

Schedule


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Valid Until: -



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LABORATORY LOCATION/ CENTRAL OFFICE:	Chemsain Konsultant Sdn. Bhd., Labuan Lot No. 31, Block D, Lazenda Warehouse Phase 3, Jalan Ranche-Ranche 87000 WP Labuan , 87000, WILAYAH PERSEKUTUAN LABUAN MALAYSIA
	
ACCREDITED SINCE :	02 MARCH 2026
FIELD(S) OF TESTING:	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:	Chemsain Konsultant Sdn. Bhd., Labuan Lot No. 31, Block D, Lazenda Warehouse Phase 3, Jalan Ranche-Ranche 87000 WP Labuan , 87000, Wilayah Persekutuan Labuan
FIELD(S) OF TESTING :	CHEMICAL,

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Aviation Fuel	Freezing Point	ASTM D2386-19
	Determination of Total Sulfur in	ASTM D 5453
	Light Hydrocarbon, Spark	None
	Ignition Engine Fuel, Diesel	None
	Engine Fuel and Engine oil by	None
	Ultraviolet Fluorescence	None
	Sulfur in Petroleum and	ASTM D4294
	Petroleum Products by Energy	None
	Dispersive X-ray Fluorescence	None
	Spectrometry	None
	Freezing point of Aviation	ASTM D2386
	Fuels	None
	Density, Relative Density and	ASTM D4052

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	
	API Gravity of Liquids by Digital Density Meter	None	
	Distillation of Petroleum Product and Liquid Fuels at Atmospheric Pressure	ASTM D86	
	(Thiol Mercaptan) Sulfur in Gasoline, Kerosine, Aviation Turbine and Distillate Fuels (Potentiometric Method)	ASTM D3227	
	Gum Content in Fuels by Jet Evaporation	ASTM D381	
	Aviation Fuel Flash Point Abel Closed Cup Method	IP 170/ EN ISO 13736	
	Corrosiveness to Copper from Petroleum Products by Copper Strip Test	ASTM D130	
	Determination of Total Sulfur in Light Hydrocarbon, Spark Ignition Engine Fuel, Diesel Engine Fuel and Engine oil by Ultraviolet Fluorescence	ASTM D 5453	
	Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry	ASTM D4294	
	Freezing point of Aviation Fuels	ASTM D2386	
	Density, Relative Density and API Gravity of Liquids by Digital Density Meter	ASTM D4052	
	Distillation of Petroleum Product and Liquid Fuels at Atmospheric Pressure	ASTM D86	
	(Thiol Mercaptan) Sulfur in Gasoline, Kerosine, Aviation Turbine and Distillate Fuels (Potentiometric Method)	ASTM D3227	
	Gum Content in Fuels by Jet Evaporation	ASTM D381	
	Aviation Fuel Flash Point Abel Closed Cup Method	IP 170/ EN ISO 13736	
	Corrosiveness to Copper from Petroleum Products by Copper Strip Test	ASTM D130	
	Biodiesel	Water by KF	ASTM D 6304-16e1
		Water Content	ASTM D6304-20
		Flash Point	ASTM D93-20
		Density	ASTM D4052-18

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	
	Density	ASTM 1298-12b (Reapproved 2017)	
	Density correction	EN 14214:2008 (E) Annex C	
	Water content	ASTM D 6304-20 (Procedure C excluded)	
	Filter Blocking Tendency	ASTM D2068	
	Filter Blocking Tendency	ASTM D2068	
Biodiesel Blend	Density @15 °C	ASTM D 1298 -" 12b (Reapproved 2017)	
Crude Oil	Density @15 °C Relative Density (Specific Gravity) @60/60°F	ASTM D 1298 -" 12b (Reapproved 2017)	
	Water	ASTM D 4928-12 (Reapproved 2018)	
	Density and Relative Density	ASTM D 5002-19	
	Water content	ASTM D 4928-12	
	Salts in Crude Oil (Electrometric Method)	ASTM D3230 None	
	Pour Point of Petroleum Products	ASTM D97 None	
	Acid Number of Petroleum Products by Potentiometric Titration	ASTM D664 None	
	Density, Relative Density or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method	ASTM D1298 None	
	Salts in Crude Oil (Electrometric Method)	ASTM D3230	
	Pour Point of Petroleum Products	ASTM D97	
	Acid Number of Petroleum Products by Potentiometric Titration	ASTM D664	
	Density, Relative Density or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method	ASTM D1298	
	Fresh Water / Produced Water / River Water / Drinking Water	Turbidity Chloride	APHA 2130 B (2017) APHA B (2017)
	Gas	Pressure (0-800 psi)	In-house Method 0564
		Pressure (0 - 800 psi)	In-house Method 0564
	Glycol	Specific Gravity	ASTM D4052-18
		pH	ASTM D1287-91 (2002)
Iron		In-House Method 0557 based on ASTM D5863-11 & ASTM D5184-12	
Total Suspended Solids		In-House Method 0584 based on APHA 2540 D, 2017	
Density		ASTM D1122-97a by Hydrometer	

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	Density	ASTM D 4052-18 by Density Meter
Hydrocarbon Liquids	Refractive Index	ASTM D 1218-12 (Procedure A) (Reapproved 2016)
Jet Fuel	Flash Point	IP 170-14
	Appearance	ASTM D4176-21a (Proc.1)
	Saybolt Color of Petroleum Products (Saybolt Chromometer Method)	ASTM D156-15
	Particulate Contamination in Aviation Fuels by Laboratory Filtration	ASTM D5452-20
	Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence	ASTM D5453-19a
	Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure	ASTM D86-20b
	Determination of flash point - Abel closed-cup method	IP 170-14
	Density, Relative Density, and API Gravity of Liquids by Digital Density Meter	ASTM D4052-18a
	Freezing Point of Aviation Fuels	ASTM D2386-19
	Corrosiveness to Copper from Petroleum Products by Copper Strip Test	ASTM D130-19 (2017)
	Thermal Oxidation Stability of Aviation Turbine Fuels	ASTM D3241-20c
	Determination of the Existent Gum Content of Aviation Turbine Fuel	IP 540-08 (2014)
	Gum Content in Fuels by Jet Evaporation	ASTM D381-19
	Determining Water Separation Characteristics of Aviation Turbine Fuels by Portable Separometer	ASTM D3948-20
	Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method	ASTM D1298-12 (2017)
Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry	ASTM D4294-21	
Flashpoint by Pensky Martens Closed Cup Tester	ASTM D93-20 (Proc.A)	
Kerosine And Aviation Fuel	Smoke Point	ASTM D 1322-18

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Liquid Petroleum Products	Hydrocarbon Types	ASTM D 1319-18 (Fluorescent Indicator Absorption, FIA)
	7~35 mm ² /s	Test instruction reference to BS EN
Natural Gas	Gas Composition by Gas Chromatography	GPA 2261-00
	Composition analysis C1-C11, C12+	GPA 2286-14 Gas Chromatography
	Mercury	ASTM D6350-14 Cold Vapor Atomic Fluorescence Spectroscopy (Analysis)
	Hydrocarbons (C1 -" C12+), CO ₂ ,	None
Petroleum Products	Water Content	ASTM D6304-16e1 (Procedure A) (Coulometric Karl Fischer)
	Density	ASTM D4052-18
	Composition analysis C8+	In-House Method 0522 based on ASTM D5442 17 Gas Chromatography
	None	None
	None	None
	Standard Test Method for	None
River Water & Industrial Effluent	Chemical Oxygen Demand COD	APHA 5220 C, 2005/2017
River Water, Industrial Effluent & Marine Water	Ammoniacal Nitrogen Biochemical Oxygen Demand BOD	APHA 4500 NH ₃ B & C, 2005/2017 APHA 5210 B & 4500 OG, 2005/ 2017
Schedule Waste (spent Lubricating Oil)	Flash Point	ASTM D93-19 (Procedure B)
Transparent And Opaque Liquid	Kinematic Viscosity @ 40°C	ASTM D445-19a
Waste Water / Effluent Water	Oil and Grease	APHA 5520 B (2005)
Water	pH	ASTM D 1293-2005 (Method B) APHA 4500 H* B 2005/2017
	pH	ASTM D1293-2005 (Method B) APHA 4500 H* B 2005/2017
	None	None
	Turbidity	APHA 2130B
	On-site Sampling & Testing (pH Temperature, Turbidity)	In-house Method SOP-0222-2001 & SOP-0222-2003
	Coliform	APHA 9221 B, Edition, 2005
	Heterotrophic plate count in	APHA Method 9215 D, Edition,
	None	None
	None	None
	pH Value	BS 1377-3 : 2018 Clause 12
	pH Value	BS 1377-3 : 2018 Clause 12
	None	None
	Calcium Hardness as CaCO ₃ ,	APHA 3500-Ca B, 2017
	Magnesium (by Calculation Method)	APHA 3500-Mg B, 2017
	Nitrate	APHA E, 2017

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	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Aluminium	None
	None	None
	Organochlorine Pesticide	APHA 6630 B, Edition
	Ammoniacal Nitrogen	APHA F, 24" Edition
	Arsenic	APHA 3125 B, Edition
	Mercury	In-house method, SGS-TM-ENVI-003, based on APHA 3125 B
	2,4-dichlorophenoxyacetic acid (2,4-D)	In-house method, SGS-TM-02-045, based on Agilent Application Note 5991-5731 EN (LCMSMS)
	Heavy Metals by ICP-MS	None
	Endotoxin	Test for Bacterial Endotoxin, BP 2022
	pH	APHA 4500 H*B
	Oil & Grease	APHA 5520 B
	Color	APHA 2120 B
	Color	APHA 2120 F
	pH	APHA 4500 H* B
	Turbidity	APHA 2130 B
	Conductivity	APHA 2510 B
	None	None
	None	None
	None	None
	Escherichia coli and coliform	ISO 9308-1: 2014 (E) / Enumeration
	Pseudomonas aeruginosa	ISO 16266:2006 (E) / Detection and
	Ammonium nitrogen	BS 6068: Section 2.7:1984 ISO 5664:1984
	Chemical Oxygen Demand	BS 6068: Section 2.34:1988
	Suspended solids	BS 2690-Part 120:1981
	Dissolved solids	BS 2690-Part 121:1981
	None	ASTM D 523-82
	COD	APHA 5220 D
	None	None
	Free Chlorine	APHA' 4500 -" CI G

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Count	(Pour Plate, Spread Plate and
	Anaerobes (Clostridia)	BS 6068-4:9: 1993
	Gross Alpha & Gross Beta	None
	Arsenic as As	None
	Antimony as Sb	None
	Aluminium as Al	None
	Beryllium as Be	None
	Cadmium as Cd	None
	Chromium as Cr	None
	Lead as Pb	None
	Silver as Ag	None
	Selenium as Se	None
	Thallium as Tl	None
	Mercury as Hg	In-house Method LWI-MWE 037 based on APHA 3112 B by
	Mercury as Hg	Mercury Analyser
	Nitrate	In-house Method LWI-MWE 032 based on HACH Nitrate
	Nitrate	Test Comparator
	Sulfide	HACH Method 8131
	Chlorine, Free Residual	In-house Method LWI-MWE
	Chlorine, Free Residual	034 based on DPD-Palintest
	Chlorine, Free Residual	Test Comparator
	Total Chlorine	In-house Method LWI-MWE
	Total Chlorine	035 based on DPD-Palintest
	Total Chlorine	Test Comparator
	Colour (ADMI)	APHA 2120 F
	Heterotrophic Plate Count	None
	Pseudomonas aeruginosa	In-house Method LWI-MME (APHA) 007
	Pseudomonas aeruginosa	based on APHA 9213 E, 2020
	Escherichia coli and Coliform	Escherichia coli and Coliform Bacteria. Part 1: Membrane filtration
	Escherichia coli and Coliform	method
	Escherichia coli and Coliform	Method No: MOH (1)
	Escherichia coli and Coliform	ISO 29981 : 2010 (E), IDF 220 :
	Escherichia coli and Coliform	2010 (E) Milk Products -
	None	None
	None	None
	None	None
	None	None
Petroleum & Petroleum Products Aviation Fuel	Aromatic Hydrocarbon Type: Di-aromatics Mono-aromatics Total aromatics	ASTM D6379
Petroleum & Petroleum Products	Fluid Properties	In House Method 0542

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Crude Oil	Molecular Weight	In House Method 0549 based on Cryette Manual
	Saturates Aromatic Resin Asphalthene	In House Method 6014 based on Energy & Fuel 2002, 16, 1571-1575 and EN 2916
	Light Hydrocarbon	IP 344/88 (2010)
Petroleum & Petroleum Products Condensate	Fluid Properties	In House Method 0542
Petroleum & Petroleum Products Diesel	Aromatic Hydrocarbon; Mono-aromatic Di-aromatic Tri-aromatic	EN12916:2016
Petroleum & Petroleum Products Lubricant Oil	RPVOT	ASTM D2272
Petroleum & Petroleum Products Glycol	Acidity as Acetic Acid	ASTM D1613
	Density, Relative Density, API Gravity	ASTM D4052
Water Water, Wastewater, River Water, Produced Water, Drinking Water, Fresh Water	Colour ADMI	APHA 2120 F 2005/2023
	Colour (Colour Unit)	APHA 2120 C, 2005/2023
	Sulphate	APHA 4500 SO ₄ ²⁻ E, 2005/2023
	Calcium Hardness (CaCO ₃) by EDTA Titrimetric	APHA 3500-Ca B, 2005/2023
	Magnesium Hardness by Calculation Method	APHA 3500-Mg B, 2005/2023
	Hardness by EDTA Titrimetric	APHA 2340 C, 2005/2023
	Calcium Hardness (as CaCO ₃) by EDTA Titrimetric	APHA 3500-Ca B, 2005/2023
	Magnesium Hardness by Calculation Method	APHA 3500-Mg B, 2005/2023
	Sulphide	APHA 4500-S ²⁻ D, 2005/2023
	Sulphate	APHA 4500 SO ₄ ²⁻ , 2005/2023
	Formaldehyde	In House Method 0527 based on AOAC 931.08
	Colour (Colour Unit)	APHA 2120 C, 2005/2023
	Free, Combined and Total Residual Chlorine	In House Method 0501 based on Palintest Comparator
Water Effluent, Industrial Effluent	Density @ 15'C	In House Method 0555
	Corrosion Inhibitor Residual	In House Method
	Colour ADMI	APHA 2120 F, 2005/2023
	Sulphide by Methylene Blue Method	APHA 4500 S ²⁻ D, 2005/2023
	Sulphate	APHA 4500 SO ₄ ²⁻ E, 2005/2023

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	Calcium Hardness (as CaCO ₃) by EDTA Titrimetric Magnesium Hardness by Calculation Method Hardness by EDTA Titrimetric	APHA 3500-Ca B, 2005/2023 APHA 3500-Mg B, 2005/2023 APHA 2340 C, 2005/2023
Water Sewage	Free, Combined and Total Residual Chlorine	In House Method 0501 based on Palintest Comparator
Water Produced Water	Corrosion Inhibitor Residual Density @ 15°C	In House Method In House Method 0555

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