



Customer:

[Redacted]
Oxford City Council
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Testing Facility:

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

Quotation
Number:

DIF-ANU-11334
(Period 1)

Samples
Received:

07 February 2024

Customer
Order Number:

Analysis
Completed:

22 February 2024

Customer
Reference:

Report Date:

27 February 2024

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



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Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S1	1	03/01/2024 08:30	01/02/2024 08:30	696.00	1.04	21.3	11.1	
OCC/24A/NA1S2	2	03/01/2024 08:33	01/02/2024 08:33	696.00	0.84	17.4	9	
OCC/24A/NA1S3	3	03/01/2024 08:35	01/02/2024 08:35	696.00	1.25	25.8	13.4	
OCC/24A/NA1S4	4	03/01/2024 08:39	01/02/2024 08:36	695.95	1.41	29	15.1	
OCC/24A/NA1S5	5	03/01/2024 08:40	01/02/2024 08:40	696.00	1.11	22.9	11.9	
OCC/24A/NA1S6	6	03/01/2024 08:43	01/02/2024 08:42	695.98	1.23	25.3	13.2	
OCC/24A/NA1S7	7	03/01/2024 08:46	01/02/2024 08:49	696.05	0.98	20.2	10.5	
OCC/24A/NA1S8	8	03/01/2024 08:50	01/02/2024 08:47	695.95	1.52	31.3	16.3	
OCC/24A/NA1S9	9	03/01/2024 08:52	01/02/2024 08:50	695.97	1.45	29.8	15.5	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S10	10	03/01/2024 08:53	01/02/2024 08:53	696.00	1.91	39.3	20.4	
OCC/24A/NA1S11	11	03/01/2024 08:55	01/02/2024 08:56	696.02	1.3	26.8	13.9	
OCC/24A/NA1S12	12	03/01/2024 08:57	01/02/2024 09:00	696.05	1.53	31.4	16.3	
OCC/24A/NA1S13	13	03/01/2024 09:05	01/02/2024 09:07	696.03	0.37	7.5	3.9	
OCC/24A/NA1S14	14	03/01/2024 09:05	01/02/2024 09:07	696.03	0.73	15	7.8	
OCC/24A/NA1S15	15	03/01/2024 09:05	01/02/2024 09:07	696.03	0.85	17.4	9.1	
OCC/24A/NA1S16	16	03/01/2024 09:12	01/02/2024 09:15	696.05	1.26	26	13.5	
OCC/24A/NA1S17	17	03/01/2024 09:15	01/02/2024 09:20	696.08	1.7	35	18.2	
OCC/24A/NA1S18	18	03/01/2024 09:18	01/02/2024 09:22	696.07	1.34	27.5	14.3	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S19	19	03/01/2024 09:22	01/02/2024 09:25	696.05	1.73	35.6	18.5	
OCC/24A/NA1S20	20	03/01/2024 09:27	01/02/2024 09:30	696.05	0.67	13.9	7.2	
OCC/24A/NA1S21	21	03/01/2024 09:33	01/02/2024 09:36	696.05	1.24	25.6	13.3	
OCC/24A/NA1S22	22	03/01/2024 09:42	01/02/2024 09:40	695.97	2.03	41.8	21.8	
OCC/24A/NA1S23	23	03/01/2024 09:44	01/02/2024 09:45	696.02	1.42	29.2	15.2	
OCC/24A/NA1S24	24	03/01/2024 09:48	01/02/2024 09:50	696.03	1.18	24.3	12.6	
OCC/24A/NA1S25	25	03/01/2024 09:51	01/02/2024 09:55	696.07	1.99	40.9	21.3	
OCC/24A/NA1S26	26	03/01/2024 10:04	01/02/2024 10:00	695.93	2.04	42	21.9	
OCC/24A/NA1S27	27	03/01/2024 10:10	01/02/2024 10:05	695.92	2	41.1	21.4	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S28	28	03/01/2024 10:15	01/02/2024 10:07	695.87	1.96	40.5	21	
OCC/24A/NA1S29	29	03/01/2024 10:29	01/02/2024 10:10	695.68	0.85	17.5	9.1	
OCC/24A/NA1S30	30	03/01/2024 10:31	01/02/2024 10:13	695.70	1.59	32.8	17	
OCC/24A/NA1S31	31	03/01/2024 10:34	01/02/2024 10:15	695.68	1.15	23.6	12.3	
OCC/24A/NA1S32	32	03/01/2024 10:39	01/02/2024 10:17	695.63	2.17	44.8	23.3	
OCC/24A/NA1S33	33	03/01/2024 10:42	01/02/2024 10:20	695.63	1.55	31.9	16.6	
OCC/24A/NA1S34	34	03/01/2024 10:45	01/02/2024 10:22	695.62	2.1	43.3	22.5	
OCC/24A/NA1S35	35	03/01/2024 13:00	01/02/2024 11:35	694.58	0.59	12.1	6.3	
OCC/24A/NA1S36	36							Missing





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S37	37	03/01/2024 13:04	01/02/2024 11:42	694.63	1.89	39	20.3	
OCC/24A/NA1S38	38	03/01/2024 13:07	01/02/2024 11:47	694.67	1.2	24.7	12.9	
OCC/24A/NA1S39	39	03/01/2024 13:10	01/02/2024 11:50	694.67	1.48	30.6	15.9	
OCC/24A/NA1S40	40	03/01/2024 13:13	01/02/2024 11:52	694.65	2.05	42.2	21.9	
OCC/24A/NA1S41	41	03/01/2024 13:15	01/02/2024 11:57	694.70	0.99	20.5	10.6	
OCC/24A/NA1S42	42	03/01/2024 13:26	01/02/2024 12:00	694.57	1.52	31.3	16.3	
OCC/24A/NA1S43	43	03/01/2024 13:28	01/02/2024 12:06	694.63	1.55	32	16.7	
OCC/24A/NA1S44	44							Missing
OCC/24A/NA1S45	45	03/01/2024 13:46	01/02/2024 12:26	694.67	2.03	41.9	21.8	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S46	46	03/01/2024 13:48	01/02/2024 12:29	694.68	1.65	34.1	17.7	
OCC/24A/NA1S47	47	03/01/2024 13:50	01/02/2024 12:31	694.68	1.21	24.9	13	
OCC/24A/NA1S48	48	03/01/2024 13:52	01/02/2024 12:34	694.70	2.13	43.9	22.8	
OCC/24A/NA1S49	49	03/01/2024 13:54	01/02/2024 12:36	694.70	1.65	34.1	17.7	
OCC/24A/NA1S50	50	03/01/2024 13:57	01/02/2024 12:40	694.72	1.41	29	15.1	
OCC/24A/NA1S51	51	03/01/2024 14:08	01/02/2024 12:51	694.72	1.47	30.4	15.8	
OCC/24A/NA1S52	52	03/01/2024 14:11	01/02/2024 12:55	694.73	1.03	21.3	11.1	
OCC/24A/NA1S53	53	03/01/2024 14:15	01/02/2024 13:09	694.90	1.2	24.7	12.9	
OCC/24A/NA1S54	54	03/01/2024 14:25	01/02/2024 13:11	694.77	1.31	26.9	14	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S55	55	03/01/2024 14:27	01/02/2024 13:13	694.77	1.5	30.9	16.1	
OCC/24A/NA1S56	56	03/01/2024 14:29	01/02/2024 13:15	694.77	1.92	39.5	20.6	
OCC/24A/NA1S57	57	03/01/2024 14:32	01/02/2024 13:20	694.80	1.02	21.1	11	
OCC/24A/NA1S58	58	03/01/2024 14:35	01/02/2024 13:25	694.83	1.2	24.8	12.9	
OCC/24A/NA1S59	59							Missing
OCC/24A/NA1S60	60	03/01/2024 14:42	01/02/2024 13:31	694.82	1.12	23.2	12.1	
OCC/24A/NA1S61	61	03/01/2024 14:38	01/02/2024 13:28	694.83	2.02	41.7	21.7	
OCC/24A/NA1S62	62	03/01/2024 14:38	01/02/2024 13:28	694.83	2.11	43.4	22.6	
OCC/24A/NA1S63	63	03/01/2024 14:38	01/02/2024 13:28	694.83	1.94	40	20.8	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S64	64	03/01/2024 14:44	01/02/2024 13:40	694.93	1.38	28.5	14.8	
OCC/24A/NA1S65	65	03/01/2024 14:47	01/02/2024 13:42	694.92	1.54	31.8	16.5	
OCC/24A/NA1S66	66	03/01/2024 14:50	01/02/2024 13:44	694.90	1.11	22.9	11.9	
OCC/24A/NA1S67	67	03/01/2024 14:55	01/02/2024 13:45	694.83	1.39	28.7	14.9	
OCC/24A/NA1S68	68	03/01/2024 14:57	01/02/2024 13:47	694.83	1.21	24.9	13	
OCC/24A/NA1S69	69	03/01/2024 15:00	01/02/2024 13:49	694.82	1.45	30	15.6	
OCC/24A/NA1S70	70	03/01/2024 15:02	01/02/2024 13:50	694.80	1.09	22.5	11.7	
OCC/24A/NA1S71	71	03/01/2024 15:04	01/02/2024 13:52	694.80	1.58	32.6	17	
OCC/24A/NA1S72	72	03/01/2024 15:08	01/02/2024 13:53	694.75	1.41	29.1	15.1	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA1S73	73	03/01/2024 15:10	01/02/2024 13:57	694.78	1.78	36.6	19	
OCC/24A/NA1S74	74	03/01/2024 15:12	01/02/2024 14:00	694.80	1.01	20.9	10.9	
OCC/24A/NA1S75	75	03/01/2024 15:15	01/02/2024 14:05	694.83	1.29	26.7	13.9	
OCC/24A/NA1S76	76	03/01/2024 14:45	01/02/2024 13:35	694.83	0.92	19	9.9	
OCC/24A/NA1S77	77	03/01/2024 14:43	01/02/2024 13:33	694.83	1.2	24.7	12.9	

