

## 目次

## ■ 专家视点

“三超”油气井井控技术难点及对策 ..... 牛新明,张进双,周号博(1)

## ■ 钻井完井

国内外地下储库现状及工程技术发展趋势 ..... 袁光杰,夏焱,金根泰,班凡生(8)

马深 1 井钻井工程设计与施工 ..... 陈明,黄志远,马庆涛,刘云鹏,葛鹏飞,夏广强(15)

南海 C 区块高温高压气井井控技术 ..... 徐优富,张忠强,方华良(21)

中低温地热井钻井完井工艺技术研究与实践 ..... 王培义,马鹏鹏,张贤印,杨卫(27)

套损井与取心井相似井段识别及其岩石力学参数确定方法 ..... 邢岳堃,张广清,李世远,王元元,杨潇(33)

生物质基液 PO-12 的合成与性能评价 ..... 单海霞,王中华,徐勤,何焕杰,杨庆叙(41)

基于分形理论的粗糙裂缝钻井液漏失模型研究 ..... 李大奇,曾义金,刘四海,康毅力(46)

延长油田西部地区低压易漏地层固井技术 ..... 刘云,王涛,于小龙,牛萌(53)

新型低密度水泥减轻材料 SXJ-1 的研制及应用 ..... 杨海波,曹成章,冯德杰,曹会莲(59)

水平井砾石充填调流控水筛管完井技术 ..... 赵旭,龙武,姚志良,庞伟(65)

双台肩钻具接头性能校验方法研究与应用 ..... 王峰,邹宗明,胡清富,王纪军,马林虎(71)

全通径滑套球座打捞机构关键技术研究 ..... 杨德锴(75)

远程控制水泥头的研制及性能试验 ..... 郑晓志,周保德,张红艳,戴文潮,陈志峰,李凤雷(81)

## ■ 油气开发

投球式井下智能分控开关系统的研制及功能试验 ..... 孙浩玉,薄鹏,李作会,华陈权,朱烈涛,马建鹏(87)

耐高温低碳烃无水液压液室内研究 ..... 王满学,何静,王永炜(93)

苏里格气田致密底水气藏堵水压裂技术 ..... 文果,蒋文学,郑维师(97)

海上油井井筒结蜡剖面预测新模型 ..... 郑春峰,魏琛,张海涛,李昂,孟红霞(103)

## ■ 测井录井

基于震源机制关系的长宁-威远区块套管变形分析 ..... 陈朝伟,王鹏飞,项德贵(110)

随钻方位电磁波仪器测量精度对电阻率及界面预测影响分析 ..... 杨震,肖红兵,李翠(115)

磁力随钻测斜仪轴向磁干扰校正方法 ..... 范光第,蒲文学,赵国山,黄根炉(121)

## ■ 科技简讯

本刊入编多种全文数据库系统致作者(70) 欢迎订阅 2018 年《石油钻探技术》(86)

CONTENTS

Expert Viewpoint

Technological Challenges and Countermeasures in Well Control of Ultra-Deep, Ultra-High Temperature and Ultra-High Pressure Oil and Gas Wells ..... NIU Xinming, ZHANG Jinshuang, ZHOU Haobo (1)

Drilling & Completion

Present State of Underground Storage and Development Trends in Engineering Technologies at Home and Abroad ..... YUAN Guangjie, XIA Yan, JIN Gentai, BAN Fansheng (8)

Design and Drilling of Well Mashen 1 ..... CHEN Ming, HUANG Zhiyuan, MA Qingtao, LIU Yunpeng, GE Pengfei, XIA Guangqiang (15)

Well Control Technologies for HTHP Gas Wells in the C Block of the South China Sea ..... XU Youfu, ZHANG Zhongqiang, FANG Huiliang (21)

Drilling and Completion Technologies of Geothermal Wells with Medium and Low Temperatures ..... WANG Peiyi, MA Pengpeng, ZHANG Xianyin, YANG Wei (27)

Identification of Similar Intervals of Wells with Casing Failure and Coring Wells and the Determination of Their Geomechanical Properties ..... XING Yuekun, ZHANG Guangqing, LI Shiyuan, WANG Yuanyuan, YANG Xiao (33)

Synthesis and Performance Assessments of Biomass Base Liquid PO<sup>-12</sup> ..... SHAN Haixia, WANG Zhonghua, XU Qin, HE Huanjie, YANG Qingxu (41)

Drilling Fluid Loss Model in Rough Fractures Based on Fractal Theory ..... LI Daqi, ZENG Yijin, LIU Sihai, KANG Yili (46)

Cementation Technology for Low-Pressure Formations Susceptible to Lost Circulation in Western Area of the Yanchang Oilfield ..... LIU Yun, WANG Tao, YU Xiaolong, NIU Meng (53)

The Development and Application of a New Low Density Cement Reducer SXJ-1 ..... YANG Haibo, CAO Chengzhang, FENG Dejie, CAO Huilian (59)

Completion Techniques Involving Gravel-Packing Inflow-Control Screens in Horizontal Wells ..... ZHAO Xu, LONG Wu, YAO Zhiliang, PANG Wei (65)

Research and Application of a Performance Calibration Method for a Double Shoulder Tool Joint ..... WANG Feng, ZOU Zongming, HU Qingfu, WANG Jijun, MA Linhu (71)

Key Technology on Ball Seat Fishing Mechanism of Full Bore Size Sleeves ..... YANG Dekai (75)

Development and Performance Tests of Remotely-Controlled Cement Head ..... ZHENG Xiaozhi, ZHOU Baode, ZHANG Hongyan, DAI Wenchao, CHEN Zhifeng, LI Fenglei (81)

Oil & Gas Exploitation

Development and Function Test of an Intelligent Split-Control Switch for Separate-Layer Oil Production ..... SUN Haoyu, BO Peng, LI Zuohui, HUA Chenquan, ZHU Lietao, MA Jianpeng (87)

Experimental Research on Performances of Hydrocarbon-Based Heat-Resistance Low-Carbon Fracturing Fluid ..... WANG Manxue, HE Jing, WANG Yongwei (93)

Water Plugging and Fracturing Technology for Tight and Bottom-Water Gas Reservoir in the Sulige Gas Field ..... WEN Guo, JIANG Wenxue, ZHENG Weishi (97)

A New Forecasting Model of a Wellbore Wax Deposition Profile in an Offshore Well ..... ZHENG Chunfeng, WEI Chen, ZHANG Haitao, LI Ang, MENG Hongxia (103)

Well Logging & Surface Logging

Analysis of Casing Deformation in the Changning-Weiyuan Block Based on Focal Mechanism ..... CHEN Zhaowei, WANG Pengfei, XIAO Degui (110)

Impacts of Accuracy of Azimuthal Electromagnetic Logging-while-Drilling on Resistivity and Interface Prediction ..... YANG Zhen, XIAO Hongbing, LI Cui (115)

Correction Methods for Axial Magnetic Interference of the Magnetic Incliner while Drilling ..... FAN Guangdi, PU Wenxue, ZHAO Guoshan, HUANG Genlu (121)