

Alpha Enriched Air Enhanced Oil Recovery, Carbon Sequestration and Hydrogen Production Pilot Project

Applicant: ATR Partners I LLC
Project Manager: Principle Petroleum LLC

The Opportunity: Wyoming is an energy rich state which garners significant revenue from energy production. The state is also home to numerous oil & gas fields where billions of barrels of reserves remain stranded due to natural declining reservoirs and a lack of feasible enhanced oil recovery alternatives. As a result, the State of Wyoming, and other stakeholders are foregoing significant reserves and the corresponding revenue. Additionally, while fossil fuels will play a meaningful role in Wyoming's energy future, the state is facing the need to develop other long-term, clean, and sustainable energy sources. In summary, Wyoming faces multiple challenges including: 1) maximizing its legacy oil & gas resources while, 2) capturing and sequestering greenhouse gases and 3) preparing for the new future of energy.

Utilizing Enriched Air for EOR: Traditionally, in-situ combustion using atmospheric air has been used for tertiary oil recovery, but its effectiveness is limited by the high nitrogen content. Enriched air offers a more efficient alternative, but its adoption has been hindered by high costs. Recent advancements in air separation technology have made enriched air injection economically viable, unlocking a significant opportunity for EOR in Wyoming's oil fields.

Project Team: Since 2013, Principle has stood as a distinguished operator in Wyoming's oil and gas industry. With a commitment to excellence, innovation, and responsible resource management, Principle has established a strong presence in the



state, earning a reputation for operational excellence and environmental stewardship. Principle currently operates multiple fields throughout Wyoming where it is focused on increasing production through efficient resource management practices, developmental drilling, and secondary & tertiary (enriched air) recovery projects.

The Alpha Pilot Project: ATR's plan involves installing air enrichment equipment, initiating injection, and launching a pilot program at the Alpha Field. The project aims to recover an additional 4.8 million barrels of oil, extending the field's life and significantly increasing production rates. Moreover, the project is expected to capture and sequester greenhouse gases and produce hydrogen for clean energy generation.

Matching Fund Request: To execute the Alpha Pilot Project, ATR is seeking \$9.85 million in Energy Matching Funds from the State of Wyoming.

ATR Funding \$9,850,000

Requested EMF Funding \$9,850,000

Total Project Cost \$19,700,000

Public Benefit: The Alpha Pilot Project promises numerous benefits for Campbell County and the State of Wyoming, including enhanced oil production, greenhouse gas mitigation, low-cost hydrogen production, increased tax revenues, job creation, and field revitalization. Moreover, ATR expects the Alpha Pilot Project to set a precedent for similar initiatives across Wyoming.