

Schedule of Accreditation



Organisation Name Environmental Laboratory Services
Trading As
INAB Reg No 111T
Contact Name Maire Bradley
Address Acorn Business Campus, Mahon Industrial Park,
Blackrock, Cork
Contact Phone No
Email maire@elsltd.com
Website
Accreditation Standard ISO 17025 T
Date Initially Awarded 21/01/2003
Scope Classification Chemical testing
Services available to the public¹

¹ Refer to document on interpreting INAB Scopes of Accreditation

Sites from which accredited services are delivered	
(the detail of the accredited services delivered at each site are on the Scope of Accreditation)	
Name	Address
1 Head Office	Acorn Business Campus, Mahon Industrial Park, Blackrock, Cork

Scope of Accreditation

Head Office

Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
756 Drugs and pharmaceuticals - .02 Quantification of pharmaceutical samples	Elemental Impurities in Drug Products ¹²³⁴	Arsenic Cadmium Cobalt Lead Mercury Molybdenum Selenium Vanadium	0.5-72 µg/g 0.2-60 µg/g 0.2-60 µg/g 0.02-60 µg/g 0.02-7.2 µg/g 1.5-450 µg/g 0.6-180 µg/g 0.2-60 µg/g	756 .01 Drugs & Pharmaceuticals Drugs	ICP-MS (USP)	Documented in-house method EW186 based on: USEPA 200.8-1999 USP232-2014 USP233-2014 by ICP-MS (USP)
766 Environmental testing (inc waters) - .01 Metal analysis	ICPMS Metals Trace ¹²³⁴	Aluminium Antimony Arsenic Boron Cadmium Chromium Copper Iron Lead Manganese Mercury Nickel Selenium Sodium Barium Calcium Cobalt Magnesium Molybdenum Potassium Strontium Tin Vanadium Zinc	5.0 to 500 µg/l 0.1 to 10 µg/l 0.2 to 20 µg/l 0.02 to 2 mg/l 0.1 to 10 µg/l 1.0 to 100 µg/l 3 to 6000 µg/l 20 to 600 µg/l 0.3 to 1500 µg/l 1.0 to 200 µg/l 0.02 to 2 µg/l 0.5 to 100 µg/l 0.2 to 20 µg/l 0.5 to 50 mg/l 1.0 to 100 µg/l 1.0 to 100mg/l 1.0 to 100 µg/l 0.3 to 20mg/l 1.0 to 100 µg/l 0.2 to 20mg/l 1.0 to 100 µg/l 1.0 to 100 µg/l 1.0 to 100 µg/l 1.0 to 500 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Metals by ICP-MS.	Documented in-house methods based on: USEPA Method 200.8 (1999) Metals by ICP-MS. EW188
	ICPMS Total Metals ¹²³⁴	Aluminium Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese	15.0-4500 µg/l 0.3-90 µg/l 1-180 µg/l 3-900 µg/l 3-900 µg/l 0.5-18 µg/l 0.3-90 µg/l 3-900 mg/l 3-900 µg/l 3-900 µg/l 0.003-27 mg/l 60-4500 µg/l 0.9-270 µg/l 1-270 mg/l 3-900 µg/l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Microwave Digestion ICP-MS	Documented in-house method EW187 based on: USEPA Method 200.8 USEPA 3051a Microwave Digestion ICP-MS

		(Manganese not accredited for Treated Sewage Effluent) Mercury Molybdenum Nickel Potassium Selenium Sodium Strontium Tellurium Thallium Tin Titanium Uranium Vanadium Zinc Zinc (untreated only)	0.06-18 µg/l 3-900 µg/l 1.5-450 µg/l 1-180 mg/l 3-180 µg/l 3-450 mg/l 4-900 µg/l 3-900 µg/l 3-900 µg/l 3-900 µg/l 3-900 µg/l 3-900 µg/l 3-900 µg/l 10-900 µg/l 10-15000 µg/l (untreated only)			
	ICPMS ¹³⁴	Total Hardness by calculation	3-330 mg/l CaCO ₃	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Total Hardness	Documented in-house methods calculation based on APHA 2340B (2012) Determination of Total Hardness. EW188
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	Robotic BOD	BOD	BOD 1 - 2480 mg O ₂ /l CBOD 1 - 2480 mg O ₂ /l	Potable water, surface water, waste water and ground water	APHA 5210B (2012) EN1899-1:1998 Biological oxygen demand EW185 (robotic)	
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	COD	COD	8 - 1500 mg O ₂ /l 8 - 15000 mg O ₂ /l	Treated and trade Untreated	APHA 5220D (2012) Closed reflux Colorimetric EW184	
	COD ¹³⁴		8-1500 mg O ₂ /l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	closed Reflux Colorimetric.	Documented in-house methods based on: APHA 5220D (2012) closed Reflux Colorimetric. EW094
766 Environmental testing (inc waters) - .04 Organic	Extraction method	Untreated, treated and trade waste water	4 - 300 mg/l	Waste water	EW004 - EPA method 1664 (HEM)	
	GC FID Extractable Petroleum Hydrocarbon (C8 to C40)	Water	0,01 - 4,0 mg/l 0,2 - 4,0 mg/l	Surface and Potable waters Treated, untreated and trade waste water	ISO 9377-2:2000	
	GCMS	Organochlorine Range Pesticides Endrin Heptachlor Epoxide Heptachlor γ-HCH (lindane) p,p'-DDE p,p'-DDD p,p'-DDT	Organochlorine Range Pesticides 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Pesticides/PAH's by Solid Phase Extraction, GC-MS Detection	Documented In-house method based on: USEPA Method 525.2 (1994) Determination of Pesticides/PAH's by Solid Phase

		0.01 to 0.2 µg/l 0.01 to 0.2 µg/l			Extraction, GC-MS Detection. EO 129.
GCMS -PAH	PAH Range Acenaphthene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(ghi)perylene Benzo(k)fluoranthene Chrysene Dibenzo(ah)anthracene Fluoranthene Fluorene Indeno(123-cd)pyrene Phenanthrene Pyrene	PAH Range 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.003 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Pesticides/PAH's by Solid Phase Extraction, GC-MS Detection	Documented In- house method based on: USEPA Method 525.2 (1994) Determination of Pesticides/PAH's by Solid Phase Extraction, GC-MS Detection. EO 129.
GCMS Pesticides	Pesticides Range Aldrin I BHC Alpha isomer BHC Beta isomer BHC Delta isomer Dieldrin Endosulphan Alpha Endosulphan Beta Endosulphan Sulphate	Pesticides Range 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l 0.01 to 0.2 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Pesticides/PAH's by Solid Phase Extraction, GC-MS Detection	Documented In- house method based on: USEPA Method 525.2 (1994) Determination of Pesticides/PAH's by Solid Phase Extraction, GC-MS Detection. EO 129.
GCMSMS ¹²³⁴	PAH's Acenaphthene Acenaphthylene Anthracene Benzo (a) Anthracene Benzo (a) Pyrene Benzo (b) Fluoranthene Benzo (ghi) Perylene Benzo (k) Fluoranthene Chrysene Dibenzo (ah) Anthracene Fluoranthene Fluorene Indeno (123-cd) Pyrene Naphthalene Phenanthrene Pyrene	PAH's 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.010 to 0.16 µg/l 0.005 to 0.16 µg/l 0.003 to 0.162 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.003 to 0.2 µg/l 0.005 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l 0.010 to 0.16 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Pesticides/PAH's by SPE GC-MS/MS detection	Documented in- house Method EO181 - Determination of Pesticides/PAH's by SPE GC-MS/MS detection
	Pesticides:- Aldrin BHC Alpha isomer BHC Beta isomer BHC Delta isomer Cypermethrin Dichlobenil Dieldrin Endosulphan Alpha isomer Endosulphan Beta isomer Endosulphan Sulphate Endrin Aldehyde Endrin Heptachlor Heptachlor Epoxide Lindane Parathion-Ethyl (Parathion) Pendimethalin P,P' DDE P,P'-DDD P,P'-DDT	Pesticides:- 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.005 to 0.16 µg/l 0.005 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l 0.010 to 0.16 µg/l 0.003 to 0.16 µg/l 0.003 to 0.16 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Determination of Pesticides/PAH's by SPE GC-MS/MS detection	Documented in- house Method EO181 - Determination of Pesticides/PAH's by SPE GC-MS/MS detection

			0.003 to 0.16 µg/l			
LCMSMS - Glyphosate ¹²³⁴	Glyphosate		0.05 to 2 µg/l for wastewater 0.005 to 0.5ug/l for all other waters	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	LCMSMS	Documented in-house method EO164 based on: USEPA 538-1-2009 USEPA 536 -2007 LCMSMS
LCMSMS - Acid Herbicides ¹²³⁴	236-Trichlorobenzoic 245-T 24-D 24-DB Bentazone Bromacil Bromoxynil Dicamba Dichloroprop (24DP) Fluroxypyr (In Potable Ground and Surface Waters only) Ioxynil MCPA MCPB Mecoprop MCPP Pentachlorophenol (PCP) Picloram Quinmerac Triclopyr		0.005 to 0.5 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	LCMSMS	Documented in-house method EO162 based on: USEPA 538-1-2009 USEPA 535-2005
	Clopyraid		0.005 to 0.5 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	LCMSMS	Documented in-house methods based on: USEPA Method 538-1-2009 USEPA Method 535-2005 LCMSMS EO162
LCMSMS - AMPA ¹²³⁴	AMPA		AMPA 0.005 to 0.5ug/l for all other waters (Not accredited for Treated Sewage Effluent)	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	LCMSMS	Documented in-house method EO164 based on: USEPA 538-1-2009 USEPA 536 -2007 LCMSMS
LCMSMS - Pesticides Suite A ¹²³⁴	Organo Phosphorus Pesticides: Azinphos-methyl Azinphos-ethyl Chlorfenvinphos Demeton-S-Methyl Diazinon Dichlorvos Dimethoate Malathion (Potable and surface water only) Mevinphos Phosalone Pirimiphos-methyl Propetamphos Triazophos Triazines:		0.005 to 0.2 µg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	LCMSMS	Documented in-house method EO165 based on: USEPA 538-1-2009 USEPA 536 -2007 LCMSMS

	<p>Ametryn Atrazine (Potable and surface water only) Cyanazine Prometryn Propazine Propyzamide Simazine Terbutryn Trietazine Urons: Chlorotoluron Diuron Isoproturon Linuron Other: Carbetamide Chloridazon (Pyrazon) Chlorpropham Epoxiconazole Metaldehyde Propiconazole Diflufenican Metazachlor</p>				
LCMSMS Acid Herbicides ⁴	<p>236-Trichlorobenzoic 245-T 24-D 24-DB Bentazone Bromacil Bromoxynil Dicamba Dichloroprop (24DP) Fluroxypyr (In Potable Ground and Surface Waters only) Ioxynil MCPA MCPB Mecoprop MCPP Pentachlorophenol (PCP) Picloram Quinmerac Triclopyr Clopyralid</p>	0.005 to 0.5 µg/l	<p>Waters for potable and domestic purposes Other Surface Water Ground water</p>	LCMSMS ⁴	<p>Documented in-house methods based on: USEPA Method 538-1-2009 USEPA Method 535-2005 LCMSMS EO162</p>
LCMSMS Glyphosate and AMPA ⁴	<p>Glyphosate AMPA</p>	<p>0.05 to 2 µg/l for wastewater 0.005 to 0.5ug/l for all other waters AMPA 0.005 to 0.5ug/l for all other waters (Not accredited for Treated Sewage Effluent)</p>	<p>Waters for potable and domestic purposes Other waters Ground water Surface water Waste water - Untreated - Treated - Trade</p>	LCMSMS ⁴	<p>Documented in-house method EO164 based on: USEPA 538-1-2009 USEPA 536 -2007 LCMSMS</p>
LCMSMS Suite A ⁴	<p>Organo Phosphorus Pesticides: Azinphos-methyl Azinphos-ethyl</p>	0.005 to 0.2 µg/l	<p>Waters for potable and domestic purposes Other</p>	LCMSMS ⁴	<p>Documented in-house method EO165 based on: USEPA 538-1-</p>

	<p>Chlorfenvinphos Demeton-S-Methyl Diazinon Dichlorvos Dimethoate Malathion (Potable and surface water only) Mevinphos Phosalone Pirimiphos-methyl Propetamphos Triazophos Triazines: Ametryn Atrazine (Potable and surface water only) Cyanazine Prometryn Propazine Propyzamide Simazine Terbutryn Trietazine Urons: Chlorotoluron Diuron Isoproturon Linuron Other: Carbetamide Chloridazon (Pyrazon) Chlorpropham Epoxiconazole Metaldehyde Propiconazole Diflufenican Metazachlor</p>		<p>Surface Water Ground water</p>		<p>2009 USEPA 536 -2007 LCMSMS</p>
VOC's ¹²³⁴	<p>Benzene 1,2-Dichloroethane Tetrachloroethene Trichloroethene Tetra & Tri SUM (Calc) Sum of Tetrachloroethene & Trichloroethene Chloroform Bromoform Dibromochloromethane Bromodichloromethane Total THM's (Calc) Bromomethane Ethyl Ether/Diethyl Ether 1,1-Dichloroethene Iodomethane/Methyl Iodide Carbon Disulphide Dichloromethane (Methylene Chloride) 2-Propenenitrile (Acrylonitrile) ChlormethylCyanide Chloroacetonitrile)</p>	<p>0.1 to 35 µg/l 0.1 to 35 µg/l 0.1 to 35 µg/l 0.1 to 35 µg/l 0.1-70 µg/l 1.0 to 150 µg/l 1.0 to 35 µg/l 1.0 to 35 µg/l 2.0 to 35 µg/l 5 - 255 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5-35 µg/l 0.5 to 35 µg/l 5.0 to 35 µg/l 2.0 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 0.5 to 35 µg/l 5.0 to 35 µg/l</p>	<p>.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade</p>	<p>Determination of volatile organic carbons in water by purge and trap GC/MS</p>	<p>Documented in-house method based on: USEPA Method 524.2 (1992) Determination of volatile organic carbons in water by purge and trap GC/MS. EO 025</p>

		Hexachlorobutadiene Trans-1,2-Dichloroethene Methyl t-butyl ether (MtBE) 1,1-Dichloroethane Cis-1,2-Dichloroethene Methyl Acrylate Bromochloromethane	0.5 to 35 µg/l			
		Stryrene Isopropyl Benzene Bromobenzene 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane Propyl Benzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene Tert Butyl Benzene 1,2,4-Trimethylbenzene Sec Butyl Benzene 1,3-Dichlorobenzene p- Isopropyltoluene 1,4- Dichlorobenzene 1,2-Dichlorobenzene n- Butyl Benzene Hexachloroethane 1,2- Dibromo 3 Chloropropane 1,2,4-Trichlorobenzene 1,2,3-Trichlorobenzene	2.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 2.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 5.0-35 µg/l 2.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Determination of volatile organic carbons in water by purge and trap GC/MS	Documented in-house method based on: USEPA Method 524.2 (1992) Determination of volatile organic carbons in water by purge and trap GC/MS. EO 025
		Tetrahydrofuran 1,1,1- Trichloroethane 1-Chlorobutane Carbon Tetrachloride 1,1- Dichloropropene 1,2- Dichloropropane Dibromomethane Methyl Methacrylate 1,3- Dichloropropene, cis (MIBK)4 Methyl 2 Pentanone Toluene 1,3- Dichloropropene, trans Ethyl Methacrylate 1,1,2-Trichloroethane 1,3-Dichloropropane 2-Hexanone 1,2-Dibromoethane Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene m & p Xylene O Xylene	5.0-35 µg/l 0.5-35µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 2.0-35 µg/l 2.0-35 µg/l 2.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 1.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 2.0-35 µg/l 0.5-35 µg/l 0.5-35 µg/l 0.5-35 µg/l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Determination of volatile organic carbons in water by purge and trap GC/MS	Documented in-house method based on: USEPA Method 524.2 (1992) Determination of volatile organic carbons in water by purge and trap GC/MS. EO 025
766 Environmental testing (inc waters) - .05 Inorganic	AQ2- Cyanide (Free) ¹²³⁴	Cyanide (Free)	1.2 to 100 µg/l CN	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Cyanide by AQ2	Documented in-house methods based on: EPA-130-A Rev.1 Cyanide by AQ2 EW154M-1

AQ2 ¹²³⁴	Ammonia /Ammonium	0.007 - 7mg/l N	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Ammonia by Autoanalyser Spectrophotometry	Documented in-house methods based on: APHA 4500NH3G (2012) Ammonia by Autoanalyser Spectrophotometry EW154M-1
	Ammonia as NH3 by calculation	0.009-8.5 mg/l NH3	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Ammonia by Autoanalyser Spectrophotometry	Documented in-house methods based on: APHA 4500NH3G (2012) Ammonia by Autoanalyser Spectrophotometry EW154M-1
	Chloride	2.67-5000 mg/l Cl	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Chloride by Autoanalyser	Documented in-house methods based on: HMSO (1981) Chloride by Autoanalyser Spectrophotometry. EW154M-1
	Colour	2.5 to 50 mg/l Pt/Co	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Colour by Autoanalyser Spectrophotometry	Documented in-house methods based on: APHA 2120C (2012) Colour by Autoanalyser Spectrophotometry. EW154M-1
	Nitrate	0.12- 250 mg/l N	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Nitrate by Autoanalyser Spectrophotometry.	Documented in-house methods based on: USEPA, 353.1 (1983) Nitrate by Autoanalyser Spectrophotometry. EW154M-1
	Nitrate by calculation	0.53-978 mg/l NO3	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Nitrate by Autoanalyser Spectrophotometry.	Documented in-house methods based on: USEPA, 353.1 (1983) Nitrate by Autoanalyser Spectrophotometry. EW154M-1
	Nitrite	0.013-50 mg/l N	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Nitrite by Autoanalyser Spectrophotometry	Documented in-house methods based on: USEPA 353.1 (1983) Nitrite by Autoanalyser Spectrophotometry. EW154M-1
	Nitrite by calculation	0.043- 164 mg/l NO2	.01 Waters for potable and domestic purposes .99 Other waters	Nitrite by Autoanalyser Spectrophotometry	Documented in-house methods based on: USEPA

				Ground water Surface water Waste water - Untreated - Treated - Trade		353.1 (1983) Nitrite by Autoanalyser Spectrophotometry. EW154M-1
	Orthophosphate Ortho Phosphate (MRP) by calculation	0.009-25 mg/IP 0.021-57.28 mg/l P ₂ O ₅ 0.028-76.65 mg/l PO ₄	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Phosphate by Autoanalyser Spectrophotometry		Documented in-house methods based on: USEPA 365.1 (1983) Phosphate by Autoanalyser Spectrophotometry. EW154M-1
	Sulphate	1 to 5000 mg/l SO ₄	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Sulphate by Autoanalyser Spectrometry		Documented in-house methods based on: HMSO (1981) Sulphate by Autoanalyser Spectrometry. EW154M-1
	Total Oxidised Nitrogen	0.2 to 51 mg/l N	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Total Oxidised Nitrogen by Calculation.		Documented in-house methods based on: USEPA 353.1 (1983) Total Oxidised Nitrogen by Calculation. EW154M-1
BOD ¹³⁴	BOD	1 to 1300 mg/L	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Biochemical Oxygen Demand		Documented in-house methods based on: APHA 5210B (2012) EN1899-1:1998 Biochemical Oxygen Demand EW001
Bromate ⁴	Bromate	1 to 50 µg/l BrO ₃	Waters for potable and domestic purposes Other Surface Water Ground water	IC ⁴		Documented in-house method on USEPA 326.0 (2002) Ion Chromatography. EW137
cBOD for Treated effluent only (Carbonaceous) ¹³⁴	cBOD for Treated effluent only (Carbonaceous)	1 - 1300 mg/L	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Biochemical Oxygen Demand		Documented in-house methods based on: APHA 5210B (2012) EN1899-1:1998 Biochemical Oxygen Demand EW001
Dissolved Oxygen ¹³⁴	Dissolved Oxygen	1 to 10 mg/l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Dissolved oxygen measurement		Documented in-house methods based on: APHA 4500G(2012) Dissolved oxygen measurement EW043
Fluoride ¹²³⁴	Fluoride	0.1 to 2 mg/L	.01 Waters for potable and domestic purposes .99 Other waters	Fluoride by IC		Documented in-house methods based on: USEPA

			Ground water Surface water Waste water - Untreated - Treated - Trade		Method 300.1 (1997). Fluoride by IC. EW137
Fluoride ⁴		0.1 - 2 mg/l	Waters for potable and domestic purposes Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	IC ⁴	Documented in-house method by Autoanalyser Spectrophotometry based on: EPA340.3 EW175
Gallery ¹²³⁴	Ammonia	0.005 - 0.5mg/l N	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: APHA 4500NH3G (2012). EW175
	Ammonia by calculation	0.006 - 0.608mg/l NH3 0.006 - 0.644 mg/l NH4	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: APHA 4500NH3G (2012). EW175
	Chloride	1-500 mg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: APHA4500-CL G (2012) EW175
	Colour	2.0-50PtCo (Hazen)	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: APHA 2120C (2012) EW175
	Cyanides-Free	1.0-100ug/l CN	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: USEPA-Method- 335.4 EW175
	Fluoride	0.1-2mg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in-house method by Autoanalyser Spectrophotometry based on: EPA340.3 EW175

	Nitrite Nitrite by calculation	0.005 - 0.5mg/IN 0.016 - 1.6 mg/l NO2	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in- house method by Autoanalyser Spectrophotometry based on:APHA 4500-NO2 (2012) EW175
	Orthophosphate ¹	0.005-5 mg/l P (Ortho Phosphate MRP) Phosphate by calculation 0.015 – 15.0 mg/l PO ₄ ¹ 0.011 – 11.5 mg/l P ₂ O ₅ ¹ (Flexible Scope Application)	Waters for potable and domestic purposes Other Surface Water Ground water	UV-Vis Spectrometry ¹ - Extension of range by Dilution	USEPA 365.1 EW175
	Phosphate Phosphate by calculation	0.005 - 0.5mg/IP (Ortho Phosphate MRP) 0.015 - 1.5 mg/l PO ₄ 0.011 - 1.15 mg/l P ₂ O ₅	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in- house method by Autoanalyser Spectrophotometry based on:USEPA 365.1 EW175
	Sulphate	1-500 mg/l	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in- house method by Autoanalyser Spectrophotometry based on:APHA 4500-SO ₄ E (2012) EW175
	TON Nitrate by Calculation	0.15 - 15mg/l N 0.15 - 15mg/l N 0.7 – 66mg/l N ₀₃	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Autoanalyser Spectrophotometry	Documented in- house method by Autoanalyser Spectrophotometry based on:USEPA 353.1.Rev 1 EW175
Ion Chromatography ¹²³⁴	Bromate	1 to 50 µg/l BrO ₃	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Ion Chromatography	Documented in- house methods based on: USEPA 326.0 (2002) Ion Chromatography. EW137
Suspended Solids ¹³⁴	Suspended Solids	5 to 1000 mg/l	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Gravimetric analysis	Documented in- house methods based on: APHA 2540D(2012) Suspended solids by Gravimetric analysis EW013
Titralab ¹²³⁴	Alkalinity	10 to1000 mg/L CaCo ₃	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated	Total Alkalinity by Titralab Measurement.	Documented in- house methods based on: APHA 2320 (2012) Total Alkalinity by Titralab Measurement. EW153

			- Treated - Trade		
	Conductivity	25-6000 µS/cm	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Titralab combined conductivity pH method	Documented in-house methods based on: APHA method 2510B (2012) Titralab combined conductivity pH method EW153M-1
	pH	4-10 pH units	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Titralab combined conductivity pH method	Documented in-house methods based on: APHA method 2510B (2012) Titralab combined conductivity pH method EW153M-1
TOC/DOC ⁴	TOC DOC	0.25 to 100 mg/l	Waters for potable and domestic purposes Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	TOC analyzer ⁴	Documented in-house method based on: USEPA Method 415.3 (2003) Total Organic Carbon by Combustion Oxidation. EW123
TOC ¹²³⁴	TOC	0.25 to 100 mg/L	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Total Organic Carbon by Combustion Oxidation	Documented in-house method based on: USEPA Method 415.3 (2003) Total Organic Carbon by Combustion Oxidation. EW123
Total Dissolved Solids ¹³⁴	Total Dissolved Solids	15-1000 mg/l	Water for potable and domestic purposes Other waters Ground water Surface water Waste water	Total Dissolved Solids at 180C	APHA 2540C (2012) Total Dissolved Solids at 180C. EW046
Total Kjeldahl Nitrogen ¹³⁴	Total Kjeldahl Nitrogen	1.0 to 49 mg/L	Water for potable and domestic purposes Other waters Ground water Surface water Waste water	Nitrogen by calculation	Documented in-house methods based on: Nitrogen by calculation EW010
Total Nitrogen ¹³⁴	Total Nitrogen	1 to 100 mg/L N	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	TN Analyser	Documented in-house methods based on: APHA 4500NB (2012) by TN Analyser. EW140
Total Nitrogen ⁴		1 - 1000mg/l	Untreated Waste Water	TN Analyser ⁴	Documented in-house methods based on: APHA 4500NB (2012) by TN Analyser. EW140

			1 to 100 mg/l N	Waters for potable and domestic purposes Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	TN Analyser ⁴	Documented in-house methods based on: APHA 4500NB (2012) by TN Analyser. EW140
	Total Phosphorus ¹³⁴	Total Phosphorus	0.01 to 40 mg/L P 0.1 - 400 mg/l P (wastewater)	.01 Waters for potable and domestic purposes .99 Other waters Ground water Surface water Waste water - Untreated - Treated - Trade	Total Phosphorus by Ganimede	Documented in-house methods based on: APHA 4500 PJ (2012) Total Phosphorus by Ganimede. EW 146.
	Turbidity ¹³⁴	Turbidity	0.11-150 NTU	.01 Water for potable and domestic purposes .99 Other waters Ground water Surface water	Turbidity Technique	Documented in-house methods based on: ISO 7027:1999 EW136
	UV Spectrometry	UV absorbance and UV transmittance	UVA 0,014 cm ⁻¹ - 1,0 cm ⁻¹ UVT 10%-96%	Ground, potable and surface water	EW182 - USEPA 415.3, Standard method 5910B	

The laboratory has been awarded flexible scope in the scope classifications as noted in the scope document and in accordance with the laboratories approved and documented procedures.

Note 1 - Range may be extended for the test

Note 2 – New parameters / tests may be added

Note 3 – New matrices may be added

Note 4 – Changes to equipment / kits where the underlying methodology does not change

For further details please refer to the laboratories 'Master list of Flexible scope changes', available directly from the laboratory.