CUSP Iron Mountain Subsurface Characterization: A CUSP Focused Project Cuse

Decarbonizing the industrial sector is critical for meeting climate goals, with this study focusing on iron processing via direct reduced iron (DRI) with carbon capture and storage (CCS). Conducted under the auspices of the Carbon Utilization and Storage Partnership (CUSP), this case study evaluates the potential for geological carbon storage near a proposed DRI facility in southern Utah. Key objectives include:

1. Comprehensive site characterization and storage capacity analysis, assessing risks and economic options for CCS.

2.2. Developing a detailed plan for drilling Approx extendraphic Westianid condictions Gravity surveying and of seising survey.





formatting n shallow surface extent (aeromag) 3 = "deeper" density control (gravity) from aeromag Gravity technical work c/o Christian Hardwick, Kayla Smith, Will Hurlbut, & Austin Jensen (UGS)

estimate range: ~10-15% (6,580'-6,590' MD)

5023

Energy & Geoscience Institute



CarbonSAFE Phase II: Storage Complex Feasibility Basin and Range Southwest Utah



The CUSP Iron Mountain Focused Project directly led to the submission of a CarbonSAFE Phase II submission under DE-FOA-0002711.

Prime Recipient

Energy and Geoscience Institute at the University of Utah

Funding

Requested DOE funding: \$7.91 million Applicant Cost-share: \$2.74 million Total Project budget: \$10.66 million

Potential Project Description

The CarbonSAFE Phase II project aims to establish the feasibility of a commercial-scale CO₂ geologic sequestration complex in southwestern Utah's Basin and Range province. The goal is to store over 50 million tons of CO₂ from Fervo Energy's Red Rock DAC Hub and Utah Iron's new DRI facility. The project will characterize four storage sites, acquire and analyze 2D and 3D seismic data, and gather