ShearFRAC®

Key Features and Benefits

+ **Early Seismic Event Risk Assessment**

Event forecasting facilitates data driven preventive measures, significantly reducing the risk of induced seismicity.

+ **Comprehensive Monitoring**

Continuous monitoring of active & offset wells ensures a detailed understanding of FDI and fluid migration pathways.

+ **Real-Time Event Forecasting**

Unique to current technologies, Richter Predictor provides real-time forecasting insights rather than postmortem analysis.

+ **Risk Mitigation**

Enhance safety protocols, protecting personnel and infrastructure by proactively managing and mitigating seismic risks.

+ **Operational Efficiency**

Optimize injection operations, reducing downtime and increasing efficiency.

+ **Regulatory Compliance Data**

Navigate stringent regulatory requirements with robust monitoring and data reporting capabilities.

+ **Machine Learning Integration**

Forecast the progression of stick-slip events into potential slippage of critically stressed faults through pattern identification of pre-seismic event pressure behavior.
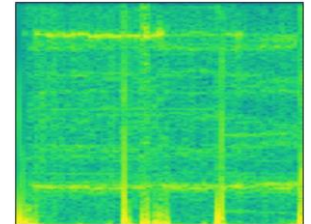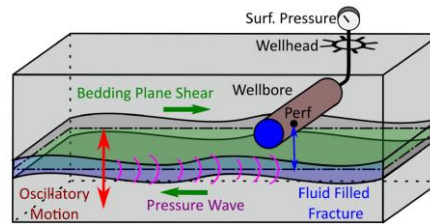
Richter PREDICTOR

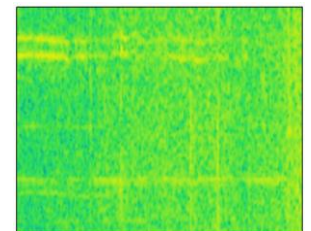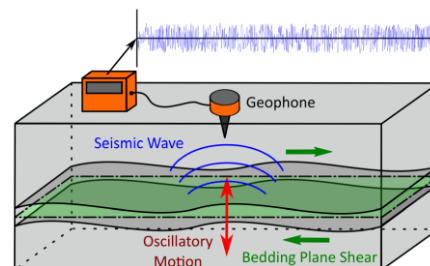**Fig 1: Pressure Signal Analysis**

Fig 2: Geophone Signal Analysis

Product Overview

The Richter Predictor provides unprecedented insights in real-time for induced seismicity risk mitigation using advanced surface pressure recording and analysis techniques. Acting as a distributed fluid antenna, this innovative tool identifies fault plane slippage during fluid injection operations assessing the risk of induced seismicity events up to days in advance. This proactive data-driven approach evaluates the effect of mitigation techniques to improve safety and efficiency of operations.

Balancing Operational Efficiency with Fracture Effectiveness