

Proficiency Testing Schemes

2023

Food & Feed Beverage Water & Environment Petroleum Consumer Safety Clinical Forensic

IL KUL KAT

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ISO/IEC 17043



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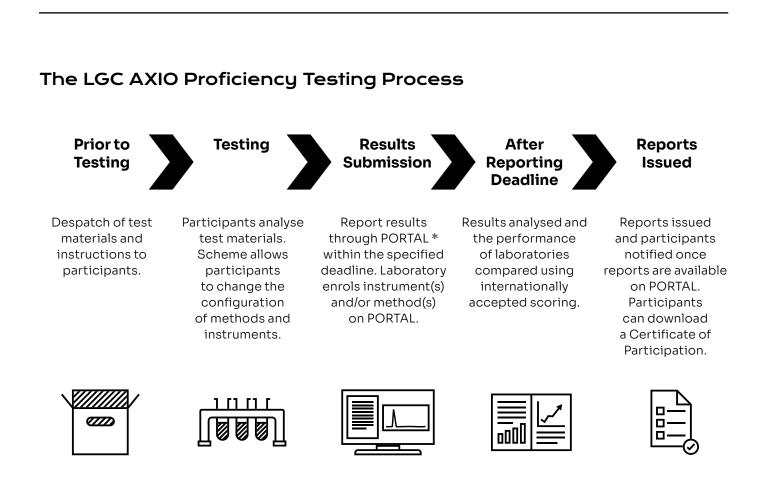
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- Fulfill accreditation requirements
- Demonstrate competency to customers and regulatory bodies
- Compare results with laboratories around the world
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- Verify methods and instrumentation
- Educate and train staff

Proficiency Testing (PT) is a requirement for accreditation to ISO/IEC 17025 and ISO 15189. AXIO operates PT schemes across the food, beverage, environmental, clinical, pharmaceutical, consumer safety, forensic and petroleum sectors – your laboratory will get the support it needs in demonstrating the effectiveness of your quality system.

If you are managing multiple laboratories and are looking for consistency in results, AXIO offers fully managed solutions for large groups. Multilaboratory, multi-method and multi-analyst reporting are all covered by our exclusive web based PORTAL platform.

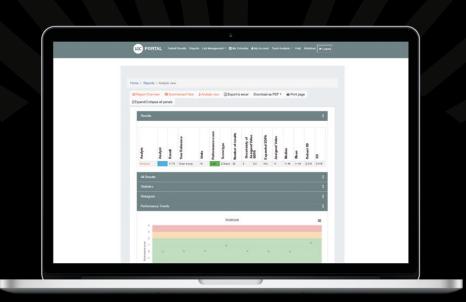
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LGC AXIO Proficiency Testing operates schemes in a wide range of sectors from Food to Forensic, Consumer Safety to Clinical. Whatever your quality and testing needs, AXIO will have the scheme and sample options that will deliver the confidence in your results that you are looking for.



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Food & Feed Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
QMS Food Microbiology	12	Microbiological	Oatmeal and skimmed milk powder, tea, herb and spice, egg, cheese, fruit, vegetable, seeds, infant formula, ready to eat foods, chicken faeces.	Comprehensive range of microorganisms of relevance to food products, including pathogens, indicator organisms, spoilage organisms and probiotics.
QDCS Dairy Chemistry	4	Chemical	Butter, cheese, cream, milk, milk powder, whey powder, yoghurt and standard solutions.	Chemical parameters covering routine nutritional analysis and more complex testing such as mycotoxins and antibiotics.
QMAS Meat & Fish	6	Chemical and Microbiological	Meat, fish, shellfish and carcass rinsate.	Chemical and microbiological parameters relevant to meat, fish and seafood industry. Trace elements, authenticity and veterinary drug residues. Various pathogens, indicator organisms.
QFCS Food Chemistry	6	Chemical	Bread, cake, cereals, cured meat, flour, fruit/ vegetable, hard cheese, nuts, oils, 'ready to eat' products, rice, spices, tea and standard solutions.	Chemical parameters covering nutritional analysis, quality and authenticity, toxic elements, and contaminants such as pesticides, mycotoxins and allergens.
QCS Chocolate	3	Chemical and Microbiological	Chocolate and cocoa powder.	Chemical and microbiological parameters relevant to the chocolate and food testing industries including nutritional and elements analysis.
AFPS Animal Feeds	4	Chemical and Microbiological	Animal feed (e.g. cattle, chicken, pig, sheep), kibbles, silage and premix.	Comprehensive range of chemical and microbiological analysis of animal feeds covering proximates and contaminants, various pathogens, indicator organisms.
QGS Gelatine	2	Chemical and Microbiological	Gelatine, gelatine hydrolysate.	Physicochemical testing and microbiological parameters of relevance to gelatine.
STEC Shiga Toxin E. coli	4	Microbiological	Skimmed milk powder, ground beef powder, with lyophilised vials.	Detection / Identification of STEC (serovars O26; O45; O103; O111; O121; O145; O157:H7).
CONF-IDENT Confirmation & Identification	4	Microbiological	Lyophilised material.	Comprehensive range of analytes for the confirmation and identification of microorganisms.

QMS

Food Microbiology

The LGC AXIO Quality in Microbiology Scheme (QMS) is intended for use by microbiologists working in the food industry, including dairy, ready meals, dried foods, herbs and spices and many other sectors.

Food testing is an essential element of the 'Hazard Analysis Critical Control Point' (HACCP) process in food production as it verifies the controls are working at the critical points in manufacturing. Failures leading to food poisoning outbreaks can have a devastating effect on reputation, brand value, a decline in consumer confidence in the product and ultimately profits. In rare cases it may also lead to civil and criminal charges.

When carrying out microbiological testing, being able to demonstrate your laboratory is producing accurate and meaningful results helps identify issues before they affect a product's quality and safety. By regularly participating in a proficiency testing scheme like ours, you build trust into your comprehensive quality assurance programme.

Test Material*	Analyte*
Oatmeal	Enumeration of aerobic psychrotrophs. Detection of Shigella species, Vibrio parahaemolyticus, Vibrio species.
Skimmed milk powder	Enumeration of Salmonella species, Yersinia enterocolitica.
Oatmeal or skimmed milk powder	Enumeration of Bacillus cereus, Bacillus species, Coagulase positive Staphylococci, Coliforms, Clostridium species, Clostridium perfringens, Enterobacteriaceae, Enterococci, Escherichia coli, Lactic acid bacteria, Listeria monocytogenes, Listeria species, Pseudomonas species, Staphylococcus species, Thermotolerant coliforms. Anaerobic sulphite-reducing bacteria, Mesophilic aerobic spores, Mesophilic anaerobic spores, Thermophilic aerobic spores, Total aerobic mesophilic count, Total anaerobic mesophilic count, Osmophilic yeast, Osmophilic mould, Yeast, Mould, Yeast and mould.
	Detection of Clostridium species, Clostridium perfringens, Coliforms, Cronobacter species, Enterobacteriaceae, Escherichia coli, E. coli O157 (non-toxigenic strain), Listeria monocytogenes, Listeria species, Salmonella species.
Lyophilised material	Enumeration of Bifidobacterium species (Probiotic), Lactobacillus species (Probiotic), Campylobacter species. Detection of Campylobacter species. Identification of an unknown microorganism. Identication of Salmonella species (serology).
Теа	Enumeration of Coagulase positive-staphylococci, Coliforms, Total aerobic mesophilic count, Yeast and mould. Detection of Salmonella species.
Herbs, spice, egg, sesame seed, chicken faeces	Detection of Salmonella species.
Paper exercise (image)	Colony count and calculation of number of microorganisms.
Hard cheeses,	Enumeration of TVC, Enterobacteriaceae, Coliforms, Coagulase positive-staphylococci, Detection of Salmonella species, Listeria species, Listeria monocytogenes
Mixed vegetables	Detection of Salmonella species, Listeria species, Listeria monocytogenes
Fruit	Enumeration of thermophilic acidophilic bacteria (Alicyclobacillus species); Detection of guaiacol producing thermophilic acidophilic bacteria.
Egg	Salmonella Enteritidis/Salmonella Typhimurium
Chicken	Salmonella Enteritidis/Salmonella Typhimurium
Ready to eat food	Total aerobic mesophilic count. Enumeration of Coliforms; Coagulase positive Staphylococci; Yeast; Mould; Yeast and Mould. Detection of Salmonella species; Listeria species; Listeria monocytogenes; E. coli O157 (non-toxigenic strain). Identification of Listeria species.
Infant formula	Detection of Salmonella species, Cronobacter species
Glass slides	Gram stain, Bacteria shape, Presence of spores

QDCS

Dairy Chemistry

The LGC AXIO Quality in Dairy Chemistry Scheme (QDCS) is a comprehensive proficiency testing scheme available to laboratories performing compositional and safety analysis in the dairy sector.

Laboratories may test dairy products to ensure a commercial product performs within preset quality standards, or to look for adulterations or contaminants that could adversely affect a product.

For laboratories that perform the analysis of dairy products using traditional 'wet' chemistry techniques, as well as determinations by infrared analysers and other methods, participation in a relevant LGC AXIO Proficiency Testing scheme can provide confidence that results are meaningful and accurate which, in turn, helps to ensure the safety of dairy foodstuffs.

Test Material*	Analyte*
Butter	Moisture, pH, Salt.
Cheese (hard, soft, processed)	Ash, Calcium, Carbohydrates, Cholesterol, ColourEnergy, Fat, Moisture, Lactose, pH, Protein, Salt, Saturates, Sodium, Sorbic acid, Total dietary fibre, Total sugars.
Cheese	Natamycin Staphylococcal enterotoxins
Freeze dried milk	Beta-lactams, Sulphonamides, Tetracyclines
Double & single cream	Fat.
Whipping cream	Fat, Titratable acidity, Dry matter, Protein.
Milk	Calcium, Freezing point depression, Lactose, Protein, pH, Titratable acidity, Total solids.
Skimmed, semi- skimmed & whole milk	Fat.
Skimmed milk powder	Ash, Fat, Insolubility index, Moisture, Protein, Scorched particles, Titratable acidity, WPNI.
Whole milk powder	Fat, Insolubility index, Minerals (calcium, potassium, copper, sodium, chloride, iron, magnesium, manganese, phosphorus, zinc), Moisture, Protein, Titratable acidity, WPNI.
Milk powder	Vitamins A, C, D, E.
Whey powder	Ash, Fat, Galactose, Lactose, Moisture, Protein, Scorched particles.
Whey protein concentrate	Ash, Bulk density, Fat, Insolubility index, Lactose, Moisture, pH, Protein.
Yoghurt	Fat, Protein, Total solids.
Buffer solution	pH.
Potassium hydrogen phthalate	COD.



Meat & Fish

The LGC AXIO Quality in Meat and Fish Analysis Scheme (QMAS) is intended for chemists and microbiologists working in, or providing analytical services to the meat, fish and shellfish processing industries.

International consumption of meat and fish in human diets has increased rapidly. Therefore the manufacturing processes need to be highly regulated, to help prevent food safety issues occurring.

Measures must be taken to prevent contamination with hazardous chemicals above specified limits, and

to reduce the number of microorganisms capable of causing human disease. Customers demand products that are authentic and genuine, preventing contamination from both deliberate fraud and accidental cross-contamination during processing.

Consumers want to be assured their food has been thoroughly tested by competent laboratories. EU Regulation 882/2004 requires official control laboratories to be accredited to ISO/IEC 17025 and use external means of monitoring performance such as proficiency testing.

Test Material*	Analyte*
Dried & cured meat	Ash, Carbohydrate, Dietary fibre, Energy, Fat, Moisture, pH, Phosphate, Protein, Salt, Sodium, Sugars (total).
Chicken	Nitrofurans, Chloramphenicol, Florfenicol, Thiamphenicol
Pork	Tetracyclines
Seafood	Dyes
Lyophilised meat & Fish product	Nitrate, Nitrite.
Meat	Fat (total), Hydroxyproline, Mono-unsaturated fats, Poly-unsaturated fats, Saturates, Total trans fatty acids. Arsenic (total), Cadmium, Lead, Mercury, Phosphorus, Zinc, Sulfur dioxide, Ractopamine. Species authenticity to be screened for presence of other meat species.
Precooked, processed & raw meat	Ash, Calcium, Carbohydrate, Dietary fibre, Energy, Fat, Moisture, pH, Phosphate, Potassium, Protein, Salt, Sodium, Sugars (total).
Fish & fish product	Fish speciation, Energy; Saturates; Carbohydrate; Dietary fibre; Ash, Fat, Moisture, pH, Protein, Salt, Histamine, Trimethylamine (TMA), Total volatile nitrogen (TVN), Arsenic (total), Cadmium, Lead, Mercury, Phosphorus, Zinc, Quinolones, Sulfonamides.
Shellfish	Arsenic (total), Cadmium, Lead, Mercury, Phosphorus, Zinc, Chloramphenicol.
* The full range and availa	bility of test materials and analytes is determined on an annual basis and may be added or removed.

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Microbiology*	Analyte*
Lyophilised meat	Enumeration of Coagulase-positive Staphylococci, Campylobacter species, Coliforms, Clostridium perfringens, Enterobacteriaceae, Escherichia coli, Lactic acid bacteria, Mould, Pseudomonas, Psyuchrotrophs, Sulphite-reducing clostridia, Total aerobic mesophilic count, Yeast. Detection of Listeria species, Listeria monocytogenes, Salmonella species.
Lyophilised fish or shellfish & Vial	Enumeration of Coagulase-positive staphylococci, Enterobacteriaceae, Escherichia coli, Total aerobic mesophilic count. Detection of Salmonella species, Vibrio parahaemolyticus, Vibrio species.
Lyophilised meat & Vial	Detection of Campylobacter species, E. coli O157 (non-toxigenic strain).
Carcass rinsate	Detection of Salmonella species, E. coli O157 (non-toxigenic strain).
Chicken	Salmonella Enteritidis/Salmonella Typhimurium

QFCS

Food Chemistry

The LGC AXIO Quality in Food Chemistry Scheme (QFCS) is specifically designed to promote the quality and comparability in the measurement of a range of analytes in food products.

An incredible variety of foodstuffs are available worldwide and all year round. Technology now allows suppliers to harvest, preserve and distribute within a short period of time. Consequently food quality, consumer satisfaction and government regulations are all factors that need to be considered when producing food. The food we eat can contain potentially harmful chemicals, some naturally occurring, some as contaminants absorbed from soil and water. Testing these end-use products is fundamental for food safety and stability. Consistent good performance in a LGC AXIO Proficiency Testing scheme will allow laboratories to show, with confidence, the quality of results to third parties.

Test Material*	Analyte*
Cereal products (flour, bread, cake, biscuits)	 Nutritional analysis: Energy; Fat; Carbohydrate; Total Sugars; Total Dietary Fibre; Protein; Salt; Sodium; Ash; Acidity; Moisture; Chloride; Calcium; Phosphate; Magnesium ; Potassium ; Zinc ; Vitamin A; B1 (Thiamine); B2 (Riboflavin); B3 (Niacin); B5 (Pantothenic Acid); B6; B9 (Folic acid); B12; C; D; Iron; Lactose (low level). Metal, elements: Total Arsenic; Inorganic Arsenic; Total Inorganic Arsenic; Arsenic III; Arsenic IV; Cadmium; Lead; Mercury. Allergens: Gluten, Egg, Almond, Soy Mycotoxins: Aflatoxins B1; B2; G1; G2; Total Aflatoxins; Ochratoxin A; Zearalenone. Pesticides: Glyphosate, AMPA, Fungicides, Herbicides, Organochlorine, Organophosphorus, Synthetic pyrethroids, Triazines. GMO
Coffee, Tea	Nutritional analysis: Energy; Fat; Carbohydrate; Total Sugars; Total Dietary Fibre; Protein; Salt; Sodium; Ash; Acidity; Moisture; Chloride; Calcium; Phosphate; Magnesium ; Potassium ; Zinc ; Vitamin A; B1 (Thiamine); B2 (Riboflavin); B3 (Niacin); B5 (Pantothenic Acid); B6; B9 (Folic acid); B12; C; D; Iron; Lactose (low level). Metal, elements: Total Arsenic; Cadmium; Lead; Mercury; Selenium. Acrylamide
Fruits, Vegetables	 Nutritional analysis: Drained weight; pH; Energy; Carbohydrate; Total sugars; Glucose; Fructose; Total dietary fibre; Vitamin C (as ascorbic acid); pH; Brix; Total acidity; Total solids; Ash; Salt; Vitamin A; Colour. Mycotoxins: Aflatoxins B1; B2; G1; G2; Total Aflatoxins; Ochratoxin A. Pesticides: Fungicides, Herbicides, Organochlorine, Organophosphorus, Synthetic pyrethroids, Triazines. Process contaminants: Nitrate, Acrylamide, Perchlorate.
Honey	Nutritional analysis: Moisture; Electrical conductivity; Ash; pH; Free acidity; Hydroxymethylfurfural (HMF); Diastase enzymatic activity (Diastase number); Fructose; Glucose; Sucrose; Water insoluble solids. Authenticity, Quality: Confirmation of authenticity.
Infant food	Nutritional analysis: Energy; Fat; Saturates; Carbohydrate; Total sugars; Protein; Total dietary fibre; Salt; Sodium; Alanine (free); Arginine (free); Aspartic acid (free); Glutamic acid (free); Glycine (free); Histidine (free); Isoleucine (free); Leucine (free); Lysine (free); Phenylalanine (free); Proline (free); Serine (free); Threonine (free); Tyrosine (free); Valine (free); Cystein & Cystine (sum of); Methionine (free); Tryptophan (total). Allergens: Milk. Continued on next page
	Process contaminants: Nitrate.

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QFCS Continued

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Nuts, seeds, oil, fats	Nutritional analysis: Energy; Fat; Carbohydrate; Total Sugars; Protein; Salt; Sodium; Total Fat; Saturates; Mono-unsaturates; Poly-unsaturates; Total trans fatty acids; Omega 3; Omega 6; Salt; Water; pH; Vitamin A; Vitamin D. Metal, elements: Total Arsenic; Cadmium; Lead; Mercury. Authenticity, Quality: Water; Free fatty acids; Saponification value; Unsaponifiable matter; Anisidine value; Colour; Iodine value; Peroxide value; Fatty acid composition; K232; K270; Wax content; 3,5 Stigmastadienes; Ethyl esters; Total Sterols; Δ-7-stigmastenol; Insoluble Impurities; Moisture and Volatile Matter at 103°C; Total Polyphenols; ΔK; β-sitosterol (apparent); Campesterol; Erythrodiol & Uvaol; ΔECN 42; Accelerated Oxidation test (Rancimat) at 120°C; 2-glyceryl monopalmitate; cis Alpha-linolenic acid (ALA); cis Eicosapentaenoic acid (EPA); cis Docosapentaenoic (DPA); cis Docosahexaenoic (DHA); Monounsaturated fatty acids; Polyunsaturated fatty acids; Saturated fatty acids; Total EPA+DHA Omega-3 fatty acids; Total Omega-3 fatty acids; Total Omega-6 fatty acids; Total Omega-9 fatty acids; Omega-3: Omega-6 ratio; Total trans fatty acids; Vitamin A; Vitamin D. Additives: Sudan IV. Mycotoxins: Aflatoxins B1; B2; G1; G2; Total Aflatoxins. Pesticides: Fungicides, Herbicides, Organochlorine, Organophosphorus, Synthetic pyrethroids, Triazines, Ethylene Oxide. Process contaminants: Benzo[a]pyrene; Benz[a]anthracene; Benzo[b]fluoranthene; Chrysene; Sum or EU 4 PAHs; Total polar compounds; Free fatty acids (Acidity); Accelerated oxidation test (Rancimat) at 120°C; Morphine; Codeine.
Processed foods	Nutritional analysis: Energy; Fat; Saturates; Mono-unsaturates; Poly-unsaturates; Total trans fatty acids; Carbohydrate; Total Sugars; Total Dietary Fibre; Protein; Salt; Sodium; Ash; Moisture; Phosphate; Cholesterol. Allergens: Gluten, Egg, Soy, Milk.
Confectionery	Nutritional analysis: Energy; Fat; Carbohydrate; Protein; Total sugars; Fructose; Glucose; Soluble solids; pH; Moisture; Ash; Total acidity; Brix Organic acids (as additives).
Condiment, herbs and spices	 Nutritional analysis: Energy; Fat; Saturates; Carbohydrate; Total sugars; Protein; Salt; Total dietary fibre; Soluble solids; pH; Total acidity; Density; Total dry extract; Volatile acidity; Citric acid; Formol number; Total trans fatty acids; Sodium; pH; Cholesterol; Moisture; Total ash; Crude fibre, insoluble index; Volatile oil; Piperine content; Acid insoluble ash; Purity; Sulfate; Iodine; Calcium; Magnesium; Total Arsenic; Lead; Cadmium; Mercury; Copper; Ferrocyanide; Capsaicin; Dihydrocapsaicin; Nordihydrocapsaicin; Heat unit; Ferrocyanide; Calcium chloride; Brix; Sulfur dioxide; Allicin; Euric acid. Authenticity, Quality: Confirmation of authenticity, Vanillin. Mycotoxins: Aflatoxins B1; B2; G1; G2; Total Aflatoxins, Illegal dyes. Metal, elements: Total Arsenic; Cadmium; Lead; Mercury. Pesticides: Pesticides from a list, Ethylene Oxide
Non dairy cheese	Authenticity, Quality: Total fat; Saturates; Mono-unsaturates; Poly-unsaturates; Total trans fatty acids; Total omega 3; Total omega 6; Total omega 3:Total omega 6 ratio; 4:0 Butyric acid; 12:0 Lauric acid.
Miscellaneous foods	Additives: Ponceau 4R; Carmoisine; Sunset Yellow; Indigo Carmine; Allura Red; Tartrazine; Quinoline Yellow; Brilliant Blue; Sulfur dioxide. Sorbic Acid; Benzoic Acid; Sulfur Dioxide; Acesulfame K; Aspartame; Saccharin; Sucralose. Water activity Foreign bodies Cannabidiol (CBD) Titanium doixide
Vegan food	Authenticity, Quality: Presence of animal origin DNA.
Swabs	Allergens: Gluten, Peanut, Sesame and Soya.
Paper exercise	Food labelling, declaration of nutritional value.
Food simulants	Food Contact materials.

QCS

Chocolate

The LGC AXIO Quality in Chocolate Scheme (QCS) is intended for chemists and microbiologists working in the chocolate and cocoa powder manufacturing industries.

Chocolate products are one of the specific food commodities whose composition is controlled at European level. Directive 2000/36/EC 'relating to cocoa and chocolate products intended for human consumption', sets common rules and definitions with regard to the composition, manufacture, packaging and labelling of chocolate and cocoa products. Consumption of contaminated chocolate is rare yet there have been sporadic global outbreaks which have led to product recalls. The consequences could include damaged reputations, possible legal actions resulting in huge financial damage and more. A comprehensive quality assurance programme which includes regular participation in a suitable proficiency testing scheme, may help to safeguard against such negative outcomes.

Chemistry*	Analyte*
Chocolate	Water activity; Moisture; Energy; Fat; Saturates; Total nitrogen; Carbohydrate; Total sugars; Fructose; Glucose; Sucrose; Salt (from sodium); Sodium; Butyric acid; Theobromine; Cadmium, Lactose.
Cocoa powder	Carbohydrate; Total sugars; Fructose; Glucose; Sucrose; Salt (from sodium); Sodium; Ash; Moisture; Theobromine; Caffeine; Total Arsenic; Cadmium, Lead.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Chocolate & cocoa	Enumeration of Coliforms, Enterobacteriaceae, Enterococci, Total aerobic mesophilic count, Yeast
powder	and Mould. Detection of Salmonella species.



Animal Feeds

The LGC AXIO Animal Feeds Proficiency Scheme (AFPS) is specifically designed to meet the needs of laboratories performing chemical or microbiological analysis of animal feeds.

Animal feed quality is highly regulated since many animals, or their products, will ultimately be converted into food for human consumption. Major food safety crises have occurred as a result of the contamination of animal feed causing risks to animal and human health. The resulting recalls have caused significant financial damage as large quantities of product have to be destroyed; and considerable damage to the reputation of businesses involved. Participation in the LGC AXIO AFPS Proficiency Testing scheme can form part of a comprehensive quality system that seeks to promote high standards and avoid potential risks.

Chemistry*	Analyte*
Animal feed	Moisture; Crude protein; Crude fat; Crude ash; Ash insoluble in hydrochloric acid; Sugars; Crude fibre; Starch; ADF; NDF; PPD; Arsenic; Cadmium; Calcium; Chloride; Chromium; Cobalt; Copper; Iron; Lead; Magnesium; Manganese; Mercury; Phosphorus; Potassium; Selenium; Sodium; Zinc; Aflatoxins B1; B2; G1; G2; Total Aflatoxins; Ochratoxin A.
Animal feed, pre-mix	Arsenic, Cadmium, Calcium, Chloride, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Phosphorus, Potassium, Selenium, Sodium, Zinc.
Wet pet food	Ash insoluble in hydrochloric acid, Crude (ash, fat, fibre, protein), Moisture, Starch, Sugars.
Fish feed	Energy; Moisture; Crude protein; Crude fat; Crude ash; Crude fibre.
Silage	Moisture; Crude protein; Crude fat; Crude ash; Crude fibre; Starch.
Coprah oil	Butylated hydroxyanisole (BHA), Butylated hydrotoluene (BHT) Peroxide value
Oats	Fumonisin B1, Fumonisin B2, T-2, HT-2
Maize oil	Deoxynivalenol (DON), Zearalenone (ZON)

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Simulated animal feed	Enumeration of Clostridium perfringens, Clostridium species Coliforms, Enterobacteriaceae, Escherichia coli, Total viable count, Yeast and Mould, Lactic Acid Bacteria, Sulphite-reducing Clostridia, Total anaerobic count.
	Detection of E. coli O157 (non-toxigenic strain) Listeria monocytogenes, Listeria species, Salmonella species.
Petfood kibbles	Coliforms, Enterobacteriaceae, Escherichia coli, Total viable count, Lactic Acid Bacteria Detection of Salmonella species

QGS

Gelatine

The LGC AXIO Quality in Gelatine Scheme (QGS) has been developed in collaboration with the trade body, Gelatine Manufacturers of Europe (GME).

GME members account for nearly half of the worldwide gelatine production and the key role of the GME is to ensure that gelatine is manufactured to a consistently high quality for the benefit of gelatine customers and consumers. The most common use of gelatine is in the food and pharmaceutical industries as well as in the cosmetics, photographic and printing industries.

If a laboratory is involved in the quality control analysis of gelatine, QGS provides test materials in gelatine and gelatine hydrolysate matrices to represent a realistic challenge, with relevant chemical, physical, and microbial tests.

Chemistry*	Analyte*
Gelatine	Ash, Gel strength (Bloom), Isoelectric point, Moisture, pH, Viscosity.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Gelatine hydrolysate	Enumeration of mesophilic anaerobic spores, Sulphite-reducing bacteria, Total aerobic mesophilic count, Clostridium perfringens, Coliforms, Enterobacteriaceae, Escherichia coli, Staphylococcus aureus, Salmonella species.



Shiga Toxin E. coli

Most Escherichia coli (E. coli) strains are harmless and can live in the gut of humans without causing any issues. However Shiga toxin-producing E. coli (STEC) strains can cause serious illness and there is therefore a requirement to test for these organisms in foods which may be of risk of contamination by STEC. A comprehensive quality assurance programme featuring the LGC AXIO STEC Proficiency Testing scheme is an excellent way of helping to keep consumers safe and ensuring reputations for quality are maintained.

There are many different strains of STEC, and these can be distinguished by their serology. The main ones found to cause illness in humans are serovars O26, O45, O103, O111, O121, O145 (known as 'the big six' in the USA) and O157:H7. As the organisms are pathogens, the test is qualitative rather than quantitative, seeking to identify the presence of these organisms rather than enumerating the levels.

The primary aim of the LGC AXIO Shiga toxin E. coli (STEC) Scheme is to enable laboratories performing the microbiological analysis of food and dairy products to monitor their performance and compare with that of their peers. STEC also aims to provide information to participants on technical issues and methodologies relating to testing of food and dairy products.

Test Material*	Analyte*
Skimmed milk powder with lyophilised vials	Detection and identification of STEC (serovars O26; O45; O103; O111; O121; O145; O157:H7).
Ground beef powder with lyophilised vials	Detection and identification of STEC (serovars O26; O45; O103; O111; O121; O145; O157:H7).

CONF-IDENT

Confirmation & Identification

The LGC AXIO CONF-IDENT proficiency testing scheme offers a comprehensive range of analytes for the confirmation and identification of microorganisms. Fast and reliable confirmation and identification of microorganisms is a key task for many laboratories.

Regular participation in the LGC AXIO CONF-IDENT proficiency testing scheme offers a truly independent assessment of measurement quality, which enables participants to compare their analytical capabilities with peers.

The LGC AXIO CONF-IDENT proficiency testing scheme allows laboratories to confirm and/or identify strains isolated from a sample using various techniques, from traditional biochemical/serological tests to more advanced genomic or molecular techniques (such as MALDI-TOF).

Successful participation in the LGC AXIO CONF-IDENT scheme is recognised as a demonstration of laboratory quality and competency by a range of third parties and customers.

Test Material*	Analyte*	
Salmonella panel	Confirmation and/or Identification of Salmonella species.	
Listeria panel	Confirmation and/or Identification of Listeria species and Listeria monocytogenes.	
Gram-negative panel	Confirmation and/or Identification of Gram-negative bacteria.	
Yeast strain panel	Confirmation and/or Identification of Yeast strain.	
Gram-positive panel	Confirmation and/or Identification of Gram-positive bacteria.	
Mixed population	Identifcation of all organisms.	

Beverage

- 24 **BAPS** Brewing Analytes
- 25 **DAPS** Alcoholic Drinks
- 26 **MAPS** Malt Analytes
- 27 **QBS** Soft Drinks & Fruit Juice
- 28 **SUPS** Sugar



Beverage Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
BAPS Brewing Analytes	up to 12 (Chemistry) 6 (Microbiology) 12 (Sensory)	Chemical, Microbiological and Sensory	Ales, craft beers, lagers, and alcohol free/low alcohol beers.	Routine and complex chemical tests relevant to the brewing industry for quality control and product characterisation. Brewery spoilage microorganisms. Sensory assessments in aroma and taste evaluation.
DAPS Alcoholic Drinks	4	Chemical	Distilled spirits, whisky, wort, ciders, wines and fortified wines, liqueurs, cream liqueurs, and other alcoholic beverages.	Chemical tests including esters relevant for alcoholic beverages and intermediate process samples.
MAPS Malt Analytes	12	Chemical and Physical	Brewing/distilling malted barley, barley, malt flour, malted wheat and black/crystal malt.	Chemical and physical tests for quality checks and complex analysis, including mycotoxins analysis.
QBS Soft Drinks & Fruit Juice	4	Chemical and Microbiological	Carbonated drink, carbonated drink (degassed), dilutable/ ready to drink fruit juice, soft drink and apple juice.	Chemical tests for quality checks and complex parameters including vitamins and mycotoxins. Comprehensive range of microorganisms of relevance to beverage products, including pathogens, indicator organisms and spoilage organisms.
SUPS Sugar	12	Chemical and Microbiological	Cane or beet sugar, raw sugar and molasses.	Chemical tests of relevance to the sugar processing, food and beverage industries. Microorganisms of relevance to sugar products, including pathogens and indicator organisms.

BAPS

Brewing Analytes

The LGC AXIO BAPS scheme is jointly run by LGC AXIO Proficiency Testing and Campden BRI, promoting quality in the measurement of chemical, microbiological and sensory analytes in real beer.

Routine and complex chemical tests for quality control and product characterisation are available in our lager and ale test materials.

Microbiological test materials contain organisms typically encountered in the brewing industry.

For sensory analysis, participants evaluate various aroma and taste characteristics of real beers and can compare their results with the Campden BRI sensory panel that provide an expert profile for the sample to enable immediate training of panels if required.

For laboratories that perform the analysis of beer, participation in BAPS can provide confidence that results are meaningful and accurate which in turn, helps to ensure consistency in the quality of beer and integrity of the brand.

Chemistry*	Analyte*	
Lager/ale	Alcohol by volume, Bitterness, Carbon dioxide, Colour at 430nm, Gravity (apparent, original, present), Haze (0°C, 20°C), Original extract, pH, Refractive index, Sulfur dioxide, Total gas pressure.	
Lager	2-Methyl butanol, 3-Methyl butanol, 2+3 Methyl butanol. Acetaldehyde, Calcium, Carbohydrate (total), Chloride, Copper, Diacetyl as VDK, Dimethyl disulfide, Dimethyl sulfide, Energy value (kcal), Energy value (kJ), Ethyl acetate, Ethyl hexanoate, Foam stability (HRV), Free alpha amylase, Free diacetyl, Free 2,3-pentanedione, Glucose, Hydrogen sulfide, Iron, Iso-alpha-acids, Iso-amyl acetate, Iso-butanol, Magnesium, Maltose, Maltotetraose, Maltotriose, Methanethiol, Methylthioacetate, Nitrate, n-Propanol, Phosphate, Polyphenols (total), Potassium, Sodium, Sulfate, Tetra-iso-alpha- acids, Total Diacetyl, TSN, Zinc, Arsenic, Cadmium and Lead.	
Dark/craft ale	Alcohol by volume, Bitterness, Colour at (430nm, 530nm), Diacetyl as VDK, Free 2,3-pentanedione, Free diacetyl, Iso-alpha-acids, Tetra-iso-alpha-acids.	
Alcohol free/low alcohol beer	Alcohol by volume (qualitative, quantitative), Bitterness, Colour at 430nm, Gravity (apparent, present), pH.	

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Sensory*	Analyte*
Lager/ale	Alcoholic/Solvent, Astringent, Bitter, Body, Burnt, Caramel, Cereal, DMS, Fruity/ Citrus, Fruity/Estery, Hop, Linger, Malty, Other sulfur, Oxidised/Aged, Sour, Sweet, and others.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Lyophilised material High level/ low level	Identity of organisms, Lactic acid bacteria count, Total aerobic bacterial count, Total aerobic microbial count. Total anaerobic microbial count, Wild yeast, count: Identity of organisms.

DAPS

Alcoholic Drinks

The LGC AXIO DAPS Alcoholic Drinks scheme covers a wide range of products including distilled spirits, wine, ciders and prepared lifestyle drinks, such as ready-to-drink cocktails and fruit based beverages.

Whilst alcohol content is an important analysis for duty payment purposes, there are many other analytes that influence the flavour of the product. Consistent analytical performance in the laboratory, supported by participation in the LGC Proficiency Testing scheme, can help ensure the consistency of the product, keeping customers loyal to their favourite drinks.

Test Material*	Analyte*
Fermented & simulated wort	Alcohol, Gravity (original, residual, final), pH (fermented only), Residual fermentable sugars (total amount of glucose, maltose, maltotriose).
Clear/dark distilled spirit & scotch whisky	Acidity (total, volatile), Alcoholic strength (actual, apparent), Chill difference, Colour, Density, Ethyl carbamate, Fructose, Glucose, Sucrose, Sugars (total), NDMA, pH, Refractive index, Specific gravity, Total solids, Turbidity (Haze). 2-Methyl butanol, 3-Methyl butanol, 2 + 3 Methyl butanols, Acetal, Acetaldehyde, Ethyl acetate, Furfural, Iso-amyl acetate, Iso-butanol, Methanol, n-Butanol, n-Propanol Phenol. Calcium, Copper, Iron, Magnesium, Potassium, Sodium. 5-HMF, Coniferaldehyde, Ellagic acid, Gallic acid, Scopoletin, Sinapaldehyde, Syringaldehyde, Syringic acid, Vanillic acid, Vanillin. 2-Phenethyl acetate, 2-Phenethyl ethanol, Ethyl decanoate, Ethyl dodecanoate, Ethyl hexadecanoate, Ethyl hexanoate, Ethyl octanoate, Ethyl tetradecanoate, Ethyl-9-Hexadecenoate.
Simulated spirit	Alcoholic strength (actual, apparent), Citric acid, Ethyl carbamate, Fructose, Glucose, Sucrose, Sugars (total), Glycerol, Maltose, NDMA, pH, Propylene glycol.
Non chill filtered whisky	2-Phenethyl acetate, 2-Phenethyl ethanol, Ethyl decanoate, Ethyl dodecanoate, Ethyl hexadecanoate, Ethyl hexanoate, Ethyl linoleate, Ethyl linolenate, Ethyl octadecanoate, Ethyl octanoate, Ethyl oleate, Ethyl tetradecanoate, Ethyl-9- hexadecenoate.
Ciders	Acidity (total, volatile), Actual alcoholic strength, Carbon dioxide, Colour, Haze, pH, Specific gravity, Sulfur dioxide (total).
White/rosé & red wine	Acidity (total, volatile), Alcoholic strength (actual), Ascorbic acid, Citric acid, Colour at (420nm, 520nm, 620nm), Copper, Fructose, Glucose, Iron, Lactic acid, Malic acid, pH, Reducing sugars, Sorbic acid, Specific gravity, Sulfur dioxide (free, total). Ready to drink Acidity (total, volatile), Alcoholic strength (actual), Ascorbic acid, Benzoic acid, Brix, Carbon dioxide, Citric acid, Colour absorbance, Density, Dissolved oxygen, pH, Refractive index, Sorbic acid, Specific gravity, Sugars (total).
Liqueur	2-Methyl butanol, 3-Methyl butanol, 2 + 3 Methyl butanols, Acidity (total, volatile), Acetal, Acetaldehyde, Alcoholic strength (actual), Brix (total), Ethyl acetate, Furfural, Iso-amyl acetate, Iso-butanol, Methanol, n-Butanol, n-Propanol, pH, Refractive index, Residue, Specific gravity, Total solids.
Cream liqueur	Specific Gravity, Actual Alcoholic Strength, pH, Residue, Iso-Butanol, 2+3 Methylbutanols, Furfural, Total Brix, Refractive Index (20°C), Total solids.

MAPS

Malt Analytes

The LGC AXIO MAPS scheme covers test materials from the full range of barley and malted barley used for brewing and distilling.

Malt is a complex product and forms a key ingredient in brewing and distilling. It is considered to be at the heart of the process, providing most of the sugars and complex carbohydrates which produce the alcohol and flavour of the final product. These test materials are analysed for a wide range of analytes, using European Brewing Convention (EBC) and Institute of Brewing and Distilling (IBD) methods, as well as a number of other physical and chemical methods.

Meeting the demanding specifications laid down by brewers and distillers is critical to the business of any maltster and is greatly dependent on the quality of the malting barley. For this reason the accuracy of the laboratory analysis is essential as it will ultimately decide if the product is suitable for use in the production plant.

Test Material*	Analyte*	
Brewers & distillers malt	Alpha amylase, Cold water extract, Diastatic power (DP IoB and DPWK), Dimethyl sulfide (free, total), Dimethyl sulfide precursor, EBC fraction IV, EBC reject fraction, Friability, Glassy (whole) corns, Glycosidic nitrile, Hartong VZ45, Homogeneity, Malt mod homogeneity, Malt modification, Moisture, NDMA, Nitrogen (total), Partly unmodified grains, Phenols (total), Residual sulfur dioxide, Sieving tests, Sacharification time.	
Brewers & distillers malt (EBC wort)	Beta glucan, Boiled wort colour, Colour, Extracts, Extract difference, FAN, Fermentability (boiled), Kolbach index, pH, TSN, Viscosity.	
Brewers & distillers malt (IOB wort)	Beta glucan, Colour, Extracts, Extract difference, FAN, Fermentability (boiled, unboiled), pH, Predicted spirit yield, Soluble extract difference, Soluble extract, SNR, TSN, Viscosity.	
Barley	BRF (8ml test), EBC fraction IV, EBC reject fraction, Germinative capacity, Germinative energy, Hectolitre weight, Moisture, Nitrogen (total), Sieving tests, Thousand corn weight, Water sensitivity.	
Black malt	Colour, Moisture.	
Crystal malt	Colour, Degrees of crystallisation, Moisture.	
High diastatic power malt	Moisture, DPWK, Diastatic Power, Alpha Amylase, IoB Soluble Extract 0.7mm, TSN (Total Soluble Nitrogen) FAN (Free Alpha Amino Nitrogen), Glycosidic Nitrile.	
Malt flour	NDMA. Mycotoxin analysis (Ochratoxin A and Deoxynivalenol (DON)).	
Malted wheat	Moisture, DPWK, Diastatic Power, Alpha Amylase, Protein, Extract: 0.2mm, Boiled Wort Colour, Kolbach Index, EBC Fermentability (Boiled), IoB Extract 0.7mm, pH, Colour, TSN (Total Soluble Nitrogen), SNR (Soluble Nitrogen Ratio), FAN (Free Alpha Amino Nitrogen), Viscosity, Beta Glucan.	

QBS

Soft Drinks & Fruit Juice

The LGC AXIO Quality in Beverages Scheme (QBS) is specifically tailored for chemists and microbiologists working in the soft drinks and fruit juice industries (including carbonated drinks).

Soft drinks and fruit juices are widely consumed throughout the world and these global customers expect their beverages to always look and taste the same. The industry continuously aims to meet these high expectations. However, maintaining and confirming the quality and reliability of a given product is a considerable challenge for production facilities and quality control laboratories meaning that contamination from microorganisms, chemicals and foreign matter could compromise product quality.

It is vital to prevent these types of errors as they can lead to the manufacture of out-of-specification product resulting in product wastage and disposal, lost production and the associated costs.

The LGC AXIO QBS scheme will allow laboratories to monitor analytical quality, helping to ensure that products are being manufactured to the highest standards.

Chemistry*	Analyte*	
Apple juice	Patulin.	
Carbonated drinks	Acidity (as citric acid monohydrate), Brix, Carbon dioxide, Fructose, Glucose, pH, Sucrose.	
Carbonated drinks (degassed)	.cesulfame K, Aspartame, Benzoic acid, Caffeine, Cyclamic acid (as free acid), Saccharin (as free nide), Sorbic acid (as free acid), Sucralose, Sulfur dioxide (free, total), Total Hardness and Total vissolved solids.	
Dilutable & ready to drink	Acesulfame K, Acidity (as citric acid monohydrate), Aspartame, Benzoic acid, Brix, Caffeine, Cyclamic acid (as free acid), Fructose, Glucose, pH, Saccharin (as free imide), Sorbic acid (as free acid), Sucrose, Sucralose, Sulfur dioxide (free, total).	
Fruit juice	Acidity (as citric acid monohydrate), Brix, Calcium, Fructose, Glucose, pH, Phosphorus, Potassium, Magnesium, Sodium, Antimony, Cadmium, Iron, Lead, Tin, Zinc.	
Liquid material	Vitamin C (Ascorbic acid).	
Soft drink	Antimony; Arsenic; Cadmium; Iron; Lead; Tin; Zinc; Calcium; Phosphorus; Potassium; Magnesium; Sodium; Aluminium; Manganese; Copper; Selenium*. Vitamin B3 (Nicotinamide), Vitamin B5 (Pantothenic acid), Vitamin B6 (Pyridoxine), Vitamin B12 (Cyanocobalamin), Vitamin C (Ascorbic acid), Vitamin E (DL-alpha-Tocopherol), Vitamin B2 (Riboflavin), Total steviol glycosides, Rebaudioside A, Vitamin A, Vitamin E.	
Smoothie	Energy; Fat; Saturates; Carbohydrate; Total Sugars; Fructose; Sucrose; Protein; Salt; Sodium; Dietary Fibre; pH.	
Energy drink	Energy; Carbohydrate; Total Sugars; Fructose; Sucrose; Salt; Sodium; pH; Caffeine, Taurine.	

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Fruit juice	Enumeration of Lactic acid bacteria, Mould, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli, Escherichia coli O157 (non toxigenic strain), Listeria monocytogenes, Salmonella species.
Liquid material (membrane filtration)	Enumeration of Lactic acid bacteria, Mould, Thermophilic acidophilic bacteria, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli, Guaiacol producing thermophilic acidophilic bacteria, Listeria monocytogenes.
Soft drink	Enumeration of Lactic acid bacteria, Mould, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli.
Fruit juice	Enumeration of Lactic acid bacteria, Mould, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli, Escherichia coli O157 (non toxigenic strain), Listeria monocytogenes, Salmonella species.
Liquid material (membrane filtration)	Enumeration of Lactic acid bacteria, Mould, Thermophilic acidophilic bacteria, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli, Guaiacol producing thermophilic acidophilic bacteria, Listeria monocytogenes.
Soft drink	Enumeration of Lactic acid bacteria, Mould, Total aerobic mesophilic count, Yeast. Detection of Escherichia coli.

SUPS

Sugar

The LGC AXIO SUPS scheme is suitable for all laboratories who analyse sugar and sugar products.

The quality of sugar has to be continually maintained, because in addition to its sweet taste it brings additional benefits to the foods and beverages it is used in, such as improving texture, enhancing flavour, providing consistency, providing natural preservation and many more.

LGC collaborates with the International Commission for Uniform Methods of Sugar Analysis (ICUMSA) who provide robust, internationally validated methods of analysis to aid the trade in sugar and sugar products. ICUMSA representatives are involved in the review of progress and performance of SUPS and provide advice on the operation and future developments of the scheme.

Participating in SUPS will provide data to help identify performance issues with methods used and will underpin the quality of the analytical results used to inform the commercial decisions about the product.

Chemistry*	Analyte*
Cane or beet sugar	Ash, Colour, Moisture, Polarisation, Reducing sugars, Reflectance grade, Sulfur dioxide, Sediment (insoluble), Turbidity. Arsenic, Cadmium, Copper, Iron, Lead, Mercury.
Molasses	Colour, Dry substance, Fermentable sugars, pH, Reducing sugars, Sucrose, Sulfated ash.
Raw sugar	Ash, Colour, Dextran, Moisture, Polarisation, Reducing sugars, Starch, Total sugar as invert sugar (TSAI) and Total sugar as reducing sugar (TSRS).
High Fructose Corn Syrup	Ash; Colour; Sucrose; Fructose; pH; Polarisation; Reducing sugars.

Microbiology*	Analyte*
Lyophilised material	Enumeration of Thermophilic acidophilic bacteria (TAB), Total aerobic mesophilic count, Osmophilic yeast and mould.

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Water & Environment

- 32 **AQUACHECK** Water, Agricultural Soils & Sludges
- 33 **QWAS** Water Microbiology
- 34 **AIR PT** Air & Stack Emissions
- 35 **CONTEST** Contaminated Land
- 36 **HYGIENE** Hygiene Surface Monitoring
- 37 **CRYPTS** Cryptosporidium

Water & Environment Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
AQUACHECK Water, Agricultural Soils & Sludges	20	Chemical, Ecotoxicological, Physical and Radiochemical	Surface waters potable waters and waste waters, agricultural soils and sewage sludge.	Inorganic, organic and elemental analytes for qualitative and quantitative analyses. Determination of radiochemical and ecotoxicological parameters.
QWAS Water Microbiology	10	Microbiological	Waters (e.g. bathing, environmental, mineral, potable, process, recreational, sea, surface, waste) and simulated effluent sludge.	Routine microbiological testing, indicator organisms and pathogens.
AIR PT Air & Stack Emissions	6	Chemical and Physical	Filters, tubes and impinger solutions.	Gravimetric, organic and elemental analytes at a range of concentrations.
CONTEST Contaminated Land	5	Chemical and Physical	Soil extracts, soil materials, solid waste, standard solutions, Incinerator bottom ash and trammel fines.	Inorganic, organic and elemental analytes measured in soil, leachates and standard solutions.
HYGIENE Hygiene Surface Monitoring	3	Microbiologica	Swabs, contact plates, dip slides, rinsates, air filters and ATP systems.	Routine microbiological testing, indicator organisms and pathogens.
CRYPTS Cryptosporidium	12	Microbiological	Slides, suspensions and filters.	Cryptosporidium.

AQUACHECK

Water, Agricultural Soils & Sludges

The industry leading LGC AXIO AQUACHECK scheme has been in continuous operation since 1985. Test materials are provided for the analysis of major inorganic/organics; metals; phenols; organochlorine pesticides and many others.

Water is vital in sustaining all natural systems. Each source requires regular analyses to determine safety and suitability of use. Potable water must be good in quality and quantity and free from harmful chemicals and microorganisms. Discharged water from local wastewater treatment plants and industry must comply with environmental guidelines. Process waters must be kept clean to ensure product quality. As water sources can change regular testing is advised.

Participation in the LGC AXIO AQUACHECK scheme allows laboratories to identify problems before they affect the quality and safety of waters. Participants will be able to demonstrate independently that they are producing accurate and meaningful results to laboratory management and customers.

Chlorophyll a, Fungicides, Geosmin and MIB,
FOA, PFOS, Formaldehyde, Phenols, Taste and absorbing organics constituents.
tive determination of unknown contaminant.
c surfactants, Suspended solids, Toxic
olybdenum, Nickel, Vanadium, Zinc, , Total nitrogen, Total phosphorus, Total ignition, pH, Extractable phosphorus, ction of sodium, Organic carbon content,
ients and others, pH, TDS.
orms, OC and OP pesticides, Phenols, PCBs, rease.
c surfactants, Non specific analytes, ed solids, Toxic metals, Turbidity.
itrogen, Phenol (total), Phosphate, Sulfate,
Iron, Lead, Manganese, Mercury, m, Total phosphorus, Total potassium,

QWAS

Water Microbiology

The LGC AXIO Quality in Water Analysis Scheme (QWAS) has been specifically developed for the microbiological analysis of waters and effluent sludge.

Microorganisms occur in water naturally and the majority are relatively harmless. However contamination of water from faecal sources can lead to large outbreaks of disease.

In many countries, water microbiology is the subject of legislation.

Regulations specify how often water sources are sampled, how sampling is done, how analysis will be performed, what microorganisms are to be tested, and the acceptable limits for the target microorganisms.

For laboratories responsible for the analysis of waters, particiption in a relevant LGC AXIO Proficiency Testing scheme can provide confidence that results of these analyses and the equipment used to produce those results are meaningful and accurate which, in turn, helps to ensure the safety of water.

Test Material*	Analyte*
Bathing, recreational & surface water	Total aerobic count, Coagulase-positive staphylococci, Staphylococcus species, Sulphite-reducing Clostridia, Clostridium perfingens
Bathing, surface & wastewater	Enterococci (faecal streptococci), Escherichia coli, Faecal coliforms, Total coliforms, Salmonella species.
Effluent sludge	Escherichia coli, Salmonella species.
Dialysis water	Total Aerobic Count.
Environmental water	Legionella pneumophila by culture, Legionella pneumophila by PCR. Legionella species by culture, Legionella species by PCR.
Potable water	Clostridium perfringens, Coliforms, Enterococci (faecal streptococci), Escherichia coli, Pseudomonas aeruginosa, Sulphite-reducing Clostridia, Sulphite-reducing Clostridia spores ONLY, Total aerobic count at 22°C and 37°C, Legionella species (low levels) Yeast and mould. Identification of (non-pathogenic) organism to correct family, genus or species level, Somatic coliphages.
Process water	Pseudomonas aeruginosa, Pseudomonas species, Total aerobic count, Yeast, Mould, Yeast and mould (total).
Sea water	Enterococci (faecal streptococci), Escherichia coli, Faecal coliforms, Total coliforms.
Lyophilised material	Unknown microorganism.
Waste water	SARS-CoV-2.
Paper exercise (image)	Colony count and calculation of number of microorganisms.

AIR PT

Air & Stack Emissions

Our AIR PT scheme is a partnership between LGC AXIO and the UK Health and Safety Executive. The scheme is operated by LGC and is supported by the technical testing and monitoring expertise at HSE. The scheme combines our scientific and production expertise in different areas, providing an integrated scheme for all laboratories undertaking analysis of samples from various fields of air monitoring.

We take air for granted: it is ubiquitous, essential, and life-giving. However, it is easily polluted by our activity

and so requires regular monitoring to assess exposures and the effectiveness of containment or ventilation. Many everyday activities create air pollutants with known or suspected harmful effects on human health and the environment. Such pollution can cause both short and long term effects on human, plant and animal life.

Participation in the AIR PT scheme supports a laboratory's quality system in the monitoring and measurement of air quality in a wide range of contexts.

Test Material*	Analyte*
Workplace air (filters)	Aldehydes, Chromium (VI), Metals, Respirable grade quartz by FTIR and XRD.
Workplace air (diffusion tubes)	VOCs (charcoal sorbent and thermal desorption).
Workplace air (dust)	Metals.
Ambient air (filters)	Anions, Metals.
Ambient air (diffusion tubes)	Nitrogen dioxide (as nitrite), VOCs (thermal desorption).
Indoor/chamber air (diffusion tubes)	Qualitative and quantitative VOCs (charcoal sorbent and thermal desorption).
Stack emissions (impinger solutions)	Ammonia, Hydrogen chloride, Hydrogen fluoride, Mercury, Nitrogen oxides as (NO2), Sulphur dioxide, Metals, Volume of solution.
Stack emissions (rinsing solution)	Dust (total solids).
Gravimetric filters (workplace air, ambient air, stack emissions)	Dust by gravimetry (mass of solids), Fly ash, Metals.

CONTEST

Contaminated Land

The LGC AXIO CONTEST scheme offers a comprehensive range of analytes in soils, soil extracts and standards solutions for the analysis of metals, inorganic contaminants, organics, soil leachates and solid waste.

Land contamination can pose both environmental and human health risks. The main causes of contamination are the direct discharge of industrial wastes, domestic pollution, over-usage of pesticides, oil and fuel dumping, leaching of wastes from landfills and leaking underground storage tanks which corrode over time releasing toxic substances into previously clean soils.

Participation in a proficiency testing scheme for soil, such as CONTEST, is a requirement of the UK Environment Agency's Monitoring Certification Scheme (MCERTS) 'Performance Standard for Laboratories Undertaking Chemical Testing of Soil'.

Test Material*	Analyte*
Soil, acid extract of soil, standard solution	Chromium (VI), Metals, Toxic metals.
Soil &/or standard solution	Ammonia, Cyanide (complex, free, total), Dry matter, Easily liberated sulfide, Fluoride (total), Loss on ignition, pH, Sulfate (total), Sulfur (total), Thiocyanate, Water soluble (boron, chloride, fluoride, sulfate), Distillable phenolic substances, Elemental sulfur, Phenols, PAHs, PCBs, TOC, TPHs, VOCs, Soil texture.
Soil, standard solution	TPH, VOCs, OC pesticides, OP Pesticides.
Soil leachate	COD, Conductivity, Cyanide (complex, free), Major ions, Metals, pH, PI,Thiocyanide, TOC/DOC, Toxic metals.
Soil waste & leachate (waste acceptance criteria)	DOC, Dry matter content ratio, Major ions, Metals, PI, TDS, Toxic metals.
Standard solution	Qualitative test of SVOCs.
Trommel fines	Loss on ignition (FINES).
Incinerator bottom	Ash, Toxic metals, pH, Alkali reserve.

HYGIENE

Hygiene Surface Monitoring

Regular hygiene monitoring of environmental surfaces and equipment in manufacturing and healthcare is a key part of any quality system.

Ensuring control of microbial contamination can directly affect the quality of both product and patient care.

In food and beverage industries, it can help avoid food spoilage and food poisoning, both of which can damage brand value and profits.

In pharmaceutical manufacturing, parenteral medicines, and the environment they are produced in, need to be free from harmful microbial strains.

In healthcare, regular environmental monitoring can demonstrate cleaning and disinfection has been carried out correctly, helping to reduce the potential spread of infection.

Participation in the LGC AXIO HYGIENE scheme can help to demonstrate that environmental monitoring is effective and under control.

Regular monitoring allows information to be collected to review and assess hygiene quality to ensure legislative standards are being met. It also helps to determine the effectiveness of control systems designed to prevent microbial contamination.

Test Material*	Analyte*
Surface testing by swabbing	Enumeration of Enterobacteriaceae, E. coli, Total aerobic mesophilic count, Yeasts and/or Moulds.
	Detection of Listeria species, Listeria monocytogenes, Salmonella species.
Surface testing by Contact plates	Enumeration of Staphylococcus aureus, Yeast, Mould, Total aerobic mesophilic count, Enterobacteriaceae.
Surface testing by dip-slides	Enumeration of Coliforms, Total viable count.
Surface testing by ATP monitoring	ATP levels.
Surface testing (Swab rinsate or dry swab)	Detection of SARS-CoV-2.
Swab rinsate	Enumeration of Yeast; Mould; Yeast and Mould; Enterobacteriaceae; Coliforms; Escherichia coli;Total aerobic mesophilic count.
	Detection of Listeria species; Listeria monocytogenes; Salmonella species; E. coli O157 (non-toxigenic strain).
Air filter	Total viable count; Yeasts and/or Moulds.
Ready to test sponge	Salmonella sp; Listeria sp; Listeria monocytogenes.

CRYPTS

Cryptosporidium

The LGC AXIO Cryptosporidium (CRYPTS) scheme is for laboratories performing microbiological analysis of cryptosporidium oocysts in treated water supplies and provides an independent assessment of measurement quality.

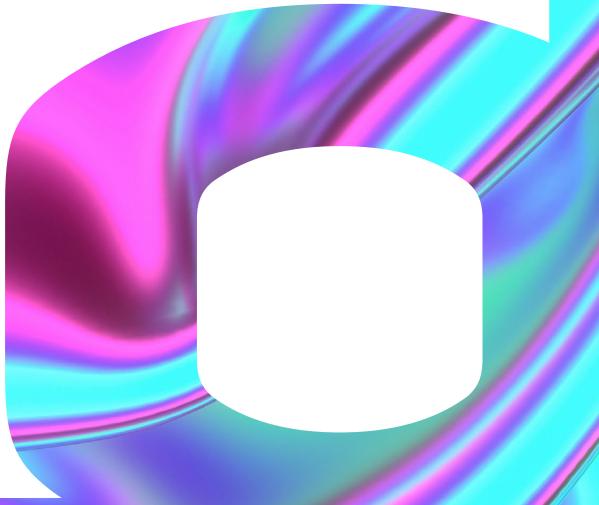
The CRYPTS scheme also provides information to participants on technical issues and methodologies relating to Cryptosporidium and enables participants to demonstrate to customers and regulatory bodies, on an international basis, the validity of their results. Slides are counted by expert analysts before and after distribution to participants, suspensions and filters are prepared using highly-accurate flow-cytometry to provide homogeneous distribution sets which can be subjected to statistical.

The operation of our CRYPTS scheme is supported by an Advisory Group.

Test Material*	Analyte*			
Dynal slides	Enumeration of Cryptosporidium oocysts.			
Genera slides	Enumeration of Cryptosporidium oocysts.			
Suspensions	Enumeration of Cryptosporidium oocysts.			
Filta-Max silters	Enumeration of Cryptosporidium oocysts.			
Xpress filters	Enumeration of Cryptosporidium oocysts.			

Petroleum

40 **OIL** Oils & Fuels



Petroleum Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
OIL** Oils & Fuels	1	Chemical and Physical	Oils & Fuels.	Various chemical and physical as per ASTM, IP and ISO protocols.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

** Please note that the OIL scheme is currently not included in our scope of accreditation.

OIL**

Oils & Fuels

The LGC AXIO OIL scheme is designed specifically to assist chemists and engineers working in the refinery, fuel, used oil and lubricant laboratories.

Petroleum products, such as oils and fuels, are tested throughout their life span from the time the oil is taken from the ground to beyond the petroleum recyclers. The concentration of contaminants and trace elements is vital in ensuring the quality of oil and petroleum products. Regulations related to cleanliness standards in engines, contamination particles and water in diesel fuel, and many more, mean it is essential that laboratories performing these measurements are capable of producing accurate data.

If a laboratory is performing the analysis of oils and fuels according to ASTM, IP and ISO protocols, participating in the LGC AXIO OIL proficiency testing scheme will enable it to monitor performance and compare it with that of other laboratories worldwide. Consistent good performance will allow laboratories to demonstrate to third parties, customers, regulators and accreditation bodies the quality of their results.

Test Material*	Analyte*
#2 Diesel fuel	Acid number, Ash, Base number, BP distribution, Carbon, Carbon residue, Cloud point, Cold filter plugging point, Colour, Copper corrosion, Density, Distillation, Flash point, Heat content, High temp stability, Hydrocarbon type(s), Hydrogen, Lubricity (HFRR) wear scar diameter, Nitrogen, Particulate contamination by filtration, Pour point, Sediment, Sulfur content, Viscosity, Water.
Crude oil	Acid number (total - potentiometric), API gravity, Asphaltenes, Density, HTSD, Iron, Micro carbon residue, Nickel, Nitrogen (total), Pour point, Reid vapour pressure, Relative density, Salt, Sediment, Sulfur, Vanadium, Viscosity, Water.
Engine oil lubricants	Acid number (potentiometric), Ash, Ash sulfated, Barium, Base number, Calcium, Colour, Demulsibility, Density, Evaporation loss (Noack), Flash point, Gelation, Magnesium, Molybdenum, Nitrogen, Phosphorous, Potassium, Pour point, Saponification number, Shear stability, Silicon, Sodium, Sulfur content, Viscosity (HTHS, kinematic, low temperature, tapered bearing, tapered plug), Volatility (GC), Water, Water content, Zinc.
Simulated in service engine oil	Acid number, Aluminium, Antimony, Barium , Base number, Boron, Cadmium, Calcium, Chromium, Copper, Flash point, FTIR (Fuel dilution, Glycol, Nitration, Oxidation, Phosphate, Sulfation, Water), Fuel dilution Glycol, Insoluble, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Particle count, Phosphorous, Potassium, Silicon, Silver, Sodium, Sulphur content, Tin, Titanium, Vanadium, Viscosity, Water content, Zinc.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed.

For accredited and non-accredited status please see current application form/scheme description.

** Please note that the OIL scheme is currently not included in our scope of accreditation.

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Consumer Safety

- 44 **PHARMASSURE** Pharmaceutical
- 45 **COSMETICS** Cosmetics & Toiletries
- 46 **TOYTEST** Toy Safety
- 47 **NiMS** Nickel Migration
- 48 **CANNABIS** Cannabis and Related Products

Consumer Safety Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
PHARMASSURE Pharmaceutical	4	Chemical, Physical and Microbiological	Pharmaceutical products and standard solutions.	Basic and advanced chemical analysis, microbiological analysis and sterility testing.
COSMETICS Cosmetics & Toiletries	4	Chemical and Microbiological	Cream, lipstick, lipgloss, liquids, mouthwash, and toothpaste.	Chemical parameters of relevance to the cosmetics and toiletries testing industries. Microbiological tests including spoilage and indicator organisms.
TOYTEST Toy Safety	4	Chemical, Microbiological, Physical and Instrument Techniques	Toys, paper exercises, real materials and standard solutions.	Interpretation of toy safety standards, various physical measurements, azo-dyes, metals and phthalates.
NiMS Nickel Migration	2	Chemical and Physical	Alloy disks, jewellery or other appropriate articles.	Nickel release and surface area.
CANNABIS Cannabis and Related Products	2	Chemical and Microbiological	Cannabis flower, Cannabis oil, Hemp oil, Simulated dry Cannabis plant	Cannabinoids (potency) Terpenes, Elements.

PHARMASSURE

Pharmaceutical

The LGC AXIO PHARMASSURE proficiency testing scheme has been specifically designed to meet the needs of the pharmaceutical industry. The test materials are provided for chemical and microbiological analysis including sterility testing.

The regulations surrounding the manufacture of pharmaceutical products and laboratories testing them are wide ranging, and compliance with GMP/ GLP requirements is aimed at ensuring the safety and efficacy of all pharmaceutical preparations. Regular participation in a LGC AXIO Proficiency Testing scheme offers a truly independent assessment of measurement quality, which enables participants to compare their analytical capabilities with peers. Managers are able to monitor trends in their laboratory's performance over time and enhance the training of individuals as they participate in frequent assessment.

Successful participation in PHARMASSURE is recognised as a demonstration of laboratory quality and competency by a range of third parties, customers, regulators and accreditation bodies.

Chemistry*	Analyte*				
Format depends upon test type (oil, powder, solution)	Acid/base titration, Density, Melting point, Other basic titration (actual analytes dependant on test), pH, Refractive index.				
Format depends upon test type (powder, solution)	Advanced titration (potentiometric, non-aqueous), Flame spectroscopy, GC, IR/FTIR, LOD, Moisture by Karl Fischer, Polarimetry, TLC, UV, Viscosity, NMR spectroscopy and X-ray Powder Diffraction (XRPD).				
Powder or solution	HPLC analysis.				
Powder	Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Zinc.				
Tablets	Dissolution, Physical measurements.				
Solutions	Low level conductivity, Particulate determination, Endotoxins.				
E-cigarette liquid	Nicotine; Propylene glycol; Glycerol ; Density, pH and Refractive index.				
Dietary and herbal supplements	Potency in Herbal supplements (Ginsenoside Rb1; Ginsenoside Rb2; Total ginsenosides; Quercetin; Kaempferol; Total Aglycones; Total Terpene Lactones; Ginkgolide B); Multivitamin (Vitamin B1, B2, B3, B5, B6, B12,, Vitamin C, Folic Acid, Biotin); Multielement (Calcium; Zinc; Magnesium; Copper; Manganese; Potassium; Iron; Chromium (total); Selenium); Cannabidiol material Phytochemical identity confirmation Contaminants (Heavy metals, Sildenafil) Compliance with labelling				

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

Microbiology*	Analyte*
Lyophilised material (low-level for direct culture or filtration)	Enumeration and/or identification of a single microorganism.
Lyophilised material (Mixed microorganisms)	Enumeration of bile-tolerant Gram-negative bacteria, Candida albicans, Escherichia coli, Mould, Staphylococcus aureus, Total aerobic microbial count, Total bacterial count, Total yeast and mould, Yeast. Detection of bile-tolerant Gram-negative bacteria, Candida albicans, Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus, Burkholderia cepacia.
Lyophilised material (5 vials for sterility testing)	Sterility testing and identification of isolated microorganisms.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

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COSMETICS

Cosmetics & Toiletries

The LGC AXIO COSMETICS proficiency testing scheme is intended for chemists and microbiologists performing product and ingredient testing in the beauty and personal care products industries.

Cosmetics have been in use for thousands of years, and the potential for harm to the wearer has been present ever since the use of toxic chemicals such as lead sulfite (galena) as an eye make-up by the ancient Egyptians. Manufacturers have a duty to ensure that potentially harmful products are not placed on the market. Products must undergo chemical, microbiological and physical testing to ensure safety, quality and legislative requirements are met.

If a laboratory performs these analyses, participation in the LGC AXIO COSMETICS scheme can provide confidence that results are meaningful, accurate and will allow for comparison to peers.

Chemistry*	Analyte*				
Lipstick, lip gloss & powder	Arsenic, Cadmium, Chromium, Lead, Mercury, Nickel.				
Cream	Hydroquinone.				
Liquid cosmetic	Density, pH, Viscosity.				
Mouthwash, toothpaste	Antimony, Arsenic, Barium, Copper, Fluoride, Mercury, Selenium, Zinc.				
Hand sanitiser	Alcohol content				
Face masks	Bacterial filtration efficiency; Differential pressure (breathability); Microbial cleanliness (bioburden); Fluid resistance to synthetic blood.				
Cosmetic	Allergenic compounds				

Microbiology*	Analyte*
Cream liquid & powder	Enumeration and detection of aerobic mesophilic bacteria, Enterobacteriaceae, Pseudomonas aeruginosa, Staphylococcus aureus, Burkholderia capacia, Candida albicans, Escherichia coli, Yeast and mould (total count). Challenge test.



Toy Safety

The LGC AXIO TOYTEST proficiency testing scheme is designed to work with the strict safety regulations that are in place to ensure that toys are appropriate for the target age group of children, and do not pose a hazard in use.

The scheme is intended to support laboratories testing to the key regulations in place in Europe and America, namely the EN71 standard in Europe and the ASTM F963 standard in America. A combination of physical toys and product information is provided over the scheme year for assessment and testing according to the standards.

Additional materials are also provided for analyses ranging from solutions and paint flakes for heavy metals, materials for kinetic testing, flammability testing, and dye analysis.

Test Material*	Analyte*			
Toy product	Paper exercise covering the scope of EN71-1 and ASTM F963 (Mechanical and physical testing).			
Cords, plastic films, toys or toy components	Measurement testing according to EN71-1 and ASTM F963.			
Toy product	Kinetic energy testing EN71-1 and ASTM F963, Acoustic testing EN71-1 Aniline.			
Magnetic toys or components	Flux testing EN71-1 and ASTM F963.			
Sections of fabric or toy product	Flammability testing EN71-2.			
Moulded plastic (ABS)	Flammability			
Paint flakes, crayons, fabric or finger paint plus standard solutions; Slime product	Migration of elements EN71-3.			
Information &/or toy product for paper exercise	Activity toys EN71-8.			
Toy or other electrical item	Electrical testing EN62115.			
Section of fabric	Azo-dyes EN14362-1 and EN14362-3.			
Dried paint flakes	Cadmium (total), Lead (total), Chromium (total).			
Section of plastic plus standard solutions	Phthalates.			
Jewellery	Cadmium, Lead			
Plastic bead or pellet	Bisphenol A			

NiMS

Nickel Migration

The LGC AXIO NiMS Proficiency Testing scheme is designed to assess the performance of laboratories undertaking the determination of nickel release from articles intended to come into direct and prolonged contact with the skin according to the European Regulation (EC) 1907/2006.

The release of nickel from jewellery products, in close contact or pierced through the skin is the most widespread cause of allergic contact dermatitis - which affects an estimated 10% to 20% of the population. Many ordinary items such as buttons, coins, spectacle frames, watchstraps and zips may also contain nickel and as such is hard for sufferers to avoid.

The method for the determination of nickel release from such products is defined in European standard EN 1811 (2011). The article to be tested is suspended in an artificial sweat solution for a period of a week, after which time the concentration of dissolved nickel in the solution is determined by ICP-MS or a similarly accurate and precise technique.

Test Material*	Analyte*
Alloy disks, jewellery or other appropriate articles	Nickel release and surface area measurement.

CANNABIS

Cannabis and Related Products

Increasingly cannabis is being legalised and used as a medicinal product in a range of markets. This legalisation process includes requirements for QC testing and therefore PT to assure the quality of the analytical data.

In addition many novel products (foods, beverage and supplements) are being developed which contain cannabis extracts (minus the psychoactive cannabinoids) for health benefits. The primary aim of the CANNABIS Proficiency Testing Scheme is to enable laboratories performing the analysis of cannabis to monitor their performance and compare it with that of their peers. Cannabis PT also aims to provide information to participants on technical issues and methodologies relating to testing of Cannabis.

Chemistry

Test Material	Analyte*
Cannabis flowers	Cannabinoids, Terpenes
Cannabis oil	Cannabinoids
Hemp oil	Cannabinoids, Terpenes.
Simulated dried cannabis plant	Elements.

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Clinical

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- 54 **SAR** SARS-CoV-2
- 55 **IPT** Immunosuppressant
- 56 **TDM** Therapeutic Drugs
- 57 **TOX** Toxicology
- 58 **DAU** Drugs of Abuse in Urine
- 59 **DOF** Drugs in Oral Fluid
- 60 **DAH** Drugs of Abuse in Hair

AXIO

Clinical Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
CLS Clinical Laboratory	Up to 12	Clinical	Range of relevant materials.	Bacteriology, Chemistry, Haematology, Immunology Mycobacteriology, Mycology, Parasitology, Virology, Molecular Multiplex discipline.
SAR SARS-CoV-2	Up to 6	Clinical	Swabs, plasma	SARS-CoV-2 RNA/Antigens/Antibodies
IPT Immuno- suppressant	12	Clinical	Blood and plasma.	Routine quantification of Immunosuppressant drugs including Ciclosporin; Tacrolimus; Sirolimus; Everolimus; Mycophenolic Acid.
TDM Therapeutic Drugs	12	Clinical	Blood, serum and urine.	Routine quantification of therapeutic drugs including Anti-epileptics; Cardiac; Analgesics; Substance abuse treatments; Psychoactives; Antibiotics; Antifungals, Anti-hypertensive, Smoking-related.
TOX Toxicology	12	Clinical	Blood, serum and urine.	Drug and alcohol determination; case studies.
DAU Drugs of Abuse in Urine	4	Clinical	Urine from volunteers and known drug users.	Mixtures of drugs and/or their metabolites from six major classes.
DOF Drugs in Oral Fluid	4	Clinical	Oral fluid from volunteers and known drug users.	Mixtures of drugs and/or their metabolites from six major classes.
DAH** Drugs of Abuse in Hair	4	Clinical	Human hair.	Mixtures of drugs and/or their metabolites from six major classes.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

** Please note that the DAH scheme is currently not included in our scope of accreditation.

CLS

Clinical Laboratory

The LGC AXIO Clinical Laboratory Scheme (CLS) includes a full range of programmes for laboratories performing analysis of patient samples. These ISO/IEC 17043 accredited programmes will assist laboratory professionals in monitoring laboratory performance and will provide an independent assessment of measurement quality. The CLS scheme will also provide valuable information to participants on current technical issues and methodologies relating to clinical laboratory science.

Test materials mimic clinical specimens in a wide array of samples that are included in the

CLS scheme, from the Chemistry, Haematology, Immunology, Bacteriology, Mycobacteriology, Mycology, Parasitology, Virology and Molecular Multiplex disciplines.

With a wide array of programmes covering all areas of the clinical laboratory, the CLS scheme supports laboratories' crucial role in helping healthcare providers diagnose and treat patients.

The operation of our CLS scheme is supported by an Advisory Group.

Test Material*	Analyte*		
Bacteriology	Blood culture, CSF culture, Ear/Eye culture, Group B, Strep culture, N. gonorrhoeae culture, Sputum, Stool culture, Throat culture, Urine colony count, Urine culture, Wound culture, Susceptibility Testing, Bordetella pertussis, Bordetella Parapertussis, Bordetella parapertussis, C. difficile Toxin, C. difficile Antigen, Chlamydia trachomatis, Neisseria gonorrhoeae, Gram Stain Interpretation, Leukocytes, Stain Quality, Sputum Specimen Quality, Bacterial vaginosis, Nugent Score, Group B Strep, Legionella pneumophila Antigen, Methicillin-Resistant Staphylococcus aureus culture, Methicillin-Resistant Staphylococcus aureus, Staphylococcus aureus, Mycoplasma pneumoniae, Streptococcus pneumoniae Antigen, Group A Strep, Group C/G Strep, Vancomycin-Resistant Enterococcus.		
Chemistry	Alcohol, Ammonia, Blood gas, Blood oximetry, Cardiac markers, Immunoassays, Glycosylated Haemoglobin, Neonatal Bilirubin, Spinal Fluid chemistry, Tumour markers, Urine chemistry.		
Haematology	Advanced Blood Cell ID, Blood cell ID and differential, Basic haematology, Coagulation, part Diff. CBCX, Microscopy, Sedimentation rate, Urinalysis and HCG.		
Immunology/SerologyHepatitis serology, HIV serology, High Sensitivity CRP, Infectious Immunoproteins C3 and C4, Rubella, SARS-CoV-2 serology, Syph Thyroid antibodies.			
Mycobacteriology	Acid Fast Bacilli Smear, Mycobacterium tuberculosis complex; Rifampin resistance, Mycobacteriology culture ID.		
Мусоlоду	Mycology culture ID.		
Parasitology	Blood parasite ID, Trichomonas vaginalis, Cryptosporidium Antigen; Giardia Antigen.		
Virology	HPV; HPV genotyping, RSV Antigen; Influenza A, Antigen; Influenza B Antigen; Influenza A or B Antigen; Adenovirus Antigen, Rotavirus Antigen, SARS-CoV-2 (molecular and serology).		
Molecular Multiplex Blood Pathogen panel (multiplex)	Acinetobacter baumannii, Enterobacteriaceae, Enterobacter cloacae complex, Enterococcus sp., Escherichia coli, Haemophilus influenza, Klebsiella oxytoca, Klebsiella pneumoniae, Listeria monocytogenes, Neisseria meningitidis, Proteus sp., Pseudomonas aeruginosa, Staphylococcus sp., Staphylococcus aureus, Streptococcus sp., Streptococcus agalactiae, Streptococcus pneumoniae, Streptococcus pyogenes, Candida albicans, Candida glabrata, Candida krusei, Candida parapsilosis, Candida tropicalis, Resistance Genes (mecA, vanA/B and KPC).		

CLS Continued	ł
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Gastrointestinal panel (multiplex)	Campylobacter sp., C. difficile toxin A/B, Enteroaggregative E. coli (EAEC), Enteropathogenic E. coli (EPEC), Enterotoxigenic E. coli (ETEC) lt/st, E. coli O157, Plesiomonas shigelloides, Salmonella sp., Shiga-like toxin-producing E. coli (STEC) stx1/stx2, Shigella/Enteroinvasive E. coli (EIEC), Yersinia enterocolitica, Vibrio sp., Vibrio cholerae, Cryptosporidium, Cyclospora cayetanensis, Entamoeba histolytica, Giardia lamblia, Astrovirus, Sapovirus, Norovirus GI/GII, Rotavirus A, Sapovirus.
Meningitis panel (multiplex)	Escherichia coli K1, Haemophilus influenza, Listeria monocytogenes, Neisseria meningitides, Streptococcus agalactiae, Streptococcus pneumoniae, Cytomegalovirus, Enterovirus, Herpes simplex virus 1, Herpes simplex virus 2, Human herpesvirus 6, Human parechovirus, Varicella zoster virus, Cryptococcus neoformans/gatti.
Pneumonia panel (multiplex)	Acinetobacter (ACB) complex, Chlamydia pneumoniae, Enterobacter cloacae complex, Escherichia coli, Haemophilus influenzae, Klebsiella aerogenes, Klebsiella oxytoca, Klebsiella pneumoniae group, Legionella pneumophila, Moraxella catarrhalis, Mycoplasma pneumoniae, Proteus sp., Pseudomonas aeruginosa, Serratia marcescens, Staphylococcus aureus, Streptococcus agalactiae, Streptococcus pneumoniae, Streptococcus pyogenes, Adenovirus, Coronavirus, Human Metapneumovirus (hMPV), Human Rhinovirus / Enterovirus, Influenza A, Influenza B, Parainfluenza Virus, Respiratory Syncytial Virus, Resistance Genes (CTX-M, IMP, KPC, mecA/C & MREJ, NDM, OXA-48, VIM).
Respiratory panel (multiplex)	Bordetella holmesii, Bordetella parapertussis / bronchiseptica, Legionella pneumophila, Bordetella pertussis, Chlamydophila pneumoniae, Mycoplasma pneumoniae, Adenovirus, Coronavirus HKU1, Coronavirus NL63, Coronavirus 229E, Coronavirus OC43, Human Metapneumovirus (hMPV), Human Rhinovirus/ Enterovirus, Influenza A, Influenza A/H1, Influenza A/H3, Influenza A/ H1-2009, Influenza B, Parainfluenza 1, Parainfluenza 2, Parainfluenza 3, Parainfluenza 4, Respiratory Syncytial Virus.

* Please note that the accredited programmes within our CLS scheme are accredited to ISO/IEC 17043 by the American Association for Laboratory Accreditation (A2LA) or the United Kingdom Accreditation Service (UKAS). For accreditation status please see current application form/scheme description.

SAR SARS-CoV-2

The SARS-CoV-2 Clinical Scheme (SAR) is the Proficiency Testing answer from AXIO to the Global COVID-19 pandemic.

Governments, health bodies, hospitals, virology labs and indeed most of the world's population find themselves locked in a war with the novel virus COVID-19. LGC is now directly involved in COVID-19-related work, from supporting diagnostic kit manufacturers, diagnostic testing and clinical research to providing quality assurance tools to ensure reliability of measurements being made. As increasing numbers of diagnostic methods are made available in the global fight against COVID-19, it is essential that laboratories ensure that their application of methods and subsequent results are reliable and accurate using external quality assurance tools, including proficiency testing.

Test materials include swab and plasma samples, to meet all Clinical laboratories and Point of Care Testing requirements.

Microbiology

Test Material*	Analyte*
Liquid sample simulating nasopharyngeal swab	SARS-CoV-2 Molecular. SARS-CoV-2 Antigen.
Dry swab	SARS-CoV-2 Molecular.
Plasma samples	SARS-CoV-2 Antibodies (IgA, IgG, IgM, Total Ab).

IPT

Immunosuppressant

The LGC AXIO Immunosuppressant proficiency testing scheme provides independent performance assessment for laboratories performing quantification of immunosuppressant drugs in blood and plasma.

Immunosuppressant drugs are a class of drugs that suppress, or reduce, the strength of the body's immune system.

In addition to being used to prevent organ rejection, they are often used to treat autoimmune disorders such as lupus, psoriasis, and rheumatoid arthritis.

Regular blood tests are essential for monitoring therapeutic levels and whether dosage changes are needed.

To successfully make these informed decisions laboratories need to demonstrate that drug measurements are reliable, reproducible and accurate.

The operation of the LGC AXIO IPT scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field.

The scheme reports on the performance of U.K. participants (who have clinical responsibilities) to the National Quality Assurance Advisory Panels for Chemical Pathology.

Test Material*	Analyte*	
Human blood	Ciclosporin/Tacrolimus, Everolimus, Sirolimus.	
Plasma	Mycophenolic acid.	

TDM

Therapeutic Drugs Monitoring

The LGC AXIO Therapeutic Drugs Monitoring (TDM) proficiency testing scheme provides independent performance assessment for the routine quantification of a wide range of anti-epileptic and other therapeutic drugs.

TDM is a measurement of specific drug concentration levels at timed intervals in patients, usually through blood/serum samples, and is necessary where control of drug concentrations is required to achieve optimum treatment for the patient, or where there is a narrow range between the therapeutic and toxic levels. The operation of the LGC AXIO TDM scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field. The scheme reports on the performance of U.K. participants (who have clinical responsibilities) to the National Quality Assurance Advisory Panels for Chemical Pathology.

Test Material*	Analyte*		
Therapeutic drug mixture (lyphilised human serum)	Carbamazepine; CBZ-epoxide; Carbamazepine+CBZ-epoxide; Clonazepam; Lamotrigine; Phenytoin; Ethosuximide; Phenobarbitone; Primidone; Valproate; Caffeine; Digoxin; Lithium; Theophylline; Methotrexate; TD-Amikacin; TD-Gentamicin; Clobazam, Norclobazam. TD-Tobramycin; TD- Vancomycin.		
Anti-epileptic drugs (lyophilised human serum)	Brivaracetam, Felbamate, Gabapentin, Lacosamide, Levetiracetam, OH-oxcarbazepine, Pregabalin, Perampanel, Retigabine (Ezogabine), Rufinamide, Tiagabine, Topiramate, Vigabatrin, Zonisamide.		
Cardiac drugs (lyophilised human serum)	Amiodarone, Desethylamiodarone, Flecainide.		
Analgesic mixture (lyophilised human serum)	Diclofenac, Ibuprofen, Tramadol.		
Substance abuse & treatment (lyophilised human serum)	Buprenorphine, EDDP, Methadone, Norbuprenorphine.		
Psychoactive drugs (lyophilised human serum, new born calf serum)	Amisulpride, Amitriptyline/Nortriptyline, Aripiprazole/Dehydroaripiprazole, Citalopram/ Norcitalopram, Clomipramine/Norclomipramine, Clozapine/Norclozapine, Doxepin/Nordoxepin, Dothiepin/Northiaden, Duloxetine, Escitalopram, Fluphenazine, Fluvoxamine, Haloperidol, Imipramine/Desipramine, Fluoxetine/Norfluoxetine, Maprotiline/Normaprotiline, Mianserin, Mirtazapine/Normirtazapine, Olanzapine, Paroxetine, Perphenazine, Quetiapine/Norquetiapine, Risperidone/HO-risperidone, Sertraline/Norsertraline, Sulpiride, Thioridazine, Trazodone, Trimipramine/Nortrimipramine, Venlafaxine/ Norvenlafaxine, Ziprasidone, Zuclopenthixol. Brexpiprazole, Lurasidone, Sertindole, Iloperidone, Vortioxetine; Meclobemide		
Psychostimulants (lyophilised human serum)	Atomoxetine, Methylphenidate. Ritalinic Acid.		
Non-smoking compliance (lyophilised human serum)	Cotinine, Nicotine.		
Antibiotics and Antifungals (liquid human serum)	Amikacin, Gentamicin, Teicoplanin, Tobramycin, Vancomycin, Antibiotics, Antifungals.		
Anti-hypertensive drugs (urine)	Drug identification.		
Tricyclic Antidepressant Screening in Serum	Amitriptyline, Trimipramine, Clomipramine, Doxepin, Nortriptyline, Nortrimipramine, Norclomipramine, Nordoxepin, Imipramine, Maprotiline, Promazine, Dothiepin (Dosulepin), Desipramine, Normaprotiline, Chlorpromazine.		

TOX

Toxicology

The LGC AXIO Toxicology (TOX) proficiency testing scheme is designed to provide an independent performance assessment of laboratories undertaking clinical and/or forensic toxicological analytical services.

Toxicological analyses may be undertaken on biological specimens, predominantly blood, serum and urine. In general, analyses are undertaken for a range of substances including prescription and nonprescription drugs, illicit drugs and alcohol. For laboratories performing these analyses, participation in TOX can provide confidence that results are meaningful and accurate. The operation of our TOX scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field. The scheme reports on the performance of U.K. participants (who have clinical responsibilities) to the National Quality Assurance Advisory Panels for Chemical Pathology.

Test Material*	Analyte*		
Metanephrines in Plasma	Metanephrine, Normetanephrine, 3-methoxytyramine.		
Human serum	Ethanol, Paracetamol (Acetaminophen), Salicylic acid.		
Human blood	Carboxyhaemoglobin, Ethanol, Paracetamol (Acetaminophen), Salicylic acid.		
Urine	Ethanol.		
Lyophilised urine	Gammahydroxybutyrate.		
Whole blood	Acetone, Ethanol, Ethylene glycol, Isopropyl alcohol, Methanol.		
Human serum & urine	Toxicology case studies include various analytes with clinical or forensic scenario.		
Whole blood toxicology	Test materials contain analytes which are pre-defined by our Advisory Group and the requests of participants.		
Lyophilised human serum	Diazepam, Nitrazepam, Nordazepam, Oxazepam, Temazepam. Zaleplon, Zolpidem, Zopiclone. Alprazolam, Bromazepam, Clonezepam, Lorazepam, Midazolam, Etizolam.		

DAU

Drugs of Abuse in Urine

The LGC AXIO Drugs of Abuse in Urine (DAU) scheme is designed to provide an independent performance assessment of laboratories and clinics that provide routine services for detection of drugs of abuse in urine.

Human urine has been used for many years to detect the presence of illicit drugs. Urine testing may be requested for a variety of reasons, including health care, occupational monitoring, insurance screening, legal and forensic purposes. Errors in tests could have severe consequences, such as dismissal from work or miscarriage of justice. Laboratories and clinics are encouraged to participate in suitable PT/EQA schemes to ensure the highest standard of drug testing is achieved through independent assessment of measurement quality.

The operation of the LGC AXIO DAU scheme is supported by an Advisory Group consisting of members of professional bodies, scheme participants, and others experienced in the field. The scheme reports on the performance of U.K. participants (who have clinical responsibilities) to the National Quality Assurance Advisory Panels for Chemical Pathology.

Test Material*	Analyte*
Urine test materials obtained from volunteers & known drug users which regularly contain mixtures of drugs & their metabolites	Amfetamines and stimulants, Cannabinoids, Cocaine and metabolites, Ethyl glucuronide, Ethyl sulfate, Gamma-Hydroxybutyrate (GHB), Minor tranquillizers, Non-opiate narcotics, Opiates. Other current drugs and/or metabolites may also be included.

DOF

Drugs in Oral Fluid

The LGC AXIO Drugs in Oral Fluid (DOF) scheme provides performance assessment for laboratories and clinics who provide analytical services for drugs in oral fluid. Samples are provided as real human oral fluid.

Advances in technology have enabled oral fluid testing for the presence of many drugs. Oral fluid collection is often less invasive, relatively easy to perform, and, in forensic situations, can be achieved under close supervision to prevent adulteration or substitution of the samples.

Drug testing is extremely accurate and reliable when all aspects of the testing process are carried out correctly. However, if poor procedures and inadequate testing methods are utilised, the information obtained may be very misleading and inaccurate.

To minimise this risk, laboratories should perform routine quality control tests and participate in suitable PT/EQA schemes.

The operation of our DOF scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field. The scheme reports on the performance of U.K. participants (who have clinical responsibilities) to the National Quality Assurance Advisory Panels for Chemical Pathology.

Test Material*	Analyte*
Oral fluid test materials obtained from volunteers & known drug users which regularly contain mixtures of drugs & their metabolites from six major classes	Amfetamines and stimulants, Cannabinoids, Cocaine and metabolites, Minor tranquillizers, Non- opiate narcotics, Opiates, Other current drugs and/or metabolites may also be included.

DAH**

Drugs of Abuse in Hair

The LGC AXIO Drugs of Abuse in Hair (DAH) scheme is suitable for laboratories performing forensic analysis of hair for drugs of abuse and provides an independent assessment of measurement quality.

Drugs and their metabolites become incorporated in hair when ingested. An analysis for these drug residues can provide a useful assessment of an individual's intake of drugs over a prolonged period of time.

The detection time of drugs in hair is significantly greater than other samples commonly tested such as blood, urine and saliva.

Advantages of analysing hair samples for the presence of drugs include a large window of detection,

the assessment of the regularity of drug use (or continued abstinance) and sample stability.

Test materials provided consist of real cut (2–3mm pieces) human hair that has been declared free from common drugs of abuse.

The analytes are then incorporated by a method that includes soaking. Drugs (and/or metabolites) from six major classes are included during the scheme year.

The operation of our DAH scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field.

Test Material*	Analyte*
Human hair	Identification and quantification of Amfetamines and stimulants, Benzodiazepines, Cannabinoids Cocaine and metabolites, Opiates, Alcohol markers (Ethyl glucuronide). Other current drugs and/or metabolites may also be included.

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description.

** Please note that the DAH scheme is currently not included in our scope of accreditation.

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Forensic

- 64 **Quartz** Forensic Blood Toxicology
- 65 **FAE** Forensic Analysis for Explosives
- 66 **FIRMS** Forensic Isotope Ratio Mass Spectrometry

Forensic Scheme Selector

Scheme	Distribution per year	Test	Test Material Matrix*	Analyte Group*
QUARTZ Forensic Blood Toxicology	4	Toxicology and Case Study	Blood and urine.	Quantification/Identification of drugs and psychoactive substances, Alcohol Technical Defense case study.
FAE Forensic Analysis for Explosives	1	Chemical	Range of relevant materials.	Explosive, trace explosives and unknowns.
FIRMS Forensic Isotope Ratio Mass Spectrometry	2	Chemical	Range of products in sealed amber vials.	Variations in isotope ratios.

QUARTZ

Forensic Blood Toxicology

The LGC AXIO QUARTZ scheme is aimed at laboratories undertaking forensic toxicology and coroners work. Test analytes and case scenarios included in the scheme are discussed regularly with the Advisory Group.

The scheme offers the choice of a number of test materials comprising blood and urine spiked with drugs and metabolites. Case scenarios provided for interpretation covered include sudden and suspicious deaths, drug facilitated sexual assaults (DFSA), impaired driving and other relevant cases. There is an Alcohol Technical Defence (ATD) exercise that allows practitioners to demonstrate competency in performing these types of calculations.

Participation in QUARTZ will provide independent performance assessment and confidence that results are meaningful and accurate. Consistent good performance will allow laboratories to demonstrate to third parties, customers, regulators and accreditation bodies the quality of their results.

The operation of our QUARTZ scheme is supported by an Advisory Group consisting of members of the professional bodies, scheme participants, and others experienced in the field.

Test Material*	Analyte*
Blood	Forensic drug identification, quantification and case study covering the following: Anaesthetics, Anticholinergics, Anticonvulsants, Antidepressants, Antihistamines, Antipsychotics, Barbiturates, Benzodiazepines, Cannabinoids, Carboxyhaemoglobin, Cardiovascular drugs, Erectile dysfunction, Hypnotic drugs, Non steroidal anti-Inflammatory analgesics, Opioid analgesics, Stimulants.
	Abuse and prescribed drug quantification of commonly encountered drugs (alternate rounds of drugs of abuse and prescription drugs).
	Alcohol in blood quantification of Ethanol and Fluoride.
	Interpretation of a case study (with analytical data, and a scenario or witness statement) to determine the potential blood alcohol level in a given time (Alcohol Technical Defence).
	Quantification of up to 4 New Psychoactive Substances (NPS).
	Identification of one of the most common synthetic Cannabinoids.
	Quantification of Oxycodone; Pregabalin; MDMA; Mirtazapine ; Loratidine; Gabapentin; Quetiapine; Valproate.
Urine	Identification of up to 4 drugs or metabolites relevant to forensic toxicology.
	Identification of Synthetic Cannabinoids.
	Identification of New Psychoactive Substances.

FAE

Forensic Analysis for Explosives

The LGC AXIO Forensic Analysis for Explosives (FAE) scheme aims to provide information depicting realistic scenarios and test materials to allow participating laboratories to demonstrate the competent analysis of trace explosives and associated chemicals.

The European Network of Forensic Science Institute (ENFSI) Working Group on Explosives provides technical advice to LGC AXIO Proficiency Testing on the organisation of this scheme. Forensic examination for explosives may include the analysis of raw materials found at a scene, the identification of potentially explosive substances and the forensic identification of post-blast explosive residues.

Participation in FAE will allow laboratories to monitor performance and compare it with that of peers against the international standards ISO/IEC 17025 and ISO/IEC 17020.

Test Material*	Analyte*	
Range of relevant test materials	Explosives, trace explosives and unknowns.	

FIRMS

Forensic Isotope Ratio Mass Spectrometry

Isotope Ratio Mass Spectrometry (IRMS) is a specialised technique that precisely measures small differences in the abundances of isotopes such as 2H/1H, 13C/12C, 15N/14N and 18O/16O. Subtle variations to the 'natural' abundance of these isotopes may be introduced during biological, chemical and physical processes.

These changes enable the differentiation of materials that otherwise may not be separated such that IRMS

is used in many fields, such as archeology, medicine, geology, food authenticity and Forensic.

Participation in the LGC AXIO FIRMS scheme will help laboratories demonstrate competence in this analytical technique. The scheme is operated by LGC AXIO Proficiency Testing and is supported by the FIRMS Network which provides input for the choice of test materials and scheme performance.

Test Material* Analyte*

Range of products Variations in isotope ratios. in sealed amber vials

* The full range and availability of test materials and analytes is determined on an annual basis and may be added or removed. For accredited and non-accredited status please see current application form/scheme description. LGC is the accredited provider of the PT scheme.

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Index of Analytes

Analyte	Scheme ID	Matrix	Sample
% reduction in microbial load	COSMETICS	Cream	30
(-)-Caryophyllene oxide	CANNABIS	Hemp oil	2
		Cannabis flower	12
(-)-α-Bisabolol	CANNABIS	Hemp oil	2
		Cannabis flower	12
(1S)-(-)-β-Pinene	CANNABIS	Hemp oil	2
		Cannabis flower	12
1,1,1,2-Tetrachloroethane	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
1,1,1-Trichloroethane	AIR	Charcoal filled glass sorbent tubes (workplace air)	6
	AQUACHECK	Synthetic effluent	19B
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
	PHARMASSURE	Residual solvents	2E
1,1,2,2-Tetrachloroethane	CONTEST	Standard solutions & soil	25
1,1,2-Trichloroethane	CONTEST	Standard solutions & soil	25
1,1-Dichloroethane	CONTEST	Standard solutions & soil	25
	PHARMASSURE	Residual solvents	2E
1,1-Dichloroethylene	CONTEST	Standard solutions & soil	25
1,1-Dichloropropylene	CONTEST	Standard solutions & soil	25
1,2,3-Trichlorobenzene	AQUACHECK	Clean water	56
		Synthetic effluent	19B
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
1,2,3-Trichloropropane	AQUACHECK	Clean water	55
	CONTEST	Standard solutions & soil	25
1,2,4-Trichlorobenzene	AQUACHECK	Clean water	56
		Synthetic effluent	19B
		Groundwater	7B
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
1,2,4-Trimethylbenzene (TMB)	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
1,2-Dibromo-3-chloropropane	AQUACHECK	Clean water	55
	CONTEST	Standard solutions & soil	25
1,2-Dibromoethane	AQUACHECK	Clean water	55
	CONTEST	Standard solutions & soil	25
1,2-Dichlorobenzene	CONTEST	Standard solutions & soil	25

Analyte	Scheme ID	Matrix	Sample
1,2-Dichloroethane	AQUACHECK	Synthetic effluent	18A
		Synthetic effluent	19B
		Water framework directive	34H
		Groundwater	6A
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
	PHARMASSURE	Residual solvents	2E
1,2-Dichloropropane	AQUACHECK	Clean water	55
	CONTEST	Standard solutions & soil	25
1,3,5-Trichlorobenzene	AQUACHECK	Clean water	56
		Synthetic effluent	19B
		Groundwater	7B
1,3,5-Trinitrobenzene	AQUACHECK	Clean water	65
1,3-Dichlorobenzene	CONTEST	Standard solutions & soil	25
1,3-Dichloropropane	CONTEST	Standard solutions & soil	25
1,3-Dinitrobenzene	AQUACHECK	Clean water	65
1,4-Dichlorobenzene	AQUACHECK	Clean water	55
1,4-Dichlorobenzene	CONTEST	Standard solutions & soil	25
11-Deoxycortisol	CLS	Lyophilized serum	СНМ
12:0 Lauric acid	QFCS	Oil or fat	778
		Grated cheese	800
1-25-(OH) Vitamin D (D3)	CLS	Lyophilized serum	IAS
14:0 Myristic acid	QFCS	Oil or fat	778
14:1 n-5 Myristoleic acid	QFCS	Oil or fat	778
15 minute luminescent bacteria IC50 tests	AQUACHECK	Ecotoxicology	50
15:0 Pentadecanoic acid	QFCS	Oil or fat	778
16:0 Palmitic acid	QFCS	Oil or fat	778
16:1 Palmitoleic acid	QFCS	Oil or fat	778
17:0 Heptadecanoic acid	QFCS	Oil or fat	778
17-OH-Progesterone	CLS	Lyophilized serum	СНМ
18:0 Stearic acid	QFCS	Oil or fat	778
18:1 cis n-9 Oleic & cis 18:1 n-11 Vaccenic (sum)	QFCS	Oil or fat	778
18:1 cis-9 Oleic acid	QFCS	Oil or fat	778
18:2 n-6 Linoleic acid	QFCS	Oil or fat	778
18:3 n-3 Linolenic acid	QFCS	Oil or fat	778
2 Chloro Ethanol	QFCS	Sesame product	857
		Spice product	868
2 + 3 Methylbutanol	BAPS	Lager	2L

Analyte	Scheme ID	Matrix	Sample
2,2,4,4,5,6-Hexabromodiphenylether (BDE	AQUACHECK	Water framework directive	34H
154)		Water framework directive	341
2,2,4,4,5-Pentabromodiphenylether (BDE	AQUACHECK	Water framework directive	34H
99)		Water framework directive	341
2,2-Dichloropropane	CONTEST	Standard solutions & soil	25
2,2-Dichloropropionic acid	AQUACHECK	Clean water	44
2,3,6-TBA	AQUACHECK	Groundwater	8
		Synthetic effluent	20
2,4,4-Tribromodiphenylether (BDE 28)	AQUACHECK	Water framework directive	34H
		Water framework directive	341
2,4,5-T	AQUACHECK	Groundwater	8
		Synthetic effluent	20
2,4,5-TP (Fenoprop)	AQUACHECK	Groundwater	8
		Synthetic effluent	20
2,4,5-Trichlorophenol	AQUACHECK	Groundwater	06B
	-	Synthetic effluent	18B
2,4,6-Trichlorophenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
2,4-D	AQUACHECK	Groundwater	8
		Synthetic effluent	20
2,4-DB	AQUACHECK	Groundwater	8
		Synthetic effluent	20
2,4-Dichlorophenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
2,4-Dimethylphenol	AQUACHECK	Groundwater	06B
		Synthetic effluent	18B
2,4-Dinitrotoluene	AQUACHECK	Clean water	65
2-(4-tert-butylbenzyl) propionaldehyde	COSMETICS	Cosmetic, fragrance	35
2,4-Toluenediamine	QFCS	Simulant	873
2,5-Dimethylphenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
2,6-Dichlorophenol	AQUACHECK	Groundwater	O6B
		Synthetic effluent	18B
2,6-Dinitrotoluene	AQUACHECK	Clean water	65

Analyte	Scheme ID	Matrix	Sample
2+3 Methylbutanol	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
20:0 Eicosanoic arachidic acid	QFCS	Oil or fat	778
		Mustard	813
22:0 Behemic acid	QFCS	Oil or fat	778
22:1 Erucic acid (cis-13-docosenoic acid)	QFCS	Oil or fat	778
22:1 Methyl erucate	QFCS	Oil or fat	778
234Uranium	AQUACHECK	Clean water	42
235Uranium	AQUACHECK	Clean water	42
238Uranium	AQUACHECK	Clean water	42
239Plutonium	AQUACHECK	Clean water	42
25-OH Vitamin D	CLS	Lyophilized serum	IAS
2-Amino-4,6-dinitrotoluene	AQUACHECK	Clean water	65
2-Chlorophenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
2-Chlorotoluene	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 19
2-Glyceryl monopalmitate	QFCS	Olive oil	791
2-Methylbutanol	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Lager	2L
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
3-Methyl-4-(2,6,6-tri-methyl-2-cyclohexen- 1-yl)-3-buten-2-one	COSMETICS	Cosmetic, fragrance	35
2-Methylphenol (o-cresol)	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
2-Nitrotoluene	AQUACHECK	Clean water	65

Analyte	Scheme ID	Matrix	Sample
2-Phenethyl Acetate	DAPS	Non chill filtered whisky	Group B, B5
2-Phenethyl Ethanol	DAPS	Non chill filtered whisky	Group B, B5
3,5 Stigmastadienes	QFCS	Extra virgin olive oil	790
3,5-Dimethylphenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
3.5 Stigmastadienes	QFCS	Olive oil	791
30 min luminescent bacteria (other) IC50 tests	AQUACHECK	Ecotoxicology	50
3-Bromophenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
3-Methylbutanol	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
	BAPS	Lager	2L
3-Methyl-4-(2,6,6-tri-methyl-2-cyclohexen- 1-yl)-3-buten-2-one	COSMETICS	Cosmetic, fragrance	35
3-Methylphenol (m-cresol)	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
3-Nitrotoluene	AQUACHECK	Clean water	65
4,4´-Methylenedianiline	QFCS	Simulant	873
4:0 Butyric acid	QFCS	Grated cheese	800
4-Amino-2,6-dinitrotoluene	AQUACHECK	Clean water	65
4-Chloro-3-Methylphenol	AQUACHECK	Groundwater	06B
		Synthetic effluent	18B
4-Chlorophenol	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
4-Chlorotoluene	CONTEST	Standard solutions & soil	25
4-Isopropyltoluene	CONTEST	Standard solutions & soil	25
4-Methylphenol (p-cresol)	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
4-Nitrotoluene	AQUACHECK	Clean water	65
4-Phenylcycohexene (4-PCH)	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
5-HMF	DAPS	Scotch whisky	Group B, B1

Analyte	Scheme ID	Matrix	Sample
6-Monoacetylmorphine screen	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
ABV (qualitative)	BAPS	Alcohol free beer	7A
		Low alcohol beer	7B
ABV (quantitative)	BAPS	Alcohol free beer	7A
		Low alcohol beer	7B
Accelerated oxidation test (Rancimat) at 120°C	QFCS	Frying oil	796
ACE	CLS	Lyophilized serum	СНМ
Acenaphthene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Acenaphthylene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Acesulfame K	QBS	Carbonated drinks (degassed)	516B
		Dilutable and ready to drink materials	517B
Acesulfame K (E950)	QFCS	Liquid	761
Acetal	DAPS	Bourbon	B2-A
		Dark rum	В2-В
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3

Analyte	Scheme ID	Matrix	Sample
Acetaldehyde	AIR	Glass fibre filter 25mm diameter (workplace air)	8
	BAPS	Lager	2L
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Acetamiprid	AQUACHECK	Groundwater	66
Acetate	AQUACHECK	Waste water	63
Acetic acid	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
	QFCS	Food product	863
Acetone	PHARMASSURE	Residual solvents	2E
	ТОХ	Blood	ТАК
		Serum	TAS
Acetone (Ketones)	CLS	Serum	ALM
Acetonitrile	CONTEST	Standard solutions & soil	25
Acid and Base titration	PHARMASSURE	Acid solution	1B
Acid detergent fibre (ADF)	AFPS	Animal feed	1
Acid Fast Bacilli Smear	CLS	Glass slides	AFB
Acid insoluble ash	QFCS	Ground pepper	815
		Garlic powder	861
		6 Herbs	879
Acid Number	OIL	#2 Diesel fuel	2
		Service engine oil	6
Acid Number – Total (potentiometric)	OIL	Crude oil	4
Acid Number (potentiometric)	OIL	Engine oil lubricants	5
Acid Phosphatase, total	CLS	Lyophilized serum	СНМ
Acidity	QFCS	Cake	793
		Bread	776

Analyte	Scheme ID	Matrix	Sample
Acidity (as Citric acid monohydrate)	QBS	Fruit juice	510
		Carbonated drinks	515
		Dilutable and ready to drink materials	517A
Acidity (total)	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		White or rosé wine	Group D, D1
		Ready to drink	Group E, El
		Liqueur	Group E, E2
		Ciders	Group C, Cl
		Red wine	Group D, D2
	QFCS	Vinegar	822
		Coffee	802
		Ketchup	811
		Mustard	813
		Jam or marmalade	817
		Tomato paste/purée	783
		Relish	858
		Candy	859
		Chewing gum	860
Acinetobacter baumannii	CLS	Liquid samples	BCP
Acinetobacter calcoaceticus-baumannii	CLS	Liquid samples	BCP
(ACB) complex		Liquid samples	PNE
Acinetobacter species	CLS	Liquid samples	BCP
Acoustic testing (EN71-1)	TOYTEST	Toy product	13
Acrylamide	AQUACHECK	Spiking solution	37
	QFCS	Snacks (e.g. Potato crisps)	788
		Coffee	881
ACTH	CLS	Lyophilized serum	IAS

Analyte	Scheme ID	Matrix	Sample
Actual alcoholic strength	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
		Ciders	Group C, Cl
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Adenovirus	CLS	Liquid samples	PNE
		Liquid samples	RSP
		Liquid samples	VIR
Adenovirus F 40/41	CLS	Liquid samples	GIP
Advanced titration (potentiometric, non- aqueous)	PHARMASSURE	Sample format will depend upon test type	6J
Aerobic mesophilic bacteria (detection)	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
Aerobic mesophilic bacteria (enumeration)	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
Aerobic psychrotrophs (enumeration)	QMAS	Lyophilised meat	758
	QMS	Oatmeal	25
		Oatmeal	25
Aflatoxin Bl	AFPS	Animal feed	5
	CANNABIS	Hemp oil	3
	QFCS	Nuts	779
		Rice	845
		Chilli powder	794
		Dried fruit	804
		Ground corn	867

Analyte	Scheme ID	Matrix	Sample
Aflatoxin B2	AFPS	Animal feed	5
	CANNABIS	Hemp oil	3
	QFCS	Nuts	779
		Rice	845
		Chilli powder	794
		Dried fruit	804
		Ground corn	867
Aflatoxin G1	AFPS	Animal feed	5
	CANNABIS	Hemp oil	3
	QFCS	Nuts	779
		Rice	845
		Chilli powder	794
		Dried fruit	804
		Ground corn	867
Aflatoxin G2	AFPS	Animal feed	5
	CANNABIS	Hemp oil	3
	QFCS	Nuts	779
		Rice	845
		Chilli powder	794
		Dried fruit	804
		Ground corn	867
Aflatoxin M1	QDCS	Freeze dried milk	60
		Soft cheese	62
Aflatoxins (Total)	CANNABIS	Hemp oil	3
	QFCS	Rice	845
		Chilli powder	794
		Dried fruit	804
		Ground corn	867
	AFPS	Animal feed	5
Aglycones (Total)	PHARMASSURE	Gingko biloba	18
Alachlor	AQUACHECK	Groundwater	8
		Clean water	53
		Water framework directive	34C
Alanine	QFCS	Infant formula powder	823
Albumin	CLS	Lyophilized serum	СНМ
		Simulated CSF	SFC
Albumin / Creatinine Ratio (ACR)	CLS	Urine	UC
Albumin/Microalbumin	CLS	Urine	UC

Analyte	Scheme ID	Matrix	Sample
Alcohol	AIR	Tenax TA filled sorbent tubes (workplace air)	22
	COSMETICS	Hand Sanitizer	33
	DAPS	Fermented wort	Group A, Al
		Simulated wort	Group A, A2
	QUARTZ	Blood	4
Alcohol by volume	BAPS	Ale	3
		Ale (bitter)	1B
		Lager	۱L
Alcohol in blood alcohol technical defence (ATD)	QUARTZ	Paper exercise	5
Aldosterone	CLS	Lyophilized serum	СНМ
Aldrin	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Alicin	QFCS	Garlic powder	861
Aliphatic	AIR	Tenax TA filled sorbent tubes (workplace air)	22
Alkali reserve	CONTEST	Standard solution	Group A, 29
Alkaline Phosphatase (ALP)	CLS	Lyophilized serum	СНМ
Alkalinity	AQUACHECK	Marine water	61
		Hard surface water	ìН
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
Alkalinity (Total)	AQUACHECK	Waste water	64
Allura Red (E129)	QFCS	Liquid	763
Almond	QFCS	Rice flour	808
Alpha Amylase	MAPS	Brewers and distillers malt	1
		Malt	6
		Wheat	7
Alpha Endosulphan	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Alpha Hexachlorocyclohexane	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
Alpha1-acid-glycoprotein	CLS	Lyophilized serum	IPR
Alphal-antitrypsin (AAT)	CLS	Lyophilized serum	IPR

Analyte	Scheme ID	Matrix	Sample
Alpha2-macroglobulin	CLS	Lyophilized serum	IPR
Alpha-fetoprotein (AFP)	CLS	Lyophilized serum	СНМ
Alprazolam	тох	Serum	BNBZ
ALT	CLS	Lyophilized serum	СНМ
Aluminium	AQUACHECK	Natural water	4
		Synthetic effluent	12
		Industrial wastewater	17C
		Groundwater	4G
	BAPS	Lager	2L
	OIL	Service engine oil	6
	QBS	Soft drink	519
Ametryn	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Amfetamine	QUARTZ	Blood	3
Amfetamines and Stimulants	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Amfetamines screen	DAH	Hair	DH01
		Hair	DH02
Amikacin	CLS	Lyophilized serum	СНМ
	TDM	Human serum	AT03
		Human serum	TDI
Amiodarone	TDM	Human serum	CRD
Amisulpride	TDM	New born calf serum	PS24
Amitriptyline	QUARTZ	Blood	3
	TDM	New born calf serum	PS01
Ammonia	AIR	Impinger solution (stack emissions)	37
	AQUACHECK	Spiking solution	10
		Waste water	60
		Marine water	61
		Industrial wastewater	17D
		Hard surface water	2H
		Soft surface water	28
		Hard potable water	2HP
		Soft potable water	2SP
	CLS	Serum	ALM
	CONTEST	Soil	Group B, 3B
		Soil	Group D, 18

Analyte	Scheme ID	Matrix	Sample
Ammoniacal Nitrogen	AQUACHECK	Sewage sludge	16
АМРА	AQUACHECK	Synthetic effluent	20
	QFCS	Barley flour	807
Amyl cinnamal	COSMETICS	Cosmetic, fragrance	35
Amylase	CLS	Urine	UC
Amylase, pancreatic	CLS	Lyophilized serum	СНМ
Amylase, total	CLS	Lyophilized serum	СНМ
Amylcin-namyl alcohol	COSMETICS	Cosmetic, fragrance	35
Anaerobic sulphite-reducing bacteria	QMS	Skimmed milk powder	15
(enumeration)		Oatmeal	15
Anaesthetic drugs	QUARTZ	Blood	1
		Blood and case study	2
Androstenedione	CLS	Lyophilized serum	СНМ
Aniline	QFCS	Simulant	873
	TOYTEST	Toy product	20
Animal DNA (detection)	QFCS	Vegan food	848
Anionic-active matter	COSMETICS	Powder detergent	29
		Liquid detergent	32
Anisidine value	QFCS	Oil or fat	778
Anisyl alcohol	COSMETICS	Cosmetic, fragrance	35
Anthracene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Antibiotics (Beta Lactam based)	QDCS	Freeze dried milk	34 (A,B&C)
Antibiotics (Penicillin and Sulfur based)	QDCS	Freeze dried milk	57 (A,B&C)
Anticholinergic drugs	QUARTZ	Blood	1
		Blood and case study	2
Anticonvulsant drugs	QUARTZ	Blood	1
		Blood and case study	2
Antidepressant drugs	QUARTZ	Blood	1
		Blood and case study	2
Anti-HAV, IgG	CLS	Serum	HEP
Anti-HAV, IgM	CLS	Serum	HEP
Anti-HAV, total	CLS	Serum	HEP
Anti-HBc, IgM	CLS	Serum	HEP
Anti-HBc, total	CLS	Serum	HEP
Anti-HBs	CLS	Serum	HEP
		Serum	HEP
Anti-HCV	CLS	Serum	HEP

Analyte	Scheme ID	Matrix	Sample
Antihistamine drugs	QUARTZ	Blood	1
		Blood and case study	2
Anti-HIV-1	CLS	Serum	HIV
Anti-HIV-1/2	CLS	Serum	HIV
Anti-HIV-2	CLS	Serum	HIV
Anti-hypertensive	TDM	Urine	AH01
Antimony	AIR	Quartz fibre filter 47mm diameter (ambient)	13
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Industrial wastewater	17C
		Clean water	5A
		Groundwater	5G
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1b
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	OIL	Service engine oil	6
	QBS	Fruit juice	518
		Soft drink	519
Antipsychotic drugs	QUARTZ	Blood	1
		Blood and case study	2
Anti-Streptolysin O	CLS	Lyophilized serum	IPR
		Lyophilized serum	IPR
		Lyophilized serum	IPR
Anti-TG	CLS	Serum	ТА
Antithrombin III	CLS	Lyophilized serum	IPR
Antithrombin III Activity	CLS	Lyophilized plasma	СОА
Anti-TPO	CLS	Serum	ТА
AOX	AQUACHECK	Wastewater	27
API Gravity	OIL	Crude oil	4

Analyte	Scheme ID	Matrix	Sample
Apparent alcoholic strength	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
Apparent gravity	BAPS	Ale (bitter)	1B
		Alcohol free beer	7A
		Low alcohol beer	7B
		Lager	1L
APTT	CLS	Lyophilized plasma	СОА
Aqueous tritium	AQUACHECK	Clean water	31
Arachidic acid C20:0	QFCS	Olive oil	791
Arginine	QFCS	Infant formula powder	823
Aripiprazole	TDM	New born calf serum	PS25
Aroma - Alcoholic/Solvent	BAPS	Lager/ale (bitter)	5
Aroma - Burnt	BAPS	Lager/ale (bitter)	5
Aroma - Caramel	BAPS	Lager/ale (bitter)	5
Aroma - Cereal	BAPS	Lager/ale (bitter)	5
Aroma - DMS	BAPS	Lager/ale (bitter)	5
Aroma - Fruity/Citrus	BAPS	Lager/ale (bitter)	5
Aroma - Fruity/Estery	BAPS	Lager/ale (bitter)	5
Aroma - Hop	BAPS	Lager/ale (bitter)	5
Aroma - Malty	BAPS	Lager/ale (bitter)	5
Aroma - Other	BAPS	Lager/ale (bitter)	5
Aroma - Other Sulfur	BAPS	Lager/ale (bitter)	5
Aroma - Oxidised/Aged	BAPS	Lager/ale (bitter)	5
Aroma - Sweet	BAPS	Lager/ale (bitter)	5
Aromatic ester	AIR	Tenax TA filled sorbent tubes (workplace air)	22
Arsenic	AFPS	Animal feed	2
		Premix	8
	AIR	Quartz fibre filter 47mm diameter (ambient air)	13
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38

Analyte	Scheme ID	Matrix	Sample
Arsenic cont.	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Clean water	5A
		Groundwater	5G
	BAPS	Lager	2L
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1b
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
		Mouthwash sample	24
		Toothpaste sample	25
	PHARMASSURE	Supplement	14
		Powder material	2B
		Pollen supplement	17
	QBS	Fruit juice	518
		Soft drink	519
	QFCS	Dried tea	780
		Cereal	784
		Edible oil	785
		Dried fruit	786
	QMAS	Shellfish	741
		Fish	742
		Meat	747
	SUPS	Cane or beet sugar	2
	TOYTEST	EN71 - 3 standard solution and real material	3
	CANNABIS	Simulated dried cannabis plant	4

Analyte	Scheme ID	Matrix	Sample
Arsenic (total)	QCS	Cocoa powder	718
	AQUACHECK	Waste water	60
	QFCS	Infant fruit/vegetable purée	827
		Brown rice	789
		Lyophilised mushrooms	795
		Table salt	819
		Ground pepper	866
		Herbs	871
Arsenic III	QFCS	Rice	789
Arsenic V	QFCS	Rice	789
Ascorbic acid	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El

Analyte	Scheme ID	Matrix	Sample
Ash	AFPS	Fish feed	13
	OIL	Engine oil lubricants	5
	QCS	Cocoa powder	716
	QDCS	Hard cheese	37
		Whole protein concentrate	43
		Soft cheese	59
		Cheese powder	63
		Skimmed milk powder	38A
		Whey powder	38B
	QFCS	Instant coffee	824
		Non-wheat flour	832
		Cereal	770
		'Ready to eat' product	772
		Flour	775
		Bread	776
		Tomato paste/purée	783
		Cake	793
		Honey	801
		Coffee	802
		Ground pasta	816
		Jam or marmalade	817
		Herbs	879
		Dried fruits	884
	QGS	Gelatine	606
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
		Fish	734
	SUPS	Syrup	11
		Cane or beet sugar	1
		Raw sugar	7
	OIL	#2 Diesel fuel	2

Analyte	Scheme ID	Matrix	Sample
Ash (Total)	QFCS	Vinegar	822
		Dried tea	829
		Ground pepper	815
		Garlic powder	861
Ash insoluble in hydrochloric acid	AFPS	Animal feed	1
		Wet pet food	9
Ash Sulfated	OIL	Engine oil lubricants	5
Aspartame	QBS	Carbonated drinks (degassed)	516B
		Dilutable and ready to drink materials	517B
	QFCS	Liquid	761
Aspartic acid	QFCS	Infant formula powder	823
Aspergillus species (detection)	CANNABIS	Simulated dried cannabis plant	7
Asphaltenes	OIL	Crude oil	4
AST	CLS	Lyophilized serum	СНМ
Astrovirus	CLS	Liquid samples	GIP
Asulam	AQUACHECK	Groundwater	8
Atomoxetine	TDM	Lyophilised human serum	PST1
Atrazine	AQUACHECK	Clean water	53
		Synthetic effluent	20B
		Water framework directive	34B
		Groundwater	8B
Azinphos-ethyl	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Azinphos-methyl	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Azo - Dyes (EN14362-1 & EN14362-3)	TOYTEST	Toy material	8
Azoxystrobin	AQUACHECK	Spiking solution	40

Analyte	Scheme ID	Matrix	Sample
Bacillus cereus (enumeration)	AFPS	Animal feed	15
	QMAS	Meat	756
	QMS	Skimmed milk powder	17
		Oatmeal	17
		Skimmed milk powder	36
		Herbs	36H
		Spices	36SP
Bacillus cereus group	CLS	Liquid samples	BCP
Bacillus species (enumeration)	QMS	Skimmed milk powder	17
		Oatmeal	17
Bacillus subtilis group	CLS	Liquid samples	BCP
Bacterial filtration efficiency (BFE)	COSMETICS	Face mask	34
Bacterial level by Bactoscan	QMS	Skimmed milk	39
Bacterial level by colony count	QMS	Skimmed milk	39
Bacterial vaginosis	CLS	Virtual gram stained slides	GSV
Barbiturate drugs	QUARTZ	Blood	1
		Blood and case study	2
Barbiturates Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3

Analyte	Scheme ID	Matrix	Sample
Barium	AQUACHECK	Natural water	4
		Marine water	62
		Industrial wastewater	17C
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
		Groundwater	4G
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	OIL	Engine oil lubricants	5
		Service engine oil	6
	TOYTEST	EN71 - 3 standard solution and real material	3
Base Number	OIL	#2 Diesel fuel	2
		Engine oil lubricants	5
		Service engine oil	6
Basophils	CLS	Virtual slide	BID
		Simulated whole blood	НМХ
Basophils, absolute	CLS	Simulated whole blood	НМХ
BBP	CONTACT	Vegetable/seed oil	4
Benazolin	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Bentazone	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Benz(a)anthracene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5

Analyte	Scheme ID	Matrix	Sample
Benz(a)pyrene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Benz[a]anthracene	QFCS	Vegetable oil	805
Benzene	AIR	Charcoal filled glass sorbent tubes (workplace air)	5
		Tenax TA filled sorbent tubes (workplace air)	7
		Tenax TA filled sorbent tubes (ambient)	12
		Tenax TA filled sorbent tubes (indoor or chamber air)	21
		Carbopack X filled sorbent tubes	12A
	AQUACHECK	Synthetic effluent	18C
		Water framework directive	34J
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 15
	PHARMASSURE	Residual solvents	2E
Benzo(a)pyrene	AQUACHECK	Clean water	52
Benzo(b)fluoranthene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Benzo(b/k)fluoranthene (Sum)	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Benzo(ghi)perylene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Benzo(k)fluoranthene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Benzo[a]pyrene	QFCS	Vegetable oil	805
Benzo[b]fluoranthene	QFCS	Vegetable oil	805

Analyte	Scheme ID	Matrix	Sample
Benzodiazepine	DAH	Hair	DH01
		Hair	DH02
Benzodiazepine drugs	QUARTZ	Blood	1
		Blood and case study	2
Benzodiazepine Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Benzoic acid	COSMETICS	Cream sample	27
		Mascara	31
	DAPS	Ready to drink	Group E, El
	QBS	Carbonated drinks (degassed)	516A
		Dilutable and ready to drink materials	517A
Benzoic acid (E210-E213)	QFCS	Liquid	760
		Food product	863
Benzyl alcohol	COSMETICS	Cosmetic, fragrance	35
Benzyl benzoate	COSMETICS	Cosmetic, fragrance	35
Benzyl cinnamate	COSMETICS	Cosmetic, fragrance	35
Benzyl salicylate	COSMETICS	Cosmetic, fragrance	35
Beryllium	AIR	37mm mixed cellulose ester filter	18
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Industrial wastewater	17C
		Groundwater	5G
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
Beta 2 Microglobulin	CLS	Lyophilized serum	TMS
Beta Endosulphan	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Beta Glucan	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
Beta Glucan (EBC Wort)	MAPS	Wheat	7
Beta Glucan (IoB Wort)	MAPS	Wheat	7

Analyte	Scheme ID	Matrix	Sample
Beta Hexachlorocyclohexane	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
Beta-lactams	QDCS	Freeze dried milk	70
Bicarbonate	AQUACHECK	Clean water	59
	CLS	Lyophilized serum	СНМ
	QBS	Liquid test material	524
Bicarbonate (tCO2)	CLS	Ampoule	BLG
Bifenox	AQUACHECK	Clean water	53
Bifenthrin	AQUACHECK	Waste water	51
Bifidobacterium species (enumeration)	QMS	Lyophilised test material	27
Bile Acid	CLS	Lyophilized serum	СНМ
Bile-tolerant gram-negative bacteria (enumerattion)	PHARMASSURE	Lyophilised test material	4A
Bilirubin	CLS	Urine	UA
Bilirubin, confirmatory	CLS	Urine	UA
Bilirubin, direct	CLS	Lyophilized serum	СНМ
		Serum	NB
Bilirubin, indirect	CLS	Lyophilized serum	СНМ
Bilirubin, total	CLS	Lyophilized serum	СНМ
		Serum	NB
Bioburden	COSMETICS	Face mask	34
Bisphenol A	AQUACHECK	Water framework directive	34D
	QFCS	Simulant	872
	TOYTEST	Plastic bead or pellet	16
	QFCS	Simulant	872
Bisphenol S	CONTACT	Simulant	1
Bitterness	BAPS	Ale (bitter)	1B
		Lager	1L
		Ale	3
		Alcohol free beer	7A
		Low alcohol beer	7B
Blood Cell Identification	CLS	Virtual slide	ABI
		Virtual slide	BID
Blood Culture Identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP

Analyte	Scheme ID	Matrix	Sample
Blood Culture Susceptibility	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Blood parasite ID	CLS	Giemsa stained blood smears; 2 x virtual giemsa stained blood smears	BPS
Blood/Haemoglobin	CLS	Urine	UA
BNP	CLS	Lyophilized serum	CAR
BOD	AQUACHECK	Spiking solution	35
BOD (5 day)	AQUACHECK	Spiking solution	3
		Spiking solution	11
Boiled Wort Colour	MAPS	Brewers and distillers malt	1
Boiled Wort Colour (EBC Wort)	MAPS	Wheat	7
Bordetella holmesii	CLS	Liquid samples	RSP
Bordetella parapertussis	CLS	Liquid samples	ВТР
		Liquid samples	RSP
Bordetella parapertussis / bronchiseptica	CLS	Liquid samples	RSP
Bordetella pertussis	CLS	Liquid samples	BTP
		Liquid samples	RSP
Boron	AQUACHECK	Natural water	4
		Marine water	62
		Industrial wastewater	17C
		Groundwater	4G
	CONTEST	Soil	Group D, 18
	OIL	Service engine oil	6
	TOYTEST	EN71 - 3 standard solution and real material	3
		Slime	17
Boron (Total)	AQUACHECK	Sewage sludge	13
		Agricultural soil	14
Boscalid	AQUACHECK	Spiking solution	40
BP Distribution	OIL	#2 Diesel fuel	2
Breathability	COSMETICS	Face mask	34
Breath alcohol (Alcohol technical defence - ATD)	QUARTZ	Paper exercise	5
Brexpiprazole	TDM	New born calf serum	PS33
BRF 8ml	MAPS	Barley	2
Brilliant blue (E133)	QFCS	Liquid	763
Brivaracetam	TDM	Human serum	AE5

Analyte	Scheme ID	Matrix	Sample
Brix	QBS	Fruit juice	510
		Carbonated drinks	515
		Dilutable and ready to drink materials	517A
	QFCS	Jam or marmalade	817
		Tomato paste/purée	783
		Relish	858
Brix (total)	DAPS	Ready to drink	Group E, El
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Bromacil	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Bromate	AQUACHECK	Spiking solution	3A
Bromazepam	TOX	Serum	BNBZ
Bromide	AQUACHECK	Spiking solution	3A
Bromobenzene	CONTEST	Standard solutions & soil	25
Bromochloroacetic acid	AQUACHECK	Clean water	44
Bromochloromethane	CONTEST	Standard solutions & soil	25
Bromodichloroacetic acid	AQUACHECK	Clean water	44
Bromodichloromethane	AQUACHECK	Waste water	64
		Synthetic effluent	18A
		Groundwater	6A
	CONTEST	Standard solutions & soil	25
Bromoform	AQUACHECK	Synthetic effluent	18A
		Groundwater	6A
	CONTEST	Standard solutions & soil	25
Bromomethane	AQUACHECK	Clean water	55
	CONTEST	Standard solutions & soil	25

Analyte	Scheme ID	Matrix	Sample
Bromoxynil	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Bulk density	QDCS	Whole protein concentrate	43
Bulk index	QFCS	Spices	870
Buprenorphine	DAH	Hair	DH01
	TDM	Human serum	SA01
Buprenorphine and Metabolite Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Burkholderia cepacia (detection)	COSMETICS	Powder	10B
		Cream	13B
		Liquid	16B
	PHARMASSURE	Lyophilised test material	4B
Butyl acetate	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
Butylated hydroxyanisole (BHA)	AFPS	Coprah oil	18
Butylated hydroxytoluene (BHT)	AFPS	Coprah oil	18
Butylparaben	COSMETICS	Cream sample	27
		Mascara	31
Butyric acid	QCS	Chocolate	715
	QFCS	Food product	863

Analyte	Scheme ID	Matrix	Sample
C. difficile Antigen	CLS	Liquid samples	CDF
C. difficile Toxin	CLS	Liquid samples	CDF
C. difficile Toxin A/B	CLS	Liquid samples	GIP
CA 15-3	CLS	Lyophilized serum	TMS
CA 19-9	CLS	Lyophilized serum	TMS
CA 27.29	CLS	Lyophilized serum	TMS
CA-125	CLS	Lyophilized serum	TMS
Cadium	QFCS	Dried tea	780
Cadmium	AFPS	Animal feed	2
		Premix	8
	AIR	25 Mm cellulose acetate (workplace air)	1
		37 Mm cellulose acetate (workplace air)	1A
		Quartz fibre filter 47mm diameter (ambient)	13
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		37 Mm cellulose acetate (workplace air)	1B
		25 Mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Water framework directive	34A
		Clean water	5B
		Groundwater	5G
	BAPS	Lager	2L
	QFCS	Simulant	874
		Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21

Analyte	Scheme ID	Matrix	Sample
Cadmium cont.	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
	OIL	Service engine oil	6
	PHARMASSURE	Supplement	14
		Powder material	2B
		Pollen supplement	17
	QBS	Fruit juice	518
		Soft drink	519
	QCS	Chocolate	719
		Cocoa powder	718
	QFCS	Cereal	784
		Dried fruit	786
		Dried tea	780
		Infant fruit/vegetable purée	827
		Edible oil	785
		Brown rice	789
		Lyophilised mushrooms	795
		Table salt	819
		Ground pepper	866
		Herbs	871
	QMAS	Shellfish	741
		Fish	742
		Meat	747
	SUPS	Cane or beet sugar	2
	TOYTEST	En71 - 3 standard solution and real material	3
	CANNABIS	Simulated dried cannabis plant	4
Cadmium (Total)	AQUACHECK	Waste water	60
	TOYTEST	Paint flakes	9
		Jewellery	18
Caffeine	QBS	Energy drink	526
		Carbonated drinks (degassed)	516A
		Dilutable and ready to drink materials	517A
	QCS	Cocoa powder	716
	QFCS	Instant coffee	824
		Dried tea	829
		Coffee	802
	TDM	Human serum	TDI

Analyte	Scheme ID	Matrix	Sample
Calcitonin	CLS	Lyophilized serum	IAS
Calcium	AFPS	Animal feed	2
		Premix	8
	AQUACHECK	Sewage sludge	16
		Clean water	59
		Marine water	61
		Hard surface water	ΊΗ
		Soft surface water	15
		Hard potable water	1HP
		Hard potable water	1SP
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Urine	UC
	CONTEST	Soil	Group D, 18
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
	OIL	Engine oil lubricants	5
		Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Fruit juice	510
		Soft drink	519
		Liquid test material	524
	QDCS	Milk	28
	2200	Hard cheese	37
		Whole milk powder	41
		Soft cheese	59
		Processed cheese	67
	QFCS	Non-wheat flour	832
	QI OO	Flour	775
		Bread	776
		Cake	793
			802
		Table salt	819
	QMAS	Soya sauce Precooked, raw or processed meat	883

Analyte	Scheme ID	Matrix	Sample
Calcium, ionised	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
Calcium (total)	CLS	Lyophilized serum	СНМ
Campesterol	QFCS	Olive oil	791
Campylobacter species	CLS	Liquid samples	GIP
Campylobacter species (confirmation)	CONF-IDENT	Lyophilised material	4
Campylobacter species (detection)	QMAS	Lyophilised meat	743
	QMS	Lyophilised test material	21
Campylobacter species (enumeration)	QMAS	Meat	726
	QMS	Lyophilised test material	32
Campylobacter species (identification)	CONF-IDENT	Lyophilised material	4
Candida albicans	CLS	Liquid samples	BCP
Candida albicans (detection)	COSMETICS	Powder	10B
		Cream	13B
		Liquid	16B
	PHARMASSURE	Lyophilised test material	4B
Candida auris	CLS	Liquid samples	ВСР
Candida dubliniensis	CLS	Liquid samples	BCP
Candida famata	CLS	Liquid samples	BCP
Candida glabrata	CLS	Liquid samples	BCP
Candida guilliermondii	CLS	Liquid samples	BCP
Candida kefyr	CLS	Liquid samples	BCP
Candida krusei	CLS	Liquid samples	BCP
Candida lusitaniae	CLS	Liquid samples	BCP
Candida parapsilosis	CLS	Liquid samples	BCP
Candida tropicalis	CLS	Liquid samples	BCP
Cannabichromene (CBC)	CANNABIS	Hemp oil	1A
		Canabis flower	10
		Cannabis oil	11
Cannabicyclol (CBL)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
Cannabidiol (CBD)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
	PHARMASSURE	Oil or powder	16
	QFCS	Food	849
Cannabidiolic Acid (CBDA)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11

Analyte	Scheme ID	Matrix	Sample
Cannabidivarin (CBDV)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
Cannabidivarinic acid (CBDVA)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Hemp oil Cannabis oil	11
Cannabigerol (CBG)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
Cannabinoid drugs	QUARTZ	Blood	1
		Blood and case study	2
Cannabinoids	DAH	Hair	DH01
		Hair	DH02
Cannabinoids Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Cannabinol (CBN)	CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
Capsaicin	QFCS	Dried chilli powder	826
Captan	AQUACHECK	Spiking solution	40
Carbamazepine	CLS	Lyophilized serum	СНМ
	TDM	Human serum	TDI
Carbamazepine + CBZ-epoxide	TDM	Human serum	TD1
Carbendazim	AQUACHECK	Spiking solution	40
Carbetamide	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Carbofuran	AQUACHECK	Groundwater	8B

Analyte	Scheme ID	Matrix	Sample
Carbohydrates	QBS	Smoothie	525
		Energy drink	526
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Condensed milk	66
		Processed cheese	67
	QFCS	Dehydrated food product	821
		Instant coffee	824
		Processed nut product	828
		Food purée	833
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Canned fruit	814
		Ground pasta	816
		Jam or marmalade	817
		Food product	834
		Food product	835
		Plant based meat	877
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
Carbohydrates (Total)	BAPS	Lager	2L
Carbohydrates (Total and available)	QFCS	Cereal	770
		'Ready to eat' product	772
Carbon	OIL	#2 Diesel fuel	2
Carbon (Total)	AQUACHECK	Sewage sludge	13
Carbon Dioxide	BAPS	Ale (bitter)	1B
		Lager	1L
	DAPS	Ciders	Group C, C1
		Ready to drink	Group E, E1
	QBS	Carbonated drinks	515
		Liquid test material	524
Carbon disulfide	CONTEST	Standard solutions & soil	25
Carbon Residue	OIL	#2 Diesel fuel	2
Carbon tetrachloride	AQUACHECK	Synthetic effluent	18A
	-	Synthetic effluent	19B
		Groundwater	6A
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
	PHARMASSURE	Residual solvents	2E

Analyte	Scheme ID	Matrix	Sample
Carbonate content	AQUACHECK	Agricultural soil	14
Carbophenothion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Carboxyhaemoglobin	CLS	Ampoule	BLX
	ТОХ	Human blood	BLD
Carboxyhaemoglobin drugs	QUARTZ	Blood	1
		Blood and case study	2
Cardiovascular drugs	QUARTZ	Blood	1
		Blood and case study	2
Carmoisine	QFCS	Liquid	762
Cationic-active matter	COSMETICS	Powder detergent	29
		Liquid detergent	32
CBZ-epoxide	TDM	Human serum	TDI
CEA	CLS	Lyophilized serum	СНМ
Ceruloplasmin	CLS	Lyophilized serum	IPR
Chill difference	DAPS	Scotch whisky	Group B, B1
Chlamydia pneumoniae	CLS	Liquid samples	PNE
Chlamydia trachomatis	CLS	Liquid samples	CGC
Chlamydophila pneumoniae	CLS	Liquid samples	RSP
Chloramphenicol	QMAS	Shellfish	754
		Chicken	724
Chlorate (High level)	AQUACHECK	Spiking solution	3A
Chlorate (Low level)	AQUACHECK	Spiking solution	3A
Chlorfenvinphos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Water framework directive	34C
		Clean water	56
	CONTEST	Standard solutions & soil	30
Chloridazon	AQUACHECK	Groundwater	8

Analyte	Scheme ID	Matrix	Sample
Chloride	AFPS	Animal feed	2
		Premix	8
	AIR	Quartz fibre filter 47mm diameter (ambient)	14
	AQUACHECK	Spiking solution	10
		Clean water	59
		Higher salinity potable water	1A
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		soft potable water	1HS
	BAPS	Lager	2L
	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Simulated CSF	SFC
		Urine	UC
	CONTEST	Solid waste leachate	24
		Soil	Group D, 18
		Soil	Group E, 21
	QBS	Liquid test material	524
	QDCS	Whole milk powder	42
	QFCS	Bread	776
		Cake	793
Chlorides (as Cl)	COSMETICS	Powder detergent	29
		Liquid or solid soap	28
		Liquid detergent	32
Chlorine (Free)	AQUACHECK	Clean water	3B
Chlorite (High level)	AQUACHECK	Spiking solution	ЗA
Chlorite (Low level)	AQUACHECK	Spiking solution	ЗA
Chlorobenzene	CONTEST	Standard solutions & soil	25
Chloroethane	CONTEST	Standard solutions & soil	25
Chloroform	AQUACHECK	Synthetic effluent	18A
		Synthetic effluent	19B
		Groundwater	6A
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
	PHARMASSURE	Residual solvents	2E
Chlorogenic acids (Total)	QFCS	Instant coffee	824
		Coffee	802
Chloromethane	CONTEST	Standard solutions & soil	25
Chlorophyll a	AQUACHECK	Clean water	33

Analyte	Scheme ID	Matrix	Sample
Chlorothalonil	AQUACHECK	Spiking solution	40
Chloroxuron	AQUACHECK	Groundwater	8B
Chlorpromazine	TDM	New born calf serum	PS31
Chlorpyrifos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Clean water	56
		Water framework directive	34C
	CONTEST	Standard solutions & soil	30
Chlortoluron	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Cholesterol	QDCS	Processed cheese	67
		Hard cheese	37
		Soft cheese	59
	QFCS	Dehydrated food product	821
		'Ready to eat' product	772
		Mayonnaise	812
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
Cholesterol, HDL	CLS	Lyophilized serum	СНМ
Cholesterol, LDL	CLS	Lyophilized serum	СНМ
Cholesterol, total	CLS	Lyophilized serum	СНМ
Cholinesterase	CLS	Lyophilized serum	СНМ
Chorine (Total)	AQUACHECK	Clean water	3C
Chromium	AFPS	Animal feed	2
		Premix	8
	AIR	25 Mm cellulose acetate (workplace air)	1
		37 Mm cellulose acetate (workplace air)	1A
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		Bulk welding fume sample	10A
		37 Mm cellulose acetate (workplace air)	1B
		25 Mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Industrial wastewater	17C
		Groundwater	5G

Analyte	Scheme ID	Matrix	Sample
Chromium cont.	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
	OIL	Service engine oil	6
	TOYTEST	EN71 - 3 Standard solution and real material	3
Chromium (III)	TOYTEST	EN71 - 3 Standard solution and real material	3
Chromium (Total)	AQUACHECK	Clean water	5B
	CONTEST	Standard solution	Group A, 29
	PHARMASSURE	Multielement supplement	21
Chromium (VI)	AIR	Welding fume or paint dust	19
		Spiked NaOH treated millipore PVDF filters 25 mm Ø	9
	AQUACHECK	Synthetic wastewater	12C
		Clean water	5C
	CONTEST	Standard solution	Group A, 13
		Soil	Group A, 3A
		Soil	Group D, 18
	TOYTEST	EN71 - 3 Standard solution and real material	3
Chrysene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
	QFCS	Vegetable oil	805
Ciclosporin	IPT	Human blood	CICTAC
Cinnamal	COSMETICS	Cosmetic, fragrance	35
Cinnamyl alcohol	COSMETICS	Cosmetic, fragrance	35
cis Alpha-linolenic acid (ALA)	QFCS	Cod liver oil	806
cis Docosahexaenoic (DHA)	QFCS	Cod liver oil	806
cis Docosapentaenoic (DPA)	QFCS	Cod liver oil	806
cis Eicosapentaenoic acid (EPA)	QFCS	Cod liver oil	806
cis-1,2-Dichloroethylene	CONTEST	Standard solutions & soil	25
cis-1,3-Dichloropropene	AQUACHECK	Clean water	55
cis-1,3-Dichloropropylene	CONTEST	Standard solutions & soil	25

Analyte	Scheme ID	Matrix	Sample
cis-chlordane	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
cis-Permethrin	AQUACHECK	Waste water	51
Citalopram	TDM	New born calf serum	PS18
	QUARTZ	Blood	3
Citral	COSMETICS	Cosmetic, fragrance	35
Citric acid	DAPS	Simulated spirit	Group B, B4
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El
	QFCS	Ketchup	811
		Food product	863
Citrobacter species	CLS	Liquid samples	BCP
Citronellol	COSMETICS	Cosmetic, fragrance	35
CK-MB, activity	CLS	Lyophilized serum	CAR
CK-MB, mass	CLS	Lyophilized serum	CAR
Clobazam	TDM	Human serum	CN1
Clomipramine	TDM	New born calf serum	PSO3
Clonazepam	тох	Serum	BNBZ
	TDM	Human serum	TDI
Clopyralid	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Clothianidin	AQUACHECK	Groundwater	66
Clostridium perfringens (detection)	QGS	Gelatine	603
	QMS	Skimmed milk	38
Clostridium perfringens (enumeration)	AFPS	Simulated animal feed	10
	QMAS	Lyophilised meat	738
	QMS	Skimmed milk powder	10D
	-	Oatmeal	10F
		Skimmed milk powder	10
		Oatmeal	10
	QWAS	Potable water	413
		Surface water	421
Clostridium species (detection)	QMS	Skimmed milk powder	10
		Oatmeal	10
Clostridium species (enumeration)	AFPS	Simulated animal feed	10
	QMS	Skimmed milk powder	10D
		Oatmeal	10F
Cloud Point	OIL	#2 Diesel fuel	2
Clozapine	TDM	Human serum	PSO4

Analyte	Scheme ID	Matrix	Sample
Coagulase positive Staphylococci (detection and/or enumeration)	QMAS	Meat	756
Coagulase positive Staphylococci (detection)	QMS	Skimmed milk powder	36
		Skimmed milk	38
		Herbs	36H
		Spices	37SP
	QWAS	Mineral water	424
Coagulase positive Staphylococci	AFPS	Animal feed	15
(enumeration)	QMAS	Lyophilised meat	738
		Lyophilised fish or shellfish	739
		Lyophilised fish or shellfish	739
	QMS	Skimmed milk powder	17
		Oatmeal	17
		Теа	29
		Skimmed milk powder	36
		Ready meal	41
		Herbs	36H
		Spices	37SP
		Cheese	50
	QWAS	Bathing, recreational and surface water	421
Cobalt	AFPS	Animal feed	2
		Premix	8
	AIR	25 Mm cellulose acetate (workplace air)	1
		37 Mm cellulose acetate (workplace air)	1A
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		Bulk welding fume sample	10A
		37 Mm cellulose acetate (workplace air)	1B
		25 Mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	5
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Groundwater	5G
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
	TOYTEST	EN71 - 3 standard solution and real material	3

Analyte	Scheme ID	Matrix	Sample
Cocaine and metabolites	DAH	Hair	DHOI
		Hair	DH02
	DAU	Urine	1
		Urine	2
		Urine	3
Cocaine and metabolites cont.	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
COD	AQUACHECK	Spiking solution	3
		Spiking solution	11
		Spiking solution	35
		Waste water	60
	CONTEST	Soil	Group D, 18
	QDCS	Potassium hydrogen phthalate	35
COD (High)	AQUACHECK	Spiking solution	29
COD (Low)	AQUACHECK	Spiking solution	29
COD (Total)	AQUACHECK	Wastewater	17A
Codeine	QFCS	Ground poppy seeds	831
	QUARTZ	Blood	3
Cold Filter Plugging Point	OIL	#2 Diesel fuel	2
Cold water extract	MAPS	Brewers and distillers malt	1
Coliforms (detection and/or enumeration)	PHARMASSURE	Medicinal herb	10
Coliforms (detection)	CANNABIS	Simulated dried cannabis plant	7
	QGS	Gelatine	602
	QMS	Skimmed milk powder	18
		Oatmeal	18

Analyte	Scheme ID	Matrix	Sample
Coliforms (enumeration)	AFPS	Simulated animal feed	7
		Petfood kibble	7KB
	CANNABIS	Simulated dried cannabis plant	7
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Lyophilised test material	10
	QCS	Cocoa powder	713
		Chocolate	717
		Lyophilised fish or shellfish	739
	QMAS	Lyophilised meat	735
	QMS	Skimmed milk powder	16
		Oatmeal	16
		Skimmed milk powder	18
		Oatmeal	18
		Теа	29
		Ready meal	41
		Cheese	50
		Herbs	36H
		Spices	36SP
	QWAS	Potable water	412
		Potable water	425
		Sterile water	428
Coliforms (Total) (enumeration)	QMAS	Meat	756
	QMS	Skimmed milk powder	36
	QWAS	Bathing, surface and wastewater	419
Colony (count)	QWAS	Water	427
Colony enumeration (calculation)	QMS	Photograph and a scenario	35

Analyte	Scheme ID	Matrix	Sample
Colour	AQUACHECK	Hard surface water	2H
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
	DAPS	Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Ciders	Group C, Cl
		Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
		Black malt	4A
		Crystal malt	4B
	OIL	#2 Diesel fuel	2
		Engine oil lubricants	5
	QDCS	Cheese powder	63
	QFCS	Oil or fat	778
		Tomato paste	864
	SUPS	Molasses	5
		Syrup	11
		Cane or beet sugar	1
		Raw sugar	7
Colour (EBC Wort)	MAPS	Wheat	7
Colour (IoB Wort)	MAPS	Wheat	7
Colour absorbance	DAPS	Ready to drink	Group E, El
Colour at 420nm	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
Colour at 430nm	BAPS	Ale (bitter)	1B
		Ale	3
		Alcohol free beer	7A
		Low alcohol beer	7B
		Lager	1L
Colour at 520nm	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
Colour at 530nm	BAPS	Ale	3
Colour at 620nm	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2

Analyte	Scheme ID	Matrix	Sample
Colour strenght	QFCS	Spices	870
Complement C3	CLS	Lyophilized serum	IPR
Complement C4	CLS	Lyophilized serum	IPR
Complex cyanide	CONTEST	Soil	Group B, 3B
Compliance with labelling	PHARMASSURE	Multielement supplement	21
Conductivity	AQUACHECK	Agricultural soil	14
Conductivity (20°C)	QBS	Liquid test material	524
	AQUACHECK	Waste water	60
		Marine water	61
		Wastewater	17A
		Hard surface water	ΊΗ
		Soft surface water	15
		Hard potable water	1НР
		Soft potable water	1SP
		Hard surface water	2Н
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
		Higher salinity potable water	1A
	CONTEST	Soil	Group D, 18
Confirmation of authenticity	QFCS	Dried oregano or ground pepper	825
		Honey	847
Coniferaldehyde	DAPS	Scotch whisky	Group B, B1
Copper	AFPS	Animal feed	2
		Premix	8
	AIR	25 mm cellulose acetate (workplace air)	1
		37 mm cellulose acetate (workplace air)	1A
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		Bulk welding fume sample	10A
		37 Mm cellulose acetate (workplace air)	1B
		25 Mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	4
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14

Analyte	Scheme ID	Matrix	Sample
Copper cont.	AQUACHECK	Marine water	62
	cont.	Industrial wastewater	17C
		Groundwater	4G
		Clean water	5B
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Lyophilized serum	СНМ
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
	OIL	Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Soft drink	519
	QDCS	Whole milk powder	41
	QFCS	Coffee	802
		Table salt	819
	SUPS	Cane or beet sugar	2
	TOYTEST	EN71 - 3 standard solution and real material	3
Copper (Total)	AQUACHECK	Waste water	60
Copper Corrosion	OIL	#2 Diesel fuel	2
Coronavirus	CLS	Liquid samples	PNE
		Liquid samples	RSP
Coronavirus 229E	CLS	Liquid samples	RSP

Analyte	Scheme ID	Matrix	Sample
Coronavirus HKU1	CLS	Liquid samples	RSP
Coronavirus NL63	CLS	Liquid samples	RSP
Coronavirus OC43	CLS	Liquid samples	RSP
Cortisol	CLS	Lyophilized serum	СНМ
Corynebacterium species	CLS	Liquid samples	BCP
Cotinine	TDM	Lyophilised human urine	NC01
Coumarin	COSMETICS	Cosmetic, fragrance	35
C-peptide	CLS	Lyophilized serum	IAS
C-Reactive Protein	CLS	Lyophilized serum	IPR
C-Reactive Protein, hs	CLS	Serum	HS
Creatine Kinase (CK)	CLS	Lyophilized serum	СНМ
Creatine Kinase (CK), total	CLS	Lyophilized serum	CAR
Creatinine	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Urine	UA
		Urine	UC
Cresols	CONTEST	Soil	Group C, 3C
Cresols (Total)	CONTEST	Standard solution	Group C, 7b
Cronobacter sakazakii	CLS	Liquid samples	BCP
Cronobacter species (confirmation)	CONF-IDENT	Lyophilised material	5
Cronobacter species (detection)	QMS	Skimmed milk powder	42
		Skimmed milk powder	43
		Oatmeal	04F
		Skimmed milk powder	4
		Infant formula powder	48
Cronobacter species (identification)	CONF-IDENT	Lyophilised material	5
Crude ash	AFPS	Animal feed	1
		Wet pet food	9
		Silage	14
Crude fat	AFPS	Animal feed	1
		Wet pet food	9
		Silage	14
Crude fibre	AFPS	Animal feed	1
		Wet pet food	9
		Silage	14
	QFCS	Dried tea	829
Crude fibre, insoluble index	QFCS	Ground pepper	815
Crude protein	AFPS	Animal feed	1
		Wet pet food	9
		Silage	14

Analyte	Scheme ID	Matrix	Sample
Cryptococcus gattii	CLS	Liquid samples	BCP
Cryptococcus neoformans	CLS	Liquid samples	BCP
Cryptococcus neoformans/gattii	CLS	Liquid samples	ВСР
		Liquid samples	MEP
Cryptosporidium Antigen	CLS	Liquid samples	CRG
Cryptosporidium oocysts (enumeration)	CRYPTS	Dynal slide	1
Cryptosporidium species	CLS	Liquid samples	GIP
Crystal violet	QMAS	Seafood	723
CSF culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
CSF culture susceptibility	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
CTX-M	CLS	Liquid samples	ВСР
		Liquid samples	PNE
Cutibacterium acnes	CLS	Liquid samples	BCP
Cyanazine	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Cyanide	AQUACHECK	Industrial wastewater	17B
Cyanide (Free)	AQUACHECK	Spiking solution	10
		Hard surface water	2Н
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
	CONTEST	Soil	Group B, 3B
		Soil	Group D, 18

Analyte	Scheme ID	Matrix	Sample
Cyanide (Total)	AQUACHECK	Hard surface water	2Н
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
		Spiking solution	10
	CONTEST	Standard solution	Group B, 6
	CONTEST	Soil	Group B, 3B
		Soil	Group D, 18
Cyclamic acid (as free acid)	QBS	Carbonated drinks (degassed)	516B
		Dilutable and ready to drink materials	517B
Cyclohexanone	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
Cyclospora cayetanensis	CLS	Liquid samples	GIP
Cyfluthrin	AQUACHECK	Waste water	51
Cypermethrin	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Waste water	51
		Clean water	52
	CONTEST	Standard solutions & soil	30
Cyproconazole	AQUACHECK	Spiking solution	40
Cyprodinil	AQUACHECK	Spiking solution	40
Cyromazine	AQUACHECK	Groundwater	8B
Cystein and Cystine (sum of)	QFCS	Infant formula powder	823
Cytomegalovirus	CLS	Liquid samples	MEP

Analyte	Scheme ID	Matrix	Sample
D-3-Hydroxybutyrate	CLS	Lyophilized serum	СНМ
Daphnia Magna 24hr EC50	AQUACHECK	Ecotoxicology	50
Daphnia Magna 48hr EC50	AQUACHECK	Ecotoxicology	50
DBP	CONTACT	Vegetable/seed oil	4
D-dimer	CLS	Lyophilized serum	CAR
Degrees of crystallisation	MAPS	Crystal malt	4B
DEHP	AQUACHECK	Water framework directive	34J
	CONTACT	Vegetable/seed oil	4
Dehydroaripiprazole	TDM	New born calf serum	PS25
Delta Hexachlorocyclohexane	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
Delta-7-stigmastenol	QFCS	Extra virgin olive oil	790
Demeton	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Demeton-O	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Demeton-S	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Demulsibility	OIL	Engine oil lubricants	5
Density	COSMETICS	Liquid cosmetics	23
	PHARMASSURE	Standard material	1D
		Solution	12
	QFCS	Vinegar	822
		Vanilla extract	850
Density (20°C)	DAPS	Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Ready to drink	Group E, El
Density at 15°C	OIL	#2 Diesel fuel	2
		Crude oil	4
		Engine oil lubricants	5
Deoxynivalenol (DON)	AFPS	Maize oil	20
	MAPS	Malt flour	4
Desethylamiodarone	TDM	Human serum	CRD
Desethylatrazine	AQUACHECK	Groundwater	8B
Desipramine	TDM	New born calf serum	PS02
Desisopropylatrazine	AQUACHECK	Groundwater	8B

Analyte	Scheme ID	Matrix	Sample
Determination of fatty acid methyl esters (FAMES)	OIL	#2 Diesel fuel	2
Dextran	SUPS	Raw sugar	7
DHEA Sulfate	CLS	Lyophilized serum	СНМ
DHEA, unconjugated	CLS	Lyophilized serum	СНМ
Diacetyl	AIR	Tenax ta filled sorbent tubes (workplace air)	21
Diacetyl (Total)	BAPS	Ale	3
		Lager	2L
Diastase enzymatic activity	QFCS	Honey	801
Diastatic Power (DP IoB)	MAPS	Brewers and distillers malt	1
		Malt	6
		Wheat	7
Diastatic Power (DPWK)	MAPS	Brewers and distillers malt	1
Diazepam	QUARTZ	Blood	3
	TOX	Human serum	BNZ
Diazinon	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Clean water	56
	CONTEST	Standard solutions & soil	30
Dibenz(ah)anthracene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Dibromoacetic acid	AQUACHECK	Clean water	44
Dibromochloroacetic acid	AQUACHECK	Clean water	44
Dibromochloromethane	AQUACHECK	Waste water	64
		Synthetic effluent	18A
		Groundwater	6A
	CONTEST	Standard solutions & soil	25
Dibromomethane	CONTEST	Standard solutions & soil	25
Dicamba	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Dichlobenil	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Dichloroacetic acid	AQUACHECK	Clean water	44
Dichlorodifluoromethane	CONTEST	Standard solutions & soil	25
Dichloromethane	AQUACHECK	Water framework directive	34H
	CONTEST	Standard solution	Group C, 19
Dichlorprop	AQUACHECK	Groundwater	8
		Synthetic effluent	20

Analyte	Scheme ID	Matrix	Sample
Dichlorvos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Clean water	56
	CONTEST	Standard solutions & soil	30
Diclofenac	AQUACHECK	Clean water	57
	TDM	Human serum	AM1
Diclofol	AQUACHECK	Clean water	53
Dieldrin	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Dietary fibre	QBS	Smoothie	525
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
Dietary fibre (Total)	QCS	Chocolate	715
	QDCS	Soft cheese	59
	QFCS	Flour	775
		Instant coffee	824
		Non-wheat flour	832
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Bread	776
		Cake	793
		Ketchup	811
		Mustard	813
		Canned fruit	814
		Ground pasta	816
		Food product	834
		Food product	835
		Plant based meat	877
		Dried fruits	884
Differential pressure	COSMETICS	Face mask	34
Diflufenican	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Digoxin	CLS	Lyophilized serum	СНМ
	TDM	Human serum	TDI
Dihydrocapsaicin	QFCS	Dried chilli powder	826
Dimethoate	AQUACHECK	Groundwater	9
		Waste water	21

Analyte	Scheme ID	Matrix	Sample
Dimethyl sulfide	BAPS	Lager	2L
Dimethyl Sulfide (DMS) (Total)	MAPS	Brewers and distillers malt	1
Dimethyl sulfide precursor (DMSP)	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
Dioxathion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Diphenylamine	AQUACHECK	Clean water	65
Dipotassium Hydrogen Phosphate	PHARMASSURE	Standard solution	1C
Dissolution	PHARMASSURE	Sample format varies for each round	2C
		Dissolution testing	7A
Dissolved Organic Carbon (DOC)	AQUACHECK	Spiking solution	3
	CONTEST	Solid waste leachate	24
		Soil	Group E, 21
Dissolved Oxygen	DAPS	Ready to drink	Group E, E1
Dissolved/Total organic carbon	AQUACHECK	Spiking solution	11
Distillable phenolic substances	CONTEST	Soil	Group C, 3C
Distillation	OIL	#2 Diesel fuel	2
Disulfoton	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Diuron	AQUACHECK	Synthetic effluent	20B
		Water framework directive	34B
		Groundwater	8B
Dodecane	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
Dothiepin	TDM	New born calf serum	PS19
Doxepin	TDM	New born calf serum	PS05
DPWK	MAPS	Wheat	7
(Diastatic power)		Malt	6
Drained weight	QFCS	Canned fruit	814
Drug identification	TDM	Lyophilised human urine	AH01
Dry matter	CONTEST	Soil	Group B, 3B
Dry Matter Content Ratio	CONTEST	Soil	Group E, 21
Dry Residue	AQUACHECK	Clean water	59
Dry residue (180°C)	QBS	Liquid test material	524
Dry substance	SUPS	Molasses	5
Duloxetine	TDM	New born calf serum	PS27
Dyes (illegal)	QFCS	Spices	886
Dynamic Viscosity	PHARMASSURE	Sample format will depend upon test type	6C

Analyte	Scheme ID	Matrix	Sample
E. coli O157 (non toxigenic strain)	QMAS	Lyophilised tablet	727
(detection)		Meat	757
	QMS	Skimmed milk powder	22
		Oatmeal	22
		Skimmed milk powder	37
E.coli O157 (detection)	HYGIENE	Lyophilised test material	11
	QMAS	Lyophilised meat	744
	QMS	Ready-to-eat	44
	STEC	Milk powder	D
		Powdered beef	М
Ear/Eye culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Easily liberated sulfide	CONTEST	Standard solution	Group B, 12
		Soil	Group B, 3B
EBC Fermentability (Boiled)	MAPS	Wheat	7
EDDP	TDM	Human serum	SA02
EDDP Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Egg white protein	QFCS	Canned meat	852
		Biscuits	854
		Cake mix	799
Electrical conductivity	QFCS	Honey	801
Electrical testing analysis	TOYTEST	Electrical	15
Elemental carbon	AIR	Quartz fibre filter 47mm diameter (ambient)	16
Elemental sulfur	CONTEST	Soil	Group C, 3C
Ellagic Acid	DAPS	Scotch whisky	Group B, B1
EN71-8 (assessment)	TOYTEST	EN71 - 8 paper exercise	5
Endosulfan Sulfate	AQUACHECK	Synthetic effluent	19A
		Groundwater	07A
Endosulphan	AQUACHECK	Water framework directive	34E
Endotoxins	PHARMASSURE	Solution	11
Endrin	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26

Analyte	Scheme ID	Matrix	Sample
Endrin Aldehyde	AQUACHECK	Groundwater	07A
		Synthetic effluent	19A
Energy	AFPS	Fish feed	13
	QBS	Smoothie	525
		Energy drink	526
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Butter	36
		Hard cheese	37
		Condensed milk	66
		Processed cheese	67
	QFCS	Cake	793
		Dehydrated food product	821
		Processed nut product	828
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Ketchup	811
		Mayonnaise	812
		Mustard	812
		Canned fruit	814
		Ground pasta	816
		Jam or marmalade	817
		Food product	834
		Food product	835
		Plant based meat	877
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
Energy Value (kcal)	BAPS	Lager	2L
Energy Value (kJ)	BAPS	Lager	2L
Entamoeba histolytica	CLS	Liquid samples	GIP
Enteroaggregative E. coli (EAEC)	CLS	Liquid samples	GIP
Enterobacter cloacae complex	CLS	Liquid samples	ВСР
		Liquid samples	PNE
Enterobacter species	CLS	Liquid samples	BCP
Enterobacterales	CLS	Liquid samples	BCP
Enterobacteriaceae (detection)	QGS	Gelatine	602
	QMS	Skimmed milk powder	18
		Oatmeal	18

Analyte	Scheme ID	Matrix	Sample
Enterobacteriaceae (enumeration)	AFPS	Simulated animal feed	7
		Petfood kibble	7KB
	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Lyophilised test material	10
		Contact plate	12
	QCS	Cocoa powder	713
		Chocolate	717
	QMAS	Meat	756
		Lyophilised meat	735
		Lyophilised fish or shellfish	739
		Lyophilised fish or shellfish	739
	QMS	Skimmed milk powder	16
		Oatmeal	16
		Skimmed milk powder	18
		Oatmeal	18
		Skimmed milk powder	36
		Herbs	36H
		Spices	36SP
		Cheese	50
Enterococci (enumeration)	QCS	Cocoa powder	713
		Chocolate	717
Enterococci (faecal streptococci) (detection)	QWAS	Potable water	425
Enterococci (faecal Streptococci)	QMS	Skimmed milk powder	9
enumeration)		Oatmeal	9
	QWAS	Potable water	412
		Bathing, surface and wastewater	419
		Mineral water	420
		Sea water	422

Analyte	Scheme ID	Matrix	Sample
Enterococcus faecalis	CLS	Liquid samples	BCP
Enterococcus faecium	CLS	Liquid samples	BCP
Enterococcus species	CLS	Liquid samples	BCP
Enteropathogenic E. coli (EPEC)	CLS	Liquid samples	GIP
Enterotoxigenic E. coli (ETEC) lt/st	CLS	Liquid samples	GIP
Enterovirus	CLS	Liquid samples	MEP
Enumeration of Cryptosporidium oocysts	CRYPTS	Genera slide	2
		Suspension	3
		Filta max filters	4
		Xpress filter	5
Eosinophils	CLS	Virtual slide	BID
		Simulated whole blood	НМХ
Eosinophils, absolute	CLS	Simulated whole blood	НМХ
Epoxyconazole	AQUACHECK	Spiking solution	40
Erectile dysfunction drugs	QUARTZ	Blood	1
		Blood and case study	2
Erythrodiol & Uvaol	QFCS	Olive oil	791
Escherichia coli	CLS	Liquid samples	BCP
		Liquid samples	PNE
Escherichia coli (detection)	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
	QBS	Fruit juice	500
		Soft drink	501
		Lyophilised test material	505
	QGS	Gelatine	602
	QMS	Skimmed milk powder	18
		Oatmeal	18
	QWAS	Potable water	425

Analyte	Scheme ID	Matrix	Sample
Escherichia coli (enumeration)	AFPS	Simulated animal feed	7
		Petfood kibble	7КВ
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Lyophilised test material	10
	PHARMASSURE	Lyophilised test material	4A
	QMAS	Meat	756
		Lyophilised meat	735
		Lyophilised fish or shellfish	739
		Lyophilised fish or shellfish	739
	QMS	Skimmed milk powder	16
		Oatmeal	16
		Skimmed milk powder	18
		Oatmeal	18
		Skimmed milk powder	20
		Oatmeal	20
		Skimmed milk powder	36
		Herbs	36H
		Spices	36SP
	QWAS	Potable water	412
		Effluent sludge	416
		Bathing, surface and wastewater	419
		Mineral water	420
		Sea water	422
Escherichia coli Kl	CLS	Liquid samples	MEP
Escherichia coli O157	CLS	Liquid samples	GIP
Escherichia coli O157 (non toxigenic strain)	HYGIENE	Lyophilised test material	11
(detection)	QBS	Fruit juice	507
	QMAS	Carcass rinsate	727
		Lyophilised meat	744
		Meat	757
	QMS	Skimmed milk powder	22
		Oatmeal	22
		Skimmed milk powder	37
		Ready-to-eat	44

Analyte	Scheme ID	Matrix	Sample
Escherichia coli O157 (toxigenic strain) (detection)	STEC	Milk powder	1D
		Powdered beef	1M
		Powdered beef	2M
Escherichia coli O157 (toxigenic strain)	STEC	Milk powder	1D
(identification)		Powdered beef	1M
		Powdered beef	2M
Escitalopram	TDM	New born calf serum	PS28
Ethanol	CLS	Serum	ALM
	PHARMASSURE	Residual solvents	2E
	ТОХ	Human blood	BLD
		Human serum	SM
		Blood	ТАК
		Serum	TAS
		Urine	URN
Ethanol (Alcohol in blood)	QUARTZ	Blood	4
Ethanol insoluble matter	COSMETICS	Liquid or solid soap	28
Ethion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Ethoprophos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Ethosuximide	TDM	Human serum	TDI
Ethyl acetate	BAPS	Lager	2L
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		lrish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Ethyl alcohol	QFCS	Vanilla extract	850

Analyte	Scheme ID	Matrix	Sample
Ethyl benzene	AIR	Charcoal filled glass sorbent tubes (workplace air)	5
		Tenax TA filled sorbent tubes (workplace air)	7
		Tenax TA filled sorbent tubes (ambient)	12
		Carbopack X filled sorbent tubes	12A
	AQUACHECK	Groundwater	6C
	CONTEST	Standard solution	Group C, 15
Ethyl carbamate	DAPS	Bourbon	B2-A
		Dark rum	В2-В
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
Ethyl Dodecanoate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl esters	QFCS	Extra virgin olive oil	790
Ethyl glucuronide	DAU	Urine	1
		Urine	2
		Urine	3
		Hair	3
		Hair	4
Ethyl Hexadecanoate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Hexanoate	BAPS	Lager	2L
	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Linoleate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Linolenate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Octadecanoate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Oleate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl Sulfate	DAU	Urine	1
		Urine	2
		Urine	3
Ethyl Tetradecanoate	DAPS	Non chill filtered whisky	Group B, B5
Ethyl-9-Hexadecenoate	DAPS	Non chill filtered whisky	Group B, B5
Ethylbenzene	AQUACHECK	Synthetic effluent	18C
	CONTEST	Standard solutions & soil	25
Ethylene glycol	TOX	Blood	ТАК
		Serum	TAS

Analyte	Scheme ID	Matrix	Sample
Ethylene oxyde	QFCS	Sesame product	857
		Spice product	868
Etizolam	ТОХ	Serum	BNZB
Eugenol	COSMETICS	Cosmetic, fragrance	35
Evaporation Loss (Noack)	OIL	Engine oil lubricants	5
Everolimus	IPT	Human blood	EVE
Extract 0.2mm	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
Extract 0.7mm	MAPS	Brewers and distillers malt	1
Extract 1.0mm	MAPS	Brewers and distillers malt	1
Extract difference (0.2 - 0.7)	MAPS	Brewers and distillers malt	1
Extract difference (0.2 - 1.0)	MAPS	Brewers and distillers malt	1
Extract: 0.2mm	MAPS	Wheat	7
Extractable phosphorus	AQUACHECK	Agricultural soil	14
Extraction of magnesium	AQUACHECK	Agricultural soil	14
Extraction of potassium	AQUACHECK	Agricultural soil	14
Extraction of sodium	AQUACHECK	Agricultural soil	14

Analyte	Scheme ID	Matrix	Sample
Factor II Activity	CLS	Lyophilized Plasma	COA
Factor IX Activity	CLS	Lyophilized plasma	COA
Factor V Activity	CLS	Lyophilized plasma	COA
Factor VII Activity	CLS	Lyophilized plasma	COA
Factor VIII Activity	CLS	Lyophilized plasma	COA
Factor X Activity	CLS	Lyophilized plasma	COA
Factor XI Activity	CLS	Lyophilized plasma	COA
Factor XII Activity	CLS	Lyophilized plasma	COA
Faecal coliforms (enumeration)	QWAS	Bathing, surface and wastewater	419
		Sea water	422
Famphur	AQUACHECK	Groundwater	9
		Synthetic effluent	21
FAN (Free Alpha Amino Nitrogen)	MAPS	Wheat	7
FAN (IoB Wort) (Free Alpha Amino Nitrogen)	MAPS	Malt	6
		Wheat	7
Farnesol	COSMETICS	Cosmetic, fragrance	35

Analyte	Scheme ID	Matrix	Sample
Fat	AFPS	Fish feed	13
	QBS	Smoothie	525
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Butter	36
		Condensed milk	66
		Processed cheese	67
		Skimmed milk	27
		Hard cheese	37
		Whipping cream	39
		Semi skimmed milk	40
		Whole protein concentrate	43
		Skimmed milk powder	51
		Whole milk powder	52
		Single cream	53
		Double cream	54
		Whole milk	55
		Yogurt	58
		Soft cheese	59
		Cheese powder	63
		Whey powder	38B
	QFCS	Dehydrated food product	821
		Instant coffee	824
		Processed nut product	828
		Non-wheat flour	832
		Food purée	833
		Cereal	770
		Cake	793
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Ground pasta	816
		Potato crisps	834
		Tortilla chips	835
		Jam or marmalade	817
		Peanut butter	862
		'Ready to eat' product	772
		Flour	775
		Bread	776
		Plant based meat	877
	QMAS	Fish	728
		Fish	734

Analyte	Scheme ID	Matrix	Sample
Fat (Total)	QFCS	Mixed fat spread	782
		Grated cheese	800
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
		Meat	733
Fecal WBC	CLS	Virtual images for microscopy	MP
Felbamate	TDM	Human serum	AE2
Fenchlorphos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Fenitrothion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Clean water	56
	CONTEST	Standard solutions & soil	30
Fenpropimorph	AQUACHECK	Spiking solution	40
Fenthion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Fermentability (Boiled)	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
Fermentability (Unboiled 0.2mm)	MAPS	Brewers and distillers malt	1
Fermentability (Unboiled 0.7mm)	MAPS	Brewers and distillers malt	1
Fermentable sugars	SUPS	Molasses	5
Fern Test	CLS	Virtual images for microscopy	MP
Ferritin	CLS	Lyophilized serum	СНМ
Ferrocyanide	QFCS	Salt	819
Fibre	AFPS	Fish feed	13
Fibrinogen	CLS	Lyophilized plasma	COA
Final gravity	DAPS	Fermented wort	Group A, Al
		Simulated wort	Group A, A2
Fish speciation	QMAS	Fish	752
Fixed acidity	DAPS	Scotch whisky	Group B, B1
Fixed acidity (previously volatile acidity)	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
Flame Spectroscopy	PHARMASSURE	Sample format will depend upon test type	6Н

Analyte	Scheme ID	Matrix	Sample
Flash Point	OIL	#2 Diesel fuel	2
		Service engine oil	6
Flash Point (Open Cup)	OIL	Engine oil lubricants	5
Flecainide	TDM	Human serum	CRD
Florasulam	AQUACHECK	Groundwater	8B
Florfenicol	QMAS	Chicken	724
Fluconazole	TDM	Human serum	AF01
Flufenacet	AQUACHECK	Groundwater	8
Fluid resistance	COSMETICS	Face mask	34
Flumethrin	AQUACHECK	Waste water	51
Fluoranthene	AQUACHECK	Clean water	52
		Synthetic effluent	19C
		Water framework directive	34F
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Fluorene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Fluoride	AQUACHECK	Sewage sludge	13
		Agricultural soil	14
		Hard surface water	lН
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
	CONTEST	Solid waste leachate	24
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	QUARTZ	Blood	4
Fluoride (Total)	CONTEST	Standard solution	Group B, 17
Fluoxetine	AQUACHECK	Clean water	57
	TDM	New born calf serum	PS06
Fluphenazine	TDM	New born calf serum	PS07
Fluroxypyr	AQUACHECK	Groundwater	8
	-	Synthetic effluent	20

Analyte	Scheme ID	Matrix	Sample
Flusilazole	AQUACHECK	Spiking solution	40
Flutriafol	AQUACHECK	Spiking solution	40
Fluvoxamine	TDM	New born calf serum	PS22
Flux testing (EN71-1 & ASTM F963)	TOYTEST	Magnets	14
Foam stability (HRV)	BAPS	Lager	2L
Folate	CLS	Lyophilized serum	СНМ
Follicle Stimulating Hormone	CLS	Lyophilized serum	СНМ
Fonofos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Food labelling	QFCS	Benchmark	846
Foreign body (identification)	QFCS	Sample A / sample B (both potentially contaminated)	818
Foreign body (detection)	QFCS	Sample A / sample B (both potentially contaminated)	818
Formaldehyde	AQUACHECK	Spiking solution	28
Formaldehyde2,4-DNPH derivative	AIR	Glass fibre filter 25mm diameter (workplace air)	8
Formol number	QFCS	Ketchup	811
Fraction IV (<2.2mm + damaged corns from	MAPS	Brewers and distillers malt	1
all other sieves)		Barley	2
Free 2,3-Pentanedione	BAPS	Ale	3
		Lager	2L
Free acidity	QFCS	Honey	801
Free Alpha Amino Nitrogen (FAN)	BAPS	Lager	2L
	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
Free caustic alkali (as NaOH)	COSMETICS	Liquid or solid soap	28
Free diacetyl	BAPS	Ale	3
		Lager	2L
Free dimethyl sulfide (DMS)	MAPS	Brewers and distillers malt	1
Free fatty acids	QFCS	Oil or fat	778
Free fatty acids (Acidity)	QFCS	Extra virgin olive oil	790
		Olive oil	791
		Frying oil	796
Free fatty acids (as oleic acid)	COSMETICS	Liquid or solid soap	28
Freezing point depression (FPD)	QDCS	Milk	56
Freshwater algae growth inhibition test – biomass reduction	AQUACHECK	Ecotoxicology	50
Friability	MAPS	Brewers and distillers malt	1
Fructosamine	CLS	Lyophilized serum	СНМ

Analyte	Scheme ID	Matrix	Sample
Fructose	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
Fructose cont.	QBS	Fruit juice	510
		Carbonated drinks	515
		Smoothie	525
		Energy drink	526
		Dilutable and ready to drink materials	517B
	QCS	Chocolate	715
		Cocoa powder	716
	QFCS	Honey	801
		Canned fruit	814
		Jam or marmalade	817
	SUPS	Syrup	11
FTIR, Glycol	OIL	Service engine oil	6
FTIR, Nitration (procedure A)	OIL	Service engine oil	6
FTIR, Nitration (procedure B)	OIL	Service engine oil	6
FTIR, Oxidation (procedure A)	OIL	Service engine oil	6
FTIR, Oxidation (procedure B)	OIL	Service engine oil	6
FTIR, Phosphate (procedure A)	OIL	Service engine oil	6
FTIR, Phosphate (procedure B)	OIL	Service engine oil	6
FTIR, Sulfation (procedure A)	OIL	Service engine oil	6
FTIR, Sulfation (procedure B)	OIL	Service engine oil	6
FTIR, Water	OIL	Service engine oil	6
Fuel Dilution	OIL	Service engine oil	6
Fumonisin B1	AFPS	Oat	19
Fumonisin B2	AFPS	Oat	19

Analyte	Scheme ID	Matrix	Sample
Furfural	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		lrish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Fusarium	CLS	Liquid samples	BCP
Fusobacterium necrophorum	CLS	Liquid samples	BCP
Fusobacterium nucleatum	CLS	Liquid samples	BCP

Analyte	Scheme ID	Matrix	Sample
Gabapentin	TDM	Human serum	AE1
	QUARTZ	Blood	10B
Gadoleic acid 20:1 (cis & trans)	QFCS	Olive oil	791
Galactose	QDCS	Whey powder	38B
Gallic acid	DAPS	Scotch whisky	Group B, B1
Gammahydroxybutyrate (GHB)	DAU	Urine	1
		Urine	2
		Urine	3
	TOX	Urine	GHB
Gastrin	CLS	Lyophilized serum	IAS
GC	PHARMASSURE	Sample format will depend upon test type	6A
Gel strength (Bloom)	QGS	Gelatine	606
Gentamicin	CLS	Lyophilized serum	СНМ
	TDM	Human serum	AT01
		Human serum	TDI
Geosmin	AQUACHECK	Spiking solution	39
Geraniol	COSMETICS	Cosmetic, fragrance	35
Germinative capacity	MAPS	Barley	2
Germinative energy	MAPS	Barley	2
GGT	CLS	Lyophilized serum	СНМ

Analyte	Scheme ID	Matrix	Sample
Giardia Antigen	CLS	Liquid samples	CRG
Giardia lamblia	CLS	Liquid samples	GIP
Gingkolide B	PHARMASSURE	Gingko biloba	18
Ginsenoside Rb1	PHARMASSURE	Supplement	13
Ginsenoside Rb2	PHARMASSURE	Supplement	13
Ginsenosides (Total)	PHARMASSURE	Supplement	13
Glassy (Whole) corns	MAPS	Brewers and distillers malt	1
GLDH	CLS	Lyophilized serum	СНМ
Glucose	BAPS	Lager	2L
	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Simulated CSF	SFC
		Urine	UA
		Urine	UC
Glucose cont.	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
	QCS	Chocolate	715
		Cocoa powder	716
	QFCS	Honey	801
		Canned fruit	814
		Jam or marmalade	817
	QBS	Fruit juice	510
		Carbonated drinks	515
		Dilutable and ready to drink materials	517B
Glucose (Total)	QFCS	Instant coffee	824
Glutamic acid	QFCS	Infant formula powder	823
Gluten	BAPS	Gluten free beer	8
	QFCS	Flour	781
	L	Pasta sauce	851
		Canned meat	852
		Biscuits	854
		Swabs	855

Analyte	Scheme ID	Matrix	Sample
Glycerol	DAPS	Simulated spirit	Group B, B4
	PHARMASSURE	Solution	12
Glycine	QFCS	Infant formula powder	823
Glycol	OIL	Service engine oil	6
Glycosidic nitrile	MAPS	Brewers and distillers malt	1
		Malt	6
Glycosylated haemoglobin (as HbA1c)	CLS	Lyophilized human blood	GLH
Glyphosate	AQUACHECK	Synthetic effluent	20
	QFCS	Pome fruits	836
		Citrus fruits	837
		Fruiting vegetables	838
		Root/Tuber vegetables	839
		Pulses	840
		Cereals	841
GMO	QFCS	Soya/Maize	878
Gram negative organisms (confirmation)	CONF-IDENT	Lyophilised material	3
Gram negative organisms (identification)	CONF-IDENT	Lyophilised material	3
Gram positive organisms (identification)	CONF-IDENT	Lyophilised material	7
Gram positive organisms (confirmation)	CONF-IDENT	Lyophilised material	7
Gram Stain	QMS	Slide	49
Gram Stain Interpretation	CLS	Virtual gram stained slides	VGS
Gross Alpha as 230Thorium	AQUACHECK	Clean water	30
Gross alpha as 239Plutonium	AQUACHECK	Clean water	30
Gross alpha as 241Americium	AQUACHECK	Clean water	30
Gross beta as 137Caesium	AQUACHECK	Clean water	30
Gross beta as 40Potassium	AQUACHECK	Clean water	30
Gross beta as 90Strontium	AQUACHECK	Clean water	30
Group A Streptococcus	CLS	Lyophilised swabs	SPY
Group B Strep culture	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Group B Streptococcus	CLS	Lyophilised swabs	GBS
Group C/G Streptococcus	CLS	Lyophilised swabs	SPY
Growth Hormone (hGH)	CLS	Lyophilized serum	СНМ
Guaiacol producing thermophilic	QBS	Lyophilised test material	506
acidophilic bacteria (detection)	QMS	Fruit	45
	SUPS	Lyophilised test material	8
Haematocrit	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ

Analyte	Scheme ID	Matrix	Sample
Haematocrit, calculated	CLS	Ampoule	BLX
Haemoglobin	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
Haemoglobin, total	CLS	Ampoule	BLX
Haemophilus influenzae	CLS	Liquid samples	BCP
		Liquid samples	MEP
		Liquid samples	PNE
Hakicarbon	AIR	Tenax TA filled sorbent tubes (workplace air)	22
Haloperidol	TDM	New born calf serum	PS14
Haptoglobin	CLS	Lyophilized serum	IPR
Hartong VZ45	MAPS	Brewers and distillers malt	1
Haze	DAPS	Ciders	Group C, Cl
Haze at 0°C	BAPS	Ale (bitter)	1B
		Lager	1L
Haze at 20°C	BAPS	Ale (bitter)	1B
		Lager	1L
НВДН	CLS	Lyophilized serum	СНМ
HBsAg	CLS	Serum	HEP
hCG	CLS	Lyophilized serum	СНМ
		Urine	UA
Heat Content	OIL	#2 Diesel fuel	2
Heat unit	QFCS	Dried chilli powder	826
Hectolitre weight	MAPS	Barley	2
Heptachlor	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Heptachlor epoxide	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Heptylphenol	AQUACHECK	Water framework directive	34D
Herpes simplex virus 1	CLS	Liquid samples	MEP
Herpes simplex virus 2	CLS	Liquid samples	MEP
Hexachloro-1,3-butadiene	CONTEST	Standard solution	Group C, 19
Hexachlorobenzene	AQUACHECK	Synthetic effluent	19A
		Water framework directive	34E
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26

Analyte	Scheme ID	Matrix	Sample
Hexachlorobutadiene	AQUACHECK	Clean water	56
		Synthetic effluent	19B
		Water framework directive	34E
		Groundwater	7B
	CONTEST	Standard solutions & soil	25
Hexachlorocyclohexane	AQUACHECK	Water framework directive	34E
Hexachloroethane	CONTEST	Standard solutions & soil	25
Hexane	PHARMASSURE	Residual solvents	2E
Hexyl cinnamic aldehyde	COSMETICS	Cosmetic, fragrance	35
Hexylphenol	AQUACHECK	Water framework directive	34D
Highly heat resistant thermophilic aerobic spores (enumeration)	QMS	Skimmed milk powder	11
Histamine	QMAS	Fish	748
Histidine	QFCS	Infant formula powder	823
HIV-1 p24 Antigen	CLS	Serum	HIV
HMX (Octogen)	AQUACHECK	Clean water	65
Homocysteine	CLS	Lyophilized serum	CAR
Homogeneity	MAPS	Brewers and distillers malt	1
HO-risperidone	TDM	New born calf serum	PS10
HPV genotyping	CLS	Preservative solution with cells containing HPV	HPV
HT-2 toxin	AFPS	Oat	19
HTHS Viscosity at 150°C	OIL	Engine oil lubricants	5
Human herpesvirus 6	CLS	Liquid samples	MEP
Human Metapneumovirus (hMPV)	CLS	Liquid samples	PNE
		Liquid samples	RSP
Human papillomavirus	CLS	Preservative solution with cells containing HPV	HPV
Human parechovirus	CLS	Liquid samples	MEP
Human Rhinovirus / Enterovirus	CLS	Liquid samples	PNE
		Liquid samples	RSP
Hydrocarbon Type	OIL	#2 Diesel fuel	2
Hydrogen	OIL	#2 Diesel fuel	2
Hydrogen chloride	AIR	Impinger solution (stack emissions)	36
Hydrogen fluoride	AIR	Impinger solution (stack emissions)	35
Hydroquinone	COSMETICS	Cream	22
Hydroxy-citronellal	COSMETICS	Cosmetic, fragrance	35
Hydroxyisohexyl 3-cyclohexene carboxaldehyde	COSMETICS	Cosmetic, fragrance	35
Hydroxymethylfurfural (HMF)	QFCS	Honey	801
Hydroxyproline	QMAS	Meat	733
Hypnotic drugs	QUARTZ	Blood	1
		Blood and case study	2

Analyte	Scheme ID	Matrix	Sample
Ibuprofen	AQUACHECK	Clean water	57
	TDM	Human serum	AM1
Identification of microorganism	PHARMASSURE	Lyophilised test material	3
		Lyophilised test material	5
Identification of organism	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	3 - Hygiene Tests
Identity of organism	BAPS	Lyophilised test material	4H
		Lyophilised test material	4L
IgA	CLS	Lyophilized serum	IPR
lgE, total	CLS	Lyophilized serum	IPR
IGF-1	CLS	Lyophilized serum	IAS
lgG	CLS	Lyophilized serum	IPR
IgM	CLS	Lyophilized serum	IPR
lloperidone	TDM	New born calf serum	PS36
Imidacloprid	AQUACHECK	Groundwater	66
Imipramine	TDM	New born calf serum	PSO2
Immature Cells	CLS	Virtual slide	BID
Immature Granulocytes	CLS	Simulated whole blood	НМХ
Immature Granulocytes, absolute	CLS	Simulated whole blood	НМХ
IMP	CLS	Liquid samples	ВСР
		Lyophilised swabs	CRO
		Liquid samples	PNE
Indeno(1,2,3-cd)pyrene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
		Water framework directive	34F
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Indigo carmine (E132)	QFCS	Liquid	762
Infectious Mononucleosis	CLS	Serum	IM
Influenza A	CLS	Liquid samples	PNE
		Liquid samples	RSP
		Liquid samples	VIR

Analyte	Scheme ID	Matrix	Sample
Influenza A / H1-2009	CLS	Liquid samples	RSP
Influenza A H1	CLS	Liquid samples	RSP
Influenza A H3	CLS	Liquid samples	RSP
Influenza A or B	CLS	Liquid samples	VIR
Influenza B	CLS	Liquid samples	PNE
		Liquid samples	RSP
		Liquid samples	VIR
Inorganic arsenic	QFCS	Infant fruit/vegetable purée	827
		Brown rice	789
INR	CLS	Lyophilized plasma	COA
Insolubility index	QDCS	Whole protein concentrate	43
		Skimmed milk powder	51
		Whole milk powder	52
Insoluble	OIL	Service engine oil	6
Insoluble Impurities	QFCS	Extra virgin olive oil	790
Insulin	CLS	Lyophilized serum	IAS
IoB Extract 0.7mm	MAPS	Wheat	7
IoB Soluble Extract 0.7mm	MAPS	Malt	6
lodide	AQUACHECK	Waste water	63
	QFCS	Table salt	819
lodine value	QFCS	Oil or fat	778
lodosulfuron methyl	AQUACHECK	Groundwater	8B
loxynil	AQUACHECK	Groundwater	8
		Synthetic effluent	20
IR/FTIR	PHARMASSURE	Sample format will depend upon test type	6E

Analyte	Scheme ID	Matrix	Sample
Iron	AFPS	Animal feed	2
		Premix	8
	AIR	25 mm cellulose acetate (workplace air)	1
		37 mm cellulose acetate (workplace air)	1A
		Bulk welding fume sample	10A
		37 mm cellulose acetate (workplace air)	1B
		25 mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	4
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Groundwater	4G
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Lyophilized serum	СНМ
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
	OIL	Crude oil	4
		Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Fruit juice	518
		Soft drink	519
	QDCS	Whole milk powder	42

Analyte	Scheme ID	Matrix	Sample
Iron cont.	QFCS	Cereal	771
		Flour	775
		Bread	776
	QMAS	Precooked, raw or processed meat	731
	SUPS	Cane or beet sugar	2
Isavuconazole	TDM	Human serum	AF01
lso-amyl acetate	BAPS	Lager	2L
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
lso-apha-acids	BAPS	Ale	3
		Lager	2L
lso-butanol	BAPS	Lager	2L
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Isoelectric point	QGS	Gelatine	606
Isoeugenol	COSMETICS	Cosmetic, fragrance	35
Isoleucine	QFCS	Infant formula powder	823
Iso-propyl alcohol (IPA)	TOX	Blood	ТАК
		Serum	TAS
Isopropylbenzene	CONTEST	Standard solutions & soil	25
Isoproturon	AQUACHECK	Synthetic effluent	20B
		Water framework directive	34B
		Groundwater	8B
Itraconazole	TDM	Human serum	AF01

Analyte	Scheme ID	Matrix	Sample
K232	QFCS	Extra virgin olive oil	790
K270	QFCS	Extra virgin olive oil	790
		Olive oil	791
Kaempferol	PHARMASSURE	Gingko biloba	18
Kappa Light Chain, free	CLS	Lyophilized serum	IPR
Kappa Light Chain, total	CLS	Lyophilized serum	IPR
Ketamine	DAH	Hair	DH01
Ketones	CLS	Urine	UA
Kinetic energy testing (EN71-1 & ASTM F963)	TOYTEST	Toy product	12
Kjeldahl nitrogen	AQUACHECK	Spiking solution	10
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
Klebsiella aerogenes	CLS	Liquid samples	PNE
Klebsiella oxytoca	CLS	Liquid samples	BCP
		Liquid samples	PNE
Klebsiella pneumoniae	CLS	Liquid samples	BCP
Klebsiella pneumoniae group	CLS	Liquid samples	PNE
Kolbach index	MAPS	Brewers and distillers malt	1
KPC	CLS	Liquid samples	ВСР
		Lyophilised swabs	CRO
		Liquid samples	PNE
Kresoxym-methyl	AQUACHECK	Spiking solution	40

Analyte	Scheme ID	Matrix	Sample
Lacosamide	TDM	Human serum	AE2
Lactate	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Human serumAmpouleLyophilized serumSimulated csfWhite or rosé wineRed wineSimulated animal feedPetfood kibbleLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialEyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialGlass fibre filter 25mm diameter (workplace air)QCSMilkHard cheeseWhole protein concentrateSoft cheeseWhole protein concentrateSoft cheeseWhey powderProcessed cheeseFood productLyophilized serumLyophilized serumLyophilized serumLyophilized serumLyophilized serum	SFC
Lactic acid	DAPS	White or rosé wine	Group D, D1
		Human serumAmpouleLyophilized serumSimulated csfWhite or rosé wineRed wineSimulated animal feedPetfood kibbleLyophilised test materialLyophilised test materialEruit juiceSoft drinkLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialLyophilised test materialSkimmed milk powderOatmealLiquid samplesLyophilised test materialGlass fibre filter 25mm diameter (workplace air)QCSMilkHard cheeseWhole protein concentrateSoft cheeseWhey powderProcessed cheeseFood productLyophilized serumHuman serumGroundwaterLyophilized serum	Group D, D2
Lactic acid bacteria (enumeration)	AFPS	Simulated animal feed	7
		Petfood kibble	7KB
	BAPS	Lyophilised test material	4H
		TDMHuman serumCLSAmpouleLyophilized serumSimulated csfDAPSWhite or rosé wineRed wineAFPSSimulated animal feedPetfood kibbleBAPSLyophilised test materialLyophilised test materialLyophilised test materialQBSFruit juiceSoft drinkLyophilised test materialQMASLyophilised meatQMSSkimmed milk powderOatmealCLSLiquid samplesQMSQCSQDCSMilkHard cheeseWhole protein concentrateSoft cheeseWhole protein concentrateSoft cheeseQFCSFood productCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumCLSLyophilized serumTDMHuman serumAQUACHECKGroundwaterCLSLyophilized serum	4L
	QBS	Fruit juice	500
		Soft drink	501
		Lyophilised test material	505
	QMAS	Lyophilised meat	746
	QMS	Skimmed milk powder	24
		Oatmeal	24
Lactobacillus species	CLS	Liquid samples	BCP
Lactobacillus species (enumeration)	QMS	Lyophilised test material	27
Lactose	AIR		15
	Lyophilized serum Simulated csf DAPS White or rosé wine Red wine AFPS Simulated animal feed Petfood kibble BAPS Lyophilised test material Lyophilised test material Lyophilised test material QBS Fruit juice QMAS Lyophilised test material QMAS Lyophilised test material QMS Skimmed milk powder QMS Liquid samples QMS Lyophilised test material QMS Lyophilised test material QMAS Lyophilised rest material QMS Skimmed milk powder Oatmeal Oatmeal QCS QCS QDCS Milk Hard cheese Whole protein concentrate Soft cheese Whey powder Processed cheese Whey powder Processed cheese QFCS QFCS Food product CLS Lyophilized serum CLS Lyophilized serum TDM Huma	715	
	QDCS	Human serumAmpouleLyophilized serumSimulated csfWhite or rosé wineRed wineSimulated animal feedPetfood kibbleLyophilised test materialLyophilised test materialSkimmed milk powderOatmealLiquid samplesLyophilised test materialGlass fibre filter 25mm diameter (workplace air)QCSMilkHard cheeseWhole protein concentrateSoft cheeseWhey powderProcessed cheeseFood productLyophilized serumLyophilized serumHuman serumCKGroundwater	28
			37
		Whole protein concentrate	43
		Soft cheese	59
		Whey powder	38B
		Processed cheese	67
	QFCS	Food product	820
Lambda Light Chain, free	CLS	Lyophilized serum	IPR
Lambda Light Chain, total	CLS	Lyophilized serum	IPR
Lamotrigine	TDM	Human serum	TDI
Lanthanum	AQUACHECK	Groundwater	5G
LDH	CLS	Lyophilized serum	СНМ
LDH		Simulated csf	SFC

Analyte	Scheme ID	Matrix	Sample
Lead	AFPS	Animal feed	2
		Premix	8
	AIR	25 mm cellulose acetate (workplace air)	1
		Bulk lead-containing dust sample	10B
		37 mm cellulose acetate (workplace air)	1A
		Quartz fibre filter 47mm diameter (ambient)	13
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		37 mm cellulose acetate (workplace air)	1B
		25 mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Water framework directive	34A
		Clean water	5B
		Groundwater	5G
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	QFCS	Simulant	874

Analyte	Scheme ID	Matrix	Sample
Lead cont.	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
	OIL	Service engine oil	6
	PHARMASSURE	Supplement	14
		Powder material	2B
		Pollen supplement	17
	QBS	Fruit juice	518
		Soft drink	519
	QCS	Cocoa powder	718
	QFCS	Dried tea	780
		Cereal	784
		Edible oil	785
		Dried fruit	786
		Infant fruit/vegetable purée	827
		Brown rice	789
		Lyophilised mushrooms	795
		Table salt	819
		Ground pepper	866
		Herbs	871
		Simulant	874
	QMAS	Shellfish	741
		Fish	742
		Meat	747
	SUPS	Cane or beet sugar	2
	TOYTEST	EN71 - 3 standard solution and real material	3
Lead (Total)	AQUACHECK	Waste water	60
	TOYTEST	Paint flakes	9
		Jewellery	18
Legionella pneumophila	CLS	Liquid samples	PNE
		Liquid samples	RSP
Legionella pneumophila (detection)	QWAS	Environmental water	417
		Environmental water	418

Analyte	Scheme ID	Matrix	Sample
Legionella pneumophila (enumeration by	QWAS	Environmental water	417
culture)		Environmental water	418
Legionella pneumophila (enumeration by	QWAS	Environmental water	417
direct count)		Environmental water	417
Legionella pneumophila (enumeration by	QWAS	Environmental water	417
PCR)		Environmental water	418
Legionella pneumophila (identification)	QWAS	Environmental water	417
		Environmental water	418
Legionella pneumophila Antigen	CLS	Liquid samples	LG
Legionella species (enumeration)	QWAS	Potable water	423
Legionella species (low level) (detection)	QWAS	Potable water	423
Leucine	QFCS	Infant formula powder	823
Leucocrystal violet	QMAS	Seafood	723
Leucomalachite green	QMAS	Seafood	723
Leukocyte Esterase	CLS	Urine	UA
Leukocytes	CLS	Virtual gram stained slides	VGS
Level of ATP	HYGIENE	Lyophilised tablet/	5
Levetiracetam	TDM	Human serum	AE1
lgG	CLS	Simulated CSF	SFC
LH	CLS	Lyophilized serum	СНМ
Limonene	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
	CANNABIS	Hemp oil	2
		Cannabis flower	12
	COSMETICS	Cosmetic, fragrance	35
Linalool	CANNABIS	Hemp oil	2
		Cannabis flower	12
	COSMETICS	Cosmetic, fragrance	35
Linalool (gin only)	DAPS	Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
Lindane (Gamma HCH)	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Linezolid	TDM	Human serum	AT08
Linoleic acid C18:2 (cis & trans)	QFCS	Extra virgin olive oil	790
Linoleic acid C18:2 (trans)	QFCS	Olive oil	791
Linoleic acid C18:3 (cis & trans)	QFCS	Extra virgin olive oil	790
Linolenic acid C18:3 (trans)	QFCS	Olive oil	791

Analyte	Scheme ID	Matrix	Sample
Linuron	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Lipase	CLS	Lyophilized serum	СНМ
Listeria monocytogenes	CLS	Liquid samples	ВСР
		Liquid samples	MEP
Listeria monocytogenes (detection)	AFPS	Simulated animal feed	11
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	2
		Lyophilised test material	11
		Sponge	13
	QBS	Fruit juice	507
	QMAS	Meat	757
		Lyophilised meat	737
	QMS	Ready-to-eat	44
		Cheese	7C
		Salad and vegetables	7V
		Skimmed milk powder	7
		Oatmeal	7
		Skimmed milk powder	37
		Herbs	7F
Listeria monocytogenes (enumeration)	QMAS	Lyophilised meat	759
	QMS	Skimmed milk powder	8
		Oatmeal	8
Listeria species	CLS	Liquid samples	ВСР
Listeria species (confirmation)	CONF-IDENT	Lyophilised material	2
Listeria species (detection)	AFPS	Simulated animal feed	11
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	2
		Lyophilised test material	11
		Sponge	13
	QMAS	Meat	757
		Lyophilised meat	737
	QMS	Skimmed milk powder	7
		Oatmeal	7
		Skimmed milk powder	37
		Ready-to-eat	44
		Cheese	07C
		Salad and vegetables	07F
Listeria species (enumeration)	QMAS	Lyophilised meat	759
	QMS	Skimmed milk powder	8
		Oatmeal	8

Analyte	Scheme ID	Matrix	Sample
Listeria species (identification)	CONF-IDENT	Lyophilised material	2
	QMAS	Meat	757
		Lyophilised meat	737
	QMS	Ready-to-eat	44
		Skimmed milk powder	37
Lithium	AQUACHECK	Natural water	4
		Marine water	62
		Groundwater	4G
	CLS	Lyophilized serum	СНМ
	TDM	Human serum	TDI
Log10 reduction in microbial load	COSMETICS	Cream	30
Loratadine	QUARTZ	Blood	10B
Lorazepam	тох	Serum	BNBZ
Loss on drying (LOD)	PHARMASSURE	Sample format will depend upon test type	6D
Loss on ignition	AQUACHECK	Agricultural soil	14
	CONTEST	Soil	Group B, 3B
Loss on ignition (500±5°C)	AQUACHECK	Sewage sludge	16
Loss on Ignition at 440oC	CONTEST	Soil	27
Low level conductivity	PHARMASSURE	Sample format will depend upon test type	2D
		Sample format will depend upon test type	8A
Low level enumeration	PHARMASSURE	Lyophilised test material	3
LSD and Metabolite Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Lubricity (HFRR) Wear scar diameter at 60°C	OIL	#2 Diesel fuel	2
Lurasidone	TDM	New born calf serum	PS34
Lymphocytes	CLS	Virtual slide	BID
		Simulated whole blood	нмх
Lymphocytes, absolute	CLS	Simulated whole blood	нмх
Lymphocytes, reactive	CLS	Virtual slide	BID
Lysine	QFCS	Infant formula powder	823

Analyte	Scheme ID	Matrix	Sample
m + p-Xylenes	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 15
Magnesium	AFPS	Animal feed	2
		Premix	8
	AQUACHECK	Sewage sludge	16
		Clean water	59
		Marine water	61
		Higher salinity potable water	1A
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Lyophilized serum	СНМ
		Urine	UC
	CONTEST	Standard solution	Group A, 29
		Soil	Group D, 18
	DAPS	Bourbon	B2-A
		Dark rum	В2-В
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
	OIL	Engine oil lubricants	5
		Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Fruit juice	510
		Soft drink	519
		Liquid test material	524
	QDCS	Whole milk powder	42
	QFCS	Cereal	770
		Coffee	802
		Table salt	819
		Soya sauce	883
	QMAS	Precooked, raw or processed meat	731
	PHARMASSURE	Standard solution	10

Analyte	Scheme ID	Matrix	Sample
Magnesium, ionised	CLS	Ampoule	BLG
Malachite green	QMAS	Seafood	723
Malathion	AQUACHECK	Groundwater	9
		Synthetic effluent	21
		Clean water	56
	CONTEST	Standard solutions & soil	30
Malic acid	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
	QFCS	Food product	863
Malt mod homogeneity	MAPS	Brewers and distillers malt	1
Malt modification	MAPS	Brewers and distillers malt	1
Maltose	BAPS	Lager	2L
	DAPS	Simulated spirit	Group B, B4
Maltotriose	BAPS	Lager	2L
Manganese	AFPS	Animal feed	2
		Premix	8
	AIR	25 mm cellulose acetate (workplace air)	1
		37 mm cellulose acetate (workplace air)	1A
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		Bulk welding fume sample	10A
		37 mm cellulose acetate (workplace air)	1B
		25 mm cellulose acetate (workplace air)	1C
	AQUACHECK	Natural water	4
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Groundwater	4G
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
	OIL	Service engine oil	6
	PHARMASSURE	Multielement supplement	21

Analyte	Scheme ID	Matrix	Sample
Manganese cont.	QBS	Soft drink	519
	QDCS	Whole milk powder	42
	TOYTEST	EN71 - 3 standard solution and real material	3
Maprotiline	ТДМ	New born calf serum	PS12
Mass of solids	AIR	Dust on glass fibre filter 25mm diameter (workplace air)	3
		Dust on glass fibre filter 37mm diameter (workplace air)	4
		Quartz fibre filter 47mm diameter (ambient)	17
		Dust on glass fibre filter 47mm diameter (stack emissions)	40
МСН	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
МСНС	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
МСРА	AQUACHECK	Groundwater	8
		Synthetic effluent	20
МСРВ	AQUACHECK	Groundwater	8
		Synthetic effluent	20
mcr-1	CLS	Liquid samples	ВСР
MCV	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
MDMA	QUARTZ	Blood	10A
Measurement testing (EN71-1 & ASTM F963)	TOYTEST	Various	11
Meat authenticity	QMAS	Meat	749
mecA	CLS	Liquid samples	ВСР
mecA/C	CLS	Liquid samples	ВСР
mecA/C & MREJ	CLS	Liquid samples	ВСР
		Liquid samples	PNE
Mechanical and physical properties	TOYTEST	ASTM F963 toy product for paper exercise	7
Meclobemide	TDM	Human serum	PS38
Mecoprop	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Melting point	PHARMASSURE	Standard material	1F

Analyte	Scheme ID	Matrix	Sample
Mercury	AFPS	Animal feed	2
		Premix	8
	AIR	Impinger solution (stack emissions)	31
		Impinger solution (stack emissions)	32
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Industrial wastewater	17C
		Water framework directive	34A
		Clean water	5B
		Groundwater	5G
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1c
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
		Mouthwash sample	24
		Toothpaste sample	25
	PHARMASSURE	Supplement	14
		Powder material	2B
		Pollen supplement	17
	QFCS	Dried tea	780
		Cereal	784
		Edible oil	785
		Dried fruit	786
		Table salt	819
		Ground pepper	866
	QMAS	Shellfish	741
		Fish	742
		Meat	747
	SUPS	Cane or beet sugar	2
	TOYTEST	EN71 - 3 standard solution and real material	3
	CANNABIS	Simulated dried cannabis plant	4
Mercury (Total)	AQUACHECK	Waste water	60
	TOYTEST	Dried paint flakes	9

Analyte	Scheme ID	Matrix	Sample
Meropenem	ТДМ	Human serum	AT08
Mesophilic aerobic spores (enumeration)	QMS	Skimmed milk powder	11
		Oatmeal	11
Mesophilic anaerobic spores (enumeration)	QGS	Gelatine	605
	QMS	Skimmed milk powder	15
		Oatmeal	15
Mesosulfuron methyl	AQUACHECK	Groundwater	8B
Metaldehyde	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Metamitron	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Metanephrines	TDM	Lyophilised plasma	MT01
Metazachlor	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Methabenzthiazuron	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Methadone	QUARTZ	Blood	3
	TDM	Human serum	SA02
Methadone and Metabolite Screen	DAU	Urine	1
		Urine	2
		Urine	3
Methadone EDDP	DAH	Hair	DH01
Methadone Screen	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Methaemoglobin	CLS	Ampoule	BLX
Methanethiol	BAPS	Lager	2L
Methanol	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
	PHARMASSURE	Residual solvents	2E
	тох	Blood	ТАК
		Serum	TAS

Analyte	Scheme ID	Matrix	Sample
Methaqualone Screen	DAU	Urine	1
		Urine	2
		Urine	3
Methicillin-Resistant Staphylococcus	CLS	Lyophilised swabs	MRM
aureus		Lyophilised swabs	MRS
Methiocarb	AQUACHECK	Groundwater	8B
Methionine	QFCS	Infant formula powder	823
Methotrexate	TDM	Human serum	TDI
Methoxychlor	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
Methyl heptin carbonate	COSMETICS	Cosmetic, fragrance	35
Methyl isoborneol	AQUACHECK	Spiking solution	39
Methyl isobutyl ketone (MIBK)	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
Methyl t-butyl ether	CONTEST	Standard solutions & soil	25
Methylene blue active substances (MBAS)	AQUACHECK	Spiking solution	3
		Spiking solution	11
Methylene chloride	CONTEST	Standard solutions & soil	25
Methylparaben	COSMETICS	Cream sample	27
		Mascara	31
Methylphenidate	TDM	Lyophilised human serum	PST1
Methylphenols (monosubstituted) (Total)	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
Metoxuron	AQUACHECK	Groundwater	8B
Metribuzin	AQUACHECK	Groundwater	8B
Metsulfuron methyl	AQUACHECK	Groundwater	8B

Analyte	Scheme ID	Matrix	Sample
Mevinphos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Mianserin	TDM	New born calf serum	PS32
Micro Carbon Residue	OIL	Crude oil	4
Microbial cleanliness	COSMETICS	Face mask	34
Microbial enumeration	COSMETICS	Cream	30
Microbiological Confirmation and Identification	CONFIDENT	Lyophilised material	8
Micrococcus species	CLS	Liquid samples	BCP
Microcystin-LR	AQUACHECK	Spiking solution	41
Microcystin-RR	AQUACHECK	Spiking solution	41
Microcystin-YR	AQUACHECK	Spiking solution	41
Microcystin (Total)	AQUACHECK	Spiking solution	41
Midazolam	тох	Serum	BNBZ
Milk protein	QFCS	Non-dairy milk	853
		Biscuits	854
Minor tranquillizers	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Mirtazapine	QUARTZ	Blood	10A
	TDM	New born calf serum	PS11

Analyte	Scheme ID	Matrix	Sample
Moisture	AFPS	Animal feed	1
		Wet pet food	9
		Fish feed	13
		Silage	14
	MAPS	Brewers and distillers malt	1
		Barley	2
		Malt	6
		Wheat	7
		Black malt	4A
		Crystal malt	4B
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Butter	36
		Hard cheese	37
		Whole protein concentrate	43
		Whole milk powder	52
		Soft cheese	59
		Cheese powder	63
		Skimmed milk powder	38A
		Whey powder	38B
	QFCS	Instant coffee	824
		Dried tea	829
		Non-wheat flour	832
		Cereal	770
		'Ready to eat' product	772
		Flour	775
		Bread	776
		Cake	793
		Honey	801
		Ground pepper	815
		Ground pasta	816
		Jam or marmalade	817
		Table salt	819
		Food product	834
		Food product	835
		Candy	859
		Chewing gum	860
		Garlic powder	861

Analyte	Scheme ID	Matrix	Sample
Moisture cont.	QFCS cont.	Peanut butter	862
		Green coffee	865
		Spices	869
		Herbs	879
		Dried fruits	884
	QGS	Gelatine	606
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
		Fish	734
	SUPS	Raw sugar	7
		Cane or beet sugar	10
Moisture and volatile matter	COSMETICS	Liquid or solid soap	28
		Powder detergent	29
		Liquid detergent	32
Moisture and volatile matter at 103°C	QFCS	Extra virgin olive oil	790
Moisture by Karl Fischer	PHARMASSURE	Sample format will depend upon test type	6F
Molybdenum	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Groundwater	5G
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	OIL	Engine oil lubricants	5
		Service engine oil	6
Monochloroacetic acid	AQUACHECK	Clean water	44
Monocytes	CLS	Virtual slide	BID
		Simulated whole blood	НМХ
Monocytes, absolute	CLS	Simulated whole blood	НМХ
Monohydric phenols (By distillation)	CONTEST	Standard solution	Group C, 7a
Monolinuron	AQUACHECK	Groundwater	8B
Monounsaturated fatty acids	QFCS	Cod liver oil	806

Analyte	Scheme ID	Matrix	Sample
Monounsaturates	QFCS	Food product	834
		Food product	835
		'Ready to eat' product	772
		Mixed fat spread	782
		Grated cheese	800
		Plant based meat	877
	QMAS	Meat	733
Monuron	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Moraxella catarrhalis	CLS	Liquid samples	PNE
Morganella morganii	CLS	Liquid samples	ВСР
Morphine	QFCS	Ground poppy seeds	831
	QUARTZ	Blood	3
Mould (detection)	CANNABIS	Simulated dried cannabis plant	7
Mould (enumeration)	AFPS	Animal feed	15
	CANNABIS	Simulated dried cannabis plant	7
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Plastic surface, a lyophilised tablet and 5ml diluent	6
		Lyophilised test material	10
	QBS	Fruit juice	500
		Soft drink	501
		Lyophilised test material	505
	QCS	Cocoa powder	713
		Chocolate	717
	QMS	Skimmed milk powder	23
		Oatmeal	23
		Skimmed milk powder	36
		Herbs	36H
		Spices	37SP
	QWAS	Potable water	413
		Process water	414
	SUPS	Lyophilised test material	6
MPV	CLS	Simulated whole blood	внм
		Simulated whole blood	нмх
МТВЕ	AQUACHECK	Groundwater	6C
m-Xylene	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
Mycobacteriology culture ID	CLS	Lyophilized loops and/ or liquid samples	МТВ

Analyte	Scheme ID	Matrix	Sample
Mycobacterium tuberculosis complex	CLS	Liquid samples	MTM
Mycology culture ID	CLS	Lyophilised swabs	MY
Mycophenolic acid	IPT	Human plasma	MPA
Mycoplasma genitalium	CLS	Liquid samples	MPG
Mycoplasma pneumoniae	CLS	Liquid samples	МРМ
		Liquid samples	PNE
		Liquid samples	RSP
Myoglobin	CLS	Lyophilized serum	CAR

Analyte	Scheme ID	Matrix	Sample
N. gonorrhoeae culture	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Naphthalene	AQUACHECK	Synthetic effluent	19C
		Water framework directive	34J
		Groundwater	7C
	CONTEST	Standard solutions & soil	25
		Soil	Group C, 3C
		Standard solution	Group C, 5
Napropamide	AQUACHECK	Groundwater	8
Naproxen	AQUACHECK	Clean water	57
Nasal Smear	CLS	Virtual images for microscopy	MP
Natamycin	QDCS	Cheese	73
n-Butanol	DAPS	Bourbon	B2-A
		Dark rum	В2-В
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3

Analyte	Scheme ID	Matrix	Sample
n-Butyl acetate	AIR	Charcoal filled glass sorbent tubes (workplace air)	6
n-Butylbenzene	CONTEST	Standard solutions & soil	25
NDM	CLS	Liquid samples	BCP
		Lyophilised swabs	CRO
		Liquid samples	PNE
NDMA	DAPS	Bourbon	B2-A
		Dark rum	В2-В
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
NEFA	CLS	Lyophilized serum	СНМ
Neisseria gonorrhoeae	CLS	Liquid samples	CGC
Neisseria meningitidis	CLS	Liquid samples	ВСР
		Liquid samples	MEP
Neutral detergent fibre (NDF)	AFPS	Animal feed	1
Neutrophils	CLS	Simulated whole blood	НМХ
Neutrophils, absolute	CLS	Simulated whole blood	НМХ
Neutrophils, band	CLS	Virtual slide	BID
Neutrophils, segmented	CLS	Virtual slide	BID
Neutrophils, segmented or band	CLS	Virtual slide	BID
New psychoactive substances	QUARTZ	Blood	6
n-Hexane	AIR	Charcoal filled glass sorbent tubes (workplace air)	6
		Tenax TA filled sorbent tubes (indoor or chamber air)	21
Nickel	AIR	25 mm cellulose acetate (workplace air)	1
		Quartz fibre filter 47mm diameter (ambient)	13
		Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
		37 mm cellulose acetate (workplace air)	1A
		Bulk welding fume sample	10A
		37 mm cellulose acetate (workplace air)	1B
		25 mm cellulose acetate (workplace air)	1C

Analyte	Scheme ID	Matrix	Sample
Nickel cont.	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Water framework directive	34A
		Clean water	5B
		Groundwater	5G
	CANNABIS	Simulated dried cannabis plant	4
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Lipstick	19
		Lip gloss	20
		Powder	21
	OIL	Crude oil	4
		Service engine oil	6
	TOYTEST	EN71 - 3 standard solution and real material	3
Nickel (Total)	AQUACHECK	Waste water	60
	TOYTEST	Paint flakes	9
Nickel release	NIMS	Alloy disks, jewellery or other appropriate articles	1A
		Alloy disks, jewellery or other appropriate articles	18
		Alloy disks, jewellery or other appropriate articles	1C
Nicotine	PHARMASSURE	Solution	12
	TDM	Lyophilised human urine	NC01

Analyte	Scheme ID	Matrix	Sample
Nitrate	AIR	Quartz fibre filter 47mm diameter (ambient)	14
	AQUACHECK	Spiking solution	10
		Clean water	59
		Waste water	60
		Marine water	61
		Hard surface water	2Н
		Soft surface water	25
		Hard potable water	2HP
		Soft potable water	2SP
Nitrate cont.	BAPS	Lager	2L
	CONTEST	Soil	Group D, 18
	QFCS	Vegetable leaves	787
		Infant vegetable food	798
	QMAS	Lyophilised meat	732
		Fish product	718
Nitrate and Nitrite	QDCS	Milk powder	65
		Milk powder	65
Nitrazepam	TOX	Human serum	BNZ
Nitrite	AQUACHECK	Spiking solution	10
		Waste water	60
		Hard surface water	2H
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
	CLS	Urine	UA
	QMAS	Lyophilised meat	732
		Fish product	718
Nitrobenzene	AQUACHECK	Clean water	65
	CONTEST	Standard solutions & soil	25
Nitrofurans	QMAS	Chicken	721
Nitrogen	OIL	#2 Diesel fuel	2
		Engine oil lubricants	5

Analyte	Scheme ID	Matrix	Sample
Nitrogen (Total)	AQUACHECK	Spiking solution	10
		Sewage sludge	13
		Agricultural soil	14
		Marine water	61
		Industrial wastewater	17D
	CLS	Urine	UC
	MAPS	Brewers and distillers malt	1
		Barley	2
	OIL	Crude oil	4
	QCS	Cocoa powder	716
		Chocolate	715
Nitrogen dioxide	AIR	Palmes-type diffusion tubes (ambient)	11
Nitrosodimethylamine (NDMA)	DAPS	Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
	MAPS	Brewers and distillers malt	1
		Malt flour	5
Non filterable COD	AQUACHECK	Wastewater	17A
Non steroidal anti-Inflammatory analgesic	QUARTZ	Blood	1
drugs		Blood and case study	2
Non volatile ether extract	QFCS	Spices	815
Non-ionic surfactants	AQUACHECK	Spiking solution	3
		Spiking solution	11
Non-opiate narcotics	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Nonylphenol	AQUACHECK	Groundwater	06B
		Synthetic effluent	18B
		Water framework directive	34D
Norbuprenorphine	TDM	Human serum	SA01
Norchlorpromazine	TDM	New born calf serum	PS31
Norcitalopram	TDM	New born calf serum	PS18
Norclobazam	TDM	Human serum	CN1

Analyte	Scheme ID	Matrix	Sample
Norclomipramine	TDM	New born calf serum	PS03
Norclozapine	TDM	Human serum	PSO4
Nordazepam	ТОХ	Human serum	BNZ
Nordihydrocapsaicin	QFCS	Dried chilli powder	826
Nordoxepin	TDM	New born calf serum	PS05
Norfluoxetine	TDM	New born calf serum	PS06
Normaprotiline	TDM	New born calf serum	PS12
Normirtazapine	TDM	New born calf serum	PS11
Norovirus Gl	CLS	Samples	NOR
Norovirus GI/GII	CLS	Liquid samples	GIP
Norovirus GII	CLS	Samples	NOR
Norquetiapine	TDM	New born calf serum	PS17
Norsertraline	TDM	New born calf serum	PS08
Northiaden	TDM	New born calf serum	PS19
Nortrimipramine	TDM	New born calf serum	PS09
Nortriptyline	TDM	New born calf serum	PS01
Norvenlafaxine	TDM	New born calf serum	PS20
n-Propanol	BAPS	Lager	2L
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
n-Propylbenzene	CONTEST	Standard solutions & soil	25
NRBCs per 100 WBCs	CLS	Virtual slide	BID
NSE	CLS	Lyophilized serum	TMS
NT pro-BNP	CLS	Lyophilized serum	CAR
Nuclear Magnetic Resonance (NMR) Spectrometry	PHARMASSURE	Sample format will depend upon test type	6K
Nucleated RBCs	CLS	Simulated whole blood	НМХ
Nugent Score	CLS	Virtual gram stained slides	GSV
Number of microorganisms (calculation)	QWAS	Water	427

Analyte	Scheme ID	Matrix	Sample
o,p'-DDD (TDE)	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
o,p'-DDE	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
o,p-DDT	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
Oak moss extract	COSMETICS	Cosmetic, fragrance	35
Ochratoxin A	AFPS	Animal feed	5
	MAPS	Malt flour	3
	QFCS	Rice	845
		Dried fruit	804
		Ground corn	867
	CANNABIS	Hemp oil	3
Octylphenol	AQUACHECK	Water framework directive	34D
Oestradiol	CLS	Lyophilized serum	СНМ
Oestriol, free (UE3)	CLS	Lyophilized serum	СНМ
Oestriol, total	CLS	Lyophilized serum	СНМ
Ofloxacin	AQUACHECK	Clean water	57
OH-Itraconazole	TDM	Human serum	AF01
OH-oxcarbazepine	TDM	Human serum	AE1
Olanzapine	TDM	Human serum	PS15
Oleic acid 18.1 (cis & trans)	QFCS	Extra virgin olive oil	790
Oleic acid C18:1 (cis & trans)	QFCS	Olive oil	791
Oleic acid C18:1 (trans)	QFCS	Olive oil	791
Omega-3	QFCS	Mixed fat spread	782
Omega-3 (Total)	QFCS	Grated cheese	800
Omega-3 fatty acids EPA+DHA (Total)	QFCS	Cod liver oil	806
Omega-3 : Omega-6 ratio	QFCS	Cod liver oil	806
Omega-3 (Total) : Omega-6 (Total) ratio	QFCS	Grated cheese	800
Omega-6 (Total)	QFCS	Grated cheese	800
Omega-6 fatty acids (Total)	QFCS	Cod liver oil	806
Omega-9 fatty acids (Total)	QFCS	Cod liver oil	806
Opiates screen (Total)	DAH	Hair	DH01
		Hair	DH02
	DAU	Urine	1
		Urine	2
		Urine	3
Opiates	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3

Analyte	Scheme ID	Matrix	Sample
Opioid analgesic drugs	QUARTZ	Blood	1
		Blood and case study	2
Organic carbon content	AQUACHECK	Agricultural soil	14
Organic chemical compounds	TOYTEST	EN71 - 9 paper exercise	6
Organic tin	TOYTEST	EN71 - 3 standard solution and real material	3
Original extract	BAPS	Ale (bitter)	1B
		Lager	۱L
Original gravity	BAPS	Ale (bitter)	1B
		Lager	1L
	DAPS	Fermented wort	Group A, A1
		Simulated wort	Group A, A2
Orthophosphate	AQUACHECK	Waste water	60
		Marine water	61
Osmolality	CLS	Lyophilized serum	СНМ
		Urine	UC
Osmophilic mould (enumeration)	QMS	Skimmed milk powder	5
		Oatmeal	5
Osmophilic mould count	SUPS	Lyophilised test material	6
Osmophilic yeast (enumeration)	QMS	Skimmed milk powder	5
		Oatmeal	5
	SUPS	Lyophilised test material	6
Osteocalcin	CLS	Lyophilized serum	IAS
Other substances of interest	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
OXA	CLS	Liquid samples	BCP
OXA-48	CLS	Lyophilised swabs	CRO
OXA-48-like	CLS	Liquid samples	BCP
		Liquid samples	PNE
Oxycodone	QUARTZ	Blood	10A
Oxazepam	TOX	Human serum	BNZ
Oxyhaemoglobin	CLS	Ampoule	BLX
o-Xylene	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 15
Oxytetracycline	AQUACHECK	Clean water	57

Analyte	Scheme ID	Matrix	Sample
p,p'-DDD	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
p,p'-DDE	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
p,p'-DDT	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A
	CONTEST	Standard solutions & soil	26
PAH (Total)	CONTEST	Soil	Group C, 3C
Palmitic acid C16:0	QFCS	Extra virgin olive oil	790
Palmitoleic acid C16:1 (cis & trans)	QFCS	Olive oil	791
PAP	CLS	Lyophilized serum	СНМ
Paracetamol (Acetaminophen)	CLS	Lyophilized serum	СНМ
	ТОХ	Human blood	BLD
		Human serum	SM
Parainfluenza 1	CLS	Liquid samples	RSP
Parainfluenza 2	CLS	Liquid samples	RSP
Parainfluenza 3	CLS	Liquid samples	RSP
Parainfluenza 4	CLS	Liquid samples	RSP
Parainfluenza virus	CLS	Liquid samples	PNE
Parathion-ethyl	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Parathion-methyl	AQUACHECK	Groundwater	9
		Synthetic effluent	21
	CONTEST	Standard solutions & soil	30
Parathyroid Hormone (PTH)	CLS	Lyophilized serum	IAS
Paroxetine	TDM	New born calf serum	PS21
Particle Count > 14 µm (c)	OIL	Service engine oil	6
Particle Count > 38 µm (c)	OIL	Service engine oil	6
Particle Count > 4 μm (c)	OIL	Service engine oil	6
Particle Count > 6 μm (c)	OIL	Service engine oil	6
Particle Count > 70 μm (c)	OIL	Service engine oil	6
Particulate Contamination by Filtration	OIL	#2 Diesel fuel	2
Particulate determination	PHARMASSURE	Sample format will depend upon test type	2D
		Sample format will depend upon test type	8B

Analyte	Scheme ID	Matrix	Sample
Partly unmodified grains	MAPS	Brewers and distillers malt	1
Patulin	QBS	Apple juice	520
РСВ (77)	CONTEST	Soil	Group C, 3C
PCB (101)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (118)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (138)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (149)	AQUACHECK	Groundwater	07D
		Synthetic effluent	19D
PCB (153)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (170)	AQUACHECK	Groundwater	07D
		Synthetic effluent	19D
PCB (180)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (28)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
PCB (52)	AQUACHECK	Synthetic effluent	19D
		Groundwater	7D
	CONTEST	Standard solution	Group C, 11
		Soil	Group C, 3C
pCO2	CLS	Ampoule	BLG
Peanut	QFCS	Surface swab	882
Pendimethalin	AQUACHECK	Clean water	58
		Synthetic effluent	19A
		Groundwater	7A

Analyte	Scheme ID	Matrix	Sample
Pentachlorobenzene	AQUACHECK	Synthetic effluent	19A
		Water framework directive	34E
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Pentachlorophenol	AQUACHECK	Synthetic effluent	18B
		Water framework directive	34D
		Groundwater	6B
Pentylphenol	AQUACHECK	Water framework directive	34D
Pepsin protein digestibility (PPD)	AFPS	Animal feed	1
Perampanel	TDM	Human serum	AE4
Perchlorates	QFCS	Perchlorates in vegetables	792
Permanganate index (PI)	AQUACHECK	Hard surface water	2H
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
Peroxide value	AFPS	Coprah oil	18
	QFCS	Oil or fat	778
		Extra virgin olive oil	790
Perphenazine	TDM	New born calf serum	PS16
Perylene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
Pesticides	CANNABIS	Hemp oil	5
	QFCS	Pome fruits	836
		Citrus fruits	837
		Fruiting vegetables	838
		Tuber fruits	839
		Pulses	840
		Cereals	841
		Vegetable	842
		Spices	843
		Fungi (mushrooms)	844
		Fruit/vegetable	773
		Dried tea	777
		Herbs	880
PETN (Pentaerythritol tetranitrate)	AQUACHECK	Clean water	65
PFAS	AQUACHECK	Ground water	67
PFOA	AQUACHECK	Spiking solution	26
		Clean water	52

Analyte	Scheme ID	Matrix	Sample
PFOS	AQUACHECK	Spiking solution	26
		Clean water	52
рН	AQUACHECK	Clean water	59
	BAPS	Ale (bitter)	1B
		Alcohol free beer	7A
		Low alcohol beer	7B
		Lager	۱L
	CLS	Ampoule	BLG
		Urine	UA
	CONTEST	Standard solution	Group A, 29
		Soil	Group B, 3B
		Soil	Group D, 18
	COSMETICS	Liquid cosmetics	23
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Fermented wort	Group A, Al
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
		Ciders	Group C, Cl
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El

Analyte	Scheme ID	Matrix	Sample
pH cont.	DAPS cont	Liqueur	Group E, E2
		Cream liqueur	Group E, E3
	MAPS	Brewers and distillers malt	1
		Brewers and distillers malt	1
	PHARMASSURE	Buffer solution	1A
		e-liquid	12
	QBS	Fruit juice	510
		Liquid test material	524
		Energy drink	525
		Energy drink	526
		Carbonated drinks	516A
		Dilutable and ready to drink materials	517A
	QCS	Cocoa powder	716
	QDCS	Butter	36
		Hard cheese	37
		Skimmed milk powder	38A
		Whole protein concentrate	43
		Soft cheese	59
		Cheese powder	63
		Milk	32A
		Buffer solution	32B
	QFCS	Vinegar	822
		Instant coffee	824
		Mixed fat spread	782
		Tomato paste/purée	783
		Honey	801
		Coffee	802
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Canned fruit	814
		Jam or marmalade	817
		Chewing gum	860
		Relish	858
		Soya sauce	883
	QGS	Gelatine	606
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
		Fish	734
	SUPS	Syrup	11
		Molasses	5

Analyte	Scheme ID	Matrix	Sample
pH (1% aqueous solution at 25°C)	COSMETICS	Powder detergent	29
		Liquid detergent	32
рН (20-25°С)	AQUACHECK	Agricultural soil	14
		Sewage sludge	16
		Waste water	60
		Marine water	61
		Waste water	64
		Wastewater	17A
		Higher salinity potable water	1A
		Hard surface water	2H
		Soft surface water	2S
		Hard potable water	2НР
		Soft potable water	2SP
рН (20-25°С) - High	AQUACHECK	Poorly buffered waters	2A
рН (20-25°С) - Low	AQUACHECK	Poorly buffered waters	2A
pH (EBC Wort)	MAPS	Wheat	7
pH (IoB Wort)	MAPS	Wheat	7
Phenanthrene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5
Phencyclidine Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Phenobarbital	CLS	Lyophilized serum	СНМ
Phenobarbitone	TDM	Human serum	TDI
Phenol	DAPS	Scotch whisky	B1
Phenol index	CONTEST	Solid waste leachate	24
		Soil	Group D, 18
		Soil	Group E, 21
Phenols	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
	AQUACHECK	Synthetic effluent	18B
		Groundwater	6B
	CONTEST	Spiking solutions	Group C, 3C
		Standard solution	Group C, 7b
Phenols (Total)	AQUACHECK	Industrial wastewater	17B
	MAPS	Brewers and distillers malt	1

Analyte	Scheme ID	Matrix	Sample
Phenylalanine	QFCS	Infant formula powder	823
Phenytoin	CLS	Lyophilized serum	СНМ
	TDM	Human serum	TDI
Phorate	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Phosmet	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Phosphatase	QDCS	Freeze dried milk	31 (A&B)
Phosphate	BAPS	Lager	2L
	CLS	Lyophilized serum	СНМ
		Urine	UC
	CONTEST	Soil	Group D, 18
	QFCS	Cereal	770
		'Ready to eat' product	772
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
Phosphates (as PO43-)	COSMETICS	Liquid detergent	32
Phosphoric acid	QBS	Carbonated drinks (degassed)	516A
Phosphorus	OIL	Engine oil lubricants	5
		Service engine oil	6
	AFPS	Animal feed	2
		Premix	8
	CANNABIS	Simulated dried cannabis plant	4
	QBS	Fruit juice	510
		Soft drink	519
	QDCS	Whole milk powder	42
		Processed cheese	67
	QFCS	Coffee	802
	QMAS	Shellfish	741
		Fish	742
		Meat	747
Phosphorus (Total)	AQUACHECK	Spiking solution	10
		Sewage sludge	13
		Agricultural soil	14
		Marine water	61
		Industrial wastewater	17D
		Hard water	ΊΗ
		Soft water	15
		Hard potable water	1HP
		Soft potable water	1SP

Analyte	Scheme ID	Matrix	Sample
Phthalates	QFCS	Vegetable/seed oil	875
	TOYTEST	Section of plastic material plus two test solutions	11
Phytochemical Identity (confirmation)	PHARMASSURE	Plant material or plant extract	19
Picloram	AQUACHECK	Groundwater	8
Pinworm Preparation	CLS	Virtual images for microscopy	MP
Piperacillin	TDM	Human serum	AT08
Piperine content	QFCS	Ground pepper	815
Pirimicarb	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Plasminogen Activity	CLS	Lyophilized plasma	COA
Platelet Estimate	CLS	Virtual slide	BID
Plateletcrit	CLS	Simulated whole blood	внм
Platelets	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
Plesiomonas shigelloides	CLS	Liquid samples	GIP
pO2	CLS	Ampoule	BLG
Polarimetry	PHARMASSURE	Sample format will depend upon test type	61
Polarisation	SUPS	Cane or beet sugar	3
		Raw sugar	7
		Syrup	11
Polyphenols (Total)	BAPS	Lager	2L
	QFCS	Extra virgin olive oil	790
Polyunsaturated fatty acids	QFCS	Cod liver oil	806
Poly-unsaturates	QFCS	'Ready to eat' product	772
		Mixed fat spread	782
		Grated cheese	800
		Potato crisps	834
		Tortilla chips	835
		Plant based meat	877
	QMAS	Meat	733
Ponceau 4R (E124)	QFCS	Liquid	762
Posaconazole	TDM	Human serum	AF01

Analyte	Scheme ID	Matrix	Sample
Potassium	AFPS	Animal feed	2
		Premix	8
	AQUACHECK	Clean water	59
		Marine water	61
		Hard surface water	1H
		Soft surface water	15
		Hard potable water	1HP
		Soft potable water	1SP
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Simulated csf	SFC
		Urine	UC
	CONTEST	Standard solution	Group A, 29
		Soil	Group D, 18
	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
	OIL	Engine oil lubricants	5
		Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Fruit juice	510
		Liquid test material	524
	QDCS	Whole milk powder	41
	QFCS	Cereal	770
		Coffee	802
		Soya sauce	883
	QMAS	Precooked, raw or processed meat	731
	QBS	Soft drink	519
otassium (Total)	AQUACHECK	Sewage sludge	13
. ,		Agricultural soil	14
our Point	OIL	#2 Diesel fuel	2
		Crude oil	4
		Engine oil lubricants	5
Prealbumin	CLS	Lyophilized serum	СНМ

Analyte	Scheme ID	Matrix	Sample
Predicted spirit yield, (as is)	MAPS	Brewers and distillers malt	1
Pregabalin	QUARTZ	Human serum	AE1
	TDM	Blood	10A
Present gravity	BAPS	Ale (bitter)	1B
		Lager	1L
Primidone	TDM	Human serum	TDI
Probiotics (Total)	QMS	Lyophilized material	27
Procalcitonin	CLS	Lyophilized serum	IAS
Progesterone	CLS	Lyophilized serum	СНМ
Prolactin	CLS	Lyophilized serum	СНМ
Proline	QFCS	Infant formula powder	823
Prometryn	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Propachlor	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Propazine	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Propetamphos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Propiconazole	AQUACHECK	Spiking solution	40
Propionic acid (E280)	QFCS	Food product	863
Propoxyphene and Metabolite Screen	DAU	Urine	1
		Urine	2
		Urine	3
	DOF	Oral fluid	OF1
		Oral fluid	OF2
		Oral fluid	OF3
Propranolol	AQUACHECK	Clean water	57
Propylene glycol	DAPS	Simulated spirit	Group B, B4
	PHARMASSURE	Solution	12
Propylparaben	COSMETICS	Cream sample	27
		Mascara	31
Propyzamide	AQUACHECK	Groundwater	8
		Synthetic effluent	20
Prosulfocarb	AQUACHECK	Groundwater	8B

Analyte	Scheme ID	Matrix	Sample
Protein	AFPS	Fish feed	13
	CLS	Urine	UA
	MAPS	Wheat	7
	QBS	Smoothie	525
	QDCS	Condensed milk	66
		Processed cheese	67
		Milk	28
		Hard cheese	37
		Whole protein concentrate	43
		Skimmed milk powder	51
		Whole milk powder	52
		Yogurt	58
		Soft cheese	59
		Cheese powder	63
		Whey powder	38B
	QFCS	Dehydrated food product	821
		Instant coffee	824
		Processed nut product	828
		Non-wheat flour	832
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Flour	775
		Bread	776
		Cake	793
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Ground pasta	816
		Jam or marmalade	817
		Potato crisps	834
		Tortilla chips	835
		Plant based meat	877
		Dried fruits	884
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
		Fish	734
Protein (Total)	CLS	Simulated CSF	SFC
		Urine	UC
Protein C Activity	CLS	Lyophilized plasma	

Analyte	Scheme ID	Matrix	Sample
Protein S Activity	CLS	Lyophilized plasma	СОА
Protein, confirmatory	CLS	Urine	UA
Protein, total	CLS	Lyophilized serum	СНМ
Proteus species	CLS	Liquid samples	BCP
		Liquid samples	PNE
Prothioconazole	AQUACHECK	Spiking solution	40
Prothrombin Time	CLS	Lyophilized plasma	COA
PSA, free	CLS	Lyophilized serum	TMS
PSA, total	CLS	Lyophilized serum	СНМ
Pseudomonas aeruginosa	CLS	Liquid samples	BCP
		Liquid samples	PNE
Pseudomonas aeruginosa (detection)	COSMETICS	Powder	10B
		Cream	13B
		Liquid	16B
	PHARMASSURE	Lyophilised test material	4B
Pseudomonas aeruginosa (enumeration)	COSMETICS	Powder	10B
		Cream	13B
		Liquid	16B
	QWAS	Potable water	413
		Process water	414
		Mineral water	420
Pseudomonas species (detection)	QMS	Oatmeal	26
		Oatmeal	26
Pseudomonas species (enumeration)	QMAS	Lyophilised meat	746
	QMS	Skimmed milk powder	26
		Oatmeal	26
	QWAS	Process water	414
Psychoactive and Synthetic Cannabinoid	QUARTZ	Urine	9
Purity	QFCS	Table salt	819
p-Xylene	AIR	Tenax TA filled sorbent tubes (indoor or chamber air)	21
	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
Pyrene	AQUACHECK	Synthetic effluent	19C
		Groundwater	7C
	CONTEST	Soil	Group C, 3C
		Standard solution	Group C, 5

Analyte	Scheme ID	Matrix	Sample
Qualitative determination in clean water	AQUACHECK	Clean water	25
Qualitative organics by GCMS	AQUACHECK	Clean water	22
Qualitative organics by purge and trap GCMS	AQUACHECK	Clean water	22A
Quercetin	PHARMASSURE	Gingko biloba	18
Quetiapine	TDM	New born calf serum	PS17
	QUARTZ	Blood	10B
Quinmerac	AQUACHECK	Groundwater	8
Quinoline yellow	QFCS	Liquid	763
Quinolones	QMAS	Fish	719
Quinoxyfen	AQUACHECK	Clean water	53

Analyte	Scheme ID	Matrix	Sample
R-(+)-Limonene	CANNABIS	Hemp oil	2
Ractopamine	QMAS	Meat	755
Rancimat Stability 120°C	QFCS	Olive oil	791
RBC	CLS	CANNABISHemp oilQMASMeatQFCSOlive oil	внм
			НМХ
RDW	CLS	Simulated whole blood	НМХ
RDW CV	CLS	Simulated whole blood	внм
RDW SD	CLS	Simulated whole blood	внм
Rebaudioside A	QBS	Soft drink	522
Reducing Substance	CLS	Urine	UA
Reducing sugars	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
	SUPS	CANNABISHemp oilQMASMeatQFCSOlive oilCLSSimulated whole bloodCLSSimulated whole bloodCLSSimulated whole bloodCLSSimulated whole bloodCLSSimulated whole bloodQBSSoft drinkCLSUrineDAPSWhite or rosé wine Red wineSUPSSyrup Cane or beet sugarQFCSHoneySUPSCane or beet sugarSUPSCane or beet sugarPHARMASSURESugar solution	11
		Cane or beet sugar	3
		Molasses	5
		Hemp oilMeatOlive oilSimulated whole bloodSimulated whole bloodSoft drinkUrineWhite or rosé wineRed wineSyrupCane or beet sugarMolassesRaw sugarHoneyCane or beet sugarSugar solutione-liquid	7
Reducing sugars (apparent)	QFCS	Honey	801
Reflectance grade	SUPS	Cane or beet sugar	1
Refractive index	PHARMASSURE	Sugar solution	1E
		e-liquid	12
	QFCS	Vanilla extract	850

Analyte	Scheme ID	Matrix	Sample
Refractive Index (20°C)	DAPS	Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Ready to drink	Group E, El
		Cream liqueur	Group E, E3
Reid Vapor Pressure	OIL	Crude oil	4
Reject fraction (EBC fraction IV plus foreign	MAPS	Brewers and distillers malt	1
matter)		Barley	2
Relative Density	OIL	Crude oil	4
Renin (Direct Concentration)	CLS	Lyophilized serum	IAS
Renin Activity	CLS	Lyophilized serum	IAS
Residual fermentable sugars (Total amount	DAPS	Fermented wort	Group A, A1
of glucose, maltose and maltotriose)		Simulated wort	Group A, A2
Residual gravity	DAPS	Fermented wort	Group A, A1
		Simulated wort	Group A, A2
Residual sulfur dioxide	MAPS	Brewers and distillers malt	1
Residue	DAPS	Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Respirable grade quartz	AIR	Quartz PVC filter 25mm diameter (workplace air)	2F
		Quartz PVC filter 25mm diameter (workplace air)	21
		Quartz PVC filter 25mm diameter (workplace air)	2X
Respiratory Syncytial Virus	CLS	Liquid samples	PNE
		Liquid samples	RSP
		Liquid samples	VIR
Retinol Binding Protein	CLS	Lyophilized serum	IPR
Rheumatoid Factor	CLS	Lyophilized serum	IPR
Rhinovirus	CLS	Liquid samples	RSP
Rhodotorula	CLS	Liquid samples	BCP
Rifampin resistance	CLS	Liquid samples	MTM
Risperidone	TDM	New born calf serum	PS10
Ritalinic acid	TDM	Lyophilised human serum	PST1
Rotavirus	CLS	Liquid samples	ROT
Rotavirus A	CLS	Liquid samples	GIP
RSV A	CLS	Liquid samples	RSP
RSV B	CLS	Liquid samples	RSP
Rubella Antibody, IgG	CLS	Serum	RUB
Rubella Antibody, IgM	CLS	Serum	RUB
Rufinamide	ТДМ	Human serum	AE2

Analyte	Scheme ID	Matrix	Sample
Saccharin (as free imide)	QBS	Carbonated drinks (degassed)	516B
		Dilutable and ready to drink materials	517B
Saccharin (E954)	QFCS	Liquid	761
Saccharification time	MAPS	Malt	1
Salicylic acid	AQUACHECK	Clean water	57
	CLS	Lyophilized serum	СНМ
	TOX	Human blood	BLD
		Human serum	SM
Salinity	AQUACHECK	Wastewater	17A
Salmonella Enteritidis	QMAS	Chicken powder	725
	QMS	Egg powder	46
Salmonella species	CLS	Liquid samples	BCP
		Liquid samples	GIP
Salmonella species (confirmation)	CONF-IDENT	Lyophilised material	1
Salmonella species (detection)	AFPS	Simulated animal feed	6AF
		Petfood kibble	бКВ
	CANNABIS	Simulated dried cannabis plant	6
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	2
		Lyophilised test material	11
		Sponge	13
	PHARMASSURE	Lyophilised test material	9
	QBS	Fruit juice	507

Analyte	Scheme ID	Matrix	Sample
Salmonella species (detection) cont.	QCS	Grated chocolate	710
		Grated chocolate	711
		Grated chocolate	712
		Cocoa powder	714
		Cocoa powder	720
	QGS	Gelatine	601
	QMAS	Lyophilised tablet	727
		Meat	757
		Lyophilised meat	736
		Lyophilised fish or shellfish	740
	QMS	Ready-to-eat	44
		Cheese	6CH
		Skimmed milk powder	6D
		Egg powder	6EG
		Oatmeal	6F
		Seeds and nuts	6NS
		Salads and vegetables	6VG
		Теа	6T
		Herb	6HB
		Spice	6SP
		Chicken faeces	6CF
		Skimmed milk powder	37
		Skimmed milk	40
		Infant formula powder	48
	QWAS	Effluent sludge	416
		Bathing, surface and wastewater	419
		Sea water	422
almonella species (enumeration)	QMS	Skimmed milk powder	3
almonella species (identification)	CONF-IDENT	Lyophilised material	1
	QMS	Freeze-dried material	34
almonella Typhimurium	QMAS	Chicken powder	725
	QMS	Egg powder	46

Analyte	Scheme ID	Matrix	Sample
Salt	OIL	Crude oil	4
	QBS	Smoothie	525
		Energy drink	526
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Condensed milk	66
		Processed cheese	67
		Butter	36
		Hard cheese	37
		Soft cheese	59
		Cheese powder	63
	QFCS	Dehydrated food product	821
		Processed nut product	828
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Mixed fat spread	782
		Cake	793
		Tomato paste/purée	783
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Potato crisps	834
		Tortilla chips	835
		Relish	858
		Peanut butter	862
		Plant based meat	877
		Soya sauce	883
	QMAS	Fish	728
		Dried or cured meat	730
		Precooked, raw or processed meat	731
		Fish	734
Saponification Number	OIL	Engine oil lubricants	5
	QFCS	Oil or fat	778
Sapovirus	CLS	Liquid samples	GIP
SARS-CoV-2	CLS	Liquid samples	RSP
SARS-CoV-2 (antigen)	SAR	Swab	ATG
SARS-CoV-2 (detection)	HYGIENE	Liquid sample	8
-	HYGIENE	Swab sample	8
	QWAS	Waste water	430

Analyte	Scheme ID	Matrix	Sample
SARS-CoV-2 (molecular)	SAR	Liquid sample containing nonreplicative recombinant virus.	COV
		Swab sample containing non- replicative recombinant virus	CVS
SARS-CoV-2 (quantification)	QWAS	Waste water	430
SARS-CoV-2 Antibody, IgA	SAR	Liquid sample containing nonreplicative recombinant virus.	SAB
SARS-CoV-2 Antibody, IgG	SAR	Liquid sample containing nonreplicative recombinant virus.	SAB
SARS-CoV-2 Antibody, IgM	SAR	Liquid sample containing nonreplicative recombinant virus.	SAB
SARS-CoV-2 Antibody, total	SAR	Liquid sample containing nonreplicative recombinant virus.	SAB
Saturated fat	QDCS	Hard cheese	37
		Soft cheese	59
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
Saturated fatty acids	QFCS	Cod liver oil	806
Saturates	QBS	Smoothie	525
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Butter	36
		Condensed milk	66
		Processed cheese	67
	QFCS	Dehydrated food product	821
		Processed nut product	828
		Food purée	833
		'Ready to eat' product	772
		Mixed fat spread	782
		Grated cheese	800
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Ground pasta	816
		Potato crisps	834
		Tortilla chips	835
		Plant based meat	877
	QMAS	Fish	728
		Meat	733
Scorched particles	QDCS	Skimmed milk powder	38A
		Whey powder	38B
sec-Butylbenzene	CONTEST	Standard solutions & soil	25

Analyte	Scheme ID	Matrix	Sample
Sediment	OIL	#2 Diesel fuel	2
		Crude oil	4
Sediment (Insoluble)	SUPS	Cane or beet sugar	4
Sedimentation Rate	CLS	Simulated whole blood	SR
Selenium	AFPS	Animal feed	2
		Premix	8
	AIR	Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Clean water	5A
		Groundwater	5G
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1b
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	PHARMASSURE	Multielement supplement	21
	QBS	Soft drink	519
	QFCS	Dried tea	780
	TOYTEST	EN71 - 3 standard solution and real material	3
Sensory Analysis	BAPS	Lager/ale (bitter)	5
Serine	QFCS	Infant formula powder	823
Serovar (026; 045; 0103; 0111; 0121; 0145;	STEC	Milk powder	D
O157:H7) (identification)		Powdered beef	М
Serratia marcescens	CLS	Liquid samples	BCP
		Liquid samples	PNE
Sertindole	TDM	New born calf serum	PS35
Sertraline	TDM	New born calf serum	PS08
Sesame	QFCS	Surface swab	882
Settleable solids	AQUACHECK	Settleable solids	15
Settled chemical oxygen demand (COD)	AQUACHECK	Wastewater	17A

Analyte	Scheme ID	Matrix	Sample
Shape (of bacteria)	QMS	Slide	49
SHBG	CLS	Lyophilized serum	СНМ
Shear Stability at 100°C	OIL	Engine oil lubricants	5
Shiga Toxin 1	CLS	Liquid samples	GIP
Shiga Toxin 2	CLS	Liquid samples	GIP
Shiga-like toxin-producing E. coli (STEC) stx1/stx2	CLS	Liquid samples	GIP
Shigella / Enteroinvasive E. coli (EIEC)	CLS	Liquid samples	GIP
Shigella species	CLS	Liquid samples	GIP
Shigella species (detection)	QMS	Oatmeal	12
Sieving Test <2.20mm	MAPS	Brewers and distillers malt	1
		Barley	2
Sieving Test <2.25mm	MAPS	Barley	2
Sieving Test >2.50mm	MAPS	Barley	2
Sieving Test >2.80mm	MAPS	Brewers and distillers malt	1
		Barley	2
Sieving Test 2.20-2.50mm	MAPS	Brewers and distillers malt	1
		Barley	2
Sieving Test 2.50-2.80mm	MAPS	Brewers and distillers malt	1
		Barley	2
Sildenafil (qualitative)	PHARMASSURE	Supplement	15
Sildenafil (quantitative)	PHARMASSURE	Supplement	15
Silicate	AQUACHECK	Spiking solution	10
		Marine water	61
		Hard surface water	2H
		Soft surface water	28
		Hard potable water	2HP
		Soft potable water	2SP
Silicon	OIL	Engine oil lubricants	5
		Service engine oil	6

Analyte	Scheme ID	Matrix	Sample
Silver	AQUACHECK	Natural water	4
		Industrial wastewater	17C
		Groundwater	4G
	OIL	Service engine oil	6
Simazine	AQUACHECK	Synthetic effluent	20B
		Water framework directive	34B
		Groundwater	8B
		Clean water	53
Sinapaldehyde	DAPS	Scotch whisky	Group B, B1
Sirolimus	IPT	Human blood	SIR
S-Metolachlor	AQUACHECK	Groundwater	8
SNR (Soluble Nitrogen Ratio)	MAPS	Wheat	7
Sodium	AFPS	Animal feed	2
		Premix	8
	AQUACHECK	Clean water	59
		Marine water	62
		Higher salinity potable water	1A
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
	BAPS	Lager	2L
	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Simulated CSF	SFC
		Urine	UC
	CONTEST	Standard solution	Group A, 29
		Soil	Group D, 18

Analyte	Scheme ID	Matrix	Sample
Sodium cont.	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
	OIL	Engine oil lubricants	5
		Service engine oil	6
	QBS	Fruit juice	510
		Soft drink	519
		Liquid test material	524
		Smoothie	525
		Energy drink	526
	QCS	Chocolate	715
		Cocoa powder	716
	QDCS	Butter	36
		Condensed milk	66
		Processed cheese	67
		Hard cheese	37
		Whole milk powder	41
		Soft cheese	59
		Cheese powder	63
	QFCS	Dehydrated food product	821
		Processed nut product	828
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Bread	776
		Cake	793
		Mayonnaise	812
		Potato crisps	834
		Tortilla chips	835
		Soya sauce	883
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731
Sodium bicarbonate	PHARMASSURE	Standard solution	1C
Sodium chloride (Concentration)	PHARMASSURE	Standard solution	1C
Solids-non-fat (SNF)	QDCS	Butter	36
Solubility in cold water at 16±2°C	QFCS	Instant coffee	824

Analyte	Scheme ID	Matrix	Sample
Soluble extract 0.2mm	MAPS	Brewers and distillers malt	1
Soluble extract 0.7mm	MAPS	Brewers and distillers malt	1
Soluble extract 1.0mm	MAPS	Brewers and distillers malt	1
Soluble extract difference (0.2 - 0.7mm)	MAPS	Brewers and distillers malt	1
Soluble extract difference (0.2 - 1.0mm)	MAPS	Brewers and distillers malt	1
Soluble Nitrogen Ratio (SNR)	MAPS	Brewers and distillers malt	1
Soluble reactive phosphorus	AQUACHECK	Spiking solution	10
		Industrial wastewater	17D
		Soft surface water	2S
		Hard surface water	2H
		Hard potable water	2HP
		Soft potable water	2SP
Soluble solids	QFCS	Ketchup	811
		Jam or marmalade	817
Somatic coliphages	QWAS	Water	431
Sorbic acid	COSMETICS	Cream sample	27
		Mascara	31
	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El
Sorbic acid (E200)	QFCS	Food product	863
		Soya sauce	883
Sorbic acid (as free acid)	QBS	Carbonated drinks (degassed)	516A
		Dilutable and ready to drink materials	517A
Sorbic acid (E200-E203)	QFCS	Liquid	760
Soy	QFCS	Non-dairy milk	853
		Rice flour	809
		Surface swab	882
Specific Gravity	CLS	Urine	UA
	DAPS	Ciders	Group C, Cl
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El
		Liqueur	Group E, E2
		Cream liqueur	Group E, E3
Specific gravity (20°C)	DAPS	Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
Sperm	CLS	Virtual images for microscopy	MP
Spores	QMS	Slide	49

Analyte	Scheme ID	Matrix	Sample
Sputum culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Sputum culture susceptibility	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Sputum Specimen Quality	CLS	Virtual gram stained slides	VGS
Stain Quality	CLS	Virtual gram stained slides	VGS
Staphylococcal enterotoxins	QDCS	Freeze-dried cheese	68
Staphylococcus aureus	CLS	Liquid samples	BCP
		Lyophilised swabs	MRM
		Liquid samples	PNE
Staphylococcus aureus (detection and/or enumeration)	PHARMASSURE	Medicinal herb	10
Staphylococcus aureus (detection)	CANNABIS	Simulated dried cannabis plant	7
	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
	QGS	Gelatine	604
Staphylococcus aureus (enumeration)	CANNABIS	Simulated dried cannabis plant	7
	COSMETICS	Powder	10A
		Cream	13A
		Liquid	16A
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	7
	PHARMASSURE	Lyophilised test material	4A
Staphylococcus epidermidis	CLS	Liquid samples	ВСР
Staphylococcus lugdunensis	CLS	Liquid samples	ВСР
Staphylococcus species	CLS	Liquid samples	ВСР
Staphylococcus species (enumeration)	QMS	Skimmed milk powder	17
		Oatmeal	17
	QWAS	Bathing, recreational and surface water	421
Starch	AFPS	Animal feed	1
		Wet pet food	9
		Silage	14
	SUPS	Raw sugar	7
Stearic acid C18:0	QFCS	Extra virgin olive oil	790
STEC (toxigenic strain) (detection)	STEC	Milk powder	1D
		Powdered beef	١м
		Powdered beef	2M

Analyte	Scheme ID	Matrix	Sample
STEC (toxigenic strain) (identification)	STEC	Milk powder	1D
		Powdered beef	1M
		Powdered beef	2M
Stenotrophomonas maltophilia	CLS	Liquid samples	ВСР
Sterility	PHARMASSURE	Lyophilised test material	5
Sterols (Total)	QFCS	Extra virgin olive oil	790
Steviol glycosides (Total)	QBS	Soft drink	522
Stimulant drugs	QUARTZ	Blood	1
		Blood and case study	2
Stool culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Streptococcus agalactiae	CLS	Liquid samples	ВСР
		Liquid samples	MEP
		Liquid samples	PNE
Streptococcus anginosus group	CLS	Liquid samples	ВСР
Streptococcus pneumoniae	CLS	Liquid samples	ВСР
		Liquid samples	MEP
		Liquid samples	PNE
Streptococcus pneumoniae Antigen	CLS	Liquid samples	SPN
Streptococcus pyogenes	CLS	Liquid samples	ВСР
		Liquid samples	PNE
Streptococcus species	CLS	Liquid samples	ВСР
Strontium	AQUACHECK	Natural water	4
		Marine water	62
		Groundwater	4G
	TOYTEST	EN71 - 3 standard solution and real material	3
Styrene	AIR	Tenax TA filled sorbent tubes (Indoor or Chamber air)	21
	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
Sucralose	QBS	Carbonated drinks (degassed)	516B
		Carbonated drinks (degassed)	517B
	QFCS	Liquid	761

Analyte	Scheme ID	Matrix	Sample
Sucrose	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
	QBS	Smoothie	525
		Energy drink	526
		Carbonated drinks	516A
		Dilutable and ready to drink materials	517B
	QCS	Chocolate	715
		Cocoa powder	716
	QFCS	Honey	801
	SUPS	Syrup	11
		Molasses	5
Sudan IV	QFCS	Palm oil	803
Sugars	AFPS	Animal feed	1
		Wet pet food	9

Analyte	Scheme ID	Matrix	Sample
Sugars (Total)	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		Simulated spirit	Group B, B4
		Ready to drink	Group E, E1
	QBS	Smoothie	525
		Energy drink	526
	QCS	Cocoa powder	716
		Chocolate	715
	QDCS	Condensed milk	66
		Processed cheese	67
	QFCS	Dehydrated food product	821
		Processed nut product	828
		Food purée	833
		Cereal	770
		'Ready to eat' product	772
		Cake	793
		Ketchup	811
		Mayonnaise	812
		Mustard	813
		Canned fruit	814
		Ground pasta	816
		Jam or marmalade	817
		Potato crisps	834
		Tortilla chips	835
		Plant based meat	877
		Soya sauce	883
		Dried fruits	884
	QMAS	Dried or cured meat	730
		Precooked, raw or processed meat	731

Analyte	Scheme ID	Matrix	Sample
Sulfate	AIR	Quartz fibre filter 47mm diameter (ambient)	14
	AQUACHECK	Clean water	59
		Marine water	61
		Industrial wastewater	17B
		Higher salinity potable water	1A
		Hard surface water	1H
		Soft surface water	1S
		Hard potable water	1HP
		Soft potable water	1SP
	BAPS	Lager	2L
	CONTEST	Solid waste leachate	24
		Soil	Group D, 18
		Soil	Group E, 21
	QBS	Liquid test material	524
	QFCS	Table salt	819
Sulfate (Total)	CONTEST	Soil	Group B, 3B
		Standard solution	Group B, 8
	AQUACHECK	Wastewater	32
Sulfonamides	QDCS	Freeze dried milk	71
	QMAS	Fish	720
Sulfur	AQUACHECK	Marine water	62
	OIL	Crude oil	4
Sulfur (Total)	CONTEST	Soil	Group B, 3B
	AQUACHECK	Sewage sludge	13
Sulfur Content	OIL	#2 Diesel fuel	2
		Engine oil lubricants	5
Sulfur dioxide	QMAS	Meat	729
	BAPS	Ale (bitter)	1B
		Lager	1L
	QFCS	Garlic powder	861
	SUPS	Cane or beet sugar	3
Sulfur dioxide (Determined as sulfate)	AIR	Impinger solution (stack emissions)	34
Sulfur dioxide (E220-E228)	QFCS	Liquid	760
Sulfur dioxide (Free)	DAPS	White or rosé wine	Group D, D1
		Red wine	Group D, D2
	QBS	Carbonated drinks (degassed)	516A
		Dilutable and ready to drink materials	517A

Analyte	Scheme ID	Matrix	Sample
Sulfur dioxide (Total)	DAPS	Ciders	Group C, Cl
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
	QBS	Carbonated drinks (degassed)	516A
		Dilutable and ready to drink materials	517A
Sulphite-reducing bacteria (enumeration)	QGS	Gelatine	603
	QMAS	Lyophilised meat	738
Sulphite-reducing Clostridia (detection)	QWAS	Potable water	413
		Mineral water	424
Sulphite-reducing Clostridia (enumeration)	AFPS	Simulated animal feed	10
	QWAS	Potable water	413
		Bathing, recreational and surface water	421
Sulphite-reducing Clostridia spores (detection only)	QWAS	Mineral water	424
Sulphite-reducing Clostridia spores (enumeration only)	QWAS	Potable water	413
Sulphite-reducing Clostridium spores	QMS	Oatmeal	15
(enumeration)		Skimmed milk powder	15
		Oatmeal	15
Sulphur	CANNABIS	Simulated dried cannabis plant	4
Sulphur Content	OIL	Service engine oil	6
Sulphur dioxide	QFCS	Dried fruit	797
Sulpiride	TDM	New born calf serum	PS30
Sum of EU 4 PAHs	QFCS	Vegetable oil	805
Sunset yellow (E110)	QFCS	Liquid	762
Surface Area	NiMS	Alloy disks, jewellery or other appropriate articles	1A
		Alloy disks, jewellery or other appropriate articles	18
		Alloy disks, jewellery or other appropriate articles	1C
Suspended solids	AQUACHECK	Spiking solution	3
		Spiking solution	11
		Wastewater	17A
SVOCs	AQUACHECK	Clean water	54
Synthetic cannabinoid	QUARTZ	Blood	7
Syphilis	CLS	Serum	SYP
Syringaldehyde	DAPS	Scotch whisky	Group B, B1
Syringic Acid	DAPS	Scotch whisky	Group B, B1

Analyte	Scheme ID	Matrix	Sample
T Uptake (%)	CLS	Lyophilized serum	СНМ
T Uptake (units)	CLS	Lyophilized serum	СНМ
T3, free	CLS	Lyophilized serum	СНМ
T4, free	CLS	Lyophilized serum	СНМ
T-2 toxin	AFPS	Oat	19
Tablet testing	PHARMASSURE	Sample format varies for each round	2C
		Tablet testing	7B
Tablet testing: Diameter	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Disintegration	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Dissolution	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Friability	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Hardness	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Resistance to CRUSHING	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Thickness	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tablet testing: Weight	PHARMASSURE	Tablet	2C
		Tablet testing	7B
Tacrolimus	IPT	Human blood	CICTAC
Tartaric acid (E334)	QFCS	Food product	863
Tartrazine (E102)	QFCS	Liquid	763
Taste - Alcoholic/Solvent	BAPS	Lager/ale (bitter)	5
Taste - Astringent	BAPS	Lager/ale (bitter)	5
Taste - Bitter	BAPS	Lager/ale (bitter)	5
Taste - Body	BAPS	Lager/ale (bitter)	5
Taste - Burnt	BAPS	Lager/ale (bitter)	5
Taste - Cereal	BAPS	Lager/ale (bitter)	5
Taste - DMS	BAPS	Lager/ale (bitter)	5
Taste - Fruity/Citrus	BAPS	Lager/ale (bitter)	5
Taste – Fruity/Estery	BAPS	Lager/ale (bitter)	5
Taste - Hop	BAPS	Lager/ale (bitter)	5
Taste - Linger	BAPS	Lager/ale (bitter)	5
Taste - Malty	BAPS	Lager/ale (bitter)	5
Taste - Other	BAPS	Lager/ale (bitter)	5
Taste - Other sulfur	BAPS	Lager/ale (bitter)	5
Taste - Oxidised/Aged	BAPS	Lager/ale (bitter)	5

Analyte	Scheme ID	Matrix	Sample
Taste - Sour	BAPS	Lager/ale (bitter)	5
Taste - Sweet	BAPS	Lager/ale (bitter)	5
Taurine	QBS	Energy drink	526
Tazobactam	TDM	Human serum	AT08
TBC	PHARMASSURE	Sample format will depend upon test type	2A
Tebuconazole	AQUACHECK	Spiking solution	40
Teicoplanin	TDM	Human serum	AT07
Tellurium	AQUACHECK	Synthetic effluent	12
Temazepam	TOX	Human serum	BNZ
Terbufos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Terbuthylazine	AQUACHECK	Groundwater	8B
Terbutryn	AQUACHECK	Clean water	53
		Synthetic effluent	20B
		Groundwater	8B
Terpene compounds	AIR	Tenax ta filled sorbent tubes (workplace air)	22
Terpene Lactones (Total)	PHARMASSURE	Gingko biloba	18
Terpinene-4-ol (gin only)	DAPS	Gin	B3-A
		Vodka	В3-В
		White rum	B3-C
tert-Butylbenzene	CONTEST	Standard solutions & soil	25
Testosterone, free	CLS	Lyophilized serum	СНМ
Testosterone, total	CLS	Lyophilized serum	СНМ
Tetrachloroethene	AIR	Charcoal filled glass sorbent tubes (workplace air)	6
	AQUACHECK	Synthetic effluent	18A
		Synthetic effluent	19B
		Groundwater	6A
		Groundwater	7B
Tetrachloroethylene	CONTEST	Standard solutions & soil	25
Tetrachloromethane	CONTEST	Standard solution	Group C, 19
Tetrachlorvinphos	AQUACHECK	Groundwater	9
		Synthetic effluent	21
Tetracyclines	QDCS	Freeze dried milk	72
	QMAS	Pork	722
Tetra-iso-alpha-acids	BAPS	Ale	3
		Lager	2L
Texture	CONTEST	Soil	Group B, 28
TFN	AQUACHECK	Spiking solution	36

Analyte	Scheme ID	Matrix	Sample
Thallium	AIR	Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
Theobromine	QCS	Chocolate	715
		Cocoa powder	716
Theophylline	CLS	Lyophilized serum	СНМ
	ТDМ	Human serum	TDI
Thermophilic acidophilic bacteria	QBS	Lyophilised test material	506
(enumeration)	QMS	Fruit	45
	SUPS	Lyophilised test material	8
Thermophilic aerobic plate count	QMS	Oatmeal	11
Thermophilic aerobic spores (enumeration)	QMS	Skimmed milk powder	11
		Skimmed milk powder	11
		Oatmeal	11
		Oatmeal	11
Thermotolerant coliforms (enumeration)	QMS	Skimmed milk powder	20
		Oatmeal	20
Thiacloprid	AQUACHECK	Groundwater	66
Thiamphenicol	QMAS	Chicken	724
Thiamethoxam	AQUACHECK	Groundwater	66
Thifensulfuron methyl	AQUACHECK	Groundwater	8B
Thiocyanate	CONTEST	Standard solution	Group B, 16
		Soil	Group B, 3B
		Soil	Group D, 18
Thioridazine	TDM	New born calf serum	PS13
Thousand corn weight	MAPS	Barley	2
Threonine	QFCS	Infant formula powder	823
Throat culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Thrombin Time	CLS	Lyophilized plasma	COA
Thyroglobulin	CLS	Lyophilized serum	TMS
Thyroxine (T4)	CLS	Lyophilized serum	СНМ
Thyroxine Binding Globulin (TBG)	CLS	Lyophilized serum	СНМ
Tiagabine	TDM	Human serum	AE1
TIBC (measured or iron-based calc.)	CLS	Lyophilized serum	СНМ
TIBC (transferrin-based calculation)	CLS	Lyophilized serum	СНМ

Analyte	Scheme ID	Matrix	Sample
Tin	AQUACHECK	Natural water	5
		Industrial wastewater	17C
		Clean water	5A
		Groundwater	5G
	BAPS	Lager	2L
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
		Soil	Group D, 18
	OIL	Service engine oil	6
	QBS	Fruit juice	518
		Soft drink	519
	TOYTEST	EN71 - 3 standard solution and real material	3
		Dried paint flakes	9
Titanium	AQUACHECK	Natural water	5
		Synthetic effluent	12
		Industrial wastewater	17C
		Groundwater	5G
	OIL	Service engine oil	6
Titanium dioxide	QFCS	Food product	888
Titratable acidity	QDCS	HCl solution	29
		Whipping cream	39
		Skimmed milk powder	51
		Whole milk powder	52
		Milk	56
Titre	PHARMASSURE	Standard solution	1C
TLC	PHARMASSURE	Sample format will depend upon test type	6G
Tobramycin	CLS	Lyophilized serum	СНМ
	TDM	Human serum	AT02
		Human serum	TDI

Analyte	Scheme ID	Matrix	Sample
Toluene	AIR	Charcoal filled glass sorbent tubes (workplace air)	5
		Tenax TA filled sorbent tubes (workplace air)	7
		Tenax TA filled sorbent tubes (workplace air)	12
		Tenax TA filled sorbent tubes (workplace air)	21
		Carbopack X filled sorbent tubes	12A
	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
	CONTEST	Standard solutions & soil	25
		Standard solution	Group C, 15
	PHARMASSURE	Residual solvents	2E
TON	AQUACHECK	Spiking solution	36
Topiramate	TDM	Human serum	AE2
Total acidity	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
		Scotch whisky	Group B, B1
		White or rosé wine	Group D, D1
		Ready to drink	Group E, El
		Liqueur	Group E, E2
		Ciders	Group C, Cl
		Red wine	Group D, D2
	QFCS	Vinegar	822
		Coffee	802
		Ketchup	811
		Mustard	813
		Jam or marmalade	817
		Tomato paste/purée	783
Total aerobic bacterial count (Spread)	BAPS	Lyophilised test material	4H
		Lyophilised test material	4L
Total aerobic count	QWAS	Process water	414
	ι	Surface water	419
Total aerobic count at 17-23°C	QWAS	Dialysis water	429

Analyte	Scheme ID	Matrix	Sample
Total aerobic count at 22°C	QWAS	Potable water	412
		Mineral water	420
Total aerobic count at 37°C	QWAS	Potable water	412
		Mineral water	420
Total aerobic mesophilic count	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Lyophilised test material	10
		Plastic surface, a lyophilised tablet and 5ml diluent	3 - Hygiene Tests
	QBS	Fruit juice	500
		Soft drink	501
		Lyophilised test material	505
	QCS	Cocoa powder	713
		Chocolate	717
	QGS	Gelatine	602
	QMAS	Meat	756
		Lyophilised meat	735
		Lyophilised fish or shellfish	739
		Lyophilised fish or shellfish	739
	QMS	Skimmed milk powder	16
		Oatmeal	16
		Теа	29
		Herbs	36
		Spices	36
		Skimmed milk powder	36
		Ready meal	41
		Cheese	50
	SUPS	Lyophilised test material	6
Total aerobic microbial count	CANNABIS	Simulated dried cannabis plant	7
	PHARMASSURE	Medicinal herb	10
		Lyophilised test material	4A
Total aerobic microbial count (Pour)	BAPS	Lyophilised test material	4H
		Lyophilised test material	4L
Total anaerobic count	AFPS	Simulated animal feed	10
Total anaerobic mesophilic count	QMAS	Lyophilised meat	738
	QMS	Skimmed milk powder	15
		Oatmeal	15
Total anaerobic microbial count	BAPS	Lyophilised test material	4H
		Lyophilised test material	4L

Analyte	Scheme ID	Matrix	Sample
Total bacterial count	PHARMASSURE	Lyophilised test material	4A
Total dissolved solids	AQUACHECK	Marine water	61
		Waste water	64
		Wastewater	17A
		Higher salinity potable water	1A
		Hard surface water	2H
		Soft surface water	2S
		Hard potable water	2HP
		Soft potable water	2SP
	CONTEST	Solid waste leachate	24
		Soil	Group E, 21
	QBS	Carbonated water	524
Total dry extract	QFCS	Vinegar	822
Total fatty matter content	COSMETICS	Liquid or solid soap	28
Total gas pressure	BAPS	Ale (bitter)	1B
		Lager	٦L
Total hardness	AQUACHECK	Waste water	64
		Hard water	ιн
		Soft water	1S
		Hard potable water	2HP
		Soft potable water	2SP
	QBS	Carbonated water	524
Total hydrocarbons by GC analysis	AQUACHECK	Mineral oil in wastewater	23
Total hydrocarbons by Gravimetric analysis	AQUACHECK	Mineral oil in wastewater	23
Total hydrocarbons by IR analysis	AQUACHECK	Mineral oil in wastewater	23
Total oil and grease	AQUACHECK	Oil and Grease in water	24
Total Organic Carbon (TOC)	AQUACHECK	Waste water	64
		Higher salinity potable water	1A
	CONTEST	Soil	Group C, 3C
Total Organic Carbon/Dissolved Organic Carbon (TOC/DOC)	CONTEST	Soil	Group D, 18
Total Oxidised Nitrogen (TON)	AQUACHECK	Spiking solution	10
		Marine water	61
		Hard water	2H
		Soft water	2S
Total phenols (Sum of phenol, cresols and xylenols)	CONTEST	Standard solution	Group C, 7b
Total polar compounds	QFCS	Frying oil	796

Analyte	Scheme ID	Matrix	Sample
Total solids	AIR	Dust rinsing solution (stack emissions)	39
	AQUACHECK	Agricultural soil	14
	DAPS	Scotch whisky	Group B, B1
		Cream liqueur	Group E, E3
	QDCS	Milk	28
		Yogurt	58
	QFCS	Tomato paste/purée	783
Total solids (105±5°C)	AQUACHECK	Sewage sludge	16
Total Soluble Nitrogen (TSN)	BAPS	Lager	2L
	MAPS	Brewers and distillers malt	1
		Wheat	7
Total tritrable acidity	QFCS	Soya sauce	883
Total TPH (C10-C40 inclusive)	CONTEST	Soil	Group C, 3C
Total trans fatty acids	QFCS	Oil or fat	778
		Dehydrated food product	821
		'Ready to eat' product	772
		Mixed fat spread	782
		Grated cheese	800
		Cod liver oil	806
		Mayonnaise	812
		Potato crisps	834
		Tortilla chips	835
		Plant based meat	877
	QMAS	Meat	733
Total viable count	AFPS	Simulated animal feed	7
		Petfood kibble	7КВ
	HYGIENE	Membrane filter	9
	QWAS	Sterile water	428
Total Volatile Nitrogen (TVN)	QMAS	Fish	748
Toxicology case studies	TOX	Serum	CAS
		Urine	CAS
Toxicology drugs/metabolites	QUARTZ	Urine	8
Toxicology in blood	TOX	Human blood	QT
TPH (C10-C40 inclusive)	CONTEST	Standard solution	Group C, 14a
TPH Aliphatic >C10-C12	CONTEST	Soil	Group C, 3C
TPH Aliphatic >C12 -C16	CONTEST	Soil	Group C, 3C
TPH Aliphatic >C16 -C21	CONTEST	Soil	Group C, 3C
TPH Aliphatic >C21-C35	CONTEST	Soil	Group C, 3C
TPH Aliphatic >C35-C40	CONTEST	Soil	Group C, 3C
TPH Aromatic >EC10-EC12	CONTEST	Soil	Group C, 3C
TPH Aromatic >EC12-EC16	CONTEST	Soil	Group C, 3C

Analyte	Scheme ID	Matrix	Sample
TPH Aromatic >EC16-EC21	CONTEST	Soil	Group C, 3C
TPH Aromatic >EC21-EC35	CONTEST	Soil	Group C, 3C
TPH Aromatic >EC35-EC40	CONTEST	Soil	Group C, 3C
TPH, Aliphatic >C6-C8	CONTEST	Standard solution	Group C, 14b
		Standard solutions & soil	23
TPH, Aliphatic >C8-C10	CONTEST	Standard solution	Group C, 14b
		Standard solutions & soil	23
TPH, Aliphatic ≤C6	CONTEST	Standard solutions & soil	23
		Standard solution	Group C, 14b
TPH, Aromatic >C6-C8	CONTEST	Standard solution	Group C, 14b
		Standard solutions & soil	23
TPH, Aromatic >C8-C10	CONTEST	Standard solution	Group C, 14b
		Standard solutions & soil	23
TPH, Aromatic C6	CONTEST	Standard solution	Group C, 14b
		Standard solutions & soil	23
Tramadol	QUARTZ	Blood	3
	TDM	Human serum	AM1
Trans-1,2-Dichloroethylene	CONTEST	Standard solutions & soil	25
Trans-1,3-Dichloropropene	AQUACHECK	Clean water	55
Trans-1,3-Dichloropropylene	CONTEST	Standard solutions & soil	25
Trans-Chlordane	AQUACHECK	Synthetic effluent	19A
		Groundwater	7A
Transferrin	CLS	Lyophilized serum	СНМ
Trans-Permethrin	AQUACHECK	Waste water	51
Trazodone	TDM	New born calf serum	PS29
Tree moss extract	COSMETICS	Cosmetic, fragrance	35
Tribenuron methyl	AQUACHECK	Groundwater	8B
Tribromoacetic acid	AQUACHECK	Clean water	44
Tribromomethane	AQUACHECK	Waste water	64
Tributyltin compounds	AQUACHECK	Water framework directive	34G
Trichlopyr	AQUACHECK	Groundwater	8
Trichloroacetic acid	AQUACHECK	Clean water	44
Trichlorobenzenes	AQUACHECK	Water framework directive	34H
Trichloroethene	AIR	Charcoal filled glass sorbent tubes (workplace air)	6
	AQUACHECK	Synthetic effluent	18A
		Synthetic effluent	19B
		Groundwater	6A
		Groundwater	7B
	CONTEST	Standard solution	Group C, 19
Trichloroethylene	CONTEST	Standard solutions & soil	25
Trichlorofluoromethane	CONTEST	Standard solutions & soil	25

Analyte	Scheme ID	Matrix	Sample
Trichloromethane	AQUACHECK	Waste water	64
		Water framework directive	34H
	CONTEST	Standard solution	Group C, 19
Trichomonas vaginalis	CLS	Liquid samples	ТСН
Triclopyr	AQUACHECK	Synthetic effluent	20
Triclosan	AQUACHECK	Clean water	43
Tricyclic Antidepressant	TDM	Lyophilised serum	TC01
Trietazine	AQUACHECK	Synthetic effluent	20B
		Groundwater	8B
Trifluralin	AQUACHECK	Synthetic effluent	19A
		Water framework directive	34E
		Groundwater	7A
		Clean water	58
	CONTEST	Standard solutions & soil	26
Triglycerides	CLS	Lyophilized serum	СНМ
Trihalomethanes (Total)	AQUACHECK	Waste water	64
Triiodothyronine (T3)	CLS	Lyophilized serum	СНМ
Trimethylamine (TMA)	QMAS	Fish	748
Trimipramine	TDM	New born calf serum	PS09
Troponin I	CLS	Lyophilized serum	CAR
Troponin T	CLS	Lyophilized serum	CAR
Tryptophan	QFCS	Infant formula powder	823
TSAI (Total sugar as invert sugar)	SUPS	Molasses	5
TSH	CLS	Lyophilized serum	СНМ
TSN (EBC Wort) (Total Soluble Nitrogen)	MAPS	Wheat	7
TSN (IoB Wort)	MAPS	Wheat	7
TSN (IoB Wort) (Total Soluble Nitrogen)	MAPS	Malt	6
TSRS (Total sugar as reducing sugar)	SUPS	Molasses	5
Turbidity	AQUACHECK	Spiking solution	3
		Spiking solution	11
		Waste water	60
	DAPS	Gin	B3-A
		Vodka	B3-B
		White rum	B3-C
	SUPS	Cane or beet sugar	1
Turbidity (Haze)	DAPS	Bourbon	B2-A
		Dark rum	B2-B
		Brandy	B2-C
		Irish whisky	B2-D
		Scotch whisky	Group B, B1
Tyrosine	QFCS	Infant formula powder	823

Analyte	Scheme ID	Matrix	Sample
UIBC	CLS	Lyophilized serum	СНМ
Unclassified Cells	CLS	Virtual slide	BID
Uniformity of dosage units	PHARMASSURE	Tablet testing	7C
Unknown organism (identification)	QMS	Freeze-dried material	33
	QWAS	Water	426
Unknown substance (identification)	FAE	Liquid	ID1/2
Unsaponifiable matter	QFCS	Oil or fat	778
Uranium	AQUACHECK	Synthetic effluent	12
Uranium (Total)	AQUACHECK	Clean water	42
Urate	CLS	Lyophilized serum	СНМ
		Urine	UC
Urea	CLS	Ampoule	BLG
		Lyophilized serum	СНМ
		Urine	UC
Urine colony count	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Urine culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Urine culture susceptibility	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-BASIC
		Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Urine Sediment	CLS	Virtual images for microscopy	MP
Urobilinogen	CLS	Urine	UA
UV	PHARMASSURE	Sample format will depend upon test type	6B
UV absorption	AQUACHECK	Spiking solution	38

Analyte	Scheme ID	Matrix	Sample
Vaginal Wet Prep - KOH	CLS	Virtual images for microscopy	MP
Vaginal Wet Preparation	CLS	Virtual images for microscopy	MP
Valine	QFCS	Infant formula powder	823
Valproate	CLS	Lyophilized serum	СНМ
	TDM	Human serum	TDI
	QUARTZ	Blood	10B
vanA	CLS	Liquid samples	BCP
vanA/B	CLS	Liquid samples	BCP
Vanadium	AIR	Metals impinger solution (stack emissions)	33
		Metals and fly ash on quartz filter 47mm diameter (stack emissions)	38
	AQUACHECK	Natural water	5
		Sewage sludge	13
		Agricultural soil	14
		Industrial wastewater	17C
		Clean water	5B
		Groundwater	5G
	CONTEST	Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Soil	Group A, 3A
	OIL	Crude oil	4
		Service engine oil	6
vanB	CLS	Liquid samples	ВСР
Vancomycin	CLS	Lyophilized serum	СНМ
	ТDМ	Human serum	AT01
		Human serum	TDI
Vancomycin-Resistant Enterococcus	CLS	Lyophilised swabs	VRE
		Lyophilised swabs	VRM
Vanillic Acid	DAPS	Scotch whisky	Group B, B1
Vanillin	DAPS	Scotch whisky	Group B, B1
	QFCS	Vanilla extract	850
Varicella zoster virus	CLS	Liquid samples	MEP
Venlafaxine	ТДМ	New born calf serum	PS20
VDK (Total)	BAPS	Ale	3
		Lager	2L
Vibrio cholerae	CLS	Liquid samples	GIP
Vibrio fischeri 30 minute IC50 (ISO 11348-3)	AQUACHECK	Ecotoxicology	50
Vibrio parahaemolyticus (detection)	QMAS	Lyophilised fish or shellfish	745
	QMS	Oatmeal	13
Vibrio species	CLS	Liquid samples	GIP

Analyte	Scheme ID	Matrix	Sample
Vibrio species (detection)	QMAS	Lyophilised fish or shellfish	745
	QMS	Oatmeal	13
Vigabatrin	TDM	Human serum	AE2
VIM	CLS	Liquid samples	BCP
		Lyophilised swabs	CRO
		Liquid samples	PNE
Viscosity	QGS	Gelatine	606
	COSMETICS	Liquid cosmetics	23
	MAPS	Brewers and distillers malt	1
Viscosity (EBC Wort)	MAPS	Wheat	7
Viscosity (IoB Wort)	MAPS	Wheat	7
Viscosity, Kinematic	OIL	Engine oil lubricants	5
	OIL	Service engine oil	6
Viscosity, Kinematic at 40°C	OIL	#2 Diesel fuel	2
		Crude oil	4
Vitamin A	QBS	Powdered beverage	527
	QDCS	Milk powder	44
	QFCS	Mixed fat spread	782
		Cod liver oil	806
		Tomato paste	864
Vitamin A (as Retinol)	QFCS	Cereal	771
Vitamin B1 (Thiamine)	QFCS	Cereal	771
		Bread	776
	PHARMASSURE	Multivitamin supplement	20
Vitamin B12	CLS	Lyophilized serum	СНМ
Vitamin B12 (Cobalamins)	QFCS	Cereal	771
Vitamin B12 (Cyanocobalamin)	QBS	Soft drink	521
Vitamin B2	QBS	Soft drink	521
	PHARMASSURE	Multivitamin supplement	20
Vitamin B2 (Riboflavin)	QFCS	Cereal	771
		Bread	776
Vitamin B3	PHARMASSURE	Multivitamin supplement	20
Vitamin B3 (Niacin)	QFCS	Cereal	771
		Bread	776
Vitamin B3 (Nicotinamide)	QBS	Soft drink	521
Vitamin B5 (Pantothenic acid)	PHARMASSURE	Multivitamin supplement	20
Vitamin B5 (Pantothenic acid)	QBS	Soft drink	521
	QFCS	Cereal	771
Vitamin B6	QFCS	Cereal	771
	PHARMASSURE	Multivitamin supplement	20

Analyte	Scheme ID	Matrix	Sample
Vitamin B6 (Pyridoxine)	QBS	Soft drink	521
Vitamin B7 (Biotin)	PHARMASSURE	Multivitamin supplement	20
Vitamin B9 (Folic acid)	QFCS	Cereal	771
	PHARMASSURE	Multivitamin supplement	20
Vitamin B12	PHARMASSURE	Multivitamin supplement	20
	QDCS	Milk powder	44
Vitamin C	QFCS	Fruit/vegetable purée	830
	PHARMASSURE	Multivitamin supplement	20
Vitamin C (Ascorbic acid)	QBS	Liquid test material	514
		Soft drink	521
	QDCS	Milk powder	44
	QFCS	Cereal	771
Vitamin D	QDCS	Milk powder	44
	QFCS	Cereal	771
		Mixed fat spread	782
		Cod liver oil	806
Vitamin E	QBS	Powdered beverage	527
	QDCS	Milk powder	44
Vitamin E (DL-a-Tocopherol)	QBS	Soft drink	521
Volatile acidity	DAPS	Ciders	Group C, Cl
		White or rosé wine	Group D, D1
		Red wine	Group D, D2
		Ready to drink	Group E, El
		Liqueur	Group E, E2
	QFCS	Vinegar	822
Volatile oil	QFCS	Ground pepper	815
		Herbs	879
Volume	AIR	Impinger solution (stack emissions)	31
		Impinger solution (stack emissions)	32
		Metals impinger solution (stack emissions)	33
		Impinger solution (stack emissions)	34
		Impinger solution (stack emissions)	35
		Impinger solution (stack emissions)	36
		Impinger solution (stack emissions)	37
Volume of sample provided	AQUACHECK	Mineral oil in wastewater	23
		Oil and grease in wastewater	24
Voriconazole	TDM	Human serum	AF01
Vortioxetine	TDM	Human serum	PS37

Analyte	Scheme ID	Matrix	Sample
Water	OIL	#2 Diesel fuel	2
		Crude oil	4
	QFCS	Oil or fat	778
		Mixed fat spread	782
		Coffee	802
Water (Procedure A)	OIL	Engine oil lubricants	5
Water (Procedure B)	OIL	Engine oil lubricants	5
Water activity	QCS	Chocolate	715
	QFCS	Cereal	774
		Cured meat	774
		Hard cheese	774
		Spices	869
		Ketchup, Mayonnaise	876
Water Content	OIL	Engine oil lubricants	5
		Service engine oil	6
Water extract	QFCS	Dried tea	829
Water extractable boron	AQUACHECK	Agricultural soil	14
Water insoluble matter	COSMETICS	Powder detergent	29
		Liquid detergent	32
Water insoluble solids	QFCS	Honey	801
Water sensitivity	MAPS	Barley	2
Water soluble Ash	QFCS	Dried tea	829
Water soluble Boron	CONTEST	Standard solution	Group B, 10
		Soil	Group B, 3B
Water soluble Chloride	CONTEST	Soil	Group B, 3B
Water soluble Fluoride	CONTEST	Soil	Group B, 3B
Water soluble Sulfate	CONTEST	Soil	Group B, 3B
Wax content	QFCS	Extra virgin olive oil	790
		Olive oil	791
WBC	CLS	Simulated whole blood	внм
		Simulated whole blood	НМХ
Wild yeast count	BAPS	Lyophilised test material	4H
		Lyophilised test material	4L
Wound culture identification	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
Wound culture susceptibility	CLS	Lyophilised swabs and/or lyophilised pellet in vials with diluent	BAC-COMP
WPNI	QDCS	Skimmed milk powder	51
		Whole milk powder	52

Analyte	Scheme ID	Matrix	Sample
X-Ray Powder Diffraction (XRPD)	PHARMASSURE	Sample format will depend upon test type	6L
Xylene (all isomers)	AIR	Charcoal filled glass sorbent tubes (workplace air)	5
		Tenax TA filled sorbent tubes (workplace air)	7
		Tenax TA filled sorbent tubes (ambient)	12
		Carbopack x filled sorbent tubes	12A
Xylene (Total)	AQUACHECK	Synthetic effluent	18C
		Groundwater	6C
Xylenols	CONTEST	Soil	Group C, 3C
Xylenols (Total)	CONTEST	Standard solution	Group C, 7b

Analyte	Scheme ID	Matrix	Sample
Yeast (detection)	CANNABIS	Simulated dried cannabis plant	7
Yeast (enumeration)	AFPS	Animal feed	15
	CANNABIS	Simulated dried cannabis plant	7
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	1
		Plastic surface, a lyophilised tablet and 5ml diluent	6
		Lyophilised test material	10
	QBS	Fruit juice	500
		Soft drink	501
		Lyophilised test material	505
	QCS	Cocoa powder	713
		Chocolate	717
	QMS	Skimmed milk powder	23
		Oatmeal	23
		Skimmed milk powder	36
		Herbs	36H
		Spices	37SP
	QWAS	Potable water	413
		Process water	414
	SUPS	Lyophilised test material	6
Yeast and mould (detection)	CANNABIS	Simulated dried cannabis plant	7

Analyte	Scheme ID	Matrix	Sample
Yeast and mould (enumeration)	CANNABIS	Simulated dried cannabis plant	7
	COSMETICS	Powder	10B
		Cream	13B
		Liquid	16B
	QMS	Skimmed milk powder	23
		Oatmeal	23
		Теа	29
		Skimmed milk powder	36
		Herbs	36H
		Spices	37SP
	QWAS	Potable water	413
		Process water	414
	HYGIENE	Plastic surface, a lyophilised tablet and 5ml diluent	6
	PHARMASSURE	Lyophilised test material	4B
Yeast and/or mould (detection and/or enumeration)	PHARMASSURE	Medicinal herb	10
Yeast and/or mould (enumeration)	QMAS	Meat	756
		Lyophilised meat	746
	QMS	Ready meal	41
	HYGIENE	Membrane filter	9
Yeast strains (confirmation)	CONF-IDENT	Lyophilised material	6
Yeast strains (identification)	CONF-IDENT	Lyophilised material	6
Yersinia enterocolitica	CLS	Liquid samples	GIP
Yersinia enterocolitica (detection)	QMS	Skimmed milk powder	14
Yersinia species (detection)	QMS	Skimmed milk powder	14

Analyte	Scheme ID	Matrix	Sample
Zaleplon	тох	Human serum	ZMIX
Zearalenone	AFPS	Maize oil	20
	QFCS	Rice	845
		Ground corn	867
Zinc	AFPS	Animal feed	2
		Premix	8

Analyte	Scheme ID	Matrix	Sample
Zinc cont.	AIR	25 mm cellulose acetate (workplace air)	1
		37 mm cellulose acetate (workplace air)	1A
		37 mm cellulose acetate (workplace air)	1В
		25 mm cellulose acetate (workplace air)	1C
		Bulk welding fume sample	10A
	AQUACHECK	Natural water	4
		Synthetic effluent	12
		Sewage sludge	13
		Agricultural soil	14
		Marine water	62
		Industrial wastewater	17C
		Groundwater	4G
		Clean water	5B
	BAPS	Lager	2L
	CANNABIS	Simulated dried cannabis plant	4
	CLS	Lyophilized serum	СНМ
	CONTEST	Solid waste leachate	24
		Standard solution	Group A, 1a
		Soil extract	Group A, 2
		Standard solution	Group A, 29
		Soil	Group A, 3A
		Soil	Group D, 18
		Soil	Group E, 21
	COSMETICS	Mouthwash sample	24
		Toothpaste sample	25
	OIL	Engine oil lubricants	5
		Service engine oil	6
	PHARMASSURE	Multielement supplement	21
	QBS	Fruit juice	518
		Soft drink	519
	QDCS	Whole milk powder	42
	QFCS	Cereal	770
	QMAS	Shellfish	741
		Fish	742
		Meat	747
	TOYTEST	EN71 - 3 standard solution and real material	3
Ziprasidone	TDM	New born calf serum	PS26

Analyte	Scheme ID	Matrix	Sample
Zolpidem	тох	Human serum	ZMIX
Zonisamide	TDM	Human serum	AE2
Zopiclone	тох	Human serum	ZMIX
Zuclopenthixol	TDM	New born calf serum	PS23

Analyte	Scheme ID	Matrix	Sample
a-Humulene	CANNABIS	Hemp oil	2
		Cannabis flower	12
a-Pinene	CANNABIS	Hemp oil	2
		Cannabis flower	12
a-Terpinolene	CANNABIS	Hemp oil	2
		Cannabis flower	12
β-Caryophyllene	CANNABIS	Hemp oil	2
		Cannabis flower	12
β-lactoglobulin	QFCS	Infant formula powder	810
β-Myrcene	CANNABIS	Hemp oil	2
		Cannabis flower	12
β-sitosterol	QFCS	Olive oil	791
δΊ3CVPDB	FIRMS	Various products (waxes, oils, plant material, chitin)	1
		Various products (waxes, oils, plant material, chitin)	2
		Cannabis flower CANNABIS Hemp oil Cannabis flower CANNABIS Hemp oil Cannabis flower CANNABIS Hemp oil Cannabis flower QFCS Infant formula powder CANNABIS Hemp oil CANNABIS Various products (waxes, oils, plant material, chitin) Various products (waxes, oils, plant material, chitin) Honey Various products (waxes, oils, plant material, chitin) Various products (waxes, oils, plant material, chitin) Honey Wine Wine	3
	Cannabis flower CANNABIS Hemp oil Cannabis flower CANNABIS Hemp oil QFCS Infant formula powder QFCS Infant formula powder QFCS Olive oil QFCS Olive oil FIRMS Various products (waxes, oils, plant material, chitin) Various products (waxes, oils, plant material, chitin) Honey Wine Extra virgin olive oil FIRMS Various products (waxes, oils, plant material, chitin) Various products (waxes, oils, plant material, chitin) Honey Various products (waxes, oils, plant material, chitin)	4	
			5
δ15NAIR	FIRMS	Various products (waxes, oils, plant material, chitin)	1
			2
		Honey	3
		Wine	4
		Extra virgin olive oil	5

Analyte	Scheme ID	Matrix	Sample
δΊ8OVSMOW	FIRMS	Various products (waxes, oils, plant material, chitin)	1
		Various products (waxes, oils, plant material, chitin)	2
		Honey	3
		Wine	4
		Extra virgin olive oil	5
δ2HVSMOW	material, chitin)	Various products (waxes, oils, plant material, chitin)	1
		Various products (waxes, oils, plant material, chitin)	2
		Honey	3
		Wine	4
		Extra virgin olive oil	5
Δ9-Tetrahydrocannabinol (THC)	oinol (THC) CANNABIS	Hemp oil	1A
		Cannabis flower	10
		Cannabis oil	11
ΔECN 42	QFCS	Olive oil	791
ΔΚ	QFCS	Olive oil	791

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About Proficiency Testing

What is proficiency testing?

Proficiency Testing (PT) provides a regular independent assessment of the the technical performance of a laboratory to assure the validity of measurements and tests, which should form part of an overall quality strategy. PT is often referred to as external quality assessment (EQA), especially in the medical/ clinical arena.

The practice of testing unknown test materials from an outside source provides an additional, independent, means to assure the quality of laboratory test results.

One of the most common designs for a PT scheme is for the provider to designate specific dates throughout the year when it will send test materials to all participants at the same time.

The test materials, whose expected values are unknown to the subscribers, are analysed by the laboratory staff who return their results to the proficiency testing provider.

The results are reviewed (using statistical techniques described in ISO 13528) to determine acceptable performance levels, and an evaluation is issued to each participant.

The evaluation and accompanying statistical data not only capture the laboratory's current performance, but over time allow the quality team to analyse trends and improve the laboratory's long term performance.

Proficiency testing is a key element in the laboratory accreditation process, alongside reference materials, enabling laboratories to monitor the quality of their analytical results as stipulated in ISO/IEC 17025 and ISO 15189.

Why enrol in a proficiency testing scheme?

- Compare your laboratory's results to those of others performing the same test or measurement.
- Demonstrate and identify performance trends.
- Monitor test performance across all of your organisation's laboratories.
- Complement internal check sample programs.
- Demonstrate competency to customers, accreditation bodies and other regulatory bodies.
- Fulfil accreditation requirements.
- Verify methods and instrumentation.
- Manage risk through early warning of potential problems.
- Educate and train staff.
- Check the reasonableness of the laboratory's estimated measurement uncertainty.

About AXIO Proficiency Testing

Which international standards are relevant to LGC AXIO Proficiency Testing schemes?

In terms of stipulating the use of proficiency testing, the main standards are ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories; and the clinical standard ISO 15189 - Medical laboratories – requirements for quality and competence. All our PT schemes are operated in accordance with the international standard ISO/ IEC 17043. The statistical analysis undertaken is in accordance with the international standard ISO 13528. LGC is accredited by the United Kingdom Accreditation Service (UKAS) for the provision of proficiency testing schemes against ISO/IEC 17043; a copy of our current scope of accreditation which lists the accredited schemes is available on our website: **Igcstandards.com**

How are your PT schemes organised?

The day-to-day operation of each PT scheme is the responsibility of LGC. Individual schemes are managed by a team of Scheme Coordinators, to cover reporting, customer service and technical functions. For some schemes, external advisors may also be used to provide the full range of relevant knowledge and expertise needed to operate the scheme effectively. A small number of schemes are run in collaboration with other organisations.

Do you use Advisors and Advisory Groups?

Yes, depending upon the PT scheme in question. Advisors are selected on the basis of their technical knowledge and experience of the industry to which the scheme is related. Advisors may be used on an ad-hoc basis and contacted when specific issues need to be addressed.

Alternatively, formal Advisory Groups may be used. Advisory Groups consist of members who may or may not be participants on the scheme but who are experienced in the field of testing covered by the PT scheme.

The composition and terms of reference of each Advisory Group will be agreed on a scheme-byscheme basis.

Do you run PT schemes that are jointly managed?

Yes, some PT schemes are operated jointly with a partner organisation. Where schemes are operated jointly, a Management Committee may be set up to address operational issues for the scheme.

What are the fees for participation?

Fees for participation are reviewed annually and the current fees for each PT scheme are available on application. Payment terms are detailed on the application form and invoice. Participants are advised that delays with payments may result in test materials and/or reports being withheld until payments are made.

Where do you source your PT test materials?

The vast majority of test materials are manufactured by LGC. Where this is not possible, test materials are carefully sourced to meet the needs of participants. Wherever practical, test materials will be as similar as possible to those samples routinely tested by participating laboratories. However, in some cases, in order to achieve the required degree of homogeneity and stability, test materials may be in the form of simulated matrices or concentrated spiking solutions.

The analyte concentration range of test materials will usually be varied from round to round in order to be realistic and challenging. Details of individual test material types are available in the relevant scheme description.

How is PT test material stability affected by time, distance and temperature?

The test materials are all stable at the stated storage temperatures for at least the period of the PT scheme round. Studies have shown there is no significant difference between results of test materials tested the day after despatch and those tested on the deadline date. There is also no evidence that results are influenced by different climatic conditions of participating countries.

Distance travelled does not affect test material results. We have undertaken studies on a number of our PT test materials comparing the average result according to distance travelled, and no correlations have been found. Stability consideration is an important part of the design and feasibility process for a PT scheme, where transport conditions such as temperature, humidity, pressure, exposure to x-rays etc are taken into account.

About the AXIO Proficiency Testing process

How do I join a PT scheme?

Participants are advised to take part in the PT scheme(s) that are most fitting to their own area of testing. Where necessary, appropriate staff at AXIO Proficiency Testing can advise on which scheme is most suitable for participants.

For each scheme, a scheme description and application form will be available, containing information about the test materials included in the scheme, and the intended distribution dates. This information is available on our website: Igcstandards.com/AXIO

Participants are invited to place orders via our webshop at lgcstandards.com/pt by selecting which test materials they wish to receive in the PT scheme year. Alternatively, it is possible to complete an application form.

Once a completed webshop order or application form is received, an order confirmation will be sent to the participant, confirming the test materials selected and distribution date.

How often do I need to participate?

The frequency that a laboratory needs to participate in proficiency testing depends on a wide range of factors specific to each individual laboratory, such as other quality tools used, the volume of work undertaken and the risk associated to the measurements. Therefore every individual laboratory may have a different need, which is why PT schemes provided by AXIO Proficiency Testing offer flexible participation, although some do have a minimum participation level. Third parties, such as regulatory bodies, may recommend minimum levels of participation. To gain the benefit from trend analysis, participation in a minimum of four rounds over a scheme year is normally recommended.

How are PT test materials packaged and transported?

Test materials are packaged appropriately to protect the contents during transit. The majority of test materials are sent using priority courier. Overseas customers must provide relevant documents to prevent delay in customs such as import permits and may be required to pay import duties locally.

Once packages have been delivered, AXIO Proficiency Testing cannot be held responsible if they subsequently fail to reach the correct personnel or are not stored under the recommended conditions.

Participants are asked to check the contents of packages immediately on receipt and to contact AXIO Proficiency Testing if there are any problems with the condition of the test materials or accompanying documentation.

How do I treat my PT test material?

It is important for laboratories to understand how to get the optimum benefit from PT participation. To do this, a laboratory must participate in an open and honest fashion, being prepared to, on occasion, be evaluated as unsatisfactory. If PT is to achieve its aims, laboratories need to treat the test materials the same as routine test materials, and staff must be encouraged to treat them appropriately and learn from their results in a constructive manner.

Do I have to use specific methods to analyse the PT test materials?

Unless otherwise instructed, participants should analyse the test materials using any method that they feel is appropriate.

Participants are asked to treat the test material in the same way as a routine sample. Participants may be asked to state their method when reporting results. It is important that this information is accurate as results are analysed and reported according to the method stated.

Do I have to report my results within a specific timescale?

Deadlines are specified for the return of results, to ensure the timely issue of assigned values and reports to participants. For each PT scheme a closure date will therefore be specified. For certain tests there may also be a date specified by which examination of the test material is recommended to have been commenced. This is to ensure that sufficient time is available to complete the test and report results in time for the deadline date.

About AXIO Proficiency Testing schemes

How should I report my results using PORTAL?

For the majority of PT schemes, results are returned through our bespoke electronic reporting software, PORTAL. Once you are ready to report your results, please go to: **portal.lgcstandards.com** You will need to log in using your lab ID, username and password. We advise that prior to using PORTAL you read the user guide which is available at: **portal.lgcstandards.com** select 'help' from the menu.

If you require further assistance please contact our support team: Tel: +44 (0)161 762 2500 Email: ptsupport@lgcgroup.com or your local LGC office.

For some schemes (or parts of a scheme) alternative reporting mechanisms are provided, details of which will be emailed to participants prior to test materials receipt.

It is recommended that results and calculations are checked thoroughly before reporting. Results should be reported clearly, in the format and units detailed in the scheme description. If calculations are used, unless instructed otherwise, the laboratory is to report only the final calculated result.

In general, results of zero should not be reported; results should be reported depending upon the detection limit of the method used, for example, <10. The exception is a small number of parameters, where it may be appropriate to report a result of zero, depending on the measurement scale being used. Results of zero and truncated results, such as < or > cannot often be included in the data analysis and therefore allocated a performance score.

Results will be rounded up or down to the number of reporting decimal places stipulated in the scheme description and may not therefore be identical to your original reported result. The effects of rounding may also mean that occasionally percentage totals do not add up exactly to 100%.

Part of the challenge of proficiency testing is the ability to perform calculations and transcribe results correctly. The proficiency testing team cannot interpret or calculate results on participants' behalf. Once submitted and received, results cannot be amended and no changes can be made after the report has been issued. However, if you notice an error in your result before the reporting deadline, this can be corrected using PORTAL until the round closes.

How many results may I submit?

Although it is desirable for participants to submit multiple results in order to compare results between different analysts, methods or instruments, a single laboratory reporting a large number of results could potentially bias the dataset. In order to minimise the effects of bias, AXIO Proficiency Testing therefore limits the number of results participants are able to report. Each participant is able to enter up to 13 different results. Of these results a maximum of 3 results can be 'nominated'. Nominated results are included in the statistical analysis of the dataset whilst non-nominated results are not, however all results will receive z performance scores and assessments as appropriate.

Nominated results must be obtained using different methods, again to minimise the effects of bias.

Further information is available in the **PORTAL User Guide** and the **PORTAL Nominated Results FAQ**, both of these documents are available for download from the PORTAL website and further information is available from **ptsupport@lgcgroup.com**

Can my results be included in the report if I've missed the deadline for reporting?

Participants are asked to return results by the given deadline in order to ensure that their results are included in the statistical analysis and the scheme report. Results received after the closure date will not be included in the report.

For PT schemes where a generic report is issued, this is available to all participants subscribing to the round regardless of whether their results were submitted or not.

Are microbiology results obtained from MPN methods comparable to those obtained using plate count methods?

MPN and plate counts are both estimates of the number of microbial cells in the original test material and therefore provided all dilutions and calculations have been performed correctly, results should be comparable.

For QWAS and QMS, comparing MPN results against results obtained from all other methods show no significant differences.

How is the assigned value established?

ISO 13528: 'Statistical Methods for use in Proficiency Testing by Interlaboratory Comparisons' sets out how the assigned value and performance assessment criteria can be established and describes the options for the various performance scoring systems.

The assigned value is the value selected as being the best estimate of the 'true value' for the parameter under test. The method used to determine the assigned value may vary depending upon the particular PT scheme and test material and is detailed in the relevant scheme description.

For quantitative tests, where it is appropriate, practicable and technically feasible, the assigned value will be derived through formulation (or occasionally through the use of a certified reference material) to provide metrological traceability; the associated uncertainty of the value can therefore be estimated. However, in many cases the use of a consensus value is the only practicable and technically feasible approach to use. When the assigned value is determined from the consensus value of participant results, or from expert laboratories, robust statistical methods are used for calculation of the consensus value, the estimated standard uncertainty and the robust standard deviation.

For qualitative tests, participant results are compared against the intended result (assigned value) based on formulation or expert assessment.

For interpretive schemes where the result is subjective rather than quantifiable, a model answer produced by appropriate experts will be published in the report.

For microbiology test materials, all participant results are transformed by converting them to log10 before the statistical analysis is undertaken.

How do I evaluate measurement uncertainty?

The aim when evaluating measurement uncertainty is to combine the effects of all the errors that will influence the measurement result, into a single value. There are many different guides available which provide advice on evaluating measurement uncertainty.

There are two specific guides that are internationally recognised:

- ISO (BIPM, IEC, IFCC, IUPAC, IUPAP and OIML) 'Guide to the Expression of Uncertainty in Measurement'
- EURACHEM/CITAC Guide 'Quantifying Uncertainty in Analytical Measurement' (available at: www. eurachem.org).

Further information on approaches to evaluating measurement uncertainty may also be available from your national accreditation body.

Can I use PT data to estimate my measurement uncertainty?

It is possible, but must be regarded as a very rough estimate, and is not an approach addressed in many guides to evaluating measurement uncertainty. However documents that do address the use of PT data are:

- EURACHEM/CITAC Guide 'Quantifying Uncertainty in Analytical Measurement' (available at www. eurachem.org)
- NORDTEST Report TR 537 'Handbook for Calculation of Measurement Uncertainty in Environmental Laboratories'
- ISO 19036 'Microbiology of Food and Animal Feeding Stuffs - Guidelines for the Estimation of Measurement Uncertainty for Quantitative Determinations'.

What is the Standard Deviation for Proficiency Assessment (SDPA)?

The SDPA expresses the acceptable difference between the laboratory result and the assigned value. An acceptable z performance score represents a result that does not deviate from the assigned value by more than twice the SDPA. The method used to determine the SDPA may vary depending upon the particular PT scheme and test material and is detailed in the relevant scheme description.

A fit for purpose value for SDPA, rather than being derived from participant results, is preferable as this enables z scores to be compared from round to round to demonstrate general trends.

For each scheme, the value of SDPA and the method used to derive it is reported in the scheme description and/or report.

What standard deviation for proficiency assessment (SDPA) is used in microbiology PT schemes?

There are many sources of variation in microbiological testing and the SDPA used to assess performance therefore needs to be fit-for-purpose and take all possible sources of variation into account. From experience and historical data, AXIO Proficiency Testing uses a fixed SDPA value of 0.35 log10 for the majority of microbiological tests.

How do I report a 'presumptive' result in microbiology?

Report your result as usual but record in the comments section that the result is 'Presumptive'.

What is the purpose of scoring my result?

Once the assigned value for the parameters under test has been established, participant laboratories are assessed on the difference between their result and the assigned value, with this difference being represented by a performance score called a z score. This provides a simple and consistent measure of performance which is the key to monitoring competence and implementing an improvement programme as required.

How is a z score calculated?

The participant's result, x, is converted into a performance score (z score) using the following formula:

$$\frac{z = (x - X)}{SDPA}$$

Where: X = the assigned value

SDPA = Standard Deviation for Proficiency Assessment

For small data sets, there will be increased uncertainty around the assigned value if derived from a consensus value from participants' results. In such cases, performance scores may not be provided, or may be given for information only.

The z score expresses performance in relation to the assigned value and the standard deviation for proficiency assessment (SDPA). A z score of 2 represents a result that is a distance of 2 x SDPA from the assigned value.

How do I interpret my results?

For quantitative examinations, participant performance is assessed using the z score, and the following interpretation is given to results:

z ≤ 2.00	Satisfactory result
2.00 < z < 3.00	Questionable result
z ≥ 3.00	Unsatisfactory result

For qualitative examinations or semi-qualitative results, laboratories reporting the assigned result or range of results will be considered correct, and therefore have satisfactory performance.

What are the advantages of using a z score to assess performance?

- Results can be expressed in a form that is easy to interpret and understand.
- Results can be summarised in graphical or tabular form to depict overall performance.
- A z score allows participants to directly compare their own result with others.
- If consistent statistical values are applied, a z score enables participants to monitor and trend their own performance over time.

It is important to interpret any performance score in the full context of the overall results and in the context of a laboratory's own quality control measures.

What is the estimated uncertainty of the assigned value?

The assigned value has a standard uncertainty (ux) that depends upon the method used to derive the assigned value. When the assigned value is determined by the consensus of participants' results, the estimated standard uncertainty of the assigned value can be calculated by:

ux = 1.25 x Robust standard deviation/√n

Where n = number of results

When the assigned value is determined by formulation, the standard uncertainty is estimated by the combination of uncertainties of all sources of error, such as gravimetric and volumetric measurements.

If ux is $\leq 0.3 \times \text{SDPA}$, then the uncertainty of the assigned value can be considered negligible and need not be considered in the interpretation of results.

If ux is > 0.3 x SDPA, then the uncertainty of the assigned value is not negligible in relation to the SDPA and so z' (z-prime) performance scores, which take into account the standard uncertainty of the assigned value in their calculation, will be reported in place of z scores.

How is a z' (z-prime) score calculated?

A z' score incorporates the standard uncertainty of the assigned value and is calculated as follows:

$$\frac{z' = (x - X)}{\sqrt{SDPA2 + ux2}}$$

Where x = participant result

X = the assigned value

SDPA = Standard Deviation for Proficiency Assessment

ux = standard uncertainty of the assigned value X

A z' score is interpreted in exactly the same way as a z score, ≤ 2 is satisfactory, >2 but <3 is questionable and ≥ 3 is unsatisfactory.

Do you include outlying results due to 'errors and blunders' in the statistical analysis of the data?

Although robust estimators are used in order to minimise the influence of outlying results, extreme results or results that are identifiably invalid should not be included in the statistical analysis of the data. For example, these may be results caused by calculation errors or the use of incorrect units. However, such results can be difficult to identify by the PT provider. For this reason, the robust mean and standard deviation will be calculated in the usual way, but those results that are out of the range of the assigned value ± 5 x SDPA will be excluded and the robust mean and standard deviation will then be recalculated. These recalculated values will be used for the statistical analysis. By removing these 'blunders' from the dataset any influence on the summary statistics is minimised. All results, including excluded results, will be given performance scores.

How can I graphically plot and analyse trends for qualitative results?

Qualitative results are difficult to depict graphically as they are not normally allocated a performance score. However for qualitative results, a correct result could be allocated a performance score of 0 to represent a satisfactory result. A false positive result can be represented by a performance score of + 3, whilst a false negative result can be represented by a performance score of - 3. If plotted graphically over time, this should give a clear visual indicator of performance in qualitative tests.

How will I receive my report?

Following statistical evaluation of the results, the reports will generally be available on the website within 4 to 10 working days of round closure (see specific scheme description). We aim to provide 95% of our reports to participants within 5 working days. Participants will be emailed when the report is available. The content of reports vary from scheme to scheme but include details of the composition of test materials, the assigned values, and tabular and / or graphical representations of participants' results.

How do I assess the reproducibility standard deviation from the PT report?

The robust standard deviation provided in the PT report for a specific method can be taken as an estimate of the reproducibility standard deviation for the PT round for that specific method.

Can I have a report that only includes my group laboratories?

Yes, we can produce reports tailored to a customer's specific requirement. There may be an additional charge for administration and computer programming costs.

My results have not been included in the report. Can I calculate my performance score (z or z' score)?

To calculate your performance score please visit: **portal.lgcstandards.com** Select 'submit results' from the menu.

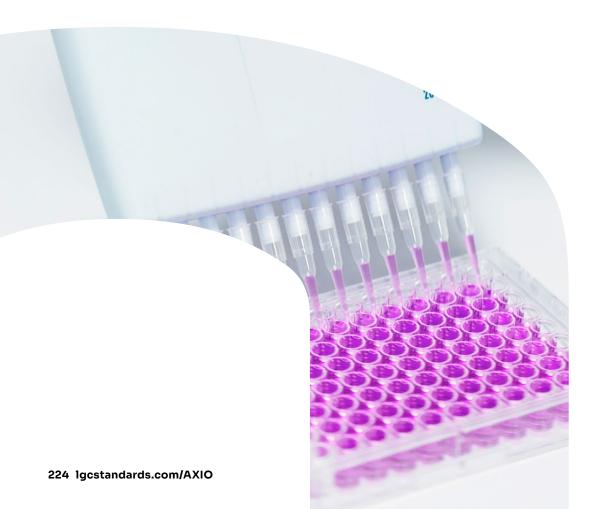
About privacy and confidentiality

Can you guarantee my laboratory's confidentiality?

In order to ensure confidentiality, participants in all PT schemes are allocated a unique laboratory reference number. This number enables results to be reported without divulging the identities of participant laboratories. Only staff within the proficiency testing team and the laboratory itself will know this number.

How do you prevent collusion and falsification of results?

It defeats the objective of taking part in proficiency testing if participants are not returning genuine results. Certain measures are built into the PT schemes to try and prevent collusion but, ultimately the responsibility rests with each participating laboratory to behave in a professional manner.



About Driving Quality Together

What could be the cause of my poor performance?

A single poor result is not indicative of overall laboratory performance but neither is a single good result. Ideally, PT results should be monitored over time to detect potential bias or repeated unsatisfactory results. There are many possible reasons for a single poor result. It is therefore important to interpret the results from PT schemes within the context of an allround quality assurance programme, including internal quality control, use of validated methods and reference materials. There are numerous potential causes of poor performance in a PT scheme which may include analytical and non-analytical errors.

Analytical errors

- Calibration / instrument problems
- Extraction / clean-up
- Interferences / matrix effects
- Diagnostic kits / reagents
- Analyst / method performance

Non-analytical errors

- Calculation / transcription
- Reporting format / units
- Poor / incorrect storage
- Test material defects

Test materials are subjected to rigorous quality control testing before being distributed to participants, and are unlikely to be the cause of a poor performance score. All possible reasons for a poor performance should be investigated fully in order to identify the most likely cause and to enable action to be taken to prevent recurrence. Repeat test materials are available after every distribution, but it is most important to investigate and understand the reason(s) for the failure, document this fully, and carry out corrective actions before repeating a test.

How can I measure my laboratory's performance over time?

You can do this by trend analysis. A single result simply reflects the performance of the laboratory on the particular day that the test was carried out and therefore gives limited information. Frequent participation in PT schemes over time can give greater insight into long-term performance and can help identify where internal bias may be occurring.

One of the best methods of summarising performance scores over time is graphically as this gives a clear overview and is less prone to misinterpretation than numerical methods. Participants are therefore advised to monitor their PT results over time.

An online trend analysis tool is included in the cost of your PT participation with AXIO Proficiency Testing. The online tool is built into the PORTAL reporting system and allows you to quickly plot your results over a range of rounds and easily download the charts for further circulation.

More information regarding interpretation and trend analysis of proficiency testing results is given in the Eurachem guide on 'Selection, Use and Interpretation of Proficiency Testing (PT) Schemes' (available at www. eurachem. org) and ISO 13528.

How can I receive advice and feedback?

Communication with participants will be carried out through PT scheme-related documentation, emails, letters, or through local LGC offices. Open meetings may also be organised and all interested parties invited to attend.

How can I send feedback?

Comments on any aspect of our products and services are welcome either by phone, letter, email or by contacting your local LGC office.

Can I suggest a PT scheme or test material?

We welcome suggestions any time. Please complete the 'Wish list' form on our website: **lgcstandards.com/AXIO**



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