

CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Bureau Veritas 2450 Hassell Road Hoffman Estates, IL 60195

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

<u>L2264.03</u> Certificate Number



Certificate Valid Through: 12/23/2022 Version No. 003 Issued: 12/17/2019





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Bureau Veritas

2450 Hassell Road Hoffman Estates, IL 60195 Richard Thorneloe 847-884-7877

TESTING

Valid to: **December 23, 2022** Certificate Number: **L2264.03**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Accelerated Stability	OCM – Accelerated Stability	Fuel	Oil bath/Filtration
Total Acid Number	ASTM D664 Mod	Oil	Manual Titration
Total Acid Number	ASTM D974 Mod	Oil, Fuel	Manual Titration
API Gravity	ASTM D287	Oil, Fuel	Hydrometer
Appearance	ASTM D4176	Fuel	Visual
Physical Properties of Coolants	OCM – Physical Properties of Coolants	Coolant	Visual
Ash Content	ASTM D482	Fuel	Hot plate/open flame
Microorganisms	OCM - Microorganisms	Any Fluid	Slide
Total Base Number	ASTM D4739 Mod	Oil	Manual Titration
Total Base Number	OCM-TBN	Oil	Manual Titration
Biodiesel Content by FTIR	IL-BioDiesel	Fuel	FTIR
Carbon Residue	ASTM D524	Fuel	Furnace
Cetane Index, Calculated	ASTM D976 ASTM D4737	Fuel	Calculation
Chlorides	IL-MWF-2011	MWF	Test Strip
Cloud Point	ASTM D2500	Fuel	Cloud Point Unit
Cold Flow Plug Point	ASTM D6371	Fuel	CFPP Unit





Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Color, ASTM	ASTM D1500	Any Fluid	Color Comparator
Color, Gardner and Sayboldt	ASTM D1500	Oil	Color Comparator
Conductivity	IL-MWF-Conductivity	MWF	Conductivity Meter
Copper Strip Corrosion	ASTM D130	Oil, Fuel	Copper Specimen
Density Specific Gravity	ASTM D1298	Oil, Fuel	Hydrometer
Dielectric Breakdown	ASTM D877	Oil	Dielectric Unit
Distillation	ASTM D86	Fuel	Distillation
Ferrography, Analytical	ASTM D7690	Any Fluid	Microscope
Ferrography DR	OCM – DR3	Oil	DR3 Unit
ELC Coolant Inhibitor	OCM – ELC Test Strip	Coolant	Test Strip
Flash Point Closed Cup	ASTM D93	Oil, Fuel	Automated Flash Point
Flash, Point Open Cup	ASTM D92	Oil	Automated Flash Point
Freeze Point of Coolant	ASTM D3321 (Mod)	Coolant	Refractometer
FTIR Infrared Analysis	OCM - FTIR	Any Fluid	FTIR
Fuel Dilution by GC	ASTM D7593	Oil	GC
Glycol	ASTM D2982	Oil	Wet Chemistry
Glycol	OCM – BP Glycol	Oil	Wet Chemistry
Estimate of Net & Gross Heat of Combustion Fuel	ASTM D4868	Fuel	Calculation
Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter	ASTM D4809	Fuel	Bomb Calorimeter
Karl Fischer Water	ASTM D6304	Oil	Karl Fischer Titrator
Lubricity by HFRR	ASTM D6079	Fuel	Compass PCS HFRR Unit
Metals by ICP	ASTM D5185 Mod	Any Fluid	ICP
MWF-Brix	IL-MWF-2011	Aqueous fluids & Metal working fluids	Refractometer





Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
MWF- Iron Chip Corrosion	IL-MWF-CICC	Metal working fluids	Wet Chemistry
MWF- Dirt by Filtration	IL-MWF -DIRT	Metal working fluids	Filtration
MWF- Free Oil	IL-MWF-Free oil	Metal working fluids	Wet Chemistry
MWF- pH & Alkalinity	IL-MWF- pH & ALK	Metal working fluids	pH Meter
MWF-Tramp Oil	IL-MWF-Tramp oil	Metal working fluids	Centrifuge
Nitrites	OCM - Nitrites	Coolant	Manual Titration
Particle Count, Laser	Laser PC 11500	Oil	APC Unit
Particulate Contamination	ASTM D5452 ASTM D6217	Fuel	Filtration
pH of Coolants	ASTM D1287	Coolant	pH Meter
Pour Point	ASTM D97	Fuel	Pour Point Unit
Refrigerants, Testing of Low & High Pressure	II-Refrig	Refrigerant	KF Titration
Reserve Alkalinity	ASTM D1121	Coolant	Manual Titration
Sulfated Ash	ASTM D874	Oil, Fuel	Hot Plate/ Open Flame
Sulfur in Petroleum by XRF Spectrometer	ASTM D4294	Oil, Fuel	XRF Spectrometer
Sulfur, Total by UV Fluorescence	ASTM D5453	Fuel	UV Fluorescence
Total Hardness (CaCO3)	IL-MWF-2011	MWF	ICP
Varnish by Quantitative Spectrophotometric Analysis (QSA)	IL 2005-QSA	Oil	Spectrophotometer
Viscosity	ASTM D445	Oil, Fuel	Viscometer
Viscosity	ASTM D7279 Mod	Oil, Fuel	Houillon Viscometer
Viscosity Index	ASTM D2270	Oil	Calculation
Viscosity, SUS Calculated	ASTM D2161	Any Fluid	Calculation
Water and Sediment	ASTM D2709 ASTM D1796 Mod	Oil, Fuel	Centrifuge
Water Percent Estimate by Hotplate	OCM – Water by Hotplate	Oil	Hot Plate



Chemical

Specific Tests and/or	Specification, Standard,	Items, Materials or	Key Equipment or
Properties Measured	Method, or Test Technique	Product Tested	Technology
Additives Elements and Wear Metals Contaminants	ASTM D6130 Mod	Coolant	ICP

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2264.03



