



Adur Community Air Quality & Traffic Monitoring

Summary of Results

March/April/May 2017

AREA has been formed by community groups in Shoreham and Lancing including those which are members of Adur Floodwatch Group

The Shoreham Society, Shoreham Beach Residents Association, Beachcroft Place Residents Association, Friends of Lancing Manor Park, West Beach Residents Association, Barfield Park Residents, Lancing Manor SE Residents Network

Road Locations above Legal Limit

A27 Sussex Pad to Busticle & Halewick Lane Intersection

Diffusion Tube ID Number	Location Description	Analysis Level $\mu\text{g}/\text{m}^3$	% above Legal Limit
894481	400 yds sign, central reservation, opposite Withy Patch	54.2	35.5
894483	200 yds sign, central reservation, Opposite Honeyman's Hole	49.79	24.5
894445	Lampost in on A27 in line with 22 Old Shoreham Road, westbound carriageway approaching Manor Roundabout	47.24	18.1
894474	Lampost, south west corner Manor Roundabout	48.86	22.2
894453	Lampost north east corner Manor Roundabout	43.84	9.6
894446	Lampost in line with 73 upper Brighton Road, west bound carriageway approaching Busticle Lane Intersection	45.41	13.5

8 locations also identified in range of 30-40 $\mu\text{g}/\text{m}^3$ – most approaching the legal limit.

Shoreham High Street

876366	The Yacht club	53.32	33.3
876362	The Chip Shop	40.73	1.9
876360	The Bridge Public house Ropetackle Roundabout	47.72	19.3

6 locations also identified in range of 30-40 $\mu\text{g}/\text{m}^3$ – most approaching the legal limit.

Nitrogen Dioxide: Legal limit is hourly/annual mean of 40 $\mu\text{g}/\text{m}^3$

Levels are permitted to exceed 200 $\mu\text{g}/\text{m}^3$ 18 times per year. This monitoring method cannot identify or track this level of exceedance or its frequency.

To validate the above analysis figures, please refer to the official Gradko analysis documents following page 2: For A27 refer Gradko report L03579R Amended.

For Shoreham refer Gradko Report L02789R

**Shoreham High Street
Traffic count
April 2017**

Average per Hour

Cars	1050
Vans	136
HGVs	42
Buses	22
Motor Bikes	24

TOTAL TRAFFIC MOVEMENTS IN 12 HOURS

Cars	12667
Vans	1634
HGVs	516
Buses	270
Motor Bikes	296
TOTAL	15,383

This activity was carried out over the period of one week.



LABORATORY ANALYSIS REPORT

NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

REPORT NUMBER Amendment to report L03579R
BOOKING IN REFERENCE L03579
DESPATCH NOTE 36565
CUSTOMER D W Freeman
 5 Manor Way
 Lancing
 West Sussex
 BN15 0QU
DATE SAMPLES RECEIVED 16/05/2017
JOB REFERENCE DWF1

Location	Sample Number	Exposure Data			µg/m ³ *	ppb *	TOTAL µg NO ₂
		Date On	Date Off	Time (hr.)			
A27 311.01	894487	23/04/2017	14/05/2017	502.13	30.77	16.06	1.12
51 Bustice Lane	894486	23/04/2017	14/05/2017	502.15	18.37	9.59	0.67
Opp. 28 Bustice Lane	894485	23/04/2017	14/05/2017	502.15	19.24	10.04	0.70
1C Cherry Tree Cottage B/Lane	894484	23/04/2017	14/05/2017	502.15	25.85	13.49	0.94
Bus stop outside No. 28 west	894472	23/04/2017	14/05/2017	503.43	25.36	13.24	0.93
Telegraph pole No. 50 west	894471	23/04/2017	14/05/2017	503.35	23.17	12.10	0.85
Green lampost corner of Crabtree Lane west	894470	23/04/2017	14/05/2017	503.30	24.84	12.97	0.91
Green lampost crossroads North Farm Rd east	894469	23/04/2017	14/05/2017	503.23	25.02	13.06	0.92
Silver give way sign junction Grinstead Ave. west	894468	23/04/2017	14/05/2017	503.07	17.82	9.30	0.65
Concrete lampost south west corner Manor roundabout	894474	23/04/2017	14/05/2017	501.98	46.86	24.46	1.71
Adur bridge car park lampost east end	894476	29/04/2017	14/05/2017	359.35	24.75	12.92	0.65
Lampost on Saltings roundabout Shoreham exit	894478	29/04/2017	14/05/2017	358.95	19.79	10.33	0.52
Opp 272 Brighton Rd on lampost 82	894479	29/04/2017	14/05/2017	358.73	18.67	9.74	0.49
Setyrgs Roundabout sign west bound	894480	29/04/2017	14/05/2017	357.72	23.48	12.25	0.61
Centre reservation opp. Beachville Court	894481	29/04/2017	14/05/2017	357.67	21.25	11.09	0.55
Opp King's Road lampost 39	894482	29/04/2017	14/05/2017	357.68	27.56	14.38	0.72
Lampost SE corner Manor roundabout A27	894444	23/04/2017	14/05/2017	503.42	36.42	19.01	1.33
Lampost opposite 22 Old Shoreham Road	894445	23/04/2017	14/05/2017	503.43	47.24	24.65	1.73
Lampost west corner Manor Close doctor's surgery	894456	23/04/2017	14/05/2017	503.40	16.07	8.39	0.59
Cycle sign opposite 66 Old Shoreham Road	894458	23/04/2017	14/05/2017	503.33	36.06	18.82	1.32
Cycle sign opposite 80 Old Shoreham Road	894459	23/04/2017	14/05/2017	503.30	29.96	15.64	1.10
Bus stop with layby next to car wash	894460	23/04/2017	14/05/2017	503.27	27.16	14.18	0.99

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 L. Gates, Laboratory Manager



LABORATORY ANALYSIS REPORT

Location	Sample Number	Exposure Data			µg/m ³ *	ppb *	TOTAL µg NO ₂
		Date On	Date Off	Time (hr.)			
400 yards sign central reservation opposite withy patch	894461	23/04/2017	14/05/2017	503.28	54.20	28.29	1.98
Central reserve 200 yards sign opp Honeyman's Hole	894463	23/04/2017	14/05/2017	503.18	49.79	25.98	1.82
Junction Old Shoreham Road/Manor Way	894455	23/04/2017	14/05/2017	500.58	32.46	16.94	1.18
Green lamppost Manor roundabout north east corner Manor Road/A27	894454	23/04/2017	14/05/2017	501.48	24.06	12.56	0.88
Traffic lights Sussex Road bus stop eastbound	894475	24/04/2017	14/05/2017	481.13	27.43	14.31	0.96
Manor roundabout north 320/13 No.2	894453	23/04/2017	14/05/2017	502.32	43.84	22.88	1.60
No 14 A27 west	894452	23/04/2017	14/05/2017	502.30	38.07	19.87	1.39
No 34 A27	894451	23/04/2017	14/05/2017	502.27	34.02	17.75	1.24
Traffic lights sign A27	894450	23/04/2017	14/05/2017	502.25	27.07	14.13	0.99
Lamppost 315/11 A27	894449	23/04/2017	14/05/2017	502.23	23.54	12.29	0.86
Sir Robert Woodwards 316/04	894448	23/04/2017	14/05/2017	502.23	27.60	14.41	1.01
Outside 49 A27	894447	23/04/2017	14/05/2017	502.20	31.85	16.62	1.16
Outside 73 A27	894446	23/04/2017	14/05/2017	502.17	45.41	23.70	1.66
Not on sheet	905413			503.43	16.39	8.55	0.60
Laboratory Blank				503.43	0.87	0.46	0.032

Comment: Results are not blank subtracted
Results have been corrected to a temperature of 293 K (20°)

Report amended to correct start date for tubes 894476 to 894482 and 894475.

Tube 894457 was not received for analysis.

Tube 905413 was received but not listed on the exposure sheet. Maximum exposure time was used.

Tube 894487 contained a spider & web. Result may be compromised.

Tube 894482 and 894474 contained a spider. Result may be compromised.

Overall M.U.	±7.8%	Limit of Detection	0.070µgNO ₂
Tube Preparation:	50% TEA /Acetone	Analysed on	UV05 Gamspec M550
Analyst Name	Zoe Munday	Report Checked By	Linda Gates
Date of Analysis	25/05/2017	Date of Report	08/06/2017

Analysis carried out in accordance with documented in-house Laboratory Method GLM7

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REPORT L02789R P1



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LABORATORY ANALYSIS REPORT

NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

REPORT NUMBER L02789R
 BOOKING IN REFERENCE L02789
 DESPATCH NOTE 35450

CUSTOMER Barbara Okelly Attn: Barbara Okelly
 24 Fairfield Close
 Shoreham-By-Sea
 West Sussex
 BN43 6BH

DATE SAMPLES RECEIVED 13/04/2017

Location	Sample Number	Exposure Data		Time (hr.)	µg/m ³ *	ppb *	TOTAL µg NO ₂
		Date On	Date Off				
Tosca, High Street, Shoreham	876367	23/03/2017	11/04/2017	450.00	37.61	19.63	1.23
Jewellers- High Street, Soreham	876365	23/03/2017	11/04/2017	450.00	30.75	16.05	1.01
Yacht Club A259	876366	23/03/2017	11/04/2017	449.75	53.32	27.83	1.74
Conservative club upper Shoreham Rd	876364	23/03/2017	11/04/2017	449.75	36.96	19.29	1.21
Treadrite High Street	876363	23/03/2017	11/04/2017	450.00	37.79	19.72	1.24
Chip Shop High Street	876362	23/03/2017	11/04/2017	450.00	40.73	21.26	1.33
convenicnce store upper soreham rd	876361	23/03/2017	11/04/2017	449.75	34.88	18.20	1.14
The Bridge A259	876360	23/03/2017	11/04/2017	450.00	47.72	24.90	1.56
Caring Lady High Street	876359	23/03/2017	11/04/2017	450.00	37.85	19.75	1.24
Beach House East St Shoreham	876358	23/03/2017	11/04/2017	450.00	21.35	11.15	0.70
Laboratory Blank				450.00	0.52	0.27	0.017

Comment: Results are not blank subtracted
 Results have been corrected to a temperature of 293 K (20°)

Overall M.U. ±7.8%

Limit of Detection 0.070µgNO₂
 Analysed on UV05
 Camspec
 M550

Tube Preparation: 50% TEA /Acetone

Analyst Name
 Zoe Munday

Report Checked By
 Duncan Wilson

Date of Analysis 24/04/2017

Date of Report 25/04/2017

In using the exposure procedure, the person providing the data is not within the scope of the UKAS accreditation. The accuracy of the data obtained using exposure data shall be indicated by an asterisk (*). Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd. Form LQF32h Issue 7 - Oct 2016

Report Number L02789R

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REPORT L02789R P2



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LABORATORY ANALYSIS REPORT

Analysis carried out in accordance with documented in-house Laboratory Method
GLM7

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk (*). Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.
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