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#### Formerly GAS PROCESSORS REPORT



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# FEATURE

### Wells Fargo: Short-Term Tight Capacity In Eagle Ford

The midstream industry continues to benefit from large production increases from the development of the shale plays. This added production, much of it coming from new areas without much infrastructure, has led to a large ramp-up in midstream infrastructure build-up.

One of the plays most in need of new infrastructure is the Eagle Ford, which Wells Fargo Securities said needs new gathering lines, processing plants, wet natural gas pipelines, y-grade NGL pipelines, and NGL fractionation capacity.

"A bottleneck at any point in this value chain could slow the drilling efforts of E&P producers, but alternatively, provide midstream MLPs with potential new growth opportunities," the company said in its May 2011 NGL Snapshot.



Wells Fargo Securities stated that midstream companies are set to build over 1,000 miles of natural gas pipelines in the play, along with 1.9 billion cubic feet equivalent per day of natural gas processing capacity and 340,000 barrels per day (b/d) of NGL takeaway capacity.

The company anticipates that production out of the play will have limited takeaway capacity through the end of 2012, when the *(continued on page 4)* 

# **INSIDE LOOK AT PROCESSING**

### DUO 2011: Bakken Midstream Poised for Substantial Buildout

Producers are struggling with limited infrastructure for their Bakken oil in North Dakota and Montana. However, help is on the way, according to a pair of midstream operators presenting at Hart Energy's DUO Conference & Exhibition in Denver, Colorado.

"We are investing in infrastructure to get production to market," proclaimed Perry Schuldhaus, vice president of business development for Enbridge Pipelines Inc. "We will be providing producers with access to the right markets and developing projects to access more markets and greater optionality."

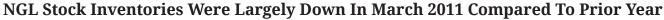
To that end, Enbridge plans several North Dakota pipeline capacity projects to grow regional take-away. The midstream operator's Phase 6 project alone will bring some 51,000 barrels per day of much-needed pipeline capacity to the region. Building on that is its Portal Reversal project with about 25,000 barrels per day of additional capacity. Other projects include Enbridge's Alexander-to-Beaver-Lodge project, its Berthold Truck Expansion and various system optimizations.

The current projects will bring some 145,000 barrels per day of transportation and are expected to be in service by January 2013. Other planned Enbridge projects include the Beaver Lodge Loop Project, the Portal Reversal Expansion Project, the Bakken Expansion 16" Line, new capacity at its Cromer Terminal facilities, and some "South of the River" initiatives.

To bring such projects to fruition, Enbridge is making good progress through its regulatory hurdles, explained Schuldhaus. To date, the company has filed a Petition for Declaratory Order on Commercial Struc-

(continued on page 7)

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Ethane prices began to recover in late 2010 and early 2011 and this increased demand was reflected in the sharp drop in stock levels from December 2010 to March 2011 as compared to the previous year's levels, according to data from the Energy Information Administration (EIA).

This four-month stretch saw ethane levels drop 15% from 956,000 barrels (bbls) in December 2010 to 815,000 bbls in March 2011, the most recent data available from the EIA. Although prices rose to their three-year highs in April, the lowest level for ethane stocks was in February 2011 when they hit 691,000 bbls.

The March 2011 stock level represented a 37% drop in stock level from the March 2010 level of 1.3 million bbls and was the lowest level in the month of March since it was 548,000 bbls in 2008.

The February 2011 stock level was 23% lower than 892,000 bbls stock level posted in February 2010. This was the lowest stock level in the month of February since it was 593,000 bbls in 2007. During the six-month period from October 2010 to March 2011, ethane stock levels fell 29%.

EIA defines ethane as "a normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48 °F. It is extracted from natural gas and refinery gas streams."

Propane stock levels have been at their lowest levels for much of the past few years and the same holds true for the monthly stock levels at natural gas processing plants as reported by the EIA.

The lowest point for the six-month period from October 2010 to March 2011 was February 2011 when it was 756,000 bbls. Over this six-month stretch, inventory levels dropped 56% from 2.4 million bbls to 1.1 million bbls.

Compared to the previous year's stock levels, the March 2011 level was down

32% from the 1.6 million bbls posted in March 2010. The February 2011 level was 23% lower than the February 2010 level of 977,000 bbls. While inventory levels were lower in late 2010 and early 2011 compared to late 2009 and early 2010, the arc followed similar paths in both time frames.

The March 2011 inventory level was the lowest in the month since 2008, when it was 1 million bbls while the February 2011 inventory level was the lowest in the month since EIA began releasing this data. Interestingly, despite such low stock levels there hasn't been a tremendous growth in propane prices. This could be due to higher levels in the fall of 2010.

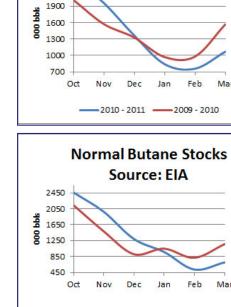
EIA defines propane as "a normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67 °F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane."

In 2010 butane stock levels were higher than their 2009 counterparts, according to data from the EIA. However, this situation reversed in the first three months of 2011 as inventory levels remained lower due to demand being greater from ethylene crackers.

In the six-month period from October 2010 to March 2011, butane stock levels plunged 72% from 2.5 million bbls to 701,000 bbls. This despite a 35% increase in stock levels from February 2011, when stocks were 521,000 bbls to March 2011.

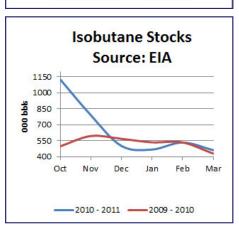
The March 2011 stock level was the lowest in the month since 1998 when it was 526,000 bbls while the February 2011 stock level was the lowest since 1993, when the EIA began reporting such data.

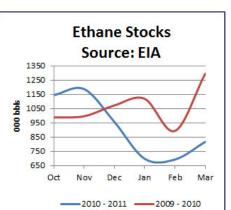
On a year-on-year basis, March 2011 inventories were 40% lower than their



-2010 - 2011 -

-2009 - 2010





**Propane Stocks** 

Source: EIA

2500

2200





March 2010 counterparts and February 2011 inventories were 36% lower than in the previous year. These stocks levels help to explain the strong prices posted by butane throughout the year, even when demand would typically ebb for the product.

EIA defines normal butanes as "a normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams."

Isobutane stock levels moved at similar levels from late 2009-early 2010 compared to late 2010-early 2011, which was one cause for the gap between butane and isobutane narrowing at various times in the first half of this year.

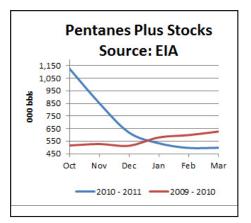
According to data from the EIA, the March 2011 stock level was 460,000 bbls. This was 8% greater than the 428,000 bbls stock level posted at the same time in the previous year. In addition, the February 2011 stock level of 532,000 bbls was only 1,000 bbls lower than at the same time in the previous year.

Over the six-month period from October 2010 to March 2011, isobutane inventory levels fell 59%. This compared to a 7% drop in inventory levels from October 2009 to March 2010 as inventories were flat in late 2009 to early 2010 due to lower demand from refiners for alkylate at that time caused by a more stagnant economy.

EIA defines iso-butane as a normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

The run-up in crude oil prices also saw significant increases in  $C_{5+}$  prices due to its close relationship to crude. This caused inventory levels for the product to fall from late 2010 into early 2011.

Stock levels fell 56% from October 2010's level of 1.1 million bbls to the



Monitor

**MIDSTREA** 

March 2011 stock level of 497,000 bbls. In addition, stock levels only rose 1,000 bbls from February 2011 to March 2011.

EIA defines pentanes plus as "a mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate."

- Frank Nieto

### DUO 2011: Industry's Fast Turn To Oil Will Pivot Returns, Boost Gas, Says Chesapeake's McClendon

Aubrey McClendon, the chairman and chief executive of Oklahoma City-based Chesapeake Energy Corp., the No. 2 producer of natural gas in the U.S., self poses the question: "Why are we drilling for oil?"

The answer: "You hope to do something with your life other than produce \$3 natural gas."

The leader of the historic gas-centric producer summed up the sentiment of the 1,900 attendees of Hart Energy's Developing Unconventional Oil (DUO) conference in Denver. The company that produces 9% of the total U.S. gas supply is turning to oil. And fast.

Comparing drilling for gas to a manufacturing line producing \$4 per thousand cubic feet equivalent (Mcfe) widgets, he said by shifting to an oil and liquids focus over the coming years, the industry is retooling to produce widgets valued at \$10 to \$17 per Mcfe per widget on an equivalency basis. "The industry's returns and profitability are about to pivot upward," he said. "Why would they go back, even if gas prices increase to \$5 or \$7 per Mcfe? This is the single biggest misunderstood aspect of the future bull case for natural gas."

Chesapeake is accelerating its liquidsfocused capex to 75% by year-end 2012, up from 10% in 2008. In that time, Mc-Clendon anticipates company production from liquids will approach 20% to 25% of its total, with wet revenues potentially topping 40%.

"Our goal is to be a top-five oil producer in three years," he said. The company currently stands at 14 with some 5 million acres with liquids and oil potential. "We are trying as quickly as possible turn around 20 years of focusing exclusively on natural gas to now focusing more on oil."

In addition to other oil-focused assets it has added in the past year and a half,

Chesapeake now has 1.2 million acres in the condensate and oil regions of the Utica shale, a growing 1.1-million-acre position in the Mississippi lime play in Oklahoma, and 200,000 acres "and building" in the Williston Basin, where it plans to began production by year-end.

"The Bakken shale represents to the oil side of the business what the Barnett shale represents to the gas business."

Today's success in oil shale reminds McClendon of an era he thought long past—wells producing in excess of 1,000 barrels a day onshore U.S. "Almost everywhere that we're drilling, we've got thousand-barrel-a-day wells."

By year-end 2016, the company models production of 250,000 barrels of liquids per day, up from the current 67,000 barrels, to be about 35% of its total volume.

- Steve Toon

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### Bill Supporting Alternative Use Of Propane Introduced Into Senate

*U. S. Senator Ben Cardin* (D-MD) joined *U.S. Senators Roy Blunt* (R-MO) and *Debbie Stabenow* (D-MI) in introducing a bipartisan bill to encourage greater use of propane as an alternative transportation fuel, especially for large fleets of trucks and buses.

The *Propane Green Autogas Solution Act*, S. 1120, would extend for five years Federal Alternative Fuel Tax Credits for propane used as a motor fuel, propane vehicles, and propane refueling infrastructure. In 2005, legislation established significant tax incentives for propane (known as propane autogas) to promote its use in motor vehicles, reduce U.S. dependence on foreign oil, and reduce damage to the environment associated with gasoline and diesel use.

"Our nation must move to a more sustainable energy policy that lessens our dependence on foreign energy sources," said *Senator Cardin*, a member of Senate Finance Committee and the Senate Environment & Public Works Committee. "It is in our national interest – and national security -- to encourage alternative energy sources, including propane, as a way to move our economy forward and protect our environment. Propane is readily available and helps provide an alternative to imported oil."

"During a time when families and job creators in Missouri and across America are struggling to make ends meet, it's critical that we continue to support domestic energy alternatives. Propane is a clean and reliable fuel, and this bill will provide consumers with greater access to this domestically-produced alternative," said *Senator Blunt*.

"Michigan is the largest propane consuming state in the nation," said *Senator Stabenow.* "At a time when so many families are struggling with high gas prices and other economic challenges, we must do everything we can to expand alternative vehicle choices. This legislation helps promote propane vehicles as one of those options."

In 2005, highway reauthorization and energy bills provided the following alter-

native fuel tax credits that benefit propane autogas, all of which would be extended under the legislation being proposed:

- Propane Fuel Credits SAFETEA-LU included a 50 cent per gallon credit for propane sold for use in motor vehicles. This credit expires at the end of 2011.
- Propane Vehicle Credits EPACT 2005 included a tax credit to consumers who purchase 'OEM" (original equipment manufacturer) propane vehicles or convert gasoline or diesel engines to propane. The amount of credit the consumer receives varies depending on vehicle weight and emissions. This credit is currently expired.
- Propane Infrastructure Credits EPACT 2005 provided a tax credit amounting to 30 percent of the cost of a fueling station, not to exceed \$30,000 per station. This credit expires at the end of 2011.

### Wells Fargo... (continued from page 1)

bulk of these new projects are scheduled to come online.

KEY NORTH AMERICAN HUB PRICES					
2:55 PM CST / June 2, 2011					
Gas Hub Name	Current Price				
Carthage,TX	4.47				
Katy Hub, TX	4.59				
Waha Hub, TX	4.50				
Henry Hub, LA	4.64				
Perryville, LA	4.60				
Houston Ship Channel	4.56				
Agua Dulce TX	4.58				
Opal Hub, Wyo.	4.33				
Blance Hub, NM	4.35				
Cheyenne Hub, Wyo.	4.41				
Chicago Hub	4.75				
Ellisburg NE Hub	4.98				
New York Hub	4.89				
AECO, Alberta	4.19				

Source: Bloomberg

"However, following the completion of these projects (and potential expansions), we believe NGL takeaway capacity should be sufficient to support production growth in the region through 2015 under our base case scenario," the company said.

The forecast from Wells Fargo Securities anticipates that production out of the Eagle Ford could support even more infrastructure growth based on its high case scenario of 8 GPM (gallons per minute) gas. Under such a scenario, the company anticipates that the play could support an additional 150-200 million cubic feet equivalent per day (MMcfe/d) in incremental processing plant capacity and 40,000-50,000 b/d of fractionation capacity.

Under its low case scenario of 6 GPM gas, Wells Fargo anticipates that the projects currently announced by midstream companies will be sufficient to handle production out of the play. These added projects will also be sufficient for a midcase scenario of 7 GPM through 2015 before production would be constrained.

"Assuming a GPM of 6-8, we forecast that an incremental 290-385,000 b/d of y-grade NGLs could be produced in the Eagle Ford over the next five years. This, in turn, implies that a similar amount of



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NGL transportation and fractionation capacity will need to be constructed," according to the report.

Currently the play is supported by three wet gas pipelines with a total of 1.2 billion cubic feet per day (Bcf/d) of takeaway capacity. These pipelines include Kinder Morgan's 600 MMcfe/d 30" Index 50 pipeline that connects to the Houston Central processing plant; Energy Transfer Partners' 400 MMcfe/d Dos Hermanas pipeline; and Enterprise Products Partners' 200 MMcfe/d White Kitchen lateral that connects to the Shilling processing plant.

This combined capacity could be increased by 2.4 Bcf/d if nine additional projects that have been announced come online by Q1 2013. These projects include Energy Transfer Partners' 600 MMcfe/d Rich Eagle Ford Mainline and 100 MMcfe/d Chisholm pipeline; Enterprise's 600 MMcfe/d Main Line, Shilling to Shoup pipeline and Marshall & Milton Area pipeline; Copano Energy's 350 MMcfe/d DK pipeline extension; Copano/Kinder Morgan's 375 MMcfe/d EFH JV pipeline and 400 MMcfe/d Crossover pipeline; and Southern Union's Trunkline gas – South Texas system pipeline. Under Wells Fargo's best case scenario, wet natural gas production in the Eagle Ford increases by 2.8 billion cubic feet equivalent per day over the next five years, which means that production would not be constrained should these projects come online as scheduled.

The report stated that of the natural gas processing plants in the play, the bulk are owned by Enterprise Products Partners, representing a combined 1.5 Bcf/d of the 2.315 Bcf/d total Eagle Ford processing capacity. While Enterprise's combined capacity makes up the bulk of the play's processing capacity, DCP Midstream LLC's plant in the play is the largest at 815,000 b/d.

The Wells Fargo report stated that there are five proposed plants in the play that would add 1.9 Bcf/d of capacity. These include the 600 MMcf/d New Jackson County plant and 120 MMcf/d New Chisholm plant from Energy Transfer Partners; Enterprise's 600 MMcf/d New Yoakum cryogenic plant; DCP Midstream LLC's 200 MMcf/d New Eagle Ford plant; and Copano's 400 MMcf/d Houston Central plant expansion.

Given that Wells Fargo is forecasting incremental wet gas production of 2.8

Bcf/d, it anticipates additional processing plants and/or expansions of existing plants to be announced to support production growth in the region.

"We estimate that there is currently 293,000 b/d of existing NGL takeaway capacity in the Eagle Ford Shale. Midstream companies have announced potential NGL pipeline projects totaling 390,000 b/d in capacity, by our calculations. The proposed NGL pipeline projects would transport raw NGL mix to fractionation and storage facilities located along the Gulf Coast and Mont Belvieu. Assuming all currently proposed Eagle Ford NGL pipelines are built, takeaway capacity in the region could increase by 270,000 b/d, assuming no expansions or 390,000 b/d with expansions.

"Hence, absent a meaningful uptick in drilling activity or NGL recovery (e.g., GPM), announced NGL projects appear sufficient to handle the growth in NGL production out of the Eagle Ford shale, in our view," according to the company. – Frank Nieto

### **NEWS & TRENDS** TX RRC Chair Aims For Rule To Disclose Frac Fluid Components

Elizabeth Ames Jones, Chairman of the Texas Railroad Commission (RRC), the energy regulatory body for the U.S.'s largest oil and natural gas producing state, will begin the process to craft rules to mandate disclosure of certain chemicals in the solutions used in the hydraulic fracturing process commonly used in drilling natural gas and oil wells.

Chairman Jones said, "A common sense frac fluid disclosure policy will balance the Railroad Commission's dual mission to prevent the waste of Texas's energy resources, and to protect the environment and the public's health and safety. The policy will be built on the sound foundation that the Railroad Commission has already laid through our staff's active leadership in the crafting of Frac Focus, a disclosure website.

"I expect any rule to formalize best practices while protecting proprietary information. As more foreign companies are investing in businesses that drill here in Texas, and more wells are produced using hydraulic fracturing, it is important that our public disclosure rule does not undermine a frac company's intellectual property and trade secrets," said Jones.

"I appreciate the legislature's recent passage of HB 3328, and our rulemaking will instill confidence and allay concerns regarding the safety of hydraulic fracturing for handlers above ground. Hydraulic fracturing has been going on for over 60 years. Our actions should not be misconstrued to upend my earlier statements that it is geologically impos-



sible for fracturing fluid or natural gas or oil to migrate upward through thousands of feet of rock, sometimes miles, to adversely affect ground water. In fact, I am committed to encouraging the development and use of technologies, across the board, like multi-stage hydraulic fracturing, that will allow for an ever shrinking drilling footprint and enhanced recovery of energy. That is simply good for Texas and good for America," added Jones. On Thursday, June 2, 2011, Jones will advise the Secretary of Energy, Steven Chu, and the Secretary of Energy Advisory Board's Natural Gas Subcommittee at the U.S. Department of Energy Headquarters on the state's successful oversight role of hydraulic fracturing. The Subcommittee is comprised of seven members: John Deutch (chair), Susan Tierney, Daniel Yergin, Stephen Holditch,

dum of understanding for the long-term

Under the terms of the agreement,

Petronet will receive up to 2.5 million tonnes

per annum of LNG from GM&TS' interna-

tional supply portfolio for up to 25 years.

MIDSTREAM

Ph.D, Fred Krupp, Kathleen McGinty, and Mark Zoback.

Jones recently testified with other experts and the Environmental Protection Agency before the U.S. House Committee on Science, Space and Technology's hearing regarding hydraulic fracturing. The archived hearing, including Jones' testimony, is available on the committee website.

### Petronet, Gazprom Sign MOU For Supply Of LNG

Petronet LNG Limited and Gazprom Global LNG, through its Singapore affiliate, Gazprom Marketing & Trading Singapore (GM&TS), a 100% subsidiary of Gazprom Marketing & Trading, have reported they have concluded a memoran-

Cardinal Gas Storage Partners Acquires Monroe Gas Storage Co.

supply of LNG.

Cardinal Gas Storage Partners, LLC, Houston, acquired Monroe Gas Storage Co., LLC, as well as an option on development rights to an adjacent depleted natural gas reservoir from High Sierra Monroe, LLC, a wholly-owned subsidiary of High Sierra Energy, LP and certain other shareholders. The total consideration is approximately \$148 million.

Monroe is a FERC-regulated, high deliverability natural gas storage reservoir facility located in northeast Mississippi. The facility has been in operation since 2009 and has 12 billion cubic feet of working gas capacity currently in service. Subject to regulatory approval and market demand, the facility has expansion potential to add up to an additional 12 billion cubic feet of working gas capacity through expansion of the existing facility and development of the Option. Monroe currently has two pipeline interconnects through a separate east and west header system to Tennessee Gas Pipeline and Texas Eastern Pipeline.

Cardinal president and chief executive, Jeff Ballew said, "The Monroe facility is strategically located downstream of known pipeline bottlenecks. It is wellpositioned in an area that serves a suite of markets including the northeast, the Atlantic seaboard and the fast growing, gas-fired power generation load of the Southeastern United States. This location adds market diversity to the existing Cardinal assets primarily located in north Louisiana. This facility's direct interconnects to the Tennessee Gas Pipeline 500 and Texas Eastern M-1 lines create the premier reservoir storage service This transaction illustrates the parties' objective to develop a direct long-term relationship after GM&TS' successfully delivery of a number of spot cargoes via third party arrangement in Petronet's Dahej LNG terminal.

alternative in the Black Warrior Basin. In addition, Monroe's close proximity to a newly-proposed pipeline could provide an additional high-value interconnect providing customers with direct storage access for shale gas production."

Cardinal is a joint venture between Redbird Gas Storage, LLC, and funds controlled by Energy Capital Partners, LLC. Since its inception in 2008, Cardinal has been focused on the development, construction, operation and management of natural gas storage facilities throughout North America. Cardinal also owns Perryville Gas Storage, LLC, Arcadia Gas Storage LLC and Cadeville Gas Storage LLC and is in the process of developing additional natural gas storage infrastructure in North America.

### Summit Midstream Closes \$285 Million Revolving Credit Facility

Summit Midstream Partners, LLC, Dallas, has reported the closing of a \$285 million senior secured revolving credit facility. The credit facility, which matures in May 2016, also contains an accordion provision that permits Summit to increase the total size of the facility by up to \$150 million at any time prior to maturity. RBS Securities Inc. was the sole bookrunner for the transaction and was joined by joint lead arrangers BMO Capital Markets Inc. and Regions Bank. In

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total, seven lenders participated in the loan syndication.

"We sincerely appreciate the support of our lenders and are excited about achieving this important milestone in Summit's history. This credit facility, in combination with our strong equity capital backing from Energy Capital, will provide Summit with significant financial resources and flexibility for the continued development of our midstream infrastructure assets in the Barnett Shale and our planned development of midstream infrastructure in the Marcellus Shale," stated Steve Newby, president and chief executive.

### DUO 2011: Bakken Midstream Poised... (continued from page 1)

ture, which was approved by Federal Energy Regulatory Commission on November 2010. It has affirmed with U.S. Department of State that reversal of its Portal Link cross-border system did not require a new Presidential border-crossing permit. The section had originally transported Canadian production south.

Also, Enbridge filed a North Dakota Public Service Commission application last November, and expects a decision on that request any day. It filed a Canadian National Energy Board application in January 2011, and has a hearing set for that on October 4th of this year.

Yet, such big projects are not the only constraints that Bakken producers face, according to Tad True, vice president for True Cos., addressing some 2,000 attendees at the DUO conference. "Logistical constraints for Bakken production include both basin constraints, meaning getting barrels out of the Williston Basin, and lease constraints, meaning getting barrels off the lease."

The midstream company, which has been in operation since 1948, plans several new activities in the region, including its Four Bears and Bakken 300 projects. "With Poplar, Belle Fourche and Four Bears, most producing wells in western North Dakota and eastern Montana will be no farther than 30 miles from pipeline access," he said, and noted that some production moved by trucks is undergoing major traffic constraints. Truck and rail transport are not as economical as pipeline transportation.

Also, pipeline capacity constraints, along with alternative transportation methods, have an opportunity cost for operators when they cannot take advantage of today's current high oil prices, because prices could fall again.

Yet, attempting to evaluate oil prices is a complex process, according to Con-

rad Barnes, manager of the Energy Pricing Center for Hart Energy, also speaking at the conference. Both quantitative and qualitative aspects of oil prices must be taken into account.

Quantitative parameters include purchasing power stability, the absolute and relative demand growth between OECD and non-OECD, the real-world scenario of OPEC's ability to replace supply disruptions, overall financial markets sentiments, foreign exchange rates and short-term demand and supply balances, he said. Qualitative parameters include geopolitical risk and value judgments.

Conrad noted that, overall, oil prices are higher than in previous years, despite increasing domestic supplies this year, which is reversing the falling U.S.-production trend of the years 1986 through 2008.

- Jeannie Stell

## **PIPELINES & TECHNOLOGY** Buckeye Partners Acquires Refined Products Terminals, Pipelines From BP

Buckeye Partners, L.P., Houston, has reported that it has completed the purchase of 33 refined petroleum products terminals and 650 miles of refined petroleum products pipeline from BP North America Inc. and its affiliates for \$165 million. The terminal and pipeline assets are located in the Midwestern, Southeastern, and Western United States, further extending Buckeye's operations into new geographic markets. This acquisition includes over 10 million barrels of storage capacity, increasing Buckeye's

total liquid petroleum storage capacity by approximately 19% to over 63 million barrels. BP will continue to be a key customer at these facilities under multi-year throughput commitments.

"We are excited to bring these new terminals and pipelines into Buckeye's growing portfolio of assets," said Forrest E. Wylie, Buckeye's chairman and chief executive. "This acquisition, which is expected to be immediately accretive to our distributable cash flow per unit, is the latest example of our commitment to creating long-term unit holder value through strategic acquisitions that leverage our core strengths as an organization. Since we commenced our best practices initiative in July 2009, our improved commercial focus has allowed us to drive incremental volumes through our legacy assets, and we are committed to applying these best practices to further enhance the commercial utilization of our newly acquired facilities."

www.midstreambusiness.com



### Second Leak This Month Shuts Down Keystone Pipeline

TransCanada has had to shutdown its Keystone pipeline for the second time in a month due to a 40 barrel leak at a pumping station in Kansas due to faulty fitting, according to Reuters. This is the second time this month that the 591,000 barrel per day oil pipeline has been shutdown due to faulty fitting.

Earlier in the month the pipeline, which runs from Hardisty, Alberta to Cushing, Oklahoma was shutdown due

### to a 500 barrel leak in Sargent County, North Dakota. The pipeline was down for approximately one week due to this leak and the company managed to recover 393 barrels of oil.

The company has not provided a timeline for the pipeline's return to service.

Resin Prices						
Market Update – June 2, 2011						
TOTAL OFFERS: 11,3	. OFFERS: 11,338,936 lbs			CONTRACT		
Resin	Total lbs	Low	High	Bid	Offer	
PP Copolymer - Inj	2,739,288	0.89	1.00	0.91	0.95	
LLDPE - Film	2,427,128	0.70	0.76	0.68	0.72	
HDPE - Blow Mold	1,813,472	0.86	0.98	0.89	0.93	
LDPE - Film	1,163,656	0.80	0.96	0.84	0.88	
HDPE - Inj	866,552	0.79	0.86	0.73	0.77	
HMWPE - Film	701,288	0.74	0.83	0.70	0.74	
PP Homopolymer - Inj	566,368	0.78	0.83	0.82	0.86	
LDPE - Inj	425,000	0.90	0.90	0.86	0.91	
GPPS	380,000	1.00	1.00	0.94	0.99	
HIPS	168,000	0.77	0.77	0.75	0.79	
LLDPE - Inj	88,184	0.78	0.78	0.71	0.75	
HMWPE - Film	88,184	0.78	0.78	0.71	0.75	

MIDSTREA

McJunkin Red Man Acquires SPF

McJunkin Red Man Corp., Houston, signed an agreement to acquire Stainless Pipe and Fittings Australia Pty Ltd (SPF), as part of its strategic vision to be the world's premier pipe, valve and fitting (PVF) distribution company to the energy and industrial markets.

Effective as of closing, SPF will operate as <u>MRC</u> SPF. The acquisition will enhance MRC's global project capabilities. The transaction, which is expected to close by the end of June, is subject to customary closing conditions.

SPF, founded in 1996, is the largest distributor of stainless steel piping products in the southern hemisphere. Headquartered in Perth, Western Australia, SPF has seven locations across Australia as well as Korea, Italy, U.K. and United Arab Emirates (UAE). SPF is a leading project supply specialist with proven capabilities supplying the oil and gas, mining and mineral processing, chemical and petrochemical and water treatment and desalination industries.

SPF's 430,000 square feet facility based in Perth would become MRC's

premier pipe, fittings and flange (PFF) stocking and distribution center for Australasia. This facility is equipped with state-of-the-art materials handling facilities including the ability to facilitate project laydowns and provide bulk supply provisions. Complementing the Perth facility are two additional stocking locations in Australia as well as strategically placed stockholdings in the Jebel Ali Free Zone, UAE and in the U.K.

Acquiring SPF would increase MRC's global PFF stockholding in stainless steel to a value in excess of US \$50 million, with global stainless PFF sales of more than \$300 million. The \$4 billion MRC group currently has over 400 global service locations and \$850 million of PVF stock located around the globe. The acquisition would complement MRC's 2009 purchase of Transmark Fcx (MRC Transmark).

Andrew Lane, chairman, president and chief executive, commented, "This acquisition furthers our vision to be the world's premier PVF distribution company to the energy and industrial markets. SPF's PFF capabilities would allow

Source: Plastics Exchange - www.theplasticsexchange.com

MRC to expand on our valve platform to have a complete global PVF supply capability. We are excited to expand our presence in Australia and with major EPC projects globally. We are also very pleased to be adding Graham Yarker and Jeff Nicholas to the MRC management team and all of SPF's 145 employees to MRC on the closing of this acquisition."

SPF's Managing Director Graham Yarker commented, "We are very pleased to be joining the MRC team. Our vision to advance SPF to the next level through sustainable growth would be realized with the global presence, scale and strength of the combined company." Jeff Nicholas, SPF's Managing Director – Sales added, "Combined SPF and MRC would create a complete global PVF solution and these synergies would create opportunity and value for the customers of both companies. SPF would expand MRC's international scope and greatly enhance supply capabilities for projects internationally."

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# NGL PRICES

### Ethane Prices Continue To Balance Out, But Short-Term Fundamentals Strong

Natural gas liquid (NGL) prices took another tumble the week of May 25, with the notable exception of  $C_{5+}$ , which continued to benefit from its close relationship to crude oil prices.

Ethane had one of the largest price drops at either hubs, as it was down 3% to 71¢ at Mont Belvieu and 2% to 49¢ at Conway. Part of these decreases was due to a balancing of the market with crackers utilizing naphtha at a higher rate the past few weeks. Once ethane prices drop enough to make it even more attractive to crackers, prices will start to rise again.

The Mont Belvieu price was the lowest at the hub since it was 70¢ the week of March 16 while the Conway price was the lowest since it was 47¢ the week of March 9.

Wells Fargo Securities anticipates continued support for ethane prices in the short-term due to the faster-than-forecasted pace of heavy- to light-end steam cracker conversions. "We continue to believe that a temporary oversupply of ethane is a distinct possibility given the pace of fractionation capacity buildout at Mont Belvieu and Conway," the company said in its May NGL Snapshot.

Ethane markets may balance by 2016-17 if one of the announced worldscale ethylene plants are constructed in the Gulf Coast. "[A]ssuming two new build ethylene plants are to be constructed in 2016-17E, we forecast that ethane markets could return to balance in 2016E and become undersupplied in 2017E," according to Wells Fargo Securities.

The company noted that ONEOK's announced Sterling III NGL pipeline that will transport unfractionated NGLs or purity NGL products from Conway to Mont Belvieu will debottleneck the movement of purity NGL products between the two markets.

Wells Fargo Securities estimates that Conway is long ethane by nearly 25,000 barrels per day (b/d) compared to Mont Belvieu. By its estimates, Conway has the capacity to produce 210,000 b/d of fractionated ethane, but local demand for the ethane is only 56,000 b/d.

"This implies that roughly 154,000 b/d of ethane production must be exported out of the region in order to keep the Conway market balanced. However, according to our estimates, purity takeaway capacity out of the region is currently limited to about 130,000 b/d...Hence, with takeaway capacity out of region constrained and local fractionation capacity more than adequate to meet demand, Conway ethane currently trades at a 23% discount to Mont Belvieu," the report said.

The largest price drop at Conway was for butane and isobutane, which each fell 3% from the previous week. The butane

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	lso	Pen+	NGL Bbl
May 25 - 31, '11	70.65	149.53	182.50	199.90	248.18	\$60.44
May 18 - 24, '11	73.18	150.16	187.47	201.32	241.48	\$60.74
May 11 - 17, '11	74.21	151.30	186.96	204.88	251.77	\$61.80
May 4 - 10, '11	82.08	153.44	191.03	208.00	260.80	\$64.18
May '11	75.69	152.10	189.34	204.72	252.68	\$62.31
April '11	75.74	144.44	189.72	203.15	256.33	\$61.63
1st Qtr '11	63.74	137.32	175.07	186.15	228.46	\$55.82
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
May 26 - June 1, '10	52.53	106.35	145.73	153.88	163.33	\$43.58
Conway, Group 140	Eth	Pro	Norm	lso	Pen+	NGL Bbl
May 25 - 31, '11	49.08	140.00	166.13	182.00	236.65	\$54.35
May 18 - 24, '11	50.98	140.62	171.98	188.57	230.44	\$54.80
May 11 - 17, '11	52.18	141.38	174.90	200.00	233.00	\$55.72
May 4 - 10, '11	57.08	143.34	176.33	199.00	249.25	\$57.91
May '11	52.63	142.00	173.01	192.24	240.62	\$56.08
April '11	54.31	134.59	175.54	199.58	246.21	\$56.18
1st Qtr '11	46.30	128.26	164.69	186.06	225.91	\$51.80
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
May 26 - June 1, '10	29.43	100.05	127.40	138.30	157.10	\$37.77

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

price was down to \$1.66, the largest drop in price since it was \$1.63 the week of March 9. The isobutane price of \$1.82 was the lowest price at the hub since it was slightly lower the week of January 26.

The Mont Belvieu price for butane was down 2% to \$1.83, the lowest price at Texas since the week of March 9 when it was \$1.76. The hub's price for isobutane was down 1% to \$2.00, which was its lowest price since it was \$1.99 the week of March 30.

It appears that butane's lower demand from the summer season is helping to drive the price lower at both hubs. The isobutane price decrease is primarily due to lower gasoline prices, which has caused the demand for summer-grade gasoline to fall slightly.

Propane prices largely held firm at both Conway and Mont Belvieu the week of May 25 as market correction may be taking place. The Mont Belvieu price was down slightly to \$1.50 while the Conway price was down to 1¢ to \$1.40. Over the past

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two years, propane inventory levels have fallen to five-year lows due to increased domestic use combined with increased export levels for the product. Various market analysts have been remarking for the past several months that propane has been trading at lower prices than its actual market value.

The lone NGL to increase in value the week of May 25 was  $C_{5+}$ , which improved by 3% to \$2.48 at Mont Belvieu and 2% to \$2.37 at Conway. The Mont Belvieu price

was the highest in three weeks while the Conway story was the highest price at the hub in a month.

– Frank Nieto

### FRAC SPREAD

#### May 2011 Frac Spread: Margins Down Across The Board

(Note: This is this not this week's Frac Spread)

Frac spread margins were down across the board in the month of May due to improved natural gas feedstock prices and lower natural gas liquids (NGL) prices at both Conway and Mont Belvieu.

The largest drop in margin was for ethane, which fell 34% at Conway and 24% at Mont Belvieu. This represented a very sizable drop at the hub from the gains posted last month. The Conway frac spread lost 10¢ per gallon (/gal) in value from April while the Mont Belvieu margin lost 13¢/gal in value.

This was followed by butane, which fell 14% in margin at Conway and 12% at Mont Belvieu for the month. The Conway margin and Mont Belvieu margin each lost 18¢/gal in value in May from April primarily due to reduced demand for the product.

Isobutane margins dropped 12% at Conway and 6% at Mont Belvieu with the Conway margin also losing 18¢/gal and the Mont Belvieu margin losing 9¢/gal due to decreases in gasoline prices in the latter half of May.

Propane margins were down 6% for the month of May at Conway and 7% for the month at Mont Belvieu. This resulted in a loss of 7¢/gal in value at Conway and a loss of 9¢/ gal in value at Mont Belvieu.

The most valuable NGL remained  $C_{5+}$  in the month of May despite a 10% drop in margin at Conway and a 9% drop at Mont Belvieu. This resulted in the Conway and Mont Belvieu frac spread falling 20¢/gal in value.

- Frank Nieto

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.

Current Frac Spread (Cents/Gal)						
MAY 2011	Conway	Change from Start of Month	Mont Belvieu	Start of Month		
Ethane	49.08		70.65			
Shrink	29.64		30.50			
Margin	19.44	-33.77%	40.15	-23.59%		
Propane	140.00		149.53			
Shrink	40.95		42.14			
Margin	99.05	-6.13%	107.39	-7.38%		
Normal Butane	166.13		182.50			
Shrink	46.35		47.70			
Margin	119.78	-13.45%	134.80	-11.68%		
lso-Butane	182.00		199.90			
Shrink	44.52		45.82			
Margin	137.48	-11.69%	154.08	-5.59%		
Pentane+	236.65		248.18			
Shrink	49.57		51.01			
Margin	187.08	-9.89%	197.17	-9.11%		
NGL \$/Bbl	54.35	-8.12%	60.44	-7.54%		
Shrink	16.33		16.80			
Margin	38.02	-12.11%	43.63	-11.09%		
Gas (\$/mmBtu)	4.47	2.76%	4.60	3.14%		
Gross Bbl Margin (in cents/gal)	87.29	-11.93%	101.65	-11.05%		
NGL Value in \$/mmBtu						
Ethane	2.70	-15.67%	3.89	-13.97%		
Propane	4.86	-3.69%	5.19	-4.64%		
Normal Butane	1.79	-9.47%	1.97	-8.23%		
lso-Butane	1.13	-8.54%	1.24	-3.72%		
Pentane+	3.05	-7.50%	3.20	-6.84%		
Total Barrel Value in \$/mmbtu	13.54	-8.32%	15.50	-7.98%		
Margin	9.07	-12.95%	10.90	-11.98%		

Source: Frank Nieto



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### C<sub>5+</sub> Lone NGL To Experience Margin Improvements

Frac spread margins were down the week of May 25 for all but one natural gas liquids (NGL) as there was a combination of decreased NGL prices and higher natural gas feedstock prices at both hubs.

Natural gas feedstock prices improved 6% at each hub, with the Conway price up to \$4.47 per million Btu (/MMBtu) and the Mont Belvieu price up to \$4.60/MMBtu as heating demand increased during the week.

The largest decreases in margin were for ethane, which fell 15% at Conway and 10% at Mont Belvieu due to ethane prices experiencing market corrections the past several weeks.

Butane had the next largest drop in margin the week of May 25 as it was down 7% at Conway and 6% at Mont Belvieu as butane also experienced decreased demand from ethylene crackers.

The lone NGL to experience improved margins was  $C_{5+}$ , which improved by 2% at each hub as it benefitted from improved crude oil prices the week of May 25.

For the week, the theoretical NGL barrel price was down 1% at both Conway and Mont Belvieu. The Conway barrel price was \$54.35 per barrel (/bbl) with a 3% drop in margin to \$38.02/bbl while the Mont Belvieu price was \$60.44/bbl with a 3% drop in margin to \$43.63/bbl.

The most profitable NGL to make at both hubs was once again  $C_{5+}$  at \$1.87 per gallon (/gal) at Conway and \$1.97/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.38/gal at Conway and \$1.54/gal at Mont Belvieu; butane at \$1.20/gal at Conway and \$1.35/gal at Mont Belvieu; propane at 99¢/gal at Conway and \$1.07/gal at Mont Belvieu; and ethane at 19¢/gal at Conway and 40¢/gal at Mont Belvieu.

Natural gas in storage for the week of May 27, the most recent data available from the Energy Information Administration, was up 83 billion cubic feet to 2.107 trillion cubic feet (Tcf) from 2.024 Tcf the previous week. This was 10% below the 2.344 Tcf figure posted last year at the same time and 2% below the five-year average of 2.149 Tcf.

Demand for natural gas should be up in much of the country based on increased cooling degree day demand for next week based on the forecast from the National Weather Service. The forecast is calling for hotter than normal weather in much of the country, specifically along the East Coast, Gulf Coast and most of the Midwest. The West Coast and Rockies are expected to experience cooler than normal temperatures. New England, southern Texas and parts of the Midwest are expected to experience normal weather for this time of year.

- Frank Nieto

Current Frac Spread (Cents/Gal)							
June 2, 2011	Conway	Change from Start of Week	Mont Belvieu	Start of Week			
Ethane	49.08		70.65				
Shrink	29.64		30.50				
Margin	19.44	-15.22%	40.15	-9.71%			
Propane	140.00		149.53				
Shrink	40.95		42.14				
Margin	99.05	-2.77%	107.39	-2.81%			
Normal Butane	166.13		182.50				
Shrink	46.35		47.70				
Margin	119.78	-6.51%	134.80	-5.45%			
Iso-Butane	182.00		199.90				
Shrink	44.52		45.82				
Margin	137.48	-6.12%	154.08	-2.60%			
Pentane+	236.65		248.18				
Shrink	49.57		51.01				
Margin	187.08	1.93%	197.17	1.92%			
NGL \$/Bbl	54.35	-0.81%	60.44	-0.50%			
Shrink	16.33		16.80				
Margin	38.02	-3.36%	43.63	-2.88%			
Gas (\$/mmBtu)	4.47	5.67%	4.60	6.24%			
Gross Bbl Margin (in cents/gal)	87.29	-3.49%	101.65	-3.01%			
NGL Value in \$/mmBtu							
Ethane	2.70	-3.73%	3.89	-3.46%			
Propane	4.86	-0.44%	5.19	-0.42%			
Normal Butane	1.79	-3.40%	1.97	-2.65%			
Iso-Butane	1.13	-3.48%	1.24	-0.71%			
Pentane+	3.05	2.69%	3.20	2.77%			
Total Barrel Value in \$/mmbtu	13.54	-1.10%	15.50	-0.88%			
Margin	9.07	-4.12%	10.90	-3.60%			

MUSTREA

Monitor

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

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# **SNAPSHOT** Columbia Gas Transmission Connects GOM Gas To Ten States

The Columbia Gas Transmission (CGT) pipeline, owned by NiSource Gas Transmission & Storage, is a natural gas pipeline that gathers gas in the Gulf of Mexico and transports it to ten states, according to the company's website. With 3 billion cubic feet per day of system capacity (Bcf/d), the pipeline runs a total of 10,318 miles. It has 103 compressor stations and 600 Bcf of seasonal storage, according to Hart Energy Mapping and Data Services.

Columbia Gas of Ohio Inc. (SST) is its highest transport customer with 1,445,000 dekatherms per day (Dth/d) of capacity; followed by Washington Gas Light Co. (SST) with 507,000 Dth/d. The rest of the top 10 are Columbia Gas of Pennsylvania Inc. with 457,000 Dth/d; Columbia Gas of Ohio Inc. (FTS) with 354,000 Dth/d; Washington Gas Light Co. (FTS) with 248,000 Dth/d; Mountaineer Gas Co. with 236,000 Dth/d: Columbia Gas of Kentucky Inc. with 221,000 Dth/d; Duke Energy Ohio Inc. with 217,000 Dth/d; CNX Gas Co., LLC, with 209,000 Dth/d; and Vectren Energy Delivery of Ohio Inc. with 200,000 Dth/d.

The Top Four storage customers on the CGT are Waterville Gas & Oil Co., with 40 MMcf; Atmos Energy Marketing, LLC, also with 40 MMcf; Ohio Cumberland Gas Co. with 13 MMcf; and Orwell Natural Gas Co. with 9 MMcf.

Its top receipt point is at TCO-Leach followed by Eagle-25 and Fairfield-Rex. Its top delivery point is Washington Gas-30, following by Baltimore Gas & Electric and Columbia Gas of Ohio OP 07-5, according to Hart Energy Mapping and Data Services.

- Rebecca Torrellas

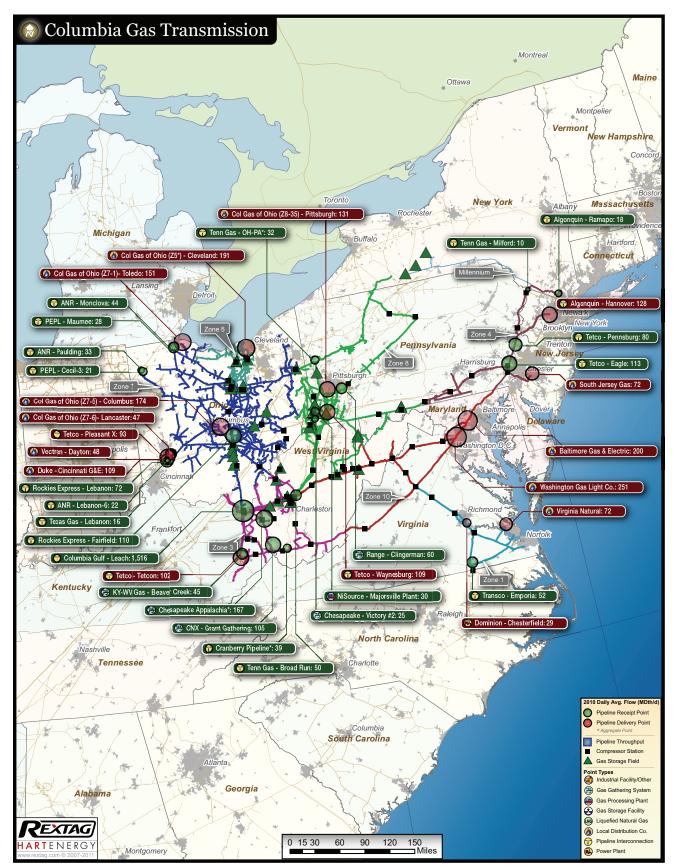


Source: Hart Energy Mapping and Data Services

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Source: Hart Energy Mapping and Data Services



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