



January 20, 2011

VOLUME 29 ISSUE 3

## 2010 Frac Spread: Ethane Margins Fall, But Other NGLs Show Improvements

Several weeks ago we reviewed natural gas liquids (NGL) prices for 2010, which were generally strong looking at the beginning of the year to the end of the year (*see Gas Processors Report 01/06/11*). This week we will be reviewing the frac spread for that time period, which shows much the same results with sizable exception of ethane, which was the lone NGL to have a negative frac spread for the year.

Although ethane prices at both Conway and Mont Belvieu recovered in the fall and winter of 2010 from their negative status in the summer they never fully regained the strength they showed in January 2010.

For the 12-month period from January to December, the Conway margin for ethane fell 27% while the Mont Belvieu margin fell slightly less at 15%. Despite the margins falling at both hubs margins remained strongly positive at each location.

The strongest gain in margin for any NGL at both hubs was for C<sub>5+</sub>, which improved its margin at Conway by 35% and its margin at Mont Belvieu by 46% due to the gains posted by crude oil, which C<sub>5+</sub> is closely linked to.

The link to crude oil also benefited isobutane and butane, which each gained strength due to increased demand for winter-grade gasoline. Isobutane margins improved by 14% at



Processing plants like DCP Midstream's East Texas plant (above) benefitted from the switch to liquids in 2010 (Photo courtesy DCP Midstream)

Mont Belvieu and 10% at Conway while butane margins improved by 24% at Mont Belvieu and 12% at Conway. Both products have seen their margins fall a bit in the new year as the refining demand for winter-grade gasoline has fallen off a bit since December.

Propane had the smallest gains in margin over the course of 2010 primarily due to the lack of heating demand outside of the first month and a half of the year when cold temperatures caused demand to spike. For the year, propane's margin at Conway rose 6% while the Mont Belvieu margin rose 13%.

Editor's Note: *Gas Processors Report* will not be published on Thursday, January 27 due to a company-wide off-site meeting. We anticipate *Gas Processors Report* will resume publishing on Friday, January 28. We apologize for any inconvenience.

### In This Week's Edition of Gas Processors Report

#### FEATURE

2010 Frac Spread: Ethane Margins Fall, But Other NGLs Show Improvements

#### INSIDE LOOK AT PROCESSING TRENDS

Capital Flows Back to Gas

Trilogy Postpones Plans for Kaybob Extraction Facility

Private Pursuits

Ernst & Young's Top 10 Deal Drivers in 2011

#### MIDSTREAM NEWS

DCP Midstream Secures Long-Term Anchor Agreements for Eagle Ford Midstream Expansion

Dominion Transmission to Build Marcellus Processing Plant in WV

Encana to Sell Fort Lupton Processing Plant as Part of Midstream Monetization Strategy

Midstream-Focused Firm Corridor Energy Announces Formation

#### FRACTIONATION SPREAD

Ethane Margins Fall for the Third Straight Week

#### BOX SCORE

NGL Prices Overcome Two-Week Slump

#### PIPELINE NEWS

Inergy Midstream Holds Open Season for Tres Palacios Extension Project

#### INTERNATIONAL NEWS

Gazprom, Japan to Build LNG Plant According to Reuters Report

Despite four of the five NGLs posting strong pricing and frac spread margin results in 2010, ethane's lower prices and decreases in margins took the theoretical NGL barrel price down at both hubs since ethane is such a large component of the barrel.

The Conway theoretical barrel price fell 7% from the start of the year to US\$50.75 per barrel (/bbl) while the Mont Belvieu theoretical barrel price dropped 2% from the start of the year to the end of the year to \$52.87/bbl.

Although the theoretical barrel price fell at both hubs over the course of the 12-month period, the frac spread margin for the barrel showed strong gains at both hubs. The Conway margin improved 9% to \$35.63/bbl while the Mont Belvieu margin showed even more improvement at 18% to \$37.71/bbl.

During the course of 2010, C<sub>5+</sub> was the most profitable NGL to make at both hubs at \$1.60 per gallon (/gal) at Conway and \$1.68/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.32/gal at Conway and Mont Belvieu; butane at \$1.20/gal at Conway and \$1.22/gal at Mont Belvieu; propane at 90¢/gal at Conway and 95¢/gal at Mont Belvieu; and ethane at 24¢/gal at Conway and 33¢/gal at Mont Belvieu.

Natural gas feedstock prices helped the frac spread margins at both hubs as dry gas prices fell 31% to \$4.14 per million Btu (/MMBtu) at Conway and 30% to \$4.15/MMBtu at Mont Belvieu. These decreased prices were due to limited demand as production remained high throughout the year as improved efficiency overcame decreases in the rig count for much of the year.

These price drops could have been worse but the spike in demand caused by the extreme early winter throughout much of the country caused storage levels to fall of their approach to record-breaking levels. On a year-on-year basis, natural gas in storage was down 179 billion cubic feet, or 9%, according to data from the U.S. Energy Information Administration (EIA) as gas in storage fell from 3.276 trillion cubic feet (Tcf) at the end of 2009 to 3.097 Tcf at the end of 2010.

While the story of 2010 in the midstream was the switch from dry gas to liquids, EIA anticipates natural gas consumption to increase over the next 25 years. According to EIA's preliminary energy outlook for 2011, natural gas consumption will rise from 22.7 Tcf in 2009 to 26.5 Tcf in 2035. This is 1.6 Tcf higher than in the 2010 outlook due to lower natural gas prices. – **Frank Nieto**

Frac Spread (Cents/Gal)				
January – December 2010				
	Conway	Change from Last Week	Mont Belvieu	Last Week
Ethane	51.13		60.37	
Shrink	27.45		27.51	
Margin	23.68	-26.54%	32.86	-15.17%
Propane	128.10		132.50	
Shrink	37.92		38.01	
Margin	90.18	5.83%	94.49	13.30%
Normal Butane	162.40		164.90	
Shrink	42.93		43.04	
Margin	119.47	12.10%	121.86	23.60%
Iso-Butane	173.00		173.30	
Shrink	41.23		41.33	
Margin	131.77	10.23%	131.97	14.12%
Pentane+	206.00		214.00	
Shrink	45.91		46.02	
Margin	160.09	34.82%	167.98	45.54%
NGL \$/Bbl	50.75	-7.36%	52.87	-1.80%
Shrink	15.12		15.16	
Margin	35.63	8.65%	37.71	17.45%
Gas (\$/mmBtu)	4.14	-31.23%	4.15	-30.25%
Gross Bbl Margin (in cents/gal)	81.76	8.74%	87.89	16.60%
NGL Value in \$/mmBtu				
Ethane	2.81	-29.13%	3.32	-22.78%
Propane	4.45	-8.73%	4.60	-3.92%
Normal Butane	1.75	-3.91%	1.78	2.87%
Iso-Butane	1.08	-3.62%	1.08	-0.91%
Pentane+	2.66	11.05%	2.76	17.97%
Total Barrel Value in \$/mmbtu	12.75	-10.08%	13.54	-4.97%
Margin	8.61	5.52%	9.39	13.16%

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.

Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation.

## INSIDE LOOK AT PROCESSING TRENDS

### Capital Flows Back to Gas

One of the starkest trading themes in the 2010 energy markets was crude oil futures' outperformance relative to natural gas. Front-month WTI gained 6% in the first 11 months of the year, while Henry Hub prices fell 24%. While U.S. gas has been trading below BTU parity versus oil for the past five years, the ratio now stands at a record differential, with oil priced more than 23 times higher than gas.

As might be expected, a similar disparity occurred in oil and gas equities during 2010. Companies whose earnings are more leveraged to oil prices outperformed those whose earnings derive more from gas prices.

Shares of oil-leveraged producers gained an average of 9% in the first 11 months, while natural gas producers declined 15%. The E&Ps that shifted focus toward shale oil or natural gas liquids fared better than those whose production profiles remained focused on North American dry gas.

### Price Outlook

Most analysts are bullish, or at least constructive, on global oil prices for 2011 and beyond due to strong demand from non-OECD countries and weak output from non-OPEC producers. But the outlook for North American natural gas is overwhelmingly pessimistic for the next several years. Inventories remain well above historical averages despite a hot summer and cold winter in 2010. And gas supply continues to grow as companies accelerate drilling even at US\$4 to \$5 prices, making their activities barely economic.

Moreover, demand for natural gas has been historically inelastic; cheap prices tend not to spur demand. Within the past three months, 21 out of 46 contributing Thomson Reuters I/B/E/S analysts have lowered their 2011 forecasts for natural gas prices. And they are placing more "Buy" recommendations on oil-weighted equities and more "Sell" ratings on those exposed to gas.

Despite this negative outlook for natural gas futures and associated stocks, a flurry of corporate deals occurred in the natural gas market this past year – and at premium prices. Industry-leader ExxonMobil initiated the activity with its \$41 billion acquisition of gas producer XTO Energy (*see Gas Processors Report 07/01/10*).

While none of the subsequent deals came close in size, several other super-majors also significantly increased their exposure to North American natural gas, either by purchasing other gas producers directly or via shale-acreage purchases or joint ventures.

Europe's largest energy company, Royal Dutch Shell Plc, in May bought most of natural gas-focused E&P East Resources Inc. for \$4.7 billion. France's Total SA made a \$2.25-billion purchase of some of Chesapeake Energy's U.S. shale operations (*see Gas Processors Report 01/04/10*). Most recently, U.S. giant Chevron paid \$4.2 billion to buy natural gas producer Atlas Energy (*see Gas Processors Report 11/10/10*). Also, several major players from Asia, notably Reliance Energy of India, have entered the U.S. natural gas market with large cash injections, especially for joint ventures in the Eagle Ford shale.

### Capital Inflows

There appears to be a dichotomy between corporate managements' strategies and the investment community's expectations regarding North American natural gas. The former seem focused on long-term production growth, while the latter is more concerned with near-term return on capital employed and free cash flow.

However, during third-quarter 2010, Thomson Reuters Lipper data showed capital inflows to some of the independent E&Ps with the most gas exposure after seeing outflows for the prior two quarters. The third-quarter investments were made on behalf of long-term, value-oriented institutions and some beta-driven hedge funds that typically have not maintained broad-based exposure to the energy markets.

The stock-specific selection in the E&Ps with exposure to the lowest-cost shale-gas resources reflects the expectation that M&A activity will continue into 2011. With already large, diverse and mature asset bases, integrated and international oil companies are struggling to find growth opportunities that can meaningfully contribute to their production expansion. And the size of the North American shale gas resource base is material enough to fit that bill.

At the same time, there are a lot of relatively small companies operating across a wide variety of shale resources that will need to respond to weak natural gas prices, assuming prices remain depressed. Given these prospects for consolidation, capital inflows to gassy E&Ps should continue.

But what about the long-term fundamental outlook for gas? On election day 2008, when Barack Obama won the presidency and Democrats acquired a majority in both houses of Congress, front-month natural gas futures spiked 6%. There was no fundamental basis for this price action – the commodity was instead supported by the gains in the broader equity indices and in crude oil prices that day.



Traders also attributed the climb in natural gas futures to the Democrats' clean-energy agenda, theorizing that the new administration would support policies to incentivize use of the commodity for power and/or transportation. So far this notion has failed to pan out, however, leaving many industry participants frustrated that the administration has lent more support to renewables than to relatively clean-burning natural gas.

With carbon-emissions legislation off the agenda, coupled with the ongoing increases in coal-fired power-generation capacity, the prospects for industrial power demand for natural gas do not look bright for the near and medium terms. Despite some coal-to-gas switching by power plants throughout the year, some analysts think that natural gas prices will have to fall further and stay low throughout 2011 to encourage enough coal substitution to dent supply and stimulate secular demand growth.

### Trilogy Postpones Plans for Kaybob Extraction Facility

Trilogy Energy Corp. announced it was postponing plans to build a deep-cut liquids extraction facility at the Kaybob North Sour Gas Plant in Alberta, Canada, after reaching a five-year agreement with Aux Sable for improved recovery values for its natural gas liquids out of the region.

The agreement allows Trilogy to begin benefiting from these improved economics, which are similar to the expected improvements from the extraction facility, immediately rather than in second-quarter 2012 with the completion of that project.

Trilogy officials stated that this agreement, which is expected to increase cash flow by as much as Cdn\$15 million (US\$15.1 million) in 2011, will prove to be mutually beneficial and will obviate the need to continue with the deep-cut liquids extraction project.

In 2009, Trilogy produced 17,838 barrels of oil equivalent per day (boe/d) from the Kaybob areas, which was down

### Private Pursuits

During the final months of 2010, industry watchers were paying special attention to E&P announcements, reading between the lines for insight about development strategies and revised sentiments about natural gas. A year previous, just as energy reporters were starting to think about the holidays, the surprise was the flurry of M&A deals that suddenly came across the wires. Near the end of 2010, however, the markets saw a different surprise when two well-known, gas-weighted E&Ps, Quicksilver Resources Inc. and Exco Resources Inc., announced plans to take the companies private.

As for transportation demand, the Natural Gas Act, which proposed incentives for purchasing natural-gas-powered vehicles, building stations and other industry development, was introduced last year but failed to pass.

Interestingly, following the 2010 election in which Republicans made notable inroads in Congress, President Obama expressed support for developing domestic natural gas resources. Lowering hydrocarbon emissions, reducing dependence on foreign oil and enhancing U.S. exports (e.g., liquefied natural gas) are causes most Americans would probably support, and they would all be auspicious for secular natural gas demand. The vagaries of politics may determine if they happen any time soon. – **Tamar Essner**, *energy analyst, Thomson Reuters Advisory Services*

from 18,570 boe/d in 2008. Should the volumes that Trilogy and Aux Sable contracted for reach 130 million cubic feet per day (MMcf/d), than Trilogy could generate up to Cdn\$30-40 million (US\$30.1-40.2 million) in cash flow per year, which could reach a five-year total of Cdn\$170 million (US\$170.7 million).

In addition, Trilogy will benefit from the negation of Cdn\$55 million (US\$55.2 million) in capital spending in 2011 and 2012 to install a new cryogenic deep-cut functional unit along with yearly costs of Cdn\$2.5 million (US\$2.51 million) in operating costs and Cdn\$3 million (US\$3.01 million) in transportation costs.

Pricing under the agreement is calculated with reference to the U.S. natural gas liquids (NGL) market in order to a larger, higher-priced, more liquid market.

– **Frank Nieto**

“While each potential transaction must be considered on its own specifics, they represent a maturing of the downcycle and a natural consequence of plentiful financing,” Stephen Richardson, analyst, Morgan Stanley & Co. Inc., wrote in an early November research note.

“For E&Ps, available funding levers have proven key to financing development and growth in a low commodity price environment. Buyouts represent another alternative to weather the downcycle. This highlights a disconnect between

required return and view of commodity upside in the public vs. private markets.

“While likely related to the perceived duration of the downcycle, we view the transactions as expressions of a common view; natural gas fundamentals have bottomed, and its cyclical nature will reassert itself for those willing to take a multiyear view,” he said.

Quicksilver’s announcement was made in mid-October, when the board received a letter from Quicksilver Energy LP indicating that it, along with members of the Darden family, wanted to explore strategic alternatives for Quicksilver Resources Inc (see *Gas Processors Report 10/07/10*).

On the heels of the Quicksilver announcement, in November, Exco Resources Inc.’s chairman and chief executive, Douglas H. Miller, offered to purchase all of the outstanding shares of stock of the company for \$20.50 per share, a 38% premium over the October 29 closing price.

The proposed Exco acquisition would merge the company with a newly formed acquisition vehicle. In his letter to the board, Miller wrote that he’d “discussed this proposal with Oaktree Capital Management LP, Ares Management LLC, and (major shareholder) Boone Pickens, and each has expressed an interest in pursuing the acquisition with me.”

### Betting on the Assets

“...This isn’t a bet on gas,” Miller said during a conference call in November. “I’m betting on the assets and the people. I’m also a believer that gas is going to be cheap for at least the next 12 to 18 months, and I think it’s an opportunity to get private and be ready to go, make some acquisitions.”

It’s not entirely surprising that select gassy companies are making this move now, said Kim Pacanovsky, a managing director at New York-based McNicoll, Lewis & Vlax LLC, a boutique investment bank and institutional broker-dealer. From a political standpoint, while there were many good pieces of pro-gas legislation written that could have improved gas demand, they were never passed and gas-weighted companies are pressing onward.

“Many management teams have taken a company public, then regretted it, because of all of the pulls of the public market,” Pacanovsky said. “But at some point, if you’re running a company and you have a large insider ownership position, if you see your work and the value you’ve created are not being represented in the stock price, selling the company or taking it private can be a reasonable solution.

“The one disadvantage is not being able to tap the public markets for capital, but with the amount of private equity available now, this isn’t the big issue it used to be.”

The appeal of going private has also grown during the past two years as the public finance markets have changed. Jack Aydin, analyst, KeyBanc Capital Markets, said, “During that time period, the way many E&P assets were being valued was a very haphazard process. Companies saw a lot of volatility in their stock prices and, ironically, there was a disconnect between stock prices and company asset values in the ground.”

And the investment landscape has evolved. Exchange-traded funds, the increase in the number of foreign buyers interested in U.S. assets, zero interest rates – all of these things have changed asset valuations and the way the investment culture works. The turmoil in the financial markets also played a role, Aydin said, and the new environment, along with the rules, regulations and compliance inherent in the public markets, probably became too cumbersome for some companies.

“Private companies still have investors to answer to, but the time horizon to see returns is different and as long as management is executing on its business model, near-term hiccups are viewed as bumps in the road.”

### Why Go Private?

Also, in line with staying flexible, Aydin said companies considering the take-private scenario shouldn’t be highly leveraged. To go private, unless a company has an investor contributing equity, the money has to be borrowed. Companies with a smaller debt load are better positioned to implement such a strategy.

“Quicksilver is asset-rich, but it has somewhere north of 60% in leverage, so the question is how much more leverage does management want to assume. They could actually get more value if they sold assets in a piecemeal fashion. In this scenario, maybe it’s worth paying a greater premium and taking on the additional leverage.”

Companies with assets that have a good, long-term development horizon can be good take-private candidates, but management teams and private-equity firms have to be positioned to take risk near-term, as it relates to natural gas prices, Aydin added.

“It’s actually surprising that so many private-equity shops, flush with cash, haven’t moved more aggressively in the gas-focused areas of the E&P sector. While each take-private announcement is a case-by-case situation, the outcome can be a good indicator of asset valuations in a specific area. And as those valuations continue to be examined, we’re going to see more foreign interest in the E&P sector going forward, especially during the next year.”

For gas-weighted companies that have fairly high insider ownership, a take-private proposal in the current environment may be a logical step. But the take-private model doesn't work for every company. It's also not something most

management teams would encourage if they don't own a large chunk of the stock, because they probably don't want a group of money managers running the company, Pacanovsky said. – **Bertie Taylor**, from *Hart's Oil and Gas Investor*

## Ernst & Young's Top 10 Deal Drivers in 2011

Oil and gas was a bright spot in the 2010 M&A landscape, according to Ernst & Young's year-end figures.

Total industry transaction value topped US\$266 billion, up 33% from 2009. Total deal activity was up 13% from 2009, with deals reported having values that were up 2%.

Availability of capital, strong oil prices, and an emphasis on portfolio rationalization to position companies for the next market cycle drove the increases in 2010.

For 2011, with gas prices depressed, investors will be looking for gas plays with strong liquid content while ongoing regulatory and legislative uncertainty will slow the pace of negotiations.

Deals in 2011 will be driven and characterized by:

1. Liquidity returning to the markets and making deals possible.
2. Depressed gas prices causing a shift in spending from gas to oil.
3. The shale gas revolution fundamentally changing the long-term outlook for natural gas.

4. Companies with intellectual property or developing technologies (including horizontal drilling) being in high demand.
5. Significant interest from global players like Korea, China, Japan and India, focusing on shale plays and the oil sands.
6. Regulations driving larger scale.
7. Strategic buyers with large amounts of cash and a need to grow being the main acquirers.
8. Heightened and ongoing environmental risks factoring into impending deals and making meticulous due diligence the new standard.
9. Cost and risk sharing through strategic partnerships and joint ventures.
10. Private equity, under pressure to deploy or repatriate capital, spurring additional M&A activity.

## MIDSTREAM NEWS

### DCP Midstream Secures Long-Term Anchor Agreements for Eagle Ford Midstream Expansion

DCP Midstream LLC signed long-term gas gathering and processing agreements with Pioneer Natural Resources USA Inc., Reliance Eagleford Upstream Holding LP and Newpek LLC (collectively, the Pioneer JV), under which DCP Midstream will provide a full scope of midstream energy services to handle liquid-rich natural gas from the Pioneer JV's acreage in the Eagle Ford shale play in south central Texas.

The agreement covers the gathering, processing, fractionation and marketing services of raw natural gas and gas liquids by DCP Midstream for the Pioneer JV's Eagle Ford shale production from more than 300,000 gross acres. In addition to the Pioneer JV acreage, DCP Midstream has also executed a long-term gathering and processing agreement with a privately held producer for 33,000 acres of Eagle Ford development in Wilson and Karnes counties.

DCP Midstream will construct approximately 130 miles of 16-, 20- and 24-inch gathering pipelines that will connect the Pioneer JV's and the privately held producer's central gathering points in south central Texas and other gas supply

to DCP Midstream's existing area gathering and processing facilities. DCP Midstream has excess processing capacity of 250 million cubic feet per day (MMcf/d) currently available in the Eagle Ford shale area.

In addition, DCP Midstream is announcing plans to construct a sixth plant of 200 MMcf/d capacity and related natural gas liquids infrastructure, which is expected to be online in third quarter 2012, increasing DCP Midstream's total capacity in the area to 1 billion cubic feet per day (Bcf/d). DCP Midstream has purchased the land and plant equipment and has received regulatory permitting from the state of Texas to begin construction.

This agreement follows DCP Midstream's recent announcement of the Trunkline Gas pipeline transaction, in which DCP Midstream will be the anchor shipper on Trunkline Gas' 20-inch, South Texas pipeline system. DCP Midstream is in the process of constructing large diameter pipelines in the Eagle Ford shale area to gather gas supply commitments. This will integrate DCP Midstream's South



and central Texas area gathering systems with Trunkline Gas' 165-mile South Texas system to create a "super system" in South Texas.

This super system will plumb together DCP Midstream's five existing processing facilities with the new Eagle gas plant to create a system with more than 1 bcf/d of processing capacity and associated fractionation capacity. DCP Midstream has executed long-term contracts with the Pioneer JV, ConocoPhillips, Petrohawk Energy, Enduring Resources, Murphy Oil, Riley Exploration and others for gas production from more than 450,000 acres in the Eagle Ford shale area.

"We are very excited to work with the Pioneer JV to provide a full slate of midstream services," said Tom O'Connor,

### Dominion Transmission to Build Marcellus Processing Plant in WV

Dominion Transmission announced plans to build a natural gas processing and fractionation plant near New Martinsville, West Virginia, as part of its previously announced Marcellus 404 Project (see *Gas Processors Report 05/06/10*).

The company acquired 56 acres of land from PPG Industries at its Natrium site that it will use to build the plant, which will process up to 300,000 cubic feet per day of natural gas and fractionate up to 38,000 barrels per day of natural gas liquids (NGL). This site is close to a railroad and barging services as well as Dominion pipeline that will help market NGLs produced at the plant.

### Encana to Sell Fort Lupton Processing Plant as Part of Midstream Monetization Strategy

Encana officials continued to sell certain midstream assets in order to combat low natural gas prices by announcing the company had reached an agreement to sell its Fort Lupton natural gas processing plant outside of Denver, Colorado, to Western Gas Partners for US\$303 million.

The facility currently operates at about full capacity by processing 84 million cubic feet per day (MMcf/d) of natural gas from the DJ basin through two cryogenic trains. The agreement, expected to close in the first quarter of 2011, includes the associated five gathering pipeline systems as well as associated compression facilities.

As part of the agreement, Encana negotiated natural gas processing fees that will allow it to continue to capture approximately 3,500 barrels of natural gas liquids (NGL) per day from its processed gas as well as long-term gathering and processing costs.

This agreement follows the company's announcement in October that it would continue to seek to monetize certain midstream assets in order to expand the company's portfolio of liquids- and oil-rich plays (see *Gas Processors Report 10/27/10*).

chairman, president and CEO of DCP Midstream. "DCP Midstream is executing on its strategy of leveraging existing area assets and integrating them to be able to provide speed-to-the-ball service for early Eagle Ford shale development, and has aggressively secured long-term gas supply commitments that support expansion plans – all of which provide economies of scale and critical mass in DCP Midstream's service footprint. This strategy is similar to DCP Midstream's approach in other liquids rich areas, such as the DJ/Niobrara, Wolfberry, Granite Wash and Avalon shale plays."

*Gas Processors Report* expects to have more on this story in the coming weeks.

The facility will be tied into the company's TL-404 transmission line in Ohio and West Virginia that will be converted into a wet gas service line.

"Further development of the Marcellus shale demands additional processing and fractionation capacity. PPG's Natrium site is strategically located close to our existing facilities, near high-Btu natural gas development, and it allows for transport of the fractionated liquids by numerous options," Paul Ruppert, senior vice president of Dominion Transmission, said.

"This divestiture is part of Encana's ongoing initiative to capture significant incremental value from its midstream assets – natural gas processing plants, pipeline gathering systems and compression facilities. We are looking to enter into long-term and competitive fee-for-service agreements with industry-leading midstream companies. These arrangements help us optimize value creation of our extensive North American natural gas resources and deliver natural gas to market in the most cost-effective manner," Renee Zemijak, Encana's executive vice president, midstream, marketing and fundamentals, said.

In accordance with this strategy, the company also began accepting bids from companies seeking to acquire and complete construction on the Cabin natural gas processing plant, which is being built in northeast British Columbia, Canada, to serve producers in the Horn River.

The project is to be developed in two phases, each with 400 MMcf/d of capacity, for total processing capacity of 800 MMcf/d. The first phase has an in-service date of 2012.

– Frank Nieto

## Midstream-Focused Firm Corridor Energy Announces Formation

Corridor Energy LLC has announced its formation as an asset management company focused on real energy infrastructure assets. Corridor Energy plans to provide growth capital to finance energy infrastructure assets deployed in sectors such as electric power transmission and distribution, and natural gas and liquid transportation and storage facilities.

The entity will seek to own energy infrastructure assets as a financing partner to energy and power companies that can be leased to operating businesses. These assets serve as critical conduits for energy delivery, relying on real estate corridors for right-of-way. As such, the real assets targeted by Corridor Energy have the potential to become real estate investment trust (REIT) qualified.

Corridor Energy is being formed by principals of the Calvin Group, as well as Tortoise Capital Advisors LLC and Tortoise's majority owner, Montage Asset Management LLC. Corridor Energy benefits from the deep experience of the Calvin Group principals in operating energy companies, as well as access to the capital markets, and the financial and research expertise of Tortoise. Richard Green, former chief executive officer of Aquila and Utilicorp United and a founder of Calvin Group, will serve as managing director of Corridor Energy and lead its management team.

The executives at Corridor Energy have a combined 70 years of energy industry experience and have originated more than 40 transactions totaling over US\$10 billion.

“Corridor Energy brings together a high level of expertise to originate innovative financing solutions as a partner to high-quality energy infrastructure companies,” said Green. “Our management team combines a track record in financial transactions with operating experience and sensitivity to the concerns of constituents such as regulators, government and customers. Together with the capital markets expertise provided by Tortoise, we will focus on providing real asset growth financing.”

“We see a tremendous need for high-quality management in energy infrastructure investments, and Tortoise is pleased to work with Corridor Energy both to supply long-term capital to the sector and to provide investors with greater access to these assets,” said David Schulte, managing director of Tortoise.

As it executes its strategy, Corridor Energy will help Tortoise Capital Resources Corp., identify, analyze and finance potential investment opportunities. TTO is a closed-end management investment company managed by Tortoise. Corridor Energy will seek to help TTO identify energy infrastructure asset investments that can be leased to operating businesses.



## FRACTIONATION SPREAD

### Ethane Margins Fall for the Third Straight Week

For the third straight week ethane frac spread margins fell at both hubs with the Conway margin again taking a large tumble and edging closer to being unprofitable to make as prices and demand continue to fall.

The Conway margin fell 27% leaving it at its lowest level at the hub since the late summer/early fall of 2010 despite another drop in natural gas feedstock prices at the hub. The Mont Belvieu margin was slightly stronger this past week as it fell 1% despite a 1% gain in feedstock prices at the hub since ethane was able to post a modest price gain.

Natural gas feedstock prices fell 1% to US\$4.39 per million Btu (/MMBtu) at Conway and rose 1% to \$4.40/MMBtu at Mont Belvieu as the Texas price was valued more than the Conway price for the first time this year.

The largest increase in margin at both hubs was for iso-butane, which improved by 9% at Conway and 3% at Mont Belvieu due to the increased demand for winter-grade gasoline. This was followed by C<sub>5+</sub>, which gained 4% at Conway, and propane, which gained 3% at Mont Belvieu.

The theoretical NGL barrel price improved 1% at both hubs as it was up to \$49.99 per barrel (/bbl) with a margin improvement of 2% to \$33.95/bbl at Conway while the Mont Belvieu price rose to \$53.65/bbl with a margin improvement of 1% to \$37.58/bbl.

The most profitable NGL to make at both hubs was C<sub>5+</sub> at \$1.63 per gallon (/gal) at Conway and \$1.68/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.31/gal at Conway and \$1.36/gal at Mont Belvieu; butane at \$1.19/gal at Conway and \$1.24/gal at Mont Belvieu; propane at 91¢/gal at Conway and 96¢/gal at Mont Belvieu; and ethane at 12¢/gal at Conway and 30¢/gal at Mont Belvieu.

Natural gas in storage for the week of January 7, the most recent data available from the U.S. Energy Information Administration, was down 138 billion cubic feet to 2.959 trillion cubic feet (Tcf) from 3.097 Tcf the previous week. This was 2% greater than the 2.890 Tcf figure posted last year at the same time and 6% higher than the five-year average of 2.798 Tcf.

The U.S. National Weather Service's forecast for the coming week should see heating demand increase as it calls for colder than normal temperatures to be experienced from the Northeast down to the Southeast and into the Midwest and Gulf Coast.

Current Frac Spread (Cents/Gal)				
January 20, 2011				
	Conway	Change from Last Week	Mont Belvieu	Last Week
Ethane	40.93		58.87	
Shrink	29.11		29.17	
Margin	11.82	-27.32%	29.70	-0.57%
Propane	130.88		136.10	
Shrink	40.21		40.30	
Margin	90.67	3.01%	95.80	2.64%
Normal Butane	164.53		169.40	
Shrink	45.52		45.63	
Margin	119.01	4.32%	123.77	1.00%
Iso-Butane	175.10		179.30	
Shrink	43.72		43.82	
Margin	131.38	8.66%	135.48	3.34%
Pentane+	212.00		216.80	
Shrink	48.69		48.80	
Margin	163.31	4.25%	168.00	0.38%
NGL \$/Bbl	49.99	0.86%	53.65	1.14%
Shrink	16.04		16.07	
Margin	33.95	1.72%	37.58	1.33%
Gas (\$/mmBtu)	4.39	-0.90%	4.40	0.69%
Gross Bbl Margin (in cents/gal)	77.98	1.79%	87.59	1.42%
NGL Value in \$/mmBtu				
Ethane	2.25	-10.32%	3.24	0.05%
Propane	4.54	1.77%	4.72	2.05%
Normal Butane	1.78	2.82%	1.83	0.92%
Iso-Butane	1.09	6.10%	1.12	2.68%
Pentane+	2.73	3.02%	2.80	0.45%
Total Barrel Value in \$/mmbtu	12.40	0.09%	13.71	1.14%
Margin	8.01	0.65%	9.31	1.36%

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.

Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation.

Warmer than normal temperatures are expected along the West Coast into the Mountain region with the rest of the country expected to experience normal winter temperatures.

– Frank Nieto

## BOX SCORE

### NGL Prices Overcome Two-Week Slump

After two weeks of declines, natural gas liquids (NGL) improved marginally at both Conway and Mont Belvieu. Although both NGLs at both hubs experienced improved prices relative to crude prices, it appears that increased production and lesser demand are taking a toll on prices.

Prices for the theoretical NGL barrel at both hubs is greater than at the same time last year, but only by US\$3.38 per barrel (/bbl) at Mont Belvieu and \$1.27/bbl at Conway. The biggest impact on these smaller gains is ethane, which is 11¢ per gallon (/gal) lower this week than it was at the same time last year at Mont Belvieu and 20¢/gal lower at Conway compared to the same time last year.

While Mont Belvieu ethane gained very slightly from last week and remained virtually unchanged in price at 59¢, its Conway counterpart fell 5% in price to 41¢. This was the lowest price at Conway since it was roughly the same price the week of October 21. Although the market for ethane appears to be a mixed bag at the moment, En\*Vantage reported in its *Weekly Energy Report* that ethane supplies should tighten next month.

“We are still estimating that ethane extraction is currently 860,000 barrels per day and that ethane storage volumes probably built in November but will decline in December, January and February. We are still projecting that ethane storage will increase nearly 1 million barrels in November due to all the ethylene plant outages that occurred that month. Ethane inventories are forecasted to resume their decline in December by approximately 700,000 barrels. Despite some swing to the heavy feedstocks this month to produce more propylene, it appears that any swing off ethane is not that material. Our estimate remains for ethane inventories to drop another 1.8 million barrels in January and drop 2 million barrels in February. The net result is that by the end of February ethane inventories should be at 20 million barrels with days of supply at 20 days, 10 days below the 10-year average,” according to the report.

Box Score						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Jan 12 - 18, '11	58.87	136.10	169.40	179.30	216.80	\$53.65
Jan 5 - 11, '11	58.84	133.36	167.86	174.62	215.83	\$53.05
Dec. 29, '10 - Jan 4, '11	61.17	133.02	167.37	175.86	218.00	\$53.52
Dec. 22 - 28, '10	64.63	133.45	167.65	178.50	212.15	\$53.80
December '10	61.75	129.45	169.76	177.25	209.47	\$52.77
November '10	62.88	125.42	161.66	166.63	197.78	\$50.96
4th Qtr '10	59.07	126.07	162.01	168.24	198.89	\$50.59
3rd Qtr '10	44.99	106.98	138.23	143.25	171.45	\$42.37
2nd Qtr '10	50.97	108.43	145.01	157.23	178.04	\$44.64
1st Qtr '10	70.80	123.84	151.72	165.09	183.29	\$50.45
Jan 13 - 19, '10	70.06	121.73	151.55	168.35	184.90	\$50.27
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Jan 12 - 18, '11	40.93	130.88	164.53	175.10	212.00	\$49.99
Jan 5 - 11, '11	45.64	128.60	160.02	165.03	205.78	\$49.56
Dec. 29, '10 - Jan 4, '11	50.46	128.36	162.56	170.50	206.52	\$50.65
Dec. 22 - 28, '10	52.53	128.05	166.80	174.00	208.33	\$51.39
December '10	51.74	124.32	167.51	170.70	205.49	\$50.57
November '10	48.20	119.49	154.72	158.68	189.78	\$47.36
4th Qtr '10	47.01	120.80	157.16	161.69	193.86	\$47.80
3rd Qtr '10	31.16	101.46	132.39	141.93	163.91	\$39.04
2nd Qtr '10	31.56	103.03	130.96	145.20	172.55	\$39.90
1st Qtr '10	59.82	123.81	143.58	160.70	181.55	\$48.69
Jan 13 - 19, '10	60.93	118.53	148.88	159.57	184.93	\$48.72

Data Provided by Intercontinental Exchange. Individual product prices in cents per gallon. NGL barrel in \$/42 gallons

This outlook is in contrast to propane, which continues to have a high storage level that continues to outpace demand despite heating demand increasing in the Northeast in recent weeks. Despite increased heating demand propane prices rose 2% to \$1.36 at Mont Belvieu and 1% to \$1.31 at Conway. Although the price improvements were marginal, the Texas price was the highest price in over a year – since it was \$1.38 the week of January 6, 2010. The Kansas price was hub’s highest price since it was \$1.37 the week of February 3.

The largest increase in price at either hub this week was for Conway isobutane, which rose 5% from last week to \$1.75. This was the highest price at the hub since it was \$1.88 the week of January 27. The Mont Belvieu price improved by 2% to \$1.79, its highest price since it was \$1.82 the week of

September 3, 2008. These price improvements are due to the continued production of winter-grade gasoline.

Butane prices rose 2% to \$1.65 at Conway and 1% to \$1.69 at Mont Belvieu this week as they also benefited from increased demand from refiners for winter-grade gasoline. The Conway price was the highest at the hub in a month while the Mont Belvieu price was the hub's highest price in five weeks.

## PIPELINE NEWS

### Inergy Midstream Holds Open Season for Tres Palacios Extension Project

Inergy Midstream LLC began a non-binding open season for firm wheeling service on an extension of its Tres Palacios gas storage facility pipeline header system, which will create a new point of interconnection at the tailgate of Copano Energy LLC's Houston Central gas processing plant in Colorado County, Texas.

The extension to the Tres Palacios facility, which is located roughly 100 miles southwest of Houston in Matagorda County, Texas, is expected to include roughly 20 miles of newly constructed lateral piping, additional compression, and interconnect facilities.

Once complete, shippers will be able to move gas along 60 miles of header pipe with access to a combination of 10 interstate and intrastate pipelines as well as the Tres Palacios storage facility and hub point. These pipelines provide shippers with access to the Houston and San Antonio markets, as well as markets in the Northeast, Midwest, Southeast and Mid-Atlantic U.S. and parts of Mexico.

## INTERNATIONAL NEWS

### Gazprom, Japan to Build LNG Plant According to Reuters Report

Gazprom and Japan's Agency for Natural Resources and Energy reached an agreement of cooperation to jointly design a liquefied natural gas (LNG) plant in Vladivostok, Russia, according to a *Reuters* report.

"The parties will also study the possibility of the pilot project on natural gas compression in Vladivostok for subsequent offshore transportation and organization of gas chemicals production," Gazprom said in a statement.

This report follows a similar report from Japanese business newspaper *Nikkei* this past summer that claimed Gazprom had reached an agreement with Itochu Corp. of Japan

Pentanes-plus (C<sub>5+</sub>) continued to have the highest price for any NGL at both hubs as it rose 2% to \$2.12 at Conway and gained 1¢ in value at Mont Belvieu to \$2.17. The Conway price was the highest price at the hub since it was \$2.26 the week of September 3, 2008 while the Mont Belvieu price was the second-highest price at the hub since the week of September 3, 2008 when it was \$2.34. – **Frank Nieto**

Roughly 90% of the facility's existing storage capacity is under firm storage contracts, and Inergy anticipates entering into firm storage contracts for the capacity being added in fourth quarter. The deal is expected to complete in the next 60 days.

This expansion will provide producers more options for selling residue gas at the tailgate of the Houston Central Plant, which is being modified to handle rich natural gas from the Eagle Ford shale.

The Tres Palacios storage facility, which Inergy acquired in the fall of 2010 (*see Gas Processors Report 09/08/10*), has capacity for 38.4 billion cubic feet (Bcf) with a planned expansion for 47.9 Bcf.

The open season commenced on January 18 and will close on February 15. The anticipated in-service date for the extension project is the summer of 2012.

and Japan Petroleum Exploration Co. to build an LNG plant in the city to transport gas to Japan (*see Gas Processors Report 07/14/10*).

Both the *Nikkei* report and the *Reuters* report stated that the LNG plant would likely have a capacity to ship approximately 5 million tons of LNG per year, although the *Reuters* report quoted a Japanese Trade Ministry official as saying that not all of this LNG would be shipped to Japan.

Further details on the proposed facility were not provided, but the previous report stated that the plant could begin operations as early as 2017. – **Frank Nieto**



## GAS PROCESSORS REPORT



*Sign me up for Gas Processors Report!  
I will receive 50 Issues in my E-mail inbox.  
1 year/50 issues for \$1,245*



NAME \_\_\_\_\_

TITLE \_\_\_\_\_

ORGANIZATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

ZIP \_\_\_\_\_ COUNTRY \_\_\_\_\_

E-MAIL (REQUIRED) \_\_\_\_\_

### Payment Options

 Check Enclosed (payable to Hart Energy Publishing) Please Bill My: Mastercard Visa AMEX Discover

CARD NO. \_\_\_\_\_ EXPIRATION DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

## CONTACT INFORMATION

### FRANK NIETO

Editor

[fnieto@hartenergy.com](mailto:fnieto@hartenergy.com)

### ARI ROMAN

To subscribe to Gas Processors Report

+1 212-608-9078

[custserv@hartenergy.com](mailto:custserv@hartenergy.com)

### Hart Energy Publishing

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

[www.hartenergy.com](http://www.hartenergy.com) • [www.worldfuels.com](http://www.worldfuels.com)

*Gas Processors Report is published weekly by Hart Energy Publishing, LP. Subscriptions: \$1,245 per year. Copyright 2011. All rights reserved. Reproduction of this newsletter, in whole or in part, without prior written consent of Hart Energy Publishing, LP 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 Publishing, LP 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](mailto:info@copyright.com).*

## HOW TO ORDER:

**1. Call:** 1-212-608-9078**2. Fax:** 1-212-608-9357**3. E-mail:** [aroman@hartenergy.com](mailto:aroman@hartenergy.com)**4. Mail:** Hart Energy Publishing, LP

110 William St. 2505

NY, NY. 10038 USA