

MIDSTREAM Monitor

Feb. 5, 2016 | Volume 34 | Issue 5

FEATURES

The Marcellus-Utica's Growing Canadian Influence

By **FRANK NIETO**, Hart Energy

PITTSBURGH—The size of the Marcellus and Utica shales is impressive enough, according to the U.S. Energy Information Administration—the Marcellus has an estimated 354 trillion cubic feet (Tcf) of recoverable natural gas, while the Utica has about 45 Tcfe. As the region's oil and gas industry has grown, so has its reach.

These formations largely underlie western

Pennsylvania, Ohio and West Virginia, but they heavily impact New York, Philadelphia, and hopefully soon, New England.

Another region of significant importance to the formations' producers and operators is Sarnia, Ontario, Canada, which holds significant midstream and petrochemical operations and assets.

Sarnia's biggest player is NOVA Chemicals, which has seen operations at its ethane cracker complex do a U-turn from concerns over its future to considerable expansion.

“Going back to 2005, we were concerned whether it had a life beyond 2010. The emergence of Marcellus supply, and the work we did in conjunction with our pipeline partners, have essentially taken the Sarnia plant and made it a very profitable facility as we continue to revamp it,” said John Hotz, vice president of corporate strategy, during the closing keynote Jan. 28 at Hart Energy's Marcellus-Utica Midstream Conference & Exhibition.



John Hotz, vice president of corporate strategy at NOVA Chemicals gives the closing keynote at Hart Energy's Marcellus-Utica Midstream Conference & Exhibition. (Source: Hart Energy)

(Continued on page 3)

A PARTNER THAT'S HERE FOR YOU. DAY AFTER DAY. DEAL AFTER DEAL.

Whether the market is primed or perilous, from one deal to the next, you can rely on the powerful experience and proven strength of Raymond James Energy Investment Banking.

20+	Years of energy experience
600+	Energy transactions
\$165B	In transaction value
30	A&D transactions in the Permian Basin since 2007
32	Dedicated energy professionals
165	Companies covered

Howard House
Managing Director
Co-Head of Energy
713.278.5252

Mike Ames
Managing Director
713.278.5268

Jimmy Murchison
Managing Director
713.278.5263

Chip Van Os
Managing Director
713.278.5273

Karen Jacobson
Senior Vice President,
Geosciences
713.278.5286

Don McDonald
Senior Vice President,
Marketing
303.200.5532

Philip Pavlich
Senior Vice President,
Engineering
713.278.5255

RAYMOND JAMES®

RJENERGYBANKING.COM/ADADVISORY

Past performance is not indicative of future results.
©2016 Raymond James & Associates, Inc., member New York Stock Exchange/SIPC. 16-ECMEnergy-0164 TA 1/16

(Continued from page 1)

As the Marcellus continues to grow, an industry truism has been that Sarnia is an extended part of the Appalachian Basin's midstream sector. The importance of the region to NOVA Chemical's operations is highlighted by the fact that many of the company's executives are located in its Pittsburgh commercial office.

Like the North American oil and gas industry, the petrochemical industry spent nearly two decades in a slow decline, facing rising costs and shrinking global market share.



“In the 1970s, 1980s and into the 1990s, the petrochemical industry was growing pretty rapidly, but it was being fueled by technology,” Hotz said. “The North American petrochemical industry began to struggle compared to global sectors, as it was high cost, and there wasn't any thought of additional investment in new capacity after 2000.”

During this time frame, at least 10% of capacity was shut down because of costs and aging facilities, he said. The emergence of shale oil and gas changed all that, leading to the industry's rebirth and repositioning it in the global market for cost.

“The Marcellus and Utica have really been a lifesaver for us in Sarnia. We have an ethylene cracker there that was designed and built as a naphtha cracker. In 2013, we completed the revamp of the facility from naphtha to one capable of running gas liquids,” Hotz said.

The cracker's feed slate is now 70% ethane sourced primarily from the Marcellus. In December, NOVA received approval for final investment to convert that cracker to 100% ethane sourced from Marcellus and Utica production. That change will be completed by 2018.

“The Marcellus and Utica have really been a lifesaver for us in Sarnia. We have an ethylene cracker there that was designed as a naphtha cracker. In 2013, we completed the revamp of the facility

—John Hotz, vice president of corporate strategy at NOVA Chemicals

Hotz added that the facility has the potential to expand capacity by 50% in 2022. At the same time, the company is planning to debottleneck the cracker by doubling it by 50%. It is also considering building another plant in that region.

The main discussion of a Marcellus-Utica hub has focused on building a world-scale cracker in Ohio, West Virginia or Pennsylvania, but by

providing these services across the border, Sarnia will remain a key part of the region's optionality in the coming years.

Moving On: Why A&D Activity Will Increase In 2016

By **DARREN BARBEE**, Hart Energy

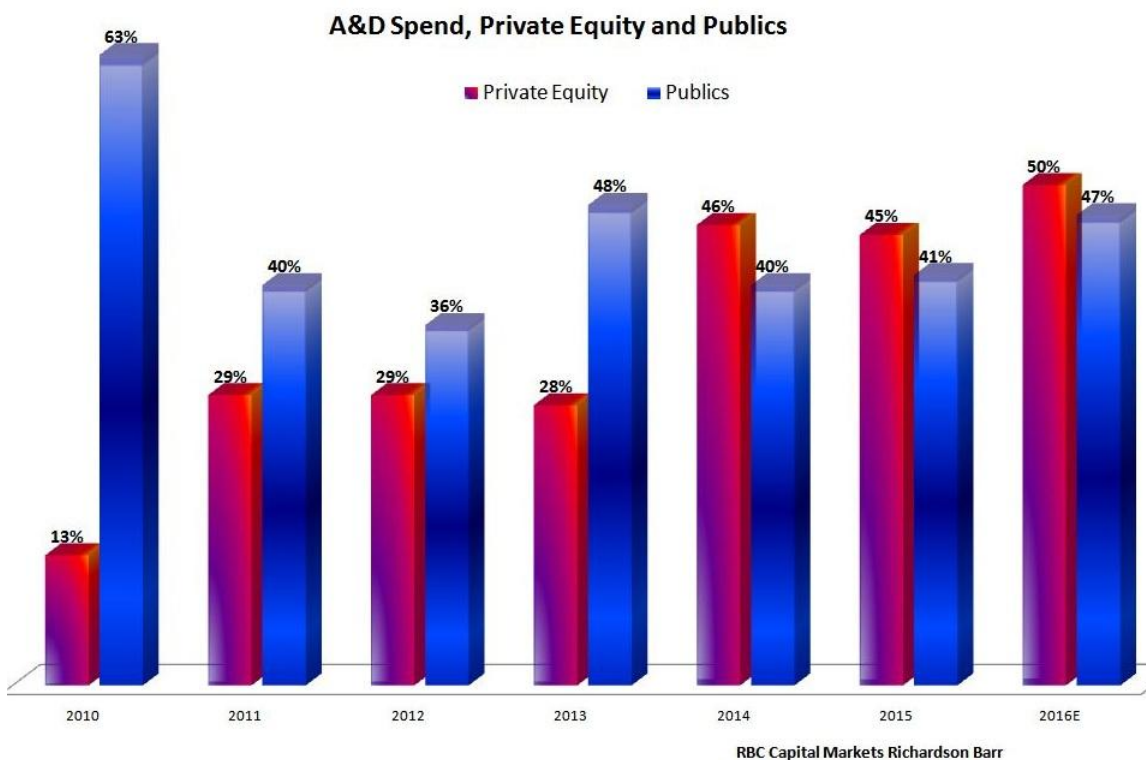
HOUSTON—If 2015 demonstrated anything about the U.S. oil and gas industry’s A&D appetites, it’s that deals go with the flow.

From 2009-14, the perceived comfort zone for deal making was \$70-\$80 barrel oil, Craig Lande, managing director at RBC Richardson Barr, said at an ADAM-Houston Energy Network meeting in January.

“Here we are at \$40-\$45 and deals are getting done,” Lande said. “Not at the same clip [as past years], but I think what it shows is this industry is incredibly resilient.”



What makes 2016 different is that, barring a significant rebound in commodity prices, capital markets are tightening, less than one-fifth of production is hedged and demand is hopelessly outmatched by supply. Lande laid out a comprehensive review of 2015, including lackluster activity, huge losses in market valuations, abandoned but still viable deals and the new “big three” plays for spending.



After a five-year stretch in which annual transactions averaged roughly \$55 billion, A&D collapsed in 2015. Last year, deal values fell to \$21 billion and transactions of at least \$100 million dwindled to 57 from 122 deals in 2014.

The shock of 2015 should now give way to the reality of 2016. Buyers and sellers in particular have to see the market for what it is and find a middle ground in the bid-ask spread.

Amid oversupply and the price collapse, Lande posed the question, “How do you survive 2016?” For some E&Ps, finding capital will be the chief concern. Large-cap independents will likely turn to asset sales, joint ventures or partnerships with private equity. Others will be forced to restructure out of court or by filing for bankruptcy.

Entering 2016, the upheaval in the oil and gas industry has given way to a delicate stability in market prices—enough to make deals possible.

Rebounding Down

In 2016, the A&D market will be a rebound year. Companies will scrounge for capital through divestitures, buyers and sellers should begin to see eye to eye on asset values and capital markets will cut off money to E&Ps not located in the Permian.

For sellers, wrapping their minds around assets suddenly stripped of a huge part of its value was never going to be easy. The A&D market stumbled in 2015 largely because so many deals never left the table. “There’s probably \$15 billion in failed deals last year,” Lande said.

Lande said he expects previously failed deals to be restarted in 2016.

In part, necessity will play a role. Companies are likely to see shrinking borrowing bases and tight capital markets, and many have lost the insulation from low prices offered by hedges, Lande said. E&Ps will instead be forced to make ends meet, some by selling assets.

“A lot of sellers were hanging on, hoping for a better day.

Unfortunately, hope is not a great strategy.

— Craig Lande, managing director at RBC Richardson Barr

The bid-ask spread should erode. Lande said he expects many more motivated sellers. But they need to accept that “this is the level we’re at,” he said. If sellers can’t live with current valuations, it will be best for them to stay out of the market.

Lande said some buyers, too, have to temper the expectations of fire sales and “steals.” With the exception of small deals here and there, “that strategy doesn’t work.”

“With larger deals, the market is very efficient. I don’t care if we’re at \$30 oil or \$130 oil, core-of-core stuff is going to trade at a premium,” he said.

Lande said deals get done through a variety of ways, including creatively addressing the disparity between what sellers paid for assets and what they now have to sell at.

“Because of that bid-ask spread, we’ve got to find a way to narrow it,” he said.

Private Equity's Conventional Gas Pursuit

Date	Value (\$MM)	Location
Dec-15	\$158	Piceance
Nov-15	\$876	Virginia
Oct-15	\$160	Haynesville
Sep-15	\$259	Multi-Basin
Aug-15	\$850	Haynesville
Jul-15	\$102	Haynesville
Jul-15	\$185	Multi-Basin
Jul-15	\$286	East Texas
Jul-15	\$840	W. Anadarko
Jun-15	\$280	Arkoma
Mar-15	\$218	East Texas
Feb-15	\$115	East Texas
Feb-15	\$395	San Juan
Jan-15	\$129	East Texas

Source: RBC Capital Markets Richardson Barr

One incentive is price kickers that give sellers the ability recoup money on deals based on various terms, such as six, 12 or 18 months.

“You’ve got to be creative in this market,” he said.

Who Pays?

With a supply of assets on the market, the pool of potential acquirers is expected to be parts vigorous, cautious and absent.

Public companies and private equity will likely be the largest players.

While large-cap companies are well positioned with relatively strong balance sheets, “they tend to be very patient,” Lande said. And, with many assets already in place, some have “too much to say grace over.”

However, they have the financial wherewithal to pull the trigger on assets that interest them.

Small-cap public companies, however, are unlikely to be players with their access to capital markets limited. MLPS, too, are largely out of the game as they face liquidity issues and attempt to repair their balance sheets. “MLPs are essentially fighting to survive,” Lande said.

That leaves private-equity firms. The huge amount of cash they have long been stockpiling—more than \$85 billion—is now ready for a home.

“They see this as an opportunity to put capital to work in hopefully what is the low point of the industry,” he said.

Since 2010, private equity has increasingly made up E&P onshore A&D demand, and RBC estimates it could command half of the A&D market in 2016. Lande said there’s an estimated 250 U.S.-focused E&P management teams in play for assets.

“I’d say half have no assets right now,” he said.

Carry That Weight

In 2015, public companies largely waited as A&D opportunities stayed dormant. But there were notable exceptions, as three basins notable exceptions.

Three basins showed signs of promise and staying power: the Midland, Delaware and the Scoop/Stack area of Oklahoma.

“The Midland Basin had a great year in 2014. In 2015, the Delaware Basin really emerged,” he said.

It’s in those areas that 2016 has already seen more deals. In January, private company Luxe Energy LLC said it will buy 18,000 net acres in the Delaware. Around the same time, Concho Resources Inc. (NYSE: [CXO](#)) said it will purchase 12,000 net Delaware acres for \$360 million.

Similarly, the Scoop and Stack saw deals expand, particularly Devon Energy Corp.’s (NYSE: [DVN](#)) \$1.9 billion acquisition of Felix Energy. In 2015, the region generated about \$4 billion in deals. In January, Lucas Energy Inc. (NYSE: [LEI](#)) said it would spend nearly \$81 million to acquire Hunton Formation acreage.

Along with the Midland Basin, “those are really the three areas from a resource perspective that at least public companies are going to be looking toward if we stay in scenario of \$30-\$40 oil,” Lande said.

While Oklahoma’s success is new, the Permian Basin has been hot for some time. But it was the Permian that appeared to have the E&P version of rent control despite the downturn.

Market Losses, Past 18 Months		
Sector	Value Loss (\$B)	Sector value lost (%)
Majors	(\$315)	(31%)
Large Caps	(\$555)	(48%)
Small Caps	(\$154)	(74%)
MLPs	(\$22)	(94%)
E&P Universe	(\$1,000)	

RBC Capital Markets Richardson Barr

In the Midland Basin, despite declines in oil price, acreage valuations in 2015 stayed as good as or better than a year ago, Lande said.

The Midland and Delaware are “still trading at \$25,000 and \$30,000 per acre. We’ve gone down to a \$45 oil environment and it’s the same price,” Lande said. “The core of the core is resilient.”

The other dominant trend of 2015 was the gobbling up of legacy gas assets.

Companies such as Devon, Marathon Oil Corp. (NYSE: [MRO](#)) and ConocoPhillips (NYSE: [COP](#)) exited conventional gas assets that have most likely been excluded from heavy capex spending for years. The buyers that emerged were private-equity firms.

While management teams likely didn’t set out to pitch conventional gas purchases, many ended up there, Lande said.

“The neglect factor draws a lot of interest,” he said, adding that private-equity firms can cut costs by 60% while exploring largely HBP assets for upside.

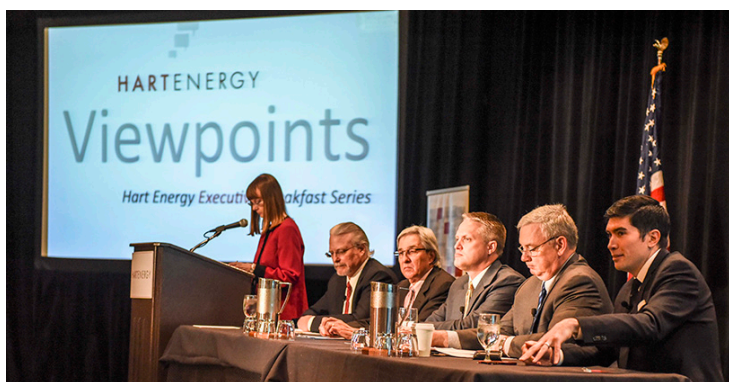
Giving Oil And Gas Executives A Gameplan For 2016

By **LEN VERMILLION**, Hart Energy

HOUSTON—Super Bowl 50 takes place this weekend in Santa Clara, Calif., and the build up to the big game has football analysts pondering a matchup between the NFL’s best defense versus one of its best offenses. The

energy industry is pondering similar strategies in the wake of low oil prices: should executives be defensive-minded or go on the attack?

Five top energy analysts from Stratas Advisors described the field of play for the oil gas industry’s upcoming year at Hart Energy’s first Viewpoint Executive Energy Club held Feb. 3 at the Omni Houston Hotel. And while strategy is a matter of perspective and market position, there’s no doubt that the game has changed over the past two years.



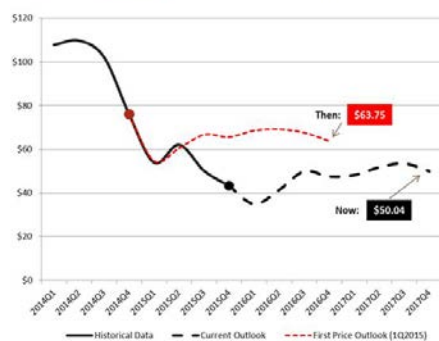
The Stratas Advisors directors at the early morning breakfast gathering touched on all aspects of the industry, from pricing and geopolitical concerns to storage capacity and bankruptcies.

How did we get here?

Back in 2014, Stratas Advisors was expecting to see oil prices at more than \$60 throughout 2016. With its revised outlook in the fourth quarter of 2015, Stratas is predicting \$50 well into 2017. Why the change?

Brent Price Outlook

How have previous [Stratas price outlooks](#) held up for the last 12 months?



Source: Bloomberg, Stratas Advisors

© Stratas Advisors. All rights reserved.

4

STRATASADVISORS
A HART ENERGY COMPANY

“In simple terms, supply did not adjust as fast as we thought. Actually, supply grew over this time,” said John Paisie, executive vice president at Stratas Advisors. “Through June 2015, OPEC supply continued to grow. Saudi Arabia ramped up production, and Russia was able to maintain its production even though price dropped.”

Despite about half as many active rigs in the U.S., shale production has continued to grow, even though it has declined from its peak. “At the end of the year, the U.S. still maintained higher production over the previous year,” Paisie said.

In fact, U.S. shale production as a key driver of the world’s pricing dynamics was a recurring theme throughout the event.

“Shale not only changed where supply was coming from, but also changed the very structure of how that supply started to affect price,” said Paul Morgan, executive director for upstream at Stratas Advisors.

With supply still coming in, Paisie added that there are concerns about demand growth around the globe.

“Demand was strong throughout [2015] but started to waiver at the end of the year,” Paisie said. He cited concerns about China and the U.S. economy as factors.

Pent-up supply

Even though U.S. shale production has increased and helped create a supply and demand imbalance, Morgan said that “shale is not going anywhere.”

“There will be some shake ups and it will have a few rough years, but innovation in completion techniques and refracking means there’s going to be supply coming out, even at today’s prices,” he said.

He said the big story will be the release of pent-up domestic and global supply. “Iran, our forecast says can put out 750,000 barrels per day (bbl/d). Iraq has about half a million,” he said. “We think shale will decline about 400,000 bbl/d, but overall, worldwide supply is going to stay flat.”

Demand dynamics

But what demand growth? Morgan said the gap is closing, but slowly.

“Our forecast shows that the trend is going to reverse and there will be an increase, not as healthy as it had been,” he said. “We think it will be about half of what it was.”

Jeff Quigley, director of energy markets at Stratass agreed. “We see pretty anemic growth,” he said.

“We see a slowing of demand but not enough to create an implosion of the world economy,” he continued. Quigley said that growth in demand will mainly come from developing markets around the world.

“The wild cards in this outlook are Middle East supply disruptions, a China slowdown and if U.S. shale producers face a liquidity crisis,” Quigley said. “All is unknown right now.”

Geopolitical risks

John Kneiss, director of Macroeconomics, geopolitics and policy for Stratass Advisors said 2.3 million barrels of oil per day is currently a risk due to geopolitical concerns around the world. The Middle East has the most potential for disruption, with Iran and Iraq being most vulnerable.

One of the more interesting worldwide growth indicators was the split growth fortunes of the BRIC (Brazil, Russia, India, China) countries. “Russia and Brazil are in severe recessions right now, and we expect those to continue,” Kneiss said. “India and China still have substantial growth. Overall, Asia is going to continue to carry the global economy.

“The main takeaways are that global growth is still very weak, deleveraging has occurred in central banks, but for now we don’t really forecast a global recession,” he said.

Kneiss doesn’t see OPEC countries agreeing on production cuts anytime soon so he expects prices to remain low.

When it comes to policy changes and initiatives in the U.S. in 2016, Kneiss advised the audience that despite some positives for the industry last year—the lift on the export ban and the trade promotion authority, in particular—not to expect much action between the White House and Congress in an election year.

“We can expect energy efficiency legislation as there is bipartisan support for that,” Kneiss said. “They’re not going to repeal or reform fuel standards, and they’re not going to update tax code.”

Check the stocks

In the midstream sector, Greg Haas, director of integrated oil and gas for Stratass pointed to the stock levels as an indication of the first integration of supply and demand.

“In 2015 we completely moved away from historical supply and demand curves,” Haas said. “We’ve gained some much more storage in 2015 as a result of continued production and [low] demand growth.”

He said that the lifting of the export ban provided some measure of export relief, but in the end the U.S. still has a significant inventory of crude. “That certainly has driven prices down,” he said.

“We import roughly 650,000 bbl/d of light crude. That light crude is the kind we have sitting in our storage tanks,” has said. “That’s a pretty strong overhang.”



He said export won't be enough to eliminate the overhang so the U.S. will remain a net importer.

But there are good signs for midstream operators when it comes to exports. "Anytime you can find new markets, that's a good thing," Haas said.

He also said that if you have long-lead time projects, you should be able to ride through the next couple of years of low prices.

But he does expect to see a number of bankruptcies this year.

Growth By Coming Together: MPLX And MarkWest

By **PAUL HART**, Hart Energy

PITTSBURGH—Two major midstream players, MPLX and MarkWest Energy Partners, completed one of the biggest energy-industry mergers of 2015 in December. That created one new and much larger firm that can grow by employing the assets of both, according to presentations by two executives at Hart Energy's Marcellus-Utica Midstream Conference & Exhibition Jan. 27 at the David L. Lawrence Convention Center.

Craig Pierson, president of Marathon Pipe Line LLC, said, "We have opportunities to serve the market across the entire hydrocarbon value chain" by joining adjacent assets.

Pierson said he sees an "efficient overlap" of the two firms—including a major presence in the Marcellus and Utica midstream—"that will enable us to serve the market in the most efficient way." MPLX, he reminded the audience, began in 2012 "with a very strong sponsor in Marathon Petroleum," which has substantial midstream assets that support its refining and market operations, creating important dropdown opportunities.

Added to those Marathon assets now, "MarkWest is a premier gatherer, processor and fractionator, with assets that are very close to some of ours," he said. "We have a great organic growth backlog and not just in local markets, that will hopefully improve producers' netbacks."

He cited the advantages of integrating MarkWest's Utica gathering and processing assets centered on Canton, Ohio, which fit together well with Marathon's nearby refinery at Catlettsburg, Ky. Adding to the combined operation, the new 50-mile, 16-inch Cornerstone Pipeline will move condensate and natural gasoline for Utica producers. Cornerstone will enter service late this year.

Work is on schedule "and by this time next year we will have a couple months of operations under our belt," he said.



Craig Pierson, president of Marathon Pipe Line LLC, pointed to "the significant opportunities in front of us" as he began his review of the recent MPLX and MarkWest merger. (Source: Hart Energy)

Looking to 2017 and beyond, Pierson said MPLX plans pipeline projects that will move Utica production west to its refineries at Lima and Toledo, Ohio, and other Midwestern downstream markets.

“When the industry does rebound, we will be there with a lot of growth potential,” Pierson said of the westward expansion.



Building on Pierson’s presentation, Scott Garner, vice president of corporate development and joint-venture management at MarkWest, discussed the business strategy set following the MPLX/MarkWest combination. He noted the merger of the firms built on a business relationship that dates back 25 years.

Garner opened his portion of the presentation by building on Pierson’s remarks that there are “a number of combination synergies that we will draw on. There are opportunities now that we did not draw on in the past.” He also emphasized MPLX/MarkWest will focus on connecting production from high-performance resource plays, such as the Marcellus and Utica, to both global and U.S. downstream markets.

“MarkWest will distinguish itself through service to its customers,” he added, noting MarkWest ranks as the second-largest gas processor in the nation, the No. 4 NGL fractionator and that it handles 10% of total U.S. NGL production. Currently, MarkWest has 11 growth projects underway, which is actually down and “a bit of a breather” from a rapid growth pace in recent years as production levels off.

MarkWest is the major gathering and processing player already in the Marcellus and Utica, Garner said, noting the firm has 41 processing and fractionation facilities serving the two plays with 10 additional facilities under construction. Garner added the firm handles three-quarters of the rich-gas production from the Marcellus and Utica with some 8 million producer acres dedicated to its midstream system.

It has 1 billion cubic feet per day (Bcf/d) of gathering capacity serving Marcellus producers, 4Bcf/d of processing capacity and 357,000 barrels per day (bbl/d) of NGL capacity. To the west in the Utica, its assets include 1Bcf/d of gathering capacity, 1.3Bcf/d of processing capacity and 160Mbbbl/d of fractionation capacity. Leveraging on the combined processing and refining assets of the firm, Garner said MarkWest is working to upgrade butane produced in Appalachia into alkylate, a high-octane gasoline blendstock.

“When the industry does rebound, we will be there with a lot of growth potential.”

—Craig Pierson, president of Marathon Pipe Line LLC

“Alkylate is an ideal gasoline blending component that will become increasingly valuable with pending fuel regulations,” he said, adding the goal is to “develop Mont Belvieu-like capabilities in the Northeast,” referring to the sprawling NGL fractionation, transportation and

storage hub outside Houston.

He noted the U.S. still imports some 500Mbbbl/d of gasoline blendstock components to feed eastern refineries—imports that can be gradually backed out as domestic blendstocks from the Marcellus and Utica become available.

FRAC SPREAD

Frac Spread: Time For A Pricing Change?

By **FRANK NIETO**, Hart Energy

West Texas Intermediate (WTI) crude prices experienced slight improvements this week as they rose above \$30 per barrel (/bbl) based on murmuring from Russia and other increasingly cash-strapped oil producing countries that they would seek to cut production to try to balance the market. Unfortunately this rally seemed to be based more on wishful thinking than on fundamentals as U.S. crude stocks rose to a record 503 million bbl and there is no evidence that production can be pulled back quickly enough to sustain a rally at this time.

The silver lining to this is that the market may be setting a floor price of \$30/bbl as En*Vantage notes that market bottoms are established once the market no longer influenced by bearish news. “We believe that oil prices below the \$30 level represent more of a call option on crude prices as the market becomes more convinced that enough is enough because a significant supply response will eventually come from the lack of drilling/funds to maintain production or geopolitical instability causes a supply disruption,” the firm said in its Feb. 4 *Weekly Energy Report*.

The improvement in WTI prices as well as traders covering short sales at the end of the month helped support gains in heavy NGL prices. In fact, there were gains across the board for NGL prices at both Conway and Mont Belvieu.

Isobutane had the biggest gain at both hubs as it rose 13% at each location. This increase was likely a combination of improved crude prices, greater gasoline demand increasing refining output, as well as the sector rebalancing. Prices at both hubs were the highest in more than a month. Butane prices were just behind this increase at 12% at both Conway and Mont Belvieu.

RESIN PRICES – MARKET UPDATE – FEBRUARY 5, 2016					
TOTAL OFFERS: 26,176,772 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
LLDPE - Film	6,627,432	0.47	0.6	0.48	0.52
LDPE - Film	4,635,912	0.5	0.62	0.5	0.54
HDPE - Inj	4,538,200	0.495	0.58	0.47	0.51
HDPE - Blow Mold	4,436,464	0.45	0.57	0.445	0.485
LLDPE - Inj	1,895,956	0.555	0.585	0.49	0.53
HMWPE - Film	1,366,852	0.5	0.58	0.47	0.51
PP Copolymer - Inj	953,196	0.585	0.67	0.605	0.645
PP Homopolymer - Inj	877,656	0.53	0.66	0.59	0.63
LDPE - Inj	845,104	0.45	0.59	0.5	0.54

Source: Plastics Exchange – www.theplasticsexchange.com



Propane inventory levels have fallen by larger-than-expected rates for two straight weeks due to greater heating demand and strong LPG exports. The Conway price rose 8% to 31 cents per gallon (/gal), its highest price since the first week of 2016. The price at Mont Belvieu was up 9% to 34 cents/gal, its highest price in a month. However, temperatures have been warming up around the country, which is limiting heating demand. In addition, LPG export arbs are contracting and are expected to only gain slightly in the months ahead.

CURRENT FRAC SPREAD (CENTS/GAL)				
FEBRUARY 5, 2016	Conway	Change from Start of Week	Mont Belvieu	Last Week
Ethane	13.92		15.18	
Shrink	13.06		13.26	
Margin	0.86	100.00%	1.92	100.00%
Propane	31.20		34.14	
Shrink	18.05		18.32	
Margin	13.15	24.71%	15.82	29.60%
Normal Butane	48.52		51.94	
Shrink	20.43		20.74	
Margin	28.09	24.65%	31.20	26.16%
Isobutane	56.00		51.98	
Shrink	19.62		19.92	
Margin	36.38	23.82%	32.06	26.01%
Pentane+	70.52		70.88	
Shrink	21.85		22.18	
Margin	48.67	11.97%	48.70	11.00%
NGL \$/Bbl	14.83	8.31%	15.32	8.07%
Shrink	7.20		7.31	
Margin	7.63	20.22%	8.02	21.82%
Gas (\$/mmBtu)	1.97	-1.99%	2.00	-3.85%
Gross Bbl Margin (in cents/gal)	16.86	21.23%	18.18	22.71%
NGL Value in \$/mmBtu (Basket Value)				
Ethane	0.77	4.66%	0.84	3.69%
Propane	1.08	7.73%	1.19	9.21%
Normal Butane	0.52	11.85%	0.56	12.18%
Isobutane	0.35	13.36%	0.32	12.61%
Pentane+	0.91	7.24%	0.91	5.89%
Total Barrel Value in \$/mmbtu	3.63	8.03%	3.82	7.84%
Margin	1.66	22.93%	1.82	24.47%

Price, Shrink of 42-gal NGL barrel based on following: Ethane, 36.5%; Propane, 31.8%; Normal Butane, 11.2%; Isobutane, 6.2%; Pentane+, 14.3%, Fuel, frac, transport costs not included. Conway gas based on NGPL Midcontinent zone, Mont Belvieu based on Houston Ship Channel.

Ethane rejection continues to decrease, but the product is only making modest price improvements due to propane being the most preferred ethylene feedstock at this time. The Mont Belvieu price remained flat at 15 cents/gal and the Conway price gained 1 cent/gal to 14 cents/gal.

Further decreases in natural gas prices improved frac spread margins for each NGL with the largest taking place for ethane. However, C5+ remained the most profitable at 49 cents/gal at both hubs. This was followed, in order, by isobutane at 36 cents/gal at Conway and 32 cents/gal at Mont Belvieu; butane at 28 cents/gal at Conway and 31 cents/gal at Mont Belvieu; propane at 13 cents/gal at Conway and 16 cents/gal at Mont Belvieu; and ethane at 1 cent/gal at Conway and 2 cents/gal at Mont Belvieu.

Natural gas storage withdrawal levels were strong once again at 152 billion cubic feet the week of Jan. 29, which lowered the storage level to 2.934 trillion cubic feet (Tcf) according to the U.S. Energy Information Administration. This was down from the 3.086 Tcf posted the previous week and 20% lower than the 2.444 Tcf posted the prior year at the same time. It was also 18% lower than the five-year average of 2.489 Tcf.

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Jan. 27 - Feb. 2, '16	15.18	34.14	51.94	51.98	70.88	\$15.32
Jan. 20 - 26, '16	14.64	31.26	46.30	46.16	66.94	\$14.18
Jan. 13 - 19, '16	14.09	31.70	44.38	44.55	69.00	\$14.14
Jan. 6 - 12, '16	15.64	34.88	50.98	50.88	79.02	\$15.96
January '16	14.99	33.52	49.29	49.26	73.66	\$15.20
December '15	14.83	38.66	56.87	57.47	92.65	\$17.69
4th Qtr '15	17.50	42.15	60.09	60.57	97.59	\$19.11
3rd Qtr '15	18.26	40.99	54.16	55.19	100.10	\$18.80
2nd Qtr '15	17.93	46.30	58.11	59.66	126.14	\$21.48
1st Qtr '15	18.38	53.01	66.35	67.81	110.53	\$21.94
Jan. 28 - Feb. 3, '15	17.85	49.34	66.00	67.90	103.10	\$20.90
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Jan. 27 - Feb. 2, '16	13.92	31.20	48.52	56.00	70.52	\$14.83
Jan. 20 - 26, '16	13.30	28.96	43.38	49.40	65.76	\$13.69
Jan. 13 - 19, '16	14.20	28.65	41.70	48.50	68.25	\$13.86
Jan. 6 - 12, '16	14.68	30.42	48.26	55.46	76.96	\$15.27
January '16	14.14	30.31	46.42	53.17	72.76	\$14.72
December '15	13.32	33.23	54.07	60.36	91.32	\$16.79
4th Qtr '15	14.90	38.06	57.31	64.04	95.84	\$18.20
3rd Qtr '15	15.47	36.28	48.59	54.34	99.10	\$17.59
2nd Qtr '15	15.50	40.55	52.40	56.80	121.50	\$19.89
1st Qtr '15	17.81	49.00	66.13	76.84	106.32	\$21.49
Jan. 28 - Feb. 3, '15	17.45	45.76	68.42	75.18	100.90	\$20.76

MORE TOP STORIES

'Remarkably Large' Incentive Results From KMI, El Paso Pipeline Case

A former investment banker landed a so-called incentive fee of \$450,000, one of the largest of its kind, for pursuing a securities lawsuit that led to \$100 million in damages against Kinder Morgan Inc.

Peter Brinckerhoff of Florida was awarded the fee for putting in more than 1,500 hours on the case, which resulted in one of the largest damage awards in the history of Delaware's Court of Chancery, which heard the case. The lawsuit benefited other investors who did not actively participate in the litigation.

"I don't know if it's the largest ever, but it's remarkably large for a securities case," said Geoffrey Miller, a professor at New York University Law School who has researched incentive awards.

Several plaintiffs and defense attorneys who specialize in securities class action cases said it was the largest incentive award they had seen.

Brinckerhoff brought the suit in 2010 to challenge a deal by El Paso Pipeline Partners, a publicly traded master limited partnership.

Vice Chancellor Travis Laster of the Court of Chancery ruled last year that the MLP overpaid when it acquired pipeline assets from its controlling parent, El Paso Corp. The judge ordered the overpayment returned to El Paso Pipeline's investors.

Kinder Morgan later acquired El Paso, and is on the hook for the damages.

Brinckerhoff had sought \$1.35 million, a figure his lawyers conceded in court papers was "unusual," to compensate him for spending five years working on the case.

Brinckerhoff was an investment banker who retired from Donaldson, Lufkin & Jenrette in 1991, according to court documents. He could not be reached for comment.

Incentive awards have been criticized as "bounties" that encourage wasteful class actions, and in 2003 Congress briefly considered banning them in federal courts.

Laster, who approved the award, has a reputation for being tough on fees when he questions the value of the litigation. In Brinckerhoff's case, Laster awarded \$33 million for lawyers with Rosenthal, Monhait & Goddess and Bragar Eigel & Squire.

Lawyers for the law firms did not respond to a request for comment.

Ted Frank, a critic of what he views as abusive tactics in class action cases, said incentive awards are more troubling when they are paid in settlement agreements.

"I don't necessarily have a problem with it," he said of the Brinckerhoff payment.

-REUTERS

Plake Appointed As President Of Holly Logistics Services

The board of directors of Holly Logistic Services LLC (HLS) appointed Mark A. Plake as its president, effective Feb. 15, when Mike Jennings resigns as president, Holly Energy Partners LP said Feb. 4.

Jennings will continue as CEO and a director of HLS and executive chairman of HollyFrontier Corp. (HFC). Plake joined HFC in 1999, serving as vice president of Holly Asphalt, vice president of special projects and vice president of human resources and government affairs.

Effective Feb. 15, Plake will resign from his most recent position as vice president of HFC's marketing, which he took on in April 2011.

Holly Energy Partners LP is based in Dallas

-BUSINESS WIRE

Shell Delays FID On LNG Canada Export Terminal

British Columbia's ambitions to become North America's next major liquefied natural gas exporter took another hit on Feb. 4, as Royal Dutch Shell pushed back a final investment decision (FID) on its LNG Canada project to late 2016.

The delay came as Europe's largest oil company reported its lowest annual income in over a decade and said it would take further steps to cut costs to cope with weak oil prices if needed.

LNG Canada, located on British Columbia's rugged northern coastline, is one of the frontrunners in a now-slowing race to build Canada's first LNG export terminal. It has already been granted its key environmental permits.

A Petronas-led project, also in the province's north, was given a conditional FID in June 2015, but an environmental review is still underway and could be further delayed by new rules requiring reviews to consider the emissions of upstream gas production.

British Columbia's ruling Liberals, meanwhile, had been banking on having three LNG export terminals in operation by 2020, delivering new jobs in the near term and bolstering government coffers in coming years. Shell has in the last year scrapped numerous multibillion-dollar projects, including a controversial exploration project in the Alaskan Arctic Sea, the Bab sour gas field in Abu Dhabi and Carmon Creek oil sands project in Canada.

"We are postponing the final investment decision on LNG Canada right through the end of this year," Chief Executive Ben van Buerden told investors on a conference call.

The LNG Canada partners - Shell, along with PetroChina Co. Ltd., Korea Gas Corp. and Mitsubishi Corp. - had planned to take FID in the first half of 2016.

Despite the delay, the team on the ground remained upbeat, noting that early work is moving ahead and the added time will be used to further derisk the C\$25 billion (\$18.22 billion) to C\$40 billion (\$29.15 billion) development.

Contact Information:

FRANK NIETO Senior Editor

fnieto@hartenergy.com

Contributing Editors: Velda Addison, Darren Barbee, Jay Bolan, Nissa Darbonne, Rhonda Duey, Annie Gallay, Leslie Haines, Paul Hart, Susan Klann, Joseph Markman, Richard Mason, Emily Moser, Brian Mothersole, Erin Pedigo, Larry Prado, Jennifer Presley, Chris Sheehan, Bryan Sims, Steve Toon, Len Vermillion, Theresa Ward, Scott Weeden, Peggy Williams

Graphic Designer: Felicia Hammons

ORDER TODAY!

Call: 1-212-608-9078 | Fax: 1-212-608-9357

HART ENERGY

1616 S. Voss, Suite 1000 • Houston TX 77057-2627 • USA

Copyright 2016. All rights reserved. Reproduction of this newsletter, in whole or in part, without prior written consent of Hart Energy is prohibited. Federal copyright law prohibits unauthorized reproduction by any means and imposes fines up to \$100,000 for violations. Permission to photocopy for internal or personal use is granted by Hart Energy provided that the appropriate fee is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Phone: 978-750-8400; Fax 978-646-8600; E-mail: info@copyright.com.