

SPE/IADC Managed Pressure Drilling & Underbalanced Operations Conference & Exhibition 2022

Kuala Lumpur, Malaysia
27 - 28 September 2022

ISBN: 978-1-7138-6221-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2022) by Society of Petroleum Engineers
All rights reserved.

Printed with permission by Curran Associates, Inc. (2022)

For permission requests, please contact Society of Petroleum Engineers
at the address below.

Society of Petroleum Engineers
P. O. Box 833836
Richardson, Texas 75083-3836

Phone: (800) 456-6863

Fax: (972) 952-9435

books@spe.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

WELL DESIGN

Kick Tolerance - A Risk-Based Strategy to Enhance Well Control in Narrow Margin Wells	1
<i>Robert Graham, Michael Cadd, Angie Theresia, Jason Polkinghorne</i>	
Limbayong Deepwater Development Well Planning – a Collaboration with Geomechanics with MPD Approach.....	15
<i>Azizul Ateamin, Eskandar M Sukri, Hazlan Abd Hakim</i>	
Calibrating ECD, Surge, and Swab Models Using Downhole Pressure Measurements to Avoid Wellbore Instability and Allow Safe Tripping	26
<i>Ryan Cioklosz, Philip Gunn, José Palacios</i>	

CASE HISTORIES AND LESSONS LEARNED I

A Review of Conventionally Undrillable Wells with Ultra-Narrow Pressure Windows Successfully Drilled Utilizing MPD Over the Last Five Years in USA and Canada	42
<i>Sagar Nauduri, Martyn Parker, Ahmed Shimi, Gildas Guefack</i>	
Real-Time Downhole Pressure Environment Determination During Managed Pressure Drilling, Tripping, and Cementing Operations to Improve Well Construction Safety Standards in Deepwater Gulf of Mexico	60
<i>Nathan Tuckwell, Maurizio Arnone</i>	

POSTER SESSION AND UNASSIGNED PAPERS OF NOTE

Automated MPD System for Drilling Optimization and Formation Characterization in an Exploratory Well	79
<i>Juan Pinzon, Oscar Castillo, Arturo Larsen, Paula Tellez, Jenny Ospina, Sebastian Muñoz, Oscar Fernandez</i>	
Cost-Efficient MPD Optimizing Long Reach Well Construction and Enhancing Safety Barriers on Strategic Haynesville HPHT Unconventional Shale	95
<i>Maurizio Arnone, Rudy Flores, Nadine Amini, Rich Norton</i>	
First Successful Managed Pressure Cementing Operation for 7" 23ppf Casing Installation in a Narrow Pressure Margin Development Wells, Offshore Miri, Sarawak in Asia Pacific Region	104
<i>Rizawati Awang, Mohd Yazid Koshim, Mohd Syafiq Sulong, Che Ku Afiza Hanim Che Ku Mazuan, Hock Wai Chan, Essam Sammat, Kee Ung Sia, Abdul Hakam Abdul Razak</i>	

COMPLETION AND WORKOVER WITH MPD TECHNIQUES

Perforating Using MPD Techniques: Design and Execution	112
<i>André Alonso Fernandes, Davi Valle Ferreira, Eduardo Schnitzler, Fabiano Hamilton de Castro, Isadora Luisa de Paiva Goncalves do Carmo, Pedro Menezes Santana, Roger Savoldi Roman</i>	

CASE HISTORIES AND LESSONS LEARNED II

Floating Casings in 10,000ft Laterals with MPD in Haynesville	125
<i>Harshad Patil, Earl Dietrich, Ian Knight, Greg Matherne, Svein Hovland</i>	
A New Approach for Designing an Underbalanced Cementing Plug Using a Managed Pressure Cementing and Pump-Pull Method with Narrow Pore-Frac Pressure Window in HPHT Exploration Well: An Offshore East Kalimantan, Indonesia Case Study	134
<i>Setiohadi, Praja Hadistira, Muhammad Alfianoor Yudhatama, Daniel Sitompul, Dhika Escodianto Hutabarat, Andre Wiharja, Reinhard Aberson Panjaitan, Crisa Agriawan, Reny Kusumawatie, Victoria Rasmi Wedhaswari, Bagus Setyo Darmanto, Ahmed Osman, Cinto Azwar, Wiwin Winarti, Andre Simanjuntak</i>	

PANEL DISCUSSION: WELL CONTROL CONSIDERATIONS

Expanded IME with New Riser Gas Handling Operation Region.....	144
<i>Oscar Gabaldon, Romar A Gonzalez Luis, Pedro Sousa, Chen Wei, Yuanhang Chen</i>	
Bridging the Gap: Highly Depleted Reservoir Entry in a Mature HPHT Field.....	164
<i>Michael Cadd, Susannah Stott, Robert Graham, Ryan Nowell, Josef Schachner</i>	
Fingerprinting Formation Breathing and Wellbore Ballooning: Getting Mixed Signals.....	176
<i>Philip Gunn, Maria Retuta</i>	

MPD EQUIPMENT AND CONTROL SYSTEMS

First Implementation of Managed Pressure Drilling (MPD) System in Swamp Barge Rig to Drill Narrow Pressure Window HPHT Exploration Well Safely – Return of Experience from Kalimantan, Indonesia.....	186
<i>Setiohadi, Praja Hadistira, Muhammad Alfianoor Yudhatama, Daniel Sitompul, Dikha Escodianto Hutabarat, Andre Wiharja, Crisa Agriawan, Aji Martadinata, Sudiariaji, Agus Sidianto, Andry Prasthio, Fikri Irawan</i>	
Pressurized Mud Cap Drilling Used to Drill and Complete Carbonate Gas Reservoir with Poor Injectivity and Severe Dynamic Losses Offshore Malaysia.....	204
<i>Timothy McCluskey, Ching Shearn Ho, Chai Yong Tan, Eric Timbancaya, Mohammad Annas Omar, Khairil Azam Mohd Khaidzir</i>	

Author Index