



SCOPE OF ACCREDITATION TO ISO/IEC 17043:2010

ASTM INTERNATIONAL
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West Conshohocken, PA 19428
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PROFICIENCY TESTING PROVIDER

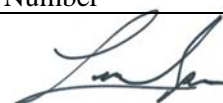
Valid To: May 31, 2021

Certificate Number: 4209.01

In recognition of the successful completion of the A2LA evaluation process, this proficiency testing provider has been found to meet ISO/IEC 17043:2010, "Conformity Assessment-General Requirements for Proficiency Testing". Accreditation is granted to this provider to provide proficiency testing samples in the following programs:

<u>PROGRAM</u>	<u>ANALYTES MEASURED¹</u>
<u>Automatic Transmission Fluid</u>	
D974	Acidity
D664	Acid Number - Total
D4951, D5185	Additive Elements
D287	API Gravity
D2896, D4739	Base Number
D1500	Color
D130	Copper Corrosion
D1298, D4052	Density
D93, D92	Flash Point
D665	Rust Prevention
D445	Viscosity Kinematic
D2983	Viscosity, Low Temperature
<u>Base Oil</u>	
D664, D974	Acid Number
D611	Aniline Point
D482	Ash Content
D2007	Clay-Gel Absorption
D1500, D6045	Color
D130	Copper Strip
D1298, D4052	Density
D2887	Distillation
D5800	Evaporation Loss
D92, D93	Flash Point
D5762	Nitrogen by Boat Inlet

<u>PROGRAM</u>	<u>ANALYTES MEASURED¹</u>
D97, D5950, D5985, D5949	Pour Point
D1218	Refractive Index
D2622, D4294	Sulfur
D5293	Viscosity/Cold Crank Simulator
D445, D2270, D7042	Viscosity, Kinematic
D6417	Volatility
D6304, D1401	Water
<u>Biodiesel</u>	
D664, D974	Acidity
D482, D874	Ash
D4530, D189	Carbon Residue
D2500, D5771, D5773, D3117	Cloud Point
D6371	Cold Filter Plugging Point
D130	Corrosion
D1298, D4052	Density
D1160	Distillation
EN14538	FAME: Ca, Mg, Na, K by ICP
EN14103	FAME: Linolenic Methyl Ester
EN14110	FAME: Methanol Content
EN14112	FAME: Oxidation Stability
EN15751	FAME: Oxidation Stability
D7501	Filtration, Cold Soak (CSFT)
D93, D3828	Flash Point
D6584	Glycerin
D6079, D7688	Lubricity
D7321	Particulate Contamination
D4951	Phosphorus
D6428, D5453, D1266, D7039	Sulfur
D6468	Thermal Stability
D445, D2270, D7042	Viscosity, Kinematic
D2709	Water and Sediment
D6304	Water by KF
<u>Engine Oil Lubricants</u>	
D6278	Shear Stability
D664, D974	Acid Number
D4628, D4927, D4951, D5185, D6443, D6481	Additive Elements
D482	Ash
D874	Ash Sulfated
D2896, D4739	Base Number
D1298, D4052	Density
D5800	Evaporating Loss
D92, D93	Flash Point
D5481	HTHS Viscosity
D3228, D4629, D5291, D5762	Nitrogen
D6749, D97, D5949, D5950, D6892	Pour Point
D94	Saponification Number



<u>PROGRAM</u>	<u>ANALYTES MEASURED¹</u>
D129, D5453	Sulfur Content
D445, D7042, D7279	Viscosity, Kinematic
D4741	Viscosity, Tapered Plug
D4683	Viscosity, Tapered Bearing
D4684, D5133, D5293	Viscosity, Low Temperature
D6417	Volatility
D6304	Water
D1744	Water Content
D1500, D6045 (D1500)	Color
D6375	Evaporation Loss by TGA Noack Method
D7346	Pour Point, No Flow Point
<u>Fuel Ethanol</u>	
D1613, D7795	Acidity
D1688 per D4806	Copper Content
D5501	Ethanol/Methanol
D7319, D7328	Inorganic Chloride
D6423	pH
D381	Solvent Washed Gum
D4052	Specific Gravity
D7319, D7328	Sulfate Content
D5453, D7039	Sulfur
E203, E1064	Water
<u>Gear Oil</u>	
D4951, D5185	Additive Elements
D287	API Gravity
D874	Ash Sulfated
D130	Copper Corrosion
D92, D93	Flash Point
D97, D5950	Pour Point
D4294	Sulfur Content
D445	Viscosity, Kinematic
D2983	Viscosity, Low Temperature
<u>Hydraulic Fluids & Oils</u>	
D1121	Acid Number
D130	Cu+ Corrosion
D1401	Water Separability
D2070	Thermal Stability
D2272	Oxidation Stability
D2619	Stability, Hydrolytic
D2983	Viscosity, Low Temperature
D3427	Air Release
D445	Viscosity, Kinematic
D5185, D4951, D6130	Elements by ICP
D664, D974	Acid Number
D665	Rust Prevention



<u>PROGRAM</u>	<u>ANALYTES MEASURED¹</u>
D892	Foaming Characteristics
D92	Flash Point
D97, D5950, D6749	Pour Point
E70	pH @ 25oC
D2711	Demulsibility
D92, D93	Flash Point
D2783	4-Ball EP
D4172	4-Ball Wear
D3233	Pin and V-block
D97	Pour Point
D665	Rust Preventions
D2782	Timken EP
D445	Viscosity, Kinematic
D1401	Water Separability
D130	Cu+ Corrosion
<u>Lubricating Grease</u>	
D217, D1403	Cone Penetration (¼ & ½ scale)
D4048	Copper Corrosion
D1743	Corrosion Preventative Properties
D566, D2265	Dropping Point (Wide temperature range)
D6138	Dynamic Rust Test (Emcor)
D972	Evaporation Loss
D2596	Extreme Pressure Prop. (Timken, 4-Ball)
D4170	Fretting Wear Protection
D3527	High Temp Life Performance
D4290	Leakage Tendencies
D2509	Load Carry Capacity
D1742, D6184	Oil Separations
D5483	Oxidation Induction Time
D942	Oxidation Stability
D1831	Roll Stability
D4049	Water Spray
D1264	Water Washout
D2266, D4170	Wear, 4-Ball
<u>Motor Gasoline</u>	
D3606, D4053, D5580, D5769	Benzene, Toluene, C9, Aromatics
D130	Copper Corrosion
D1298, D4052	Density
D86, D7096	Distillation
D381	Gum
D1319, D6839	Hydrocarbon Type
D3237	Lead Content
D3227	Mercaptan Sulfur
D6550	Olefin Content
D525	Oxidation Stability
D5599, D5845, D4815	Oxygenates



<u>PROGRAM</u>	<u>ANALYTES MEASURED¹</u>
D3231	Phosphorus Content
D2622, D4294, D5453, D7039	Sulfur Content
D5188	Vapor/Liquid Ratio
D5191	Vapor Pressure
<u>Petroleum Wax</u>	
D156, D6045, D1500, D2008	Color
D938	Congealing Point
D1298, D4052	Density
D92	Flash Point
D87, D127	Melting Point
D1321	Needle Penetration @ 25 and 40°C
D721	Oil Content
D445	Viscosity, Kinematic @ 100°C
D1833	Odor
D3235	Solvent Extractables
<u>Reformulated Gasoline</u>	
D287	API Gravity
D3606, D5580, D5769	Benzene, Toulene, C ₉ Plus Aromatics
D1298, D4052	Density
D86	Distillation
D381	Gum
D1319	Hydrocarbon Type
D6550	Olefin Content
D4815, D5599, D5845	Oxygenates
D2622, D5453, D7039	Sulfur Content
D5188	Vapor/Liquid Ratio
D5191	Vapor Pressure

¹Assigned values and associated uncertainties determined via consensus values.





Accredited Proficiency Testing Provider

A2LA has accredited

ASTM INTERNATIONAL *West Conshohocken, PA*

This accreditation covers the specific proficiency testing schemes listed on the agreed upon Scope of Accreditation.

This provider is accredited in accordance with the recognized International Standard ISO/IEC 17043: 2010 *Conformity assessment - General requirements for proficiency testing*. This accreditation demonstrates technical competence for a defined scope and the operation of a quality management system.



Presented this 17th day of April 2017.

President and CEO
For the Accreditation Council
Certificate Number 4209.01
Valid to May 31, 2021

For the proficiency testing schemes to which this accreditation applies, please refer to the provider's Scope of Accreditation.