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DUG MIDCONTINENT | MIDSTREAM TECHNICAL FORUM



Safety Remains Major Issue

TERRANCE HARRIS

HART ENERGY

KLAHOMA CITY—When an accident occurs on a job as the result of a safety breach, particularly in the oil and gas industry, the almost natural inclination is for the company is to terminate the person or people at fault and then hire a replacement.

But director of USDOT Peter Katchmar has an interesting perspective on this cycle that doesn't always deal with the internal breakdown that made the safety breach possible, but hires someone new who is susceptible to the same mistakes. Katchmar calls it his pickle juice theory.

"You are going to go hire another cucumber, put him in your jar of pickle juice and create a new pickle," Katchmar said to the amusement of those in attendance for the Safety Roundtable talk during the Midstream Technical Forum that was part of the kick off to Hart Energy's DUG Midcontinent on Nov. 13. "That's what you are going to do, you are going

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to throw this pickle out and you are going to go hire a new cucumber and throw him in that pickle jar. It's your pickle juice and he is just going to turn into that same pickle that you just got rid of."

While Katchmar's analogy drew much laughter in the room, safety in the oil and gas industry—whether on offshore rigs or pipelines—is a serious concern for all companies.

Katchmar, who heads the PHMSA Accident Investigation Division at USDOT, says with the industry becoming



Sean Atkin, EnLink Midstream; Peter Katchmar, USDOT; Mark Prewitt, DCP Midstream; and Aubrey Harper, 4AM Midstream; discuss worker safety at the Midstream Technical Forum at DUG Midcontinent in

younger and less experienced because much of the workforce is retiring that safety is becoming even more of a concern.

Less experienced workers are more prone to make safety mistakes that could end catastrophically.

"I've seen people die because they say 'Yeah, I'm

qualified," Katchmar said. "The second question is do you use written procedures? This gentleman had been trained for a year and he was the job for six months, a big operator, and had never used written procedure ever and he was trained with a guy who had been in the business for 40 years.



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"I don't mean to put a damper or shadow over this whole thing but I like taking warm showers in the morning. I like being able to fill up my gas tank at the local gas stations. You guys do a wonderful job a lot the time—most of the time."

The consensus among the four-member panel is that a lot is already being done but that even more is needed to ensure the safety of the industry's most valued asset, it's employees. What did seem varied in the discussion are the best practices to achieve the safest work environment.

Aubrey Harper, president and CEO of 4AM Midstream, said his company's approach is to create an environment that goes beyond safety just in the workplace. For example, he said his company has talks with the employees about practical best safety practices like how to properly use a ladder at home and how to prevent from getting mugged at a shopping center during Christmas time.

"It creates that culture where you are thinking about safety beyond just where we are," Harper said. "What can we do to keep our company, family safe? When you do that you create a culture where safety goes beyond the 8 to 5 or 7 to 6.

"It becomes a part of life for associates and our families. We feel like that's important and we push for that."

Midstream Connect: Bernadette Johnson of Drillinginfo



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"On the operational side, it's all about timing," said Bernadette Johnson, vice president of market intelligence for Drillinginfo Inc. "How far we need to move all these molecules to get to the coast."

During a break at the Midstream Finance Conference in Dallas, Johnson also told Steve Toon, editor-in-chief of *Oil and Gas Investor*, that while the Permian Basin is "ground zero" for bottlenecks, takeaway capacity is an issue in several areas across the industry. In the NGL space, a lack of pipelines has spurred price volatility for ethane and others.

-HART ENERGY STAFF

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FRAC SPREAD

Prices Rise But Margins Are Squeezed

JOSEPH MARKMAN | HART ENERGY

With the average price of Henry Hub natural gas up 17.6% during the eight-day period since the last Frac Spread and the Mont Belvieu, Texas, hypothetical NGL barrel holding steady, post-Thanksgiving Day margins were creamed across the board.

CURRENT FRAC SPREAD (CENTS/GAL)				
NOVEMBER 30, 2018	Conway	Change from Start of Week	Mont Belvieu	Last Week
Ethane	19.89		32.58	
Shrink	29.67		29.18	
Margin	-9.78	8.85%	3.40	-34.01%
Propane	66.48		73.75	
Shrink	40.99		40.32	
Margin	25.49	-6.58%	33.43	-14.24%
Normal Butane	76.64		78.33	
Shrink	46.41		45.65	
Margin	30.23	-5.08%	32.68	-23.82%
Isobutane	92.00		87.30	
Shrink	44.57		43.84	
Margin	47.43	-1.90%	43.46	-11.88%
Pentane+	108.13		104.74	
Shrink	49.63		48.82	
Margin	58.50	-12.01%	55.92	-18.13%
NGL \$/Bbl	24.99	5.07%	27.34	-0.13%
Shrink	16.35		16.08	
Margin	8.65	-9.85%	11.26	-17.86%
Gas (\$/mmBtu)	4.48	15.16%	4.40	17.66%
Gross Bbl Margin (in cents/gal)	19.23	-10.44%	26.22	-17.819
NGI	. Value in \$/mmBtu	(Basket Value)		
Ethane	1.10	18.53%	1.79	8.78%
Propane	2.31	5.73%	2.56	0.68%
Normal Butane	0.83	6.22%	0.85	-4.12%
Isobutane	0.57	5.69%	0.54	0.83%
Pentane+	1.39	-1.32%	1.35	-4.619
Total Barrel Value in \$/mmbtu	6.20	6.11%	7.09	0.92%
Margin	1.72	-11.88%	2.69	-18.12%

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 Midwest region, Mont Belvieu based on Houston region. Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation.

Indeed, all Mont Belvieu NGL suffered double-digit setbacks, especially ethane, which absorbed a 34% reduction to 3.4 cents per gallon (gal). Isobutane emerged the least damaged with its margin narrowing by just under 12%.

Ethane prices moved up last week, rising 8.8% to return to a 30+ cents/gal territory at Mont Belvieu and 18.5% at Conway, Kan., to its highest point since mid-January.

The lift, EnVantage Inc. said in a report, can be attributed to those surging natural gas prices—\$4.48 per million



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British Thermal Units (MMBtu) at Chicago City Gate and \$4.40/MMBtu at Henry Hub. Otherwise, reduced cracking demand and weaker exports would lower ethane prices, and the outlook is not terribly sunny.

"Over the next several weeks, there are very few catalysts to move ethane demand higher," said EnVantage. "U.S. ethylene inventories are still high and polyethylene exports may be hampered by low crude prices and soft Asian markets. In this scenario, there is no incentive to significantly increase ethane cracking, especially in a low oil price environment where heavier feedstocks are competitive."

Oil prices will stay in the low-\$50s per

barrel, EnVantage said, because bearish traders fear a supply glut in 2019 as the global economy slows. Only a report of declines in the inventories of gasoline and distillates kept prices from falling even more, the analysts said.

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Dropdown MLPs:

Time To Double (Drop)Down Or Fold (In)?



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It's no secret that MLP equity markets have been challenged since oil prices cratered in 2014, and the recent volatility in oil prices and the broader market haven't helped. The difficult market environment has raised questions around the viability of **dropdown MLPs**, particularly given the recent examples of parents planning to buy in their dropdown MLPs.

Do dropdown MLPs still work? Could other dropdown MLPs be potential consolidation candidates? What about those MLPs that were dropdown stories but are now focused on organic growth?

Dropdown MLPs promising 20+% distribution growth were once the darlings of the MLP space, as investors were willing to stomach equity issuances to see their distributions increase.

Weak capital markets have made issuing equity difficult, and investors have a lower tolerance for equity issuance, particularly as the space shifts more toward **self-funding**.

At the same time, distribution growth has not really been rewarded in terms of MLP equity performance. The combination is problematic for dropdown MLPs and their parents. If a dropdown MLP cannot raise equity to pay for acquisitions with cash, the value of the MLP to its refiner, producer or utility parent is arguably diminished.

-STACEY MORRIS | ALERIAN

From Bull To Bear: What To Make Of The Sell-Off?

In the last month, crude oil prices have retreated from four-high highs amid concerns of rising oil production worldwide and weakening demand from developing countries despite the U.S. reimposing sanctions on Iran. The oil market sell-off has shaved more than a fifth off the global Brent crude benchmark and slashed the price of U.S. crude (West Texas Intermediate, or WTI) by 25% since early October, harkening back to similar trends seen during the oil price rout of late 2014.

More recently, on Nov. 14, 2018, Brent and WTI crude futures snapped a record 12-day streak of losses and have since tried to recover. WTI futures posted a sixth straight weekly loss during the week ended Nov. 16, 2018.



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In light of recent events, we pose the question: Is the crude sell-off and bearish market sentiment overblown? The short answer is no. —RYAN DUSEK | OPPORTUNE LLP

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