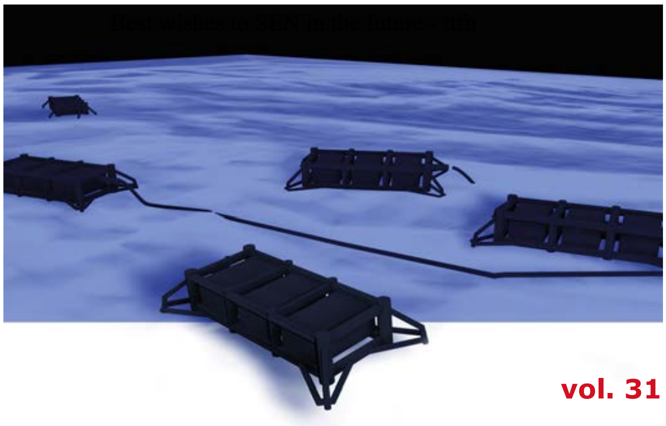

vol. 31 - no. 24   5 March 2015

HARTENERGY

SEN

SUBSEA ENGINEERING NEWS

PARTNERS AT ODDS OVER *ORMEN LANGE* COMPRESSION

From the North Sea (NT): The roadmap has been ditched – that is, the roadmap showing the way forward for the *Ormen Lange* (SEN, 31/23) offshore compression project which Shell agreed to prepare last April in response to Petoro's concerns about the work being halted (31/3).

There is no such roadmap in its plans, Shell now tells SEN.

Instead the partnership is 'opening up the solution space in an effort to identify viable solutions to increase recovery,' and a work-group is looking into alternative options and ways to reduce costs. 'It is still too early to conclude if a project to increase recovery beyond onshore compression will be reopened as a future opportunity for *Ormen Lange*,' Shell says.

More please, sir

Petoro is saying something else. It told SEN it expects the 'operator and the other licence partners to…be committed to a further development of the *Ormen Lange* field, where a solution for compression is necessary in the late phase.'

The possible scrapping of offshore compression must come as a bit of a jolt for the Norwegian authorities, which have always shown willing to invest in offshore R&D. The authorities will not be happy to see the subsea option sink without a trace, an official from one of the partners told SEN.

And they usually have a way of getting their feelings across. There is also the NOK2.5bn invested by the licensees in the subsea compression pilot project. Is this money down the drain? It has yet to be formally explained how subsea compression compares with surface/onshore compression, the main aim of the pilot.

Ormen Lange, 120 km from shore, clearly presents a greater challenge than *Åsgard*, where Statoil is progressing well with its subsea compression project (30/22).

WHAT'S INSIDE

Here the subsea option was established as preferable to platform-based compression at an early stage for the 37km tieback. The compression trains are due to be installed this summer, a little behind schedule, and start-up is looming by late summer/autumn.

FLOATER NEWS

COBALT CUTS $2BN OFF *CAMEIA* PRICE TAG

From Houston (BN): The declining oil price is delaying sanction and downsizing the development plan for Cobalt's *Cameia* (SEN, 31/17) project, offshore Angola.

Cobalt is also seeking a partner to help finance *Cameia* and other Angolan projects.

In reporting its 2014 results, management said they are now planning the sanction of *Cameia* by the end of this year, a year later than previous forecast, with first oil pushed into 2018 from the earlier target of 2017.

CEO Joe Bryant said Cobalt believes its projects remain attractive even at lower oil prices. Bryant also said a review started late last year has cut $2bn from the estimated $20bn cost of the development.

Among changes is downsizing the processing capacity of the fpso to 75-80,000b/d rather than previously suggested 100,000b/d. In comments, Bryant emphasised the positive, noting the 50% decline in the oil price since last June is pressuring equipment and service suppliers to cut prices.

Delaying sanction allows Cobalt to let the downward spiral in costs deepen before it seeks lower bids on equipment and services. It also allows time for the project to benefit from new leadership.

Shashank Karve, former MODEC ceo and chairman, joined the company in December and was named executive vice president over *Cameia* in February.

'With Shashank's leadership and some other folks, we really saw late...that there was...a much better way, a more economic way, to develop this field, and if that meant a few months delay in sanction or first oil, we were willing to take that,' Bryant told analysts.

He did not detail what 'more economic' means, other than a smaller fpso, possibly leased rather than purchased, but Bryant did say the downsizing does not mean slower, phased development.

'It's basically one continuous development,' he told analysts.

Cobalt did not respond to requests for more details. Does 'more economic' mean fewer wells, field layout changes, different technology? Reserves in the field, discovered in 2011 in 1,682m in Block 21, are still estimated at 250-300mmboe, with potential recovery as great as 500mmboe.

CHEVRON PLANS TO FLOW NEW FIELDS TO *LUCIUS*

From Houston (BN): Chevron's *Buckskin* (SEN, 31/12) and *Moccasin* (30/10) prospects in the far southern Gulf of Mexico will be developed as subsea tiebacks to Anadarko's *Lucius* (31/22) spar.

Anadarko announced the new production-handling agreement with Chevron this week, and Chevron said it has contracted INTECSEA to do engineering and long-lead procurement services for the FEED phase of the projects. Intecsea did the pre-FEED.

Lucius, with a boilerplate capacity of 80,000b/d, achieved first oil in January. It is comprised of parts of Keathley Canyon 874-875-918-919 in 2,160m, 440km southwest of New Orleans.

Buckskin is in KC785-828-829-872 with potential expansion into KC871 with *Buckskin South*, where regulators have approved an exploration plan. Discovered in 2009 in KC872 in 2,109m, *Buckskin* is about 14km west of the Anadarko spar.

Moccasin, discovered in 2011 in KC736 in 2,022m and now unitised with KC692, lies about 19km northwest of *Buckskin*.

Both fields are in the Lower Tertiary, with discovery wells drilled to 8,962m and and 9,614m respectively, while *Lucius* is in shallower Miocene and Pliocene sands, with the discovery well drilled to 6,096m.

Chevron operates *Buckskin* (55%) and *Moccasin* (43.75%) with different partners. In the former they are Maersk, Repsol and Samson and in the latter, BP and Samson.

FLOATER BRIEFS

From Houston (BN): BW Offshore announced it has recovered the last of the missing personnel following the 11 February explosion (SEN, 31/23) aboard the fpso *Cidade de Sao Mateus*. The final death toll stands at nine.

Two of the 27 crew members reported injured remain hospitalised in stable condition. BW operates the fpso for Petrobras on the **CAMARUPIM** and **CAMARUPIM NORTE** fields about 120km east of the Espirito Santo coast. Investigation of the cause continues, but preliminary indication is a gas leak in the pump room. Discussions are underway about restarting the unit with no target date in view.

From the editor: While on BW, it was interesting to note, gleaned from a corporate presentation this week, that its current chartering priority is the redeployment of the unit *Azurite* (30/17), following the early termination of the contract.

Originally deployed on the eponymous field in the Congo for Murphy, it was the first ever fdpso with the 'd' for drilling. BW never owned the drilling equipment - it was leased by Murphy - and has now been removed. While it is being marketed now simply as an fpso, it does have a unique design with a substantial moonpool.

If the current market wasn't so depressed, it might have found a use for well intervention. Now it just needs to find a warm weather location and be used as a 'pool'!

Ithaca Energy has taken a $10mn hit after pushing back start-up of production from the **GREATER STELLA AREA** (SEN, 31/21) hub in the UK North Sea because of delays to modification and upgrade work on the *FPF-1* semi floating production unit.

FPF-1 is being modified by Petrofac at the Remontowa yard in Poland, but Ithaca boss Les Thomas said completion of the work programme has 'proved difficult.' Progress has been slower than expected and the vessel will not be ready to sail-away as planned in spring of this year.

This milestone is now set for early 2016, resulting in first hydrocarbons in Q2, a delay from the planned Q3 2015 start-up.

Ithaca said over three-quarters of the construction work has been finished on the *FPF-1* and the unit and risers have been designed for year round installation.

The remainder of the *GSA* development programme is progressing well, Ithaca stressed. The *Stella* drilling campaign is almost complete, with the results of the cleanup flow test on the fifth and final well (*Stella Ekofisk*) anticipated this month.

The majority of the subsea infrastructure has already been installed and the rest is scheduled for installation in the second quarter of 2015.

The £10mn added cost to Ithaca relates to project management for the overall development, as the *FPF-1* modifications are being borne by Petrofac.

From Houston (BN): It is difficult to continue growing without any operating cashflow. As a result, Cobalt Energy has executed what it calls the Gulf of Mexico's first reserve-based loan facility to fund most of its remaining share of the Anadarko-led **HEIDELBERG** (31/8) spar development. Societe General is providing the $150mn senior secured reserve-based loan facility, which is expected to be further syndicated.

While **SEVAN MARINE** continues to find study work for units based on its circular fpso design - for Shell *Penguins* (31/23) and

Premier *Vette*, the field formerly known as *Bream* (31/21) - it is putting a big focus on floating LNG using the HiLoad technology for offloading purposes.

While on FLNG, Höegh LNG has linked up with US-based Delfin LNG on its **LNG DEEPWATER PORT** project in the Gulf of Mexico. The scheme is to pipe onshore gas in a 42in line to FLNG vessels moored 80km offshore. Delfin aims to export up to 13mt/a of LNG to approved countries.

From Australia (RW): Neptune Marine Services has completed the structural grouting of the riser support structure at the **ICHTHYS** (31/23) gas field in the Browse basin off Western Australia.

The work was done under a sub-contract with McDermott which is the principal SURF EPCI contractor on the project.

Neptune employed a team of seven including two engineers on a round the clock basis to complete the work on schedule.

Testing of the grout mix design was undertaken prior to the offshore work and after the work was completed. All compressive strength requirements were met. On completion of the job, Neptune began subsea grouting of the scour protection systems under a second sub-contract.

Tullow Oil's *Tweneboa-Enyenra-Ntomme* (**TEN**) development (31/15) off Ghana could be delayed by a maritime boundary spat between Ghana and Côte d'Ivoire.

The Ivoirian government has applied for provisional measures to be ordered in the dispute, which began in 2014 and is in arbitration before a Special Chamber of the International Tribunal of the Law of the Sea (ITLOS) in Hamburg.

The application asks ITLOS to order Ghana to suspend ongoing exploration and production operations in the disputed area in which the *TEN* project is situated until ITLOS gives its full verdict, which is expected towards the end of 2017. A decision on the application for provisional measures is expected before the end of April 2015.

Tullow said it has been given legal advice that Ghana has a 'strong case' under international law that the current boundary will be upheld. First oil from *TEN* is currently due next year.

From Australia (RW): The first custom-built LNG carrier for the **PNG-LNG** project (31/21) has docked at the Port Moresby LNG plant.

Named MV *Papua*, the 172,000m^3 vessel has begun loading its maiden cargo bound for Sinopec in China. The vessel will be used to supply the project's customers in Asia.

Papua was built in Shanghai by Hudong-Zhongua Shipbuilding Co and is the largest carrier ever built in the country. The vessel is owned by a joint venture of Aquarius LNG Shipping, Mitsui OSK Lines, China Shipping Group and Sinopec. It is operated by Mitsui on behalf of the PNG-LNG joint venture participants at the direction of ExxonMobil.

The project will have four dedicated carriers. Three of them - *The Spririt of Helga*, *Gigira Laitebo* and now *Papua* - are in operation. The fourth vessel is still under construction.

FES International has won a $2mn contract to supply bend stiffener connectors for Total's **EGINA** (31/23) fpso development off Nigeria.

The bscs are being supplied under a subcontract with SURF contractor Saipem. The field, currently under development, is scheduled to begin production by the end of 2017. The bscs will be used to connect five dynamic umbilicals to the *Egina* fpso.

Offshore service company **BUMI ARMADA** which has a growing slice of the floater market - it has three vessels under conversion - took a profit hit of 35% in 2014 compared with the previous year.

Like others, it is looking to cut costs and carry out what it calls 'a headcount rationalisation', nice phrase for cutting jobs.

SEN Online Glossary of Terms - click here

PROJECT UPDATES

TOTAL FOCUSES ON GAS TIE-INS AFTER KILLING OIL RIM PROJECT

Total has put on ice plans to develop the 100mmbl oil rim of its deepwater *Tormore* (SEN, 31/12) gas field, west of Shetland, as first reported in *Deepwater International*.

Concepts for the oil rim, discovered while drilling a *Tormore* development well, had included a tieback to a new relatively small standalone offshore facility or buoy, as well as a long-distance tieback direct to shore or to Chevron's planned, but currently stalled *Rosebank* (31/19) fpso.

Now rather than develop the oil rim, however, the current low oil price environment means Total will drill an extra production well on the main field later this year to increase the gas-condensate field's eventual output to around 90,000boe/d.

No 'there' there

The $5.5bn *Laggan-Tormore* development is a significant new frontier hub for Total and DONG (80% and 20%, respectively) in an area (206/2 and 205/5a) where previously there was no infrastructure.

The two field complex lies in 600m approximately 140km northwest of the Shetland Islands and was originally due onstream before the end of 2014.

It is being developed as a long subsea tieback to a new gas processing terminal (Shetland Gas Plant) being built at Sullom Voe.

However, ongoing schedule delays mean that first production is only now expected during Q3 this year, SEN understands.

Laggan-Tormore hold an estimated 4bnbbls of mainly gas-condensate reserves.

Total will now look at the future tie-in of smaller stranded gas-condensate discoveries in the surrounding vicinity, with finds such as *Glenlivet* (31/16) in 214/30a lined up in 2018 as an eventual contributor via the nearby *Edradour* (206/4) discovery.

Technip has just landed a contract from Total for work on *Glenlivet* to be carried out in parallel with development of *Edradour* which Technip is already involved in.

The *Glenlivet* scope includes fabrication and installation of a 12in production line plus a 6in MEG with 2in piggybacked service line and supply and installation of a steel tube umbilical, which will be manufactured at Technip Umbilicals facility on Tyneside.

It also includes supply and installation of flexible tails from Flexi France, fabrication and installation of a plem, flets, flexible tails and rigid tie-in spools, as well as the installation of templates and manifolds, rock dumping and pre-commissioning.

Vessels from the group fleet will carry out installation in the summer seasons of 2016 and 2017.

CHEVRON GETS FIRST OK FOR 4TH *GORGON* TRAIN

From Australia (RW): The Environmental Protection Authority of Western Australia has approved plans for expansion of the *Greater Gorgon* (SEN, 31/23) subsea gas-to-LNG project on Barrow Island into a fourth train. The expansion will see the Chevron-led group push the foundation production of 15mt/a of LNG up to an annual total of 20mt/a.

The expansion includes construction of a feed gas pipeline system along either the Northern Pipeline Route Option or the Southern Pipeline Route Option plus the addition of a fourth LNG train on Barrow with associated infrastructure.

The WA EPA considers the expansion can be managed to meet objectives for benthic species and habitat as well as marine environmental quality. The authority added that the proposal can be managed to meet the objective of air quality and atmospheric gases and also for marine fauna.

The expansion plans received comments during the public review period last summer, many which focussed on impacts to benthic communities, habitat and marine environmental quality from directional drilling and offshore pipelay activities.

Concerns were also raised over impacts on marine fauna, notably turtles, from artificial light, noise and vibration, vessel movements and discharges, and air quality and greenhouse gas emissions.

Chevron plans to address these concerns by ensuring the clearing of up to 10ha of terrestrial vegetation at the plant site falls within the 332ha limit allowed under the Barrow Island Act 2003. It will refine the lighting design to reduce light emissions and impacts on marine fauna and minimise emissions of atmospheric pollutants.

The JV also plans to inject about 80,000t/a of reservoir CO_2 generated by the fourth train into a reservoir beneath Barrow Island using the existing injection system infrastructure.

The EPA noted and approved these measures. Chevron's plan still needs approval from the WA state and federal governments.

NORWAY'S RESOURCES SHRINK, BUT STILL HAS LOTS TO PLAY FOR

From the North Sea (NT): Norway's total recoverable resources are estimated by the Norwegian Petroleum Directorate at 88.7bboe, down by 132mmboe on the year-ago figure.

But the country can still look forward to many years as an oil and gas exporter, climate policy permitting, as less than half, 40.2bboe, has been produced and sold.

There is still a lot to explore for. The volume of undiscovered resources is 17.8bboe, down by 660mmboe to take account of last year's discoveries. The Barents Sea is reckoned to hold 7.6bboe still to be found, the Norwegian Sea 5.2bboe and the North Sea 5bboe.

Undiscovered gas (4.7bboe) predominates over liquids (2.6bnbbl) in both the Barents and the Norwegian Sea (2.9bboe v 2bnbbl), while the North Sea has the greatest volume of undiscovered liquids (3.5bnbbl) as well as 1.5bboe of gas.

Remaining recoverable discovered reserves – defined as the volume in fields either in production or being developed – are up by 251mmbbl, mainly due to increased estimates for the *Troll*, *Grane* and *Ivar Aasen* fields, but down by 17bcm. This is partly the result of the NPD decision to drop additional reserves linked to the *Ormen Lange* subsea compression project because of uncertainties as to whether it will be implemented.

Not likely

Meanwhile the reason why the new estimate of total recoverable resources has been reduced is because the NPD has taken out a dozen recent finds which it now considers unlikely to be developed.

Included in this category are several of Statoil's unsuccessful Barents Sea wells from 2013 and 2014 – *Iskrystall*, *Kramsnø*, *Nunatak*, *Skavl*, *Mercury* and *Atlantis*.

PROJECT BRIEFS

From the North Sea (NT): Statoil's **OSEBERG DELTA 2** (SEN, 31/7) subsea development, which came onstream in late February, is expected to remain in production for 20 years, helping to extend *Oseberg*'s lifetime. Estimated reserves are 32mmbbl of oil and 7.2bcm of gas. Initially three subsea oil producers and two gas injectors - for substantially increased recovery, according to Statoil - have been drilled.

Start-up took place 38 months after the project became part of the 'fast-track' portfolio. Subsea production equipment, including two templates, was supplied by FMC, pipelay and subsea construction were performed by Subsea 7 and Nexans provided the umbilicals.

The semi *Songa Delta*, appropriately, is responsible for development drilling. First oil was achieved through a single well. The water depth is 104m.

The first phase of development of the *Delta Terrace* has produced since 2008 through two wells. Further potential has been identified in the area and an exploration well is planned in the south, Statoil says.

EXXONMOBIL is big, but it is only when it puts its numbers on paper that it becomes easier to fathom. Like others, it has cut its capex budget for this year - by 12% - but it is still $34bn. Over the next three years, it has 16 major projects coming onstream which will boost production to 4.3mboe/d in 2017. This year production growth will be 2% driven by a 7% boost in liquids.

Projects of note this year include *Hadrian South* in the Gulf of Mexico and expansions at its West African deepwater *Erha* (Nigeria) and *Kizomba* (Angola) complexes. In the next two years, *Gorgon/Jansz* (Australia) and *Hebron* (Canada) come onstream.

TRANS ADRIATIC PIPELINE (31/14) has launched a pair of pre-qualification proecedures for the 105km offshore pipeline section in the Adriatic Sea. The first comprises work on the offshore section of the 36in pipeline between Albania and southern Italy. The EPCI scope includes civil works at the landfalls in both Albania and Italy, as well as survey, seabed and pre-commissioning activities. The greatest depth the pipeline will be laid is 820m.

The second pre-qualification process is for supply of offshore line pipes and coating. Following the selection stage, TAP aims to issue the related ITTs for offshore construction by May 2015.

TAP will transport natural gas from the *Shah Deniz II* (31/12) field in Azerbaijan to Europe. The 870km long pipeline will connect with the Trans Anatolian Pipeline near the Turkish-Greek border at Kipoi, cross Greece and Albania and the Adriatic Sea, before coming ashore in Southern Italy.

From the North Sea (NT): The name of its innovative single-lift vessel did not prove popular – Allseas recently had to change it from *Pieter Schelte* to *Pioneering Spirit* (SEN 31/23) – but even before it has lifted a deck in anger, the vessel is proving a hit.

Statoil has contracted it it to install the topsides for three of the **JOHAN SVERDRUP** (31/21) platforms - drilling in 2018 and the process and quarters in 2019. The heaviest lift will be the processing topsides at 26,000t.

These are the vessel's first installation jobs. It already has topsides removal work booked for Talisman's *Yme* (31/12) and in Shell's *Brent* complex (31/16).

Norwegian pipeline operator Gassco has taken over the new 106km 12in gas export line from BG's **KNARR** (31/19) fpso development which push out 1.7mcm/d of rich gas into the *FLAGS* system and then to St Fergus.

Subsea 7 has landed a $240mn two-year extension to contracts for **DSV AND ROVSV SERVICES** from Shell UK. S-7 will continue to provide subsea construction, inspection, repair, maintenance and decommissioning services to Shell's UK offshore fields and facilities under the deals which begin in 2016. The dsv contract will be delivered on a 24/7 basis through to the third quarter 2018.

Helix and BP have agreed changes to the existing the five-year charter of the newbuild semi well intervention vessel **Q5000**. The contract, for a minimum of 270 days per year, was due to start in September, but has been pushed back to April 2016. It also gives Helix more flexibility in its chartering for the unsecured 90 days per year.

McDermott will fabricate the production manifold and the subsea isolate valve module for Eni's deepwater **JANGKRIK** (31/6) fpso project, offshore Indonesia. The work, 3,200t of fabrication to be carried out at its indigenous Batam Island facility, is being done under a subcontract with FMC.

McD's has also picked up SURF work - installation of a replacement umbilical and two new power and communication cables - as part of bigger fabrication jobs in the Middle East for Saudi Aramco and Qatar Petroleum.

Technip will supply around 200km of flexible pipe to Petrobras for the **LULA ALTO** (31/19) development, offshore Brazil. The flexibles, to be installed in up to 2,500m and for high-pressure operations, will be used for production, water and gas injection and gas lift. The agreement qualifies as 'major' under Technip's definition which is over €500mn.

Heerema Marine Contractors has extended its master service agreement with **DOF SUBSEA** covering survey and positioning services for its fleet...IKM Ocean Design has picked up the detailed design contract for the SURF portion of Statoil's **JOHAN SVERDRUP** (31/21) development in Norway...DeepOcean Brasil, using *Deep Endeavour*, has had its **IRM SERVICES** and flexibles repair deal with Petrobras extended by a year

From the North Sea (NT): Wintershall has been appointed the operator of the **VEGA** and **VEGA SOUTH** fields in the Norwegian North Sea. It takes over from Statoil, whose stake it acquired in an asset deal completed in December (31/18).

In the intervening period, Statoil continued as the operator despite having no interest in the fields. Being the *Vega* operator will help Wintershall build its subsea expertise, it says. This will come in useful given its plans to develop *Maria* (31/23) as a subsea tieback, and possibly also for its *Skarfjell* (31/12) discovery, which may be developed as a tieback to *Gjøa*.

From Houston (BN): ConocoPhillips has won approval of its plan to drill six deepwater exploration wells in the far southwestern **GULF OF MEXICO**.

There will be four in Port Isabel 791, one in Alaminos Canyon 749 and one in AC750. COP plans to use managed pressure drilling, which is not new technology but when used on a mobile rig is not considered proven in the GoM. The wells will be drilled over the next five years in waters ranging from 1,100-1,200m. It is an under- explored area, more than 80km west of Shell's *Perdido Hub*.

Freeport-McMoRan has received the go-ahead of its plan to drill five wells in its *Sun* prospect in Atwater Valley 198. The wells are to be drilled between February 2018 and June 2020. The prospect is in 1,480m about 267km south-southeast of New Orleans.

Cobalt Energy has said it spudded the *North Platte-2* (SEN, 31/21) appraisal well in Garden Banks 959 early last month. This is the first appraisal of a 2012 discovery that penetrated 885m net oil pay in multiple inboard Lower Tertiary reservoirs. Cobalt operates and holds a 60% interest. Total owns the rest.

Maersk Drilling has been awarded a $545mn contract from Eni for the charter of the newbuild drillship *Maersk Voyager* to work on the *Offshore Cape Three Points* (**OCTP**) floater development (31/23), offshore Ghana. The firm contract period is 3.5 years with an option to extend by one year. The drillship is expected to begin operations in July 2015.

SeaBird Exploration is carrying out a 1,700km 2-D seismic survey in the Central Blocks 2312 and 2412a **OFFSHORE NAMIBIA** for Chariot Oil & Gas.The survey will infill an existing grid of data in order to gain a better understanding of the regional prospectivity of this large licence area, which covers approximately 16,800 km2.

Providence Resources says seismic data acquired by Polarcus over the Lower Cretaceous **DROMBEG** prospect in the southern Porcupine Basin, offshore south-west Ireland, looks encouraging.

Initial evaluation of the fast-track 3D volume has revealed 'seismic morphologies' in the Drombeg prospect which are consistent with a large deep-water fan system. The data also suggest that the *Drombeg* fan is being sourced from the Porcupine Bank via discrete sediment feeder systems. Further results from the analysis are due in April.

John O'Sullivan, technical director at Providence, said that whilst much further work remains to be carried out, the company is 'obviously encouraged' by the initial results. Farm-out discussions with 'a number of major international oil companies' are underway.

Lansdowne Oil & Gas has been given the green light by the Irish government for a farm in by Petronas subsidiary Kinsale Energy on SEL 4/07 in the North Celtic Sea offshore Ireland. As operator (80% stake) of the licence, Kinsale will fund 100% of the costs of drilling a well on the **MIDLETON** prospect. Well planning is underway.

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VESSELS

CEONA EARNS ITS SPURS, WHILE AWAITING DELIVERY OF *AMAZON*

From Huisman yard, Schiedam: Some time in the next month, Ceona, a relative newcomer to the offshore construction sector, will take possession of its newbuild field development vessel *Ceona Amazon* and take a stronger place in the crowded SURF contracting field.

The delivery of this impressive ship which is completing most of its fitting out here does not mean that Ceona is a tier one player. In theory, it has the managerial, technical and financial potential to be a bigger player, but much of that will be left to the vagaries of the marketplace and how it pans out over the next few years, while the offshore sector recovers from the recent high-wire crash.

As with all new participants who come into a fiercely competitive market sector, the company has had to prove itself by picking up jobs where it can.

It has used its long-term (five years from GC Rieber) chartered vessel, *Polar Onyx*, to carry its flag along with the short-term (one year) unit *Normand Pacific*. The former is on a five-year deal with Petrobras as a flexible product installer, known in the Brazilian sector as a pipelay support vessel (plsv). Anywhere else it would simply be an installation unit.

Meanwhile *Normand Pacific* has been moving around, mostly in West Africa, handling small and medium-sized jobs which allow it to build up 'street cred', but also to cultivate a client base among smaller operators.

The big moment will be when *Amazon* sets sail for the Gulf of Mexico for its first contracted job, although its marketing team is looking for earlier work than the one on the books for Walter Oil & Gas. It will be ready to sail once its new modular firing is in place.

Offshore manager Colin McCabe told SEN that the export line for *Coelecanth* is 'the perfect first job' for a new unit - twin 10.75in export lines totalling 35km in 365m of water in a straight line.

This might seem like small potatoes for such a mighty ship which measures in at just a hair under 200m with its giant 'g-lay' system and a pair of 400t ahc cranes, but as they say, you have to start somewhere.

There are no illusions among the management team many who were here - including well-known industry veteran Mark Preece - that the next few years will be a tough going. It has already decided to slim down by releasing *Normand Pacific* and pushing back plans for *Amazon II* until at least 2018.

SCHIEDAM SIGHTINGS: There was an awful lot going on - it was really crowded! - in the harbour area around Huismann's busy fabrication yard here.

Firstly, in addition to *Ceona Amazon*, at Huismann's facility were two other complete or nearly complete pipelay towers for Subsea 7 and DOF Subsea.

Also in view further up the channel was EMAS AMC's newbuild pipelay-lift ship *Lewek Constellation* which has only just finished its fitting out at Huismann with an 800t pipelay system for both rigid and flexible pipe and a 3,000t deepwater crane.

By now, it should have left Europe enroute to its first pipelay job for Noble Energy in the Gulf of Mexico.

But of some considerable interest, across the channel from *Amazon* at the Damen shipyard, was the vessel that changed the way the industry approached floating production, the venerable *Petrojarl 1*.

Originally known as the pts, or production test ship, it had its first outing at Norsk Hydro's *Oseberg* field in 1986 and showed the industry the value of the flexibility of such a unit. Historically it never had a production regularity on any of its projects under 96% and all of those jobs were in the North Sea.

Owner Teekay Offshore is having it upgraded and spruced up for its next assignment across the pond for QGEP on the *Atlanta* (SEN, 31/19) field, offshore Brazil.

POLICY

OGA THROWS DOWN THE GAUNTLET ON ASSET STEWARDSHIP

From Aberdeen (IF): The Oil & Gas Authority (OGA) has told the top 20 North Sea operators to present it with stewardship improvement plans by the end of next month.

This is one of the top priorities for the new UK industry regulator in its first year of operation.

Others include facilitating the preparation of regional development plans by the end of 2015 for critical regions of the North Sea, building on data provided by operators.

An ongoing action is to support the Treasury as it develops a revised a fiscal regime which instils confidence and secures investment.

Andy Samuel, CEO of the OGA, has just produced initial findings to a request by Energy Secretary Edward Davey on what practical measures can be taken by industry and government to mitigate immediate risks facing the oil and gas business following the plunge in oil prices.

Risks

Samuel, who took up his new post in January, said there are two key risks that require urgent focus.

One is that the profitability of producing fields will be insufficient to attract continued long-term investment, leading to early decommissioning of assets. Actions needed include protecting critical infrastructure; improving production efficiency; and creating a competitive cost base.

The second risk is that confidence in the future in British waters will continue to decline, resulting in long-term investment not being committed. There needs to revitalise exploration; improve collaboration on decommissioning; supporting the supply chain; and developing and retaining skills.

Samuel said there are resources and economic value to be delivered from the UK North Sea and to unlock this potential there requires a more competitive and efficient operating environment, where costs are managed and companies have the confidence to invest today and tomorrow.

The new CEO said he was working to establish the OGA as a strong and effective regulator, which can be a catalyst for change and a facilitator of action, seeking to drive performance and remove unnecessary barriers to protect current production and secure the future of the sector.

OGA cannot achieve these outcomes in isolation, Samuel said.

'Industry, government and the OGA must build on the positive...relationship, which has developed since the publication of the Wood Review, to demonstrate collective leadership and deliver solutions. The future of our ...industry depends on it,' he added.

It is just over a year since the publication of Sir Ian Wood's final report into maximising recovery from UK waters. A new Act, which received Royal assent last month, enshrines the principle of maximising economic recovery (MER) of this resource.

The report said the industry regulator must have the capability to facilitate and influence collaboration between operators on exploration, developments and infrastructure.

An asset strategy will ensure operators are held to account for the proper recovery of their reserves and oversight of infrastructure consistent with the MER aim.

Sir Ian said OGA should set clear expectations on stewardship factors such as production and recovery efficiency and work with each partnership to ensure they are met.

Technology focus

Elsewhere, the Oil & Gas Technology Leadership Board has said it will focus its attention this year on three specific areas: improved recovery from small fields, innovative well construction and inspection for managing integrity of ageing facilities.

OFFICIAL ACTIVITY HOTS UP IN US WATERS

From Houston (BN): The Bureau of Ocean Energy Management plans to offer all remaining blocks in the western Gulf of Mexico for lease in Sale 246 in August.

Sale 246 will include about 4,000 blocks, covering roughly 21.8mn acres, located from 15km to 400km offshore, in water depths ranging from 5m to 3,346m.

BOEM estimates the proposed lease sale could result in the production of 116-200mmbbls and up to 27bcm. It will be the eighth sale in the agency's 2012-17 five-year programme. The seventh, Sale 235, is set for 18 March and will offer leases in the central GoM.

BOEM has added three sessions to its schedule of public meetings on a plan to open parts of the east coast to offshore development. The meetings in New Jersey, North Carolina and Georgia specifically concern scoping of the draft environmental impact statement required for its 2017-22 lease sales. Stakeholder input is being invited to determine which environmental issues to evaluate in detail.

The additional sessions are a response to interest from the public and local officials in those areas. The three sessions are added to the 20 already scheduled nationally – on the east coast, the Gulf coast and in Alaska.

An EIS is necessary prior to final adoption of a draft proposed leasing program announced in January that includes 10 sales in the Gulf, three off the coast of Alaska, and one in a portion of the Mid- and South-Atlantic.

Arctic rules

The Bureau of Safety & Environmental Enforcement has proposed rules for drilling in the Chukchi and Beaufort seas off Alaska, establishing in law requirements placed on Shell in its 2012 campaign.

A key rule is close availability of a second rig for drilling a relief well should a blowout occur. Other necessities include Arctic-ready support vessels and equipment including a capping stack and a capture dome.

Given the 60 days for public comment and the time required to evaluate comments and finalise the rules, these new codification is unlikely to bear on Shell's plan to drill in the Arctic this summer. Shell already planned to have two rigs operating, and the other rules already were in place, just not set in stone.

The company did not respond to requests for comment. Shell played a role in developing the new rules, which arise partly out of government findings related to Shell's disastrous 2012 campaign.

BUSINESS

DRILLING JOBS GO AS UK FACES INVESTMENT DROUGHT

From Aberdeen (IF): The major problems facing the drilling industry become more apparent as each week passes.

Archer, which has more than 8,000 employees worldwide at locations including Aberdeen, has revealed it will lose about 1,000 jobs. No breakdown on the location of where the jobs will go, but the driller's North Sea operations are expected to be among those worst affected.

This will be another blow to the Aberdeen economy, which has been hit by a series of staff cuts by leading industry firms.

News of Archer's job cuts came on the same week it was confirmed by Oil & Gas UK that the number of exploration wells drilled in UK last year was the lowest since 1965.

Archer reported Q4 results above expectations, but it said there had been a rapid deterioration at the end of 2014 and the beginning of 2015. The sharp decline in the oil price meant many of Archer's customers had decided to significantly reduce investment and expenditure.

These cuts are most prominent in the US land market, but the company also said there had been a reduction in activity in the North Sea with customers on the Norwegian Continental Shelf last year cutting spending as part of longer term cost-saving initiatives. Around 11% of the company's workforce will now go.

The difficulties which drillers and others in the industry find themselves in are highlighted in the latest activity survey from OGUK. Exploration activity in 2014 was significantly worse than anticipated, with only 14 of the expected 25 wells actually drilled.

OGUK said exploration in British waters has collapsed over recent years. The situation is unlikely to improve in 2015 with just eight to 13 wells anticipated. Only 18 appraisal wells were drilled last year and the outlook for this year is worse, with just five wells forecast.

Malcolm Webb of OGUK said the survey paints a bleak picture, but it also identifies the basin's potential.

Opex in UK waters rose by almost 8% to £9.6bn in 2014 and, on a unit of production basis, reached a record high of £18.50/bbl.

Falling oil price meant that revenues dropped to just over £24bn for the year, the lowest since 1998. This, combined with rising costs, resulted in a negative cash-flow of £5.3bn for the basin, the worst since the 1970s.

Cost over-runs and schedule slippage on several large projects pushed capital investment in 2014 beyond expectations to £14.8bn with half spent on just 12 fields.

As these large projects move from development into production, OGUK said there is little new investment to replace them. Annual investment in sanctioned projects is forecast to decline rapidly and could collapse to £2.5bn by 2018.

Webb said, that the industry realises that its cost base is unsustainable. Cost and efficiency improvements of up to 40% are required to give this sector a viable future. An adjustment is underway, but cost control alone is not the answer.

'The basin needs sustained, high investment - £94bn...to recover the 10bboe in known reserves. This is why a concerted effort on ...tax, regulation and cost...to make the basin more attractive to investors and ensure that significant...capital comes to the UK' is required, Webb said.

CAL-DIVE, HIT BY TRIPLE WHAMMY, FILES FOR BANKRUPTCY

From Houston (BN): Squeezed by client project delays, the 2014 industry downturn as well as untimely bad weather, Cal-Dive International has filed for protection under US Chapter 11 bankruptcy rules.

The 40-year-old provider of diving services to the offshore industry said this week that project delays, particularly in Mexico, created a liquidity squeeze from which the company could not extricate itself. Financial details were unavailable Tuesday because court documents had not been filed, but Cal-Dive has lost money every year since 2009.

In its Q3 2014 filings with the Securities & Exchange Commission, which reported a loss of $42.6mn on revenues of $114.mn, Cal-Dive blamed problems completing work for and getting paid by Pemex. Heavy upfront spending to work on four unnamed Pemex projects was followed by Pemex delays that prevented Cal-Dive from meeting milestones and receiving payment.

Cal-Dive said Pemex changes contributed to delayed completion of one project from Q3 to Q4 last year. Pemex suspended two other projects for several months, pushing Cal-Dive's milestone-based payments into the Q2 this year.

The company also cited delays in other work for unnamed clients in the US Gulf of Mexico due to storms early in the summer and Loop Currents that arise periodically, but which have been a particular problem in recent months here.

SEN inquiries to Cal-Dive and equity analysts did not produce more detail. Cal-Dive said its foreign subsidiaries are not part of the filing and will continue to operate normally.

Also, Cal-Dive has received $120mn in interim financing to continue operating with 'no disruption in its services' as debtor-in-possession while Chapter 11 reorganisation takes place.

From the editor: There is continued fall-out from the bankruptcy of Reef Subsea (SEN, 31/23), owned by Norwegian equity group Hitech Vision. The latest has seen Specialist Subsea Services (S3) call in administrators.

S3, a 2007 startup, was acquired by Reef in 2009. In a growth spurt, it took on the charter of the vessel *EDT Hercules* and acquired two wrovs and other associated equipment. Despite having secured a major frame agreement, with Reef, a major customer, facing insolvency and the industry facing a general downturn in the face of the oil price collapse, S3 found itself unable to meet its increase in fixed costs.

KPMG's Aberdeen office which has provided joint administrators is seeking a sale of S3's business and assets.

BUSINESS BRIEFS

MCDERMOTT INTERNATIONAL and **PETROFAC** have formed an alliance to bid for large-scale SURF contracts.

The five-year deal covers project bids over $200mn in the North Sea, US and Mexican waters of the Gulf of Mexico, Brazil, West Africa and the Mediterannean.

McD is the bigger player in this market with a multi-vessel fleet including its newbuild *DLV 2000*, but Petrofac brings its newbuild field development vessel *JSD6000* to the table.

McD has been in alliances before, most recently with Allseas covering recent bids for deepwater gas developments in Mozambique.

The deal was announced in the wake of McD's improved performance in 2014, although it still reported a net loss of $326mn. It is implementing a three-part improvement plan based on increased efficiency; centralised business functions; and cost initiatives and outsourcing of some activities.

Investment vehicle LetterOne (L1) has been given seven days to convince the UK government that it should not be forced to sell oil and gas assets it has just acquired in the North Sea.

The Secretary of State for Energy & Climate Change, Ed Davey, has written to L1, owned by Russian oligarch Mikhail Fridman, about its $5.64bn acquisition of **RWE DEA**. The new entity will be called Deutsche Erdoel Ag or simply DEA.

RWE Dea owns 12 oil and gas fields in the UK North Sea, including *Breagh*, *Clipper South* and *Devenick*, as well as assets in Norway, Germany and Egypt. The UK government is concerned that sanctions imposed on Russia in the wake of the conflict in Ukraine could affect Fridman's businesses.

In his letter of 4 March, Ed Davey said he would be 'willing to consider further representations' from L1 and has given them a week to explain why he should 'not now proceed to issue Notices under the Licences to require further changes of control.'

Davey initially wrote to L1 and RWE at the weekend on concerns about the effect that possible future sanctions imposed on L1 'may have on the continued operation of these 12 fields and the serious health and safety and environmental risks that may result'.

L1 responded saying it was 'deeply disappointed and concerned' by the letter, given the extensive efforts the parties have made to address concerns oer the sale.

'Protecting these assets is the Secretary of State's priority,' DECC stressed.

(NB: Lord Browne, former head of BP, has been named as head of new company's supervisory board.)

From Houston (BN): The financial outlook continues to darken at **PETROBRAS** even as Brazil sets new production records.

The state-controlled company's executive board has boosted planned asset divestitures in 2015-16 to $13.7bn from $5bn to $11bn forecast indicated in the 2014-18 five-year business plan. The sales will include 30% of exploration and production assets at home and abroad with a focus on non-operated stakes, 30% of downstream assets and 40% of gas and energy assets.

The plan is aimed at reducing leverage and preserving cash. It prioritises the most productive investments in oil and gas prospects in Brazil. Each asset sale will undergo review by the executive board and board of directors as well as the relevant government authorities and international regulatory agencies. Petrobras said the plan is not set in stone. If market conditions change, the plan may change.

Meanwhile, Moody's rating service has hit Petrobras with a two-notch downgrading of its debt, from Baa3 to Ba2. The downgrade follows Petrobras' inability to produce audited results since the third quarter as it wrestles with asset valuations in the wake of a bribery-kickback scandal. Some analysts said the downgrading was too aggressive, but but not good news nonetheless.

FUGRO which has been stalked by Royal Boskalis Westminster (SEN, 31/22) for the last several months has announced a strategic refocus of its activities targetting the geotechnical and survey markets.

The Dutch contractor is seeking reduce its involvement in the Seabed Geosolutions venture with seismic specialist CGG as well as seeking a partner for and a divestment of its Subsea Services - rov and diving - division.

In its annual results, Fugro saw total revenue in 2014 grow marginally (6%) to €2.57bn, but saw it fall into a loss of €457mn, compared to a profit of €224mn in 2013.

The Seanamics Group, formerly known as the Subsea Manufacturing Group based around deckhandling specialist Caley Ocean Systems, has expanded through the acquisition of **UMBILICALS INTERNATIONAL** of Houston.

UI, led by former JDR executive Colin Zak, manufactures special application cables, hoses and umbilicals, out of Stafford TX. Together with Caley, they plan to offer 'integrated solutions' for deploying modules and equipment subsea and for well intervention packages.

Seanamics was set up by Simmons & Co and led by former Duco and Wellstream executive Ally McDonald.

James Fisher & Co which has been growing its involvement in the offshore sector over the last year or so has acquired South African-based marine and subsea contractor **SUBTECH**. There was an initial cash payment of £3.4mn with subsequent potential payments of up to £14.6mn depending on hitting profit targets through 2017.

Subtech has executed projects in Africa and the Middle East for Shell, Maersk, NPCC of Abu Dhabi and Qatar Petroleum.

These are unlikely to be the last of deals for offshore and subsea companies. In particular, expect to see more private equity to private equity swaps with those holding assets too long wanting to get out, while others are chomping at the bit with money in their pockets to pick up some bargains.

From Australia (RW): **TAP OIL** is under siege from Thai millionaire Chatchai Yenbamroong's Northern Gulf Petroleum.

Tap's major asset is 30% of the *Manora* (31/8) oil field in the Gulf of Thailand that hit peak production several weeks ago. NGP is a joint venture partner in the field.

NGP recently increased its holding in Tap from 6% to 19.98% and the company is now seeking to control Tap by replacing its board with its own nominees. Yenbamroong is using a section 203D notice for the move which requires two months' notice prior to the calling of an extraordinary general meeting.

Tap received the notice after renegotiating its *Manora* debt facility with BNP Paribas and Siam Commercial Bank with an ability to draw down $78.9mn, $10mn more than the previous arrangement. This ensures the company can meet all financial commitments.

Tap also put in place a hedging program for 495,000bbls of *Manora* oil at $62.75/bbl to

SEN Online Glossary of Terms - click here

support the new facility. It has also revised the development drilling programme which now calls for seven of the originally proposed 10 development wells. Four wells have been deferred or cancelled.

Tap's total estimated capex at *Manora* is about $105mn after repayment of the carry of

NGP and reserve payments of up to $30mn during the first four years of production, assuming 2P reserves in the field remain above 10mmbbls.

It is easy to see where the offshore industry as a whole and the subsea sector in particular are heading.

SUBSEA 7 had good results in 2014 with revenue up 9% to $6.9bn and EDBITDA up 50% to $1.44bn. S-7 even managed to pull back $100mn from its projected loss on the *Guará-Lula* fiasco.

But...Q4 revenue was down 12% from 2013 and its backlog is $3.5bn less than last year and half of the backlog - $4.1bn - is for execution in 2015. Don't look to far ahead.

And here are just a few comments from other companies: pipecoating specialist **SHAWCOR** had a good Q4 2014 with revenue up to $500mn, but noted that it has taken 'proactive steps to prepare...for the expected downturn in...2015.' **IONA ENERGY** is another minnow which could be in breach of bond covenants due to reduced revenue following the precipitious fall in the price of oil, while **NORECO** has cancelled its upcoming bondholders meeting. **AFREN** said it did not pay $15mn in interest due on 1 February. **DET NORSKE OLJESELSKAP** which actually started making some serious money in 2014 as its production multiplied by more than tenfold, almost immediately instigated a cost-cutting exercise to take $100mn out of its overheads.

From Aberdeen (IF): The new chief executive of Oil & Gas UK is to be industry veteran **Deirdre Michie**. Ms Michie takes up the post on May 1, replacing Malcolm Webb who is retiring after more than 10 years in charge.

Ms Michie is to be based in the association's Aberdeen office and will also have an office in London. She joins OGUK from Shell, where her career has spanned almost 30 years in senior UK and global upstream and downstream management positions.

Lots of changes in Wood Group. **Steve Wayman** is stepping down as ceo of Wood Group Kenny to become head of strategy and development for the whole group. He is replaced by **Bob MacDonald** who was WGK regional director for the North Sea.

Dave Stewart takes over as CEO of Wood Group PSN moving up from running the UK business. He replaces **Robin Watson** who become COO of the whole group in April.

Michele McNichol becomes CEO of Wood Group Mustang following the retirement of **Steve Knowles**. Ms McNichol has been with Mustang since 2001.

Rod Larson has been named president and COO of Oceaneering. Larson who moves up form senior veep has been with Oceaneering since 2012 after 20 years with Baker Hughes.

NEXT ISSUE : 26 MARCH - WATCH OUT FOR THE NEW-LOOK *SEN*!

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SUBSEA ENGINEERING NEWS (ISSN 0266-2205) is published twice monthly by Hart Energy Publishing LLP, Houston TX, USA. Editorial office: Knighton Enterprises Ltd, PO Box 27, Cheltenham GL53 0YH, UK; telephone: +44 (0)1242 - 574027; fax: +44 (0)1242 - 574102; e-mail: sen@btinternet.com; web-site: *www.subsea-news.co.uk*.

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