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200 YEARS CITI

Introduction

AN INTERESTING STEW

ombine huge oil and gas resource potential, thousands of drilling locations just waiting for the drill bit, and more private equity dollars than have ever been available before. Add in a conversation about producers being able to revive basically every play in the U.S., and maybe even export oil and gas. Season this with intense investor interest in energy. It makes for a spicy financial stew.

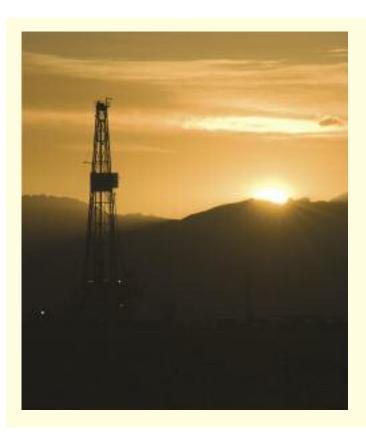
Last year at this time, the E&P and financing communities were agog at the many billion-dollar joint ventures that had been formed. These brought into the U.S. significant amounts of much-needed capital to enable E&Ps to drill up the resource plays, which are known to contain literally thousands of drilling locations.

This year, E&P companies and their capital providers must figure out how to cook up a deal in an ever-changing environment marked by regulatory uncertainty, a volatile stock market buffeted by European economic upheaval, and an uncertain economic recovery in the U.S.

How are leading investment banks, reserve-backed commercial lenders and private-equity firms changing their business models, when natural gas prices remain near 10-year lows and oil prices are near 10-year highs? The M&A scene is evolving as well.

From sourcing deals to structuring and executing transactions, all have had to adapt. This annual special supplement to Oil and Gas Investor brings you some information on what the bankers are thinking and how E&Ps are using private equity. And in a thoughtful think piece, one of our contributing authors, Matt Epstein, explores new ways to fund development drilling.

> —Leslie Haines, Editor-in-chief Oil and Gas Investor



FOR MORE INFORMATION:

Every day at OilandGasInvestor.com, you will find news announcements about recent public and private financings, new sources of capital, changes to existing sources, and information about startup E&Ps that have received new funding from private-equity sources.

What's more, you can also search our online library for indepth information. This archive contains previous articles on financing trends and how-tos, the anatomy of specific deals, and profiles of individuals and companies that provide capital, dating back to 2000. Plus, we have the Oil and Gas Finance Sourcebook online, with much more detailed, annotated listings on capital providers and E&P companies looking for partners and investments.



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Private-equity Round-up

SEEKING GOOD DEALS

NON-OPERATED POSITIONS, DISTRESSED DEBT, AND MICRO FUNDING IDEAS FIND FAVOR WITH PRIVATE-EQUITY PLAYERS; NATURAL GAS DOES NOT.

BY GREGORY DL MORRIS

Private-equity investors say the pattern for 2012 is shaping up like a dumbbell curve. At one end are the high-dollar, high-return investments being made in marquee oil plays in the Permian Basin and the Bakken and Eagle Ford shales. At the other end are natural gas assets, where producers remain hunkered down, not getting much attention but not really seeking it anyway.

These conditions are expected to persist or even grow more polarized through the traditional gas-storage season this summer, and only start to moderate as the heating season begins.

Most private-equity investors say economic risks in the U.S. and Europe are now priced into the market for assets and commodities, and they generally are not too concerned with further macroeconomic or election-year buffeting. Rather, they are keeping their heads down, focusing on the industry itself.

Quite a few new financing models are gaining favor as the competition to place equity heats up, notably the growing popularity of funding non-operating investments as a lower-risk, economical way to get into hot basins. Another approach is to invest in distressed properties. In all cases, however, there is a strong sense that the best operators in any play are not the ones spending the most capital, but those which have the best control over costs.

And, there is a broad, but not universal, sense that it is too early to get on board for any possible recovery in natural gas.

Some 300 E&P and midstream companies are now funded by private-equity funds focused on oil and gas. Nearly a dozen privateequity firms are in the market now, expecting to raise by year-end an aggregate \$27 billion, to restock their coffers for energy. We canvassed some of these private-equity players for their views on the oil and gas scene and to learn more about their recent deal parameters.

SW CAPITAL PARTNERS

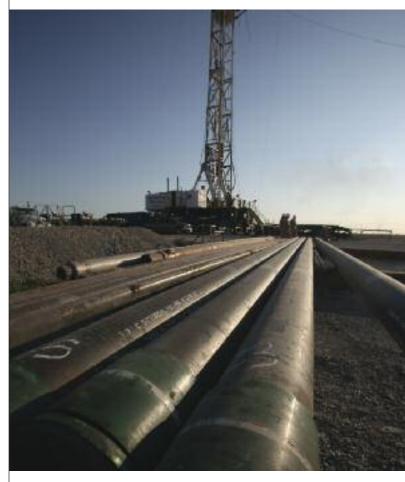
For a small company, SW Capital Partners had a very busy year in 2011, says Tym Tombar, managing director based in Houston. He and his partners run the \$200-million SW Energy Capital fund, which currently has six commitments, of which three were made last year.

"This year we are seeing a lot of deal flow around the industry," Tombar notes, "but it will be a little slower for us. Costs have risen, and the barriers to entry for investors have come down a little. Also there does not seem to be a great deal of willingness on the part of sellers, especially on the gas side."

Tombar details an investment that SW made last year, a \$4-gas play. "At the time we thought it was a contrarian move," he recalls. "Now, of course, the market is much tougher. We hedged that production, so we are okay there for this year and next."

He adds that with gas prices so low, the producers that are left have hunkered down and seem prepared to ride out the storm. "Not many people want to sell with their assets being valued against \$2 gas that might go to \$3.50 in a year or so."

But that is fine with Tombar and his partners. "We are not seek-



A surge of private equity makes the competition fierce, but gives operators lots of choices.

ing the next Utica or Eagle Ford shale. Being a small company gives us a competitive advantage. The bigger funds need to chase the high-dollar shale plays, but we can look in the conventional plays, in north Texas, northcentral Oklahoma and the northern Rockies,

where well costs are not \$8 million. We can invest in wells costing \$3 million, or even three-quarters of a million."

The role of consolidator fits nicely with SW's strategy, Tombar explains. "As a firsttime fund, we are building relationships. We are looking for teams that have executed in a basin as part of a larger operation, who can then go out and consolidate in those basins."

DONOVAN CAPITAL

Donovan Capital has been on the forefront of unconventional plays for the past several years, going back to early investments in the Permian Wolfcamp when it was "easy stuff," says John Donovan, founder. "We are involved in more than just exploration and production. Also workovers, water and fluid logistics, and working with service companies."

Donovan Capital just marked its fifth anniversary, having been spun out from Quantum Energy Partners. It conducts both advisory (financial intermediary) services as well as making direct investment. Its "opportunistic" range, as the founder puts it, runs from \$1 million in bank debt for a service company, to \$100 million in equity for a producer.

"We represent management to get the best deal possible," says Donovan, "whether that is equity, debt or some form of recapitalization. We sometimes roll our fees into equity or in-kind positions, and even put in cash. We are trying to foster long-term relationships." Donovan handled seven transactions in 2011 and has completed \$300 million in aggregate transactions in its five years.

"We tend to play below the radar of other investors," says Donovan. "We helped one Illinois Basin producer with

> mezzanine capital, we helped a Permian producer raising straight equity capital, and we backed a service company in a consolidation play in water. The private-equity market is so

efficient now, that we can be

very effective." Pursuing production is one of the three themes to which Donovan is holding currently. "We are looking to consolidate

existing production in a basin. We are looking at the arbitrage in scale on the buy-buildsell cycle. The exit strategy is to the yield-seeking market, to sell to an MLP or a trust."

The second theme is in the service sector, primarily in the Permian. "We get capital to the smaller players so they can go from organic equity to a full cash flow model," Donovan says. The third theme is unique

opportunities in areas such as oil storage and terminals, in partnership with tank-farm operators.

"The market determines what the strengths and weaknesses are for any set of assets, resources, or management teams," says Donovan. "We provide the options of what is most economic in the opportunity, and

management selects which way to go."

GUGGENHEIM PARTNERS

In a case of finance imitating life, unconventional resource drilling and development is calling for unconventional investments, says Mike Beman, a vice president at Guggenheim Partners LLC, based in Houston. "In general over the past year or two, we have augmented our conventional financing models with new strategies to capture unconventional opportunities," he says.

Two themes have come to the fore in recent transactions: the non-operator approach, and the increased attractiveness of distressed or undercapitalized properties. "Distressed' is a general term that can mean companies or properties that have been starved for investment, and those approaching, in, or emerging from bankruptcy.

"We have provided funding for capitalconstrained operations or the purchase of assets out of bankruptcy. We're looking for opportunities to unlock undervalued assets by infusing capital," says Beman.

He notes that these assets vary greatly, and there is no set moment in the process where Guggenheim will step in. Sometimes it is simplest to make a deal before the bankruptcy process starts, other times it is best to wait until the court takes over, or until a plan is approved and the firm begins the exit process.

"In a recent transaction we backed a



John Donovan, Donovan Capital

management team we knew well to purchase assets in their own backyard out of bankruptcy," says Beman. "We were familiar with the assets, but particularly comfortable with the team."

He is active with the middlemarket leveraged-credit group working in both primary and secondary investments. He usually handles transactions

with smaller, private companies.

Across the industry Beman notes that there are "plenty of freshly loaded capital providers looking to put money out the door. The challenge is that the deal fairway for liquid-loaded opportunity is often fully priced."



Tym Tombar, SW Energy Partners

ROCK RIDGE ENERGY

Rock Ridge Energy LLC is a new advisor with a veteran at the helm, Marshall Lynn Bass, formerly of Gas Rock capital. He now advises three financial institutions and two portfolios of oil and gas investments. "On the oil side it is a great time to sell into a very strong market," says Bass. "But the gas side is very tough. A lot of difficult decisions need to be made."

One of the operations in which Rock Ridge is involved is Two Oaks Exploration & Production, active in the San Andres play in Andrews County, West Texas. "We have vertical production and are finding a lot of oil that was left behind by previous

developers," says Bass.

The strategy is to prove up the play, then sell it wherever the best fit and value might be, whether to the industry or to the market. "These days you don't have to drill quite so much as you used to, to prove up a play. Many companies need oil in their portfolio, and not even so much actual production as reserves."

Rock Ridge Energy LLC

One challenge, and opportunity, in the Permian is the need for consolidation, Bass notes. "This was an old play but now it is a new play. At one time we did need 1,200 operators, but now there are certainly projects that can be consolidated. It makes sense to pull together larger acreage positions in a basin where so much was left behind."

That said, Bass is sanguine that further technological development will allow greater and greater reserve recovery rates. "As an investor, that is what excites me about this industry in North America: the opportunity to buy mature oil formations that still have so much production potential.

Producers tend to agree. Speaking at the IPAA Oil & Gas Investment Symposium (OGIS) in New York in April, Tim Leach, chairman and CEO of major Permian producer Concho Resources, said, "There will be as much oil produced from the source rock in this basin as has been produced from the traps over the past 70 years." By Concho's count that is 30 billion barrels.

STELLUS CAPITAL

Todd Overbergen, partner and head of energy investing at Stellus Capital, based in Houston, has seen producers and their investors shift from emphasizing gassy assets to a stress on oily ones and taken that realignment as confirmation. "We were a very early adopter of the idea that oily resource plays were the profitable model," he says. "As far back as late

> 2007 and into 2008 and 2009 during the recession, we saw the trends in natural gas drilling and decided that the best risk/reward proposition was in oil."

> That approach carried through the launch of Stellus out of D.E. Shaw at the start of this year. "We have had great success in the Permian, Niobrara, Eagle Ford and have an early investment in the Mis-

sissippi lime." says Overbergen. For him the resource plays can be grouped by those that have more of a cost challenge, and those that still have some geologic risk.

"One fairly typical operator of ours built a strong position in the Wolfberry trend," says Overbergen. "We have since sold that position, and now are working with an operator that is active in the Wolfbone. We really like that position. The Permian Basin continues to show multiple pay zones with large, oil-saturated options."

Stellus is not deterred by the high lease and operating costs in hot plays like the Permian and the Eagle Ford because Overbergen explains that for all the higher costs, there are still good ultimate returns to be made.

"These hot basins are largely derisked," he

explains. "But we still see highly fractured ownership. The minerals lessors are very savvy guys who are astute at being able to negotiate those positions. So, yes, land costs are high. In the Delaware Basin you can pay \$2,000 to \$3,000 an acre and then have to pay \$3 million or \$4 million to drill a well. But there is still plenty of opportunity in that. At the end of the day these leases are only 20% to 30% developed. Operators are able to sell their positions at \$20,000 to \$30,000 an acre."

Though the Permian is decades old and widely considered derisked, it is still in the early days as a resource play. "But if you look at the potential to down-space wells and boost production in a variety of ways, there are still plenty of opportunities and plenty of upside, even at higher acreage and completion costs."

Two other hot basins offer variations on this theme. The Mississippi lime in north-central Oklahoma and south-central Kansas offers lower drilling costs, \$3- to \$3.5 million for a horizontal well, almost more typical of a vertical-well play. "In the Eagle Ford you are looking at drilling costs of \$7- to \$9 million a well," says Overbergen. "It is a technically challenging play with high well costs."

HELLO, NON-OP?

Prompted in part by those high well costs, Stellus has chosen to invest in the Eagle Ford by taking non-operated positions with experienced producers. "I see a lot of growth coming in the non-operated model," says Overbergen, adding that there are great opportunities for consolidation in basins where there are lots of small operators, like the Permian.

"The non-op model works very well for the smaller independents, who might invest \$10 - to \$40 million in a play where full development could reach into the billions of dollars. The smaller independents have limited time and capital to get to the stage where they can sell to the major players,



Marshall Lynn Bass,

who are going to take the position or the whole play to the next level."

Overbergen thinks the non-op model is an ideal food chain for the growing number of upstream master limited partnerships (MLPs). "In a basin with lots of operators, those with

the smaller working interests can sell to an MLP or a non-op investor. Either way it is an efficient way to consolidate in a play."

There are different challenges in the Niobrara, a play where geological risk still abounds. "We have historically done well in the Niobrara, but it is definitely patchy. We were successful with one operator that has since gone public, but you re-

ally, really have to know your geology."

Regardless of the play, Overbergen says investors have to "take a critical eye to any acreage position and any drilling success or problem until the type curve and capital costs



Todd Overbergen, Stellus Capital

for wells in that basin are understood. Typically we see capital costs go down over time, and also see EURs go up."

Beman notes that non-op investments enable Guggenheim to do two things that would otherwise seem to be mutually exclusive:

> cherry pick the best wells or acreage, and at the same time work with operators that are on the leading edge of technology use and cost control.

> "In our non-op investments, we are able to create partnerships with the larger exploration and production companies," says Beman. He favors producers that are not just big, but that are bringing advantages to the

play through their size and scope. Non-op is the way Guggenheim is working in hot plays like the Eagle Ford, where prices for everything have soared.

"Well costs can run \$9- to \$10 million in

the Eagle Ford," says Beman. "But the leading-edge companies, the ones that bring economies of scale and cost advantages to oilfield services, are bringing in wells in the \$6- to \$7-million range. The two or three leading players are getting materially better cost advantages, and our angle has been to take advantage of that expertise through non-operator investment."

That thesis was corroborated by Ryan Gilbertson, president of Northern Oil & Gas, one of the largest non-operator participants in the Bakken with 170,000 net acres and participation in 950 gross wells.

"More money does not equal better wells," said Gilbertson, speaking at the IPAA OGIS in New York in mid-April. "The best well we know in the basin is the Whiting Tarpon Federal, in which we participate. It made an initial production of 8,000 barrels per day and only cost \$6.3 million drilled and completed. It does not take \$10-\$11 million to make a great well." •

The Gas Conundrum

For those E&Ps holding gas assets, why has there been, so far, a lack of capitulation? Bass at Rock Ridge offers an answer: "It is tough to figure, but this downturn is different," he muses. "In previous ones we saw capital flight, but not this time. There are several funds out there who want long-term exposure to hydrocarbons, and their models call for them to own across the energy class, so that means gas as well as oil. Maybe especially they need to hold gas."

He also suggests that with natural gas oversupply so much in the news, and the constant buzz of trying to call the bottom on gas prices, there is the general tendency for investors to follow the headlines. "Some people have gotten out, but others have stayed in or gotten in, even though value has been toasted in the past three years," says Bass. "The users of capital who are committed to gas are not flighty. I have seen high-quality institutional investors who want meaningful exposure to gas."

Even with Stellus's themes of patience and persistence, Overbergen says he has stayed away from gas deals. He acknowledges that prices are near the nadir of the cycle, but he simply cannot get excited about bottom fishing. "It is difficult for us to take a position in natural gas. There certainly might be opportunities in that business, and I do believe that prices will rise."

Nevertheless, he continues, the sticking point is the classic question of the time value of money. "I don't think our investors have the time frame for gas. They want to see their money back in three to five years. We are not willing to bet that investing in gas today will enable us to sell in three to five years and make money. There are just too many other more compelling opportunities in oil."

Donovan is also undeterred by the difficulties in gas. "There are often private to private opportunities in that market," he asserts. "One man's trash is another man's treasure. You are not chasing resources, in many circumstances, you are just dealing with conventional production. Look at what Linn Energy LLC just bought from BP, it was predominantly gas. Look at EV in the Barnett, and what Atlas Energy just bought from Carrizo Oil & Gas."

On the micro-cap level, Donovan says he is seeing a great deal of activity around conventional gas assets. "Once those things come on stream, there is very little cost beyond compression. You are not paying for PUDs, these are strictly PDP transactions."

Prudential Capital Group

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Senior Debt	Mezzanine Debt	Private Equity
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Calendar of Events



5th Annual Energy Capital Conference June 6-7, 2012 | Houston, TX Omni Houston Hotel DEVELOPING UNCONVENTIONALS



1st Annual DUG Canada Conference & Exhibition June 18-20, 2012 | Calgary, AB, Canada Calgary TELUS Convention Centre



11th Annual A&D Strategies and Opportunities Conference September 5-6, 2012 | Dallas, TX The Ritz-Carlton Hotel



4th Annual Marcellus Midstream Conference & Exhibition

January 29-31, 2013 | Pittsburgh, PA David L. Lawrence Convention Center DEVELOPING UNCONVENTIONALS



3rd Annual DUG Eagle Ford Conference & Exhibition October 14-16, 2012 | San Antonio, TX Henry B. Gonzalez Convention Center

DEVELOPING UNCONVENTIONALS



8th Annual DUG the Original Conference & Exhibition April 2-4, 2013 | Fort Worth, TX Fort Worth Convention Center DEVELOPING UNCONVENTIONALS



4th Annual DUG East Conference & Exhibition November 13-15, 2012 | Pittsburgh, PA David L. Lawrence Convention Center

DEVELOPING UNCONVENTIONALS



3rd Annual DUO Reservoirs Conference & Exhibition May 29-31, 2013 | Denver, CO Colorado Convention Center

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Private-equity Case Studies DENHAM'S FAMILY

E&P GROWTH IS PROMPTING HUGE CAPITAL NEEDS FOR INDEPENDENTS; ONE SOURCE, DENHAM CAPITAL, HAS FUNDED SEVERAL. HERE'S A LOOK.

BY GARY CLOUSER

enham Capital Management in March closed its \$3billion Fund VI—its largest ever—in just eight months. It did so despite what remains a challenging global fundraising environment, succeeding in part because of the oil and gas industry's dramatic resurgence in recent years.

"There is a lot of capital coming into the oil and natural gas space, but I have never seen a time when the industry—upstream and midstream—needed so much capital," says Carl Tricoli, who has spent more than three decades in energy finance. Tricoli, based in Houston, in 2004 was one of the founders of Denham. He is managing partner and co-president, heading its oil/gas and metals and mining team. Denham is headquartered in Boston with additional offices in Houston and Short Hills, New Jersey, as well as several offices internationally. It invests across all stages of the corporate and asset life cycle from development projects to mature, operating businesses.

Shale production has spurred domestic E&P growth, and much of that production is in areas needing more infrastructure. The result is a dramatic need for midstream expansion and investment dollars, Tricoli says. Also, technology originally developed for unconventional projects is now being used even in conventional plays, spurring even more capital needs. A typical onshore well used to cost about \$2 million to \$3 million. Now, similar assets are being produced using horizontal wells and fracing technology, with well costs rising to \$8- to \$10 million.

When in July 2011 Denham began raising its Fund VI, an energy and resourcesoriented fund, it planned to cap it at \$2.5

billion, compared to its previous fund high of \$2 billion for Fund V, which is now fully committed. But investor interest was so strong that Denham closed Fund VI at a "hard cap" of \$3 billion.

The investors come from a variety of global institutions representing leading foundations, endowments, public and private pension funds, and high-networth individuals and families that share Denham's positive outlook on energy investment.

Tricoli expects that in all,

Fund VI will provide capital to about 15 to 20 companies. Normally, the portfolio companies to be included in a fund are identified within three to five years. Noting the strong interest from E&Ps, however, Tricoli expects all portfolio companies for this fund to be identified in about three years. The amount of capital per company will range from \$50 million to more than \$250 million, but Denham's preference, or sweet spot, is \$100 million to \$250 million.

Although there is no requirement, or guide, Denham expects more than half of that total will be invested in the oil and gas vertical, including upstream, midstream and services. Historically, Denham has committed about two-thirds of a fund to oil and gas investments. For Fund VI, it anticipates at least half will go toward oil and gas. The remainder will be invested in power and renewables, and metals and mining.

RECENT FUNDINGS

Denham has already committed capital from Fund VI to two E&Ps: **Ursa Resources Group II LLC** and Cascade Petroleum LLC. Ursa II is focused on liquids-rich unconventional plays as well as the acquisition of domestic conventional oil and gas producing properties. Headquartered in

> Houston, it is a follow-on venture with the Ursa Resources Group LLC team, which Denham successfully backed previously. Cascade Petroleum, a start-up, is led by an operationally experienced management team seeking to acquire, explore for and develop oil and gas acreage in the Rocky Mountain region.

> Many of the portfolio companies, Ursa included, have managers who have previously partnered with Denham. Ursa II, in October 2011, closed on

a \$200-million private-equity commitment from Denham Capital's Fund VI and Fund V.

"With Ursa II, we plan to build on the success of our first partnership," says Matthew Steele, chief executive officer of

Ursa II and founder of the Ursa Resources Group. Steele will be joined by other management principals from that company, including Steve Skinner, who has been promoted to chief operating officer.

Ursa's origin is that of bigcompany personnel seeking to start their own company. Led by Steele and Skinner, each of whom had stints at large E&Ps and met while working together at Southwestern Energy Co., Ursa I started small in 2008, focusing on the

Bakken shale and amassing acreage. It soon became apparent that outside capital was needed for the company to participate in the expensive, technology-driven shale play, and in 2010 Ursa closed an equity deal with Denham's Fund V for \$100 million.

Steele says before seeking capital from Denham, the company had secured leases and was almost a fully functioning company, or prospect-generating shop. "When we came to Denham's managers, we didn't have to convince them that we could aggregate valuable assets, and we had a good plan we could show them," he says.

At the time, the goal was to control about 50,000 acres, but in consultation, and with an additional undisclosed capital commitment from Denham, that goal doubled and quickly Ursa held positions over about 120,000 acres. It was a sellers' market for leases, and securing commitments from service companies was becoming more difficult and costly, so Ursa, originally intending to divest only some of its assets, by mid-2011 had found eager buyers for all of them.

Steele was eager to re-enter the market. With a different target, his team again acquired financial backing. He was convinced



"With Ursa II, we plan to build on the success of our first partnership (with Denham)," says Matthew Steele, chief executive officer of Ursa II and founder of the Ursa Resources Group.

conventional gas assets were priced near a floor and were under-exploited, and many were economic even at current commodity prices—unlike many shale developments. He adopted a two-pronged

that with other companies ob-

sessed with shale plays, con-

ventional dry-gas assets would

become available in a buyers'

market. Steele reasoned that

strategy: Focus primarily on core, proved developed producing conventional gas, providing the needed cash flow,

while still seeking participation in liquidsrich shale ventures.

"Denham Capital is...excited to continue our relationship with Matt and the rest of the team," Tricoli says. "Ursa is con-



time when the industry-

stream-needed so much

capital," says Carl Tricoli,

global head of natural

Capital Management.

resources, Denham

upstream and mid-

sistent with Denham's strategy of partnership and capitalizing management teams in order to build oil and gas businesses. We are confident that Ursa II can grow to be a major independent E&P company leveraging the same skill and effort that made Ursa successful."

Denver-based **Cascade Petroleum LLC** is headed by Mike Wylie, formerly of ExxonMobil and later, Newfield Exploration. He was the manager for Newfield's eastern Rockies asset team, focused primarily on developing the Bakken and exploring in western Montana. Cascade was founded in September 2011 with an undisclosed financial commitment from Denham.

Wylie says he selected Denham for several reasons, including its shared vision of value creation and its willingness to back the company based on its confidence in the team, rather than on the merits of existing physical assets.

The company plans to pursue earlyentry, large-scale resource plays in the

Rocky Mountain region. It "will utilize modern drilling and completion technology to unlock known, but poorly understood, reservoirs," he says. "The team has the experience base required to take prospects from exploration and assessment into full-scale development and production, allowing Cascade and Denham to divest at the optimum value point anywhere in an asset's life cycle."

MIDSTREAM ACTION

Other recent oil and gas investments made by Denham include **Tradition Midstream LLC**. Tradition Midstream is led by a fivemember team that first worked together in the 1990s, most recently building Millennium Midstream Partners, which was purchased by Eagle Rock Energy Partners in 2008. Tradition secured a \$200-million equity commitment in July 2011 from Den-

ham's Fund V to launch a new company, based in The Woodlands, Texas. Tradition is focused on acquiring and building midstream oil, gas, and water assets with an emphasis on domestic shale plays.

"There is a tremendous opportunity for an established midstream group to assist producers and consumers in developing, constructing and operating infrastructure in emerging shale plays across the U.S.," says John O'Shea, chief executive officer of Tradition.

The company's manage- executive o ment team of O'Shea; Don tion Midstre Brown, president; James Lee, chief financial officer; Bryan Johnson, chief operating officer; and Mark Edge, vice president of

> land, collectively have more than 100 years of experience in the midstream sector. They first worked together at Natural Gas Clearinghouse (later known as Dynegy) before building Millennium in 2002, backed by "angel" investors. In 2007, Millennium was the fastest-growing private energy company in the U.S.

> After Millennium was sold, the team, minus O'Shea, who took a sabbatical from the midstream business to pursue interests in nonprofit organi-

zations, founded Tradition. Initially, the plan was to be a small, grassroots company, financed on its own. But, they soon realized that great opportunities, resulting from emerging shale plays, existed for new midstream assets. Capital demands, however, would lead Tradition to seek privateequity capital.

At that time, O'Shea was doing some

consulting work for Denham,



"There is a tremendous opportunity for an established midstream group to assist producers and consumers in developing, constructing and operating infrastructure in emerging shale plays...," says John O'Shea, chief executive officer of Tradition Midstream. and it was agreed that O'Shea would reunite with the Millennium team. O'Shea says a big factor in Tradition pairing with Denham was that unlike many other private-equity firms with several midstream portfolio companies competing against one another, the new company would become Denham's midstream company in Tradition's areas of focus. As such. Tradition is also poised to work with and provide midstream services for Denham's E&P portfolio companies.

m. "Denham is excited to partner with Tradition and is looking forward to assisting the company's growth. We have known the Tradition principals for nearly two decades and witnessed the significant success of Millennium," says Bill Zartler, managing partner of Denham.

O'Shea and Zartler were colleagues at Natural Gas Clearinghouse, the predecessor to Dynegy, in the early 1990s. O'Shea at that time was involved in business development and acquisitions of gathering and processing facilities, and Zartler was heading the natural gas liquids (NGLs) trading business. Zartler and O'Shea worked together on NGC's acquisition of Trident NGL Holdings Inc, which led to NGC becoming a publicly traded company.

Tradition is pursuing opportunities in the Appalachian Basin, Bakken and Niobrara shales and other emerging plays, as well as in traditional producing basins, where its managers have extensive experience. As of the end of April, the company did not yet have operations, but it expected



Denver-based Cascade Petroleum plans to pursue early-entry, largescale resource plays in the Rocky Mountain region, notes Mike Wylie, who heads the company.

within two months to make some construction announcements. O'Shea says the company plans before the end of the second quarter to begin construction of one or two pipeline projects, and before the end of the third quarter, it will begin constructing a processing plant, NGL fractionation facility, condensate stabilization/crude gathering facility, including trucking and terminaling, and a produced-water gathering and disposal project.

In aggregate, those projects are expected to cost \$50- to \$75 million. Several of the planned projects will service Denham's E&P portfolio companies.

UTICA SHALE

Sierra Buckeye LLC, formed by Sierra Resources LLC in Houston, received a \$250-million commitment from Denham's Fund V. It was started by Sierra Resources to focus exclusively on unconventional production in the Utica shale. The company has a 70,000acre position in the liquidsrich play, all in Ohio. It is led by John Eads, who has been an independent producer since 1977. Eads founded Sierra Mineral Development LLC in

1992. That company, under a new ownership structure, became Houston-based Sierra Resources in 2002.

Sierra and its predecessors have successfully acquired underexploited properties and enhanced their value by adding previously unrecognized reserves through drilling, Eads says. The Sierra Buckeye technical team will continue using a large North American geochemical and geological database to identify and evaluate additional unconventional resource opportunities. Prior to Sierra Buckeye, the Sierra team had discovered in excess of 750 billion cubic feet equivalent of oil and gas reserves.

SUCCESSFUL NEW PARTNERSHIPS

Tricoli says he and his team will look at hundreds of potential portfolio companies. A vast majority of them will be dismissed early in the process. Still, for every one that is chosen, there will be considerable "real analysis" on about another four, he says. From the time a company has begun to actively seek capital to when a deal is done usually takes about six months.

"We are looking for the best investments, with the best risk-and-reward pro-

> file,' Tricoli says. "Usually our funded companies have what we call 'dislocated value,' meaning that the value we perceive is not yet fully recognized in the market, and often the company possesses assets and potential that are underpriced."

Denham believes it is a value-added partner and seeks to apply its operational and commercial expertise and riskmanagement strategies to create value.

The most important criteria for securing funding sounds trite, but it is by far the most important, Tricoli says: "We look for the best people." Denham is seeking to team with a CEO who has both technical and general management capabilities. "The CEO needs to know how to allocate capital. There is a big difference between knowing how to produce hydrocarbons and knowing how to make money." Usually before talking with management teams about providing capital, one or more of Denham's key personnel, through the company's extensive networking, has had a business acquaintance with those individuals.

Second, the applicant company must demonstrate it has the necessary technical resources and knowledgeable personnel, Tricoli says. Of course, the number crunching, due diligence, and the projects' merits are also taken into consideration. Usually, if the first two are present—good people with technical resources—applicants come to the table with projects having merit, or a feasible plan.

FLEXIBLE EXIT PLANS

From its previous five funds, Denham has committed about \$4.3 billion to 48 companies. Denham has since exited about half of those. As with all private-equity firms, an exit strategy and timetable are part of the plan. That plan involves Denham providing capital to a company to enable it to reach an identified goal or benchmark. In exchange for the capital, Denham receives a partial or full ownership stake in the company. Typically, Denham expects to exit, or sell, its stake in a portfolio company in two to six years.

"Denham Capital is flexible in creatively structuring the best transaction to fit all parties' interests. Our investments are structured to create alignment with the interests of management teams, ensuring a shared definition of success and a shared vision of how to achieve goals," Tricoli says.

"We seek to partner with management teams that share our vision for growth and value creation-managers who truly seek to build businesses, not just to own assets, and who understand the power of collaboration. Because Denham Capital has a flexible investment horizon and a patient long-term orientation, we are not looking for market timers or quick results. We work with management teams to develop an exit strategy that makes sense for all parties in view of expectations set at the onset of the partnership." •



Sierra Buckeye, which received a \$250-million commitment from Denham's Fund V, focuses on unconventional production in the Utica shale, led by John Eads, an independent producer since 1977.

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David Albert

The eight-person, energy-focused mezzanine team is co-led by industry veteran managing directors David Albert and Rahul Culas. With investment professionals based in both New York and Houston, the group has funded three exploration and production companies so far. It has also provided construction financing for a biomass power plant being built in

Connecticut, scheduled to come online by year-end 2013.

The Carlyle Energy Mezzanine Opportunities strategy is to back E&P companies making acquisitions or seeking capital to drill their proved reserves. The broad mandate can also include midstream transactions and power generation in North America. "We have the ability to do deals in the range of \$20 million up to \$200- or \$300 million on the high side," says Albert. "We make our decisions on a case-by-case basis, with a skew to transactions in the conventional space, with conventional players."

The Energy Mezzanine group is agnostic when it comes to

the particular commodity it prefers to invest in, and it does not maintain a specific oil and gas price deck. It typically does require some commodity hedging and certainly, it monitors the forward curve on Nymex, but doesn't make its energy investment decisions based on any specific price expectation, Culas says. For the moment, he expects oil



Rahul Culas

prices to remain flat, trading in the \$100-barrel range.

"That said, we are generally bullish on natural gas right now. These current prices are not sustainable, and I suspect, if the weather cooperates, we could see a \$4 handle soon. Some rationalization in dry-gas drilling means that dry-gas production should start to decline," says Culas.

"There could be near-term pain, but longer-term, we see upside. In fact, we are looking at a large number of natural gas investment opportunities, and unlike most of the traditional reserve-based lenders, we aren't making investment decisions based exclusively on proved developed hydrocarbons and on draconian forward price decks," says Albert.

"WE MAKE OUR DECISIONS ON A CASE-BY-CASE BASIS, WITH A SKEW TO TRANSACTIONS IN THE CONVENTIONAL SPACE, WITH CONVENTIONAL PLAYERS."

-David Albert

The team has committed funds to three companies in the upstream oil and gas space: Core Minerals, Black Raven Energy and TexOak Energy. Core Minerals is headquartered in Evansville, Indiana, with assets located in the Illinois Basin. Black Raven Energy is based in Denver, with assets located in the Denver-Julesburg (DJ) Basin in Colorado and Nebraska. TexOak Energy is headquartered in San Antonio, Texas, with assets located in Texas and Oklahoma. In each of these deals, the group worked closely with the management teams to develop a plan of development for the respective assets. All three companies entered into hedges for their hydrocarbon volumes with different commodity swap providers. •



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Petroleum Finance

DEVELOPMENT CAPITAL

NEW FUNDING STRUCTURES ARE NEEDED FOR THE NEW REALITY OF DEVELOPING ONSHORE PROVED UNDEVELOPED RESERVES.

BY MATT EPSTEIN

orth American upstream activity has seen a dramatic transformation in the past decade. The application of advanced drilling and completion technologies, combined with factory-like, learning-curve cost reductions, have enabled shale formation development while expanding the commercially viable exploitation frontier of traditional reservoirs.

The advancement of technology and process has created a fundamental change in the basic onshore reservoir development risk-reward proposition. Capital and activity levels have swarmed to the space in response. Unfortunately, however, the traditional channels by which capital and opportunity connect have not truly evolved to meet the new realities of the change in risk-reward.

The result has been an awkward logjam of sorts, with billions of dollars accumulating in private-equity funds and master limited partnerships (MLPs) that are unable or unwilling to connect with the full range of development opportunities. This funding logjam demands new financing structures designed to alleviate the pooling of idle capital, which is less than optimal for investors and operators alike.

LOWER RISK-REWARD

The fundamental risk-reward characteristics of onshore, factorylike proved undeveloped (PUD) reserves conversion are different from traditional exploration/exploitation models. The reward is lower, as is the risk. There are no 10 baggers (10x) in these development plays; outright dry holes are rare as well.

With known reservoirs, lease and land aggregators are able to extract higher valuations earlier in the process, particularly if a couple of early test wells can give just enough data to transform possible reserves into PUDs. Higher upfront costs throughout the food chain mean lower returns in general. So far, the physics of Economics 101 prevail, with the onshore PUD development boom just falling into a lower but rational point on the risk-reward continuum. The capital is there, as are the opportunities; thus, an examination of the methods of connecting the two is in order. mand the most security (in the form of a primary claim on the underlying assets), tend to limit their exposure to just 65% of the value of PDP (proved developed producing) reserves. There is rarely a case in

TYPES OF CORPORATE FINANCE

Debt Capital

- bank-led borrowing-base facilities (BBFs)
- public issuance of bonds and notes
- privately placed debt securities
- mezzanine debt via dedicated funds or transient investors including hedge funds
- insurance companies
- merchant energy trading companies
- securitization techniques such as volumetric production payments (VPPs) structured transactions and merchant trading pre-payment schemes

Equity

- public equity issuance
- private-equity fund investment
- master limited partnerships
- private C-Corp equity issuance
- direct working interest participation
- resource management funds

HARD TO FINANCE PUDs WITH DEBT

Debt investors primarily operate in a sphere of defined cash flow and term, capped upside, and defined asset valuation/security (downside). Development opportunities, by nature, fall into a reserve classification--PUD--that is not particularly compatible with traditional debt requirements.

PUDs produce no current cash flow, limiting their ability to support any debt whatsoever. Additionally, PUDs may trade at widely different valuations, even in the same play, such that financial investors find little security in lending based on those asset values alone.

In fact, commercial banks, which de-

this banking environment where someone can borrow 100% of PDP, or any portion of PUD on a secured basis.

Thus, by and large, at the project level, we assert that subsurface development spending is limited to equity or equity-like financing.

Large companies may be able to overcollateralize on a corporate basis to achieve some level of debt financing that is nominally targeted at development, but the reality is that for true PUD development, mezzanine "debt" is the only game in town, and all-in pricing with warrants, conversion rights and all the bells and whistles approaches the traditional benchmarks of private-equity internal rate of returns (IRRs).

RELIANCE ON EQUITY

The fact that shale and tight-oil PUD conversion must largely be financed by equity is the crux of the issue. Unlike debt, which by definition is restricted to financing highly defined, tangible and objectively valued opportunities, equity is far more flexible. That flexibility comes with a hidden cost, which may be described, in perhaps an oversimplified manner, as distribution bias.

Whereas debt investors tend to organize themselves around sectors, ratings and statistical financial coverage ratios, equity investors tend to find comfort organizing themselves around individual industries and broader distribution channels.

Notably, each channel tends to target different risk-reward characteristics, and thus different end-investor markets. MLPs target yield hungry retail clients. Public equity tends to be distributed to institutional investors first, with retail clean-up. Private equity targets a wide spectrum of family offices, pension and endowment funds. Resource funds target pension and endowment funds, but are not widely accepted as either MLP or equity counterparts.

Each of the equity sources has different hurdle rates, restrictions, and nuances. We'll look at these from the perspective of onshore PUD development only, and identify some key structural strengths and weaknesses. More important, we will explore an industry macro trend that has compounded the difficulty in connecting capital and opportunity, but that, ironically, has opened the door for a whole new source of development capital.

PUBLIC EQUITY

The single most important controllable metrics for publicly traded oil and gas companies are reserve and production growth. There is clear evidence that after commodity price exposure, steady and prolonged growth is more important to public investors than projectlevel IRRs. Of course, in the long run, companies that make poor decisions managing their capital will be punished, but it often takes time for project economics to be reflected in accounting reports in a manner that investors notice. In the short run, stock price movement is typically dominated by commodity price exposure and growth.

If there was no divergence between natural gas and oil prices, the public-equity markets might be in a better position to satisfy the huge demand for development capital. Unfortunately, most public companies are struggling with portfolio transition as a result of weak natural gas prices, limiting their ability to issue new shares on a competitive basis. Unfortunately, the barriers in terms of credentials and track record prevent the majority of smaller participants from attempting initial public offerings.

PRIVATE EQUITY'S MODEL

The private-equity model for upstream investment has traditionally been described as: seasoned management, plus viable asset, plus capital targeting a defined exit (preferably an IPO). The value of management expertise in exploring for reserves (the act of identifying and capturing probable and possible reserves) cannot be overstated.

Finding new reserves--even smaller pockets that exist in well-explored regions--is the highest return opportunity in the sector. The underlying profitability of exploration is such that it supports the so-called "double-promote" that exists in most upstream energy private-equity funds. The doublepromote is an incentive payment mechanism where the operating management receives up to a 20% slice of equity (the operational promote) while the aggregator of capital and financial risk manager also receives a carried interest of approximately 20% (the financial promote).

The double operational-financial promote is not exclusive to private-equity funds, as many oil companies have long practiced the promotion of the operator by the nonoperated financial party. There is nothing wrong or broken with the model, provided returns can support the heavy incentive structure--and to date they have.

We would argue, particularly as the trends mature, that private-equity funds are in a challenging position to deploy their capital. PUD acquisition and development carries very attractive, but necessarily lower returns than successful exploration. Indeed, as reserve basins are not discovered, but rather redefined, the inflation of land and lease acquisition prices has skyrocketed. The reduction in risk associated with systematic PUD development has not corresponded with an increase in the ability to fund with lower-cost debt. With lower risk-reward, but no ability to increase debt financing, equity returns must contract. Eventually, a double-promote will derail the ability of any team to achieve the targets necessary to satisfy end investors.

Finally, the logistical reality of finding experienced management teams able to credibly execute a four- to six-year growth plan with a public exit is few and far between. Hence, the result is a current and growing logjam between private-equity fund capital and PUD development opportunity.

MLPs AND RESOURCE MANAGEMENT FUNDS

MLPs tend to attract yield-seeking retail investors, which have the right risk-return expectations to fund PUD development. The MLPs would be in a terrific position to serve as the ideal conduit between capital and opportunity, except for a fatal structural deficit.

As a creature emanating from tax construct, MLPs must distribute 90% of their income, which makes it extremely difficult to have too large an exposure to PUD assets, irrespective of risk/return compatibility (or superiority). PUDs consume cash flow as they are being transformed into producing PDP assets, and thus upstream MLP development activity is largely restricted to heavy exposure to PDP assets.

Finally, as tax-constructed vehicles, I think most investors would readily admit there are very few MLP management teams that have the operational credibility to lead an aggressive PUD development strategy.

Resource-management funds are essentially private MLPs. They have considerably more flexibility than their public cousins in terms of asset mix. Conceptually, they might be a big part of the solution towards PUD development. Yet these vehicles have traditionally been marketed as MLP alternatives for tax-free investors such as pensions and endowments that may not be able to effectively invest in higher yielding MLPs.

Unfortunately, this current yield-driven strategy limits the ability of most current resource-management funds to attack the PUD opportunity head on, although one could argue that their management teams are by and large of a higher quality than their generic public cousins.

The biggest problem in repositioning resource-management funds as primary development-capital vehicles would be establishing credibility among the current target investor market–pensions and endowments tend not to be the leaders in investment transformation. At best, one might be able to expect modest co-investment by a few early adopters if the entire process were shepherded by some gold-plated names.

COMPLICATING FACTOR: A SHIFT IN THE OWNERSHIP OF DOMAIN EXPERTISE

Compounding the difficulties of financing PUD reserve development is a macro-industry trend that we would categorize as a shift in the ownership and control of domain expertise. The magic underlying both shale development and the expansion of

Vendor Finance

OUR POSTULATION THAT DOMAIN EXPERTISE SURROUNDING THE APPLICATION OF D&C TECHNOLOGY, TECHNIQUES AND PROCESS MANAGEMENT HAS SHIFTED FIRMLY INTO THE CAMP OF SERVICE COMPANIES NEED NOT BE AN ISSUE OF CONTENTION FOR E&P COMPANIES. IN FACT, FOR SMALL AND MIDSIZED E&PS, IT IS A GIANT OPPORTUNITY!

he largest oilfield service and drilling companies have solid balance sheets, healthy credit ratings, and can access incremental capital far easier--and at far lower rates--than the vast majority of participants in PUD development. Their domain knowledge enables them to be in an advantaged position to determine which projects are most likely to be successful, so oil companies and investors should embrace this, and demand their input, participation and alignment.

The mechanisms by which this "vendor-finance" solution may be implemented do exist to some extent in the market, yet this is a very experimental arena at best. The key requirements for sustainable success, in our opinion, are:

- Oil companies should be more open to understanding and sharing value creation with service companies. In a properly structured relationship, the oil and service companies' incentive are very strongly aligned. In fact, the discussion and mind-set should shift from finding the lowest absolute-cost providers to finding the highest value-add partners.
- Service companies should remain service companies, regardless of any specific domain expertise. Thus, their economic participation, regardless of proportionate contribution, should be limited strictly to debt economics. Unlimited or uncapped equity participation would lead to unintended consequences. A violation of this basic tenant would only create potential antagonism or mistrust between operators and service companies.
- Service pricing should be open and in-line with market rates.
- The decision on service pricing and on providing vendor finance should be by discreet, separately-motivated

groups. Vendor financing is not a back-door pricing tool. The consequences of mixing these two functions is potentially disastrous for service companies balance sheets, and could lead to severe incentive distortions.

- Service companies, oil companies and investors would be well advised to create linkage and alignment between service vendor-finance and new investor mezzanine debt. This relationship would serve as both a check and balance for both parties (i.e. service company wants to lend, but the mezzanine lender does not, and vice versa), as well as providing far more financial coverage than the service company could achieve on its own.
- Service companies would be advised to start vendor finance programs at rates equivalent to today's mezzanine rates (i.e. 18% to 25%), and gradually adjust down, filling the gap that starts at the upper limit of secured debt, based on experience and market conditions.
- For sustained success, service companies should offer vendor finance based on the perceived risk-reward of the opportunity, not based on their overall cost of capital.
- Both service and oil companies should invest in additional specialized staff. Additional credit evaluation personnel would be needed at the service companies. Oil companies would require closer cooperation between operational and corporate financial personnel. Note that the addition of debt, in any form, increases the risk profile of a company or project. Thus, it would be important for all debt-holders and issuers to shift more commodity price risk to third parties. Additional hedging personnel would therefore be suggested at all levels of the food chain.

-Matt Epstein

traditional reserve boundaries is the successful application of drilling and completion (D&C) technologies. It is this unique combination of technique, technology, process management and cumulative experience that is the core enabler of value creation.

While lease aggregators may speculate about the edge of viable commercialization, the existence of reserves is not in debate. Finding new reserves has always been the core domain expertise of oil companies. Likewise, designing and implementing one-off, bespoke development plans, as is the case with deepwater reserves or the Arctic, remains firmly in the control of oil companies.

But it is less clear that oil companies, particularly smaller oil companies, dominate, control or even own the primary knowledge surrounding the application of D&C technique, technology and process management. Which companies are designing the fracs? Whose people are "learning" via cumulative experience in the repeated process of D&C? We would argue that in many cases, particularly among smaller participants, the service companies have greater drilling and completion domain expertise than the oil companies themselves.

Notably, the D&C revolution is unlike the explosion of opportunity in the 1990s caused by the widespread adoption of 3-D seismic. In the case of the application of 3-D seismic, it was still the oil companies making the difficult decisions about which bright spots to select. In the present case of applied D&C, in many cases it is the service companies that can make the best determinations of frac design and implementation as well as drilling strategy. Most certainly, the people that retain the cumulative field-level drilling experience are employees of the service and drilling companies, not the oil companies.

THE NEW REALITY OF ONSHORE PUD DEVELOPMENT

The new reality of onshore PUD development is summarized by the following:

- A shift in emphasis to development from exploration
- Lower fundamental risk-return profile of factory-like PUD development compared to traditional exploration and exploitation
- An inability to offset lower fundamental asset development risk-return with increased debt financing
- A shift in domain expertise toward drilling and completion service providers
- Difficulty in finding experienced management teams, exacerbated by the shift in domain expertise
- Difficulty in achieving targeted investment returns using current doublepromote mechanisms
- A fundamental need to redesign capital allocation and alignment mechanisms
- An admission that public-equity issuance and MLPs are not a clearly superior method of financing PUD development.

RELEVANCE TO DEVELOPMENT FINANCING

Domain expertise is the primary differentiated input employed when forming an opinion about asset valuation and project risk-reward. In investment terms, capturing domain expertise is paramount to capturing alpha, or noncorrelated, excess returns. Capital allocation tends to be optimized when it is fully aligned with and directed by the party that has the highest level of domain expertise, provided sufficient motivation. A potential shift in the domination, control and ownership of domain expertise should result in a corresponding shift in both optimal capital flows and alignmentincentive mechanisms.

POTENTIAL SOLUTIONS

We see several complementary avenues for accelerating capital deployment.

First, we would suggest the creation and mass promotion of a new breed of dedicated development mezzanine funds together with a lower-yield variant of resource-management funds. These vehicles would target lower absolute hurdle rates than current private-equity funds, and be more ideally suited to the new realities of PUD development risk-reward.

Second, we would suggest that service companies aggressively engage in vendor finance-type solutions. Consistent with our postulation of a shift in domain expertise, service companies, unlike outside debt and equity investors, are in a unique position to most accurately gauge PUD development risk-reward. As such, investors and oil companies should demand that they shoulder more of the risk, most appropriately in the form of debt-like, term-limited vendor finance agreements.

A NEW BREED OF FUNDS

Mezzanine funds operate in the gap between secured debt and private equity. This area is dramatically undercapitalized relative to bank finance and private equity, and is in need of some new dedicated funds specifically targeting North American PUD development opportunities.

Traditional debt return expectations

range from Libor plus 100-400 Basis points on senior secured, borrowing-base facilities to 5% to 12% on subordinated notes, bonds and debentures. Meanwhile, private equity typically must generate in excess of 25% returns on the asset level, in order to deliver low- to mid-teen net returns to pensions, endowments and other private-equity fund sponsors.

The heavy incentive promotion is the primary difference between asset-level and net investor-level returns. The current breed of mezzanine debt participants usually target returns of 18% to 25%, and often demand some sort of equity participation. All-in, these funds are equity-like in their behavior and cost.

The evidence of undercapitalization in this area is that it is the only portion of the capital spectrum where "transient" sources of nonspecialized capital, such as hedge funds, distressed debt funds and merchant energy companies, feel they have the competitive edge to participate.

Not surprisingly, many of these mezzanine funds are operated by private-equity teams that are seeking to creep down the ladder while increasing overall assets under management.

We foresee the emergence of dedicated PUD development funds targeting the 12% to 25% return window. Unlike current mezzanine funds, these would offer true debt and not demand warrants, conversion rights, or other dilutive equity features. With capped upside, these funds would have to work more closely with both oil company management and service providers in order to properly understand and manage selection and operational risk.

These funds would also have to take a more proactive role in managing commodity price risk, a skill-set that neither operating management nor private-equity firms obviously possess.

Yet we see potentially insatiable demand

for capital such as this, capable of working with existing management to realize the true value of PUD development. Funds such as these could complement and potentially unblock the logjam of private-equity capital, by increasing the return on equity potential of PUD development to levels universally above minimum targeted asset hurdle rates.

Resource-management funds such as those offered by Merit, Sheridan and Quantum are essentially private versions of their MLP cousins. They have been in the market for over 20 years, and occupy a solid, albeit quiet niche, providing steady dividend yield to tax-free and international institutional investors that are unable to directly participate in publicly traded MLPs. These funds mirror the high PDP strategies of MLPs, in order to produce the same high dividend yield characteristics offered by MLPs.

Resource-management funds have much more flexibility than MLPs, however. Their investors are already tax-advantaged, so there are no special income distribution rules with which they need to adhere. Furthermore, these funds have direct operating capability, unlike either mezzanine or private equity. That direct operating ability enables resource-management funds to combine the capital raising, asset allocation, and operating decision-making ability under one roof.

This combined approach is usually reflected by a lower, single promote--again, putting these vehicles in a good position to occupy the lower risk-reward proposition offered by domestic onshore PUD development. We see the potential for a new breed of resource-management funds that offer lower current yield, but higher growth than the current variety. The biggest hurdle would be in educating and converting their extremely conservative investor base.

Notably, unlike the new breed of mezzanine funds suggested, these new funds would not directly alleviate the current logjam of capital deployment at privateequity funds, but rather would compete directly with it. It would therefore be strategic for all of the major energy private-equity firms to follow the lead of Quantum and create their own in-house resource-management fund.

CONCLUSION

Ideally, service-company vendor finance, combined with increased availability of a new breed of dedicated lower-cost mezzanine debt, would boost the returns available for private equity, thus alleviating the current logjam in capital deployment. Furthermore, a new breed of resource-management funds could further lower incentive overhead, enabling participation in wider variety of development opportunities, particularly as trends mature over the next five years.

All participants will have to adapt to the new reality of onshore PUD development. Investors should adjust risk-reward expectations lower, and work diligently to capitalize on the shift in domain expertise.

Investors and oil companies should be prepared to experiment with new vendor-financing and incentive-alignment mechanisms. Oil companies and privateequity firms should be prepared to lower or share incentive promotions to reflect the growing importance of service company participation in capital allocation decisions.

While some of these changes may be difficult to embrace, history shows that excess returns are available to those who adapt capital investment to best align and incentivize those with the strongest domain expertise. •

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PROFILE: AN F&M BANK ENERGY LENDING "BEST FIT" TRANSACTION

In April 2012, The F&M Bank & Trust Company closed a \$25 million finance facility with a privately held exploration company. This client is larger than F&M's average energy client by assets (in excess of \$400 million) and had its choice of lending institutions. The bank claims to have won the business as a result of its transparency and "make-sense" quality of lending processes in addressing the client's transaction. Clients appreciate F&M's simple lending structures, allowing them to avoid complicated sales processes. These deal attributes demonstrate why F&M, with offices in Tulsa, OK and Dallas, TX, is well positioned to be a competitive senior lender in energy.

F&M Bank provided senior debt to the third generation, familyowned firm, which focuses on the application of advanced exploration, drilling and completions technology. The facility was secured by a collateral carve-out of the firm's assets in the Permian Basin, where they have operated for more than 30 years. F&M Bank serves as the only lending institution to this firm, which is believed to be an acknowledgment of the bank's energy brand competitiveness. This transaction is representative of F&M Bank's commitment to working directly and to fostering meaningful relationships with each client, by delivering lending structures best suited to fit the client's objectives.

F&M Bank is well positioned to be competitive, not only in the Permian Basin, but also with other conventional, unconventional and legacy exploitation projects. As a primarily proved-developed producing lender, the bank's lending platform includes a competitive price deck specifically oriented to this model and tagged to NYMEX futures' estimations. F&M's lending approach is different than many of its Texas and Oklahoma peers, in its evaluation of reserves being more closely in trend to production's marketable value. This differentiation is both competitive and logical in providing leverage to current reserves for further development or acquisition.

RECENT TRANSACTION

\$25 million lending facility

F&M Bank's Energy Finance Group, serving as sole lending institution, provided senior debt to a third generation, family owned exploration company in the Permian Basin.

The recent transaction was custom-tailored to meet the client's needs, which F&M strives to do with each customer. "We try to find opportunities where we can be an important, bank relationship, understanding and meeting the needs of quality exploration and production firms," said Chris Cardoni, senior vice president and manager of energy lending.

An example of how F&M's Energy Finance Group positions itself to be meaningful is displayed in the bank's choice to directly work with E&P firms with average EBITDA of \$500,000 to \$25MM. This is the segment that F&M is best suited to. "F&M Bank is largely a direct financing, single source in the domestic, onshore oil and gas space, rather than a participant bank to large syndicated facilities," said Christina Kitchens, senior vice president and manager of Texas energy lending, "We provide transparency and a one-stop, make-sense approach when we do business, which is both appreciated by the client and proves valuable to a successful, long-term financing relationship."

F&M's Energy Finance Group is principally focused, in both Texas and Oklahoma, on relationship banking for firms seeking \$2 million to \$75 million, primarily in revolvers or term facilities secured by oil and gas assets. The F&M energy lending team has significant experience in financing projects throughout North American oil and gas basins, including the Eagle Ford and Bakken shales in a non-operated or operated area. In every project, F&M Bank pledges that all clients will work directly with the people and lenders who have the authority to craft solutions.



CHRIS CARDONI Senior Vice President, Manager Euryp Leuding, Otlehoma



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Banking Trends

HEADING FOR HOME PLATE

GIANTS LIKE WELLS FARGO AND START-UPS LIKE KLR LIKE THE VIEW ON ENERGY.

BY ELLEN CHANG

s the stock market recovers, but the overall U.S. economy still looks to find a firmer footing, the oil and gas sector is leading the way in steady growth, creating solid singles and doubles for the fans. From multibillion-dollar deals to funding for small-caps, it remains a favored sector for institutions and individual investors. For E&P companies with the right assets, and that are well-hedged, coming across home plate with new capital should not be a problem.

Although natural gas prices remain depressed and a rally has failed to emerge, many companies have relied on their hedges and liquidity to operate successfully. Their move to oilier plays also makes the industry attractive, as oil continues to trade near \$100 a barrel.

Oil and gas companies with attractive assets will not have any issues obtaining capital, according to Jim McBride, head of energy investment banking at Capital One Bank.

"Investors' projections for future gas prices will certainly have an impact on investing decisions during this time; however, we expect companies with attractive growth opportunities, proven management teams and appropriate hedging strategies to have access to capital," he says. Companies with ample liquidity can take advantage of the low natural gas prices to acquire reserves at historically low valuations. "While we will always have to deal with market volatility, we expect the capital markets to remain open and receptive to opportunities into 2013, especially for attractive investment opportunities," McBride says.

"Companies with sufficient liquidity and patient capital will see significant upside potential when prices rebound."

Many companies successfully worked through their loan redeterminations this spring, and most bankers do not expect any surprises to the balance sheet or need for additional capital.

The capital markets are active currently and are lending to startup enterprises and midstream companies, says Scott Joyce, senior vice president of energy at Capital One Bank.

"Funding and liquidity remain solid. With this strength behind us, our energy bankers can utilize national assets and capabilities to help meet the financing needs of our customers through good times and bad."

M&A OUTLOOK

Mergers and acquisition activity will continue to rise due in part to the popularity of shale acreage. Capital One Southcoast recently helped a private client sell 38,000 acres in the Utica trend for an attractive price. The bank also helped a private E&P company based in Oklahoma City raise \$345 million of private equity to reduce leverage and fund capital expenditures.

Debt financing for energy companies rose in 2011, says Steve Kennedy, executive vice president and manager of the energy group at Amegy Bank in Houston. Amegy grew its energy loan portfolio by 35% and its energy deposit portfolio by 43% in 2011.

In fourth-quarter 2011, Amegy reported \$4.7 billion of energy commitments and \$2.5 billion in outstanding loans. The commitments included 42% from E&P companies, 39% from oilfield services companies and 15% from midstream companies. The size of the loans ranged from \$5- to \$50 million and included small, middle market and large NYSE-listed companies with a market cap of \$1 billion

and more.

NATURAL GAS COMEBACK?

Low natural gas prices are a hot topic for players and coaches in every clubhouse. Low prices could result in a number of mergers and acquisitions "because there are a number of companies with

capital on the sidelines looking for good deals," he says. Investors with a longer-term outlook will try to buy dry-gas opportunities at favorable prices.

Gas prices will recover during the next 12 to 18 months, and it is unlikely they will remain below \$4 for a long period, due to the economics in the major natural gas basins, Kennedy thinks. Only five major natural gas basins provide a 10%

ROI (return on investment) at or below \$4 per Mcf (thousand cubic feet), he says.

"We are still optimistic that the annual average will be above \$3.50," Kennedy says. "We view natural gas in the long term to still be favorable and most likely in the range of \$4 to \$6, since North America has a natural depletion rate of 34% annually. Once drilling

rigs have been laid down, a natural gas glut should correct itself 4.5 times faster than an oil glut would, since oil's worldwide depletion rate is only 7% per year."

Despite low prices, lending to E&P and oilfield service companies has remained active in 2012, says Keith Behrens, a managing director for Stephens Inc., a Little Rock, Arkansas-based investment banking firm.

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Jim McBride, Capital One Bank

\$300 million in senior debt, with some of the more aggressive deals including mezzanine financing, he adds. Natural gas-weighted com-

Most of his client companies seek \$50- to

panies still have access to capital; many have been financed primarily by commercial banks. While their borrowing bases are linked to a decline in gas prices, their bank loans have been recapitalized with debt financing that allows the

companies to boost reserves.

This option helps the companies avoid having to raise equity, Behrens says.

"The transactions are twofold, and we are seeing situations where companies with exposure to natural gas prices have their revolver or borrowing bases redetermined, since their reserves are not worth as

> much as last year," says Davidson Hall, a managing director and head of debt capital markets for Stephens.

Keith Behrens, Stephens Inc.

"Unfortunately, some companies with significant gas exposure have a significant amount already drawn and once the redeterminations occur, they have exceeded their borrowing bases. The companies are able to refi-

nance a portion of the revolver with subordinated debt, lowering their senior debt outstandings."

Even companies that have an oilier asset base still need more capital: they have spent the past 18 months drawing down their revolving credit facilities, in order to chase higher-return oil plays and boost capital spending. This should significantly improve cash flow and EBITDA over the following 18 to 24 months, he says.

HIGH-YIELD WIDE OPEN

Companies also are tapping the high-yield bond markets to refinance outstanding debt under their revolvers. "The high-yield bond markets are very active right now and wide open," Hall says. "Thus, refinancing revolver borrowings with longer-term highyield debt, at historically low coupons, is becoming very popular."

Last year Stephens served as sole place-

ment agent for Elm Ridge Exploration Co., a private, Dallas-based oil and gas company. Elm Ridge completed a \$160-million recapitalization in August 2011 to repay the company's outstanding senior credit facility and to fund future drilling opportunities.

"Stephens was able to garner a lot of interest from select debt groups, which ultimately

provided Elm Ridge with more favorable terms and a lower cost of capital," says Behrens. "Elm Ridge had previously been fully leveraged with bank loans, but now it has a more flexible debt facility with a nice covenant package that allows for more breathing room."

While oil-focused companies have many financing options to choose from, gas-focused ones face a different scenario. Some potential acquirers, including private-equity firms, are looking for less expensive acquisitions, Behrens notes. Most deals will likely occur in the \$50- to \$300 million range, he thinks.

Recapitalizations are becoming common as E&P companies find themselves extended over their borrowing base, Behrens says.

"Everyone is projecting natural gas prices to stay pretty low for the rest of the year. Some companies still have decent hedges that have not rolled off."



Steve Kennedy, Amegy Bank

Newcomers

WITH THE OIL AND GAS STORY REMAINING ATTRACTIVE IN AN OTHERWISE SOMEWHAT DEPRESSED U.S. ECONOMY, NEW LENDERS HAVE EMERGED FOR THE ENERGY INDUSTRY, PROVIDING MORE OPTIONS FOR OIL AND GAS COMPANIES.

ssociated Bank, NA. (NASDAQ: ASBC), which has \$22 billion in assets and is based in Green Bay, Wisconsin, started its oil and gas group in Houston recently. It is led by Tim Brendel, senior vice president and oil and gas segment leader. Brendel had previously served as a vice president in Union Bank's oil and gas group and prior to that, worked in Ernst & Young's transaction advisory services group specializing in oil and gas valuation.

Associated Bank is actively putting capital to work in the oil and gas sector, primarily focusing on reserve-secured loans to independent producers.

"I foresee our appetite for loan growth in this sector continuing through the remainder of 2012 into 2013 and beyond, as it is a sector that is very familiar to and championed by the top ranks of Associated, up to the CEO level," Brendel says.

Associated's president and CEO, Phil Flynn, was hired from Union Bank in December 2009. Flynn had formed the energy lending unit at Union Bank in 1985.

Although natural gas producers are feeling the pain of low prices now, most of Associated's gas-focused customers have adequate liquidity and maintain active hedging programs.

"With the dramatic decrease in the market price of natural gas over the past several months, the price deck we use to evaluate transactions followed suit."

Since forming the group in February 2011, Associated Bank has committed more than \$300 million to 18 borrowers, primarily focusing on reserve-based lending to public and private independent producers.

"We view reserve-based lending as a very prudent lending model," Brendel says. "Our goal is to sensibly grow loans for Associated and diversify credit exposure geographically and by industry."

Associated Bank lends to producers of all sizes, but prefers to initially lend between \$10- and \$25 million. It has the ability to grow that credit commitment up to about \$35 million. A few examples of clients it has helped include public E&P Vanguard Natural Resources LLC; Arena Energy, a privately held offshore Gulf of Mexico producer, and NFR Energy, a Houston-based private-equity sponsored Haynesville/Cotton Valley producer.

Each of these deals is a multi-bank revolving credit facility.

KLR GROUP LLC

Another new participant in the sector is **KLR Group, LLC**, which was founded in March by former employees from the Rodman & Renshaw oil and gas investment banking and research practice. The company is growing to 30 employees between its Houston and New York offices.

KLR focuses on domestic and international upstream with plans to expand into the service and midstream sectors. It provides public and private equity and debt, structured transactions, A&D, M&A advisory, joint-venture structuring and research.

Interest in financing transactions has been "tremendous" and is coming from a variety of sources, including private equity, public investment funds, strategic investors, banks and family offices, says Edward Kovalik, a managing partner of KLR.

KLR anticipates the price of oil hovering near \$100 for the balance of 2012 and gas prices trading in the \$2 to \$2.30 range. "Most companies have been 'getting oily' over the last 18 months so I don't think many will be hit by redeterminations," he says.

When Kovalik worked at Rodman, the client companies tended to be \$100 million to \$2 billion in value. The loan size ranged from \$15 million to over \$1 billion. KLR plans to work with companies of a similar size and arrange loans in the same range.

During the past year, the former Rodman bankers worked on the merger between Zaza Energy and Torreador Resources, along with an offering of \$100 million of senior debt notes for Zaza. The bankers also worked on a \$350-million senior debt deal for ATP Oil & Gas and numerous public offerings including for Approach Resources, Gulfport and GeoResources.

BANKING TRENDS =

WELLS FARGO'S **BIG PUSH**

The Wells Fargo Energy Group, based in

Houston, greatly expanded with its acquisition of the reserve-based lending business of BNP Paribas in the United States and Canada, comprised of \$9 billion of total loan commitments, including \$3 billion in funded balances as of December 31, 2011.

The deal gives Wells Fargo some 500 clients and \$30 billion in commitments, accord-

ing to Kyle Hranicky, executive vice president of the Wells Fargo Energy Group.

Kyle Hranicky,

Wells Fargo Energy Group

"Going forward into 2013, we see Wells Fargo well-positioned to continue serving the energy space and grow due to the increased size of our platform following the BNP Paribas acquisition."

The group conducts a range of transactions from mid-sized businesses to facilitating multi-billion-dollar transactions. During the past two years, Wells Fargo has worked closely with Kodiak Oil & Gas Corp., a Denver-based E&P company that focuses exclusively on the Williston Basin (Bakken and Three Forks formations).

Driven by successful drilling and acquisitions, the company experienced tremendous growth over a very short period of time, resulting in its market cap increasing from approximately \$400 million to \$2.4 billion, Hranicky says. Kodiak completed four acquisitions in the Bakken play, which resulted in tripling its acreage there.

In addition, Kodiak's borrowing base credit facility grew to \$225 million from \$20 million. Wells Fargo became the key partner for Kodiak in supporting this rapid growth trajectory, primarily by providing a substantial amount of debt capital at critical times (i.e. financing of the four acquisitions and development), as well as by participating in

> multiple equity issuances, a bond offering and a bridge loan facility.

Another recent notable transaction demonstrates Wells Fargo's expertise to work on larger transactions. Samson Investment Co. was acquired by private equity firms Kohlberg Kravis Roberts & Co. LP, Natural Gas Partners and Crestview Partners for \$7.2 bil-

lion. Wells Fargo worked closely with KKR to develop the financing-strategy, not only for based investment bank and financial advisory services company.

"The energy value chain for service companies is ticking up," he says.

GulfStar served as exclusive financial advisor to Sharewell LP, a Houston-based drilling tools company, when it was recapitalized by White Deer Energy LP, a Houston and New York middle market private-equity fund. The deal closed on March 29, 2012.

"We have advised Sharewell's management as they grew Electro-TracTM from a prototype in 2007 to full commercialization in 2008," Atherton says. "At the same time, they expanded Sharewell's service capability in the directional drilling market. I am pretty optimistic of how this partner-

"CAPITAL IN THE MIDDLE MARKET, FROM BOTH STRATEGIC BUYERS AND PRIVATE-EQUITY FIRMS, IS STILL AVAILABLE."

-Cliff Atherton, GulfStar Group

the senior borrowing base facility, but also the bridge loan and associated refinancing via the company's initial senior unsecured

note offering, Hranicky says.

Wells Fargo served as a colead arranger and syndication agent on the senior borrowing base facility and was a joint book-runner on the company's senior note offering.

GULFSTAR GROUP

Energy services firms such as in the refining, industrial and oilfield sectors have a good

backlog of business, and capital expenditures will continue in order for these companies to maintain their competitive advantage, says Cliff Atherton, a managing director at the GulfStar Group, a Houstonship will work out."

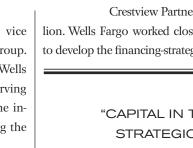
Sharewell's revenue grew in 2010 and 2011, but its technology needed time to mature and to receive acceptance from the market. The recapitalization will enable Sharewell to engage in a more aggressive manufacturing program, he says.

Pent-up demands from investors and business owners resulted in GulfStar closing 25 deals with a value of about \$800 million in 2011, its highest annual deal count yet. In 2010, it did 15 deals with a value of \$550 million. The company's transactions range from \$25- to \$350 million.

"Capital in the middle market, from both strategic buyers and private-equity firms, is still available," Atherton says. "Debt and equity and valuation multiples have returned to pre-crash levels. We are pretty optimistic about where the business is going." •



Cliff Atherton, GulfStar Group



FAQ:

HIGH-YIELD BOND MARKET

WE ASKED RAVI KAMATH, SENIOR ANALYST, GLOBAL HUNTER SECURITIES INC., TO WALK US THROUGH A PRIMER ON THE HIGH-YIELD BOND MARKET. ENERGY COMPANIES FIT WELL WITH THIS SOURCE OF CAPITAL.

WHO OWNS HIGH-YIELD BONDS?

Ownership is divided as follows: insurance companies own 25%; pension funds, 23%; high-yield mutual funds, 19%; investment-grade, equity and income funds, 16%; foreign holders, 12%; hedge funds and others, 5%.

WHY DO INVESTORS BUY HIGH-YIELD BONDS?

These bonds have a low correlation to other asset classes (e.g. equities, commodities and real estate), providing portfolio diversification. The high-yield index is currently yielding around 7.5%, above the investment-grade index at about 4% and 10-year Treasuries at around 2%. Finally, high-yield bond returns have been higher than equity returns over the past 3, 5, 10 and 15 years.

WHAT IS THE SIZE OF THIS MARKET?

The current size is \$1.3 trillion. In 2011, total new issuance was approximately \$250 billion, the second-highest year on record, behind approximately \$300 billion issued in 2010. Year-to-date (April) 2012, new issuance was around \$120 billion.

WHERE DOES THE ENERGY INDUSTRY FIT INTO THE HIGH-YIELD MARKET?

Energy is the largest industry, with a 14% market share of outstanding high-yield bonds. The energy sector has been the largest issuer of high-yield bonds since 2009, accounting for an increasing percentage of new issuance, with shares of 12% in 2009, 13% in 2010, 15% in 2012and 20% YTD for 2012. E&P companies account for approximately 50% of all energy issuance. Oilfield services account for about 20%, midstream accounts for about 20% and refining and marketing firms issue about 10%.

IS THE E&P SECTOR AN INVESTMENT-GRADE SECTOR?

No. A handful of large domestic independent E&P companies (each with a minimum market cap of \$10 billion) are investment grade, including Apache, Anadarko, Devon, EOG, Marathon, Murphy, Noble and Southwestern Energy. The rest are high-yield issuers.

WHY ARE E&P COMPANIES ISSUING HIGH-YIELD BONDS?

The use of proceeds for the majority of recent high-yield issuances by E&P companies is to refinance outstanding debt, including existing bond issues and debt under revolving credit facilities, which are subject to semi-annual borrowing-base redeterminations. Other popular uses include funding acquisitions, including LBOs, and prefunding capital expenditures.

CAN HIGH-YIELD BONDS BE USED TO FUND LEVERAGED BUYOUTS (LBOS)?

Yes. KKR funded the \$7.2-billion LBO of Samson Investment with \$2.25 billion of high-yield bonds. Apollo Management used \$2.75 billion of high-yield bonds to fund its \$7.2-billion LBO of El Paso's E&P assets.

HOW MANY PUBLIC E&P COMPANIES HAVE HIGH-YIELD BONDS OUTSTANDING?

There are 48 public domestic E&P companies with \$57 billion of high-yield bonds outstanding. Equity market caps range from \$96 million (GMX Resources) to \$11.6 billion (Chesapeake Energy).

IS THE HIGH-YIELD MARKET OPEN TO FOREIGN E&P COMPANIES?

Yes. Seven Canadian companies and two other foreign E&P companies have an aggregate of \$5 billion in U.S. dollar-denominated high-yield bonds outstanding.

WHAT ABOUT PRIVATE E&P COMPANIES?

Yes. Twelve private E&P companies have an aggregate of \$10 billion of these bonds outstanding.

IS THE HIGH-YIELD MARKET OPEN TO FIRST-TIME E&P ISSUERS?

Yes. Thus far in 2012, eight first-time issuers (PetroBakken, Aurora, Samson, Lone Pine, Endeavour, Vanguard, Everest and Resolute) have issued an aggregate of \$7 billion in high-yield bonds.

WHAT IS THE MINIMUM SIZE OF A HIGH-YIELD BOND OFFERING?

While the market prefers deals above \$200 million, Saratoga Resources recently completed a \$127.5-million high-yield deal.

ARE E&P HIGH-YIELD BONDS TYPICALLY SECURED?

No. Only 9% of the outstanding E&P bonds are secured, typically for smaller companies. The vast majority (77%) are senior unsecured, while some higher-quality companies (Denbury, Newfield, Range, Whiting) issue subordinated bonds (14%).

WHAT SIZE E&P COMPANIES ISSUE HIGH-YIELD BONDS?

Proved reserves among high-yield-issuing E&P companies range from 91 Bcfe (Woodbine Acquisition, LLC) to 19 Tcfe (Chesapeake Energy). Production ranges from 19 MMcfe/d (Saratoga Resources) to 3.5 Bcfe/d (Chesapeake Energy). Last-twelve-month's EBITDA ranges from \$48 million (Saratoga Resources) to \$5.1 billion (Chesapeake Energy).

HOW DO E&P BOND YIELDS VARY WITH RATINGS?

The E&P high-yield bonds outstanding are broken down by ratings as follows: BB – 29%; B/BB – 16%; B – 31%; B/CCC – 14%; CCC/Not Rated – 10%. The yield-to worst (YTW) for E&P companies by rating are as follows: BB – 5.5%; B/BB – 5.9%; B – 8.3%; B/CCC – 8.8%; CCC/Not Rated – 14.2%.

HOW DO E&P BOND YIELDS VARY FOR OIL-WEIGHTED COMPARED TO GAS WEIGHTED COMPANIES?

B-rated, gassy companies such as EXCO Resources and Penn Virginia trade at approximately 11% yield, while B/CCC rated oily companies such as Oasis and Kodiak trade at 7% or lower.

ARE HIGH-YIELD BONDS AN ATTRACTIVE SOURCE OF FINANCING FOR COMPANIES AT CURRENT LEVELS?

With yields near all-time lows, the cost of high-yield debt is attractive, with recent deals for BB-rated companies (Cimarex, Concho, Continental, Range, QEP) being done at yields of 5%-6%. YTD (April) 2012, E&P companies have issued approximately \$18 billion of high-yield bonds, compared to \$20 billion for all of 2011.

FAQ

E&P HIGH-YIELD BOND ISSUANCE

Company	Issue Month	Amount (\$MM)	Security	Coupon	Maturity	Rating	lssue Yield
BreitBurn Energy Partners	1/12	250	Sr Nts	7.88%	4/15/22	B3/B	8.00%
PetroBakken Energy	1/12	900	Sr Nts	8.63%	2/1/20	Caa1/CCC+	8.71%
Aurora Oil & Gas	2/12	200	Sr Nts	9.88%	2/15/17	Caa1/CCC+	10.25%
Samson Investment Co.	2/12	2,250	Sr Nts	9.75%	2/15/20	B1/B	9.75%
Lone Pine Resources	2/12	200	Sr Nts	10.38%	2/15/17	Caa2/B-	10.75%
Chesapeake Energy Corp.	2/12	1,300	Sr Nts	6.78%	3/15/19	Ba3/BB+	7.00%
Endeavour International Corp.	2/12	350	Sr Sec Nts	12.00%	3/1/18	Caa1/CCC	12.98%
Endeavour International Corp.	2/12	150	Sr Sec Nts	12.00%	6/1/18	Caa2/CCC	12.95%
Range Resources	2/12	600	Sr Sub Nts	5.00%	8/15/22	Ba3/BB	5.00%
QEP Resources	2/12	500	Sr Nts	5.38%	10/1/22	Ba1/BB+	5.38%
LINN Energy LLC	2/12	1,800	Sr Nts	6.25%	11/1/19	B2/B	6.25%
Afren plc	3/12	300	Sr Sec Nts	10.25%	4/8/19	NA/B-	10.25%
Berry Petroleum	3/12	600	Sr Nts	6.38%	9/15/22	B2/B+	6.38%
Bill Barrett Corp.	3/12	400	Sr Nts	7.00%	10/15/22	B1/BB-	7.00%
Continental Resources	3/12	800	Sr Nts	5.00%	9/15/22	Ba2/BB+	5.00%
Concho Resources	3/12	600	Sr Nts	5.50%	10/1/22	B1/BB+	5.50%
EV Energy Partners (add-on)	3/12	200	Sr Nts	8.00%	4/15/19	B3/B-	7.28%
Cimarex Energy	3/12	750	Sr Nts	5.88%	5/1/22	Ba1/BB+	5.88%
Vanguard Natural Resources	3/12	350	Sr Nts	7.88%	4/1/20	Caa1/B-	8.00%
SandRidge Energy	4/12	750	Sr Nts	8.13%	9/15/22	B3/B	8.13%
Everest Acquisition	4/12	750	Sr Sec Nts	6.88%	5/1/19	Ba3/BB-	6.88%
Everest Acquisition	4/12	2,000	Sr Nts	9.38%	5/1/20	B2/B	9.38%
Resolute Energy	4/12	250	Sr Nts	8.50%	5/1/20	B3/B-	8.50%
Chaparral Energy	4/12	400	Sr Nts	7.63%	11/15/22	B3/B-	7.63%
Laredo Petroleum	4/12	500	Sr Nts	7.38%	5/1/22	B3/B-	7.38%
Plains Exploration	4/12	750	Sr Nts	6.13%	6/15/19	B1/BB-	6.13%
2012 Total	17,900 SOURCE: GLOBAL HUNTER SECURITIES, INC.						

This announcement appears as a matter of record only.

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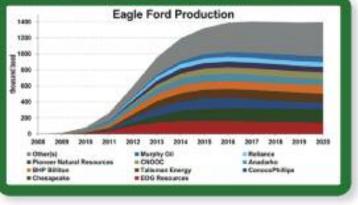
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