

LABORATORY ANALYSIS REPORT

NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

REPORT NUMBER N09198R
BOOKING IN REFERENCE N09198
DESPATCH NOTE 70183
CUSTOMER Tewkesbury Borough Council Attn: Kath Henly
Environmental Health Dept.
Gloucester Road
Tewkesbury 'A'
Gloucestershire
GL20 5TT

DATE SAMPLES RECEIVED 09/12/2019

Location	Sample Number	Exposure Data			µg/m ³ *	ppb *	µg NO ₂ on tube
		Date On*	Date Off*	Time* (hr.)			
19/11/(3)1N	1451924	07/11/2019	05/12/2019	670.50	47.46	24.77	2.31
19/11/(3)2N	1451925	07/11/2019	05/12/2019	670.75	33.39	17.43	1.63
19/11/5N	1451926	07/11/2019	05/12/2019	670.75	36.43	19.01	1.78
19/11/6N	1451927	07/11/2019	05/12/2019	670.75	36.86	19.24	1.80
19/11/14N	1451928	06/11/2019	05/12/2019	696.25	42.33	22.09	2.14
19/11/15N	1451929	11/11/2019	05/12/2019	572.00	29.90	15.61	1.24
19/11/16N	1451930	06/11/2019	05/12/2019	694.58	25.87	13.50	1.31
19/11/20N	1451931	11/11/2019	05/12/2019	575.00	12.42	6.48	0.52
19/11/35N	1451932	07/11/2019	05/12/2019	670.75	42.63	22.25	2.08
19/11/37N	1451933	07/11/2019	05/12/2019	671.00	35.25	18.40	1.72
19/11/41N	1451916	07/11/2019	05/12/2019	670.75	38.85	20.28	1.89
19/11/47N	1451917	07/11/2019	05/12/2019	670.75	34.26	17.88	1.67
19/11/50N	1451918	11/11/2019	05/12/2019	575.00	30.80	16.07	1.29
19/11/52N	1451919	06/11/2019	05/12/2019	695.33	30.22	15.77	1.53
19/11/53N	1451920	11/11/2019	05/12/2019	575.00	31.68	16.54	1.32
19/11/55N	1451921	08/11/2019	05/12/2019	642.00	25.95	13.55	1.21
Not on sheet	1470397			696.25	<0.85	<0.44	<0.043
Laboratory Blank				696.25	0.14	0.07	0.007

Comment: Results are not blank subtracted

Tubes 1451916, 1415920 contained spiders. Results may be compromised.

Tube 1470397 was received but not listed on the exposure sheet. Maximum exposure times were used.

Results reported as <0.043 are below the reporting limit.

Results have been corrected to a temperature of 293 K (20°)

Overall M.U. ±9.7%

Limit of Detection 0.043µgNO₂

The reported expanded uncertainty is based on a standard uncertainty multiplied by a factor of $k=2$, providing a level of confidence of approximately 95%. Uncertainty of measurement has not been applied to the reported results.

Tube Preparation: 50% TEA /Acetone

Analysed on UV CARY1

Analyst Name Aaron Nolan

Report Checked By Pedro Gomes

Date of Analysis 17/12/2019

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

Samples have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures. Results within this report relate only to samples as received. Data provided by the client and any subsequent calculations shall be indicated by an asterisk (*), these calculations and results are not within the scope of our UKAS accreditation. Any queries concerning 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.

REPORT OFFICIALLY CHECKED

Gradko International Ltd
This signature confirms the authenticity of these results
Signed.....
L. Gates, Laboratory Manager