OPIS North America LPG Report

OPIS By IHS Markit

A Daily Report on NGL Spot Prices plus News and Commentary on the United States, Canada and Mexico

January 4, 2019

Energy Futures at Settlement

WTI Crude Oil (\$/bbl)													
Month	Price	Change											
FEB	47.96	0.87											
MAR	48.28	0.88											
Brent Crude Oil (\$/bbl)													
Month Price Change													
MAR 57.06 1.11													
APR 57.21 1.07													
Natu	ral Gas (\$/mɪ	nbtu)*											
Month	Price	Change											
FEB	3.044	0.099											
MAR	2.905	0.093											
	RBOB (\$/gal)											
Month	Price	Change											
FEB 1.348 0.00													
MAR 1.362 0.00													
*Preliminary S	ettlements												

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REMINDER: The solicitation for feedback deadline regarding the submitted proposal to increase the minimum volume traded, to be used in the daily OPIS assessed pricing for the Mont Belvieu natural gas liquids physical spot market for certain products, from 10,000 bbl to 25,000 bbl, ends at the close of business this Friday, January 4. Please send comments or questions to OPIS-Energy- CustomerService@ihsmarkit.com or Ben.Scriber@ihsmarkit.com.

1/4/19 - The runway was cleared for a big rally in oil markets this morning, and with a strong December jobs report and equities market that was also off to the races clearing the path.

Crude oil and refined products topped out at roughly two-week highs this morning, but a bearish EIA report that showed large product builds and mostly flat crude oil inventories helped push prices back from the morning highs.

RBOB took the biggest hit after being up about a nickel at one point today as February ended the day down 17 points at \$1.3478/gal. While RBOB futures gave back gains, WTI and Brent were able to stick to positive territory, though the morning gains were cut by more than half as both contracts were up by more than \$2 today. Inventories were flat when a draw was expected, which pressured oil to give back most if not all the gains.

The equities markets more or less saved the day for crude oil bulls as gains of 3% in U.S. equities kept crude oil from pulling back any further.

IN SPOT TRADING...

Mont Belvieu NGLs ended the first week of 2019 on a mostly positive note, drawing strength from a rally in crude oil prices and a somewhat bullish inventory report.

Ethane and isobutane were the only products to end the week in the red.

Meanwhile, the U.S. Energy Information Administration (EIA) reported a 1.566 million-bbl decline in propane/propylene supplies, slightly more than the 1.4 million bbl average

(Continued on Page 2)

OPIS Mont Belvieu Spot Gas Liquids Aggregate Prices (cts/gal)

	Any Current Month				F	Prompt Cu	urrent Mont	:h	Out Month (Feb)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane	63.500	64.500	64.0000	63.6320	63.500	64.500	64.0000	63.6320	64.250	65.250	64.7500	64.1735	
N. Butane	74.563	75.438	75.0005	74.4795	74.563	75.438	75.0005	74.4795	74.594	75.563	75.0785	74.5002	
Isobutane	79.750	80.250	80.0000	80.0000	79.750	80.250	80.0000	80.0000	80.375	81.500	80.9375	79.7708	
N. Gasoline	99.000	101.250	100.1250	98.1387	99.000	101.250	100.1250	98.3053	99.667	101.917	100.7920	98.6460	
EP Mix	29.000	29.500	29.2500	29.1875	29.000	29.500	29.2500	29.1875	29.125	29.875	29.5000	29.5417	
Purity Ethane	30.313	32.063	31.1880	30.9378	30.313	32.063	31.1880	30.9378	30.438	32.438	31.4380	31.2920	

OPIS Mont Belvieu Spot Gas Liquids Prices (cts/gal)

OPIS Mont Belvieu Spot Ga	s Liquias	s Prices	(cts/gai)									
		Any Cur	rent Month	l	ı	Prompt Co	urrent Mon	th		Out Mo	nth (Feb)	
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
TET Propane	63.750	64.500	64.1250	63.8542	63.750	64.500	64.1250	63.8542	64.000	64.750	64.3750	64.1458
Non-TET Propane	63.125	64.250	63.6875	63.1250	63.125	64.250	63.6875	63.1250	64.125	65.250	64.6875	63.7917
Other Non-TET Propane	63.625	64.750	64.1875	63.9167	63.625	64.750	64.1875	63.9167	64.625	65.750	65.1875	64.5833
TET N. Butane	65.000	65.875	65.4375	66.7292	65.000	65.875	65.4375	66.7292	65.125	66.000	65.5625	66.9375
TET Isom N. Butane	78.250	79.125	78.6875	77.5625	78.250	79.125	78.6875	77.5625	78.250	79.250	78.7500	77.5208
Non-TET N. Butane	77.500	78.375	77.9375	76.8125	77.500	78.375	77.9375	76.8125	77.500	78.500	78.0000	76.7708
Other Non-TET N. Butane	77.500	78.375	77.9375	76.8125	77.500	78.375	77.9375	76.8125	77.500	78.500	78.0000	76.7708
TET Isobutane	79.750	80.250	80.0000	80.0000	79.750	80.250	80.0000	80.0000	80.375	81.500	80.9375	79.7708
Non-TET Isobutane	79.750	80.250	80.0000	80.0000	79.750	80.250	80.0000	80.0000	80.375	81.500	80.9375	79.7708
Other Non-TET Isobutane	79.750	80.250	80.0000	80.0000	79.750	80.250	80.0000	80.0000	80.375	81.500	80.9375	79.7708
TET N. Gasoline	100.000	102.250	101.1250	99.2500	100.000	102.250	101.1250	99.7500	100.000	102.250	101.1250	98.9583
Non-TET N. Gasoline	98.000	100.250	99.1250	97.0833	98.000	100.250	99.1250	97.0833	99.750	102.000	100.8750	98.7292
Other N. Gasoline	99.000	101.250	100.1250	98.0833	99.000	101.250	100.1250	98.0833	99.250	101.500	100.3750	98.2500
River N. Gasoline	104.000	106.250	105.1250	103.0833	104.000	106.250	105.1250	103.0833	105.750	108.000	106.8750	104.7292
EP Mix	28.375	28.875	28.6250	28.5625	28.375	28.875	28.6250	28.5625	28.500	29.250	28.8750	28.9167
Other Non-TET E-P Mix	29.625	30.125	29.8750	29.8125	29.625	30.125	29.8750	29.8125	29.750	30.500	30.1250	30.1667
Purity Ethane	30.250	32.000	31.1250	30.8958	30.250	32.000	31.1250	30.8958	30.375	32.375	31.3750	31.2500
Other Non-TET Purity Ethane	30.375	32.125	31.2500	30.9792	30.375	32.125	31.2500	30.9792	30.500	32.500	31.5000	31.3333

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OPIS Mont Belvieu Non-TET NGL Basket

	Any Curre	nt Month	Month T	To Date
Product	Avg (cts/gal)	Avg (\$/bbl)	MTD (cts/gal)	MTD (\$/bbl)
Non-TET NGL Basket	57.1644	24.009	56.5215	23.739

OPIS Transatlantic ARB - Mont Belvieu/Cif ARA

	Mont Belvieu Non-TET	Avg		Cif ARA Physical A	vg	Differ	ential
Product	(cts/gal)	(\$/mt)	Product	(cts/gal)	(\$/mt)	(cts/gal)	(\$/mt)
Propane	63.6875	331.812	Propane	76.4875	398.500	-12.800	-66.688
Butane	77.9375	353.057	Butane	84.4371	382.500	-6.500	-29.443

OPIS Conway In-Well Spot Gas Liquids Prices (cts/gal)

		Any Current Month				rompt Cu	rrent Mont	h	Out Month (Feb)			
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	54.000	55.500	54.7500	55.5417	54.000	55.500	54.7500	55.5417	54.250	55.750	55.0000	55.7500
N. Butane	68.250	68.750	68.5000	70.3750	68.250	68.750	68.5000	70.3750	67.750	68.250	68.0000	70.0417
Isobutane	78.000	78.500	78.2500	81.2500	78.000	78.500	78.2500	81.2500	77.000	77.500	77.2500	80.7500
N. Gasoline	86.000	86.500	86.2500	85.9167	86.000	86.500	86.2500	85.9167	87.500	88.000	87.7500	87.0000
Ethane (in E-P)	17.000	17.625	17.3125	18.8542	17.000	17.625	17.3125	18.8542	16.000	16.625	16.3125	18.1875

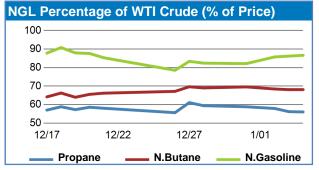
OPIS Conway In-Line Spot Gas Liquids Prices (cts/gal)

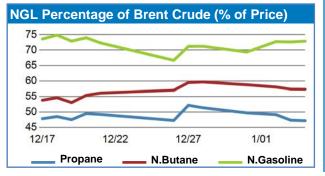
	Any Current Month				P	rompt Cu	rrent Mont	h	Out Month (Feb)			
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	54.000	55.500	54.7500	55.5417	54.000	55.500	54.7500	55.5417	54.250	55.750	55.0000	55.7500
N. Butane	68.250	68.750	68.5000	70.3750	68.250	68.750	68.5000	70.3750	67.750	68.250	68.0000	70.0417
Isobutane	78.000	78.500	78.2500	81.2500	78.000	78.500	78.2500	81.2500	77.000	77.500	77.2500	80.7500
N. Gasoline	86.000	86.500	86.2500	85.9167	86.000	86.500	86.2500	85.9167	87.500	88.000	87.7500	87.0000
Ethane (in E-P)	17.000	17.625	17.3125	18.8542	17.000	17.625	17.3125	18.8542	16.000	16.625	16.3125	18.1875

OPIS Bushton Spot Gas Liquids Prices (cts/gal)

		Any Curr	ent Month		Prompt Current Month				Out Month (Feb)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane KM	54.000	55.500	54.7500	55.5417	54.000	55.500	54.7500	55.5417	54.250	55.750	55.0000	55.7500	
N. Butane KM	68.250	68.750	68.5000	70.3750	68.250	68.750	68.5000	70.3750	67.750	68.250	68.0000	70.0417	
Isobutane KM	78.000	78.500	78.2500	81.2500	78.000	78.500	78.2500	81.2500	77.000	77.500	77.2500	80.7500	
N. Gasoline KM	86.000	86.500	86.2500	85.9167	86.000	86.500	86.2500	85.9167	87.500	88.000	87.7500	87.0000	
Ethane (in E-P) KM	17.000	17.625	17.3125	18.8542	17.000	17.625	17.3125	18.8542	16.000	16.625	16.3125	18.1875	

20-Day Spread Trends





(Continued from Page 1)

predicted in an OPIS market survey.

However, the EIA report also revealed another record week for propane production at 2.145 million b/d. This is the third week in a row that propane production has set an all-time high.

Mont Belvieu TET (LST) propane anys traded at 63.75-64.5cts/gal, up 1.58%. The out month traded at a quarter-cent premium to anys. TET trading volume topped out at approximately 60,000 bbl confirmed.

Non-TET (EPC) propane anys traded at 63.125-64.25cts/gal, up 2%. Non-TET moved about 110,000 bbl confirmed.

Other non-TET (TAR) propane traded in a range of 63.75-64cts/gal at confirmed volumes of 30,000 bbl. Hattiesburg inline anys exchanged hands at 66-68cts/gal. In spread activity, non-TET C3 anys were done at 0.625-0.75ct discount to TET, and other non-TET flat to TET.

Purity ethane anys were at 30.25-32cts/gal, down 1.19%. Purity outs fetched a range of 31.5-31.75cts/gal. Purity trading volume was nearly 300,000 confirmed bbl.

E/P mix anys were assessed at 28.375-28.875cts/gal based on the day's bid- offer range and OPIS methodology.

In the heavies, normal butane anys traded at 77.5-78.375cts/gal, up 1.88%. Normal butane remained the most traded commodity with approximately 360,000 bbl confirmed. Refinery grade butane (RGB) was assessed at 12.5cts/gal discount to non-TET normal butane.

(Continued on Page 3)

OPIS Hattiesburg Spot Gas Liquids Prices (cts/gal)

		Any Curr	ent Month		P	rompt Cu	rrent Mont	:h	Out Month (Feb)			
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane - In-Line	66.000	68.000	67.0000	66.3333	66.000	68.000	67.0000	66.3333	66.250	68.250	67.2500	66.6250
Propane - Storage	66.000	68.000	67.0000	66.3333	66.000	68.000	67.0000	66.3333	66.250	68.250	67.2500	66.6250

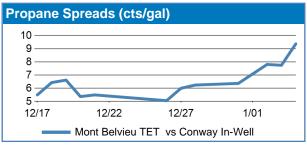
OPIS FOB Napoleonville Spot Gas Liquids Prices (cts/gal)

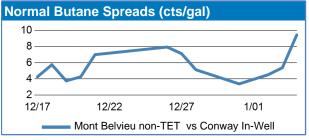
		Any Curr	ent Month		P	rompt Cu	rrent Mont	h	Out Month (Feb)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane	46.125	47.250	46.6875	46.1250	46.125	47.250	46.6875	46.1250	47.125	48.250	47.6875	46.7917	
N. Butane	77.500	78.375	77.9375	76.8125	77.500	78.375	77.9375	76.8125	77.500	78.500	78.0000	76.7708	
Isobutane	88.375	88.875	88.6250	88.6250	88.375	88.875	88.6250	88.6250	89.000	90.125	89.5625	88.3958	
N. Gasoline	95.875	98.125	97.0000	94.9583	95.875	98.125	97.0000	94.9583	97.625	99.875	98.7500	96.6042	
Purity Ethane	27.750	29.500	28.6250	28.3958	27.750	29.500	28.6250	28.3958	27.875	29.875	28.8750	28.7500	
Ethane (in E-P)	26.875	27.375	27.1250	27.0625	26.875	27.375	27.1250	27.0625	27.000	27.750	27.3750	27.4167	

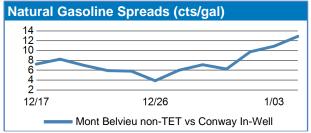
OPIS FOB Geismar/Sorrento Area Spot Gas Liquids Prices (cts/gal)

	Any Current Month				F	Prompt Current Month				Out Month (Feb)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD		
Propane	57.125	58.250	57.6875	57.1250	57.125	58.250	57.6875	57.1250	58.125	59.250	58.6875	57.7917		
N. Butane	82.500	83.375	82.9375	81.8125	82.500	83.375	82.9375	81.8125	82.500	83.500	83.0000	81.7708		
Isobutane	73.250	73.750	73.5000	73.5000	73.250	73.750	73.5000	73.5000	73.875	75.000	74.4375	73.2708		
N. Gasoline	103.750	106.000	104.8750	102.8333	103.750	106.000	104.8750	102.8333	105.500	107.750	106.6250	104.4792		
Purity Ethane	32.750	34.500	33.6250	33.3958	32.750	34.500	33.6250	33.3958	32.875	34.875	33.8750	33.7500		

20-Day Spread Trends Mont Belvieu Purity Ethane Frac Spread (cts/gal) 12 10 8 6 4 2 12/17 12/26 1/03







(Continued from Page 2)

Isobutane anys were executed at 80cts/gal, down 0.62%, with only one lot of 10,000 bbl confirmed.

Non-TET natural gasoline anys were at 98-100.25cts/gal, up 2.32%, at about 60,000 bbl confirmed. It was also reported that out month C5 volumes traded at a premium of 1.75cts/gal to current month.

--Bobbie Clark, bclark@opisnet.com

The Conway propane market seemed to find little inspiration from either firmer crude oil prices or weekly inventory data. Of the 1.566 million bbl pulled from storage in the week ended Dec. 28, only 300,000 bbl of that came from the Midwest.

Conway propane anys fell 1.1% as deals were done from 54-55.5cts/gal on less than 50,000 bbl worth of volume. E/P mix also came off, gapping lower from 17- 17.625cts/gal, vs. Thursday's 19cts/gal midpoint.

Heavy-end NGL volumes were nonexistent until nearly the end of the session, with normal butane pulling back 3.7% to 68.5cts/gal and isobutane off 2.8% to 78.25cts/gal. Natural gasoline ended the session largely flat with Thursday at 86.25cts/gal.

--Jessica Marron, jmarron@opisnet.com

Some positive signals by way of firming petroleum futures prices and an easing of physical railcar constraints have boosted the spirits of some in the New York Harbor butane markets. However, as a whole, "it's still not a healthy blending market by any means," a source commented.

January trucks reportedly traded in the mid-90s (cts/gal), with an end-of-week bid/ask range called from 91-97cts/gal, vs. valuations around 95-98cts/gal last week.

Railcars were last heard done at 86cts/gal outright. Delivered differentials were unchanged from the previous week at 8-15cts over the January Mont Belvieu TET refinery grade butane average, with prompter deliveries commanding the higher premiums, sources said.

One source estimated February pricing at roughly the same levels as January, while another suggested the month-ahead market was a couple

(Continued on Page 6)

Canada Spot Gas Liquids Prices

OPIS Sarnia Spot Gas Liquids Prices (US cts/gal)

		Any Current Month				rompt Cu	rrent Mont	:h	Out Month (Feb)			
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	77.000	77.500	77.2500	79.0833	77.000	77.500	77.2500	79.0833	77.250	77.750	77.5000	79.3750
N. Butane	65.000	65.875	65.4375	66.7292	65.000	65.875	65.4375	66.7292	65.125	66.000	65.5625	66.9375
Isobutane	76.750	77.250	77.0000	77.0000	76.750	77.250	77.0000	77.0000	77.375	78.500	77.9375	76.7708

OPIS Edmonton Spot Gas Liquids Prices (US cts/gal)

	Any Current Month			Prompt Current Month			Out Month (Feb)					
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	24.000	25.500	24.7500	25.5417	24.000	25.500	24.7500	25.5417	24.250	25.750	25.0000	25.7500
Field Grade Butane	11.250	11.500	11.3750	11.2500	11.250	11.500	11.3750	11.2500	11.375	11.625	11.5000	11.2917
N. Gasoline	104.666	107.047	105.8565	103.1822	104.666	107.047	105.8565	103.1822	109.857	110.452	110.1545	107.7417
N. Gasoline Diff to WTI*	(4.000)	(3.000)	(3.5000)	(3.9167)	(4.000)	(3.000)	(3.5000)	(3.9167)	(2.250)	(2.000)	(2.1250)	(2.3750)

^{*} N. Gasoline Diff to WTI Implied Calendar Month Average

OPIS West Coast Spot Gas Liquids Prices

Anys Prices (cts/gal)

	Los Angeles			San Francisco			Bakersfield					
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	124.875	127.875	126.3750	125.8750	123.875	124.875	124.3750	124.3750	124.875	126.875	125.8750	124.8750
N. Butane	112.750	113.250	113.0000	111.8333	112.750	113.250	113.0000	111.8333	100.750	101.250	101.0000	99.8333
Butane Mix	112.750	113.250	113.0000	111.8333	112.750	113.250	113.0000	111.8333	100.750	101.250	101.0000	99.8333
Isobutane	114.750	115.250	115.0000	115.0000	114.750	115.250	115.0000	115.0000				
N.Gasoline									111.750	114.250	113.0000	111.3333

Prompt Calif. Cap-at-the-Rack LPG Price (01/03/2019): 9.12	MTD: 9.115
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Frac Spread and Percentage of Crude Snapshot (cts/gal)

Mont	Belvieu

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
TET Propane	64.125	1.000	36.2532	7.054	56.0316
Non-TET Propane	63.688	1.250	35.8157	7.006	55.6493
Non-TET N. Butane	77.938	1.438	46.3590	7.572	68.1007
TET N. Butane	65.438	(0.062)	33.8590	6.357	57.1784
TET Isom N. Butane	78.688	1.438	47.1090	7.645	68.7561
Non-TET Isobutane	80.000	(0.500)	49.6726	8.086	69.9029
TET Isobutane	80.000	(0.500)	49.6726	8.086	69.9029
Non-TET N. Gasoline	99.125	2.250	63.8298	9.003	86.6141
TET N. Gasoline	101.125	2.000	65.8298	9.185	88.3617
Purity Ethane	31.125	(0.375)	10.9311	4.680	27.1966
E-P Mix	28.625	(0.625)			
River N. Gasoline	105.125	2.250	69.8298	9.548	91.8568
Other N. Gasoline	100.125	2.250	64.8298	9.094	87.4879
Oth N-TET N. Butane	77.938	1.438	46.3590	7.572	68.1007

Bushton

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane KM	54.750	(0.625)	26.8782	6.023	47.8398
N. Butane KM	68.500	(2.625)	36.9215	6.655	59.8544
Isobutane KM	78.250	(2.250)	47.9226	7.909	68.3738
N. Gasoline KM	86.250	0.250	50.9548	7.834	75.3641
Ethane (in E-P) KM	17.313	(1.688)			

Napoleonville

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	46.688	1.250	18.8157	5.136	40.7949
N. Butane	77.938	1.438	46.3590	7.572	68.1007
Isobutane	88.625	(0.500)	58.2976	8.958	77.4393
N. Gasoline	97.000	2.250	61.7048	8.810	84.7573
Purity Ethane	28.625	(0.375)	8.4311	4.305	25.0121
Ethane (in E-P)	27.125	(0.625)			

Conway In-Well

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	54.750	(0.625)	26.8782	6.023	47.8398
N. Butane	68.500	(2.625)	36.9215	6.655	59.8544
Isobutane	78.250	(2.250)	47.9226	7.909	68.3738
N. Gasoline	86.250	0.250	50.9548	7.834	75.3641
Ethane (in E-P)	17.313	(1.688)			

Geismar/Sorrento

Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
Propane	57.688	1.250	29.8157	6.346	50.4066
N. Butane	82.938	1.438	51.3590	8.058	72.4697
Isobutane	73.500	(0.500)	43.1726	7.429	64.2233
N. Gasoline	104.875	2.250	69.5798	9.525	91.6383
Purity Ethane	33.625	(0.375)	13.4311	5.056	29.3811

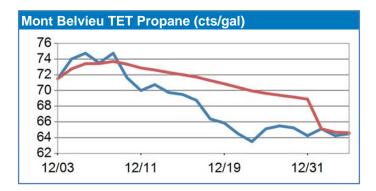
Percentage of Crude 5-Year Rolling Average

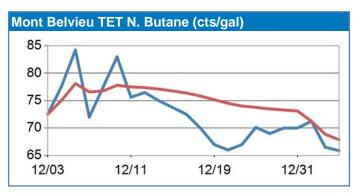
Market	Product	% Crude	5-Yr Avg
Mont Belvieu TET	Propane	56.0316	50.5343
Mont Belvieu Non-TET	N. Butane	68.1007	62.4174
Mont Belvieu Non-TET	N. Gasoline	86.6141	91.9030
Mont Belvieu	Purity Ethane	27.1966	17.8025
Conway In-Well	Propane	47.8398	46.7088

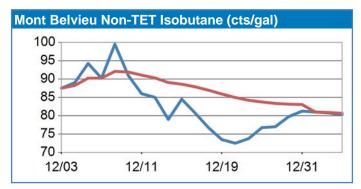
OPIS U.S. Gulf Coast FOB LNG Price Assessments (\$/MMBtu)

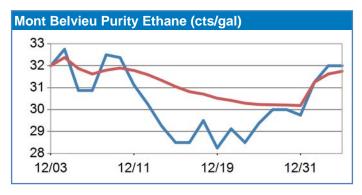
NG Price 2.748 3.044 2.905 2.905	Periods	1-15 Day 01/05-01/19	16-30 Day 01/20-02/03	31-45 Day 02/04-02/18	46-60 Day 02/19-03/05
2000	Differential	4.013	3.593	3.602	3.369
A	NG Price	2.748	3.044	2.905	2.905
Assessment 6.761 6.637 6.507 6.274	Assessment	6.761	6.637	6.507	6.274

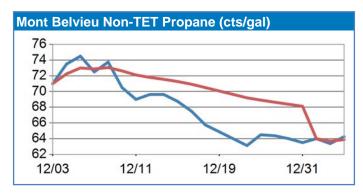
Daily Average and Month-to-Date Average Prices

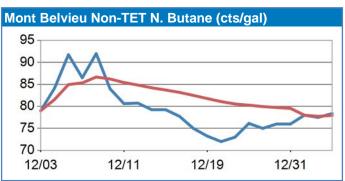


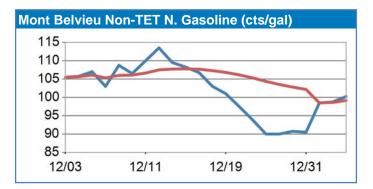


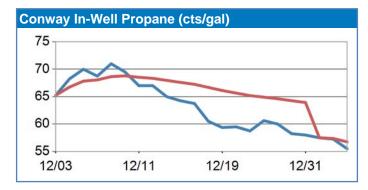












Legend

Represents daily anys average price, the mean of each trading day's lowest and highest price in US cents per gallon.

Represents month-to-date anys average price, the sum of each trading day's anys average price divided by the sum of trading days since the beginning of month.

(Continued from page 3)

cents lower.

--Jessica Marron, jmarron@opisnet.com

Sarnia propane prices finally showed movement after about two weeks of no changes, but not in the direction most anticipate this time of year. The range dropped to 77-77.5cts/gal from 80cts/gal Thursday. Edmonton inventory propane was estimated at minus 30cts to Conway in-well supply, unchanged from yesterday.

In butanes, Edmonton field grade butane was steady at 10% of the WTI futures average. Sarnia normal butane was estimated unchanged at flat to the Mont Belvieu TET grade and isobutane was seen steady at minus 3cts/gal. Edmonton natural gasoline was seen at minus \$4 to minus \$3/bbl to the front- month WTI futures, in slightly from the previous two days' minus \$4.5 to minus \$3.75.

--Tom Galatola, tgalatola@opisnet.com

Gas Liquids Methodology

LPGas is published each business day. Prices reflect information confirmed by 5:00 pm eastern time. OPIS does not guarantee the accuracy of these prices. Editors have the ability to review and reflect transactions reached on electronic platforms, such as HostEnergy and ICE, within published ranges, but posted "bid/asked" numbers or even confirmed deals on such networks are viewed subjectively by OPIS staff.

For a description of the OPIS LP Report methodology, please visit www.opisnet.com/about/methodology.aspx

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Schedule

Schedule for the week of 1/7/2018. Subject to change without notice.

Jessica Marron: 1/7-1/9 (Mont Belvieu, with Bobbie Clark), 1/10 (Conway, CA), 1/11 (Conway)

Ben Scriber: 1/7 (CA and WC), 1/8 (CA), 1/9 (Conway, WC), 1/10-11 (Mont Belvieu, with Bobbie Clark)

Tom Galatola: 1/7 (Conway), 1/8 (Conway, WC), 1/9 (CA), 1/10 (WC), 1/11 (CA, WC)

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West Coast propane prices showed a slight rise in one part of the Bakersfield range while Los Angeles and San Francisco prices were steady. Normal butane and isobutane prices were mixed.

The Bakersfield range was \$1.24875-\$1.26875/gal as the low end rose from \$1.22875/gal Thursday while the high end was steady. The Los Angeles propane range was flat at \$1.24875-\$1.27875/gal and San Francisco prices were estimated unchanged at \$1.23875-\$1.24875/gal. The ranges were assessed at supplier postings, less 9.11cts for Cap-atthe-Rack costs.

Normal butane in Los Angeles and San Francisco edged up to \$1.1275-\$1.1325/gal from \$1.1125-\$1.1175/gal yesterday. The differential to Mt. Belvieu stayed at a 35 cents premium. Los Angeles and San Francisco isobutane prices dipped to \$1.1475-\$1.1525/gal from \$1.1525-\$1.1575/gal Thursday and the premium to Mt. Belvieu isobutane also remained at 35 cents. Bakersfield natural gasoline was assessed at \$1.1175-\$1.1425/gal, moving up from \$1.09875-\$1.1225/gal yesterday as the WTI average rose to \$47.96/bbl from \$47.17/bbl.

--Tom Galatola, tgalatola@opisnet.com

The FOB U.S. Gulf coast propane resale market experienced a slight boost on the last day of the trading week, partly due to growing U.S. propane production, while fresh export volumes out of the U.S. East Coast were expected to be limited.

The U.S. Energy Information Administration (EIA) reported propane/propylene stocks for the week ending Dec. 28 at 70.7 million bbl, down by about 1.5 million bbl from the previous week, driven by strong demand.

Combined demand, which includes exports and product supplied, reached 2.52 million b/d, up 137,000 b/d from the previous week, while production set a new record at 2.145 million b/d, up by 88,000 b/d from the previous week.

The latest inventory level remained higher than year-ago level of 68 million bbl. The draw was in line with mean expectations from an OPIS poll of minus 1.4 million bbl on average, with individual draw estimates ranging from minus 0.3 million bbl to minus 2.8million-bbl.

While strong demand persisted during the holiday season, the hike in production captured market participants' attention.

Both the Midwest and the Gulf Coast regions have set a new weekly production record at 534,000 b/d and 1.201 million b/d respectively, leading the overall hike in the nationwide propane/propylene production.

"If demand wasn't as strong as it is, we could have seen a build this week with that number," said a source.

Arbitrage margins to the Far East and Northwest Europe retreated to below 5cts/gal on Friday as the February Mont Belvieu propane marker stood at an estimated 64.25cts/gal at presstime, up by 0.875cts/gal.

However, sources said that resale values have picked up and are currently hovering above the 5cts/gal mark.

Meanwhile, the market impact of fresh supply through the Mariner East 2 (ME2) pipeline was being assessed, as Energy Transfer Partners (ETP) announced an ME2 in-service effective on Dec. 29, 2018. Sources' views on the potential impact on the U.S. East Coast export market varied, but so far, only limited activities were observed related to fresh ME2

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(Continued from page 6)

supply.

"Nothing so far, it's been quiet from what we have seen. Guess, maybe [it] will come to light in the next few weeks. It's doubtful there will be some sort of surge though," said a source

"Not too much, I'm still waiting to hear how much line fill they have, may not get any consistent flows until Feb.," said a second source.

"Not just yet," a third source echoed.

In addition, sources said that multiple contract holders with rights to export their contracted volumes also "have the option to sell FOB at the rack" for local distribution, a factor that may weigh on the fresh exports volumes amid robust local winter demand in the Northeast.

"Hear maybe [a] cargo [i.e. fresh volumes from ME2 for export] end Jan.," said a fourth source.

One source, however, observed rather high exports last week from the U.S. East Coast, totaling 170,000 b/d onto three vessels, including the BW Mindoro, Gaschem Hamburg, Clipper Moon.

"Last week has [seen] some real strong exports for the USEC, but not sure how much is timing vs. actual new flows," said the source.

The ME2, a 350-mile NGL pipeline transports ethane, propane and butane from processing plants in Ohio across West Virginia and Pennsylvania to ETP's Marcus Hook Industrial complex in Delaware Country, Pa., for domestic and waterborne markets.

OPIS FOB USGC PROPANE RESALE Diff: +5.00-5.50cts/gal

--Charles Kim, ckim@opisnet.com

In Northwest Europe, cutbacks in crude oil by key OPEC members in late-2018 filtered through to LPG and naphtha markets, as the first week progressed to its conclusion after a New Year wobble.

Early cuts in crude production by Saudi Arabia and the United Arab Emirates from December appear to have provided a lift to the market. Brent hit a high of \$58.27/bbl mid-afternoon Friday, before subsiding. The marker had made a steady climb, straight lining upwards in the early hours of Friday morning, reaching \$2/bbl over the previous close when trade opened in Europe.

Naphtha took the cue more so than propane, the latter seeing another large- cargo import on the horizon, which took the edge off the rise in price.

Propane swaps ended the day marked at \$397/t inside the 4:00-4:30pm GMT timeframe, up by \$6/t on the day, seeing a single trade at 50kt early in the 30-minute session. Another 50kt trade for February was done inside the same timeframe at \$394/t, as well as a regular-sized pitch for February late in the session at \$387/t. The large swap placement was suggestive of similarly-sized cargoes.

Physical large-cargo activity was absent for propane as the week closed, leaving the OPIS assessment of the cash differential unchanged on day at +\$1.5/t to January, or \$398.5/t outright.

The second VLGC-sized cargo import of the new year appeared at the end of the week. The BW Mindoro changed its

destination from Tarragona to Terneuzen, having departed the loadport Marcus Hook on the U.S. East Coast.

OPIS had noted on the opening workday of 2019 that the propane/naphtha Jan. spread had sprung wider, just shy of doubling, thus moving the spread toward improved viability for propane as a cracking feedstock in NW Europe.

The Jan. spread ended Friday wider still, at -\$55/t from -\$46/t a day ago. The Feb. discount was marked at -\$58/t from Thursday's -\$50/t.

Large-cargo butane was gauged higher at 86% to January naphtha, following a deal earlier this week, which had been initiated by a cargo offer.

Butane coasters in NW Europe were gauged at 90% to naphtha.

In monomer markets, the agreed term prices for January showed a decrease, as crude prices had been depressed at the time of the settlement.

Ethylene was agreed at EUR 985/t (from EUR 1,025/t in December), and propylene was set at EUR 925/t (from EUR 985/t).

Ethylene is seeing persistent length, according to a note by IHS-Markit Chemicals, exemplified by spot prices in January in a EUR 820-860/t range, whilst propylene is seen more balanced, though spot prices have been seen in range of EUR 870-890/t.

The Navigator Venus was noted by broking sources as loading at Stenungsund Friday, with a possible ethylene export, whilst propylene is set to arrive into the ARA from the Mediterranean region early in the month.

--Dermot McGowan, dmcgowan@opisnet.com

The Asian LPG market sentiments remained fragile, even as two physical deals for the H1 February delivery cycle were heard concluded in the trading window.

Although crude oil prices bounced on the possibility of more supply cuts from OPEC and Russia, CFR values fell slightly, weighed down by offers seen in the trading window. CP-linked propane swap values edged higher, however, supported by recent signs of AG cargo tightness.

The Feb propane CP swaps value rose by \$6.00/mt to \$409.00/mt, and the Feb- Mar timespread remained at a backwardation of \$7.00/mt.

In the CFR forward market, two deals for the H1 Feb delivery cycle were heard done on Friday. One deal for a 23,000-mt of propane parcel was heard done at a premium of \$3.00/mt to Feb Far East quotes, which worked out to \$430.00/mt, while another deal was heard done at a premium of \$2.00/mt to Feb Far East quotes, which worked out to \$429.00/mt.

In the H2 Feb delivery cycle, the lowest offer was heard placed at a premium of \$5.00/mt to Feb Far East quotes, which worked out to \$432.00/mt. No bids were heard for the same delivery cycle.

On the evenly-split and butane cargo front, no bids or offers were heard.

As a result, H1 Feb, H2 Feb and H1 Mar delivery propane were assessed at \$429.50/mt, \$427.50/mt and \$423.50/mt, respectively, while LPG prices were assessed at \$429.50/mt, \$427.50/mt and \$423.50/mt for the same respective delivery

periods.

Worries about ample supply as well as ongoing volatile crude oil market were still weighed on the Asian market.

Meanwhile, LPG demand from India remained robust. According to data compiled by IHS Markit, India's LPG imports in October increased by 8.73% on-month to 1.12 million mt, consisting of 600,991 mt of butane and 508,147 mt of propane.

Accumulated imports volume for Jan-Oct in 2018 recorded 9.82 million mt which is up 29.55% on-year, the data also shows. India's monthly imports figures through October already surpassed Japan's record till November which was 9.73 million mt as well as India's own total LPG imports in 2017.

India's total LPG imports in 2017 recorded 9.17 million, consisting of 5.17 million mt of butane and 4 million mt of propane, respectively.

On the shipping front, spot chartering rates for Houston to Japan via the Panama Canal were seen at around \$59.00/mt. The freight rate for Middle East to Japan was seen at \$33.96/mt.

--Eunah Park, epark@opisnet.com

IN THE LNG MARKET...

U.S. Gulf Coast (USGC) LNG prices were underpinned by strength in European gas values on Friday, with the arbitrage indicator pointing at Northwest Europe for all periods.

OPIS assessed the 1st period at \$6.761/MMBtu, the 2nd period at \$6.637/MMBtu, the 3rd period at \$6.507/MMBtu and 4th period at \$6.274/MMBtu.

U.S. natural gas futures rebounded with the month of February ending the day at \$3.044/MMBtu, up by \$0.099/MMBtu, while OPIS PointLogic-assessed Henry Hub spot physical for January 5th through January 7th stood at \$2.748/MMBtu, up by \$0.061/MMBtu. FOB USGC LNG differentials ended the day with the 1st period at \$4.013/MMBtu, the 2nd at \$3.593/MMBtu, the 3rd at \$3.602/MMBtu and the 4th period at \$3.369/MMBtu.

Meanwhile, Cheniere Energy was granted a regulatory approval and is gearing up for commissioning Train 2 of its Corpus Christi LNG terminal.

On January 3, the Federal Energy Regulatory Commission (FERC) issued a statement saying, "I grant your December 19, 2018 request for Corpus Christi Liquefaction, LLC (CCL) to introduce gas and commission the Train 2 fuel gas system."

This came as the commissioning activities for Train 1 of the Corpus Christi LNG terminal are underway and Cheniere Energy expects to achieve substantial completion for Train 1 of the Corpus Christi liquefaction plant in the first quarter of 2019 and the second half of 2019 for Train 2. As the firm reaches substantial completion for Train 1, its SPAs with firms including Endesa, lberdrola and Pertamina are set to begin, a factor that is expected to increase the U.S.-Europe LNG flow.

Cheniere Energy's Corpus Christi LNG terminal has so far shipped out two LNG cargoes on the LNG carrier MARVEL FALCON on December 25 and the MARIA ENERGY on December 11.

In addition, the new LNG terminal was seen accommodating its third LNG vessel, the BW PARIS, according to IHS Markit's Market Intelligence Network (MINT).

While the feed gas delivery volumes tend to be volatile during the commissioning period, the average feed gas delivery to the facility has increased to 584 MMcf/d in the current week, sharply higher compared to 83.8 MMcf/d recorded in the week ended December 20, according to data from OPIS PointLogic.

Located on the La Quinta Channel on the Northeast side of Corpus Christi Bay in San Patricio County, Texas, the facility houses two 0.6 Bcf/d trains, while the firm made a final investment decision for its Train 3 at the liquefaction terminal with a substantial completion expected in the second half of 2021. The seven smaller trains currently under development would increase the LNG terminal's total capacity to about 23 MTPA.

--Charles Kim, ckim@opisnet.com

IN THE NEWS...

U.S. propane and propylene stocks fell by 1.566 million bbl to 70.653 million bbl in the week ended Dec. 28, the U.S. Energy Information Administration said Friday. That marked a 2.2% decline on the week, though inventories are still 3.9% above last year's levels.

The decline was roughly in line with an OPIS market survey, which on Thursday had predicted stocks would fall by an average 1.4 million bbl. The wider estimated withdrawal range spanned from 0.3 million-2.8 million bbl.

The PADD 3 region saw stocks dip by 1 million bbl to 40.5 million bbl, while PADD 2 (Midwest) declined 300,000 bbl to 21 million bbl. PADD 1 on the East Coast was unchanged on the week at 6.4 million bbl, while PADDs 4 and 5 stumbled by 400,000 bbl to 2.7 million bbl.

Propylene for non-fuel use increased by 300,000 bbl to 5.1 million bbl in the week ended Dec. 28, EIA data showed.

Demand for propane, as suggested by the products supplied category, jumped by 449,000 b/d to 1.586 million b/d, while refinery production was also strong at 2.145 million b/d, up 88,000 b/d on the week.

EIA showed exports of propane and propylene declined 312,000 b/d to 934,000 b/d, while imports fell 28,000 b/d to 151,000 b/d.

ArcLight Energy Partners Fund has revised its non-binding offer price for the shares that it does not already own in American Midstream Partners (AMID) by 26%, according to AMID on Thursday.

The revised offer for AMID shares is \$4.50 per common unit, compared with \$6.10 per unit proposed on Sept. 28.

The other proposed terms of the potential transaction remain as set forth in the original non-binding proposal.

The proposed transaction remains subject to a number of contingencies, including the approval of the Conflicts Committee of the GP Board, the approval by holders of a majority of the outstanding common units of the Partnership, and the satisfaction of any conditions to the consummation of a transaction set forth in any definitive agreement concerning the transaction.

OPIS North America LPG Report

January 04, 2019

AMID provides midstream infrastructure that links producers of natural gas, crude oil, NGLs and condensate to end-use markets. AMID's assets are located in offshore and onshore basins in the Permian, Eagle Ford, East Texas, Bakken and Gulf Coast.

AMID owns or has an ownership interest in approximately 5,100 miles of interstate and intrastate pipelines, as well as ownership in gas processing plants, fractionation facilities, an offshore semi-submersible floating production system with nameplate processing capacity of 90,000 b/d of crude oil and 220 MMcf/d of natural gas; and terminal sites with approximately 4.3 million bbl of storage capacity.

ArcLight Energy Partners Funds are set up by ArcLight Capital Partners as investment vehicles in the energy and power sectors.

OPIS notes that ArcLight, a private equity firm, has been on a buying spree, snapping up or planning to buy energy assets, including TransMontaigne, Thorntons, AMID, St. Croix oil refinery and Gulf Oil, in the past few years. ArcLight also bought some Gulf Coast gas and NGL logistics assets from Enbridge