# HAMM INSTITUTE LABORATORY



At the Hamm Institute for American Energy, we are dedicated to creating solutions that advance energy security for all humanity. As the most high-tech facility in Oklahoma for applied research, our lab has tools to support groundbreaking work in areas such as geothermal and carbon capture. Our flexible laboratory and configurable well bores provide a unique space to develop free-market energy solutions and test new technologies.

## **CUTTING-EDGE RESEARCH FACILITIES:**

- + Technology Validation: Uniquely suited to test and validate new technologies, supporting scale-up from Early Technology Readiness Level to customer-ready.
- + Flow and Pressure Equipment: Modular design allows for quick and flexible creation of custom flow loops.
- + Outdoor Lab Space: For large equipment testing with available utilities.

#### + Test Wells:

- + 5000 psi Wellhead: Multi-section wellhead allows for uniquely configurable well bores.
- + 400 ft Well: 365 ft available depth for geothermal testing. 450°F (232°C) 9 5/8 heated casing, 750 kW electrical heat, 5000 psi wellhead.
- + 65 ft Well: 20-inch cased open hole.
- + Support Equipment: 30-ton crane, power tongs for threaded casing joints, 750kW electrical service.

#### + Pressure Vessel:

- + 650°F (343°C) at 5000 psi.
- + 450°F (232°C) at 7000 psi.
- + 6.5" ID x 42" length.
- + Multizonal temperature control for accurate heating.
- + Control for liquid and gas injection, pressure, and temperature.
- + Accommodate any angle between horizontal and vertical.

# CREATING **ENERGY** SOLUTIONS

#### OTHER LAB & OFFICE SPACE

- + Flexible, plug-and-play laboratory.
- + Large equipment manipulation in controlled environments.
- + Ideal for advanced environmental monitoring research.
- + Encourages broader engagement and inspiration by opening spaces to more researchers and engineers.



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