



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 3)

Samples
Received:

05 April 2024

Customer
Order Number:

Analysis
Completed:

10 April 2024

Customer
Reference:

Report Date:

11 April 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/NA3S1	1							Missing
OCC/24A/NA3S2	2							Missing
OCC/24A/NA3S3	3	07/03/2024 08:52	03/04/2024 09:22	648.50	1.02	22.5	11.7	
OCC/24A/NA3S4	4	07/03/2024 08:55	03/04/2024 09:24	648.48	0.86	19	9.9	
OCC/24A/NA3S5	5	07/03/2024 08:58	03/04/2024 09:27	648.48	0.99	22	11.4	
OCC/24A/NA3S6	6	07/03/2024 09:00	03/04/2024 09:28	648.47	0.81	17.8	9.3	
OCC/24A/NA3S7	7	07/03/2024 09:02	03/04/2024 09:30	648.47	0.63	14	7.3	
OCC/24A/NA3S8	8	07/03/2024 09:05	03/04/2024 09:32	648.45	0.83	18.4	9.6	
OCC/24A/NA3S9	9	07/03/2024 09:07	03/04/2024 09:34	648.45	0.93	20.6	10.7	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA3S10	10	07/03/2024 09:10	03/04/2024 09:37	648.45	1.19	26.4	13.7	
OCC/24A/NA3S11	11	07/03/2024 09:12	03/04/2024 09:40	648.47	0.68	14.9	7.8	
OCC/24A/NA3S12	12	07/03/2024 09:14	03/04/2024 09:45	648.52	1.17	25.9	13.5	
OCC/24A/NA3S13	13	07/03/2024 09:21	03/04/2024 09:56	648.58	0.52	11.5	6	
OCC/24A/NA3S14	14	07/03/2024 09:21	03/04/2024 09:56	648.58	0.48	10.7	5.6	
OCC/24A/NA3S15	15	07/03/2024 09:21	03/04/2024 09:56	648.58	0.54	12	6.3	
OCC/24A/NA3S16	16	07/03/2024 09:28	03/04/2024 10:05	648.62	0.97	21.3	11.1	
OCC/24A/NA3S17	17	07/03/2024 09:30	03/04/2024 10:06	648.60	1.21	26.6	13.8	
OCC/24A/NA3S18	18	07/03/2024 09:35	03/04/2024 10:09	648.57	1.05	23.1	12	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA3S19	19	07/03/2024 09:38	03/04/2024 10:15	648.62	1.17	26	13.5	
OCC/24A/NA3S20	20	07/03/2024 09:40	03/04/2024 10:20	648.67	0.53	11.6	6	
OCC/24A/NA3S21	21	07/03/2024 09:44	03/04/2024 10:25	648.68	0.79	17.4	9	
OCC/24A/NA3S22	22	07/03/2024 09:48	03/04/2024 10:27	648.65	1.14	25.2	13.1	
OCC/24A/NA3S23	23	07/03/2024 09:54	03/04/2024 10:33	648.65	0.74	16.3	8.5	
OCC/24A/NA3S24	24	07/03/2024 10:00	03/04/2024 10:37	648.62	0.69	15.2	7.9	
OCC/24A/NA3S25	25	07/03/2024 10:07	03/04/2024 10:43	648.60	1.22	26.9	14	
OCC/24A/NA3S26	26	07/03/2024 10:10	03/04/2024 10:49	648.65	1.51	33.5	17.4	
OCC/24A/NA3S27	27	07/03/2024 10:12	03/04/2024 10:52	648.67	1.45	31.9	16.6	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA3S28	28	07/03/2024 10:15	03/04/2024 10:54	648.65	1.5	33.1	17.2	
OCC/24A/NA3S29	29	07/03/2024 10:17	03/04/2024 10:57	648.67	0.88	19.5	10.1	
OCC/24A/NA3S30	30	07/03/2024 10:20	03/04/2024 11:00	648.67	1.27	28	14.6	
OCC/24A/NA3S31	31	07/03/2024 10:25	03/04/2024 11:03	648.63	0.76	16.9	8.8	
OCC/24A/NA3S32	32	07/03/2024 10:27	03/04/2024 11:07	648.67	1.48	32.8	17	
OCC/24A/NA3S33	33	07/03/2024 10:33	03/04/2024 11:15	648.70	1.3	28.6	14.9	
OCC/24A/NA3S34	34	07/03/2024 10:40	03/04/2024 11:20	648.67	1.72	37.9	19.7	
OCC/24A/NA3S35	35	07/03/2024 11:46	03/04/2024 12:10	648.40	2	44.3	23	
OCC/24A/NA3S36	36	07/03/2024 11:49	03/04/2024 12:12	648.38	2	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/24A/NA3S37	37	07/03/2024 11:52	03/04/2024 12:15	648.38	1.33	29.5	15.3	
OCC/24A/NA3S38	38	07/03/2024 11:57	03/04/2024 12:17	648.33	0.98	21.6	11.2	
OCC/24A/NA3S39	39	07/03/2024 12:00	03/04/2024 12:24	648.40	1.3	28.8	15	
OCC/24A/NA3S40	40	07/03/2024 12:02	03/04/2024 12:28	648.43	1.5	33.1	17.2	
OCC/24A/NA3S41	41	07/03/2024 12:04	03/04/2024 12:32	648.47	0.64	14.2	7.4	
OCC/24A/NA3S42	42	07/03/2024 12:06	03/04/2024 12:37	648.52	1.07	23.6	12.3	
OCC/24A/NA3S43	43	07/03/2024 12:15	03/04/2024 12:40	648.42	0.97	21.4	11.1	
OCC/24A/NA3S44	44	07/03/2024 12:28	03/04/2024 12:53	648.42	1.21	26.7	13.9	
OCC/24A/NA3S45	45	07/03/2024 12:30	03/04/2024 12:55	648.42	1.46	32.2	16.7	



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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/NA3S46	46	07/03/2024 12:32	03/04/2024 12:57	648.42	1.17	25.9	13.5	
OCC/24A/NA3S47	47	07/03/2024 12:35	03/04/2024 12:59	648.40	0.65	14.4	7.5	
OCC/24A/NA3S48	48	07/03/2024 12:38	03/04/2024 13:00	648.37	1.65	36.4	18.9	
OCC/24A/NA3S49	49	07/03/2024 12:42	03/04/2024 13:05	648.38	1.53	33.8	17.6	
OCC/24A/NA3S50	50	07/03/2024 12:45	03/04/2024 13:10	648.42	1.09	24.1	12.5	
OCC/24A/NA3S51	51	07/03/2024 12:55	03/04/2024 13:22	648.45	1	22.1	11.5	
OCC/24A/NA3S52	52	07/03/2024 13:05	03/04/2024 13:25	648.33	0.61	13.6	7.1	
OCC/24A/NA3S53	53	07/03/2024 13:12	03/04/2024 13:35	648.38	0.99	21.9	11.4	
OCC/24A/NA3S54	54	07/03/2024 13:14	03/04/2024 13:40	648.43	1.35	29.9	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/NA3S55	55	07/03/2024 13:17	03/04/2024 13:41	648.40	1.69	37.5	19.5	
OCC/24A/NA3S56	56	07/03/2024 13:20	03/04/2024 13:43	648.38	0.88	19.4	10.1	
OCC/24A/NA3S57	57	07/03/2024 13:22	03/04/2024 13:45	648.38	1.26	27.9	14.5	
OCC/24A/NA3S58	58	07/03/2024 13:25	03/04/2024 13:47	648.37	1.1	24.3	12.6	
OCC/24A/NA3S59	59							Missing
OCC/24A/NA3S60	60	07/03/2024 13:33	03/04/2024 13:56	648.38	0.87	19.3	10	
OCC/24A/NA3S61	61	07/03/2024 13:28	03/04/2024 13:50	648.37	1.85	40.8	21.2	
OCC/24A/NA3S62	62	07/03/2024 13:28	03/04/2024 13:50	648.37	1.43	31.6	16.4	
OCC/24A/NA3S63	63	07/03/2024 13:28	03/04/2024 13:50	648.37	1.98	43.8	22.8	





Sample Number	Site	Date and Time ON	Date and Time OFF	Exposure Time (Hours)	Total µg	µg m ⁻³	ppb	Comments
OCC/24A/NA3S64	64	07/03/2024 13:41	03/04/2024 14:05	648.40	1.29	28.5	14.8	
OCC/24A/NA3S65	65	07/03/2024 13:43	03/04/2024 14:07	648.40	1.09	24	12.5	
OCC/24A/NA3S66	66	07/03/2024 13:45	03/04/2024 14:10	648.42	1.99	44	22.9	
OCC/24A/NA3S67	67	07/03/2024 13:46	03/04/2024 14:12	648.43	1.17	25.9	13.5	
OCC/24A/NA3S68	68	07/03/2024 13:48	03/04/2024 14:13	648.42	0.92	20.4	10.6	
OCC/24A/NA3S69	69	07/03/2024 13:50	03/04/2024 14:15	648.42	1.05	23.2	12.1	
OCC/24A/NA3S70	70	07/03/2024 13:51	03/04/2024 14:17	648.43	0.91	20.2	10.5	
OCC/24A/NA3S71	71	07/03/2024 13:52	03/04/2024 14:20	648.47	1.09	24	12.5	
OCC/24A/NA3S72	72	07/03/2024 13:53	03/04/2024 14:23	648.50	1.35	29.9	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/NA3S73	73	07/03/2024 13:55	03/04/2024 14:25	648.50	1.55	34.2	17.8	
OCC/24A/NA3S74	74	07/03/2024 13:57	03/04/2024 14:27	648.50	1.04	22.9	11.9	
OCC/24A/NA3S75	75	07/03/2024 14:00	03/04/2024 14:30	648.50	1.1	24.2	12.6	
OCC/24A/NA3S76	76	07/03/2024 13:37	03/04/2024 14:01	648.40	0.99	21.9	11.4	
OCC/24A/NA3S77	77	07/03/2024 13:35	03/04/2024 13:57	648.37	1.01	22.3	11.6	

