

Cement & Lime Decarbonization Workshop – Session 1 Mitchell – Current Work

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MITCHELL CEMENT PLANT – MITCHELL, INDIANA



Why Mitchell?

- New plant w/7,000 mt/day clinker production
- 2M mt CO₂ at 95% capture rate
- Illinois Basin CO₂ storage potential
- Large property holding
- Proven capable workforce
- Local, state, and federal support
- Community construction “awareness”



DOE ASSISTANCE CCUS PROJECTS – MITCHELL CEMENT PLANT

DOE Office of Fossil Energy Carbon and Management (FECM)

DE-FE003222 FEED Studies for Carbon Capture Systems at Industrial Facilities

- We received a DOE award letter on 8/26/22. Currently in contract negotiations. Total \$4.8M, DOE \$3.7, Cost share \$1.1M
- 18 mo FEED study for amine solvent MHIA KS -21™ carbon capture technology
- Prime = Heidelberg Materials, Technology = MHIA, Engineer = S&L,

DE-FE0032268 CarbonSAFE Phase II – Storage Complex Feasibility

- ISGS received a DOE award letter on 1/27/23. ISGS as prime and Heidelberg “host” to install a 7,250’ boring/well at Mitchell Total \$11.1M, DOE funding \$9M, ISGS \$.6M, Heidelberg Materials \$1.5M. Currently in contract negotiations
- Pre-contract approval to conduct 2D Seismic. Completed over 50 miles in June

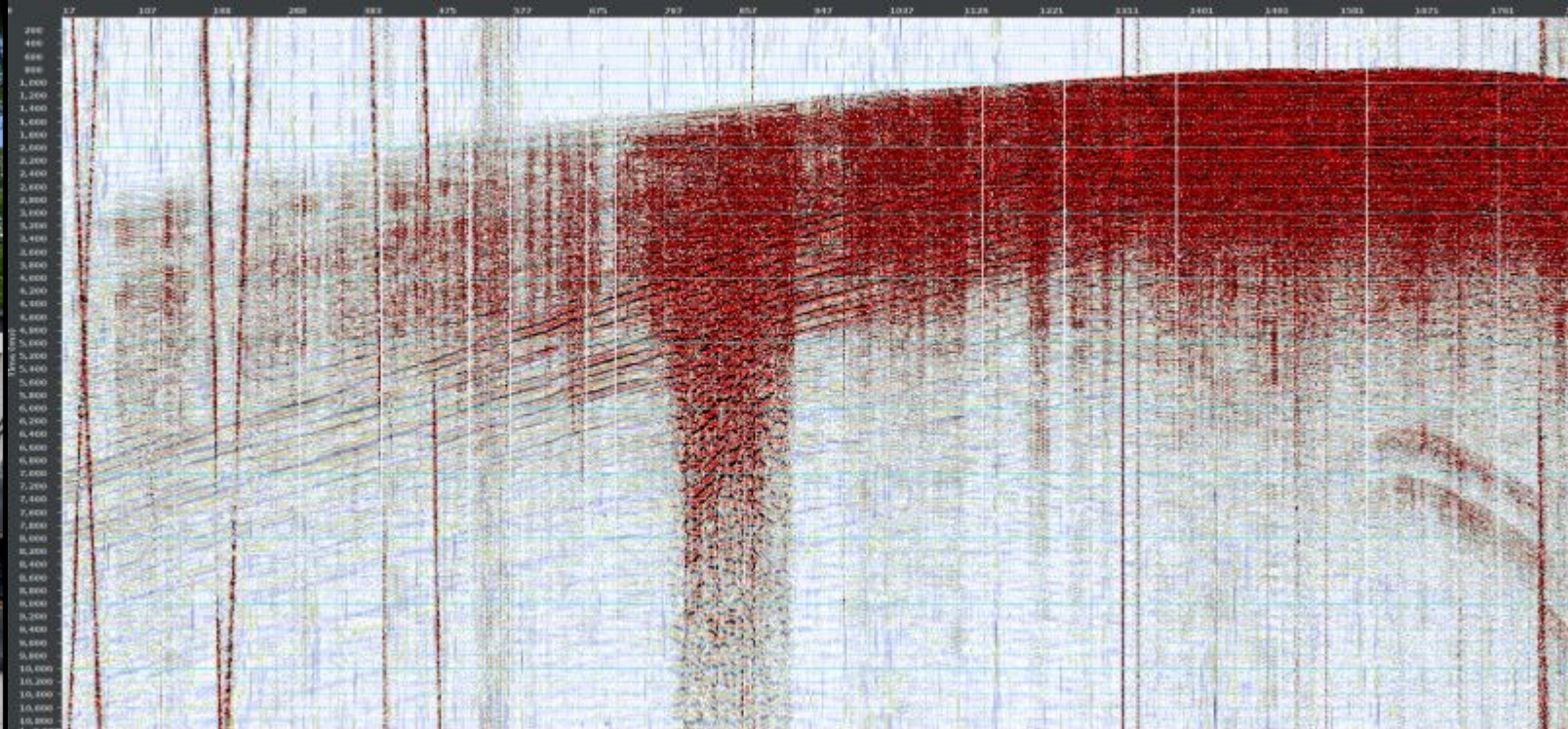
DOE Office of Clean Energy Demonstrations (OCED)

DE-CD0000009 Demonstration Projects for Integrated Carbon Capture, Transport and Storage Systems

- We received DOE award letter on 5/5/2023. Currently in contract negotiations. Total \$10M for Phase I, DOE \$5M, Cost share \$5M. Integrated FEED studies for amine solvent MHIA KS -21™ + transportation, storage, and Class VI permitting (Phase I)
- Prime = Heidelberg Materials, Technology = MHIA, Engineer = S&L, Constructor = Kiewit, Storage Characterization/Class VI Permitting = ISGS, Storage Site Development = Baker Hughes, Community Benefits/Environmental Justice = GTI Energy



2D SEISMIC DATA COLLECTION – 2 WEEKS IN JUNE, OVER 50 MILES



- Bonus data collected during a quarry blast of over 41,000 lbs of explosives which produced more than 116 gigajoules of energy!
- 1,800 STRYDE receiver nodes deployed on over 7 miles of nearby roadways which collected some interesting results
- The data is currently being processed by EarthSignal



Thank You.

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