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LABORATORY ANALYSIS REPORT

NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY

REPORT NUMBER R02739R **BOOKING IN REFERENCE** R02739 **DESPATCH NOTE** 93564

> **CUSTOMER** Tewkesbury Borough Council Attn: Philip Grist

Environmental Health Dept.

Gloucester Road Tewkesbury 'A' Gloucestershire **GL20 5TT**

DATE SAMPLES RECEIVED 05/04/2023 JOB REFERENCE Mar-23

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|---|---------|---------------|------------|--------|---------|--------|--------------------|
| | Sample | Exposure Data | | Time* | | | μg NO ₂ |
| Location | Number | Date On* | Date Off* | (hr.) | μg/m³ * | ppb * | on tube |
| Scrivens, 131, High Street, Tewkesbury (3)1N | 2176947 | 03/03/2023 | 03/04/2023 | 744.00 | 24.65 | 12.87 | 1.33 |
| Corner of Oldbury Road/East Street, Tewkesbury (3)2N | 2176946 | 03/03/2023 | 03/04/2023 | 744.00 | 14.50 | 7.57 | 0.78 |
| Kellands, 13-14, Barton Street, Tewkesbury 5N | 2176945 | 03/03/2023 | 03/04/2023 | 744.00 | 19.82 | 10.35 | 1.07 |
| Age Concern, 14, High Street, Tewkesbury 6N | 2176944 | 03/03/2023 | 03/04/2023 | 744.00 | 29.33 | 15.31 | 1.59 |
| 69, Sussex Gardens, Hucclecote 14N | 2176943 | 03/03/2023 | 03/04/2023 | 738.75 | 19.26 | 10.05 | 1.03 |
| Comus, Bamfurlong, Staverton 15N | 2176942 | 03/03/2023 | 03/04/2023 | 738.50 | 17.49 | 9.13 | 0.94 |
| 15, Withybridge Gardens, Withybridge 16N | 2176953 | 03/03/2023 | 03/04/2023 | 738.25 | 19.98 | 10.43 | 1.07 |
| Snowshill Farm, Snowshill 20N | 2176952 | 03/03/2023 | 03/04/2023 | 738.75 | < 0.80 | < 0.42 | < 0.043 |
| Peacocks, High Street, Tewkesbury 35N | 2176951 | 03/03/2023 | 03/04/2023 | 744.00 | 30.61 | 15.97 | 1.66 |
| Wetherspoons, The Cross, Tewkesbury 37N | 2176950 | 03/03/2023 | 03/04/2023 | 744.00 | 21.01 | 10.96 | 1.14 |
| Avonside, 38, High Street, Tewkesbury 38N | 2176949 | 03/03/2023 | 03/04/2023 | 744.00 | 21.23 | 11.08 | 1.15 |
| The Tackle Shop, 31, Barton Street, Tewkesbury 41N | 2176948 | 03/03/2023 | 03/04/2023 | 744.00 | 28.48 | 14.86 | 1.54 |
| 65, Barton Street, Tewkesbury 47N | 2176959 | 03/03/2023 | 03/04/2023 | 744.00 | 26.11 | 13.63 | 1.41 |
| The White Hart, Castle Street, Winchcombe 50N | 2176958 | 03/03/2023 | 03/04/2023 | 738.50 | 12.87 | 6.72 | 0.69 |
| 43, Stocken Close, Hucclecote 52N | 2176957 | 03/03/2023 | 03/04/2023 | 738.75 | 15.42 | 8.05 | 0.83 |
| Ashchurch Road, Ashchurch, Tewkesbury 53N | 2176956 | 03/03/2023 | 03/04/2023 | 739.25 | 16.21 | 8.46 | 0.87 |
| Stoke Road, Bishops Cleeve 55N | 2176955 | 03/03/2023 | 03/04/2023 | 738.50 | 20.57 | 10.74 | 1.10 |
| Tewkesbury Church of England Primary School, Rope Walk, | | | | | | | |
| Tewkesbury 56N | 2176954 | 03/03/2023 | 03/04/2023 | 744.00 | 10.73 | 5.60 | 0.58 |
| 15, Kestrel Way, Northway, Tewkesbury 57N | 2176964 | 03/03/2023 | 03/04/2023 | 739.50 | 16.63 | 8.68 | 0.89 |
| Blank | 2176963 | | | 744.00 | 0.33 | 0.17 | 0.02 |
| Laboratory Blank | | | | 744.00 | 0.22 | 0.12 | 0.012 |

Comment: Results are not blank subtracted

Results reported as <0.043 are below the reporting limit.

Tube 2176953 contained a spider. Result may be compromised.

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

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

±9.7%

approximately 95%. Uncertainty of measurement has not been applied to the reported results. Tube Preparation: 50% TEA /Acetone

Analysed on UV CARY1

Limit of Detection

Analyst Name Sania Choudhury Report Checked By Adam Robinson

12/04/2023 **Date of Analysis Date of Report** 12/04/2023

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.

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