

Project List - Implemented

Industry Technology Facilitator - Project List (Implemented)



Implemented Yes

Project No. 1001 PWD

ITF Funding (£k): 337.513

Duration (Months): 9

Title: The Continuous Circulation Coupler Development Project

Description: StatoilHydro used the CCS Mark 2 to achieve Continuous Circulation Drilling on the sensitive sections of 2 wells drilled from the Scarabeo 5 Semi in the Kristin field and 4 wells from the Kvitebjorn Platform, with complete success. To date 1,627 connections have been made with continuous circulation (and therefore steady ECD and cuttings transportation) with an average 'Total Connection time' (stop drilling to start drilling) of 24 minutes, of which the 'Total CCS Operating Time' averaged only 13 minutes. ('waiting on rig time' averaged 11 minutes).

Project No. 1056 PWD CCC

ITF Funding (£k): 1000.125

Duration (Months): 6

Title: Development of the Continuous Circulation System: Phase 2- Detailed System Design & Component Testing

Description: StatoilHydro used the CCS Mark 2 to achieve Continuous Circulation Drilling on the sensitive sections of 2 wells drilled from the Scarabeo 5 Semi in the Kristin field and 4 wells from the Kvitebjorn Platform, with complete success. To date 1,627 connections have been made with continuous circulation (and therefore steady ECD and cuttings transportation) with an average 'Total Connection time' (stop drilling to start drilling) of 24 minutes, of which the 'Total CCS Operating Time' averaged only 13 minutes. ('waiting on rig time' averaged 11 minutes).

Project No. 1130 PWD CCC

ITF Funding (£k): 300

Duration (Months): 24

Title: Development of the continuous circulation coupler: Phase 4a

Description: StatoilHydro used the CCS Mark 2 to achieve Continuous Circulation Drilling on the sensitive sections of 2 wells drilled from the Scarabeo 5 Semi in the Kristin field and 4 wells from the Kvitebjorn Platform, with complete success. To date 1,627 connections have been made with continuous circulation (and therefore steady ECD and cuttings transportation) with an average 'Total Connection time' (stop drilling to start drilling) of 24 minutes, of which the 'Total CCS Operating Time' averaged only 13 minutes. ('waiting on rig time' averaged 11 minutes).

Project No. 1180 PWD CCC

ITF Funding (£k): 146

Duration (Months): 24

Title: Development of the Continuous Circulation Coupler-Phase 4b (Field Drilling Trial on a Land Rig)

Description: StatoilHydro used the CCS Mark 2 to achieve Continuous Circulation Drilling on the sensitive sections of 2 wells drilled from the Scarabeo 5 Semi in the Kristin field and 4 wells from the Kvitebjorn Platform, with complete success. To date 1,627 connections have been made with continuous circulation (and therefore steady ECD and cuttings transportation)

with an average 'Total Connection time' (stop drilling to start drilling) of 24 minutes, of which the 'Total CCS Operating Time' averaged only 13 minutes. ('waiting on rig time' averaged 11 minutes).

Project No. 1300 PWD HETS **ITF Funding (£k):** 729.5 **Duration (Months):** 16

Title: External Patch for Casing Repair, Industry Type Standard

Description: ISO Qualified HETS External Casing Patch recently run in the North Sea for 2 major operators solving 2 serious casing problems. A case study is being prepared in collaboration with READ Well Services.

Project No. 1307 PWD **ITF Funding (£k):** 150 **Duration (Months):** 13

Title: Real-Time Well-Intervention and Downhole HPHT Camera For Deployment on Electric-Line and Coiled Tubing

Description: The slickline memory camera is now commercialised and has been run on 2 of our members assets. The camera was run in a gas injection well down to a depth of 12,900ft at a deviation of 30° and temperature of 208°F in 3 7/8" tubing. The object of the exercise was to inspect the top of a fish which was expected to show wire in the hole that had previously been cut. What was actually found was scale debris sitting on top of the fish. The comment that was made from the operator that 'our team are all in agreement that is some of the best data / pictures we have seen in some time.'
Real-time imaging has been proven on 25,000ft length of electrical wireline giving image refresh rate at up to 25 frames per second. The technology has been designed to be flexible so the image quality and refresh rate can be altered. This allows a high refresh rate lower quality for running into hole for obstacle avoidance and once the area of interest in the wellbore is found the system can be changed to lower refresh rate higher quality. The technology is currently being miniaturised for the 1 11/16" tool.

Project No. 1311 PWT **ITF Funding (£k):** 51.450 **Duration (Months):** 5

Title: The Mud Watcher

Description: The Mudwatcher system is still undergoing long term trials with the sponsor; these are 90% complete, with further trials scheduled for autumn 2008, four systems have now been delivered for deployment by Transocean.

Project No. 1342 PWT SlimWELL **ITF Funding (£k):** 526 **Duration (Months):** 13

Title: SlimWell Trial 11.3/4" x 13.3/8" SW

Description: Since 2004 Caledus has developed the slender well construction technique SlimWELL, based on a close clearance flush joint liner hanger system that provides for maximum bore liners beneath another casing or liner. The SlimWELL MaxBORE Liner Hanger System has been developed and tested and trialled in 2 commercial sizes now, 5.1/2" x 7" (triated by Talisman) and the 4" x 5.1/2" (sponsored by BP) and now the 11.3/4"-11.7/8" x 13.3/8" is nearing field trials (sponsored by Eni). Several commercial systems have been sold to Tullow, and BP and Dubai Petroleum has recently been the first commercial users of a whole system in the UAE. The technical hurdle has been overcome and a system to deploy

Project No. 3128 PSD SINBAD **ITF Funding (£k):** 850 **Duration (Months):** 54

Title: Seismic Imaging by Next-generation BAsis-function Decomposition

Description: This project successfully leveraged recently developed techniques in modern computational and applied harmonic analysis to seismic imaging. A lot of interest has been generated in application of these developments both within sponsors and the contracting community. This project was awarded matched funding by the Canadian Government. Some of the knowledge generated by the project is being applied by sponsors to address issues such as primary multiple separation and seismic data regularisation. SINBAD II has been established as a consortium with support from BG, BP, Schlumberger and Petrobras.

Project No. 3182 PSD COMPFRACT **ITF Funding (£k):** 182 **Duration (Months):** 36

Title: A Computational Framework for Prediction of the Initiation and Evolution of Fractures and Faults

Description: New applications for the geomechanics software developed under this project continue to be implemented by the sponsoring companies.

Project No. 3189 PSD IPEGG **ITF Funding (£k):** 590 **Duration (Months):** 36

Title: Integrated Petroleum Engineering - Geomechanics – Geophysics – Next Generation Technology for the Petroleum Industry

Description: This project completed in March 09 and has successfully developed codes / methodologies to couple Rockfield’s FE-based geomechanical modelling software (ELFEN) to industry standard production simulation models (ECLIPSE, TEMPEST & VIP). The output is then incorporated into rock physics models to allow production-related changes in seismic properties of the reservoir and surrounding strata to be estimated. Some of the project sponsors have incorporated the coupled modelling approaches into their workflows.

Project No. 3222 PSD ISF2 **ITF Funding (£k):** 450 **Duration (Months):** 36

Title: Improved Simulation of Fractured & Faulted Reservoirs

Description: The development work from the upscaling of three phase fluid flow in complex reservoirs is being applied to a number of sponsors' reservoirs, in particular the Clair and Hanze fields.

Project No. 4035 PPD SPINAV2 **ITF Funding (£k):** 300 **Duration (Months):** 12

Title: Subsea Pilotless Inspection with an Autonomous Vehicle (Phase II)

Description: The technology has been demonstrated offshore on board ROVs and the prototype has been commercialised by SeeByte as SeeTrack Offshore, a retro-fit Dynamic Positioning system for ROVs.

