Laboratory & technical services

Normec
Latis Scientific

Ensuring the best quality
and safety, everywhere

Contents

March 2026

Every effort has been made to ensure the accuracy and reliability of the information presented in this document. However, inadvertent errors or typographical inaccuracies may occur. While we strive to provide the most current and precise details regarding our testing services, the nature of scientific and regulatory developments means that information is subject to change. **Normec Latis Scientific Ltd** accepts no liability for any inaccuracies, interpretations, or decisions made based on the content of this document. We reserve the right to amend or update the information herein without prior notice.

Laboratory and technical services

We provide a comprehensive range of UKAS-accredited analytical testing services across the UK. Through our strategically located laboratories and national logistics network, we support a wide spectrum of testing requirements with precision, reliability, and speed.

Industries we serve

We are proud to support a diverse client base, including:

- Water treatment and hygiene consultants
- Healthcare providers and medical device manufacturers
- Local authorities and industrial water companies
- Environmental and site investigation consultants
- Remediation and waste management companies

Our capabilities

We offer an extensive portfolio of ISO/IEC 17025:2017-accredited microbiological and chemical testing services. Our testing supports compliance with key regulatory standards, including:

- HTM 01-01, HTM 01-04, HTM 01-06
- BSRIA BG29 and BSRIA BG50
- Discharge Consents and other environmental regulations

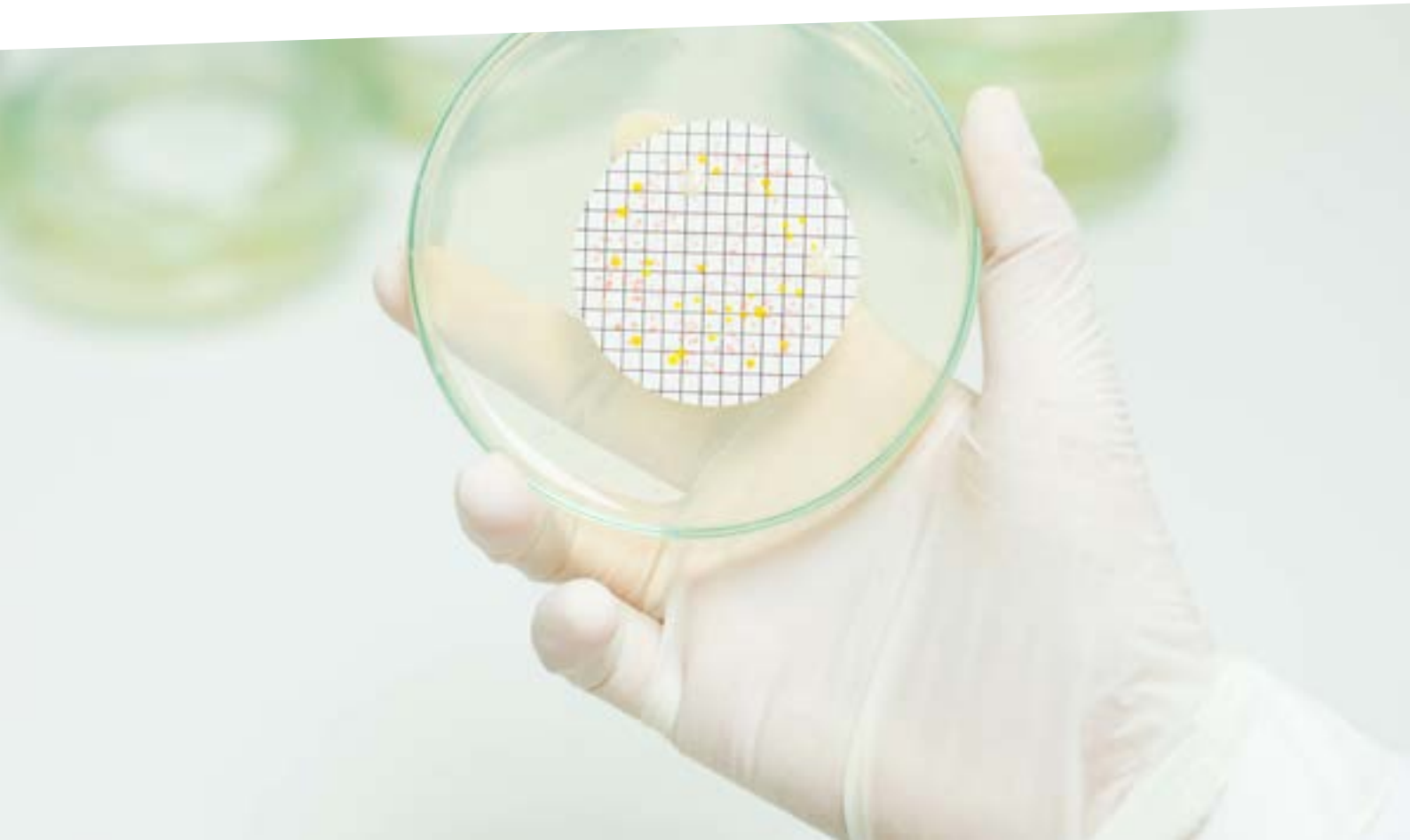
With state-of-the-art laboratories in London and County Durham, and a national refrigerated logistics network, we ensure timely and accurate results across the UK.

Quality and certifications

Our commitment to quality is embedded in every aspect of our operations. We are proud to hold the following certifications and accreditations:

- UKAS accredited testing laboratory No. 2279, operating to ISO/IEC 17025:2017
- ISO 9001 – Quality Management System (SGS Certified)
- ISO 14001 – Environmental Management System (SGS Certified)
- OHSAS 18001 – Occupational Health and Safety (SGS Certified)
- City & Guilds accredited – Training Academy
- LCA accredited – Legionella Control Association
- Legionella analysis – ISO 11731 standard (as per HSG274 Part 1)

This guide is for our laboratory & technical services. We have **a separate guide** dedicated to analysis for the healthcare industry.



Closed water systems

Waters from heating, cooling, and other closed pipework systems present a particularly challenging matrix for analysis. Each system often contains a unique chemical composition and potential unknown interferences, making standard testing approaches insufficient.

We bring years of specialised experience in analysing closed water systems. Our laboratory has developed optimised, bespoke methods to address these complexities, ensuring accurate and reliable results. In addition to testing, our expert team provides interpretive advice to help clients understand and act on their analytical data.

Commissioning support

We offer a range of tailored test suites designed to support compliance with BSRIA guidelines, particularly during system commissioning. These suites help ensure that new or refurbished systems meet performance and safety standards from the outset.

Guidance for BG29/2021 - Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Al36	Aluminium, total	0.03	mg/l	Yes	For information only
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes	Range as recommended by the cleaning specialist in their method statement
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes	N/A
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes	N/A
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes	N/A
Chloride01	Chloride	5	mg/l	Yes	Maximum as recommended by the cleaning specialist in their method statement
Cu35	Copper, dissolved	0.1	mg/l	Yes	For information only
Cu36	Copper, total	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their method statement
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes	Range as recommended by the cleaning specialist in their method statement (depends on water treatment regime)
Fe35	Iron, dissolved	0.1	mg/l	Yes	Less than 3mg/l
Fe36	Iron, total	0.1	mg/l	Yes	Less than 6mg/l
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	Range as recommended by the cleaning specialist in their method statement

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes	
pH05	pH	2 - 13	pH	Yes	Range as recommended by the cleaning specialist in their method statement (depends on water treatment regime)
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	Range as recommended by the cleaning specialist in their method statement (depends on water treatment regime)
Solids06	Suspended Solids @ 105°C	5	mg/l	Yes	Less than 30mg/l in circulating water at pumps, Less than 45mg/l in pipework at extremes of system or at terminal units
Sulphate01	Sulphate	5	mg/l	Yes	Range as recommended by the cleaning specialist in their method statement
Zn36	Zinc, total	0.08	mg/l	Yes	For information only

Request BG29C - BSRIA Chemistry - 7 day after Completion of Pre-Commissioning Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 5 guideline for practical completion
Al36	Aluminium, total	0.03	mg/l	Yes	For information only
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes	Range as recommended by the specialist
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes	N/A
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes	N/A
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes	N/A
Chloride01	Chloride	5	mg/l	Yes	Maximum as recommended by the specialist
Cu35	Copper, dissolved	0.1	mg/l	Yes	For information only
Cu36	Copper, total	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the specialist
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes	Range as recommended by the specialist
Fe35	Iron, dissolved	0.1	mg/l	Yes	Less than 3mg/l subject to advice from water treatment chemical supplier
Fe36	Iron, total	0.1	mg/l	Yes	Less than 15mg/l subject to advice from water treatment chemical supplier

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 5 guideline for practical completion
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	Range as recommended by the water treatment specialist
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes	Range as recommended by the water treatment specialist
pH05	pH	2 - 13	pH	Yes	Range as recommended by the cleaning specialist in their method statement (depends on water treatment regime)
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	Range as recommended by the specialist
Solids06	Suspended solids @ 105°C	5	mg/l	Yes	Less than 30mg/l at system pump during circulation, less than 60mg/l in pipework at extremes of system; less than 45mg/l in pipework at extremes of system if previously sampled within 3 weeks; less than 90mg/l at terminal units not previously sampled; less than 45mg/l at terminal units if previously sampled or flushed within 3 weeks
Sulphate01	Sulphate	5	mg/l	Yes	Range as recommended by the specialist
Zn36	Zinc, total	0.08	mg/l	Yes	For information only
DO04	Dissolved oxygen	0.1	mg/l	No	For information only, range as recommended by the specialist

Request BG9C2 - BSRIA Chemistry Practical Completion Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 6 guidelines
Chloride01	Chloride	5	mg/l	Yes	<250mg/l
pH05	pH	2 - 13	pH	Yes	6.0 - 8.5
Sulphate01	Sulphate	5	mg/l	Yes	<250mg/l
Hard20	Hardness, total as $CaCO_3$	1	mg/l	Yes	As recommended by water treatment specialist

Request BG29C4 when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters	BG29/2021 Table 6 guidelines
P_SPEC4	Pseudomonads @ 30°C	10 - 10,000	cfu/ml	Yes	<1000 cfu/ml
TVC_01	Total viable count @ 30°C/48hrs	0 - 30,000	cfu/ml	Yes	<1000 cfu/ml

Request BG9B3 - BSRIA Fill Water Quality Microbiology suite when ordering these tests.

Guidance for 20BG29/2021 - Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Alk01	Alkalinity, total as $CaCO_3$	10	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk03	Alkalinity, bicarbonate as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Alk05	Alkalinity, carbonate as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Alk07	Alkalinity, hydroxide as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Chloride01	Chloride	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Sulphate01	Sulphate	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Fe35	Iron, dissolved	0.1	mg/l	Yes	Less than 3mg/l or as recommended by the cleaning specialist in their sampling and analysis plan

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Cu35	Copper, dissolved	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
pH05	pH	2	pH	Yes	As recommended by the cleaning specialist in their sampling and analysis plan depending on system materials and water treatment regime
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Solids06	Suspended solids @ 105°C	5	mg/l	Yes	Less than 30mg/l at main pump during circulation Less than 45mg/l at system extremities and terminal units
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Fe36	Iron, total	0.1	mg/l	Yes	Less than 6mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Cu36	Copper, total	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Al36	Aluminium, total	0.03	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan

Request 20BG29C4 - BSRIA BG29 - 2020 Chemistry Suite Table 4 - 7 day when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Alk01	Alkalinity, bicarbonate as $CaCO_3$	10	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk03	Alkalinity, bicarbonate as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Alk05	Alkalinity, carbonate as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Alk07	Alkalinity, hydroxide as $CaCO_3$	10	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Chloride01	Chloride	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Sulphate01	Sulphate	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Fe35	Iron, dissolved	0.1	mg/l	Yes	Less than 3mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Cu35	Copper, dissolved	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
pH05	pH	2	pH	Yes	As recommended by the cleaning specialist in their sampling and analysis plan depending on system materials and water treatment regime

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Solids06	Suspended solids @ 105°C	5	mg/l	Yes	Less than 30mg/l at main pump during circulation Less than 45mg/l at system extremities and terminal units
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Fe36	Iron, total	0.1	mg/l	Yes	Less than 6mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Cu36	Copper, total	0.1	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Zn36	Zinc, total	0.08	mg/l	Yes	N/A
Al36	Aluminium, total	0.03	mg/l	Yes	Less than 1mg/l or as recommended by the cleaning specialist in their sampling and analysis plan

Request 20BG29C5 - BSRIA BG29 - 2020 Chemistry Suite Table 5 - PC when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Hard21	Hardness, total as $CaCO_3$	10	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
ChloridG01	Chloride	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
SulphatG01	Sulphate as SO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
pH05	pH	2	pH	Yes	As recommended by the cleaning specialist in their sampling and analysis plan

Request 20BG29C6 - BSRIA BG29 - 2020 Chemistry Suite Table 6 - Fill Water Quality when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Fe35	Iron, dissolved	0.1	mg/l	Yes	Less than 3mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
NitriteG03	Nitrite as $NaNO_2$	0.075	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
ChloridG01	Chloride	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
SulphatG01	Sulphate as SO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
pH05	pH	2	pH	Yes	As recommended by the cleaning specialist in their sampling and analysis plan depending on system materials and water treatment regime

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Solids06	Suspended solids @ 105°C	5	mg/l	Yes	Less than 30mg/l at main pump during circulation Less than 45mg/l at system extremities and terminal units
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan
Fe36	Iron, total	0.1	mg/l	Yes	Less than 6mg/l or as recommended by the cleaning specialist in their sampling and analysis plan

Request BSCH when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
NitriteG03	Nitrite as $NaNO_2$	0.075	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
ChloridG01	Chloride	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
SulphatG01	Sulphate as SO_4	5	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
pH05	pH	2	pH	Yes	As recommended by the cleaning specialist in their sampling and analysis plan depending on system materials and water treatment regime
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes	As recommended by the cleaning specialist in their sampling and analysis plan
Solids06	Suspended solids @ 105°C	5	mg/l	Yes	Less than 30mg/l at main pump during circulation Less than 45mg/l at system extremities and terminal units
Fe30	Iron, total	0.05	mg/l	Yes	Less than 6mg/l or as recommended by the cleaning specialist in their sampling and analysis plan

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters	BG29/2021 Table 4 guidelines
Fe29	Iron, dissolved	0.05	mg/l	Yes	Less than 3mg/l or as recommended by the cleaning specialist in their sampling and analysis plan
Solids03	Total dissolved solids @ 105°C	30	mg/l	No	As recommended by the cleaning specialist in their sampling and analysis plan

Request BSCHL when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters	BG29/2021 Table 4 - guideline levels
P_SPEC16	Pseudomonads @ 30°C	10 - 10,000	cfu/ml	Yes	<1000 cfu/ml
SRB_8	Sulphate reducing bacteria - 5 days	Detected / not detected	-	No	Absent
TVC_52	TVC @ 30°C	0 - 1,500,000	cfu/ml	Yes	<10,000 cfu/ml

Request 20BG29B - BSRIA BG29 - 2020 Microbiology Suite Table 4/5 when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters	BG29/2021 Table 4 - guideline levels
P_SPEC16	Pseudomonads @ 30°C	10 - 10,000	cfu/ml	Yes	<1000 cfu/ml
TVC_52	TVC @ 30°C	0 - 1,500,000	cfu/ml	Yes	<10,000 cfu/ml

Request 20BG29B6 - BSRIA BG29 - 2020 Microbiology Suite Table 4/5 when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters	BG29/2021 Table 5 guidelines for practical completion
P_SPEC16	Pseudomonads @ 30°C	10 - 10,000	cfu/ml	Yes	<1000 cfu/ml
SRB_8	Sulphate reducing bacteria - 5 days	Detected / not detected		No	Absent
TVC_52	Total viable count @ 22°C/72hrs	0 - 1,500,000	cfu/ml	Yes	<10,000 cfu/ml
NRB_2	Nitrite-reducing bacteria	Detected / not detected		No	For information only

Request 20BG29BN - BSRIA BG29 - 2020 Microbiology Suite Table 4/5 incl. NRB when ordering these tests.

Routine monitoring - Chemistry and microbiology testing available

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Solids06	Suspended solids @ 105°C	5	mg/l	Yes
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
pH05	pH	2 - 13	pH	Yes
Appear02, Appear04, Appear08	Visual appearance	N/A	Descriptive	No
Appear05	Odour	N/A	Descriptive	No
DO04	Dissolved oxygen	0.1	mg/l	No
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Hard20	Hardness, total as $CaCO_3$	1	mg/l	Yes
Amm01	Ammoniacal nitrogen as N	0.04	mg/l	Yes
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Sulphate01	Sulphate	5	mg/l	Yes
Chloride01	Chloride	5	mg/l	Yes
Fe36	Iron, total	0.1	mg/l	Yes
Fe35	Iron, dissolved	0.1	mg/l	Yes
Cu35	Copper, total	0.1	mg/l	Yes
Cu36	Copper, dissolved	0.1	mg/l	Yes
Al36	Aluminium, total	0.03	mg/l	Yes
Zn36	Zinc, total	0.08	mg/l	Yes
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes
EGlycol02	Ethylene glycol (antifreeze)	0.4	% v/v	No
---	Biocides			
TVC_01	Total viable count @ 22°C/72 hours	0 - 15,000,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48 hours	0 - 1,500,000	cfu/ml	Yes
P_SPEC16	Pseudomonads @ 30°C	0 - 100,000	cfu/ml	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
SRB_2 SRB_8	Sulphate reducing bacteria - 21 days Sulphate reducing bacteria - 5 days	Detected / not detected		No No
NRB_2	Nitrite-reducing bacteria - 5 days	Detected / not detected		No

We understand that every system is unique. That's why we offer bespoke test suites tailored to your specific requirements. Whether you're commissioning a new system or monitoring an existing one, our team can help design a testing programme that aligns with your operational and compliance needs.

Reporting ranges for microbiological tests can be extended upon request to meet more stringent or specialised criteria. Please contact us to discuss your requirements in detail.

Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes
AmmG01	Ammoniacal nitrogen as N	0.15	mg/l	Yes
Appear02	Colour	N/A	Descriptive	No
Appear04	Clarity	N/A	Descriptive	No
Appear05	Odour	N/A	Descriptive	No
Appear08	Solids - visual	N/A	Descriptive	No
Chloride01	Chloride	5	mg/l	Yes
Cu35	Copper, dissolved	0.1	mg/l	Yes
Cu36	Copper, total	0.1	mg/l	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Fe35	Iron, dissolved	0.1	mg/l	Yes
Fe36	Iron, total	0.1	mg/l	Yes
Hard20	Hardness, total as $CaCO_3$	1	mg/l	Yes
Molybdat13	Molybdate as MoO_4	5	mg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Solids06	Suspended solids @ 105°C	5	mg/l	Yes
Sulphate01	Sulphate	5	mg/l	Yes
Zn35	Zinc, dissolved	0.08	mg/l	Yes
Zn36	Zinc, total	0.08	mg/l	Yes
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Al36	Aluminium, total	0.03	mg/l	Yes

Request HCFC when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters
BACILLUS1	Bacillus	0 - 300	cfu/ml	No
FLAVBAC1	Flavobacterium	0 - 300	cfu/ml	No
MicroFungi	Microfungi	0 - 100	cfu/100ml	No
NRB_2	Nitrite-reducing bacteria	Detected / not detected		No
P_SPEC4	Pseudomonads @ 30°C	100 - 100,000	cfu/100ml	Yes
SRB_2	Sulphate reducing bacteria @ 21 days	Detected / not detected		No
TVC_01	Total viable count @ 22°C/72hrs	0 - 15,000,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48hrs	0 - 1,500,000	cfu/ml	Yes

Request RDF-21DAY when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters
NRB_2	Nitrite-reducing bacteria	Detected / not detected		No
P_SPEC16	Pseudomonads @ 30°C	10 - 10,000	cfu/ml	Yes
SRB_2	Sulphate reducing bacteria - 21 days	Detected / not detected		No
TVC_52	Total viable count @ 30°C/48hrs	0 - 1,500,000	cfu/ml	Yes

Request 20BG29-21 - BSRIA BG29 - 2020 Microbiology Suite incl. NRB & SRB when ordering these tests.

Closed system volume estimate

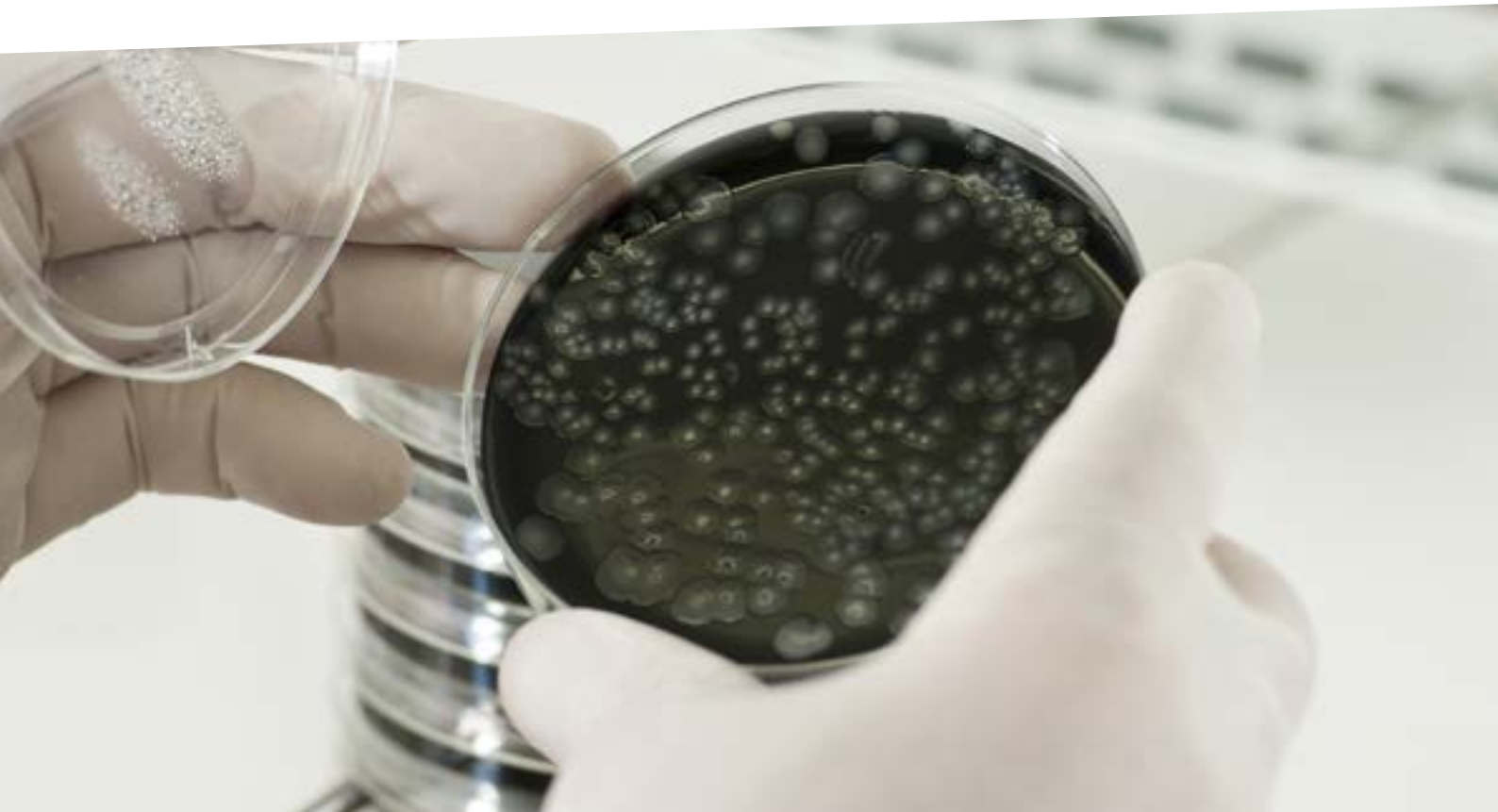
We offer general-purpose reagent-grade lithium chloride powder for use in system volume estimation. By dosing the system and analysing water samples taken before and after the addition of lithium chloride, we can calculate the estimated system volume based on the change in lithium concentration.

This method is particularly valuable for large or complex systems where the total volume is unknown - an essential parameter when determining correct dosing levels for corrosion inhibitors and biocides.

Our team can support you with:

- Supply of high-purity lithium chloride reagent
- Sample collection and laboratory analysis
- Accurate volume estimation and interpretive reporting

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Li04	Lithium, total	0.2	mg/l	No



Closed system water discharge

Requirements for discharge consent will vary between sewage undertakers. However, here are some of the common parameters which may be required.

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
As04	Arsenic, total	0.01	mg/l	No
B04	Boron, total	0.01	mg/l	No
Zn36	Zinc, total	0.08	mg/l	Yes
Cu35	Copper, dissolved	0.1	mg/l	Yes
Cu36	Copper, total	0.1	mg/l	Yes
Al36	Aluminium, total	0.03	mg/l	Yes
Cd04	Cadmium, total	0.005	mg/l	Yes
Cr04	Chromium, total	0.01	mg/l	Yes
Pb04	Lead, total	0.01	mg/l	Yes
Ni04	Nickel, total	0.01	mg/l	Yes
P02	Phosphorus, total	0.02	mg/l	Yes
COD03	Chemical oxygen demand	10	mg/l	Yes
Solids05	Total Solids @ 105°C	5	mg/l	No
Solids08	Settleable solids	5	mg/l	No
Solids07	Settleable solids, rapid	5	mg/l	No
pH05	pH	2 - 13	pH	Yes
Mo04	Molybdenum, total	0.05	mg/l	No
Nitrite03	Nitrite as $NaNO_2$	9.9	mg/l	Yes
EGlycol02	Ethylene glycol	0.04	% v/v	No
TOC-man3LL	Total organic carbon	1	mg/l	No
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Amm01	Ammoniacal nitrogen as N	0.04	mg/l	Yes
Chloride01	Chloride	5	mg/l	Yes
Sulphate01	Sulphate	5	mg/l	Yes

Potable water systems

Potable water supply tests

We offer a comprehensive range of testing services for potable water supplies, tailored to meet the needs of various environments and regulatory standards. Whether you're addressing a specific concern or conducting routine monitoring, we have a solution to support you.

Our services are suitable for:

- Aesthetic complaints (e.g. taste, odour, discolouration)
- Water outlets in homes, offices, and healthcare premises
- New domestic pipework systems
- Private water supplies (e.g. boreholes, wells, springs)

We provide:

- UKAS-accredited microbiological and chemical testing
- Sampling kits or on-site sampling services
- Interpretive reporting to support compliance and corrective action
- Flexible test suites based on your specific needs or regulatory requirements

New domestic water supply installation

According to BS 8558:2011, which complements BS EN 806, when a newly installed domestic water system has been disinfected but cannot be routinely flushed prior to occupancy, it is essential to verify that water quality has not deteriorated during the stagnation period. In such cases, water sampling and analysis must be carried out to confirm that the system remains safe for use.

This precaution helps ensure that microbial growth, such as Legionella, has not occurred and that the water remains compliant with health and safety standards. All sampling results and associated documentation should be retained as part of the commissioning records.

Microbiology

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters	BS 8558:2015 guidelines
TVC_01	Total viable count @ 37°C/48 hours	0 - 15,000	cfu/ml	Yes	Corrective action required if deterioration is evident
TVC_02	Total viable count @ 22°C/72 hours	0 - 15,000	cfu/ml	Yes	
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes	Flush and re-test if present. Investigate and consider repeat disinfection if positive results persist
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes	
P_AERU1	Pseudomonas aeruginosa	0 - 100	cfu/100ml	Yes	
LEGIOND1	Other Legionella species	50 - 15,000	cfu/volume	Yes	Repeat disinfection if detected
LEGIOND2	Legionella pneumophila SG 1	50 - 15,000	cfu/volume	Yes	Repeat disinfection if detected
LEGIOND3	Legionella pneumophila SG 2-14	50 - 15,000	cfu/volume	Yes	Repeat disinfection if detected

Private water supply testing - Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Nitrate02	Nitrate as NO_3	2.2	mg/l	Yes
Appear03	Colour	0	hu	No
Appear09	Odour, quantitative	0	Dilution no.	N/A
Appear10	Taste, quantitative	0	Dilution no.	No
AmmG02	Ammoniacal nitrogen as NH_4	0.15	mg/l	Yes
pH05	pH	2	pH	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Nitrite05	Nitrite as NO_2	0.03	mg/l	Yes
Al63	Aluminium, total	0.0014	mg/l	Yes
Fe63	Iron, total	0.0023	mg/l	Yes
Mn63	Manganese, total	0.0003	mg/l	Yes
Turb01	Turbidity	0.1	NTU	Yes

Request PWSCHEM2 to order these tests

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Appear19	Colour	1	mg/l pt/co	Yes
Appear20	Odour, quantitative	0	Dilution no.	Yes
Appear21	Taste, quantitative	0	Dilution no.	Yes
pH11	pH @ 20°C	0	pH	Yes
EC08	Electrical conductivity @ 20°C	14	µS/cm	Yes
Amm20	Ammoniacal nitrogen as NH_4	0.02	mg/l	Yes
Nitrate17	Nitrate as NO_3	1	mg/l	Yes
Nitrite23	Nitrite as NO_2	0.003	mg/l	Yes
Chloride19	Chloride	3	mg/l	Yes
Sulphate17	Sulphate	2	mg/l	Yes
Fluoride07	Fluoride	0.05	mg/l	Yes
Fe66	Iron, total	7.3	µg/l	Yes
Cu66	Copper, total	0.009	mg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Pb66	Lead, total	0.9	µg/l	Yes
Cr66	Chromium, total	0.5	µg/l	Yes
Ni66	Nickel, total	0.9	µg/l	Yes
Mn66	Manganese, total	1.7	µg/l	Yes
Cd66	Cadmium, total	0.12	µg/l	Yes
Hg66	Mercury, total	0.04	µg/l	Yes
As66	Arsenic, total	1	µg/l	Yes
Al66	Aluminium, total	6.1	µg/l	Yes
Sb66	Antimony, total	0.2	µg/l	Yes
B66	Boron, total	0.04	mg/l	Yes
Se66	Selenium, total	0.8	µg/l	Yes
Na66	Sodium, total	1.1	mg/l	Yes
CN10	Cyanide, total	4.1	µg/l	Yes
GROSSALP04	Gross alpha	0.02	Bq/l	N/A
TRITIUM05	Tritium	8.5	Bq/l	N/A
TOC08	Total organic carbon	0.3	mg/l	Yes
GROSSBET04	Gross beta	0.28	Bq/l	N/A
THM18	Total trihalomethanes	0	µg/l	Yes
VOC301	1,2-dichloroethane	0.12	µg/l	Yes
VOC302	Dichlorobromomethane	0.43	µg/l	Yes
VOC303	Tribromomethane	0.6	µg/l	Yes
VOC304	Tetrachloromethane	0.11	µg/l	Yes
VOC305	Chloroform (trichloromethane)	0.5	µg/l	Yes
VOC306	Dibromochloromethane	0.5	µg/l	Yes
VOC307	Benzene	0.02	µg/l	Yes
VOC309	Vinyl chloride	0.5	µg/l	Yes
VOC308	Trichloroethene + tetrachloroethene	0	µg/l	Yes
Turb05	Turbidity	0.04	NTU	Yes
Bromate03	Bromate	0.8	µg/l	Yes
AcidHerb52	2,4-5 - T	0.007	µg/l	N/A
ACRYL02	Acrylamide	0.003	µg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
AcidHerb53	2,4-D	0.007	µg/l	N/A
AcidHerb54	Bentazone	0.007	µg/l	N/A
AcidHerb55	Bromoxynil	0.007	µg/l	N/A
AcidHerb56	Dicamba	0.02	µg/l	N/A
AcidHerb57	Dichlorprop	0.003	µg/l	N/A
AcidHerb58	Fluroxypyr	0.008	µg/l	N/A
EPICHLOR03	Epichlorohydrin	0.1	µg/l	N/A
AcidHerb59	MCPA	0.008	µg/l	N/A
AcidHerb60	MCPB	0.008	µg/l	N/A
AcidHerb61	Mecoprop (MCPP)	0.005	µg/l	N/A
AcidHerb62	Triclopyr	0.015	µg/l	N/A
PAH63	Total PWS 4 PAH	0	µg/l	Yes
PAH64	Benzo(a)pyrene	0.003	µg/l	Yes
PAH65	Benzo(b)fluoranthene	0.003	µg/l	Yes
PAH66	Benzo(k)fluoranthene	0.003	µg/l	Yes
PAH67	Indeno(1,2,3-cd)pyrene	0.003	µg/l	Yes
PAH68	Benzo(g,h,i)perylene	0.003	µg/l	Yes
AzolHerb01	Atrazine	0.002	µg/l	N/A
AzolHerb02	Carbendazim	0.001	µg/l	N/A
AzolHerb03	Carbetamide	0.002	µg/l	N/A
PEST35	Dieldrin	0.007	µg/l	Yes
PEST34	Dichlobenil	0.006	µg/l	Yes
PEST33	Aldrin	0.007	µg/l	Yes
PEST36	Gamma- HCH (lindane)	0.005	µg/l	Yes
PEST37	Heptachlor	0.008	µg/l	Yes
PEST38	Heptachlor epoxide	0.005	µg/l	Yes
AzolHerb04	Chlortoluron	0.004	µg/l	N/A
PEST43	Trifluralin	0.006	µg/l	Yes
PEST39	Heptachlor epoxide A	0.005	µg/l	Yes
PEST41	Propyzamide	0.005	µg/l	Yes
PEST40	Heptachlor epoxide B	0.004	µg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
PEST42	Tri-allate	0.005	µg/l	Yes
AzolHerb05	Diuron	0.003	µg/l	N/A
AzolHerb06	Epoxiconazole	0.003	µg/l	N/A
AzolHerb07	Flutriafol	0.003	µg/l	N/A
AzolHerb08	Isoproturon	0.003	µg/l	N/A
AzolHerb09	Linuron	0.003	µg/l	N/A
AzolHerb10	Oxadixyl	0.003	µg/l	N/A
AzolHerb11	Pendimethalin	0.007	µg/l	N/A
AzolHerb12	Prometryn	0.002	µg/l	N/A
AzolHerb13	Propazine	0.002	µg/l	N/A
AzolHerb14	Simazine	0.003	µg/l	N/A
AzolHerb15	Terbutryn	0.002	µg/l	N/A
AzolHerb16	Trietazine	0.004	µg/l	N/A

Request PWCHEMREG1 to order these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Appear19	Colour	1	mg/l pt/Co	Yes
Appear20	Odour, quantitative	0	Dilution no.	Yes
Appear21	Taste, quantitative	0	Dilution no.	Yes
pH11	pH @ 20°C	0	pH	Yes
EC08	Electrical conductivity @ 20°C	14	µS/cm	Yes
Amm20	Ammoniacal nitrogen as NH_4	0.02	mg/l	Yes
Nitrate17	Nitrate as NO_3	1	mg/l	Yes
Nitrite23	Nitrite as NO_2	0.003	mg/l	Yes
Fe66	Iron, total	7.3	µg/l	Yes
Mn66	Manganese, total	1.7	µg/l	Yes
Al66	Aluminium, total	6.1	µg/l	Yes
Turb05	Turbidity	0.04	NTU	Yes

Request PWCHEMREG2 to order these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
CL_PERF1	Clostridium perfringens	0-100	cfu/100ml	Yes
COLIFILT1	Total coliforms	0-100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0-100	cfu/100ml	Yes
F_ENT1	Enterococci	0-100	cfu/100ml	Yes
TVC01	Total viable count @ 22°C/72hrs	0-15,000	cfu/ml	Yes
TVC02	Total viable count @ 37°C/48hrs	0-15,000	cfu/ml	Yes

Request PWSMIC1 to order these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
TVC01	Total viable count @ 22°C/72hrs	0-15,000	cfu/ml	Yes
TVC02	Total viable count @ 37°C/48hrs	0-15,000	cfu/ml	Yes
COLIFILT1	Total coliforms	0-100	cfu/100ml	Yes
CL_PERF1	Clostridium perfringens	0-100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0-100	cfu/100ml	Yes

Request PWSMIC2 to order these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
CL_PERF6	Clostridium perfringens	0-100	cfu/100ml	Yes
ECOLI5	Escherichia coli	0-100	mpn/100ml	Yes
COLI8	Total coliforms	0-100	mpn/100ml	Yes
TVC26	Total viable count @ 22°C/72hrs	0-300	cfu/ml	Yes
TVC27	Total viable count @ 37°C/48hrs	0-300	cfu/ml	Yes
TVC_E05	Estimated TVC @ 22°C/72hrs	0-15,000	cfu/ml	N/A
TVC_E06	Estimated TVC @ 37°C/48hrs	0-15,000	cfu/ml	N/A

Request PWSMICREG2 to order these tests.

New mains water connection testing

Before a new connection can be made to the mains water supply, the associated pipework must be disinfected and a sample collected for laboratory analysis. This ensures the system is free from microbial contamination and safe for potable use.
Testing must be carried out by a UKAS-accredited laboratory, and the required test suite is determined by the local water supply company.

These typically include:

- Microbiological tests (e.g. E. coli, coliforms, total viable count)
- Chlorine residuals
- Turbidity and appearance
- pH and conductivity

We offer:

- UKAS-accredited testing in accordance with water company specifications
- Rapid turnaround times to avoid project delays
- Sampling kits or on-site sampling services
- Certificate of analysis for submission to the water authority

Please contact us to confirm the specific requirements for your region and to arrange testing.

Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Chlorine03	Chlorine, free	0.02	mg/l	No
Chlorine04	Chlorine, total	0.02	mg/l	No
Turb01	Turbidity	0.1	NTU	Yes

Request TWCH when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes
TVC_01	Total viable count @ 22°C/72 hours	0 - 15,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48 hours	0 - 15,000	cfu/ml	Yes

Request TWB when ordering these tests.

Routine microbiological assessment

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes
TVC_01	Total viable count @ 22°C/72 hours	0 - 15,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48 hours	0 - 15,000	cfu/ml	Yes

Request POT when ordering these tests or DWB when assessment is required.

Drinking water complaints

Drinking water complaint (DWC) investigation

We offer targeted microbiological and chemical test suites to help investigate common drinking water complaints, including:

- Discoloured water
- Unpleasant odours or tastes
- Presence of visible deposits or particulates

These issues can arise from a variety of causes such as pipe corrosion, biofilm formation, treatment imbalances, or contamination events.

DWC test suites

Our DWC suites are designed to identify potential causes through a combination of:

- Microbiological analysis (e.g. E. coli, coliforms, Pseudomonas spp.)
- Chemical testing (e.g. iron, manganese, turbidity, pH, chlorine residuals)
- Physical observations (e.g. colour, clarity, odour)

Each suite includes a written interpretation of the results by our technical experts, helping you understand the findings and take appropriate corrective action.

Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes
Amm01	Ammoniacal nitrogen as N	0.04	mg/l	Yes
Amm07	Albuminoid nitrogen as N	0.04	mg/l	Yes
Appear02	Colour	N/A	N/A	No

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for potable waters
Appear04	Clarity	N/A	N/A	No
Appear05	Odour	N/A	N/A	No
Appear06	Taste, qualitative	N/A	N/A	No
Appear08	Solids - visual	N/A	N/A	No
Cd63	Cadmium, total	0.0002	mg/l	Yes
Chloride01	Chloride	5	mg/l	Yes
Cr63	Chromium, total	0.0003	mg/l	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Fe63	Iron, total	0.0023	mg/l	Yes
Hard21	Hardness, total as $CaCO_3$	10	mg/l	Yes
K63	Potassium, total	0.3	mg/l	Yes
Mn63	Manganese, total	0.0003	mg/l	Yes
Na63	Sodium, total	0.5	mg/l	Yes
Ni63	Nickel, total	0.0003	mg/l	Yes
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Nitrite04	Nitrite as N	0.01	mg/l	Yes
Pb63	Lead, total	0.0002	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
PV01	Permanganate value - 4hrs @ 27°C	0.5	mg/l	Yes
Solids18	Total dissolved solids - meter	100	mg/l	No
Sulphate01	Sulphate	5	mg/l	Yes
Zn63	Zinc, total	0.0029	mg/l	Yes
Cu63	Copper, total	0.0017	mg/l	Yes

Request DWC when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
Assessmnt4	Assessment	N/A	N/A	N/A
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes
P_AERU1	Pseudomonas aeruginosa	0 - 100	cfu/100ml	Yes
P_SPEC1	Pseudomonas species @ 30°C	0 - 100	cfu/100ml	Yes
TVC_01	Total viable count @ 22°C/72 hours	0 - 15,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48 hours	0 - 15,000	cfu/ml	Yes

Request DVM when ordering these tests.

Other microbiological test suites are available depending on the particular site concerns.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters	Satisfactory results HTM 04-01
P_AERU1	Pseudomonas aeruginosa (culture)	0 - 100	cfu/100ml	Yes	Not detected
P_AERU6	Pseudomonas aeruginosa (IDEXX)	0 - 201	MPN/100ml	Yes	Not detected

Healthcare premises

Pseudomonas aeruginosa testing in healthcare environments

Potable water systems in healthcare premises are often large, complex, and critical to patient safety. Effective management is essential to control waterborne pathogens, particularly in augmented care units where vulnerable patients are at increased risk.

In addition to compliance with the HSE's Approved Code of Practice (L8) for Legionella control, HTM 04-01 places specific emphasis on the control of Pseudomonas aeruginosa in healthcare water systems.

About pseudomonas aeruginosa

Pseudomonas aeruginosa is an opportunistic pathogen capable of causing serious infections in immunocompromised individuals. It can readily colonise water systems and outlets if not properly managed, making routine monitoring and rapid detection essential.

Our testing methods

We offer two UKAS-accredited methods for the detection of Pseudomonas aeruginosa:

1. Culture method (HTM 04-01 Part B, Appendix F)

- Based on Microbiology of Drinking Water – Part 8
- Standard method for healthcare compliance
- Turnaround time: 2 days (+1 day for confirmation if needed)

2. Rapid method (Method C)

- Also based on Microbiology of Drinking Water – Part 8
- Validated using BS EN ISO 17994
- Turnaround time: Confirmed positive result in 24 hours
- Sensitivity and specificity comparable to the culture method

Additional options

- **Retention of positive isolates** available upon request
- **Adjustable reporting ranges** with suitable dilutions
- **Expert interpretation** and support for compliance with HTM 04-01

Indicator organisms in water testing

Indicator organisms are used in water testing to signal the potential presence of pathogenic microorganisms and to assess the effectiveness of treatment processes. These organisms are not necessarily harmful themselves, but their presence can indicate contamination or inadequate disinfection.

The most commonly used indicator is:

- Escherichia coli (E. coli) – a key faecal indicator organism, used to detect contamination from human or animal waste.

Depending on the context and water type, additional indicator organisms may be included to provide a broader assessment of water quality, such as:

- Total coliforms
- Enterococci
- Clostridium perfringens
- Pseudomonas aeruginosa (in recreational waters)

These organisms help build a comprehensive microbiological profile, supporting both public health protection and regulatory compliance.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for potable waters
ECOLIFILT1	Escherichia coli (E.coli)	0 - 100	cfu/100ml	Yes
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
F_ENT1	Enterococci	0 - 100	cfu/100ml	Yes
CL_PERF6	Clostridium perfringens	0 - 100	cfu/100ml	Yes

WELL building standard compliance

Introduced in 2014 by the International WELL Building Institute, the WELL Building Standard is gaining significant traction in the UK construction and property sectors. This performance-based system focuses on enhancing human health and well-being through the built environment.

We offer a comprehensive suite of water testing services to support compliance with the WELL Building Standard. Our testing covers both microbiological and chemical determinands, ensuring your project meets the rigorous water quality criteria outlined in the standard.

For the most up-to-date WELL testing suites and tailored advice, please contact our team.

Chemistry

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Nitrate02	Nitrate as NO_3	2.2	mg/l	Yes
Chloride01	Chloride	5	mg/l	Yes
Sulphate01	Sulphate	5	mg/l	Yes
Fluoride01	Fluoride	0.1	mg/l	Yes
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
Chlorine28	Chlorine, total - average of three tests	0.02	mg/l	No
NitriteG02	Nitrite as N	0.016	mg/l	Yes
pH05	pH	2	pH	Yes
THM7	Total trihalomethanes	1	µg/l	N/A
VOC84	Trichloromethane	1	µg/l	N/A
VOC86	1,2-Dichloroethane	1	µg/l	N/A
VOC89	Benzene	1	µg/l	N/A
VOC89	Benzene	1	µg/l	N/A
VOC92	Trichloroethene	1	µg/l	N/A
VOC94	Bromodichloromethane	1	µg/l	N/A
VOC97	Toluene	1	µg/l	N/A
VOC100	Dibromochloromethane	1	µg/l	N/A
VOC101	Tetrachloroethene	1	µg/l	N/A
VOC106	p & m-xylene	1	µg/l	N/A

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
VOC108	Tribromomethane	1	µg/l	N/A
VOC109	o-Xylene	1	µg/l	N/A
HACETIC01	Total haloacetic acid	10	µg/l	No
OCP26	o,p-DDT	0.01	µg/l	N/A
OCP39	gamma-HCH (Lindane) (gamma-BHC)	0.01	µg/l	N/A
OCP27	p,p-DDT	0.01	µg/l	N/A
OCP32	Dieldrin	0.01	µg/l	N/A
OCP25	Chlordane	0.01	µg/l	N/A
OCP24	Aldrin	0.01	µg/l	N/A
Sulphide07	Sulphide as S^{2-}	0.01	mg/l	No
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Ag63	Silver, total	0.0002	mg/l	Yes
Ni63	Nickel, total	0.0003	mg/l	Yes
Pb65	Lead, total	0.2	µg/l	Yes
Cd63	Cadmium, total	0.0002	mg/l	Yes
As63	Arsenic, total	0.0003	mg/l	Yes
Al63	Aluminium, total	0.0014	mg/l	Yes
Fe63	Iron, total	0.0023	mg/l	Yes
Mn63	Manganese, total	0.0003	mg/l	Yes
Pb63	Lead, total	0.0002	mg/l	Yes
Cu63	Copper, total	0.0017	mg/l	Yes
Cr63	Chromium, total	0.0003	mg/l	Yes
Zn63	Zinc, total	0.0029	mg/l	Yes
Na63	Sodium, total	0.5	mg/l	Yes
Hg63	Mercury, total	0.0001	mg/l	Yes
Turb04	Turbidity - average of three tests	0.1	NTU	Yes

Request WELLV2Q121 - WELL Building V2 Q1 2021 - All Parameters Suite when ordering these tests

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Turb04	Turbidity - average of three tests	0.1	NTU	Yes

Request WELLW1P1C - WELL V2 Q1 2021 W01 Part 1 Chemistry Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Fluoride01	Fluoride	0.1	mg/l	Yes
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
Chlorine28	Chlorine, total - average of three tests	0.02	mg/l	No
NitriteG02	Nitrite as N	0.016	mg/l	Yes
THM7	Total Trihalomethanes	1	µg/l	N/A
HACETIC01	Total haloacetic acid	10	µg/l	No
Cr63	Chromium, total	0.0003	mg/l	Yes
As63	Arsenic, total	0.0003	mg/l	Yes
Cu63	Copper, total	0.0017	mg/l	Yes
Ni63	Nickel, total	0.0003	mg/l	Yes
Cd63	Cadmium, total	0.0002	mg/l	Yes
Pb63	Lead, total	0.0002	mg/l	Yes
Hg63	Mercury, total	0.0001	mg/l	Yes

Request WELLW2P1 - WELL V2 Q1 2021 W02 Part 1 Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
VOC86	1,2-Dichloroethane	1	µg/l	N/A
VOC89	Benzene	1	µg/l	N/A
VOC92	Trichloroethene	1	µg/l	N/A
VOC97	Toluene	1	µg/l	N/A
VOC101	Tetrachloroethene	1	µg/l	N/A
VOC106	p & m-xylene	1	µg/l	N/A
VOC109	o-Xylene	1	µg/l	N/A
OCP39	gamma-HCH (Lindane) (gamma-BHC)	0.01	µg/l	N/A
OCP24	Aldrin	0.01	µg/l	N/A
OCP27	p,p-DDT	0.01	µg/l	N/A
OCP26	o,p-DDT	0.01	µg/l	N/A
OCP32	Dieldrin	0.01	µg/l	N/A
OCP25	Chlordane	0.01	µg/l	N/A

Request WELLW2P2 - WELL V2 Q1 2021 W02 Part 2 - Organics & Pesticides when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
pH05	pH	2	pH	Yes
Turb04	Turbidity - average of three tests	0.1	NTU	Yes

Request WELLW3P1C - WELL V2 Q1 2021 W03 Part 1 Chemistry Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
ChloridG01	Chloride	5	mg/l	Yes
SulphatG01	Sulphate as SO_4	5	mg/l	Yes
Sulphide07	Sulphide as S^{2-}	0.01	mg/l	No
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Mn63	Manganese, total	0.0003	mg/l	Yes
Zn63	Zinc, total	0.0029	mg/l	Yes
Fe63	Iron, total	0.0023	mg/l	Yes
Na63	Sodium, total	0.5	mg/l	Yes
Ag63	Silver, total	0.0002	mg/l	Yes
Al63	Aluminium, total	0.0014	mg/l	Yes
Cu63	Copper, total	0.0017	mg/l	Yes

Request WELLW4P1 - WELL V2 Q1 2021 W04 Enhanced Water Quality Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Nitrate02	Nitrate as NO_3	2.2	mg/l	Yes
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
Chlorine28	Chlorine, total - average of three tests	0.02	mg/l	No
pH05	pH	2	pH	Yes
VOC89	Benzene	1	µg/l	N/A
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Cu63	Copper, total	0.0017	mg/l	Yes
As63	Arsenic, total	0.0003	mg/l	Yes
Pb63	Lead, total	0.0002	mg/l	Yes
Turb04	Turbidity - average of three tests	0.1	NTU	Yes

Request WELLW5P1S1 - WELL V2 Q1 2021 W05 Part 1 - 1 Water Quality Pr Suite when ordering these tests.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for process waters
Chlorine27	Chlorine, free - average of three tests	0.02	mg/l	No
Chlorine28	Chlorine, total - average of three tests	0.02	mg/l	No
pH05	pH	2	pH	Yes
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Cu63	Copper, total	0.0017	mg/l	Yes
Pb65	Lead, total	0.2	µg/l	Yes
Turb04	Turbidity - average of three tests	0.1	NTU	Yes

Request WELLW5P1S2 - WELL V2 Q1 2021 W05 Part 1 - 2 Water Quality Mo Suite when ordering these tests.

Microbiology

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for process waters
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes

Request WELLCOLI - WELL V2 Q1 2021 Coliform W01P1/ W03P1/ W05P1 Suite when ordering these tests

Recreational waters

Routine microbiological testing suite

Our routine microbiological suite is specifically designed to meet the requirements of:

- The Pool Water Treatment Advisory Group (PWTAG)
- The Health and Safety Executive (HSE) guidance document HSG282: "Control of Legionella and other infectious agents in spa-pool systems"

This suite typically includes testing for:

- Total Viable Count (TVC)
- Escherichia coli (E. coli)
- Pseudomonas aeruginosa
- Coliform bacteria
- Legionella spp. (where applicable)

We also provide sampling kits, on-site sampling services, and interpretive reporting to support your water hygiene management programme.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for recreational waters
COLIFILT1	Total coliforms	0 - 100	cfu/100ml	Yes
ECOLIFILT1	Escherichia coli	0 - 100	cfu/100ml	Yes
P_AERU6	Pseudomonas aeruginosa	0 - 201	MPN/100ml	Yes
TVC_04	Total viable count @ 37°C/24hrs	0 - 15,000	cfu/ml	Yes

Request SPB1 when ordering these tests.

Other microbiological analysis

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for recreational waters
ALGAE	Algae	37,000 - 106,560,000	cells/l	No
P_SPEC1	Pseudomonas species @ 30°C	0 - 100	cfu/100ml	Yes

Chemical testing for pools, spas & hydrotherapy systems

Whether you're designing a new pool, installing a treatment plant, or conducting routine water quality monitoring, we offer a wide range of chemical testing services to support safe and compliant recreational water management.

Our testing helps ensure:

- Optimal water balance
- Effective disinfection
- Bather comfort and safety
- Compliance with PWTAG and HSG282 guidance

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for recreational waters
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes
Appear02	Colour	N/A		No
Appear05	Odour	N/A		No
Chlorate01	Chlorate	0.05	mg/l	No
Chloride01	Chloride	5	mg/l	Yes
Cu04	Copper, total	0.02	mg/l	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Fe04	Iron, total	0.05	mg/l	Yes
Hard08	Hardness, total as $CaCO_3$	1	mg/l	No
Hard11	Hardness, calcium as $CaCO_3$	1	mg/l	No
Lang01	Langelier index	-0.30 - +0.30	LSI	No
Nitrate01	Nitrate as N	0.5	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
PV01	Permanganate value - 4hrs @ 27°C	0.5	mg/l	Yes
Solids18	Total dissolved solids - meter	100	mg/l	No
Sulphate01	Sulphate	5	mg/l	Yes
Turb01	Turbidity	0.1	NTU	Yes
Zn04	Zinc, total	0.01	mg/l	Yes
TOC04	Total organic carbon	0.1	mg/l	N/A
VOC84	Trichloromethane	1	µg/l	N/A

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for recreational waters
VOC94	Bromodichloromethane	1	µg/l	N/A
VOC100	Dibromochloromethane	1	µg/l	N/A
VOC108	Tribromomethane	1	µg/l	N/A
Chlorine02	Chlorine, combined	0.02	mg/l	No
Chlorine03	Chlorine, free	0.02	mg/l	No
Chlorine04	Chlorine, total	0.02	mg/l	No
Amm01	Ammoniacal nitrogen as N	0.04	mg/l	Yes
Amm07	Albuminoid nitrogen as N	0.04	mg/l	Yes

Legionella

Legionella testing and risk management

Legionellosis is a collective term for diseases caused by Legionella bacteria, the most serious of which is Legionnaires' disease — a potentially fatal form of pneumonia.

Legionella bacteria are naturally present in low numbers in rivers, lakes, reservoirs, and soils, but they can also colonise man-made water systems such as:

- Cooling towers and evaporative condensers
- Domestic hot and cold water systems
- Spa pools and hot tubs
- Decorative fountains and humidifiers

When conditions are favourable—such as warm temperatures, stagnant water, and the presence of biofilm or scale—Legionella can multiply rapidly, increasing the risk of infection.

Our testing methods

We follow the latest international standard for Legionella detection:

- ISO 11731:2017 – Water Quality: Enumeration of Legionella

We offer two validated methods:

- Filtration Method (MIC003d) – our standard approach for most water types
- Centrifugation Method – ideal for 'dirty' or high-particulate samples

These methods are supported by expert interpretation and can be integrated into your Legionella risk management programme in line with current guidance and legislation.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
LEGIOND1	Other Legionella species	50 - 15,000	cfu/vol	Yes
LEGIOND2	Legionella pneumophila SG 1	50 - 15,000	cfu/vol	Yes
LEGIOND3	Legionella pneumophila SG 2-14	50 - 15,000	cfu/vol	Yes

Request LEGP when ordering these tests.

Rapid Legionella analysis (qPCR)

In addition to traditional culture methods, we offer rapid Legionella testing using quantitative Polymerase Chain Reaction (qPCR) — a molecular technique that delivers results in as little as 6 to 48 hours.

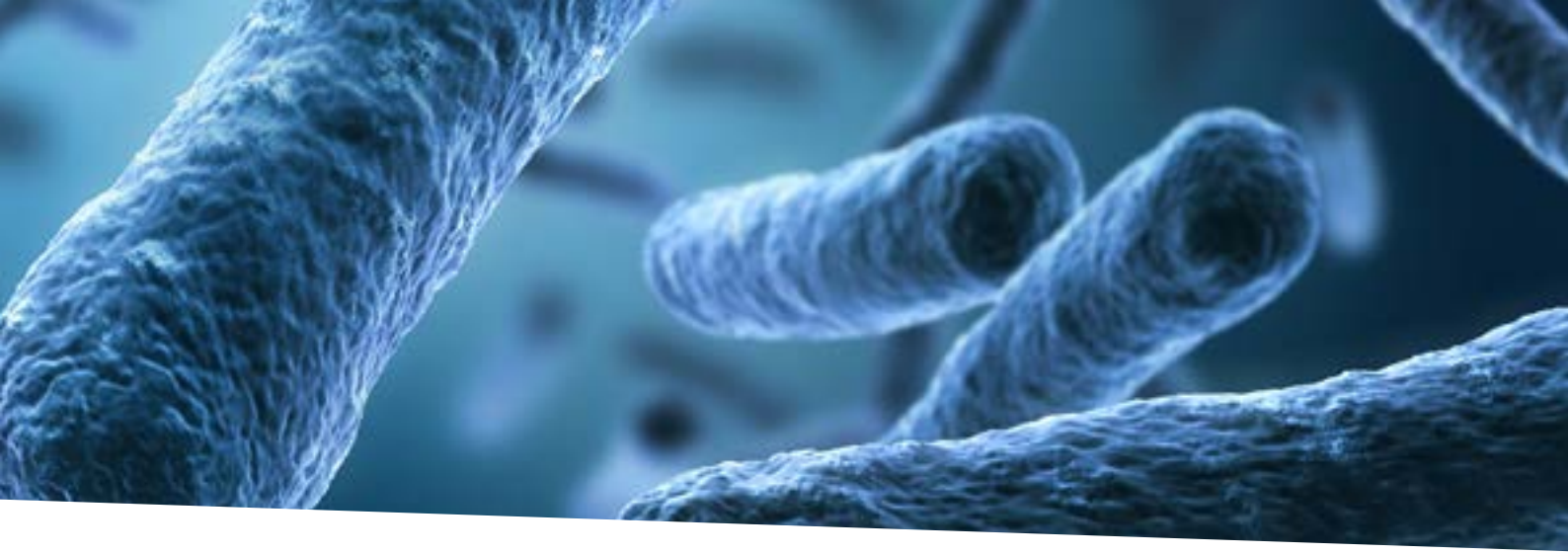
This method is ideal for:

- High-risk environments requiring fast turnaround (e.g. hospitals, cooling towers, hotels)
- Post-remediation verification
- Outbreak response and emergency investigations
- Trend monitoring in water management programmes

Key benefits of qPCR Testing:

- Speed: Results available within 1–2 days
- Sensitivity: Detects low levels of Legionella DNA
- Broad detection: Identifies both culturable and non-culturable (VBNC) cells
- Early warning: Enables faster intervention and risk mitigation

While qPCR is not yet universally accepted for regulatory compliance, it is increasingly used as a complementary tool to traditional culture methods, especially where rapid decision-making is critical.



Determinand code	Determinand	Reporting range	Units	UKAS accreditation
LEGPCR01	Legionella species PCR result	80 - 1,184,000	GU/l	Yes
LEGPCR02	Legionella pneumophila PCR result	80 - 1,184,000	GU/l	Yes

We are accredited for potable, process and purified water.

Comparison of legionella culture and rapid qPCR method

Specification	Culture	qPCR
Result turn-around time	10 - 12 days	Rapid 6 - 48 hours
Interferences with nontarget microorganisms	High	Very low
Viable But Non- culturable (VBNC)	Not detected	Detected
Culturable cells	Detected	Detected
Dead cells	Not detected	Detected
Regulatory compliance	Yes	Not currently, but likely in future versions of regs
Cost	Low	Moderate
Expression of results	Colony Forming Units (CFU)	Genomic Units (GU)

Surface water testing – lakes, rivers and reservoirs

Lakes and other surface waters are vulnerable to pollution from agricultural, domestic, and industrial runoff. These contaminants can significantly alter the aquatic environment, impacting fish populations, aquatic vegetation, and overall ecosystem health.

We offer:

- Expert advice on surface water quality issues
- Comprehensive testing to identify and quantify pollutants
- Support in environmental investigations and compliance monitoring

Our surface water testing can help determine the presence of:

- Nutrient overloads (e.g. nitrates, phosphates)
- Pesticides and herbicides
- Heavy metals and hydrocarbons
- Microbiological contamination
- Physical parameters (e.g. turbidity, pH, dissolved oxygen)

We work with environmental consultants, local authorities, and landowners to assess water quality and support remediation efforts.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for surface waters
AmmG02	Ammoniacal nitrogen as NH_4	0.15	mg/l	Yes
Appear08	Solids - visual	N/A	N/A	No
As04	Arsenic, total	0.01	mg/l	No
BOD01	Biochemical oxygen demand	5.6	mg/l	No
Cd04	Cadmium, total	0.005	mg/l	Yes
Chloride01	Chloride	5	mg/l	Yes
CN03	Cyanide, total	0.03	mg/l	No
COD03	Chemical oxygen demand	10	mg/l	Yes
Cr04	Chromium, total	0.01	mg/l	Yes
Cu04	Copper, total	0.02	mg/l	Yes
Deter10	Anionic surfactants	0.05	mg/l	No
DO01	Dissolved oxygen	2.5	mg/l	Yes
DO02	Oxygen saturation	2.5	%	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Hg04	Mercury, total	0.005	mg/l	No
Mn04	Manganese, total	0.01	mg/l	Yes
Ni04	Nickel, total	0.01	mg/l	Yes
Nitrate02	Nitrate as NO_3	2.2	mg/l	Yes
Nitrite05	Nitrite as NO_2	0.03	mg/l	No
P02	Phosphorus, total	0.02	mg/l	No

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for surface waters
Pb04	Lead, total	0.01	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
Phenols01	Phenols, total	0.01	mg/l	No
Solids18	Total dissolved solids - meter	100	mg/l	No
Solids06	Suspended solids @ 105°C	5	mg/l	Yes
TKN06	Total Kjeldahl nitrogen as N	0.2	mg/l	No
Zn04	Zinc, total	0.01	mg/l	Yes

Request LWCH when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for surface waters
COLI1	Total coliforms	0 - 240,000	MPN/100ml	Yes
ECOLI1	Escherichia coli	0 - 240,000	MPN/100ml	Yes
I_ENT1	Intestinal enterococci	0 - 10,000	cfu/100ml	Yes

Request LWB2 when ordering these tests.

Some common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for surface waters
SALMON1	Salmonella spp.	Detected / not detected	per 1l	No
ALGAE	Algae	37,000 - 106,560,000	cells/l	No

Wastewater

Effluent testing services

We provide effluent discharge testing for a wide range of industries, helping clients meet environmental compliance requirements and discharge consent conditions. Whether you're operating a manufacturing facility, treatment plant, or commercial site, our team can design a bespoke effluent testing profile that meets regulatory obligations.

Some of the most common tests are listed below. Please contact us for more information.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for recreational waters
Chlorine03	Chlorine, free	0.02	mg/l	No
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Solids07	Settleable solids, rapid	5	mg/l	No
Solids08	Settleable solids	5	mg/l	No
Solids06	Suspended solids @ 105°C	5	mg/l	Yes
BOD01	Biochemical oxygen demand	1	mg/l	No
BOD02	Biochemical oxygen demand - settled	1	mg/l	No
DO01	Dissolved oxygen	2.5	mg/l	Yes
COD01	Chemical oxygen demand	10	mg/l	Yes
AmmG01	Ammoniacal nitrogen as N	0.15	mg/l	No
AmmG02	Ammoniacal nitrogen as NH_4	0.15	mg/l	No
Na04	Sodium, total	0.1	mg/l	No
K04	Potassium, total	0.5	mg/l	No
Sulphite01	Sulphite as Na_2SO_3	0.1	mg/l	No
Ag03	Silver, dissolved	0.005	mg/l	No
Cd04	Cadmium, total	0.005	mg/l	No
Cr04	Chromium, total	0.01	mg/l	No
Cu04	Copper, total	0.02	mg/l	No
Ni04	Nickel, total	0.01	mg/l	No
Pb04	Lead, total	0.01	mg/l	No
Zn04	Zinc, total	0.01	mg/l	No
Sb04	Antimony, total	0.02	mg/l	No

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for recreational waters
Be04	Beryllium, total	0.01	mg/l	No
Se04	Selenium, total	0.05	mg/l	No
Ag04	Silver, total	0.005	mg/l	No
Sn04	Tin, total	0.01	mg/l	No
V04	Vanadium, total	0.02	mg/l	No
B03	Boron, dissolved	0.01	mg/l	No
P02	Phosphorus, total	0.02	mg/l	No
Fe03	Iron, dissolved	0.05	mg/l	No
As04	Arsenic, total	0.01	mg/l	No
Al04	Aluminium, total	0.01	mg/l	No
Mo04	Molybdenum, total	0.05	mg/l	No
P06	Phosphorus, total as PO_4	0.061	mg/l	No
Na04	Sodium, total	0.1	mg/l	No
K04	Potassium, total	0.5	mg/l	No
Ca05	Calcium, total	0.05	mg/l	No
Mg05	Magnesium, total	0.1	mg/l	No
Co04	Cobalt, total	0.01	mg/l	No
Fe04	Iron, total	0.05	mg/l	No
Mn04	Manganese, total	0.01	mg/l	No
Hg04	Mercury, total	0.005	mg/l	No
Ti04	Titanium, total	0.01	mg/l	No
Ba04	Barium, total	0.01	mg/l	No
B04	Boron, total	0.01	mg/l	No
Sr04	Strontium, total	0.01	mg/l	No
Tl02	Thallium, total	0.01	mg/l	No
Phosphat03	Phosphate, total inorganic as P	0.025	mg/l	No
Phosphat04	Phosphate, total inorganic as PO_4	0.075	mg/l	No

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for recreational waters
Phosphat06	Phosphate, ortho as PO_4	0.031	mg/l	No
Phosphat05	Phosphate, ortho as P	0.01	mg/l	No
CN03	Cyanide, total	0.03	mg/l	No
Sulphide01	Sulphide as H_2S	0.01	mg/l	No
Sulphide07	Sulphide as S^{2-}	0.01	mg/l	No
OIL01	Oil & grease, total	5	mg/l	No
OIL02	Oil & grease, saponifiable	5	mg/l	No
OIL03	Oil & grease, unsaponifiable	5	mg/l	No
Chloride01	Chloride	5	mg/l	Yes
Fluoride01	Fluoride	0.1	mg/l	Yes
Sulphate01	Sulphate	5	mg/l	Yes
Sulphate02	Available sulphur dioxide as SO_2	5	mg/l	No
Bromide01	Bromide	0.5	mg/l	Yes
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Phosphat05	Phosphate, ortho as P	0.01	mg/l	No
Nitrite01	Nitrite as N	2	mg/l	Yes
Nitrite02	Nitrite as NO2	6.6	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk12	Alkalinity, total as HCO_3	15	mg/l	Yes
EC06	Electrical conductivity @ 25°C	100	µS/cm	Yes
COD03	Chemical oxygen demand	10	mg/l	Yes
COD05	Chemical oxygen demand - non-settled	10	mg/l	Yes
Phenols01	Phenols, total	0.01	mg/l	No
Hard08	Hardness, total as $CaCO_3$	1	mg/l	No
Hard09	Hardness, total as Ca	10	mg/l	No
Appear03	Colour	0	HU	No

Groundwater

We provide comprehensive groundwater testing to meet a wide range of needs—from assessing raw borehole water prior to treatment for private water supplies, to evaluating whether land is contaminated.

Our services are tailored to your specific requirements, and our team is available to guide you through the appropriate testing options.

Chemistry

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for groundwaters
Appear02	Colour	N/A	N/A	No
Appear04	Clarity	N/A	N/A	No
Appear05	Odour	N/A	N/A	No
Appear08	Solids - visual	N/A	N/A	No
Appear01	Appearance	N/A	N/A	No
Appear09	Odour, quantitative	0	Dilution no	No
Chlorine03	Chlorine, free	0.02	mg/l	No
Solids03	Total dissolved solids @ 105°C	30	mg/l	No
Solids04	Total dissolved solids @ 180°C	30	mg/l	No
Solids06	Suspended solids @ 105°C	5	mg/l	Yes
BOD01	Biochemical oxygen demand	1	mg/l	No
AmmG01	Ammoniacal nitrogen as N	0.15	mg/l	No
AmmG02	Ammoniacal nitrogen as NH_4	0.15	mg/l	No
Hard01	Hardness, total as $CaCO_3$	10	mg/l	No
Hard15	Hardness, permanent as $CaCO_3$	10	mg/l	No
Hard19	Hardness, temporary as $CaCO_3$	10	mg/l	No
K04	Potassium, total	0.5	mg/l	Yes
Al04	Aluminium, total	0.01	mg/l	No
B04	Boron, total	0.01	mg/l	No
Cr04	Chromium, total	0.01	mg/l	Yes
Cu04	Copper, total	0.02	mg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for groundwaters
Fe04	Iron, total	0.05	mg/l	Yes
Mn04	Manganese, total	0.01	mg/l	Yes
Na04	Sodium, total	0.1	mg/l	Yes
Ni04	Nickel, total	0.01	mg/l	Yes
Ba04	Barium, total	0.01	mg/l	No
Co04	Cobalt, total	0.01	mg/l	No
Mo04	Molybdenum, total	0.05	mg/l	No
Zn04	Zinc, total	0.01	mg/l	Yes
Ca05	Calcium, total	0.05	mg/l	Yes
Mg05	Magnesium, total	0.1	mg/l	Yes
P02	Phosphorus, total	0.02	mg/l	No
Si05	Silica, total	0.01	mg/l	No
Pb04	Lead, total	0.01	mg/l	Yes
Fe03	Iron, dissolved	0.05	mg/l	Yes
Cd04	Cadmium, total	0.005	mg/l	Yes
CN03	Cyanide, total	0.03	mg/l	No
Sulphide01	Sulphide as H_2S	0.01	mg/l	No
Nitrite05	Nitrite as NO_2	0.03	mg/l	No
Nitrite04	Nitrite as N	0.01	mg/l	No
Chloride01	Chloride	5	mg/l	No
Bromate01	Bromate	0.25	mg/l	No
Fluoride01	Fluoride	0.1	mg/l	No
Nitrate02	Nitrate as NO_3	2.2	mg/l	No
Sulphate01	Sulphate	5	mg/l	No
Nitrate01	Nitrate as N	0.5	mg/l	No
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation for groundwaters
EC05	Electrical conductivity @ 20°C	100	µS/cm	Yes
pH05	pH	2 - 13	pH	Yes
COD03	Chemical oxygen demand	10	mg/l	Yes
Turb01	Turbidity	0.1	NTU	Yes
Appear03	Colour	0	HU	No

Microbiology

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation for groundwaters
TVC_01	Total viable count @ 22°C/72hrs	0 - 15,000	cfu/ml	Yes
TVC_02	Total viable count @ 37°C/48hrs	0 - 15,000	cfu/ml	Yes
LEGIOND1	Other Legionella species	50 - 15,000	cfu/vol	No
LEGIOND2	Legionella pneumophila SG 1	50 - 15,000	cfu/vol	No
LEGIOND3	Legionella pneumophila SG 2-14	50 - 15,000	cfu/vol	No
CL_PERF1	Clostridium perfringens	0 - 100	cfu/100ml	Yes
F_ENT1	Enterococci	0 - 100	cfu/100ml	Yes
COLI1	Total coliforms	0 - 201	MPN/100ml	Yes
ECOLI1	Escherichia coli	0 - 201	MPN/100ml	Yes
FaecalCol1	Faecal coliforms	0 - 100	MPN/100ml	No

Surface and air tests

Surface and air sampling services

We offer a wide range of microbiological and chemical testing for both surface and air samples, suitable for various environments including healthcare, cleanrooms, manufacturing, and public spaces.

Our services include:

- Surface sampling using swabs and contact plates
- Analysis of microbial load, chemical residues, and environmental contaminants

To support your sampling needs, we provide:

- Consumables such as sterile swabs, contact plates, and settle plates
- Portable air samplers available for loan, compatible with contact plate sampling

These services are ideal for:

- Environmental monitoring
- Cleanroom validation
- Infection control assessments
- Indoor air quality investigations

For tailored advice or to arrange a sampling kit or equipment loan, please contact our team.

Surface samples

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
TVC_11	Total viable count @ 25°C (plate)	0 - 100	cfu/plate	No
YEAST4	Yeasts (plate count)	0 - 100	cfu/plate	No
Mould01	Penicillium species*	0 - 100	cfu/plate	No
Asper01	Aspergillus species*	0 - 100	cfu/plate	No
Penic01	Moulds	0 - 100	cfu/plate	No

** Morphological identification*

Request AIRC when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
Asper03	Aspergillus species	0 - 100	cfu/swab	No
TVC_18	Total viable count @ 25°C (swab)	0 - 100	cfu/swab	No
YEAST1	Yeast (Swab)	0 - 100	cfu/swab	No
Penic03	Penicillium species	0 - 100	cfu/swab	No
Mould03	Moulds	0 - 100	cfu/swab	No

Request AIRW when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
LEGIONQ06	Other Legionella species	50 - 15,000	cfu/swab	No
LEGIONQ07	Legionella pneumophila SG 1	50 - 15,000	cfu/swab	No
LEGIONQ08	Legionella pneumophila SG 2-14	50 - 15,000	cfu/swab	No

Request LEGPS when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
ECOLIFILT2	Escherichia coli	10 - 1,000	cfu/swab	No
CL_PERF2	Clostridium perfringens swab	10 - 1,000	cfu/swab	No
F_ENT2	Enterococci	10 - 1,000	cfu/swab	No

Request FAECALSWAB when ordering these tests.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
P_AERU2	Pseudomonas aeruginosa	10 - 1,000	cfu/swab	No
P_SPEC3	Pseudomonas species @ 30°C	10 - 1,000	cfu/swab	No

Request PSEUDSWAB when ordering these tests

Air samples

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
TVC_11	Total viable count @ 25°C (plate)	0 - 100	cfu/plate	No
YEAST4	Yeasts (plate count)	0 - 100	cfu/plate	No
Penic01	Penicillium species	0 - 100	cfu/plate	No
Asper01	Aspergillus species	0 - 100	cfu/plate	No
Mould01	Moulds	0 - 100	cfu/plate	No

Request AIRP suite for settle plates or AIRC suite for contact plates.

Deposits

Deposits can form in water systems due to a variety of causes, including:

- Precipitation of metals (e.g., iron, copper, zinc)
- Residual treatment chemicals
- Hardness scale (e.g., calcium carbonate)
- Sloughed biofilm and organic matter

These deposits can pose significant health risks, as they may create environments where bacteria—such as Legionella—can thrive.

Additionally, deposits can lead to reduced system efficiency, blockages, and premature wear of expensive equipment and fittings.

We offer expert analysis to help you:

- Identify the type of deposit present
- Determine the root cause of deposition
- Recommend corrective actions to mitigate future risk

Our deposit analysis services are a vital part of maintaining system health, safety, and longevity.

Chemical deposit suite

Our Chemical Deposit Suite is designed to support the investigation of deposit-related issues in closed water systems. It includes a range of analytical tests tailored to the specific characteristics of your system.

Please note:
The exact reporting parameters may differ from the generic suite outlined below, depending on the outcome of certain preliminary analyses. This ensures that the testing is targeted and relevant to your system's unique conditions.

For more information or to arrange a tailored deposit analysis, please contact our technical or consultancy team.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation
Ca09	Calcium as $CaCO_3$	0.1	% w/w	No
Cu07	Copper as $CuCO_3$, $Cu(OH)_2$	0.1	% w/w	No
Deposit02	Acid insoluble material	0.1	% w/w	No
Deposit03	Loss on ignition @ 525°C	0.1	% w/w	No
Deposit05	Appearance			No
Deposit07	Dried / crushed appearance			No
Deposit08	Odour on acidification			No
Fe07	Iron as $Fe2O_3$ / $Fe3O_4$	0.1	% w/w	No
Zn09	Zinc as $ZnCO_3$	0.1	% w/w	No
Al07	Aluminium, as $Al2O_3$	0.1	% w/w	No

Request DEP when ordering these tests.

Further analysis available

If the major component of a deposit is not identified through the standard Chemical Deposit Suite, we can perform additional targeted analysis based on the system information provided.

This ensures a more complete understanding of the deposit's composition and origin, enabling more effective remediation strategies.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
Mg08	Magnesium as $MgCO_3$	0.1	% w/w	No

Microbiology

We offer a range of microbiological tests to assess the presence and activity of microorganisms in solid or deposit samples. The table below outlines the available determinands, their reporting ranges, and UKAS accreditation status.
Note: While these tests are not currently UKAS accredited, they are performed under strict quality-controlled conditions by experienced microbiologists.

Some of the most common tests are listed below. Contact us for more information.

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
TVC_S1	Total viable count @ 22°C/72hrs	10 - 1,500,000	cfu/g	No
TVC_S2	Total viable count @ 37°C/48hrs	10 - 1,500,000	cfu/g	No
P_SPEC8	Pseudomonas species	10 - 1,000	cfu/g	No
MICROFUNGS	Microfungi	10 - 1,000	cfu/g	No
MicroscopS	Microscopy	N/A	N/A	No

Ingress water investigation

Water ingress can occur through a variety of pathways and often causes significant damage to buildings and their contents. Identifying the source of ingress is critical—not only to stop the immediate issue but also to prevent future recurrence.

We offer specialist investigatory services to determine the nature and origin of unknown water ingress. Our team can attend site for sampling and assessment, or alternatively, we can analyse water samples submitted by clients.

This work is highly specialised and time-sensitive, as unidentified ingress may pose a serious threat to structural integrity and hygiene.

We offer a targeted suite of microbiological tests to support ingress investigations:

Determinand code	Determinand	Reporting range	Units	UKAS accreditation
COLI1	Total Coliforms	0 - 24,000	MPN/100ml	Yes*
ECOLI1	Escherichia coli	0 - 24,000	MPN/100ml	Yes*
F_ENT1	Enterococci	0 - 1,000	cfu/100ml	Yes*

** UKAS accreditation for process, potable, recreational, ground, surface, effluent and sewage waters. Ingress water will be classified as an 'unknown' matrix type and UKAS accreditation will not apply.*

Request IWB when ordering these tests.

Ingress water and comparison source testing

To support the identification of ingress water sources, we offer a comprehensive suite of chemical and physical tests. These tests are performed on both the ingress water and a known comparison source (e.g., mains water, groundwater, or process water) to help determine the origin and characteristics of the ingress.

Note: UKAS accreditation applies only to potable water matrices. Since ingress water is classified as an 'unknown' matrix, UKAS accreditation does not apply in this context.

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation
Alk11	Alkalinity, total as $CaCO_3$	15	mg/l	Yes
Alk13	Alkalinity, bicarbonate as $CaCO_3$	15	mg/l	Yes
Alk15	Alkalinity, carbonate as $CaCO_3$	15	mg/l	Yes
Alk17	Alkalinity, hydroxide as $CaCO_3$	15	mg/l	Yes
Amm01	Ammoniacal nitrogen as N	0.04	mg/l	Yes
Amm07	Albuminoid nitrogen as N	0.04	mg/l	Yes
Appear02	Colour	N/A	N/A	No
Appear04	Clarity	N/A	N/A	No
Appear05	Odour	N/A	N/A	No

Determinand code	Determinand	Reporting limit(s)	Units	UKAS accreditation
Appear08	Solids - visual	N/A	N/A	No
Chloride01	Chloride	5	mg/l	Yes
Deter10	Anionic Surfactants	0.05	mg/l	No
EC05	Electrical Conductivity @ 20°C	100	µS/cm	Yes
Hard08	Hardness, total as $CaCO_3$	1	mg/l	No
K04	Potassium, total	0.5	mg/l	Yes
Na04	Sodium, total	0.1	mg/l	Yes
Nitrate01	Nitrate as N	0.5	mg/l	Yes
Nitrite04	Nitrite as N	0.01	mg/l	Yes
pH05	pH	2 - 13	pH	Yes
Phosphat03	Phosphate, total Inorganic as P	0.01	mg/l	Yes
PV01	Permanganate value - 4hrs @ 27°C	0.5	mg/l	Yes
Solids18	Total dissolved solids - Meter	100	mg/l	No
Sulphate01	Sulphate	5	mg/l	Yes

Request IWCH when ordering these tests.

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