



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## *Certificate of Accreditation*

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

***Herguth Laboratories, Inc.  
101 Corporate Place  
Vallejo, CA 94590***

*(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:*

***ISO/IEC 17025:2005***

*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 January 2009):*

***Chemical Testing of Petroleum Products  
(As detailed in the supplement)***

*Such testing and/or calibration services shall only be offered at or from the address given above. 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:

Tracy Szerszen  
President/Operations Manager

*The validity of this certificate is mandated through ongoing surveillance.*

Perry Johnson Laboratory  
Accreditation, Inc. (PJLA)  
26555 Evergreen, Suite 1325  
Southfield, Michigan 48076

*Initial Accreditation Date:*

April 28, 2010

*Accreditation No.:*

66166

*Issue Date:*

April 28, 2010

*Certificate No.:*

L10-54

*Expiration Date:*

April 27, 2012

*Page No.:*

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# Certificate of Accreditation: Supplement

**Herguth Laboratories, Inc.**  
 101 Corporate Place  
 Vallejo, CA 94590

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

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Chemical	Fuels	Distillation of Petroleum Products	ASTM D86 Herzog Automated Distillation Unit
		Heat of Combustion	ASTM D240 Parr Bomb Calorimeter
		Cetane Index	ASTM D976 Calculation
		Oxidation Stability of Fuel Oil	ASTM D2274 Apparatus
		Particulates by Filtration	ASTM D2276
		Sediment and Water	ASTM D2709 Centrifuge
		Free Water and Particulates	ASTM D4176
		Cetane Index (Calculated)	ASTM D4737 Calculation
		Heat of Combustion - Precision Method	ASTM D4809 Parr Bomb Calorimeter
		Particulates by Filtration	ASTM D5452
		High Frequency Reciprocating Rig	ASTM D6079 HFRR Instrument
		Particulates by Filtration	D6217
		Particulates by Filtration	HL-0102
		Bio-diesel present by FTIR	HL-1141A FTIR
	Lube Oils	Cleveland Open Cup Flash Point Testing	ASTM D92 Herzog Automated Flash Point Manual Flash Point Apparatus
		Water by Distillation	ASTM D95
		Ash	ASTM D482 Muffle Furnace
		Ramsbottom Residue	ASTM D524
		Total Acid Number	ASTM D664 Automated Titration Unit
		Rust and Corrosion	ASTM D665 Rust Apparatus
		Sulfated Ash	ASTM D874 Muffle Furnace
		Foam Test	ASTM D892 Foam Apparatus



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Chemical	Lube Oils	Pentane/Toluene Insolubles	ASTM D893 Centrifuge
		Water Separability	ASTM D1401 Apparatus
		Rotating Pressure Vessel Oxidation Stability	ASTM D2272 Vessels and Apparatus
		Total Base Number	ASTM D2896 Automated Titration Unit
		Air Release Properties	ASTM D3427 Apparatus
		Fuel Dilution by GC	ASTM D3524 Varian GC
		Total Base Number	ASTM D4739 Automated Titration Unit
		Automatic Titration - TAN/TBN	HL-1118 Automated Titration Unit
		Direct Reading Ferrography	HL-1131 Predict DR-III
		Analytical Ferrography	HL-1132 Microscope
		Infrared Analysis (Integra)	HL-1140 FTIR
		Infrared Analysis (Omnic) - Scans	HL-1141 FTIR
	Grease	Cone Penetration of Grease - Full Scale	ASTM D217 Penetrometer, Cone and Attachments
		Cone Penetration of Grease - 1/2 & 1/4 Scale	ASTM D1403 Penetrometer, Cone and Attachments
		Dropping Point	ASTM D2265 Apparatus
	Fuels and Lube Oils	Pensky Martin closed Cup Flash Point	ASTM D93 Herzog Automated Flash Point Manual Flash Point Apparatus
		Pour Point	ASTM D97 Lawler Automated Cloud/Pour Point
		Copper Corrosion	ASTM D130
		Conradson Carbon Residue	ASTM D189



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Chemical	Fuels and Lube Oils	API Gravity	ASTM D287 Hydrometers
		Kinematic Viscosity	ASTM D445 Cannon Automated Viscometers
		Total Acid Number	ASTM D974
		API, Specific Gravity & Density	ASTM D1298 Hydrometers
		Color ASTM	ASTM D1500 Colorimeter
		Sediment and Water	ASTM D1796 Centrifuge
		Viscosity Index	ASTM D2270 Calculation
		Cloud Point	ASTM D2500 Lawler Automated Cloud/Pour Point
		Sulfur	ASTM D3120 Mitsubishi TOX-100 Microcoulometer
		Digital Densimeter	ASTM D4052 Anton Parr Digital Densimeter
		Sulfur by X-Ray Fluorescence	ASTM D4294 Horiba Sulfur Analyzer
		Wear Metals, Contaminants & Additives	ASMT D5185 ICP Optical Emission Spectroscopy
		Water by Karl Fisher Apparatus	ASTM D6304 KF Instruments
		Appearance	HL-1121
		Spectro-Chemical Analysis	HL-1158 ICP Optical Emission Spectroscopy
Particle Count by APC	HL-1185 Hiac Royko Automatic Particle Counters		