

Will the NGL market become oversupplied?

Report: Threat of economic slowdown, oversupply are pushing prices down

BY **FRANK NIETO** | EDITOR, MIDSTREAM MONITOR AND MIDSTREAMBUSINESS.COM

While natural gas liquids have been the saving grace in the past year for producers that have struggled with extremely low gas prices, a Bernstein Research group report suggests that the party may be coming to an end.

“The threat of an economic slowdown and creeping NGL oversupply are pushing liquids pricing down, reducing organic cash flow for E&Ps and threatening future spending plans,” according to the report titled “Drowning in Liquids – Who’s at Risk if U.S. Liquids Pricing Continues to Tumble?”

In the past 18 months, ethane and propane prices have taken the largest hit of any NGLs with ethane’s value dropping from a 25% proportion of Brent crude prices to 13% with propane’s value falling from 60% to 30% in that same time. The report noted that these decreases outpaced oil price declines and resulted in producers generating more than 20% less cash flow based on WTI, NGL and Henry Hub prices in Q2 2012 than in the previous quarter.



A TOUGH 18 MONTHS | According to a Bernstein report, ethane and propane prices have taken the largest hit of any of the NGLs. Ethane’s value dropped from a 25% proportion of Brent crude prices to 13%, and propane’s value fell from 60% to 30% during the same year-and-a-half period.

Heavy NGL prices haven’t fallen at this rate, but since ethane and propane make up the majority of the NGL barrel the lighter NGLs have had a disproportionate impact on liquids producers’ bottom lines.

The difficulty in properly putting forth an NGL 12-month forecast is because of the complexity of the market, the research firm noted. “There are many moving

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HIGHLIGHTS FROM TODAY’S EDITION



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NGL PRICES & FRAC

A world of influence

Concerns about the global economy have a stern grip on commodity prices.

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First step in Texas

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\$2, \$3 or even higher

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SNAPSHOT

It’s about multitasking

CFOs say that they are wearing more hats in today’s business environment. **PAGE 11**



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NGL PRICES & FRAC SPREAD | Week in Review

Economic concerns maintain grip on global NGL prices and margins

BY **FRANK NIETO** | EDITOR, MIDSTREAM MONITOR AND MIDSTREAMBUSINESS.COM

Commodity prices continue to remain at low levels amid worries of a global economic downturn largely caused by the debt crisis in Europe. As the economy falters, demand is decreasing for crude oil, NGLs and natural gas even as traditional demand impacts for crude and NGLs are increasing.

WTI crude prices increased slightly as the summer driving season began, but they continued to hover between \$82 per barrel (/bbl) and \$83/bbl. In addition, natural gas prices dropped 9%

CURRENT FRAC SPREAD (CENTS/GAL)				
June 15, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	9.68		29.82	
Shrink	14.12		14.52	
Margin	-4.44	15.78%	15.30	12.11%
Propane	56.94		77.28	
Shrink	19.51		20.06	
Margin	37.43	12.92%	57.22	8.01%
Normal Butane	118.10		136.34	
Shrink	22.09		22.71	
Margin	96.01	-2.58%	113.63	3.76%
Iso-Butane	135.94		146.40	
Shrink	21.21		21.81	
Margin	114.73	-0.68%	124.59	-2.31%
Pentane+	180.17		176.53	
Shrink	23.62		24.29	
Margin	156.55	-1.06%	152.24	-4.51%
NGL \$/Bbl	30.42	-1.32%	36.83	-0.98%
Shrink	7.78		8.00	
Margin	22.64	1.62%	28.83	1.41%
Gas (\$/mmBtu)	2.13	-8.97%	2.19	-8.75%
Gross Bbl Margin (in cents/gal)	50.53	2.21%	66.00	1.86%
NGL Value in \$/mmBtu				
Ethane	0.53	-5.47%	1.64	0.88%
Propane	1.98	4.32%	2.68	3.09%
Normal Butane	1.28	-3.84%	1.47	1.44%
Iso-Butane	0.85	-2.07%	0.91	-3.33%
Pentane+	2.32	-2.18%	2.28	-5.12%
Total Barrel Value in \$/mmbtu	6.95	-0.99%	8.98	-0.42%
Margin	4.82	3.00%	6.79	2.59%

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
June 6 - 12, '12	29.82	77.28	136.34	146.40	176.53	\$36.83
May 30 - June 5, '12	29.56	74.96	134.40	151.44	186.05	\$37.20
May 23 - 29, '12	35.58	84.38	153.90	170.13	201.18	\$41.79
May 16 - 22, '12	39.00	93.92	160.82	177.80	206.30	\$44.37
May '12	37.89	95.11	162.91	179.74	209.64	\$44.73
April '12	45.55	119.39	189.84	203.99	237.95	\$52.78
1st Qtr '12	53.93	125.90	192.36	204.32	238.95	\$55.05
4th Qtr '11	84.49	144.13	188.16	227.18	224.44	\$61.34
3rd Qtr '11	76.03	153.87	188.27	208.52	237.59	\$61.59
2nd Qtr '11	75.14	149.59	186.75	202.07	248.23	\$61.42
June 8 - 14, '11	75.36	154.22	187.98	201.52	246.05	\$61.90
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
June 6 - 12, '12	9.68	56.94	118.10	135.94	180.17	\$30.42
May 30 - June 5, '12	10.24	54.58	122.82	138.82	184.18	\$30.83
May 23 - 29, '12	12.50	65.78	134.08	151.25	199.05	\$34.47
May 16 - 22, '12	11.78	70.58	134.45	153.40	197.66	\$34.90
May '12	11.85	72.43	138.80	163.54	202.23	\$35.94
April '12	14.42	90.99	160.18	190.26	230.04	\$42.30
1st Qtr '12	26.93	103.34	168.65	184.75	227.16	\$45.92
4th Qtr '11	34.29	129.43	160.82	204.27	196.08	\$48.23
3rd Qtr '11	46.69	143.07	166.30	199.68	210.98	\$53.06
2nd Qtr '11	52.63	139.38	170.76	192.47	236.00	\$55.34
June 8 - 14, '11	49.48	143.32	168.42	184.00	228.75	\$54.45

(Above) Data Provided by Intercontinental Exchange. Individual product prices in cents per gallon. NGL barrel in \$/42 gallons | Source: Frank Nieto

(Left) 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. Source: Frank Nieto

at both Conway and Mont Belvieu, which pushed prices down to slightly above \$2 per million Btu.

Ethane crackers have been coming back online, but ethane prices remained largely unchanged. The Mont Belvieu price increased 1% to 30¢ per gallon (/gal) while the Conway price dropped 5% to 10¢/gal. Since dry gas feedstock prices dropped so low, margins improved at both hubs with the Mont

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NGL PRICES & FRAC SPREAD | Week in Review

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Belvieu margin increasing 12% and the Conway margin increasing 16%. However, the actual margins remain low at both hubs.

By and large NGLs and natural gas storage levels remain high, but the ability to work these levels off along with the ability for prices to increase is tied to macroeconomic issues.

“Our biggest concern remains whether the global economy will be strong enough to support U.S. ethylene operating rates around 95% when ethylene plant turnarounds are completed. It is imperative that the U.S. ethylene industry operate around 95% of capacity to work off excess ethane inventories,” according to En*Vantage.

The company further stated that there are reports that there is up to 50,000 b/d of ethane being rejected, primarily in the Mid-Continent and Rockies. In some cases Conway ethane is being processed in the Rockies due to the price difference. Despite the reports of ethane rejections, the ethylene industry’s appetite remains healthy as this past week propane cracking increased to more than 400,000 barrels per day (b/d) due to low propylene prices.

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / June 14, 2012	
Gas Hub Name	Current Price
Carthage, TX	2.14
Katy Hub, TX	2.17
Waha Hub, TX	2.17
Henry Hub, LA	2.19
Perryville, LA	2.17
Houston Ship Channel	2.18
Agua Dulce, TX	1.88
Opal Hub, Wyo.	2.08
Blance Hub, NM	2.09
Cheyenne Hub, Wyo.	2.07
Chicago Hub	2.21
Ellisburg NE Hub	2.25
New York Hub	2.34
AECO, Alberta	1.77

Source: Bloomberg

increase was primarily prices rebalancing themselves after experiencing an excessive price decrease last week. As crude prices decline, demand from refiners for heavy NGLs has also tumbled.

The theoretical NGL barrel price fell 1% at both Mont Belvieu and Conway. The Texas price was \$36.83/bbl with a 1% gain in

The increase in propane cracking along with a very small storage build-up resulted in an uptick of prices at both hubs. The Mont Belvieu price rose 3% to 77¢/gal while the Conway price increased 4% to 57¢/gal. Margins improved at both hubs with a 13% improvement at Conway and an 8% increase at Mont Belvieu.

Heavy NGL prices fell at both hubs with the lone exception of Mont Belvieu butane, which increased 1%. This

RESIN PRICES – MARKET UPDATE – JUNE 14, 2012					
TOTAL OFFERS: 22,960,484 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Inj	5,686,488	0.55	0.655	0.54	0.58
LDPE - Film	5,028,556	0.63	0.72	0.62	0.66
HDPE - Blow Mold	2,984,508	0.59	0.7	0.54	0.58
PP Homopolymer - Inj	1,730,460	0.62	0.67	0.59	0.63
LLDPE - Film	1,465,472	0.61	0.75	0.58	0.62
PP Copolymer - Inj	920,644	0.67	0.8	0.61	0.65
LLDPE - Inj	660,000	0.63	0.67	0.6	0.64
GPPS	570,000	0.82	0.88	0.8	0.85
HIPS	570,000	0.96	1	0.92	0.97
LDPE - Inj	534,368	0.68	0.71	0.62	0.66
HMWPE - Film	322,276	0.59	0.64	0.58	0.62

Source: Plastics Exchange – www.theplasticsexchange.com

margin to \$28.83/bbl. The Kansas price fell to \$30.42/bbl with a 2% improvement in margin to \$22.64/bbl.

The most profitable NGL to make remained C5+ at \$1.57/gal at Conway and \$1.52/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.15/gal at Conway and \$1.25/gal at Mont Belvieu; butane at 96¢/gal at Conway and \$1.14/gal at Mont Belvieu; propane at 37¢/gal at Conway and 57¢/gal at Mont Belvieu; and ethane at a theoretical negative figure at Conway and 15¢/gal at Mont Belvieu.

Cooling demand has increased across the country due to higher temperatures, which has seen natural gas storage injections lower than normal. The increased demand is one obvious cause for this, but another factor is that natural gas production is decreasing as prices remain at very low levels.

According to the Energy Information Administration, natural gas in storage for the week increased by 67 billion cubic feet to 2.944 trillion cubic feet (Tcf) from 2.877 Tcf the previous week. This was 32% greater than the storage figure of 2.236 Tcf reported last year at the same time and 29% greater than the five-year average of 2.278 Tcf.

The National Weather Service’s forecast for next week indicates that cooling demand will return to normal summer levels as much of the country is expected to experience normal temperatures. The East Coast is expected to experience slightly warmer than normal temperatures along with the Southwest.

PROCESSING TRENDS | An Inside Look

Operators foresee gas revival, but it could take a little time

BY RICHARD MASON | HART ENERGY

Natural gas, the prodigal son of commodities, plans to return home. It's a long journey that could take 24 months, but oil and gas operators are expressing faith in a commodity that has been more out of favor lately than anything except energy stocks -- especially energy service stocks.

That was one takeaway from RBC Capital Markets' 6th annual Global Power and Energy Conference in New York.

The conference is set up on a different format than the 20-minute serial rope-a-dope canned corporate presentations at most industry confabs in that the RBC gathering features open-ended panels of several operators, or one-on-one breakout sessions with individual presenters.

It's a matter of ask, and you shall receive. And attendees on the buy side frequently asked operators about the direction of commodity prices in a world where oil had dropped nearly \$10 per barrel in a week, leaving the investment community in the shock and "ouch" phase when it comes to energy.

Can prodigal gas get back to \$3? For sure, according to all presenters. Can it get back to \$4? Yes, if one can wait a couple of years. There were even those who argued for a \$5 gas world, though nobody was willing to name a date or to venture up to \$6 gas--absent the most extraordinary circumstances.

The twin themes supporting a rebound in gas price center on a return to normalcy in weather and the impending rollover in gas production as U.S. gas rig count spirals down. There is also a difference in confidence depending on which side of the 49th parallel that a company calls home.

"We're big gas bulls," enthused David Wilson, CEO of Canada's Celtic Exploration Ltd. "By the end of the year it will be a very different world on the gas side. You've got your demand that has increased dramatically because of cheap gas prices. Some of that goes away, but what doesn't go away is we've had gas rigs flopping over here every week for the last year, so sooner or later supply comes off."

Canada's Michael Culbert, Progress Energy Resources Corp. CEO, flagged underlying changes in both the external and internal gas market dynamics.

"If we have a normal winter we will ultimately see production in the U.S. start to slide," he observed. "If you look at the history in Canada, Canadian gas production has been declining for two to three years. It's not because we have a lack of opportunity. I

would argue that Canadian producers have shown more discipline by making sure they are only spending capital where it made sense."

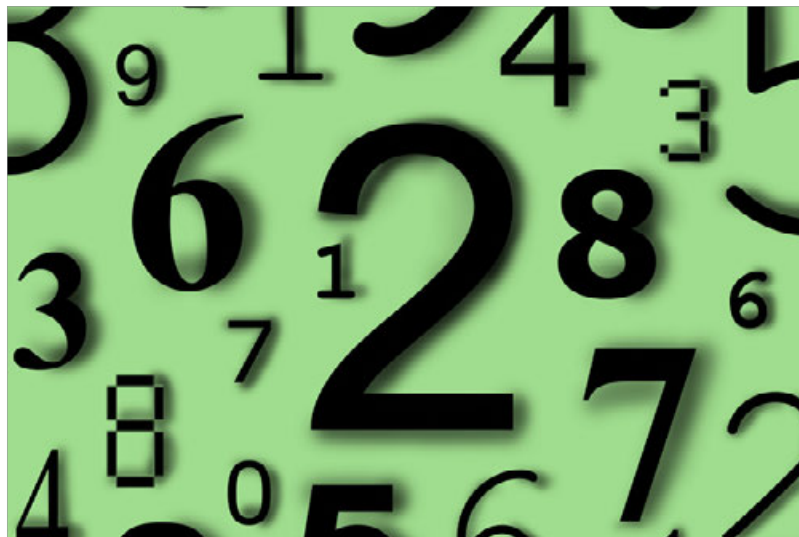
Culbert pointed to land tenure issues, joint ventures, and widespread hedges as artificial drilling inflators in the U.S. market, but noted those factors were mostly behind the industry.

"At current prices, there will be a supply impact," he said. "If win-

ter fails to show again, you're not going to see a good gas price. But in the long term the value proposition is too great. You cannot have a 50-to-1 ratio between oil and gas like we've had."

The impact of weather also found resonance at U.S. producer, EQT Corp.

"Assuming normal weather for the next year and looking out longer term with increased demand and gas rig count having dropped fairly substantially, we're getting to the point where we will see impact on supply," argued Steve Schlotterbeck, senior vice president for Exploration &



HOW HIGH CAN IT GO? | Can gas get back to \$3? For sure, the experts say. Can it get back to \$4? Yes, if one can wait a couple of years. Some are even anticipating \$5 gas.

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PROCESSING TRENDS | An Inside Look

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Production. “If you look out to 2014 we’re looking at a \$4 handle on natural gas with continued extreme volatility in the meantime.”

News that operators perceive the long-predicted rollover in natural gas at hand speaks to either a Pollyannish optimism or the type of faith that buoyed the unsinkable Molly Brown. After all, one of the enduring mysteries in oil and gas is how gas production continually rises regardless of direction in gas rig count. But this time is different, operators insist, and they promise a supply response to lower gas rig count.

“I’m even more comfortable today about the fact that the rig count is dropping and we have a chance in the next couple years for something higher than a \$3 handle on the price,” explained

“If winter fails to show again, you’re not going to see a good gas price. But in the long term the value proposition is too great. You cannot have a 50-to-1 ratio between oil and gas like we’ve had.”

- Michael Culbert, Progress Energy Resources Corp. CEO

Steve Mueller, Southwestern Energy Corp. CEO. “Certainly this year is challenged. But next year we are looking for another 50 or 60 rigs to drop out of the rig count and, if that happens, maybe towards the end of next year you start having something with a \$4 handle. Thinking out longer term we’re comfortable it has to be something between \$4 and \$5--and not above \$5. Does it make it next year, or make it in two years? We don’t know, but it has to be somewhere between \$4 and \$5 at some time.”

Separately, SandRidge Energy Inc. CEO Tom Ward detailed the continuing issues facing domestic gas producers.

“I’m a pessimist on natural gas and how much it will cost in the U.S. to supply gas,” Ward said during a breakout session. “I think it was fairly well documented in 2009 that whenever the gas price was \$3.87, most companies didn’t have PV-10s on their books, so to me \$4 gas doesn’t put you back in a position to be drilling for natural gas.”

Liquids, crude continue to drive drilling activity

BY KEEFE BORDEN | HART ENERGY

The ongoing strength in crude prices and the weakness in gas prices continues to push upstream producers and their service and supply companies into areas where liquids or crude have greater potential, a panel of energy experts stated recently.

Speaking at Oil and Gas Investor’s recent Energy Capital Conference in Houston, the panelists said this trend was likely to continue throughout the U.S. for the foreseeable future.

Jerrit Coward, president of Willbros Group Inc.’s oil and gas segment, said the current pricing environment encourages producers to look for liquids-rich resource plays. As upstream operators produce growing amounts of oil and liquids-rich gas, their midstream counterparts are struggling to keep pace with them. Midstream construction companies continue to invest in processing and treating assets needed to separate the liquids and transport them to market.

“Right now, processing is just booming. There are a lot of fractionation plants going in,” he said. The industry is expected to spend \$7 billion over the next three to five years in processing and fractionation capacity.

In addition, to keep up with the ongoing growth in production from shale and other unconventional plays, Coward said he expects the industry to need an additional \$10 billion in investments in additional gathering systems over the next 10 years.

The one exception to this rule is natural gas storage facilities. “We are not seeing a lot of interest in gas storage projects,” he said.

In addition to treating and processing facilities, construction companies like Willbros are installing a growing number of liquids pipelines to keep pace with the upstream interest in the sector, he said. The smaller liquids lines require fewer resources than the larger crude lines to install.

The rush to develop liquids plays has led to a shortage of trained personnel, Coward said. In some areas truck drivers earn as much as \$150,000 per year.

Other panelists agreed with the opportunities in the midstream sector. “It’s a great time to be in the midstream

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PROCESSING TRENDS | An Inside Look

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business,” said Bruce Vincent, president of Swift Energy Co.

Vincent said the current pricing structure for natural gas is likely to remain unchanged for the foreseeable future and he encouraged producers to take a long-term view of prices when making capital investment decisions. “You have got to keep a long-term view of prices,” he said.

Many producers are unable to pull back production abruptly in response to weak natural gas prices because of long lead times and long-term commitments already made. In some cases, the production of dry gas is tied to liquid or crude plays, which makes it difficult to cut back production, Vincent said.

“In many cases, companies cannot react that quickly,” he said.

Given the current level of constraints, natural gas companies may have to withstand weak prices until 2013 or 2014. Those companies that don’t have a strong balance sheet may have to look at alternatives in today’s pricing environment, such as joint ventures of asset sales, Vincent said.

Ed Morse, managing director and global head of commodities research at Citigroup Global Markets Inc., said the abundance of natural gas supplies is a worldwide phenomenon. “The world seems to be awash in natural gas,” he said, which was the logical result of capital expenditures.

Morse said he expected the current relationship between expensive crude and relatively cheap natural gas should hold for the foreseeable future.

In today’s current environment, Morse sees a price ceiling for crude of around \$90 per barrel, with a floor of around \$65 to \$70 per barrel. This band of trading could fall out of this range if world supply outlook changes unexpectedly.

He added that the world’s economy cannot sustain crude prices above \$130 per barrel because at that price level, economic growth would slow.

Cyprus plans to construct natural gas processing plant

Neoklis Sylikiotis, Cyprus commerce minister, told The Associated Press that the country is planning to build a \$7.5 billion to

\$8.7 billion natural gas processing and storage facility to handle volumes produced off its southern coast.

Volumes will be used for both domestic use as well as export after they are liquefied.

The facility is scheduled to be completed by 2019.

U.S. declines waiver to China for Iranian crude imports

BY **FRANK NIETO** | EDITOR, MIDSTREAM MONITOR AND MIDSTREAMBUSINESS.COM

The U.S. Department of State announced that it was providing waivers to seven more countries from its sanctions against Iranian crude oil for 180 days after they significantly reduced their crude purchases from Iran. However, China was not included among these nations.

The department added India, Malaysia, the Republic of Korea, South Africa, Sri Lanka, Turkey and Taiwan to its the 11 countries it previously granted waivers to. This original list included Belgium, the Czech Republic, France, Germany, Greece, Italy, Japan, the Netherlands, Poland, Spain, and the United Kingdom.

“We have implemented these sanctions to support our efforts to prevent Iran from acquiring a nuclear weapon and to encourage Iran to comply with its international obligations,” Secretary of State Hillary Rodham Clinton said in a news statement. “[This] announcement underscores the success of our sanctions implementation. By reducing Iran’s oil sales, we are sending a decisive message to Iran’s leaders: until they take concrete actions to satisfy the concerns of the international community, they will continue to face increasing isolation and pressure.”

“The United States remains committed to a dual-track policy that offers Iran the chance to engage seriously with the international community to resolve our concerns over its nuclear program through negotiations with the P5+1. Iran has the ability to address these concerns by taking concrete steps during the next round of talks in Moscow. I urge its leaders to do so,” Secretary Clinton continued.

PIPELINES & TECHNOLOGY | Developments

Enterprise Eagle Ford crude oil system receives first deliveries

BUSINESS WIRE

Enterprise Products Partners L.P. (NYSE: EPD) announced that the partnership's Phase I Eagle Ford crude oil system has begun accepting deliveries and commissioning the pipeline and delivery stations. Originating in Wilson County, Texas and extending 147 miles to Sealy, Texas, the 24-inch diameter crude oil pipeline has a capacity of 350,000 barrels per day (b/d) and provides Eagle Ford Shale producers with improved access to the Gulf Coast refining complex.

A link to Enterprise's Rancho pipeline at Sealy allows the Eagle Ford crude oil system to reach the Gulf Coast infrastructure network, including Enterprise's ECHO crude oil storage facility under construction in southeast Houston. Initial operation is on schedule for July 2012, coinciding with the first deliveries of Eagle Ford Shale crude oil into the Houston area.

Magellan, Occidental are seeking commitments for proposed pipeline

Magellan Midstream Partners LP and Occidental Petroleum Corp. announced the launch of an open season to jointly assess customer interest to transport crude oil from Colorado City, Texas, to the Houston Gulf Coast area.

Interested customers must submit binding commitments by July 11, 2012.

The proposed BridgeTex Pipeline will be capable of transporting approximately 278,000 barrels per day of crude oil from Colorado City to Texas City.

Magellan and Occidental will form a new project company to execute the project and will share commercial responsibilities. A joint project team will oversee construction of the new pipeline, with Magellan serving as operator.

Quality Distribution completes acquisition of RM Resources

Quality Distribution Inc. announced that it has completed its previously announced acquisition of the operating assets and rights of RM Resources LLC. Together with the previously announced closing of the acquisition of certain operating assets of Wylie Bice Trucking LLC on June 1, 2012, the aggregate purchase price for the combined businesses is approximately \$81.5 million plus potential additional consideration of \$19.0 million if certain future operating and financial performance criteria are satisfied.

Headquartered in Killdeer, N.D., Bice is a leading provider of transportation services to the unconventional oil and gas industry within the Bakken shale region, primarily hauling fresh water, flowback and production water, and oil for numerous energy customers.

The flowback and production water that Bice hauls is primarily disposed of utilizing five existing salt water injection wells owned and operated by RM.

Plains Midstream is continuing Rangeland pipeline cleanup efforts

The Rangeland pipeline owned by Plains Midstream Canada leaked light sour crude into Jackson Creek near Sundre, Alberta, Canada on June 7.

The crude oil release has been contained within the two booms on the Gleniffer Reservoir that were placed on June 8. The company is deploying an additional boom on the west-end of the Gleniffer Reservoir to expedite its clean-up operations. At its peak, approximately 90 response personnel were on site.

"We deeply regret this incident and are working to ensure we're doing all we can to limit the extent of the release and any community and environmental impacts," Stephen Bart, vice president, crude oil operations, Plains Midstream Canada, said in a news release. "We're committing the resources necessary to mount a full-scale response."

The volume of crude oil released remains under evaluation. Preliminary estimates suggest approximately 1,000 – 3,000 barrels of crude oil were released. The cause of the pipeline leak is being investigated.

NEWS & TRENDS | Up To Date

Rangeland begins service at Bakken crude terminal

BUSINESS WIRE

Rangeland Energy LLC announced that the company's COLT facility is in service in North Dakota's Bakken Shale. COLT is North Dakota's largest, open-access crude oil marketing terminal.

Strategically located in the heart of the prolific Bakken and Three Forks shale oil producing areas, the COLT terminal provides refiners, marketers and producers with outbound service by unit train and through the COLT Connector, a 21-mile, bidirectional pipeline that links the COLT terminal with multiple existing and planned pipelines at Rangeland's Dry Fork Terminal near Tioga, N.D., including the Tesoro and Enbridge pipeline systems.



BEGINNING IN THE BAKKEN | Served by BNSF Railway Company, the COLT Hub loads unit-train shipments of crude oil bound for markets throughout North America.

The COLT Hub aggregates crude oil produced in the Bakken utilizing gathering pipelines and trucks. COLT offers crude oil handling and storage service through on-site tankage and access to multiple downstream markets through the COLT Connector and railcar loading facilities.

Served by BNSF Railway Company, the COLT Hub loads unit-train shipments of crude oil bound for markets throughout North America, including crude oil receiving terminals along the Gulf Coast. The first unit train filled with crude oil departed the COLT facility on June 5.

COLT's initial 720 MBL (thousands of barrels) of working storage capacity is expected to expand as Bakken production increases. COLT's current tankage position includes five 120 MBL storage tanks located at the COLT Hub and an additional 120 MBL storage tank at the Dry Fork terminal. Initial rail export capacity is 120 MBD (thousands of barrels per day). In addition, the COLT Connector has the capacity to move an additional 75 MBD.

Musket Completes expansion of its terminal in Dore, N.D.

Musket Corp. announced the completion of a major expansion project at its Dore, N.D., crude-by-rail facility.

The terminal now has outbound capacity of up to 60,000 barrels per day of crude oil from North Dakota to markets across the country, up from 10,000 barrels per day before the expansion. The terminal will receive oil from trucks and pipeline through a connection to the Banner Pipeline.

"This state-of-the-art facility allows us to provide comprehensive solutions for our customers with marketing and logistics needs in the Bakken," said J.P. Fjeld-Hansen, managing director for Musket. "The increased capacity allows Musket to deliver more efficiency to customers needing services from rail-loading and supply-chain management to price-risk management and end markets."

Musket first opened its Dore crude-by-rail facility in 2008. The Dore facility originally employed 20 people. With the expansion, employment opportunities will increase to 50 jobs.

WGC Poll: China will lead shale gas production by 2030

Delegates at the World Gas Conference (WGC) in Kuala Lumpur, Malaysia, believe China will become the world's largest producer of shale gas by 2030, according to a poll conducted by GL Noble Denton.

The poll conveyed that 81% of participants thought that China will become the largest shale gas producer in the next 18 years, while 19% thought that it will not.

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Richard Bailey, GL Noble Denton's executive vice president for Asia Pacific, said, "The Chinese Ministry of Land and Resources has estimated that the country

“It reflects the belief of some players in the industry that China's shale gas resources could radically alter the dynamics of supply for the world's biggest energy consumer, just as shale gas is changing the situation in the U.S.”

- Richard Bailey, GL Noble Denton, executive vice president for Asia Pacific

of some players in the industry that China's shale gas resources could radically alter the dynamics of supply for the world's biggest energy consumer, just as shale gas is changing the situation in the U.S.”

may have 25 trillion cubic meters of potentially recoverable shale gas. The impact of those reserves could be even greater than in North America, which has turned from a gas importer to a potential exporter in less than a decade.”

“Just a year ago, Asian unconventional gas projects were widely considered to be in its infancy, albeit with a promising outlook. The result of this poll highlights the optimism for unconventional gas production in the region. It reflects the belief

the country's gas infrastructure, according to Reuters. It is possible that the country will seek additional volumes from the U.S., which is awash in natural gas.

Shell, Travel Centers Of America ink U.S. natural gas station MoU

Shell and TravelCenters of America (TA) announced June 7 a memorandum of understanding (MoU) to construct and operate a minimum of 200 natural gas-fueling lanes at the site of at least 100 TA retail truck stops.

“The locations will be jointly selected by TA and Shell with the intention of creating the infrastructure required to allow natural gas powered trucks to travel across the United States,” according to the announcement.

TA currently operates 238 travel centers in North America under the “TA” and “Petro” brands, almost all of which are located at interstate highway system exits. The company principally caters to diesel-powered trucks.

“In order to facilitate the introduction of natural gas powered vehicles to the interstate trucking industry, TA expects to train and equip a sufficient number of TA's 3,000 repair technicians, 1,000 truck service bays and 400 ‘Road Squad’ emergency roadside repair vehicles to service natural gas powered truck engines,” according to the announcement.

“Details of the agreement between TA and Shell are expected to be completed during an exclusive negotiating period, and the first natural gas fueling lanes for trucks traveling along the U.S. Interstate Highway System are expected to be operational at TA locations during 2013.”

Japan is expected to increase LNG Imports by 10% this year

Japan will increase its imports of liquefied natural gas (LNG) to 90 million more tons this year compared to last year, according to Mitsunori Torihara, chairman of the Japan Gas Association.

These added volumes will be necessary in order to compensate for the loss of nuclear power generation caused by last spring's tsunami and the resulting Fukushima nuclear power plant meltdown that resulted in the country shutting down all of their nuclear power plants. Nuclear power previously accounted for 30% of the country's power generation.

This would be 10% greater than the 82 million tons the country, the largest importer of LNG in the world, bought in 2011. Any volumes above 85 million tons will put tremendous pressure on

Petrokemya, Spanish company announce petrochemical plant JV

Saudi Basic Industries Corp's Petrokemya subsidiary and Técnicas Reunidas of Spain signed an agreement to build a petrochemical plant in Jubail, Saudi Arabia.

The \$561 million facility will produce 140,000 tons of acrylonitrile butadiene styrene (ABS) when it begins operations in Q4 2014.

SNAPSHOT | Industry Insight

For CFOs, more administrative, management duties part of the job

BY **SUSAN KLANN** | GROUP MANAGING EDITOR,
OIL AND GAS INVESTOR

The roles of chief financial officers at energy companies are shifting rapidly, with plenty of administrative and management duties added to the traditional finance responsibilities.

At Hart Energy's recent Energy Capital Conference held in Houston, a CFO roundtable brought together executives to discuss top-of-mind concerns such as risk management, recruitment and retention, and capital-raising strategies.

Moderated by Oracle regional manager Bill Arend, the panel included CFOs Victor M. Perez, Glori Energy Inc.; Mike Aldridge, Saratoga Resources Inc.; Richard Robert, Vanguard Natural Resources LLC; and George Passela, Momentum/M3 Midstream LLC.

Glori, which recently filed an S-1 to go public, is a clean technology energy company that uses biotechnology to release oil in fields after conventional and traditional waterflooding have been exhausted. It has about 30 projects under way in the U.S. and internationally.

M3 is the third iteration built and backed by private-equity funder Yorktown Energy Partners, focused on the midstream. "Our business plan is to identify areas of high organic activity," said Passela, who has been involved in three midstream companies and one upstream company built during the past decade. Today, Momentum's assets are in the Marcellus and Utica shales. "We do a lot of work on understanding the resource, identifying the core of the play, seeing who the producers are and going after them to sign them to long-term contracts," he said.

The company buys rights-of-way and builds gathering, processing and fractionation facilities. "Once the companies are up and running with cash flow, we take them to market and sell to MLPs who don't want to put in capital but want the cash flow. We've been successful with our first two midstream companies and we hope to make this third a success as well," he said.

Vanguard's Robert noted the company went public in 2007 with an enterprise value of \$200 million; it closed transactions just days before the Energy Capital conference that boosted its value to \$2.4 billion. "We are an upstream MLP structured as



BUSINESS MODEL | "We buy mature assets, maintain cash flow, reduce commodity risk and seek to increase distributions over time," said Richard Robert, Vanguard Natural Resources LLC.

an LLC with a simple model", he said. "We buy mature assets, maintain cash flow, reduce commodity risk and seek to increase distributions over time." Recent deals involved the Woodford and Fayetteville shales. "We drill to maintain cash flow, and acquire to increase cash flow. Our drilling inventory is our insurance policy to pay distributions regardless of commodity prices."

Saratoga's Aldridge also has a track record of building companies. He joined the company in October 2011. It has legacy assets in the Louisiana and Gulf Coast transition zones with stacked pay, as well as exposure to the shallow-water ultradeep play. It operates and owns its assets 100%, allowing it to maintain a lot of control. The plan is to grow to \$1 billion based on its existing assets. "The challenge is to keep our capital structure commensurate with our risk profile," he said.

How has the role of CFO changed? Passela, who has been with public companies and now, a private company, said he wears a lot of hats, participating in corporate governance, risk management, policies and planning, codes of conduct, and more. "Today you have to manage private companies as if they were public, in terms of risk management and governance," he said.

"Capital raising has gotten easier; what is more time consuming is financial reporting, budgeting, and what I call making sure the trains run on time."

An extended version of this story can be found on the website.

LEAD STORY | From The Front

Continued from Page 1 parts to the outlook during the next 12 months, including the possibility of incremental NGL oversupply pushing NGL prices even lower, WTI closing the pricing gap with Brent, a moderate gas price rebound, some combination of these elements, or recession.” In addition, the report noted that price hedging could also lessen the impact of price decreases.

In order to account for each of these moving parts, Bernstein Research presented forecasts for NGL prices for various scenarios. Its 2011 prices were as follows: \$95 per barrel (/bbl) for WTI crude, NGLs were a combined 61% of WTI crude prices and Henry Hub gas prices were \$4.00 per million cubic feet (/MMcf). By Q1 2012, these figures were \$103/bbl, 51% and \$2.45/MMcf. Currently, these figures are \$85/bbl, 45% and \$2.50/MMcf.

Should NGLs become oversupplied, the firm forecasts that WTI crude prices will be \$85/bbl with NGLs representing 35% of WTI prices and Henry Hub gas prices continuing at \$2.50/MMcf.

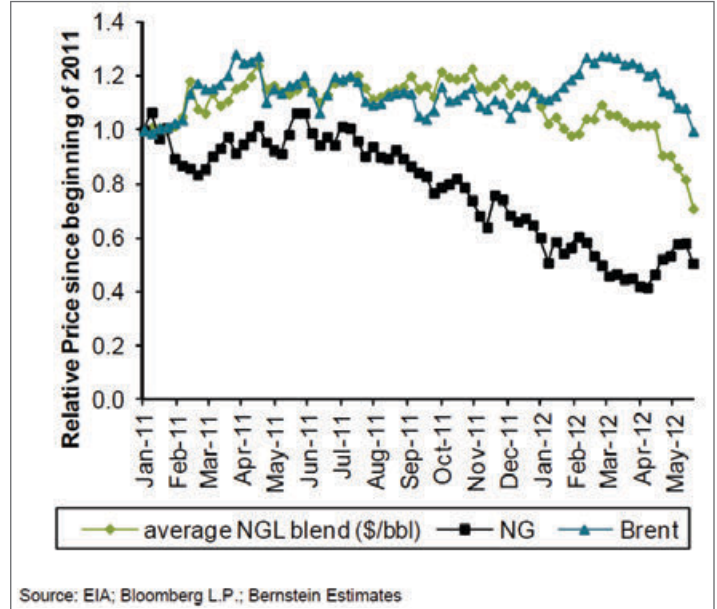
Should gas prices rebound, then WTI crude would remain \$85/bbl with NGLs representing 45% of WTI crude prices and Henry Hub gas prices improving to \$3.50/MMcf.

In a scenario in which the WTI and Brent crude price gap closes, the firm forecasts WTI prices to improve to \$100/bbl with NGLs representing 45% of crude prices and Henry Hub gas prices improving slightly to \$2.50/MMcf.

Since liquids components are a smaller portion of production, producers would only stand to lose a small percentage of cash flow if NGL prices further weakened, according to the report.

In addition, improved gas prices would obviously represent a positive for producers, but activity would still be in a double-digit percentage decline from Q1 2012 levels with crude prices at \$85/bbl.

As would be expected, crude prices have a much larger impact on NGL prices than gas prices. Consequently, Bernstein



A CONSISTENT SLIDE | During the past quarter, natural gas prices have moved downward.

Research thinks that the best near-term scenario for producers would be if WTI prices closed the gap with Brent prices. “This would allow marginal oil activity like the Permian to continue, but overall E&P cash flow would still be down mid single digits,” the report said.

The worst-case scenario for producers would be if another recession were to hit as this would push crude prices even lower and cause a 40% drop in activity. The report found that the companies most at risk are producers operating in gas plays, marginal liquids plays that require oil prices to be at least \$80/bbl. Producers in the Bakken and Eagle Ford can continue to make a profit on oil produced at \$60/bbl and should be able to withstand any changes in the market.

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