

# CERTIFICATE OF ACCREDITATION

This is to certify that:

**C & M CONSULTING ENGINEERS CC**

**Co. reg no: CK 1988/000386/23**

Facility Accreditation Number: **1508**

is a South African National Accreditation System accredited Calibration laboratory provided that all SANAS conditions and requirements are complied with.

This certificate is valid as per the scope on the accompanying schedule of accreditation bearing the above accreditation number for

## **GAS METROLOGY**

The facility complies with the general requirements of

**ISO/IEC 17025:2005**

*This accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system and shall remain in force subject to continuing compliance with SANAS accreditation criteria, ISO/IEC 17025:2005 and any further requirements specified by SANAS.*

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS logo to issue facility reports and/or certificates

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**Mr MA Peet**  
**Chief Executive Officer**

**Initial Accreditation: March 2006**

**Certificate Commences: March 2008**

**Certificate Expires: March 2011**

*"Recognised as the official national accreditation body by the Department of Trade and Industry of the Republic of South Africa"*

This certificate is only valid when accompanied by its schedule of accreditation.

# SCHEDULE OF ACCREDITATION

## GAS METROLOGY

Laboratory Accreditation Number 1508

<p><b>Permanent Address of Laboratory:</b> C &amp; M Consulting Engineers 170 Watermeyer Street Meyerspark 0184</p> <p><b>Postal Address:</b> P O Box 74936 Lynwood Ridge 0040</p> <p>Tel : (012) 803-5124/5 Fax : (012) 809-5126 Email : <a href="mailto:info@airploguys.com">info@airploguys.com</a></p>	<p><b>Technical Signatories</b> : Mr A Laubscher : Mr JC Lisowski ( All items except 5)</p> <p><b>Nominated Representative</b> : Mr CH Albertyn</p> <p>Issue No. : 03 Date of issue : March 2008 Expiry date : March 2011</p>		
	FUNCTION OR TYPE OF INSTRUMENT	NOMINAL RANGE	MEASUREMENT CAPABILITIES EXPRESSED AS AN UNCERTAINTY (±)
1	Calibration of SO <sub>2</sub> / H <sub>2</sub> S point gas analysers	0 to100 ppb 100 ppb to 100 ppm	4 ppb 4% of reading
2	Calibration of point NO / NO <sub>2</sub> gas analysers	0 to 100 ppb 100 ppb to 100 ppm	4 ppb 4% of reading
3	Calibration of O <sub>3</sub> point gas analysers	0 to 100 ppb 100 ppb to 100 ppm	5 ppb 5 % of reading
4	Calibration of point CO gas analysers	0 to 100 ppm 100 ppm to 1 000 ppm	4 ppm 4% of reading
5	Calibration of Opsis open path gas analysers for: NO, NO <sub>2</sub> , SO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , Cl <sub>2</sub> , CLO <sub>2</sub> , HCl, HF, CO <sub>2</sub> , CO, Benzene, Toluene and p-Xylene	0 to 1 ppm  1 to 15 %	5% of reading above minimum detection limit as specified for each individual gas by Opsis  3% of reading
6	On-Site Calibration for item 1 to 5		

Original date of accreditation: March 2006

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Abbreviations: ppm is parts per million (parts in 10<sup>6</sup>)  
ppb is parts per billion (parts in 10<sup>9</sup>)  
Expressed as volume/volume

The MC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor k = 2, corresponding to a confidence level of approximately 95%

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

**Field Manager**