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Lundin Hit by Double Blow



The Haewene Brim FPSO has experienced production problems.

Lundin Petroleum has been hit by a double blow, forcing it to cut its 2015 production guidance because of the delay of the installation of the **Edvard Grieg** (*SEN*, 32/9) topsides and problems on its **Brynhild** (32/1) Field, both offshore Norway.

The cut to 32 Mboe/d from guidance of 41 Mboe/d to 51 Mboe/d came after Lundin said production from the Brynhild Field, which came onstream in December 2014, has been "very disappointing."

The production efficiency of the *Haewene Brim* FPSO vessel has been below forecast due to a number of issues particularly relating to topside efficiency and water-handling constraints.

Brynhild produced just over 3 Mbbl/d of oil during the first half of the year, which was more than 60% below forecast.

Production on the field was halted in mid-January, less than a month after it came onstream, due to operational issues on Bluewater's *Haewene Brim* FPSO vessel in the U.K. sector where it is tied back. A leak was detected in a gas injection flexible flowline and a connection point between one of the mooring chains and the riser buoy was found to be damaged. Production resumed following repairs.

Lundin CEO Ashley Heppenstall said, "We have seen improvements in production over recent weeks, but we have revised our production efficiency forecasts to what we believe are more realistic levels going forward, which coupled with the first-half production will have a negative impact on our 2015 production guidance."

Although Lundin said it has made good progress with the Edvard Grieg development project, production startup there has been delayed from the beginning to the end of the fourth quarter after the *Thialf* heavy-lift vessel was two months late in arriving at the field.

The topside installation has been successfully completed and the offshore hookup and commissioning is underway.

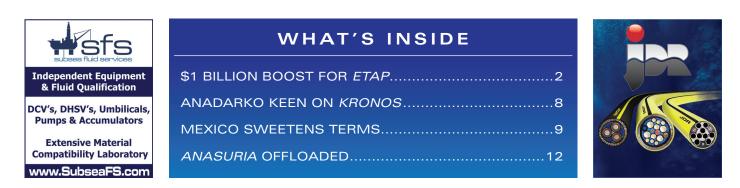
The *Safe Boreas* flotel is bridge-linked to the platform and more than 400 people are on board and involved with offshore operations.

In better news for the company, Lundin said it will use the results from its recently completed and successful 16/1-23 S appraisal well on Edvard Grieg to optimise the drainage strategy and determine the best possible location for production wells in the area.

The well, which also was testing incremental resource potential in this part of the field, was located in PL338 and was drilled about 2.4 km southeast of the Edvard Grieg platform.

The well encountered a 66-m gross oil column in pebbly sandstone with medium to good reservoir quality.

Extensive data acquisition and sampling is ongoing with the initial data results appearing very promising with regard to additional in-place volumes.



This is the tenth exploration/appraisal well in PL338 of which seven have been drilled in the Edvard Grieg Field. The licence was awarded on Dec. 17, 2004 (APA 2004).

The well was drilled to a vertical depth of 2,043 m below the sea surface and terminated in granite basement. The well will be permanently plugged and abandoned. Water depth at the site is 108 m.

DEVELOPMENT

Chevron Warns on Gorgon Delays

From Australia (LB): Chevron has warned of potential production delays at the \$54 billion **Gorgon** (*SEN*, 32/8) project in Western Australia, while revealing the timetable for **Wheatstone** (32/8) has recently come under pressure.

Speaking to investors following the company's second-quarter results, Chevron Executive Vice President Jay Johnson said it could not guarantee the first LNG cargo would be produced by the revised target of late 2015.

"The schedule is dependent on managing commissioning and startup risks including equipment malfunctions, possible labour and weather disruptions as well as other unforeseen issues," he said.

"Our focus is on a safe and incident free startup that leads to reliable long-term operations. We are working to achieve the first LNG cargo by year-end; however, given these risks, it's likely to occur in early 2016."

Gorgon was initially slated to produce gas in early 2015 at a cost of \$37 billion when the final investment decision was made. In 2013, Chevron pushed the timetable for first gas to mid-2015, but more recent company rhetoric referred to a revised startup date of late 2015.

Along with timing delays, Chevron has twice revised the capital cost for Gorgon, blaming weather delays, a high Australian dollar, logistical issues and low productivity for the cost overruns.

Despite the many challenges encountered at the mega project, there are only months left on Gorgon's development timetable with the 15.6 million tonnes per year project now more than 90% complete. The well was drilled by the jackup rig *Rowan Viking*, which will return to the Edvard Grieg platform to continue drilling of production and injection wells.

Lundin Norway is the operator of PL338 with 50%. The partners are OMV Norge with 20%, Statoil 15% and Wintershall 15%.

At the plant, located on Barrow Island, Johnson said all LNG and condensate tanks required for first LNG were ready, with commissioning of completed process systems underway.

"We expect to perform the first commissioning run of the compressors and testing of the hydrate prevention system in late September," he said.

Discussing the progress of Chevron's other development asset, Johnson said the \$29 billion Wheatstone LNG project was now more than 65% complete.

Hookup and commissioning is on plan with all subsea structures installed. At the plant site, 11 of 24 major process modules for Train 1 have been delivered, while all refrigeration compressors and gas turbine generators have been installed and the domestic gas pipeline has been completed.

"The focus of activity at the plant has shifted from civil works to mechanical, electrical and instrumentation systems," Johnson said.

While Johnson described the work on site as "going very well," he said the biggest challenge had been the delays in module delivery from a fabrication yard that was "putting pressure on the schedule."

"To address the delays, we've expanded to an additional yard and provided increased oversight in the yards," he said.

"We've seen positive results from these actions and are not anticipating any further delays in the module delivery schedule.

"Our objective remains first LNG by year-end 2016, and we will continue to provide updates on our progress over the next 18 months."

BP Pumps \$1 Billion into ETAP

BP is investing \$1 billion in its **Eastern Trough Area Project** (ETAP) (*SEN*, 31/19), which will secure the project's future for a further 15 years to 2030.

ETAP is an integrated development of nine different reservoirs with six fields operated by BP—**Marnock**, **Mungo**, **Monan**, **Machar**, **Mirren** and **Madoes** (the M fields); and three by Shell—**Heron**, **Egret** and **Skua** (the Heron cluster). All fields are located within a 35-km area.

The investment also will involve two drilling rigs, *Byford Dolphin* and *Ensco* 101, working on ETAP simultaneously, while subsea infrastructure will be replaced.

Trevor Garlick, regional president for BP's North Sea business, said, "Two weeks ago we welcomed the arrival of the *Safe Caledonia* flotel into the ETAP area, launching the start of a major investment programme to renew the platform and extend its field life.

"In parallel, we are drilling new wells on ETAP's Machar and Marnock fields, replacing subsea infrastructure, and deploying new technologies to help maximise the fields' recovery.

"ETAP holds significant potential and we are working to ensure its reliability, efficiency and long-term competitiveness. This project will secure the future of the field until 2030 and beyond."

First production from ETAP was in July 1998 with the satellites Mirren and Madoes, coming on stream via a subsea tieback and additional platform facilities in 2002.

DEVELOPMENT BRIEFS

Det norske oljeselskap has been given permission by Norway's Ministry of Petroleum and Energy to drop development of the northern part of the **Jette** (*SEN*, 30/21) Field in the Norwegian North Sea.

The company had originally included further development of Jette in the plan for development and operation, which was submitted in 2011.

Jette is Det norske's first operated development with two subsea wells tied back to the Esso Norge's *Jotun* FPSO vessel.

Jette has been beset with problems during development. Original partners Bridge Energy and Dana Petroleum declined to take part in the project. One wellbore collapsed during drilling, while costs rose and reserves fell. Reserves are put at 6 MMboe to 7 MMboe, half the 13.8 MMboe registered at the time of approval.

Det norske owns 70% of the licence and Petoro holds the remaining 30%.



The Seven Borealis will work on West Nile Delta.

Subsea 7 has scooped a \$500 million contract from BP and partner DEA for the development of the **Taurus** and **Libra** (*32/5*) subsea fields offshore Alexandria, Egypt.

The development is the first phase of Egypt's **West** Nile Delta (32/5) project in about 800 m of water.

The contract scope includes the engineering, procurement, installation and pre-commissioning of subsea infrastructure for nine wells including 75 km of umbilicals and 100 km of pipeline.

Engineering and project management work will begin immediately at Subsea 7's Global Projects Centre in London. Fabrication of the subsea structures and spools will be carried out at the Petrojet Maadia yard near Alexandria.

Offshore installation is scheduled to begin in second-half 2016 using the

Subsea 7 pipelay vessel *Seven Borealis* and heavy construction vessel *Seven Arctic*.

From Australia (LB): Cooper Energy has signed its first gas supply agreement for the **Sole** (32/9) gas field in Victo-

ria, Australia, with the company indicating further supply deals are likely to follow.

The company announced details of a heads of agreement (HoA) inked with glass manufacturing firm O-I Australia.

The HoA sets out the key commercial terms for the supply of gas of one petajoule per annum for the lesser of eight years, or the life of the field, from Cooper Energy's 50% share of Sole production. The volume contracted represents 8% of the company's share of the field's anticipated production.

The Sole gas project is expected to comprise a single vertical subsea well and pipeline to the onshore Orbost gas plant, which is connected to the Eastern Gas Pipeline.

The final investment decision is expected to be made by September 2016, and that first supply from Sole to O-I Australia would start in January 2019.

The Sole Field is located in VIC/RL3, offshore Victoria about 62 km from the Orbost gas plant.

Cape has landed a \pounds 9.8 million (US\$15.3 million) contract in support of the hookup and commissioning of BP's two new bridge-linked **Clair Ridge** (32/7) platforms West of Shetland.

The deal will secure about 170 jobs for Cape employees through the provision of core services including access, insulation, coating, passive fire protection and platform services for the Clair Ridge hookup work.

Statoil is heralding the success of one of its largest fasttrack projects so far after kicking off production from the **Gullfaks South** (32/3) scheme for IOR in the Norwegian North Sea.

Gullfaks South will increase output from the Gullfaks area by about 65 MMboe.

The project is part of Statoil's fast-track portfolio, but it has a larger and more complex subsea scope than usual. It includes two subsea templates, four production wells, two gas injectors, a gas injection pipeline and a total of three production tubings, in addition to umbilicals and power cables for pipeline heating. There are 22 subsea tie-ins.

"Gullfaks South demonstrates how we can increase recovery and profitability by use of standardised, simplified development solutions tied to existing infrastructure," said Arild Dybvig, vice president for fast-track projects in development and production Norway.

Production started three years after the project was approved and \$1.09 billion has been invested in the project.

Close to 800 vessel days and 2.3 million working hours have been completed on the project. The project also involved 370 drilling rig days. The drilling programme will continue through first-quarter 2016.

The **Peregrino** (31/1) Field in the Campos basin offshore Brazil has produced more than 100 MMbbl of oil since it came onstream in April 2011. The Peregrino Field includes two fixed drilling platforms (WHP A and WHP B) and the *Peregrino* FPSO vessel.

In January, the \$3.5 billion development plan of Peregrino Phase II was submitted to Brazilian regulator ANP. The project involves a new drilling platform (WHP C) and will add about 250 MMbbl in recoverable reserves to the Peregrino Field.

Statoil holds a 60% stake and is the operator of the field, while Sinochem holds the remaining 40%.

Peregrino is Brazil's eighth largest field and is also the largest field operated by Statoil outside Norway and accounts for about 12% of its international production (around 720 Mbbl/d).

The recoverable reserves are estimated between 300 to 600 MMbbl.



The Peregrino FPSO produces on the Campos Basin field.

FLOATERS

Big Foot Delayed until 2018

From Houston (BN): Recent installation problems with the **Big Foot** tension-leg platform (*SEN*, 32-6) probably mean no production from the project before 2018, two years later than the latest timeline called for, Chevron said in its second-quarter earnings call.

"At this point we're not expecting any Big Foot production in 2016 or 2017, which is a reduction from our original plan of 10,000 net barrels per day in 2016 and 22,000 in 2017," Jay Johnson, executive vice president upstream, told analysts.

Installation work was halted in June after nine of 16 tendons lost buoyancy. The \$5 billion project has been plagued with delays. Startup originally was targeted for mid-2014, then 2015, then 2016.

The Big Foot site is in 1,600 m in Walker Ridge Block 29, about 360 km south of New Orleans.

Chevron also disclosed it has given the new name **Tigris** to the northwest Keathley Canyon area about 365 km southwest of New Orleans that includes the **Guada**-



The Big Foot TLP won't produce before 2018.

lupe, **Gila** and **Tiber** discoveries and the undrilled **Gibson** prospect, all in waters at least 1,200 m deep.

Recent results from deepening the Gila discovery well have been encouraging and further drilling is planned, he said.

Chevron, BP and ConocoPhillips (COP) recently agreed to work together (31/22) to develop the Tiber



and Gila discoveries and Gibson prospect, with Chevron taking over operatorship.

Petrobras also is a partner in Tiber, Venari in Guadalupe. COP is not a partner in the Chevron discovery at Guadalupe, which Chevron has said could be hubbed with the other three. Johnson also touted a Lower Tertiary discovery at the Sicily prospect in 2,025 m in Keathley Canyon Block 814, about 410 km southwest of New Orleans. "We are encouraged by the results of the discovery well and follow-up appraisal work is planned," Johnson said.

Tullow's TEN on Track

Tullow Oil's offshore Ghana **TEN** (*SEN, 32/8*) project remains within budget and on schedule for first oil in mid-2016, the company said.

During the second-quarter it achieved several important milestones on the project, including the running of the first two of 10 well completions and the installation of the turret on the bow of the FPSO vessel.

The first in-country fabrication works have been completed for the start of the offshore installation campaign, while specialist subsea manifolds and umbilicals from the U.S. are now ready for transport to Ghana.

On its **Jubilee** Field offshore Ghana, production has remained strong averaging about 105 Mbbl/d gross during first-half 2015.

Final commissioning of the onshore gas-processing facility was completed in March and since then gas exports from the Jubilee Field have averaged about 22 MMcm/d.

Tullow plans to drill two additional Phase 1A wells and the first of these, J-37, has commenced drilling.

Work continues to incorporate the **Mahogany**, **Teak** and **Akasa** resources in the Greater Jubilee Full Field Development Plan, which the partnership plans to submit to the Government of Ghana by year-end. In first-half 2015, West Africa working interest oil production was within guidance averaging 66.5 Mbbl/d.

As a result of strong performance from Jubilee and the non-operated portfolio, Tullow said 2015 working interest production guidance for West Africa has been increased to 66 Mbbl/d to 70 Mbbl/d of oil from 63 Mbbl/d to 68 Mbbl/d.

Meanwhile, in the Caribbean-Guyanas, Tullow said it has been very active maturing its exploration opportunities in the region. In May, the Spari-1 well in Suriname commenced drilling with a result expected in August.

In Jamaica, where Tullow has a significant offshore acreage position, a bathymetry survey has been completed on the Walton and Morant blocks. The survey results provided indications of possible seeps on which to position drop cores and this operation has commenced.

In Norway, Tullow completed the Bjaaland exploration well in May with only residual oil shows encountered. The well was plugged and abandoned. The *Leiv Eiriksson* semisubmersible rig drilled the Bjaaland well and moved to the Tullow-operated Zumba prospect, which completed drilling in June and was plugged and abandoned as a dry hole.

BG Strikes Brazilian Bounty



The Cidade de Ilhabela produces 88 Mbbl/d.

BG has announced first oil from the *Cidade de Itaguaí* FPSO vessel, the sixth unit to start production across the group's discoveries in the Santos Basin, offshore Brazil.

The FPSO will produce from the **Iracema North** area of the **Lula** (*32*/*8*) Field in the Petrobras-operated Block BM-S-11.

The *Cidade de Itaguaí* is anchored 240 km off the coast of Rio de Janeiro in about 2,200 m of water.

This is the second leased FPSO deployed on the Iracema development and will double the gross production capacity to 300 Mbbl/d of oil and 16 MMcm/d of natural gas from the area. The FPSO has capacity to store 1.6 MMbbl of oil.

BG said it achieved record net production from the Santos Basin in July, reaching 159 Mboe/d.

Gross production from FPSO 4 *Cidade de Ilhabela* has averaged about 88 Mbbl/d with three producer wells and



one injector well. FPSO 5 *Cidade de Mangaratiba* has averaged about 130 Mbbl/d from four producer and three injector wells.

Production will continue to increase from both FPSOs through 2015 as additional wells are connected. FPSO 7 is in the Brasa shipyard in Brazil and final integration works have commenced. FPSO 8 is completing its current integration phase in China and is due to sail away in the coming weeks, while FPSO 9 integration works continue in Singapore. FPSOs 7 to 9 are due onstream in 2016.

Meanwhile, BG said that at the end of June, the BM-S-11 consortium submitted the initial field development plans for the proposed **Atapú**, **Sururu** and **Berbigão** areas within the wider **Iara** area.

This minimum development requirement incorporates two replicant FPSO vessels on Atapú due onstream in 2018, and one assigned to Berbigão/Sururu due onstream in 2019.

First production from Sururu will be via the connection of wells to the FPSO planned to be deployed on Berbigão.

This initial development plan might be amended and adjusted as additional information is acquired from the first FPSOs, BG added.

SBM Upbeat after Strong Results

There has been good news for SBM Offshore, which said it was "happy to report" better than expected first-half revenue of \$1.6 billion.

The company said it continues to see a healthy appetite for its projects, as evidenced by the 45% taken up by joint-venture partners in the *Turritella* project as well as the recently announced \$1.55 billion of project financing for *Cidade de Saquarema*.

SBM said construction continued for the finance leased *Turritella* vessel, which will be used on the U.S. Gulf of Mexico (GoM) **Stones** (*32/9*) Field in the first half of the year, with refurbishment and conversion work near completion at Keppel Singapore.

Sail away for the GoM, where anchoring and commissioning will take place, is expected during second-half 2015 with delivery to the client expected near the end of first-half 2016. The charter contract includes an initial period of 10 years with extension options up to a total of 20 additional years.

When installed at almost 3 km water depth, the FPSO *Turritella* will be the deepest offshore production facility of any type in the world.

In Turret Mooring Systems, SBM said the three large, complex turrets for the **Prelude** (*32/8*) floating LNG (FLNG) unit, **Quad 204** (*31/19*) and **Ichthys** (*32/8*) are progressing in accordance to clients' schedule.

Integration of the Quad 204 turret with the vessel has been completed in Korea and the client has accepted delivery, while fabrication work on Prelude FLNG has been completed in Dubai with final integration in Korea.

The last elements of the Ichthys turret have been delivered for final integration in Korea with expected delivery in early 2016.

FLOATER BRIEFS

From Australia (LB): Wood Group has secured a FEED contract for the Woodside-operated proposed **Browse** (*SEN*, *32/8*) FLNG development, offshore Western Australia.

Wood Group Kenny (WGK) will perform all design engineering for the insulated production flowline system required for the asset's offshore gas-condensate fields— **Brecknock, Calliance** and **Torosa**—located 300 km from the Kimberly coast.

The 12-month contract, worth \$6 million and effective immediately, will be delivered from WGK's Perth office.

The primary focus of the Browse subsea flowline FEED contract is to develop the engineering and design of the rigid flowline system to assist the Browse joint-venture participants to take final investment decision, which Woodside is targeting in second-half 2016.

The award follows WGK's successful delivery of the preliminary engineering for the Browse flowline system during the basis of design phase.

It also continues the long-term partnership between both companies. WGK has worked on projects including **Greater Western Flank Phase 2**, **Pluto**, **Angel** and the Trunkline System Expansion Project.

Talisman Energy Norge has exercised an option to extend the contract for the *Petrojarl Varg* FPSO vessel for three years until the end of June 2019.

Talisman has one remaining option to extend the contract period for a further three years.

The ship-shaped, turret moored FPSO has been in production on the **Varg** Field off Norway since 1998.

Bechtel has been selected by Delfin LNG to carry out a FEED study for the first U.S.-based floating LNG (FLNG) vessel.

The vessel is planned to go into operation at Port Delfin, a proposed deepwater port and FLNG facility that will be located about 50 miles off the coast of Louisiana.

Once the final investment decision is made, Bechtel is expected to design, build and commission the FLNG vessel.

Port Delfin consists of onshore gas compression facilities and a deepwater port that uses existing pipeline infrastructure in the Gulf of Mexico to transport natural gas offshore to four moored floating liquefaction vessels.

Delfin has submitted an application to the Maritime Administration and the U.S. Coast Guard for authorisation to construct, own and operate a deepwater port capable of exporting 12.5 Bcm/year of natural gas or 9.2 MMtpa of LNG. Delfin has signed joint-development agreements with Höegh LNG and Enbridge for the scheme.

SBM Offshore has completed the \$1.55 billion project financing for the *Cidade de Saquarema* (32/3) FPSO vessel, the largest project financing in the company's history.

The FPSO *Cidade de Saquarema* is owned and operated by a joint venture (JV) owned by affiliated companies of SBM Offshore (56%), Mitsubishi Corporation (20%), Nippon Yusen Kabushiki Kaisha (19%) and Queiroz Galvão (5%).

The vessel has processing capacity of up to 150 Mbbl/d of crude oil and 6 MMcm/d of gas, and storage capacity of about 1.6 MMbbl of crude oil. The JV will own and operate the vessel on a 20-year charter service for Tupi.

Combined with the \$1.45 billion project financing for the FPSO *Cidade de Maricá*, the deal completes the successful financing of \$3 billion for two sister units destined for the **Lula** Field in the presalt province offshore Brazil.

Block BM-S-11 is under concession to a consortium comprised of Petrobras (65%), BG (25%) and Petrogal Brasil (10%).

Technip has been awarded an engineering, procurement, construction, installation and commisioning contract by Petronas Carigali for the tie-in of the *PFLNG1 (32/8)* facility to the KAKG-A platform in the **Kanowit** Field, located 200 km offshore Bintulu, East Malaysia, in 80 m of water.

The contract covers the procurement and installation of a 3.2-km flexible flowline between the existing KAKG-A central processing platform in the Kanowit Field to the *PFLNG1* riser. It also includes modification and tie-in works at KAKG-A. Technip's operating centre in Kuala Lumpur will execute the contract. The flexible flowline will be manufactured in Asiaflex Products, Technip's manufacturing facility in Tanjung Langsat, Johor, Malaysia. It will then be installed by the group's multipurpose vessel, *Deep Orient*.

The installation campaign is scheduled for completion in late 2015.

The *PFLNG1* vessel, which will produce 1.2 million tonnes per year of LNG, will play a significant role in Petronas' efforts to unlock gas reserves in Malaysia's remote and stranded fields to help meet the growing demand for gas, the company said.

The first oil output from a long-duration test in Brazil's giant **Libra** (32/8) offshore area will flow in first-quarter 2017, platform joint operator Odebrecht Oil & Gas said.

That is later than the 2016 second-half start forecast in June by Brazil's state-run oil company Petrobras, which manages exploration in Libra.

A Petrobras-led consortium won E&P rights to Libra, one of the world's largest recent oil discoveries, in 2013. Total and Royal Dutch Shell are also parts of the group, with 20% each, while Chinese state oil companies CNOOC and China National Petroleum Co. hold 10% each.

"The test will begin in the first quarter of 2017," Rogério Ibrahim, CFO of engineering group Odebrecht, said. "We will deliver the ship at the end of December [2016] and the receivables start flowing [to us] in 2017."

Cosco Corp. has extended the delivery dates of a floating accommodation unit (FAU) at the request of a shipowner.

Cosco's Nantong Shipyard in China had secured contracts for the conversion of two semi-completed hulls to high-end FAUs.

The first FAU has been delivered to the shipowner and the delivery date of the second FAU will be extended for a period of not more than 12 months from its original delivery date of October 2015.

EXPLORATION

Shell Begins Arctic Drilling

From Houston (BN): Shell has spudded the first of two wells planned this summer in the Chukchi Sea off Alaska. Drilling began at **Burger J** in 44 m of water about 110

km northwest of Wainwright, Alaska, on July 30.

The *Transocean Polar Explorer* will carry out tophole-only drilling and casing down to about 915 m pending arrival of the icebreaker *Fennica*.

The *Fennica* carries specially built blowout control equipment, and regulators have said it must be on site before potential hydrocarbon-bearing zones are penetrated.

Shell has managed to keep going despite interference from protestors and a gash torn in the hull of the *Fennica* as it left Dutch Harbor en route to the drill site (32/7), forcing its return to Portland, Ore., for repairs.



The Fennica icebreaker is on its way to the Arctic drill site.

As of last week, it was headed back, nearing the Aleutians as it headed toward the Chukchi Sea. "At this time, we expect the *Fennica* to be in theatre in time to drill into hydrocarbon-bearing zones," a spokeswoman told *SEN*.

"We are not working under any predetermined timelines. We are permitted to drill up to two wells, and our plan is to make as much of the time in theatre as we can before ice arrives in 2015. Whatever we don't accomplish in the summer ahead we are fully prepared to finish in 2016."

The second well planned this summer is Burger V. Shell drilled a tophole at Burger A during the failed campaign of 2012, but decided not to continue it and to focus on J and V, which offers "a better opportunity to evaluate the Burger Prospect quicker and more efficiently."

Using a formula applying icing experience in the area over the past 10 years, regulators have set Sept. 28 as the absolute last day Shell can "conduct exploratory drilling operations below the casing shoe of the last string of casing set."

The cutoff date is earlier (Sept. 24) if the *Noble Discoverer*, the second rig regulators require nearby in case a relief well has to be drilled, is at Dutch Harbor instead of on site. Other operations at the site can continue, conditions permitting, up to Oct. 31.

Anadarko Confident of Kronos Oil

From Houston (BN): Details of the discovery at **Kronos** (*SEN*, 32/5) offshore Colombia were shared by Executive Vice President and CFO Bob Gwin during Anadarko's second-quarter earnings call.

The wildcat encountered significant natural gas pay but is being drilled to a deeper objective where the company hopes to find oil.

Total depth is expected during the third quarter. "We have not seen any direct evidence of oil at this point, but all the indirect evidence is pointing to, very consistent with, our original predrill estimates, that this should be an oil-prone system," Gwin told analysts.

"We've got to get down to our second objective. We have geomechanical issues that we've got to work our way through—to get this well down. But we're making progress."

After Kronos is drilled to total depth, the rig will move to Calasu on the same block "and see what we have there in a very different play style... We've got multiple play styles [and] multiple objectives out there."

Anadarko has leased 6 million acres in the Fuerte area and 10 million in the Col area.

In the Gulf of Mexico (GoM), the company confirmed what became apparent in Central GoM Lease Sale 235 last March: **Coronado** (*32/1*) is not being abandoned. ConocoPhillips (COP) and Chevron withdrew, and remaining partners Anadarko and Venari let the original leases expire.

The partners withheld comment other than letting COP talk down Coronado's appraisal as disappointing.

SPE Offshore

CONFERENCE & EXHIBITION

Europe

Then a 60:40 partnership between Anadarko and Venari submitted the only bid in the March sale, re-leasing the tracts (Walker Ridge 98 and 99) for \$7.3 million.

In the second-quarter earnings call, Gwin was asked about the prospect. "Coronado is part of the Shenandoah mini-basin. We've got a discovery there that we have appraised. So, we think we've got a pretty good handle on what it is. We recently picked up our blocks again ... [and] that's going to stay that way until we have a **Shenandoah** (32/1) development put in place, because

we see it (Coronado) as a tieback through that facility." Translation: Coronado might not be a standalone, as discoverer Chevron originally thought, but it's going forward in future.

Anadarko also reported **Heidelberg** spar (32-7) moored and "storm-ready" on location in Green Canyon Block 860. Installation of mooring lines, suction piles, flowlines and export lines is complete. Umbilical installation is set for the third quarter.

Topsides for the 8-Mbbl/d facility are complete at Kiewit's Ingleside, Texas, yard and they are undergoing commissioning before being hauled out to the spar and installed. Production startup is targeted for mid-2016.

And Anadarko updated the outlook for its **Phobos** (32/4) discovery in Sigsbee Escarpment blocks 39 and 40.

Gwin said, "We're looking at a potential appraisal well in early 2016. We're trying to get all the partners aligned, get their views on how they see it. And then get that into the drilling schedule that's being worked as we speak."





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Brazil Offers 83 Offshore Blocks

From Houston (BN): Brazilian oil regulator ANP is moving forward with plans for the 13th Licensing Round, which will offer 266 blocks in 10 sedimentary basins: the Amazon, Parnaíba, Potiguar, Reconcavo, Sergipe-Alagoas, Jacuípe, Camamu-Almada, Holy Spirit, Campos and Pelotas.

Eighty-three of the blocks are offshore, including three in the Campos, seven in Espirito Santo, nine in Camamu-Almada off Bahia, four in Jacuipe also off Bahia, 50 in Pelotas off the far south coast near Uruguay and 10 in Sergipe-Alagoas, off the states of the same name just north of Bahia.

But the terms offered by ANP are under fire.

IBP, the Brazilian petroleum industry association, called the requirements placed on bidders the worst yet and said they were inappropriate in the current environment of collapsed oil prices and a corruption investigation. IBP particularly blasted contract clauses restricting lessees' rights to arbitration and obligating them to pay fines for local content violations prior to appeals. Bids are due to be opened and apparent winners announced in October, with awards made in December and concessions qualified and signed by March 2016.

Meanwhile, fallout from the "Carwash" bribery-kickback scandal in Brazil keeps widening even as planning goes forward for this autumn's 13th Round auction of blocks.

A top aide to former President Lula has been arrested. Petrobras is requiring broader oversight of deal making, limiting individual executives' power to award contracts.

In more upbeat news, Petrobras has lifted a bidding ban imposed on TKK Engenharia Ltd. because authorities have shelved that administrative case.

EXPLORATION NOTES

Dolphin Geophysical is currently acquiring 4,192 sq km of new Multi-Client 3D SHarp Broadband seismic in the northernmost region of the Norwegian North Sea.

The survey, which is 40% complete and being carried out by the *Polar Duchess*, is targeting both open and newly awarded APA acreage.

It is being conducted adjacent to the shallow 2005 **Peon** (31/23) gas discovery and will cover three minor discoveries and six wells in total, including discovery wells 35/3-2, 6204/10-1 and 6204/11-1.

Fugro has been awarded a contract by BG to conduct an integrated multibeam echosounder (MBES) survey and seabed coring campaign over its offshore acreage in the Honduran Caribbean.

As part of BG's exploration licence commitments, the campaign will map the seafloor to interpret, identify, sample and analyse potential hydrocarbon seeps.

Fugro's survey vessel *MV Fugro Brasilis*, began the twomonth mapping and interpretation portion in July 2015.

The MBES and seabed coring programme will cover an area of the Patuca Basin in excess of 10,000 sq km in the northern part of the block.

BP has put an end to its deepwater exploration activities off Uruguay, according to an official at Uruguay's stateowned oil company Ancap.

BP has exited the South American country, three years after it won rights to explore blocks 11 and 12 in Uruguay's Pelotas Basin and Block 6 in the Punta del Este Basin.

The acreage covers an area of almost 26,000 sq km in 50 m to 2,000 m of water.

Otto Energy has spudded the **Hawkeye-1** exploration well in the Palawan Basin, offshore Philippines.



The Norne FPSO produces from the Norne field.

The well was spudded on July 31 and reached a depth of 2,449 m.

The forward plan is to connect the BOP to the wellhead and pressure test before commencing to drill the 17.5-in. hole to just above the primary target reservoir.

Otto expects to hit the primary target reservoir in about two weeks.

The Hawkeye-1 exploration well will be plugged and abandoned upon completion of drilling and logging.

SOCO is teaming up with PetroVietnam and SOVICO Holdings for potential E&P on blocks 125-126, offshore Vietnam.

SOCO began evaluating the exploration potential of the blocks in the Phu Khanh Basin in 2010.

Lime Petroleum has agreed to acquire EnQuest's 50% stake in licences PL760 and PL760B in the Norwegian Sea.

The licences are located some 25 km west of the **Norne** oil/gas field in 370 m of water. The proximity to existing infrastructure has been a particular draw for Lime, which will take a drill-or-drop decision in February 2016, following which drilling could take place in 2016 or 2017.

VESSEL BRIEFS

From Houston (BN): Helix will save \$200 million with an agreement for the Singapore shipyard building Q7000 to delay delivery of the semisubmersible rig until 2017, Executive Vice President and CFO Tony Tripodo told analysts in a second-quarter earnings call.

CEO Owen Kratz said the company is focused mostly on "maintaining adequate liquidity" to complete the Q7000 as well as the *Siem Helix I* and *II*.

Helix is talking to clients, including Petrobras, about how to reduce costs while preserving contracted work. "This current situation in our industry is looking like a lower-for-longer scenario under this premise over the next year or two," Kratz said.

Meanwhile, OSBIT Power has delivered two well intervention equipment projects, exact cost undisclosed, for installation on the *Q7000*.

The custom-made equipment includes twin cursor-type ROV launch and recovery systems and an umbilical guidewire handling system, allowing unobstructed access through the moonpool to launch and recover large well equipment. OSBIT also is building intervention tension frame systems for *Siem Helix I* and *II* and *Q7000*.

SURF contractor Ceona has expanded its West African reach with a strategic partnership with Interoil Angola.

The partnership will see Interoil Angola, which is a key player in offshore support vessel management in West Africa, support Ceona's plans to expand into Angola.

Ceona is already active in West Africa through its Ceona-Seaweld joint venture in Ghana as well as the company's strategic partnership with Marine Platforms in Nigeria.

Headquartered in Luanda and with a yard in Sonils, Interoil Angola's core business is managing support vessels in-country. The company, which is registered with Sonangol, offers oil and gas services in strategic alliance with reliable and proven technical partners.

Its Ceona Amazon is a powerful, purpose-built hybrid



The Jascon 31 is heading to the Gulf of Mexico.

vessel that can execute complex logistical projects in remote, harsh and deepwater territories.

Sea Trucks has landed a charter for the *Jascon 31* accommodation construction vessel in the Gulf of Mexico (GoM). The DP3 vessel will start sailing soon from West Africa to the Mexican sector of the GoM.

Sea Trucks will provide accommodation support services, lifting operations and installation work to Permaducto for work on Pemex's KMZ68/69 project for 95 days plus options.

Jascon 31 is a DP3 accommodation construction vessel for both shallow and deepwater operations. The vessel is equipped with a 400-t, heave-compensated, main crane, enabling the vessel to provide extensive subsea support services.

DOF Subsea has agreed to charter the *Skandi Acergy*, *Skandi Seven* and *Skandi Skansen* vessels to Subsea 7.

It will take the *Skandi Acergy* for another three years until August 2019. Subsea 7 has taken the *Skandi Skansen* on a new contract for 2016 ensuring utilisation for most of the summer.

Skandi Seven will be redelivered to DOF Subsea on Jan. 1, 2016.

POLICY

More Awards in UK Offshore Round

Oil and gas exploration on the U.K. Continental Shelf has been given a boost with more awards in the 28th Offshore Licensing Round.

Some 41 new licences have been handed out in addition to the 134 confirmed in late 2014, making the round one of the largest in the five decades since the first licensing round took place in 1964—a total of 175 licences covering 353 blocks.

The 28th Offshore Licensing Round was launched on Jan. 24, 2014, and 173 applications were received.



The main tranche of awards was announced on Nov. 6, 2014, and the latest awards have been confirmed following additional environmental assessment and consultation.

Of note, Hurricane Energy has been awarded blocks 204/30b and 205/26b offshore the Shetland Islands, which link up to two of its nearby existing licences.

BP has been awarded five licences covering blocks 204/23a, 2014/24b and 204/25c, which it applied for on its own and also part of Block 47/9d and Block 47/14e, both of which have been awarded to BP and its partners, Perenco and Centrica.

Mexico Moves to Encourage Bids

From Houston (BN): Mexico is moving to sweeten contract terms to attract foreign investment as part of ongoing massive energy reforms.

At press time for SEN, the 300-page text of new changes by SENER (the Mexican secretariat of energy) had not been posted on the agency website.

But a news release signaled changes intended to make bidding more attractive to international companies for Phase 2 (Shallow Water - Production) of Round 1.

Gabriel Salinas, an energy lawyer at Houston's Mayer Brown focused on Mexico, said the news release indicates SENER is "trying to move in the right direction."

But he added, "We expect the conversation to continue. We don't think the changes that have been announced will solve all problems."

He listed changes announced but not detailed in the news release as: modification in favour of bidders of a payment adjustment mechanism that is triggered at certain rates of return; increased flexibility in line with international practice governing guarantees companies must provide; clarification of the meaning of "fault" and "willand secured blocks 43/19b, 42/10b, 43/20c and 44/18c with partners. Shell was awarded 10 blocks outright in the licensing

Centrica has picked up blocks 49/3, 49/4d and 49/9d

round. Europa Oil and Gas was awarded Block 41/24 in the southern North Sea. Ithaca Energy has been awarded Block 15/19e through its partner Idemitsu.

Other companies to be awarded licences include Statoil, ENI, Gdf Suez, Maersk, E.ON, Total, Parkmead, Strike Oil and Suncor Energy.

ful misconduct" in administrative rescission cases; and a company will be allowed to bid both individually and as part of a consortium as long as the bids are not for the same tract.

"There's a constant conversation between industry and Mexican authorities through the Round 1 process, which I believe is being productive and generating changes favourable to the industry," Salinas said.

Round 1 is unfolding in phases over several months. The first phase generated only two winning bids out of 14 tracts offered, boosting pressure on Mexico to be more accommodating to industry.

Meanwhile, preparation continues for expanded foreign involvement in Mexico's offshore oil sector.

MultiClient Geophysical has begun data acquisition in a multiclient 2-D seismic campaign in the Campeche Deep and Yucatan Shelf basins.

And Dolphin Geophysical has started a multiclient 2-D long-offset seismic survey in the East Campeche Basin. Plans call for release of data prior to the blocks covered coming up for auction.



Oil and gas output has increased on the UKCS.

Figures released by U.K. authorities show that oil and gas production rose for the first time in 15 years in the first six months this year.

A month ahead of the publication of Oil & Gas UK's Economic Report 2015, CEO Deirdre Michie welcomed the rise and said the basin is in the midst of reform.

"Recent provisional figures from the Department for Energy suggest that oil and gas production from the U.K.

Continental Shelf (UKCS) over the first six months of this year could be 2.5% higher than the same period last year. It's still early days, but initial indications suggest that production could increase this year for the first time in 15 years."

Provisional data for the first six months of 2015 show liquids production to be up about 3% and net gas production to be up about 2.5% this year, compared to the first six months of last year.



UK First-half Production Rises 2.5%

Production in the second quarter looks particularly encouraging and early figures suggest that May saw the most oil and gas produced on the UKCS since March 2012.

"We will be able to discuss annual estimates with more certainty by the end of the summer maintenance season, as figures for July and August are historically the most uncertain," Michie added.

Oil & Gas UK believes the improved performance is partly due to production from the large **Golden Eagle**

BUSINESS

Job Losses Continue to Bite

existing assets.

From Houston: Dire market conditions with lower commodity prices have forced Chevron to let go of employees to rein in costs.

Chevron said it will reduce its staff by about 1,500 positions, just more than 2% of its worldwide workforce, as the company targets reductions of about \$1 billion with additional cost savings expected.

The news comes as the industry continues to grapple with oil prices that have essentially been sliced in half within a year's time as ample supplies outpace demand.

The situation has caused companies to cut back spending, sell assets, form partnerships and reduce staff to soften blows on bottom lines.

"In light of the current market environment, Chevron is taking action to reduce internal costs in multiple operating units and the corporate centre," spokeswoman Melissa Ritchie told *SEN*.

"These initiatives, which are currently underway, are focused on increasing efficiency, reducing costs and focusing on work that directly supports business priorities."

Of the positions that will be eliminated, 950 are in Houston, where Chevron has about 8,000 employees. The

company plans to reduce its nearly 3,200 San Ramon staff by 500 positions.

(31/20) Field, which only started producing in Novem-

ber 2014, as well as, importantly, stronger delivery from

Deirdre Michie added, "Clearly the oil price, which has

more than halved since this time last year, continues to

really challenge the industry. However, this positive news

can indeed be attributed to the effort and investment the

industry has put into improving the integrity and perfor-

mance of UKCS assets-something we'll look to explore

in further detail in our Economic Report 2015."

"Additionally, there will be a reduction of approximately 600 staff augmentation contractors from the 24 groups in the corporate centre," Ritchie said.

The cuts are not limited to the U.S. Fifty positions are international.

However, about 270 of the 1,500 positions are currently vacant and will not be filled, Ritchie said.

Chevron is not the only company that is cutting back. Anglo American is targeting \$500 million in cost savings through the reduction of 6,000 jobs, including from businesses that it is divesting.

BHP also announced it was cutting about 100 jobs at its Melbourne headquarters. Technip has announced plans to cut 6,000 jobs.

Oilfield service companies also are letting go of employees by the thousands. By the end of June, Baker Hughes had eliminated about 11,000 of 13,000 planned position cuts.

Halliburton is cutting about 16% of its workforce. Schlumberger reduced its headcount by about 11,000 employees in first-quarter 2015.

Shell Sells UK North Sea Anasuria Assets

Shell and Esso Exploration and Production have agreed to sell off the U.K. North Sea **Anasuria** Cluster to Malaysia's Hibiscus Petroleum and Ping Petroleum.

The cluster is in the U.K. Central North Sea and consists of a 100% interest in the *Anasuria* FPSO vessel, **Teal**, **Teal South**, **Guillemot A** fields and a 38.65% interest in the **Cook** Field.

Hibiscus said the cluster represents an attractive, geographically focused package of operated interests in the producing fields and associated infrastructure.

Hibiscus plans to take up a 50% stake in the Anasuria Cluster for \$52.5 million. Ping will take the remaining 50% stake.

Ken Pereira, managing director of Hibiscus, said, "This acquisition will complete our company's strategy of

acquiring a balanced portfolio of assets, which includes exploration, development and producing assets within five years of listing our company.

"We will be able to cut our teeth as operator in conjunction with Ping in one of the world's foremost oil and gas production basins.

"The Anasuria Cluster has development potential for a company of the size of Hibiscus and provides us with an excellent foundation upon which we can build a significant North Sea presence."

A Shell spokeswoman said, "The Anasuria cluster has entered a phase where it offers greater value to other companies than it does for Shell."

Total Sells 20% Stake in Laggan/Tormore

Total is selling 20% of its interests in the West of Shetland Laggan (*SEN*, 32/7), Tormore, Edradour and Glen-livet fields to SSE E&P UK for \$876 million.

The move is part of a plan to divest \$5 billion worth of assets in 2015.

The Laggan and Tormore fields are located about 140 km west of the Shetland Islands on blocks 206/1a, 205/4b and 205/5a, in 600 m of water. Development of the fields was launched in 2010 but has been delayed and first gas is expected in the coming months.

The development concept consists of a 140-km tieback of five subsea wells to the new onshore Shetland Gas Plant, with a peak production rate of 14 MMcm/d of gas. Edradour will be developed by converting the discovery well into a production well, connected to the main Laggan–Tormore flowline by a 16-km subsea tieback.

Glenlivet will be developed via two wells and a 17-km production pipeline tied back to Edradour. Edradour is expected to start up in 2017, followed by Glenlivet in 2018.

Following completion of the deal, Total will hold a 60% operated interest in the Laggan, Tormore, Edradour and Glenlivet fields, alongside partners Dong (20%) and SSE (20%).

The sale also includes 20% of Total's interest in the Shetland Gas Plant and interests in several exploration licenses located in the West of Shetland area, including the Tobermory discovery.

BUSINESS BRIEFS

From Houston (BN): **Oceaneering** has announced it will cease manufacture of subsea BOP control systems. During a second-quarter earnings call, President and CEO Kevin McEvoy told analysts the business had shrunk to the point that it was "not really material."

He said Oceaneering will continue to support equipment already deployed. With the entire industry engaged in cost reductions due to the collapse of oil prices, Senior Vice President and CFO Cardon Gerner said it will be challenging to maintain profit margins.

But McEvoy said there were no plans to exit any other product lines. Oceaneering's BOP controls equipment included conventional control pods, accumulators, hydraulic power units and deadman autosheer units, among other things.

Sparrows Group has expanded into the Malaysian market after forming a strategic partnership with a local service provider in the region, Efficient Technology.

Sparrows said it intends to treble business in Asia Pacific over the next five years and will offer services such as offshore crane maintenance, crane hire, fluid power, inspection and cable and pipelay products, which are in particularly high demand in the region.

Malaysian regulations stipulate all offshore service activity for Petronas, the state's national oil and gas company, should be carried out through a local company.

Atlantic Petroleum has completed the sale of its 10% stake in U.K. Block 43/13b, which contains the **Pegasus West** gas discovery to Third Energy Offshore.

Third Energy also picked up 10% equity in U.K. blocks 43/17b, 43/18b and 43/12.

The Pegasus West well 43/13b-7 was drilled and tested at a combined rate of 2.5 MMcm/d of gas in late 2014.

Technip's **Bruno Faure** has taken over the role of president of the International Marine Contractors Association for the next two years.

Faure is senior vice president for subsea projects and operations at Technip.

Rowan Companies reported a higher-than-expected quarterly profit as the driller retained customers by deploying new ultradeepwater rigs and lowering prices.

A more than 50% drop in oil prices since June last year has forced producers to cut spending.

In response, Rowan has lowered prices of its rigs and extended contract terms with customers to keep its rigs on the job. It also has deployed four new ultradeepwater drillships over the past year.

The company's net income jumped to \$84.7 million in the quarter, from \$32.8 million.

From Houston: **Exxon Mobil Corp.** saw double-digit liquids production growth, but the barrels did not carry as much value given the drop in oil prices compared to last year.

Tough market conditions with lower commodity prices—a result of abundant supplies and not enough demand sliced Exxon Mobil's second-quarter 2015 earnings in half, dropping to \$4.2 billion from \$8.8 billion a year ago. This came despite the company's \$1.5 billion in refining business profit and upstream efforts to reduce operational costs.

Production worldwide grew for the second quarter, compared with the same time period last year.

Liquids volumes increased 11.9% to 2.3 MMbbl/d mainly due to new developments in Angola, Canada, Indonesia, Papua New Guinea and the U.S.

Overall, Exxon Mobil produced 4 MMboe/d, up 3.6% compared to second-quarter 2014.

Marathon Oil felt the pinch in the second quarter, making an adjusted net loss of \$155 million. Capital spending was down 40% to \$680 million compared to the first quarter. The full-year capital programme will be "at or below \$3.3 billion," the company said.

Total net production averaged 407 Mboe/d, up 6% over the year-ago quarter.

DOF Subsea North America has been awarded an inspection, maintenance and repair contract with Freeport McMoran for a period of six months firm with two six-month options.

Operations will commence immediately with the *Har*vey Deep Sea vessel.

Statoil's net income came in at NOK 10.1 billion (US\$1.22 billion) for the second quarter, with adjusted earnings of NOK 22.4 billion (US\$2.7 billion) compared to adjusted earnings of NOK 32.3 billion (US\$3.9 billion) in the same period in 2014.

The reduction was primarily a consequence of lower oil prices in second-quarter 2015 compared to the same period last year.

Realised average liquids prices in the quarter were down 28% measured in NOK compared to the second quarter last year.

Despite divestments, Statoil delivered production of 1.87 MMboe/d in the second quarter, up 4% compared to the same period in 2014.

As the offshore drilling rig sector continues to endure choppy seas with cancelled orders adding to a mound of stacked rigs, ultradeepwater rigs provided a glimmer of hope for **Diamond Offshore**.

The company reported this week that contract drilling revenue for its ultradeepwater floaters jumped 73% to \$315.7 million for second-quarter 2015, compared to a year ago. Revenue from deepwater floaters also increased, rising 50% to \$181 million.

The increase was partly attributed to two newbuild drillships, the sixth-generation *Ocean BlackRhino* drillship and the *Ocean BlackHornet*, starting contracts in the Gulf of Mexico for Murphy Oil and Anadarko.

Sterling Resources made a net loss of \$40m for the six months to the end of June, compared to net income of \$174.8 million qa year earlier.

On a more positive note, the company said significant progress was made on its UK North Sea Cladhan development during the second quarter with the resumption of the subsea installation campaign and continuation of Tern topsides and conductor modification work.

Subsea work included pipeline burial, pressure testing and final tie-in work at the Cladhan field. Shutdown of the Tern platform commenced in mid-June to enable final tie-in and process modification work.



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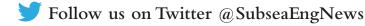
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