

# Accreditation Certificate

## IAS Ltd

Unit 4 Bagenalstown Business Park, Bagenalstown, Co Carlow

### Testing Laboratory

Registration number: 275T

is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2<sup>nd</sup> Edition "General Requirements for the Competence of Testing and Calibration Laboratories"

*(This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)*

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Date of award of accreditation: 07:December:2010

Date of last renewal of accreditation: 07:December:2010

Expiry date of this certificate of accreditation: 07:December:2015

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This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 

Dr Adrienne Duff

Chairperson: 

Mr Tom O'Neill

Issued on 07 December 2010

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

# Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent Laboratory:  
Category A

## IAS LTD

### Chemical Testing Laboratory

**Initial Registration Date :** 7-December-2010  
**Postal Address:** Unit 4 Bagenalstown Business Park  
*(Address of other locations as they apply)* Bagenalstown  
Co Carlow

**Telephone:** +353 (59) 9721022  
**Fax:** +353 (59) 9721897  
**E-mail:** [denise@iaslabs.ie](mailto:denise@iaslabs.ie)  
**Contact Name:** Denise Reilly  
**Facilities:** Public testing service

# Schedule of Accreditation



Permanent Laboratory:  
 Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

## Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
  - (b) a site laboratory
  - (c) a mobile laboratory or
  - (d) equipment from a mobile or site laboratory

## Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

## Glossary of Terms

### Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.

# Scope of Accreditation



IAS LTD

Permanent Laboratory:  
Category A

## Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
761 Agricultural Products and Materials .22 Soil	Soil pH 4 - 10	Standard Method in DAF Publication: Standard Soil analysis for REPS: Nov 2004 SOP 2001
	Soil Buffer pH (Lime Requirement) pH 4 - 10	Standard Method in DAF Publication: Standard Soil analysis for REPS: Nov 2004 SOP 2002
	Organic matter content 0.1 - 99.9%	Schedule 1 of SI No. 101 of 2009 SOP 2007
	Extractable Phosphorus (Morgans Extract) 1- 20 mg/L	Standard Method in DAF Publication: Standard Soil analysis for REPS: Nov 2004 Morgans extract followed by colorimetry SOP 2008
	Extractable Potassium (Morgans Extract) 25 - 200 mg/L	Standard Method in DAF Publication: Standard Soil analysis for REPS: Nov 2004 Morgans extract followed by flame photometry SOP 2009

# Scope of Accreditation



IAS LTD

Permanent Laboratory:  
Category A

## Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b> .04 Sewage, Leachates .05 Trade Waters .99 And Surface Waters	COD 1-150 and 50-5000mg/L  BOD 1 - 1000 mg/L	Standard Methods for the Examination of Water and Wastewater, 21st edition Method 5220 D SOP2005  Standard Methods for the Examination of Water and Wastewater, 21st edition Method 5210 B SOP2006
.01 Potable, .04 Sewage, Leachates .05 Trade, .07 Bore .99 Surface Waters	pH 4 - 10 pH units  Conductivity (1uScm <sup>-1</sup> -1999 uScm <sup>-1</sup> )	Standard Methods for the Examination of Water and Wastewater, 21st edition Method 4500 H <sup>+</sup> B SOP 2004  Standard Methods for the Examination of Water and Wastewater, 21st edition Method 2510 B SOP 2003

# Scope of Accreditation



IAS LTD

Permanent Laboratory:  
Category A

## Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	<b>Waters</b>		
.01	Waters for potable and domestic purposes	Ammonia/Ammonium 0.01mg/l to 0.50mg/l NH <sub>3</sub> -N	SOP 2013 based on HACH Method 8155
.04	Sewage	0.01mg/l to 0.61 mg/l NH <sub>3</sub>	
.05	Trade Waters	0.01mg/l to 0.65 mg/l NH <sub>4</sub>	
.07	Bore Waters		
.99	Other <i>Surface and ground water</i>	Total Suspended Solids (1mg/l to 1000 mg/l)	SOP 2016 Gravimetric Determination based Standard Methods for the examination of water and Wastewater, 21st Edition, 2005
		Sulphate (5mg/l to 70mg/l)	SOP 2020 based on HACH Method 8051
.01	Waters for potable and domestic purposes	Determination of Metals by ICP-MS Calcium 0.5 - 200mg/l Magnesium 0.5-200mg/l Sodium 0.5-200mg/l Potassium 0.5-200mg/l Iron 20-500µg/l Manganese 5-500µg/l Copper 10-500µg/l Zinc 10-500µg/l Lead 1-100µg/l Aluminium 20-500µg/l	SOP 2041 Based on ICP-MS

# Scope of Accreditation



IAS LTD

Permanent Laboratory:  
Category A

## Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters		
.01 Waters for potable and domestic purposes	Determination of Metals by ICP-MS Nickel 2-100µg/l Chromium 5-500µg/l Cadmium 0.5-100µg/l	SOP 2041 Based on ICP-MS
.05 Trade wastes .07 Bore Waters .99 Other waters -Surface and ground water -Effluents	Determination of Metals by ICP-MS Calcium 2 - 200mg/l Magnesium 2 -200mg/l Sodium 2 -200mg/l Potassium 2 -200mg/l Iron 20-2000µg/l Manganese 20-2000µg/l Copper 20-2000µg/l Zinc 20-2000µg/l Lead 20-2000µg/l Aluminium 20-2000µg/l Nickel 20-2000µg/l Chromium 20-2000µg/l Cadmium 20-2000µg/l	
.01 Waters for potable and domestic purposes	Hardness 1mg/l - 911mg/l	SOP 2024 Calculation. Based Standard Methods for the examination of water and Wastewater, 21st Edition 2005

# Scope of Accreditation



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## Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters .01 Waters for potable and domestic purposes .04 Sewage .05 Trade Waters .07 Bore Waters .99 Other <i>Surface and ground water</i>	Chloride 2mg/l - 100mg/l  Alkalinity 10mg/l-800 mg/l  Orthophosphate 0.05mg/l-1.00mg/l	SOP 2019 Titration  SOP 2018 Titration. Standard Methods for the examination of water and Wastewater, 21st Edition, 2005  SOP 2026 UV Spectrophotometry. Standard Methods for the examination of water and Wastewater, 21st Edition, 2005