



Australian Oil & Gas News

Spring 2006



Welcome to Australian Oil & Gas

This quarterly newsletter is prepared by the United States Commercial Service Australia to advise US exporters on developments and opportunities in the Australian Oil & Gas market.

Increasing demand for fuel products are resulting in continuing high oil prices, which in turn is fuelling the exploration, development and production of both existing and new fields across Australia. The future is looking bright for the industry with all companies reporting increasing levels of activity in the coming year.

Australia is a net consumer of oil & gas equipment with much of the technology used in upstream and downstream being imported. Estimates of the annual market for this kind of equipment are around USD \$2 billion, however this tends to be dependent upon the amount of project work scheduled in any particular year.

For further information relating to this sector please contact.

John McCaffrey
Commercial Specialist – Oil & Gas
US Commercial Service – Melbourne
john.mccaffrey@mail.doc.gov
Tel: +61 3 9526 5924
Fax: +61 3 9510 4660

Inside This Edition

2. Australian Domestic Oil & Gas Companies.

3. Woodside.

4. Skill & Equipment Shortage

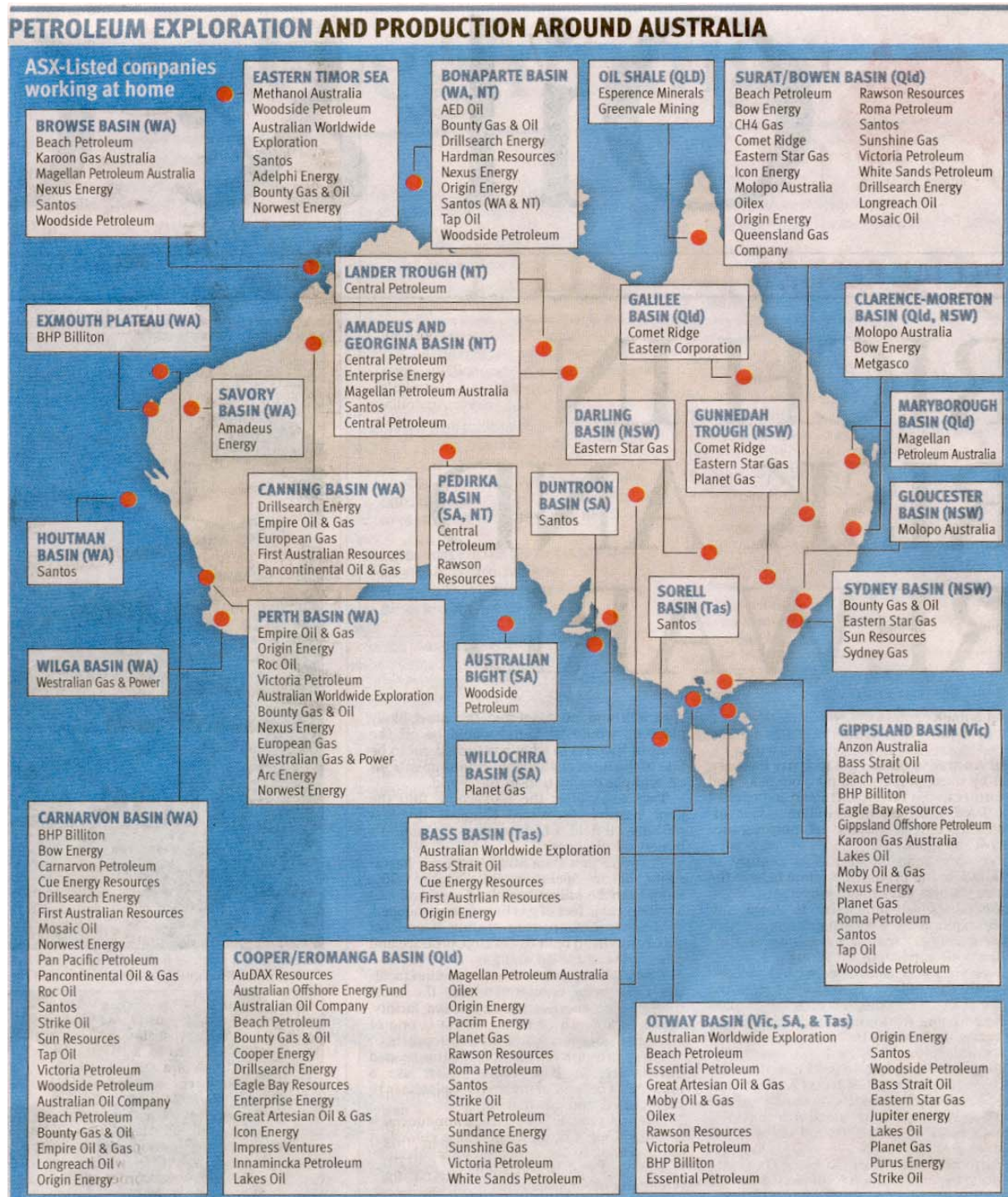
5. AOG 2007

6. Other Trade Events

Australian Domestic Oil & Gas Companies Booming

Map first published in Weekend Australian newspaper April 1-2, 2006

Whilst many of Australia's oil and gas fields have high levels of foreign company participation, the map below shows that local oil and gas companies are alive and well in all of Australia's geological basins. High prices and a willing stock market have allowed junior explorers to raise funds for exploration and in some cases production activities. Many of these companies actively seek local and foreign partners for farm-ins and other venturing arrangements, as well as being consumers of oil production and exploration equipment.



Commonly Asked Questions About Woodside

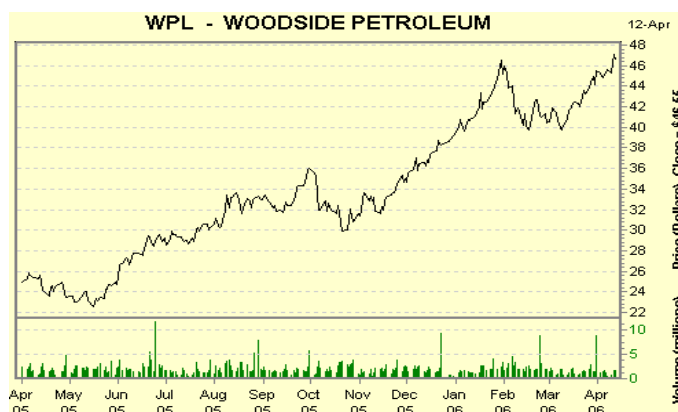


1. Who is Woodside?

Woodside is Australia's largest oil and gas company with a market capitalization of around USD \$23 billion. Woodside is probably best known as the operator of Australia's largest oil & gas project the North West Shelf (USD \$14 billion) which commenced production in 1989 and has delivered more than 2000 cargoes around the world.

2. Where did Woodside come from?

Woodside was established a year after Australia's first oil discovery. Incorporated on 26 July 1954 as Woodside (Lakes Entrance) Oil Co NL, the company took its name from the small town of Woodside in Australia's southern-most mainland state, Victoria. The company's initial 375,000-pound (USD\$684,000) share issue in September 1954 was over-subscribed by more than 200,000 pounds (A\$370,000).



In 1956, led by Chairman Geoff Donaldson and Managing Director Rees Withers, Woodside secured the first offshore exploration licence to be granted in Victoria – a 2600sqkm stretch off Ninety Mile Beach that extended 2km into Bass Strait. Woodside was drilling in water up to 60 metres deep, an unremarkable depth today, but a world-record drilling depth in the 1950s. After 10 years without success in southern Australia, Woodside was awarded exploration rights in June 1963 over more than 367,000sqkm off north-western Australia in what is known as the North West Shelf.

Exploration drilling began in 1967 and major gas and condensate discoveries were made in 1971 at Scott Reef, 425km north of Broome, and North Rankin and Angel, north of Dampier in Western Australia. In 1972, the Goodwyn gas and condensate field was discovered to the west of North Rankin. These fields contained reserves of nearly 50 tcf of gas and provided the basis of the North West Shelf Venture, Australia's largest resource project.

3. Where is Woodside going?

From their humble beginnings Woodside has developed into a multinational oil and gas company with operations spanning four continents. The company's has doubled its exploration acreage since 1999 and now has interests in more than 300,000sqkm worldwide. Indications are Woodside will spend around USD \$370 million on exploration in 2006 including the drilling of around 40 wells. At 1 January 2006 Woodside had more than A\$7 billion in projects under development. Woodside operates daily production of about 600,000 barrels of oil equivalent, and plans to increase this to one million barrels of oil a day by 2007.

4. What projects is Woodside involved with?

The following is a list of some of the larger projects Woodside are working on.

Enfield	Western Australia	USD \$1.1b	90% complete, first production Q3 2006, 100,000 barrels/day
Thylacine-Geographe	Victoria	USD \$800m	75% complete, first production 2006
North West Shelf	Western Australia	USD \$1.5b	Fifth LNG train, under construction completion in 2008
Perseus	Western Australia	USD \$500m	Connection of new subsea development into North West Shelf
Angel	Western Australia	USD \$1.2b	New platform + 45km pipeline to North West Shelf – in planning
Pluto	Western Australia	~USD \$3.8b	Platform, 200km pipeline + 5t LNG train – FEED 2006, FID 2007
Gulf of Mexico	United States	Unknown	Operates 11 platforms, 6 more development fields for 60mcf/day
Sunrise	NT, Australia	~USD \$3.8b	Regional dispute resolved, FEED work could recommence

NB: Information in the above article has been sourced from a number of sources including the company website www.woodside.com.au, recent press articles and the Australian Stock Exchange www.asx.com.au

Skills, equipment shortages hamper exploration industry

James Dunn

IN ONE sense, higher oil prices are good news for petroleum explorers, in the leverage that can power their share prices on good drilling news. But the oil boom has a downside in the constraints it places on them. Rigs, equipment, skilled people — the exploration industry finds it difficult to get hold of them all.

The most obvious factor says John Doran, chief executive officer at Roc Oil Limited, is the difficulty of securing a rig. "About 18 months ago an offshore rig could be secured for \$US60,000 (\$80,000) a day. A year later, that was \$US100,000 a day and by the end of this year that is expected to be closer to \$US200,000. I doubt that we could develop Cliff Head (an oilfield discovered in 2001 off Western Australia) if we had to make the decision today. We now realise that we were lucky making that decision when we did, 18 months ago. It's like buying a house in Sydney — you think at the time that you paid too much, but two years down the track you realise that you didn't."

Derek Morrow, operations manager at Atwood Oceanics Australia and chairman of the Australasian Chapter of the International Association of Drilling Contractors (IADC), says there are about 50 rigs operating in Australia at the moment, 12 of them offshore. "That's a fairly historic high in numbers, but what's really important is the capacity. Two or three years ago utilisation was running at 60-70 per cent, and there were spare rigs. Now utilisation is up to 100 per cent."

Complicating the situation in Australia is the relatively recent beginning of the coal-bed methane (CBM) industry, which has about 15 (albeit specialised) rigs working, and the heavy schedule of development work. Morrow says Woodside is developing the Enfield oilfield off Western Australia, which will take about 18 months, and the Otway gas project, off Victoria, which will take about a year, while BHP Billiton is developing the deep-water Stybarrow oilfield off the coast of Western Australia, which will also take about a year. "All of this work takes exploration rigs off the roster," he says.

If the rig shortage was only being felt in Australia, says Morrow, rigs could simply be brought in from elsewhere, but every region is busy. "It's not just the higher oil prices, although that is obviously a factor. For the last decade, oil companies have been mainly looking to increase their reserves through mergers and acquisitions. Companies haven't been replacing reserves as they should have. Now the consumption profile is rising, driven by China and India, they have to play catch-up and the pent-up demand has caught everybody out."

According to IADC statistics, global drilling activity increased by 4.5 per cent in 2005 — equivalent to more than 93,500 wells. What this means, says Morrow, is that there are no spare rigs. "We're seeing the biggest rig-building program the industry has seen since the mid-1970s and early 1980s. There are 60 new offshore rigs being built. That's a \$US12 billion investment, but it will take two to three years to come on-stream."

Not only does it take longer to obtain rigs, contracts are getting longer, says Morrow. "If you decided now that you wanted to drill in 2006, forget it. People are planning 2008 drilling now, and 2007 contracts are being rolled over into 2008-09."

Doran says the cost of seismic work — the precursor to drilling — has also shot up by 50-100 per cent over the last year. "Even rudimentary seismic equipment like cable now comes with a long lead-time attached to it. Two years ago, it was available with just a phone call, but not now."

Things are only going to get worse, says Ken Pickard, chief executive officer of drilling contractor Ensign International Energy Services. "I'm a contractor, so I would say that day rates haven't gone up enough! Our cost of materials is rising all the time. For example,



Scarce: Too few people for hard work

steel shortages mean that drilling pipe has risen by 50 per cent in price in two years, and we're having to order in pipe a year ahead. But people is a greater issue. The wage pressure we are under is enormous. Your senior people, who hold most of your expertise, are offered 50 per cent salary rises to go overseas, with tax benefits that we can't compete with in Australia. That is a huge problem."

Doran says that the petroleum industry is being punished now for its "capricious" nature. "It's always been a very cyclical industry, and because of that the whole human resources field — hiring, firing, recruiting and training — has not been done properly for the last 20 years. The last big cyclical downturn was in 1985 and after that, people were shed like leaves in autumn. Many didn't come back and those that did lost eight to 10 years of their careers. What this means is that expertise is very thinly spread. If you look around any exploration company, people with 20 or 30 years' experience are very hard to find. We haven't been good at training people."

Another problem, he says, is the "algal bloom" in upstream oil and gas companies. "There were 20-30 in 1996, but there are more than 100 now. They've all got a chief executive officer, a chief financial officer and a board. You have to ask where did all those qualified people come from? I don't know if the industry is capable of producing all those high-calibre people in such a short time."

Virginia Hilliard, chief executive officer of the Australian Drilling Industry Training Committee, says senior personnel in the industry are spread as far as possible, and spread very thinly. "The skills gap now is mostly in the middle, and that's where we're focusing our efforts."

Hilliard points to the Australian Centre for Energy and Process Training (ACEPT), a collaboration of seven West Australian TAFE Colleges which specialise in training and skill development programs to meet the petroleum industry's needs. ACEPT project director Nigel Haywood says the project recognises that mostly the industry has trained its people on-site.

"The difficulty is that a drilling rig is a hazardous environment, and you've got to be careful using it for training. We provide an off-the-job solution. In 2005, the WA Government committed \$25 million to develop ACEPT's Henderson site as a full-scale hydrocarbon processing facility. We have 100 students in training there, and they'll be coming out progressively over the next five years. We have an intake every January, and it's a two to five-year training period. There is no quick fix, but we're certainly doing everything we can."

Buoyant Market Leads to Skills and Equipment Shortages!!

As the recent article from the Australian newspaper indicates many Australian projects in the resources sector are being constrained by a lack of skilled personnel and specialized equipment. Daily rates for offshore drill rigs have more than tripled in the last two years. This presents an opportunity to US companies supplying equipment or services to the petroleum, industry to extend their markets into Australia.



ANDREW GEOGHEGAN: While the employment figures are positive, many businesses are still struggling to find workers, particularly in the resources sector. And concern is mounting that the skills shortage could be undermining the resources boom and overall economic growth.

MEGAN MOTTO: Well, certainly the outlook for Consulting Engineering reports shows that whilst the engineering industry is set for yet another bumper year with activities to forecast by at least 10 per cent, which is three times inflation, the skills shortage is definitely an issue.

ANDREW GEOGHEGAN: Megan Motto is the Chief Executive of the Association of Consulting Engineers Australia. She says on average two thirds of Australian firms are delaying or declining projects because they don't have the staff available.

MEGAN MOTTO: Certainly if we don't address the problem, both in the short-term and the long-term, the skill shortage is expected to continue in the future. Governments and industry need to work together to provide long-term solutions.

Excerpt from radio interview — 6 April 2006

The rush of articles over the last 18 months, such as the above piece, highlights a key area of demand in the Australian petroleum industry at the moment. This has led a number of federal and state government agencies to look internationally for skilled and professional personnel. Identified as being in high demand are petroleum engineers, metal workers skilled in pipelines and first class welders. The response to shortages has been to move towards modular construction with modules constructed overseas.

http://www.immi.gov.au/migration/skilled/advice_doc/gn_modl.htm

AustralAsian Oil and Gas 2007



AustralAsian
Oil & Gas
Exhibition & Conference



The Commercial Service in association with IMEX Management and Swan Exhibition is providing US exporters with a unique opportunity to gain access to Australia's oil and gas industry. Next year's Australasian Oil and Gas Show (AOG), run by Swan Exhibitions, has been selected as a Department of Commerce approved Trade Fair. IMEX Management and the Commercial Service are putting together a dedicated US pavilion to showcase US companies. The US is recognized as being one of the key suppliers of oil & gas equipment to the Australian petroleum industry. With the volume of resource projects being undertaken in Australia in the next few years, securing the latest technologies and reliable suppliers is a key concern for many of those companies developing projects in Australia.



Dates: February 21-23, 2007

Location: Perth Convention Exhibition Centre
Perth, Western Australia

Exhibit Profile: All equipment, supplies and technology used in offshore/onshore oil and gas exploration and production, transportation, geophysics, drilling and completion, measurement systems, automation and information technology, refining and petrochemicals, security and environmental protection, telecommunications and specialized education.

Visitor Profile: Petroleum engineers and managers; reservoir, pipeline, process, mechanical, electrical and civil engineers; refinery managers; geologists and geophysicists; marine, rig, drilling rig and supply vessel managers and operators from throughout Australia and Asia Pacific:

- 83% are a decisive influence in the purchasing decision of a company.
- 72% intend to make a purchase in the near future.
- 54% come specifically to see new products and services.

Previous Show: February 23-25, 2005

of Visitors: 3,764

of Exhibitors: 327 including 36 international

For More Information: [Sarah Vacchiano](#)
Tel: 704-365-0041

[Show Website](#)

Other Trade Events

The following trade events will have active involvement from the industry and are great places to meet potential buyers, business partners and joint venturers.

Offshore Technology Conference 2006 1-4 May 2006, Houston, TX

The Commercial Service is Australia is again attending the OTC show in Houston, TX. Together with our domestic colleagues a specialist from Australia will be available to meet with US companies at the show. It is possible to sign up for these meetings at the following weblink:

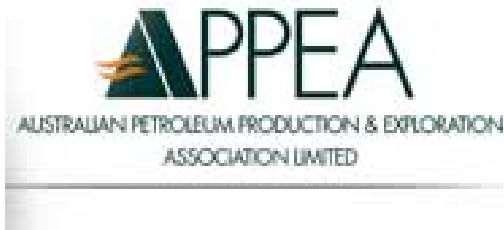
<http://www.buyusa.gov/eme/otc.html>

Australia has also been selected as one of the countries for this year's breakfast series. Representatives of the Australian Federal Government, Western Australia's energy minister and Chevron Australia will be sharing their insights on doing business in Australia and the opportunities in oil & gas.

http://www.otcnet.org/2006/tech_prog/breakfast_australia.html



OTC.06



APPEA Annual Conference 7-10 May 2006, Gold Coast QLD

The 2005 APPEA Conference & Exhibition was an outstanding success and the largest ever held in the event's 45-year history. Over 1,700 participants attended during the course of the Conference and over 105 companies occupied the equivalent space of 180 booths in the 2005 APPEA Exhibition. This year's event promises to be just as exciting for those focusing on the Australian oil & gas industry.

www.appea.com.au

SEAAOC Annual Conference 19-21 June 2006, Darwin NT

Annually featuring in excess of 300 industry players ranging from the Australian and Asian petroleum value chain with a vested interest in the development of the region, to key global oil, gas and LNG buyers. The SEAAOC conference focuses on the oil & gas interests in Australia's northern region.

<http://www.seaaoc.com/2006.htm>

SEAAOC