

Operator outlook bullish in face of strong commodity prices

Mike Killalea, Editor & Publisher

"IT'S A GREAT time to be exploring in the Gulf of Mexico," exulted **Vastar** Senior Vice President/CFO **Steven Shapiro** at the recent **Dain Rauscher Wessels** Energy Conference, held in Houston during September. After a protracted period of depressed E&P activity, fettered by record-low oil and sagging natural gas, commodity prices have rebounded, and with it, a sense of excitement in a handdog business.

In particular, stronger commodity prices spell good news for contractors and other oilfield service companies. Despite the growing thirst in North America for natural gas, that commodity remains tied to its big brother—OIL. This fact is clearly recognized by the service community.

Remarked **Rowan Companies** Chairman **Robert Palmer**, "Our business and our stock are tied directly to the price of oil, notwithstanding that 90% of our rigs are drilling for gas."

Operators speaking at the event radiated confidence about the commodity outlook. "We see and believe that commodity prices are going to be strong," remarked **Barrett Resources** CFO **Frank Keller**. What's more surprising is to hear optimism on this level emitted from the mouth of an operator whose operations—and 85% of its budget—center in the Rocky Mountains, hardly one of the industry's hot spots in recent years.

Even so, many are hedging by ensuring profitability on production even at much lower energy prices. Take Barrett, for example. Much of its activity lies in the extremely shallow (250-2,500 ft) coal-bed methane fields of the Powder River Basin. A hallmark of this region is minimal capital expenditures. Mr Keller estimated drilling and completion costs at only \$65,000 per well and, when land costs are included, about \$80,000. Barrett typically works 8-10 rigs steadily, he added, in an area with some 30-40 Tcf are in place. Finding costs could hardly be lower at 20-25 cents/MM scf.

The company has already drilled about 900 wells in the region and is producing 359. Barrett further plans to drill 600 wells this year. Mr Keller said the drilling program would continue at a 600- to 1,000-well annual rate.

"We believe 10 Tcf will be recoverable in this area," he said.

'Our business and our stock are tied directly to the price of oil, notwithstanding that 90% of our rigs are drilling for gas'

**—Robert C Palmer,
Chairman, Rowan Companies**

RATES WILL LAG CAPEX

Still, even if strong energy prices are sustainable, it will take time for that good news to tumble down hill in the form of increased drilling rates. While some contractors are already reporting increased rates, **Santa Fe International Corp** Vice President-Investor Relations **Richard Hoffman** pointed out that dayrates lag utilization, which in turn lags E&P CAPEX.

During the last cycle, he said, it took 2 years for utilization of 300-ft cantilever jackups industrywide to increase from 77%-90%, although oil remained in a presumably healthy \$17-\$21 range for West Texas Intermediate. Another year elapsed before utilization rose from 90% to 95%. At that level, dayrates were twice that of 1994. After yet another year at 95% utilization, dayrates finally rose to what turned out to be their peak.

On this basis, Mr Hoffman projected that it would take until 2002 for utilization to reach 95%. By later that year, therefore, dayrates should essentially double, relative to current levels. Rates, he suggested, would triple by early '03.

WATCHING COSTS

Cost control will play a vital role, companies say, even if the recovery firms up as anticipated. During recent remarks

to the IADC Houston Chapter, **Shell Exploration and Production Co** President **Walter van de Vijver** could not stress this point enough.

"If the well cost is high, a lot of marginal prospects won't make it," he said. He urged the industry not to be complacent about rising energy prices and to be prepared to face low oil again.

Similarly, **Ocean Energy** is also focused on keeping costs down. According to data presented by Ocean Energy Vice President-Drilling **William S Flores Jr**, Ocean Energy already ranks number 1 for low cost on the GOM Shelf, at \$251/ft, compared to \$257/ft for number-2 ranked **Spirit Energy** and \$304/ft for **Newfield Exploration**, which came in at number 3. And for 2000, Ocean Energy's goal is to cut that to less than \$200/ft, Mr Flores said.

"It's not necessarily drilling the well faster," Mr Flores said. "It's keeping the cost of the well low." He explains that companies such as Ocean Energy operate on a thin margin. Finding and development costs total \$7/bbl, with the cost of capital at \$2/bbl, G&A at \$1.50/bbl and lifting cost at \$3.50/bbl, for a total cost of production of \$14/bbl. If oil prices average \$15/bbl, the net profit is just \$1/bbl.

'LANDING' THE RECOVERY

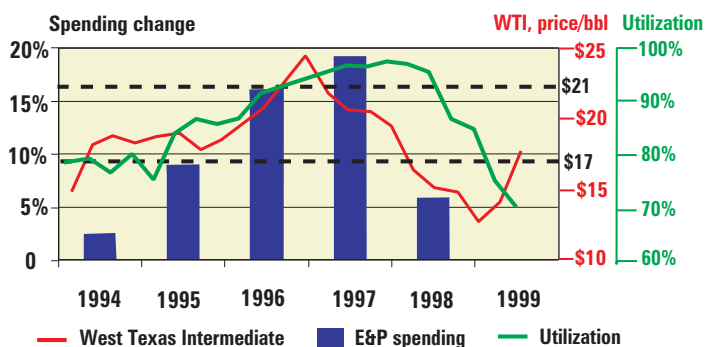
Faith in the promise of natural gas, though flagging somewhat during the late lean days, has never really dissipated, as did confidence in stratospheric oil prices. This raises the interesting specter that this recovery, rather than being driven by the sexy high-tech and deepwater frontiers, could spawn from land and shelf drilling. That would be a first, particularly for the onshore.

Anadarko, for instance, is very excited about the East Texas Bossier play, at depths exceeding 14,000 ft. The company has 12 rigs running there, with another 5 slated to begin drilling by the end of the year. The field, said Anadarko President/COO **John Seitz**, has some 80 producing wells, with combined output of some 90 MM scf/day as of 1 Sept. Production is expected to reach 100 MM scf/day by the end of the year. Mr Seitz anticipates the Bossier will plateau out at 160 MM scf/day even without new discoveries.

"But we have one new discovery now and believe more are out there," he said.

The E&P Domino Effect

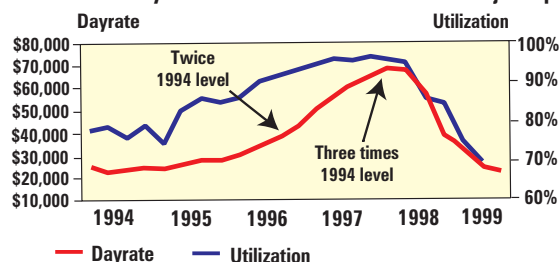
Domino effect: Oil price to E&P spending to rig utilization



Source: Santa Fe International Corp

Forget the roller coaster, let's play dominoes: Dominoes could supplant roller coasters as a model for the E&P and oilfield service industries. Data compiled by Santa Fe International shows the knock-on effect of oil price on E&P spending and thence to rig utilization and finally dayrate.

Utilization to dayrate dominoes for 300-ft cantilever jackup



Source: Santa Fe International Corp

This field will produce a 40% rate of return at natural-gas prices lower than \$2.32/MM scf, the price when Mr Seitz made his remarks. And Anadarko is bullish for natural-gas prices this winter.

"I believe this is a trillion cubic foot gas field," Mr Seitz said.

The company plans to hustle exploration in the Bossier trend, as well. "We're not satisfied with finding one giant gas field here," Mr Seitz said. "We think there are more."

Beyond the 17 rigs planned for this year, Mr Seitz said the company would likely be running 30 during 2000.

The trend, he added, apparently disappears to the south and southwest. The company, therefore, is leasing land northward to augment its 7,000-acre initial core area.

Ocean Energy also plans an ambitious drilling program onshore. From a primarily GOM- and Gulf Coast-focused operator, Ocean Energy through its merger with **Seagull Energy** has transformed itself into a large independent with significant land and international operations, in addition to its roots in the GOM. In the second half of '99, Ocean Energy plans 10 wells in Texas and Oklahoma and 120 coal-bed methane wells in Montana. These are in addition to its offshore programs—14 on the GOM shelf and 2 internationally, one off-

shore Pakistan and one offshore Coté D'Ivoire.

LAND DRILLERS

If the deep gas evidenced by the Bossier Trend will indeed prove the next horizon in land drilling activity, there are drilling contractors ready and waiting to plumb those depths. 2 of the most obvious contenders are **Grey Wolf** and **Nabors Industries**.

"For the first time in the history of this business, land drillers will lead the recovery for the oil service industry," said Grey Wolf Chairman/CEO **Tom Richards**.

He noted that US gas consumption is at some 23 Tcf/year and expected to rise. Mr Richards predicted the land-rig market would tighten rapidly in response.

"Pent-up demand is on the doorstep," he said, predicting a 39% in rig demand in Grey Wolf's core markets of South Texas, Gulf Coast, Ark-La-Tex and the Mississippi-Alabama region. As a result of higher, gas-driven utilization, rates in this core market will increase, especially for deep-drilling SCR units, he said.

Between them, Grey Wolf and Nabors control some 85% of deep-drilling SCR units in the US, according to Nabors Chairman **Eugene M Isenberg**. In an industry marked by intensive consolidation over the last couple of years, Nabors stands out as a colossus, with a total of 1,357 units, including 61 offshore

units, 786 workover rigs and 500 land-drilling rigs.

Noted Dain Rauscher Wessels Managing Director **James Wicklund**, "Gene [Isenberg] has done a better job than almost anybody in consolidating. The challenge for him is where next."

Indeed, the company already boasts diverse operations and a broad geographic presence. In the US, only the Michigan and Northeastern drilling markets lie outside the Nabors empire. He says the company's equipment was purchased at the "right time and the right place", providing the company with a low-cost asset base. Its size also optimizes its buying power, making the company a low-cost service provider.

Despite its mammoth proportions, Mr Isenberg stresses that Nabors' goal is differentiation. The company boasts 60% of the deep-drilling SCR rigs in the US Lower 48 states, for instance. Alaska is another key market. There, Nabors holds close to half the drilling business and, in its recent combination with **Pool Energy Services**, about 70% of the "quality" drilling rigs in the state, Mr Isenberg said. Internationally, the company is well-established in the Middle East, in particular. Mr Isenberg pointed to the company's developed infrastructure in Iraq, Algeria and Iran.

During the mid-'90s, Nabors subsidiary **Sundowner Offshore** launched a number of modular platform rigs in the Gulf

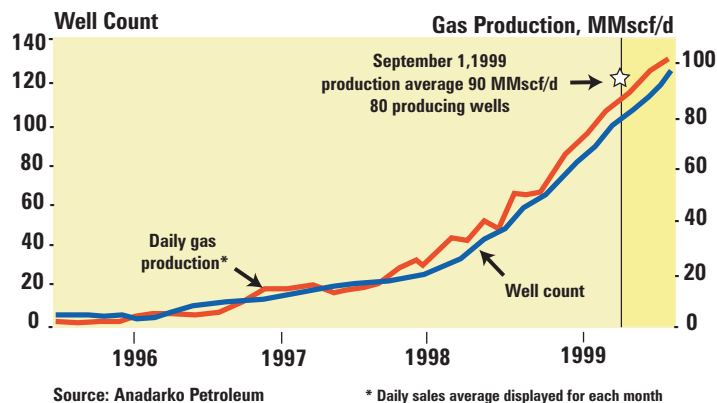


Will the onshore sector 'land' this recovery?

'For the first time in the history of this business, land drillers will lead the recovery for the oil service industry'

—Thomas P Richards, Chairman/CEO, Grey Wolf Inc

Anadarko's Bossier Trend: Freestone County, Texas



Natural-gas finds like Anadarko's Bossier Trend play, underpinned by a strong commodity price, give rise to the unprecedented notion that onshore activities could lead the way into the next recovery.

Anadarko in September was running some 12 rigs in this East Texas region, with 5 more slated to kick off operations by the end of the year, when production on existing finds is expected to reach 100 MM scf/day, and a total of 30 rigs in 2000. The field could hold a trillion scf.



'2 years from now we'll look back and see that rig rates had to go up'

—Eugene M Isenberg, Chairman, Nabors Industries

of Mexico. The company's GOM presence was further enhanced by its acquisition of Pool's jackups.

Nabors is also pursuing opportunities in other oilfield service activities. The rig instrumentation produced by its **Epoch** subsidiary, Mr Isenberg said, will ultimately be implemented on all Nabors rigs. **Canrig** develops top drives, which he said can produce \$1,500/day margins.

"It makes sense for us to do things to add value," Mr Isenberg said. He expects to achieve some 70% penetration of top-drive and instrumentation rentals among SCR rigs by 2003.

'HITTING ON 32 CYLINDERS'

Mr Isenberg looks for the gas-driven rebound for SCR drilling rigs to begin soon. Within the next 3-4 years, he said, all areas of Nabors' interests will be "hitting on 32 cylinders", he said.

Still, there's a long road to haul. The company has been enduring "incredibly" low utilization. In Alaska, usage is only about 30%, with Nabors operating just 4 rigs. Dayrates are not only running well below replacement prices, but below those achieved in 1997-98. That high-water mark in recent land dayrates was itself below replacement value,

especially for deep SCR rigs, he said.

Mr Isenberg notes, though, that the increase in gas rig utilization in recent years failed to increase gas production. And, logically enough, as the gas rig count plummeted, so did gas production. The decline, however, Mr Isenberg observed, was cushioned somewhat by coal-seam drilling.

"There's not an equilibrium situation here. The gas price is too low."

In a worst case situation, he added, gas prices would soar and with them, gas-rig utilization, especially deep rigs. Meanwhile, he explained, rig supply has

diminished and continues to fall. "2 years from now we'll look back and see that rig rates had to go up," Mr Isenberg said. He added that rates have already begun to increase for SCR rigs, though not dramatically.

He cited as a "probable" scenario for 2001-03 that SCR rates would reach about 60% of economic replacement rates, generating some \$7,000 each in cash flow. Mechanical rigs, though, will fare less well, he projected. These units would achieve only about 35% utilization, generating \$1,800 in cash flow.

He further expects that Nabors will be running a dozen rigs in Alaska by then, with international activity also strong.

MEDIUM-DEPTH DRILLERS

Contractors focused on the medium-depth drilling range also see a solid upside ahead in their business. First of all, the US land-rig situation is far tighter than most assume. **Patterson Drilling** Chairman/CEO **Cloyce Talbott** estimates that there are only about 1,100 land rigs that could be put to work in the US, 20% less than the 1,384 counted by the 1999 **Reed-Hycalog Rig Census**.

Plus, consolidation is having a telling effect. He notes that only 7 companies control about 950 US land rigs—86% of his estimated total.

"It's getting fairly concentrated into the hands of a few," Mr Talbott said. Patterson is among the leaders here, as the 2nd-largest US land-drilling company. The company markets 114 of its 119 rigs, primarily in the South Central US and Utah.

In Patterson's depth range, wells typically take 25 days to drill.

Patterson's move into Utah is recent, as is its shift of 4 rigs into Oklahoma. Mr Talbott said the company will probably move more assets to Oklahoma.

Peripherally, Patterson reaps 6% of its revenue from drilling fluids and another 6.5% as an oil and gas producer in its own right.

"We have made a concerted effort to consolidate in the mid-range depths," he said.

Mr Talbott also noted that 3-D seismic

has compressed the time cycle for drilling prospects, generating work more quickly.

The upshot is better times ahead, as in '97-'98. Financially, DRW's Wicklund noted that the land-drilling segment was the best-performing sector of the oil-field-service industry in both '97 and '99.

"We're seeing some dayrate increases," Mr Talbott said. "There could be significant increases by the 4th Quarter or early next year."

Mr Talbott says Patterson plans some strategic acquisitions, mainly in the 1-10 rig range. Most recently, the company acquired Corpus-Christi-based **Padre**

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Chairman/CEO, R&B
Falcon Corp**



Drilling, a 5-rig January 1999 purchase. However, the pickings are slender. "There's less out there," he said.

UTI Energy targets somewhat deeper horizons than Patterson, but shallower than Grey Wolf and Nabors. UTI, explained Chairman **Mark Siegel**, has approached its many acquisitions without replacement economics as a premise. Most recently, UTI acquired **Norton Drilling** of Lubbock, Texas, picking up 16 rigs for some \$20 million.

"We think we're the buyer of choice for a lot of sellers," Mr Siegel said.

UTI's strategy is to focus on the largest markets in the Lower 48 states and gain new markets through acquisitions. Principal current markets include Ark-La-Tex, Mid-Continent, Eastern New Mexico, South Texas, West Texas and the Rockies. Of these, only the West Texas market is primarily oil-focused.

In its management structure, UTI makes the most of the experience base it has acquired. The company's operations are guided by "experienced senior vice presidents who have cut their teeth in

the regions of interest," remarked UTI President **Vaughn Drum**.

The company also engages in pressure pumping in Appalachia, the Northeast, and, most recently, in the 4 Corners region.

SHELF RENAISSANCE

Operators and contractors also anticipate a gas-driven renaissance on the GOM Shelf. Observed **ENSCO** CFO **Christopher Gaut**, "Gas production will have to increase to meet demand." Currently, first-year decline rates on GOM offshore gas wells are approaching 50%.

Diamond Offshore Drilling President **Larry Dickerson** also believes the future is spelled "high gas prices", saying, "We believe many of our customers will look at the gas prices out there and increase their drilling budgets."

Noble Drilling President **Bob Campbell** is less sanguine. He thinks it will be the 2nd or 3rd quarter of 2000 before the drilling market improves significantly. Nonetheless, he noted that **BP Amoco** and **Conoco** have hinted that they could increase by 30% their CAPEX for exploration. Most majors, however, remain reticent. On the other hand, he said, independents, who enjoy near-split-second flexibility, are beginning to gear up.

Already, higher commodity prices are improving the drilling business, some say. Mr Gaut said **ENSCO** is seeing \$2,000-\$3,000 recovery in jackup dayrates and—that most comforting sign to drilling contractors—the growth of a backlog.

The company will also receive the new harsh-environment jackup **ENSCO 101** in the first half of 2000.

Noted **Global Marine Drilling** CFO **Matt Ralls**, dayrates are moving up in the elite 300-ft jackup category. "Once utilization reaches the 85% level, we start to see favorable movement in dayrates," he said. Currently, he said, the Gulf of Mexico is only about 20 rigs away from reaching that flashpoint level. However, he cautioned, the industry has only rarely enjoyed 85% utilization over the last 15 years.

While dayrates languish, at least one contractor—**R&B Falcon**—declines to bring stacked units onto the market. That company, with the world's largest marine drilling fleet, unilaterally

stacked 15 of its 24 jackup units to await better times.

Vowed R&B Falcon Chairman/CEO **Paul Loyd Jr.**, "We have no intention of bringing our cold-stacked rigs out until rates come up." He added that he expects this turnaround soon.

Mr Dickerson further noted that commodity prices differentiate between types of offshore drilling units. Oil prices, he said, correlate to activity for semis, while gas prices track jackups.

Diamond has been active in rig upgrades during the year, spending a total of \$86 million on these projects, notably on the drillship *Ocean Clipper* and the converted semisubmersible accommodation unit *Ocean Confidence*. Of that total, the bulk—\$27 million—has gone into increasing deck-load capacity. Cranes ranked number 2 at \$19 million, with riser costs 3rd at \$17 million. Diamond invested \$12 million in anchor chain. Finally, mooring and jackup upgrades cost \$6 million and \$5 million, respectively.

Diamond Offshore has carved a significant niche for itself drilling deepwater turnkeys. Most recently, the *Ocean Clipper* set a world record for turnkey drilling in 7,208 ft of water (September/October *Drilling Contractor*).

Rowan pursues its own strategy in 4 key areas, Mr Palmer said. Its geographic strategy is to focus on the North Sea, Gulf of Mexico and East Canada. Its equipment strategy is to maintain and build a high-quality jackup fleet with special emphasis on harsh environments.

Mr Palmer eschews the race to deepwater: "Log me in as a non-believer in the deepwater drilling market."

Rowan's human-resources strategy, Mr Palmer said, is to promote from within and to reward loyalty. Its financial strategy is to meet all obligations, "as we have for 76 years".

Mr Palmer noted that the North Sea and West African markets remain soft. He said that if the political situation in

Angola and Nigeria does not improve, rigs are likely to exit the region, most likely coming to roost in the Gulf of Mexico. Rowan recently moved a rig out of the North Sea. However, Mr Palmer expects activity will increase in that market over the next year, especially in the southern North Sea gas basin.

discoveries have magnified the already great allure and high expectations of the deepwater frontier. And in October, **Shell** reported that one of its *Ursa* wells set a Gulf of Mexico production record. On 8 Sept, the A-7 well produced 39,317 bbl oil/day and 60.7 MM scf gas/day—50,150 boe/day. This beats the previous record of 46,475 boe at the *Troika* development.

Shell attributed the breakthrough to the use of cutting-edge technologies in a "world-class reservoir". Shell executed a frac and pack at 40 bbl/min, another GOM record, and used shunt tubes to ensure a solid pack. 5 1/2-in. tubulars were used to flow the well.

Ursa now has 2 wells on production, and was completing a 3rd in early October. On average, the field produces 50,000 bbl oil/day and 75 MM scf gas/day. Estimated ultimate gross recovery is some 400 MM boe.

With such mouthwatering production and exploration results, it's not surprising that deepwater drilling contractors remain excited over this emerging frontier.

ENSCO, for instance, views the shelf as the nest near-term opportunity, but is focusing on deepwater semis, such as its new ENSCO 7500, as the best longtime investment. The dynamically positioned unit will be capable of working in water depths to 5,000 ft, though with enhancements it could operate in 7,500 ft of water. The rig is under contract for a minimum 3-year term to **Burlington Resources** for GOM operations.

R&B Falcon says rig farm-outs are coming into play in deepwater, and the company is open to these contracts. Mr Loyd reported that Elf recently paid **Conoco**, R&B Falcon's partner on 2 deepwater drillships, \$195,000/day to drill a Gulf of Mexico well.

"That would not have happened a few months ago," he said.

R&B Falcon owns 9 "ultra-deepwater" rigs, defined as those with drilling depth capacities greater than 7,000 ft. This 29% market share that marks it as the largest in the sector, one rig up on the **Transocean/Sedco Forex** combination.

An operator's catechism: Rein in well costs!

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—Walter van de Vijver, President,
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BETWEEN THE SALT?

Another exciting area, remarked Anadarko President/COO Seitz, is *between* salt formations in the Gulf. Anadarko, of course, is famous for its subsalt discoveries, such as Mahogany, and Mr Seitz expects this activity to continue as well. He called the between-salt region an area "almost untouched by the drill bit".

Anadarko is zeroing in on a rectangular area it has dubbed the "Subsalt Fairway" that stretches east to west from High Island East to West Delta and lies south of the southern boundaries of the near-shore blocks High Island East, East Cameron, Vermilion and so on. The Subsalt Fairway boasts the celebrated Mahogany, as well as the development areas of Hickory, Agate and Tanzanite. Exploration areas in the Fairway include Garnet, Monazite, Moonstone, and Teak. The leases belong to Anadarko alone or to Anadarko/**Texaco**.

"That rectangular area," Mr Seitz said, "will determine our drilling plans in 2000."

DEEPWATER EXPECTATIONS

Several recently announced deepwater

A year ago, the burgeoning deepwater sector seemed to rest on a solid bedrock of long-term contracts for new builds and conversions alike. Mr Loyd pointed out that of the 31 units in the ultra-deepwater fleet, only 3 (**Ocean Rigs 1 and 2** and **Navis 1**) were built on speculation. However, as oil companies merged and low oil prices bit into revenues, producers aggressively and determinedly set about cutting back their commitments to their deepwater—and other—rig contracts. This occurred even before the rigs were delivered.

Into 2000-01, that picture is changing rapidly, Mr Loyd said, mainly due to the anticipated salutary effect increased oil prices should have on operator CAPEX. He said operators are conducting an about face and reconfirming their commitments to deepwater. Previous deepwater programs are being reactivated, and rig supply is tightening. He said only 4 ultra-deepwater rigs are clearly available in 2000-01, the 2 Ocean Rig and the Navis rig, along with R&B Falcon's own Peregrine VII drillship.

Even so, oil companies are wary and not looking to expand their rig commitments. Remarked Shell E&P President van de Vijver, "We have all the deepwater rigs we need, thank you."

Still, he indicated that drilling activity would increase in 2000. He said Shell was still committed to the deepwater GOM, as well as US onshore gas.

INT'L STRATEGIES

As for Santa Fe International, the best rates and markets remain those outside the US.

"We still believe this is the best strategy," said Santa Fe VP Hoffman. He said the company would enjoy 100% utilization during 2001.

The oil companies think so, too. **Phillips China** recently drilled and tested its 3rd successful well in Block 11/05 of China's Bohai Bay. based on its cumulative results, Phillips estimates recoverable reserves as high as 400 MM bbl. Phillips now plans to turn to the as-yet unexplored southern end of the field.

Phillips plans to drill 4 more appraisal wells before the end of the year using 2 rigs. The company announced the discovery well in July 1999.

Also, **Texaco** announced a deepwater gas discovery off the northwest coast of

Western Australia. The discovery well, in 4,000 ft of water, reached a TD of 11,500 ft. The company said its results indicated gas plays in 3 zones, with a net gas pay of 370 ft. The deepwater semi Marine 500 was to drill exploration wells until November, then return to Western Australia in early 2000 for more exploration operations.

THERE'S NO CURE

Rowan's Palmer observes that the oil-service industry is "an irrational business and there's no cure."

His key to success is no cipher: "Just pay attention to oil-inventory levels, OPEC and weather forecasts—then buy low and sell high." It just couldn't be any easier! ■