

It is therefore essential to ensure continuous, real-time monitoring of the well and its environment by deploying a fiber optic cable in the well. The FEBUS T1-R (DTS - Distributed Temperature Sensing) ...

To analyse the downhole performance of mud displacement and cement slurry during the cementing processes, this work focuses on real-time well monitoring technologies using fiber optic cables which ...

The most prevalent sensing technology for structure monitoring applications is DSS, which monitors strain related to mechanical loads of structures. Cables for DSS must be designed and installed in a ...

Optiq real-time fiber-optic interpretation and analysis uses proprietary SLB algorithms and dynamic well models to analyze raw DTS, DAS, and DSS data in real time. Subsequently, a cloud or web interface ...

1 Testing Tier 2 testing involves the use of an optical time domain reflectometer (OTDR) to provide a trace (visual picture) of the installed fiber optic network . Figure 2). The wavelength(s) used for ...

In this study, we suggest utilizing distributed fiber optic sensing techniques for multipurpose acquisition (injection profile, well and caprock integrity and early leakage detection) in ...

The novel aspect of the paper is the first presentation of a theoretical background for the understanding of the performance of flexible cables inside horizontal wells used as static or dynamic ...

These measurements can be used to monitor the hydraulic fracturing treatment of nearby wells. We present a theoretical framework for the understanding of the cable behavior and to ...

Distributed Acoustic Sensing (DAS) utilizes single mode Fiber Optic cables to measure acoustic data. This can be useful for detecting a number of characteristics relevant to well production ...

Testing fiber optic components and cable plants requires making several measurements with the most common measurement parameters listed in the Table below.

FIBERSIGHT map sensors are deployed along the wellbore during the casing run to determine and communicate the orientation of a fiber optic cable back to the surface.

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