



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CONSUMERS ENERGY/LABORATORY SERVICES
135 West Trail Street
Jackson, MI 49201
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CHEMICAL

Valid To: July 31, 2026

Certificate Number: 1097.05

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following chemical tests:

Test Type/Technology:	Test Method:
Acid and Base Number of Petroleum Oil Products by Color Indicator Titration	ASTM D974
Analysis of Dissolved Gases in Electrical Insulating Liquids by Gas Chromatography (Carbon Dioxide, Acetylene, Ethylene, Ethane, Hydrogen, Oxygen, Nitrogen, Methane, Carbon Monoxide)	ASTM D3612
Interfacial Tension of Oil Against Water by the Ring Method	ASTM D971
Sampling of Electrical Insulating Liquids	ASTM D923
Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)	ASTM D1500
Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids Using Disk Electrodes	ASTM D877
Standard Test Method for Dielectric Breakdown Voltage of Insulating Oils of Petroleum Origin Using VDE Electrodes	ASTM D1816
Water Content in Electrical Insulating Liquids by Coulometric Karl-Fischer Titration	ASTM D1533



Accredited Laboratory

A2LA has accredited

CONSUMERS ENERGY/LABORATORY SERVICES

Jackson, MI

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. 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).



Presented this 9th day of August 2024.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1097.05
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.