



**REQUEST FOR PROPOSALS**  
**MOWRY SHALE PROJECT PHASE II**  
**ISSUED BY THE UW SCHOOL OF ENERGY RESOURCES**

Proposals are due June 15, 2023  
Selected projects will be notified by  
July 1, 2023

*The School of Energy Resources (SER) is focused on energy-driven economic development for Wyoming. Wyoming produces more than 80 million barrels of crude oil and nearly 1.4 trillion cubic feet of natural gas. The Mowry Shale is the largest hydrocarbon source for Lower Cretaceous petroleum systems in the Powder River Basin (PRB). In 2009 the USGS estimated that 116–307 million barrels of undiscovered oil and gas reserves lie in the Mowry Petroleum System in the PRB. However, the Mowry Petroleum System has only rarely been a direct focus of unconventional oil and gas exploration and production. The Mowry is geochemically and geomechanically complex which has led to hydraulic fracture failures, low energy drives, and variable oil and water saturations. Increased understanding of the reservoir should optimize production and improve performance.*

*During the Summer of 2022, the School of Energy Resources selected seven Phase I projects to increase the understanding of the Mowry Shale, with the aim of improving production and increasing reserves. To build upon the initial work SER is seeking new proposals in two areas of interest (AOI). The first Area of Interest is to recruit additional projects in disciplines not covered in the first round of funding. Area of Interest 2 seeks to continue and expand the existing projects.*

### **TOPICS OF INTEREST:**

High priority projects will be selected in two areas of interest:

- **AOI 1: Phase I (Seed Funding) Fundamental Shale Studies:** Fundamental experimental, modeling, and mapping studies in the areas of drilling, completions and operations (including fluid compatibility), facies characterization, total petroleum systems, faults and fractures, and geophysical characterization necessary for improving production or performance in the Mowry Shale.
- **AOI 2: Phase II Fundamental Shale Studies:** Mowry Project Phase II is open to projects funded in the previous round of funding. Phase II projects should build upon the work completed in Phase I. Phase II proposals are encouraged to collaborate and identify synergies between existing projects and propose a clear plan for how the research can improve exploration and production within the Mowry Shale.

### **HOW TO APPLY:**

Submit a 3 page (max) proposal that includes:

- Principal Investigator, college/department affiliation, and expertise
- Description of proposed research
- Explanation of how the research will grow or diversify Wyoming's energy sector
- Project timeline
- How funds will be spent
- Email the proposal and questions to Scott Quillinan, Sr. Director of Research ([scottyq@uwyo.edu](mailto:scottyq@uwyo.edu)), with the subject "Mowry Shale Proposal 2.0"

## TIMELINE:

- Proposals are due June 15, 2023
- Selected projects will be notified by July 1, 2023
- Project duration:
  - AOI 1 September 1, 2023 to August 30, 2025
  - AOI 2 September 1, 2023 to August 30, 2026

## EXPECTED DELIVERABLES:

- Quarterly progress reports (1 page)
- Presentation and project progress and status and submittal of presentation file (pdf. Or ppt.) by December 15 of each year of the project
- Final report by October 30, 2025 (AOI 1) or October 30, 2026 (AOI 2) (10 pages or less)

## FUNDING OPPORTUNITY:

- **Anticipated award size:**
  - AOI 1: \$50,000 to \$100,000
  - AOI 2: \$50,000 to \$250,000
- **Funds can be used for research purposes, including**
  - Graduate student support
  - Undergraduate student support
  - Research equipment, consumables, and other needs for the proposed research
  - Faculty summer salary (maximum one month per fiscal year)
  - Travel
- **Anticipated number of awards**
  - AOI 1: 1-6 awards subject to the availability of funds
  - AOI 2: 1-6 awards subject to the availability of funds