

World Oil®

ADVANCES IN DRILLING

A variety of technologies help operators drill with greater accuracy, reliability and cost-effectiveness

DRILL BIT INNOVATIONS

New designs improve drilling economics, results

SHALETECH: NIOBRARA/CODELL

Record production amidst regulatory mélange

REGIONAL REPORT: MENA

Leading producers increase output, replace reserves



Gulf Energy®

CONTENTS

OCTOBER 2019 / VOL. 240 NO. 10



SPECIAL FOCUS: ADVANCES IN DRILLING

- 25 Innovation is key to drilling longer laterals**
J. Evans / C. Sampson
- 29 RSS with resistivity capabilities delivers superior real-time LWD measurements**
K. Wedewer
- 33 Custom low-ECD reservoir drilling fluid solves complex field challenges**
C. Webber / M. Langford
- 37 Longer, heavier casing, rig time key targets of landing string buoyancy system**
W. von Eberstein / C. von Eberstein

DRILL BIT INNOVATIONS

- 39 Manufacturers introduce new bit technologies to improve drilling economics**
C. Fleming

RETROSPECTIVE: T. BOONE PICKENS

- 44 Storied oilman T. Boone Pickens dies at 91**
World Oil staff

PROPPANT TECHNOLOGY

- 45 Improved well economics through formation water reduction technology**
A. Harper

SHALETECH: NIOBRARA-CODELL SHALE

- 48 Record production amidst regulatory mélange**
J. Redden

GEOLOGICAL & GEOPHYSICAL TECHNOLOGY

- 53 Optimizing E&P using strategic criteria and new geophysical technologies**
E. Trincherio / L. Vernengo

REGIONAL REPORT: MENA

- 58 Leading producers plan to increase output, replace reserves**
R. Bitto

DIGITAL TRANSFORMATION

- 63 The path to oilfield efficiency is digital**
M. Nimbalkar

OFFSHORE/COMPLETION TECHNOLOGY

- 67 Rising to the challenge of external corrosion**
B. Mackenzie
- 71 Inflow control proves helpful for Troll**
Tendeka

COLUMNS

- 7 First oil**
Canadian companies look southward for business
- 13 What's new in exploration**
Exploration is back to the future
- 15 Drilling advances**
Steadier as she goes
- 17 What's new in production**
The (not so) new oil
- 19 Oil and gas in the capitals**
Challenges to dollar oil pricing
- 21 Executive viewpoint**
Alliance takes on oilfield water issues in Texas
- 78 The last barrel**
LNG players jockey for position

NEWS AND RESOURCES

- 9 World of oil and gas**
- 23 Industry at a glance**
- 73 People in the industry**
- 74 Companies in the news**
- 75 New products and services**
- 76 Advertising sales offices / Advertisers' index**
- 77 Meetings and events**

ABOUT THE COVER

Illustrating *Advances in Drilling*, a rare, massive dust storm, sparked by thunderstorm outflow, descended on West Texas during June 5, 2019, rolling from west to east and engulfing cities that included Lubbock and Big Spring. Caught in the dust storm's path was Latshaw Rig 20, drilling some 20 mi north of Big Spring. Dexter Bernard, an MWD field specialist with MS Directional, was working along with Latshaw Drilling on the rig site, when he caught this image of the storm as it approached. Image: Latshaw Drilling Company.