



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

SPL, Inc. dba Alcor Petrolab
1300 Corporate Drive E.
Arlington, TX 76006

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

AT-2811

Certificate Number


ANAB Approval

Certificate Valid Through: 09/11/2021
Version No. 001 Issued: 09/11/2019



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



ANSI National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SPL, Inc. dba Alcor Petrolab

1300 Corporate Drive E.

Arlington, TX 76006

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TESTING

Valid to: **September 11, 2021**

Certificate Number: **AT-2811**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Acidity	ASTM D3242	Petroleum Products	Titration
Hydrocarbon Type by FIA	ASTM D1319	Petroleum Products	Column Chromatography
Sulfur	ASTM D7039 ASTM D2622	Petroleum Products	Wavelength dispersive X-ray Fluorescence Spectrometer (WDXRF)
Active Sulfur Species in Fuels and Solvents (Doctor Test)	ASTM D4952	Petroleum Products	Visual
Naphthalene by UV-VIS	ASTM D1840	Petroleum Products	UV -VIS Spectrophotometry
Electrical Conductivity	ASTM D2624	Petroleum Products	Conductivity Meter
Fatty Acid Methyl Ester Content (FAME) in Middle Distillate and Aviation Turbine Fuels	ASTM D7797 ASTM D7963	Petroleum Products	Fourier Transform Infrared Spectroscopy (FTIR)
Simulated Distillation of Petroleum Fractions	ASTM D2887	Petroleum Products	Gas Chromatography
Saybolt Color by Automatic Tristimulus	ASTM D6045	Petroleum Products	Automatic Tristimulus
Estimated Hydrogen Content	ASTM D3343	Petroleum Products	Calculation



Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Vapor Pressure, Mini Method	ASTM D5191	Petroleum Products	Vapor Pressure Instrument
Driveability Index	ASTM D4814	Petroleum Products	Calculation
Oxygenate Content in Gasoline	ASTM D4815	Petroleum Products	Gas Chromatography
Benzene and Toluene Content in Gasoline	ASTM D3606	Petroleum Products	Gas Chromatography
Biodiesel Content in Diesel Fuel Oil	ASTM D7371	Petroleum Products	Fourier Transform Infrared Spectroscopy
Karl Fischer Water Content	ASTM D7923, ASTM D6304, ASTM E1064	Petroleum Products	Coulometric Titrator
Karl Fischer Water Content	ASTM D7923, ASTM E203	Petroleum Products	Volumetric Titrator
Ethanol and Methanol Content in Fuels with >20% Ethanol	ASTM D5501	Petroleum Products	Gas Chromatography
Inorganic Chloride in Fuel Ethanol	ASTM D7328	Petroleum Products	Ion Chromatography
Existent Sulfate in Fuel Ethanol	ASTM D7328	Petroleum Products	Ion Chromatography
pHe of Ethanol and Ethanol Blends	ASTM D6423	Petroleum Products	pH
Acid Number	ASTM D664, SAE ARP 5088	Petroleum Products	Titrator
Base Number	ASTM D2896	Petroleum Products	Titrator
Metals by ICP-AES	ASTM D7111, ASTM D5185, ASTM D4951, ASTM D7691, ASTM D5708, EN 14538	Petroleum Products	Inductively Coupled Plasma-Atomic Emission Spectrophotometer (ICP-AES)

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Distillation	ASTM D 86	Petroleum Products	Distillation Apparatus
TAG CC Flash Point	ASTM D56	Petroleum Products	Flash Point Instrument
PMCC Flash Point	ASTM D93	Petroleum Products	Flash Point Instrument
Density, Relative Density and API Gravity	ASTM D4052	Petroleum Products	Densitometer
Freezing Point	ASTM D5972	Petroleum Products	Phase Instrument
Freezing Point	ASTM D2386	Petroleum Products	Freeze Point Bath
Kinematic Viscosity	ASTM D445, ASTM D2532	Petroleum Products	Viscosity Bath
Estimated Net Heat of Combustion	ASTM D3338	Petroleum Products	Calculation
Gross Heat of Combustion	ASTM D4809, ASTM D240	Petroleum Products	Calorimeter
Smoke Point	ASTM D1322	Petroleum Products	Smoke Point Instrument
Copper Corrosion	ASTM D130	Petroleum Products	Copper Corrosion Bath
Thermal Oxidation Stability (JFTOT)	ASTM D3241	Petroleum Products	Jet Fuel Thermal Oxidation Tester (JFTOT)
Gum Solvent Washed, Unwashed and Existent	IP 540, ASTM D381	Petroleum Products	Evaporation Bath
Water Separation, MSEP	ASTM D3948	Petroleum Products	Microseparometer (MSEP)
Particulate Contamination	ASTM D5452, ASTM D6217, ASTM D7321, ASTM D4898	Petroleum Products	Filtration
Lubricity by BOCLE	ASTM D5001	Petroleum Products	Ball on Cylinder Lubricity Evaluator (BOCLE)
Appearance	ASTM D4176	Petroleum Products	Visual
Water Reaction	ASTM D1094	Petroleum Products	Graduated Cylinder
Oxidation Stability (Induction Period)	ASTM D525	Petroleum Products	Oxidation Stability Bath
Research Octane Number	ASTM D2699	Petroleum Products	Octane Engine

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Motor Octane Number	ASTM D2700	Petroleum Products	Octane Engine
Antiknock Index	ASTM D4814 X1.4.2	Petroleum Products	Calculation
Estimated Vapor-Liquid Ratio	ASTM D4814 X2.3	Petroleum Products	Calculation
Water and Sediment	ASTM D2709	Petroleum Products	Centrifuge
Ash Content	ASTM D482	Petroleum Products	Muffle Furnace
Cetane Index	ASTM D976, ASTM D4737	Petroleum Products	Calculation
Cloud Point	ASTM D2500	Petroleum Products	Cloud Point Bath
Cloud Point	ASTM D5773	Petroleum Products	Phase Instrument
Pour Point	ASTM D97	Petroleum Products	Pour Point Bath
Lubricity by HFRR	ASTM D6079	Petroleum Products	High Frequency Reciprocating Rig (HFRR)
Particle Size and Count	ISO 4406	Petroleum Products	Laser Particle Counter
Cleveland Open Cup Flash Point and Fire Point	ASTM D92	Petroleum Products	Flash Point Tester
Evaporation Loss	ASTM D972	Petroleum Products	Hot Block
Foaming Seq I, 11, III	ASTM D892	Petroleum Products	Foam Test Bath
Elastomer Compatibility-Swell	FTM 3604, FTM 3603	Petroleum Products	Oven
Elastomer Compatibility-Swell, Tensile, Hardness	FTM 3433, FTM 3432	Petroleum Products	Hot Block
Thermal Stability and Corrosivity	FTM 3411	Petroleum Products	Hot Block
Shear Stability	ASTM D2603, ASTM D5621	Petroleum Products	Sonic Shear
Corrosion and Oxidative Stability	ASTM D4636, FTM 5307, FTM 5308	Petroleum Products	Hot Block
Hot Liquid Process Simulator (HLPS)	SAE ARP 5996	Petroleum Products	Hot Liquid Process Simulator (HLPS)
Vapor Pressure by Isoteniscope	ASTM D2879	Petroleum Products	Isoteniscope
Lead Corrosion	FTM 5321	Petroleum Products	Oil Bath
Accelerated Storage Stability	MIL-PRF-7808L 4.4.5	Petroleum Products	Oven

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Corrosiveness of Lubricants	FTM 5305	Petroleum Products	Oven
Corrosion Protection - Humidity Cabinet	ASTM D1748 and FTM 5329	Petroleum Products	Humidity Cabinet
Corrosion Protection- Salt Spray Fog	ASTM B117	Petroleum Products	Salt Spray Cabinet
Rotating Pressure Vessel Oxidation Test (RPVOT)	ASTM D2272, ASTM D2112	Petroleum Products	Rotating Pressure Vessel Oxidation Test (RPVOT)
Precipitation Number	ASTM D91	Petroleum Products	Centrifuge
Trace Sediment	ASTM D2273	Petroleum Products	Centrifuge
Wear Preventative Characteristics (4-ball)	ASTM D4172, ASTM D2266	Petroleum Products	4- ball
Low Temperature Stability	FTM 3458	Petroleum Products	Low Temp Chamber
Viscosity Index	ASTM D2270	Petroleum Products	Calculation
Oxidation Stability of Mineral Oil	IP 280, ASTM D2440	Petroleum Products	Hot Block
Vacuum Distillation	ASTM D1160	Biodiesel Products	Vacuum Distillation Apparatus

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-2811.



Vice President

