Principle of ASEAN Well Logging Optical Cable



Overview

 Principle: Based on Rayleigh scattering to capture acoustic signals along the wellbore. Application: DAS is used to detect and locate leaks, monitor cement integrity, and identify mechanical issues within the well. 5,495,547 issued to Rafie et al and assigned to the assignee of this inventiondescribes limitations in the signal carrying capacity of electrical well. FIBRE OPTIC WELL LOGGING CABLES The present invention relates to the field of armored electrical cables used for well logging. 5,495,547 issued to. Vertical seismic profiling (VSP) using DAS An initial test DAS-VSP survey using the permanent sensor cables installed at Ketzin had revealed that superior data quality can be achieved with sensor cables cemented in place compared to other installation methods (Daley et al. Based on this, a. Well logging, also known as borehole logging is the practice of making a detailed record (a well log) of the geologic formations penetrated by a borehole. The log may be based either on visual inspection of samples brought to the surface (geological logs) or on physical measurements made by. Barehole Televiewer or (BHTV) was used to obtain high-resolution acoustical images from the borehole wall. A probe with a high resolution downward looking camera is used. The camera has specific optics (a conical mirror with a ring of bulbs) with just one shot needed to capture the entire borehole. Maintaining well integrity is a critical aspect of safe, efficient, and economically viable oil and gas production.

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Article Content

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In the preferred embodiment, the tube is surrounded by an elastomeric jacket, and is filled with hydraulic oil or the like to prevent entry of wellbore fluids into the tube under hydrostatic...

Well Logging: Principles, Applications and Uncertainties

Well logging is a means of recording the physical, acoustic and electrical properties of the rocks penetrated by a well. It is carried out by service companies, which work under contract for the oil

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Direct substitution of electrical conductors with optical fibres to provide a logging cable having optical fibres can result in the cable having asymmetrical tensile and bending properties,...

New methods in geophysical exploration and monitoring with DTS and

We show that fiber-optic sensing opens up new possibilities for geophysical measurements with a broad range of applications in well logging and seismic exploration and monitoring.

Study on Continuous Monitoring Technology of Fiber-Optic ...

In this paper, a technology of continuous monitoring of production profile by optical fiber is proposed. The optical cable is bundled outside the oil pipe in the production well, and is lowered

Research on the Data Interpretation Model of Optical Fiber Profile ...

Abstract: Fiber optic cables have the advantages of high temperature resistance, high pressure resistance, corrosion resistance, and high accuracy in measuring temperature DTS data. They are

Well logging

This technique provides similar well information to conventional wireline logging but instead of sensors being lowered into the well at the end of wireline cable, the sensors are integrated into the drill string

Accoustic and Optical Televiewer Borehole Logging

Light intensity is either preset prior to logging or, in some systems, may be adjusted while logging. The optical image scan is either sent up the logging cable as an analog signal and digitized up-hole or

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Bazaid et al No 1

Common well integrity problems where fiber optics can be effectively deployed include identifying sources of sustained annulus pressure, confirming packer integrity, pinpointing leak locations, and

Optical fiber logging cable Special cable

Optical fiber logging cable enables the transmission of detailed data over long distances, making it an essential component in oilfield service operations. Overall, the use of optical fiber

Production logging via coiled tubing fiber optic ...

According to the optical fiber production profile testing technology with continuous tubing as the carrier, the main production layer and the bottom hole liquid condition can be found clearly

Fiber-Optic Technology Reduces Production Logging ...

The new technique uses coiled tubing equipped with optical fibers to acquire real-time measurements from the downhole logging string. The advantages of this conveyance option include

Fiber Optic Technology Allows Real-Time Production Logging Well ...

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Design and Experimental Research of a Fiber-Optic Communication

Download Citation | Design and Experimental Research of a Fiber-Optic Communication Module for Well Logging | Fiber-optic transmission has been applied in oil and gas industry over the

Distributed Acoustic Sensing Acquired Wellbore Seismic Data Using ...

When optical fibers are part of a hybrid optical-electrical logging cable, seismic data can be acquired during any logging intervention, improving efficiency and data collection. This integration

Repeat DAS and DTS Production Logs on a Permanent Fiber Optic Cable

Abstract. This paper presents how joint DAS and DTS logging on a permanently deployed fiber optic system allows us to sense changes in production distribution along a horizontal

Vertical seismic optical profiling on wireline logging cable

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ABSTRACT Vertical seismic profiles are usually acquired by deploying downhole seismic sensors below a wireline logging cable. A seismic source is triggered at surface while recording the downhole

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A well logging cable 10 includes an optical fibre 2 and a pressure sealed enclosure 26 surrounding the fibre. The enclosure is adapted to be able to be elongated to the maximum expected axial strain on

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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