Schedule of Accreditation

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Trading As	
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Scope Classification	Chemical testing
Services available to the public[1]	Yes

[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	53 Broomhill Drive, Tallaght, Dublin, D24

Scope of Accreditation

Head Office

Chemical Testing

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
766 Environmental testing (inc waters) - .02 Biochemical oxygen demand	BOD	O2	1-15000 mg/l	Sewage trade	5 day incubation and DO meter	QP-CHEM-2016 based on APHA 5210
			1-300 mg/l	Potable, steam, Bore, Surface Water	5 day incubation and DO Meter	QP-CHEM-2016 based on APHA 5210

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	BOD	O2	2-15000mg/l	Sewage Trade	5 day incubation and DO meter	QP-CHEM-2016 based on APHA 5210
			2-300 mg/l	Potable, steam, Bore, Surface Water	5 day incubation and DO Meter	QP-CHEM-2016 based on APHA 5210
766 Environmental testing (inc waters) - .03 Chemical oxygen demand	COD		20-150000O2mg/L	Sewage, Trade	Spectophotometry	QP-CHEM-2065 based on APHA 5221
			5-1500 O2mg/l	Potable, Steam , Bore, Surface	Spectophotometry	QP-CHEM-2065 based on APHA 5220
766 Environmental testing (inc waters) - .05 Inorganic	Alkalinity	CaCO3	1.0 to 3000 mg/L	Potable, Steam , Bore, Surface	Potentiometric Titration	QP-CHEM-2012 based on APHA 2320B
	Ammonia	N	0.02-200 mg/l	Potable, steam,Bore, Surface Sewage Trade	Spectrometry	QP-CHEM-2037 based on APHA 4500 NH3F
	Chloride	Cl	1-20000 mgCl/L	Potable, Steam , Bore, Surface, Sewage, Trade	Titration	QP-CHEM-2035 based on APHA 4500-CL B
	Colour	PT	1-50 Pt/l	Potable, Steam , Bore, Surface	Spectophotometry	QP-CHEM-2064 based on APHA 2120
	Fluoride	FL	0.02-100 mg/l	Potable, Steam , Bore, Surface	Ion Selective Electrode	QP-CHEM-2036 based on APHA 4500- C
	Nitrate	Nitrate	1.00 -1000mg/l NO3	Potable, Steam, Bore, Surface, Sewage Trade	Ion Selective Electrode	QP-CHEM-2043 based on APHA 4500 NO3D
	Orthophosphate	P	0.02-160 mg/l	Potable Steam,Bore,	Spectrometry	QP-CHEM-2040 based on APHA 4500 PE

				Surface Sewage Trade		
	Sulphate	Sulphate	2-1000mg/l	Potable, Steam , Bore, Surface	Turbidimetry	QP-CHEM-2050 based on APHA 4500E
			2-2000mg/l	Sewage, Trade	Turbidimetry	QP-CHEM-2050 based on APHA 4500E
	Turbidity	NTU	0.02 to 1000 NTU	Potable, Steam , Bore, Surface	Turbidity Meter	QP-CHEM-2014 based on APHA 2130B
767 Physical test/measurement - .01 pH	pH	pH	2-12 pH units	Potable, Steam , Bore, Surface, Sewage, Trade	pH Meter	QP-CHEM-2007 based on APHA 4500
767 Physical test/measurement - .02 Conductivity	Conductivity	Conductivity at 25C by calculation	111 - 14,297 uS/cm	Potable, Steam, Bore, Groundwater, Surface water, Sewage, Trade	Conductivity Meter	QP-CHEM-2008 based on APHA 2510B
		uS	100-12880 uS/cm	Potable, Steam , Bore, Surface, Sewage, Trade	Conductivity Meter	QP-CHEM-2008 based on APHA 2510B
767 Physical test/measurement - .03 Suspended Solids	Suspended Solids	suspended solids	3-200mg/l	Potable, Steam , Bore, Surface	Gravimetric	QP-CHEM-2002 based on APHA 2540
			3-8000mg/l	Sewage, Trade	Gravimetric	QP-CHEM-2002 based on APHA 2540
770 Gases and aerosols - .07 Other gases and mixtures	Determination of hydrogen in gas	Hydrogen	0.024367 - 0.1017 %mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Determination of nitrogen in gas	Nitrogen	1.73334 - 99.9992 %mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on

					composition data as described in ISEN6976
Determination of oxygen in gas	Oxygen	0.06887 - 0.9947 %mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
Natural gas and biogas analysis	Carbon dioxide	0.01541% to 2.5% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Ethane	0.01849% to 12% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Iso butane	0.00061% to 0.1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Iso pentane	0.00061% to 1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5,

					ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Isopentane	0.000061% to 1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Methane	0.30425% to 99.99% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	n-butane	0.00061% to 0.1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
	Neo pentane	0.00061% to 0.1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976

		n-hexane	0.00061% to 0.1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
		n-pentane	0.00061% to 0.1% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
		Propane	0.00612% to 1.009% mol/mol	Natural gas and biogas	GC TCD and GC FID	Inhouse method QP-CHEM-2107 in accordance with ISO 6974:4, ISO 6974:5, ISO 6974:6 and calculation of propeerties based on composition data as described in ISEN6976
782 Workplace environment and hazards - .03 Inspirable dust	Weighing Particulate Matter inhalable dust	dust	0.01-200 mg	Occupational	Gravimetric	QP-CHEM-2055 Method 14/4
782 Workplace environment and hazards - .04 Respirable dust	Weighing Particulate Matter respirable dust		0.01-200 mg	Occupational	Gravimetric	QP-CHEM-2055 Method 14/4
797 Miscellaneous materials and products - .03 Other tests	Analysis of a range of Sulfur Compounds in Natural Gas and biogas	Carbonyl Sulphide	0.63 - 10.14 µmol/mol	Gaseous Fuels	GC PFPD	In House method QP-CHEM-2080 in accordance with ISO6974
		Ethyl mercaptan	0.64 - 10.23 µmol/mol	Gaseous Fuels	GC PFPD	In house method QP-CHEM-2080 in accordance with ISO6974

		Hydrogen Sulphide	0.62 - 9.95 µmol/mol	Gaseous Fuels	GC PFPD	In House method QP-CHEM-2080 in accordance with ISO6974
		Iso-propyl mercaptan	0.54 - 10.23 µmol/mol	Gaseous Fuels	GC PFPD	In house method QP-CHEM-2080 in accordance with ISO6974
		Methyl mercaptan	0.62 - 9.88 µmol/mol	Gaseous Fuels	GC PFPD	In house method QP-CHEM-2080 in accordance with ISO6974
		N-butyl mercaptan	0.06 - 5.16 µmol/mol	Gaseous Fuels	GC PFPD	In House method QP-CHEM-2080 in accordance with ISO6974
		N-propyl mercaptan	0.64 - 10.26 µmol/mol	Gaseous Fuels	GC PFPD	In House method QP-CHEM-2080 in accordance with ISO6974
		Total Sulfur as S	2.41 - 38.62 µmol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
	Natural gas and biogas	Calculated values from composition gross calorific value net calorific value relative density density gross Wobbe index net Wobbe index molar mass compression factor	Range depends on composition of gas	Gaseous Fuel	GC TCD and FID	QP-CHEM-2107 Values calculated according to ISO 6976:2016 on a real or ideal gas basis assuming mixture is dry (free from water) Combustion properties can be expressed in units of the Joule (J) or in kilowatt hours (kWh)

		Calculated values from composition Sooting index Incomplete combustion factor	Range depends on composition of gas	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107. Values calculated from composition and physical properties according to ISO 6976:2016 on a real or ideal gas basis assuming mixture is dry (free from water) Based on UK Statutory Instrument 1996 No.551 Gas Safety (Management) Regulations 1996 - Regulation 8 (Schedule 3) - Content and other Characteristics of Gas - Part III - Interpretation
		Hydrocarbon dewpoint and Phase Diagram	Range depends on composition of gas	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 Calculated from composition in accordance with ISO23874
	Natural Gas and biogas Composition Analysis	C6+ Hydrocarbons	0.01 – 0.1 % mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
		Carbon Dioxide	0.3593 - 2.5 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6

				and calculations of properties based on composition data as described in ISEN6976
Ethane	0.3043 - 12 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
Iso-butane	0.0101 - 1 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
Iso-pentane	0.0144 - 0.1 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
Methane	0.01 - 100 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
	0.01 - 100 %mol/mol	Gaseous Fuels	GC PFPD	In house method QP-CHEM-2080 in

						accordance with ISO6974
		N-butane	0.0144 - 0.1 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
		Neo-pentane	0.0147 - 0.1 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
		N-pentane	0.0146 - 0.1 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
		Propane	0.1025 - 12 %mol/mol	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 in accordance with ISO6974:4, ISO6974:5, ISO6974:6 and calculations of properties based on composition data as described in ISEN6976
	Natural Gas Composition Analysis	Calculated values from composition superior calorific value	Range depends on composition of gas	Gaseous Fuel	GC TCD and FID	In house method QP-CHEM-2107 Values calculated according to ISO 6976:1995

		inferior calorific value relative density density superior Wobbe index inferior Wobbe index molar mass compression factor				(including amendment No 1, May 1998) on a real or ideal gas basis assuming mixture is dry (free from water) Combustion properties can be expressed in units of the Joule (J) or in kilowatt hours (kWh)
	Odourants in Natural Gas	Dimethly Sulphide	0.08-10 mg/m3	Gaseous fuels	Gas Chromatography	QP-CHEM-2080 based on ASTM D5504-12
		t-butyl mercaptan	0.23-10 mg/m3	Gaseous fuels	Gas Chromatography	QP-CHEM-2080 based on ASTM D6228-10
	Weighing Particulate Matter filters and rinses	dust	0.1 - 1000 mg	Industrial emissions	Gravimetric	QP-CHEM-2105 EN 13284-1 2002 & ISO 9096:2017
798 Sampling	Sampling of natural gas and biomethane using absorption in accordance with EN14791 and analysis in an accredited lab	Ammonia	Depends on accredited lab	Natural gas, biomethane	Sampling	QP-SITE-2013
	Sampling of natural gas and biomethane using adsorption in accordance with EN ISO 16017-1 and analysis in an accredited lab	Organics	Depends on accredited lab	Natural gas, biomethane	Sampling	QP-SITE-2016

Chemical Testing

Category: B

Chemistry Field - Tests	Test name	Analyte	Range of measurement	Matrix	Equipment/technique	Standard reference/SOP
770 Gases and aerosols - .04 Industrial fumes and emissions	Total Organic Carbon	TOC	0.2-1600mg/m3	Industrial emissions	Flame Ionisaton Detector	QP_SITE-2025 based in EN12619
798 Sampling	Conductivity	Conductivity at 20C by calculation	9 - 90,000uS/cm	Potable, Steam, Bore, Groundwater, Surface water, Sewage, Trade	Conductivity Meter	QP-MEAS-2009
		mS	0.01-100 mS/cm	Potable, Steam , Purged Well, Surface, Lakes	Conductivity Meter	QP-MEAS-2009
	Dissolved Oxygen	O2	0.01 - 20 mg/lO2	Potable, Steam , Purged Well, Surface, Lakes	DO Meter	QP-MEAS-2019
			0.01-200 % O2	Potable, Steam , Purged Well, Surface, Lakes	DO Meter	QP-MEAS-2019
			0.5-13 mg/l	Potable stream purged well surface lakes	DO Meter	QP-MEAS-2019
	Drinking Water Sampling	Water Sampling				Qp-SITE -6003 based on ISO 5667-5
	pH	pH	2-12 pH units	Potable, Steam , Purged Well, Surface, Lakes	pH Meter	QP-MEAS-2010 and 2011
	Purged Well sampling	water				QP-SITE-6002 based on ISO 5667-11
	Temperature	oC	0-40 C	Potable, Steam , Purged Well, Surface, Lakes	pH/Temp Meter	QP-MEAS- 2010 and 2011

	Water sampling lakes, rivers, stream	water				QP-SITE-6001 based on ISO 5667-4 & -6