



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CONSUMERS ENERGY/LABORATORY SERVICES

Laboratory Services  
135 West Trail Street  
Jackson, MI 49201  
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CHEMICAL

Valid To: July 31, 2020

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:

Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids Using Disk Electrodes	ASTM D877
Sampling of Electrical Insulating Liquids	ASTM D923
Interfacial Tension of Oil Against Water by the Ring Method	ASTM D971
Acid and Base Number of Petroleum Oil Products by Color Indicator Titration	ASTM D974
Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)	ASTM D1500
Water Content in Electrical Insulating Liquids by Coulometric Karl-Fischer Titration	ASTM D1533
Standard Test Method for Dielectric Breakdown Voltage of Insulating Oils of Petroleum Origin Using VDE Electrodes	ASTM D1816
Analysis of Dissolved Gases in Electrical Insulating Liquids by Gas Chromatography	ASTM D3612
Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography	ASTM D4059
Asbestos Identification in Building Materials by Polarized Light Microscopy	NIOSH 9002
Asbestos Fiber Count by Phase Contrast Microscopy	OSHA 160



## *Accredited Laboratory*

A2LA has accredited

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*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 8<sup>th</sup> day of August 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 1097.05  
Valid to July 31, 2020

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