


Figure 3 SO₂ Concentrations – August 2019

5.1 Meteorology

Meteorology data sourced from MCC's onsite meteorology station for August indicated winds were predominately from the North West quadrant as well as having a South East component. The average wind speed for the month was 3.1 m/s.

When winds are from the North West, the monitoring location is generally down wind of the mine site. A wind rose for this monitoring period can be found attached as **Figure 4**.

6.0 Conclusion

AECOM commenced ambient air quality monitoring on Muscle Creek Rd on 26 July 2017. Monitoring results for the period 1 to 31 August 2019 returned no exceedances of either the 1hr or 24hr criteria for H₂S or SO₂. Wind data obtained from the MCC meteorology station indicates that winds for this period were predominantly from the North West quadrant as well as having a South East component placing the monitoring location generally down wind of the mine site for a significant period of August 2019.

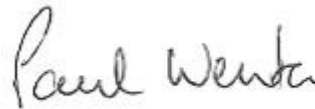
Yours faithfully,



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encl: Hourly Monitoring Data, Wind Rose



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Table 5 H₂S 1hr Data (ppb) – August 2019

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
1/08/2019	0	5	2/08/2019	0	7.1	3/08/2019	0	6.7	4/08/2019	0	9.6	5/08/2019	0	No Data
1/08/2019	1	5	2/08/2019	1	7.9	3/08/2019	1	7.9	4/08/2019	1	9.2	5/08/2019	1	No Data
1/08/2019	2	5	2/08/2019	2	8.3	3/08/2019	2	9.6	4/08/2019	2	9.6	5/08/2019	2	No Data
1/08/2019	3	5	2/08/2019	3	6.3	3/08/2019	3	10.4	4/08/2019	3	9.6	5/08/2019	3	No Data
1/08/2019	4	5	2/08/2019	4	7.5	3/08/2019	4	10.4	4/08/2019	4	8.3	5/08/2019	4	No Data
1/08/2019	5	5	2/08/2019	5	7.5	3/08/2019	5	11.7	4/08/2019	5	No Data	5/08/2019	5	No Data
1/08/2019	6	5	2/08/2019	6	9.6	3/08/2019	6	9.6	4/08/2019	6	No Data	5/08/2019	6	No Data
1/08/2019	7	5	2/08/2019	7	10.0	3/08/2019	7	10.0	4/08/2019	7	No Data	5/08/2019	7	No Data
1/08/2019	8	5	2/08/2019	8	11.7	3/08/2019	8	20.0	4/08/2019	8	No Data	5/08/2019	8	No Data
1/08/2019	9	5	2/08/2019	9	15.4	3/08/2019	9	13.8	4/08/2019	9	No Data	5/08/2019	9	No Data
1/08/2019	10	5	2/08/2019	10	6.7	3/08/2019	10	5	4/08/2019	10	No Data	5/08/2019	10	No Data
1/08/2019	11	5	2/08/2019	11	6.3	3/08/2019	11	5.8	4/08/2019	11	No Data	5/08/2019	11	No Data
1/08/2019	12	31.8	2/08/2019	12	7.1	3/08/2019	12	5	4/08/2019	12	No Data	5/08/2019	12	No Data
1/08/2019	13	10.4	2/08/2019	13	6.7	3/08/2019	13	5.4	4/08/2019	13	No Data	5/08/2019	13	No Data
1/08/2019	14	7.1	2/08/2019	14	6.7	3/08/2019	14	5.8	4/08/2019	14	No Data	5/08/2019	14	No Data
1/08/2019	15	6.7	2/08/2019	15	6.7	3/08/2019	15	6.3	4/08/2019	15	No Data	5/08/2019	15	No Data
1/08/2019	16	6.7	2/08/2019	16	8.8	3/08/2019	16	6.3	4/08/2019	16	No Data	5/08/2019	16	No Data
1/08/2019	17	16.7	2/08/2019	17	10.0	3/08/2019	17	18.8	4/08/2019	17	No Data	5/08/2019	17	No Data
1/08/2019	18	10.0	2/08/2019	18	8.3	3/08/2019	18	15.0	4/08/2019	18	No Data	5/08/2019	18	No Data
1/08/2019	19	8.8	2/08/2019	19	11.3	3/08/2019	19	7.9	4/08/2019	19	No Data	5/08/2019	19	No Data
1/08/2019	20	7.9	2/08/2019	20	8.3	3/08/2019	20	7.1	4/08/2019	20	No Data	5/08/2019	20	No Data
1/08/2019	21	7.9	2/08/2019	21	7.5	3/08/2019	21	5.4	4/08/2019	21	No Data	5/08/2019	21	No Data
1/08/2019	22	7.5	2/08/2019	22	7.1	3/08/2019	22	7.9	4/08/2019	22	No Data	5/08/2019	22	No Data
1/08/2019	23	6.7	2/08/2019	23	7.1	3/08/2019	23	9.6	4/08/2019	23	No Data	5/08/2019	23	No Data
Maximum		31.8			15.4			20.0			9.6			No Data

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
6/08/2019	0	No Data	7/08/2019	0	5	8/08/2019	0	5	9/08/2019	0	5	10/08/2019	0	5
6/08/2019	1	No Data	7/08/2019	1	5	8/08/2019	1	5	9/08/2019	1	5	10/08/2019	1	5
6/08/2019	2	No Data	7/08/2019	2	5	8/08/2019	2	5	9/08/2019	2	5	10/08/2019	2	5
6/08/2019	3	No Data	7/08/2019	3	5	8/08/2019	3	5	9/08/2019	3	5	10/08/2019	3	5
6/08/2019	4	No Data	7/08/2019	4	5	8/08/2019	4	5	9/08/2019	4	5	10/08/2019	4	5
6/08/2019	5	No Data	7/08/2019	5	5	8/08/2019	5	5	9/08/2019	5	5	10/08/2019	5	5
6/08/2019	6	No Data	7/08/2019	6	5	8/08/2019	6	5	9/08/2019	6	5	10/08/2019	6	5
6/08/2019	7	No Data	7/08/2019	7	5	8/08/2019	7	11.3	9/08/2019	7	5	10/08/2019	7	5
6/08/2019	8	No Data	7/08/2019	8	5	8/08/2019	8	5	9/08/2019	8	5.4	10/08/2019	8	5
6/08/2019	9	No Data	7/08/2019	9	5	8/08/2019	9	5	9/08/2019	9	5	10/08/2019	9	5
6/08/2019	10	No Data	7/08/2019	10	5	8/08/2019	10	5	9/08/2019	10	5	10/08/2019	10	5
6/08/2019	11	No Data	7/08/2019	11	5	8/08/2019	11	5	9/08/2019	11	5	10/08/2019	11	5
6/08/2019	12	No Data	7/08/2019	12	5	8/08/2019	12	5	9/08/2019	12	5	10/08/2019	12	5
6/08/2019	13	No Data	7/08/2019	13	5	8/08/2019	13	5	9/08/2019	13	5	10/08/2019	13	5
6/08/2019	14	No Data	7/08/2019	14	5	8/08/2019	14	5	9/08/2019	14	5	10/08/2019	14	5
6/08/2019	15	No Data	7/08/2019	15	5	8/08/2019	15	5	9/08/2019	15	5	10/08/2019	15	5
6/08/2019	16	5	7/08/2019	16	5	8/08/2019	16	5	9/08/2019	16	5	10/08/2019	16	5
6/08/2019	17	5	7/08/2019	17	5	8/08/2019	17	5	9/08/2019	17	5	10/08/2019	17	5
6/08/2019	18	5	7/08/2019	18	5	8/08/2019	18	5	9/08/2019	18	5	10/08/2019	18	5
6/08/2019	19	5	7/08/2019	19	5	8/08/2019	19	5	9/08/2019	19	5	10/08/2019	19	5
6/08/2019	20	5	7/08/2019	20	5	8/08/2019	20	5	9/08/2019	20	5	10/08/2019	20	5
6/08/2019	21	5	7/08/2019	21	5	8/08/2019	21	5	9/08/2019	21	5	10/08/2019	21	5
6/08/2019	22	5	7/08/2019	22	5	8/08/2019	22	5	9/08/2019	22	5	10/08/2019	22	5
6/08/2019	23	5	7/08/2019	23	5	8/08/2019	23	5	9/08/2019	23	5	10/08/2019	23	5
Maximum		5*			5*			11.3			5.4			5*

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
11/08/2019	0	5	12/08/2019	0	5	13/08/2019	0	5	14/08/2019	0	22.9	15/08/2019	0	No Data
11/08/2019	1	5	12/08/2019	1	5	13/08/2019	1	5	14/08/2019	1	5	15/08/2019	1	No Data
11/08/2019	2	5	12/08/2019	2	5	13/08/2019	2	5	14/08/2019	2	5	15/08/2019	2	No Data
11/08/2019	3	5	12/08/2019	3	5	13/08/2019	3	5	14/08/2019	3	13.8	15/08/2019	3	No Data
11/08/2019	4	5	12/08/2019	4	5	13/08/2019	4	5	14/08/2019	4	14.6	15/08/2019	4	No Data
11/08/2019	5	5	12/08/2019	5	5	13/08/2019	5	5	14/08/2019	5	9.6	15/08/2019	5	No Data
11/08/2019	6	5	12/08/2019	6	5	13/08/2019	6	5	14/08/2019	6	No Data	15/08/2019	6	No Data
11/08/2019	7	5	12/08/2019	7	5	13/08/2019	7	7.9	14/08/2019	7	No Data	15/08/2019	7	No Data
11/08/2019	8	5	12/08/2019	8	5	13/08/2019	8	16.7	14/08/2019	8	No Data	15/08/2019	8	No Data
11/08/2019	9	5.8	12/08/2019	9	5.4	13/08/2019	9	5	14/08/2019	9	No Data	15/08/2019	9	No Data
11/08/2019	10	5	12/08/2019	10	5	13/08/2019	10	5	14/08/2019	10	No Data	15/08/2019	10	No Data
11/08/2019	11	5	12/08/2019	11	5	13/08/2019	11	5	14/08/2019	11	5	15/08/2019	11	No Data
11/08/2019	12	5	12/08/2019	12	5	13/08/2019	12	5	14/08/2019	12	5	15/08/2019	12	No Data
11/08/2019	13	5	12/08/2019	13	5	13/08/2019	13	5	14/08/2019	13	No Data	15/08/2019	13	No Data
11/08/2019	14	5	12/08/2019	14	5	13/08/2019	14	5	14/08/2019	14	No Data	15/08/2019	14	No Data
11/08/2019	15	5	12/08/2019	15	5	13/08/2019	15	5	14/08/2019	15	No Data	15/08/2019	15	No Data
11/08/2019	16	5	12/08/2019	16	5	13/08/2019	16	5	14/08/2019	16	No Data	15/08/2019	16	5
11/08/2019	17	5	12/08/2019	17	5	13/08/2019	17	5	14/08/2019	17	No Data	15/08/2019	17	5
11/08/2019	18	5	12/08/2019	18	5	13/08/2019	18	5	14/08/2019	18	No Data	15/08/2019	18	5
11/08/2019	19	5	12/08/2019	19	5	13/08/2019	19	5	14/08/2019	19	No Data	15/08/2019	19	5
11/08/2019	20	5	12/08/2019	20	5	13/08/2019	20	5.4	14/08/2019	20	No Data	15/08/2019	20	5
11/08/2019	21	5	12/08/2019	21	5	13/08/2019	21	17.5	14/08/2019	21	No Data	15/08/2019	21	5
11/08/2019	22	5	12/08/2019	22	5	13/08/2019	22	34.2	14/08/2019	22	No Data	15/08/2019	22	5
11/08/2019	23	5	12/08/2019	23	5	13/08/2019	23	29.2	14/08/2019	23	No Data	15/08/2019	23	5
Maximum		5.8			5.4			34.2			22.9			5*

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
16/08/2019	0	5	17/08/2019	0	5	18/08/2019	0	5	19/08/2019	0	5	20/08/2019	0	5
16/08/2019	1	5	17/08/2019	1	5	18/08/2019	1	5	19/08/2019	1	5	20/08/2019	1	5
16/08/2019	2	5	17/08/2019	2	5	18/08/2019	2	5	19/08/2019	2	5	20/08/2019	2	5
16/08/2019	3	5	17/08/2019	3	5	18/08/2019	3	5	19/08/2019	3	5	20/08/2019	3	5
16/08/2019	4	5	17/08/2019	4	5	18/08/2019	4	5	19/08/2019	4	5	20/08/2019	4	5
16/08/2019	5	5	17/08/2019	5	5	18/08/2019	5	5	19/08/2019	5	5	20/08/2019	5	5
16/08/2019	6	5	17/08/2019	6	5	18/08/2019	6	5	19/08/2019	6	5	20/08/2019	6	5
16/08/2019	7	5	17/08/2019	7	5	18/08/2019	7	5	19/08/2019	7	5	20/08/2019	7	5
16/08/2019	8	5	17/08/2019	8	5	18/08/2019	8	5	19/08/2019	8	5	20/08/2019	8	5
16/08/2019	9	5	17/08/2019	9	5	18/08/2019	9	5	19/08/2019	9	5	20/08/2019	9	5
16/08/2019	10	5	17/08/2019	10	5	18/08/2019	10	5	19/08/2019	10	5	20/08/2019	10	5
16/08/2019	11	5	17/08/2019	11	5	18/08/2019	11	5	19/08/2019	11	5	20/08/2019	11	5
16/08/2019	12	5	17/08/2019	12	5	18/08/2019	12	5	19/08/2019	12	5	20/08/2019	12	5
16/08/2019	13	5	17/08/2019	13	5	18/08/2019	13	5	19/08/2019	13	5	20/08/2019	13	5
16/08/2019	14	5	17/08/2019	14	5	18/08/2019	14	5	19/08/2019	14	5	20/08/2019	14	5
16/08/2019	15	5	17/08/2019	15	5	18/08/2019	15	5	19/08/2019	15	5	20/08/2019	15	5
16/08/2019	16	5	17/08/2019	16	5	18/08/2019	16	5	19/08/2019	16	5	20/08/2019	16	5
16/08/2019	17	5	17/08/2019	17	5	18/08/2019	17	5	19/08/2019	17	5	20/08/2019	17	5
16/08/2019	18	5	17/08/2019	18	5	18/08/2019	18	5	19/08/2019	18	5	20/08/2019	18	5
16/08/2019	19	5	17/08/2019	19	5	18/08/2019	19	5	19/08/2019	19	5	20/08/2019	19	5
16/08/2019	20	5	17/08/2019	20	5	18/08/2019	20	5	19/08/2019	20	5	20/08/2019	20	5
16/08/2019	21	5	17/08/2019	21	5	18/08/2019	21	5	19/08/2019	21	5	20/08/2019	21	5
16/08/2019	22	5	17/08/2019	22	5	18/08/2019	22	5	19/08/2019	22	5	20/08/2019	22	5
16/08/2019	23	5	17/08/2019	23	5	18/08/2019	23	5	19/08/2019	23	5	20/08/2019	23	5
Maximum		5*			5*			5*			5*			5*

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
21/08/2019	0	5	22/08/2019	0	5	23/08/2019	0	5	24/08/2019	0	5	25/08/2019	0	5
21/08/2019	1	5	22/08/2019	1	5	23/08/2019	1	5	24/08/2019	1	5	25/08/2019	1	5
21/08/2019	2	5	22/08/2019	2	5	23/08/2019	2	5	24/08/2019	2	5	25/08/2019	2	5
21/08/2019	3	7.1	22/08/2019	3	5	23/08/2019	3	5	24/08/2019	3	5	25/08/2019	3	5
21/08/2019	4	7.5	22/08/2019	4	5	23/08/2019	4	5	24/08/2019	4	5	25/08/2019	4	5
21/08/2019	5	5	22/08/2019	5	5	23/08/2019	5	5	24/08/2019	5	5	25/08/2019	5	5
21/08/2019	6	5	22/08/2019	6	5	23/08/2019	6	5	24/08/2019	6	5	25/08/2019	6	5
21/08/2019	7	5	22/08/2019	7	5	23/08/2019	7	5	24/08/2019	7	5	25/08/2019	7	5
21/08/2019	8	5	22/08/2019	8	5	23/08/2019	8	5	24/08/2019	8	5	25/08/2019	8	5
21/08/2019	9	5	22/08/2019	9	5	23/08/2019	9	5	24/08/2019	9	5	25/08/2019	9	5
21/08/2019	10	5	22/08/2019	10	5	23/08/2019	10	5	24/08/2019	10	5	25/08/2019	10	5
21/08/2019	11	5	22/08/2019	11	5	23/08/2019	11	5	24/08/2019	11	5	25/08/2019	11	5
21/08/2019	12	5	22/08/2019	12	5	23/08/2019	12	5	24/08/2019	12	5	25/08/2019	12	5
21/08/2019	13	5	22/08/2019	13	5	23/08/2019	13	5	24/08/2019	13	5	25/08/2019	13	5
21/08/2019	14	5	22/08/2019	14	5	23/08/2019	14	5	24/08/2019	14	5	25/08/2019	14	5
21/08/2019	15	5	22/08/2019	15	5	23/08/2019	15	5	24/08/2019	15	5	25/08/2019	15	5
21/08/2019	16	5	22/08/2019	16	5	23/08/2019	16	5	24/08/2019	16	5	25/08/2019	16	5
21/08/2019	17	5	22/08/2019	17	5	23/08/2019	17	5	24/08/2019	17	5	25/08/2019	17	5
21/08/2019	18	5	22/08/2019	18	5	23/08/2019	18	5.4	24/08/2019	18	5	25/08/2019	18	5
21/08/2019	19	5	22/08/2019	19	5	23/08/2019	19	5	24/08/2019	19	5	25/08/2019	19	5
21/08/2019	20	5	22/08/2019	20	5	23/08/2019	20	5	24/08/2019	20	5	25/08/2019	20	5
21/08/2019	21	5	22/08/2019	21	5	23/08/2019	21	5	24/08/2019	21	5	25/08/2019	21	5
21/08/2019	22	5	22/08/2019	22	5	23/08/2019	22	5	24/08/2019	22	5	25/08/2019	22	5
21/08/2019	23	5	22/08/2019	23	5	23/08/2019	23	5	24/08/2019	23	5	25/08/2019	23	5
Maximum		7.5			5*			5.4			5*			5*

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
26/08/2019	0	5	27/08/2019	0	5	28/08/2019	0	5	29/08/2019	0	5	30/08/2019	0	No Data
26/08/2019	1	5	27/08/2019	1	5	28/08/2019	1	5	29/08/2019	1	5	30/08/2019	1	No Data
26/08/2019	2	5	27/08/2019	2	5	28/08/2019	2	5	29/08/2019	2	5	30/08/2019	2	No Data
26/08/2019	3	5	27/08/2019	3	5	28/08/2019	3	5	29/08/2019	3	5	30/08/2019	3	No Data
26/08/2019	4	5	27/08/2019	4	5	28/08/2019	4	5	29/08/2019	4	5	30/08/2019	4	No Data
26/08/2019	5	5	27/08/2019	5	5	28/08/2019	5	5	29/08/2019	5	8.3	30/08/2019	5	No Data
26/08/2019	6	5	27/08/2019	6	5	28/08/2019	6	5	29/08/2019	6	5	30/08/2019	6	No Data
26/08/2019	7	5	27/08/2019	7	5	28/08/2019	7	5	29/08/2019	7	5	30/08/2019	7	No Data
26/08/2019	8	5	27/08/2019	8	5	28/08/2019	8	5	29/08/2019	8	5	30/08/2019	8	No Data
26/08/2019	9	5	27/08/2019	9	5	28/08/2019	9	5	29/08/2019	9	5	30/08/2019	9	No Data
26/08/2019	10	5	27/08/2019	10	5	28/08/2019	10	5	29/08/2019	10	5	30/08/2019	10	No Data
26/08/2019	11	5	27/08/2019	11	5	28/08/2019	11	5	29/08/2019	11	5	30/08/2019	11	No Data
26/08/2019	12	5	27/08/2019	12	5	28/08/2019	12	5	29/08/2019	12	5	30/08/2019	12	No Data
26/08/2019	13	5	27/08/2019	13	5	28/08/2019	13	5	29/08/2019	13	5	30/08/2019	13	No Data
26/08/2019	14	5	27/08/2019	14	5	28/08/2019	14	5	29/08/2019	14	5	30/08/2019	14	No Data
26/08/2019	15	5	27/08/2019	15	5	28/08/2019	15	5	29/08/2019	15	5	30/08/2019	15	No Data
26/08/2019	16	5	27/08/2019	16	5	28/08/2019	16	5	29/08/2019	16	5	30/08/2019	16	No Data
26/08/2019	17	5	27/08/2019	17	5	28/08/2019	17	5	29/08/2019	17	5	30/08/2019	17	No Data
26/08/2019	18	5	27/08/2019	18	5	28/08/2019	18	5	29/08/2019	18	5	30/08/2019	18	No Data
26/08/2019	19	5	27/08/2019	19	5	28/08/2019	19	5	29/08/2019	19	No Data	30/08/2019	19	No Data
26/08/2019	20	5	27/08/2019	20	5	28/08/2019	20	5	29/08/2019	20	No Data	30/08/2019	20	No Data
26/08/2019	21	5	27/08/2019	21	5	28/08/2019	21	5	29/08/2019	21	No Data	30/08/2019	21	No Data
26/08/2019	22	5	27/08/2019	22	5	28/08/2019	22	5	29/08/2019	22	No Data	30/08/2019	22	No Data
26/08/2019	23	5	27/08/2019	23	5	28/08/2019	23	5	29/08/2019	23	No Data	30/08/2019	23	No Data
Maximum		5*			5*			5*			8.3			No Data

Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average	Date	Hour	H ₂ S 1hr Average
31/08/2019	0	No Data												
31/08/2019	1	No Data												
31/08/2019	2	No Data												
31/08/2019	3	No Data												
31/08/2019	4	No Data												
31/08/2019	5	No Data												
31/08/2019	6	No Data												
31/08/2019	7	No Data												
31/08/2019	8	No Data												
31/08/2019	9	No Data												
31/08/2019	10	No Data												
31/08/2019	11	No Data												
31/08/2019	12	No Data												
31/08/2019	13	No Data												
31/08/2019	14	No Data												
31/08/2019	15	No Data												
31/08/2019	16	No Data												
31/08/2019	17	No Data												
31/08/2019	18	No Data												
31/08/2019	19	No Data												
31/08/2019	20	No Data												
31/08/2019	21	No Data												
31/08/2019	22	No Data												
31/08/2019	23	No Data												
Maximum		No Data												

Table 6 SO₂ 1hr Data (ppb) – August 2019

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
1/08/2019	0	5	2/08/2019	0	5	3/08/2019	0	5	4/08/2019	0	5	5/08/2019	0	No Data
1/08/2019	1	5	2/08/2019	1	5	3/08/2019	1	5	4/08/2019	1	5	5/08/2019	1	No Data
1/08/2019	2	5	2/08/2019	2	5	3/08/2019	2	5	4/08/2019	2	5	5/08/2019	2	No Data
1/08/2019	3	5	2/08/2019	3	5	3/08/2019	3	5	4/08/2019	3	5	5/08/2019	3	No Data
1/08/2019	4	5	2/08/2019	4	5	3/08/2019	4	5	4/08/2019	4	5	5/08/2019	4	No Data
1/08/2019	5	5	2/08/2019	5	5	3/08/2019	5	5	4/08/2019	5	No Data	5/08/2019	5	No Data
1/08/2019	6	5	2/08/2019	6	5	3/08/2019	6	5	4/08/2019	6	No Data	5/08/2019	6	No Data
1/08/2019	7	5	2/08/2019	7	5	3/08/2019	7	5	4/08/2019	7	No Data	5/08/2019	7	No Data
1/08/2019	8	5	2/08/2019	8	5	3/08/2019	8	5	4/08/2019	8	No Data	5/08/2019	8	No Data
1/08/2019	9	5	2/08/2019	9	5.4	3/08/2019	9	5	4/08/2019	9	No Data	5/08/2019	9	No Data
1/08/2019	10	5	2/08/2019	10	5	3/08/2019	10	5	4/08/2019	10	No Data	5/08/2019	10	No Data
1/08/2019	11	26.3	2/08/2019	11	5	3/08/2019	11	5	4/08/2019	11	No Data	5/08/2019	11	No Data
1/08/2019	12	5	2/08/2019	12	5	3/08/2019	12	5	4/08/2019	12	No Data	5/08/2019	12	No Data
1/08/2019	13	5	2/08/2019	13	5	3/08/2019	13	5	4/08/2019	13	No Data	5/08/2019	13	No Data
1/08/2019	14	5	2/08/2019	14	5	3/08/2019	14	5	4/08/2019	14	No Data	5/08/2019	14	No Data
1/08/2019	15	5	2/08/2019	15	5	3/08/2019	15	5	4/08/2019	15	No Data	5/08/2019	15	No Data
1/08/2019	16	5	2/08/2019	16	5	3/08/2019	16	5	4/08/2019	16	No Data	5/08/2019	16	No Data
1/08/2019	17	5	2/08/2019	17	5	3/08/2019	17	5	4/08/2019	17	No Data	5/08/2019	17	No Data
1/08/2019	18	5	2/08/2019	18	5	3/08/2019	18	5	4/08/2019	18	No Data	5/08/2019	18	No Data
1/08/2019	19	5	2/08/2019	19	5	3/08/2019	19	5	4/08/2019	19	No Data	5/08/2019	19	No Data
1/08/2019	20	5	2/08/2019	20	5	3/08/2019	20	5	4/08/2019	20	No Data	5/08/2019	20	No Data
1/08/2019	21	5	2/08/2019	21	5	3/08/2019	21	5	4/08/2019	21	No Data	5/08/2019	21	No Data
1/08/2019	22	5	2/08/2019	22	5	3/08/2019	22	5	4/08/2019	22	No Data	5/08/2019	22	No Data
1/08/2019	23	5	2/08/2019	23	5	3/08/2019	23	5	4/08/2019	23	No Data	5/08/2019	23	No Data
Maximum		26.3			5.4			5*			5*			No Data

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
6/08/2019	0	No Data	7/08/2019	0	5.8	8/08/2019	0	5	9/08/2019	0	5	10/08/2019	0	5
6/08/2019	1	No Data	7/08/2019	1	9.6	8/08/2019	1	5	9/08/2019	1	5	10/08/2019	1	5
6/08/2019	2	No Data	7/08/2019	2	9.6	8/08/2019	2	5	9/08/2019	2	5	10/08/2019	2	5
6/08/2019	3	No Data	7/08/2019	3	5	8/08/2019	3	5	9/08/2019	3	5	10/08/2019	3	5
6/08/2019	4	No Data	7/08/2019	4	5	8/08/2019	4	5	9/08/2019	4	5	10/08/2019	4	5
6/08/2019	5	No Data	7/08/2019	5	5	8/08/2019	5	5	9/08/2019	5	5	10/08/2019	5	5
6/08/2019	6	No Data	7/08/2019	6	15.0	8/08/2019	6	5	9/08/2019	6	5	10/08/2019	6	5
6/08/2019	7	No Data	7/08/2019	7	29.6	8/08/2019	7	5	9/08/2019	7	5	10/08/2019	7	5
6/08/2019	8	No Data	7/08/2019	8	5	8/08/2019	8	12.1	9/08/2019	8	6.3	10/08/2019	8	5
6/08/2019	9	No Data	7/08/2019	9	5	8/08/2019	9	5	9/08/2019	9	50.4	10/08/2019	9	5
6/08/2019	10	No Data	7/08/2019	10	5	8/08/2019	10	5	9/08/2019	10	50.8	10/08/2019	10	5
6/08/2019	11	No Data	7/08/2019	11	5	8/08/2019	11	5	9/08/2019	11	5	10/08/2019	11	5
6/08/2019	12	No Data	7/08/2019	12	5	8/08/2019	12	5	9/08/2019	12	5	10/08/2019	12	5
6/08/2019	13	No Data	7/08/2019	13	5	8/08/2019	13	5	9/08/2019	13	5	10/08/2019	13	5
6/08/2019	14	No Data	7/08/2019	14	5	8/08/2019	14	5	9/08/2019	14	5	10/08/2019	14	5
6/08/2019	15	No Data	7/08/2019	15	5	8/08/2019	15	5	9/08/2019	15	5	10/08/2019	15	5
6/08/2019	16	No Data	7/08/2019	16	5	8/08/2019	16	5	9/08/2019	16	5	10/08/2019	16	5
6/08/2019	17	5	7/08/2019	17	5	8/08/2019	17	5	9/08/2019	17	5	10/08/2019	17	5
6/08/2019	18	5	7/08/2019	18	5	8/08/2019	18	5	9/08/2019	18	5	10/08/2019	18	5
6/08/2019	19	5	7/08/2019	19	5	8/08/2019	19	5	9/08/2019	19	5	10/08/2019	19	5
6/08/2019	20	5	7/08/2019	20	5	8/08/2019	20	5	9/08/2019	20	5	10/08/2019	20	5
6/08/2019	21	5	7/08/2019	21	5	8/08/2019	21	5	9/08/2019	21	5	10/08/2019	21	5
6/08/2019	22	5	7/08/2019	22	5	8/08/2019	22	5	9/08/2019	22	5	10/08/2019	22	5
6/08/2019	23	5	7/08/2019	23	5	8/08/2019	23	5	9/08/2019	23	5	10/08/2019	23	5
Maximum		5*			29.6			12.1			50.8			5*

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
11/08/2019	0	5	12/08/2019	0	5	13/08/2019	0	5.8	14/08/2019	0	74.2	15/08/2019	0	No Data
11/08/2019	1	5	12/08/2019	1	5	13/08/2019	1	5	14/08/2019	1	17.9	15/08/2019	1	No Data
11/08/2019	2	5	12/08/2019	2	5.4	13/08/2019	2	5	14/08/2019	2	5	15/08/2019	2	No Data
11/08/2019	3	5	12/08/2019	3	5	13/08/2019	3	5	14/08/2019	3	16.7	15/08/2019	3	No Data
11/08/2019	4	5	12/08/2019	4	5	13/08/2019	4	5	14/08/2019	4	53.3	15/08/2019	4	No Data
11/08/2019	5	5	12/08/2019	5	5	13/08/2019	5	5	14/08/2019	5	37.9	15/08/2019	5	No Data
11/08/2019	6	5	12/08/2019	6	5	13/08/2019	6	7.7	14/08/2019	6	No Data	15/08/2019	6	No Data
11/08/2019	7	5	12/08/2019	7	5	13/08/2019	7	5.8	14/08/2019	7	No Data	15/08/2019	7	No Data
11/08/2019	8	5	12/08/2019	8	5	13/08/2019	8	19.6	14/08/2019	8	No Data	15/08/2019	8	No Data
11/08/2019	9	7.9	12/08/2019	9	6.7	13/08/2019	9	5	14/08/2019	9	No Data	15/08/2019	9	No Data
11/08/2019	10	6.3	12/08/2019	10	5	13/08/2019	10	5	14/08/2019	10	No Data	15/08/2019	10	No Data
11/08/2019	11	5	12/08/2019	11	5	13/08/2019	11	5	14/08/2019	11	11.4	15/08/2019	11	No Data
11/08/2019	12	5	12/08/2019	12	5	13/08/2019	12	5	14/08/2019	12	5	15/08/2019	12	No Data
11/08/2019	13	5	12/08/2019	13	5	13/08/2019	13	5	14/08/2019	13	No Data	15/08/2019	13	No Data
11/08/2019	14	5	12/08/2019	14	5	13/08/2019	14	5	14/08/2019	14	No Data	15/08/2019	14	No Data
11/08/2019	15	5	12/08/2019	15	5	13/08/2019	15	5	14/08/2019	15	No Data	15/08/2019	15	No Data
11/08/2019	16	5	12/08/2019	16	5.4	13/08/2019	16	5	14/08/2019	16	No Data	15/08/2019	16	6.3
11/08/2019	17	5	12/08/2019	17	5	13/08/2019	17	5	14/08/2019	17	No Data	15/08/2019	17	5
11/08/2019	18	5	12/08/2019	18	5	13/08/2019	18	5	14/08/2019	18	No Data	15/08/2019	18	13.3
11/08/2019	19	5	12/08/2019	19	5	13/08/2019	19	5.4	14/08/2019	19	No Data	15/08/2019	19	6.3
11/08/2019	20	5	12/08/2019	20	7.1	13/08/2019	20	12.1	14/08/2019	20	No Data	15/08/2019	20	10.4
11/08/2019	21	5	12/08/2019	21	5.4	13/08/2019	21	34.6	14/08/2019	21	No Data	15/08/2019	21	25.4
11/08/2019	22	5	12/08/2019	22	5	13/08/2019	22	75.8	14/08/2019	22	No Data	15/08/2019	22	11.7
11/08/2019	23	5	12/08/2019	23	5	13/08/2019	23	71.7	14/08/2019	23	No Data	15/08/2019	23	47.5
Maximum		7.9			7.1			75.8			74.2			47.5

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
16/08/2019	0	25.8	17/08/2019	0	5	18/08/2019	0	6.3	19/08/2019	0	5.8	20/08/2019	0	90.8
16/08/2019	1	12.5	17/08/2019	1	5	18/08/2019	1	6.3	19/08/2019	1	5	20/08/2019	1	61.7
16/08/2019	2	45.0	17/08/2019	2	5	18/08/2019	2	7.1	19/08/2019	2	5	20/08/2019	2	58.3
16/08/2019	3	56.7	17/08/2019	3	5	18/08/2019	3	6.3	19/08/2019	3	5	20/08/2019	3	55.0
16/08/2019	4	65.8	17/08/2019	4	7.1	18/08/2019	4	5	19/08/2019	4	6.3	20/08/2019	4	42.5
16/08/2019	5	55.0	17/08/2019	5	7.5	18/08/2019	5	5	19/08/2019	5	9.2	20/08/2019	5	71.7
16/08/2019	6	68.0	17/08/2019	6	10.9	18/08/2019	6	6.5	19/08/2019	6	22.7	20/08/2019	6	55.5
16/08/2019	7	57.1	17/08/2019	7	77.5	18/08/2019	7	22.5	19/08/2019	7	37.5	20/08/2019	7	37.5
16/08/2019	8	7.9	17/08/2019	8	24.2	18/08/2019	8	18.3	19/08/2019	8	10.0	20/08/2019	8	10.8
16/08/2019	9	5	17/08/2019	9	5	18/08/2019	9	5	19/08/2019	9	5.4	20/08/2019	9	8.3
16/08/2019	10	5	17/08/2019	10	5	18/08/2019	10	5	19/08/2019	10	5.4	20/08/2019	10	5
16/08/2019	11	5	17/08/2019	11	5	18/08/2019	11	5	19/08/2019	11	6.7	20/08/2019	11	5
16/08/2019	12	5	17/08/2019	12	5	18/08/2019	12	5	19/08/2019	12	5.4	20/08/2019	12	5
16/08/2019	13	5	17/08/2019	13	5	18/08/2019	13	5	19/08/2019	13	5	20/08/2019	13	5
16/08/2019	14	5	17/08/2019	14	5	18/08/2019	14	5	19/08/2019	14	5	20/08/2019	14	5
16/08/2019	15	5	17/08/2019	15	5	18/08/2019	15	5	19/08/2019	15	5	20/08/2019	15	5
16/08/2019	16	5	17/08/2019	16	5	18/08/2019	16	5	19/08/2019	16	5.4	20/08/2019	16	5
16/08/2019	17	5	17/08/2019	17	5	18/08/2019	17	5	19/08/2019	17	13.8	20/08/2019	17	5
16/08/2019	18	10.4	17/08/2019	18	5	18/08/2019	18	5	19/08/2019	18	13.8	20/08/2019	18	5
16/08/2019	19	15.8	17/08/2019	19	5	18/08/2019	19	5	19/08/2019	19	36.7	20/08/2019	19	5
16/08/2019	20	25.8	17/08/2019	20	5	18/08/2019	20	5	19/08/2019	20	75.0	20/08/2019	20	5
16/08/2019	21	24.2	17/08/2019	21	5.4	18/08/2019	21	5	19/08/2019	21	42.9	20/08/2019	21	5
16/08/2019	22	14.2	17/08/2019	22	7.1	18/08/2019	22	5	19/08/2019	22	61.3	20/08/2019	22	5.8
16/08/2019	23	10.8	17/08/2019	23	7.1	18/08/2019	23	5	19/08/2019	23	97.5	20/08/2019	23	7.9
Maximum		68.0			77.5			22.5			97.5			90.8

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
21/08/2019	0	10.8	22/08/2019	0	5	23/08/2019	0	5.4	24/08/2019	0	40.0	25/08/2019	0	5
21/08/2019	1	11.7	22/08/2019	1	5	23/08/2019	1	7.1	24/08/2019	1	45.0	25/08/2019	1	5
21/08/2019	2	16.7	22/08/2019	2	5	23/08/2019	2	5	24/08/2019	2	41.7	25/08/2019	2	5
21/08/2019	3	20.4	22/08/2019	3	5.4	23/08/2019	3	7.5	24/08/2019	3	20.0	25/08/2019	3	5
21/08/2019	4	6.7	22/08/2019	4	5	23/08/2019	4	8.8	24/08/2019	4	19.2	25/08/2019	4	5
21/08/2019	5	5	22/08/2019	5	5	23/08/2019	5	10.8	24/08/2019	5	18.3	25/08/2019	5	5
21/08/2019	6	9.1	22/08/2019	6	6.8	23/08/2019	6	30.0	24/08/2019	6	30.9	25/08/2019	6	11.0
21/08/2019	7	9.2	22/08/2019	7	11.7	23/08/2019	7	64.2	24/08/2019	7	68.3	25/08/2019	7	37.5
21/08/2019	8	10.8	22/08/2019	8	6.3	23/08/2019	8	10.4	24/08/2019	8	20.0	25/08/2019	8	5
21/08/2019	9	6.7	22/08/2019	9	7.1	23/08/2019	9	5.4	24/08/2019	9	10.0	25/08/2019	9	5
21/08/2019	10	5	22/08/2019	10	5	23/08/2019	10	5	24/08/2019	10	5	25/08/2019	10	5
21/08/2019	11	5.4	22/08/2019	11	5	23/08/2019	11	5	24/08/2019	11	5	25/08/2019	11	5
21/08/2019	12	5	22/08/2019	12	5	23/08/2019	12	5	24/08/2019	12	5	25/08/2019	12	5
21/08/2019	13	5	22/08/2019	13	5	23/08/2019	13	5	24/08/2019	13	5	25/08/2019	13	5
21/08/2019	14	5.4	22/08/2019	14	5	23/08/2019	14	5	24/08/2019	14	5	25/08/2019	14	5
21/08/2019	15	5	22/08/2019	15	5	23/08/2019	15	5	24/08/2019	15	5	25/08/2019	15	5
21/08/2019	16	5.4	22/08/2019	16	5	23/08/2019	16	5	24/08/2019	16	5	25/08/2019	16	5
21/08/2019	17	5	22/08/2019	17	14.6	23/08/2019	17	7.9	24/08/2019	17	5	25/08/2019	17	5
21/08/2019	18	5	22/08/2019	18	7.9	23/08/2019	18	36.7	24/08/2019	18	5	25/08/2019	18	6.3
21/08/2019	19	5	22/08/2019	19	6.7	23/08/2019	19	42.5	24/08/2019	19	5	25/08/2019	19	5.4
21/08/2019	20	5	22/08/2019	20	5.4	23/08/2019	20	55.8	24/08/2019	20	5	25/08/2019	20	5.4
21/08/2019	21	5	22/08/2019	21	5	23/08/2019	21	58.3	24/08/2019	21	5	25/08/2019	21	5
21/08/2019	22	5	22/08/2019	22	5	23/08/2019	22	50.8	24/08/2019	22	5	25/08/2019	22	5
21/08/2019	23	5	22/08/2019	23	5	23/08/2019	23	42.5	24/08/2019	23	5	25/08/2019	23	5
Maximum		20.4			14.6			64.2			68.3			37.5

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
26/08/2019	0	5	27/08/2019	0	10.8	28/08/2019	0	8.8	29/08/2019	0	43.3	30/08/2019	0	No Data
26/08/2019	1	5	27/08/2019	1	7.5	28/08/2019	1	6.7	29/08/2019	1	36.7	30/08/2019	1	No Data
26/08/2019	2	5.4	27/08/2019	2	10.8	28/08/2019	2	7.1	29/08/2019	2	40.0	30/08/2019	2	No Data
26/08/2019	3	5	27/08/2019	3	10.8	28/08/2019	3	6.7	29/08/2019	3	35.8	30/08/2019	3	No Data
26/08/2019	4	5	27/08/2019	4	6.3	28/08/2019	4	6.3	29/08/2019	4	30.8	30/08/2019	4	No Data
26/08/2019	5	6.7	27/08/2019	5	5.8	28/08/2019	5	9.2	29/08/2019	5	46.7	30/08/2019	5	No Data
26/08/2019	6	5.5	27/08/2019	6	5	28/08/2019	6	11.4	29/08/2019	6	40.0	30/08/2019	6	No Data
26/08/2019	7	12.5	27/08/2019	7	5	28/08/2019	7	6.7	29/08/2019	7	40.8	30/08/2019	7	No Data
26/08/2019	8	5	27/08/2019	8	5	28/08/2019	8	5	29/08/2019	8	6.7	30/08/2019	8	No Data
26/08/2019	9	5	27/08/2019	9	5	28/08/2019	9	5.4	29/08/2019	9	5	30/08/2019	9	No Data
26/08/2019	10	5	27/08/2019	10	5	28/08/2019	10	5	29/08/2019	10	5.4	30/08/2019	10	No Data
26/08/2019	11	5	27/08/2019	11	5	28/08/2019	11	5	29/08/2019	11	5.8	30/08/2019	11	No Data
26/08/2019	12	5	27/08/2019	12	5	28/08/2019	12	5	29/08/2019	12	5.4	30/08/2019	12	No Data
26/08/2019	13	5	27/08/2019	13	5	28/08/2019	13	5	29/08/2019	13	5	30/08/2019	13	No Data
26/08/2019	14	5	27/08/2019	14	5	28/08/2019	14	5	29/08/2019	14	5	30/08/2019	14	No Data
26/08/2019	15	5	27/08/2019	15	5	28/08/2019	15	5	29/08/2019	15	5	30/08/2019	15	No Data
26/08/2019	16	5	27/08/2019	16	5	28/08/2019	16	5	29/08/2019	16	5.4	30/08/2019	16	No Data
26/08/2019	17	5	27/08/2019	17	5	28/08/2019	17	5	29/08/2019	17	12.9	30/08/2019	17	No Data
26/08/2019	18	5.4	27/08/2019	18	5.4	28/08/2019	18	10.8	29/08/2019	18	25.8	30/08/2019	18	No Data
26/08/2019	19	7.1	27/08/2019	19	5.4	28/08/2019	19	20.0	29/08/2019	19	No Data	30/08/2019	19	No Data
26/08/2019	20	7.1	27/08/2019	20	5.4	28/08/2019	20	29.2	29/08/2019	20	No Data	30/08/2019	20	No Data
26/08/2019	21	7.5	27/08/2019	21	6.3	28/08/2019	21	33.3	29/08/2019	21	No Data	30/08/2019	21	No Data
26/08/2019	22	8.3	27/08/2019	22	11.7	28/08/2019	22	30.8	29/08/2019	22	No Data	30/08/2019	22	No Data
26/08/2019	23	8.3	27/08/2019	23	10.8	28/08/2019	23	35.8	29/08/2019	23	No Data	30/08/2019	23	No Data
Maximum		12.5			11.7			35.8			46.7			No Data

Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average	Date	Hour	SO ₂ 1hr Average
31/08/2019	0	No Data												
31/08/2019	1	No Data												
31/08/2019	2	No Data												
31/08/2019	3	No Data												
31/08/2019	4	No Data												
31/08/2019	5	No Data												
31/08/2019	6	No Data												
31/08/2019	7	No Data												
31/08/2019	8	No Data												
31/08/2019	9	No Data												
31/08/2019	10	No Data												
31/08/2019	11	No Data												
31/08/2019	12	No Data												
31/08/2019	13	No Data												
31/08/2019	14	No Data												
31/08/2019	15	No Data												
31/08/2019	16	No Data												
31/08/2019	17	No Data												
31/08/2019	18	No Data												
31/08/2019	19	No Data												
31/08/2019	20	No Data												
31/08/2019	21	No Data												
31/08/2019	22	No Data												
31/08/2019	23	No Data												
Maximum		No Data												

August 2019

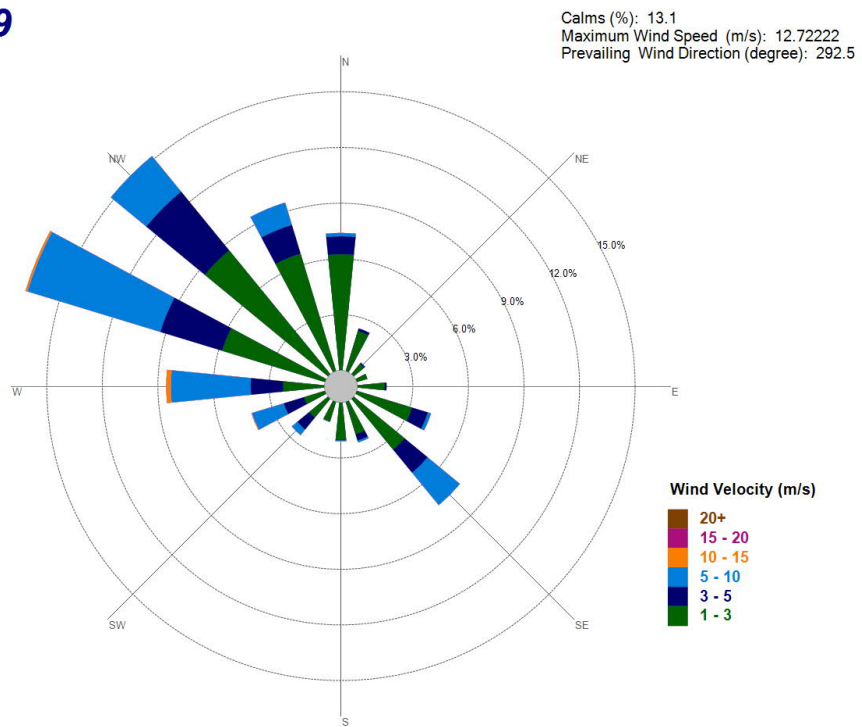


Figure 4 MCC August 2019 Meteorology Data