Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

1494

Accredited to ISO/IEC 17025:2017

United Utilities Water Ltd operating as United Utilities Scientific Services

Issue No: 114 **Issue date:** 14 August 2026

Lingley Mere Laboratory
PO Box 458
Lingley Green Avenue
Great Sankey
Warrington
WA5 3LP

Contact: Mr J Perry
Tel: +44 (0)1925 677077
Fax: +44 (0)1925 678933
E-Mail: jeff.perry@uuplc.co.uk

Testing performed by the Organisation at the locations specified below

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details	Activity	Location code
Address Lingley Mere Laboratory PO Box 458 Lingley Green Avenue Great Sankey Warrington WA5 3LP **Local contact** Mr J Perry Tel: +44 (0)1925 677077 Fax: +44 (0)1925 678933 E-Mail: jeff.perry@uuplc.co.uk	Environmental Analysis	A

Site activities performed away from the locations listed above:

Location details	Activity	Location code
Waste Water Treatment Works (WWTW) Water Treatment Works (WTW) Service Reservoirs and Domestic Premises Ground and Surface Water Sources	Sampling and on-site testing	B
All locations suitable for the activities listed	Sampling and Testing of Bituminous materials	C

1494 Accredited to ISO/IEC 17025:2017	**Schedule of Accreditation** **issued by** **United Kingdom Accreditation Service** 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	United Utilities Water plc **operating as United Utilities Scientific Services** **Issue No:** 114 **Issue date:** 14 August 2026
Testing performed by the Organisation at the locations specified	

This schedule is ordered as follows:

Section 1
ISO 17025 + DWTS
Inorganic Chemistry
Organic Chemistry
Sensory
Radiochemistry
Microbiology and Cryptosporidium
Sampling

Section 2
ISO 17025 + MCERTS (waters)
Inorganic Chemistry
Organic Chemistry
Sampling

Section 3
ISO 17025 only
Inorganic Chemistry Waters
Organic Chemistry Waters
Inorganic Chemistry Sludges and Soils
Microbiology

Section 4
Flexible scopes

Note: accreditation to MCERTS (waters) and DWTS automatically confers an equivalent accreditation to ISO/IEC 17025:2017

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SECTION 1			
	Analysis for the purpose of enforcement of "The Water Supply (Water Quality)" (England) Regulations 2016 as amended	Methodology meeting the requirements of The Drinking Water Testing Specification	
WATERS Raw (surface water and groundwater), and drinking waters	<u>Chemical Tests</u>	Documented In-House Methods:	
	Alkalinity	QI231/64 by Robotic Titrator	A
	Total Organic Carbon	QI 231/15 using persulphate oxidation by non-dispersive infra-red detector	A
	pH	QI 230/28 using pH Meter	A
	Turbidity, Electrical Conductivity and Colour	QI231/77 using robotic system	A
	Total Cyanide	QI 231/53 using SFA and colorimetry	A
	Determination of Mercury	QI 231/82 by ICP-MS	A
Raw (surface water and groundwater), drinking waters and Healthcare Waters (Dialysis)	**Anions:** Fluoride Bromide Chlorate Chlorite Sulphate	QI 231/84 using Ion Chromatography with Conductivity Detection	A
	Bromate	QI 231/84 using Ion Chromatography with Mass Spectrometry Detection	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Raw (surface water and groundwater), drinking waters and bottled waters	Elements including: Antimony Arsenic Cadmium Chromium Copper Lead Nickel Selenium Silver Zinc Uranium	QI 231/73 by ICP-MS	A
Raw (surface water and groundwater), drinking waters, bottled waters and Healthcare Waters (Dialysis)	Elements including: Aluminium Manganese Iron Phosphorus Sodium Calcium Magnesium Potassium Barium Boron Mg Hardness (calculated from Mg) Ca Hardness (calculated from Ca) Total Hardness (as Calcium Carbonate)	QI 231/83 By ICP-OES	A
Healthcare Waters (Dialysis)	Nickel Copper Zinc Lead	QI 231/73 by ICP-MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd) Raw (surface water and groundwater), drinking waters and bottled waters	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Raw (groundwater, surface water) and drinking waters	Hexavalent Chromium	QI 231/74 by Ion chromatography	A
Drinking, surface, groundwaters and Healthcare Waters (Dialysis)	Ammonium Chloride Nitrate (Calculated) Nitrite Total Oxidised Nitrogen	QI 231/86 by Discrete Analyser	A
Drinking, surface and Groundwaters	**Halogenated Hydrocarbons including THMs:** Trichloromethane° Bromodichloromethane° Dibromochloromethane° Tribromomethane° Tetrachloromethane Trichloroethene[1] Tetrachloroethene[1] Total THM (total of 4 THMs marked °) Total CHC (total of 2 CHCs marked [1])	QI 260/66 using Headspace - GC-MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Drinking, surface and Groundwaters (cont'd)	**Volatile Organic Compounds:** 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dichloroethane Benzene Ethylbenzene m&p-Xylene[2] o-Xylene[2] Total Xylenes (Sum of 2 marked [2]) MTBE Naphthalene Toluene Vinyl Chloride	QI 260/66 using Headspace - GC-MS	A
Drinking, surface and Groundwaters	**Polyaromatic Hydrocarbons:** Elements including: Benzo(b)fluoranthene* Benzo(k)fluoranthene* Indeno(1,2,3-cd)pyrene* Benzo(g,h,i)perylene* Benzo(a)pyrene Fluoranthene Total PAH (total of 4 PAHs marked *)	QI 260/03 using solvent extraction followed by HPLC with fluorescence detection	A
Drinking, surface and Groundwaters	**PFAS Compounds:** PFBA PFPeA PFHxA PFHpA PFOA PFNA PFDA PFUnA PFDoA PFTrDA PFTeA PFHxDA PFODA PFBS	QI 260/98 by Direct Injection LC-MSMS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Drinking, surface and Groundwaters	**PFAS Compounds:** (cont'd) PFPeS PFHxS PFHpS PFOS PFNS PFDS PFUnDS PFDoS HFPO-DA HFPO-TA DONA PFMOPrA NFDHA PFMOBA PFecHS 3:3 FTCA 5:3 FTCA 7:3 FTCA PFEESA 6:2 Cl-PFESA 8:2 Cl-PFESA 4:2 FTSA 6:2 FTSA 8:2 FTSA FBSA FhxSA FOSA (PFOSA) MeFOSA EtFOSA MeFOSE NMeFOSAA NEtFOSAA 6:2 FTAB	QI 260/98 by Direct Injection LC-MSMS	A
Raw (surface water and groundwater), drinking waters	Glyphosate AMPA Glufonisate-Ammonium	QI 260/69 Using LC-MS-MS	A
Raw (surface and groundwater) drinking waters	Asulam Metaldehyde	QI260/78 using LC MS-MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Raw (surface and groundwater) and drinking waters	Geosmin 2-Methyl isoborneol	QI260/71 using GCMS	A
Raw (surface and groundwater) and drinking waters	Geosmin 2-Methylisoborneol 2,4,6-Trichloroanisole	QI260/99 using DiLLME-GCMS	A
Raw (surface water and groundwater) and drinking water	Clopyralid Dicamba Fluroxypyr Bromoxynil 2,4-D MCPA Trichlopyr Ioxynil Dichlorprop 2,4,5-T Mecoprop 2,4-DB MCPB Pentachlorophenol Bentazone	QI 260/92 by direct injection LC-MS-MS	A
Raw (surface water and groundwater) and drinking water	**Haloacetic Acids:** Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid Tribromoacetic Acid Bromochloroacetic Acid Bromodichloroacetic Acid Dibromochloroacetic Acid	QI 260/05 by LC-MS/MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Methodology meeting the requirements of The Drinking Water Testing Specification	
Raw (surface water and groundwater) and drinking water	**Herbicides and Pesticides:** Chlorotoluron Metazachlor Isoproturon Diuron Linuron Carbetamide Metribuzin Simazine Atrazine Propyzamide Diazinon	QI 260/73 by LCMS-MS	A
Raw (surface water and groundwater) and drinking water	**Polycyclic Aromatic Hydrocarbons:** Benzo (b) fluoranthene Benzo (k) fluoranthene Benzo (a) pyrene Benzo (g,h,i) perylene Indeno (1,2,3-cd) pyrene Fluoranthene	QI 260/40 by GCMS/MS	A
	Sensory Tests		
Raw and drinking water	Quantitative Odour Quantitative Taste	QI 233/02 using assessed panel – SCA blue book: determination of taste and odour in drinking water (2014)	A
Raw and drinking water	Gross alpha (relative to AM-241)	QI 232/10 using α/B multi-detector based on ISO9696:2007	A
Raw and drinking water	Gross beta (relative to K-40)	QI 232/10 using α/B multi-detector based on ISO9697:2008	A
Drinking Water	Gamma emitting radionuclides Range 59-2000keV	QI 232/04 by Gamma Spectrometry	A
Drinking and Raw Waters	Radon 222 Range 1-120Bq/l	QI 232/05 determined from Bi-214 and Pb-214 in secular equilibrium by Gamma Spectrometry	A
Drinking, Surface and Ground Waters	Tritium Range 10 – 200 Bq/L	QI 232/06 using Liquid Scintillation Counting based on ISO/DIS 13168	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Microbiological Tests Enumeration of:	Documented In-House Methods based on The Microbiology of Drinking Water 2002 and their subsequent updates – Methods for the Examination of Waters and Associated Materials. A report by the Environment Agency (EA).	
Drinking Water, Ground water and surface water	Colony count at 22 °C and 37 °C	QI 240/11 using manual pour plate method based on MODW 2020 Part 7	A
	Isolation and enumeration and confirmation of: Total Coliforms and *Escherichia coli*	QI 240/02 manual method using membrane filtration and QI240/05 based on MODW 2016 Part 4 or by MALDI-TOF using QI 240/08	A
	Isolation and enumeration and confirmation of Enterococci	QI 240/02 manual method using membrane filtration and QI240/05 based on MODW 2012 Part 5 or by MALDI-TOF using QI 240/08	A
	Isolation, enumeration and confirmation of *Clostridium perfringens*	QI 240/02 manual method using membrane filtration and QI240/05 based on MODW 2021 Part 6 or by MALDI-TOF using QI 240/08	A
Drinking Water, Ground water and surface water	*Cryptosporidium*	QI 243/01 – using Filta-Max xpress, Dynal IMS procedure. Staining, examination and identification based on MODW 2010 Part 14	A
	Giardia	QI 243/01 – using Filta-Max xpress, Dynal IMS procedure. Staining, examination and identification based on MoDW 2010 Part 14	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Microbiological Tests (cont'd)	Documented In-House Methods based on The Microbiology of Drinking Water 2002 and their subsequent updates - Methods for the Examination of Waters and Associated Materials. A report by the Environment Agency (EA).	
Drinking Water, Ground water and surface water	Enumeration/Confirmation *Escherichia coli* Total Coliforms	QI240/54 using defined substrate MPN method and Colilert – 18 Quanti- tray based on MODW 2016 Part 4	A
Transport Swabs	Recovery / Confirmation of Coliform organisms after up to 48 hours refrigeration	Method QI240/30 based on in house method and by MALDI-TOF using QI 240/08	A
Microscopically confirmed Cryptosporidium spp oocysts from treated and raw water sources on slides	*Cryptosporidium* oocyst speciation and identification	Documented in-house methods QI 243/05 and 243/06, Extraction, PCR amplification of oocyst DNA and sequencing using SeqStudio Analyser	A
Drinking Water (Surface and Ground)	Detection and Enumeration of *Pseudomonas aeruginosa*	QI 240/15 using IDEXX Pseudalert Reagent and Quantitray based on MODW 2015 Part 8	A
Drinking Water, Ground water and surface water	Total bacterial counts and intact bacterial counts for operational purposes	QI 242/10 Flow cytometry using the Attune NxT flow cytometer with CytKick	A
Drinking water	*Legionella* spp.	QI 241/15 membrane filtration based on BS EN ISO 11731:2017 using membrane filter on plate, using GVPC [Matrix A; Procedure 7, Media C], confirmation using MALDI-ToF using QI 240/08 and or latex agglutination	A
Surface water	Isolation and enumeration and confirmation of *Salmonella* spp (excluding *Salmonella typhi*)	QI 241/01 membrane filtration using selective enrichment and MPN based on MORW 2016 Part 8 or by MALDI-TOF using QI 240/08	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd) Drinking, ground and surface waters	For the purpose of enforcement of The Water Supply (Water Quality) Regulations 2016 (SI 614) as amended	Where applicable the methodology meeting the requirements of The Drinking Water Testing Specification	
From: Consumer taps Standpipes Service reservoirs Water treatment works Alternate Supply Vehicles	Sampling: For Chemical and Microbiological Testing ((including *Cryptosporidium*)	Documented In-house Procedures QI638/01	B
From: Open Water Sources (Environmental waters including impounding reservoirs and rivers)	Sampling: For Chemical and Microbiological Testing	Documented In-house Procedure QI800 using an aerial drone (for collection of samples)	B
Raw waters including: Surface Waters: impounding reservoirs, canals, lakes Groundwater: boreholes	<u>On-site Testing</u>	Documented In-House Methods:	
Raw (groundwater and surface water) and Drinking Water	pH	Method QI640/01	B
Raw (groundwater) and Drinking Water	Free Residual Chlorine Total Residual Chlorine	Method QI510/17	B
Drinking Water only	Qualitative Taste and Odour	Method QI626/01 based on SCA determination of taste and odour in drinking waters (2014)	B

END OF SECTION 1

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SECTION 2			
WASTE WATERS	Chemical Testing	Documented In-House Method to meet the requirements of the Environment Agency MCERTS Performance Standard - sampling and chemical testing of untreated sewage, sewage effluent and trade effluent	
Trade Effluents	Orthophosphate	QI251/44 using Skalar Analyser	A
Untreated sewage Treated sewage effluent Trade effluent	Total nitrogen	QI 251/39 using Formacs total N analyser	A
Untreated sewage Treated sewage effluent Trade effluent	Chloride	QI 251/45 using continuous flow analyser	A
Untreated sewage, Treated sewage effluent Trade effluent Trade effluent to Controlled Waters	Suspended solids	QI 250/12 by gravimetry	A
Treated sewage effluent Untreated Sewage Effluent	Anionic Surfactants	QI 251/06 by sealed tube	A
Untreated sewage, treated sewage, trade effluent to controlled waters and trade effluent to sewer	Determination of Mercury	QI 231/81 by ICP-MS	A
Untreated sewage Treated sewage effluent Trade Effluent Trade Effluent to Controlled Water	Biochemical Oxygen Demand (BOD)	QI 251/17 based on 5-day biochemical oxygen demand, semi-automated, 2nd edition, HMSO 1998	A
Untreated sewage Trade effluent	Chemical Oxygen Demand	QI251/19 high range by sealed tube automated and manual Readback	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WASTE WATERS (cont'd)	Chemical Testing (cont'd)	Documented In-House Method to meet the requirements of the Environment Agency MCERTS Performance Standard - sampling and chemical testing of untreated sewage, sewage effluent and trade effluent	
Treated sewage effluent	Chemical Oxygen Demand	QI251/19 low range by sealed tube	A
Treated sewage effluent Trade effluent	**Metals:**		
Untreated Sewage Treated Sewage Effluent Trade Effluent Trade Effluent to Controlled Water	Aluminium (Total/Dissolved) Calcium Cobalt Iron (Total/Dissolved) Magnesium Manganese (Total/Dissolved) Phosphorus Potassium Sodium Vanadium	QI 231/75 using ICP-OES	A
Untreated sewage, treated sewage, trade effluent	Determination of Total Oxidised Nitrogen (TON) as N, orthophosphate as P & ammonia as N	QI 251/76 by Skalar San ++	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WASTE WATERS (cont'd)	Chemical Testing (cont'd)	Documented In-House Method to meet the requirements of the Environment Agency MCERTS Performance Standard - sampling and chemical testing of untreated sewage, sewage effluent and trade effluent	
Untreated Sewage Treated Sewage Trade effluent to controlled waters Trade effluent to sewer	Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Molybdenum Nickel Phosphorus Selenium Thallium zinc	QI 231/79 By ICP-MS	A
Untreated Sewage Treated Sewage Effluent	OrthoPhosphate High level Ammonia Total Oxidised Nitrogen (TON)	QI251/51 using Skalar analyser	A
Untreated Sewage Treated Sewage Effluent Trade Effluent	Total Nitrogen	QI 251/41	A
Treated Sewage Effluent	Chemical oxygen demand	QI 251/54 by automated equipment.	A
Treated sewage effluent Untreated Sewage Trade Effluent	**Organotin Compounds:** Tributyltin Triphenyltin	QI 260/29 by Iso-octane extraction and derivatisation and analysis by GC-MS	A
Trade Effluent	Cadmium Chromium Copper Lead Nickel	QI 231/76 by ICP-OES	A
Untreated sewage, treated sewage, trade effluent	Determination of Nitrite	QI 251/74 by Discrete Analyser	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WASTE WATERS (cont'd)	Chemical Testing (cont'd)	Documented In-House Method to meet the requirements of the Environment Agency MCERTS Performance Standard - sampling and chemical testing of untreated sewage, sewage effluent and trade effluent	
Untreated Sewage, Treated Sewage and Trade Effluent	**VOC's:** Elements including: Dichloromethane Chloroform Carbon Tetrachloride 1,2 Dichloroethane Trichloroethene Tetrachloroethene Toluene o-xylene m+p-xylene 1,2,3 trichlorobenzene 1,2,4 trichlorobenzene 1,3,5 trichlorobenzene Bromoform Benzene MTBE n-hexane 1,1,1 trichloroethane 1,1,2 trichloroethane Dicyclopentadiene Hexachloro-1,3-butadiene	QI 260/09 by GC-MS	A
Treated sewage effluent	On-site measurement of: pH	Documented in-house methods: QI 640/01 using pH meter	B
Trade effluent	Total residual chlorine	Documented in-house method QI 510/17 using hand held	B
Trade Effluent to Controlled Water, Trade Effluent to Sewer, Treated Sewage Effluent, Untreated Sewage Effluent	Total Sulphide	QI251/33 by air segmented flow analyser	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WASTE WATERS (cont'd)	Sampling	Documented In-House Method to meet the requirements of the Environment Agency MCERTS Performance Standard - sampling and chemical testing of untreated sewage, sewage effluent and trade effluent	
Treated sewage effluent Trade effluent to controlled waters	For chemical testing	Method QI 510/05 using manual spot sampling	B

END OF SECTION 2

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SECTION 3			
WATERS	<u>Chemical Tests</u>		
Untreated Sewage Trade Effluent	Chemical oxygen demand	QI 251/19 by sealed tube method High Range	A
Treated Sewage Effluent	Chemical oxygen demand	QI 251/19 by sealed tube method Low Range automated and manual Readback	A
Untreated Sewage Trade Effluent Treated Sewage Effluent	Free and easily liberated cyanide	QI 251/53	A
Untreated Sewage Treated Sewage Effluent Mixed liquor	Suspended solids	QI 250/12 based on HMSO 1980 using gravimetric technique	A
Untreated sewage Mixed liquor	Suspended solids, volatile material and ash	QI 250/12 based on HMSO 1980	A
Untreated (Crude) Sewage Treated Sewage Effluent Raw Surface Water	Total organic carbon LOD – 25 mg/L	QI 251/40 using Formacs H analyser	A
Untreated Sewage Treated Sewage Effluent Trade Effluent	Total Nitrogen	QI 251/39 using Formacs Analyser	A
Trade Effluents Treated Sewage Effluent	Orthophosphate Nitrate Nitrite	QI251/44 using Skalar Analyser	A
Treated Sewage Effluent Trade Effluent	Nitrite	QI251/48 using Skalar Analyser	A
Untreated Sewage Treated Sewage Effluent Trade Effluent	Chloride	QI 251/45 using continuous flow analyser	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)		
Treated Sewage Effluent Trade Effluent	Fluoride	QI251/35 using Ion Selective Electrode	A
Surface water, sludge	Determination of Total Oxidised Nitrogen (TON) as N, orthophosphate as P & ammonia as N	QI 251/76 by Skalar San ++	A
Untreated Sewage Treated Sewage Effluent Trade Effluent	Alkalinity	QI251/47 using robotic potentiometric titration	A
Treated Sewage Effluent River Water	Anionic Surfactants	QI 251/06 by sealed tube	A
Effluent, Trade Effluent, Surface Water, Sludge, Trade Effluent to Controlled Water	Biochemical oxygen demand (BOD)	QI 251/17 based on 5-day biochemical oxygen demand, semi-automated, 2nd edition, HMSO 1988	A
Untreated Sewage Trade Effluents	Total Sulphide	QI251/33 by air segmented flow analyser	A
Treated and Untreated Sewage, Trade Effluent	Sulphate	QI251/52 by continuous flow analyser	A
Treated and Untreated Sewage, Trade Effluent	Determination of Fats, Oils And Greases (FOG)	QI251/75 by TD-NMR	A
Surface Water and Sludge	Determination of Nitrite	QI 251/74 by Discrete Analyser	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Documented In-House Methods	
Untreated Sewage Treated Sewage Effluent Trade Effluent	**Organotin Compounds:** Tributyltin Triphenyltin	QI 260/29 by Iso-octane extraction and derivatisation and analysis by GC-MS	A
Trade Effluent Treated Sewage Effluent	**Elements including:** 2-chlorophenol 4-chlorophenol 3,5-dimethylphenol 4-chloro-3-methylphenol Phenol 2-methylphenol 3 and 4-methylphenol 4-chloro-3,5-dimethylphenol 2,4-dichloro-3,5-dimethylphenol 2,4-dichlorophenol	QI 260/24 using GC-FID	A
Landfill Leachate Trade Effluent Surface Water	Methane	QI 260/75 using Gas Chromatography with Flame Ionisation Detector (GC-FID)	A
Untreated Sewage Treated Sewage Effluent Trade Effluent	**VOC's:** Elements including: Dichloromethane Chloroform Carbon Tetrachloride 1,2 Dichloroethane Trichloroethene Tetrachloroethene Toluene o-xylene m/p-xylene 1,2,3 trichlorobenzene 1,2,4 trichlorobenzene 1,3,5 trichlorobenzene Bromoform Benzene Naphthalene MTBE n-hexane 1,1,1 trichloroethane 1,1,2 trichloroethane Dicyclopentadiene Hexachloro-1,3-butadiene	QI 260/09 by GC-MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)	Documented In-House Methods	
Trade effluents, Treated Sewage Effluents Crude Sewage	Chlorobenzene Ethylbenzene Styrene 4-chlorotoluene 2-chlorotoluene 3-chlorotoluene 2-ethylhexanol 1,2-diclorobenzene	QI 260/95 by GC-MS	A
SOILS only	Extractable phosphate	QI 252/14 using segmented continuous flow analyser	A
SLUDGE only	pH	QI 252/07 using pH electrode	A
Sludge Only	Dry solids at 105 °C Organic and volatile matter at 700 °C	QI252/19 using thermogravimetric analyser	A
Sludge Only	Fluoride	QI251/35 using Ion Selective Electrode	A
Sludge	Ammonia	QI251/51 using Skalar Analyser	A
Sludge and sludge filtrate	Alkalinity	QI251/47 using robotic potentiometric titration	A
Mixed Liquor (sludge)	Suspended Solids	QI250/12 using gravimetric technique	A
Filtered Sludge Liquor	Sulphate	QI251/52 by continuous flow analyser	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
WATERS (cont'd)	Chemical Tests (cont'd)		
Raw Sewage Sludge Digested Sludge Sludge Cake Sludge Limed Cake Soils	Aluminium Arsenic Cadmium Chromium Copper Iron Lead Magnesium Mercury Molybdenum Nickel Phosphorous Potassium Selenium Zinc	QI231/78 by Aqua Regia Digestion followed by ICP-MS	A
Untreated Sewage Treated Sewage Trade Effluent to Sewer	Methanol Ethanol Acetone Propan-2-ol Propan-1-ol Ethyl acetate Butanone Butan-2-ol 2-methylpropanol Butan-1-ol 4-methylpentan-2-one Acetronitrile	QI260/25 Solvents by Headspace GC-MS	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
PROCESS WATERS, BATHING WATERS, SEWAGE AND WASTE WATERS	Microbiological Tests	Documented In-House Methods based on The Microbiology of Drinking Water 2002 and their subsequent updates - Methods for the Examination of Waters and Associated Materials. A report by the Environment Agency (EA).	A
Treated sewage	Isolation, enumeration and confirmation of Coliforms and *Escherichia coli*	QI 240/02 manual method using membrane filtration & QI 240/05 based on MORW 2016 Part 3	A
Untreated sewage and treated sewage	Isolation, enumeration and confirmation of enterococci	QI 240/02 manual method using membrane filtration & QI 240/05 based on MORW 2015 Part 4	A
Untreated sewage, treated sewage and sewage sludge	Isolation and enumeration and confirmation of *Salmonella* spp (excluding *Salmonella typhi*)	QI 241/01 membrane filtration using selective enrichment and MPN based on MOSS 2004 Part 4 and MORW 2016 Part 8 or by MALDI-TOF using QI 240/08	A
Surface water	Identification of Algal spp	QI 242/01 by membrane filtration and optical microscopy based on Blue Book 139 1990	A
Surface Water	Chlorophyll a	QI242/02 by Fluorimeter based on Blue Book 65, 1980	A
Man-made Recreational Water and Hydroptherapy Waters	Enumeration/Confirmation *Escherichia coli* Total Coliforms	QI240/54 using defined substrate MPN method and Colilert – 18 Quanti-tray based on MODW 2016 Part 4	A
Man-Made Recreational Water and Hydroptherapy Waters	Isolation, enumeration and confirmation of Coliforms and *Escherichia coli*	QI 240/02 manual method using membrane filtration and QI240/05 based on MODW 2016 Part 4 or by MALDI-TOF using QI 240/08	A
Man-Made Recreational Water and Hydroptherapy Waters	Colony count at 22 °C and 37 °C	QI 240/11 using manual pour plate method based on MODW 2020 Part 7	A
Sewage sludge	Isolation, enumeration,and confirmation of *Escherichia coli*	QI 241/29 using Colillert based on MOSS 2003 Part 3	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
PROCESS WATERS, BATHING WATERS, SEWAGE AND WASTE WATERS (cont'd)	Microbiological Tests (cont'd)	Documented In-House Methods based on The Microbiology of Drinking Water 2002 and their subsequent updates - Methods for the Examination of Waters and Associated Materials. A report by the Environment Agency (EA).	A
Sewage sludge	Isolation and enumeration of *Escherichia coli*	QI 241/29 manual method using membrane filtration based on MOSS 2003 Part 3	A
Recreational Waters, Hydrotherapy Waters and Man-Made Recreational Waters	Detection and Enumeration of *Pseudomonas aeruginosa*	QI 240/15 using IDEXX Pseudalert Reagent and Quantitray based on MODW 2015 Part 8	A
WASTEWATERS:	Sampling for subsequent chemical testing at an ISO/IEC 17025 accredited laboratory	Documented In-House Method to meet the requirements of ISO 17025 and the requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994	B
Treated sewage effluent Untreated (crude) sewage	Sampling for Chemical Testing	Method QI510/05 composite sampling using automated sampling equipment	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Reinstatement Of Opening In Highways	<u>Pavement Construction</u>	Methods of test required for the New Roads and Street Works Act (1991) (Specification for the Reinstatement of Openings in Highways) using data from the test methods detailed below:	
	Sampling of laid and compacted materials by coring	BSEN 12697-27: 2017	C
	Determination of the thickness of a bituminous pavement - destructive measurement	BSEN 12697-36:2022	C
	Bulk density - sealed specimen (wax)	BSEN 12697-6:2020	C
	Maximum density - volumetric procedure	BSEN 12697-5:2018	C
	Air void content	BSEN 12697-8:2018	C

END OF SECTION 3

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Section 4			
As listed on fixed scope	<u>Chemical Tests</u> The laboratory holds a flexible scope of accreditation for chemistry test methods at the Lingley Mere Site covering the following: • Incorporation of additional determinands or matrices covered by fixed scope to existing accredited methods. • Authorising the use of replacement equipment for existing methods. • Development of new methods for matrix types and using techniques and instruments that appear on the fixed scope. Please contact the laboratory for details of the individual determinands and matrices that can be analysed.	Meeting the requirements of The Drinking Water Testing Specification (DWTS) where applicable Meeting the requirements of Environment Agency MCERTS Performance Standard for Chemical Testing of Water where applicable Documented In house generic protocol QI 275//04 for analysis using analytical techniques included in this schedule	A A
END			