

Schedule of Accreditation



Organisation Name	Dublin City Council
Trading As	
INAB Reg No	79T
Contact Name	Sean Walsh
Address	Central Laboratory, Eblana House, 68/70 Marrowbone Lane, Dublin, D8
Contact Phone No	01-222 4333
Email	seanp.walsh@dublincity.ie
Website	
Accreditation Standard	EN ISO/IEC 17025 T
Standard Version	2017
Date of award of accreditation	15/11/2002
Scope Classification	Biological and veterinary testing
Scope Classification	Chemical testing
Services available to the public ¹	No

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	Central Laboratory, Eblana House, 68/70 Marrowbone Lane, Dublin, D8

Scope of Accreditation

Head Office

Biological and Veterinary Testing

Category: A

Biology/veterinary field - Tests	Test name	Technique	Matrix	Equipment	Std. reference
802 Preparation of films on slides followed by microscopic examination with or without fixation and staining with dyes as required - .02 Microscopic examination for parasites	Concentration, recovery and enumeration of Cryptosporidium oocysts.	Recovery, staining and counting of oocysts that have been concentrated from water samples.	Potable Water	Microscope, centrifuge, filtration devices.	SOP'S 293/294/ 298 USEPA Method 1623, Version EPA-815-R-25-002, Dec 2005; The microbiology of drinking water, Part 14, 2010, Environment Agency.
			Potable Water, Environmental Waters, Swimming Pools & Spas	Microscope, centrifuge, filtration devices including Idexx Xpress system.	SOP'S 293/294a/ 298 USEPA Method 1623.1, Version EPA-815-R-12-001, Jan 2012; The microbiology of drinking water, Part 14, 2010, Environment Agency. DWI SOP for the monitoring of Cryptosporidium oocysts in treated water supplies to satisfy Water Supply Regulations, 2000, SI No. 3184, June 2005
			Swimming Pools & Spas, Environmental Waters	Microscope, centrifuge, filtration devices.	SOP'S 293/294/ 298 USEPA Method 1623.1, Version EPA-815-R-12-001, Jan 2012; The microbiology of drinking water, Part 14, 2010, Environment Agency.
	Concentration, recovery and enumeration of Giardia cysts.	Recovery, staining and counting of cysts that have	Potable Water, Environmental Waters,	Microscope, centrifuge, filtration devices	SOP'S 293/294a/ 298 USEPA Method 1623.1, Version EPA-815-R-12-001, Jan

		been concentrated from water samples.	Swimming Pools & Spas	including Idexx Xpress system.	2012; The microbiology of drinking water, Part 14, 2010, Environment Agency.
			Potable Water, Environmental Waters, Swimming Pools & Spas	Microscope, centrifuge, filtration devices.	SOP'S 293/294/ 299 USEPA Method 1623.1, Version EPA-815-R-12-001, Jan 2012; The microbiology of drinking water, Part 14, 2010, Environment Agency.
803 Culture of organisms in liquid or agar based culture media with visual or instrument monitoring for growth - .01 Culture of bacteria	Detection and enumeration of Clostridium perfringens by membrane filtration (Trytone Sulphite Cycloserine Agar Method)	membrane filtration	Potable Water	Filter apparatus, calibrated incubator.	SOP 285a; Water Quality - Enumeration of Clostridium perfringens - Method using membrane filtration (I.D. EN ISO 14189:2016)
	Enumeration of coliforms (Colilert)	Defined Substrate MPN Method	Potable Water, Environmental Waters (including saline bathing waters), Sewage, Trade Wastes, WWTP Effluent	Calibrated incubator, Tray Sealer, Colilert.	SOP 290d The Microbiology of Drinking Water (2016), Part 4, Environment Agency; ISO 9308 2:2012.
	Enumeration of E. coli (Colilert)		Potable Water, Environmental Waters (including saline bathing waters), Sewage, Trade Wastes, WWTP Effluent	Calibrated incubator, Tray Sealer, Colilert.	SOP 291d ISO 9308-2:2012
	Enumeration of E. coli in Marine Bathing Water (Colilert)		Saline Waters	Calibrated incubator, Tray Sealer, Colilert.	SOP 291m The microbiology of drinking water, Part 4, 2016, S.C.A.
	Enumeration of E. coli in sewage sludge (treated and untreated), (Colilert).		Sewage Sludge (treated and untreated)	Calibrated incubator, Tray Sealer, Colilert.	SOP 291e The microbiology of sludge, Part 2 (2003) and the microbiology of Drinking Water Part 3 (2003), Environment Agency.
	Enumeration of Heterotrophic Bacteria at 22 Degrees C.		Pour Plate Method	Potable Water, Environmental Waters	Filter apparatus, calibrated incubator.

	Enumeration of Heterotrophic Bacteria at 36 Degrees C.		Potable Water, Environmental Waters	Filter apparatus, calibrated incubator.	SOP 296 Methods for the examination of waters and associated materials. The Microbiology of drinking water, Part 7, 2012, Environment Agency
806 Identification of cultured bacteria and fungi using non-nucleic acid based techniques - .01 Biochemical methods , CE marked commercial systems	Isolation and enumeration of Enterococci (including intestinal enterococci)	Membrane Filtration	Potable Water, Environmental Waters, Sewage, Trade Wastes, WWTP Effluent	Filter apparatus, calibrated incubator.	SOP 292; The Microbiology of drinking water, Part 5, 2012, Environment Agency; ISO 7899/2:2000 (E) Water Quality - Detection and enumeration of Intestinal Enterococci - Part 2: Method by Membrane Filtration.
			Potable Water, Environmental Waters, Sewage, Trade Wastes, WWTP Effluent	Filter apparatus, calibrated incubator.	SOP 292 Methods for the examination of waters and associated materials. The Microbiology of drinking water, Part 5, 2012, Environment Agency; ISO 7899/2:2000 (E)

Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
766 Environmental testing (inc waters) - .01 Metal analysis	Determination of Boron by ICP-MS	Boron	10 to 2,000 µg/l	Potable Waters	Agilent 7700 ICP-MS	SOP m998 / 752 Standard Methods 24th Ed.
	Determination of Metals by Agilent 7800 ICP-MS	Mercury	0.05 to 1.5 µg/l	Potable Waters, Lakes, Rivers and reservoirs	Agilent 7800 ICP-MS	SOP m960/ Standard Methods 24th Ed.
	Determination of metals by ICP-MS	Aluminium	1 to 200000µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
			34 µg/l to 500mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		Antimony	0.5 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
			2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		Arsenic	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
			1 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual

	Barium	1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Beryllium	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Cadmium	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Calcium	0.05 to 2000 mg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		0.5 mg/l to 5000 mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Chromium	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual

	Cobalt	0.5 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		1 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Copper	1 to 200000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		12 µg/l to 500mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Iron	1 to 200000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		13 µg/l to 500mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Lead	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Magnesium	0.01 to 2000 mg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		0.1 mg/l to 5000 mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual

	Manganese	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		3 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Molybdenum	1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Nickel	0.5 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Potassium	0.05 to 2000 mg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		0.4 mg/l to 5000 mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Selenium	0.5 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		3 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual

	Silver	0.5 µg/l to 500 µg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Sodium	0.05 to 2000 mg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		0.4 mg/l to 5000 mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Strontium	0.5 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		3 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Vanadium	0.1 to 20000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		2 µg/l to 50mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
	Zinc	14 µg/l to 500mg/l	Trade Wastes, Leachates	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
		5 to 200000 µg/l	Potable Waters, Lakes, Rivers, Surface Waters	Agilent 7700 ICP-MS	SOP m997 Standard Methods 24th Ed. Agilent 7700 User Manual
Determination of metals by ICP-OES	Boron	32 to 2000 µg/l	Potable Waters	Varian Vista-Pro ICP- OES	SOP's m950 / 752 Standard Methods 24th Ed.

Determination of metals by ICP-OES with Pneumatic Nebuliser	Aluminium	1 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		6 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Cadmium	0.3 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		2 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Chromium	0.4 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		2 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Copper	0.5 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		6 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Iron	1 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		6 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Lead	10 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.

			3 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
		Manganese	0.4 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
			2 to 20,000 µg/l	Sewage, Rivers, Trade Waters, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
		Nickel	2 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
			6 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
		Zinc	4 to 20,000 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m993 / 752 Standard Methods 24th Ed.
			6 to 20,000 µg/l	Sewage, Rivers, Trade Wastes, WWTP Effluent	Varian Vista-Pro ICP-OES	SOP's m993/m995a/752 Standard Methods 24th Ed.
	Determination of metals by ICP-OES with Vapour Generation	Mercury	0.17 to 50 µg/l	Potable Waters	Varian Vista-Pro ICP-OES	SOP's m952/ m996 / 752 Standard Methods 24th Ed.
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	BOD	O2	1 to 10,000 mg/l	Sewage, Leachates, Rivers, Surface Waters, Trade Wastes, WWTP Effluent	DO meter, Calibrated Incubator	SOP 013c 5 day BOD with dissolved Oxygen in waters, HMSO 1988.
			1 to 8 mg/l	Saline Waters	DO meter, Calibrated Incubator	SOP 013D Methods for the examination of water and associated Material, HMSO 1979; Examination of water and Associated

						Materials 5 day BOD 2nd Ed. HMSO 1988.
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	Chemical Oxygen Demand	COD	10 to 100,000 mg/l	Sewage, Leachates, Rivers, Surface Waters, Trade Wastes, WWTP Effluent	HACH Reactor, Metrohm Dosimat	SOP 014 COD Standard Methods 24th Ed. Introduction to COD, Hach; AOAC Official Methods of Analysis, 15th Ed. 1992
766 Environmental testing (inc waters) - .04 Organic	Calculation of Total Trihalomethanes and Sum of Tetrachloroethene and Trichloroethene.	Various Trihalomethanes	Total THM's 1 to 480 ug/L and Sum of Tetrachloroethene and Trichloroethene 0.04 to 24 ug/L.	Potable Waters	Varian GC-MS	SOP t005c/ USEPA Method 524.3/INAB PS36 Calculated Methods.
	Determination of Dissolved Organic Carbon	Dissolved Organic Carbon	1.0 to 30mg/l and up to 100mg/l by dilution	Potable water, surface water and wastewater	Analytikjena Multi N/C 3100 Analyser	SOP 015D, EN 1484:1997 Water analysis - guidelines for the determination of TOC & DOC, 11-3- 81, Multi N/C 3100 operating manual.
	Determination of Fats, Oils and Greases	Fats, Oils and Greases	10 to 20,000 mg/l	Sewage, Trade Wastes, WWTP Effluent	Foss Tecator Soxtec 8000, calibrated balance	SOP 027 Standard Methods, 24th Ed., The determination of Oils, Fats and Greases in wastewater by filtration, solvent extraction and gravimetry, HMSO, 1987
	Determination of Total Organic Carbon	Total Organic Carbon	0.5 to 30mg/l and up to 100mg/l by dilution	Potable water, surface water and wastewater	Analytikjena Multi N/C 3100 Analyser	SOP 015C, EN 1484:1997 Water analysis - guidelines for the determination of TOC & DOC, 11-3- 81, Multi N/C 3100 operating manual.
	Purgeable Organic Compounds	1,2-Dichloroethane	0.08 to 4 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009

		Benzene	0.02 to 4 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Bromodichloromethane	1 to 120 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Bromoform	2 to 120 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Chloroform	2 to 120 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Dibromochloromethane	1 to 120 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Tetrachloroethene	0.06 to 12 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
		Trichloroethene	0.04 to 12 µg/l	Potable Waters, Rivers	Varian GC-MS	SOP t005 USEPA Method 524.3, Version 1.0, June 2009
766 Environmental testing (inc waters) - .05 Inorganic	Determination of Ammonium in saline water	Ammonium as N	10 to 20,000 µg/l as N	Saline Waters	Skalar CFA	SOP 022S SOP 750S Practical guidelines for the analysis of seawater, Oliver Warl, 2009 and Skalar Method 158-001 w/r Issue 073015
	Determination of Apparent Colour	Apparent Colour	1 to 250Hz	Potable and surface waters	Lovibond PFX-i	SOP 001P, Colour and turbidity of water, HMSO 1981.
	Determination of Orthophosphate in saline water	Orthophosphate as P	10 to 20,000 µg/l as P	Saline Waters	Skalar CFA	SOP 025S SOP 750S Practical guidelines for the analysis of seawater, Oliver Warl, 2009 and Skalar Method 503-010 w/r Issue 073015
	Determination of Silicate	Silicate	0.20 to 20 mg/L as SiO ₂	Surface waters	Gallery Plus Analyser	SOP's 010G/750G Standard Methods

					24th Ed., Gallery Plus Reference Manual and User Guide
Determination of Silicates in saline water	Silicate as SiO ₂	50 to 80,000 µg/l as SiO ₂	Saline Waters	Skalar CFA	SOP 010S SOP 750S Practical guidelines for the analysis of seawater, Oliver Warl, 2009 and Skalar Method 461-031+P1 Issue 073015
Determination of TON in saline water	TON as N	40 to 80,000 µg/l as N	Saline Waters	Skalar CFA	SOP 033S SOP 750S Practical guidelines for the analysis of seawater, Oliver Warl, 2009 and Skalar Method 461-031+P1 Issue 073015
Determination of Total Alkalinity using Metrohm Autotitrator	Total Alkalinity	5 to 500 mg/l Ca CO ₃	Potable Waters, Surface Waters	Metrohm 814 Sample Processor and accessories	SOP 065M Standard Methods 24th Ed., Metrohm ISE Manual
Determination of Total Cyanide	Total Cyanide	5 to 100 µg/l	Potable Waters, Rivers, Surface Waters, Trade Wastes	Skalar San plus system	SOP 043s Methods for the examination of waters and associated materials: the determination of cyanide in water and associated materials, Environment Agency, 2007.
Determination of Total Hardness using Metrohm Autotitrator	Total Hardness	5 to 500 mg/l Ca CO ₃	Potable Waters, Surface Waters	Metrohm 814 Sample Processor and accessories	SOP 011M Standard Methods 24th Ed., Metrohm ISE Manual
Determination of Total Nitrogen	Total Nitrogen	0.46 to 1,000 mg/l as N	Sewage, Surface Waters, Trade Wastes, WWTP Effluent	Ganimede N analyser	SOP 052G Ganimede N Operating Manual 2011.
		0.5 to 100mg/l and up to 1000mg/l by dilution	Surface Waters, Trade Wastes, wastewater	Analykjena Multi N/C 3100 Analyser	SOP 052H, Multi N/C 3100 operating manual.

Determination of Total Phosphorus	Total Phosphorous as P	0.01 to 0.20 mg/l	Rivers, Surface Waters	Ganimede P analyser	SOP 026d Ganimede P operating manual
		0.05 to 100 mg/l	Sewage, WWTP Effluent	Ganimede P analyser	SOP 026 Ganimede P operating manual
Determination of True Colour	True Colour	1 to 250 Hz	Potable and surface waters	Lovibond PFX-i	SOP 001T, Colour and turbidity of water, HMSO 1981.
Determination of Turbidity by HACH TU5200	Turbidity	0.1 to 100 NTU	Potable Waters	Hach TU5200	SOP 002T / Standard Methods 24th Edition.
Fluoride by ISE, determination of	Fluoride	0.05 to 1.0 mg/l	Potable Waters, Surface Waters	I.S.E.	SOP 016 Fluoride in Effluents, Sludges, Plants and Soils HMSO 1982
Nutrients, determination of by Discrete Analysis	Ammonia	0.03mg/l to 453 mg/l as N	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Aquakem 250	SOP's 022K/750K Standard Methods 24th Ed., Aquakem Reference Manual Version E, 5.4.2004
	Nitrate by calculation	0.09 mg/l to 4004 mg/l as N	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Aquakem 250	SOP's 020K/750K Standard Methods 24th Ed., Aquakem Reference Manual Version E, 5.4.2004
	Nitrite	0.003 mg/l to 100 mg/l as N	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Aquakem 250	SOP's 021K/750K Standard Methods 24th Ed., Aquakem Reference Manual Version E, 5.4.2004
	Soluble Reactive Phosphorous	0.03 mg/l to 500 mg/l as P	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Aquakem 250	SOP's 025K/750K Standard Methods 24th Ed., Aquakem Reference Manual Version E, 5.4.2004
	TON	0.09 mg/l to 4004 mg/l as N	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Aquakem 250	SOP's 033K/750K Standard Methods 24th Ed., Aquakem Reference Manual Version E, 5.4.2004

	Nutrients, determination of on Gallery Plus	Ammonia	0.01 mg/l to 20 mg/l as N	Potable Waters, Lakes, Rivers	Gallery Plus	SOP's 022G/750G Standard Methods 24th Ed., Gallery Plus Reference Manual and User Guide
		Nitrate by calculation	0.10 mg/l to 200mg/l as N	Potable Waters, Lakes, Rivers	Gallery Plus	SOP's 020G/750G Standard Methods 24th Ed., Gallery Plus Reference Manual and User Guide
		Nitrite	0.005 mg/l to 10 mg/l as N	Potable Waters, Lakes, Rivers	Gallery Plus	SOP's 021G/750G Standard Methods 24th Ed., Gallery Plus Reference Manual and User Guide
		Soluble Reactive Phosphorous	0.01 mg/l to 20 mg/l as P	Potable Waters, Lakes, Rivers	Gallery Plus	SOP's 025G/750G Standard Methods 24th Ed., Gallery Plus Reference Manual and User Guide
		TON	0.10 mg/l to 200 mg/l as N	Potable Waters, Lakes, Rivers	Gallery Plus	SOP's 033G/750G Standard Methods 24th Ed., Gallery Plus Reference Manual and User Guide
	Total Phosphorous as P	Total Phosphorous	0.01 to 0.20 mg/l	Potable Waters	Ganimede P analyser	SOP 026d Ganimede P operating manual
767 Physical test/measurement - .01 pH	pH, determination of	pH	1 to 14	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	pH Probe/XYZ Analyser	SOP 006M Standard Methods 24th Ed, The measurement of electrical conductivity and the laboratory determination of the pH values of natural, treated and waste waters, HMSO 1978.
767 Physical test/measurement - .02 Conductivity	Conductivity, determination of	Electrical Conductivity	8 to 102100 microS/cm	Potable Waters, Rivers, Sewage, Trade Wastes, WWTP Effluent	Conductivity Probe/XYZ Analyser	SOP 007M Standard Methods 24th Ed, The measurement of electrical conductivity and the laboratory

						determination of the pH value of natural, treated and waste waters, HMSO 1978.
767 Physical test/measurement - .03 Suspended Solids	Suspended Solids	Suspended Solids	5 to 40,000 mg/l	Sewage, Leachates, Rivers, Surface Waters, Trade Wastes, WWTP Effluent	Drying Oven, Calibrated Balance	SOP 037 Suspended, settleable and total dissolved solids in waters and effluents, HMSO, 1980.