



Ziebel US, Inc., Houston, TX, seeks a **Reservoir Engineering Data Analyst** to perform production flow profiling and optimization using quantitative (Distributed Temperature Sensing) DTS, (Distributed Acoustic Sensing) DAS, and (Production Logging Tool) PLT flow diagnostics. Quality check third party data to incorporate into distributed fiber optic data. Integrated quality check data into workflow, third party data includes surface production numbers, pressure data and other completion data.

Process large volumes of raw Distributed Acoustic Sensing (DAS) data using proprietary python scripts to calculate frequency band extracted data values and generate a stitched DAS image tile file. Temperature calibrates the Distributed Temperature Sensing (DTS) data to compensate for differential attenuation of different components of backscatter.

Depth matches the DAS and DTS data to the measurements at known depths in wellbore.

Analyze DTS and DAS data to determine producing clusters and calculate the cluster efficiency for analyzing wellbore efficiency.

Analyze various frequencies within the DAS data by interpreting acoustical intensity, fluid phase, and velocities for cluster performance.

Use temperature data for volumetric approximation of stimulation fluid distribution by using Nowaks Method. Analyze flowing pressure profile along with rock and fluid properties to build an accurate reservoir model for flow allocation. Use industry standard temperature modeling software, PLATO, to quantify cluster-level flow rates for injection and production profiling.

Analyze performances of different completion designs and recommend completion optimization strategies.

Study pressure transient along with DAS and DTS during well interference testing for understanding well interaction and optimizing well spacing. Investigate and identify anomalies and abnormal well behavior in DAS and DTS data for well completion integrity. Use python libraries such as matplotlib, pandas, bokeh, and proprietary algorithms to generate DAS and DTS visualizations for analysis.

Prepare a detailed report.

Optimize and enhance current answer products to create informative user-friendly data for clients. Deliver analysis results to clients to help them better understand well performance and make recommendations for well completion optimization.

**REQUIREMENTS:**

Bachelor's Degree or foreign equivalent in Petroleum Engineering or Computer Science and completion of a university level course, research project, research assistantship, internship, or thesis or 6 months of experience involving the following:

- (1) Analyzing hydraulic fracturing and well completion processes.
- (2) Applying basic mass and energy conservation laws.
- (3) Conducting well testing for fractured reservoirs
- (4) Extracting fluid properties, rock properties, and geological information from logging and PVT reports.
- (5) Using numerical simulation tools for complex physical problems
- (6) Using Microsoft office tools including Excel and PowerPoint
- (7) Coding in Python, MATLAB, VBA, C++
- (8) Performing numerical and analytical solutions to complex problems

**MAY TELECOMMUTE FROM HOME UP TO 20% OF TIME**

**APPLY:** Email resume to [careers@ziebel.com](mailto:careers@ziebel.com) Must reference REDA2022 in the subject line.