

# Accreditation Certificate

## Independent Analytical Supplies Ltd (Trading as) IAS Laboratories

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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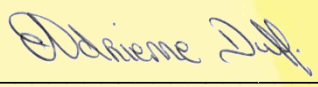
Date of award of accreditation: **07:12:2010**

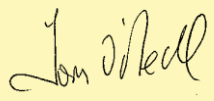
Date of last renewal of accreditation: **21:09:2015**

Expiry date of this certificate of accreditation: **21:09:2020**

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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 21 September 2015

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

## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES

### Chemical and Biological Testing Laboratory

**Initial Registration Date :** Chemistry Testing 7 - December - 2010  
Biological Testing 6 - December - 2017

**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:** qualitycontrol@iaslabs.ie  
**Contact Name:** Ruth Clinton  
**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 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
- portable test equipment
  - a site laboratory
  - a mobile laboratory or
  - 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



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

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 Atomic Absorption SOP 2009

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>761</b> <b>Agricultural Products and Materials</b>  .22    Soil	Morgans Phosphorus 1.0 - 250.0 mg/l  Morgans Potassium 25 - 200 mg/l  Morgans Magnesium 25 - 200 mg/l	SOP 2040 - Determination of Morgans Phosphorus using the Konelab 20i Aquakem  SOP 2120 based on Standard Soil Analysis for REPS  SOP 2120 based on Standard Soil Analysis for REPS
<b>766</b> <b>Waters</b>  .04    Sewage WWTP effluent  .05    Trade Waters  .99    Other Waters <i>Surface waters</i> <i>Leachates</i>	COD 1-150 and 50-5000mg/L        BOD 1 - 1000 mg/L	Standard Methods for the Examination of Water and Wastewater, 22nd Edition Method 5220 D SOP 2005  Standard Methods for the Examination of Water and Wastewater, 22nd Edition Method 5210 B SOP 2006
.01    Potable	Fluoride 0.08 - 1.5 mg/l	Kone 20i Aquakem SOP 2069

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>		
.01 Potable,	pH 4 - 10 pH units	Standard Methods for the Examination of Water and Wastewater, 22nd Edition Method 4500 H <sup>+</sup> B SOP 2004
.04 Sewage, WWTP effluent		
.05 Trade,		
.07 Bore		
.99 Other Waters <i>Surface waters</i> <i>Leachates</i>	Conductivity 10-1999µs/cm	SOP 2076 using the Mettler Toledo Meter
	Ammonia/Ammonium 0.01mg/l to 0.50mg/l NH <sub>3</sub> -N 0.01mg/l to 0.61 mg/l NH <sub>3</sub> 0.01mg/l to 0.65 mg/l NH <sub>4</sub>	SOP 2013 based on HACH Method 8155
	Total Suspended Solids (1 mg/l to 1000 mg/l)	SOP 2016 Gravimetric Determination based Standard Methods for the examination of Water and Wastewater, 22nd Edition, 2005
	Sulphate (5 mg/l to 70 mg/l)	SOP 2020 based on HACH Method 8051

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>		
.01 Waters for potable and domestic purposes	Determination of Metals by ICP-MS Calcium 0.5 - 200 mg/l Magnesium 0.5-200 mg/l Sodium 0.5-200 mg/l Potassium 0.5-200 mg/l Iron 20-500 µg/l Manganese 5-500 µg/l Copper 10-500 µg/l Zinc 10-500 µg/l Lead 1-100 µg/l Aluminium 20-500 µg/l Nickel 2-100 µg/l Chromium 5-500 µg/l Cadmium 0.5-100 µg/l	SOP 2041 Based on ICP-MS

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

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 WWTP effluent .05 Trade wastes .07 Bore Waters .99 Other waters <i>Surface and ground water</i>	Determination of Metals by ICP-MS Calcium 2 - 200 mg/l Magnesium 2 -200 mg/l Sodium 2 -200 mg/l Potassium 2 -200 mg/l Iron 20-2000 µg/l Manganese 20-2000 µg/l Copper 20-2000 µg/l Zinc 20-2000 µg/l Lead 20-2000 µg/l Aluminium 20-2000 µg/l Nickel 20-2000 µg/l Chromium 20-2000 µg/l Cadmium 20-2000 µg/l	SOP 2041 Based on ICP-MS
.01 Waters for potable and domestic purposes	Hardness 1mg/l - 911 mg/l	SOP 2024 Calculation. Based on Standard Methods for the examination of water and Wastewater, 22nd Edition 2005



# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>  .01 Waters for potable and domestic purposes .04 Sewage WWTP effluent .05 Trade Waters .07 Bore Waters .99 Other <i>Surface and ground water</i>	Orthophosphate 0.05 mg/l- 1.00 mg/l   Ammonia/Ammonium 0.01 - 20 mg/l NH3 - N 0.01 - 24.40 mg/l NH3 0.01 - 20 mg/l NH4 - N 0.01 - 25.80 mg/l - NH4	Standard Methods for the examination of water and Wastewater, 22nd Edition, 2005   SOP 2026 UV Spectrophotometry. Standard Methods for the examination of water and Wastewater, 22nd Edition, 2005  SOP 2057 using the Konelab 20i Aquakem

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>		
.01 Waters for potable and domestic purposes	Orthophosphate 0.01 - 10 mg/l PO <sub>4</sub>	SOP 2061 using the Konelab 20i Aquakem
.04 Sewage WWTP effluent	0.01 - 3.26 mg/IP	
.05 Trade Waters	Sulphate	SOP 2062 using the Konelab 20i Aquakem
.07 Bore Waters	2.5 mg/l to 500 mg/l	
.99 Other <i>Surface and ground water</i>	Chloride 1 - 500 mg/l	SOP 2065 using the Konelab 20i
	Alkalinity 1 - 1000 mg/l	SOP 2064 using the Konelab 20i Aquakem
	Total Oxidised Nitrogen (TON) 0.5 - 50 mg/l TON as N	SOP 2058 in water using the Konelab 20i Aquakem

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>		
.01 Waters for potable and domestic purposes	Nitrite 0.01 - 5 mg/l NO <sub>2</sub> as N	SOP 2059 using the Konelab 20i Aquakem
.04 Sewage WWTP effluent	0.03 - 16.5 mg/l NO <sub>2</sub>	
.05 Trade Waters	Nitrate	SOP 2060 using the Konelab 20i Aquakem
.07 Bore Waters	0.5 - 50 mg/l NO <sub>3</sub> as N	
.99 Other <i>Surface and ground water</i>	2.2 - 220 mg/l NO <sub>3</sub>	
	Colour 1 - 500 Pt Co	SOP 2063 using the Konelab 20i Aquakem
	Turbidity 0.02 -1000 NTU	SOP 2022 using the Tubriquant 1100T Based on DIN EN ISO 7027

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b>		
.01 Waters for potable and domestic purposes	Total Nitrogen 0.5 - 25 mg/l	SOP 2075 using the Persulfate Digestion method.
.04 Sewage		
.05 Trade Waters		
.07 Bore Waters		
.99 Other <i>Surface and ground water</i>	Total Phosphorus 0.01 - 2 mg/l	SOP 2021 using ICP-MS

# Scope of Accreditation



## INDEPENDENT ANALYTICAL SUPPLIES LTD (TRADING AS) IAS LABORATORIES Biological Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>870</b> Waters including effluents		
.11 Bacteriological condition of potable waters	Coliforms 0 - 2419.6 MPN/100ml (Colilert 18)	SOP 2090 base on the Microbiology of Drinking Water Part 4
	E.coli 0 - 2419.6 MPN/100ml (Colilert 18)	SOP 2090 base on the Microbiology of Drinking Water Part 4
	Enterococci 0 - 200 MPN/100ml (Enterolert-DW)	SOP 2114 base on the Microbiology of Drinking Water Part 5