

Akastor wraps Odfjell deal

Norway's Akastor has completed its planned investment in Odfjell Drilling.

The spending is related to Odfjell Drilling's US \$505m acquisition of the *Stena Midmax* semi-submersible rig from Samsung, which was announced in April.

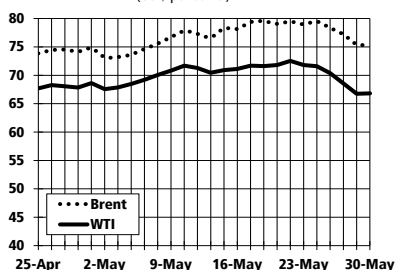
At that time, Odfjell said it planned to fund the acquisition of the rig through a contemplated \$325m senior secured term loan facility, proceeds from the private placement, proceeds from a contemplated issue of preference shares to an affiliate of Akastor, and a seller's credit from Samsung Heavy Industries of \$48.25m.



OIL WATCH

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EUROPEAN OFFSHORE PETROLEUM NEWSLETTER

Vol. 43 No 21

30 May 2018

Aker BP's Norway strike

Aker BP has made a minor – currently non-commercial – gas discovery with exploration well 7221/12-1 in Production Licence 659 (PL 659) offshore Norway.

The well was drilled around 20km west of the 7222/11-2 discovery well (**Langlitinden**) in the Barents Sea and around 175km northwest of Hammerfest.

The objective of the well was to prove petroleum in Upper Triassic reservoir rocks (in the upper part of the Snadd formation).

Well 7221/12-1 encountered a total gas column of around 20m (66ft) in the upper part of the Snadd formation, of which a total of 7m (23ft) was sandstone layers with good to moderate reservoir quality. The gas-water contact was encountered around 555m (1,821ft) below the sea surface, said the Norwegian Petroleum Directorate (NPD).

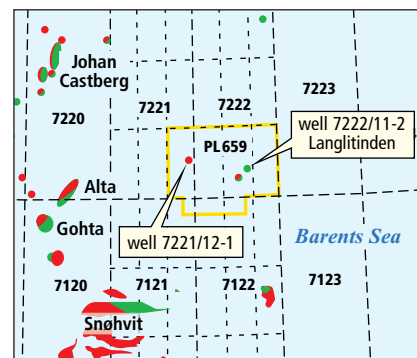
This is the second exploration well in PL 659, which was awarded in APA2011.

Well 7221/12-1 was drilled to a vertical depth of 700m (2,297ft) below the sea surface, and was terminated in the Snadd formation in the Upper Triassic. Water depth at the site is 346m (1,135ft). The well will now be permanently plugged and abandoned.

Well 7221/12-1 was drilled by *Deepeat Stavanger*, which will now drill appraisal well 25/4-12 S in PL 203 in the Norwegian sector of the North Sea, where Aker BP is also the operator.

“Preliminary results from gas samples indicate that the gas may be in the gas-hydrate phase. Attempts will be made to clarify this through further analysis. If there is free gas in the reservoir, the preliminary estimate is that the size of the discovery is between 2.0-3.5 Bcm (70.6-123.6 Bcf) of recoverable gas,” added the NPD.

“The discovery is not considered to be commercial at this time. The licensees will assess the results from the well in the further evaluation of the area. The well was not formation-tested, but extensive data acquisition and sampling have been carried out.”



BW: field sanctions to rise

BW Offshore forecasts offshore field development activity to increase, following years of low investment in the wake of the industry recession and oversupply of oil in the market.

In a quarterly results statement, BW said: “Offshore production of oil and gas is expected to decline after several years of low investments. This will likely become more evident in coming years, as production tied to investments made in the previous up-cycle now has commenced and will start to decline.”

BW added that the overall market balance has improved with a reduced oversupply of crude oil. The industry has become more effective with lower break-even costs for new developments, the company noted.

“This is expected to lead to sanction of new projects which will improve the market outlook for offshore field developments. Initially, the company expects increased focus on incremental investments to existing infrastructure, while more green-field investments may emerge later in the cycle,” BW said.

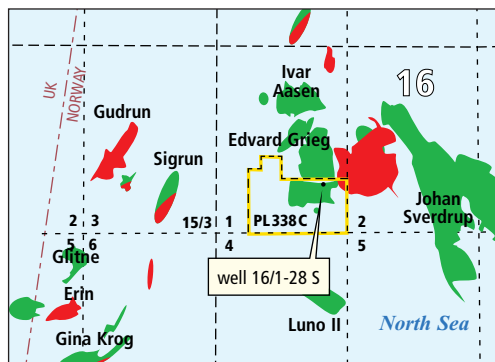
BW also reported a Q1 2018 net profit of US \$18.1m. This was a decrease compared to the \$47.2m in Q4 2017 but was an improvement compared to the \$15.1m loss in Q1 2017. Operating revenue for Q1 2018 was \$192.5m, compared to \$150.3m in Q4 2017. This is also an increase compared to the Q1 2017 figure of \$159.6m.

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NORWAY

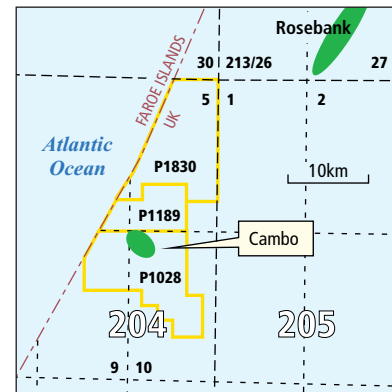
- Aker BP has made a minor gas discovery with exploration well **7221/12-1** in **Production Licence 659** (PL 659) offshore Norway. The well was drilled around 20km west of the **7222/11-2** discovery well (**Langlitinden**) in the Barents Sea and around 175km north-west of Hammerfest (*see story, pg 1*).
- The Norwegian Petroleum Directorate (NPD) has handed Wellesley Petroleum a permit to drill an exploration well on the **Serin** prospect in the Norwegian sector of the North Sea (*see story, pg 4*).
- Wellesley Petroleum is currently drilling ahead with exploration well **35/12-6 S** on the **Kallåsen** prospect in the Norwegian sector of the North Sea using the *Transocean Arctic* semisubmersible rig. The probe lies in **PL 25** and has a water depth of 355m (1,165ft). The well was spudded on 13 May (*see story, pg 4*).
- Equinor is drilling ahead with exploration probe **16/1-29S** using the *Deepsea Bergen* rig. The well is located in **PL 167** at a water depth of 114m (374ft). The probe was spudded on 22 April.

- Lundin Petroleum is drilling ahead with the **Rolvsnæs** appraisal well **16/1-28 S** with the *COSLInnovator* semisub unit. The well lies in **PL 338 C** and was spudded on 3 April in the Norwegian sector of the North Sea. The probe has a water depth of 107m (351ft).
- Lundin Petroleum is drilling ahead with appraisal well **7220/11-5 S** using the *Leiv Eiriksson* semisubmersible rig in the Barents Sea. The probe was spudded on 6 April and lies in **PL 609**. The well has a water depth of 386m (1,266ft).
- Spirit Energy is testing appraisal well **6506/9-4 A** using the *Island Innovator* semisub rig. The probe is targeting the **Fogelberg** prospect and was spudded on 3 February and lies in **PL 433** at a water depth of 300m (984ft).



UNITED KINGDOM

- Siccar Point Energy is drilling ahead with its final appraisal well on the **Cambo** field, which lies northwest of Shetland. Results of the Cambo appraisal are expected this summer. Cambo is “a large basement high” with sedimentary sequences draped over the top of the structure. The field contains a minimum of 600m bbl of oil in place. The *West Hercules* rig is drilling the probe, which kicked off on 24 April.



THE NETHERLANDS

- ONE is drilling ahead with exploration well **N/7-4A** using the *Prospector 1* rig. The probe was spudded on 17 February. A sidetrack well is now planned.

Technology

DeltaTek wraps North Sea trials

Well construction company DeltaTek Global has completed two successful onshore field trials of its SeaCure system, resulting in subsequent offshore trials with two North Sea operators this summer, as part of a project backed by the Oil & Gas Technology Centre (OGTC).

“SeaCure is a pioneering subsea cementing system, delivering stabbed in inner string cementing for subsea wells. Providing significant time and cost benefits, SeaCure’s initial ‘proof of concept’ trials took place in April at an onshore test well at Frank’s International’s Aberdeen base,” DeltaTek said.

These will be followed this summer by three offshore trials in live North Sea wells operated by Chevron and Siccar Point Energy, down to a water depth of 1,524m (5,000ft).

The trials are expected to lead to a full product launch in September.

Tristram Horn, CEO of DeltaTek, said: “The success of these trials clearly illustrates DeltaTek’s fundamental ethos; to save rig time by providing a number of genuinely unique value propositions to drilling operators. We are delighted to have the support of Chevron and Siccar Point Energy for the trials in live wells.

“With the ability to undertake offshore cement jobs in any range of water depths, SeaCure’s inherent benefits include improved success rates of cement placement back to the seabed

for conductor and surface casings, performing a pressure test of a subsea casing string prior to and post cementation, as well as entirely eliminating a clean-out run from a subsea drilling programme.”

Wiens van Zeil, Technology manager of Chevron Upstream Europe, said: “We look forward to collaborating with DeltaTek and the OGTC for the offshore trial of SeaCure. At Chevron, technology is a strategic enabler of business performance and field testing emerging technology is a critical development milestone.”

Malcolm Banks, Well Construction Solution Centre manager for the OGTC, said: “We are impressed with the progress of the SeaCure technology. There was strong operator interest from the outset and the successful onshore deployment means we can progress the project to live offshore trials later this year. DeltaTek Global is a great example of an SME with innovative technology that’s benefiting from working with the Technology Centre. This project has gone from proposal to trial in a matter of months, accelerating a process that would usually take years.”

Launched in 2015, DeltaTek’s disruptive innovations – SeaCure and ArticLock – were created in response to the growing requirement for efficiently implemented, intelligent, cost saving and risk reducing products, added DeltaTek.

Norway exploration spend rises

Oil companies in Norway are raising their exploration spending more than expected, the head of the country's industry regulator Norwegian Petroleum Directorate (NPD) told Reuters.

Players such as Equinor and other operators are now expected to drill around 45 exploration and appraisal wells in 2018, up from an earlier forecast of around 35 for the year, said the NPD's chief Bente Nyland.

In 2017, companies completed 34 wells off the coast of

Norway, Western Europe's top producer of oil and natural gas.

As a result of the increased activity, the NPD may have to revise upwards its forecasts for the oil industry's overall investments in Norway, Nyland told Reuters, adding that investments are likely to rise further in 2019 and 2020 as cost inflation returns to the industry.

• Meanwhile, Norway's Oil Minister Terje Soeviknes said he expects to name the winners of new exploration acreage in Norway's 24th Licensing Round in June.

Cara discovery gets award

Neptune Energy's **Cara** discovery in **Production Licence 636** (PL 636) in the Norwegian North Sea has won the Exploration Innovation Prize 2018 at the Recent Discoveries Conference in Oslo.

Cara is now being developed as a "fast track" project. Concept selection is scheduled for end of this year and a Final Investment Decision (FID) is planned to be made in the first half 2019.

The Geological Society of Norway and Geo Publishing awarded the prize during the NCS Exploration – Recent Discoveries 2018 conference. Out of 10 nominees, a public voting selected three finalists. The three finalists were Cara, **Kayak** and **Zumba**.

The jury's criteria for winning the prize is first and foremost to be "a licence group, company, team or person who during the last years have given a courageous and innovative contribution in exploration for oil and gas on the NCS."

Neptune's head of Exploration, Raphaël Fillon, said: "With this prize, our peers in the industry have recognised the quality of our performance. The prize shows that Neptune Energy definitely has the competence, the focus and the mind-set needed to create value through exploration on the Norwegian Continental Shelf (NCS) and in this particular case in one of our core areas."

Cara is one of the largest discoveries on the NCS since 2016,

according to the Norwegian Petroleum Directorate (NPD).

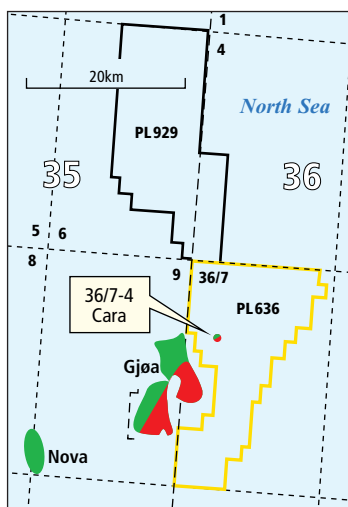
The partners in PL 636 are: operator Neptune Energy (30%), Idemitsu Petroleum Norge (30%), Pandion Energy (20%) and Wellesley Petroleum (20%).

The objective of the Cara-well was to prove petroleum in a stratigraphic trap in Early Cretaceous Agat formation. Norsk Hydro drilled well **36/7-3** in 2002 as a dry hole. In 2013-2014 Neptune Energy identified and matured Cara to a drillable prospect integrating all available data and knowledge. The Cara well, **36/7-4**, was drilled in summer 2016, proving oil and gas likely to be commercial.

"The Cara discovery well is most likely a play opener as it has proven that Cretaceous sandstones can make up commercial targets. Our understanding of the Cretaceous play has significantly progressed thanks to hard work from the exploration team, and we are optimistic about the exploration potential of our

portfolio in this area," said Matthieu Vialla, Exploration manager Northern Europe.

The discovery is located 6km northeast of the **Gjøa** field, operated by Neptune Energy, and confirms the company's view that even mature areas of the NCS have an interesting exploration potential. Further intensive exploration programme is launched in PL 636 and in surrounding operating blocks, such as **PL 929**, recently acquired by Neptune at APA 2017.



Lebanon kicks off Mediterranean exploration

Lebanon has started offshore exploration work in its sector of the Mediterranean Sea after authorities approved an exploration plan submitted by a consortium of France's Total, Italy's Eni and Russia's Novatek.

Energy and Water Minister Cesar Abi Khalil said in a televised statement that exploration started after authorities gave the go ahead on Monday. Lebanon hoped to launch a second offshore licensing round by the end of 2018 or early 2019, he said.

In February, Lebanon signed its first offshore oil and gas exploration and production agreements with the Total-Eni-Novatek consortium for offshore **Blocks 4 and 9**.

Part of Block 9 contains waters disputed with neighbouring Israel but the consortium has said it has no plans to drill in the

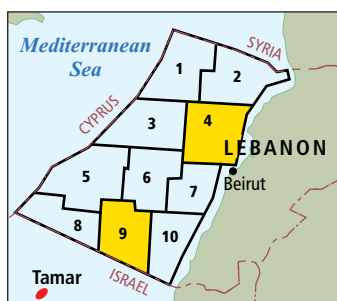
disputed area, Reuters said.

Khalil said exploration of the two blocks would last up to three years and the first well is expected to be drilled in 2019,

providing all government departments grant necessary licences and permissions "on time and without delay".

Khalil has served as Energy Minister since December 2016 but is currently a caretaker minister because Prime Minister-designate Saad al-Hariri has not yet formed a government after parliamentary elections on 6 May.

Until drilling starts Lebanon will not know what reserves lie in its waters. Khalil said exploration wells would be drilled in the areas with the highest probability of commercially viable discoveries based on seismic studies.



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Wellesley gets Norway permit

The Norwegian Petroleum Directorate (NPD) has granted Wellesley Petroleum a permit to drill an exploration well to test the **Serin** prospect located in the Norwegian sector of the North Sea.

Well **35/12-7** is located in **Production Licence 925** (PL 925), which is operated by Wellesley with a 90% stake, while Concedo holds the remaining 10%. The company has already gained consent to drill the well using the *Transocean Arctic* rig.

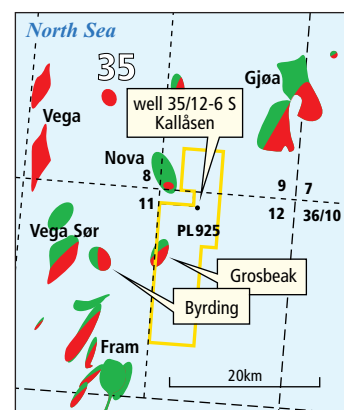
“The area in this licence consists of parts of **Block 35/9** and **35/12**. The well will be drilled about 23km southwest of the **Gjøa**

field and 7km east of the **Byrding** field.

The drilling is planned to begin in June 2018, with a duration of around 26 days, depending on whether a discovery is made,” added the NPD.

PL 925 was awarded in APA 2017 and this is the second well to be drilled on the licence.

The Serin well is part of Wellesley’s North Sea drilling campaign, which has already started. The first well, **35/12-6S** on the **Kallåsen** prospect, was spudded earlier this month. Both wells have contingent side-tracks and well tests depending on the well results.



Field Development

Fabricom bags Rough work

Fabricom Offshore Services has landed a contract to provide Engineering, Procurement, Construction and Management (EPCM) services to Centrica Storage Limited (CSL) on the **Rough** field platforms in the UK North Sea.

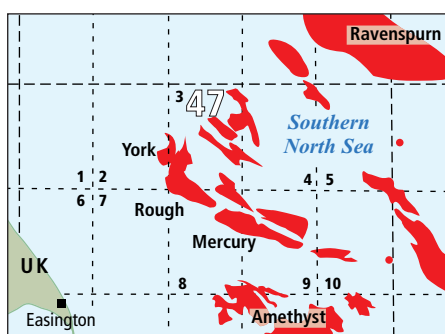
The Rough field lies 29km offshore the coast of East Yorkshire. The framework agreement also comprises options to provide support to the Easington terminal.

This five plus five year framework agreement will see Fabricom provide a variety of EPCM services, including brown field modifications, platform integrity and equipment upgrades, pre-commissioning and decommissioning scopes on both platforms in the field.

Construction personnel have now been mobilised on both platforms to undertake the workload.

Nick Oates, business unit director at Fabricom, said “The award of this contract comes at a time of significant growth for Fabricom. We have changed the way in which we work, adopting a lean management approach and are focused on delivering the best value to our clients.”

Fabricom also recently signed a two-year contract extension with Bluewater for the provision of engineering, procurement, construction and associated services to the Bluewater fleet of floating production, storage and offloading vessels around the world.



Offshore Services

Oseberg Øst facility boost

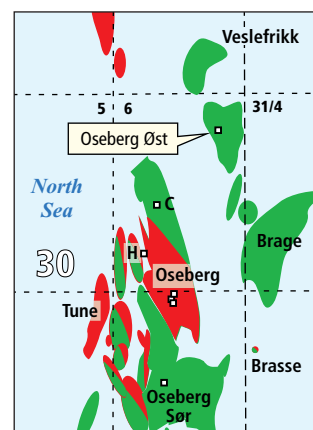
Equinor (formerly Statoil) has been granted consent for continued use of the **Oseberg Øst** facility offshore Norway until 31 March 2031.

The Norwegian Petroleum Directorate (NPD) said that it believes there is a basis for continuing operations on Oseberg Øst to recover remaining resources in the field. Equinor had a permit to use the facility until the end of 2018.

Oseberg Øst lies in the northern part of the Norwegian North Sea, 15km east of the **Oseberg** field. Production from the field

started in 1999. Original oil reserves were 167m bbl and the remaining oil reserves are estimated at 31m bbl.

The field was developed with an integrated fixed facility with living quarter, drilling module and separation of oil, water and gas. Oil is transported by pipeline to the Oseberg field centre for further treatment and transport via the Oseberg transport system to the Sture terminal in Hordaland County. Gas is primarily used for injection and power production for the installation.



TWMA wins Nexen job

TWMA has scooped a five-year contract from Nexen Petroleum UK to provide drilling waste management and associated services on numerous assets in the UK North Sea.

More than 50 TWMA personnel will work on this contract, which will see TWMA provide drill cuttings processing both onshore and offshore.

The contract gives Nexen access to TWMA’s EfficientC technology for drill cuttings transfer and distribution, and its exclusive TCC RotoMill thermal processing technology for the processing of drill cuttings.

Addressing the requirement for the safe handling, treatment and disposal of drill cuttings for a number of development and exploration wells, TWMA said it landed the deal because of “its service quality and proven track record in this area”.

TWMA’s chief commercial officer, Gareth Innes, said: “We are extremely pleased that Nexen has selected TWMA to provide solutions for one of the premier drilling waste management projects in the UK. This is testament to our ability to consistently add value by delivering solutions centred around safety, cost optimisation and operational efficiency.”

Bravenes handed to Van Oord

The Netherlands' dredging and offshore services player Van Oord has taken delivery of the *Bravenes* subsea rock installation vessel.

The *Bravenes* can operate in three different ways. The vessel can install rock through a fallpipe inserted through the moon-pool, through a fallpipe over the side, and through a tremie pipe over the side.

Using the tremie pipe method, the *Bravenes* is able to perform subsea rock installation close to offshore platforms.

Maurits den Broeder, Van Oord's managing director for

Offshore said: "The *Bravenes* will allow Van Oord to maintain its leading position in this market."

The *Bravenes* is set to leave for Norway to work on various North Sea projects. From mid-July, it will be carrying out stabilisation operations on the **Nord Stream 2** pipeline project in the Baltic Sea.

The vessel was designed by Design & Solutions. The subsea rock installation vessel can stabilise and protect subsea pipelines, cables and other structures at water depths of down to 1,500m (4,922ft).

SeaBird wins Europe work

Seismic player SeaBird Exploration has signed an agreement to supply one 2D vessel for "an upcoming survey in northwest Europe."

SeaBird said that the survey would be conducted during this

summer season, with work scheduled to start in early Q3 2018 and run for around one month.

The *Harrier Explorer* vessel will perform the survey, SeaBird said.

DOF bags UK & Brazil deals

Norway's shipping player DOF has won new contracts from Brazil's state-owned Petrobras and US player Chevron.

Norskan Offshore, a Brazilian company subsidiary of DOF, has been awarded a one-year contract by Petrobras for the *Skandi Fluminense* vessel. The contract is expected to start in July and includes one ROV.

The *Skandi Fluminense* is an anchor handling tug and supply

vessel of a UT 722L design built in 2007.

DOF has also been awarded a contract by Chevron North Sea for the vessel *Skandi Kvitsøy*. This contract will be for a period of approximately 140 days, starting in June 2018 to support drilling operations in the North Sea.

Built in 2012, the *Skandi Kvitsøy* is part of a new range of platform supply vessel designs.

LNG

Total acquires Arctic LNG 2 stake

Total has signed an agreement with Novatek outlining the terms upon which the French major will acquire a 10% stake in the huge **Arctic LNG 2** project lead by Novatek on the Gydan Peninsula in northern Siberia, Russia.

Novatek and Total have also agreed that Total will have the opportunity to acquire a 10% to 15% stake in Novatek's future LNG projects in Yamal and Gydan.

The project will involve the installation of three gravity based structures in the Gulf of Ob on which will be installed the three liquefaction trains of 6.6m tonnes a year capacity each.

The Final Investment Decision is expected in 2019, with plans to start up the first train by the end of 2023.

"Total is delighted to be part of this new world class LNG

project alongside its partner Novatek, leveraging the positive experience acquired in the successful Yamal LNG project. This project fits into our strategic partnership with Novatek and also with our sustained commitment to contribute to developing the vast gas resources in Russia's far north which will primarily be destined for the strongly growing Asian market," said Patrick Pouyanné, chairman and CEO of Total. "Arctic LNG 2 will contribute to our strategy of growth in LNG by developing competitive projects based on giant low costs resources."

With a production capacity of around 19.8m tons per year, equivalent to 535,000 boe/d, Arctic LNG 2 will unlock more than 7 Bn boe of hydrocarbons' resources in the onshore **Utrenneye** gas and condensate field.

Swedegas-Barents NaturGass pact

In the coming months, vessels will for the first time be able to bunker LNG at a permanent facility at the Port of Gothenburg, Sweden.

Infrastructure company Swedegas, which will own and operate the facility, and Norway's Barents NaturGass, which can supply the LNG with ISO-containers from main European terminals, have entered into an agreement.

"The shipping sector can now purchase marine fuel complying with the tightening emissions regulations based on a one-stop-shop concept. LNG is the cleanest marine fuel available for large-scale shipping and is gradually replacing oil-based products. As a fuel, LNG reduces emissions of sulphur and particles nearly to zero. In addition, nitrogen oxide emissions are reduced by up to 90% and CO2 emissions are reduced by around 25%. The growth of LNG as a marine fuel is accelerating following increasingly strict global emission rules," said Swedegas.

Gothenburg's first LNG facility at the Energy Port will soon be completed. Construction has been in progress since the

winter and the facility is expected to become operational in August this year. Vessels can bunker day and night while loading and unloading. Moreover, the facility can over time be expanded to stay in line with market growth. It is also ready for supply of biogas.

"We always build infrastructure that can handle both natural gas and renewable gas. It must be simple for shipping companies to gradually increase the mix of renewable gas as the transition progresses," said Johan Zettergren, Swedegas chief executive.

"We are very pleased to have the opportunity to work at the largest port in the Nordic region and with the shipping companies that use the port. Gothenburg based shipping companies have been amongst the first to adopt LNG in Sweden. Several vessels have already been built and launched which are ready to run on LNG. We are keen to start our LNG supply services and meet the customers' needs," said Gudrun Rollesfsen, CEO of Barents NaturGass.

TGS-PGS win Norway shoot

Norwegian seismic players TGS and PGS have landed a new multi-client project in the Barents Sea offshore Norway.

The 'Nansen 3D Geostreamer' survey will cover around 6,100sq km in an active APA area of the Hammerfest Basin. The acquisition will start imminently and is due to be completed in September 2018.

The project is designed to improve the imaging of the known fields and discoveries and allow identification and development of new targets in both mature and new plays. The survey area contains shallow targets on the basin flanks and platforms, with deeper exploration potential elsewhere in the basin, TGS said.

Kristian Johansen, CEO of TGS, said: "Nansen 3D will

expand TGS's data coverage in the Barents Sea where we have a strong track record of success. This project will provide modern, high quality seismic data to an area that is highly relevant for exploration in the current and upcoming APA rounds."

PGS's *Ramform Atlas* will tow an ultra-high-density 3D configuration with a 16 x 56.25m x 7,000m setup. Three of the streamers are towed with 10km offsets for optimised performance of full waveform inversion.

Data processing will be performed by TGS using its Clari-Fi™ broadband technology. Fast-track data will be available in Q1 2019 with final data in Q4, TGS said.

Trends

AUVs experience LOFI boom

Autonomous Underwater Vehicles (AUVs) are nothing new but are being used for more Life of Field Inspection (LOFI) contracts than predicted, says consultants Westwood Global Energy Group.

"They have been with us, in one guise or another, since the 1950s. Differing from their more complex family members, the Remotely Operated Vehicle (ROV), they glide quicker through the water without the need to be tethered to a host vessel by an umbilical," Ian McDonald, manager of EMEA Consulting, Westwood Global Energy Group.

"Historically these torpedo shaped robots have found use predominantly by the world's Navies, deploying them for a variety of uses from intelligence gathering, to training sonar operators, tasked with finding and following something that mimics the attributes of an enemy submarine.

"They are also favoured amongst the scientific community, ideal for seabed surveys in harsh conditions where you simply can't sail a vessel or allowing subsea exploration under great swathes of ice at the planet's poles," added McDonald.

"AUVs were expected to find a natural home in the recent development of offshore wind, but the reality has been less pronounced than Westwood previously forecast. At a time when many subsea vessel operators had inspection or work class ROV's sitting redundant, day rates were such that chartering a vessel and ROV was more cost-competitive.

"Furthermore, most offshore wind developments are close to shore in very shallow water. This is not the sweet spot for AUV use, and particularly so if other surface vessels are in-situ, forcing the AUV deeper and thus further restricting its

market."

In 2017, however, the oil and gas industry adopted AUVs to start carrying out LOFI, noted Westwood.

"A work scope focused on assurance of asset integrity throughout its operational lifespan. As developments move to deeper water, the vessels and ROVs needed to inspect subsea infrastructure become more complex, which inevitably drives higher cost. However, the benefits of using AUVs for field inspection go beyond cost savings. They can increase operational safety, reduce environmental impact and reduce personnel at sea," McDonald said.

Westwood predicts AUV demand in the commercial sector is expected "to grow aggressively through to 2022 as LOFI work scopes become increasingly prevalent."

The report added: "Technology developments are such that AUVs could very soon be constantly patrolling deepwater pipelines and infrastructure, remotely docking on subsea charging stations in-between inspections, meaning downtime (out of the water) is greatly reduced. The docking stations will facilitate the download of gathered data allowing swift diagnosis of problems, thus increasing the operational efficiency of any repair work needed.

"When such solutions are considered alongside other innovations like the Permanent Reservoir Monitoring Equinor has installed for **Johan Sverdrup**, it is clear that the much heralded 'field of tomorrow' is becoming a reality. Problems offshore can be identified earlier and continuous data feeds can be analysed quickly to ensure the longevity of production, safely and cost-effectively," added McDonald.

Legal

PGS appeals ruling

PGS Geophysical has appealed the recent ruling dismissing PGS's US \$m (€9m) claim against GC Rieber Shipping's subsidiary Armada Seismic Invest II.

PGS's claim, related to the delivery of the *Polar Duchess* vessel, had been dismissed by the Gulating Court of Appeal in Bergen. However, GC Rieber Shipping on Tuesday said "the decision has now been appealed by the claimant, PGS."

The issue started back in June 2012, when Arrow Seismic Invest II, now PGS Geophysical (UK) Limited, alleged that GC Rieber Shipping's subsidiary, Armada Seismic Invest II, acted negligently when the company took delivery of the seismic vessel *Polar Duchess*, and claimed \$10.5m (€9m) in damages.

The vessel was built by the Factorias Vulcano shipyard in

Spain and delivered in October 2011.

After various delays due to procedural issues, the claim against Armada was dismissed by the Bergen District Court in March 2016 and Armada was awarded full legal fees in the amount of \$425,900 (NOK 3.4m). PGS then in April of the same year appealed the court's decision. Then, on 30 April, the Gulating Court of Appeal in Bergen dismissed the PGS claim, awarding Armada full legal fees in the amount of \$425,900 (NOK 3.4m).

GC Rieber said: "Armada maintains its view that the claim is unfounded, which was also confirmed by Bergen District Court in the first instance and Gulating Court of Appeal in Bergen in the second instance. Armada will continue to defend itself against the claim before the Supreme Court."

Bergen bags NCS contract

Norway's Bergen Group AAK has been handed a five-year framework agreement with an unnamed operator for work on the Norwegian Continental Shelf (NCS).

The framework agreement has an estimated total value of around US \$4.8m-\$7.3m (NOK 40m-60m) for the period between now and 2023, Bergen AAK said.

The workload applies to various types of mechanical assignments on offshore installations where complex access technology is required.

"In addition, the framework agreement also includes the possibility of delivering relevant prefabrication," Bergen AAK said.

Bergen Group AAK is a subsidiary of Bergen Group. The company is a provider of access techniques used for maintenance,

modifications and operations, typically for work at height or areas with complicated access.

CEO of Bergen Group, Torgeir Nærø, said: "Bergen Group AAK has a long experience in performing various types of service and maintenance operations under challenging conditions both in height and on installations with demanding access. During the spring, we have registered an increasing demand for access technology services both in the offshore and in the onshore market. The increased demand combined with new long-term framework agreements provides basis for growth and an expansion of the workforce."

Bergen Group acquired provider of access technology AAK Energy Services around a year ago.

World News

Angola Zinia 2 FID made

France's Total and its partners have made the Final Investment Decision (FID) to proceed with the Zinia 2 deepwater development in Block 17 offshore Angola.

The Zinia 2 project will have a production capacity of 40,000 b/d, sustaining Pazflor field production, which has been onstream since 2011. Zinia 2 lies 150km off Angola.

Zinia 2 is the first of several possible short-cycle developments on Block 17 that will unlock its full potential by connecting satellite reservoirs to the existing Floating Production, Storage and Offloading (FPSO) units, Total said.

"Zinia 2 opens a new chapter in the history of Block 17. This project will allow Total to extend the profitability of this prolific block, with over 2.6 billion barrels already produced. Thanks to the favourable fiscal framework introduced by the Angolan authorities for satellite developments, other projects similar to Zinia 2 are currently under consideration on Block 17," said Arnaud Breuillac, president of Total Exploration & Production.

The budget for Zinia 2 is around US \$1.2 Bn. Total operates Block 17 with a 40% stake, while the other partners are Equinor (23.33%), ExxonMobil (20%) and BP (16.67%).

Shell's GoM Dover discovery

Shell has made "a large deepwater discovery" with its US Gulf of Mexico (GoM) Dover well.

The Dover discovery is Shell's sixth in the Norphlet play and has encountered more than 244m (800ft) of pay. The discovery is located around 21km from the Appomattox host and is "considered an attractive potential tieback".

Shell's Appomattox host has now arrived on location in the GoM and is expected to start production before the end of 2019.

"Dover showcases our expertise in discovering new, commercial resources in a heartland helping deliver our deepwater growth priority," said Andy Brown, Upstream director for Shell. "By focusing on near-field exploration opportunities in the Norphlet, we are adding to our resource base in a prolific basin that will be anchored by the Appomattox development."

Shell's major, deepwater hubs are well positioned for production expansion through near-field exploration and additional subsea tiebacks. The company expects its global, deepwater production to exceed 900,000 boe/d by 2020, from already discovered, established areas.

McDermott bags Vietnam deal

McDermott International has landed "a sizeable transportation and installation subcontract" from PetroVietnam Technical Services Corporation for the Sao Vang and Dai Nguyet gas and condensate field development projects in the Nam Con Son Basin offshore Vietnam.

The work scope will cover transportation and installation services for the central processing platform jacket, topside float-over, wellhead platform, flexible pipelines, subsea power cables and auxiliary services. Installation will be undertaken at water depths of between 110m (361ft) and 130m (427ft).

McDermott plans to use resources from Kuala Lumpur, Dubai and Houston for project management and engineering. The work will be performed from 2019 to 2021.

The contract award will be reflected in McDermott's Q2 2018 backlog. McDermott defines a sizeable contract as between US \$1m and \$50m.

India Deendayal boost

By early 2019, India's state-owned Oil and Natural Gas Corp (ONGC) will quadruple gas production from the Deendayal Block in the Bay of Bengal that it spent US \$1 Bn on last year, according to a senior ONGC official.

Output from the Deendayal Block off India's east coast will reach up to 1 MMcm/d (35.3 MMcf/d) by January 2019, according to Rajesh Kakkar, head of ONGC's offshore division, Reuters reported.

Calendar
2018

JUNE

25-29 27th World Gas Conference (WGC 2018)
Washington DC, USA
Contact: info@wgc2018.com
Tel: +44 20 7978 0019
https://wgc2018.com

SEPTEMBER

26-27 Tank Storage Asia 2018
Singapore
Contact: info@stocexpo.com
www.stocexpo.com

OCTOBER

2-8 2018 Operational Excellence in Energy Europe Summit
London

DECEMBER

5-6 Tank Storage Germany 2018
Hamburg, Germany
Contact: anthony@stocexpo.com
Tel: +44 (0)20 3196 4390
www.tankstoragegermany.com

ConocoPhillips joins JIP

US major ConocoPhillips has joined a Joint Industry Project (JIP), which aims to “revolutionise pumps for seabed and unmanned platforms.”

The JIP plans to bring Fuglesangs Subsea’s Omnirise Single-Phase Booster to market by mid-2019.

ConocoPhillips joins Equinor, Aker BP, Lundin and National Oilwell Varco in the JIP, which is also supported with US \$1.70m (NOK 14m) by the Research Council of Norway’s ‘Demo2000’ programme.

Privately held Norwegian firm Fuglesangs Subsea’s Omnirise boosting system is an Increased Oil Recovery (IOR) tool that has “the potential to deliver improvements in all three areas: cost, weight, and reliability.”

As operator of the **Ekofisk** field, the first discovery on the Norwegian Continental Shelf, ConocoPhillips has a keen focus on IOR from offshore wells.

“Traditional subsea pump solutions are costly, add tremendous weight to a platform and their reliability record is not stellar,” said CEO of Fuglesangs Subsea, Alexander Fuglesang.

“This is why they are not in wider use, even though booster pumps can add 10% to 30% to recovery rates. One percent increased recovery equals more than NOK 200 Bn (\$24.29 Bn) at \$60 per barrel ... in Norway alone,” he added.

As explained by the subsea company, conventional pump systems require not only mechanical shaft seals which fail all too frequently, they also require a constant flow of barrier fluid, supplied by topside hydraulic equipment and delivered through umbilical lines. Traditional variable speed drives also add considerable weight and volume topside, with projected subsea versions looking equally as bulky, the company said.

Fuglesangs Subsea said that the Omnirise system gets rid of all these elements by employing a patented Hydromag Drive Unit.

In capex alone, Rystad Energy has estimated that Omnirise can provide savings of \$18.22m (NOK 150m) on a single-well boosting installation, compared to conventional boosting systems.

BW: field sanctions to rise

...continued from page 1 BW’s EBITDA for Q1 2018 was \$108.5m, compared to \$73.5m in Q1 2017. The increase is mainly related to a full quarter of income from the *BW Catcher* FPSO in the UK North Sea, partly offset by no contribution from the *Berge Helene*, which is being demobilised after completing its contract at the end of Q4 2017. In addition, the *Sendje Berge* FPSO provided lower contribution for Q1 2018 due to the revised contract with Addax, BW said.

“BW Offshore is seeing improved market activity for FPSOs. The company will take a commercially disciplined approach to new investments by bidding selectively on new projects,” BW said.

Onshore Caspian

Caspian Sunrise’s well progress

Caspian Sunrise reports that it is making progress with its wells near the coast of the Caspian Sea, Kazakhstan.

“As previously announced our plan to bring Deep Well 801 into production was by drilling a sidetrack of between 450m-500m (1,476-1,641ft) from a starting depth of 4,501m (14,768ft). Having identified potential oil bearing (net-pay) intervals covering in aggregate 121m (397ft) so far during the drilling of the sidetrack, we have decided to stop the sidetrack at a depth of 4,851m (15,916ft) and, after running and cementing a 5-inch liner to the full depth of the sidetrack, to test the well,” the company said.



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Annual subscription: £775

ISSN 0332 5210

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