Schedule

Issue date: 25 March 2025
Valid Until: -

NO: SAMM 132

LABORATORY LOCATION/ CENTRAL OFFICE:	Jabatan Kimia Malaysia Negeri Terengganu Jalan Alif 1, Kampung Melintang, Wakaf Beruas 20050 Kuala Terengganu Terengganu , 20050, TERENGGANU MALAYSIA
ACCREDITED SINCE :	25 MARCH 2025
FIELD(S) OF TESTING:	MICROBIOLOGICAL CHEMICAL

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

CENTRAL LOCATION:	Jabatan Kimia Malaysia Negeri Terengganu Jalan Alif 1, Kampung Melintang, Wakaf Beruas 20050 Kuala Terengganu Terengganu , 20050, Terengganu
FIELD(S) OF TESTING :	MICROBIOLOGICAL, CHEMICAL

SCOPE OF TESTING : MICROBIOLOGICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Water Sample	Coliform & E. *coli* Count (Membrane Filtration)	USEPA;Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and E.coli in Finished Water, Version 1.0,2000

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Coliform and E. *coli*	Most Probable Number (MPN); APHA Standard Methods for the Examination of Water and Wastewater. 21st Edition APHA 9221 B and 9221 F
	Coliform and E. *coli*	Most Probable Number (MPN); APHA Standard Methods for the Examination of Water and Wastewater. 21st Edition APHA 9211 A, B, C and 9233 A, B
Food Samples	Coliform Count – Petrifilm	AOAC, 18th Edition, 2005 (17.3.04) – Coliform and *Escherichia coli* Counts in Foods
	E.coli Count –Petrifilm-	AOAC, 18th Edition, 2005 (17.3.04) – Coliform and *Escherichia coli* Counts in Foods
	Aerobic plate counts – FDA	Bacteriological Analytical Manual Online 2001, Chapter 3
Food And Animal Feed	Detection of *Salmonella* spp.	Microbiology of Food and Animal Feeding Stuffs – Horizontal Method for the Detection of *Salmonella spp.* - ISO 6579:2002

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
environmental Monitoring Rubber & Palm Oil Mill Effluents	BOD 3 day 30°C	DOE Approved Method (Reference Method)
	COD	DOE Approved Method (Reference Method)
	Total Nitrogen	DOE Approved Method (Reference Method)
	Ammoniacal Nitrogen	DOE Approved Method (Reference Method)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Oil & Grease	DOE Approved Method (Reference Method for Treated Effluent)
	Suspended Solids	DOE Approved Method (Reference Method)
Potable Water surface Water groundwater liquid Effluents	BOD 5 day 20°C	APHA 5210 B 5-day BOD Test APHA 4500-O G Membrane Electrode Method
	COD	APHA 5220 B Open Reflux Method
	pH	APHA 4500-H^+B Electrometric Method
	Total Solids	APHA 2540 B Total Solids Dried @ 103-105 Deg C
	Suspended Solids	APHA 2540 D Total Suspended Solids Dried @ 103-105°C
	Dissolved Solids	JKM E 0105 (Gravimetric)
	Oil & Grease	APHA 5520 B Partition-Gravimetric Method
	Colour	APHA 2120 B Visual Comparison Method
	Phosphate	APHA 4500-P D Stannous Chloride Method
	Chloride	APHA 4500-CI- B Argentometric Method
	Alkalinity	APHA 2320 B Titration Method
	Hardness	APHA 2340 C EDTA Titrimetric Method
	Turbidity	APHA 2130 B Nephelometric Method
	Silica	JKM E 0110 (APHA 4500-SiO_2C) - Molybdosilicate Method
	Metals : Cu, Ni, Pb, Cd, Mn, Fe, Cr, Ca, and Zn	APHA 3111 B Direct Air-Acetylene Method
	Potassium	APHA 3500-K B - Flame Photometric Method
	Sodium	APHA 3500-Na B - Flame Emission Photometric Method

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Calcium	APHA 3500-Ca B EDTA Titrimetric Method
	Magnesium	APHA 3500-Mg B Calculation Method
	Arsenic	APHA 3114 C Continuous Hydride Generation/ AAS Method
	Total Nitrogen	APHA 4500- N_{org} B Macro - Kjeldahl Method
	Ammonical – Nitrogen	APHA 4500-NH_3 C Titrimetric Method
	Conductivity	APHA 2510-B Laboratory Method
	Phenols	APHA 5530B Clean up Procedure APHA 5530D Direct Photometric Method
	Mercury	APHA 3112B Cold–Vapor Atomic Absorption Spectrometric Method
	Fluoride	HACH method 8029, SPADNS Method
	Sulphate	HACH method 8051, SulfaVer 4 Method
	ADMI Colour	APHA 2120 F
	Chromium Hexavalensi in water	APHA 3500 Cr-B
	Nitrate in Water	HACH Method 8192, Cadmium Reduction Method
	Determination of Nitrogen Ammonia by HACH Method (Low range)	HACH METHOD 10023
water Portable Water, Surface Water, Ground Water	Determination of Volatile Organic Compounds (VOCs) in Water by Purge and Trap-Gas Chromatography Mass Spectrometer. Refer Appendix 1	JKM W 0404 (In-house Method)
	Determination of Total Organic Compounds (TOC) in water by Combustion Infrared Method for Low Concentration	JKM W 0416 (In-house Method)
	BOD 5 day 20°C	APHA 5210 B 5-day BOD Test APHA 4500-O G Membrane Electrode Method

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
	Chemical Oxygen Demand	HACH Method, 8000 Reactor Digestion Method
Tobacco And By-products	Identification of tobacco leaves and cloves by microscopic examination	JKM K 0701 (In-house Method)
	Identification of tobacco leaves and cloves by thin layer chromatography	JKM K 0702 (In-house Method)
Foods soy Sauce cereal	Determination of Total Nitrogen/Protein	JKM F 0908 (In-house Method)/ Kjeldahl Digestion Method
Cereal	Determination of Total Nitrogen/Protein	JKM F 0908 (In-house Method)/ Kjeldahl Digestion Method
	Determination of Total Ash Contents in Cereal Foods	JKM (KT) KES 24 6005 (In-house Method)
Soy Sauce	Determination of salt content in food	JKM F 0920 (In-house Method)/ Titrimetric Method
Cordial	Identification and Confirmation of synthetic acidic colours in food samples	JKM F 0201 (In-house Method)/ Paper Chromatography and UV-VIS Spectrometry
Rice	Rice Grading	JKM (KT) KES 16 6720 (In-house Method)
Coffee	Determination of Theobromine and Caffeine in Coffee, Cocoa and derivatives	F0941 (In-house Method)/HPLC
	Determination of Total Ash, Water Soluble Ash & Water Insoluble Ash	JKM F 0901 (In-house Method)
Palm Oils, Vegetables Oil And The Products	Iodine Value	JKM K 0213 (In-house Method)/ (Cyclohexane-Acetic Acid Method)
	Iodine Value	JKM K 0213 (In-house Method)/ (Cyclohexane-Acetic Acid Method)
Margarine And Butter	Determination of Total Fat in Margarine and Butter	JKM F 0904 (In-house Method)
	Determination of Sodium Chloride in Margarine	JKM (KT) KES 27 6046 (In-house Method)
Milk	Determination of Acidity in milk (Powdered milk/Condensed Milk/Cultured or Fermented Milk)	JKM F 0918 (In-house Method)/ Titration
	Total Milk Solids in Unsweetened Evaporated Milk	JKM F 0913 (In-house Method)
	Determination of Fat in milk	JKM F 0905 (In-house Method) / Gerber Method
Tea	Determination Of Water Soluble Extract In Tea.	JKM FD 0912 (In-house Method)
Foods (others.)	Determination of Fat Contents in Food	JKM F 0921 (In-house Method)/ Soxhlet Extraction Method

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	Identification of Water-Soluble Coal-Tar Dyes present in Foodstuffs	JKM F 0202 (In-house Method)/ TLC and UV-VIS Spectrophotometry
	Determination of Total Ash and Acid Insoluble Ash	JKM F 0902 (In-house Method)
Tomato Sauce	% Total solids	JKM MDS 264: 1982 (In-house Method)
	Determination of Acidity (as Acetic Acid) in Food	JKM (KT) KES 26 6092 (In-house Method)
Chili Sauce	% Total solids	JKM MDS 345: 1985 (In-house Method)
	Determination of Acidity (as Acetic Acid) in Food	JKM (KT) KES 26 6092 (In-house Method)
Oyster Sauce	% Total solids	JKM MDS 580:2004 (In-house Method)
	Determination of Acidity (as Acetic Acid) in Food	JKM (KT) KES 26 6092 (In-house Method)
Common Salt	Determination of Sodium Chloride in Common Salt	JKM F 0910 (In-house Method)