Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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



1639 Accredited to ISO/IEC 17025:2017 DD1 5JJ

Tayside Scientific Services

Issue No: 062 Issue date: 23 April 2024

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Testing performed at the above address only

DETAIL OF ACCREDITATION

| DETAIL OF ACCREDITATION | | |
|---------------------------|--|--|
| Materials/Products tested | Type of test/Properties measured/Range of measurement | Standard specifications/ Equipment/Techniques used |
| ANIMAL FEEDINGSTUFFS | Chemical Tests * Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Documented In-House Methods identified by method number GAx based on SI 1999, No 1663 'The Feedingstuffs (Sampling and Analysis) Regulations |
| | *Compositional Analysis, Additives, colourings, preservatives and related contaminants | Development and modification of methods for analysis using Flexible Scope Procedure PFG 1 (HPLC, GC, GC-MS and UV spectroscopy) |
| | *Determination of Elements | Development and modification of methods for analysis using Flexible Scope Procedure PFG 2 (AAS and ICP-OES) |
| | *Foreign Body identification | Development and modification of methods for analysis using Flexible Scope Procedure PFG 3 (Light Microscopy) |
| | *Compositional Analysis, Additives, colourings, preservatives and related contaminants | Development and modification of methods for analysis using Flexible Scope Procedure PFG 4 (Gravimetric, titremetric and other classical wet chemistry technicques) |
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| ANIMAL FEEDINGSTUFFS (cont'd) | Chemical Tests *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Documented In-House Method identified by method number |
| | *Aflatoxin B1, B2, G1, G2 and Ochratoxin A | PF099 by HPLC fluorescence with Kobra Cell |
| | *Deoxynivalenol | PF091 by immunoaffinity column separation and HPLC |
| | *Zearalenone | PF088 by immunoaffinity column separation and HPLC |
| | *Ash | GA008 based on EC152/2009 |
| | *Crude Fibre | GA010 based on EC152/2009 |
| | *Moisture | GA002 by oven drying based on EC152/2009 |
| | *Oil (total) | GA004 based on EC152/2009 |
| | *Nitrogen and Protein | PF082 using the Dumas Combustion method |
| | *Vitamins A and E | PF061 using High Performance Liquid Chromatography |
| | *Cobalt *Copper *Iron *Manganese *Zinc | GA013 using Flame Atomic Absorption Spectrometry |
| | *Cadmium *Lead | GA012 using Flame Atomic Absorption Spectroscopy |
| | *Arsenic *Selenium | GA014 using Hydride Generation Atomic Absorption Spectrometry |
| | | |

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| FOODS | Chemical Tests *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Methods documented in 'Analytical Methods Manual for VEMS' Association of Public Analysts and identified by method number or Documented In-House Methods identified by method number PFx |
| Bakery wares e.g. bread, toasted bread, crisp bread and biscuits, potato products e.g. potato chips and crisps | *Acrylamide | PF105 by GC-MS |
| DAIRY PRODUCTS | *Fat | PF092 by alkaline hydrolysis (Rose Gottlieb method) |
| Cream | *Acidity (titratable) | F/0251 by titration |
| | *Fat | F/0216 by Gerber technique |
| Milk, Liquid | *Acidity (titratable) | VEMS F/0131 |
| | *Antibiotics | PF070 using Delvo kit |
| | *Fat | F/0008 using Gerber technique |
| | *Freezing Point | PF008 using Thermistor Cryoscope |
| | *Total solids | PF057 using Gravimetry |
| FAT | *Butyric acid | F/0289 by gas chromatography |
| FATS and OILS | *Peroxide value | F/0009 by titration |
| | *Fatty acid profile | PF 051 GC/FID (analysis of fatty acids converted to fatty acid methyl esters) |
| | *Free fatty acids | F/0010 by titration |
| FISH - FRESH and FROZEN, FISH PRODUCTS and PROCESSED FISH | *Ash | PF012 by muffle furnace |
| | | |

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|---|--|--|
| FOODS (cont'd) | Chemical Tests (cont'd) *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Methods documented in 'Analytical Methods Manual for VEMS' Association of Public Analysts and identified by method number or Documented In-House Methods identified by method number PFx |
| FISH - FRESH and FROZEN, FISH PRODUCTS and PROCESSED FISH | *Fat *Moisture | PF002 by oven drying and Soxhlet Extraction |
| | *Histamine | PF117 by HPLC based on ISO 19343:2017 |
| BREAD | *Propionic Acid | PF049 by Gas Chromatography (GC) |
| HONEY | *Hydroxymethyl furfural | PF046 by HPLC |
| | *Identification of Pollen Grains | PF045 by light microscopy |
| | *Moisture | F/0265 by refractometry |
| SPIRITS | *Apparent and Actual Alcohol | PF021 by Pycnometry and Obscuration (Reference Method) PF019 by density meter and Obscuration (Primary Method) |
| | *Congeners | F/0161 by Gas Chromatogrpahy |
| MEAT - FRESH and FROZEN MEAT PRODUCTS and | *Ash | PF012 by muffle furnace |
| PROCESSED MEAT | *Fat and Moisture | PF002 by oven drying and Soxhlet extraction |
| | *Nitrogen and crude protein | PF082 by Dumas |
| FLESH FOODS and MEAT PRODUCTS | *Total volatile nitrogen | F/0157 by Distillation followed by titration |
| | *Hydroxyproline | PF011 based on BS 4401:Part 11:1995 |
| | *Calculation of apparent fish content | PF017 by calculation |

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| FOODS (cont'd) | Chemical Tests (cont'd) *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Methods documented in 'Analytical Methods Manual for VEMS' Association of Public Analysts and identified by method number or Documented In-House Methods identified by method number PFx |
| SOFT DRINKS | *Acesulfame K Aspartame Benzoic acid Caffeine Saccharin Sorbic acid | PF023 by HPLC |
| SOYA SAUCE | *3-monochloropropane-1,2-diol | PF100 by gas Chromatography with Mass Spectroscometric detection (GC/MS) based on BS EN 14573:2004 |
| FOODS, General | *Compositional Analysis, Additives, colourings, preservatives and related contaminants | Development and modification of methods for analysis using Flexible Scope Procedure PFG 1 (HPLC, GC, GC-MS and UV spectroscopy) |
| | *Determination of Elements | Development and modification of methods for analysis using Flexible Scope Procedure PFG 2 (AAS and ICP-OES) |
| | *Foreign Body identification | Development and modification of methods for analysis using Flexible Scope Procedure PFG 3 (Light Microscopy) |
| | *Compositional Analysis, Additives, colourings, preservatives and related contaminants | Development and modification of methods for analysis using Flexible Scope Procedure PFG 4 (Gravimetric, titremetric and other classical wet chemistry technicques) |
| | *Ash *Moisture | PF012 by gravimetry |
| | *Arsenic, Total and inorganic | PF107 by Hydride Generation Atomic Absorption |

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| FOODS, General (cont'd) | Chemical Tests (cont'd) *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Methods documented in 'Analytical Methods Manual for VEMS' Association of Public Analysts and identified by method number or Documented In-House Methods identified by method number PFx |
| | *Calcium | VEMS F/0183 |
| | *Chloride | PF078 using Ion Chromatography |
| | *Dietary Fibre | PF027 by enzymatic digestion and gravimetry |
| | *Ethanol | PF058 by GC-FID |
| | *Fat (total) | PF005 by acid digestion/extraction |
| | *Aflatoxin B1, B2, G1, G2 and Ochratoxin A | PF099 by HPLC fluorescence with Kobra Cell |
| | *Deoxynivalenol | PF091 by by immunoaffinity column separation and HPLC |
| FOODS, Water soluble (soft drinks, sugar confectionery) | *Synthetic Food Colour (Water soluble): Allura Red (E129) Amaranth (E123) Brilliant Blue (BFCF) Carmoisine (E122) Green S Patent Blue (E131) Ponceau 4R (E124) Quinoline Yellow FCF (E104) Red 2G (E128) Sunset yellow (E110) Tartrazine (E102) | PF087 by HPLC-DAD |
| FOODS, General (cont'd) | *Zearalenone | PF088 by immunoaffinity column separation and HPLC |
| | *Allergens, Contaminants and Protein Species | PF069 - Flexible Scope method for performance verification and use of commercial ELISA test kits |

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|---|--|--|
| FOODS, General (cont'd) | Chemical Tests (cont'd) *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Methods documented in 'Analytical Methods Manual for VEMS' Association of Public Analysts and identified by method number or Documented In-House Methods identified by method number PFx |
| | *Gluten | PF116 – by ELISA using the R- Biopharm RIDASCREEN R7001 and R7002 test kits |
| | *Nitrate and Nitrite | PF033 by HPLC |
| | *Nitrogen and Protein | PF082 using the Dumas Combustion method |
| | *pH | PF065 based on VEMS F0282 |
| | *Sodium | PF052 by Flame Emission Spectrophotometry |
| | *Soluble Solids in food | PF 079 using refractometry |
| | *Sorbic acid | PF050 by HPLC |
| | *Sugars: (Total and Fructose, Galactose, Glucose, Lactose, Maltose, Sucrose) | PF022 by HPLC with Refractive Index detection |
| | *Sulphur Dioxide | PF060 using Gravimetric weighing |
| | *Cadmium and Lead | PF085 using ashing followed by ICP-OES |
| Foods - except baby foods, infant formulae and dietary foods intended for infants | *Tin | VEMS F/0134 using acid digestion followed by Flame AAS |
| | *Vitamins A and E | PF061 using HPLC |
| | *Vitamin C | PF074 using HPLC |
| | *Water activity | PF053 by hygrometer |
| | *Apparent meat content | PF056 based on APA guidelines |
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| FOODS, General (cont'd) | Chemical Tests (cont'd) *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Documented In-House Methods identified by method number PFx |
| | *Energy value | F/0381 by calculation from analytical data |
| FOODS (as specified) | Molecular Tests | |
| MEAT and MEAT PRODUCTS | *Species identification (qualitative) beef pork lamb horse chicken turkey | PF098 using RT-PCR |
| FISH and FISH PRODUCTS | *Species identification (qualitative) | PF094 using PCR-RFLP and Agilent 2100 Bioanalyser |
| Animal Feeding Stuffs, Foods and Waters | *Detection and/or determination of DNA sequences for speciation, genetically modified organisms (GMO's), allergens and microorganisms | Development and modification of methods for analysis using Flexible Scope Procedure PFG5 (PCR, qPCR, PCR-RFLP) |
| DIFFUSION TUBE SAMPLERS | Chemical Tests | Documented In-House Methods |
| | Nitrogen dioxide | PE002 by spectrophotometry |

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| Materials/Products tested | Type of test/Properties measured/Range of measurement | Standard specifications/ Equipment/Techniques used |
|-----------------------------|--|--|
| FOODS, General | Microbiological Tests *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Documented In-House Methods identified by method number PMFx based on/incorporating published procedures referenced by BS EN ISO Methods |
| | Detection: | |
| | *Campylobacter spp | PMF025 based on ISO 10272- 1:2017 + AMD 1:2023 |
| | *Escherichia coli O157 | PMF014 based on BS EN ISO 16654:2017 + AMD 2:2023 |
| | *Listeria monocytogenes | PMF024 based on BS EN ISO 11290-1:2017 |
| | *Salmonella species | PMF009 based on BS EN ISO 6579-1:2017 AMD 1 :2020 |
| | *Shiga Toxin-Producing Escherichia coli (Presumptive) | PMF029 based on CEN ISO/TS 13136:2012 by Multiplex Real-Time PCR using Life Technologies extraction and PCR test kit and Agilent MX3005 analyser |
| | Enumeration: | |
| | *Listeria monocytogenes and other Listeria spp | PMF021 based on BS EN ISO 11290-2:2017 |
| | *Yeasts and Moulds | PMF027 based on ISO 21527Parts 1 & 2: 2008 |
| Ready-to-eat prepared foods | *Aerobic Colony Count at 30°C | PMF015 using Plate count agar at 30°C for 48 hours using spiral plating technique |
| | *Bacillus cereus | PMF011 based on BS EN ISO 7932:2004 AMD 1:2020 |
| | *Clostridium perfringens | PMF008 based on ISO 7937:2004 |
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|--|--|
| Microbiological Tests *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 | Documented In-House Methods identified by method number PMFx based on/incorporating published procedures referenced by BS EN ISO Methods |
| | |
| *Enterobacteriaceae | PMF023 using Pour Plate based on BS EN ISO 21528-2:2017 |
| *Escherichia coli | PMF004 based on ISO 16649- 2:2001 using surface spread technique |
| *Coagulase positive Staphylococci (including <i>Staphylococcus aureus</i>) | PMF006 based onBS EN ISO 6888-1:2021 + AMD 1:2023 |
| *Escherichia coli | PMF026 using MPN based on ISO 16649-3:2015 |
| | Microbiological Tests *Indicates analysis performed under Food Standards Scotland designation as Official Laboratory in accordance with retained Regulation (EU) 2017/625 Enumeration (cont'd): *Enterobacteriaceae *Escherichia coli *Coagulase positive Staphylococci (including Staphylococcus aureus) |

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| WATERS (regulatory testing) | Analysis for the purpose of enforcement of: - Water Supply (Water Quality) (Scotland) Regulations 2014 - The Private Water Supplies (Scotland) Regulations 2017 | Methodology meeting the requirements of The Drinking Water Testing Specification |
| | Microbiological Tests | Documented In-House Methods |
| | Enumeration: | |
| Private water supplies Drinking waters | Total coliforms and Escherichia coli | PMW008 based on the Microbiology of Drinking Water (2016):Part 4D using the colilert system |
| | Enterococci | PMW009 based on the Microbiology of Drinking Water 2012:Part 5B using EnterolertTM |
| | Sporulated sulphite-reducing Clostridia and Clostridium perfringens | PMW007 based on The Microbiology of Drinking Water Part-6 2021 using membrane filtration |
| | Total Colony Count at 22 °C and 37 °C | PMW003 based on the Microbiology of Drinking Water (2020):Part 7A using YEA pour plate |
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|--|---|---|
| WATERS (non regulatory testing) | Microbiological Tests | Documented in house methods based on the Microbiology of Drinking Waters |
| Raw, drinking and recreational waters | Enumeration: | |
| watere | Coliforms and Escherichia coli | PMW008 based on the Microbiology of Drinking Water (2016): Part 4D using the colilert system |
| | Total Colony Count at 22° and 37°C | PMW003 based on Microbiology of Drinking Waters (2020), Part 7A using YEA pour plate |
| Raw, drinking and recreational waters | Enterococci | PMW009 based on MDW 2012 Part 5B using Enterolert |
| Swimming pool, Spa pool, Drinking water supplies, Drinking water, (excluding Natural Mineral and Bottled Waters) | Pseudomonas aeruginosa | PMW010 MPN using Pseudalert at 38°C based on MDW 2015 Part 8 Method C |
| Bottled Waters) | Detection of: | Documented In-House Methods |
| | Campylobacter spp | PMF025 based in ISO 10272- 1:2017 |
| | Legionella spp | PMW002 based on ISO 11731: 2017 Matrix A & B. Procedure 8, 9, 10 |
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| WATERS (non regulatory testing) | Molecular Tests | Documented In-House Methods identified by method number PMWx, based on International Standards |
| Drinking Recreational (man made) | Detection and Quantification of DNA from Legionella pneumophila Detection of: | PMW011 based on ISO/TS 12869:2019 by Real-Time PCR using filtration, Aquadien DNA Extraction Kit, Bio-Rad iQ Check Test Kit and Agilent MX3005 analyser |
| Drinking | Shiga Toxin-Producing <i>Escherichia</i> coli (Presumptive) | PMF029 based on CEN ISO/TS 13136:2012 by Multiplex Real-Time PCR using Life Technologies extraction and PCR test kit and Agilent MX3005 analyser |
| END | | |

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