

St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH  
tel.: 01962 860331 fax: 01962 841339 e-mail: diffusion@gradko.co.uk

## LABORATORY ANALYSIS REPORT

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

**REPORT NUMBER** 46284

**BOOKING IN REFERENCE No** E 4674

**CUSTOMER** South Holland District Council  
Council Offices, Priory Road  
Spalding, Lincolnshire PE11 2XE

**DATE SAMPLES RECEIVED** 08/09/2011

Aug-11		Exposure Data				TOTAL
Tube Number	Date On	Date Off	Time (hr.)	$\mu\text{g}/\text{m}^3$ *	ppb *	$\mu\text{G NO}_2$
1	01/08/2011	30/08/2011	695.50	9.56	4.99	0.48
2	05/08/2011	31/08/2011	627.22	9.19	4.80	0.42
3	05/08/2011	30/08/2011	599.92	15.41	8.04	0.67
4	05/08/2011	30/08/2011	606.00	9.92	5.18	0.44
5	03/08/2011	30/08/2011	644.00	16.15	8.43	0.76
6	05/08/2011	31/08/2011	627.30	22.28	11.63	1.02
7	05/08/2011	30/08/2011	605.72	20.81	10.86	0.92
8	05/08/2011	31/08/2011	625.58	11.24	5.87	0.51
9	05/08/2011	31/08/2011	625.58	10.03	5.23	0.46
10	05/08/2011	31/08/2011	625.58	10.62	5.54	0.48
11	05/08/2011	30/08/2011	605.00	13.35	6.97	0.59
13	03/08/2011	30/08/2011	644.42	31.77	16.58	1.49
14	05/08/2011	30/08/2011	598.92	9.99	5.22	0.44
15	03/08/2011	30/08/2011	644.08	29.22	15.25	1.37
16	03/08/2011	30/08/2011	644.58	12.76	6.66	0.60
17	05/08/2011	30/08/2011	604.58	23.80	12.42	1.05
12 Travel Blank			695.50	1.33	0.69	0.07
Lab Blank			695.50	0.57	0.30	0.029

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd.

Form LQF32 Issue 2

Report Number 46284

Page 1 of 2

**REPORT OFFICIALLY CHECKED**

Gradko International Ltd  
This signature confirms the authenticity of these results  
Signed.....*L. Gates*.....  
L. Gates, Laboratory Supervisor

## LABORATORY ANALYSIS REPORT

**Comment: Results are not blank subtracted**

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

**Overall M.O.U.**

7.3% +/-

Tube Preparation : 50% TEA /Acetone

Analysed on UVS03 Cecil

**Limit of  
Detection**

0.087µgNO<sub>2</sub>

**Analyst Name**

J. Samuel

**Date of Analysis**

09/09/2011

**Date of Report**

14/09/2011

**Analysis carried out in accordance with documented in-house Laboratory Method GLM7**

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd.

Form LQF32 Issue 2

Report Number 46284

Page 2 of 2

REPORT OFFICIALLY CHECKED

Gradko International Ltd

This signature confirms the authenticity of these results

Signed.....

L. Gates, Laboratory Supervisor