Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

1642

Accredited to ISO/IEC 17025:2017

Fera Science Limited

Issue No: 076 **Issue date:** 28 October 2026

Sand Hutton
York
YO41 1LZ

Contact: Simon Devine
Tel: +44 (0)1904 462261
E-Mail: sales@fera.co.uk
Website: www.fera.co.uk

Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests **The organisation holds a flexible scope of accreditation using protocol FSG 106** **Please contact the organisation for details of the individual compounds that potentially can be analysed**	Documented In-House Methods: Methods developed and validated following the Flexible Scope generic protocol FSG 106 and related procedures using sample preparation, extraction procedures, ELISA and instrumental analysis using GC, GC-MS, LC, LC-MS LC-MS/MS, Ion-exchange chromatography (IC)IC-MS/MS
ANIMAL FEEDS	Compositional analysis Mycotoxins Organic environmental contaminants Pesticide residues Veterinary residues	
ANIMAL TISSUE, FLUIDS AND PRODUCTS	Organic environmental contaminants Pesticide residues Veterinary residues Mycotoxins	
FOODSTUFFS (FOOD AND BEVERAGES) FOOD SUPPLEMENTS	Compositional analysis Food additives Mycotoxins Organic environmental contaminants Pesticide residues Packaging ingredients Process contaminants Veterinary residues	
PLANT MATERIALS	Mycotoxins Organic environmental contaminants Pesticide residues	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests *Indicates analysis performed under Food Standards Agency designated as an Official Laboratory (monitoring), and ** National Reference Laboratory (additives) in accordance with assimilated European law AEUL OCR 2017/625	Documented In-House Methods identified by method number
SAMPLE EXTRACTS prepared from ANIMAL FEED, ANIMAL TISSUE, FOODS of ANIMAL ORIGIN, FOODSTUFFS and ENVIRONMENTAL SAMPLES	Identification and quantitative determination of veterinary drug residues including: Avermectins Benzimidazoles Carazolol Ciprofloxacin Dinitrocarbanilide Enrofloxacin Flumequine Lasalocid Levamisole Malachite green Nalidixic acid Nitroimidazoles Oxolinic acid Sarafloxacin Sulphonamides Tetracyclines Tranquilisers	FSG/002 using LC-MS and LC-MS/MS
ANIMAL FEEDS	Screening for Nitrofurans: Furaltadone Furazolidone Nitrofurantoin Nitrofurazone	FSG367 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN MILK	Screening for Antimicrobials (see Table 4 for list of analytes)	FSG377 using LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN HONEY	Screening for Aminoglycosides and spectinomycin Dihydrostreptomycin Streptomycin Spectinomycin Paromomycin Apramycin Kanamycin Gentamicin Neomycin	FSG350 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Antimicrobials screening (see Table 4 for list of analytes) Confirmation of trimethoprim	FSG385 using LC-MS/MS
Animal Tissue	Determination of Nitrovin by LCMS	FSG 388 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Screening, quantification and confirmation for Avermectins: Abamectin Doramectin Emamectin Eprinomectin Ivermectin Moxidectin	FSG302 using HPLC with Fluorimetric detection and/or LC-MS/MS
FISH CRUSTACEANS	Screening, quantification and confirmation for dyes: malachite green leucomalachite green crystal violet leucocrystal violet	FSG322 using LC-MS/MS
KIDNEY, URINE	Chloramphenicol (quantitative)	FSG347 using LC-MS/MS
KIDNEY	Florfenicol and Thiamphenicol.	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FEED	Chloramphenicol & nitroimidazoles dimetridazole ipronidazole metronidazole ronidazole	FSG 381 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN HONEY	Tetracyclines (see Table 4 for list of analytes)	FSG375 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Screening, quantification and confirmation for Sulphonamides (see Table 3 for list of analytes)	FSG308 using LC-MS/MS
HONEY	Dapsone	
ANIMAL TISSUE, FEED URINE MOLASSES	Screening, quantification and confirmation of: β Agonists (see Table 3 for list of analytes)	FSG348 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN, HONEY, URINE, WINE	Chloramphenicol, thiamphenicol, florfenicol	FSG342 using Solid Phase Extraction and LC-MS/MS
EGG	Tiamulin	FSG384 using LC-MS/MS
HONEY	Penicillins including: amoxicillin cefazolin penicillin G penicillin V ampicillin oxacillin cloxacillin Dicloxacillin methicillin ticarcillin phenethicillin	FSG353 using LC-MS/MS
HONEY	Naphthalene & 1,4-dichlorobenzene	FSG355 using GCMS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
ANIMAL and FISH TISSUE and FOODS of ANIMAL ORIGIN HONEY SHELLFISH Food and beverages Food supplements	Nitrofuran metabolites as markers of nitrofuran antibiotic drug use: 3-amino-2-oxazolidinone (AOZ) 5-methylmorpholine-3-amino-2-oxazolidinone (AMOZ) l-aminohydantoin (AHD) semicarbazide (SEM) 3,5-dinitrosalicyclic acid hydrazide (DNSH)	FSG341 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN, ANIMAL FEEDS	Screening, confirmation and quantitation for veterinary drugs (see Table 3 for list of Coccidiostats, Nitroimidazoles, Quinolones/Fluoroquinolones, Dyes, Macrolides, Tranquillisers, Phenolic anthelmintics and Benzimidazoles)	FSG357 using extraction and clean-up procedures followed by LC/MS/MS
HONEY	Screening, quantification and confirmation for: Nitroimidazoles (see Table 3 for list of analytes)	
FEED	Screening, quantification and confirmation for: Coccidiostats) (see Table 3 for list of analytes)	
KIDNEY	Screening, quantification and confirmation for: Non-steroidal Anti-inflammatory Drugs (NSAIDs) (see Table 3 for list of analytes)	
FISH and SHELLFISH Animal Feed and Feed Components	FSG 390 Determination of Triphenylmethane and Triarylmethane Dyes	FSG 390 using extraction and clean-up procedures followed by LC/MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Screening, quantification and confirmation of florfenicol at residue levels	FSG339 using LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Screening, quantification and confirmation for: Non-steroidal Anti-inflammatory Drugs (NSAIDs) (see Table 3 for list of analytes)	FSG370 using LC-MS/MS
	Gestagens including: altrogest chlormadinone acetate, flugestone medroxyprogesterone acetate megestrol acetate melengestrol acetate altrnogest	FSG376 using LC-MS/MS
Milk	Non-steroidal Anti-inflammatory Drugs (NSAIDs) including (see Table 3 for list of analytes)	FSG380 using LC-MS/MS
Liver Milk	Glucocorticoids including betamethasone, dexamethasone, prednisole	FSG371 using LC-MS/MS
Urine, cattle serum, milk	Steroids (see Table 4 for list of analytes)	FSG373 using LC-MS/MS
Liver, Fish	Steroids including : diethylstilbestrol hexestrol dienestrol 17α-trenbolone taleranol zeranol 17α-methyltestosterone	FSG374 using LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
URINE	Thyrostats: Methimazole (Tapazole) Phenylthiouracil Propylthiouracil Thiouracil Methylthiouracil 2-mercaptobenzimidazole 5,6-dimethyl-2-thiouracil 5-ethyl-2-thiouracil 6-benzyl-2-thiouracil	FSG368 using LC-MS/MS
MUSCLE	Tiamulin	FSG386 using LC-MS/MS
ANIMAL TISSUE and FOODS of ANIMAL ORIGIN	Ceftiofur	FSG378 using LC-MS/MS
FEED	Methyltestosterone	FSG379 using LC-MS/MS
ANIMAL PRODUCTS CHOCOLATE HIGH FAT AND OIL PRODUCTS FISH and FISH PRODUCTS MEAT and MEAT PRODUCTS	Pesticide residues - detection, quantification and confirmation of Pesticides (see Table 2 for the list of analytes):	FSG/159 by ethyl acetate solvent extraction with HPGPC clean-up and GC-MS/MS determination
CEREAL	Trinexapac-ethyl	FSG/169 by solvent extraction and LC-MS/MS determination
FRUITS and VEGETABLES, SUGAR, CEREALS, CANNABIS, COMPOST, MODERN ORAL POUCHES (MOPS) (TOBACCO)	Dithiocarbamate fungicide residues (as CS2)	FSG/153 using GC-MS/MS
FRUITS and VEGETABLES INFANT FOOD CEREALS CEREAL PRODUCTS SEEDS	Pesticide residues - detection, quantification and confirmation (see Table 1 for the list of analytes)	FSG/154 and related standard operating procedures by multi-residue method using ethyl acetate extraction and GC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FRUITS and VEGETABLES CANNABIS CEREALS CEREAL PRODUCTS INFANT FOOD ANIMAL PRODUCTS HONEY CHOCOLATE and SUGAR HIGH FAT and OIL PRODUCTS FISH and FISH PRODUCTS MEAT and MEAT PRODUCTS COMPOST, ROCKWOOL, MODERN ORAL POUCHES (MOPS) (TOBACCO)	Detection, quantification and confirmation of pesticide residues (see Table 1 for list of analytes)	FSG/167 and related standard operating procedures by multi-residue method using acetonitrile extraction and LC-MS/MS and GC-MS/MS determination
SUGAR, WATER (including for IRRIGATION), BEVERAGES	Detection, quantification and confirmation of pesticide residues (see Table 2 for the list of analytes)	FSG/168 by multi-residue method using SPE clean-up and LC-MS/MS
WATER (including for IRRIGATION), BEVERAGES	Detection, quantification and confirmation of pesticide residues (see Table 2 for the list of analytes)	Extraction and SPE clean-up using FSG/173 and GC-MS
CEREALS CEREAL PRODUCTS INFANT FOOD FRUITS and VEGETABLES ROCKWOOL	ETU and iso-PTU	FSG/164 using HPLC-MS/MS
CEREALS CEREAL PRODUCTS INFANT FOOD FRUITS and VEGETABLES	Chlormequat Mepiquat	FSG/152 using HPLC-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
SAMPLES OF PLANT ORIGIN, CEREALS, ANIMAL TISSUE, FLUIDS AND PRODUCTS, WATER, INFANT FOOD, CANNABIS, MODERN ORAL POUCHES (MOPS) (TOBACCO) COMPOST, ROCKWOOL	Detection, quantification and confirmation of pesticide residues: AMPA n-acetyl-AMPA Chlorate Perchlorate Maleic hydrazide 3-MPPA aminopyralid amitrole chlormequat clopyralid cyromazine daminozide ethephon Fosetyl-Al fosfomycin glufosinate glufosinate-N-acetyl glyphosate n-acetyl glyphosate Inorganic bromide mepiquat phosphonic acid trinexpac ethyl	FSG/185 using LC-MS/MS
Poultry Muscle	Determination of Fosfomycin by LCMS	FSG389 using LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ANIMAL FEEDS, BEVERAGES, FOODS and HUMAN TISSUES CROPS SOILS POLLUTANTS and EFFLUENTS (solid)	See Table 5 for list of analytes: Polybrominated dibenzo-p-dioxins (PBDDs)*/** Polybrominated dibenzofurans (PBDFs)*/** Polychlorinated dibenzo-p-dioxins (PCDDs) and Total TEQ */** Polychlorinated dibenzofurans (PCDFs) */**	FSG/403-406, FSG/407, FSG/409, FSG/412, FSG/413 using High Resolution Gas Chromatography-High Resolution Mass Spectrometry Isotope Dilution with 13C - labelled internal standards
ANIMAL FEEDS, BEVERAGES, FOODS and HUMAN TISSUES CROPS SOILS POLLUTANTS and EFFLUENTS (solid)	See table 5 for list of analytes: ICES 6/Non-Dioxin Like Polychlorinated biphenyls (NDL indicators PCBs) */** Dioxin-Like Polychlorinated biphenyls (DL-PCBs) */** Additional Polychlorinated biphenyls (PCBs) */**	FSG/403-406, FSG/408, FSG/409, using High Resolution Gas Chromatography-High and Low Resolution Mass Spectrometry Isotope Dilution with ^{13}C - labelled internal standards
ANIMAL FEEDS, BEVERAGES, FOODS and HUMAN TISSUES CROPS SOILS POLLUTANTS and EFFLUENTS (solid)	See table 5 for list of analytes: Polybrominated biphenyls (PBBs) (Non-ortho and ortho) */**	FSG/403-406, FSG/412, FSG/413 using High Resolution Gas Chromatography-High Resolution Mass Spectrometry Isotope Dilution with ^{13}C - labelled internal standards
ANIMAL FEEDS, BEVERAGES, FOODS and HUMAN TISSUES CROPS SOILS POLLUTANTS and EFFLUENTS (solid) (cont'd)	Polybrominated diphenyl ethers (PBDEs) */** (see Table 5 for list of analytes)	FSG/403-406 FSG/412extraction and clean up of matrix and analysis using High Resolution Gas Chromatography-High Resolution Mass Spectrometry Isotope Dilution with ^{13}C - labelled Internal standards
FOODS MODERN ORAL POUCHES (MOPS) (tobacco)	Polycyclic aromatic hydrocarbons (PAHs) */** (see Table 5 for list of analytes)	FSG/410 using High Resolution Gas Chromatography-Low Resolution Mass Spectrometry Isotope Dilution with ^{13}C - labelled internal standards

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FOOD and FOOD PRODUCTS	Per and polyfluroalkyl substances (PFAS) – see Table 10	FSG 417 using liquid chromatography with tanden mass spectrometry (LC-MS/MS)
FOODS BEVERAGES	Acesulfame-K Aspartame Saccharin	FSG/259 using HPLC
FOODS BEVERAGES	Acrylamide**	FSG/262 using Gas Chromatography Mass Spectrometry (GC-MS)
FOOD and Beverages	acrylamide Furan 2-methyl furan 3-Methyl furan 2,5-Dmethyl furan Ethyl furan Butyl Furan Pentyl furan	FSG/804 using Headspace extraction and GC-MS
FOODS BEVERAGES	Benzoic acid Sorbic acid	FSG/256 using HPLC
FOODS BEVERAGES BABY FOOD, CEREALS, CEREAL PRODUCTS, PLANT MATERIALS and EXTRACTS, ANIMAL TISSUE, ANIMAL FEED	Aflatoxins B_1, B_2, G_1, G_2**	FSG/251 using QuEChERS & immuno-affinity column clean-up and HPLC with post column derivatisation
FOODS BEVERAGES ANIMAL TISSUES CEREALS CEREAL PRODUCTS BABY FOOD	Ochratoxin A**	FSG/252 using QuEChERS & immuno-affinity column clean-up and HPLC
FOODS BEVERAGES BABY FOOD MODERN ORAL POUCHES (MOPS) (tobacco)	Aflatoxins B_1, B_2, G_1, G_2 Ochratoxin A (simultaneous determination)**	FSG/261 using immuno-affinity column clean-up and HPLC with post column derivatisation

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FOODS BEVERAGES MODERN ORAL POUCHES (MOPS) (tobacco)	Nitrate** Nitrite**	FSG/255 using HPLC
MILK INFANT FORMULA	Aflatoxin M_1**	FSG/253 using immuno-affinity clean-up and HPLC
CEREALSCEREAL PRODUCTS BABY FOOD	Ergot alkaloids ** See table 7 for list of analytes	FSG/601 using LC-MS/MS
CEREALS CEREAL PRODUCTS BABY FOOD	cyanogenic glycosides ** See table 7 for list of analytes	FSG/825 LC-MS/MS
CEREALS CEREAL PRODUCTS BABY FOOD	Fumonisins B1, B2, B3 **	FSG/264 using immuno-affinity clean-up and LC-MS/MS
ANIMAL FEED (CEREAL BASED) CEREALS PET FOODS CEREAL PRODUCTS BABY FOOD	Fusarium Multi-mycotoxins ** See table 7 for list of analytes	FSG/818 using LC-MS/MS
FOOD and beverages	Fusarium Multi-mycotoxins ** See table 7 for list of analytes	FSG/828 using immunoaffinity column clean up and LC-MS/MS
FOOD and Feed	Deoxynivalenol Zearalenone T2 & HT2 toxins	FSG/820 using immunoaffinity column clean up and LC-MS/MS
CEREALS CEREAL PRODUCTS BABY FOOD	Trichothecenes **	FSG/263 using solid phase clean-up and LC/MS/MS
CEREALS CEREAL PRODUCTS BABY FOOD	Zearalenone **	FSG/258 using immuno-affinity column clean-up and HPLC
FRUITS FRUIT PRODUCTS	Patulin **	FSG/254 using HPLC or LC/MS/MS
FOODS	3-Monochloropropane-1, 2-Diol (3-MCPD) **	FSG/257 using GC-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FOODS	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
Oils and infant foods	2-monochloropropane-1,2-diol ((2-MCPD) 3-monochloropropane-1,2-diol (£-MCPD Glycidyl esters	FSG/419 using GC-MS
FOOD, beverages and food supplements	Styrene	FSG/825 using headspace extraction and GC-MS
FOODS (of Marine and Plant origin)	Arsenic (inorganic)	FSG/466 using HPLC ICP-MS
MATRICES/ELEMENTS THAT ARE ACID DIGESTABLE/ SOLUBLE INCLUDING: ANIMAL FEEDS BEVERAGES FOODS CROPS SOILS	Single and multi-elemental analysis */**	FSG/461microwave acid extraction procedures using FSG/457 ICP-MS
SAMPLES OF CLINICAL ORIGIN (covering blood, serum and organs of animal/human origin)	Bromine Chlorine Iodine	FSG/455 alkaline extraction (TMAH) using FSG/457 ICP-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FISH and SHELLFISH (dried or fresh material)	Mono-methyl mercury	FSG/454, FSG/461, FSG/464 microwave acid extraction procedures using FSG/457 inductively coupled plasma - quadruple mass spectrometry and high resolution mass spectrometry (ICP-MS)
FOOD AND FOOD PRODUCTS	Mono-methyl mercury	Extraction using FSG/467, analysis using FSG/457 liquid chromatography with inductively coupled plasma -quadruple mass spectrometry and high-resolution mass spectrometry (ICP-MS) and determination using FSG/463
FRUITS BEVERAGES	D/HI and D/HII ratio determination for ethanol	FSG/751 and FSG/752 using SNIF-NMR
	13C/12C ratio determination for ethanol	FSG/751 and FSG/753 using EA-C-IRMS
HONEY	Dihydroxy acetone (DHA) 5-(hydroxymethyl) furfural (HMF) Methylglyoxal (MGO)	FSG 783 using ultra-high performance liquid chromatography (UHPLC) and diode array detection.
	Leptosperin	FSG 789 using liquid chromatography with ultraviolet and fluorescence detection
	2-methoxyacetophenone (2-MAP) 2-methoxybenzoic acid (2-MBA) 3-phenyllactic acid (3-PA) 4-hydroxyphenyllactic acid (4-HPA)	FSG 784 using liquid chromatograhy tandem mass spectrometry (LC-MS/MS)
FOODSTUFFS and PLANT MATERIAL	Pyrrolizidine Alkaloids ** See table 8 for list of analytes	FSG/823 using LC-MS/MS
FOOD and beverages	Tropane alkaloids Atropine Scopolamine	FSG/826 using LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods identified by method number
FOOD CONTACT MATERIALS AND ARTICLES	Overall migration from packaging materials into aqueous food simulants by total immersion **	Packaging 002 using Gravimetric technique
	Primary Aromatic Amines in 3% aqueous acetic acid food simulant **	Packaging 005 using LC-MS/MS
	Formaldehyde and hexamethylenetetramine in 3% acetic acid food simulant **	Packaging 006 using spectrophotometry
Oil based products, baked products, beverages, food supplements, confectionary	Analysis of Cannabinoids (For list of compounds see table 9)	FSG/788 using solvent extraction and LC-MS/MS
	Determination of Cannabidiol (CBD)	FSG/785 using solvent extraction and LC-UV

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Microbiological Tests	Documented In-House Procedures
FOODSTUFFS	Detection of:	
	Clostridium botulinum (spores and vegetative cells)	SMS/128 based on Bacteriological Analytical Manual (BAM) 2001
	Clostridium botulinum pre-formed toxins	SMS/001 based on Bacteriological Analytical Manual (BAM) 2001
SAMPLES PREPARED FOR THE PURPOSES OF PROVISION OF PROFICIENCY TESTING MATERIALS	Enumeration of:	
	Bacillus cereus (presumptive)	SMS034 based on BS EN ISO 7932:2004+A1:2020
	Clostridium perfringens (presumptive)	SMS033 based on BS EN ISO 15213-2:2023
	Coagulase positive Staphylococci	SMS034 based BS EN ISO 6888-1:2021+A1:2023
	Coliforms (presumptive)	SMS033 based on BS EN ISO 4832:2006
	Lactic Acid Bacteria	SMS033 based ISO 15214:1998
	Listeria monocytogenes and *Listeria* spp	SMS034 based BS EN ISO 11290-2:2017
	Yeast	SMS033 using RBC agar
	Total aerobic count at 30°C	SMS034 based on BS EN ISO 4833-2:2013+Amd1:2022
	Enterobacteriaceae (presumptive)	SMS033 based BS EN ISO 21528-2:2017
	Enterococci	SMS034 using Slantez and Bartley Agar
	β-glucuronidase-positive *Escherichia coli*	SMS033 based BS EN ISO 16649-2:2001

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SAMPLES PREPARED FOR THE PURPOSES OF PROVISION OF PROFICIENCY TESTING MATERIALS (cont'd)	Microbiological Tests (cont'd)	Documented In-House Procedures
	Enumeration of:	
	Total aerobic count at 30°C	SMS/014 based on BS EN ISO 4833-1:2013+Amd1:2022
	Detection of:	
	Campylobacter spp	SMS/009 documented in house procedure using Bolton broth enrichment and plating onto mCCDA, confirmed by oxidase, Gram stain, motility
	Escherichia coli O157	SMS/027 based on BS EN ISO 16654:2001+A2:2023 using automated immunomagnetic separation
	Listeria monocytogenes and other Listeria species	SMS/008 based on BS EN ISO 11290-1:2017 using ALOA
	Salmonella spp	SMS/007 documented in house procedure using RVS enrichment and selective plating on XLD, confirmed by biochemistry and serology
BEE LARVAE (*Apis mellifera*)	Detection and identification of *Melissococcus plutonius* (European Foulbrood) and *Paenibacillus larvae* (American Foulbrood)	NBU/027 using Fera / Abingdon Diagnostics lateral flow device and microscopy using Nigrosine staining technique

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLANTS and PLANT MATERIALS	Plant Health Diagnostic Tests	Documented In-House Procedures
	Qualitative analysis for the diagnosis of plant pathogens and pests	Method developed and validated following the Flexible Scope generic protocol FSG 106 and PLH/135 using real-time PCR
	Isolation and Identification of plant pathogenic bacteria	PLH/018, PLH/019 & PLH/020 by culture, extraction fatty acid profiling using GC
POTATO HEEL ENDS	Isolation and Identification of Brown rot (*Ralstonia solanacearum*) and Ring rot (*Clavibacter sepedonicus*)	PLH/163, PLH/165 & PLH/166 extraction, processing and primary screening of potato vascular cores for detection of Brown rot and Ring rot using indirect immunofluorescence (IF) assay for ring rot
	Identification of *Bemisia tabaci puparia*	PLH/102, PLH/103 slide preparation and microscopy
	Detection and identification of *Ditylenchus* to genus and *D. dipsaci* to species	PLH/104, PLH/021 slide preparation and microscopy
PLANTS, SOILS AND WATER	Morphological identification of Thrips palmi adults	PLH/110, PLH/155 slide preparation and microscopy
SOILS	Extraction of cyst nematodes for subsequent identification	PLH/012 extraction using Fenwick can
		PLH/047 extraction using Wye Washer
	Cyst nematode identification to genus	PLH/021, PLH/017 selection, preparation and mounting PLH/015 by microscopy (species ID)
	Cyst nematode viable eggs / juveniles count	PLH/044 by microscopy

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLANTS and PLANT MATERIALS (cont'd)	Plant Health Diagnostic Tests (cont'd)	Documented In-House Procedures
	Identification of Potato cyst nematodes (*Globodera pallida* and *Globodera rostochiensis*)	PLH/049, PLH/015 by image analysis for digital capture PLH/113 by PCR
Potato roots	Detection and Identification of:	
	Potato cyst nematodes (*Globodera pallida* and *Globodera rostochiensis*)	PLH/049, PLH/015 by image analysis for digital capture PLH/113 by PCR
PLANTS, PLANT MATERIALS AND SOILS	Identification of Nematode species	PLH/049, PLH/021 by image analysis for digital capture and measurement
Strawberry plants	*Colletotrichum acutatum*	PLH/035 by ELISA
PLANTS, SOILS AND WATER	Detection and Identification of:	
	Phytophthora ramorum (sudden oak death) and Phytophthora kernoviae	PLH/067 PLH/056 for morphological identification PLH/055 using real-time PCR
	Detection of Columnea latent viroid	PLH/199 using real-time TaqMan RT-PCR
	Detection, Identification and Diagnosis of Chrysanthemum stunt viroid	PLH/809 using real-time TaqMan RT-PCR
LEAF MATERIAL FROM SUSCEPTIBLE SOLANACEOUS HOSTS	Detection of Potato spindle tuber viroid (PSTVd)	PLH/077 using real-time PCR
LEAF MATERIAL FROM SUSCEPTIBLE HOSTS	Detection of Tomato black ring virus (TBRV) and Beet ringspot virus (BRSV)	PHL/1320 by DAS- ELISA
TOMATO PLANT LEAVES	Detection of Pepino mosaic Virus (PepMV)	PLH/901 by ELISA

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLANT MATERIALS	Molecular Tests	Documented In-House Methods identified by method number
	Screening for EU authorised GMO's (Genetically modified organisms) (See Table 6)	PLH/899 Screening for authorised GMOs using Real-time PCR
	Quantification of EU authorised GMOs: - Roundup Ready™ (GT40-3-2) soya - MON810 maize - MON88302 oilseed rape	PLH/900 using Real-time PCR
END		

TABLE 1: **PESTICIDES**

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
aclonifen	1,4-dimethylnapthalene	acephate
acrinathrin	2,4-D	alachlor
aldrin	2,4-DB	aldrin
allethrin	2,4,5-T	azinphos-ethyl
amitraz	2-phenylphenol	azinphos-methyl
atrazine	6-benzylaminopurine	bromophos
azinphos-ethyl	abamectin	bromophos-ethyl
azinphos-methyl	acephate	bromopropylate
azoxystrobin	acetamiprid	carbenzazim
benalaxyl	acetochlor	chlordane (cis)
bendiocarb	acibenzolar-S-methyl	chlordane (trans)
bifenox	aclonifen	chlorfenvinphos
bifenthrin	acrinathrin	chlorpyrifos
biphenyl	alachlor	chlorpyrifos-methyl
bitertanol	aldicarb	chlorthal-dimethyl
boscalid	aldicarb sulfone	cyfluthrin
bromophos	aldicarb sulfoxide	cyhalothrin-lambda
bromophos-methyl	aldrin	cypermethrin
bromopropylate	allethrin	DDD-op
bupirimate	ametoctradin	DDD-pp
buprofezin	amidosulfuron	DDE-op
cadusafos	aminocarb	DDE-pp
captafol	amitraz	DDT-op
captan	asulam	DDT-pp
carbaryl	atrazine	deltamethrin
carbetamide	azamethiphos	diazinon
carbofuran	azinphos-ethyl	dichlofluanid
chlorbufam	azinphos-methyl	dichlorvos
chlordane (*cis*)	azoxystrobin	dicofol BD
chlordane (*trans*)	BAC 10	dieldrin
chlorfenvinphos	BAC 12	dimethoate
chloridazon	BAC 14	ETU
chlorobenzilate	BAC 16	endosulfan (I)
chlorothalonil	benalaxyl	endosulfan (II)
chlorpropham	bendiocarb	endosulfan-sulphate
chlorpyrifos	bentazone	endrin
chlorpyrifos-methyl	benthiavalicarb	ethion
chlorthal-dimethyl	benzovidiflupyr	etrimfos
chlozolinate	bicyclopyrone	fenchlorophos-oxon
cinidon-ethyl	bifenazate	fenchlorphos
clomazone	bifenox	fenitrothion
coumaphos	bifenthrin	fenpropathrin
cyanazine	bioresmethrin	fensulfothion
cycloate	biphenyl	fensulfothion-Sulfone

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
cyfluthrin	bispyribac-sodium	fensulfothion-oxon
cyhalothrin-lambda	bitertanol	fensulfothion-oxon-sulfone
cypermethrin	bixafen	fenthion
cyproconazole	boscalid	fenthion sulfone
cyprodinil	bromophos	fenthion sulfoxide
DDD-op	bromophos-ethyl	fenthion-oxon
DDD-pp	bromopropylate	fenthion-oxon sulfone
DDE pp	bromoxynil	fenthion-oxon sulfoxide
DDE-op	bromuconazole	fenvalerate
DDT-op	BTS 40348	flucythrinate
DDT-pp	BTS 44595	fluvalinate
deltamethrin	BTS 44596	fonofos
diazinon	bupirimate	HCH-alpha
dichlobenil	buprofezin	HCH-beta
dichlofluanid	butachlor	HCH-delta
dichlorvos	butocarboxim	HCH-epsilon
dicloran	butocarboxim sulfone	HCH-gamma
dicofol	butocarboxim sulfoxide	heptachlor
dicrotophos	butoxycarboxim	heptachlor epoxide (cis)
dieldrin	cadusafos	heptachlor epoxide (trans)
difenoconazole	captan	hexachlorobenzene
diflufenican	carbaryl	imidacloprid
dimethenamid	carbendazim	inorganic bromide
dimethoate	carbetamide	malaoxon
dimethomorph	carbofuran	malathion
diniconazole	carbofuran (3-hydroxy)	mecarbam
diphenylamine	carboxin	methacrifos
DMST	carfentrazone-ethyl	methamidophos
edifenphos	chlorantraniliprole	methidathion
endosulfan (I)	chlorbufam	methoxychlor
endosulfan (II)	chlordane (cis)	mirex
endosulfan sulfate	chlordane (trans)	monocrotophos
endrin	chlorfenapyr	n-desethyl-pirimiphos-methyl
EPN	chlorfenvinphos	octachlorodipropyl ether
epoxiconazole	chlorfluazuron	omethoate
EPTC	chloridazon	oxychlordane
ethion	chlorobenzilate	paraoxon-ethyl
ethofumesate	2-chloroethanol	paraoxon-methyl
ethoprophos	chlorothalonil	parathion-ethyl
ethoxyquin	chlorotoluron	parathion-methyl
etoxazole	chlorpropham	pendimethalin
etridiazole	chlorpyrifos	pentachloroanaline
etrimfos	chlorpyrifos-methyl	pentachlorothioanisole
famoxadone	chlorthal-dimethyl	permethrin
fenarimol	chlortoluron	phosalone
fenazaquin	chlozolinate	phosmet
fenbuconazole	chromafenozide	piperonyl butoxide

FSG 154 **Ethyl acetate extraction**	**FSG 167** **Acetonitrile extraction**	**FSG 167 Rockwool**
fenitrothion	cinidon-ethyl	pirimiphos-ethyl
fenoxycarb	clethodim	pirimiphos-methyl
fenpropathrin	clofentezine	procymidone
fenpropidin	clomazone	profenofos
fenpropimorph	clopyralid	prothiofos
fensulfothion	clothianidin	PTU
fenvalerate	coumaphos	pyrethrins
fluazifop-butyl	cruformate	quinalphos
flucythrinate	cyanazine	quintozene
fludioxonil	cyanitraniprole	tecnazene
flufenacet	cyazofamid	tetradifon
fluquinconazole	cycloate	thiacloprid
flurochloridone	cycloxydim	thiophanate-methyl
flusilazole	cyflufenamid	vinclozolin
flutolanil	cyfluthrin	**END OF LIST**
fluvalinate	cyhalofop-butyl	
folpet	cyhalothrin-lambda	
fonofos	cymoxanil	
formothion	cypermethrin	
furalaxyl	cyproconazole	
HCH-alpha	cyprodinil	
HCH-beta	cyromazine	
HCH-delta	DDAC	
HCH-gamma	DDD-op	
heptachlor	DDD-pp	
heptachlor epoxide (*cis*)	DDE-op	
heptachlor epoxide (*trans*)	DDE-pp	
heptenophos	DDT-op	
hexachlorobenzene	DDT-pp	
hexaconazole	deltamethrin	
hexazinone	demeton-S-methyl	
imazalil	demeton-S-methyl sulfone	
iprodione	desmedipham	
isazofos	desmetryn	
isocarbophos	diafenthiuron	
isofenphos	diazinon	
isofenphos-methyl	dicamba	
kresoxim-methyl	dichlobenil	
lenacil	dichlofluanid	
malaoxon	dichlorprop	
malathion	dichlorvos	
mecarbam	diclobutrazol	
mepanipyrim	dicloran	
mephosfolan	dicofol	
metalaxyl	dicrotophos	
metazachlor	dieldrin	
metconazole	diethofencarb	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
methacrifos	difenoconazole	
methidathion	diflubenzuron	
methiocarb	diflufenican	
methoxychlor	dimethenamid	
metolachlor	dimethoate	
metoxuron	dimethomorph	
metribuzin	dimoxystrobin	
mevinphos	diniconazole	
monocrotophos	dinoseb	
myclobutanil	dinotefuran	
napropamide	diphenylamine	
nitrofen	disulfoton	
nitrothal-isopropyl	disulfoton sulfone	
ofurace	disulfoton sulfoxide	
omethoate	dithianon	
oxadiazon	diuron	
oxadixyl	DMF	
oxychlordane	DMPF	
oxyfluorfen	DMSA	
paclobutrazol	dodine	
paraoxon-methyl	emamectin benzoate	
parathion	endosulfan (I)	
parathion-methyl	endosulfan (II)	
penconazole	endosulfan-sulphate	
pendimethalin	endrin	
pentachloroanaline	EPN	
pentanochlor	epoxiconazole	
permethrin	EPTC	
2-phenylphenol	esfenvalerate	
phenthoate	ethiofencarb	
phosalone	ethiofencarb sulfone	
phosmet	ethiofencarb sulphoxide	
phosphamidon	ethion	
piperonyl butoxide	ethiprole	
pirimicarb	ethirimol	
pirimiphos ethyl	ethofumesate	
pirimiphos-methyl	ethoprophos	
prochloraz	etofenprox	
procymidone	etoxazole	
profenofos	etridiazole	
prometryn	etrimfos	
propachlor	ethylene oxide	
propanil	famoxadone	
propargite	fenamidone	
propetamphos	fenamiphos	
propham	fenamiphos sulfone	
propiconazole	fenamiphos sulfoxide	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
propoxur	fenarimol	
propyzamide	fenazaquin	
prosulfocarb	fenbuconazole	
prothioconazole	fenbutatin oxide	
prothiofos	fenchlorophos	
pyrazophos	fenchlorophos-oxon	
pyridaben	fenhexamid	
pyridaphenthion	fenitrothion	
pyrifenox	fenoprop	
pyrimethanil	fenoxycarb	
quinalphos	fenpropathrin	
quinomethionate	fenpropidin	
quinoxyfen	fenpropimorph	
quintozene	fenpyrazamine	
simazine	fenpyroximate	
spirodiclofen	fensulfothion	
tebufenpyrad	fensulfothion sulfone	
tebuthiuron	fensulfothion sulfoxide	
tecnazene	fensulfothion-oxon	
tefluthrin	fensulfothion-oxon-sulfone	
tepraloxydim	fenthion	
terbuthylazine	Fenthion-oxon	
terbutryn	fenthion-oxon sulfone	
tetrachlorvinphos	fenthion-oxon sulfoxide	
tetraconazole	fenthion sulfone	
tetradifon	fenthion sulfoxide	
tetramethrin	fentin acetate	
thiabendazole	fenvalerate	
Tolclofos-methyl	fipronil	
tolylfluanid	fipronil de-sulfinyl	
triadimefonacetochlor	fipronil-sulfone	
triallate	fipronil sulphide	
triazophos	flonicamid	
trifloxystrobin	florasulam	
trifluralin	fluazifop (free acid)	
vinclozolin	fluazifop-p-butyl	
END OF LIST	fluazinam	
	flubendiamide	
	flucythrinate	
	fludioxonil	
	flufenacet	
	flufenoxuron	
	flumethrin	
	fluopicolide	
	fluopyram	
	fluorochloridone	
	fluoxastrobin	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	flupyradifurone	
	fluquinconazole	
	flurochloridone	
	fluroxypyr	
	flusilazole	
	flutolanil	
	flutriafol	
	fluvalinate	
	fluxapyroxad	
	folpet	
	fonofos	
	formetanate-HCl	
	formothion	
	fosthiazate	
	fuberidazole	
	furalaxyl	
	furathiocarb	
	furmecyclox	
	halauxifen-methyl	
	halofenozide	
	halosulfuron-methyl	
	haloxyfop (free acid)	
	haloxyfop methyl	
	HCH-alpha	
	HCH-beta	
	HCH-delta	
	HCH-gamma	
	HCH-epsilon mirex	
	heptachlor	
	heptachlor epoxide (cis)	
	heptachlor epoxide (trans)	
	heptenophos	
	hexachlorobenzene	
	hexaconazole	
	hexazinone	
	hexaflumuron	
	hexythiazox	
	imazalil	
	imazamox	
	imazethapyr	
	imazapic	
	imazaquin	
	imidacloprid	
	indoxacarb	
	iodosulfuron-methyl sodium	
	ioxynil	
	iprodione	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	iprovalicarb	
	isazofos	
	isocarbofos	
	isofenphos	
	isofenphos-methyl	
	isoprocarb	
	isoprothiolane	
	isoproturon	
	isopyrazam	
	isoxaben	
	isoxaflutole	
	kresoxim-methyl	
	isoflucypram	
	lenacil	
	linuron	
	lufenuron	
	malaoxon	
	malathion	
	mandipropamid	
	matrine	
	MCPA	
	MCPB	
	mecarbam	
	mecoprop	
	mefentrifluconazole	
	mepanipyrim	
	mephosfolan	
	mepronil	
	mesosulfuron-methyl	
	mesotrione	
	metaflumizone	
	metalaxyl	
	metamitron	
	metazachlor	
	metconazole	
	methabenzthiazuron	
	methacrifos	
	methamidophos	
	methidathion	
	methiocarb	
	methiocarb sulfoxide	
	methiocarb sulphone	
	methomyl	
	methoxychlor	
	methoxyfenozide	
	metobromuron	
	metolachlor	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	metolcarb	
	metosulam	
	metoxuron	
	metrafenone	
	metribuzin	
	metsulfuron-methyl	
	mevinphos	
	molinate	
	monocrotophos	
	monolinuron	
	monuron	
	myclobutanil	
	napropamide	
	neburon	
	nicotine	
	nicosulfuron	
	nitenpyram	
	nitrofen	
	nitrothal-isopropyl	
	novaluron	
	nuarimol	
	octachlorodipropl ether	
	ofurace	
	omethoate	
	oxadiargyl	
	oxadiazon	
	oxadixyl	
	oxamyl	
	oxasulfuron	
	oxychlordane	
	oxydemeton-methyl	
	oxyfluorfen	
	oxymatrine	
	paclobutrazol	
	paraoxon-ethyl	
	paraoxon-methyl	
	parathion-ethyl	
	parathion-methyl	
	penconazole	
	pencycuron	
	pendimethalin	
	penflufen	
	pentachloroanaline	
	pentachlorophenol	
	pentanochlor	
	pentachlorothioanisole	
	penthiopyrad	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	permethrin	
	phenmedipham	
	phenthoate	
	phorate	
	phorate sulfone	
	phorate sulfoxide	
	phosalone	
	phosmet	
	phosphamidon	
	phoxim	
	picloram	
	picolinafen	
	picoxystrobin	
	piperonyl butoxide	
	pirimicarb	
	pirimicarb-desmethyl	
	pirimiphos-ethyl	
	pirimiphos-methyl	
	n-desmethyl pirimiphos-methyl	
	prochloraz	
	procymidone	
	profenofos	
	promecarb	
	prometryn	
	propachlor	
	propamocarb	
	propanil	
	propaquizafop	
	propargite	
	propetamphos	
	propham	
	propiconazole	
	propoxur	
	propyzamide	
	proquinazid	
	prosulfocarb	
	prosulfuron	
	prothioconazole-desthio	
	prothiofos	
	pydiflumetofen	
	pymetrozine	
	pyraclostrobin	
	pyraflufen-ethyl	
	pyrazophos	
	pyrethrins	
	pyridaben	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	pyridalyl	
	pyridaphenthion	
	pyridate	
	pyrifenox	
	pyrimethanil	
	pyriproxyfen	
	pyroxsulam	
	quassia	
	quinalphos	
	quinmerac	
	quinoclamine	
	quinoxyfen	
	quintozene	
	quizalofop-p	
	rimsulfuron	
	rotenone	
	saflufenacil	
	simazine	
	spinetroram	
	spinosad	
	spirodiclofen	
	spiromesifen	
	spirotetramat	
	spirotetramat-enol	
	spirotetramat BYI08330-ketohyfroxy	
	spiroxamine	
	sulcotrione	
	sulfoxaflor	
	tebuconazole	
	tebufenozide	
	tebufenpyrad	
	tebupirimfos	
	tebuthiuron	
	tecnazene	
	teflubenzuron	
	tefluthrin	
	tepraloxydim	
	terbacil	
	terbufos	
	terbufos sulfone	
	terbufos sulfoxide	
	terbumeton	
	terbuthylazine	
	terbutryn	
	tetrachlorvinphos	
	tetraconazole	

FSG 154 Ethyl acetate extraction	FSG 167 Acetonitrile extraction	FSG 167 Rockwool
	tetradifon	
	tetramethrin	
	TFNA	
	TFNG	
	thiabendazole	
	thiacloprid	
	thiamethoxam	
	thiodicarb	
	thiophanate-methyl	
	tolclofos-methyl	
	tolfenpyrad	
	tolylfluanid	
	triadimefon	
	triadimefonfluometuron	
	triadimenol	
	triallate	
	triasulfuron	
	triazamate (free acid)	
	triazophos	
	trichlorfon	
	triclopyr	
	tricyclazole	
	trifloxystrobin	
	triflumizole	
	triflumuron	
	trifluralin	
	triflusulfuron-methyl	
	triforine	
	31riasulfuron methyl	
	triticonazole	
	tritosulfuron	
	vamidothion	
	vinclozolin	
	zoxamide	
	cyflumetofen	
	Triflumizole metabolite FM-6-1	
	Pencycuron-PB-amine	
	Carboxin sulfone	
	END OF LIST	

TABLE 2: **PESTICIDES**

FSG 168 **Solid phase extraction**	**FSG 173** **Solid phase extraction**	**FSG 159** **Detection/confirmation of Organophosphorus compounds**
2,3,6-TBA	2-phenylphenol	acephate
2,4,5-T	aclonifen	aldrin
2,4-D	aldrin	bifenthrin
2,4-DB	atrazine	bromophos-ethyl
2-aminoflubendazole	benalaxyl	cadusafos
5-hydroxythiabendazole	benfluralin	carbaryl
Abamectin	captan	carbofuran
Acetamiprid	Carfentrazone-ethyl	chlordane (cis)
Acetochlor	chlordane (*cis*)	chlordane (trans)
acibenzolar-S-methyl	chlordane (*trans*)	chlorfenvinphos
Alachlor	chlorothanolonil	chlorobenzilate
Albendazole	chlorpropham	chlorpropham
Aldicarb	chlorpyrifos	chlorpyrifos
aldicarb sulfone	clomazone	chlorpyrifos-methyl
aldicarb sulfoxide	cyanazine	cyfluthrin
Ametoctradin	cyfluthrin	cyhalothrin-lambda
amidosulfuron	cyhalothrin-lambda	cypermethrin
Amisulbrom	cypermethrin	DDD-op
Azoxystrobin	DDD-op	DDD-pp
Bendiocarb	DDE-pp	DDE-op
Bentazone	DDT-op	DDE-pp
benthiavalicarb-isopropyl	DDT-pp	DDT-op
Bispyribac-sodium	deltamethrin	DDT-pp
Bromacil	dieldrin	deltamethrin
Boscalid	dimethenamid	diazinon
Bromoxynil	endosulfan (I)	dichlorvos
bromuconazole	endosulfan (II)	dieldrin
Bupirmate	endosulfan-sulfate	endosulfan (I)
Butachlor	endrin	endosulfan (II)
Cadusafos	ethion	endosulfan-sulphate
Carbaryl	etoxazole	endrin
Carbendazim	etridazole	ethoprophos
Carbetamide	fenitrothion	etoxazole
carbofuran	fenvalerate	fenitrothion
carbofuran (3-hydroxy)	flutolanil	fenpropathrin
carboxin	folpet	fenvalerate
carfentrazone-ethyl	HCH-alpha	fluvalinate
chlorantraniliprole	HCH-beta	HCH-alpha
chloridazon	HCH-delta	HCH-beta
chlortoluron	HCH-gamma	HCH-delta
chromafenozide	heptachlor	HCH-gamma
cinidon-ethyl	heptachlor epoxide (trans)	heptachlor
clethodim	hexachlorobenzene	heptachlor epoxide (cis)

FSG 168 **Solid phase extraction**	**FSG 173** **Solid phase extraction**	**FSG 159** **Detection/confirmation of Organophosphorus compounds**
clomazone	hexachlorocyclopentadiene	heptachlor epoxide (trans)
clothianidin	malaoxon	hexachlorobenzene
cyazofamid	malathion	malaoxon
cycloate	methoxychlor	malathion
cycloxydim	oxychlordane	methacrifos
cyflufenamid	paraoxon-methyl	methamidophos
cymoxanil	parathion	methidathion
cyprodinil	parathion-methyl	methoxychlor
demeton S-methyl	pendimethalin	nitrofen
demeton S-methyl sulfone	permethrin	omethoate
desmedipham	2-phenlyphenol	oxychlordane
dicamba	picloram iso-octyl ester	PCB 101
dichlorprop	propanil	PCB 118
dichlorvos	prosulfocarb	PCB 138
difenoconazole	pirimiphos-methyl	PCB 153
diflubenzuron	pyridaben	PCB 180
diflufenican	simazine	PCB 28
dimethenamid	tefluthrin	PCB 52
dimethoate	terbuthylazine	pendimethalin
dimethomorph	tetrahydrophthalimide	permethrin
dimoxystrobin	trifluralin	pirimicarb
diniconazole	**END OF LIST**	pirimiphos-methyl
disulfoton		propetamphos
disulfoton sulfone		propoxur
disulfoton sulfoxide		pyridaben
diuron		quintozene
EPTC		resmethrin
ethiprole		tecnazene
ethirimol		tetrachlorvinphos
famoxadone		trifluralin
fenamidone		vinclozolin
fenamiphos		**END OF LIST**
fenamiphos sulfone		
fenamiphos sulfoxide		
fenhexamid		
fenoprop		
fenoxaprop		
fenthion		
fenthion sulfone		
fenthion sulfoxide		
fentin acetate		
fipronil		
flazasulfuron		
flonicamid		
fluazifop-butyl (free acid)		

FSG 168 Solid phase extraction	FSG 173 Solid phase extraction	FSG 159 Detection/confirmation of Organophosphorus compounds
fluazinam		
fludioxonil		
flufenacet		
fluometuron		
fluopicolide		
fluopyram		
fluoxastrobin		
fluquinconazole		
flurochloridone		
fluroxypyr		
flutolanil		
flutriafol		
fluxapyroxad		
fosthiazate		
halosulfuron-methyl		
haloxyfop-(free acid)		
hexazinone		
imazalil		
imidacloprid		
indoxacarb		
iodosulfuron-methyl-sodium		
ioxynil		
isoproturon		
isoxaflutole		
kresoxim-methyl		
lenacil		
linuron		
mandipropamid		
MCPA		
mecoprop		
mepronil		
mesosulfuron-methyl		
metalaxyl		
metamitron		
metazachlor		
metconazole		
methiocarb		
methiocarb sulfone		
methiocarb sulfoxide		
methomyl		
methoxyfenozide		
metobromuron		
metolachlor		
metosulam		
metrafenone		

FSG 168 **Solid phase extraction**	**FSG 173** **Solid phase extraction**	**FSG 159** **Detection/confirmation of Organophosphorus compounds**
metribuzin		
metsulfuron-methyl		
molinate		
myclobutanil		
naled		
napropamide		
oxadiazon		
oxamyl		
oxathiapiprolin		
oxydemeton-methyl		
penconazole		
pencycuron		
penflufen		
pentachlorophenol		
phenmedipham		
phenthoate		
phorate		
phorate sulfone		
phorate sulfoxide		
picoxystrobin		
piperonyl butoxide		
pirimicarb		
propachlor		
prochloraz		
prochloraz metabolite BTS 44595		
prochloraz metabolite BTS 44596		
propamocarb		
propaquizafop		
propoxur		
propyzamide		
prosulfuron		
pyraclostrobin		
pyrafufen ethyl		
pyrethrins		
pyriproxyfen		
pymetrozine		
pyrimethanil		
quassia		
quinmerac		
quizalofop		
rimsulfuron		
rotenone		
spinosad		
spirotetramat		
spirotetramat enol		

FSG 168 **Solid phase extraction**	**FSG 173** **Solid phase extraction**	**FSG 159** **Detection/confirmation of Organophosphorus compounds**
sulcotrione		
tebuconazole		
tebufenozide		
tebufenpyrad		
tebupirimfos		
tebuthiuron		
teflubenzuron		
terbacil		
terbufos		
terbufos sulfone		
terbufos sulfoxide		
terbutryn		
TFNA		
TFNG		
thiabendazole		
thiacloprid		
triadimefon		
triadimenol		
thiamethoxam		
thifensulfuron-methyl		
triadimenol		
tribenuron-methyl		
triallate		
triasulfuron		
triazamate (free acid)		
trichlorfon		
triclopyr		
trifloxystrobin		
triflumuron		
triflusulfuron-methyl		
triticonazole		
zoamide		
END OF LIST		

TABLE 3: **VETERINARY DRUGS**

FSG 357 (multiresidue)	FSG370/ FSG380 (NSAIDS)	FSG 348 (β-agonists - multiresidue)	FSG 308 (sulphonamides)
Anthelmintics:	Diclofenac	brombuterol	sulphachlorpyridazine
Azamethiphos	Flunixin / hydroxyflunixin	cimaterol	sulphadiazine
Diflubenzuron	Ibuprofen	cimbuterol	sulphadimethoxine
Lufenuron	Ketoprofen	clenbuterol	sulphadoxine
Teflubenzuron	Meloxicam	clenpenterol	sulphaguanidine
Coccidiostats:	Naproxen	clenproperol	sulphamerazine
Clopidol	Niflumic acid	hydroxymethylclenbuterol	sulphamethazine
decoquinate	Phenylbutazone	isoxuprine	sulphamethizole
diclazuril	Tolfenamic acid	mabuterol	sulphamethoxazole
dinitrocarbanilide	Vedaprofen	mapenterol	sulphamethoxypyridazine
halofuginone	END OF LIST	ractopamine	sulphamonomethoxine
imidocarb		salbutamol	sulphamoxole
lasalocid		salmeterol	sulphapyridine
maduramycin		terbutaline	sulphaquinoxaline
monensin		tulobuterol	sulphathiazole
narasin		zilpaterol	sulphisoxazole
robenidine		**END OF LIST**	**END OF LIST**
salinomycin			
semduramicin			
toltrazuril sulfone			
Nitrimidazoles:			
dimetridazole			
hydroxydimetridazole			
hydroxyipronidazole			
hydroxymetronidazole			
ipronidazole			
metronidazole			
ronidazole			
Quinolones/Fluoroquinolones			
ciprofloxacin			
danofloxacin			
difloxacin			
enrofloxacin			
flumequine			
marbofloxacin			
nalidixic acid			
norfloxacin			
oxolinic acid			
sarafloxacin			
Sulphonamides			
sulphaguanidine			
sulphachlorpyridazine			
sulphadiazine			
sulphadimethoxine			

FSG 357 (multiresidue)	FSG370/ FSG380 (NSAIDS)	FSG 348 (β-agonists - multiresidue)	FSG 308 (sulphonamides)
sulphadoxine			
sulphamerazine			
sulphamethazine			
sulphamethizole			
sulphamethoxazole			
sulphamethoxypyridazine			
sulphamonomethoxine			
sulphamoxole			
sulphapyridine			
sulphaquinoxaline			
sulphathiazole			
sulphisoxazole			
Dyes			
crystal violet			
azure B			
brilliant green			
ethyl violet			
leucocrystal violet			
leucomalachite green			
malachite green			
methylene blue			
new methylene blue			
nile blue A			
pararosaniline base			
rhodamine 6G			
victoria blue B			
victoria blue R			
victoria pure blue BO			
Macrolides			
3-O-acetyltylosin			
dapsone			
erythromycin			
gamithromycin			
josamycin			
lincomycin			
pirlimycin			
rifampicin			
spiramycin			
tildipirosin			
tilmicosin			
tulathromycin			
tylosin			
virginiamycin M1			
3-O-acetyltylosin			
Tranquillisers			
acepromazine			
azaperol			

FSG 357 (multiresidue)	FSG370/ FSG380 (NSAIDS)	FSG 348 (β-agonists - multiresidue)	FSG 308 (sulphonamides)
azaperone			
carazolol			
chlorpromazine			
haloperidol			
propionylpromazine			
xylazine			
Phenolic Anthelmintics			
closantel			
nitroxynil			
oxyclozanide			
rafoxinide			
Benzimidazoles			
albendazole			
2-aminoflubendazole			
5-hydroxythiabendazole			
albendazole sulfone			
albendazole sulfoxide			
albendazole-2-aminosulfone			
clorsulon			
cyromazine			
derquantel			
dicyclanil			
febantel			
fenbendazole			
fenbendazole sulfone			
firocoxib			
flubendazole			
hydroxymebendazole			
ketotriclabendazole			
levamisole			
mebendazole			
mebendazole amine			
monepantel sulfone			
oxfendazole			
oxibendazole			
thiabendazole			
triclabendazole			
triclabendazole sulfone			
2,4,6-triamino-pyrimidine-5-carbonitrile			
END OF LIST			

TABLE 4: **VETERINARY DRUGS**

FSG 377 Penicillins & Cephalosporins	**FSG 375 Tetracyclines**	**FSG 373 Steroids 1**	**FSG 385 Antimicrobials**
cefalexin	chlortetracycline	α-boldenone	3-0-Acetyltylosin
cefalonium	4-epichlortetracycline	β-boldenone	Amoxacillin
cefapirin	combined chlortetracycline	α-trenbolone	Ampicillin
desacetylcefapirin	oxytetracycline	17β- trenbolone	Cefalexin
cefoperazone	4-epioxytetracycline	dienestrol	Cefalonium
cefquinome	combine oxytetracycline	diethystilbestrol	Cefapirin
cefazolin	tetracycline	hexestrol	Cefazolin
amoxicillin	4-epitetracycline	hydroxystanozolol	Cefoperazone
ampicillin	combined tetracycline	methyltestosterone	Cefquinome
benzylpenicillin	doxycycline	17α-19-nortestosterone	Ceftiofur
penicillin V	**END OF LIST**	17β-19-nortestosterone	Chlortetracycline
cloxacillin		Taleranol	Ciprofloxacin
dicloxacillin		zeranol	Cloxacillin
oxacillin		zearalenone	Danofloxacin
nafcillin		oestradiol	Dapsone
END OF LIST		testosterone	Desacetyl-cepharine
		END OF LIST	Dicloxacillin
			Difoxacin
			Doxycycline
			Enrofloxacin
			4-Epichlortetracycline
			4-Epioxytetracycline
			4-Epitetracycline
			Erythromycin A
			Flumequine
			Gamithromycin
			Josamycin
			Marbofloxacin
			Nafcillin
			Nalidixic acid
			Nitovin
			Norfloxacin
			Oxacillin
			Oxolinic acid
			Oxytetracycline
			Penicillin G
			Penicillin V
			Pirlimycin
			Rifampicin
			Sarafloxacin
			Spiramycin
			Sulfachloropyridazine
			Sulfadiazine

FSG 377 Penicillins & Cephalosporins	FSG 375 Tetracyclines	FSG 373 Steroids 1	FSG 385 Antimicrobials
			Sulfadimethoxine
			Sulfadoxine
			Sulfaguanidine
			Sulfamerazine
			Sulfamethazine
			Sulfamethizole
			Sulfamethoxazole
			Sulfamethoxypyridazine
			Sulfamonomethoxine
			Sulfamoxole
			Sulfanilamide
			Sulfapyridine
			Sulfaquinoxaline
			Sulfathiazole
			Sulfiisoxazole
			Tetracycline
			Tildipirosin
			Tilmicosin
			Trimethoprim
			Tulathromycin
			Tylosin
			Tylvasolin (Aivlosin)
			Valnemulin
			Virginiamycion M1
			END OF LIST

TABLE 5: DIOXINS AND PAHS

FSG 407/409/412/413 Polychlorinated dibenzo-p-dioxins (PCDDs) & Sum of WHO TEQ	**FSG 408/409 ICES 6 / Non-Dioxin Like Polychlorinated biphenyls (NDL - Indicator PCBs)**	**FSG 410 Polycyclic aromatic hydrocarbons (PAHs)**	**FSG 412/413 Polybrominated biphenyls (PBBs) (Non-ortho and ortho)**
1,2,3,4,6,7,8-HpCDD	PCB-28	acenaphthene	PBB-77
1,2,3,4,6,7,8-HpCDF	PCB-52	5-methylchrysene	PBB-126
1,2,3,4,7,8-HxCDD	PCB-101	acenaphthylene	PBB-169
1,2,3,4,7,8- HxCDF	PCB-138	anthanthrene	PBB-15
1,2,3,4,7,8,9- HpCDF	PCB-153	anthracene	PBB-49
1,2,3,6,7,8-HxCDD	PCB-180	benz [a] anthracene **(PAH 4)**	PBB-52
1,2,3,6,7,8- HxCDF	PCB-77	benzo-[a]-pyrene **(PAH 4)**	PBB-80
1,2,3,7,8-PeCDF	PCB-81	benzo-[b]-fluoranthene **(PAH 4)**	PBB-101
1,2,3,7,8,9-HxCDF	PCB-126	benzo (b) naphtha (2,1-d)thiophene	PBB-153
1,2,3,7,8,9-HxDD	PCB-169	benzo (c) fluorene	
2,3,4,6,7,8- HxCDF	PCB-105	benzo-(e)-pyrene	**Polybrominated diphenyl ethers (PBDEs)**
	PCB-114	benzo[ghi]fluoranthene	PBDE-17
2,3,7,8-TCDD	PCB-118	benzo-(g,h,i)perylene	PBDE-28
2,3,7,8-TCDF	PCB-123	benzo-[j]-fluoranthene	PBDE-47
OCDD	PCB-156	benzo-[k]-fluoranthene	PBDE-49
OCDF	PCB-157	chrysene **(PAH 4)**	PBDE-66
1,2,3,7,8-PeCDD	PCB-167	coronene	PBDE-71
	PCB-189	cyclopenta[c,d]pyrene	PBDE-77
		dibenz-[ah]-anthracene	PBDE-85
		dibenzo[a,e]pyrene	PBDE-99
		dibenzo[a,h]pyrene	PBDE-100
Polybrominated dibenzo-p-dioxins (PBDDs)	**Additional Polychlorinated biphenyls (PCBs)**	dibenzo[a,i]pyrene	PBDE-119
2,3,7-T_3BDD	PCB-18	dibenzo[a,l]pyrene	PBDE-126
2,3,7,8-TBDD	PCB-31	fluoranthene	PBDE-153
1,2,3,7,8-PeBDD	PCB-33	fluorene	PBDE-138
1,2,3,4,7,8-HxBDD/	PCB-37	indeno-[1,2,3-cd] pyrene	PBDE-154
1,2,3,6,7,8-HxBDD	PCB-41	phenanthrene	PBDE-183
1,2,3,7,8,9-HxBDD	PCB-44	pyrene	**END OF LIST**
	PCB-47	**END OF LIST**	
	PCB-49		
Polybrominated dibenzofurans (PBDFs)	PCB-51		
2,3,8-T_3BDF	PCB-56/60		
2,3,7,8-TBDF	PCB-61/74		
1,2,3,7,8-PeBDF	PCB-66		
2,3,4,7,8-PeBDF	PCB-87		

FSG 407/409/412/413 Polychlorinated dibenzo-p-dioxins (PCDDs) & Sum of WHO TEQ	FSG 408/409 ICES 6 / Non-Dioxin Like Polychlorinated biphenyls (NDL - Indicator PCBs)	FSG 410 Polycyclic aromatic hydrocarbons (PAHs)	FSG 412/413 Polybrominated biphenyls (PBBs) (Non-ortho and ortho)
1,2,3,4,7,8-HxBDF	PCB-99		
1,2,3,4,6,7,8-HpBDF	PCB-110		
END OF LIST	PCB-128		
	PCB-129		
	PCB-141		
	PCB-149		
	PCB-151		
	PCB-170		
	PCB-183		
	PCB-185		
	PCB-187		
	PCB-191		
	PCB-193		
	PCB-194		
	PCB-201		
	PCB-202		
	PCB-203		
	PCB-206		
	PCB-208		
	PCB-209		
	END OF LIST		

Table 6: **GMO screening assays**

PLH/899 Screening Assay	DNA sequence(s) detected
Maize (MHMG)	Taxon detection for maize
Soya (LEC)	Taxon detection for soya
Brassica (CCF)	Taxon detection for *Brassica spp.*
Potato (UDPPG)	Taxon detection for potato
Rice (PLD)	Taxon detection for rice
Plant (Chloroplast)	Generic detection of plant material
p35S	GM element detection for CaMV 35S promotor
CRY1Ab/Ac	GM element detection for CRY1Ab/Ac gene
PAT	GM element detection for PAT gene
BAR	GM element detection for BAR gene
CP4-EPSPS	GM construct detection for CTP2-CP4 epsps
tNOS	GM element detection for NOS terminator
CV127	GM event (soya) detection for CV127
MON87769	GM event (soya) detection for MON87769
MON87708	GM event (soya) detection for MON87708
DAS-40278	GM event (maize) detection for DAS-40278
73496	GM event (oilseed rape) detection for 73496
End of Table 6	

Table 7: **Ergot alkaloids and Fusarium multi-mycotoxins**

FSG/601 Ergot alkaloids	**FSG/825 Cyanogenic glycosides**	**FSG/818 Fusarium multi-mycotoxins**
Ergocornine	Amygdalin	3-Acetyldeoxynivalenol
Ergocristinine	Linamarin	15-Acetyldeoxynivalenol
a+b-Ergocryptine	Linustatin	Deoxynivalenol
Ergometrinine	Lotaustralin	Deoxynivalenol-3-glucoside
Ergotamine	Neolinustatin	Diacetoxyscirpenol
Ergocorninine	Prunasin	Fusarenon X
a-Ergocryptine	**END OF LIST**	HT-2 toxin
a+b-Ergocryptinine		Neosolaniol
Ergosine		Nivalenol
Ergotaminine		T-2 toxin
Ergocristine		T-2 toxin-β3-glucoside
b-Ergocryptine		α-Zearalenol
Ergometrine		β-Zearalenol
Ergosinine		α-Zearalenol-14-glucoside
END OF LIST		β-Zearalenol-14-glucoside
		Zearalenone
		Zearalenone-14-glucoside
		END OF LIST

Table 8: **Pyrrolizidine Alkaloids**

Echimidine (Em)	Echimidine-N-oxide (Em-ox)	Erucifoline (Er)
Erucifoline-N-oxide (Er-ox)	Europine (Eu)	Europine-N-oxide (Eu)
Heliotrine (Ht)	Heliotrine-N-oxide (Ht-ox)	Intermedine (Im)
Intermedine-N-oxide (Im-ox)	Jacobine (Jb)	Jacobine-N-oxide (Jb-ox)
Lasiocarpine (Lc)	Lasiocarpine-N-oxide (Lc-ox)	Lycopsamine (Ly)
Lycopsamine-N-oxide (Ly-ox)	Monocrotaline (Mc)	Monocrotaline-N-oxide (Mc-ox)
Retrorsine (Rt)	Retrorsine-N-oxide (Rt-ox)	Senecionine (Sn)
Senecionine-N-oxide (Sn-ox)	Seneciphylline (Sp)	Seneciphylline-N-oxide (Sp-ox)
Senecivernine (Sv)	Senecivernine-N-oxide (Sv-ox)	Senkirkine (Sk)
Trichodesmine (Td)		
End of Table 8		

Table 9 **Analysis of Cannabinoids (FSG/788)**

Cannabichromene (CBC)	Cannabidiol (CBD)	Cannabidiolic Acid (CBD-A)
Cannabigerol (CBG)	Cannabinol (CBN)	Δ9-Tetrahydrocannabinol (THC)
Δ9-Tetrahydrocannabinolic acid A (THC-A)	8-Tetrahydrocannabinol (8-THC)	9-Tetrahydrocannabivarin (THCV)
9-Tetrahydrocannabivarinic acid (THCV-A)	Cannabidivarin (CBDV)	Cannabidivarinic acid (CBDV-A)
Cannabigerolic acid (CBG-A)	Cannabichromene acid (CBC-A)	
End of Table 9		

Table 10 **Per and polyfluroalkyl substances (PFAS)**

Perfluoro-n-butanoic acid	PFBA
Perfluoro-n-pentanoic acid	PFPeA
Perfluoro-n-hexanoic acid	PFHxA
Perfluoro-n-heptanoic acid	PFHpA
Perfluoro-n-octanoic acid	PFOA
Perfluoro-n-nonanoic acid	PFNA
Perfluoro-n-decanoic acid	PFDA
Perfluoro-n-undecanoic acid	PFUdA
Perfluoro-n-dodecanoic acid	PFDoA
Perfluoro-n-tridecanoic acid	PFTrDA
Perfluoro-n-tetradecanoic acid	PFTeDA
Perfluoro-1-butanesulfonamide	FBSA
Perfluoro-1-hexanesulfonamide	FHxSA
Perfluoro-1-octanesulfonamide	FOSA
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoroproproxy)propanoic acid	HFPO-DA
N-methylperfluorooctanesulfonamidoacetic acid	N-MeFOSAA (Linear)
N-methylperfluorooctanesulfonamidoacetic acid	N-MeFOSAA (Branched)
N-ethylperfluorooctanesulfonamidoacetic acid	N-EtFOSAA (Linear)
N-ethylperfluorooctanesulfonamidoacetic acid	N-EtFOSAA (Branched)
Potassium perfluoro-1-butanesulfonate	L-PFBS
Sodium perfluoro-1-pentanesulfonate	L-PFPeS
Potassium perfluorohexanesulfonate	PFHxS (Linear)
Potassium perfluorohexanesulfonate	PFHxS (Branched)
Sodium perfluoro-1-heptanesulfonate	L-PFHpS
Potassium perfluorooctanesulfonate	PFOSK (Linear)
Potassium perfluorooctanesulfonate	PFOSK (Branched)
Sodium perfluoro-1-nonanesulfonate	L-PFNS
Sodium perfluoro-1-decanesulfonate	L-PFDS
Sodium 1H,1H,2H,2H-perfluorohexanesulfonate	4:2 FTS
Sodium 1H,1H,2H,2H-perfluorooctanesulfonate	6:2 FTS
Sodium 1H,1H,2H,2H-perfluorodecanesulfonate	8:2 FTS
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PFOUdS
Sum of PFAS	
End of Table	