BUILDING CONFIDENCE IN THE GULF

As the proverbial storm clouds clear over the Gulf of Mexico, independents are feeling the wind in their sails.

ARTICLE BY
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LLOG Exploration's Delta House production platform is in Mississippi Canyon 254 in about 4,500 feet of water. Four operated fields are currently tied into it, and three more operated fields are expected to be tied in later this year.

The recent downturn shuffled the deck and reduced the number of independent operators in the Gulf of Mexico during the past several years. Those that remain or dropped anchor since, however, are giddy to be there. In fact, they believe they are sitting on unprecedented opportunity.

That was the message of several opportunistic offshore players, both public and private, both shallow water and deep water, at the Louisiana Energy Conference in late May, hosted by Al Petrie Advisors. GulfSlope Energy Inc., Murphy Oil Corp., Deep Gulf Energy Cos., LLOG Exploration Co. and Talos Energy Inc., among others, touted the economics of their portfolios and strategies in the proved but now somewhat forgotten basin.

"We're about to begin our first phase of a multiwell exploratory drilling campaign in one of the most historically prolific and economically profitable petroleum production areas in the world," said Clint Moore, vice president and principal petroleum geologist for GulfSlope Energy. "The Gulf alone has produced about 100 billion barrels of oil to date. Our high-impact drilling portfolio has nine high-potential prospects that contain over 1 billion barrels of oil and gas of gross recoverable reserves."

Greg Hebertson, vice president of exploration and new ventures for Murphy Oil, said, "I stood at this podium a year ago and I said that now was the best time in the last decade to be in the exploration business. I still believe that's the case. … That includes the Gulf of Mexico, both the U.S. side and the Mexico side."

Talos CEO Tim Duncan said his mission is to "remind everybody that the Gulf of Mexico is still the second largest producing oil basin in

PHOTO COURTESY LLOG EXPLORATION CO.

GulfSlope Energy, formed by the same team that led Anadarko Petroleum's sub-salt exploration campaign in the 1990s, was formed to continue and finish that program, said Clint Moore, vice president and principal petroleum geologist.

the country—I think we just forgot that somewhere along the way."

Just like old times ... but better

GulfSlope is a reincarnation of Anadarko Petroleum Corp.'s Gulf of Mexico exploration team from the 1990s, most notably former Anadarko CEO and president John Seitz, who is now GulfSlope CEO. Moore hails from that era at Anadarko as well.

"Our multi-disciplined team led the Gulf of Mexico sub-salt drilling campaign while at Anadarko in the 1990s. We've built GulfSlope for a specific purpose—to ramp up and finish that campaign," he said.

Moore said that the Anadarko team made seven discoveries out of 10 exploration wells at that time and what's more, without the powerful seismic imaging tools available today. "We are looking forward to even more success thanks to the new tools we can employ."

GulfSlope, headquartered in Houston, is primarily deploying reverse-time migration, or RTM, to process 3-D seismic data, a technology Moore helped launch while with ION Geophysical before co-founding GulfSlope in 2013.

"The revolution of reverse-time migration coming into the marketplace in 2008 allowed industry to finally see—with clarity—below salt in many environments. This technological development is the game changer and makes it all possible for us to accurately put the wells where they need to be so we have a high chance of success."

Some 20 years after Anadarko's successes in the Gulf, the GulfSlope team is laser-focused on the sub-salt Miocene play. The company targets depositional reservoirs at least 26,000 feet deep beneath the outer shelf. But almost all of that depth will be drilled through rock, not seawater, said Moore. "And because we are in 250 to 400 feet of water depth, the economics are outstanding.

"The industry has discovered and produced the first five fields in this play with old technology, and we believe that with new technology, we will discover and produce even more. Billions more barrels of oil and gas are likely to be discovered, developed and produced in this play now and in the future."

GulfSlope, which trades on the Over-The-Counter Ventures Market, has licensed some 2.2 million acres—or the equivalent of 400 OCS blocks—of multi-client seismic data and has reprocessed the most prospective areas with the latest imaging technology. From that, the company is now focused on nine drill-ready prospects.

In January, Israel offshore operator Delek Group joined with GulfSlope and partner Texas South Energy Inc. to fund and drill the prospects. GulfSlope is operator and will retain a 20% interest. The company has commissioned Rowan's Ralph Coffman rig, a large 240-C class jack-up, which will soon begin drilling the first two wells of a multiwell exploratory drilling campaign.

The Canoe prospect, a shallow above-salt Pleistocene play located in Vermilion, South Addition Block 378, spud Aug. 9. The second well—the Tau prospect located in the Ship Shoal Area, South Addition Blocks 336/351—will be drilled to 26,000 feet TVD (29,728 feet MD) and will begin the proof of concept for the program, he said. Tau will drill through 9,000 feet of thick salt, before kicking directionally toward the salt flank as that flank slopes under the overlying salt sheet.

Together, the nine prospects represent an eventual $11 billion of NPV-10 value.

"All fields begin with a discovery," Moore emphasized, "and to make discoveries, you have to drill wells."

Short-cycle exploration

Murphy is a public E&P trading on the NYSE with global reach and a balanced portfolio onshore and offshore. Hebertson—also an Anadarko alum—emphasized, though, that the company remained committed to exploration through the downturn while resetting its asset base in advance of a recovery, "which we knew was coming."

The Houston company took the downturn as a time to refocus, exiting various international offshore positions while focusing on four: Brazil, Vietnam, Australia and, of course, the Gulf of Mexico. These in particular compete with the economics of its onshore programs, specifically with full-cycle rates of return in excess of 30% and with F&D costs below $15 per barrel (bbl).

"We're trying to take a more pragmatic approach at exploration, focusing in high-potential, proven areas with proven partners. The economics are better than you think. The projects we're investing in at Murphy are competitive with our onshore projects."

Within the Gulf, traditional Miocene plays in the deep waters will garner Murphy's attention. "We are not looking at Wilcox" nor the Norphlet, he said. "We believe a Miocene play is proven. We believe it's commercially attractive. We believe it offers opportunity for near-term, short-cycle times to both Murphy infrastructure as well as existing infrastructure in the region."

Murphy is focused on two opportunities in 2018: An appraisal of its Samurai discovery in Green Canyon 432, which is currently drilling, as well as a new exploration target in Atwater Valley 23 called King Cake. "We expect, over our mid-range plan, two to three high-impact exploration wells in the Gulf of Mexico."

Murphy was also an early mover offshore Mexico following the reforms that opened the basin to non-Mexican companies, having won rights to the deepwater Block 5 in the Salina Basin in bid round 1.4 in December 2016. "We're very excited about our position there."

Block 5 is equivalent to approximately 111 U.S. Gulf of Mexico blocks, per his comparison. "We see over 1 billion barrels of potential on the prospectivity in that area, and we hope to be spudding a well there late 2018 or 2019 with permits in hand."

Echoing GulfSlope's Moore, Hebertson

TALOS' TIE-INS

If the Zama discovery offshore Mexico last year wasn't enough chest thumping, Talos Energy Inc. in May closed its $1.9-billion reverse merger with restructured Stone Energy, slingshotting itself into the public marketplace and gaining Stone's vast offshore portfolio. Speaking just three weeks after the company went public, Talos CEO Tim Duncan sees the portfolio getting even larger.

"The breadth of opportunity, I would tell you, is unlike anything we've seen before. I do think there's quite a bit of consolidation [remaining] in the Gulf of Mexico. We have a window of 10 years to attack that. It's our job to consummate a very good deal and piece together a very healthy company."

Post-merger, Talos holds some 760,000 net acres scattered across the U.S. Gulf, with shallow and deepwater assets, as well as its Mexican block. Proved reserves are 151 MMboe. The company is guiding 2018 production between 49,000 and 53,000 gross boe/d.

Just days before the merger, Stone acquired Ram Powell Field and a production unit from Shell with Talos' blessing. Ram Powell is located in 3,200 feet of water in Viosca Knoll Area, Block 956, and is capable of processing 60,000 bbl/d and 200 million cubic feet of gas per day. In 2017, production from Ram Powell Field averaged just 6,100 boe/d.

"What could we do around that facility?" Duncan asked. "What could others do around that facility when we open for business? Draw a 25-mile radius around that platform and any idea we might have, or others might have, ought to run itself through that facility. You want to fill that up similar to how it might have been filled up 15 years ago. We'll be pretty darn commercial about that. You should think about that almost as a business center."

Those "ideas" might include finds as small as 10 MMbbl, or "singles" as he calls them. At $70 oil, such a discovery would return 30% to 50% as short subsea tie-backs, depending on distance. And that's risking that 30% of wells don't work.

"Those opportunities to aggregate these small commercial deposits around these big facilities are still in play," he said. "That's small stuff just lying around."

Duncan hopes to replicate the Ram Powell idea elsewhere.

"We're going to buy producing reserves, and then we're going to take that infrastructure and organically work from there."

The Gulf of Mexico is wide open for opportunists, he believes, of which he is one.

"There's stuff to do here and, interestingly, we have a basin that doesn't have a lot of operators. Between M&A activity and cost of goods not rising as fast as other basins, we think that in and of itself is an interesting kind of proposal from an investment standpoint."

"The industry has discovered and produced the first five fields in this play with old technology, and we believe that with new technology, we will discover and produce even more."

—Clint Moore, GulfSlope Energy

reiterated that all oil fields are discovered through exploration, "and you have success by drilling wells.

"We've entered a phase that we believe is correlative to what we experienced in the early to mid-2000s, where we have a cost structure that is attractive. Global offshore wells are far less than $100 million these days. Rig contracts are one-fifth of what they were a few years ago. Long-term contracts are available. Attractive fiscals are available. All the things that we need to be successful as explorers are in place. The way you win is you buy low and you sell high. And we're getting in low.

"So I stand here again a year later and still believe that this is the best time in the last decade to be involved in the offshore exploration business. And that is going to continue for at least a few more years."

Great time to drill

What goes around comes around, and the team running privately held Deep Gulf Energy is the same group that started Mariner Energy in the 1990s.

"Our group has been pursuing basically the same strategy in executing projects in the deep water for over 20 years," said Deep Gulf president Richard Clark. "We're focused solely in the deep water of the Gulf of Mexico. That's all we do."

First formed in 2005, Houston-based Deep Gulf Energy III launched in 2014 with a $498-million equity commitment. First Reserve Corp. is its primary sponsor. "We specialize in sub-sea developments and we're drillbit driven. We do both low-risk exploration and exploitation," Clark said.

The company holds proved reserves of 57 MMbbl of crude, with another 85 MMbbl 2P and 120 million 3P, largely concentrated in Mississippi Canyon where it has been most active recently. Production is approximately 25,000 barrels of oil equivalent per day (Mboe/d) from 16 gross producing wells, 47% operated, 84% oil. Like the others, Miocene is the objective with reserves in the 200- to 500-million-bbl range.

"We see a lot of running room in the deep water from an exploration standpoint," said Clark. "The wells are very prolific: 10,000, 20,000 barrels of oil per day per well is not uncommon. Drilling and completion costs are down 65% over the last four years, so it's a great time to be drilling wells out there."

Although Deep Gulf operates in and around the majors in the deep water, he said it is not in competition. "We're doing different things; we're in the same area but we're working on different trends. We do low-risk exploration, which is primarily amplitude-driven."

However, the explorer keeps a close eye on what the major oil companies are doing in their exploration programs. If one drills a prospect looking for 200 MMbbl and finds 50, "if it's not near one of their own platforms they're

With a focus on deepwater Miocene, Deep Gulf president Richard Clark said, "It's a great time to be drilling wells out there."

Between 2016 and 2017, LLOG embarked on an exploration campaign in which it made 12 discoveries, "so we're continuing to feed the hopper," said Eric Zimmerman, vice president of geology.

probably not going to do it. We look for those situations, and we'll buy it from them and we'll do it ourselves."

Deep Gulf stays near existing infrastructure to maximize costs as well as time. "It's important to us to get projects onstream very quickly. We want to establish cash flow as quick as we can." Ample spare capacity is available via tie-backs, he said. The company has averaged 19 months from spud to first production, with "very prolific" results—average IP is above 11,000 boe/d.

The better news: because its model is connecting production via tiebacks, the company has no P&A liabilities.

And most new wells are undersubscribed, he suggested. "There's not enough capital out there, so if you can identify a project, you can probably get in it if you want to. It's a good time to be buying prospects."

(Editor's Note: In early August, Dallas-based international explorer Kosmos Energy announced it would buy Deep Gulf for $1.2 billion, marking its entry into the Gulf of Mexico.)

Into the deep

Covington, La., private explorer LLOG Exploration may be 40 years old, but its tack shifted sharply to deep water in 2012 when it joined with private-equity firm Blackstone for a $1.2 billion cash infusion. At that time it had 12 deepwater producing wells; today it has 31, with another 22 to bring online. Constructing its Who Dat and Delta House production facilities in 2011 and 2015, respectively, were turning points for the company.

"Today, we are a deepwater Gulf of Mexico player," said Eric Zimmerman, vice president of geology. "We still have shelf production, but we're not really looking to acquire or explore the shelf."

Between 2016 and 2017, LLOG embarked on an exploration campaign in which it made 12 discoveries, "so we're continuing to feed the hopper." Its focus is now on Green Canyon, Garden Banks and Keathley Canyon.

LLOG drilled its first well in its Buckskin campaign earlier this year with its second in progress at the time he spoke. Buckskin is a lower Tertiary project with first production expected by the middle of next year. "It's a lower Tertiary Wilcox play, so it's a change of strategy for us, but ultimately it was an opportunity we couldn't pass up."

In all, LLOG is anticipating eight wells online from five fields in 2018, with two more from Buckskin expected in 2019. Additionally, it has 10 pre-sanctioned discoveries in waiting, and another 40 prospects.

"We see the strength of our company as having a balanced portfolio that has a solid production base, solid developed asset discoveries that we're currently working to develop, discoveries that are in the hopper to be sanctioned to be developed and an exploration portfolio. One of the main rules that we have on the corporate side is to make sure that we maintain that balance of production, development and exploration."

LLOG produced 50,000 boe/d at year-end 2017, and held some 300 MMboe proved reserves (75% oil).

Zimmerman said the company maintained a flat budget through the downturn the past two to three years, which positioned it well for the opportunities at hand. "We think that's positioned us nicely for our developments that we're working, and allowed us to create a lot of value through exploration and making discoveries." □

PHOTO COURTESY: GULFSLOPE ENERGY INC

Rowan's Ralph Coffman rig will drill two wells for GulfSlope Energy by year-end, the first to a shallow 6,000-foot depth in Vermilion, then in Ship Shoal targeting sub-salt Miocene at 26,000 feet TVD.