## 水平井地质导向重点工作流程

## 摘要

综合地质导向是当前国内积极发展的新技术,具有广泛的应用和发展前景,地质导向技术指的是在水平井的钻进过程中,依据各种临井的地质资料、随钻测井及测量数据,根据油藏地质模型和实钻情况,在油藏、定向、测录井、地质等工程师、专家的指导指挥下实时调整井眼轨迹的测量控制技术。本文通过对义页平1井的地质导向施工,从对钻井设计、地质设计的理解到结合构造位置、沉积特征、地层特征、区域岩性特点、评估可用的地震资料,根据设计的靶点信息提前建好地质导向模型,并结合本井实钻数据,及时分析,实时调整,修正井眼轨迹,优化井身轨迹剖面,指导钻井施工方向,顺利完成该井钻探目的。并对该井实钻过程中实施的策略、遇到的问题进行梳理,总结了地质导向的关键施工节点及一整套的工作方法。

关键词:水平井;地质导向;靶点;建模

## **Abstract**

Comprehensive geological orientation and actively developing new technology at home and has wide application and prospects of geosteering technology refers to in the process of drilling horizontal well, on the basis of all kinds of Wells in the geological data, well logging with drilling and measuring data, according to the reservoir geological model and real drilling situation, in the reservoir, directional, logging, geology and other engineers and experts under the guidance of real-time adjust the well track measurement control technology. This article through to a page of well construction, from the understanding of design, geological drilling design to combined with the feature of tectonic position, sedimentary characteristics, formation, regional lithologic characteristics, assessment of the available seismic data, according to the design of target information in advance to build good geosteering model, and combining with the well drilling data, timely analysis, real-time adjustment, correction borehole trajectory, optimization of well bore trajectory profile, guide the drilling direction and the construction is completed the well drilling purposes. It also summarizes the key construction nodes and a set of working methods of geological guidance.

**Key words:**horizontal well;Geosteering;target spot;modeling

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