

# Schedule of Accreditation



Organisation Name	EPA
Trading As	Environmental Protection Agency
INAB Reg No	113T
Contact Name	Éidín Christie
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Accreditation Standard	EN ISO/IEC 17025 T
Standard Version	2017
Date of award of accreditation	11/11/2002
Scope Classification	Radiometry testing
Scope Classification	Chemical testing
Services available to the public <sup>1</sup>	No

<sup>1</sup> 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	Dublin - Clonskeagh Square	3 Clonskeagh Square, Clonskeagh Road, Dublin, Ireland, D14 H424
2	Monaghan	The Glen, Monaghan, H18 YT02
3	Mayo	John Moore Road, Castlebar, Mayo, F23 KT91
4	Dublin - McCumiskey House	McCumiskey House, Richview, Clonskeagh Road, Dublin 14, Dublin, D14 YR62
5	Kilkenny	Seville Lodge, Callan Road, Kilkenny, R95 ED28

# Scope of Accreditation

## Dublin - Clonskeagh Square

### Radiometry

Category: A

Field - Tests	Product tested	Property measured	Range of measurement	Std. ref & SOP
1501 Ionising radiation - .01 Measurement of alpha, beta, gamma, neutron radiations	Gross alpha beta screening of ground and surface water	Activity per unit volume, based on emission of alpha and beta radiation	Alpha: 0.015 Bq/l to 0.5 Bq/l Beta: 0.030 Bq/l to 1.1 Bq/l	Documented In-house methods: RT107, based on the method EN ISO 11704:2018.
	Milk and Foods (Diet Samples)	Sr-90 Activity per unit mass, based on emission of beta radiation	Sr-90: 0.01 Bq/kg to 25 Bq/kg	Documented In-House Methods: RT080 - RT083: Determination of Sr-90 in milk and diet samples.
	Milk and Milk Powder, Water and Misc. aqueous solutions, Meat, Misc. solid food types (specific gravity $\leq 2$ ), vegetation	Energy Range: 59keV - 2000 keV	0.01 Bq/Kg to 10 <sup>3</sup> kBq/Kg	Documented In-House Methods: RT050 - Determination of gamma emitting radionuclides by gamma spectroscopy
	Water	Rn-222 Activity per unit volume, based on emission of alpha and beta radiation	Rn-222: 0.5 Bq/l to 10 KBq/l	Documented In-House Methods: RT100 - RT101 based on ISO 13164 – Part 4:2015

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	W05 <sup>1 2 3 4</sup>	Aluminium	2 to 100,000 µg/l	Bore waters Leachate Potable waters Surface water Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2016/W05
		Antimony	1 to 1,000µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
		Arsenic	1 to 1,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
		Barium	1 to 5,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
		Beryllium	1 to 1,000µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
		Boron	10 to 50,000 µg/l	Bore waters Leachates	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05

		Potable waters Surface waters Trade wastes WWTP Effluent		
Cadmium	0.02 to 1,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Calcium	1 to 5,000 mg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Chromium	1 to 5,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Cobalt	1 to 1,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Copper	1 to 50,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Iron	10 to 500,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05

Lead	0.2 to 2,000 µg/l	Potable Waters Trade wastes Bore waters WWTP Effluent Surface water Leachate	ICP-MS	ISO17294-1:2006 & ISO17294-2:2016/W05
Magnesium	0.25 to 1,000 mg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Manganese	5 to 50,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Molybdenum	1 to 2,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Nickel	1 to 50,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Potassium	0.25 to 2,000 mg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Selenium	1 to 1,000 µg/l	Bore waters Leachates Potable waters Surface waters	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05

		Trade wastes WWTP Effluent		
Sodium	1 to 10,000 mg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Strontium	10 to 10,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Thallium	0.2 to 1,000 µg/l	Potable Waters Trade wastes Bore waters WWTP Effluent Surface water Leachate	ICP-MS	ISO17294-1:2006 & ISO17294-2:2016/W05
Total Hardness	4 to 16,600 mg/l CaCO <sub>3</sub>	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Uranium	0.2 to 1,000 µg/l	Potable Waters Trade wastes Bore waters WWTP Effluent Surface water Leachate	ICP-MS	ISO17294-1:2006 & ISO17294-2:2016/W05
Vanadium	1 to 1,000 µg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05
Zinc	1 to 50,000 µg/l	Bore waters Leachates Potable waters	ICP-MS	ISO17294-1:2006 & ISO17294-2:2004/W05

				Surface waters Trade wastes WWTP Effluent		
	W18 <sup>1 3 4</sup>	Mercury	0.02 to 50µg/l Hg	Trade Wastes Bore waters Leachates Surface waters WWTP Effluent	ICP-MS	ISO 17294-1:2006, 17294-2:2004/W18
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	W04 <sup>1 3 4</sup>	BOD	1 to 100,000 mg/l	Leachates Saline waters Surface waters Trade Wastes	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
		cBOD	1 to 100,000 mg/l	WWTP Effluent	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	W01 <sup>1 3 4</sup>	COD	10 to 100,000 mg/l O <sub>2</sub>	Trade Wastes Surface waters Trade wastes WWTP Effluent	Digestion/Colorimetry	ISO15705:2002/W01
766 Environmental testing (inc waters) - .05 Inorganic	W07 <sup>1 2 3 4</sup>	Ammonia	0.02 to 10,000 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923- 1:2013/W07
		Chloride	2 to 50,000 mg/l	Bore Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923- 1:2013/W07
		Nitrate	0.2 to 5,000 mg/l N	Bore Leachates Surface waters Trade wastes WWTP Effluent	Calculation	ISO 15923- 1:2013/W07
		Nitrite	0.004 to 50 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923- 1:2013/W07
		o-Phosphate	0.01 to 1,000 mg/l N	Bore Leachates	Spectrometry	ISO 15923- 1:2013/W07



				Surface waters Trade wastes WWTP Effluent		
		Total Oxidised Nitrogen	0.2 to 5,000 mg/l N	Bore Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
	W11 <sup>1 3 4</sup>	Silica	0.1 to 200mg/l SiO <sub>2</sub>	Bore waters Saline waters Surface waters	Spectrometry	ISO 15923-1:2013/W11
	W15 <sup>1 3 4</sup>	Colour	5 to 1,000 mg/l Pt/Co	Bore water Potable waters Saline waters Surface waters	Spectrometry	EN ISO 7887:2011/W15
	W16 <sup>1 3 4</sup>	Total Hardness	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Surface waters	Spectrometry	USA EPA 130.1/W16
	W17 <sup>1 3 4</sup>	Total Alkalinity	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Surface waters	Spectrometry	HMSO 0117516015, 1981/W17
	W19 <sup>1 2 3 4</sup>	Ammonia	0.01 to 10 mg/l N	Saline waters Surface water	Spectrometry	Lachat Instrument Application/W19
		o-Phosphate	0.005 to 10 mg/l P	Saline waters Surface waters	Spectrometry	Lachat Instrument Application/W19
		Total Oxidised Nitrogen	0.01 to 20 mg/l N	Surface waters Saline waters	Spectrometry	Lachat Instrument Application/W19
	W22	Total Organic Carbon (as NPOC)	1 to 1000 mg/l C	Saline Waters	Oxidation/IR Detection	ISO 8245:1999/W22
767 Physical test/measurement - .01 pH	W09 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Leachates Saline Waters Surface waters Trade wastes WWTP Effluent	pH Meter	IS EN 10523:2012/W09
767 Physical test/measurement - .02 Conductivity	W08 <sup>1 3 4</sup>	Conductivity	15 to 100,000 µS/cm	Bore waters Leachates Saline Waters Surface waters Trade wastes WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W08

767 Physical test/measurement - .03 Suspended Solids	W03 <sup>1 3 4</sup>	Suspended Solids	4 to 100,000 mg/l	Leachates Saline waters Surface waters Trade wastes WWTP Effluent	Gravimetry	IS EN 872:2005/W03
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*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.*

## Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
767 Physical test/measurement - .01 pH	W27 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	ISO 10523:2008/W27
767 Physical test/measurement - .02 Conductivity		Conductivity	15 to 100,000 µS/cm	Bore waters Surface waters WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W27

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Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	W04 <sup>1 3 4</sup>	BOD	1 to 100,000 mg/l	Leachates Surface waters Saline waters Trade wastes	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
		cBOD	1 to 100,000 mg/l	WWTP Effluent	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	W01 <sup>1 3 4</sup>	COD	10 to 100,000 mg/l O <sub>2</sub>	Leachates Surface waters Trade Wastes WWTP Effluent	Digestion/Colorimetry	ISO15705:2002/W01
766 Environmental testing (inc waters) - .04 Organic	W22 <sup>1 3 4</sup>	Total Organic Carbon (as NPOC)	1 to 1000 mg/l C	Bore waters Surface waters Trade wastes WWTP Effluent	Oxidation/IR Detection	ISO 8245:1999/W22
766 Environmental testing (inc waters) - .05 Inorganic	W07 <sup>1 2 3 4</sup>	Ammonia	0.02 to 10,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Chloride	2 to 50,000 mg/l	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Nitrate	0.2 to 5,000 mg/l N	Bore waters Leachates Potable waters Surface waters	Calculation	ISO 15923-1:2013/W07

				Trade wastes WWTP Effluent		
		Nitrite	0.004 to 50 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		o-Phosphate	0.01 to 1,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Total Oxidised Nitrogen	0.2 to 5,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
W11	<sup>1 3 4</sup>	Silica	0.1 to 200 mg/l SiO <sub>2</sub>	Bore waters Saline waters Surface waters	Spectrometry	ISO 15923-1:2013/W11
W12	<sup>1 2 3 4</sup>	Fluoride	0.2 to 500 mg/l F	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Ion Chromatography	EN ISO 10304-1:2009/W12
		Sulphate	1 to 20,000 mg/l SO <sub>4</sub>	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Ion Chromatography	EN ISO 10304-1:2009/W12
W15	<sup>1 3 4</sup>	Colour	5 to 1,000 mg/l Pt/Co	Bore waters Potable waters Surface waters	Spectrometry	EN ISO 7887:2011/W15

	W16 <sup>1 3 4</sup>	Total Hardness	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Potable waters Surface waters	Spectrometry	USA EPA 130.1/W16
767 Physical test/measurement - .01 pH	W09 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Leachates Potable waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	IS EN 10523:2012/W09
767 Physical test/measurement - .02 Conductivity	W08 <sup>1 3 4</sup>	Conductivity	15 to 100,000 µS/cm	Bore waters Leachates Potable waters Saline waters Surface waters Trade wastes WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W08
767 Physical test/measurement - .03 Suspended Solids	W03 <sup>1 3 4</sup>	Suspended Solids	4 to 100,000 mg/l	Leachates Saline waters Surface waters Trade Wastes WWTP Effluent	Gravimetry	IS EN 872:2005/W03
782 Workplace environment and hazards - .04 Respirable dust	ATO1/2	PM10	0.1 to 120 µg/m <sup>3</sup>	Ambient Air	Gravimetry	EN 12341:1999 & EN 14907:2005/AT01 & AT02
		PM2.5	0.1 to 120 µg/m <sup>3</sup>	Ambient Air	Gravimetry	EN 12341:1999 & EN 14907:2005/AT01 & AT02

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Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
767 Physical test/measurement - .01 pH	W27 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	ISO 10523:2008/W27
767 Physical test/measurement - .02 Conductivity		Conductivity	15 to 100,000 µS/cm	Bore waters Surface waters WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W27

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Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	W04 <sup>1 3 4</sup>	BOD	1 to 100,000 mg/l	Leachates Saline waters Surface waters Trade wastes	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	W01 <sup>1 3 4</sup>	COD	10 to 100,000 mg/l O <sub>2</sub>	Leachates Surface waters Trade Wastes WWTP Effluent	Digestion/Colorimetry	ISO15705:2002/W01
766 Environmental testing (inc waters) - .04 Organic	W22 <sup>1 3 4</sup>	Total Organic Carbon (as NPOC)	1 to 1000 mg/l C	Bore waters Surface waters Trade wastes WWTP Effluent	Oxidation/IR Detection	ISO 8245:1999/W22
766 Environmental testing (inc waters) - .05 Inorganic	W06 <sup>1 3 4</sup>	Total Phosphorus	0.01 to 1,000 mg/l P	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Digestion/Spectrometry	IS EN ISO 6878:2004/W06
	W07 <sup>1 2 3 4</sup>	Ammonia	0.02 to 10,000 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Chloride	2 to 50,000 mg/l	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Nitrate	0.2 to 5,000 mg/l N	Bore waters Leachates Surface waters	Calculation	ISO 15923-1:2013/W07



				Trade wastes WWTP Effluent		
		Nitrite	0.004 to 50 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		o-Phosphate	0.01 to 1,000 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Total Oxidised Nitrogen	0.2 to 5,000 mg/l N	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
	W11 <sup>1 3 4</sup>	Silica	0.1 to 200 mg/l SiO <sub>2</sub>	Bore waters Saline waters Surface waters	Spectrometry	ISO 15923-1:2013/W11
	W15 <sup>1 3 4</sup>	Colour	5 to 1,000 mg/l Pt/Co	Bore waters Potable waters Surface waters	Spectrometry	EN ISO 7887:2011/W15
	W16 <sup>1 3 4</sup>	Total Hardness	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Surface waters	Spectrometry	USA EPA 130.1/W16
	W17 <sup>1 3 4</sup>	Total Alkalinity	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Surface waters	Spectrometry	HMSO 0117516015, 1981/W17
	W24 <sup>1 3 4</sup>	Alkalinity	1 to 1000 mg/l CaCO <sub>3</sub>	Bore waters Surface waters	Titration	ISO 9963-1:1994/W24
	W37	Total Nitrogen	0.25 to 2,000mg/L N	Surface Waters Bore Waters WWTP Effluent Trade Effluents	Thermal Catalytic Combustion/ Chemiluminescence Detection	ISO20236:2018/W37
767 Physical test/measurement - .01 pH	W09 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Leachates Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	IS EN 10523:2012/W09

767 Physical test/measurement - .02 Conductivity	W08 <sup>1 3 4</sup>	Conductivity	15 to 100,000 µS/cm	Bore waters Leachates Saline waters Surface waters Trade wastes WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W08
767 Physical test/measurement - .03 Suspended Solids	W03 <sup>1 3 4</sup>	Suspended Solids	4 to 100,000 mg/l	Leachates Saline waters Surface waters Trade wastes WWTP Effluent	Gravimetry	IS EN 872:2005/W03

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Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
767 Physical test/measurement - .01 pH	W27 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	ISO 10523:2008/W27
767 Physical test/measurement - .02 Conductivity		Conductivity	15 to 100,000 µS/cm	Bore waters Surface waters WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W27

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Chemical Testing

Category: A

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	W04 <sup>1 3 4</sup>	BOD	1 to 100,000 mg/l	Bore waters Leachates Saline waters Surface waters Trade wastes	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
		cBOD	1 to 100,000 mg/l	WWTP Effluent	DO Meter	ISO5815-1:2019; ISO5815-2:2003/W04
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	W01 <sup>1 3 4</sup>	COD	10 to 100,000 mg/l O <sub>2</sub>	Leachates Surface waters Trade wastes WWTP Effluent	Digestion/Colorimetry	ISO15705:2002/W01
766 Environmental testing (inc waters) - .04 Organic	W22 <sup>1 3 4</sup>	Dissolved Organic Carbon	1 to 1000 mg/l C	Bore Waters	Oxidation/IR Detection	ISO 8245:1999/W22
	W22 <sup>1 3 4</sup>	Total Organic Carbon (as NPOC)	1 to 1000 mg/l C	Bore waters Surface waters Trade wastes WWTP Effluent Saline Waters	Oxidation/IR Detection	ISO 8245:1999/W22
766 Environmental testing (inc waters) - .05 Inorganic	W06 <sup>1 3 4</sup>	Total Phosphorus	0.01 to 1,000 mg/l P	Bore waters Leachates Surface waters Trade wastes WWTP Effluent	Digestion/Spectrometry	IS EN ISO 6878:2004/W06
	W07 <sup>1 2 3 4</sup>	Ammonia	0.02 to 10,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
		Chloride	2 to 50,000 mg/l	Bore waters Leachates	Spectrometry	ISO 15923-1:2013/W07

			Potable waters Surface waters Trade wastes WWTP Effluent		
	Nitrate	0.2 to 5,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Calculation	ISO 15923-1:2013/W07
	Nitrite	0.004 to 50 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
	o-Phosphate	0.01 to 1,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
	Total Oxidised Nitrogen	0.2 to 5,000 mg/l N	Bore waters Leachates Potable waters Surface waters Trade wastes WWTP Effluent	Spectrometry	ISO 15923-1:2013/W07
W11 <sup>1 3 4</sup>	Silica	0.1 to 200 mg/l SiO <sub>2</sub>	Bore waters Saline waters Surface waters	Spectrometry	ISO 15923-1:2013/W11
W14 <sup>1 3 4</sup>	Turbidity	0.5 to 1,000 NTU	Bore waters Potable waters Saline waters Surface waters	Nephelometry	EN ISO 7027:2000/W14
W15 <sup>1 3 4</sup>	Colour	5 to 1,000 mg/l Pt/Co	Bore waters Potable waters Saline waters Surface waters	Spectrometry	EN ISO 7887:2011/W15

	W16 <sup>1 3 4</sup>	Total Hardness	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Potable waters Surface waters	Spectrometry	USA EPA 130.1/W16
	W17 <sup>1 3 4</sup>	Total Alkalinity	10 to 10,000 mg/l CaCO <sub>3</sub>	Bore waters Potable waters Surface waters	Spectrometry	HMSO 0117516015, 1981/W17
	W19 <sup>1 2 3 4</sup>	Ammonia	0.01 to 10 mg/l N	Saline waters Surface waters	Spectrometry	Lachat or SEAL Instrument Application/W19
		o-Phosphate	0.005 to 10 mg/l P	Saline waters Surface waters	Spectrometry	Lachat or SEAL Instrument Application/W19
	W19 <sup>1 2 3 4</sup>	Total Oxidised Nitrogen	0.01 to 20 mg/l N	Saline waters Surface waters	Spectrometry	Lachat or SEAL Instrument Application/W19
767 Physical test/measurement - .01 pH	W09 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Leachates Potable waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	IS EN 10523:2012/W09
767 Physical test/measurement - .02 Conductivity	W08 <sup>1 3 4</sup>	Conductivity	15 to 100,000 µS/cm	Bore waters Leachates Potable waters Saline waters Surface waters Trade wastes WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W08
767 Physical test/measurement - .03 Suspended Solids	W03 <sup>1 3 4</sup>	Suspended Solids	4 to 100,000 mg/l	Leachates Saline waters Surface waters Trade wastes WWTP Effluent	Gravimetry	IS EN 872:2005/W03

*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.*

Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
767 Physical test/measurement - .01 pH	W27 <sup>1 3 4</sup>	pH	2 to 12 pH Units	Bore waters Saline waters Surface waters Trade wastes WWTP Effluent	pH Meter	ISO 10523:2008/W27
767 Physical test/measurement - .02 Conductivity		Conductivity	15 to 100,000 µS/cm	Bore waters Surface waters WWTP Effluent	Conductivity Meter	IS EN 27888:1993/W27

*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.*