



# **Battery Innovation Center Qualification of 2<sup>nd</sup> Life Battery Materials**

*“Leading the Charge for Innovation”*





>11 years in operation  
TRL 0 to 3

Newberry, Indiana  
adjacent to Crane NSWC

The Emerging Manufacturing  
Collaboration Center  
Technology

TRL 4 to 6  
Indianapolis, Indiana



## Core Capabilities

- Advanced Cell Manufacturing
  - Materials processing to electrochemical testing
  - R&D, Applied Services
- Testing, Evaluation & Certification
  - Cells, Modules, Small/Large Packs & Containerized
  - Engineering Review
  - AC/DC Microgrid and Cybersecurity
- Technical Consulting
- Accredited Training & Short Courses

## Distinguishing Features



Catalyze technologies to streamline, shorten innovation-to-commercialization cycle and cut development costs



Do not hold patent rights



Collaborate & jointly develop IP



IP-secure, U.S. ITAR facility generating reliable data using leading techniques and equipment

- Discharging, Dismantling, & Characterization of Packs, Modules and Cells
- Destructive and Non-destructive Advanced Electrochemical Characterization & Modeling of Packs, Modules and Cells
- SEM-EDS, Particle Size Analysis, X-ray Diffraction, SAXS & WAXS, EDXRF, ICP-OES, ICP-XRF, NMR, GC-MS, TGA & DSC of powders and electrolyte components
- Slurry Mixing & Characterization and Coating of Recycled Materials
- Coin, Pouch and Cylindrical Cell Preparation and Testing

## ○ Yellowstone: Lamar Buffalo Ranch

○ 208 recovered Camry Hybrid NMH packs provide power for location without access to electrical grid

○ Battery modules graded at the BIC

○ 85kWh of storage



**More Information on How to Work with the BIC**  
**<https://bicindiana.com>**

**For More Information on Qualifying 2<sup>nd</sup> Life Battery**  
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