

11 February 2019

Julie Thomas  
Environmental Superintendent  
Muswellbrook Coal Company Ltd

Dear Julie,

## **Ambient Air Monitoring - Muscle Creek Rd - January 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 (H<sub>2</sub>S) and Sulfur Dioxide (SO<sub>2</sub>) 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 January to 31 January 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 H<sub>2</sub>S Assessment Criteria**

| Analyte Averaging Period         | Criteria | Unit |
|----------------------------------|----------|------|
| H <sub>2</sub> S 1 Hour Average  | 500      | ppb  |
| H <sub>2</sub> S 24 Hour Average | 100      | ppb  |

**Table 2 SO<sub>2</sub> Assessment Criteria**

| Analyte Averaging Period        | Criteria | Unit |
|---------------------------------|----------|------|
| SO <sub>2</sub> 1 Hour Average  | 200      | ppb  |
| SO <sub>2</sub> 24 Hour Average | 80       | ppb  |

### 4.0 Methodology

Monitoring is performed by a GrayWolf TG-501 Toxic Gas Probe fitted with H<sub>2</sub>S and SO<sub>2</sub> 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).

- H<sub>2</sub>S: 0.01 ppm; and
- SO<sub>2</sub>: 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 H<sub>2</sub>S and SO<sub>2</sub>. 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 H<sub>2</sub>S and SO<sub>2</sub> results for January 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 – January 2019**

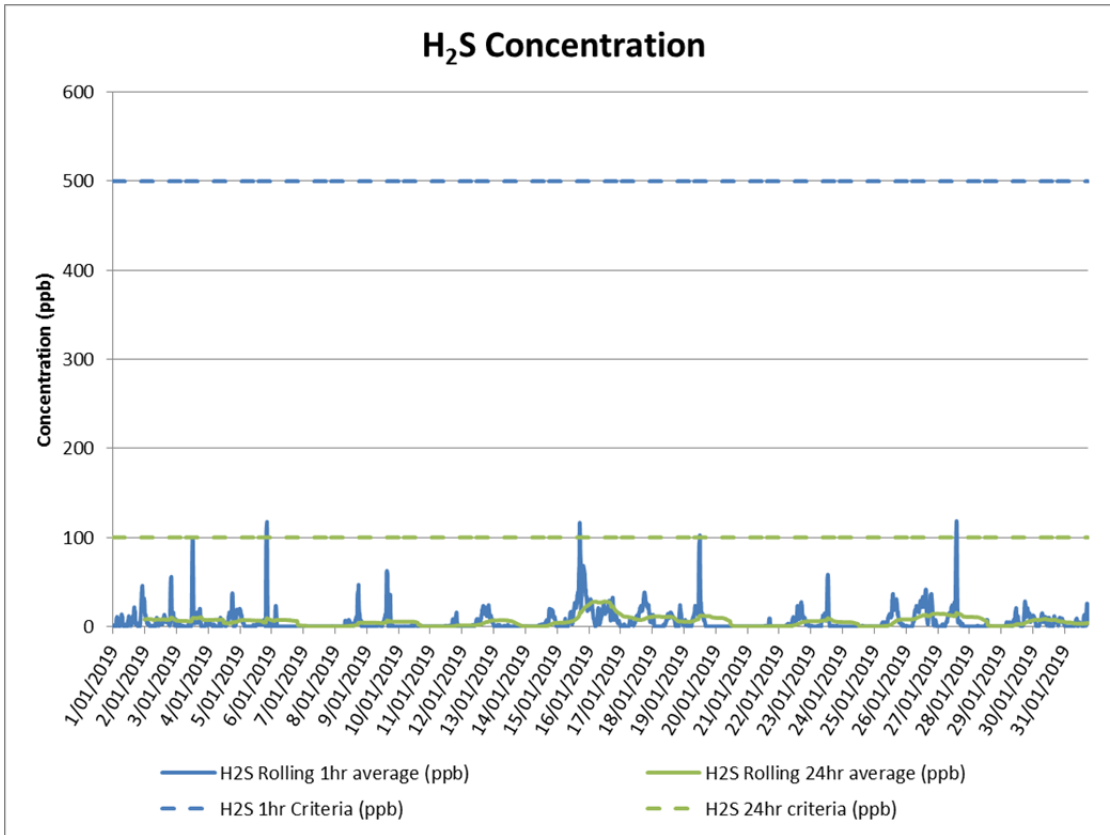
| Parameter                       | Units | Hydrogen Sulfide (H <sub>2</sub> S) | Sulfur Dioxide (SO <sub>2</sub> ) |
|---------------------------------|-------|-------------------------------------|-----------------------------------|
| Maximum 1 Hour Average          | ppb   | 111.7                               | 37.5                              |
| Maximum 24 Hour Average         | ppb   | 23.7                                | 6.6                               |
| Number of Exceedances – 1 Hour  | -     | 0                                   | 0                                 |
| Number of Exceedances – 24 Hour | -     | 0                                   | 0                                 |

There were no exceedances of the applicable criteria for either H<sub>2</sub>S or SO<sub>2</sub> for the January 2019 monitoring period. The data capture rates for January 2019 were 99.14% for both H<sub>2</sub>S and SO<sub>2</sub>.

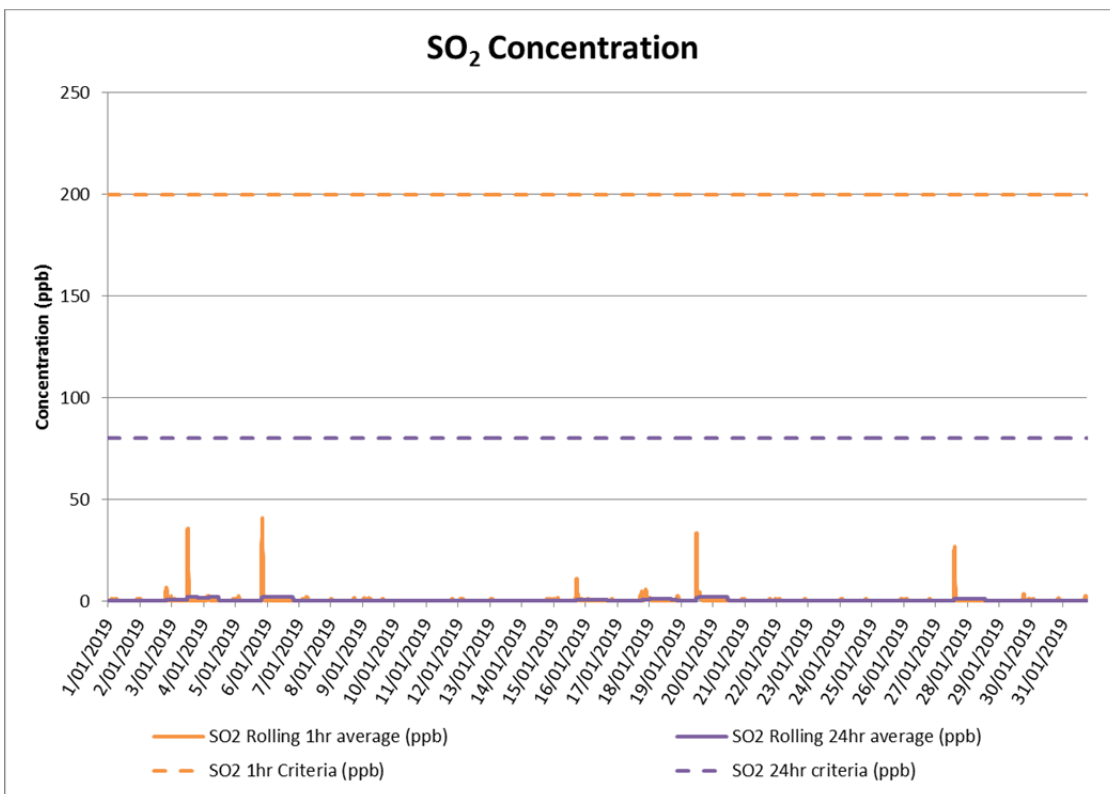
**Table 4 24hr Averages (Midnight to Midnight) and Maximum 1hr Averages – January 2019**

| Date                | Hydrogen Sulfide (H <sub>2</sub> S) (ppb) |                     | Sulfur Dioxide (SO <sub>2</sub> ) (ppb) |                     |
|---------------------|---|---------------------|---|---------------------|
|                     | 24hr Average                              | Maximum 1hr Average | 24hr Average                            | Maximum 1hr Average |
| 1/1/2019            | 11.1                                      | 39.6                | 5.1                                     | 5.4                 |
| 2/1/2019            | 10.0                                      | 50.0                | 5.3                                     | 8.8                 |
| 3/1/2019            | 11.1                                      | 96.7                | 6.4                                     | 37.5                |
| 4/1/2019            | 9.7                                       | 37.1                | 5.1                                     | 6.3                 |
| 5/1/2019            | 11.4                                      | 108.3               | 6.6                                     | 35.0                |
| 6/1/2019            | 5.9                                       | 23.8                | 5.1                                     | 5.9                 |
| 7/1/2019            | 5*  | 5*                  | 5.1                                     | 5.8                 |
| 8/1/2019            | 8.4                                       | 40.0                | 5.1                                     | 5.9                 |
| 9/1/2019            | 9.7                                       | 61.7                | 5.1                                     | 5.5                 |
| 10/1/2019           | 5.1                                       | 5.8                 | 5*                                      | 5*                  |
| 11/1/2019           | 5.8                                       | 17.1                | 5.0                                     | 5.4                 |
| 12/1/2019           | 9.5                                       | 20.8                | 5.0                                     | 5.4                 |
| 13/1/2019           | 5.5                                       | 10.8                | 5.0                                     | 5.4                 |
| 14/1/2019           | 7.5                                       | 20.4                | 5.0                                     | 5.4                 |
| 15/1/2019           | 23.7                                      | 111.7               | 5.5                                     | 12.1                |
| 16/1/2019           | 18.0                                      | 34.2                | 5.0                                     | 5.4                 |
| 17/1/2019           | 12.7                                      | 35.0                | 5.2                                     | 7.1                 |
| 18/1/2019           | 8.8                                       | 16.3                | 5.2                                     | 7.5                 |
| 19/1/2019           | 13.7                                      | 75.0                | 6.5                                     | 29.6                |
| 20/1/2019           | 5*  | 5*                  | 5.0                                     | 5.4                 |
| 21/1/2019           | 5.3                                       | 11.7                | 5.1                                     | 5.5                 |
| 22/1/2019           | 8.9                                       | 25.4                | 5.0                                     | 5.4                 |
| 23/1/2019           | 9.3                                       | 45.8                | 5.0                                     | 5.4                 |
| 24/1/2019           | 5.1                                       | 5.8                 | 5.0                                     | 5.4                 |
| 25/1/2019           | 10.8                                      | 35.8                | 5*                                      | 5*                  |
| 26/1/2019           | 15.4                                      | 40.0                | 5.0                                     | 5.6                 |
| 27/1/2019           | 14.9                                      | 109.2               | 6.0                                     | 25.4                |
| 28/1/2019           | 5.3                                       | 10.4                | 5*                                      | 5*                  |
| 29/1/2019           | 7.9                                       | 26.7                | 5.1                                     | 6.3                 |
| 30/1/2019           | 9.4                                       | 17.9                | 5.1                                     | 5.4                 |
| 31/1/2019           | 7.7                                       | 25.0                | 5.1                                     | 5.8                 |
| <b>Criteria</b>     | <b>100</b>                                | <b>500</b>          | <b>80</b>                               | <b>200</b>          |
| <b>Capture Rate</b> | <b>99.14%</b>                             |                     | <b>99.14%</b>                           |                     |

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



**Figure 2 H<sub>2</sub>S Concentrations – January 2019**



**Figure 3 SO<sub>2</sub> Concentrations – January 2019**

## 5.1 Meteorology


Meteorology data sourced from MCC's onsite meteorology station for January indicated winds were predominately from the South East quadrant. The average wind speed for the month was 3.3 m/s.

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

## 6.0 Conclusion

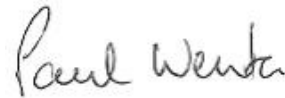
AECOM commenced ambient air quality monitoring on Muscle Creek Rd on 26 July 2017. Monitoring results for the period 1 to 31 January 2019 returned no exceedances of either the 1hr or 24hr criteria for H<sub>2</sub>S or SO<sub>2</sub>. Wind data obtained from the MCC meteorology station indicates that winds for this period were predominantly from the South East placing the monitoring location generally up wind of the mine site for the majority of January.

Yours faithfully,



James Enright  
Scientist – Compliance Services  
james.enright@aecom.com

Direct Dial: +T +61 2 4911 4900  
Direct Fax: +F +61 2 4911 4999



Paul Wenta  
Principal Scientist - Air Quality  
paul.wenta@aecom.com

Mobile: +61 438 670 281  
Direct Dial: +61 2 4911 4855  
Direct Fax: +61 2 4911 4999

encl: Hourly Monitoring Data, Wind Rose

Table 5 H<sub>2</sub>S 1hr Data (ppb) – January 2019

| Date           | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average  |
|----------------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|--------------|
| 1/01/2019      | 0    | 5.8         | 2/01/2019 | 0    | 13.8        | 3/01/2019 | 0    | 5           | 4/01/2019 | 0    | 7.1         | 5/01/2019 | 0    | 17.5         |
| 1/01/2019      | 1    | 5           | 2/01/2019 | 1    | 7.1         | 3/01/2019 | 1    | 6.7         | 4/01/2019 | 1    | 7.9         | 5/01/2019 | 1    | 13.8         |
| 1/01/2019      | 2    | 12.5        | 2/01/2019 | 2    | 6.7         | 3/01/2019 | 2    | 6.3         | 4/01/2019 | 2    | 5.8         | 5/01/2019 | 2    | 7.9          |
| 1/01/2019      | 3    | 5.8         | 2/01/2019 | 3    | 5.8         | 3/01/2019 | 3    | 5           | 4/01/2019 | 3    | 6.3         | 5/01/2019 | 3    | 6.3          |
| 1/01/2019      | 4    | 5           | 2/01/2019 | 4    | 5           | 3/01/2019 | 4    | 5.4         | 4/01/2019 | 4    | 6.7         | 5/01/2019 | 4    | 5            |
| 1/01/2019      | 5    | 8.8         | 2/01/2019 | 5    | 5.4         | 3/01/2019 | 5    | 5           | 4/01/2019 | 5    | 5.4         | 5/01/2019 | 5    | 5            |
| 1/01/2019      | 6    | 12.7        | 2/01/2019 | 6    | 5           | 3/01/2019 | 6    | 5           | 4/01/2019 | 6    | 5           | 5/01/2019 | 6    | 5            |
| 1/01/2019      | 7    | 5.4         | 2/01/2019 | 7    | 5           | 3/01/2019 | 7    | 5           | 4/01/2019 | 7    | 5           | 5/01/2019 | 7    | 5            |
| 1/01/2019      | 8    | 5           | 2/01/2019 | 8    | 10.0        | 3/01/2019 | 8    | 5           | 4/01/2019 | 8    | 5           | 5/01/2019 | 8    | 5            |
| 1/01/2019      | 9    | 6.3         | 2/01/2019 | 9    | 10.4        | 3/01/2019 | 9    | 7.1         | 4/01/2019 | 9    | 12.9        | 5/01/2019 | 9    | 5            |
| 1/01/2019      | 10   | 5.4         | 2/01/2019 | 10   | 5.4         | 3/01/2019 | 10   | 5.4         | 4/01/2019 | 10   | 5.4         | 5/01/2019 | 10   | 5.8          |
| 1/01/2019      | 11   | 10.8        | 2/01/2019 | 11   | 6.7         | 3/01/2019 | 11   | 8.3         | 4/01/2019 | 11   | 6.3         | 5/01/2019 | 11   | 5.4          |
| 1/01/2019      | 12   | 7.9         | 2/01/2019 | 12   | 8.3         | 3/01/2019 | 12   | 96.7        | 4/01/2019 | 12   | 8.3         | 5/01/2019 | 12   | 5.4          |
| 1/01/2019      | 13   | 6.3         | 2/01/2019 | 13   | 7.5         | 3/01/2019 | 13   | 7.9         | 4/01/2019 | 13   | 5           | 5/01/2019 | 13   | 6.7          |
| 1/01/2019      | 14   | 12.1        | 2/01/2019 | 14   | 12.1        | 3/01/2019 | 14   | 8.8         | 4/01/2019 | 14   | 7.5         | 5/01/2019 | 14   | 6.3          |
| 1/01/2019      | 15   | 19.6        | 2/01/2019 | 15   | 9.2         | 3/01/2019 | 15   | 17.5        | 4/01/2019 | 15   | 8.3         | 5/01/2019 | 15   | 7.1          |
| 1/01/2019      | 16   | 10.0        | 2/01/2019 | 16   | 7.9         | 3/01/2019 | 16   | 9.6         | 4/01/2019 | 16   | 17.1        | 5/01/2019 | 16   | 7.9          |
| 1/01/2019      | 17   | 7.5         | 2/01/2019 | 17   | 8.3         | 3/01/2019 | 17   | 19.2        | 4/01/2019 | 17   | 14.2        | 5/01/2019 | 17   | 6.3          |
| 1/01/2019      | 18   | 5           | 2/01/2019 | 18   | 5.8         | 3/01/2019 | 18   | 7.5         | 4/01/2019 | 18   | 37.1        | 5/01/2019 | 18   | 8.8          |
| 1/01/2019      | 19   | 5           | 2/01/2019 | 19   | 50.0        | 3/01/2019 | 19   | 5           | 4/01/2019 | 19   | 5.4         | 5/01/2019 | 19   | 5.4          |
| 1/01/2019      | 20   | 12.1        | 2/01/2019 | 20   | 12.5        | 3/01/2019 | 20   | 5           | 4/01/2019 | 20   | 5.4         | 5/01/2019 | 20   | 108.3        |
| 1/01/2019      | 21   | 39.6        | 2/01/2019 | 21   | 15.8        | 3/01/2019 | 21   | 5.4         | 4/01/2019 | 21   | 11.7        | 5/01/2019 | 21   | 14.2         |
| 1/01/2019      | 22   | 22.9        | 2/01/2019 | 22   | 5.4         | 3/01/2019 | 22   | 7.9         | 4/01/2019 | 22   | 17.5        | 5/01/2019 | 22   | 5            |
| 1/01/2019      | 23   | 30.4        | 2/01/2019 | 23   | 9.6         | 3/01/2019 | 23   | 5.8         | 4/01/2019 | 23   | 15.0        | 5/01/2019 | 23   | 5.8          |
| <b>Maximum</b> |      | <b>39.6</b> |           |      | <b>50.0</b> |           |      | <b>96.7</b> |           |      | <b>37.1</b> |           |      | <b>108.3</b> |

| Date           | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|-------------|------------|------|-------------|
| 6/01/2019      | 0    | 6.3         | 7/01/2019 | 0    | 5           | 8/01/2019 | 0    | 5           | 9/01/2019 | 0    | 5           | 10/01/2019 | 0    | 5           |
| 6/01/2019      | 1    | 5           | 7/01/2019 | 1    | 5           | 8/01/2019 | 1    | 5           | 9/01/2019 | 1    | 5           | 10/01/2019 | 1    | 5           |
| 6/01/2019      | 2    | 5.4         | 7/01/2019 | 2    | 5           | 8/01/2019 | 2    | 5           | 9/01/2019 | 2    | 5           | 10/01/2019 | 2    | 5           |
| 6/01/2019      | 3    | 23.8        | 7/01/2019 | 3    | 5           | 8/01/2019 | 3    | 5           | 9/01/2019 | 3    | 5           | 10/01/2019 | 3    | 5           |
| 6/01/2019      | 4    | 5.4         | 7/01/2019 | 4    | 5           | 8/01/2019 | 4    | 5           | 9/01/2019 | 4    | 5           | 10/01/2019 | 4    | 5           |
| 6/01/2019      | 5    | 5           | 7/01/2019 | 5    | 5           | 8/01/2019 | 5    | 5           | 9/01/2019 | 5    | 5           | 10/01/2019 | 5    | 5           |
| 6/01/2019      | 6    | 5           | 7/01/2019 | 6    | 5           | 8/01/2019 | 6    | 5           | 9/01/2019 | 6    | 5           | 10/01/2019 | 6    | 5           |
| 6/01/2019      | 7    | 5           | 7/01/2019 | 7    | 5           | 8/01/2019 | 7    | 5           | 9/01/2019 | 7    | 5           | 10/01/2019 | 7    | 5           |
| 6/01/2019      | 8    | 5           | 7/01/2019 | 8    | 5           | 8/01/2019 | 8    | 10.4        | 9/01/2019 | 8    | 5.4         | 10/01/2019 | 8    | 5           |
| 6/01/2019      | 9    | 5           | 7/01/2019 | 9    | 5           | 8/01/2019 | 9    | 5           | 9/01/2019 | 9    | 5.8         | 10/01/2019 | 9    | 5           |
| 6/01/2019      | 10   | 5           | 7/01/2019 | 10   | 5           | 8/01/2019 | 10   | 7.1         | 9/01/2019 | 10   | 5.4         | 10/01/2019 | 10   | 5           |
| 6/01/2019      | 11   | 5           | 7/01/2019 | 11   | 5           | 8/01/2019 | 11   | 9.2         | 9/01/2019 | 11   | 5.8         | 10/01/2019 | 11   | 5.8         |
| 6/01/2019      | 12   | 5           | 7/01/2019 | 12   | 5           | 8/01/2019 | 12   | 7.1         | 9/01/2019 | 12   | 5           | 10/01/2019 | 12   | 5           |
| 6/01/2019      | 13   | 5           | 7/01/2019 | 13   | 5           | 8/01/2019 | 13   | 7.1         | 9/01/2019 | 13   | 7.9         | 10/01/2019 | 13   | 5.4         |
| 6/01/2019      | 14   | 5           | 7/01/2019 | 14   | 5           | 8/01/2019 | 14   | 5.4         | 9/01/2019 | 14   | 11.7        | 10/01/2019 | 14   | 5.8         |
| 6/01/2019      | 15   | 5           | 7/01/2019 | 15   | 5           | 8/01/2019 | 15   | 7.1         | 9/01/2019 | 15   | 15.8        | 10/01/2019 | 15   | 5.4         |
| 6/01/2019      | 16   | 5           | 7/01/2019 | 16   | 5           | 8/01/2019 | 16   | 9.6         | 9/01/2019 | 16   | 61.7        | 10/01/2019 | 16   | 5           |
| 6/01/2019      | 17   | 5           | 7/01/2019 | 17   | 5           | 8/01/2019 | 17   | 11.7        | 9/01/2019 | 17   | 5           | 10/01/2019 | 17   | 5           |
| 6/01/2019      | 18   | 5           | 7/01/2019 | 18   | 5           | 8/01/2019 | 18   | 40.0        | 9/01/2019 | 18   | 36.7        | 10/01/2019 | 18   | 5           |
| 6/01/2019      | 19   | 5           | 7/01/2019 | 19   | 5           | 8/01/2019 | 19   | 16.7        | 9/01/2019 | 19   | 5.4         | 10/01/2019 | 19   | 5           |
| 6/01/2019      | 20   | 5           | 7/01/2019 | 20   | 5           | 8/01/2019 | 20   | 10.4        | 9/01/2019 | 20   | 5.8         | 10/01/2019 | 20   | 5           |
| 6/01/2019      | 21   | 5           | 7/01/2019 | 21   | 5           | 8/01/2019 | 21   | 5           | 9/01/2019 | 21   | 5           | 10/01/2019 | 21   | 5           |
| 6/01/2019      | 22   | 5           | 7/01/2019 | 22   | 5           | 8/01/2019 | 22   | 5           | 9/01/2019 | 22   | 5           | 10/01/2019 | 22   | 5           |
| 6/01/2019      | 23   | 5           | 7/01/2019 | 23   | 5           | 8/01/2019 | 23   | 5           | 9/01/2019 | 23   | 5           | 10/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>23.8</b> |           |      | <b>5</b>    |           |      | <b>40.0</b> |           |      | <b>61.7</b> |            |      | <b>5.8</b>  |

| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average  |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|--------------|
| 11/01/2019     | 0    | 5           | 12/01/2019 | 0    | 5           | 13/01/2019 | 0    | 10.8        | 14/01/2019 | 0    | 5           | 15/01/2019 | 0    | 10.4         |
| 11/01/2019     | 1    | 5           | 12/01/2019 | 1    | 5           | 13/01/2019 | 1    | 7.1         | 14/01/2019 | 1    | 5           | 15/01/2019 | 1    | 5.8          |
| 11/01/2019     | 2    | 5           | 12/01/2019 | 2    | 5           | 13/01/2019 | 2    | 5           | 14/01/2019 | 2    | 5           | 15/01/2019 | 2    | 5.4          |
| 11/01/2019     | 3    | 5           | 12/01/2019 | 3    | 5           | 13/01/2019 | 3    | 5.4         | 14/01/2019 | 3    | 5           | 15/01/2019 | 3    | 5.4          |
| 11/01/2019     | 4    | 5           | 12/01/2019 | 4    | 5           | 13/01/2019 | 4    | 5.4         | 14/01/2019 | 4    | 5           | 15/01/2019 | 4    | 5.8          |
| 11/01/2019     | 5    | 5           | 12/01/2019 | 5    | 5           | 13/01/2019 | 5    | 5.8         | 14/01/2019 | 5    | 5           | 15/01/2019 | 5    | 5            |
| 11/01/2019     | 6    | 5           | 12/01/2019 | 6    | 5           | 13/01/2019 | 6    | 5.5         | 14/01/2019 | 6    | 5           | 15/01/2019 | 6    | 5            |
| 11/01/2019     | 7    | 5           | 12/01/2019 | 7    | 5           | 13/01/2019 | 7    | 5           | 14/01/2019 | 7    | 5           | 15/01/2019 | 7    | 5            |
| 11/01/2019     | 8    | 5           | 12/01/2019 | 8    | 5           | 13/01/2019 | 8    | 5           | 14/01/2019 | 8    | 5           | 15/01/2019 | 8    | 12.0         |
| 11/01/2019     | 9    | 5           | 12/01/2019 | 9    | 5.4         | 13/01/2019 | 9    | 5           | 14/01/2019 | 9    | 5           | 15/01/2019 | 9    | No Data      |
| 11/01/2019     | 10   | 5           | 12/01/2019 | 10   | 5.4         | 13/01/2019 | 10   | 5.4         | 14/01/2019 | 10   | 5           | 15/01/2019 | 10   | 5.6          |
| 11/01/2019     | 11   | 5           | 12/01/2019 | 11   | 5.8         | 13/01/2019 | 11   | 5           | 14/01/2019 | 11   | 5           | 15/01/2019 | 11   | 7.5          |
| 11/01/2019     | 12   | 5           | 12/01/2019 | 12   | 7.9         | 13/01/2019 | 12   | 5.8         | 14/01/2019 | 12   | 5.8         | 15/01/2019 | 12   | 16.3         |
| 11/01/2019     | 13   | 5.4         | 12/01/2019 | 13   | 9.6         | 13/01/2019 | 13   | 5           | 14/01/2019 | 13   | 5.4         | 15/01/2019 | 13   | 8.8          |
| 11/01/2019     | 14   | 5           | 12/01/2019 | 14   | 8.8         | 13/01/2019 | 14   | 5           | 14/01/2019 | 14   | 6.3         | 15/01/2019 | 14   | 11.7         |
| 11/01/2019     | 15   | 5.4         | 12/01/2019 | 15   | 6.3         | 13/01/2019 | 15   | 5           | 14/01/2019 | 15   | 5.4         | 15/01/2019 | 15   | 23.3         |
| 11/01/2019     | 16   | 5           | 12/01/2019 | 16   | 14.6        | 13/01/2019 | 16   | 5           | 14/01/2019 | 16   | 6.3         | 15/01/2019 | 16   | 23.3         |
| 11/01/2019     | 17   | 5.8         | 12/01/2019 | 17   | 20.8        | 13/01/2019 | 17   | 5           | 14/01/2019 | 17   | 7.1         | 15/01/2019 | 17   | 30.8         |
| 11/01/2019     | 18   | 9.6         | 12/01/2019 | 18   | 17.5        | 13/01/2019 | 18   | 5.4         | 14/01/2019 | 18   | 9.6         | 15/01/2019 | 18   | 34.2         |
| 11/01/2019     | 19   | 6.3         | 12/01/2019 | 19   | 20.8        | 13/01/2019 | 19   | 5           | 14/01/2019 | 19   | 6.3         | 15/01/2019 | 19   | 111.7        |
| 11/01/2019     | 20   | 5           | 12/01/2019 | 20   | 12.5        | 13/01/2019 | 20   | 5           | 14/01/2019 | 20   | 20.4        | 15/01/2019 | 20   | 26.3         |
| 11/01/2019     | 21   | 17.1        | 12/01/2019 | 21   | 18.8        | 13/01/2019 | 21   | 5           | 14/01/2019 | 21   | 15.0        | 15/01/2019 | 21   | 57.5         |
| 11/01/2019     | 22   | 5           | 12/01/2019 | 22   | 18.8        | 13/01/2019 | 22   | 5           | 14/01/2019 | 22   | 17.5        | 15/01/2019 | 22   | 65.0         |
| 11/01/2019     | 23   | 5           | 12/01/2019 | 23   | 10.8        | 13/01/2019 | 23   | 5           | 14/01/2019 | 23   | 13.8        | 15/01/2019 | 23   | 53.3         |
| <b>Maximum</b> |      | <b>17.1</b> |            |      | <b>20.8</b> |            |      | <b>10.8</b> |            |      | <b>20.4</b> |            |      | <b>111.7</b> |



| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 16/01/2019     | 0    | 34.2        | 17/01/2019 | 0    | 8.3         | 18/01/2019 | 0    | 15.4        | 19/01/2019 | 0    | 17.9        | 20/01/2019 | 0    | 5           |
| 16/01/2019     | 1    | 21.7        | 17/01/2019 | 1    | 9.2         | 18/01/2019 | 1    | 9.6         | 19/01/2019 | 1    | 7.1         | 20/01/2019 | 1    | 5           |
| 16/01/2019     | 2    | 25.4        | 17/01/2019 | 2    | 5           | 18/01/2019 | 2    | 9.6         | 19/01/2019 | 2    | 7.1         | 20/01/2019 | 2    | 5           |
| 16/01/2019     | 3    | 29.2        | 17/01/2019 | 3    | 5           | 18/01/2019 | 3    | 14.2        | 19/01/2019 | 3    | 7.5         | 20/01/2019 | 3    | 5           |
| 16/01/2019     | 4    | 24.2        | 17/01/2019 | 4    | 5           | 18/01/2019 | 4    | 5           | 19/01/2019 | 4    | 8.3         | 20/01/2019 | 4    | 5           |
| 16/01/2019     | 5    | 17.5        | 17/01/2019 | 5    | 6.3         | 18/01/2019 | 5    | 5           | 19/01/2019 | 5    | 5.8         | 20/01/2019 | 5    | 5           |
| 16/01/2019     | 6    | 9.1         | 17/01/2019 | 6    | 5           | 18/01/2019 | 6    | 5           | 19/01/2019 | 6    | 5           | 20/01/2019 | 6    | 5           |
| 16/01/2019     | 7    | 5           | 17/01/2019 | 7    | 5           | 18/01/2019 | 7    | 5           | 19/01/2019 | 7    | 5           | 20/01/2019 | 7    | 5           |
| 16/01/2019     | 8    | 7.5         | 17/01/2019 | 8    | 5           | 18/01/2019 | 8    | 5           | 19/01/2019 | 8    | 5           | 20/01/2019 | 8    | 5           |
| 16/01/2019     | 9    | 18.8        | 17/01/2019 | 9    | 7.5         | 18/01/2019 | 9    | 5           | 19/01/2019 | 9    | 9.6         | 20/01/2019 | 9    | 5           |
| 16/01/2019     | 10   | 9.2         | 17/01/2019 | 10   | 9.6         | 18/01/2019 | 10   | 5           | 19/01/2019 | 10   | 11.7        | 20/01/2019 | 10   | 5           |
| 16/01/2019     | 11   | 10.4        | 17/01/2019 | 11   | 5.8         | 18/01/2019 | 11   | 5.8         | 19/01/2019 | 11   | 22.1        | 20/01/2019 | 11   | 5           |
| 16/01/2019     | 12   | 14.2        | 17/01/2019 | 12   | 5.8         | 18/01/2019 | 12   | 5.8         | 19/01/2019 | 12   | 17.5        | 20/01/2019 | 12   | 5           |
| 16/01/2019     | 13   | 23.3        | 17/01/2019 | 13   | 6.7         | 18/01/2019 | 13   | 8.8         | 19/01/2019 | 13   | 16.7        | 20/01/2019 | 13   | 5           |
| 16/01/2019     | 14   | 19.2        | 17/01/2019 | 14   | 11.3        | 18/01/2019 | 14   | 14.2        | 19/01/2019 | 14   | 75.0        | 20/01/2019 | 14   | 5           |
| 16/01/2019     | 15   | 21.3        | 17/01/2019 | 15   | 13.8        | 18/01/2019 | 15   | 12.1        | 19/01/2019 | 15   | 45.8        | 20/01/2019 | 15   | 5           |
| 16/01/2019     | 16   | 16.7        | 17/01/2019 | 16   | 14.2        | 18/01/2019 | 16   | 12.5        | 19/01/2019 | 16   | 12.9        | 20/01/2019 | 16   | 5           |
| 16/01/2019     | 17   | 23.3        | 17/01/2019 | 17   | 21.7        | 18/01/2019 | 17   | 15.0        | 19/01/2019 | 17   | 14.2        | 20/01/2019 | 17   | 5           |
| 16/01/2019     | 18   | 22.9        | 17/01/2019 | 18   | 17.5        | 18/01/2019 | 18   | 11.7        | 19/01/2019 | 18   | 9.2         | 20/01/2019 | 18   | 5           |
| 16/01/2019     | 19   | 11.3        | 17/01/2019 | 19   | 21.7        | 18/01/2019 | 19   | 9.6         | 19/01/2019 | 19   | 5.4         | 20/01/2019 | 19   | 5           |
| 16/01/2019     | 20   | 31.7        | 17/01/2019 | 20   | 35.0        | 18/01/2019 | 20   | 5.8         | 19/01/2019 | 20   | 5           | 20/01/2019 | 20   | 5           |
| 16/01/2019     | 21   | 10.0        | 17/01/2019 | 21   | 33.3        | 18/01/2019 | 21   | 5           | 19/01/2019 | 21   | 5           | 20/01/2019 | 21   | 5           |
| 16/01/2019     | 22   | 15.8        | 17/01/2019 | 22   | 25.8        | 18/01/2019 | 22   | 5           | 19/01/2019 | 22   | 5           | 20/01/2019 | 22   | 5           |
| 16/01/2019     | 23   | 10.8        | 17/01/2019 | 23   | 21.7        | 18/01/2019 | 23   | 16.3        | 19/01/2019 | 23   | 5           | 20/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>34.2</b> |            |      | <b>35.0</b> |            |      | <b>16.3</b> |            |      | <b>75.0</b> |            |      | <b>5</b>    |

| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 21/01/2019     | 0    | 5           | 22/01/2019 | 0    | 5           | 23/01/2019 | 0    | 5.8         | 24/01/2019 | 0    | 5           | 25/01/2019 | 0    | 5           |
| 21/01/2019     | 1    | 5           | 22/01/2019 | 1    | 5           | 23/01/2019 | 1    | 8.3         | 24/01/2019 | 1    | 5           | 25/01/2019 | 1    | 5           |
| 21/01/2019     | 2    | 5           | 22/01/2019 | 2    | 5           | 23/01/2019 | 2    | 5.4         | 24/01/2019 | 2    | 5           | 25/01/2019 | 2    | 5           |
| 21/01/2019     | 3    | 5           | 22/01/2019 | 3    | 5           | 23/01/2019 | 3    | 5           | 24/01/2019 | 3    | 5           | 25/01/2019 | 3    | 5           |
| 21/01/2019     | 4    | 5           | 22/01/2019 | 4    | 5           | 23/01/2019 | 4    | 5.4         | 24/01/2019 | 4    | 5           | 25/01/2019 | 4    | 5           |
| 21/01/2019     | 5    | 5           | 22/01/2019 | 5    | 5           | 23/01/2019 | 5    | 5           | 24/01/2019 | 5    | 5           | 25/01/2019 | 5    | 5           |
| 21/01/2019     | 6    | 5           | 22/01/2019 | 6    | 5           | 23/01/2019 | 6    | 5           | 24/01/2019 | 6    | 5           | 25/01/2019 | 6    | 5           |
| 21/01/2019     | 7    | 5           | 22/01/2019 | 7    | 5           | 23/01/2019 | 7    | 5           | 24/01/2019 | 7    | 5           | 25/01/2019 | 7    | 5           |
| 21/01/2019     | 8    | 5           | 22/01/2019 | 8    | 5           | 23/01/2019 | 8    | 5           | 24/01/2019 | 8    | 5           | 25/01/2019 | 8    | 5           |
| 21/01/2019     | 9    | 5           | 22/01/2019 | 9    | 5.8         | 23/01/2019 | 9    | 5.4         | 24/01/2019 | 9    | 5           | 25/01/2019 | 9    | 5           |
| 21/01/2019     | 10   | 5           | 22/01/2019 | 10   | 6.7         | 23/01/2019 | 10   | 5           | 24/01/2019 | 10   | 5           | 25/01/2019 | 10   | 7.5         |
| 21/01/2019     | 11   | 5           | 22/01/2019 | 11   | 5.4         | 23/01/2019 | 11   | 6.7         | 24/01/2019 | 11   | 5           | 25/01/2019 | 11   | 6.3         |
| 21/01/2019     | 12   | 5           | 22/01/2019 | 12   | 5           | 23/01/2019 | 12   | 9.2         | 24/01/2019 | 12   | 5           | 25/01/2019 | 12   | 7.9         |
| 21/01/2019     | 13   | 5           | 22/01/2019 | 13   | 7.9         | 23/01/2019 | 13   | 13.8        | 24/01/2019 | 13   | 5           | 25/01/2019 | 13   | 6.3         |
| 21/01/2019     | 14   | 5           | 22/01/2019 | 14   | 11.3        | 23/01/2019 | 14   | 15.8        | 24/01/2019 | 14   | 5.4         | 25/01/2019 | 14   | 7.1         |
| 21/01/2019     | 15   | 5           | 22/01/2019 | 15   | 7.9         | 23/01/2019 | 15   | 9.2         | 24/01/2019 | 15   | 5.8         | 25/01/2019 | 15   | 14.2        |
| 21/01/2019     | 16   | 5           | 22/01/2019 | 16   | 10.4        | 23/01/2019 | 16   | 45.8        | 24/01/2019 | 16   | 5           | 25/01/2019 | 16   | 13.8        |
| 21/01/2019     | 17   | 5.4         | 22/01/2019 | 17   | 21.7        | 23/01/2019 | 17   | 24.2        | 24/01/2019 | 17   | 5           | 25/01/2019 | 17   | 12.5        |
| 21/01/2019     | 18   | 5           | 22/01/2019 | 18   | 12.9        | 23/01/2019 | 18   | 5           | 24/01/2019 | 18   | 5           | 25/01/2019 | 18   | 35.8        |
| 21/01/2019     | 19   | 5           | 22/01/2019 | 19   | 12.9        | 23/01/2019 | 19   | 5           | 24/01/2019 | 19   | 5.4         | 25/01/2019 | 19   | 20.0        |
| 21/01/2019     | 20   | 11.7        | 22/01/2019 | 20   | 25.4        | 23/01/2019 | 20   | 5.4         | 24/01/2019 | 20   | 5           | 25/01/2019 | 20   | 27.5        |
| 21/01/2019     | 21   | 5           | 22/01/2019 | 21   | 14.6        | 23/01/2019 | 21   | 5           | 24/01/2019 | 21   | 5           | 25/01/2019 | 21   | 25.8        |
| 21/01/2019     | 22   | 5           | 22/01/2019 | 22   | 10.8        | 23/01/2019 | 22   | 5           | 24/01/2019 | 22   | 5           | 25/01/2019 | 22   | 15.8        |
| 21/01/2019     | 23   | 5           | 22/01/2019 | 23   | 10.0        | 23/01/2019 | 23   | 5.4         | 24/01/2019 | 23   | 5           | 25/01/2019 | 23   | 7.5         |
| <b>Maximum</b> |      | <b>11.7</b> |            |      | <b>25.4</b> |            |      | <b>45.8</b> |            |      | <b>5.8</b>  |            |      | <b>35.8</b> |

| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average  | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|--------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 26/01/2019     | 0    | 7.9         | 27/01/2019 | 0    | 25.8         | 28/01/2019 | 0    | 5.4         | 29/01/2019 | 0    | 5           | 30/01/2019 | 0    | 14.6        |
| 26/01/2019     | 1    | 5.4         | 27/01/2019 | 1    | 6.3          | 28/01/2019 | 1    | 5           | 29/01/2019 | 1    | 5           | 30/01/2019 | 1    | 17.9        |
| 26/01/2019     | 2    | 5.8         | 27/01/2019 | 2    | 5.8          | 28/01/2019 | 2    | 5           | 29/01/2019 | 2    | 5           | 30/01/2019 | 2    | 15.0        |
| 26/01/2019     | 3    | 5           | 27/01/2019 | 3    | 8.8          | 28/01/2019 | 3    | 5           | 29/01/2019 | 3    | 5           | 30/01/2019 | 3    | 9.2         |
| 26/01/2019     | 4    | 5.4         | 27/01/2019 | 4    | 5            | 28/01/2019 | 4    | 5           | 29/01/2019 | 4    | 5           | 30/01/2019 | 4    | 10.0        |
| 26/01/2019     | 5    | 5           | 27/01/2019 | 5    | 5            | 28/01/2019 | 5    | 5           | 29/01/2019 | 5    | 5           | 30/01/2019 | 5    | 13.3        |
| 26/01/2019     | 6    | 5           | 27/01/2019 | 6    | 5            | 28/01/2019 | 6    | 5           | 29/01/2019 | 6    | 5           | 30/01/2019 | 6    | 10.0        |
| 26/01/2019     | 7    | 5           | 27/01/2019 | 7    | 5            | 28/01/2019 | 7    | 5           | 29/01/2019 | 7    | 5           | 30/01/2019 | 7    | 7.5         |
| 26/01/2019     | 8    | 5           | 27/01/2019 | 8    | 6.3          | 28/01/2019 | 8    | 5           | 29/01/2019 | 8    | 5           | 30/01/2019 | 8    | 5           |
| 26/01/2019     | 9    | 5           | 27/01/2019 | 9    | 5            | 28/01/2019 | 9    | 5           | 29/01/2019 | 9    | 7.9         | 30/01/2019 | 9    | 5           |
| 26/01/2019     | 10   | 8.8         | 27/01/2019 | 10   | 5            | 28/01/2019 | 10   | 5           | 29/01/2019 | 10   | 5.4         | 30/01/2019 | 10   | 6.7         |
| 26/01/2019     | 11   | 17.9        | 27/01/2019 | 11   | 7.9          | 28/01/2019 | 11   | 5.4         | 29/01/2019 | 11   | 7.5         | 30/01/2019 | 11   | 9.6         |
| 26/01/2019     | 12   | 23.3        | 27/01/2019 | 12   | 10.8         | 28/01/2019 | 12   | 5           | 29/01/2019 | 12   | 6.3         | 30/01/2019 | 12   | 15.8        |
| 26/01/2019     | 13   | 17.5        | 27/01/2019 | 13   | 15.8         | 28/01/2019 | 13   | 5           | 29/01/2019 | 13   | 5           | 30/01/2019 | 13   | 7.5         |
| 26/01/2019     | 14   | 17.1        | 27/01/2019 | 14   | 13.8         | 28/01/2019 | 14   | 5           | 29/01/2019 | 14   | 8.3         | 30/01/2019 | 14   | 11.3        |
| 26/01/2019     | 15   | 26.7        | 27/01/2019 | 15   | 19.6         | 28/01/2019 | 15   | 5           | 29/01/2019 | 15   | 8.3         | 30/01/2019 | 15   | 8.8         |
| 26/01/2019     | 16   | 27.1        | 27/01/2019 | 16   | 19.6         | 28/01/2019 | 16   | 5           | 29/01/2019 | 16   | 21.7        | 30/01/2019 | 16   | 5.8         |
| 26/01/2019     | 17   | 33.3        | 27/01/2019 | 17   | 22.5         | 28/01/2019 | 17   | 5.8         | 29/01/2019 | 17   | 13.3        | 30/01/2019 | 17   | 12.1        |
| 26/01/2019     | 18   | 23.3        | 27/01/2019 | 18   | 27.1         | 28/01/2019 | 18   | 10.4        | 29/01/2019 | 18   | 7.5         | 30/01/2019 | 18   | 5           |
| 26/01/2019     | 19   | 40.0        | 27/01/2019 | 19   | 109.2        | 28/01/2019 | 19   | 5           | 29/01/2019 | 19   | 5.8         | 30/01/2019 | 19   | 5           |
| 26/01/2019     | 20   | 13.3        | 27/01/2019 | 20   | 7.5          | 28/01/2019 | 20   | 5           | 29/01/2019 | 20   | 5           | 30/01/2019 | 20   | 5           |
| 26/01/2019     | 21   | 8.8         | 27/01/2019 | 21   | 8.3          | 28/01/2019 | 21   | 5           | 29/01/2019 | 21   | 5.4         | 30/01/2019 | 21   | 11.3        |
| 26/01/2019     | 22   | 18.3        | 27/01/2019 | 22   | 5.8          | 28/01/2019 | 22   | 5           | 29/01/2019 | 22   | 9.2         | 30/01/2019 | 22   | 8.3         |
| 26/01/2019     | 23   | 35.8        | 27/01/2019 | 23   | 6.3          | 28/01/2019 | 23   | 5           | 29/01/2019 | 23   | 26.7        | 30/01/2019 | 23   | 7.1         |
| <b>Maximum</b> |      | <b>40.0</b> |            |      | <b>109.2</b> |            |      | <b>10.4</b> |            |      | <b>26.7</b> |            |      | <b>17.9</b> |

| Date           | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average |
|----------------|------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|
| 31/01/2019     | 0    | 6.7         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 1    | 10.0        |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 2    | 9.2         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 3    | 9.2         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 4    | 7.9         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 5    | 5.8         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 6    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 7    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 8    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 9    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 10   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 11   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 12   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 13   | 7.5         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 14   | 10.8        |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 15   | 5.8         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 16   | 7.1         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 17   | 6.3         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 18   | 5.8         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 19   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 20   | 14.6        |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 21   | 5.4         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 22   | 25.0        |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 23   | 7.1         |      |      |             |      |      |             |      |      |             |      |      |             |
| <b>Maximum</b> |      | <b>25.0</b> |      |      |             |      |      |             |      |      |             |      |      |             |

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

| Date           | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average |
|----------------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|-------------|
| 1/01/2019      | 0    | 5           | 2/01/2019 | 0    | 5           | 3/01/2019 | 0    | 5           | 4/01/2019 | 0    | 5.4         | 5/01/2019 | 0    | 5.4         |
| 1/01/2019      | 1    | 5           | 2/01/2019 | 1    | 5           | 3/01/2019 | 1    | 5           | 4/01/2019 | 1    | 5           | 5/01/2019 | 1    | 5           |
| 1/01/2019      | 2    | 5.4         | 2/01/2019 | 2    | 5           | 3/01/2019 | 2    | 5.4         | 4/01/2019 | 2    | 5.4         | 5/01/2019 | 2    | 5.8         |
| 1/01/2019      | 3    | 5           | 2/01/2019 | 3    | 5           | 3/01/2019 | 3    | 5           | 4/01/2019 | 3    | 6.3         | 5/01/2019 | 3    | 5.4         |
| 1/01/2019      | 4    | 5           | 2/01/2019 | 4    | 5           | 3/01/2019 | 4    | 5           | 4/01/2019 | 4    | 5.8         | 5/01/2019 | 4    | 5           |
| 1/01/2019      | 5    | 5.4         | 2/01/2019 | 5    | 5           | 3/01/2019 | 5    | 5           | 4/01/2019 | 5    | 5           | 5/01/2019 | 5    | 5           |
| 1/01/2019      | 6    | 5           | 2/01/2019 | 6    | 5           | 3/01/2019 | 6    | 5           | 4/01/2019 | 6    | 5           | 5/01/2019 | 6    | 5           |
| 1/01/2019      | 7    | 5           | 2/01/2019 | 7    | 5           | 3/01/2019 | 7    | 5           | 4/01/2019 | 7    | 5           | 5/01/2019 | 7    | 5           |
| 1/01/2019      | 8    | 5           | 2/01/2019 | 8    | 5           | 3/01/2019 | 8    | 5           | 4/01/2019 | 8    | 5           | 5/01/2019 | 8    | 5           |
| 1/01/2019      | 9    | 5           | 2/01/2019 | 9    | 5           | 3/01/2019 | 9    | 5           | 4/01/2019 | 9    | 5           | 5/01/2019 | 9    | 5           |
| 1/01/2019      | 10   | 5           | 2/01/2019 | 10   | 5           | 3/01/2019 | 10   | 5           | 4/01/2019 | 10   | 5           | 5/01/2019 | 10   | 5           |
| 1/01/2019      | 11   | 5           | 2/01/2019 | 11   | 5           | 3/01/2019 | 11   | 5           | 4/01/2019 | 11   | 5           | 5/01/2019 | 11   | 5           |
| 1/01/2019      | 12   | 5           | 2/01/2019 | 12   | 5           | 3/01/2019 | 12   | 37.5        | 4/01/2019 | 12   | 5           | 5/01/2019 | 12   | 5           |
| 1/01/2019      | 13   | 5           | 2/01/2019 | 13   | 5           | 3/01/2019 | 13   | 5           | 4/01/2019 | 13   | 5           | 5/01/2019 | 13   | 5           |
| 1/01/2019      | 14   | 5           | 2/01/2019 | 14   | 5           | 3/01/2019 | 14   | 5           | 4/01/2019 | 14   | 5           | 5/01/2019 | 14   | 5           |
| 1/01/2019      | 15   | 5           | 2/01/2019 | 15   | 5           | 3/01/2019 | 15   | 5           | 4/01/2019 | 15   | 5           | 5/01/2019 | 15   | 5           |
| 1/01/2019      | 16   | 5           | 2/01/2019 | 16   | 5           | 3/01/2019 | 16   | 5           | 4/01/2019 | 16   | 5           | 5/01/2019 | 16   | 5           |
| 1/01/2019      | 17   | 5           | 2/01/2019 | 17   | 5           | 3/01/2019 | 17   | 5           | 4/01/2019 | 17   | 5           | 5/01/2019 | 17   | 5           |
| 1/01/2019      | 18   | 5           | 2/01/2019 | 18   | 5           | 3/01/2019 | 18   | 5           | 4/01/2019 | 18   | 5           | 5/01/2019 | 18   | 5           |
| 1/01/2019      | 19   | 5           | 2/01/2019 | 19   | 8.8         | 3/01/2019 | 19   | 5           | 4/01/2019 | 19   | 5           | 5/01/2019 | 19   | 5           |
| 1/01/2019      | 20   | 5           | 2/01/2019 | 20   | 5.8         | 3/01/2019 | 20   | 5           | 4/01/2019 | 20   | 5           | 5/01/2019 | 20   | 35.0        |
| 1/01/2019      | 21   | 5.4         | 2/01/2019 | 21   | 5.4         | 3/01/2019 | 21   | 5           | 4/01/2019 | 21   | 5           | 5/01/2019 | 21   | 11.7        |
| 1/01/2019      | 22   | 5           | 2/01/2019 | 22   | 5           | 3/01/2019 | 22   | 5.4         | 4/01/2019 | 22   | 5.4         | 5/01/2019 | 22   | 5.4         |
| 1/01/2019      | 23   | 5.4         | 2/01/2019 | 23   | 6.3         | 3/01/2019 | 23   | 5           | 4/01/2019 | 23   | 5           | 5/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>5.4</b>  |           |      | <b>8.8</b>  |           |      | <b>37.5</b> |           |      | <b>6.3</b>  |           |      | <b>35.0</b> |

| Date           | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date      | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|-------------|------------|------|-------------|
| 6/01/2019      | 0    | 5.8         | 7/01/2019 | 0    | 5           | 8/01/2019 | 0    | 5           | 9/01/2019 | 0    | 5           | 10/01/2019 | 0    | 5           |
| 6/01/2019      | 1    | 5.8         | 7/01/2019 | 1    | 5           | 8/01/2019 | 1    | 5.4         | 9/01/2019 | 1    | 5.4         | 10/01/2019 | 1    | 5           |
| 6/01/2019      | 2    | 5.4         | 7/01/2019 | 2    | 5           | 8/01/2019 | 2    | 5           | 9/01/2019 | 2    | 5.4         | 10/01/2019 | 2    | 5           |
| 6/01/2019      | 3    | 5           | 7/01/2019 | 3    | 5.4         | 8/01/2019 | 3    | 5           | 9/01/2019 | 3    | 5           | 10/01/2019 | 3    | 5           |
| 6/01/2019      | 4    | 5           | 7/01/2019 | 4    | 5           | 8/01/2019 | 4    | 5           | 9/01/2019 | 4    | 5.4         | 10/01/2019 | 4    | 5           |
| 6/01/2019      | 5    | 5           | 7/01/2019 | 5    | 5           | 8/01/2019 | 5    | 5           | 9/01/2019 | 5    | 5.4         | 10/01/2019 | 5    | 5           |
| 6/01/2019      | 6    | 5           | 7/01/2019 | 6    | 5.9         | 8/01/2019 | 6    | 5           | 9/01/2019 | 6    | 5.5         | 10/01/2019 | 6    | 5           |
| 6/01/2019      | 7    | 5           | 7/01/2019 | 7    | 5           | 8/01/2019 | 7    | 5           | 9/01/2019 | 7    | 5           | 10/01/2019 | 7    | 5           |
| 6/01/2019      | 8    | 5           | 7/01/2019 | 8    | 5           | 8/01/2019 | 8    | 5           | 9/01/2019 | 8    | 5           | 10/01/2019 | 8    | 5           |
| 6/01/2019      | 9    | 5           | 7/01/2019 | 9    | 5           | 8/01/2019 | 9    | 5           | 9/01/2019 | 9    | 5           | 10/01/2019 | 9    | 5           |
| 6/01/2019      | 10   | 5           | 7/01/2019 | 10   | 5           | 8/01/2019 | 10   | 5           | 9/01/2019 | 10   | 5           | 10/01/2019 | 10   | 5           |
| 6/01/2019      | 11   | 5           | 7/01/2019 | 11   | 5           | 8/01/2019 | 11   | 5           | 9/01/2019 | 11   | 5           | 10/01/2019 | 11   | 5           |
| 6/01/2019      | 12   | 5           | 7/01/2019 | 12   | 5           | 8/01/2019 | 12   | 5           | 9/01/2019 | 12   | 5           | 10/01/2019 | 12   | 5           |
| 6/01/2019      | 13   | 5           | 7/01/2019 | 13   | 5           | 8/01/2019 | 13   | 5           | 9/01/2019 | 13   | 5           | 10/01/2019 | 13   | 5           |
| 6/01/2019      | 14   | 5           | 7/01/2019 | 14   | 5           | 8/01/2019 | 14   | 5           | 9/01/2019 | 14   | 5           | 10/01/2019 | 14   | 5           |
| 6/01/2019      | 15   | 5           | 7/01/2019 | 15   | 5           | 8/01/2019 | 15   | 5           | 9/01/2019 | 15   | 5           | 10/01/2019 | 15   | 5           |
| 6/01/2019      | 16   | 5           | 7/01/2019 | 16   | 5           | 8/01/2019 | 16   | 5           | 9/01/2019 | 16   | 5.4         | 10/01/2019 | 16   | 5           |
| 6/01/2019      | 17   | 5           | 7/01/2019 | 17   | 5           | 8/01/2019 | 17   | 5           | 9/01/2019 | 17   | 5           | 10/01/2019 | 17   | 5           |
| 6/01/2019      | 18   | 5           | 7/01/2019 | 18   | 5           | 8/01/2019 | 18   | 5.8         | 9/01/2019 | 18   | 5           | 10/01/2019 | 18   | 5           |
| 6/01/2019      | 19   | 5           | 7/01/2019 | 19   | 5           | 8/01/2019 | 19   | 5           | 9/01/2019 | 19   | 5           | 10/01/2019 | 19   | 5           |
| 6/01/2019      | 20   | 5           | 7/01/2019 | 20   | 5           | 8/01/2019 | 20   | 5           | 9/01/2019 | 20   | 5           | 10/01/2019 | 20   | 5           |
| 6/01/2019      | 21   | 5           | 7/01/2019 | 21   | 5           | 8/01/2019 | 21   | 5           | 9/01/2019 | 21   | 5           | 10/01/2019 | 21   | 5           |
| 6/01/2019      | 22   | 5           | 7/01/2019 | 22   | 5           | 8/01/2019 | 22   | 5           | 9/01/2019 | 22   | 5           | 10/01/2019 | 22   | 5           |
| 6/01/2019      | 23   | 5           | 7/01/2019 | 23   | 5           | 8/01/2019 | 23   | 5           | 9/01/2019 | 23   | 5           | 10/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>5.8</b>  |           |      | <b>5.9</b>  |           |      | <b>5.8</b>  |           |      | <b>5.5</b>  |            |      | <b>5</b>    |

| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 11/01/2019     | 0    | 5           | 12/01/2019 | 0    | 5           | 13/01/2019 | 0    | 5           | 14/01/2019 | 0    | 5           | 15/01/2019 | 0    | 5           |
| 11/01/2019     | 1    | 5           | 12/01/2019 | 1    | 5           | 13/01/2019 | 1    | 5           | 14/01/2019 | 1    | 5           | 15/01/2019 | 1    | 5           |
| 11/01/2019     | 2    | 5           | 12/01/2019 | 2    | 5           | 13/01/2019 | 2    | 5.4         | 14/01/2019 | 2    | 5           | 15/01/2019 | 2    | 5.4         |
| 11/01/2019     | 3    | 5           | 12/01/2019 | 3    | 5.4         | 13/01/2019 | 3    | 5           | 14/01/2019 | 3    | 5           | 15/01/2019 | 3    | 5           |
| 11/01/2019     | 4    | 5           | 12/01/2019 | 4    | 5           | 13/01/2019 | 4    | 5           | 14/01/2019 | 4    | 5           | 15/01/2019 | 4    | 5           |
| 11/01/2019     | 5    | 5           | 12/01/2019 | 5    | 5.4         | 13/01/2019 | 5    | 5           | 14/01/2019 | 5    | 5           | 15/01/2019 | 5    | 5.8         |
| 11/01/2019     | 6    | 5           | 12/01/2019 | 6    | 5           | 13/01/2019 | 6    | 5           | 14/01/2019 | 6    | 5           | 15/01/2019 | 6    | 5           |
| 11/01/2019     | 7    | 5           | 12/01/2019 | 7    | 5           | 13/01/2019 | 7    | 5           | 14/01/2019 | 7    | 5           | 15/01/2019 | 7    | 5           |
| 11/01/2019     | 8    | 5           | 12/01/2019 | 8    | 5           | 13/01/2019 | 8    | 5           | 14/01/2019 | 8    | 5           | 15/01/2019 | 8    | 5           |
| 11/01/2019     | 9    | 5           | 12/01/2019 | 9    | 5           | 13/01/2019 | 9    | 5           | 14/01/2019 | 9    | 5           | 15/01/2019 | 9    | No Data     |
| 11/01/2019     | 10   | 5           | 12/01/2019 | 10   | 5           | 13/01/2019 | 10   | 5           | 14/01/2019 | 10   | 5           | 15/01/2019 | 10   | 5           |
| 11/01/2019     | 11   | 5           | 12/01/2019 | 11   | 5           | 13/01/2019 | 11   | 5           | 14/01/2019 | 11   | 5           | 15/01/2019 | 11   | 5           |
| 11/01/2019     | 12   | 5           | 12/01/2019 | 12   | 5           | 13/01/2019 | 12   | 5           | 14/01/2019 | 12   | 5           | 15/01/2019 | 12   | 5           |
| 11/01/2019     | 13   | 5           | 12/01/2019 | 13   | 5           | 13/01/2019 | 13   | 5           | 14/01/2019 | 13   | 5           | 15/01/2019 | 13   | 5           |
| 11/01/2019     | 14   | 5           | 12/01/2019 | 14   | 5           | 13/01/2019 | 14   | 5           | 14/01/2019 | 14   | 5           | 15/01/2019 | 14   | 5           |
| 11/01/2019     | 15   | 5           | 12/01/2019 | 15   | 5           | 13/01/2019 | 15   | 5           | 14/01/2019 | 15   | 5           | 15/01/2019 | 15   | 5           |
| 11/01/2019     | 16   | 5           | 12/01/2019 | 16   | 5           | 13/01/2019 | 16   | 5           | 14/01/2019 | 16   | 5           | 15/01/2019 | 16   | 5           |
| 11/01/2019     | 17   | 5           | 12/01/2019 | 17   | 5           | 13/01/2019 | 17   | 5           | 14/01/2019 | 17   | 5           | 15/01/2019 | 17   | 5           |
| 11/01/2019     | 18   | 5           | 12/01/2019 | 18   | 5           | 13/01/2019 | 18   | 5           | 14/01/2019 | 18   | 5           | 15/01/2019 | 18   | 5           |
| 11/01/2019     | 19   | 5           | 12/01/2019 | 19   | 5           | 13/01/2019 | 19   | 5           | 14/01/2019 | 19   | 5           | 15/01/2019 | 19   | 12.1        |
| 11/01/2019     | 20   | 5           | 12/01/2019 | 20   | 5           | 13/01/2019 | 20   | 5           | 14/01/2019 | 20   | 5           | 15/01/2019 | 20   | 6.3         |
| 11/01/2019     | 21   | 5.4         | 12/01/2019 | 21   | 5           | 13/01/2019 | 21   | 5           | 14/01/2019 | 21   | 5.4         | 15/01/2019 | 21   | 5.8         |
| 11/01/2019     | 22   | 5           | 12/01/2019 | 22   | 5           | 13/01/2019 | 22   | 5           | 14/01/2019 | 22   | 5           | 15/01/2019 | 22   | 5           |
| 11/01/2019     | 23   | 5           | 12/01/2019 | 23   | 5           | 13/01/2019 | 23   | 5           | 14/01/2019 | 23   | 5.4         | 15/01/2019 | 23   | 5.4         |
| <b>Maximum</b> |      | <b>5.4</b>  |            |      | <b>5.4</b>  |            |      | <b>5.4</b>  |            |      | <b>5.4</b>  |            |      | <b>12.1</b> |

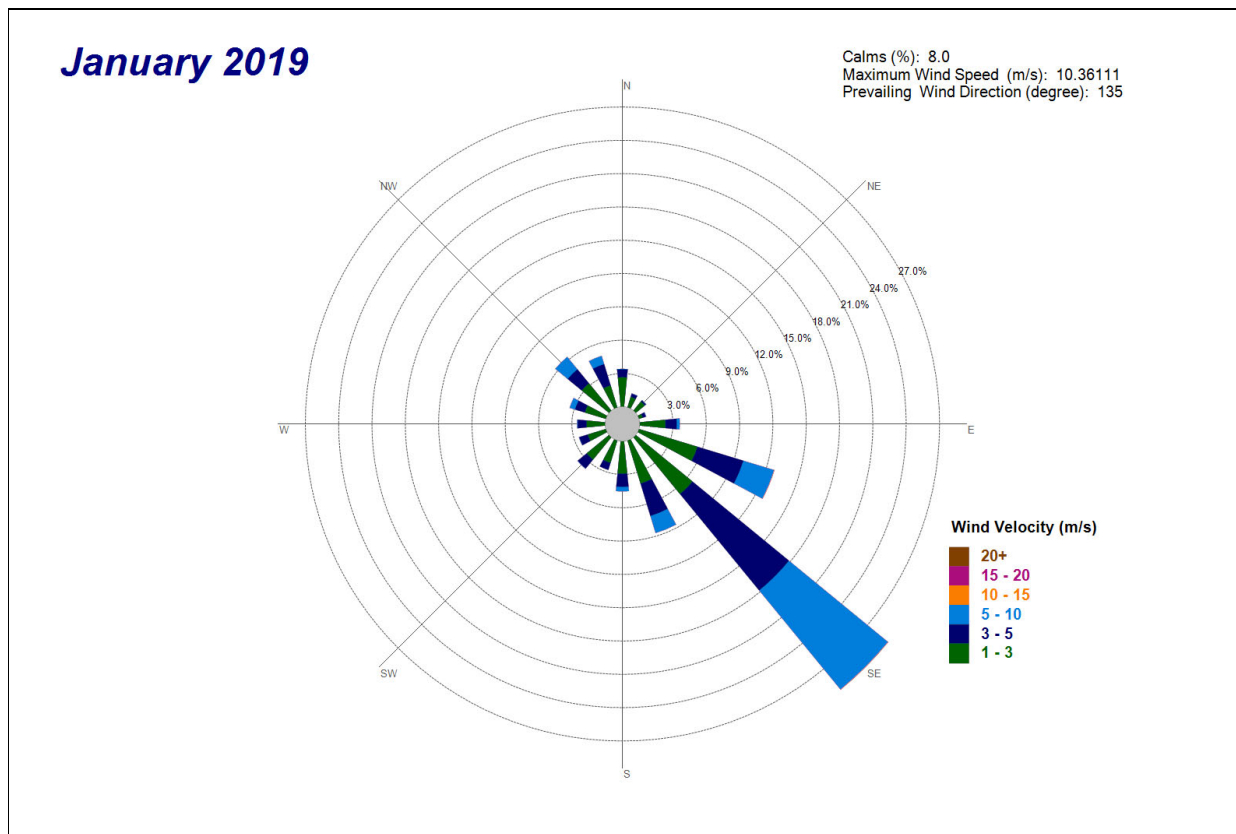
| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 16/01/2019     | 0    | 5           | 17/01/2019 | 0    | 5           | 18/01/2019 | 0    | 7.5         | 19/01/2019 | 0    | 6.3         | 20/01/2019 | 0    | 5           |
| 16/01/2019     | 1    | 5           | 17/01/2019 | 1    | 5           | 18/01/2019 | 1    | 5.4         | 19/01/2019 | 1    | 5           | 20/01/2019 | 1    | 5.4         |
| 16/01/2019     | 2    | 5           | 17/01/2019 | 2    | 5           | 18/01/2019 | 2    | 5.8         | 19/01/2019 | 2    | 5           | 20/01/2019 | 2    | 5           |
| 16/01/2019     | 3    | 5           | 17/01/2019 | 3    | 5           | 18/01/2019 | 3    | 5.8         | 19/01/2019 | 3    | 5           | 20/01/2019 | 3    | 5           |
| 16/01/2019     | 4    | 5.4         | 17/01/2019 | 4    | 5           | 18/01/2019 | 4    | 5           | 19/01/2019 | 4    | 5           | 20/01/2019 | 4    | 5           |
| 16/01/2019     | 5    | 5           | 17/01/2019 | 5    | 5           | 18/01/2019 | 5    | 5           | 19/01/2019 | 5    | 5           | 20/01/2019 | 5    | 5           |
| 16/01/2019     | 6    | 5           | 17/01/2019 | 6    | 5           | 18/01/2019 | 6    | 5           | 19/01/2019 | 6    | 5           | 20/01/2019 | 6    | 5           |
| 16/01/2019     | 7    | 5           | 17/01/2019 | 7    | 5           | 18/01/2019 | 7    | 5           | 19/01/2019 | 7    | 5           | 20/01/2019 | 7    | 5           |
| 16/01/2019     | 8    | 5           | 17/01/2019 | 8    | 5           | 18/01/2019 | 8    | 5           | 19/01/2019 | 8    | 5           | 20/01/2019 | 8    | 5           |
| 16/01/2019     | 9    | 5           | 17/01/2019 | 9    | 5           | 18/01/2019 | 9    | 5           | 19/01/2019 | 9    | 5           | 20/01/2019 | 9    | 5           |
| 16/01/2019     | 10   | 5           | 17/01/2019 | 10   | 5           | 18/01/2019 | 10   | 5           | 19/01/2019 | 10   | 5           | 20/01/2019 | 10   | 5           |
| 16/01/2019     | 11   | 5           | 17/01/2019 | 11   | 5           | 18/01/2019 | 11   | 5           | 19/01/2019 | 11   | 5           | 20/01/2019 | 11   | 5           |
| 16/01/2019     | 12   | 5           | 17/01/2019 | 12   | 5           | 18/01/2019 | 12   | 5           | 19/01/2019 | 12   | 5           | 20/01/2019 | 12   | 5           |
| 16/01/2019     | 13   | 5           | 17/01/2019 | 13   | 5           | 18/01/2019 | 13   | 5           | 19/01/2019 | 13   | 5           | 20/01/2019 | 13   | 5           |
| 16/01/2019     | 14   | 5           | 17/01/2019 | 14   | 5           | 18/01/2019 | 14   | 5           | 19/01/2019 | 14   | 29.6        | 20/01/2019 | 14   | 5           |
| 16/01/2019     | 15   | 5           | 17/01/2019 | 15   | 5           | 18/01/2019 | 15   | 5           | 19/01/2019 | 15   | 11.7        | 20/01/2019 | 15   | 5           |
| 16/01/2019     | 16   | 5           | 17/01/2019 | 16   | 5           | 18/01/2019 | 16   | 5           | 19/01/2019 | 16   | 5.8         | 20/01/2019 | 16   | 5           |
| 16/01/2019     | 17   | 5           | 17/01/2019 | 17   | 5           | 18/01/2019 | 17   | 5           | 19/01/2019 | 17   | 7.1         | 20/01/2019 | 17   | 5           |
| 16/01/2019     | 18   | 5           | 17/01/2019 | 18   | 5           | 18/01/2019 | 18   | 5           | 19/01/2019 | 18   | 5.8         | 20/01/2019 | 18   | 5           |
| 16/01/2019     | 19   | 5           | 17/01/2019 | 19   | 5           | 18/01/2019 | 19   | 5           | 19/01/2019 | 19   | 5           | 20/01/2019 | 19   | 5           |
| 16/01/2019     | 20   | 5           | 17/01/2019 | 20   | 6.7         | 18/01/2019 | 20   | 5           | 19/01/2019 | 20   | 5           | 20/01/2019 | 20   | 5           |
| 16/01/2019     | 21   | 5           | 17/01/2019 | 21   | 7.1         | 18/01/2019 | 21   | 5           | 19/01/2019 | 21   | 5           | 20/01/2019 | 21   | 5           |
| 16/01/2019     | 22   | 5.4         | 17/01/2019 | 22   | 5.4         | 18/01/2019 | 22   | 5           | 19/01/2019 | 22   | 5           | 20/01/2019 | 22   | 5           |
| 16/01/2019     | 23   | 5           | 17/01/2019 | 23   | 6.3         | 18/01/2019 | 23   | 5.4         | 19/01/2019 | 23   | 5           | 20/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>5.4</b>  |            |      | <b>7.1</b>  |            |      | <b>7.5</b>  |            |      | <b>29.6</b> |            |      | <b>5.4</b>  |



| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 21/01/2019     | 0    | 5           | 22/01/2019 | 0    | 5           | 23/01/2019 | 0    | 5           | 24/01/2019 | 0    | 5           | 25/01/2019 | 0    | 5           |
| 21/01/2019     | 1    | 5.4         | 22/01/2019 | 1    | 5           | 23/01/2019 | 1    | 5.4         | 24/01/2019 | 1    | 5           | 25/01/2019 | 1    | 5           |
| 21/01/2019     | 2    | 5.5         | 22/01/2019 | 2    | 5.4         | 23/01/2019 | 2    | 5           | 24/01/2019 | 2    | 5           | 25/01/2019 | 2    | 5           |
| 21/01/2019     | 3    | 5           | 22/01/2019 | 3    | 5           | 23/01/2019 | 3    | 5           | 24/01/2019 | 3    | 5           | 25/01/2019 | 3    | 5           |
| 21/01/2019     | 4    | 5           | 22/01/2019 | 4    | 5           | 23/01/2019 | 4    | 5           | 24/01/2019 | 4    | 5           | 25/01/2019 | 4    | 5           |
| 21/01/2019     | 5    | 5           | 22/01/2019 | 5    | 5.4         | 23/01/2019 | 5    | 5           | 24/01/2019 | 5    | 5.4         | 25/01/2019 | 5    | 5           |
| 21/01/2019     | 6    | 5           | 22/01/2019 | 6    | 5           | 23/01/2019 | 6    | 5           | 24/01/2019 | 6    | 5           | 25/01/2019 | 6    | 5           |
| 21/01/2019     | 7    | 5           | 22/01/2019 | 7    | 5           | 23/01/2019 | 7    | 5           | 24/01/2019 | 7    | 5           | 25/01/2019 | 7    | 5           |
| 21/01/2019     | 8    | 5           | 22/01/2019 | 8    | 5           | 23/01/2019 | 8    | 5           | 24/01/2019 | 8    | 5           | 25/01/2019 | 8    | 5           |
| 21/01/2019     | 9    | 5           | 22/01/2019 | 9    | 5           | 23/01/2019 | 9    | 5           | 24/01/2019 | 9    | 5           | 25/01/2019 | 9    | 5           |
| 21/01/2019     | 10   | 5           | 22/01/2019 | 10   | 5           | 23/01/2019 | 10   | 5           | 24/01/2019 | 10   | 5           | 25/01/2019 | 10   | 5           |
| 21/01/2019     | 11   | 5           | 22/01/2019 | 11   | 5           | 23/01/2019 | 11   | 5           | 24/01/2019 | 11   | 5           | 25/01/2019 | 11   | 5           |
| 21/01/2019     | 12   | 5           | 22/01/2019 | 12   | 5           | 23/01/2019 | 12   | 5           | 24/01/2019 | 12   | 5           | 25/01/2019 | 12   | 5           |
| 21/01/2019     | 13   | 5           | 22/01/2019 | 13   | 5           | 23/01/2019 | 13   | 5           | 24/01/2019 | 13   | 5           | 25/01/2019 | 13   | 5           |
| 21/01/2019     | 14   | 5           | 22/01/2019 | 14   | 5           | 23/01/2019 | 14   | 5           | 24/01/2019 | 14   | 5           | 25/01/2019 | 14   | 5           |
| 21/01/2019     | 15   | 5           | 22/01/2019 | 15   | 5           | 23/01/2019 | 15   | 5           | 24/01/2019 | 15   | 5           | 25/01/2019 | 15   | 5           |
| 21/01/2019     | 16   | 5           | 22/01/2019 | 16   | 5           | 23/01/2019 | 16   | 5           | 24/01/2019 | 16   | 5           | 25/01/2019 | 16   | 5           |
| 21/01/2019     | 17   | 5           | 22/01/2019 | 17   | 5           | 23/01/2019 | 17   | 5           | 24/01/2019 | 17   | 5           | 25/01/2019 | 17   | 5           |
| 21/01/2019     | 18   | 5           | 22/01/2019 | 18   | 5           | 23/01/2019 | 18   | 5           | 24/01/2019 | 18   | 5           | 25/01/2019 | 18   | 5           |
| 21/01/2019     | 19   | 5           | 22/01/2019 | 19   | 5           | 23/01/2019 | 19   | 5           | 24/01/2019 | 19   | 5           | 25/01/2019 | 19   | 5           |
| 21/01/2019     | 20   | 5           | 22/01/2019 | 20   | 5           | 23/01/2019 | 20   | 5           | 24/01/2019 | 20   | 5           | 25/01/2019 | 20   | 5           |
| 21/01/2019     | 21   | 5           | 22/01/2019 | 21   | 5           | 23/01/2019 | 21   | 5           | 24/01/2019 | 21   | 5           | 25/01/2019 | 21   | 5           |
| 21/01/2019     | 22   | 5.4         | 22/01/2019 | 22   | 5           | 23/01/2019 | 22   | 5           | 24/01/2019 | 22   | 5           | 25/01/2019 | 22   | 5           |
| 21/01/2019     | 23   | 5           | 22/01/2019 | 23   | 5           | 23/01/2019 | 23   | 5           | 24/01/2019 | 23   | 5.4         | 25/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>5.5</b>  |            |      | <b>5.4</b>  |            |      | <b>5.4</b>  |            |      | <b>5.4</b>  |            |      | <b>5</b>    |

| Date           | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average | Date       | Hour | 1hr Average |
|----------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|------------|------|-------------|
| 26/01/2019     | 0    | 5           | 27/01/2019 | 0    | 5.4         | 28/01/2019 | 0    | 5           | 29/01/2019 | 0    | 5           | 30/01/2019 | 0    | 5.4         |
| 26/01/2019     | 1    | 5           | 27/01/2019 | 1    | 5           | 28/01/2019 | 1    | 5           | 29/01/2019 | 1    | 5           | 30/01/2019 | 1    | 5           |
| 26/01/2019     | 2    | 5.4         | 27/01/2019 | 2    | 5           | 28/01/2019 | 2    | 5           | 29/01/2019 | 2    | 5           | 30/01/2019 | 2    | 5           |
| 26/01/2019     | 3    | 5           | 27/01/2019 | 3    | 5           | 28/01/2019 | 3    | 5           | 29/01/2019 | 3    | 5           | 30/01/2019 | 3    | 5.4         |
| 26/01/2019     | 4    | 5           | 27/01/2019 | 4    | 5           | 28/01/2019 | 4    | 5           | 29/01/2019 | 4    | 5           | 30/01/2019 | 4    | 5           |
| 26/01/2019     | 5    | 5           | 27/01/2019 | 5    | 5           | 28/01/2019 | 5    | 5           | 29/01/2019 | 5    | 5           | 30/01/2019 | 5    | 5           |
| 26/01/2019     | 6    | 5.6         | 27/01/2019 | 6    | 5           | 28/01/2019 | 6    | 5           | 29/01/2019 | 6    | 5           | 30/01/2019 | 6    | 5           |
| 26/01/2019     | 7    | 5           | 27/01/2019 | 7    | 5           | 28/01/2019 | 7    | 5           | 29/01/2019 | 7    | 5           | 30/01/2019 | 7    | 5.4         |
| 26/01/2019     | 8    | 5           | 27/01/2019 | 8    | 5           | 28/01/2019 | 8    | 5           | 29/01/2019 | 8    | 5           | 30/01/2019 | 8    | 5           |
| 26/01/2019     | 9    | 5           | 27/01/2019 | 9    | 5           | 28/01/2019 | 9    | 5           | 29/01/2019 | 9    | 5           | 30/01/2019 | 9    | 5           |
| 26/01/2019     | 10   | 5           | 27/01/2019 | 10   | 5           | 28/01/2019 | 10   | 5           | 29/01/2019 | 10   | 5           | 30/01/2019 | 10   | 5           |
| 26/01/2019     | 11   | 5           | 27/01/2019 | 11   | 5           | 28/01/2019 | 11   | 5           | 29/01/2019 | 11   | 5           | 30/01/2019 | 11   | 5           |
| 26/01/2019     | 12   | 5           | 27/01/2019 | 12   | 5           | 28/01/2019 | 12   | 5           | 29/01/2019 | 12   | 5           | 30/01/2019 | 12   | 5           |
| 26/01/2019     | 13   | 5           | 27/01/2019 | 13   | 5           | 28/01/2019 | 13   | 5           | 29/01/2019 | 13   | 5           | 30/01/2019 | 13   | 5           |
| 26/01/2019     | 14   | 5           | 27/01/2019 | 14   | 5           | 28/01/2019 | 14   | 5           | 29/01/2019 | 14   | 5           | 30/01/2019 | 14   | 5           |
| 26/01/2019     | 15   | 5           | 27/01/2019 | 15   | 5           | 28/01/2019 | 15   | 5           | 29/01/2019 | 15   | 5           | 30/01/2019 | 15   | 5           |
| 26/01/2019     | 16   | 5           | 27/01/2019 | 16   | 5           | 28/01/2019 | 16   | 5           | 29/01/2019 | 16   | 5           | 30/01/2019 | 16   | 5           |
| 26/01/2019     | 17   | 5           | 27/01/2019 | 17   | 5           | 28/01/2019 | 17   | 5           | 29/01/2019 | 17   | 5           | 30/01/2019 | 17   | 5           |
| 26/01/2019     | 18   | 5           | 27/01/2019 | 18   | 7.1         | 28/01/2019 | 18   | 5           | 29/01/2019 | 18   | 5           | 30/01/2019 | 18   | 5           |
| 26/01/2019     | 19   | 5           | 27/01/2019 | 19   | 25.4        | 28/01/2019 | 19   | 5           | 29/01/2019 | 19   | 5           | 30/01/2019 | 19   | 5           |
| 26/01/2019     | 20   | 5           | 27/01/2019 | 20   | 5           | 28/01/2019 | 20   | 5           | 29/01/2019 | 20   | 5           | 30/01/2019 | 20   | 5           |
| 26/01/2019     | 21   | 5           | 27/01/2019 | 21   | 5.4         | 28/01/2019 | 21   | 5           | 29/01/2019 | 21   | 5           | 30/01/2019 | 21   | 5           |
| 26/01/2019     | 22   | 5           | 27/01/2019 | 22   | 5           | 28/01/2019 | 22   | 5           | 29/01/2019 | 22   | 5           | 30/01/2019 | 22   | 5           |
| 26/01/2019     | 23   | 5           | 27/01/2019 | 23   | 5           | 28/01/2019 | 23   | 5           | 29/01/2019 | 23   | 6.3         | 30/01/2019 | 23   | 5           |
| <b>Maximum</b> |      | <b>5.6</b>  |            |      | <b>25.4</b> |            |      | <b>5</b>    |            |      | <b>6.3</b>  |            |      | <b>5.4</b>  |

| Date           | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average | Date | Hour | 1hr Average |
|----------------|------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|
| 31/01/2019     | 0    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 1    | 5.4         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 2    | 5.4         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 3    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 4    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 5    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 6    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 7    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 8    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 9    | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 10   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 11   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 12   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 13   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 14   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 15   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 16   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 17   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 18   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 19   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 20   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 21   | 5           |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 22   | 5.8         |      |      |             |      |      |             |      |      |             |      |      |             |
| 31/01/2019     | 23   | 5.4         |      |      |             |      |      |             |      |      |             |      |      |             |
| <b>Maximum</b> |      | <b>5.8</b>  |      |      |             |      |      |             |      |      |             |      |      |             |



**Figure 4** MCC January 2019 Meteorology Data