



3 SHORT BLASTS

Just when you thought we were making headway...

THE OFFICIAL BULLETIN OF THE AMOU WESTERN AREA BRANCH

MERMAID MARINE NEWBUILD VESSEL SET FOR PLUTO PIPELINE WORK

WA-based Mermaid Marine Australia Ltd (MMA) has taken delivery of its latest newbuild vessel, the “Mermaid Searcher”. Mermaid Marine has revealed that the vessel’s first major role will be to support the pipeline installation for Woodside’s Pluto project.

Mermaid Marine confirmed that the vessel sailed from Hong Kong on December 12.

The “Mermaid Searcher” was constructed specifically for the company through Cheoy Lee, a Hong Kong-based shipbuilder with an excellent track record of constructing high quality vessels.

The vessel was built at the Guangzhou Panyu Lingshan Shipyard in Southern China to a modified Conan Wu design taking into account the additional requirements for an Australia-operated vessel.

The “Mermaid Searcher” is designed as a multi-purpose vessel in line with MMA’s strategy of providing its clients with a flexible fleet that ensures it is able to continue to meet the on-going demand for vessel services in the company’s core North West Shelf market.

The vessel has a Special Purpose Certificate which allows it to carry up to 34 people and the layout and equipment on board makes it ideally suited to survey, ROV work or cargo operations.

Equipped with Joy Stick control and bow and stern thrusters, it has excellent station holding capability to ensure safe and efficient operations.

The Technical details of the vessel are:

- Class: ABS
- Flag: Australian
- LOA: 54m
- Beam: 13.8m
- Draft: 4.5m
- BHP: 3200
- Fuel: 900 M3
- Water: 100 M3
- Deck Space: 220 M2 main deck, 50 m2 mezzanine deck
- Accommodation: 34 POB

“The delivery of this vessel represents the on-going commitment of MMA to increasing our fleet capacity and capability to service the offshore oil and gas industry,” MMA said.

Source: An extract from Oil & Gas Australia, December - January 2008-2009. Page 58

DEFERRAL OF REINDEER SHORT-LIVED FOLLOWING MAJOR GAS SALES DEAL

THE Apache-operated Reindeer project is back on track following the signing of a major gas sales agreement in January. The offshore WA project had been deferred in early December following delays in the execution of a previous gas supply agreement.

Apache and its joint venture partner Santos announced on January 6 that a deal had been struck with CITIC Pacific for the supply of Reindeer gas over a seven year period, commencing in the second half of 2011.

The supply of Reindeer gas will in effect satisfy the majority of the estimated gas requirements of Sino Iron Pty Ltd's (a subsidiary of CITIC Pacific) Australian mining operations located at Cape Preston in northern Western Australia.

Reindeer gas will supply the Sino Iron project, a world scale magnetite mining development, via a new 105 kilometre offshore pipeline and a new onshore sales gas processing facility at Devil Creek. Devil Creek is located approximately 45 kilometres south-west of Dampier.

The Reindeer project will have the capacity to produce 215 terrajoules (tj) of gas per day.

Under the contract, the Sino Iron project will be supplied with 75 petajoules (pj) of gas over seven years.

The contract price for the first three years is a fixed price with periodic adjustments for changes in the consumer price index. From years four to seven, the price will be indexed to international oil prices.

Assuming an oil price of US\$50 per barrel, Santo's net share of the expected revenue over the seven years of the contract will be approximately US\$585 million.

“Development of the Reindeer field and Devil Creek plant will increase gas supplies in Western Australia, introduce a third major avenue for offshore gas to be delivered into the domestic gas market, and fuel production growth for Apache's shareholders,” said Apache's president and chief executive officer, Steven Farris.

"We are pleased we were able to sign this contract with CITIC Pacific. The advent of significantly higher natural gas prices in Western Australia has enabled the large capital commitments required to develop new fields such as Reindeer.

"Apache has an active programme to explore for and develop new oil and gas resources in order to expand Western Australia's energy supplies," he added.

Apache Northwest Pty Ltd has a 55 per cent interest in the Reindeer field and Devil Creek, with the remaining interest held by Santos (45 per cent).

"We are pleased we were able to sign this new gas sales contract with CITIC Pacific," said Santos ceo David Knox.

"The Reindeer field and Devil Creek facility represent important steps in bringing a significant new source of gas supply into the rapidly growing Western Australian market."

CITIC Pacific said the contract marked another significant milestone for CITIC Pacific's Sino Iron project.

"The contract reflects CITIC Pacific's ongoing commitment to the project, which currently employs more than 500 people in Perth, Cape Preston and China," the company said.

The new gas supply will be used to feed the project's combined-cycle power station, which is currently under construction. The first of the gas turbines and other major equipment have been manufactured and are ready for shipping to the site.

Other long lead-time components are currently being manufactured. Earthworks for the power station have been completed and civil works have commenced.

With approximately 75 per cent of capital expenditures committed, the Sino Iron project is the most advanced magnetite development in Western Australia. Earthworks for the power station and processing plant have been completed and the mine is under development.

The Sino Iron project has funding arrangements in place with the China Development Bank.

Apache and Santos plan to sell additional production from the Reindeer field to other domestic customers in Western Australia.

ENGINEERING AND PROCUREMENT

The gas sales agreement with CITIC Pacific will not take effect unless Apache and Santos sign contracts for engineering and procurement of the gas plant and pipeline by mid-March 2009 (or a later date if agreed by all parties).

Clough announced on December 8 that Apache had terminated for convenience both Clough's onshore and offshore construction contracts.

Following the CITIC Pacific announcement, Clough confirmed that it remained of the view that it is ideally placed to support Apache to realise the project, given the substantial knowledge of the project and work already completed to date by Clough.

Clough ceo John Smith said the residual value of the contracts at termination was \$390 million. The contracts were expected to be completed by mid 2010.

Clough was awarded the contracts in April 2008, valued at approximately \$260 million. The scope of work was for the engineering, procurement and construction of the onshore facilities for the processing and transportation of gas from the reindeer field.

The self-contained Devil Creek gas plant will comprise gas treatment/dehydration, condensate liquid stabilisation, storage and road loadout facilities, gas compression and metering.

An onshore three phase 16 inch raw gas pipeline will link to the shore crossing. The tie-in to the existing Dampier to Bunbury natural Gas Pipeline was not included in the scope.

Clough performed the front end engineering design (FEED) for the offshore production facilities and the onshore gas plant.

WELLHEAD PLATFORM CONTRACT

AusGroup Ltd was originally awarded a A\$42.8 million (US\$41 million) contract to fabricate a wellhead platform for Reindeer, before the project was deferred in December.

The work scope covered the procurement, supply, fabrication, testing, assembly and loading-out of the wellhead platform. The offshore production facility consists of a fully integrated topside, jackets, piles, load-out barge skid rails and buoyancy tanks. The contract value covered the fabrication, re-measurable at unit rates for weight growth and included a mechanism for labour escalation. The material procurement, load-out and hook-up for the platform would be on a cost reimbursable basis.

The components of the wellhead platform and associated structures were to be pre-fabricated at AusGroup's (AGC) fabrication workshops in Kwinana, Western Australia.

Final assembly and load-out of the offshore structure was set to take place at AusGroup's leased large waterfront fabrication Hall at the Australian Marine Complex (AMC) in Henderson, Western Australia. Project completion was scheduled for September 2009.

DCDP

The Devil Creek Development Project (DCDP) is a Greenfield gas development project. The DCDP plan consists of: an unmanned offshore gas production platform; an offshore gas supply pipeline; an onshore gas supply pipeline; a gas processing plant; and a sales gas export pipeline.

DCDP gas will initially be extracted from the Reindeer field and brought to the mainland via a 110km offshore and onshore gas supply pipeline to the Devil Creek gas plant.

The offshore gas supply pipeline will cross the mainland in the vicinity of Forty Mile Beach, located approximately 42 km south-west of Dampier.

The raw natural gas will be processed and then supplied into the Dampier to Bunbury Natural Gas (DBNG) pipeline. A second commercial product derived from the gas stream will be gas condensate, which is to be exported south from the project area via heavy haulage trailers along the North West Coastal Highway and further south to Kwinana.

The DCDP will initially provide up to 100 million standard cubic feet per day (MMSCFD) of dry natural gas and 80 kl per day of gas condensate. The facilities, however, will be designed to process up to 200 MMSCFD and 160 kl per day of condensate.

The proposed location of the Devil Creek Gas Plant is in the immediate vicinity of the North West Coastal Highway, approximately 10 km inland from Forty Mile Beach.

The proposed location for the gas plant is on Mardie Station pastoral lease, currently open and generally unused pastoral land.

The proposed accommodation facilities for construction workers and gas plant personnel, located in the vicinity of the Devil Creek Well on land that is currently part of the Mardie Station pastoral lease, had a proposed construction timeline of May to November 2008.

The most recent timeline released by the Reindeer joint venture was: November 2008 to May 2010: gas plant construction; November 2008 to May 2009: construction of the onshore gas supply pipeline; September 2009 to January 2010: installation of the offshore gas supply pipeline and offshore platform; June 2010: commissioning the gas plant; June 2010: First DCDP gas produced.

The DCDP will provide an ongoing benefit to the State by ensuring a further additional and independent gas supply of up to 200 MMSCFD into the DBNG pipeline.

All of the produced gas from DCDP will service the domestic gas market in WA.

Natural gas is a key commodity in WA and has served to underpin the robust growth of the resources sector and associated industries. The reticulated supply of natural gas to cities and towns in WA is largely dependent on the continuity of gas supply from the North West Shelf.

CONDENSATE

The DCDP is also expected to produce between 80 kl and 160 kl of gas condensate per day. This liquid fuel is an ideal refinery feedstock, further underpinning the continuity of supply of light liquid hydrocarbons deemed essential to the transport industry within WA.

Condensate production from the gas plant will assist in reducing the reliance on foreign supply of crude oil.

Source: Oil and Gas Australia Journal – December – January 2008 – 2009 page 2.

GORGON PARTNERS MOVE TOWARDS FID AS PROJECT PUSHES FORWARD

THE Chevron-operated Gorgon project has moved a step closer to reaching the long anticipated final investment decision (FID).

Chevron said recently that the joint venture participants – Chevron (50 per cent), ExxonMobil (25 per cent) and Shell (25 per cent) – are committed to bringing the project into production, with the current focus on finalizing approvals and front-end engineering and design (FEED) while managing costs and a number of other challenges.

The Gorgon project team is “on track to achieve FID in our designated timeframe”, Chevron stated recently.

During 2008, progress made on the multi-billion dollar LNG development included:

- \$1 billion to undertake key activities leading into a final investment decision;
- Securing and investing in marine supply bases, including an investment of up to \$100 million in a Dampier supply base;
- Two major framework agreements, including a contract with Vetco Gray for subsea equipment supply and services; and
- An increase in the Gorgon project team from approximately 600 to 1000.

During 2008, two well-attended supplier briefings were held. The briefings attracted approximately 500 and 700 people respectively.

The first briefing took place in October with Industry Capability Network WA (ICNWA) while the other took place in late November with conjunction with the Chamber of Commerce and Industry's Resource and Energy Projects Service.

DAMPIER SUPPLY BASE

In 2008, a deal was finalized which has paved the way for the Gorgon project to have access to the common-user marine supply base located at Mermaid Marine Australia's (MMA) Dampier facility.

Greater Gorgon Area general manager, Colin Beckett, said the supply base would play a key role in the logistics supply chain for the Gorgon project – a strategic move which would allow Chevron to secure access to a suitable supply base.

Mr Beckett also highlighted that the agreement with MMA would provide the Gorgon project with water access for shipping to Barrow Island.

The agreement also includes laydown areas and administration buildings. The overall development will be constructed by MMA in a phased approach over a 12 month period. The move also continues to support Gorgon's commitment to minimising the impacts and disturbance on Barrow Island.

"The supply base will provide wash-down and quarantine areas to ensure world-class stringent controls can be maintained to protect the unique environment of Barrow Island – where the Gorgon project's processing plant will be located," Mr Beckett said.

The agreement includes a five year term plus extension options, rental fees and provision of wharf and other supply base support services with an overall contract value of up to \$100 million.

MMA is the proponent of the development and responsible for all approvals and construction. The development is part of MMA's plan to build common user facilities in Dampier to support development of the State, and will be able to be used by multiple future users.

The investment would also provide a significant and lasting improvement to the State's marine supply industry.

UPSTREAM CONTRACTS

A number of upstream contracts have been awarded to suppliers in support of Gorgon. In late November Mitsui and Co Australia Ltd, Japan Steel Works Ltd secured a framework agreement for the Gorgon project. The agreement

covers the supply of corrosion resistant alloy (CRA) clad carbon steel line pipe and bends – one of the project's larger upstream procurement packages.

The CRA line pipe and bends will be used to construct the infield flow-lines and will be among the biggest CRA pipe manufactured in the world in terms of combined wall thickness and diameter.

SUBSEA BALL VALVES CONTRACT

Cameron Valves and PetrolValves Srl have been awarded purchase orders for the provision of 14, 20 inch subsea ball valves and the development of 34 inch subsea ball valve prototypes.

Having successfully developed prototype 20 inch ball valves, Cameron Valves and PetrolValves Srl have started manufacturing the production valves that will be utilised in the final offshore installations.

The valves will be incorporated into subsea structures that will be installed at the Gorgon and Jansz fields.

The 34 inch prototype valves are required for Gorgon and Jansz and will be the largest ever used in a subsea structure and are a reflection of the project's cutting-edge technology and innovative solutions to complex technical challenges. The manufacture of the valves is expected to take up to two years.

The MonoEthyl Glycate (MEG) dosage valve is another important component of the Gorgon project and Weir Valves & Controls have been awarded a purchase order for the development of a prototype unit.

MEG is the chemical used to prevent hydrate (ice) formation within the subsea flow-lines which could block the production flow. The chemical is injected into the flowlines through the dosage valve, which regulates the injection rate.

Tender evaluations are underway for the supply of the offshore umbilicals as well as double submerged arc welding line pipe, sealess line pipe and bends and a range of other services and equipment as the Gorgon project moves towards FID.

The Greater Gorgon gas fields are located between 130km and 200 km off the north-west coast of Western Australia.

Source: Oil and Gas Australia Journal – December – January 2008 – 2009 page 12.