rigamarole

DELVING into the DEEP } PAGE 2

Acting Up } PAGE 12 Small Wonder } PAGE 20 On the Hunt } PAGE 26 Barges to Behemoths } PAGE 32 Generations } PAGE 38

> A PUBLICATION for the PEOPLE, CUSTOMERS, SUPPLIERS and FRIENDS of DIAMOND OFFSHORE DRILLING, Inc.

SPRING 2007



2 DELVING into the DEEP

Suppose that today's high-price/high-demand oil market lasted for another 10 to 25 years. That is what a growing number of analysts are now forecasting, with many agreeing that prices could trend near today's levels (after adjustment for inflation) deep into the next decade, or beyond in the longest-running analyses. Driven by that robust environment, deepwater offshore's contribution to world oil productive capacity could double as soon as 2015.

¹² Acting Up

What started as a fun skit loosely related to a play about an infamous bordello in LaGrange, Texas has turned into a fullblown traveling production and raised more than \$1.3 million for charity in the process.

20 Small Wonder

The mercury is showing 120-degrees Fahrenheit. You are working under the merciless smother of the Persian Gulf sun on a metal structure, amid the drone of diesel engines and clangor of cranes, pipes and shakers. And for some reason you and your fellow crewmembers are behaving like there is nowhere else you would rather be. Has the sun taken a toll on your sanity? Hardly. You just happen to be working on the *Ocean Heritage*—a small jackup that is regularly chalking up bigger than life accomplishments off the coast of Qatar.

²⁶ On the Hunt

As Devon Energy expands its global deepwater exploration program, R.K. "Rick" Mitchell, Vice President Worldwide Drilling and E&P Services, talks about the company's plans and the role Diamond Offshore's newly commissioned ultra-deepwater semi, the Ocean Endeavor, will play.

32 Barges to Behemoths

Diamond Offshore traces the Company's beginnings to the earliest days of the offshore drilling industry. Today, after decades of innovation and opportunistic multiple-company and rig acquisitions, Diamond Offshore provides contract drilling services to the energy industry around the globe and is a leader in deepwater drilling.

38 Generations

From time to time, sons and daughters choose to follow in their father's footsteps. In this issue, we feature a few of the father and son teams who have followed that path at Diamond Offshore. Meet some of the people who help the Company succeed.

46 Facets

rigamarole is published for and about the people and customers of Diamond Offshore. For more information, write to us or call: rigamarole Diamond Offshore Drilling PO Box 4558 Houston, Texas 77210 USA 281 492 5393 riss@dodi.com Les Van Dyke ABC Managing Editor **Rigsby Hull** Design and Production Steve Woods Printing Printing

A Letter from Larry Dickerson President and Chief Operating Officer

EACH MORNING as I am driving to work, the radio station I tune in to invites listeners to submit a list of four songs that fit the theme: Something Old, Something New, Something Borrowed (a cover song), Something Blue. There is also a secondary theme, which this morning was "fire."

The old song was *Fire on the Mountain* by the Grateful Dead; *Yell Fire* by Michea Franti & Spearhead was the new tune; the cover was *Great Balls of Fire*; and the blue song was *Crossfire* by Stevie Ray Vaughn. The Something Old, Something New phrase stuck in my mind as I was reviewing a fleet list, and caused me to wonder if you could classify our rigs this way?

The 26-year old *Ocean Heritage* might qualify as something old. This "old" rig has accomplished incredible things. Of course, we have maintained the rig and done various upgrades over the years, and the *Heritage*, rated to drill to only 20,000 ft., recently drilled a horizontal well to a record length of 29,740 ft. What makes the achievement even more impressive is that the *Heritage* has gone over eight years without a lost time incident and over two years without a recordable doctor case. And they have achieved this performance working in Qatar's 120-degree F. (48.8-degrees C.) temperatures, at the edge of technical limits. You can read more about this remarkable rig and crew elsewhere in this issue.

In terms of new, I think about our 350-ft. IC jack-up rigs, the *Ocean Shield* and *Ocean Scepter*, which are under construction and taking shape nicely—in Singapore and in Brownsville, Texas. Both rigs are scheduled for delivery in the first quarter of 2008. When completed, Diamond Offshore's new-builds will be on the leading edge of drilling depth capabilities and among the select few rigs suitable for deep shelf applications in the Gulf of Mexico (GOM), and other deep drilling opportunities internationally.

Though completion is still approximately a year away, the *Ocean Shield* will be the first to go to work under a one-to-two year contract in Australia.



That there is such strong demand for this type of equipment so far in advance of delivery is testimony to the equipment specifications, to Diamond Offshore's capabilities and to the strength of the international market. And with the *Scepter* already in the GOM, we have high hopes that the rig will find a home in that market in advance of delivery.

Though the upgraded *Ocean Endeavor* is essentially a new rig, in a sense we "borrowed" the massive Victory-class hull from the old 2nd generation version of the unit. The new *Endeavor* is a success story in every way. The conversion of the *Endeavor* from mid-water semi to ultra-deepwater super-rig has been completed on time and under budget. That is no small feat with over 100 new rigs jamming the world's shipyards. These days, coming out anywhere near schedule and budget shows amazing team integration. Like the *Shield*, the *Endeavor* is already contracted and the rig is expected to go to work in the GOM this summer. This issue of *Rigamarole* covers the completion of the *Endeavor* upgrade.

The something blue part stumped me for a minute. Then I remembered that one of our predecessor companies, Diamond M, painted rigs blue. I have always been partial to blue and might have voted to keep the color except for the fact that, with other acquisitions, gray rigs began to significantly outnumber blue units in our fleet. Two of the Diamond M rigs that remain in our fleet are the *Ocean Nugget* and the *Ocean New Era*, and my guess is that if you scratched deep enough, you might still find some blue paint beneath today's cleanly painted gray exterior. Both of these rigs will be heading south this summer from the U.S. GOM for two-year jobs with Pemex in Mexico.

So there you have it—something old, something new, something borrowed and something blue. Too bad each rig doesn't have a song—I could submit the list to the radio. \blacklozenge

DELVING

into the DEEP

An IN-DEPTH LOOK at DEEPWATER OFFSHORE ACTIVITY and FORECASTS AHEAD

And in case of the

By BARBARA SAUNDERS Photography MIEKO MAHI and CHRIS SHINN





Suppose that today's high-price/high-demand oil market lasted for another 10 to 25 years. That is what a growing number of analysts are now forecasting, with many agreeing that prices could trend near today's levels (after adjustment for inflation) deep into the next decade, or beyond in the longestrunning analyses. Driven by that robust environment, deepwater offshore's contribution to world oil productive capacity could double as soon as 2015.

Fueled by strong demand growth—particularly in China and India average crude prices have remained above the \$50 per barrel mark for virtually the entire time since early 2005—sometimes well above. This is the only period in recent history that a dramatic oil price jump was triggered by strong demand alone, rather than by geopolitical tensions, primarily in the Middle East. And analysts do not foresee demand relaxing anytime soon—quite the opposite.

For example, figures released in January 2007 by the U.S. Energy Information Administration (EIA) predicted that world oil demand would increase by 47 percent from 2003 to 2030, with-non-OPEC Asia, including China and India, accounting for 43 percent of the increase.

Similarly, the International Energy Agency's (IEA) most recent World Energy Outlook, published in November 2006, forecasts global energy demand increasing by one half through 2030. More than 70 percent of the increase in demand over the projected period will come from developing countries, with China alone accounting for 30 percent. And some 85 percent of this demand will come from fossil fuels. The IEA sees global oil demand reaching 99 million barrels per day in 2015 and 116 million barrels per day in 2030, up from 84 million barrels per day in 2005. (Note: China and India have now catapulted into the second and third largest energy consumers, respectively, after the U.S).

With tighter, demand-driven markets and high prices has already come an intensified push for exploration and production (E&P) of the world's deepwater hydrocarbon resources.

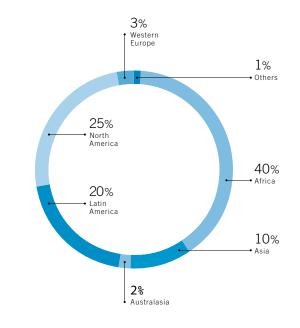
Meanwhile, the outlook for so-called "mid-water" activity—at ocean depths between 1,000 ft. and 3,499 ft.—also remains

strong, industry observers say. Several factors support the strong mid-water activity. With effective rig utilization at virtually 100 percent, near-term availability is very limited. But the shorterterm nature of the mid-water contracts provides more opportunity for E&P operators to secure a rig than in the deepwater, where contracts are typically longer in duration. At the same time, the lack of deepwater equipment encourages E&P operators to seek rigs in the next-best-class of equipment that can do the job and often to challenge drilling contractors to operate mid-water units in atypical water depths. All of this translates into more demand, more frequent new contract fixtures, and increased opportunities on the part of the drilling contractors to extend term length and/or increase dayrates on mid-water equipment.

High Utilization—Lengthening Contracts

Utilization levels and construction plans, of course, are a key bellwether of the industry's overall direction. During 2005 and 2006, the effective utilization rate for floater rigs at all depth ratings ran at virtually 100 percent worldwide. This compares with about 80 percent in mid-2004, when crude prices began to escalate sharply from the \$20 to \$30 per barrel levels that had prevailed for several years.

Tom Kellock, director of research in Houston for ODS-Petrodata, told *Rigamarole*: "We see effective utilization for both semis and drillships staying near 100 percent throughout 2007." As a result of rising rig demand, contract terms have continued to lengthen, particularly for the deepwater sector.





Diamond Offshore's ten deepwater floaters show a decisive trend toward longer contracts. All of the Company's deepwater rigs have present or future contracts ranging from 2008 to 2010. Also already committed are the Company's planned additions to its ultradeepwater fleet, the substantial upgrade of two former mid-water rigs, the *Ocean Endeavor* and the *Ocean Monarch*, due for delivery in 2007 and 2008, respectively. Shipyard work on the *Endeavor* has been completed and the unit is expected to begin work in early summer on a contract extending until 2011. The *Monarch* is contracted until 2012. Both units are rated for water depths of up to 10,000 ft. "The *Endeavor* and the *Monarch* represent a new threshold for our Victory-class rigs. With over 50,000 sq. ft. of usable deck space each, and ultra-deepwater capabilities, these units are well suited to meet the enormous demands of today's deepwater frontiers." says Larry Dickerson, Diamond Offshore's President and Chief Operating Officer.

Adds John Gabriel, Diamond Offshore Senior Vice President of Contracts and Marketing: "What we saw in 2005 were things that we anticipated, building on what happened in 2004. This gave us some insight into the seriousness and robustness of the market. 2006 has seen dramatic benefits from an earnings standpoint. Meanwhile, deepwater rates are going ever higher, terms are lengthening and the more capable rigs are being committed earlier in the cycle. In short, there is limited availability and this has been good for our business."

Strengthening demand and ever-tightening rig supply has kept well-reported upward pressure on dayrates. For example, 2nd and 3rd generation semisubmersibles that were cold-stacked in 2004, were committed at dayrates of \$175,000 by mid-2005 and are now contracted for dayrates in the \$300,000s. Fourth generation rigs earning \$70,000 per day in 2004, were up to \$240,000 by mid-2005, and were topping \$400,000 at this writing, while 5th generation rigs that went for dayrates in the \$300,000 range are now topping \$500,000.

Rig availability has become especially tight in the ultradeepwater segment. Some ultra-deepwater floaters, or those rated for 7,500 ft. of water or more, are achieving dayrates of over \$500,000 for term work, said analysts at Morgan Stanley late last year. They went so far as to predict a "likely imminent panic in the ultra-deepwater market." At year-end 2006, only four rigs were open in 2008 and another 10-12 rigs in 2009 within this segment of the market. "This squares with visible unsatisfied incremental demand of 10 to 15 units in 2008 and significant additional demand in 2009," Morgan Stanley said.

There is concern in some quarters about the current offshore rigbuilding boom destroying the market, as has happened during highprice cycles before. But by and large, at least in the floater markets, there do not seem to be any serious overcapacity problems looming.

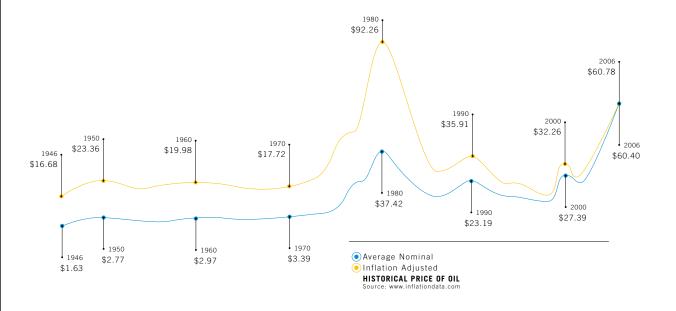
ODS-Petrodata's Kellock commented that "in 2008, there are only eight new floaters joining the fleet that do not already have contracts. We believe that they will easily be absorbed without having any pressure on dayrates." At this writing in late January 2007, approximately 75 percent of the 50 new-build and upgrade floaters under construction already have contracts in hand. Kellock also noted that the strong demand extends to mid-water rigs, which are aggregated with deepwater rigs in many analyses. "Intermediate rigs have actually seen greater increases in dayrates in percentage terms than deepwater units and are very much in demand," he said.

Extended Cycle

Of course, this is a cyclical industry. And the question always comes: "When will the cycle end?" Commodity demand is the key, and the current demand-led price fundamentals appear to provide extrasound economics for deepwater offshore to see the most productive and extended cycle to date.

The EIA believes that average oil prices could decline somewhat from 2006 levels that touched \$80 in 2006 "assuming that expanded investment in exploration and development brings new supplies to the world market." However, the agency predicts that after a few years, real prices will "begin to rise and that by 2030, the average real price of crude oil will be above \$59 per barrel in 2005 dollars, or about \$95 per barrel in nominal dollars.

Meanwhile, the IEA in Paris recently revised upwards their assumptions for oil prices, in the expectation that crude oil and refined-product markets remain tight. "Market fundamentals point to



a modest easing of prices as new capacity comes on stream and demand growth slows. But new geopolitical tensions or, worse, a major supply disruption could drive prices even higher," the IEA says.

However, indications are that the oil and gas industry currently does not necessarily hinge deepwater or other major new spending plans upon expectations of lasting crude commodity prices significantly in excess of \$50 per barrel.

Many of the major companies will admit privately that they use internal company price decks, or hypothetical prices, in the \$25 to \$35 per barrel range to evaluate whether planned new projects will yield acceptable returns. Lord John Browne, group chief executive of BP, confirmed this publicly for BP last year at a meeting of investment analysts. "BP has a strategy that is designed to be robust to a very broad range of outcomes, and this is why we test our projects down to \$25 per barrel," Browne said.

The latest Lehman Brothers E&P Spending Survey of 300 companies for 2007, which includes a large number of small independents that typically use higher prices to justify smaller, more marginal prospects, found that E&P budgets are being put together this year based on an average price expectation of about \$55.50 per barrel for crude oil and \$6.70 per million cubic feet for natural gas.

However, because of the long-term nature of planning involved in exploring for and developing a prospect, that does not mean activity would slow below \$55 per bbl. Rather, the average price that would trigger companies to reduce their E&P budget is about \$42.50 per barrel for oil and \$4.80 per million cubic feet for natural gas, the survey showed. Among the survey's other key findings:

- Worldwide E&P expenditures are expected to continue to grow in 2007, although at a lesser pace than that of the last two years.
- Holding down the global rate of growth, U.S. E&P spending growth is forecast to slow to 5.1 percent to \$73 billion in 2007, reflecting in part reduced price expectations for natural gas to \$6.70 per million cubic feet on average in 2007.
- Offsetting this is healthy international growth, estimated to rise by 13 percent to \$196 billion, led by national oil companies (NOCs).

• Lehman believes that the 13 percent international growth estimated in the survey understates the magnitude of the growth likely in 2007, as the survey excludes most of the state-owned companies in the Middle East and Africa, where spending is expected to increase substantially in 2007.

In both 2006 and 2007, an overwhelming percentage of companies plan on spending a greater portion of their offshore budget in deepwater, Lehman Brothers said. Angie Sedita, a Senior Vice President at Lehman, says that she expects the ultra-deepwater to stay strong into the next decade, even if prices were to dip down to around \$35 per barrel. "There is simply so much drilling to be done, and relatively few rigs out there.

That is clearly where the oil is." The tendency of the ultra-deepwater to yield the giant finds will keep the economics strong, even if oil prices should take a steep plunge back to the \$30 range per barrel.

However, in the mid-water range, Sedita believes that oil prices will need to remain in the \$40s to justify continued activity at today's levels. Nevertheless, she foresees the market for all offshore drilling in the mid, deep and ultra-deepwater levels to stay strong for at least the next few years.

High Cost—High Return

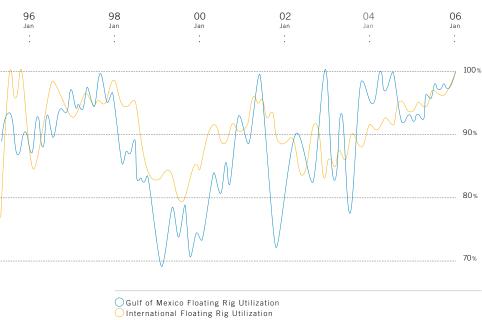
Naturally, more spending—spurred by strong demand and higher commodity prices—has supported the push to deep and ultradeepwater areas, where the greater potential for major discoveries remains but higher prices are required to justify the economics.

Explained Peter Jackson, director of oil market analysis for the Cambridge Energy Research Associates (CERA,) in an interview: "The push for deepwater capacity will continue, especially in non-OPEC countries, because prospects tend to be large and have more materiality. These large-scale prospects are now rare in the relatively well-explored onshore and shallow water parts of prospective basins. The scale of these projects is also important from and operational efficiency and economic viewpoint."

CERA projects that offshore areas more than 2,500 ft. deep will contribute 10.42 million barrels per day in 2015 to the world's

Fueled by strong demand growth—particularly in China and India—average crude prices have remained above the \$50 per barrel mark for virtually the entire time since early 2005 sometimes well above. This is the only period in recent history that a dramatic oil price jump was triggered by strong demand alone, rather than by geopolitical tensions, primarily in the Middle East. And analysts do not foresee demand relaxing anytime soon—quite the opposite.

This is a cyclical industry. When will the cycle end? Commodity demand is the key, and the current demand-led price fundamentals appear to provide extra-sound economics for deepwater offshore to see the most productive and extended cycle to date.



FLOATER RIG UTILIZATION 1995 TO PRESENT

hydrocarbon liquids capacity, up from 4.09 million barrels per day in 2006. That translates to the deepwater offshore more than doubling its contribution to total world liquids capacity, from less than 5 percent in 2005 to nearly 10 percent by 2015. Put into perspective, this would mean that the deepwater could provide enough productive capacity to supply the entire world for more than one month in 2015.

U.K. consultancy Douglas Westwood Ltd. also emphasized the growth in worldwide energy demand as "the underlying driver for all offshore activity." And pushing deepwater activity especially hard will be "the lack of new opportunities onshore or in shallow waters that can meet this demand."

Over the last five years, Douglas Westwood estimated that \$160 billion was spent on shallow water drilling, representing 83 percent of all drilling expenditure, while \$33 billion was spent on deepwater drilling. Over the next five years, the consultancy forecast that \$197 billion will be spent on shallow water drilling, with another \$65 billion being spent on deepwater drilling.

Energy experts also widely agree that the three regions known as the "Golden Triangle" will continue to prove the most productive deepwater areas. Specifically, they cite Africa (led by Angola) followed by Latin America (led by Brazil), then North America (led by the Gulf of Mexico). However, activity is already heating up in the Asia-Pacific, which is expected to become a significant new deepwater contributor, and many other areas of the world are exploring promising prospects.

Rise of the NOCs

Despite all the upside potential, there are challenges in the current situation. One is the shifting power base caused by the rising influence of National Oil Companies, or NOCs. Note in the Lehman Bros. survey cited earlier how NOCs are leading international E&P spending for 2007.

"Around 80 percent of hydrocarbon assets are under state ownership," observed IHS Inc., a large energy consultancy. "The future of the industry is back in the hands of governments."

Says Duncan Weir, Diamond Offshore's Vice President of International Contracts and Marketing: "NOCs were always important, and they have become more important. They want a bigger slice of the pie all the time. The NOCs are under pressure to increase their share of the revenue, particularly in Africa where there is a high level of poverty. This impacts us, because we see more pressure to plow more money back into the local economy, to support more of their businesses locally, to hire additional local people, and to use local company equipment. ... There also is much greater pressure to invest in a much wider more long term sense. This can create a very difficult situation, because even the most lucrative contracts are usually only three to four years long, and we will probably leave the country afterwards if we have no more work there."

Infield's research director, Will Rowley, says this makes matters particularly challenging offshore because NOCs are increasingly seeking participation in offshore ventures outside their own countries. "Since January 2004, the top 10 NOCs alone have become participants in an additional 124 offshore fields with commercial prospects outside of their own countries—a 35 percent combined increase.

Rowley continued: "As NOCs expand on the international stage, the impact on international contractors and suppliers is likely to increase. At best, this could mean the development of new relationships as technology and experience brings new partners together; at worst, this could lead to the expansion of [NOC] affiliate companies at the expense of international contractors and suppliers."

Although the increasing influence of NOCs is difficult to dispute, much else about today's oil climate is difficult to predict. In any event, the consensus today seems to signal that current market forces will prevail for some time to come, yielding the most sustained period to date that the offshore regions of the world will have to prove their worth, particularly the deep and ultra-deepwater areas.

BARBARA SAUNDERS, an award-winning writer in the fields of energy, history and technology, has covered worldwide oil markets since the late 1970s, including for National Pubic Television, the U.S. House of Representatives and the Oil & Gas Journal. She holds a bachelor's degree with highest departmental honors in economics and history from Mary Washington University in Virginia.

"Elephant" Hunters

This past September, the hopes of deepwater areas the world over were symbolized by the #2 test well on the 2004 discovery "Jack" by Chevron Corp. and its partners in the Gulf of Mexico (GOM).

Additional testing needs to be conducted. But the 6,000 barrel per day flowrate on the well boosted hope that the entire 300-mile-wide Lower Tertiary trend, where "Jack" was discovered 150 miles offshore in some 7,000 ft. of water, can produce oil at a sufficiently high rate to justify the billions of dollars that will be need to bring the oil to market. Just how much oil remains to be seen, but speculation is that the entire Lower Tertiary trend could contain reserves ranging from four to 15 billion barrels of oil. By comparison, total oil reserves in the GOM currently total just over four billion barrels of oil.

There have been a total of 12 discoveries in the Lower Tertiary trend since 2001—seven of them since 2004. According to Wood MacKenzie's Gerro Ferruggio, exploratory wells in the Lower Tertiary trend have yielded more than a 63 percent success rate and the reserves discovered per well are estimated at 120 million barrels of oil per well.

Today's higher oil prices make so-called "elephant" oilfield hunts in deepwater (> 3,500 ft.) and ultra-deepwater (>7,500 ft.) much more economic for companies to embark upon worldwide. With a single deepwater well costing in the hundreds of millions of dollars, giant finds are necessary to offset the finding costs. Even with such promising discoveries as are occurring in the GOM's Lower Tertiary trend, the time taken and the high costs of bringing a successful exploration venture to production can be staggering. For example, Chevron said that the test well alone on "Jack" cost more than \$100 million dollars. The company anticipates that it will take most of 2007 to fully assess potential flows from "Jack," then another three to five years after that to produce the first oil.

Still, experts agree that if a company wants a really big find, the best place to go is deepwater. For instance, the U.S. Minerals Management Service (MMS) notes that: "...the most important feature of the deepwater field discoveries, [is] that their average size is many times larger than the average size of shallow-water fields. During the last 10 years, the average shallow-water field added approximately five million barrels of oil equivalent of proved and unproved reserves. In contrast, the average deepwater field added over 67 million barrels of oil equivalent of proved and unproved reserves."

Internationally, Angola has brought West Africa into the leading position in the "Golden Triangle" of deepwater offshore producers since the first major discovery was made there in the mid-1990s. Some 40 percent of Angola's Gross National Product now comes from oil exports, with the oil being produced primarily in deepwater. Total proven reserves are on the order of 5.4 billion barrels of oil, but a recent estimate by ExxonMobil places possible reserves from newer discoveries on Block 31 alone at another 4.5 billion barrels. Nigeria also contributes in a major way to West Africa's deepwater prominence, but has many fewer fields slated for development between 2007 and 2011.

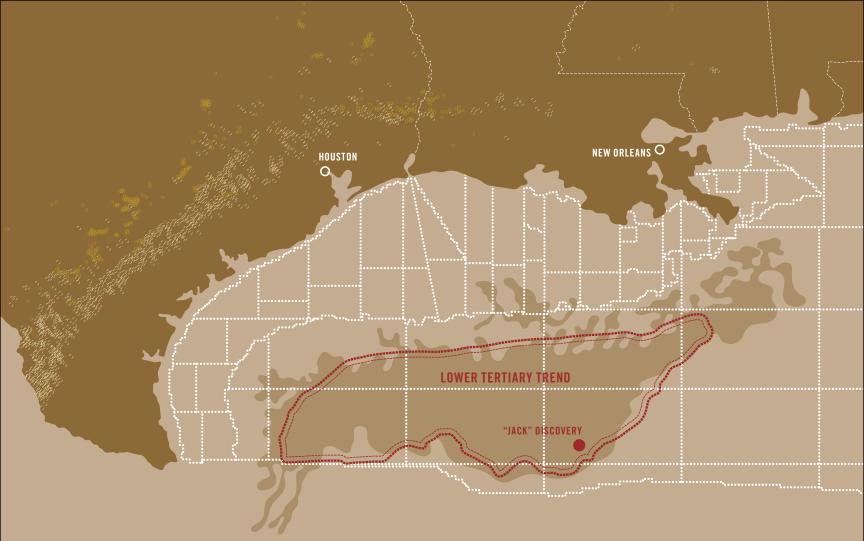
Brazil holds second place in the "Golden Triangle's" deepwater production, and has literally reversed the nation's energy fortunes from developments in the hydrocarbon-rich Campos and Santos Basins.

The U.S. ranks third in deepwater production, if first in the number of active projects underway at any given time, due to a tendency toward smaller fields and an active leasing program. According to MMS' deepwater report for 2006, as of the first quarter of last year, there were 118 deepwater hydrocarbon production projects on line. From only 27 percent of all offshore Gulf of Mexico leases in 1992, deepwater areas now hold a commanding 54 percent of all leases. More than 900 exploration wells have been drilled in the deepwater Gulf since 1995, with at least 126 deepwater discoveries announced since then.

But new "elephants" are badly needed worldwide to keep pace with expected demand growth. While the Gulf's deepwater areas provide a growing proportion, or 73 percent, of the region's offshore output, deepwater output has declined steadily since 1997. The opposite trends are the case in other key deepwater producing nations.

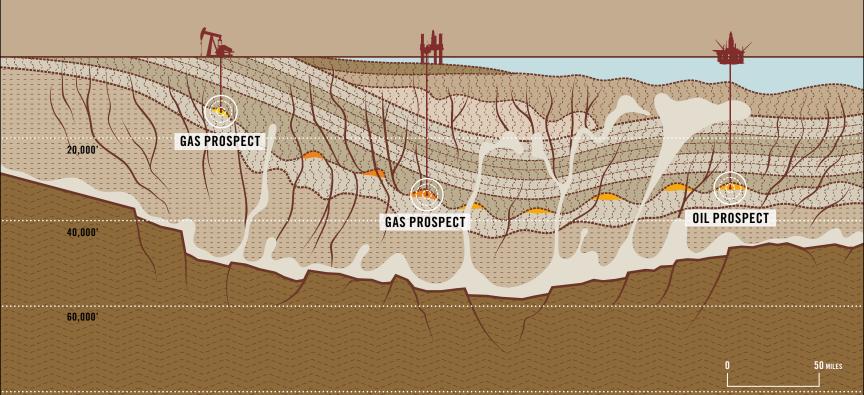
In general, mid-to-deepwater discoveries do not closely track jumps in oil prices. This is due to the long lag times from when prices rise, more rigs are contracted and more explorations yields a higher number of discoveries. Yet, as demand for deepwater and ultra-deepwater floaters shows, strong demand and higher prices have made it much more economically feasible for a host of countries worldwide to explore the most promising prospects and develop what proves to be commercial in scale.

One never knows exactly where the next "elephant" field will appear —only that it's much more likely to be found in deep or ultra-deepwater, than in shallow waters or onshore.



- A trend is an interval defined by a certain period of time. In this case, the cower fertiary trend was deposited between 24 and 65 million years ago.
 The trend is composed of various types of plays, which are productive intervals related by common characteristics, such as hydrocarbon trapping mechanisms.
 Each play contains one or more prospects, which are expected hydrocarbon accumulations separated by topographic lows.
 The Lower Tertiary trend has been producing gas and oil from sands onshore in Texas and Louisiana for decades

- the Lower Tertiary has occurred in the GOM to date.
 First production is anticipated in 2009.
 The recent drilling in water depths between 5,000 and 10,000 ft. is targeting the downdip extension of the onshore trend deposits.
- "Jack" renewed interest in bidding on deepwater tracts.
 38% of tracts receiving bids in Western GOM Sale 200 in August 2006 had a Lower Tertiary potential target





ACTING UP

WHAT STARTED AS A FUN SKIT LOOSELY RELATED TO THE INFAMOUS BORDELLO

> IN LAGRANGE, TEXAS HAS TURNED INTO A FULL-BLOWN TRAVELING PRODUCTION RAISING OVER **\$1.3 MILLION** FOR CHARITY.

> > WRITTEN BY DENISE ALLEN ZWICKER

> > > PHOTOGRAPHY BY TERRY VINE

MOE PLAISANCE, VICE PRESIDENT OF INTERNATIONAL OPERATIONS, PLAYS THE PART OF THE GOVERNOR OF TEXAS.

REMEMBER THAT PLAY YOU PUT ON IN HIGH SCHOOL?

A lot of work, right? And a lot of fun, too. Wouldn't you like to try something like that again? Or, if you were in the audience in high school, wouldn't it be fun to be on stage now? That is what a group of oil and gas executives and their spouses and friends began to ponder in 2003. The result is a three-year effort that, so far, has netted more than \$1.3 million for charity.

The Oil and Gas Late-Night Players, which includes Diamond Offshore's Vice President of International Operations Moe Plaisance and his wife Vickie, got their start in summer 2003 during a couples' golf and tennis weekend, called the Oil and Gas Executive Invitational, at Barton Creek Resort & Spa in Austin, Texas.

"Instead of the Country-Western Night we'd had the year before, we chose to put on a skit. We used the country-western band as our musical backup," recalls Vickie Plaisance. "Tom Wertz from M-I SWACO, our leader, wrote the script. He adapted the musical, '*The Best Little Whorehouse in Texas*.'

"He chose songs from the musical that we amateurs could do, and he altered the parts to suit each of us," she continues. "We called our play the 'chicken ranch,' so as not to offend. Tom's wife Dixie did all the casting. Hannah Wilder did all the choreography. I played Miss Vickie, the 'girls' surrogate mom.' Moe was the governor of Texas. The whole thing just evolved."

Diamond Offshore's Vice President of Marketing Bodley Thornton and his wife Karen also starred in the show. Bodley was an Aggie dancer, supposedly from the nearby university, Texas A&M. Karen played a "yard babe" (one of the "girls") and an "Aggie Angelette" in a choreographed song with puppets. "All of us were pretty green," says Bodley. "If nothing else, the experience made us realize how much work a true actor does to make things just right."

"NEXT THING I KNOW, [TOM WERTZ] IS ASKING ME, **'COULD YOU PLAY MISS MONA?'** I THOUGHT HE WAS CRAZY. I'M A SINGER, NOT AN ACTRESS! BUT TOM CAN BE VERY PERSUASIVE."

The first real show, in May 2004, was at the Barton Creek resort. There, 240 friends of the cast enjoyed themselves so much that they stood for five ovations throughout the show. "It was like somebody plugged them in!" said Wertz of the cast's response to the audience glee.

In fact, within days, they had been asked to repeat the show in Boca Raton, Fla., at an IPAA (Independent Petroleum Association of America) conference. "At that point, we were still just having fun," says Wertz. "After that, we said, 'Let's go make some money with this for charity." And they did.

At their next show, in September, they charged admission, giving the proceeds to the Palmer Drug Abuse Program. Later that month, a show at the Society of Petroleum Engineers (SPE) raised money for SPE college scholarships. And, in February 2005, after a show at Hobby Center in Houston, the players made a large donation to the Cystic Fibrosis Foundation. Through corporate sponsorships and donations, personal donations, and ticket sales, the group has raised more than \$1.3 million for charity since September 2004. And they show no signs of stopping.

"The original play is based on a real news story in the early 1970s. The show ends with the shutting down of the 'chicken ranch' and the scattering of the 'girls'," says Wertz, now dubbed the director/producer of the group. "That scattering gave us a platform to write sequels that take place in the cities where the girls might have landed, such as New York, New Orleans, Paris, etc.

Now we are writing new plays, taking songs from other shows to fit our story lines." Although the story may change, one thing that has not changed is the band: Tracie Lynn's Band from Austin, a group of six country-western musicians who have become loyal members of the cast.

"We met Tom Wertz when we played at some parties for M-I SWACO," says Lynn, a singersongwriter. "Then, the next thing I know, he is asking me, 'Could you play (the "Best Little Whorehouse" character) Miss Mona?' I thought he was crazy. I'm a singer, not an actress! But Tom can be very persuasive. The next thing I knew, we were on the road, with me playing Miss Mona!

"Now, we'll play a part for as long as they will let us," she says. "It really makes us feel good to raise the money for charity."

Lynn has done more than sing and act. She has also written three new songs for the shows: "Leave a Trail," "Girl Talk," and "65 Roses." And the role has pushed her to do things she never thought she would do. "At our recent show at the commissioning of the USS TEXAS submarine in Galveston, I couldn't believe it, but I was escorting sailors from the audience to join us onstage in a motorcycle vignette called 'Tonight We Ride.'"

In fact, audience participation is a vital part of the success of the shows. Houston television reporter Marvin Zindler, who spurred the real "best little chicken ranch" news story, has played cameo roles in two shows. He called the oilfield show "the best version of the play" he

VICKIE PLAISANCE, PLAYS THE PART OF MISS VICKIE



"FOR THE FIRST FEW SHOWS, WE HAD ALL THESE SCARED PEOPLE BACKSTAGE. NOW THEY MARCH IN FOR DRESS REHEARSAL AND DEMAND, 'WHERE'S MY DRESSING ROOM AND IS IT LIGHTED?'



has seen. Other cameo roles have been played by former Houston Astros baseball player Larry Dierker, New Orleans singer Charmaine Neville, well-known Houston attorney Rusty Hardin, and half the crew of the USS TEXAS at the submarine's commissioning in September 2006. And Houston Mayor Bill White opened the show at Wortham Theater Center in Houston.

Even with 12 shows under their belts, the mostly middle-aged actors remain amateurs. "The actors are busy people with real jobs, so we never have the whole cast at our rehearsals," says Wertz. "But we have never failed to pull off a show, even though things can look dicey during rehearsal."

To hold down costs, the actors pay their own travel costs and supply their own costumes. And some of the actors rely on their employers to help cover equipment costs and other expenses. They set aside all of the ticket income for the chosen charity.

The executive producer is Don McKenzie, president of M-I SWACO. He supports the shows with both zeal and cash. Co-producers are Bryan Dudman, president of Smith Services; Mike Pearce, president of Smith Technologies; and Diamond Offshore's president Larry Dickerson—to honor the many hours that Moe and Vickie Plaisance give to the effort.

"We have come a long way in just a few years," says Wertz. "The experience has proved to me that you should never underestimate what people can do. These folks, most of whom have never been on a stage before, now even write their own lines! For the first few shows, we had all these scared people backstage. Now they march in for dress rehearsal and demand, 'Where's my dressing room and is it lighted?'

"Our next show will be April 20 at Brooke Army Medical Center in San Antonio, where we'll entertain the wounded troops from Iraq and Afghanistan," Wertz says. "We are also hoping to put on a show to help those who suffered in Hurricane Katrina."

"We're grateful for the friendships and memories we've made with these shows—and we can't wait for the next one!" responds Vickie Plaisance, no doubt speaking for the rest of the enthusiastic cast.

DENISE ALLEN ZWICKER, longtime Houston freelance writer, had so much fun writing this article that she's thinking of joining the cast.

ABOVE: THE LADIES OF THE CAST GATHER FOR A PHOTO AFTER THE PERFORMANCE FOR SPINDLETOP CHARITIES.



THE MERCURY IS SHOWING 120-DEGREES FAHRENHEIT. YOU ARE WORKING UNDER THE MERCILESS SMOTHER OF THE PERSIAN GULF SUN ON A METAL STRUCTURE, AMID THE DRONE OF DIESEL ENGINES AND CLANGOR OF CRANES, PIPES AND SHAKERS.

THE SEA SURROUNDING YOU SEEMS TO BE RISING WITH THE BUCKETS YOU ARE SWEATING. AND FOR SOME REASON YOU AND YOUR FELLOW CREWMEMBERS ARE BEHAVING LIKE THERE IS NOWHERE ELSE YOU WOULD RATHER BE—CELEBRATING YOUR WORK WITH THE PRIDE OF A WINNING SUPER BOWL TEAM. HAS THE SUN TAKEN A TOLL ON YOUR SANITY?

BY SCOTT REDEPENNING PHOTOGRAPHY CHRIS SHINN

Hardly. You just happen to be working on the *Ocean Heritage*—a small jack-up that is regularly chalking up bigger than life accomplishments off the coast of Qatar.

"This is a plain vanilla little drilling rig doing extraordinary things," says Duncan Weir, Diamond Offshore's Vice President of Contracts and Marketing. "And by extraordinary, I mean that this rig is drilling huge step-out wells with long, long horizontal sections. These are by any industry standards significantly challenging wells and the *Heritage* has done a great job for our customer, Maersk Oil."

A well's "step out" is defined as the horizontal distance from the rig to the end of the drill string. Being able to drill for long horizontal distances is key to operating in this part of the Persian Gulf, because reservoirs here are typically broad and very flat, sometimes as shallow as five feet. Drilling horizontally through these flat areas exposes the wellbore to thousands of feet of payzone, allowing for high production rates.

Over 34 intensely busy days last summer, the *Ocean Heritage* drilled to a record length of 29,740 ft., with 21,000 ft. of the trip being horizontal. That equates to about 5.6 miles of drill pipe. And the rig is currently drilling a well targeted to be nearly that length, which is number five in a series of eight wells the *Heritage* is contracted to drill for Maersk. Most of the wells are planned to push significantly over the 25,000-ft. mark. The catch—the *Heritage* is only rated to drill to a depth of 20,000 ft.

"In all my 38 years I have never drilled anything like this," says Luke James, who manages the rig's operations from Doha, Qatar's capital city and economic center. "When they said they wanted a 25,000-ft. well, I thought they had picked the wrong rig. But when I saw how they wanted to drill, the job started to make sense. This rig can handle a well up to 20,000 ft. deep, but these wells only go to a depth of about 3,500 ft. From there the drilling is pretty much completely horizontal."

James explains that a rig is given a drilling depth rating based on the unit's "hook load," capacity, which is how much total drill pipe weight the rig can handle pulling out of the hole. The Heritage is able to go far beyond the rig's ratings because so much of the pipe is being supported by the horizontal wellbore. Gravity is a huge help in this regard, but also presents a huge challenge. Imagine four miles of pipe just lying on the ground. Now imagine grabbing one end and trying to rotate the whole string. Obviously, rotation is the most basic force involved in the act of drilling. And pushing that drill string farther and farther away from the rig is pushing equipment and crews to the limit. "The rig is pretty much running at 100 percent capacity 100 percent of the time," says James. "And our guys are pretty proud of what they have been able to do."

Weir punctuates that thought. "These are big wells, and thus far we have been able to achieve all the objectives that Maersk has given us. They know that this is a challenge for this rig, but they are counting on us. And so far so good. That is certainly something to be proud of."

THE ULTIMATE ACHIEVEMENT—SAFETY

The pride to which Luke James and Duncan Weir refer is founded on much more than reaching the client's desired total depth. What truly makes these achievements astonishing is the safety record the *Heritage* has realized in the process. The rig has gone over eight years without a lost time incident and over two years without a recordable doctor case.

"These people on the rig are remarkable," says Jimmy Moore, Area Manager of Europe Africa & Middle East. "They know full well that they and the rig are being pushed extra hard, and they are coming through with extraordinary operational service and safety.

"What makes all this even more impressive," he adds, "is the atmosphere they are working under. We get 120-degree temperatures. We have an international crew working together— American, Maltese, Australian, Scottish, Indonesian, Phillipino, Indian—speaking half a dozen languages. We have to do a lot to keep the crew sharp and the equipment in great working order. This kind of environment would seem to cause incidents, but our guys are doing great. They never complain or shut down on you. They work the rig, keep the structure clean, keep the workplace safe, and keep the customer satisfied."

And Maersk Qatar is not the only customer that has enjoyed the safety record. The *Heritage* has also worked in Egypt, Indonesia, Australia, Ecuador and India. In late 2006, the rig also spent 50 incident-free days being extensively refurbished at Lamprell shipyard in the U.A.E. "And still there is one more factor," says Luke James. "The wells drilled in Qatar are invariably through hydrogen sulfide gas formations. H2S is a highly poisonous gas that the rig and crew have to be specially geared up for, which makes the safety record even more outstanding."

CUSTOMER SATISFACTION

Svend Aage Hansen, Drilling Manager for Maersk Qatar agrees that something pretty special is happening on the *Ocean Heritage*, which is the first Diamond Offshore rig his company has ever contracted.

"We knew going in that the rig was a little bit small and might have problems drilling the kinds of wells we wanted," he says. "But we have all been pleasantly surprised. I know in many cases we have been running at the very edge of the capacity that the rig was built for and even beyond. Diamond Offshore has shown immense commitment to the team. They have been very forthcoming on the limitations of the rig, but also very committed to our objectives. Everything has turned out to be a really good experience."

Hansen is quick to add that in the eyes of his company, the safety record is what has been the crowning achievement. "Safety is at the top of the agenda for Maersk," he says. "We really appreciate the balance this crew has shown – getting great productivity and efficiency without pushing beyond safety. Sometimes there seems to be a contradiction between getting high safety and high productivity, but not on this rig. They have gone hand in hand. This is quite obviously a very safety conscious crew, both on board the rig and the Diamond Offshore people onshore in Doha."

Maersk has operated in Qatar since 1992, but the company dramatically stepped up operations in the area last year. That is when they turned to Diamond Offshore. Hansen admits that contracting the *Heritage* was simply a matter of timing. "The rig was available when we wanted to get started, as simple as that." Duncan Weir adds, "Let's be honest, this rig is all they could get at the time. That is why I think everyone is extra proud of what we have achieved. I think we were almost expected to come up a little short, so the determination has really been there to come through." The *Ocean Heritage* is contracted to Maersk through this summer.

SCOTT REDEPENNING is an internationally experienced freelance writer, enthusiastic soccer coach to 5-year-olds, and a highly qualified beach bum.

A NEW HERITAGE

The Ocean Heritage was built in 1981 at Keppel FELS shipyard in Singapore and upgraded there in 2002. But last April, upon emerging from an extensive upgrade at Lamprell shipyards in the U.A.E., there was much to distinguish the rig from its former self. Improvements include two new Seatrax cranes, four new Derrick Flo-Line shale shakers, six new 1,600 cubic-foot bulk tanks, six new winches, extensive new decking and anode replacements on the legs.

The upgrade paid extra attention to the human factor. There is new plumbing, air-conditioning, floors and ceilings in the expanded living quarters and a new climate-controlled driller's shack. A second Alpha-Laval water maker has been added and ventilation has been increased in the machinery spaces. A servicecompany office and conference room also have been added, as well as a PBX rig phone system interfaced with a new General Alarm / Public Address system.

"This is an old rig, so the facelift has been great," says operations manager Luke James. "There are new quarters, new cranes, a lot of steel replacements, new paint—the whole rig feels brand new. This has been really great for morale. There is a definite feeling of pride on this rig." ⁶⁶ THIS IS A PLAIN VANILLA LITTLE RIG doing extraordinary things," says duncan weir, diamond offshore's vice president of contracts and marketing. "and by extraordinary, I mean that this rig is drilling huge step-out wells with long, long horizontal sections. These are by any industry standards significantly challenging wells and the *heritage* has done a great job for our customer, maersk oil."

QATAR A SPARKLE in the SAND



A TINY DESERT NATION that sits

upon an enormous volume of the world's oil and gas reserves, Qatar is a spirited commingling of Islamic cultural heritage and ultra-modern life. The country is home to roughly 600,000 nationals, total. The immense disparity in the people-to-oil ratio has made the Qataris by far the wealthiest individuals on the planet, per capita. This prosperity shows.

"Life there is very good, very relaxed," says Duncan Weir, who developed the contract for the *Ocean Heritage*, drilling in the Persian Gulf. "I have been going to Qatar for over 10 years. The landscape of the country is predominantly sand and scrub, but Doha has developed incredibly over the last 10 years."

Weir is referring to Qatar's bayside capital city—a metropolis that rises from the sand in sparkling newness, beckoning corporate investment and tourism alike. Doha's relatively recent development includes an international airport, modern seaport, world-class hotels, dining and sports facilities, thoughtfully laid out along a waterfront lined with seven kilometers of lush gardens.

Beyond Doha, which is home to nearly the entire country's population, settlements are scarce. Qatar is roughly one-fourth the size of Denmark, or slightly smaller than the U.S. state of Connecticut. Most of the country is flat, occasionally giving way to hills and sweeping sand dunes. Summer temperatures regularly reach 120-degrees Fahrenheit (48.8C), and yearly rainfall tops out at three inches (76mm).

Islam is the official religion of Qatar, with Arabic the official language. The country's legislation derives from Shari'a (Islamic Law), and government rule is hereditary, headed by the Emir H.H. Sheikh Hamad Bin Khalifa Al-Thani.

While attracting an increasing flow of investment and tourism, Qatar is also sending much out into the world. The country sits upon the planet's third largest gas reserve and is currently building one of the world's largest plants to process and export the resource.

"From where I sit this is one of the most important areas in the world where we can be," says Weir. "There are tremendous resources to be tapped here. So we are very happy that our Company is taking part." \blacklozenge



On the Hunt

As Devon Energy expands its global deepwater exploration program,

R.K. "Rick" Mitchell, Vice President Worldwide Drilling and E&P Services, talks about the company's plans and the role Diamond Offshore's newly commissioned ultra-deepwater semi, the Ocean Endeavor, will play.

BY MOLLY GLENTZER

PHOTOGRAPHS BY JEFF HEGER



R.K. "Rick" Mitchell doesn't keep many knick-knacks in his corner office in Downtown Houston, which has a close-up view of the former Enron towers. But high on one shelf sits a small statue of a golden elephant. The figure reminds Mitchell of safaris he has taken in Africa; but the statue could also represent the position his employer, Devon Energy Corporation, enjoys as one of North America's largest independent oil and gas producers.

As Vice President Worldwide Drilling and E&P Services, Mitchell oversees Devon's worldwide drilling programs and strategic contracting, which include deepwater operations in the Gulf of Mexico, Brazil, and China. Devon's philosophy, Mitchell says, "is to maintain a good balance between strong, reliable U.S. and Canada onshore developments and high-impact deepwater offshore exploration."

Founded in 1971 and headquartered in Oklahoma City, Devon has grown through the mergers and acquisitions of 27 different companies, Mitchell says. Six of those have happened since 2000. A merger with Ocean Energy in 2003 enabled the development of Devon's large deepwater and Gulf of Mexico portfolio.



"We think big but still have that small company feel. We try not to bog down with bureaucracy. That gives us a competitive advantage: the ability to move quickly."

While deepwater exploration accounts for only about 10 percent of Devon's current portfolio, Mitchell says the company aims to expand. "We now have a significant number of high impact drilling prospects. To date, Devon has made four discoveries in the Gulf of Mexico's Lower Tertiary (see Elephant Hunters, p. 10). "None of the discoveries are on production as yet, but we have built up a significant inventory, with a variety of partners, and are now confident that we are in a position to move within the Lower Tertiary and Miocene," says Mitchell. In fact, Devon is the second largest leaseholder in the Lower Tertiary.

Diamond Offshore's newly upgraded 5th generation ultradeepwater semi, the *Ocean Endeavor*, is contracted with Devon for four years, and is due to be working in the Gulf of Mexico by early this summer. Members of Devon's Corporate Drilling Group have teamed with Diamond Offshore in Keppel FELS shipyard in Singapore, where the rig has been since early 2005, to modify, commission, and test the rig to ensure a smooth transition.

"When we make a big commitment like this, we want to make sure we have everything lined up strategically," Mitchell says. "We have been working closely with Glenn Gipson and the rest of Diamond Offshore's Singapore team on all the commissioning activities, so that the *Endeavor* is ready to go when the rig arrives in the Gulf. Between the rig, ancillary equipment and services, the spread rate for us on the *Endeavor* is about \$6 per second, or \$500,000 per day; so we want the rig fully functional and operating efficiently from Day One."

Though by no means the company's first deepwater contract, this is Devon's first long-term rig commitment with Diamond Offshore. "We like Diamond Offshore's longstanding history of performance. We picked up a great rig, and the unit can handle anything we need it to do," Mitchell says. "And with Phil Toby and his people managing the rig, it's a good team."

Devon plans to use the *Endeavor* to drill and complete the first two development wells on the Cascade Development as well as several significant exploration prospects. "We are hoping this will be the first Lower Tertiary development brought onto production," Mitchell says. The wells will be drilled and completed by Devon and then operated by Brazil's national oil company, Petrobras, with production expected in 2009.



Devon also plans to kick off a major deepwater exploration program offshore Brazil in early 2009. The company will continue its exploration program offshore China and move to deeper water where Devon's production is currently more than 70,000 barrels a day in shallow water. "There have only been a couple of deepwater wells drilled in China to date. Husky drilled the initial deepwater discovery well, and we have the block right next to them, so we are pretty excited," Mitchell says.

Devon remains high on the GOM partly because the cost of access is still reasonable there, compared to hot spots such as Nigeria and Angola. While the international market will be active for many years to come, Mitchell explains, the ability to gain access to acreage is a challenging issue. "We have tried to focus on and move to areas before the cost of entry becomes extreme."

Mitchell's perspective comes from years of international experience. "I'm kind of an oilfield brat," he says. He grew up in southwest New York State, where his father worked for Dresser Clark, a builder of oilfield compressors. With a petroleum engineering degree from the University of Oklahoma, Mitchell worked 18 years for Chevron and has spent much of his career overseas—from the North Sea and Holland to Kazakhstan, Russia, and the Ivory Coast. He landed at Devon via Ocean Energy, where he was Vice President of International Operations.

Mitchell likes Devon's well-rounded nature. "We think big but still have that small company feel. We try not to bog down with

bureaucracy," he says. "That gives us a competitive advantage: the ability to move quickly."

Devon has about 4,600 employees, including field staff, worldwide. Yet, Mitchell says, "It's not uncommon to have our Senior Management pop by your office. You can have a relationship with senior management here, and they like to hear everything, good and bad."

Mitchell and his wife, Cyndee, have two sons—Brandt, 27, and Nick, 15. "And there are the three other kids," he says, smiling: "Our dogs." Come summer, the trout steams and ponds near the family's cabin in Pennsylvania beckon. "There are also lots of deer, turkey and bear," Mitchell says.

Animals of all types loom large in Mitchell's life. He serves on the board of the Houston Zoo, and his exotic vacation of choice is a safari. "I don't get to do a safari that often, but I have been to Namibia and Zimbabwe, and I'm taking Nick to South Africa this summer." As apt to carry a camera as a gun, Mitchell says his biggest thrill "is really just seeing the animals."

But he has got more than a statue of an elephant to prove his prowess. His favorite trophy is a prize specimen of a greater kudu, a large antelope with spiral horns, which hangs at the cabin. "That is my deal with Cyndee," Mitchell says, grinning. "No taxidermy in the house, only in the cabin." \blacklozenge

Freelance writer MOLLY GLENTZER is based in Houston, Texas.





From shallow-water submersibles to ultra-deepwater floaters,

Diamond Offshore

holds a long and rich heritage in the offshore drilling industry.

BARGES to BEHEMOT SF

A LOOK AT DIAMOND OFFSHORE'S DEEP ROOTS

By Denise Allen Zwicker

Diamond Offshore traces the Company's beginnings to the earliest days of the offshore drilling industry. Today, after decades of innovation and opportunistic multiple-company and rig acquisitions, we provide contract drilling services to

the energy industry around the globe and are a leader in deepwater drilling.



A History of Innovation > **ODECO**The Predecessor Companies: ODECO

Much of Diamond Offshore's history is that of ODECO

(Ocean Drilling and Exploration Co.). ODECO was founded in New Orleans in 1953 by Alden J. "Doc" Laborde. This marine engineer and commander of a destroyer escort in World War II got to know the oil field in 1947, when he went to work for Kerr-McGee, the first driller to work offshore in the Gulf of Mexico.

"In those days, they built a steel-piling platform, put a converted land rig on it, and used boats to supply it," says M.R. "Moe" Plaisance, vice president—International Operations for Diamond Offshore and a former ODECO employee. "If they drilled a good well, they had a structure in place to produce the oil or gas. But, if the well was dry, it was a lot of trouble and very costly to take down and rebuild elsewhere. Laborde noticed the way inland barges work and said 'Why not do that for offshore drilling?' He wanted to design a mobile offshore drilling unit (MODU) that could move from one spot to another without having to be rebuilt each time."

Laborde designed a platform supported by columns on top of a barge. The barge could be flooded so that the unit's hull rested on the ocean floor. When the drilling was finished, the barge could be towed to a new drilling site.

"His was the first submersible rig design in the world, and he tried to sell the design to Kerr-McGee, but they wouldn't bite," Plaisance notes. "So he quit his job and started looking for someone to back him. At last, he found Murphy Oil Co. in El Dorado, Ark. Charles Murphy ran an onshore oil company, but he saw promise offshore. And he saw this as a way to enter the offshore arena.

"Laborde needed \$1 million to build his rig, so Murphy put up \$500,000 of that (a new semisubmersible today can cost as much as \$700 million). Laborde found other investors to put up the rest. Murphy gave Laborde 10 percent and made him president. And, when Laborde built that first rig, he named it *Mr. Charlie* in thanks to Charles Murphy for believing in his idea," Plaisance says.

Not everyone believed. "The president of McDermott came to the shipyard where they were building *Mr. Charlie* and said, 'You ought to put some big pad eyes (for lifting) on this thing so I can haul it off for salvage," Plaisance notes. But Laborde had the last laugh. The rig drilled a discovery well on its first attempt—the South Pass Field, near the mouth of the Mississippi River, for Shell Oil.

After a decade of working with submersibles, Laborde and his staff had noticed how stable the rigs were while they were being submerged at a location. "They tried not pumping out all of the water and moving the rig while it was partly submerged," says Plaisance. "The idea worked. So they opted to design a rig that was semisubmersible, held in place by anchors. "They built a scale model and tested the rig in Laborde's neighbor's swimming pool. They were pretty amazed that the model sat there, almost still," he says. "So they decided to build the *Ocean Driller* in 1964—which was the first purpose-built semisubmersible." The *Ocean Driller* and its successor, *Ocean Explorer*, were the company's two prototype semisubmersibles. They ushered in a new era of offshore drilling for the growing company.

ODECO rigs pioneered exploration of the North Sea during the late 1960s, finding seven major fields. *Ocean Viking* discovered the giant Ecofisk Field for Phillips Petroleum. *Ocean Victory* found the Piper and Claymore fields for Occidental Petroleum. *Ocean Voyager* discovered the Brent, Cormorant, and Auk fields. And *Ocean Kokuei* found the Ninian Field.

In 1969, ODECO got in the jack-up business, building the *Ocean Star* (not to be confused with Diamond Offshore's present day semisubmersible of the same name). The original *Ocean Star* is now an offshore-drilling museum at the Offshore Energy Center in Galveston, Texas. And, in 1971, ODECO designed and built the world's first self-propelled semisubmersible, *Ocean Prospector*.

In 1974, ODECO became the largest and most diversified offshore drilling contractor in the world when the company acquired Storm Drilling & Marine of Houston. The Storm deal added two semisubmersibles, four drillships, and eight jack-ups to ODECO's fleet and brought the company's worldwide drilling operations into new offshore frontiers, such as West Africa and South America.

Murphy Oil Corp. acquired 100 percent ownership of ODECO in 1991. And, in 1992, ODECO was purchased by Diamond M Corp., soon to become Diamond Offshore Drilling, Inc.



Zapata Petroleum Corporation > Arethusa (Offshore) Ltd.

At about the same time that Laborde was founding ODECO, four as-yet-unknown partners were forming another Diamond Offshore predecessor: Zapata Petroleum Corporation, an oil exploration company. The partners were George H.W. Bush (the 41st U.S. President), John Overbey, J. Hugh Liedtke, and Bill Liedtke.

The fledgling company formed an offshore exploration company, Zapata Off-Shore Co., in 1954, with 30-year-old Bush as the company's president. The young company pioneered new offshore drilling equipment. (Zapata Petroleum, headed by the Liedtke brothers, later would become Pennzoil.)

Zapata also was a pioneer offshore Canada, with the *Zapata Ugland* semisubmersible, which was one of the first partnerships between a U.S. driller and Norwegian shipping companies. This is one of the roughest environments for drilling in the world, with rogue waves, fog, icebergs, sea ice, hurricanes and nor'easter winter storms.

The Bush link was always interesting, too. Once, during a meeting, a key Zapata person was called to the phone to talk to 'George.' Turned out that 'George' was the President of the United States!

The offshore company's name was changed to Zapata Corp. in 1982. During the downturn of the late 1980s, Zapata was in trouble and looking to sell its rig fleet. A consortium from Europe, led by Belgians, formed Arethusa (Off-Shore) Ltd. and bought the fleet in 1990. In 1996, Diamond Offshore purchased Arethusa.



Diamond M Drilling Co.

In the early 1960s, an onshore drilling company, Brewster-Bartle, went bankrupt. The banks that now owned the company's rigs called Don McMahon, a Texas rancher and oilman, and asked him to take over the failed company. McMahon took the challenge and formed Diamond M Drilling Co. in 1964. He named the company after Diamond M Acres, his ranch near Simonton, Texas.

In 1965, Diamond M began as an inland-barge contractor in the Gulf of Mexico, soon growing into the world's largest inland-barge drilling company.

McMahon took Diamond M public in 1970, expanding into offshore waters with jack-up rigs, posted barges, semisubmersible rigs, and a drillship. In the early 1970s, Diamond M was one of the largest owners of barge rigs in the industry. The company expanded overseas into Brazil, Chile, West Africa, Ireland, Sicily, Tunisia, Australia, and Southeast Asia.

In the late 1970s, Western Oceanic tendered an offer to buy Diamond M. Loath to be purchased, Diamond sought and found a "white knight" in Kaneb Services, Inc.

Putting the Pieces Together

After the oil collapse of the 1980s, Kaneb was fighting bankruptcy. Jim Tisch of Loews Corp., New York, had been buying drilling rigs at distress prices. He approached Diamond M's president, Bob Rose, in 1989 with an offer to buy a rig. Rose instead offered Tisch the entire company. Tisch agreed.

In 1992, Diamond M Corp. bought ODECO (with 40 rigs), briefly changing the company's name to Diamond M-Odeco Drilling Inc. before changing the name to Diamond Offshore Drilling, Inc., in 1993. The purchase created the world's largest offshore drilling fleet: 52 semisubmersibles, jack-ups, offshore platform rigs, and a drillship. The company also owned and operated 32 land-based drilling rigs.

Until October 1995, Diamond Offshore was a wholly owned subsidiary of Loews Corp. Then Loews sold 30 percent of the company in an initial public offering. Diamond Offshore Drilling began trading on the New York Stock Exchange under the ticker symbol "DO."

In April 1996, Diamond Offshore acquired Arethusa (Off-Shore) Ltd. (and 11 rigs) with stock. This reduced Loews' stake in the company to 54 percent. Since that time, Loews' share in the company has virtually remained constant. In December 1996, Diamond M Onshore was sold to DI Industries, Inc.

A Legacy of Experience Worldwide

Today, all of the barge, platform and land rigs acquired in earlier transactions have been sold and additional semisubmersibles have been acquired. As a result, Diamond Offshore's fleet now stands at 44 rigs, including 30 semis, one drillship and 13 jack-up rigs, with two additional ultra-premium jack-up units under construction, making Diamond Offshore one of the largest drilling contractors in the world. And with more than four decades of real-world, global drilling experience, the legacies of ODECO, Zapata, and Diamond M have produced one of the most trusted drilling partners in the energy industry.

Houston freelance writer DENISE ALLEN ZWICKER has been writing about the energy industry since about the time Diamond M found its "white knight" in Kaneb Services.

ENDEAVOR(ING) To succeed

THE SHIPYARD PHASE OF THE OCEAN ENDEAVOR CONVERSION FROM MID-WATER SEMI TO ULTRA-DEEPWATER SUPER-RIG HAS BEEN COMPLETED ON TIME AND UNDER BUDGET. THAT IS NO SMALL FEET IN THE BURGEONING E&P INDUSTRY WHERE OVER 100 NEW RIGS ARE EITHER ON THE BOOKS, UNDER CONSTRUCTION OR HAVE BEEN RECENTLY DELIVERED. FINAL COMMISSIONING IS NOW UNDER WAY.

> "These days, coming out anywhere near schedule and budget shows amazing team integration," says John Vecchio, Diamond Offshore's Senior VP of Technical Services. "In fact, a good percentage of the budget contingency was returned, which is almost unheard of. And that is taking into account that these projects are not over-endowed with high contingencies."

The respect attached to this accomplishment is augmented by the sheer enormity of the project. Upon arrival at Singapore's Keppel FELS shipyard in May 2005, the 2,000-ft. water-depthrated 2nd generation Ocean Endeavor was stripped to the bare bones and has now reemerged with all the splendor of a Victory-class new-build. The rig boasts 5th generation equipment, over 50,000 sq. ft. of usable deck space, 6,000 long tons of operating variable deck load, a new integrated hurricane mooring system. and comfortable accommodations for a 140-person crew. By comparison, an equivalent new-build would likely be twice as expensive and take significantly longer to finish.

Designed to drill wells up to 35,000 ft. in 10,000 ft. of water, the *Endeavor* will be more than ready for its first assignment in the Gulf of Mexico for Devon Energy once final commissioning is complete. But before the unit is delivered to any customer, Vecchio stresses that there is an essential round of intense testing and commissioning, and "that is the time we will deal with any unavaged issues that may arise." "Right now, the rig is in Singapore harbor awaiting the heavy lift transport ship," Vecchio says. "While the Endeavor is there, we are running the unit through the paces." The first step is to make sure individual components like the electrical and piping are hooked up correctly. Moving to the next level, each major system is checked, such as the bulk system and mud system. Next is a full integration test, where all systems are brought online and actual drilling is simulated. "We dive right in and mix mud, make up pipe, and do just about everything else that is normally done on the job," Vecchio says. "And we do the work with the real crew that will ultimately be working the rig."

Although the upcoming well site is half a world away from where the *Endeavor* was upgraded, the crew has been phased in over the course of the construction. Crewmembers have helped with equipment installation and will be there through commissioning and testing. They have been getting familiar with this rig, as well as going out to work on other upgraded Victory-class rigs in the fleet to get real hands-on application training. They have also been completing the training courses required for their individual jobs. All this so they are ready to work even before the rig is.

"All of these measures are not required by the client," Vecchio concludes. "But we do this to make sure we are delivering a great working product. We also typically use the same third-party testing companies that our clients do, so everyone is ahead of the game. They do not have to duplicate the effort, and we know we are working from the beginning to be client-ready."

Assuming commissioning goes smoothly, the *Ocean Endeavor* is currently slated to commence drilling in the Gulf of Mexico this summer.

"THESE DAYS, COMING OUT OF THE SHIPYARD ANYWHERE NEAR SCHEDULE AND BUDGET SHOWS AMAZING TEAM INTEGRATION. IN FACT, A GOOD PERCENTAGE OF THE BUDGET CONTINGENCY WAS EVEN RETURNED, WHICH IS ALMOST UNHEARD OF. AND THAT IS TAKING INTO ACCOUNT THAT THESE PROJECTS ARE NOT OVER-ENDOWED WITH HIGH CONTINGENCIES."

OCEAN ENDEAVOR

FOUR FATHERS, FOUR SONS A LOOK at the GENERATIONS

of DIAMOND OFFSHORE

bγ MOLLY GLENTZER photographs by TERRY VINE

IN SOME WAYS, senior well control facilitator Ted Triche and his 20-year old son Derek Triche, a floorhand on the Ocean America, are a little like oil and water. "I was small and didn't play any team sports in high school but I enjoyed playing competitive tennis," says Ted, who grew up near New Orleans. "Derek excelled at high school football. He was a middle linebacker for the 2003 Division II 5A State Champion Katy High School Tigers—although to him, that is ancient history now."

Ted has always felt at home in a classroom. Twentyseven years ago, he left a job as a school teacher to join the offshore oil industry as a rig safety representative. He has designed Diamond Offshore's I.A.D.C. WellCAP Accreditation programs for 15 years. "Through the years, it's been pleasurable and rewarding to see these guys continually develop their well control skills in the classroom," Ted says. "The quality of the hands has improved substantially."

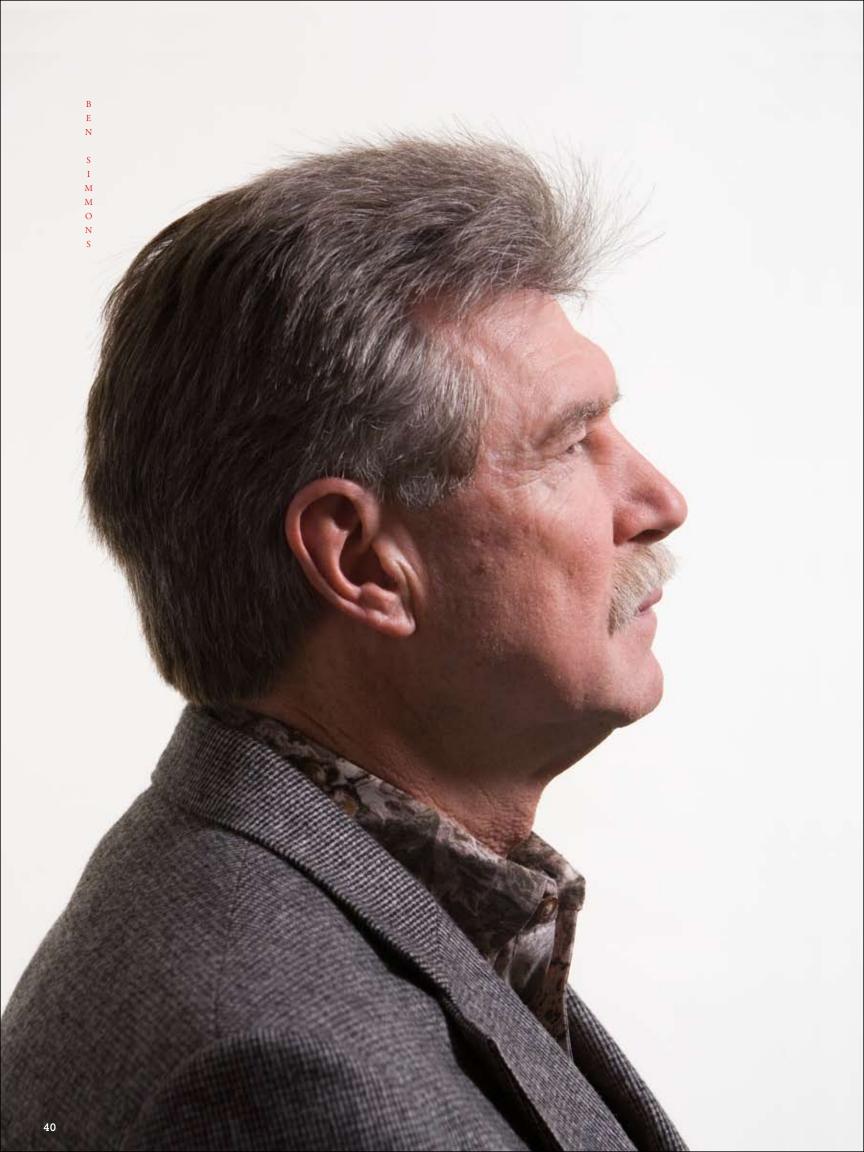
His son has other passions. After two semesters "I realized college wasn't for me. I like working with my

hands." Ted says that Derek thought about joining the military, but his family wanted him to consider all the other career opportunities that were available to him."

Derek didn't have to convince his dad about the benefits of joining Diamond Offshore-including, as Ted says, "a nice truck, an apartment, days off to go hunting, fishing or in the future to raise a family." Now, Ted anticipates watching Derek build his career. "I've told him to work safely and to learn as much as he can on the rig," Ted says. With all the current drilling activity, there are lots of opportunities for advancement."

Unlike oil and water, this father and son do mix well at home. Derek has an apartment in College Station, not too far from his parents' home in Katy, Texas. His mom, Jearnell, drives a special needs school bus for Katy I.S.D.; and his special needs brother, Blake, works at Petsmart. Father and sons fish together at Lake Fayette, between Houston and Austin; along the Galveston jetties; or in Louisiana. Ted and Derek at Blinn College in College Station, Texas, Derek says, both like computers, Ted says, "although he is more into web sites like My Space."





"I HAVE COME TO REALIZE over the many years I have been in this industry that offshore work is not for everyone. But it has certainly been good to me. And I sincerely feel that working offshore is an excellent career opportunity for a young man who wants to get started in this industry," says subsea superintendent Ben Simmons, who began his career as a rig electrician in 1973. He isn't only speaking from personal experience. Ben's 27-year old son Clint Simmons, who joined Diamond Offshore as a roustabout in 1998, is now a driller on the *Ocean Valiant*.

L I N T

S I M O N S

"The opportunity is extraordinary," says Clint. His co-workers on the rig are "as much my family as the people at home," he adds. "I've developed good friendships; and the all-around environment is good." Clint supervises about six rig employees, on average; and he sees additional responsibilities in his future. "I just want to move up within the company. Night tool pusher would be my next step," he says.

The Simmons are equally intent on quality time when they are at home, which usually means weekends together in Mississippi. Ben and his wife, Dana, a successful Relocation Realtor with Keller Williams Realty in the Houston area, live in Houston although they are remodeling what will one day be their retirement home in Lumberton, south of Hattiesburg, Mississippi. "We have a little place out in the country that we like to refer to as our little piece of Heaven as Clint so fondly called it once just after we first bought the place," Ben says. Clint recently bought a wonderful four-bedroom home in nearby Purvis. Clint loves to play golf in his off time. "We also like to hunt small game, deer, turkeys, and when we are not hunting we love to fish and shoot skeet with family and friends," Ben says "It is about the camaraderie – having a pleasant time, and simply spending time together as a family." We are a lot alike, Ben says of Clint. "Sometimes it's kind of scary."

Ben's family also includes his daughters Aaron, Amberly and Angela, and two sons Kevin and Jeffrey—both of whom decided against careers in the oil patch. Our Family is growing; our oldest son, Kevin, and daughterin-law Robin, just added our 6th grand-daughter to the family tree on Feb 22, 2007. Still no Grandsons yet, "although I am hopeful," says Ben.



SAFETY SUPERVISOR David Roxburgh's father was a milkman, and his grandfather worked for a funeral home. Five of Roxburgh's six children are taking equally divergent paths, but his 31-year old son Matthew appears to be a chip off the old block. Matthew, a roustabout on the *Ocean Confidence*, joined Diamond Offshore in June 2006.

"I tried to persuade him not to join the oilfield at first because of the time he would miss with his wife and kids," says David. Matthew and his wife, Lory, have four children ages 8 to 12. But they were both working and attending college full-time, and Matthew wanted a career change.

He had a lifetime role model in David, who travels frequently to Mexico and serves as a member of the Latin American Safety Board. "I have been in the oilfields 30 years, and a safety man since '79," David says. "I can go on any rig Diamond Offshore has and know somebody."

Which means that Matthew also has a reputation to uphold. "He has to earn his own way," David says. "You've got to fit in out there, because you are together six months a year." Matthew says building rapport with the guys is one of his job's pleasures. "You build a routine." And when family matters arise, he adds, "Diamond Offshore takes care of you." He is happy that the Company's rigs will receive WIFI this year, allowing him to maintain closer contact with Lory and the kids back in South Texas.

"When I'm home, it's all about them," Matthew says. He also enjoys time with his dad. "We both love motorcycles. Dad belongs to a club in Beaumont that does charity work for kids, and he just got a new Harley," Matthew says. "We're good friends, not just father and son."

KEEPING A CLOSE EYE on Diamond Offshore's physical assets is Manager of Materials Control, Tom Richter's focus. On an auditing trip a few years ago to the Ocean Tower, he also keenly eyed a human asset: His son Matt was working there. "I could see how safe and how smart he was working," Tom says. "That helped calm my nerves."

Tom had worked on rigs, too; he joined Diamond Offshore 13 years ago as a roustabout. "It has been a wonderful ride, like working with family," he says. Still, recently moved to West Monroe, La. and are buying his wife, Cassie, couldn't help but feel some parental concern when her younger son headed offshore. (The Richters' older son, Mike, works for Clear Channel.) "We have an amazing safety culture and an excellent safety record," Tom explains, "but anything on a rig can hurt you if you are not paying attention."

year with Diamond Offshore, he is now a derrick hand. Offshore," he says. "We are both big on doing the "He has been an active leader since he could walk," whole father thing, from diapers to careers." 🔶

Tom says. Matt, in return, credits his dad. When he was growing up, hearing Tom's stories about the rigs, he says, "kept me on the edge of my seat. The stories made me think every man out there was superhuman. And working my way up the ladder, I learned to have a whole new respect for my father. Knowing what he went through to get where he is showed me what it takes to make something out of myself."

Matt, his wife, Krystle, and their son Ethan a home there. Since Tom is based in Houston, they don't see each other now as often as they would like. "We try to spend as much time as possible with each other," says Matt. They hunt and fish together, and they both enjoy trucks—especially big ones.

Tom is a proud dad, all the way around. "Folks Matt, now 23, has excelled on the job. In his fourth like Matt and his peers are the future of Diamond



Н 0 М A S R Ι С Н Т E

Ocean Epoch safe well-test completion

I would like to congratulate you all for the safe completion of the well-test in Prelude-1A. This being a high level activity in a new operation for Shell, we have paid extra attention and scrutiny to the planning and execution of this well-test, and I am very impressed with the focus on safety, the professionalism and team work displayed. This test has seen excellent team work between staff in Australia/New Zealand/Malaysia and between our main service providers for this test operation.

I thank the Schlumberger and Diamond Offshore organizations for the safe execution of the well-test and would like to mention Ken Glover, who has done an excellent job in leading and coordinating the test and Hatem Kandeel who has provided excellent regional support.

Thank you and regards,

MARTIN VOS HEAD OF WELL DELIVERY (REGION SHELL ASIA PACIFIC

Ocean Vanguard willie dow's jungle run

"Four days worth of jungle running are beginning to take a heavy toll on the competitors. Several are out due to the effects of the heat and humidity. Foot problems plague most of those left. The first of the toe-nails are coming off, along with large chunks of mashed skin. The jungle is doing everything possible to include the runners in the local food chain. If not mosquitos chewing your ears, its ants at your toes. Most are struggling to obtain the daily calorie requirement, with ingenious combinations of food stuffs. One Brazilian competitor even managed to get to checkpoint 3 (day 3) with an unbroken raw egg rattling around his 'bumbag' --- incredible, bordering on the miraculous! Tomorrow, the big stage and an overnighter in the jungle for many."

Ocean Vanguardstoreman Willie Dow'sson, Willie, is a competitor, a patriot and a humanitarian. Willie Sr. says that his son entered the The Jungle Marathon (International marathon through the Amazon jungle in Brazil) in aid of The Beanfeast Charity for Children, which is designed to make a meaningful difference in the lives of children in Scotland and around the world. The 200 km marathon took place over six stages, with runners battling 200-meter river swims, swamps, heat, humidity and the "beasts" of the jungle. Approximately 60 runners took part, but many retired due to the effects of scorpion stings, ant bites and trench foot. Rest, if you could get any at the end of each stage, was a hammock strung between two trees. Stage 5 was an 87 km romp through the night. Willie reported that most of the jungle creatures must have worked the night shift and that he dreads to think what he was running on and how many flying "beasties" he swallowed. For this torture The *Ocean Vanguard* crew gave him £500 and the Aberdeen office staff pledged approx£150 for the charity plus various other companies have given their support.

Willie did not cross the finish line in first place, but he certainly was not last. After a week back at his base in Benson, Oxfordshire with his wife and son, Willie deployed to Iraq with the 33 Squadron for another two month tour of duty. Rumour is that Willie is going to try the Canadian Death Run next year. Nutty lad, comments his dad.

Ocean Guardian EXCELLENT HPHT PERFORMANCE

I (would like to) document our thanks to your HPHT drilling team for an excellent operational performance on Quasimodo in the North Sea. To safely complete a difficult exploration well in two thirds of the planned time is a fine achievement despite the coincident geological disappointment. I look forward to reading the post-well performance analysis of what learning springs from this successful execution.

Regards,

MICHAEL SMITH

EUROPE EXPLORATION PROJECT MANAGER EXXONMOBIL INTERNATIONAL LIMITED

Ocean Guardian, Ocean Princess, Ocean Nomad Five star safety awards

Diamond Offshore Drilling (UK) Ltd.'s office in Dyce, England, together with three Diamond Offshore rigs operating in the U.K. sector of the North Sea, have received the internationally recognized Five Star Health and Safety Audit award from the British Safety Council.

Following a comprehensive safety evaluation, organizations are given star ratings from one to five—to indicate the effectiveness of their safety programs. Action plans are then provided to the participants that are designed to help companies reduce their insurance premiums and increase repeat business from customers by identifying health and safety strengths and weaknesses.

David Ballard, Chief Executive of the British Safety Council, says: "A positive company image through first-class health and safety is vital. It not only makes excellent business sense to have the safest workplace possible, but it also boosts the morale of employees. "I hope other companies will take the lead from Diamond Offshore Drilling (UK) Ltd and forge the way towards a safer future with a Five Star award."

Diamond Offshore SAFETY EXCELLENCE IN LAKE JACKSON DISTRICT

Diamond Offshore has been awarded the 2006 Lake Jackson MMS District SAFE award for Safety Excellence. The SAFE Program recognizes exemplary performance by Outer Continental Shelf oil and gas operators and contractors. Diamond Offshore rigs earning the recognition include:

Ocean Spartan:

Two inspections in the district in 2006

Ocean Valiant:

Two inspections in the district in 2006

Ocean Champion:

Five inspections in the district in 2006

Ocean King:

Four inspections in the district in 2006

During the 2006 inspections, the MMS found no Incidents of Non-compliance (INC) and no lost time accidents were incurred. The .00 INC-to-Inspection ratio for these rigs is substantially lower than the .034 industry average in the district. As a district award winner, Diamond Offshore also becomes eligible to win a National SAFE Award, which is presented in April of each year.

Ocean Vanguard safe, efficient, great teamwork - job well done

Just wanted to send a final note of thanks to the team in DODI who made this summers' work both a success and enjoyable. Feel free to circulate to your guys back in Aberdeen and Houston.

The work done was significant for Shell in both business terms and local office terms. Draugen (oil field) in the North Sea is the only operated asset we have, and this year we did some major servicing of the older wells. I have attached some of the internal text (see below) that was sent throughout the Shell world so you can see what was said. I really enjoyed the work and consider the teamwork to be the highlight of the summer's operations. The DODI team onshore and offshore played their part very well in this respect and what I would call character was shown when we had our problems with all parties pitching in to make the job both safe and successful. The fact that the Vanguard has now proven itself as a completions rig is I hope going to bring you more work. I am happy to be used as a reference if ever needed in this respect.

Many thanks,

CALLUM SMYTH

SHELL

A SUMMARY OF THE WORK DONE:

E1: Diamond Offshore bought the Ocean Vanguard in 2003 from Smedvig. Before the rig came to Shell in the summer of 2006, the Diamond Offshore crew had never performed any completion operations with the unit. Therefore, a great credit is due to all the companies involved (Diamond Offshore, FMC, Kværner, Vestbase, Halliburton, Schlumberger, Seadrill, Oceaneering, Expro, Odfjell, Fugro, Smith Red Baron and Shell) that the rig managed to go straight into a subsea flowbase replacement operation. The operation was done safely and within budget with some very challenging rig limitations. Custom built skids were made for the movement of the xmas tree and flowbase on the rig and the operational success of the job is primarily due to the excellent teamwork that was a key theme for the whole project.

SWIT: After E1, the rig moved to SWIT and conducted a two-well workover operation, pulling the xmas trees and tubing and replacing with new pipe and re-furbished trees. Again, the excellent teamwork resulted in a very

impressive performance and the operation that was planned for 73 days was delivered in 60 days. One very notable success was the fact that one of the trees pulled was turned around, with FMC working night and day for four weeks, and re-run as part of the project. This was not in the original work scope at the time of project sanction, and hence a second intervention with another vessel/rig has been avoided. Once again this is due to the efforts of very dedicated people, over 310 people in all, who contributed to the project and it is the efforts of these people who have made the project a success. When I think about this project, what comes to mind first is teamwork. The offshore crews have worked together and this is illustrated by both the result (three wells back in service), plus the quality and quantity of the daily safety focus (STOP, TOFS, JSA's etc). When we have had our challenges we have worked together to solve the issues and always made forward progress because people have come up with solutions.

The result today is that E1 is online and producing some 500-750 m3/d oil, ready for gas lift. The SWIT wells are both up and running with a total of 21,000 m3/d combined injection (max rate from pump) with a reduced back pressure (some 20 bar lower due to the larger tubing) and full integrity on the annulus and tubing.

The rig has moved to A55 and is now anchoring up over this well. This in itself merits thanks as this addition to the project has, like all other challenges, been taken in our stride with people doing what was needed to get the job done. We have around a weeks' work to do and then the rig will move to Total. While this will mark the end of the 2006 Draugen rig campaign, I look forward to working together with many of you on the forthcoming 2007 Draugen campaign.

A55: Well A55 had been closed in since December 2005 due to the tree becoming un-locked from the wellhead. In September 2006, the primary well barrier was noted to be leaking and progressively worsening. With a serious threat to the secondary well barrier (the xmas tree) this status was considered serious enough to prioritize a well intervention using one of the rigs available to Norske Shell. The obvious choice was the Ocean Vanguard, working within the Draugen field already. The Vanguard project team was requested to prepare for an intervention and given the time frame (three weeks) the team planned and then executed an outstanding operation that

solved the integrity issue with the well allowing production to recommence.

Overall: When the rig moves off location, the unit will have been with Norske Shell for 98 days. The results speak for themselves, with four wells retuned to service contributing around 3,000 m3 oil equivalent, which is 20% of the Draugen total daily production. Throughout the campaign, safety has been given the highest priority by both Shell and all the contributing service companies with the Diamond Offshore safety systems being used at all times. There have been incidents on the rig, but the response to these incidents has been very professional. Nearly 6,000 safety points were recorded over the campaign (this includes permits, STOP cards, Job Safely Analysis, safely inductions and time outs for safety). Thanks to everyone for making such a good project.

Ocean General Performance recognition

We would like to acknowledge and recognize the excellent recent performance of the "Team *Ocean General*" on our drilling program in 2006 (Block 12 drilling and testing), with particular emphasis on the following items:

■ The five-year free LTA target achieved on September 3, 2006.

• The substantial efforts and contribution of the rig team in achieving and maintaining our ISO14001 and OHSAS 18001 accreditations.

• The safe and successful assimilation of new Vietnamese drill crew into the rig team with the excellent approach to supervision and training adopted on the *Ocean General*.

• The very low percentage of rig nonproductive time experienced throughout the campaign attributable to good maintenance and attention to detail.

• The effective and professional approach to dealing with the loss/kick difficulties experienced on the Dua 4X ST2 well.

• The very efficient manner in which all rig moves and anchor handling operating were planned and executed.

In recognition of these achievements, Premier Oil Vietnam Offshore BV is pleased to be able to contribute to the installation of a tracking system for the rig's satellite TV entertainment system.

We at Premier Oil Vietnam Offshore BV are looking forward to working with Diamond Offshore on another occasion in the near future. With Best Regards,

CHARLES DUNNE DRILLING MANAGER PREMIER OIL/VIETNAM OFFSHORE



SEMISUBMERSIBLES			
OCEAN CONFIDENCE	7,500	DP: 15K: 4M	G 0 M – U S
OCEAN BARONESS		VC; 15K; 4M	
OCEAN AMERICA	5,500	SP: 15K: 3M	
OCEAN STAR	5,500	VC; 15K; 3M	
OCEAN VALIANT	5,500	SP: 15K: 3M	
OCEAN VICTORY	5,500	VC; 15K; 3M	
OCEAN QUEST	3,500	VC; 15K; 3M	G O M – U S
OCEAN VOYAGER	3,200	V C	G O M – U S
OCEAN CONCORD	2,200	3 M	G O M – U S
OCEAN WHITTINGTON	1,500	3 M	G O M – U S
OCEAN SARATOGA	2,200	3 M	G O M – U S
OCEAN NEW ERA	1,500		G O M – U S
OCEAN WORKER	3.500	3 M	MEXICO
OCEAN YORKTOWN	2,850	3 M	MEXICO
OCEAN AMBASSADOR	1,100	3 M	MEXICO
OCEAN GUARDIAN	1,500	3 M	NORTH SEA-UK
OCEAN PRINCESS	1,500	3 M	NORTH SEA-UK
OCEAN VANGUARD	1,500	15K; 3M	NORTH SEA-NORWAY
OCEAN NOMAD	1,200	3 M	NORTH SEA-UK
OCEAN ROVER	7,000+	VC; 15K; 4M	MALAYSIA
OCEAN EPOCH	1,640	3 M	MALAYSIA
OCEAN GENERAL	1,640	3 M	VIETNAM
OCEAN BOUNTY	1,500	VC; 3M	AUSTRALIA
OCEAN PATRIOT	1,500	15K; 3M	AUSTRALIA
OCEAN ALLIANCE	5,000	DP; 15K; 3M	BRAZIL
OCEAN WINNER	4,000	3 M	BRAZIL
OCEAN YATZY	3,300	D P	BRAZIL
OCEAN LEXINGTON	2,200	3 M	EGYPT

JACK-UPS			
OCEAN TITAN	350	IC; 15K; 3	G 0 M – U S
OCEAN TOWER	350	IC; 3 M	G 0 M – U S
OCEAN KING	300	IC; 3 M	G O M – U S
OCEAN SPARTAN	300	IC	G O M – U S
OCEAN SUMMIT	300	IC	G O M – U S
OCEAN COLUMBIA	250	IC	G O M – U S
OCEAN CHAMPION	250	MS	G O M – U S
OCEAN CRUSADER	200	MC	G O M – U S
OCEAN DRAKE	200	MC	G O M – U S
OCEAN HERITAGE	300	IC	Q A T A R
OCEAN SOVEREIGN	300	IC	INDONESIA
OCEAN SPUR	300	IC	TUNISIA
OCEAN NUGGET	300	IC	MEXICO
INTERNATIONAL DRILLSHIP			
OCEAN CLIPPER	7,500	DP; 15K; 3M	BRAZIL
UPGRADING			
OCEAN ENDEAVOR	8,000+	VC; 15K; 4M	SINGAPORE
OCEAN MONARCH	8,000+	VC; 15K; 4M	SINGAPORE
UNDER CONSTRUCTION			
OCEAN SHIELD	350	IC; 3-4 M	SINGAPORE
OCEAN SCEPTER	350	IC; 3-4 M	G O M – U S

KEY

DP = DYNAMICALLY POSITIONED/SELF-PROPELLED IC = INDEPENDENT-LEG CANTILEVERED RIG

MC = MAT-SUPPORTED CANTILEVERED RIG MS = MAT-SUPPORTED SLOT RIG

VC = VICTORY-CLASS

 $\mathsf{S}\,\mathsf{P} \quad = \mathsf{S}\,\mathsf{E}\,\mathsf{L}\,\mathsf{F}\,\mathsf{-}\,\mathsf{P}\,\mathsf{R}\,\mathsf{O}\,\mathsf{P}\,\mathsf{E}\,\mathsf{L}\,\mathsf{L}\,\mathsf{E}\,\mathsf{D}$

3 M = THREE MUD PUMPS

 $4 \mathsf{M} = \mathsf{FOUR} \mathsf{MUD} \mathsf{PUMPS}$

15K = 15,000 PSI WELL-CONTROL SYSTEM

"But grime comes back," was the sheepish roommate's reluctant excuse for a not-so-tidy living space. Lame, perhaps, but not entirely lacking in logic. So what could this young roustabout possibly be thinking, vacuuming the deck of an offshore drilling platform? Surely the grime will come back. (It will.) Surely he knows this. (He does.)

But spit-and-polish isn't the point of his efforts. Of course, nobody likes a dirty workplace And there are safety issues. But this job is about something more than tidying up—a lot more. It's about keeping oil from the *Ocean Baroness*' oil-based drilling mud out of the pristine waters of the Gulf of Mexico below. So what, if ships of every size and purpose dumped their waste into the seas for thousands of years? Today, we know better. And we have the tools to do better.

It's doubtful that our modern-day ocean steward bothers to make the comparison. Or, if he thinks about it all, he probably considers himself lucky. After all, vacuum cleaners aren't as old as offshore drilling (the world's first offshore oil well was drilled in 1897 from a pier at Summerland Beach, about five miles south of Santa Barbara, California). It took a Chicago janitor with allergies to come up with the predecessor to today's modern vacuums. Exactly 100 years ago. And the first industrial vacuum cleaner didn't arrive for another 60 years. To be sure, doing his job the old-fashioned way-with a mop and bucket—would certainly leave a lot to be desired. In fact, it might even lead to the

RUMINI

pollution he is trying to avoid. Then again, who could blame him for dreaming of having one of those nifty little robots on a timer to roam these decks at his command.

