



Ventia Pty Ltd

AirportlinkM7 Ambient Air Quality Monitoring Report

January 2016

Ref: DR.1601APL304.1

Issue Date: 16 February 2016

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Document Control

Revision	Date	Details	Prepared By	Approved By
0	15/02/2016	Original	CP	BN
1	16/02/2016	Updated exceedance table	CP	BN

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16 February 2016

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16 February 2016

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Glossary

The following terms and abbreviations may be found throughout this report:

AQMS – Air Quality Monitoring Station

EPA – Environment Protection Authority

NO – Nitric Oxide

NO₂ – Nitrogen Dioxide

NO_x – Nitrogen Oxides

CO – Carbon Monoxide

PM₁₀ – Particulate matter of 10 microns or less aerodynamic equivalent size

PM_{2.5} – Particulate matter of 2.5 microns or less aerodynamic equivalent size

TSP – Total Suspended Particulate

HVAS – High Volume Air Sampler

ppm – Parts Per Million

µg/m³ – micrograms per cubic meter

AHS – Aviation High School

KSHS – Kedron State High School

LS – Lewis Street

ALOC – Airportlink Operation Centre

CS – Cartwright St

Executive Summary

Exceedance Reporting

There were no readings over the relevant Air Quality Standards during the reporting period.

AirportlinkM7 AQMS Exceedance Reporting January 2016							
Pollutant	Averaging period	Maximum Allowed Concentration	Number of Exceedances January 2016				
			Station 1 (AHS)	Station 2 (KSHS)	Station 3 (LS)	Station 4 (ALOC)	Station 5 (CS)
Carbon Monoxide	8 hour (rolling average)	8 ppm	0	0	0	0	0
Nitrogen dioxide	1 hour	0.120 ppm	0	0	0	0	0
	1 year	63 µg/m ³	0	0	0	0	0
PM2.5	24 hour	25 µg/m ³	0	0	0	0	0
PM10	24 hour	50 µg/m ³	0	0	0	0	0

Table 1 Exceedance Reporting

Maximum allowed concentration criteria are as specified in Condition 19(k) of the Conditions of Approval.

Introduction

Norditech Pty Ltd was appointed by Ventia Pty Limited in February 2015 to operate, maintain and report on the AirportlinkM7 Air Quality Monitoring Network.

The AirportlinkM7 Air Quality Monitoring Network consists of five sites located in close proximity to key locations of the Airportlink project, and is a requirement of the Conditions of Approval issued by the Coordinator General.

The addresses of the two parties are as follows

AirportlinkM7
PO Box 412
Lutwyche QLD 4030

Norditech Pty Ltd
Unit 36/70 Holbeche Rd
Arndell Park NSW 2148

Monitoring

Site Locations

AirportlinkM7 Site Location Coordinates		
	Latitude	Longitude
Station 1 (Aviation High School)	-27° 24' 46.5084"	153° 3' 48.0744"
Station 2 (Kedron State High School)	-27° 24' 47.5344"	153° 2' 17.8476"
Station 3 (Lewis Street)	-27° 24' 39.5532"	153° 3' 18.18"
Station 4 (Airportlink Operation Centre)	-27° 24' 43.2252"	153° 1' 58.3104"
Station 5 (Cartwright Street)	-27° 26' 22.5852"	153° 2' 5.784"

Table 2 Site Location Coordinates

Station Instrumentation Details

Each station continuously monitors the following pollutants:

- NO (Nitrogen Oxide)
- NO₂ (Nitrogen Dioxide)
- NO_x (Total Oxides of Nitrogen)
- CO (Carbon Monoxide)
- PM₁₀
- PM_{2.5}
- TSP (Samples on a 1 in 6 day cycle)

Monthly validated data for each site are provided in the following Microsoft® Excel™ spreadsheet

- 201508 ALM7 Monthly Validated Data Spreadsheet.xlsx
 - Sheet 1 – 5 minute average data
 - Sheet 2 – 1 hour average data
 - Sheet 3 – 8 hour average data
 - Sheet 4 – 24 hour average data

Instrumentation Details								
Parameter	Units	Uncertainty	Method	Last Calibration Date				
				Station 1	Station 2	Station 3	Station 4	Station 5
NO NO ₂ NO _x	ppm	2.78%	AS 3580.5.1	21/01/2016	14/01/2016	14/01/2016	14/01/2016	14/01/2016
CO	ppm	2.56%	AS 3580.7.1	21/01/2016	14/01/2016	14/01/2016	14/01/2016	14/01/2016
PM ₁₀	µg/m ³	3.21 µg/m ³	AS 3580.9.11	30/11/2015*	25/11/2015	30/11/2015*	24/11/2015*	24/11/2015
PM _{2.5}	µg/m ³	3.21 µg/m ³	AS 3580.9.11 / EQPM 0308- 170	30/11/2015	25/11/2015	30/11/2015	24/11/2015	24/11/2015
TSP	µg/m ³	7.34%	AS 3580.9.3	14/01/2015	14/01/2016	14/01/2016	14/01/2016	14/01/2016

Table 3 Instrumentation Details

* These sites have TEOMs installed operating under method AS 3580.9.8

Data Logging

Data are recorded to a WinAQMS data logger located at each site at 5 minute averaging periods, calculated from 10 second samples. All data are retrieved periodically, approximately on an hourly basis, over a private 3G network, to a central WinCollect database, where data validation is performed to remove any data not deemed as valid prior to reporting. Data validation is performed as per the relevant standard, and/or as per the instrument manufacturers recommended guidelines.

All averages greater than 5 minute averages are calculated from the 5 minute average data set. 75% valid data must be available to calculate re-averaged data. For example, to calculate a 1hr average from 5 minute data, there must be a minimum of 9 out of 12 valid 5 minute average data points available.

All data is recorded to Australian Eastern Standard Time.

Data capture rates are calculated as per the following formula:

$$\text{Data Capture Rate \%} = \frac{\text{Available data points}}{\text{Total data points}} * 100$$

where:

Available data points = total number of 5 minute averages for the reporting period in which valid data was recorded

Total data points = total number of 5 minute averages for the reporting period inclusive of invalid data

Results

Station 1 (Aviation High School)

Summary

Station 1 Aviation High School Ambient AQMS Summary January 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.014	18/01/2016 22:00	95.8
CO	ppm	8.0	8 Hours	0.5	04/01/2016 14:00	96.3
PM _{2.5}	µg/m3	25	24 Hours	13.5	25/01/2016	93.1
PM ₁₀	µg/m3	50	24 Hours	24.5	25/01/2016	90.5

Table 4 Station 1 Monthly Summary

Graphical Representations



Figure 1 Station 1 Nitrogen Dioxide 1hr averages



Figure 2 Station 1 Carbon Monoxide 8hr rolling averages

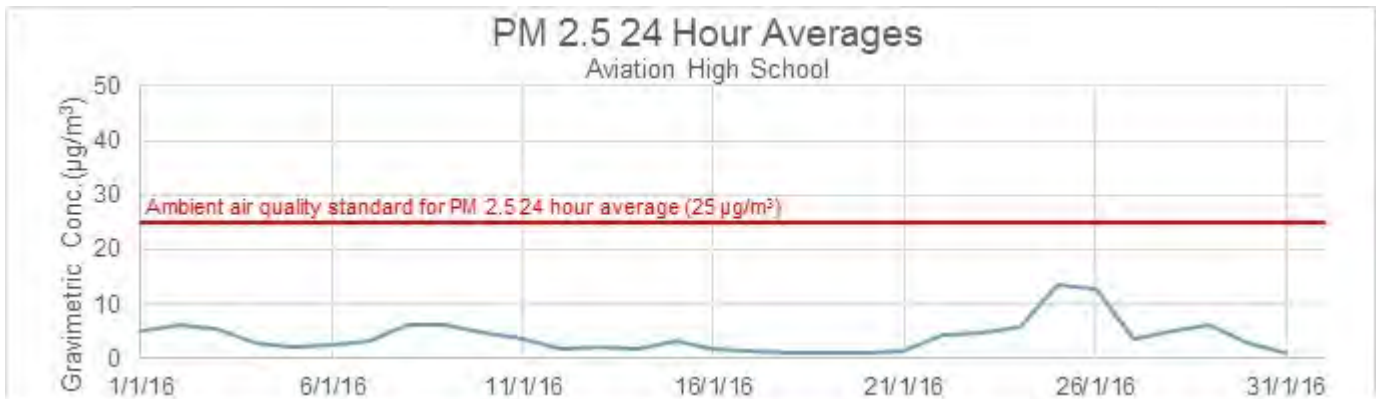


Figure 3 Station 1 PM2.5 24hr averages

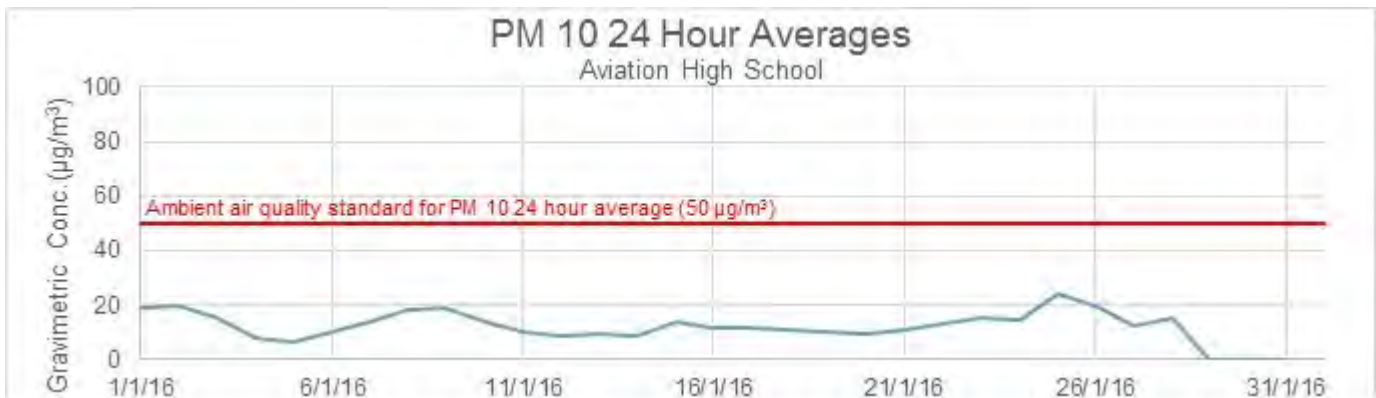


Figure 4 Station 1 PM10 24hr averages

Nitrogen Dioxide Summary

Station 1 Aviation High School Ambient AQMS Nitrogen Dioxide Summary January 2016						
Date	24hr Avg (ppm)	1 hr Avgs		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/01/2016	-0.001	-0.002	0.002	03:00	0	97.2
2/01/2016	0.001	-0.001	0.007	03:00	0	97.2
3/01/2016	0.000	-0.001	0.002	08:00	0	97.2
4/01/2016	0.004	0.000	0.011	19:00	0	97.2
5/01/2016	0.007	0.002	0.012	22:00	0	97.2
6/01/2016	0.003	0.001	0.011	19:00	0	97.2
7/01/2016	0.002	-0.001	0.008	00:00	0	97.2
8/01/2016	0.001	-0.001	0.005	22:00	0	97.2
9/01/2016	0.002	-0.001	0.008	06:00	0	97.2
10/01/2016	0.001	-0.001	0.007	04:00	0	97.2
11/01/2016	0.003	0.000	0.007	05:00	0	97.2
12/01/2016	0.002	0.000	0.005	06:00	0	97.2
¹ 13/01/2016	-	0.001	0.009	22:00	0	71.5
14/01/2016	0.002	-0.001	0.008	00:00	0	84.0
15/01/2016	0.002	-0.001	0.005	05:00	0	97.2
16/01/2016	0.000	-0.002	0.004	09:00	0	97.2
17/01/2016	-0.001	-0.002	0.001	07:00	0	97.2
18/01/2016	0.003	-0.001	0.014	22:00	0	97.2
19/01/2016	0.005	0.000	0.011	03:00	0	97.2
20/01/2016	0.004	0.000	0.010	06:00	0	97.2
21/01/2016	0.003	0.000	0.009	06:00	0	93.4
22/01/2016	0.003	-0.001	0.008	07:00	0	97.2
23/01/2016	0.003	0.000	0.009	22:00	0	97.2
24/01/2016	0.001	-0.002	0.006	00:00	0	97.2
25/01/2016	0.003	0.000	0.011	06:00	0	97.2
26/01/2016	0.000	-0.001	0.002	06:00	0	97.2
27/01/2016	0.002	-0.001	0.005	06:00	0	97.2
28/01/2016	0.005	0.001	0.011	08:00	0	97.2
29/01/2016	0.005	0.002	0.010	07:00	0	97.2
30/01/2016	0.004	0.001	0.011	04:00	0	97.2
31/01/2016	0.001	-0.001	0.003	0:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 5 Station 1 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 1 Aviation High School Ambient AQMS Carbon Monoxide Summary January 2016								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/01/2016	0.2	0.1	0.3	22:00	0.3	01:00	0	96.5
2/01/2016	0.2	0.2	0.3	23:00	0.3	05:00	0	96.5
3/01/2016	0.2	0.0	0.3	00:00	0.3	01:00	0	96.5
4/01/2016	0.5	0.3	0.6	09:00	0.5	14:00	0	96.5
5/01/2016	0.3	0.3	0.5	21:00	0.4	00:00	0	96.5
6/01/2016	0.5	0.3	0.6	22:00	0.5	23:00	0	96.2
7/01/2016	0.2	0.1	0.4	07:00	0.5	00:00	0	96.5
8/01/2016	0.2	0.1	0.3	21:00	0.2	00:00	0	96.5
9/01/2016	0.2	0.1	0.3	06:00	0.3	23:00	0	96.5
10/01/2016	0.2	0.1	0.3	21:00	0.3	00:00	0	96.5
11/01/2016	0.1	0.0	0.2	17:00	0.2	00:00	0	96.5
12/01/2016	0.4	0.3	0.7	06:00	0.5	08:00	0	95.1
13/01/2016	0.4	0.2	0.7	06:00	0.5	07:00	0	95.5
14/01/2016	0.2	0.1	0.5	19:00	0.4	00:00	0	93.8
15/01/2016	0.2	0.0	0.3	08:00	0.3	02:00	0	96.5
16/01/2016	0.3	0.2	0.4	09:00	0.3	14:00	0	96.9
17/01/2016	0.2	0.2	0.2	07:00	0.3	00:00	0	96.9
18/01/2016	0.3	0.2	0.3	23:00	0.3	23:00	0	96.9
19/01/2016	0.3	0.2	0.3	07:00	0.3	07:00	0	96.5
20/01/2016	0.3	0.2	0.4	05:00	0.4	11:00	0	96.9
21/01/2016	0.2	0.1	0.4	06:00	0.3	09:00	0	93.1
22/01/2016	0.0	-0.1	0.2	07:00	0.1	12:00	0	95.1
23/01/2016	0.1	0.1	0.2	22:00	0.2	23:00	0	96.9
24/01/2016	0.1	0.1	0.2	00:00	0.2	02:00	0	96.9
25/01/2016	0.2	0.1	0.2	07:00	0.2	23:00	0	96.9
26/01/2016	0.2	0.1	0.2	05:00	0.2	08:00	0	96.9
27/01/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	96.9
28/01/2016	0.2	0.1	0.3	08:00	0.2	23:00	0	96.9
29/01/2016	0.2	0.1	0.3	06:00	0.2	12:00	0	96.9
30/01/2016	0.1	0.1	0.2	17:00	0.2	10:00	0	96.9
31/01/2016	0.1	0.1	0.2	11:00	0.2	16:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 6 Station 1 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 1 Aviation High School Ambient AQMS Particulate PM2.5 Summary January 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 25.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)			
1/01/2016	5.0	2.0	7.8	22:00	0	100.0
2/01/2016	6.1	4.0	9.8	20:00	0	100.0
3/01/2016	5.5	1.4	14.5	01:00	0	100.0
4/01/2016	3.0	-0.9	9.0	18:00	0	95.8
5/01/2016	2.2	-0.9	6.8	14:00	0	91.7
6/01/2016	2.4	-0.9	7.8	21:00	0	100.0
7/01/2016	3.2	0.6	6.8	01:00	0	95.8
8/01/2016	6.1	2.3	13.9	03:00	0	100.0
9/01/2016	6.2	3.3	12.6	05:00	0	100.0
10/01/2016	4.6	1.4	7.0	13:00	0	100.0
11/01/2016	3.5	-1.0	13.5	05:00	0	100.0
12/01/2016	1.6	-1.0	4.8	07:00	0	75.0
13/01/2016	2.3	-1.0	6.0	13:00	0	70.8
14/01/2016	1.7	-0.9	6.8	21:00	0	100.0
15/01/2016	3.3	-1.0	7.8	10:00	0	91.7
16/01/2016	1.6	0.0	3.0	22:00	0	83.3
17/01/2016	1.3	-1.0	4.9	07:00	0	100.0
18/01/2016	1.0	-1.0	5.8	22:00	0	87.5
19/01/2016	1.1	-1.0	4.0	12:00	0	79.2
20/01/2016	1.2	-1.0	3.8	13:00	0	75.0
21/01/2016	1.3	-1.0	3.8	16:00	0	75.0
22/01/2016	4.3	-1.0	11.8	14:00	0	87.5
23/01/2016	4.9	-0.8	10.9	23:00	0	95.8
24/01/2016	5.7	1.3	9.8	21:00	0	100.0
25/01/2016	13.5	7.2	19.7	21:00	0	100.0
26/01/2016	12.7	4.2	19.8	01:00	0	100.0
27/01/2016	3.7	-0.8	9.7	15:00	0	100.0
28/01/2016	5.0	-0.9	9.7	21:00	0	100.0
29/01/2016	6.2	1.0	14.8	14:00	0	100.0
30/01/2016	3.0	-1.0	10.7	14:00	0	91.7
31/01/2016	1.2	-0.9	5.7	12:00	0	91.7

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 7 Station 1 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 1 Aviation High School Ambient AQMS Particulate PM10 Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	19.3	11.2	36.5	13:00	0	100.0
2/01/2016	19.6	15.2	28.4	14:00	0	100.0
3/01/2016	15.5	2.3	21.9	14:00	0	95.8
4/01/2016	8.0	1.4	15.9	16:00	0	95.8
5/01/2016	6.5	2.2	12.2	19:00	0	100.0
6/01/2016	10.2	4.1	47.1	20:00	0	83.3
7/01/2016	13.6	6.5	23.1	21:00	0	91.7
8/01/2016	18.6	8.2	30.7	15:00	0	100.0
9/01/2016	18.7	12.0	25.8	11:00	0	100.0
10/01/2016	14.0	7.7	28.6	11:00	0	100.0
11/01/2016	10.5	3.7	19.4	09:00	0	100.0
12/01/2016	8.8	4.0	19.0	12:00	0	95.8
13/01/2016	9.8	3.9	25.5	13:00	0	100.0
14/01/2016	8.5	4.7	17.1	05:00	0	100.0
15/01/2016	13.5	1.4	35.9	15:00	0	100.0
16/01/2016	11.5	5.6	20.2	15:00	0	95.8
17/01/2016	11.6	4.9	17.2	19:00	0	100.0
18/01/2016	10.9	5.9	19.5	13:00	0	100.0
19/01/2016	10.1	3.9	17.7	07:00	0	100.0
20/01/2016	9.7	5.1	17.2	05:00	0	91.7
21/01/2016	10.9	3.3	19.1	14:00	0	95.8
22/01/2016	13.5	2.0	27.0	11:00	0	100.0
23/01/2016	15.4	5.8	28.0	12:00	0	100.0
24/01/2016	14.8	3.0	26.1	16:00	0	100.0
25/01/2016	24.5	20.5	33.5	07:00	0	100.0
26/01/2016	19.5	5.8	38.1	03:00	0	95.8
27/01/2016	12.6	6.1	32.0	14:00	0	95.8
28/01/2016	15.2	6.7	29.6	20:00	0	100.0
¹ 29/01/2016	-	2.9	61.3	06:00	0	66.7
¹ 30/01/2016	-	-	-	-	0	0.0
¹ 31/01/2016	-	-	-	-	0	0.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 8 Station 1 PM₁₀ Monthly Summary

Station 2 (Kedron State High School)

Summary

Station 2 Kedron State High School Ambient AQMS Summary January 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.015	24/01/2016 00:00	93.7
CO	ppm	8.0	8 Hours	0.2	26/01/2016 09:00	96.6
PM _{2.5}	µg/m ³	25	24 Hours	17.1	26/01/2016	88.2
PM ₁₀	µg/m ³	50	24 Hours	32.6	25/01/2016	99.7

Table 9 Station 2 Monthly Summary

Graphical Representations

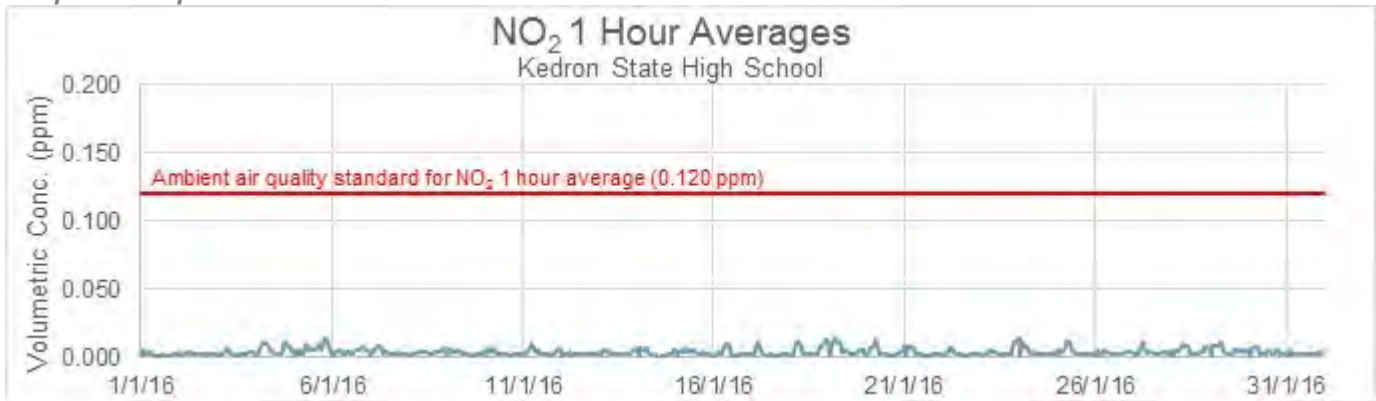


Figure 5 Station 2 Dioxide 1hr averages

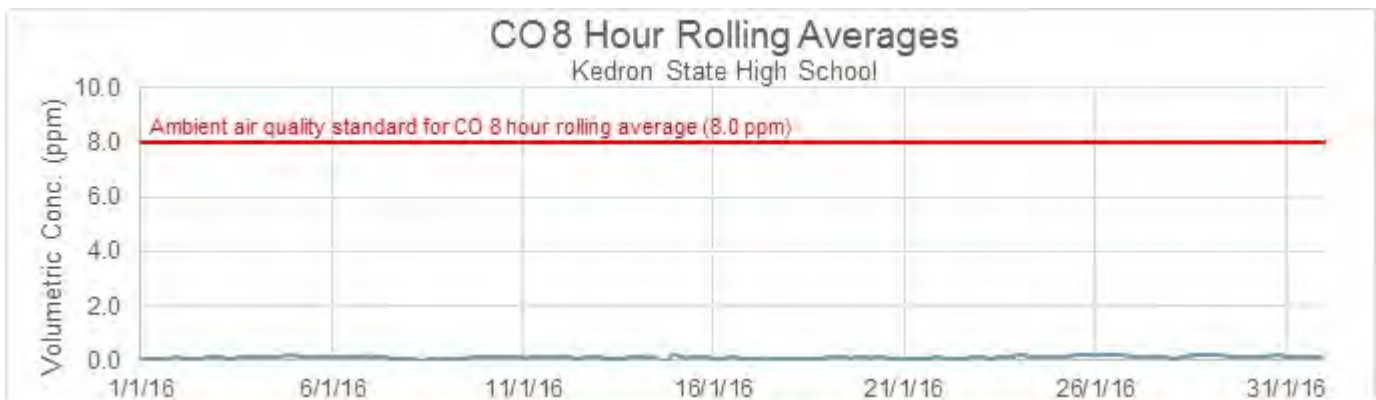


Figure 6 Station 2 Carbon Monoxide 8hr rolling averages

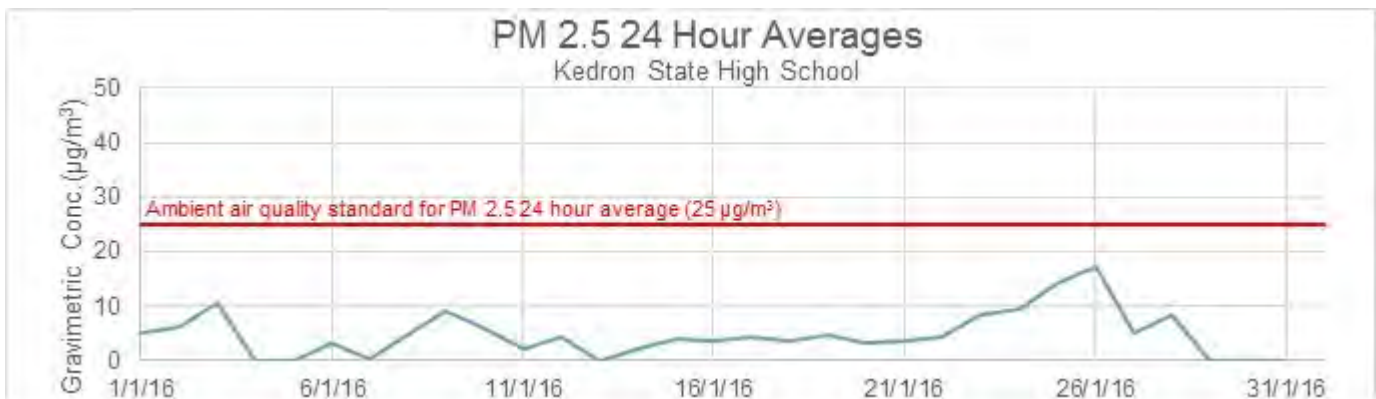


Figure 7 Station 2 PM2.5 24hr averages

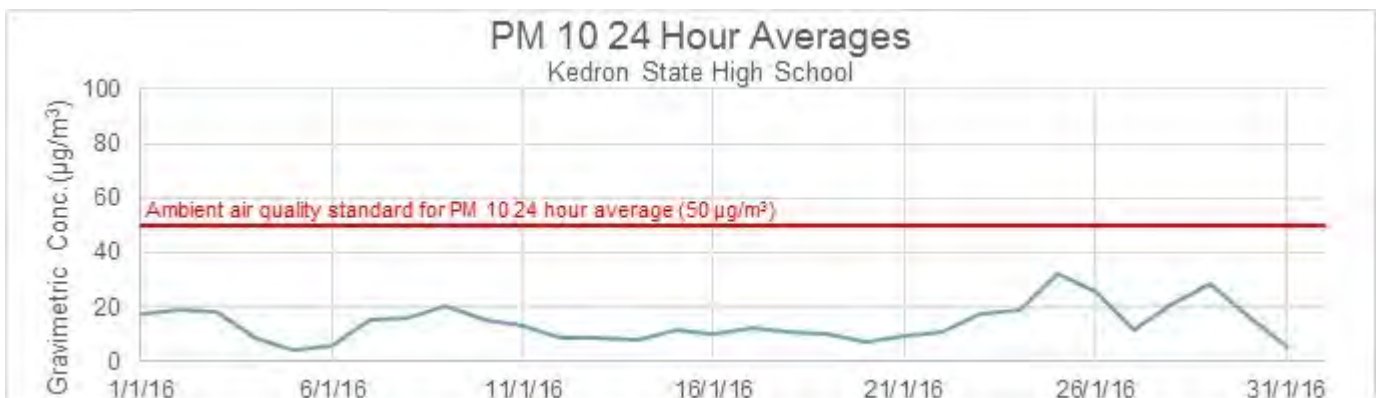


Figure 8 Station 2 PM10 24hr averages

Nitrogen Dioxide Summary

Station 2 KSHS Ambient AQMS Nitrogen Dioxide Summary January 2016						
Date	24hr Avg (ppm)	Min (ppm)	1 hr Avgs		Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
			Max (ppm)	Time of Max		
1/01/2016	0.002	0.001	0.006	02:00	0	94.1
2/01/2016	0.003	0.002	0.004	06:00	0	93.8
3/01/2016	0.003	0.002	0.007	06:00	0	95.1
4/01/2016	0.006	0.002	0.012	19:00	0	94.4
5/01/2016	0.007	0.003	0.014	20:00	0	95.5
6/01/2016	0.005	0.003	0.009	20:00	0	93.8
7/01/2016	0.004	0.002	0.009	06:00	0	95.8
8/01/2016	0.004	0.002	0.007	23:00	0	94.4
9/01/2016	0.004	0.001	0.006	02:00	0	94.8
10/01/2016	0.003	0.002	0.007	06:00	0	92.7
11/01/2016	0.004	0.002	0.010	06:00	0	93.1
12/01/2016	0.003	0.002	0.005	00:00	0	93.4
13/01/2016	0.004	0.002	0.007	23:00	0	94.4
14/01/2016	0.004	0.001	0.008	02:00	0	85.8
15/01/2016	0.004	0.002	0.007	06:00	0	94.1
16/01/2016	0.004	0.001	0.011	07:00	0	94.1
17/01/2016	0.003	0.001	0.011	04:00	0	94.8
18/01/2016	0.006	0.002	0.013	23:00	0	93.4
19/01/2016	0.006	0.002	0.014	05:00	0	91.3
20/01/2016	0.004	0.001	0.013	06:00	0	92.4
21/01/2016	0.004	0.001	0.009	02:00	0	93.4
22/01/2016	0.003	0.001	0.008	06:00	0	94.8
23/01/2016	0.004	0.002	0.013	23:00	0	94.8
24/01/2016	0.005	0.002	0.015	00:00	0	92.7
25/01/2016	0.005	0.002	0.012	07:00	0	92.7
26/01/2016	0.003	0.002	0.006	02:00	0	94.4
27/01/2016	0.004	0.002	0.012	06:00	0	95.5
28/01/2016	0.005	0.002	0.010	07:00	0	94.4
29/01/2016	0.006	0.002	0.011	07:00	0	91.7
30/01/2016	0.004	0.002	0.008	05:00	0	94.4
31/01/2016	0.003	0.002	0.005	2:00	0	95.5

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 10 Station 2 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 2 KSHS Ambient AQMS Carbon Monoxide Summary January 2016

Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/01/2016	0.1	0.0	0.1	15:00	0.1	22:00	0	96.9
2/01/2016	0.1	0.0	0.2	16:00	0.1	21:00	0	96.9
3/01/2016	0.1	0.1	0.2	00:00	0.1	23:00	0	96.9
4/01/2016	0.2	0.1	0.2	18:00	0.2	23:00	0	96.9
5/01/2016	0.1	0.1	0.2	20:00	0.2	00:00	0	96.9
6/01/2016	0.1	0.1	0.2	20:00	0.2	23:00	0	96.9
7/01/2016	0.1	0.0	0.2	05:00	0.2	00:00	0	96.9
8/01/2016	0.0	0.0	0.1	16:00	0.1	23:00	0	96.9
9/01/2016	0.1	0.0	0.2	17:00	0.1	19:00	0	96.9
10/01/2016	0.1	0.1	0.2	06:00	0.1	18:00	0	96.9
11/01/2016	0.1	0.1	0.2	06:00	0.2	23:00	0	96.9
12/01/2016	0.1	0.1	0.1	14:00	0.1	00:00	0	96.9
13/01/2016	0.1	0.0	0.1	23:00	0.1	00:00	0	96.9
14/01/2016	0.2	0.1	0.2	17:00	0.2	23:00	0	86.8
15/01/2016	0.1	0.0	0.2	00:00	0.2	00:00	0	96.9
16/01/2016	0.1	0.0	0.2	07:00	0.1	13:00	0	96.9
17/01/2016	0.0	0.0	0.1	14:00	0.1	17:00	0	96.9
18/01/2016	0.1	0.0	0.1	23:00	0.1	23:00	0	96.9
19/01/2016	0.1	0.1	0.2	00:00	0.1	06:00	0	96.9
20/01/2016	0.1	0.0	0.2	06:00	0.1	07:00	0	96.9
21/01/2016	0.1	0.0	0.1	17:00	0.1	19:00	0	96.9
22/01/2016	0.1	0.0	0.1	06:00	0.1	23:00	0	96.9
23/01/2016	0.1	0.1	0.2	23:00	0.2	23:00	0	96.9
24/01/2016	0.1	0.1	0.2	00:00	0.2	01:00	0	96.9
25/01/2016	0.2	0.1	0.2	23:00	0.2	23:00	0	96.9
26/01/2016	0.2	0.1	0.3	06:00	0.2	09:00	0	96.9
27/01/2016	0.1	0.1	0.2	06:00	0.2	00:00	0	96.9
28/01/2016	0.2	0.1	0.3	22:00	0.2	23:00	0	96.9
29/01/2016	0.2	0.1	0.2	07:00	0.2	00:00	0	96.9
30/01/2016	0.2	0.1	0.2	14:00	0.2	19:00	0	96.9
31/01/2016	0.1	0.1	0.2	14:00	0.2	18:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

Table 11 Station 2 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 2 KSHS Ambient AQMS Particulate PM _{2.5} Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	5.2	1.9	12.9	08:00	0	100.0
2/01/2016	6.3	2.1	16.8	22:00	0	100.0
3/01/2016	10.6	4.7	17.7	18:00	0	83.3
¹ 4/01/2016	-	0.5	3.6	08:00	0	41.7
¹ 5/01/2016	-	0.4	2.8	10:00	0	58.3
6/01/2016	3.2	0.4	16.8	06:00	0	100.0
7/01/2016	0.4	0.4	0.4	18:00	0	100.0
8/01/2016	4.6	0.4	19.7	20:00	0	100.0
9/01/2016	9.0	4.1	17.7	16:00	0	100.0
10/01/2016	5.7	0.4	21.1	01:00	0	83.3
11/01/2016	2.2	0.4	10.0	04:00	0	100.0
12/01/2016	4.3	0.5	9.9	00:00	0	75.0
¹ 13/01/2016	-	0.4	9.1	05:00	0	66.7
14/01/2016	2.2	0.4	5.5	19:00	0	91.7
15/01/2016	4.1	1.3	12.7	08:00	0	100.0
16/01/2016	3.4	2.0	6.4	10:00	0	100.0
17/01/2016	4.3	1.8	7.5	04:00	0	100.0
18/01/2016	3.8	1.3	8.8	04:00	0	100.0
19/01/2016	4.9	2.1	10.0	00:00	0	100.0
20/01/2016	3.1	0.8	7.3	02:00	0	100.0
21/01/2016	3.7	1.4	6.1	04:00	0	100.0
22/01/2016	4.3	1.4	8.0	06:00	0	100.0
23/01/2016	8.5	3.0	24.2	17:00	0	100.0
24/01/2016	9.4	4.7	16.7	00:00	0	100.0
25/01/2016	14.1	7.6	20.2	20:00	0	100.0
26/01/2016	17.1	8.9	33.6	04:00	0	100.0
27/01/2016	5.1	2.3	13.6	08:00	0	100.0
28/01/2016	8.4	1.2	21.9	22:00	0	100.0
¹ 29/01/2016	-	4.0	28.3	17:00	0	66.7
¹ 30/01/2016	-	4.3	8.2	14:00	0	16.7
¹ 31/01/2016	-	0.5	5.7	12:00	0	50.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 12 Station 2 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 2 KSHS Ambient AQMS Particulate PM ₁₀ Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	17.9	9.9	25.4	20:00	0	100.0
2/01/2016	19.2	12.1	29.6	16:00	0	100.0
3/01/2016	18.1	12.4	27.4	20:00	0	100.0
4/01/2016	8.8	3.5	12.7	00:00	0	100.0
5/01/2016	4.6	2.2	10.7	22:00	0	100.0
6/01/2016	6.1	1.6	34.2	23:00	0	100.0
7/01/2016	15.6	4.7	40.8	00:00	0	100.0
8/01/2016	15.8	9.6	23.3	20:00	0	100.0
9/01/2016	20.2	15.3	28.7	16:00	0	100.0
10/01/2016	15.6	6.0	23.3	02:00	0	100.0
11/01/2016	13.3	10.6	15.4	18:00	0	100.0
12/01/2016	8.9	3.1	19.3	14:00	0	100.0
13/01/2016	8.8	3.7	15.3	14:00	0	100.0
14/01/2016	7.8	3.0	12.8	00:00	0	91.7
15/01/2016	11.9	6.1	24.3	18:00	0	100.0
16/01/2016	10.3	2.2	20.1	20:00	0	100.0
17/01/2016	12.5	9.3	15.3	08:00	0	100.0
18/01/2016	10.8	5.7	20.1	08:00	0	100.0
19/01/2016	10.5	6.2	18.3	06:00	0	100.0
20/01/2016	7.1	3.2	12.6	06:00	0	100.0
21/01/2016	9.3	3.8	16.9	08:00	0	100.0
22/01/2016	11.1	3.3	20.0	22:00	0	100.0
23/01/2016	17.7	7.7	42.5	20:00	0	100.0
24/01/2016	18.7	10.6	32.8	00:00	0	100.0
25/01/2016	32.6	16.4	57.5	18:00	0	100.0
26/01/2016	25.3	14.2	42.4	04:00	0	100.0
27/01/2016	11.6	6.8	20.3	12:00	0	100.0
28/01/2016	21.1	7.3	43.7	20:00	0	100.0
29/01/2016	28.2	10.6	55.3	16:00	0	100.0
30/01/2016	16.7	4.5	57.6	14:00	0	100.0
31/01/2016	6.1	2.6	11.9	23:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 13 Station 2 PM₁₀ Monthly Summary

Station 3 (Lewis Street)

Summary

Station 3 Lewis St Ambient AQMS Summary January 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.016	30/01/2016 04:00	87.3
CO	ppm	8.0	8 Hours	0.3	26/01/2016 08:00	87.0
PM _{2.5}	µg/m ³	25	24 Hours	17.7	25/01/2016	65.7
PM ₁₀	µg/m ³	50	24 Hours	26.9	25/01/2016	55.6

Table 14 Station 3 Monthly Summary

Graphical Representations



Figure 9 Station 3 Nitrogen Dioxide 1hr averages



Figure 10 Station 3 Carbon Monoxide 8hr rolling averages



Figure 11 Station 3 PM2.5 24hr averages



Figure 12 Station 3 PM10 24hr averages

Nitrogen Dioxide Summary

Station 3 Lewis St Ambient AQMS Nitrogen Dioxide Summary January 2016						
Date	24hr Avg (ppm)	Min (ppm)	1 hr Aves		Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
			Max (ppm)	Time of Max		
1/01/2016	0.005	0.003	0.011	02:00	0	97.2
2/01/2016	0.005	0.003	0.008	03:00	0	97.2
3/01/2016	0.005	0.003	0.006	20:00	0	97.2
4/01/2016	0.007	0.004	0.012	19:00	0	97.2
5/01/2016	0.010	0.005	0.015	21:00	0	97.2
6/01/2016	0.005	0.003	0.012	20:00	0	97.2
7/01/2016	0.006	0.003	0.009	06:00	0	97.2
8/01/2016	0.006	0.003	0.011	22:00	0	97.2
9/01/2016	0.006	0.004	0.009	06:00	0	97.2
¹ 10/01/2016	-	0.007	0.007	00:00	0	4.2
¹ 11/01/2016	-	-	-	-	0	0.0
¹ 12/01/2016	-	-	-	-	0	0.0
13/01/2016	0.006	0.004	0.010	22:00	0	93.1
14/01/2016	0.005	0.003	0.010	06:00	0	81.9
15/01/2016	0.006	0.003	0.009	15:00	0	97.2
16/01/2016	0.005	0.003	0.008	08:00	0	97.2
17/01/2016	0.004	0.002	0.006	20:00	0	97.2
18/01/2016	0.008	0.003	0.016	22:00	0	97.2
19/01/2016	0.008	0.004	0.013	04:00	0	97.2
20/01/2016	0.006	0.003	0.013	06:00	0	97.2
21/01/2016	0.005	0.003	0.009	02:00	0	97.2
22/01/2016	0.004	0.003	0.007	06:00	0	97.2
23/01/2016	0.005	0.003	0.012	22:00	0	97.2
24/01/2016	0.006	0.004	0.010	00:00	0	97.2
25/01/2016	0.008	0.005	0.015	06:00	0	97.2
26/01/2016	0.005	0.003	0.008	22:00	0	97.2
27/01/2016	0.007	0.004	0.010	05:00	0	97.2
28/01/2016	0.006	0.004	0.011	07:00	0	97.2
29/01/2016	0.006	0.003	0.011	07:00	0	97.2
30/01/2016	0.006	0.003	0.016	04:00	0	97.2
31/01/2016	0.004	0.003	0.006	2:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due gas calibrator fault

Table 15 Station 3 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 3 Lewis St Ambient AQMS Carbon Monoxide Summary January 2016

Date	24 hr Avg (ppm)	1 hr Avgs		Time of Max	8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)		Max (ppm)	Time of Max		
1/01/2016	0.2	0.1	0.2	14:00	0.2	20:00	0	96.2
2/01/2016	0.1	0.1	0.2	16:00	0.2	00:00	0	96.9
3/01/2016	0.1	0.1	0.2	21:00	0.2	23:00	0	96.9
4/01/2016	0.2	0.1	0.2	19:00	0.2	23:00	0	96.9
5/01/2016	0.2	0.2	0.3	21:00	0.2	22:00	0	96.9
6/01/2016	0.2	0.1	0.2	20:00	0.2	00:00	0	96.9
7/01/2016	0.2	0.1	0.2	06:00	0.2	07:00	0	96.9
8/01/2016	0.1	0.1	0.2	22:00	0.2	00:00	0	96.9
9/01/2016	0.1	0.1	0.2	17:00	0.2	18:00	0	96.9
¹ 10/01/2016	-	0.1	0.1	00:00	0.1	00:00	0	3.8
¹ 11/01/2016	-	-	-	-	-	-	0	0.0
¹ 12/01/2016	-	-	-	-	-	-	0	0.0
13/01/2016	0.2	0.1	0.2	22:00	0.2	23:00	0	93.1
14/01/2016	0.2	0.1	0.2	06:00	0.2	22:00	0	81.6
15/01/2016	0.2	0.1	0.2	06:00	0.2	17:00	0	96.9
16/01/2016	0.1	0.1	0.2	09:00	0.1	12:00	0	96.9
17/01/2016	0.1	0.1	0.1	20:00	0.1	23:00	0	96.9
18/01/2016	0.1	0.1	0.2	23:00	0.1	23:00	0	96.9
19/01/2016	0.2	0.1	0.2	00:00	0.2	07:00	0	96.9
20/01/2016	0.2	0.1	0.3	06:00	0.2	10:00	0	96.9
21/01/2016	0.1	0.1	0.1	04:00	0.1	00:00	0	96.9
22/01/2016	0.2	0.1	0.2	14:00	0.2	19:00	0	96.9
23/01/2016	0.2	0.1	0.3	23:00	0.2	23:00	0	95.8
24/01/2016	0.2	0.1	0.2	00:00	0.2	02:00	0	96.9
25/01/2016	0.2	0.2	0.3	22:00	0.3	23:00	0	96.9
26/01/2016	0.2	0.2	0.3	06:00	0.3	08:00	0	96.9
27/01/2016	0.1	0.1	0.2	06:00	0.2	00:00	0	96.9
28/01/2016	0.2	0.1	0.3	22:00	0.2	23:00	0	97.2
29/01/2016	0.2	0.2	0.3	07:00	0.3	09:00	0	96.9
30/01/2016	0.2	0.2	0.3	13:00	0.2	06:00	0	96.9
31/01/2016	0.2	0.2	0.2	12:00	0.2	0:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to gas calibrator

Table 16 Station 3 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 3 Lewis St Ambient AQMS Particulate PM2.5 Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	4.0	-1.0	10.7	17:00	0	91.7
2/01/2016	3.2	0.2	9.0	14:00	0	100.0
3/01/2016	3.0	-1.0	9.5	02:00	0	95.8
¹ 4/01/2016	-	-1.0	1.9	08:00	0	25.0
¹ 5/01/2016	-	-0.9	1.9	19:00	0	37.5
¹ 6/01/2016	-	-1.0	0.0	00:00	0	33.3
7/01/2016	2.0	-1.0	6.0	23:00	0	75.0
8/01/2016	4.3	0.0	10.9	17:00	0	100.0
9/01/2016	3.9	1.1	6.9	02:00	0	100.0
10/01/2016	2.6	-0.7	5.0	13:00	0	83.3
11/01/2016	1.8	-1.0	6.8	12:00	0	79.2
¹ 12/01/2016	-	-1.0	1.8	19:00	0	41.7
¹ 13/01/2016	-	-1.0	4.9	15:00	0	54.2
¹ 14/01/2016	-	-1.0	1.0	07:00	0	29.2
¹ 15/01/2016	-	-1.0	5.0	10:00	0	66.7
¹ 16/01/2016	-	-1.0	1.0	18:00	0	25.0
¹ 17/01/2016	-	-1.0	0.0	08:00	0	8.3
¹ 18/01/2016	-	-1.0	0.9	20:00	0	41.7
¹ 19/01/2016	-	-1.0	0.0	16:00	0	12.5
¹ 20/01/2016	-	0.0	0.0	18:00	0	4.2
¹ 21/01/2016	-	-	-	-	0	0.0
¹ 22/01/2016	-	4.1	8.9	20:00	0	33.3
23/01/2016	7.5	3.4	15.3	21:00	0	100.0
24/01/2016	10.7	5.3	15.2	20:00	0	100.0
25/01/2016	17.7	6.3	22.2	23:00	0	100.0
26/01/2016	16.9	7.3	24.7	07:00	0	100.0
27/01/2016	7.8	3.3	11.9	13:00	0	100.0
28/01/2016	8.8	5.0	15.5	21:00	0	100.0
29/01/2016	11.2	6.6	16.7	17:00	0	100.0
30/01/2016	9.7	4.3	19.2	17:00	0	100.0
31/01/2016	5.1	-1.0	10.8	14:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 17 Station 3 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 3 Lewis St Ambient AQMS Particulate PM10 Summary January 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 50.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)			
¹ 1/01/2016	-	-	-	-	0	0.0
¹ 2/01/2016	-	-	-	-	0	0.0
¹ 3/01/2016	-	-	-	-	0	0.0
¹ 4/01/2016	-	-	-	-	0	0.0
¹ 5/01/2016	-	-	-	-	0	0.0
¹ 6/01/2016	-	-	-	-	0	0.0
¹ 7/01/2016	-	-	-	-	0	0.0
¹ 8/01/2016	-	-	-	-	0	0.0
¹ 9/01/2016	-	-	-	-	0	0.0
¹ 10/01/2016	-	-	-	-	0	0.0
¹ 11/01/2016	-	-	-	-	0	0.0
¹ 12/01/2016	-	-	-	-	0	0.0
¹ 13/01/2016	-	-	-	-	0	0.0
¹ 14/01/2016	-	5.8	10.6	20:00	0	45.8
15/01/2016	18.2	7.7	36.1	15:00	0	100.0
16/01/2016	13.9	3.4	25.2	16:00	0	100.0
17/01/2016	14.4	9.6	17.7	08:00	0	100.0
18/01/2016	13.4	7.7	19.5	13:00	0	100.0
19/01/2016	11.9	7.7	17.4	07:00	0	100.0
20/01/2016	10.0	6.4	16.7	06:00	0	100.0
21/01/2016	11.5	7.9	18.5	12:00	0	100.0
22/01/2016	13.9	7.4	23.4	12:00	0	100.0
23/01/2016	16.6	7.9	26.2	18:00	0	100.0
24/01/2016	18.2	8.3	29.0	16:00	0	100.0
25/01/2016	26.9	17.3	36.6	07:00	0	100.0
26/01/2016	21.5	10.1	34.2	02:00	0	100.0
27/01/2016	13.5	8.2	22.3	14:00	0	100.0
28/01/2016	18.0	9.2	55.3	08:00	0	100.0
29/01/2016	12.9	2.4	26.5	12:00	0	87.5
30/01/2016	10.6	3.0	17.5	14:00	0	91.7
31/01/2016	8.4	3.3	10.6	22:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 18 Station 3 PM₁₀ Monthly Summary

Station 4 (Airportlink Operation Centre)

Summary

Station 4 Airportlink Operation Centre Ambient AQMS Summary January 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.022	25/01/2016 08:00	96.2
CO	ppm	8.0	8 Hours	0.5	26/01/2016 22:00	95.8
PM _{2.5}	µg/m ³	25	24 Hours	12.1	26/01/2016	76.2
PM ₁₀	µg/m ³	50	24 Hours	19.9	01/01/2016	71.5

Table 19 Station 4 Monthly Summary

Graphical Representations



Figure 13 Station 4 Nitrogen Dioxide 1hr averages



Figure 14 Station 4 Carbon Monoxide 8hr rolling averages



Figure 15 Station 4 PM2.5 24hr averages



Figure 16 Station 4 PM10 24hr averages

Nitrogen Dioxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Nitrogen Dioxide Summary January 2016						
Date	24hr Avg (ppm)	1 hr Avgs		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/01/2016	0.004	0.002	0.008	19:00	0	97.2
2/01/2016	0.005	0.003	0.009	21:00	0	97.2
3/01/2016	0.006	0.003	0.009	16:00	0	97.2
4/01/2016	0.009	0.004	0.014	11:00	0	97.2
5/01/2016	0.011	0.004	0.017	07:00	0	97.2
6/01/2016	0.005	0.003	0.013	21:00	0	97.2
7/01/2016	0.008	0.004	0.014	08:00	0	97.2
8/01/2016	0.009	0.002	0.014	21:00	0	97.2
9/01/2016	0.006	0.004	0.009	11:00	0	97.2
10/01/2016	0.006	0.004	0.007	06:00	0	97.2
¹ 11/01/2016	-	0.005	0.009	09:00	0	68.1
12/01/2016	0.004	0.003	0.007	11:00	0	97.2
13/01/2016	0.007	0.004	0.009	06:00	0	97.2
14/01/2016	0.006	0.003	0.008	02:00	0	94.8
15/01/2016	0.007	0.003	0.014	17:00	0	97.2
16/01/2016	0.005	0.002	0.009	10:00	0	97.2
17/01/2016	0.006	0.003	0.008	03:00	0	97.2
18/01/2016	0.008	0.003	0.015	23:00	0	97.2
19/01/2016	0.008	0.004	0.015	00:00	0	97.2
20/01/2016	0.007	0.003	0.013	22:00	0	97.2
21/01/2016	0.006	0.003	0.009	00:00	0	97.2
22/01/2016	0.005	0.004	0.007	03:00	0	97.2
23/01/2016	0.006	0.004	0.012	22:00	0	97.2
24/01/2016	0.008	0.005	0.014	00:00	0	97.2
25/01/2016	0.009	0.004	0.022	08:00	0	97.2
26/01/2016	0.006	0.002	0.010	18:00	0	97.2
27/01/2016	0.007	0.003	0.012	08:00	0	97.2
28/01/2016	0.007	0.004	0.011	10:00	0	97.2
29/01/2016	0.008	0.003	0.012	15:00	0	97.2
30/01/2016	0.007	0.005	0.013	18:00	0	97.2
31/01/2016	0.005	0.003	0.008	18:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 20 Station 4 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Carbon Monoxide Summary January 2016

Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/01/2016	0.2	0.2	0.3	19:00	0.2	23:00	0	96.5
2/01/2016	0.2	0.2	0.3	22:00	0.3	23:00	0	96.5
3/01/2016	0.2	0.2	0.3	16:00	0.3	18:00	0	96.5
4/01/2016	0.3	0.3	0.4	13:00	0.4	20:00	0	96.5
5/01/2016	0.4	0.3	0.5	16:00	0.5	16:00	0	96.5
6/01/2016	0.3	0.3	0.5	21:00	0.4	00:00	0	96.9
7/01/2016	0.3	0.3	0.4	20:00	0.4	03:00	0	96.9
8/01/2016	0.3	0.2	0.4	19:00	0.3	00:00	0	96.9
9/01/2016	0.2	0.2	0.3	21:00	0.3	01:00	0	96.9
10/01/2016	0.3	0.3	0.3	02:00	0.3	19:00	0	96.9
¹ 11/01/2016	-	0.2	0.4	09:00	0.3	14:00	0	67.7
12/01/2016	0.3	0.2	0.3	11:00	0.3	18:00	0	96.9
13/01/2016	0.3	0.3	0.4	06:00	0.3	08:00	0	96.9
14/01/2016	0.3	0.3	0.4	06:00	0.3	07:00	0	94.4
15/01/2016	0.3	0.3	0.4	17:00	0.4	18:00	0	96.9
16/01/2016	0.2	0.2	0.3	10:00	0.3	00:00	0	96.9
17/01/2016	0.2	0.2	0.2	14:00	0.2	16:00	0	96.9
18/01/2016	0.2	0.2	0.3	21:00	0.3	23:00	0	96.9
19/01/2016	0.3	0.2	0.3	06:00	0.3	01:00	0	96.9
20/01/2016	0.2	0.2	0.4	06:00	0.3	08:00	0	96.9
21/01/2016	0.3	0.2	0.3	22:00	0.3	22:00	0	96.9
22/01/2016	0.3	0.2	0.3	11:00	0.3	17:00	0	96.9
23/01/2016	0.3	0.3	0.4	12:00	0.3	13:00	0	96.2
24/01/2016	0.4	0.3	0.4	09:00	0.4	16:00	0	96.9
25/01/2016	0.4	0.3	0.5	07:00	0.4	22:00	0	96.9
26/01/2016	0.4	0.4	0.5	18:00	0.5	22:00	0	96.9
27/01/2016	0.3	0.3	0.4	07:00	0.4	00:00	0	96.9
28/01/2016	0.3	0.3	0.4	21:00	0.4	22:00	0	96.9
29/01/2016	0.4	0.3	0.5	07:00	0.4	08:00	0	96.9
30/01/2016	0.4	0.3	0.4	18:00	0.4	19:00	0	96.9
31/01/2016	0.3	0.3	0.4	2:00	0.4	0:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 21 Station 4 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM_{2.5} Summary January 2016

Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	2.3	-0.8	6.7	22:00	0	91.7
2/01/2016	1.6	-0.7	4.7	22:00	0	95.8
3/01/2016	1.6	-1.0	6.0	01:00	0	75.0
¹ 4/01/2016	-	-1.0	4.7	01:00	0	58.3
¹ 5/01/2016	-	-0.9	3.0	13:00	0	41.7
¹ 6/01/2016	-	-1.0	4.0	16:00	0	45.8
¹ 7/01/2016	-	-1.0	2.6	13:00	0	41.7
8/01/2016	3.6	-1.0	10.4	23:00	0	100.0
9/01/2016	4.3	1.1	15.1	09:00	0	100.0
10/01/2016	5.4	1.0	15.0	02:00	0	100.0
11/01/2016	4.5	0.0	9.9	07:00	0	75.0
¹ 12/01/2016	-	-1.0	3.9	06:00	0	62.5
13/01/2016	1.9	-1.0	8.7	23:00	0	83.3
¹ 14/01/2016	-	-1.0	8.6	08:00	0	66.7
¹ 15/01/2016	-	-1.0	3.9	17:00	0	54.2
16/01/2016	1.2	-1.0	9.6	14:00	0	87.5
¹ 17/01/2016	-	-1.0	7.9	10:00	0	58.3
¹ 18/01/2016	-	-1.0	17.0	08:00	0	54.2
¹ 19/01/2016	-	-1.0	6.6	08:00	0	54.2
¹ 20/01/2016	-	-1.0	3.0	00:00	0	37.5
¹ 21/01/2016	-	-1.0	3.6	23:00	0	54.2
22/01/2016	3.5	-1.0	9.7	13:00	0	95.8
23/01/2016	5.1	-0.7	10.7	23:00	0	100.0
24/01/2016	5.1	0.2	7.9	06:00	0	100.0
25/01/2016	11.3	3.3	22.3	07:00	0	100.0
26/01/2016	12.1	4.3	23.6	02:00	0	100.0
27/01/2016	3.1	-0.8	8.8	08:00	0	95.8
28/01/2016	4.1	1.1	7.0	17:00	0	100.0
29/01/2016	4.6	1.1	7.7	04:00	0	100.0
30/01/2016	3.3	-1.0	7.6	07:00	0	95.8
¹ 31/01/2016	-	-1.0	0.9	12:00	0	37.5

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to intermittent instrument fault

Table 22 Station 4 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM ₁₀ Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	19.9	13.3	30.4	13:00	0	100.0
2/01/2016	19.5	11.8	28.6	14:00	0	100.0
3/01/2016	15.1	3.5	24.1	00:00	0	100.0
4/01/2016	9.3	2.9	15.6	11:00	0	95.8
¹ 5/01/2016	-	5.3	19.1	20:00	0	58.3
6/01/2016	9.6	2.3	35.4	20:00	0	70.8
7/01/2016	16.1	6.4	23.6	02:00	0	70.8
8/01/2016	19.2	10.9	30.9	15:00	0	100.0
9/01/2016	19.6	13.8	41.5	06:00	0	100.0
10/01/2016	15.0	9.9	27.8	11:00	0	100.0
11/01/2016	12.1	6.6	18.4	16:00	0	100.0
12/01/2016	8.7	4.2	20.3	11:00	0	100.0
13/01/2016	10.7	6.9	23.8	13:00	0	95.8
14/01/2016	8.8	3.8	15.5	18:00	0	95.8
15/01/2016	14.2	5.4	34.5	15:00	0	100.0
16/01/2016	11.9	1.6	20.8	15:00	0	100.0
17/01/2016	13.3	7.3	18.1	19:00	0	100.0
18/01/2016	12.9	6.5	19.5	16:00	0	100.0
19/01/2016	11.5	6.0	23.7	12:00	0	100.0
20/01/2016	9.1	2.4	15.9	06:00	0	100.0
21/01/2016	10.5	6.5	19.3	10:00	0	100.0
22/01/2016	12.5	3.5	23.0	11:00	0	100.0
23/01/2016	15.0	2.3	27.7	18:00	0	79.2
¹ 24/01/2016	-	5.3	24.4	16:00	0	50.0
¹ 25/01/2016	-	-	-	-	0	0.0
¹ 26/01/2016	-	-	-	-	0	0.0
¹ 27/01/2016	-	-	-	-	0	0.0
¹ 28/01/2016	-	-	-	-	0	0.0
¹ 29/01/2016	-	-	-	-	0	0.0
¹ 30/01/2016	-	-	-	-	0	0.0
¹ 31/01/2016	-	-	-	-	0	0.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to instrument fault

Table 23 Station 4 PM₁₀ Monthly Summary

Station 5 (Cartwright Street)

Summary

Station 5 Cartwright St Ambient AQMS Summary January 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.016	05/01/2016 20:00	94.0
CO	ppm	8.0	8 Hours	0.5	26/01/2016 01:00	93.2
PM _{2.5}	µg/m ³	25	24 Hours	19.3	25/01/2016	92.2
PM ₁₀	µg/m ³	50	24 Hours	30.8	25/01/2016	97.6

Table 24 Station 5 Monthly Summary

Graphical Representations



Figure 17 Station 5 Dioxide 1hr averages



Figure 18 Station 5 Carbon Monoxide 8hr rolling averages



Figure 19 Station 5 PM2.5 24hr averages



Figure 20 Station 5 PM10 24hr averages

Nitrogen Dioxide Summary

Station 5 Cartwright St Ambient AQMS Nitrogen Dioxide Summary January 2016						
Date	24hr Avg (ppm)	1 hr Aves		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/01/2016	0.003	0.001	0.012	02:00	0	97.2
2/01/2016	0.003	0.001	0.011	03:00	0	97.2
3/01/2016	0.003	0.002	0.005	08:00	0	97.2
4/01/2016	0.007	0.002	0.011	08:00	0	97.2
5/01/2016	0.009	0.003	0.016	20:00	0	97.2
6/01/2016	0.004	0.002	0.010	19:00	0	97.2
7/01/2016	0.005	0.002	0.013	05:00	0	97.2
8/01/2016	0.005	0.002	0.008	22:00	0	97.2
9/01/2016	0.004	0.002	0.008	07:00	0	97.2
¹ 10/01/2016	-	0.002	0.002	00:00	0	4.2
11/01/2016	0.006	0.003	0.013	04:00	0	93.1
12/01/2016	0.004	0.002	0.007	05:00	0	97.2
13/01/2016	0.005	0.003	0.009	23:00	0	97.2
14/01/2016	0.004	0.002	0.009	00:00	0	94.1
15/01/2016	0.005	0.001	0.009	06:00	0	97.2
16/01/2016	0.004	0.001	0.010	07:00	0	97.2
17/01/2016	0.002	0.001	0.005	05:00	0	97.2
18/01/2016	0.006	0.002	0.012	23:00	0	97.2
19/01/2016	0.007	0.002	0.014	05:00	0	97.2
20/01/2016	0.005	0.002	0.014	06:00	0	97.2
21/01/2016	0.005	0.002	0.012	03:00	0	97.2
22/01/2016	0.004	0.001	0.008	05:00	0	97.2
23/01/2016	0.005	0.002	0.013	23:00	0	97.2
24/01/2016	0.004	0.002	0.012	00:00	0	97.2
25/01/2016	0.005	0.002	0.013	08:00	0	97.2
26/01/2016	0.003	0.001	0.006	06:00	0	97.2
27/01/2016	0.006	0.002	0.014	14:00	0	97.2
28/01/2016	0.006	0.003	0.010	07:00	0	97.2
29/01/2016	0.007	0.003	0.012	04:00	0	97.2
30/01/2016	0.006	0.002	0.015	03:00	0	97.2
31/01/2016	0.003	0.001	0.004	20:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to air conditioner failure

Table 25 Station 5 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 5 Cartwright St Ambient AQMS Carbon Monoxide Summary January 2016

Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/01/2016	0.2	0.1	0.3	21:00	0.2	00:00	0	94.8
2/01/2016	0.2	0.1	0.3	23:00	0.3	23:00	0	96.2
3/01/2016	0.2	0.1	0.3	23:00	0.3	01:00	0	96.5
4/01/2016	0.3	0.1	0.4	19:00	0.3	23:00	0	96.5
5/01/2016	0.3	0.2	0.4	20:00	0.3	00:00	0	96.5
6/01/2016	0.2	0.0	0.4	23:00	0.3	23:00	0	96.2
7/01/2016	0.2	0.1	0.4	05:00	0.4	02:00	0	96.2
8/01/2016	0.1	0.0	0.2	23:00	0.3	01:00	0	96.5
9/01/2016	0.2	0.1	0.4	23:00	0.3	23:00	0	96.2
¹ 10/01/2016	-	0.2	0.2	00:00	0.3	01:00	0	3.5
11/01/2016	0.2	0.1	0.4	07:00	0.3	07:00	0	92.7
12/01/2016	0.3	0.1	0.4	23:00	0.3	23:00	0	96.2
13/01/2016	0.2	0.1	0.3	19:00	0.3	01:00	0	95.8
14/01/2016	0.2	0.1	0.4	23:00	0.3	23:00	0	93.1
15/01/2016	0.2	0.1	0.4	06:00	0.3	01:00	0	95.8
16/01/2016	0.2	0.1	0.3	09:00	0.2	12:00	0	96.5
17/01/2016	0.1	0.0	0.2	23:00	0.2	00:00	0	96.5
18/01/2016	0.2	0.1	0.3	23:00	0.2	09:00	0	96.5
19/01/2016	0.2	0.1	0.4	22:00	0.3	23:00	0	96.2
20/01/2016	0.2	0.0	0.3	06:00	0.3	01:00	0	95.8
21/01/2016	0.2	0.1	0.4	22:00	0.3	23:00	0	96.2
22/01/2016	0.2	0.1	0.3	06:00	0.3	01:00	0	96.5
23/01/2016	0.2	0.1	0.4	23:00	0.3	23:00	0	96.9
24/01/2016	0.3	0.1	0.5	23:00	0.4	23:00	0	96.5
25/01/2016	0.4	0.2	0.5	23:00	0.5	23:00	0	96.5
26/01/2016	0.3	0.2	0.4	05:00	0.5	01:00	0	96.9
27/01/2016	0.2	0.1	0.3	06:00	0.3	00:00	0	96.9
28/01/2016	0.3	0.2	0.4	21:00	0.3	23:00	0	96.9
29/01/2016	0.2	0.1	0.4	07:00	0.3	02:00	0	96.9
30/01/2016	0.3	0.2	0.3	02:00	0.3	07:00	0	96.9
31/01/2016	0.2	0.0	0.3	2:00	0.3	1:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

¹ Loss of data due to air conditioner failure

Table 26 Station 5 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 5 Cartwright St Ambient AQMS Particulate PM2.5 Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	13.6	7.3	26.6	18:00	0	95.8
2/01/2016	11.5	1.8	23.0	16:00	0	91.7
3/01/2016	10.4	2.3	24.7	15:00	0	91.7
4/01/2016	11.4	1.1	20.0	09:00	0	91.7
5/01/2016	12.6	2.8	28.1	01:00	0	95.8
6/01/2016	9.0	0.3	17.9	05:00	0	87.5
7/01/2016	9.7	-0.7	26.5	23:00	0	100.0
8/01/2016	11.7	1.2	25.0	12:00	0	87.5
9/01/2016	14.2	2.8	25.0	13:00	0	91.7
10/01/2016	11.5	0.0	24.5	17:00	0	95.8
11/01/2016	10.2	3.4	19.0	02:00	0	79.2
12/01/2016	11.0	0.7	25.3	19:00	0	100.0
13/01/2016	10.5	1.4	28.9	17:00	0	91.7
14/01/2016	11.8	0.6	28.0	19:00	0	83.3
15/01/2016	10.5	2.7	22.3	08:00	0	95.8
16/01/2016	12.6	3.1	24.6	17:00	0	95.8
17/01/2016	10.8	3.4	23.5	19:00	0	91.7
18/01/2016	12.3	5.0	23.8	19:00	0	87.5
19/01/2016	9.7	4.6	22.0	18:00	0	87.5
20/01/2016	9.3	2.5	16.0	15:00	0	91.7
21/01/2016	10.3	0.6	21.9	03:00	0	100.0
22/01/2016	8.5	2.0	19.0	10:00	0	95.8
23/01/2016	12.4	4.0	24.6	23:00	0	91.7
24/01/2016	13.1	4.1	27.1	16:00	0	87.5
25/01/2016	19.3	7.3	29.0	18:00	0	100.0
26/01/2016	17.2	8.8	28.2	14:00	0	87.5
27/01/2016	14.0	5.4	26.3	11:00	0	95.8
28/01/2016	16.8	3.6	28.3	21:00	0	87.5
29/01/2016	14.2	3.3	42.6	16:00	0	91.7
30/01/2016	11.8	1.5	25.5	17:00	0	95.8
31/01/2016	11.4	-0.8	24.0	5:00	0	91.7

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 27 Station 5 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 5 Cartwright St Ambient AQMS Particulate PM10 Summary January 2016						
Date	24 hr Avg ($\mu\text{g}/\text{m}^3$)	1 hr Avgs		Time of Max	No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)			
1/01/2016	25.0	13.7	37.5	16:00	0	100.0
2/01/2016	25.1	15.1	33.3	14:00	0	95.8
3/01/2016	17.8	8.0	30.8	00:00	0	91.7
4/01/2016	9.4	1.4	18.2	15:00	0	100.0
5/01/2016	10.3	3.2	24.1	16:00	0	100.0
6/01/2016	10.5	0.3	18.4	23:00	0	95.8
7/01/2016	18.1	7.1	33.8	23:00	0	100.0
8/01/2016	23.1	13.4	35.7	14:00	0	95.8
9/01/2016	22.1	13.0	29.4	13:00	0	100.0
10/01/2016	27.2	8.3	209.3	07:00	0	100.0
11/01/2016	15.9	4.0	30.7	08:00	0	91.7
12/01/2016	17.7	4.3	47.5	13:00	0	100.0
13/01/2016	17.9	7.9	43.4	15:00	0	100.0
14/01/2016	15.8	4.6	34.5	11:00	0	95.8
15/01/2016	16.2	6.1	38.5	15:00	0	100.0
16/01/2016	16.6	6.0	33.5	18:00	0	100.0
17/01/2016	15.6	10.1	22.1	11:00	0	100.0
18/01/2016	16.8	6.8	30.2	15:00	0	100.0
19/01/2016	17.3	6.3	37.0	16:00	0	91.7
20/01/2016	16.1	3.4	41.4	16:00	0	95.8
21/01/2016	18.6	7.0	48.4	13:00	0	100.0
22/01/2016	21.2	6.5	63.5	13:00	0	91.7
23/01/2016	26.4	14.5	39.5	16:00	0	100.0
24/01/2016	21.2	8.2	32.2	16:00	0	100.0
25/01/2016	30.8	21.1	37.5	21:00	0	100.0
26/01/2016	25.1	11.0	38.0	04:00	0	87.5
27/01/2016	20.1	13.4	35.0	15:00	0	100.0
28/01/2016	27.7	11.5	46.5	14:00	0	100.0
29/01/2016	26.2	3.7	79.6	14:00	0	95.8
30/01/2016	18.6	4.2	48.6	04:00	0	100.0
31/01/2016	15.7	3.3	26.0	14:00	0	95.8

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.
 There will be no daily results if there is less than 75% valid data for that day

Table 28 Station 5 PM₁₀ Monthly Summary

TSP High Volume Air Sampler Results

Total Suspended Particulate High Volume Air Sampler results are presented in Table 29 below. The HVAS are run on a one in six day cycle.

The Coordinator General's criterion of 90 $\mu\text{g}/\text{m}^3$ was not exceeded during the reporting period at any of the five sites.

TSP Results January 2016					
Sample Date	Station 1 AHS ($\mu\text{g}/\text{m}^3$)	Station 2 KSHS ($\mu\text{g}/\text{m}^3$)	Station 3 LS ($\mu\text{g}/\text{m}^3$)	Station 4 ALOC ($\mu\text{g}/\text{m}^3$)	Station 5 BS ($\mu\text{g}/\text{m}^3$)
01/01/2016	36	32	37	35	33
07/01/2016	30	24	28	27	26
13/01/2016	22	21	21	23	33
19/01/2016	28	27	25	28	30
25/01/2016	44	42	42	42	41
31/01/2016	16	15	14	16	17
Monthly Average	29.3	26.8	27.8	28.5	30.0

Table 29 TSP High Volume Air Sampler Results

Validation Tables

The following tables outline any data removed during the data validation process, or automatically invalidated by the data acquisition system.

Station 1 Aviation High School

Station 1 Aviation High School Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/01/2016 01:05:00	30/01/2016 15:30:00	PM _{2.5}	Intermittent instrument faults – error code logged	11/02/2016	CP
3/01/2016 11:45:00	30/01/2016 01:50:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	11/02/2016	CP
13/01/2016 12:10:00	13/01/2016 18:15:00	NO, NO ₂ , NO _x	Instrument fault	11/02/2016	CP
14/01/2016 06:20:00	14/01/2016 09:00:00	NO, NO ₂ , NO _x	Instrument fault	11/02/2016	CP
14/01/2016 09:00:00	14/01/2016 09:05:00	CO, NO, NO ₂ , NO _x	Maintenance	11/02/2016	CP
14/01/2016 12:00:00	14/01/2016 12:15:00	All parameters	Communication error	11/02/2016	CP
21/01/2016 09:15:00	21/01/2016 10:05:00	All parameters	Maintenance	11/02/2016	CP
29/01/2016 16:50:00	31/01/2016 23:55:00	PM ₁₀	Instrument fault	11/02/2016	CP

Table 30 Station 1 Aviation High School AQMS Data Validation Table

Station 2 Kedron State High School

Station 2 Kedron State High School Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/01/2016 04:35:00	31/01/2016 22:05:00	NO, NO ₂ , NO _x	Intermittent communication errors	11/02/2016	CP
3/01/2016 19:45:00	4/01/2016 07:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
4/01/2016 17:45:00	5/01/2016 09:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
10/01/2016 01:45:00	10/01/2016 05:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
12/01/2016 05:45:00	12/01/2016 11:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
13/01/2016 05:45:00	13/01/2016 13:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
14/01/2016 12:55:00	14/01/2016 15:15:00	All parameters	Maintenance	11/02/2016	CP
29/01/2016 07:45:00	29/01/2016 09:40:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
29/01/2016 17:45:00	30/01/2016 13:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP
30/01/2016 17:45:00	31/01/2016 11:45:00	PM _{2.5}	Instrument fault, PM _{2.5} > PM ₁₀	11/02/2016	CP

Table 31 Station 2 Kedron High School AQMS Data Validation Table

Station 3 Lewis Street

Station 3 Lewis Street Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/01/2016	14/01/2016 09:00:00	PM ₁₀	Instrument fault	11/02/2016	CP
1/01/2016 02:05:00	29/01/2016 16:40:00	PM _{2.5}	Intermittent instrument faults – error code logged	11/02/2016	CP
1/01/2016 04:55:00	30/01/2016 16:25:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	11/02/2016	CP
10/01/2016 01:00:00	13/01/2016 01:35:00	CO, NO, NO ₂ , NO _x	Instrument fault	11/02/2016	CP
14/01/2016 09:05:00	14/01/2016 12:40:00	All channels	Maintenance	11/02/2016	CP
21/01/2016 07:40:00	22/01/2016 15:50:00	PM _{2.5}	Maintenance	11/02/2016	CP

Table 32 Station 3 Lewis St AQMS Data Validation Table

Station 4 Airport Link Operation Centre

Station 4 Airport Link Operation Centre Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/01/2016 01:05:00	31/01/2016 23:05:00	PM _{2.5}	Intermittent instrument faults – error code logged	11/02/2016	CP
1/01/2016 05:55:00	31/01/2016 23:50:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	11/02/2016	CP
11/01/2016 01:00:00	11/01/2016 08:35:00	CO, NO, NO ₂ , NO _x	Instrument fault	11/02/2016	CP
11/01/2016 08:25:00	11/01/2016 08:30:00	All parameters	Maintenance	11/02/2016	CP
14/01/2016 14:40:00	14/01/2016 15:10:00	All parameters	Scheduled maintenance	11/02/2016	CP
23/01/2016 19:40:00	24/01/2016 04:20:00	PM ₁₀	Instrument fault	11/02/2016	CP
24/01/2016 16:50:00	31/01/2016 23:55:00	PM ₁₀	Instrument fault	11/02/2016	CP

Table 33 Station 4 Airport Link Operation Centre AQMS Data Validation Table

Station 5 Cartwright St

Station 5 Cartwright Street Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/01/2016 01:05:00	31/01/2016 23:45:00	PM _{2.5} , PM ₁₀	Intermittent instrument faults – error code logged	11/02/2016	CP
2/01/2016 16:55:00	31/01/2016 10:50:00	PM _{2.5}	Intermittent unrealistic data less than -1.0 µg/m ³	11/02/2016	CP
2/01/2016 17:55:00	31/01/2016 17:50:00	PM _{2.5} , PM ₁₀	Intermittent instrument fault – PM _{2.5} > PM ₁₀	11/02/2016	CP
10/01/2016 01:00:00	11/01/2016 01:35:00	NO, NO ₂ , NO _x , CO	Instrument fault	11/02/2016	CP
14/01/2016 13:25:00	14/01/2016 14:05:00	All channels	Maintenance	11/02/2016	CP

Table 34 Station 5 Cartwright St AQMS Data Validation Table