


NO: SAMM 695

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LABORATORY LOCATION/ CENTRAL OFFICE:	Petroknowledge Sdn. Bhd. Plot 7873 Rumah Kedai Sebelah Petronas Bukit Kuang 24000 Kemaman, Terengganu , 24000, TERENGGANU MALAYSIA
	
ACCREDITED SINCE :	12 MARCH 2025
FIELD(S) OF TESTING:	CHEMICAL MICROBIOLOGICAL

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:	Petroknowledge Sdn. Bhd. Plot 7873 Rumah Kedai Sebelah Petronas Bukit Kuang 24000 Kemaman, Terengganu , 24000, Terengganu
FIELD(S) OF TESTING :	CHEMICAL, MICROBIOLOGICAL

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Crude Oil & Condensate	Determine of light hydrocarbon in stabilized Crude oils – Gas Chromatography method	IP344/88 (2010)
	Standard Test Method for Density and Relative Density of Crude Oils by Digital Density Analyzer	ASTM D5002 - 18
	Standard Test Method for Water in Crude Oils by Coulometric Karl Fischer Titration	ASTM D4928 - 12
	Standard Test Method for Water in Crude Oils by Potentiometric Karl Fischer Titration	ASTM D4377 - 00 (Reapproved 2011)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Total Mercury and Mercury Species in Liquid Hydrocarbons	UOP 938 - 10
	Standard Test Method for Total Mercury in Crude Oil Using Combustion-Gold Amalgamation and Cold Vapor Atomic Absorption Method	ASTM D7623 - 10(2015)
	Standard Test Method for Water and Sediment in Crude Oil by Centrifuge Method (Laboratory Procedure)	ASTM D4007 - 11 (2016) e1
	Standard Test Method for Dynamic Viscosity and Density of Liquids by Stabinger Viscometer (and the Calculation of Kinematic Viscosity)	ASTM D7042 - 16e3
	Standard Test Method for Acid Number of Petroleum Product by Potentiometric Titration	ASTM D664 - 18e2
Natural Gas	Tentative Method of Extended Analysis for Natural Gas and Similar Gaseous Mixtures by Temperature Programmed Gas Chromatography	GPA 2286 - 95
	Analysis of Natural Gas and Similar Gaseous Mixtures by Gas Chromatography	GPA 2261 - 13
	Natural Gas – Determination of water by the Karl Fischer method - Part 3: Coulometric procedure	ISO 10101 - 3:1993(E)
	Mercury Sampling and Analysis in Natural Gas by Atomic Fluorescence Spectroscopy	ASTM 6350 - 14 (Analysis Only)
	Standard Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy	ASTM D5954 - 98(2014)e1
Petroleum Product	Standard Test Method for Density, Relative Density and API Gravity of liquid by Digital Density Meter	ASTM D4052 - 22
	Standard Test Method for Determination of Water in Petroleum Product, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration	ASTM D6304 - 20

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Standard Test Method for Determination of Water in Liquid Petroleum Product by Karl Fischer Reagent	ASTM D1744 - 13
	Standard Test Method for Multi element Determination of Used and Unused Lubricating Oils and Base Oils by Inductively Coupled Plasma Atomic Emission Spectrometry	(ICP-AES) ASTM D5185 - 18
	Standard Test Method for Insoluble in Used Lubricating Oils	ASTM D893 - 14
	Standard Test Method for Oxidation Stability of Steam Turbine Oils by Rotating Pressure Vessel	ASTM D2272 - 14a
	Standard Test Method for Water Separability of Petroleum Oils and Synthetic Fluids	ASTM D1401 - 21
	Standard Test Method for Measurement of Hindered Phenolic and Aromatic Amine Antioxidant Content in Non-Zinc Turbine Oils by Linear Sweep Voltammetry	ASTM D6971 - 09(2014)
	Standard Test Method for Measurement of Lubricant Generated Insoluble Color Bodies in In-Service Turbine Oils using Membrane Patch Colorimetry	ASTM D7843 - 21
	Standard Test Method for ASTM Color Petroleum Product (ASTM Color Scale)	ASTM D1500 - 12
	Standard Test Method for Foaming Characteristic of Lubricating Oils	ASTM D892 - 18
	Standard Test Method for Dynamic Viscometer and Density of Liquids by Stabinger Viscometer (and the Calculation of Kinematic Viscosity)	ASTM D7042 - 21a
	Standard Test Method for Flash Point by Pensky-Martens Closed Cup Tester.	ASTM D93 - 20
	Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration	ASTM D664 - 18e2

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Standard Test Method for Base Number of Petroleum Products by Potentiometric Perchloric Acid Titration	ASTM D2896 - 21
	Condition Monitoring of Used Lubricants by Trend Analysis Using Fourier Transform Infrared (FT-IR) Spectrometry	ASTM E2412 - 10
	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)	ASTM D445 - 21e1
	Standard Practice for Calculating Viscosity Index from Kinematic Viscosity at 40°C and 100°C	ASTM D2270 - 10(2016)
	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester	ASTM D92 - 18
	Standard Test Method for Base Number Determination by Potentiometric Hydrochloric Acid Titration	ASTM D4739 - 17
	Standard Test Method for Hydraulic Fluid Power-Fluid Method for Coding the Level of Contamination by Solid Particle	ISO 4406: 1999 NAS 1638
Grease	Standard Test Method for Cone Penetration of Lubricating Grease	ASTM D217-17
	Standard Test Method for Determining the Water Washout Characteristics of Lubricating Greases	ASTM D1264-18
	Standard Test Method for Dropping Point of Lubricating Grease	ASTM D566-17
Water & Waste Water	Metal By Induction Coupled Plasma (Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silica (SiO ₂), Silver, Sodium, Strontium, Thallium, Vanadium, Zinc)	APHA 3120 B - 22nd Edition
	Oil and Grease (Liquid – Liquid, Partition – Gravimetric Method)	APHA 5520 B -22 nd Edition
	Oil and Grease (Hydrocarbon)	APHA 5520 F -22 nd Edition

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	ADMI Color	APHA 2120 F -22 nd Edition HACH 10048
	Turbidity	APHA 2130 B-22 nd Edition
	Free Chlorine	HACH 8021
	Hardness	APHA 2340 B-22 nd Edition
	Anions (Fluoride, Chloride, Nitrite – N, Bromide, Nitrate – N, Orthophosphate Sulfate) (SUSPENDED)	APHA 4110 B-22 nd Edition (SUSPENDED)
	Alkalinity – (Titration Method – Carbonate, Bicarbonate & Hydroxide)	APHA 2320 B -22 nd Edition
Water & Drinking Water	Mercury	US EPA 1631
	pH	APHA 4500H+ B – 22nd Edition
	Conductivity	APHA 2510B – 22nd Edition
	Alkalinity – (Titration Method – Carbonate, Bicarbonate & Hydroxide)	APHA 2320B – 22nd Edition
	ADMI Color	APHA 2120 F – 22 nd Edition HACH 10048
	Turbidity	APHA 2130 B– 22 nd Edition
	Free Chlorine	HACH 8021
	Hardness	APHA 2340 B– 22 nd Edition
	Anions (Fluoride, Chloride, Nitrite – N, Bromide, Nitrate – N, Orthophosphate Sulfate) (SUSPENDED)	APHA 4110 B– 22 nd Edition (SUSPENDED)
Sewage & Industrial Effluents / Waste Water Drinking Water potable Water Raw Water Surface Water ground Water Mineral Water	Total Dissolved Solid (TDS) at 180 °C	APHA 2540 C-22 nd Edition
	Total Suspended Solid (TSS) at 103 °C - 105 °C	APHA 2540 D-22 nd Edition
	Fixed & Volatile Solids Ignited at 550 °C	APHA 2540 E-22 nd Edition
	Boron	HACH 8015

SCOPE OF TESTING : MICROBIOLOGICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Water & Drinking Water	E.coli Coliform	APHA 9223 B - 22nd Edition

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