

SPE/IADC Managed Pressure Drilling & Underbalanced Operations Conference & Exhibition 2019

Amsterdam, The Netherlands
9-10 April 2019

ISBN: 978-1-5108-8597-4

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© (2019) by Society of Petroleum Engineers
All rights reserved.

Printed by Curran Associates, Inc. (2019)

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

SESSION 2: WELL CONTROL / IME

DEVELOPMENT OF A PRACTICAL TOOL TO GENERATE INFLUX MANAGEMENT ENVELOPES IME FOR MPD FIELD OPERATIONS	1
<i>Helmi, Mohamed ; Cadd, Michael</i>	
EVOLVING WELL CONTROL PROCEDURES WITH MPD ON FLOATERS	16
<i>Fernandes, Andre A. ; Vanni, Guilherme S. ; Martinello, Isac A. ; Terra, Felipe de Souza ; Sales, Ivan M. ; Guedes, Jonas ; Vasconcelos, Kelliton da Silva</i>	
INFLUX MANAGEMENT ENVELOPE: LIMITS REDEFINITION AND PARAMETRIC SENSITIVITY ANALYSIS BASED ON DATA AND LESSONS LEARNED FROM OFFSHORE APPLICATIONS	27
<i>Gabalton, Oscar ; Gonzalez, Romar A. ; Bacon, William ; Brand, Patrick</i>	

SESSION 3: RIG EQUIPMENT

THE IMPACT OF FMCD TECHNOLOGY IN WELL CONTROL EQUIPMENT AND EDS DISCONNECTION	55
<i>Rocha, Leandro D. B. ; de Almeida Campos, José E. ; Xavier, Cristiano V. ; Visser, Thijs ; Freitas, Felipe ; Stahl, Matt ; Cruse, Greg</i>	
LESSONS LEARNED WITH REAL INTEGRATION OF A DEEPWATER MPD CONTROL SYSTEM	71
<i>Hovland, Svein ; van Kuilenburg, Robert ; Eide, Trym ; Stridsklev, Christian ; Munro, Colin</i>	

SESSION 5: CASE HISTORIES

EXPERIENCE FROM DRILLING A HORIZONTAL WELL IN A NATURALLY FRACTURED AND KARSTIFIED CARBONATE RESERVOIR IN THE BARENTS SEA USING A CML MPD SYSTEM	78
<i>Tangen, Geir I. ; Smaaskjaer, Geir ; Bergseth, Einar ; Clark, Andy ; Fosli, Børre ; Claudy, Eric ; Qiang, Zhizhuang</i>	
OPERATOR'S FIRST APPLICATION OF MPD IN DEEPWATER GOM DELIVERS TOP QUARTILE WELL	97
<i>Essam, Wael ; Scarborough, Christopher ; Wilson, Nick ; Shimi, Ahmed ; Santos, Helio ; Hannam, Jason ; Catak, Erdem ; Lancaster, Jay ; Gooding, Neil ; Baan, Robert</i>	

SESSION 10: ALTERNATE

ACOUSTIC TELEMETRY NETWORK PROVIDES REAL-TIME DOWNHOLE DATA TRANSMISSION DURING DRILLING, CEMENTING AND COMPLETION INSTALLATION FOR USE IN DEPLETED RESERVOIRS AND DURING MANAGED PRESSURE OPERATIONS	108
<i>Hawthorn, Andy ; Groves, Duncan</i>	
MPD DEPLOYMENT FOR DEEPWATER DRILLING OPERATIONS – HSE & RISK CONSIDERATIONS AND MITIGATION, RIG CONFIGURATION CHALLENGES AND MPD EQUIPMENT SELECTION AND STANDARDIZATION	113
<i>Mohammed, Sohail ; Vanjarapu, Ravi</i>	
WIRELINING LOGGING IN MANAGED PRESSURE DRILLING WELL ON A DP RIG	119
<i>Sales, Ivan M. ; Guedes, Jonas D. S. ; Martinello, Isac A. ; Kropf, Talles C. L. ; Caetano, Leonardo M. ; Fernandes, Andre A. ; Sa, Lucas L.</i>	
EXPERIENCES WITH CML ON THE TROLL FIELD, NORWAY: A CASE HISTORY	129
<i>van der Linden, Rik ; Valvik, Beate ; Molde, Dag O. ; Skår, Gjertrud ; Fredriksen, Ragnar M.</i>	
UTILIZATION OF MANAGED PRESSURE DRILLING IN DEEP HIGH PRESSURE HIGH TEMPERATURE GAS WELLS	145
<i>Moid, Farrukh ; Ghamdi, Ahmed A. ; Nutaiji, AbdulRahman M. ; Utaibi, Abdullah A.</i>	

AUTOMATED PRESSURE CONTROL FOR UBD OPERATIONS; CASE STUDY AND FIELD VALIDATION	151
<i>Berg, Christian ; Stakvik, Jon Å. ; Kulikov, Stanislav ; Kaasa, Glenn-Ole ; Dubovtsev, Aleksandr ; Korolev, Sergey ; Gurban, Veliyev</i>	
ROAD TO SUCCESS IN MPD - VACA MUERTA CASE HISTORY	165
<i>Bulant, Ezequiel ; Gabaldon, Oscar ; Bedoya, Jorge</i>	

SESSION 6: ONSHORE OPERATIONS

NITROGEN CAP DRILLING A MANAGED PRESSURE DRILLING ALTERNATIVE FOR HIGHLY FRACTURED CARBONATE RESERVOIR	176
<i>Podust, Alexey ; Starkey, Craig ; Wood, Jeff ; Cameron, Gareth</i>	
CBHP MPD ASSISTED CASING DRILLING: A NOVEL MPD SOLUTION COMBINING TWO DRILLING TECHNOLOGIES, PLANNED AND EXECUTED ON OTHERWISE NOT DRILLABLE MULTIPLE DIRECTIONAL WELLS IN NORTH AMERICA	188
<i>Nauduri, Sagar ; Parker, Martyn ; Nabiyev, Akram ; Sampley, Eddy ; Kirstein, Lenord ; Morris, Jason ; Wilkinson, Matthew ; Buckner, Jason</i>	
MPD CALLED TO A POST WELL-CONTROL EVENT TO FREE A DIFFERENTIALLY STUCK PIPE	196
<i>Nabiyev, Akram ; Nauduri, Sagar ; Parker, Martyn ; Fisher, Darin ; Cunningham, David</i>	

SESSION 7: MPD CEMENTING AND COMPLETION

USING MANAGED PRESSURE DRILLING AND EARLY KICK/LOSS DETECTION SYSTEM TO EXECUTE A CHALLENGING DEEPWATER COMPLETIONS JOB IN THE GULF OF MEXICO	205
<i>Hernandez, Julian ; Arnone, Maurizio ; Valecillos, Juan ; Vives, Javier ; Vannoort, Roger ; Groves, Duncan ; Hawthorn, Andy</i>	
MANAGED PRESSURE CEMENTING MPC WITHIN A NARROW PRESSURE WINDOW, DEEPWATER GULF OF MEXICO APPLICATION	220
<i>Teoh, Michael ; Moghazy, Sharief ; Smelker, Keith ; Van Noort, Roger ; Valecillos, Juan C. ; Hernandez, Julian ; Arnone, Maurizio ; Krietemeyer, Lance</i>	

SESSION 9: OPERATOR'S ANALYSIS

THE BUSINESS CASE FOR ABP MPD USE IN DEEPWATER GULF OF MEXICO	232
<i>Moghazy, Sharief ; Van Noort, Roger ; Shayegi, Sara</i>	
Author Index	