TEVERRA

DFISS: A Disruptive Tool for Direct Measurement of In-situ Stresses in Deep Wells

Company:

TEVERRA DFISS, a subsidiary of **TEVERRA LLC**, is developing a groundbreaking tool to directly measure in-situ stresses in deep wells, de-risking operations and saving the energy industry billions annually. TEVERRA, established in 2014, is dedicated to harnessing the Earth's resources for clean and reliable energy generation and storage. We serve the energy industry by offering innovative subsurface solutions, developing cutting-edge technologies, providing consulting services, and executing global projects to promote a sustainable low-carbon energy mix. Our track record includes the successful completion of numerous geothermal, CCS, and oil and gas projects worldwide.

Opportunity:

Despite several decades of subsurface operations in the energy industry, we still face **$15–20 billion of annual losses** caused by catastrophic failures of the borehole and undesired seismicity due to a lack of knowledge of the complex **in-situ stress state** of the subsurface. Current methods for measuring the stress state rely on indirect estimations from other properties measured with high uncertainties.

Solution:

Teverra is developing a unique downhole technology (**DFISS**) capable of directly and accurately measuring all components of in-situ stress and its orientation, enhancing efficiency, safety, and cost-effectiveness in subsurface operations such as drilling, stimulation, production and injection for the oil and gas, CCS and geothermal industries. This transformative tool:

- Provides accurate calibration data for geomechanical models reducing uncertainty
- Improves wellbore stability and drilling performance minimizing non-productive time and costs
- Mitigates the risk of induced seismicity which is environmentally a showstopper for many subsurface operations
- De-risks Enhanced Geothermal Systems (EGS) not facing the same challenges that shale gas is facing now
- Triples production in unconventional resources
- Minimizes the risk of undesired CO2 migration in carbon sequestration projects
- Saves billions of dollars to the industry annually

Technology Status:

A **design prototype** was developed with an NSF SBIR Phase I Grant of $250,000 received in 2022 to further the development of the tool. An additional NSF Phase II Application for $1M fund is currently pending.

Intellectual Property:

Patent application was filed in July, 30, 2021 under patent number **US-20230272712-A1** (PCT No. PCT/US21/44000). Applications were filed with the European Patent Office, Australian Intellectual Property Office, Canadian Patent Office, and the United States Patent and Trademark Office in January 17, 2023.

Product/Business:

We aspire to become the company that unlocks subsurface potentials by minimizing risks and maximizing profitability. Our product is a versatile tool designed to measure in-situ stresses during or after drilling, compatible with wireline, drill pipe, or coiled tubing, and adaptable to wells of any trajectory, location, or orientation.

Market:

With no direct competitors, DFISS addresses a massive global market spanning oil and gas, geothermal, CCS, mining, waste disposal, and energy storage. The Enhanced Geothermal Systems (EGS) market alone represents a significant growth opportunity. Estimated market value exceeds **$180 million annually**.

Commercialization Strategy:

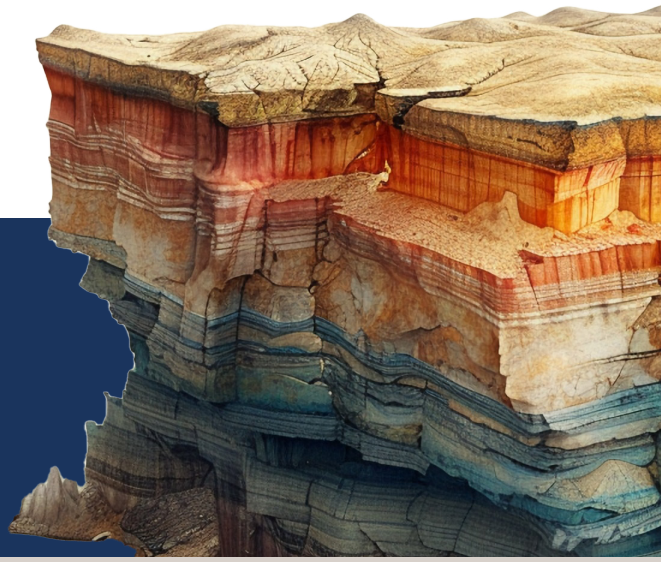
Our go-to-market plan includes **partnering with service providers** to deploy the tool and co-marketing with consulting services. We aim to field test prototypes by 2026, fully commercialize by 2027, and expand globally by 2030, culminating in a **strategic exit in 2031**.

Financial Projections:

We project revenues from sales will range from **$704,000 to $15,900,000 annually** from 2027 to 2030. Cumulative three-year revenues are expected to be over **$20 M** and cumulative net income over **$7 M**. With scaling investments, annual revenues are projected to reach **$25M** by 2032.

Team:

The company has **10 employees and 5 consultants**. We have partnered with **Sandia National Lab** for prototyping and field testing.



Ask:

We are raising **$3 million** in seed funding in exchange for **25% equity** to accelerate the development and commercialization of DFISS. Join us in revolutionizing subsurface energy operations, enhancing efficiency, safety, and profitability, and paving the way for a sustainable energy future.

TEVERRA

+1 404 916 9446
info@teverra.com
www.teverra.com

Locations:
Atlanta | Houston | Dallas | Denver