

## LABORATORY ANALYSIS REPORT

### NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

**REPORT NUMBER** S06010R  
**BOOKING IN REFERENCE** S06010  
**DESPATCH NOTE** 93581  
**CUSTOMER** Tewkesbury Borough Council Attn: Isabel Hooper

Environmental Health Dept.  
Gloucester Road  
Tewkesbury 'A'  
Gloucestershire  
GL20 5TT

**DATE SAMPLES RECEIVED** 05/09/2024  
**JOB REFERENCE** Aug-24

Location	Sample Number	Exposure Data Date On* Date Off*	Time* (hr.)	$\mu\text{g}/\text{m}^3$ *	ppb *	$\mu\text{g NO}_2$ on tube
Scrivens, 131, High Street, Tewkesbury (3)1N	2497240	02/08/2024 03/09/2024	769.00	16.00	8.35	0.89
Corner of Oldbury Road/East Street, Tewkesbury (3)2N	2497241	02/08/2024 03/09/2024	769.00	10.07	5.26	0.56
Kellands, 13-14, Barton Street, Tewkesbury 5N	2497242	02/08/2024 03/09/2024	769.50	14.93	7.79	0.84
Age Concern, 14, High Street, Tewkesbury 6N	2497243	02/08/2024 03/09/2024	769.00	21.22	11.08	1.19
69, Sussex Gardens, Hucclecote 14N	2497244	02/08/2024 03/09/2024	765.25	13.38	6.98	0.74
Comus, Bamfurlong, Staverton 15N	2497245	02/08/2024 03/09/2024	766.25	13.70	7.15	0.76
15, Withybridge Gardens, Withybridge 16N	2497246	02/08/2024 03/09/2024	766.25	15.30	7.98	0.85
Snowhill Farm, Snowhill 20N	2497247	05/08/2024 03/09/2024	702.75	2.41	1.26	0.12
Peacocks, High Street, Tewkesbury 35N	2497248	02/08/2024 03/09/2024	769.00	23.22	12.12	1.30
Wetherspoons, The Cross, Tewkesbury 37N	2497249	02/08/2024 03/09/2024	769.00	16.73	8.73	0.94
Avonside, 38, High Street, Tewkesbury 38N	2497250	02/08/2024 03/09/2024	769.25	9.43	4.92	0.53
The Tackle Shop, 31, Barton Street, Tewkesbury 41N	2497251	02/08/2024 03/09/2024	769.25	22.09	11.53	1.24
65, Barton Street, Tewkesbury 47N	2497252	02/08/2024 03/09/2024	769.50	20.13	10.51	1.13
The White Hart, Castle Street, Winchcombe 50N	2497253	05/08/2024 03/09/2024	702.75	10.06	5.25	0.51
43, Stocken Close, Hucclecote 52N	2497254	02/08/2024 03/09/2024	765.25	13.74	7.17	0.76
Ashchurch Road, Ashchurch, Tewkesbury 53N	2497255	02/08/2024 03/09/2024	769.00	9.64	5.03	0.54
Stoke Road, Bishops Cleeve 55N	2497256	02/08/2024 03/09/2024	764.25	9.97	5.21	0.55
Tewkesbury Church of England Primary School, Rope Walk, Tewkesbury 56N	2497257	02/08/2024 03/09/2024	769.25	6.73	3.51	0.38
15, Kestrel Way, Northway, Tewkesbury 57N	2497258	02/08/2024 03/09/2024	769.25	12.11	6.32	0.68
Not on sheet, "24/09/Blank" on tube label	2514471		769.50	0.32	0.17	0.02
Laboratory Blank			769.50	0.16	0.08	0.009

**Comment: Results are not blank subtracted**

**Tube 2497259 was missing on arrival.**

**Tube 2514471 was received but not listed on the exposure sheet. Maximum exposure time was used.**

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

**Overall M.U.**

±9.7%

**Limit of Detection** 0.043 $\mu\text{gNO}_2$

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 CARY4

**Analyst Name**

Alison Wright

**Report Checked By** Adam Robinson

**Date of Analysis**

09/09/2024

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09/09/2024

**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.