

# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

#### Savant Labs

4800 James Savage Road, Midland, MI 48642

(Hereinafter called the Organization) and hereby declares that Organization 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 (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

# Chemical and Mechanical Testing (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

President

Initial Accreditation Date:

Issue Date:

Expiration Date:

December 11, 2015

January 30, 2024

March 31, 2026

Accreditation No.:

Certificate No.:

84229

L24-82

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084 The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: <a href="www.pjlabs.com">www.pjlabs.com</a>



### Certificate of Accreditation: Supplement

**Savant Laboratory** 4800 James Savage Road, Midland, MI 48642 Contact Name: Mike Habitz Phone: 989-496-2301

Accreditation is granted to the facility to perform the following testing:

FLEX CODE	FIELD OF TEST	ITEMS, MATERIALS, OR PRODUCTS TESTED	COMPONENT, CHARACTERISTIC, PARAMETER TESTED	SPECIFICATION OR STANDARD METHOD	TECHNOLOGY OR TECHNIQUE USED
F1, F2	Chemical F	Engine Oils and	Kinematic	ASTM D445	Viscometer
		Lubricants		ASTM D2270	
F1, F2			Dynamic Viscosities	ASTM D4683	Viscometer
				ASTM D6616	
F1, F2				ASTM D5133	Viscometer
F1, F2				ASTM D2983	Viscometer
F1, F2				ASTM D5293	Viscometer
F1, F2			Sulfur Analysis	ASTM D5453	UV Fluorescence
F1, F2			Multielement Determination of Used and Unused Lubricating Oils and Base Oils	ASTM D5185 ASTM D4951	ICPAES
F1, F2			Boiling Point Distribution and Estimation of Engine Oil Volatility	ASTM D6417 ASTM D2887 EXT	GC
F1, F2			Oxidation, Soot (Phosphate and Sulfate), and Nitration	ASTM E2412: ASTM D7414, ASTM D7415, ASTM D7412, ASTM D7844, ASTM D7624	FTIR
F1, F2			Nitrogen	ASTM D5762 ASTM D4629	Chemiluminescence
F1, F2			Elastomer properties	ASTM D7216 CEC L-112	Test chamber
F1, F2			Base Number	ASTM D2896 ASTM D4739	Titration
F1, F2			Water by Karl Fischer	ASTM D6304	Karl Fischer Titration
F1, F2			Acid Number	ASTM D664	Titration
F1, F2		Engine Oils	Oxidation Deposits	ASTM D7097	MHT
F1, F2			Oxidation Deposits	ASTM D6335	TEOST
F1, F2			Oxidation Deposits	ASTM D8447	TEOST TURBO
F1, F2		Steam Turbine Oils	Oxidation Stability	ASTM D2272	RPVOT Apparatus
F1, F4		Fluid Lubricants	Viscosity Loss	CEC-L-45-99 modified	KRL
F1, F2		Oils and Lubricants	Oxidation Stability of Lubricating Oils used in Automotive Transmissions	CEC L-48	Test Apparatus



Issue: 01/2024



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F1, F2	Chemical <sup>F</sup>	Oils and Lubricants	Low Temperature Pumpability	CEC L-105	Test Apparatus
F1, F2			Oxidation Test for Engine Oils Operating in the Presence of Biodiesel Fuel	CEC L-109	Test Apparatus
F1, F2			Wear preventive characteristics of lubricating fluid	ASTM D4172 ASTM D2266	Wear Tester
F1, F2			Four Ball Extreme Pressure	ASTM D2783 ASTM D2596	Wear Tester
F1, F2	Mechanical F	Engine Oils and	Flash and Fire Point	ASTM D92	Open Cup Tester
F1, F2		Lubricants	Flash Point	ASTM D93	Closed Cup Tester
F1, F2			Foam Sequence I-III	ASTM D892	Foaming Bath
F1, F2			Foam Sequence IV	ASTM D6082	Foaming Bath
F1, F2			Pour Point	ASTM D97	Bath
F1, F2			Sulfated Ash	ASTM D874	Muffle Furnace
F1, F2			Evaporation Loss of Lubricating Oils	ASTM D5800	Noack Evaporative Tester
F1, F2			Density	SAVLAB Density	Pycnometer
F1, F2			Kurt Orbahn 30 Pass 90 Pass	ASTM D6278 ASTM D7109	Testing Apparatus
F1, F2			Dynamic Viscosities	ASTM D4684 ASTM D3829	Viscometer
F1, F2			Fuel Dilution	ASTM D3525 ASTM D3524	GC
F1, F2		Corrosiveness in Diesel Engine Oil at 135 °C	Tarnish Rating and Concentrations of Copper and Lead and any changes in metal concentrations	ASTM D6594	Test Apparatus
F1, F2		Corrosiveness to Copper (Oils and Greases)	Level of tarnish and corrosion	ASTM D130 ASTM D4048	Test Apparatus

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location.