

Accreditation Certificate

City Analysts Ltd.

Pigeon House Road, Ringsend, Dublin 4

Testing Laboratory

Registration number: 138T

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 2nd Edition** “*General Requirements for the Competence of Testing and Calibration Laboratories*”
(This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

Date of award of accreditation: **19:05:2003**


Date of last renewal of accreditation: **05:04:2018**

Expiry date of this certificate of accreditation: **05:04:2023**

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 

Ms Ita Kinahan

Issued on 05 April 2018

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

CITY ANALYSTS LTD.

Chemical/Biological Testing Laboratory

Initial Registration Date : 19-May-2003
Postal Address: Pigeon House Road
(Address of other locations as they apply) Ringsend
Dublin 4
Telephone: +353 (1) 6136003
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E-mail: miriamb@cityanalysts.ie
Contact Name: Miriam Byrne
Facilities: Public testing service

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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



City Analysts Ltd.

Chemical Testing Laboratory, Dublin

Permanent Laboratory:

Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters		In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd edition:2012
.04 Sewage <i>Influent</i> <i>Effluent</i>	Total Suspended Solids: Range: 5-300 mg/l	Standard method 2540D Method Ref: 1049
.05 Trade wastes		
.06 Saline waters	Total Suspended Solids: Range: 2-300 mg/l	Method Ref: 1049 based on standard method 2540D
.99 Other waters <i>Surface Waters</i>		
.04 Sewage <i>Influent</i> <i>Effluent</i>	BOD Range 2-1000 mg/l O ₂ consumed (diluted samples)	Method Ref: 1003 based on standard method 5210B
.05 Trade wastes		
.06 Saline waters	BOD Range	Method Ref: D/1003 based on standard method ref 5210D
.99 Other waters <i>Surface waters</i>	2-7 mg/l O ₂ consumed (undiluted samples)	
.04 Sewage <i>Influent</i> <i>Effluent</i>	COD Range: 8-2000 mg/l	Method Ref: 1009 based on standard method ref 5220D
.05 Trade wastes		
.06 Saline waters		
.99 Other waters <i>Surface waters</i>		
.04 Sewage <i>Influent</i> <i>Effluent</i>	Total Solids at 0.1-99 % 103 ° C	Method Ref: 3086 based on standard method ref 2540B

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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 <i>Influent</i> <i>Effluent</i> .05 Trade wastes .06 Saline waters .99 Other waters <i>Surface waters</i>	pH Range: 4-10	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012 Method Ref: 1041 based on standard method 4500-HB
766 Waters .04 Sewage <i>Influent</i> <i>Effluent</i> .05 Trade wastes .07 Bore waters .99 Other waters <i>Surface waters</i>	Ortho Phosphate as P 0.025-25 mg/l Nitrite as N 0.01-0.5 mg/l Nitrite as NO2 0.66-6.6 mg/l Chloride as Cl 50-5000 mg/l Total Oxidised Nitrogen as N 5-500 mg/l Total Oxidised Nitrogen as NO3 8.9-2215mg/l Ammonia As N 1-100 mg/l Ammonia as NH4 1.3-129mg/l Nitrate as N - calculated value 4.8-500 mg/l (Total Oxidised Nitrogen - Nitrite) Nitrate as NO3 -calculated value 21.2-2215 mg/l (Total Oxidised Nitrogen-Nitrite) Sulphate 20-500 mg/l Alkalinity 30-1500 mg/l	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012 Colorimetric Method Ref: 3000 using discrete analyser

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INAB Classification number (P9)	Materials/products tested	Type of test/properties measured	Range of measurement	Standard specifications	Equipment/techniques used
766	Waters	Turbidity			
.01	Waters for potable and domestic purposes		0.1-150 NTU for surface water		
.07	Bore waters		0.1-150 NTU for potable water		
.99	Other waters		0.1-150 NTU for ground water		
	<i>Surface waters</i>	Colour	5-400 Hazen		
		Fluoride	0.1-5 mg/l		
				In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012	
				Turbidimetric	
				Method Ref: 3054 based on std method ref 2130B	
				Spectrophotometric	
				Method Ref: 3010 based on std ref method 2120C	
				Ion Selective	
				Method Ref: 3015 based on std ref 4500-FC	
766	Waters	Alkalinity as CaCO ₃	30-1500 mg/l		
.01	Waters for potable and domestic purposes	Ammonia as N	0.01-100 mg/l		
		Ammonia as NH ₄	0.013-129 mg/l		
.07	Bore waters	Chloride	10-500 mg/l		
.99	Other waters	Nitrate as N	2-100 mg/l		
	<i>Surface waters</i>	Nitrate as NO ₃	8.9-443 mg/l		
		Nitrite as N	0.005-2.0 mg/l		
		Nitrite as NO ₂	0.066-1.65 mg/l		
		Ortho Phosphate	0.025-25 mg/l		
		Total Oxidised Nitrogen as N	2-100 mg/l		
		Total Oxidised Nitrogen as NO ₃	8.86-443 mg/l		
		Sulphate	20-500 mg/l		
				In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012	
				Colorimetric method using discrete analyser	
				Method Ref: 3000	
				Turbidimetric method using discrete analyser:	3000

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INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement		Standard specifications Equipment/techniques used
766	Waters	Sodium	0.15-60	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012 ICP-OES Method Ref: 3001 based on 3120B-ICP method
.01	Waters for potable and domestic purposes	mg/l		
.07	Bore waters	Calcium	0.1-60 mg/l	
	Other waters	Magnesium	0.15-60 mg/l	
	Surface waters	Potassium	0.4-60 mg/l	
		Hardness as CaCO ₃	33-369.9mg/l	
		Hardness as Ca	13.4-160.8	
		mg/l		
		Boron	0.05-1 mg/l	
		Aluminium	5 - 1000 µg/l	
		Cadmium	0.2 - 25 µg/l	
		Chromium	0.9 - 250 µg/l	
		Copper	2 - 1000 µg/l	
		Iron	7.2 - 1000 µg/l	
		Lead	1.7- 120 µg/l	
		Manganese	0.7 - 250 µg/l	
		Nickel	0.5 - 100 µg/l	
		Zinc	2.8 - 1000 µg/l	
766	Waters			Gallery Discrete Analyser Method 3243
.01	Waters for potable and domestic purposes	Alkalinity as CaCo3	30-3000 mg/l	
.04	Sewage Influent Effluent	Alkalinity as HCO3	36.6-3660 mg/l	
.07	Bore Waters			
.99	Other waters Surface Waters			

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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 Influent Effluent .05 Trade Waters .07 Bore Waters .99 Other waters Surface Waters	Ortho Phosphate (Low Range) 0.5-25 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .04 Sewage Influent Effluent	Ortho Phosphate (High Range) 2-200 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters	(High Range) Ammonia as N 1-100 mg/l Ammonia as NH4 mg/l 1.29-129	Gallery Discrete Analyser Method 3243

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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 .07 Effluent .99 Bore Waters Other Waters Surface Waters	(Low Range) Ammonia as N 0.01-2.5 mg/l Ammonia as NH4 0.013-3.23 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters	(High Range) Chloride 50-10, 000 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters or potable and domestic purposes .04 Sewage Effluent .99 Other Waters Surface Waters	(Low Range) Chloride 2-1000 µg/l	Gallery Discrete Analyser Method 3243

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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 Influent Effluent .05 Trade Waste .07 Bore Waters	(High Range) Nitrite as N 0.2-10 mg/l Nitrite as NO2 0.66-32.9 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Effluent .07 Bore Waters .99 Other Waters Surface Waters	(Low Range) Nitrite as N 0.01-.10 mg/l Nitrite as NO2 0.033-0.329 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters .99 Other Waters Surface Waters	Silica 0.5-25mg/l	Gallery Discrete Analyser Method 3243

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters	(High Range) Total Oxidised Nitrogen [TON] as N 10-250 mg/l Total Oxidised Nitrogen [TON] as NO3 44.3-1107.5 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters .99 Other Waters Surface Waters	(Low Range) Total Oxidised Nitrogen [TON] as N 2-100 mg/l Total Oxidised Nitrogen [TON] as NO3 8.86-443 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters .99 Other Waters Surface Waters	(Low Range) Nitrate as N 2-200 mg/l Nitrate as NO3 8.86-886 mg/l	Gallery Discrete Analyser Method 3243

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters	(High Range) Nitrate as N 10-500 mg/l Nitrate as NO3 44.30-2215 mg/l	Gallery Discrete Analyser Method 3243
766 Waters .01 Waters for potable and domestic purposes .04 Sewage Influent Effluent .05 Trade Waste .07 Bore Waters .99 Other Waters Surface Waters	Sulphate 10-500 mg/l	Gallery Discrete Analyser Method 3243

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INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	Waters	Aluminium 0.2 - 50 mg/l	In house methods based on "APHA Standard Methods for the Examination of Water and Wastewater" 22 nd Edition:2012 Ref: 3001 based on 3120B - ICP method
.04	Sewage	Cadmium 0.2 - 50 mg/l	
	<i>Influent</i>	Chromium 0.2 - 50 mg/l	
	<i>Effluent</i>	Copper 0.2 - 50 mg/l	
		Iron 0.2 - 50 mg/l	
		Lead 0.2 - 50 mg/l	
		Manganese 0.2 - 50 mg/l	
		Nickel 0.2 - 50 mg/l	
		Zinc 0.2 - 50 mg/l	
781	Constituents of the Environment		
.31	Soil	Total solids at	Gravimetry Method Ref: 3086 based on std ref 2540B
.33	Solid waste <i>Sludge</i>	103° C 0.1-99%	
766	Waters	Total P 0.05 - 3 mg/l	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd Edition:2012 Method Ref: 3001 based on std method 4500-P.
.01	Waters for potable and domestic purposes	Total P 2-20 mg/l (Influent only)	
.04	Sewage <i>Influent</i>		
	Bore waters		
.07	Other waters		
.99	<i>Surface waters</i>		

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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 <i>Influent</i> <i>Effluent</i> .99 Other waters <i>Surface waters</i>	Conductivity @ 20C 132 - 9030 uS /cm	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012 Method Ref: 3011
766 Waters .04 Sewage <i>Effluent</i>	KJN by calculation	Based on standard methods 4500N Method Ref: 3228
766 Waters .01 Waters for potable and domestic purposes	Monochloramine 0.1 - 4.5 mg/L Free ammonia 0.05-0.5 mg/L	Analytical procedures for DR/800 Instruments Method 10200

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City Analysts Ltd.

Permanent Laboratory:

Category A

Chemical Testing Laboratory, Shannon

INAB Classification number (P9)	Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 .04 .99	Waters Sewage <i>Influent</i> <i>Effluent</i> Other waters <i>Surface waters</i>	BOD Range 2-1000mg/l O ₂ consumed	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 1003
766 .05 .99	Waters Trade wastes Other waters <i>Surface waters</i>	COD Range 8-1450mg/l	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 1009
766 .04 .06 .99	Waters Sewage <i>Influent</i> <i>Effluent</i> Saline Waters Other waters <i>Surface waters</i>	Total suspended solids 2-300 mg/l - surface water 5-300 mg/l - all others	Method ref :1049

Scope of Accreditation



City Analysts Ltd.

Permanent Laboratory:

Category A

Chemical Testing Laboratory, Shannon

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 .07 Bore waters .99 Other waters <i>Surface waters</i>	Turbidity 0.1 - 150 NTU	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22nd Edition:2012 Turbidimetric Method Ref: 3054 based on std method ref 2130B

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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 .04 and domestic purposes Sewage <i>Influent</i> .05 <i>Effluent</i> .06 Trade wastes .99 Saline waters Other waters <i>Surface waters</i>	pH Range: 4-10	In house methods based on "APHA Standard Methods for the Waters and Wastewater" 22nd Edition:2012 Method Ref: 1041
766 Waters .01 Waters for potable and domestic purposes .07 Bore Waters .99 Other Waters <i>Surface Waters</i> .04 Sewage <i>Influent</i> <i>Effluent</i> .05 Trade wastes .99 Other waters <i>Surface waters</i>	Colour 5-400 Hazen Fats, Oils and Grease -1-300mg/L	In house methods based on "APHA Standard Methods for the Waters and Wastewater" 22nd Edition: 2012 Method Ref: 3010 In house method based on: ASTM D 3921-85 Method (Reapproved 1990) Method Ref: 3208

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Permanent Laboratory:

Category A

Chemical Testing Laboratory, Shannon

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 .01 .07 .99	Waters Waters for potable and domestic purposes Bore Waters Other Waters <i>Surface Waters</i>	In house methods based on "APHA Standard Methods for the Waters and Wastewater" 22nd Edition: 2012 Colorimetric method using the discrete analyser. Method Ref 3000
.04 .99	Sewage <i>Influent</i> <i>Effluent</i> Other waters <i>Surface waters</i>	Ortho Phosphate (high range) 0.5-50mg/l Ortho Phosphate (Low range) 0.025-5.0mg/l Alkalinity as CaCO3 30-3000 mg/l Alkalinity as HCO3 36.6 - 3660 mg/l Ammonia as N (High range) 1-100 mg/l Ammonia as NH4 1.29 - 129 mg/l Ammonia as N (low range)0.01- 5.0 mg/l Ammonia as NH4 0.013-6.45 mg/l Chloride (High range) 50-5,000 mg/l Chloride(low range) 10-937.5 mg/l (High Range)Nitrite as N 0.2-20 mg/l Nitrite as NO2 0.66-65.8 mg/l (Low Range) Nitrite as N 0.01-1.0 mg/l Nitrite as NO2 0.033-0.329 mg/l Total Oxidised Nitrogen(high range) as N 10-250 mg/l Total Oxidised Nitrogen(low range) as N 2-200 mg/l

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
	Total Oxidised Nitrogen as NO3 44.3-1107.5 mg/l Total Oxidised Nitrogen as NO3 8.86-886 mg/l Nitrate(high range) as N 10-250 mg/l Nitrate(low range) as N 2-200 mg/l Nitrate as NO3 44-1107 mg/l Nitrate as NO3 8.86-886 mg/l	
766 .04 Waters Sewage <i>Influent</i> <i>Effluent</i>	KJN by calculation	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 3228
766 .01 .04 .99 Waters Waters for potable and domestic purposes Sewage <i>Influent</i> <i>Effluent</i> Other waters <i>Surface waters</i>	TOC (TC-IC) 5-50 mg/l (.04 only) TOC(NPOC) 0.5-20mg/l (.01, .99) Dissolved Organic Carbon 0.5 - 20 mg/l (.01 and .99)	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 3224

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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 <i>Influent</i> <i>Effluent</i> .99 Other waters <i>Surface waters</i>	Conductivity @20C 132 - 9030 uS/cm 4.5 uS - 132.3 uS (.99 only)	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 3011
766 Waters .01 Waters for potable and domestic purposes .99 Other waters <i>Surface waters</i>	UV Transmissivity 70-100%	Method reference 3233

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 .04 <i>Waters</i> Sewage <i>Effluent</i> <i>Influent</i> .99 Other waters Surface waters	Total N 2.5-100 mg/L	In house methods based on "APHA Standard Methods for Waters and Wastewater" 22 nd edition:2012 Method Ref: 3228
766 .01 Waters for potable and domestic purposes	VOC's by GC/MS 1,3,5 Trimethylbenzene 0.5 - 100 µg/L 2 Chlorotoluene 0.5 - 100 µg/L Benzene 0.5 - 100 µg/L 1,3,5 Trichlorobenzene 0.7 - 100 µg/L Chlorobenzene 0.5 - 100 µg/L Propylbenzene 0.6 - 100 µg/L 1,1,2,2 Tetrachloroethane 0.5 - 100 µg/L 1,1,2 Trichloroethane 1.1 - 100 µg/L 1,2 Dibromoethane 0.5 - 100 µg/L 1,2 Dichloroethane 0.5 - 100 µg/L Ethylbenzene 0.5 - 100 µg/L Hexachlorobutadiene 3.0 - 100 µg/L Bromodichloromethane 1.9 - 100 µg/L Dibromomethane 0.5 - 100 µg/L Dibromochloromethane 1.0 - 100 µg/L 1, 2 Dichloropropane 0.5 - 100 µg/L 1,3 Dichloropropane 0.5 - 100 µg/L Tetrachloroethene 0.6 - 100 µg/L	In house method based on: Method 8260B, Volatile Organic compounds by Gas Chromatography, Mass Spectrometry US EPA method 524.2 - Measurement of Purgeable Organic compounds in water by Capillary Column Gas Chromatography / Mass Spectrometry. Method Ref: 1016

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 .01	Waters Waters for potable and domestic purposes	VOC's by GC/MS
	Trichloroethene 0.6 - 100 µg/L	In house method based on: Method 8260B, Volatile
	m/p Xylene 0.5 - 100 µg/L	Organic compounds by Gas
	n-Propylbenzene 0.7 - 100 µg/L	Chromatography, Mass
	o-Xylene 0.5 - 100 µg/L	Spectrometry
	sec Butylbenzene 0.7 - 100 µg/L	US EPA method 524.2 -
	1,2,4 trichlorobenzene 3.0 - 100 µg/L	Measurement of Purgeable
	1,2,4 Trimethylbenzene 0.6 - 100 µg/L	Organic compounds in water
	1,3 Dichlorobenzene 1.0 - 100 µg/L	by Capillary Column Gas
	1,4 Dichlorobenzene 1.0 - 100 µg/L	Chromatography / Mass
	1,1 Dichloro-1-propene 1.0 - 100 µg/L	Spectrometry.
	1,3 Dichloro-1-propene (E) 1.0 - 100 µg/L	Method Ref: 1016
	1,3 Dichloro-1-propene (Z) 1.0 - 100 µg/L	In house method based on:
	4 Chlorotoluene 1.0 - 100 µg/L	Method 8260B, Volatile
	Bromobenzene 1.0 - 100 µg/L	Organic compounds by Gas
	Bromoform 1.0 - 100 µg/L	Chromatography, Mass
	Carbon Tetrachloride 1.0 - 100 µg/L	Spectrometry
	1,1,1 Trichloroethane 1.0 - 100 µg/L	US EPA method 524.2 -
	1,2 Dibromo-3-chloropropane 2.0 - 100 µg/L	Measurement of Purgeable
	Toluene 1.0 - 100 µg/L	Organic compounds in water
	Trichloromethane 1.0 - 100 µg/L	by Capillary Column Gas
	n-Butylbenzene 1.2 - 100 µg/L	Chromatography / Mass
	1,1 Dichloroethane 10 - 100 µg/L	Spectrometry.
	1,2 Dichloroethene (E) 10 - 100 µg/L	Method Ref: 1016

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INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement		Standard specifications Equipment/techniques used
766 .01	Waters Waters for potable and domestic purposes	VOC's by GC/MS 1,2 Dichloroethene (Z)	10 - 100 µg/L	In house method based on: Method 8260B, Volatile Organic compounds by Gas Chromatography, Mass Spectrometry US EPA method 524.2 - Measurement of Purgeable Organic compounds in water by Capillary Column Gas Chromatography / Mass Spectrometry. Method Ref: 1016
766 .01 .99	Waters including Effluents Potable Waters Other Waters Surface Waters Treated waters	Chromium Manganese Iron Nickel Copper Zinc Lead Beryllium Aluminium Vanadium Cobalt Arsenic Selenium Molybdenum Silver Antimony	1-2000 µg/l 1-2000 µg/l 10-2000 µg/l 2.5-2000 µg/l 5-2000 µg/l 10-2000 µg/l 1-1000 µg/l 1-250 µg/l 10-500 µg/l 1-100 µg/l 1-100 µg/l 1-500 µg/l 1-500 µg/l 5-500 µg/l 1-500 µg/l 1-500 µg/l	In house method using Varian 820 ICP-MS Method 3244

Scope of Accreditation



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Category A

Biological Testing Laboratory, Dublin

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<p>870 Waters, including effluents</p> <p>.16 Bacteriological condition of environmental waters</p>	<p>Detection and enumeration of enterococci</p>	<p>Method Ref: 1205</p> <p>Based on:</p> <p>The Microbiology of Drinking Water (2010) - Methods for the examination of waters and associated materials</p> <p>Part 5 - A method for the isolation and enumeration of enterococci by membrane filtration.</p>
<p>870 Waters, including effluents</p> <p>.11 Bacteriological condition of potable waters</p> <p>.12 Bacteriological condition of industrial waters (treated, recirculating)</p>	<p>TVC @ 22°C for 72 hours</p> <p>TVC @ 37°C for 48 hours</p>	<p>Method Ref: 1208</p> <p>Based on:</p> <p>The Microbiology of Drinking Water (2007) - Methods for the examination of waters and associated materials</p> <p>Part 7 - Methods for the enumeration of heterotrophic bacteria by pour and spread plate techniques</p>

Scope of Accreditation



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Biological Laboratory, Dublin

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870 Waters, including effluents	Detection and enumeration of coliforms (MPN)	Method Ref: 1201
.11 Bacteriological condition of potable waters	Detection and enumeration of E.coli (MPN)	Based on: IDEXX Colilert® 18 Test Kit - DST as described in The Microbiology of Drinking Water (2009) - Methods for the examination of waters and associated materials
.12 Bacteriological condition of industrial waters (treated, recirculating)		Part 4 - Methods for the isolation and enumeration of coliform bacteria and E.coli.
.13 Bacteriological condition of sewage		
.14 Bacteriological condition of trade wastes	Isolation and Enumeration of faecal coliforms in water by membrane filtration. (Excluding P9 category .15)	Method Ref: 3221 Apha Standard Methods for examination of waters and waste waters (22nd Edition).
.15 Bacteriological condition of swimming pools and spas		

Scope of Accreditation



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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<p>781 Constituents of the Environment</p> <p>.33 Solid waste Pasteurised, Thermodigestion, Lime stabilised sludges</p>	<p>Detection of Salmonella</p>	<p>Method ref: 3242 Customer specified method. Based on EA - The Microbiology of Sludge (2004) Part 4.</p>

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Biological Testing Laboratory, Dublin

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
865 Aquatic Biology of potable water .31 <i>Identification of enteric protozoa to specified level</i>	Detection of Cryptosporidium oocysts in raw and treated water using Idexx Filta Max workstation or stomacher elution.	Method ref: 1202 Microbiology of Drinking water (2010) Part 14: Methods for the isolation, identification and enumeration of Cryptosporidium oocysts and Giardia cysts
870 Waters, including effluents .11 Bacteriological condition of potable waters .16 Bacteriological condition of environmental waters .99 Other Waters <i>Surface waters</i>	Isolation and enumeration of <i>Clostridium perfringens</i> in water by membrane filtration.	Method Ref: 1214 Based on: The Microbiology of Drinking Water (2010) - Methods for the examination of waters and associated materials Part 6

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Biological Testing Laboratory, Dublin

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870 Waters, including effluents .16 Bacteriological condition of environmental waters .99 Other Waters <i>Swimming pool waters</i>	Enumeration of <i>Staphylococcus aureus</i> by membrane filtration Enumeration of <i>Pseudomonas aeruginosa</i> by membrane filtration	Method ref: 3230 Method ref : 3231
870 Waters, including effluents .99 Other Waters <i>Endoscopy waters</i>	TVC at 30C 1-100cfu/100ml Enumeration of <i>Pseudomonas aeruginosa</i>	Method ref: 3234 Department of health - Choice of framework for local policy and procedures 01-06- Decontamination of flexible endoscopes The microbiology of drinking water 2013 part 7. Method ref : 3231

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City Analysts Ltd.

Biological Testing Laboratory, Shannon

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
866 Ecotoxicology .01 Bioassay, including toxicity tests for waters, including effluents.	Acute toxicity test - Determination of the inhibition of mobility of <i>Daphnia magna</i> straus (Cladocera, Crustacea)	Method 3235 based on ISO6341:2012
	Determination of acute lethal toxicity to marine copepods (Copepoda Crustacea) <i>Tisbe battagliai</i>	Method 3238 based on ISO14669:1999
	Marine Algal growth inhibition test with <i>Skeletonema cosatum</i> and <i>Phaeodactylum tricornutum</i> .	Method 3237 based on ISO 10253:2006
	Freshwater Algal Growth Inhibition test with unicellular green algae	Method 3236 based on ISO8692:2012
	Water quality -Determination of the inhibitory effect of water samples on the light emission of <i>Vibrio fischeri</i> (Luminescent bacteria test)	Method 3239 using freeze-dried bacteria based on ISO 11348-3:2007.
	Determination of the median lethal concentration (LC ₅₀) of the test substance to <i>Oncorhynchus mykiss</i> (Rainbow trout) or <i>Psetta maxima</i> (Turbot) after 96 hours	Method 3240 based on OECD 203, 1992 OECD guideline for testing of chemicals-Fish, acute toxicity test'.

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City Analysts Ltd.

Biological Testing Laboratory, Shannon

Permanent Laboratory:

Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870 Waters. including effluents		Method Ref: 1208
.11 Bacteriological condition of potable waters	TVC @ 22°C for 72 hours (excluding .15) TVC @ 37°C for 48 hours (excluding .15)	Based on: The Microbiology of Drinking Water (2007) - Methods for the examination of waters and associated materials
.12 Bacteriological condition of industrial waters (treated, recirculating)	Detection and enumeration of coliforms (MPN)	Part 7 - Methods for the enumeration of heterotrophic bacteria by pour and spread plate techniques
.13 Bacteriological condition of sewage	Detection and enumeration of E.coli (MPN)	Method Ref: 1201 Based on: IDEXX Colilert® 18 Test Kit - DST as described in
.14 Bacteriological condition of trade wastes		The Microbiology of Drinking Water (2009) - Methods for the examination of waters and associated materials
.15 Bacteriological condition of swimming pools and spas		Part 4 - Methods for the isolation and enumeration of coliform bacteria and E.coli.

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Biological Testing Laboratory, Shannon

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870 .11 .16	<p>Waters, including effluents</p> <p>Bacteriological Condition of potable waters</p> <p>Bacteriological condition of environmental waters: River waters</p>	Isolation and Enumeration of <i>Clostridium perfringens</i> in Water by membrane filtration	<p>Method Ref: 1214</p> <p>Based on:</p> <p>The Microbiology of Drinking Water (2010) - Methods for the examination of waters and associated materials</p> <p>Part 6</p>
870 .13	<p>Waters, including effluents</p> <p>Bacteriological condition of sewage</p>	Isolation and Enumeration of faecal coliforms in water by membrane filtration.	<p>Method Ref: 3221</p> <p>Based on:</p> <p>Apha Standard methods for examination of waters and waste waters 22nd Edition.</p>
870 .16	<p>Waters, including effluents</p> <p>Bacteriological condition of environmental waters</p>	Detection and enumeration of enterococci	<p>Method Ref: 1205</p> <p>Based on:</p> <p>The Microbiology of Drinking Water (2010) - Methods for the examination of waters and associated materials</p> <p>Part 5 - A method for the isolation and enumeration of enterococci by membrane filtration.</p>

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Biological Testing Laboratory, Shannon

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870 Waters, including effluents .11 Potable waters .99 Other waters Hot and cold water systems including showers	Detection and enumeration of Legionella	Method Ref: 3232 Based on: ISO 11731 Water quality detection and enumeration of Legionella(Part 1 and 2)
870 Waters, including effluents .99 Other Waters <i>Endoscopy waters</i>	TVC at 30C 1-100cfu/100ml Enumeration of <i>Pseudomonas aeruginosa</i>	Method ref: 3234 Department of health - Choice of framework for local policy and procedures 01-06- Decontamination of flexible endoscopes The microbiology of drinking water 2013 part 7. Method ref : 3231
781 Constituents of the Environment .33 Solid waste Pasteurised, Thermodigestion, Lime stabilised sludges	Detection of Salmonella	Method ref: 3242 Customer specified method. Based on EA - The Microbiology of Sludge (2004) Part 4.