

## Technical Session 10: Case Histories

SPE/IADC 105649

*CIDS to Orlan: Transformation and Startup of Sakhalin's Ice-Resistant Drilling Platform.* A.M. Higgins, B. Zuskov and P.V. Zande, ExxonMobil.

The offshore Sakhalin drilling and operating environment is one of the most challenging in the world. The milestones and learnings attained during the conversion and start up of the former Glomar Beaufort Sea I (CIDS) to its current status as the Orlan Drilling and Production platform are detailed in this paper.

SPE/IADC 105212

*Deployment of a Riserless Mud Recovery System Offshore Sakhalin Island.* J.D. Brown, V.V. Urvant and J.L. Thorogood, CJSC Elvayr Neftegaz; N.L. Rolland, AGR Subsea.

A riserless mud recovery system enables dual gradient subsea drilling operations to take place with the well open at the seabed. There are no pressure containment devices at the wellhead, but as with earlier systems developed for deepwater drilling, mud and cuttings are returned to the rig by means of a subsea pumping system and umbilical. The system was field-tested as part of the Norwegian DEMO2000 programme. Subsequently, it has seen operational service in a multi-well drilling campaign in the Caspian Sea. The paper will describe how the system was implemented in a remote area exploration drilling operation off Sakhalin Island.

SPE/IADC 105766

*How Much is Left of Your Centralizer After Exiting a Casing Window in an Extended-Reach Horizontal Multilateral? Modeling, Yard Tests and Field Results from Alaska's West Sak Development.* E.M. Peterson, M.R. Greener and E.R. Davis, ConocoPhillips; D.T. Craig, Baker Oil Tools.

The West Sak viscous oilfield on the North Slope of Alaska is being developed with extended reach multilateral wells in which horizontal slotted liners are utilized in conjunction with level 3 multilateral junction systems. Centralizers are necessary on the slotted liners to reduce drag and avoid slot plugging and limit differential sticking. Selection of proper centralizers to run through a casing window, without a whipstock in place, has been key.

Several recent failures of centralizers run through casing exits have resulted in significant lost time and cost overruns. It became essential to study the passage of a centralized liner through a casing exit. Torque and drag modeling provided the down and side force estimates exerted on the liner and centralizers as they passed through a casing exit. A test fixture was used to simulate liners being run through a casing exit.

This paper will discuss the problems noted in the installation prior to the testing program, detail the modeling used to determine the loads being exerted on the centralizers at the window, show the results of the yard tests conducted on several commonly utilized industry centralizers, and make recommendations.

SPE/IADC 105051

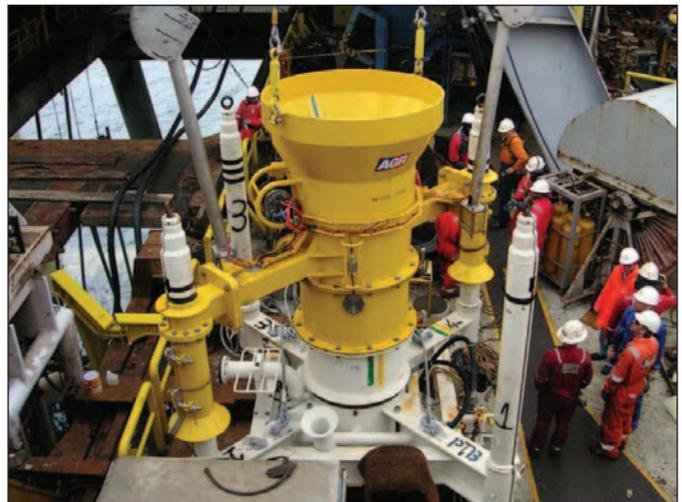
*Step Change in Remote Exploration.* R.S. Shafer, ConocoPhillips.

Remote Arctic onshore exploration can be very costly, exceeding the cost of a deepwater Gulf of Mexico well. This paper reviews the reasons for the high costs and a possible combination of new technologies and rig designs to significantly reduce the costs. A significant reduction in exploration final hole size is the primary driver, leading to a major reduction in rig size.

SPE/IADC 105874

*Drilling for Coalbed Methane in the San Juan Basin with Coiled Tubing: Results, Learnings and a World First.* S. Noynaert, D. Pumphrey, T. Eiden, F. Hartensteiner and C. Nelson, BP; T. Pink, Schlumberger.

Coiled tubing drilling (CTD) has proven successful throughout the world, including Azerbaijan, Canada and most notably Alaska's North Slope. We hoped to replicate this success in the San Juan basin with a special-built hybrid CTD rig. The pilot project involved drilling 13 wells with the hybrid rig, which has not only the capabilities of CTD but also the capabilities of rotary drilling through the use of an integrated single joint top drive equipped derrick. The well types included vertical CBM grassroots wells, deep set intermediate casing strings for future rotary drillout, build & drop pad wells, and thru-tubing re-entry horizontal side-tracks. The paper will show the learning curve progression and how the project was successful in building on learnings from each previous well.



**SPE/IADC 105212: A riserless mud recovery system was field-tested as part of the Norwegian DEMO2000 programme and has seen operational service in a Caspian Sea drilling campaign.**

SPE/IADC 105541

*Magnolia Deepwater Experience Frac-Packing Long Perforated Intervals in Unconsolidated Silt Reservoirs.* L.F. Eaton and W.R. Reinhardt, ConocoPhillips; J.S. Bennett, Devon Energy; K. Blake and H. Morales, Schlumberger.

ConocoPhillips is developing the Magnolia field with a TLP in 4,674 ft of water at Garden Banks block 783 in the Gulf of Mexico. The wells targeted multiple zones resulting in complex directional wells with 50-60° maximum hole angles. The wells are producing primarily from thick, fine grained reservoirs that required sand control. To ensure high-rate, long-life completions, the producing zones were frac packed. Premium screens with alternate path tubes were used on the wells due to the long deviated intervals. This paper will discuss screen selection philosophy in fine silt reservoirs, carrier fluid selection, perforation strategy, and ability to frac across shale intervals.

## Technical Session 11: Health, Safety, Security & Environment

SPE/IADC 105934

*Integrating Safety Leadership and Cultural Change.* G. Siokos, EDN; J. Karish, ENSCO.

This presentation will focus on the work done by ENSCO to enhance its safety culture through a leadership development program and strategy designed to develop leaders who are able and willing to make a difference in safety. First, the program and strategy integrates prescribed leadership competencies with the organization's vision, values, strategies and safety management system. Second, it involves the top 150 leaders in the organization. Third, there is focused follow-up. Fourth, the leadership strategy is linked to other local business unit safety leadership programs. Fifth, the leadership development program challenges participants with personal feedback on their HSE leadership competencies and behaviors and encourages the development of a personal leadership development action plan.

SPE/IADC 105099

*Improving Security on Offshore Installations.* D. Struthers, G. Esson and R. Ferguson, Poseidon Maritime.

Following the events of 9/11, the International Ship and Port Facility Security Code's (ISPS) legal requirements provided an ideal benchmark for the offshore industry to evaluate the principle and practice of existing security policies and procedures. Simply having security procedures in place does not necessarily provide effective security. Effective security plans must be designed. Has the offshore industry successfully maintained focus on this security philosophy or have concerns following 9/11 simply been left to fade away? The paper will outline ways in which regulatory and non-regulatory security-based thinking should be approached.

SPE/IADC 105065

*Multi-Skilling as a Key Factor for Economically Viable Operations in a Mature Oil Province: Oseberg East as a Case Example.* J.O. Dagestad, E. Saeverhagen and E. Nathan, INTEQ; S. Knutsen, Norsk Hydro.