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ASIA OIL AND GAS NEWSLETTER

BREAKING NEWS AND ANALYSIS FROM ACROSS ASIA

South China Sea probe success

Canada's Husky Energy has drilled a successful exploration well in the South China Sea.

Husky said that the successful well was drilled on **Block 15/33** in the Pearl River Mouth Basin, around 160km south-east of Hong Kong.

Initial results from the first of two exploration wells drilled on the 155sq km block demonstrated four oil-bearing zones with a combined thickness of around 70m (230ft). The water depth is around 80m (262ft).

"Further testing is under way to assess potential commercial development," Husky said.

Husky added that, following completion of the test phase, another exploration well targeting a separate structure on the block is planned. The company also plans to drill two exploration wells at the nearby **Block 16/25** in the second half of 2018.

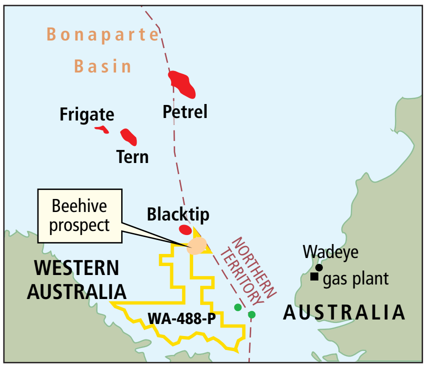
Husky has a 100% stake in Block 15/33. In the event of a commercial discovery, its partner CNOOC Limited can take up to a 51% stake. Exploration cost recovery from production would be allocated to Husky.

● Husky and CNOOC have just signed two Production Sharing Contracts for Blocks 22/11 and 23/07 in the South China Sea (*see story on page 5*).

Melbana gets Australia Beehive nod

Melbana Energy has received environmental approval from regulator NOPSEMA to undertake the Beehive 3D seismic survey over the **Beehive** prospect in the Joseph Bonaparte Gulf, Australia.

Melbana described Beehive as "one of the largest undrilled hydrocarbon structures in Australia."



The Beehive 3D survey is being operated by Australia's Santos pursuant to an Operations Services Agreement and is fully funded by French major Total and Santos, Melbana added.

"The Beehive 3D survey contractor will be appointed imminently and the survey itself is expected to commence in July and be completed before the end of August 2018. The survey is a typical 3D survey using methods and procedures similar to others conducted in Australian waters," said Melbana.

The survey acquisition area is around 600km with a larger operational area around it to allow for vessel turns and testing of equipment. The operational area is located in the Joseph Bonaparte Gulf, around 225km west-southwest from Darwin.

Total and Santos have an option (exerciseable together or individually) to acquire a direct 80% participating interest in the permit in return for fully funding the costs of all activities until completion of the first well in the **WA-488-P** permit.

In the event of a commercial discovery, Melbana will repay carried funding from its share of cash flow from the Beehive field. Melbana will have no re-payment obligations for such carried funding in the event there is no commercial discovery and development in WA-488-P, Melbana noted.

"The acquisition of a new 3D seismic survey over Beehive will provide potential for further de-risking of the prospect and will facilitate consideration of a preferred location for the **Beehive-1** exploration well," added Melbana.

Melbana's CEO, Robert Zammit, said: "We are pleased that we have been able to secure the environmental permit in sufficient time to enable the prompt acquisition of the Beehive 3D seismic survey. Our existing commercial arrangement with Total and Santos provides Melbana with the opportunity to explore this enormous prospect at no further cost to Melbana through to the completion of the first exploration well, which if successful, would be a game changer for our company, the region and its shareholders."

The Beehive prospect is a Carboniferous 180sq km isolated carbonate build up with 400m (1,312ft) of mapped vertical relief, analogous to the giant **Tengiz** field in the Caspian Basin, said Melbana.

Beehive is located 75km offshore at a water depth of 40m (131ft) and is therefore suitable for a jack-up rig, noted Melbana, adding that the field can be developed by either a Floating Production, Storage and Offloading unit or by pipeline to existing infrastructure.

"This play type is new and undrilled in the Bonaparte Basin with no wells having been drilled to this depth in the basin. Beehive is located close to several existing facilities, including the **Ichthys** project and **Blacktip** field and pipeline offering several options for future gas monetisation," the company noted.

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INSIDE THIS WEEK

TRENDS

Offshore 'requires trillions' to 2040

Offshore energy activity is forecast to increase and will "require trillions of dollars" of investments up until 2040, says a report by the International Energy Agency (IEA).

The IEA's Offshore Energy Outlook considers two scenarios: the New Policies Scenario (NPS) and the Sustainable Development Scenario (SDS).

The NPS includes existing energy policies, as well as an assessment of the results likely to stem from the implementation of announced policy intentions, while the SDS covers an integrated approach to achieving internationally agreed objectives on climate change, air quality and universal access to modern energy.

The industry is forecast for growth under both scenarios but the future spending on oil, gas and wind vary depending on the policies in place, said the IEA outlook.

In the NPS, offshore oil production edges higher, while gas rises to become the largest segment of offshore production. Generation from offshore wind rises by more than 10 times to 2040, helped by supportive policies in Europe, China and elsewhere, IEA said.

In the SDS, in which the world reaches climate, air quality and energy access goals, the balance of offshore activity shifts but the overall level remains substantial.

According to IEA, by the 2030s, offshore investment in the SDS – currently heavily weighted towards oil – is split into three roughly equal parts as oil and (to a lesser extent) gas output growth is lower than in IEA's main scenario, while offshore electricity generation grows twice as fast and provides 4% of global power generation by 2040.

Overall, the SDS requires US $4.6 trillion in capital investment in all types of offshore energy over the period to 2040, compared with $5.9 trillion over the same period in the NPS.

The IEA says that the prospects for offshore gas remain relatively robust in the SDS but a decline in oil demand in this scenario weighs against new capital-intensive offshore oil projects.

FIELD DEVELOPMENT

Western Gas seeks Equus partners

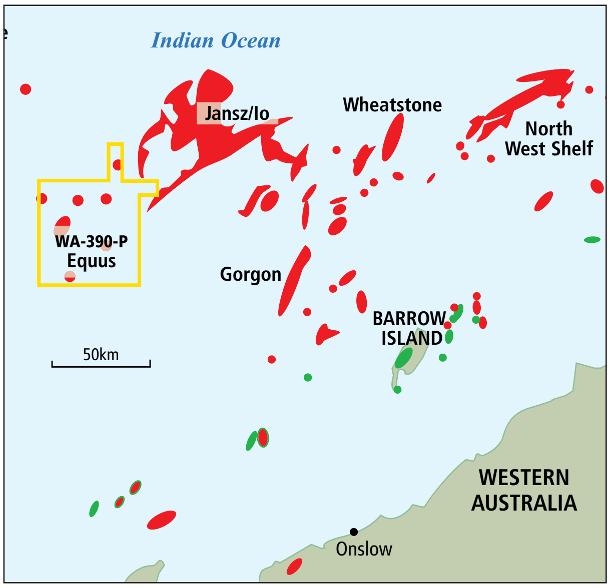
Western Gas is on the hunt for partners to help it develop the recently acquired **Equus** gas field offshore Western Australia.

Western Gas, which bought the field from Hess in November 2017, has completed the basis of design for the development of the Equus gas project, and has issued a request for proposals to secure "a world-class project development partner."

The company is looking for services that cover full field development, including drilling, subsea, offshore processing and a gas pipeline to shore.

Andrew Leibovitch, executive director of Western Gas, said the company has built on the extensive development studies it acquired when it purchased the project and prepared a fit-for-purpose Basis of Design, with first gas planned from 2023.

"It was clear from the start that a new approach would be needed to develop this significant resource in a timely way," Leibovitch said. "We have resized the project to match the discovered gas resource and to meet gas customers' needs for long-term secure contracts and innovative pricing. We're now moving forward to secure a project partner and bring this gas to market."



Since 2007, more than US $1.5 Bn has been spent on exploration, appraisal, engineering and development planning for the Equus project.

The Equus gas project comprises an independently certified resource of 56.66 Bcm (2 Tcf) of gas and 42m bbl of condensate. These reserves are enough to supply 25% of Western Australian domestic gas demand or two tonnes of LNG a year for 20 years, Western Gas said.

Leibovitch added that Western Gas was progressing the marketing of Equus gas with a focus on securing foundation customers, as well as undertaking project financing activities.

Front End Engineering Design (FEED) will start once customer arrangements are secured, with a Final Investment Decision expected in late 2019.

Leibovitch added that while Western Gas was progressing a stand-alone development plan for Equus, he saw opportunities for Western Gas and other resource owners to access expected spare processing capacity in existing infrastructure and planned new developments from the early 2020s.

"With the Basis of Design for development of the project completed, leading to lower up-front development costs, Equus is positioned to provide a new independent source of gas supply from the North West Shelf," Leibovitch said.

The Equus gas project basis of design comprises an offshore processing facility and a pipeline to shore, with landfall near Onslow.

Development will be phased, with the initial development comprising three production wells linked by subsea infrastructure to a Floating Production, Storage and Offloading (FPSO) unit.

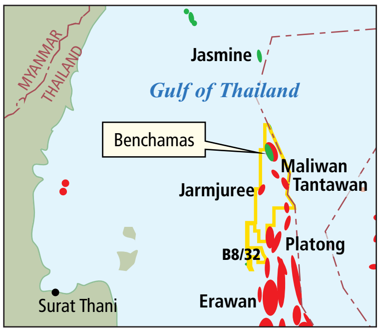
Facilities on board the FPSO will include gas dehydration, condensate stripping and gas compression. Water depth at the well locations is 1,000-1,200m (3,281-6,562ft). Dry sales gas will be piped to shore by way of a 220km pipeline, with onshore facilities dependent on the outcome of gas marketing arrangements.

Gas supply is expected to be up to 6.71 Bcm/d (236.6 Bcf/d).

InterMoor wraps *Benchamas 2* installation

InterMoor has completed installation work on the new *Benchamas 2* Floating Storage and Offloading (FSO) vessel in **Block B8/32** in the Gulf of Thailand.

Initial production in Block B8/32 started in 1999 using the *Benchamas Explorer* FSO. After operating the facility for nearly 20 years, US player Chevron decided to replace the old facility with the new *FSO Benchamas 2*.



The *FSO Benchamas 2* was delivered by maritime solutions and services provider MISC Berhad in March.

Conversion work for the *FSO Benchamas 2* started in early 2017. The donor vessel for the conversion was the formerly AET-operated *Bunga Kelana 5*, an Aframax tanker that was built in March 1999.

The *Benchamas 2* has a storage capacity of 650,000 bbl with 12 years design life without drydocking. The project was MISC's first step into Thailand's oil and gas market.

The contract for the lease and operations of the FSO was sealed via an international competitive bidding process and was signed between MISC Offshore Floating Terminals (MOFT) and Chevron Offshore Thailand in August 2016.

InterMoor's work scope on the project included project management, engineering, and manpower for the tow of the *Benchamas 2* from MMHE shipyard in Malaysia to the **Benchamas** field offshore Thailand.

The company also chartered two Anchor Handling Tug Supply (AHTS) vessels for station keeping during the hook-up of the FSO and provided engineering and analysis to support the hook-up of the FSO and installation of the riser system.

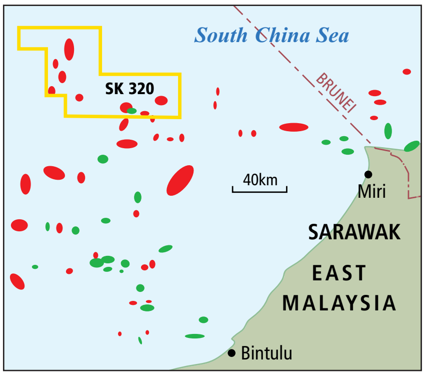
The new FSO is turret-moored at the same location as the *Benchamas Explorer* and is connected to the existing mooring system and piles, in 71m (233ft) of water.

Martin Kobiela, managing director of InterMoor Asia Pacific, said: "The project involved a high level of details and complexity and we are proud to have completed it successfully and to have been associated with such an important endeavour."

InterMoor said the work was completed on time, without interruption of production, and without any lost time incidents.

KKB handed Sapura LoA

Malaysia's KKB Engineering has been awarded a Letter of Award (LoA) from Sapura Fabrication for the procurement and construction of wellhead deck, piles and conductors for the **Pegaga** development project offshore Sarawak, East Malaysia.



KKB said that the contract was awarded to its subsidiary company OceanMight.

The LoA is part of the Sapura's Engineering, Procurement, Construction, Installation and Commissioning (EPCIC) contract for the Pegaga project, which is operated by Mubadala Petroleum, in **Block SK320**.

"The award is expected to contribute positively to the earnings and net assets of the KKB Group for the financial years ending 31 December 2018 to 31 December 2019," KKB said.

Under the Pegaga project contract, Sapura was awarded the EPCIC deal for an offshore Integrated Central Processing Platform (ICPP) for the gas field in late March.

The field is located in the Central Luconia province, offshore Sarawak, at a water depth of around 108m (354ft).

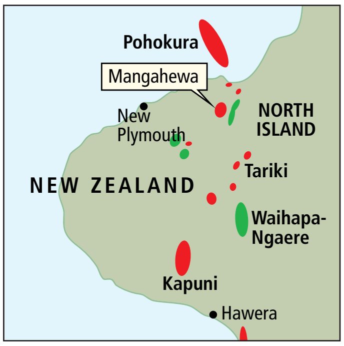
The development concept comprises an eight-legged ICPP jacket. The facility is designed for a production rate of 550 MMcf/d (15.58 MMcm/d) of gas plus condensate.

The produced fluids will be transported through a new 38-inch subsea pipeline tying into an existing offshore network and subsequently to the onshore Malaysia LNG plant in Bintulu.

Mubadala is the operator of Block SK320 with a 55% stake, while Malaysia's state-owned Petronas holds 25% and Anglo Dutch major Shell has 20%.

New Zealand reserves dip

New Zealand's proven and probable gas reserves have dipped, according to data from the country's Ministry of Business, Innovation & Employment.



The data, compiled from assessments of permit holders' annual summary reports, shows a 5% drop in proved plus probable gas reserves estimates over the last year.

Gas reserves stand at 52.29 Bcf (1.881 Tcf) at 1 January 2018. It represents around 10.5 years of demand at 2017 demand levels, the ministry said.

The main factor behind the dip is a 27.2% decrease in gas reserves at the **Pohokura** field, while gas reserves at **Mangahewa** increased by 44.5%.

Josh Adams, New Zealand's national petroleum manager, said: "The data is typically made available as part of MBIE's yearly Energy in New Zealand publication released each September but a decision was made to bring forward its release to help inform debate around the status of the country's petroleum reserves. Companies review their reserves on an annual basis. Variations from year to year are expected for a range of reasons, including technical and economic factors."

EXPLORATION

Quadrant waits on weather for Dorado-1 spud

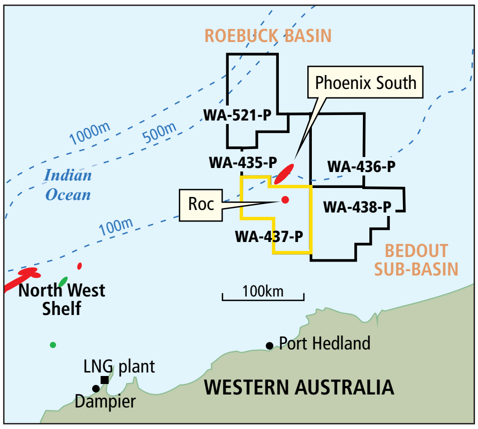
Quadrant Energy is waiting for sea conditions to improve so that it can spud the **Dorado-1** exploration well offshore Australia using the *Ensco 107* jack-up.

The Dorado-1 well is located in the **WA-437-P** exploration permit, which is operated by Quadrant with an 80% stake and Carnarvon Petroleum holds the remaining 20%.

Following the contract award in November 2017, the *Ensco 107* jack-up drilling rig was mobilised from Singapore at the end of April with plans to reach the well location in mid-May 2018 and start drilling before the end of the month.

Carnarvon said that the rig is currently located near the Dorado-1 well site and is waiting for swell conditions to subside to enable it to move onto the drilling location.

Quadrant added that, once on location, the legs will be jacked down onto the seafloor and the rig prepared to start drilling.



Drilling of the well is expected to take around 60 days to complete and be at the top of the primary objective in around 35 days.

The primary objective of the Dorado-1 well is to assess the gas and liquids potential in the Caley member. The Dorado-1 well lies less than 20km from and updip of the successful **Roc-1** and **Roc-2** wells.

Quadrant and Carnarvon are also partners in the **Phoenix South-3** well, which is located in the adjacent **WA-435-P** permit. This well was spudded in mid-April using Transocean's *GSF Development Driller-1* semi-submersible rig.

Carnarvon reports that the Phoenix South-3 well is currently setting casing at 3,733m (12,248ft) before drilling ahead to the Caley formation target at a depth of around 5,300m (17,389ft).

Tap's Thai Manora-8 spud

Tap Oil reports that the **Manora-8** well offshore Thailand was spudded on 20 May 2018.

"The primary objective of the Manora-8 well is to explore for hydrocarbons in the 600 series sands that are the primary producing sands in Manora. The well targets a three-way dip closure of the **Manora Footwall A** prospect in the upthrown (footwall) side west of the **Manora Central Block**. The planned total depth of the well is 1.957m (6,420ft)," said Tap.

SUBSEA

Wood starts Australian subsea study

Wood Group has kicked off the next stage of a collaborative industry effort to develop a better understanding of the reliability of subsea equipment for use offshore Australia.

Wood said it is leading the Subsea Equipment Australian Reliability Joint Industry Project (SEAR JIP), which is an initiative supported by a group of operators, including Chevron, ConocoPhillips, Quadrant and Woodside.

The project is focused on collaboration and knowledge sharing in order to improve subsea equipment design and reduce the requirement for costly and time consuming interventions in Australia's challenging offshore warm water environment.

This latest phase of the SEAR JIP will continue the collaboration effort across a large group of Australian subsea system operators and continue to collect reliability data for subsea equipment in Australian operations.

In addition, it will expand a marine fouling subsea test programme, with a focus on deploying additional living laboratories in Northern Australia to assess innovative coatings, materials and technologies for their performance against calcareous deposition and plant/animal growth and establish marine fouling cleaning best practice and identify optimisation opportunities to improve the effectiveness of existing practices.

Finally, it will evaluate the performance of umbilicals and identify best practice remediation strategies.

Bob MacDonald, CEO of Wood's Specialist Technical Solutions business, said: "We have been leading the SEAR JIP since 2014, partnering closely with Australian subsea system operators to deliver what we are confident will create a tangible step-change in subsea reliability."

"The powerful combination of Wood and the collaborating companies' knowledge and expertise enables the development of innovative solutions to address the challenges we collectively face."

Adriana Botto, Wood's project manager for the SEAR JIP, added: "Enhancing the design of subsea equipment to mitigate issues and reduce the requirement for intervention was a key focus in the initial phases of the SEAR JIP. Through our collaborative work we have taken significant strides forward in identifying the root cause of equipment performance issues, so that they can be designed out by vendors in the future.

"This phase of the project will build on our work to date, with a key focus on improving understanding of subsea equipment reliability issues. The long-term value of the project will be a step change in industry practice and performance, with lessons learned shared across operators, vendors and research institutions," added Botto.

News in Brief

Japanese invest in Brazil FPSO

Five Japanese companies have joined forces to build an FPSO that will operate offshore Brazil for Petrobras.

Mitsui, MOL, Marubeni and Mitsui E&S will invest in a long-term charter business currently promoted by the Japanese player Modec. The FPSO will work on Petrobras' Mero field.

Based on the agreements signed by the five companies, Mitsui, MOL, Marubeni and Mitsui E&S will invest in Libra MV31 (MV31), a Netherlands company that was set up by Modec. The companies will proceed with the project in a joint venture.

LICENSING

Australia offers 21 blocks

The Australian government has unveiled the 2018 Offshore Petroleum Exploration Acreage Release covering Western Australia, South Australia, Victoria, and the Ashmore and Cartier Islands.

The 2018 Round offers 21 blocks across six basins, where 16 areas are available for work programme bidding and five areas for cash bidding.

The acreage is offered across the Bonaparte Basin, Browse Basin, Northern Carnarvon Basin, Bight Basin, Otway Basin and Gippsland Basin.

The blocks are located in water depths of 15-4,534m (49-14,876ft). They vary in size from 80sq km to 12,128sq km and also vary in level of existing geological knowledge. All areas are supported by pre-competitive geological and geophysical data and analysis undertaken by Geoscience Australia.

Minister for Resources and Northern Australia Matthew Canavan said the areas would provide "a wide range of options for the oil and gas industry, from well-known, petroleum-producing basins to frontier basins that are among the most prospective in the world."

"The Australian government is committed to the safe and responsible development of oil and gas resources," Minister Canavan said. "Offshore oil and gas exploration is vital to meeting Australia's future energy needs. The annual Offshore Petroleum Exploration Acreage Release is a key part of our plan to promote investment in new offshore exploration."

Husky-CNOOC sign China PSCs

State-owned China National Offshore Oil Corporation (CNOOC) has signed two Production Sharing Contracts (PSCs) with Husky Oil for **Blocks 22/11** and **23/07** in the Beibu Gulf in the South China Sea.

Block 22/11 covers a total area of 1,663sq km with a water depth of 40-80m (131-262ft) and Block 23/07 covers a total area of 1,210sq km with a water depth of 20-40m (66.5-131ft).

Under the terms of the PSCs, Husky will act as the operator during the exploration period and conduct exploration activities in the two blocks, in which all costs will be met by Husky.

Once it enters the development phase, CNOOC has the right to participate in up to a 51% stake in any commercial discoveries of the blocks.

After signing the PSCs, except for those relating to CNOOC's administrative functions, CNOOC will assign all of its rights and obligations under PSCs to CNOOC China Limited, a subsidiary of CNOOC Limited.

Rosneft South China Sea well stance

Drilling in the South China Sea (SCS) by Russia's Rosneft is within Vietnamese territorial waters, Rosneft said after its Vietnamese subsidiary spudded a well in waters that are claimed by China.

Rosneft Vietnam is concerned that its recent drilling in an area of the SCS that falls within China's "nine-dash line" could upset Beijing, two sources with direct knowledge of the situation told Reuters.

"Offshore licence areas of Rosneft on the South China Sea are situated within the territorial waters of Vietnam," Rosneft said. "The company conducts its operations on the shelf of Vietnam in a strict accordance with the licence obligations and compliance with the subsoil use legislation of Vietnam."

RIGS

Borr to buy five jack-ups for $745m

Norway's Borr Drilling has signed a Master Agreement (MA) with Singapore's Keppel to acquire five jack-up rigs for a total of around US $745m, which equates to $149m per rig.

These are existing jack-up rigs which are being built by Keppel FELS to the KFELS B class designs. The price of the five rigs excludes any down payments made by the respective original owners. Before the oil prices collapsed in 2014, a KFELS B rig price was around $206m, according to reports.

"The MA with Borr Drilling will become effective upon the satisfaction of certain conditions, including Borr Drilling raising sufficient funds, and the relevant sales and purchase agreements for the individual rigs having been entered into," Borr said.

Borr Drilling will pay the first installment of $288m within 20 business days of the effective date of the MA and the remaining amounts are payable within five years from the respective delivery dates of each rig, on a seller's credit with interest at market rates, Keppel said.

The rigs are scheduled to be delivered progressively from Q4 2019 to Q4 2020, with one rig to be delivered in 2019 and four rigs in 2020.

Chris Ong, CEO of Keppel O&M, said: "The agreement with Borr Drilling demonstrates that rig owners continue to look for reliable, high quality rigs, such as the KFELS B Class, to maximise efficiency and productivity. This is a win-win agreement for all parties and enables Keppel O&M to further improve our cash flow, minimise the holding risks of the projects, and clear several of the deferred orders."

CEO of Borr Drilling, Svend Anton Maier, added: "We are pleased to be getting another five high quality jack-up rigs from Keppel FELS on top of the five we acquired earlier. Our partnership with Keppel is crucial as it enables us to provide the market with the latest in jack-up rig technology, safety, and operability. This is an opportune time for us to grow our fleet of highly capable jack-up rigs as the market is showing signs of recovery from the bottom of the business cycle."

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Seatankers buys four Fujian Mawei PSVs

Cyprus-based Seatankers Management, part of the Fredriksen Group, has acquired four Platform Supply Vessels (PSVs) from China's Fujian Mawei Shipbuilding.

Seatankers bought three platform supplier hulls – *MW6282*, *MW6283*, *MW6285* – and the already launched *Armada Tuah 520*, formerly known as *MW6281*.

All four vessels have a deadweight of 5,200 tonnes and deck space of 720 square metres.

This is Seatankers' first addition to its PSV fleet, which currently comprises 18 vessels: 14 bulkers and four tankers. The company is also waiting for 12 newbuilds to arrive in 2019 and 2020, reported VesselsValue, which did not give any price for the vessels but said the total market value of the PSVs is US $71.4m.

All four vessels were originally ordered by Singapore-listed Nam Cheong in 2013.

Exmar's 10-year Gunvor FSRU deal

Exmar has executed a "fully effective 10-year charter" for the provision of its Floating Storage and Regasification Unit (FSRU) barge and services in Bangladesh for Gunvor.

The FSRU barge is currently at Keppel Shipyard undergoing site-specific modifications after having been delivered from Wison Offshore and Marine in December 2017.

The FSRU barge is expected to arrive in Bangladesh in Q4 this year and start operations after full commissioning. The FSRU has been fully paid by Exmar and the financing of the unit is under discussion.

"As a leading global trader of LNG, Gunvor is keen to support the development of new LNG markets by providing reliable and efficient LNG infrastructure solutions. The floating solution developed and operated by Exmar is going to perfectly serve Gunvor's long-term strategy, and the group is very satisfied with its first strategic move in the FSRU space in cooperation with Exmar," Exmar said.

Exmar has previously said the FSRU barge is the first, newly built regasification barge in the world, built on a speculative basis by Exmar. The FSRU obtained the long-term contract prior to its delivery from the yard. Gunvor has only now been revealed as the client.

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

8-11 2nd Emergency Management for Oil & Gas Summit 2018 Singapore
Contact: enquiry@equip-global.com
Tel: +65 63760908
www.equip-global.com/emergency-management-for-oil-and-gas

NOVEMBER

27-29 OSEA 2018
held alongside: OGmTech & SUBSEA Asia
Singapore
www.osea-asia.com

DECEMBER

5-6 Tank Storage Germany 2018
Hamburg, Germany
Contact: info@stocexpo.com
www.stocexpo.com

2019

APRIL

1-5 19th International Conference & Exhibition on Liquefied Natural Gas
Shanghai, China
Contact: info@lng2019
Tel: +44 20 7978 0775
http://www.lng2019.com

PJ Valves wins FPSO work

PJ Valves (PJV), a UK-based manufacturer and supplier of valves to the global energy industry, has been awarded two valve supply contracts for Floating Production, Storage and Offloading (FPSO) vessels.

The comany said the contracts were awarded by "two major oil and gas operators" with a combined total worth of US $3.5m. The company will manufacture and supply the valves to projects located offshore Malaysia and in the UK North Sea.

PJ Valves said it will manufacture and deliver 2,000 ball valves, both manual and pneumatically actuated, to the project in Malaysia.

All the valves will be manufactured in accordance with the project demands, and the operator's offshore duplex requirements. The valves will be installed on the topside modules and used in a range of process applications including gas processing and treatment.

In the UK North Sea, PJ Valves will manufacture more than 150 forged steel gate, globe and check valves, in addition to ball valves, from its facilities in Italy.

The products include specifications of up to 1,500lb pressure-class with Grayloc hub ends and will be manufactured in duplex and super duplex materials. PJ Valves will also manage the DNV inspection process.

DRILLING

Aqualis wins Turkmenistan deal

Aqualis Offshore has landed a one-year service agreement from Malaysia's state-owned Petronas Carigali to perform drilling rig integrity inspection services for its drilling campaign in Turkmenistan.

Aqualis Offshore's rig inspection work scope includes in depth surveys, including new-build rig acceptance surveys, acceptance trials and final integrated endurance tests.

The work will be conducted by Aqualis Offshore's team of rig inspection specialists, which consists of multi-disciplined engineers to provide regulatory compliance and equipment operability assurance to rig owners and operators.

"What we essentially do is to contribute towards ensuring safe and effective operational performance of drilling rigs. A strong rig inspection team will help reduce risks and increase operational uptime for the assets in question," said Steven Lee, head of rig inspection services at Aqualis Offshore, which is part of Oslo-listed energy consulting group Aqualis.

Aqualis Offshore has previously supported Petronas in South East Asia but this is the company's first job in the Caspian region. Aqualis Offshore's contract party is Aqualis Offshore UK.

Santos rejects Harbour's final offer

Australian operator Santos has rejected a "best and final" offer from Harbour Energy to acquire 100% of Santos shares via a scheme of arrangement at a cash price of US $5.25 per share.

"The final proposal was a highly leveraged private equity-backed structure that, prior to implementation, would have required Santos to provide significant support for Harbour's debt raising and to hedge a significant proportion of oil-linked production," Santos said.

"In addition, the final proposal was stated to be subject to various conditions, including FIRB approval and restrictions on the conduct of Santos' business from the time of entering into the Scheme Implementation Deed until implementation.

"After careful consideration of all aspects of the Final Proposal, the Santos independent directors, managing director and CEO have unanimously resolved to reject the final proposal on the basis that it does not represent a full value of the company and, when combined with the associated risks, is not in the best interests of Santos shareholders."

Santos has now terminated all discussions with Harbour Energy.

The Santos board believes superior shareholder value could be realised when considering:

- The significant improvement in operating performance over the past two years and a continuing positive outlook;
- Santos expecting to reach its 2019 net debt target of $2 Bn more than a year ahead of schedule, based on current oil prices;
- Santos' strong balance sheet enabling restoration of fully franked dividends in the near term;
- The superior value for shareholders that the Santos board believes could be realised through the execution of Santos' existing strategy, capitalising on its strong free cash flows, sustainable low cost operating model and significant growth opportunities; and
- Feedback from shareholders indicating support for Santos' existing strategy and management.

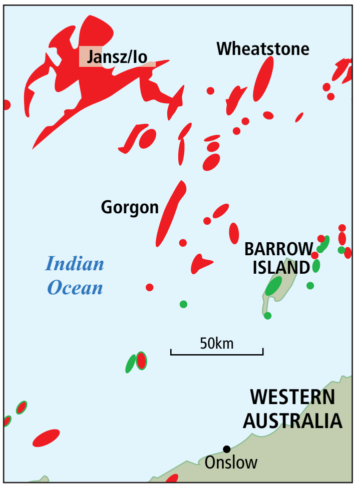
Santos chairman Keith Spence said: "Santos has a well-developed strategy, strong leadership and management team and outstanding growth opportunities that the board believes will deliver superior value for its shareholders over time."

LNG

Wood wins Gorgon work

Wood Group has won an extension to its framework agreement with Chevron to provide master contractor services to the **Gorgon Stage Two** development offshore Western Australia.

Effective immediately, the two-year contract extends an agreement that has been in place since 2015 and will continue to be delivered by Wood in Perth.



The work scope of the agreement covers engineering, design, construction management, procurement, logistics, quality assurance, health, environment and safety management services for Chevron-operated onshore and offshore assets.

Wood's multi-disciplinary team in Perth will continue to provide engineering design and logistics support to Gorgon Stage Two.

Chevron's Gorgon LNG project is located on Barrow Island off the northwest coast of Western Australia. Gorgon comprises a three-train, 15.6m tonnes per annum LNG facility and a domestic gas plant with the capacity to supply 8.05 Bcm/d (284.3 Bcf/d) to Western Australia.

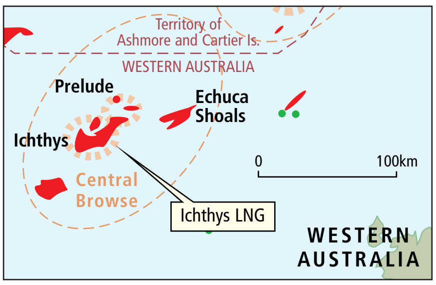
It is supplied from the Gorgon and **Jansz-Io** gas fields, located in the **Greater Gorgon Area**, between 80 miles (130 km) and 136 miles (220km) off the northwest coast of Western Australia.

The first LNG cargo departed Barrow Island in March 2016 and domestic gas supply to the Western Australian market started in December 2016. In April 2017, Chevron made a decision to proceed with future offshore developments at **Gorgon**.

This planned future development phase at the Gorgon natural gas facility involves new wells in the Gorgon and Jansz-Io fields, and accompanying offshore production pipelines and subsea structures. The development fits within Chevron's stated annual spending of US $18-20 Bn up until 2020.

ABB awarded Ichthys deal

ABB has secured a five-year framework agreement with Inpex to provide services ensuring equipment uptime and optimisation of LNG production at the **Ichthys** LNG project offshore Australia.



The Ichthys LNG project includes offshore facilities located 220km offshore West Australia, as well as onshore processing facilities in Darwin and an 890km subsea pipeline to link them together.

ABB said that the project contained more than US $200m worth of electrification and automation equipment supplied by the company across onshore and offshore project components, along with critical equipment in the gas processing plant.

"The project is expected to have an operational life of 40 years, therefore extending equipment asset lifetimes to reduce capital expenditures, along with maintenance and operational costs is critical," ABB said.

The agreement offers Inpex a commercial framework and a single entity for services, products, and around-the-clock support.

The agreement also includes support for the electrical power distribution for the entire *Ichthys Venturer* FPSO and the semi-submersible central processing facility *Ichthys Explorer*.

The Ichthys LNG project is a joint venture between operator Inpex, Total, CPC Corporation Taiwan and the Australian subsidiaries of Tokyo Gas, Osaka Gas, Kansai Electric Power, JERA and Toho Gas.

BP to cut 540 upstream jobs

UK major BP plans to cut around 540 people from its upstream business as it looks to trim the work force in this area by 3%.

BP's upstream segment accounts for around 18,000 people around the world and the cuts will be in a global context. The major noted that the majority of the job cuts would be "realised through natural attrition" but did not give exact figures for regions.

"BP has informed staff of planned organisational changes in its upstream business regions worldwide, aimed at further improving the efficiency and competitiveness of its organisation," the operator said.

"This is part of the ongoing process across BP to modernise its business to adopt more efficient ways of working and also to further simplify its organisation and increase efficiency following US $50 Bn worth of divestments over recent years.

"BP estimates that these changes will result in headcount reduction of around 3% across its global upstream business."

BP said it continued to focus on the efficiency of its capital spend to maintain its competitiveness "in a rapidly changing world, without compromising safety, which remains BP's number one priority."

"BP remains committed to developing its upstream opportunities and delivering its five-year growth strategy," the company noted.

UMV changes name

Malaysia's offshore drilling and services player UMW Oil & Gas has changed its name to Velesto Energy.

The name change was announced in April 2018, after having been approved by the Companies Commission of Malaysia (CCM) on 15 March 2018. The name change was subject to the approval being obtained from the shareholders of the company at a general meeting.

UMW Oil & Gas operates in the upstream sector of the oil and gas industry through the provision of offshore drilling, hydraulic workover, threading, repair, and inspection services.

The company decided to change the name following its demerger from UMW Holdings in 2017. The new name is part of the company's rebranding strategy "to position itself to have a new corporate identity for its existing and future undertakings."

Bransby appointed to OGS position

Fraser Bransby has been appointed Fugro chair in geotechnics at the University of Western Australia's Oceans Graduate School (UWA OGS).

Fugro said that Bransby worked across academia and industry, most recently at Fugro AG Pty Ltd.

After obtaining his PhD in soil mechanics from the University of Cambridge, he spent time in university geotechnical research and in industrial consultancy before joining Fugro.

Having established the Fugro chair in geotechnics in 2014, UWA and Fugro developed a sustainable research group that is significant to Fugro's activities worldwide. By ensuring the group's applied research is targeted to solving real-world problems, it also supports the wider geotechnical community, Fugro added.

Bransby said: "With my previous experience in seabed characterisation, pipeline, and subsea foundation design, I think I have an excellent starting point. The aim will be to continue to develop the partnership between Fugro and the UWA, and identify and execute research which will make a real difference to design, construction, and asset management practice."

Ogilvie

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