



# CERTIFICATE OF ACCREDITATION

## ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**Energy Assurance, LLC**  
**5202 Belle Wood Court, Suite 106**  
**Buford, GA 30518**

has been assessed by ANAB  
and meets the requirements of international standard

**ISO/IEC 17025:2005**

while demonstrating technical competence in the field(s) of

**TESTING**

Refer to the accompanying Scope(s) of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-1601

Certificate Number

ANAB Approval

Certificate Valid To: 01/08/2018

Version No. 002 Issued: 10/19/2015



This laboratory 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 (*refer to joint ISO-ILAC-IAF Communiqué dated January 2009*).



# ANSI-ASQ National Accreditation Board

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

### Energy Assurance, LLC.

5202 Belle Wood Court, Suite 106, Buford, GA 30518  
 Cindy Millsaps Phone: 770-294-8395  
 cindymillsaps@energy-assurance.com www.energy-assurance.com

### TESTING

Valid to: January 8, 2018

Certificate Number: AT - 1601

#### I. Electrical

ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*KEY EQUIPMENT OR TECHNOLOGY
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	Preconditioning (Battery cycling)	UN Manual of Tests, UN 38.3 and IEC 62281	Preconditioning of product
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T1) Altitude Simulation (Low Pressure)	UN Manual of Tests, UN 38.3 and IEC 62281 and IEC 62133/UL62133	Vacuum Chamber
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T2) Thermal Test	UN Manual of Tests, UN 38.3 and IEC 62281	Temperature Chamber Data Logger
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T3) Vibration	UN Manual of Tests, UN 38.3 and IEC 62281; UL 62133 and IEC 62133	Weight Voltage Vibration / Slip Table
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T4) Shock (Mechanical Shock)	UN Manual of Tests, UN 38.3 and IEC 62281; UL 62133 and IEC 62133	Weight Voltage Mechanical Shock
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T5) Short Circuit	UN Manual of Tests, UN 38.3 and IEC 62281	Temperature Chamber
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T6) Impact/Crush	UN Manual of Tests, UN 38.3 and IEC 62281; UL 62133 and IEC 62133	Weight Test Chamber
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T7) Overcharge	UN Manual of Tests, UN 38.3 and IEC 62281	Power Supply Test chamber

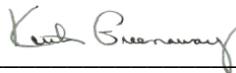


<b>ITEMS, MATERIALS OR PRODUCTS TESTED</b>	<b>SPECIFIC TESTS OR PROPERTIES MEASURED</b>	<b>SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED</b>	<b>*KEY EQUIPMENT OR TECHNOLOGY</b>
Solid Cathode Primary Lithium and Secondary Li Ion Cells and Batteries	(T8) Forced Discharge	UN Manual of Tests, UN 38.3 and IEC 62281	Test chamber
Secondary Li Ion Cells and Batteries	Continuous Charge (Low Rate Charging)	IEC 62133/UL 62133	Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Thermal Abuse	IEC 62133/UL 62133	Oven
Secondary Li Ion Cells and Batteries	Molded Case Stress	IEC 62133/UL 62133	Oven or Temperature Chamber
Secondary Li Ion Cells and Batteries	Temperature Cycling	IEC 62133/UL 62133	Temperature Chamber
Secondary Li Ion Cells and Batteries	External Short Circuit	IEC 62133/UL 62133	Temperature Chamber
Secondary Li Ion Cells and Batteries	Free Fall	IEC 62133/UL 62133	Ruler and drop surfaces
Secondary Li Ion Cells and Batteries	Overcharge of Nickel Systems	IEC 62133/UL 62133	Power Supply and Test Chamber
Secondary Li Ion Cells and Batteries	Overcharge for Lithium Systems	IEC 62133/UL 62133	Power Supply and Test Chamber
Secondary Li Ion Cells and Batteries	Forced Discharge	IEC 62133/UL 62133	Test Chamber
Secondary Li Ion Cells and Batteries	Cell Protection Against a High Charging Rate (Lithium Systems only)	IEC 62133	Power Supply and Test Chamber
Secondary Li Ion Cells and Batteries	Charge (Procedure 2)	IEC 62133/UL 62133	Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Incorrect Installation	IEC 62133/UL 62133	Test Chamber
Secondary Li Ion Cells and Batteries	Thermal Abuse	IEC 62133/UL 62133	Oven

ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*KEY EQUIPMENT OR TECHNOLOGY
Secondary Li Ion Cells and Batteries	Insulation and Wiring	IEC 62133/UL 62133	Insulation Resistance Tester
Secondary Li Ion Cells and Batteries	Discharge performance at 20 °C, and -20 °C	IEC 61960	Temperature Chamber and Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	High Rate Discharge Performance at 20 °C	IEC 61960	Temperature Chamber and Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Charge (capacity) Retention and Recovery	IEC 61960	Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Charge (capacity) Recovery After Long Term Storage	IEC 61960	Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Endurance in Cycles	IEC 61960	Battery Cycling Equipment
Secondary Li Ion Cells and Batteries	Battery Internal Resistance	IEC 61960	Impedance Meter
Portable Primary Cells and Batteries with Aqueous Electrolyte	Cell and Battery Application Testing	ANSI C18.1M, Part 1:2015 and IEC 60086-2:2011	Battery Cycling Equipment

**Notes:**

1. \* = As Applicable
2. This scope is formatted as part of a single document including the Certificate of Accreditation No. AT-1601



Vice President