



Customer:



Testing Facility:

SOCOTEC
Unit 12
Moorbrook
Southmead Industrial
Park
Didcot
Oxfordshire
OX11 7HP

Quotation
Number:

DIF-ANU-10952
(Period 2)

Samples
Received:

02 March 2023

Customer
Order Number:

Analysis
Completed:

07 March 2023

Customer
Reference:

Report Date:

08 March 2023

Nitrogen Dioxide Diffusion Tube Analysis Report

The samples have been analysed in accordance with SOCOTEC's standard operating procedure ANU/SOP/1015. This method meets the guidelines set out in DEFRA's 'Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance.'

The tubes were prepared by spiking acetone:triethanolamine (50:50) onto the grids prior to the tubes being assembled. The tubes were desorbed with distilled water and the extract analysed using a segmented flow auto analyser with ultraviolet detection. All samples were received in good condition, unless otherwise stated in the comments field of results table. Please note:

- (i) As set out in the practical guidance, the results were initially calculated assuming an ambient temperature of 11°C, the reported values **have** been adjusted to 20°C to allow for direct comparison with EU limits.
- (ii) The reported results have not been bias adjusted.

This analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on the tube is within the scope of our UKAS schedule. Any further calculations and assessments requiring exposure details and conditions fall outside the scope of our accreditation. In the AIR PT intercomparison scheme for comparing spiked Nitrogen Dioxide diffusion tubes, SOCOTEC currently holds the highest rank of a **Satisfactory** laboratory.

This report shall not be reproduced except in full without approval of the laboratory.

Approved By



1252



Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S1	1	01/02/2023 08:20	01/03/2023 08:20	672.00	1.39	29.6	15.4	
OCC/23A/NA2S2	2	01/02/2023 08:25	01/03/2023 08:25	672.00	0.97	20.8	10.8	
OCC/23A/NA2S3	3	01/02/2023 08:27	01/03/2023 08:28	672.02	1.44	30.8	16	
OCC/23A/NA2S4	4	01/02/2023 08:30	01/03/2023 08:30	672.00	1.32	28.1	14.6	
OCC/23A/NA2S5	5	01/02/2023 08:33	01/03/2023 08:34	672.02	1.12	23.8	12.4	
OCC/23A/NA2S6	6	01/02/2023 08:37	01/03/2023 08:36	671.98	1.39	29.6	15.4	
OCC/23A/NA2S7	7	01/02/2023 08:40	01/03/2023 08:38	671.97	0.96	20.5	10.6	
OCC/23A/NA2S8	8	01/02/2023 08:43	01/03/2023 08:42	671.98	1.32	28.1	14.6	
OCC/23A/NA2S9	9	01/02/2023 08:45	01/03/2023 08:45	672.00	1.49	31.7	16.5	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S10	10	01/02/2023 08:50	01/03/2023 08:50	672.00	2.12	45.1	23.5	
OCC/23A/NA2S11	11	01/02/2023 08:53	01/03/2023 08:52	671.98	1.16	24.7	12.9	
OCC/23A/NA2S12	12	01/02/2023 08:55	01/03/2023 08:55	672.00	1.61	34.3	17.9	
OCC/23A/NA2S13	13	01/02/2023 09:00	01/03/2023 09:00	672.00	0.76	16.2	8.4	
OCC/23A/NA2S14	14	01/02/2023 09:00	01/03/2023 09:00	672.00	0.72	15.5	8	
OCC/23A/NA2S15	15	01/02/2023 09:00	01/03/2023 09:00	672.00	0.83	17.7	9.2	
OCC/23A/NA2S16	16	01/02/2023 09:06	01/03/2023 09:05	671.98	1.2	25.6	13.3	
OCC/23A/NA2S17	17	01/02/2023 09:10	01/03/2023 09:07	671.95	1.73	37	19.2	
OCC/23A/NA2S18	18	01/02/2023 09:12	01/03/2023 09:10	671.97	1.31	27.9	14.5	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S19	19	01/02/2023 09:18	01/03/2023 09:12	671.90	1.58	33.7	17.5	
OCC/23A/NA2S20	20	01/02/2023 09:23	01/03/2023 09:15	671.87	0.68	14.4	7.5	
OCC/23A/NA2S21	21	01/02/2023 09:30	01/03/2023 09:27	671.95	1.29	27.5	14.3	
OCC/23A/NA2S22	22	01/02/2023 09:32	01/03/2023 09:30	671.97	2.02	43	22.4	
OCC/23A/NA2S23	23	01/02/2023 09:35	01/03/2023 09:35	672.00	1.17	25	13	
OCC/23A/NA2S24	24	01/02/2023 09:40	01/03/2023 09:42	672.03	0.78	16.5	8.6	
OCC/23A/NA2S25	25	01/02/2023 09:46	01/03/2023 09:44	671.97	1.52	32.4	16.8	
OCC/23A/NA2S26	26	01/02/2023 09:53	01/03/2023 09:47	671.90	2.13	45.4	23.6	
OCC/23A/NA2S27	27	01/02/2023 09:55	01/03/2023 09:50	671.92	2	42.6	22.1	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S28	28	01/02/2023 09:59	01/03/2023 09:55	671.93	1.13	24	12.5	
OCC/23A/NA2S29	29	01/02/2023 10:05	01/03/2023 10:02	671.95	1.2	25.7	13.4	
OCC/23A/NA2S30	30	01/02/2023 10:08	01/03/2023 10:05	671.95	1.64	35	18.2	
OCC/23A/NA2S31	31	01/02/2023 10:10	01/03/2023 10:10	672.00	0.74	15.8	8.2	
OCC/23A/NA2S32	32	01/02/2023 10:15	01/03/2023 10:15	672.00	1.9	40.6	21.1	
OCC/23A/NA2S33	33	01/02/2023 10:20	01/03/2023 10:20	672.00	2.07	44.1	22.9	
OCC/23A/NA2S34	34	01/02/2023 10:23	01/03/2023 10:30	672.12	2.4	51.2	26.6	
OCC/23A/NA2S35	35	01/02/2023 13:13	01/03/2023 11:12	669.98	2.08	44.4	23.1	
OCC/23A/NA2S36	36	01/02/2023 13:17	01/03/2023 11:15	669.97	2.06	44.2	23	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S37	37	01/02/2023 13:20	01/03/2023 11:18	669.97	1.6	34.3	17.8	
OCC/23A/NA2S38	38	01/02/2023 13:26	01/03/2023 11:22	669.93	1.27	27.2	14.2	
OCC/23A/NA2S39	39	01/02/2023 13:30	01/03/2023 11:25	669.92	1.49	31.8	16.6	
OCC/23A/NA2S40	40	01/02/2023 13:33	01/03/2023 11:30	669.95	2.04	43.7	22.7	
OCC/23A/NA2S41	41	01/02/2023 13:35	01/03/2023 11:34	669.98	1.24	26.5	13.8	
OCC/23A/NA2S42	42	01/02/2023 13:40	01/03/2023 11:37	669.95	1.36	29	15.1	
OCC/23A/NA2S43	43	01/02/2023 13:45	01/03/2023 11:40	669.92	1.26	26.9	14	
OCC/23A/NA2S44	44	01/02/2023 14:04	01/03/2023 11:55	669.85	2.02	43.3	22.5	
OCC/23A/NA2S45	45							Missing - new lamp post





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S46	46	01/02/2023 14:10	01/03/2023 12:10	670.00	1.33	28.5	14.8	
OCC/23A/NA2S47	47	01/02/2023 14:12	01/03/2023 12:12	670.00	1.5	32.1	16.7	
OCC/23A/NA2S48	48	01/02/2023 14:15	01/03/2023 12:15	670.00	1.92	41	21.3	
OCC/23A/NA2S49	49	01/02/2023 14:17	01/03/2023 12:17	670.00	1.71	36.6	19	
OCC/23A/NA2S50	50	01/02/2023 14:21	01/03/2023 12:20	669.98	1.49	31.8	16.5	
OCC/23A/NA2S51	51	01/02/2023 14:28	01/03/2023 12:25	669.95	1.19	25.5	13.3	
OCC/23A/NA2S52	52	01/02/2023 14:35	01/03/2023 12:28	669.88	0.96	20.6	10.7	
OCC/23A/NA2S53	53	01/02/2023 14:44	01/03/2023 12:38	669.90	1.05	22.5	11.7	
OCC/23A/NA2S54	54	01/02/2023 14:47	01/03/2023 12:40	669.88	1.42	30.3	15.8	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S55	55	01/02/2023 14:50	01/03/2023 12:44	669.90	1.65	35.3	18.3	
OCC/23A/NA2S56	56	01/02/2023 14:53	01/03/2023 12:48	669.92	1.11	23.7	12.3	
OCC/23A/NA2S57	57	01/02/2023 14:55	01/03/2023 12:53	669.97	1.18	25.3	13.1	
OCC/23A/NA2S58	58	01/02/2023 14:58	01/03/2023 12:55	669.95	1.22	26.2	13.6	
OCC/23A/NA2S59	59	01/02/2023 15:05	01/03/2023 13:00	669.92	1.38	29.4	15.3	
OCC/23A/NA2S60	60	01/02/2023 15:07	01/03/2023 13:03	669.93	1.01	21.5	11.2	
OCC/23A/NA2S61	61	01/02/2023 15:00	01/03/2023 12:57	669.95	2.32	49.5	25.8	
OCC/23A/NA2S62	62	01/02/2023 15:00	01/03/2023 12:57	669.95	1.72	36.8	19.1	
OCC/23A/NA2S63	63	01/02/2023 15:00	01/03/2023 12:57	669.95	1.95	41.8	21.7	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S64	64	01/02/2023 15:17	01/03/2023 13:15	669.97	1.06	22.7	11.8	
OCC/23A/NA2S65	65	01/02/2023 15:20	01/03/2023 13:20	670.00	1.52	32.5	16.9	
OCC/23A/NA2S66	66	01/02/2023 15:21	01/03/2023 13:25	670.07	1.14	24.3	12.6	
OCC/23A/NA2S67	67	01/02/2023 15:23	01/03/2023 13:27	670.07	1.78	38.1	19.8	
OCC/23A/NA2S68	68	01/02/2023 15:24	01/03/2023 13:30	670.10	1.1	23.6	12.3	
OCC/23A/NA2S69	69	01/02/2023 15:27	01/03/2023 13:32	670.08	1.88	40.2	20.9	
OCC/23A/NA2S70	70	01/02/2023 15:28	01/03/2023 13:35	670.12	1.22	26.2	13.6	
OCC/23A/NA2S71	71	01/02/2023 15:30	01/03/2023 13:40	670.17	1.84	39.5	20.5	
OCC/23A/NA2S72	72	01/02/2023 15:33	01/03/2023 13:42	670.15	1.74	37.3	19.4	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/23A/NA2S73	73	01/02/2023 15:35	01/03/2023 13:44	670.15	1.43	30.7	15.9	
OCC/23A/NA2S74	74	01/02/2023 15:40	01/03/2023 13:46	670.10	1.25	26.8	13.9	
OCC/23A/NA2S75	75	01/02/2023 15:45	01/03/2023 13:50	670.08	1.65	35.3	18.4	
OCC/23A/NA2S76	76	01/02/2023 15:12	01/03/2023 13:13	670.02	0.77	16.5	8.6	
OCC/23A/NA2S77	77							Missing

