OPIS North America LPG Report A Daily Report on NGL Liquids Spot Prices plus News and Commentary

Energy Futures at Settlement

WTI Crude Oil (\$/bbl)											
Month	Price	Change									
MAY	51.70	0.55									
JUN	52.13	0.53									

Brei	Brent Crude Oil (\$/bbl)											
Month	Price	Change										
JUN	54.89	0.53										
JUL	55.17	0.54										

Natu	Natural Gas (\$/mmbtu)*											
Month	Price	Change										
MAY	3.331	0.065										
JUN	3.401	0.057										

*Preliminary Settlements

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PFAA SPRING GOLF TOURNAMENT: Register now for the 4th Annual PFAA Spring 2017 Golf Tournament, held Thursday, Apr. 20, 2017 at The Woodlands Resort and Golf Country Club. Registration is still open to all PFAA member companies, as well as all non-members and industry brokers. Registration fees and sponsorship information are available at www.pfaaonline.com on the Events tab. If you should need any additional information about the tournament, please do not hesitate to contact any of the PFAA Board of Directors or golf committee members noted on the website.

4/6/17 - Oil futures started the session without much direction but by midafternoon were pointing higher, finishing the session close to intraday highs.

May WTI settled up 55cts today at \$51.70/bbl, only about 12cts away from today's high of \$51.82/bbl. ICE Brent for delivery in June followed suit, picking up 53cts on the day to settle at \$54.89/bbl, just below the \$55/bbl high tide for the day.

The stronger crude settlements helped lift spot NGL prices at Mont Belvieu and Conway, with the exception of natural gasoline, which posted small day-over -day losses in both markets.

On the refined product side, gains were also solid but light. RBOB for May delivery picked up 1.43cts to settle at \$1.7296/gal, only about a quarter-penny away from today's high of \$1.7320/gal. Ultra-low-sulfur diesel futures for May got a little less of a bounce, picking up 94cts to round out the session at \$1.6129/gal, a little further away than RBOB from its high of \$1.6175/gal for the day.

The market as a whole could be near a breakout, according to some of the latest resistance points from chartists.

For crude contracts, WTI's 200-day moving average is \$51.32/bbl, and today's settle put

(Continued on Page 2)

OPIS Transatlantic ARB - Mont Belvieu/Cif ARA

	Mont Belvieu Non-TE	Г Аvg		Cif ARA Physical A	vg	Differential		
Product	(cts/gal)	(\$/mt)	Product	(cts/gal)	(\$/mt)	(cts/gal)	(\$/mt)	
Propane	64.063	333.766	Propane	71.401	372.000	-7.339	-38.234	
Butane	76.813	347.961	Butane	82.671	374.500	-5.859	-26.539	
	·	A C	ront Month					

	Any Curre	nt Month
Product	Avg (cts/gal)	Avg (\$/bbl)
NGL Basket OPIS MB Non-TET	56.1738	23.5930

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

		Any Cur	rent Month		F	Prompt Cu	urrent Mon	th		Out Mo	onth (May)	
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
TET Propane	63.000	64.000	63.5000	62.2188	63.000	64.000	63.5000	62.2188	62.125	63.250	62.6875	61.2656
Non-TET Propane	63.750	64.375	64.0625	63.1094	63.750	64.375	64.0625	63.1094	62.250	62.875	62.5625	61.3281
Other Non-TET Propane	65.000	65.625	65.3125	64.5469	65.000	65.625	65.3125	64.5469	63.500	64.125	63.8125	62.7656
TET N. Butane	68.250	70.375	69.3125	68.6719	68.250	70.375	69.3125	68.6719	71.000	73.125	72.0625	69.0781
TET Isom N. Butane	76.500	78.625	77.5625	75.9219	76.500	78.625	77.5625	75.9219	76.750	78.875	77.8125	76.1250
Non-TET N. Butane	75.750	77.875	76.8125	75.0469	75.750	77.875	76.8125	75.0469	76.000	78.125	77.0625	75.2500
Other Non-TET N. Butane	76.000	78.625	77.3125	75.9219	76.000	78.625	77.3125	75.9219	76.250	78.875	77.5625	76.1250
TET Isobutane	75.000	77.000	76.0000	74.4219	75.000	77.000	76.0000	74.4219	75.500	77.500	76.5000	75.4063
Non-TET Isobutane	75.000	77.000	76.0000	74.4219	75.000	77.000	76.0000	74.4219	75.500	77.500	76.5000	75.4063
Other Non-TET Isobutane	75.000	77.000	76.0000	74.4219	75.000	77.000	76.0000	74.4219	75.500	77.500	76.5000	75.4063
TET N. Gasoline	114.500	115.375	114.9375	115.6719	114.500	115.375	114.9375	115.6719	114.875	115.750	115.3125	115.7656
Non-TET N. Gasoline	113.250	114.125	113.6875	114.7031	113.250	114.125	113.6875	114.7031	114.375	115.250	114.8125	114.7188
Other N. Gasoline	114.000	114.875	114.4375	115.3906	114.000	114.875	114.4375	115.3906	114.625	115.500	115.0625	115.5469
River N. Gasoline	119.250	120.125	119.6875	120.7031	119.250	120.125	119.6875	120.7031	120.375	121.250	120.8125	120.7188
EP Mix	23.000	23.750	23.3750	22.7031	23.000	23.750	23.3750	22.7031	23.250	24.000	23.6250	23.1406
Other Non-TET E-P Mix	23.750	24.500	24.1250	23.2656	23.750	24.500	24.1250	23.2656	24.000	24.750	24.3750	23.7031
Purity Ethane	24.500	25.250	24.8750	24.0781	24.500	25.250	24.8750	24.0781	24.500	25.500	25.0000	24.3438
Other Non-TET Purity Ethane	24.500	25.250	24.8750	24.0625	24.500	25.250	24.8750	24.0625	24.500	25.500	25.0000	24.2813

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

		Any Cur	rent Month	1	F	Prompt Cu	urrent Mon	th	Out Month (May)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane	58.250	59.250	58.7500	57.1563	58.250	59.250	58.7500	57.1563	58.125	59.125	58.6250	57.0938	
N. Butane	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.5938	
Isobutane	81.750	82.250	82.0000	81.3125	81.750	83.000	82.3750	81.4063	81.750	82.250	82.0000	81.3125	
N. Gasoline	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	
Ethane (in E-P)	21.000	22.000	21.5000	20.4219	21.000	22.000	21.5000	20.4219	21.250	22.250	21.7500	20.6094	

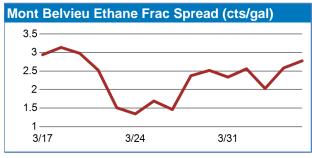
OPIS Conway In-Line Spot Gas Liquids Prices (cts/gal)

		Any Cur	rent Month	1	F	Prompt Cu	urrent Mon	th	Out Month (May)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane	58.250	59.250	58.7500	57.1563	58.250	59.250	58.7500	57.1563	58.125	59.125	58.6250	57.0938	
N. Butane	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.5938	
Isobutane	81.750	82.250	82.0000	81.3125	81.750	83.000	82.3750	81.4063	81.750	82.250	82.0000	81.3125	
N. Gasoline	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	
Ethane (in E-P)	21.000	22.000	21.5000	20.4219	21.000	22.000	21.5000	20.4219	21.250	22.250	21.7500	20.6094	

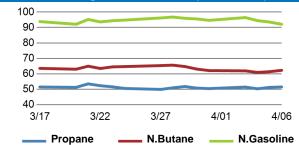
OPIS Bushton Spot Gas Liquids Prices (cts/gal)

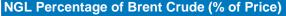
		Any Cur	rent Month	1	F	Prompt C	urrent Mon	th	Out Month (May)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane KM	58.250	59.250	58.7500	57.1563	58.250	59.250	58.7500	57.1250	58.125	59.125	58.6250	57.0938	
N. Butane KM	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.7188	72.000	73.000	72.5000	70.5938	
Isobutane KM	83.750	84.250	84.0000	83.3125	83.750	85.000	84.3750	83.4063	83.750	84.250	84.0000	83.3125	
N. Gasoline KM	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	113.500	114.125	113.8125	114.1094	
Ethane (in E-P) KM	21.000	22.000	21.5000	20.4219	21.000	22.000	21.5000	20.4219	21.250	22.250	21.7500	20.6094	

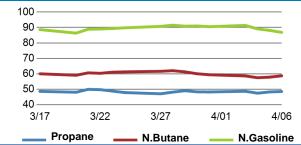
20-Day Spread Trends



NGL Percentage of WTI Crude (% of Price)







(Continued from Page 1)

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values above that. The 100-day moving average could be the new ceiling to break through at \$52.72/bbl. ICE Brent's 100-day moving average is \$55.16/bbl, with today's settle still a bit beneath that.

Refined product points are a little higher than today's levels. RBOB needs to break through its 100-day moving average at \$1.7368/gal to test a new range, while ULSD still needs a half-penny or so to get above its 100-day moving average of \$1.6226/gal.

IN SPOT TRADING ...

Spot NGLs at Mont Belvieu posted small upticks today in tandem with higher crude oil prices, though volumes were lackluster and even the largest increase did not exceed 3% in value.

TET propane anys, with less than 200,000 bbl seen done, rose 1.6% to 63- 64cts/gal, while non-TET moved from 63.75-64.375cts/gal on over 125,000 bbl transacted. Other non-TET (Targa) anys were dealt 1.25cts above non-TET.

Hattiesburg in-line anys got done at 62.75cts/gal, while wet barrels were confirmed from 62.625-62.75cts/gal. Sources suggested prompts were valued flat to anys, and storage estimated flat to in-line.

Ethane volumes were stout at some 200,000 bbl, and anys rose 2.6% to 24.5-25.25cts/gal. E/P mix was assessed from 23-23.75cts/gal based on recent price trends.

Non-TET normal butane picked up 2.5% as it traded from 75.75-77.875cts/gal, and TET refinery grade butane moved at a 7.5cts discount. Volumes exceeded 150,000 bbl.

Though Targa normal butane was seen done at a 0.75ct discount to non-TET, multiple sources deemed that level out of the market. Broker and trader estimates for the Targa value spanned from 0.25-0.75ct above non-TET, which is where OPIS ultimately assessed the grade at the end of the day.

Isobutane got done from 75-77cts/gal and from 0.625-1ct below normal butane on a spread basis, rising 2.2% from yesterday. Natural gasoline

(Continued on Page 3)

OPIS Hattiesburg Spot Gas Liquids Prices (cts/gal)

		Any Curr	ent Month		P	rompt Cu	rrent Mont	h	Out Month (May)			
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane - In-Line	62.625	62.750	62.6875	60.8594	62.625	62.750	62.6875	60.8594	61.750	62.000	61.8750	59.9063
Propane - Storage	62.625	62.750	62.6875	60.8594	62.625	62.750	62.6875	60.8594	61.750	62.000	61.8750	59.9063

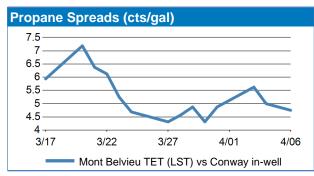
OPIS FOB Napoleonville Spot Gas Liquids Prices (cts/gal)

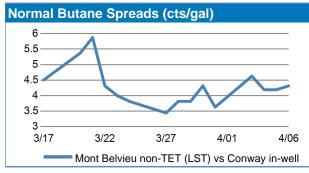
		Any Cur	rent Month		I	Prompt Cu	urrent Mon	th	Out Month (May)				
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD	
Propane	57.250	57.875	57.5625	56.6094	57.250	57.875	57.5625	56.6094	55.750	56.375	56.0625	54.8281	
N. Butane	67.250	69.375	68.3125	66.5469	67.250	69.375	68.3125	66.5469	67.500	69.625	68.5625	66.7500	
Isobutane	84.000	86.000	85.0000	83.4219	84.000	86.000	85.0000	83.4219	84.500	86.500	85.5000	84.4063	
N. Gasoline	111.125	112.000	111.5625	112.5781	111.125	112.000	111.5625	112.5781	112.250	113.125	112.6875	112.5938	
Purity Ethane	22.000	22.750	22.3750	21.5781	22.000	22.750	22.3750	21.5781	22.000	23.000	22.5000	21.8438	
Ethane (in E-P)	21.500	22.250	21.8750	21.2031	21.500	22.250	21.8750	21.2031	21.750	22.500	22.1250	21.6406	

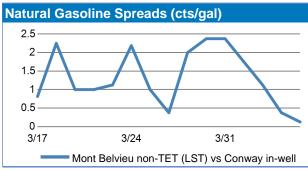
OPIS FOB Geismar/Sorrento Area Spot Gas Liquids Prices (cts/gal)

		Any Cur	rent Month	1	I	Prompt Cu	urrent Mon	th		Out Mo	nth (May)	
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	61.750	62.375	62.0625	61.1094	61.750	62.375	62.0625	61.1094	60.250	60.875	60.5625	59.3281
N. Butane	80.750	82.875	81.8125	80.0469	80.750	82.875	81.8125	80.0469	81.000	83.125	82.0625	80.2500
Isobutane	82.000	84.000	83.0000	81.4219	82.000	84.000	83.0000	81.4219	82.500	84.500	83.5000	82.4063
N. Gasoline	119.000	119.875	119.4375	120.4531	119.000	119.875	119.4375	120.4531	120.125	121.000	120.5625	120.4688
Purity Ethane	27.000	27.750	27.3750	26.5781	27.000	27.750	27.3750	26.5781	27.000	28.000	27.5000	26.8438

20-Day Spread Trends







(Continued from Page 2)

was one of a handful of products to lose a small bit of ground, transacting from \$1.1325-\$1.14125/gal.

--Jessica Marron, jmarron@opisnet.com

Conway NGLs marched higher alongside stronger oil futures, with the exception of natural gasoline, off 0.7% in Thursday's session. Propane anys, up 2% on the day, were the most active of the Conway NGLs, with at least 40,000 bbl done at 58.25-59.25cts/gal. In other light ends, E/P mix anys rebounded 7.8% in trades spanning from 21-22cts/gal. E/P mix also traded at a 3cts discount to Mont Belvieu non-TET ethane.

Turning to the heavies, OPIS assessed normal butane anys at 72-73cts/gal, based on volumes of at least 20,000 bbl. May butane traded flat to anys. Isobutane was done at 82cts/gal, with wets changing hands at 83cts/gal. Natural gasoline was done at \$1.135-\$1.14125/gal. --Mary Welge, mwelge@opisnet.com

Canadian propane prices were slightly lower Thursday. Sarnia propane was quoted at 60cts-60.25cts/gal, down from an average 60.3125cts/gal Wednesday. Edmonton inventory propane was seen at an average 23.75 cents discount to Conway in-well supply, in from minus 26.5 cents yesterday. In butanes, Edmonton field grade butane was estimated at 60% of WTI futures averages, up from 58% Wednesday. Sarnia normal butane saw a 1.5cts premium to the Mont Belvieu TET grade, flat from plus 1.5 cents while isobutane was seen at a 3 cents discount to TET, steady from minus 3 cents yesterday. Edmonton natural gasoline for April was estimated at plus 50 cents to plus 90 cents to the front-month WTI average. May was assessed at at a 75 cents to a 95 cents premium. --Tom Galatola, tgalatola@opisnet.com

NGL propane prices on the West Coast were steady Thursday. The range in Los Angeles was 71.375cts-76.375cts/gal. The low is unchanged while the high dipped from 77.375cts/gal Wednesday. The prices reflect a subtraction of 7.625 cents CAR value. The propane range

(Continued on Page 6)

Canada Spot Gas Liquids Prices

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

		Any Curr	ent Month		P	rompt Cu	rrent Mont	h		Out Mo	nth (May)	
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	60.000	60.250	60.1250	60.5156	60.000	60.250	60.1250	60.5156	59.125	59.500	59.3125	59.5625
N. Butane	69.750	71.875	70.8125	70.1719	69.750	71.875	70.8125	70.1719	72.500	74.625	73.5625	70.5781
Isobutane	72.000	74.000	73.0000	71.4219	72.000	74.000	73.0000	71.4219	72.500	74.500	73.5000	72.4063

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

	Any Current Month			Prompt Current Month			Out Month (May)					
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	34.500	35.500	35.0000	31.3438	34.500	35.500	35.0000	31.3438	34.375	35.375	34.8750	31.2813
Field Grade Butane	73.750	74.000	73.8750	71.2188	73.750	74.000	73.8750	71.2188	74.375	74.625	74.5000	71.8438
N. Gasoline	124.261	125.214	124.7375	124.1126	124.261	125.214	124.7375	124.1126	126.166	126.642	126.4040	125.6006
N. Gasoline Diff to WTI*	0.500	0.900	0.7000	1.0125	0.500	0.900	0.7000	1.0125	0.750	0.950	0.8500	1.1500

* N. Gasoline Diff to WTI Implied Calendar Month Average

OPIS West Coast Spot Gas Liquids Prices

Anys Prices (cts/gal)

		Los A	ngeles			San Fr	ancisco			Bake	rsfield	
Product	Low	High	Avg	MTD	Low	High	Avg	MTD	Low	High	Avg	MTD
Propane	71.375	76.375	73.8750	74.2500	74.375	80.375	77.3750	77.3750	75.375	78.375	76.8750	78.3750
N. Butane	63.750	64.000	63.8750	62.0938	63.750	64.000	63.8750	62.0938	81.750	82.000	81.8750	78.4688
Butane Mix	63.750	64.000	63.8750	62.0938	63.750	64.000	63.8750	62.0938	81.750	82.000	81.8750	78.4688
Isobutane	95.875	96.125	96.0000	94.4375	95.875	96.125	96.0000	94.4375				
N.Gasoline									89.125	90.375	89.7500	88.3750

Prompt Calif. Cap-at-the-Rack Propane Price (04/05/2017): 7.64

MTD: 7.643

Average Change

0.375

1.875

1.625

0.562

0.625

62.063

81.813

83.000

119.438

27.375

Frac Spread and Percentage of Crude Snapshot (cts/gal)

Mont Belvieu						Bushton					
Product	Average	Change	Frac Spread	\$/mmbtu	% Crude	Product	Average	Change	Frac Spread	\$/mmbtu	% Crude
TET Propane	63.500	1.000	33.0004	6.986	51.4435	Propane KM	58.750	1.125	28.2504	6.463	47.5953
Non-TET Propane	64.063	0.375	33.5629	7.048	51.8992	N. Butane KM	72.500	1.750	37.9442	7.044	58.7346
Non-TET N. Butane	76.813	1.875	42.2567	7.463	62.2283	Isobutane KM	84.000		50.8132	8.490	68.0512
TET N. Butane	69.313	2.125	34.7567	6.734	56.1524	N. Gasoline KM	113.813	0.812	75.1896	10.337	92.2033
TET Isom N. Butane	77.563	1.875	43.0067	7.535	62.8359	Ethane (in E-P) KM	21.500	1.563			
Non-TET Isobutane	76.000	1.625	42.8132	7.682	61.5701	Napoleonville	-				
TET Isobutane	76.000	1.625	42.8132	7.682	61.5701				Frac		
Non-TET N. Gasoline	113.688	0.562	75.0646	10.326	92.1020	Product	Average	Change	Spread	\$/mmbtu	% Crude
TET N. Gasoline	114.938	0.562	76.3146	10.439	93.1147	Propane	57.563	0.375	27.0629	6.333	46.6333
Purity Ethane	24.875	0.625	2.7771	3.741	20.1521	N. Butane	68.313	1.875	33.7567	6.637	55.3422
E-P Mix	23.375	0.625				Isobutane	85.000	1.625	51.8132	8.591	68.8613
River N. Gasoline	119.688	0.562	81.0646	10.871	96.9628	N. Gasoline	111.563	0.562	72.9396	10.133	90.3805
Other N. Gasoline	114.438	1.063	75.8146	10.394	92.7096	Purity Ethane	22.375	0.625	0.2771	3.365	18.1267
Oth N-TET N. Butane	77.313	1.375	42.7567	7.511	62.6334	Ethane (in E-P)	21.875	0.625			

Conway In-Well

Conway In-Well						Geismar/Sorrento
Product	Average	Change	Frac Spread	\$/mmbtu	% Crude	Product
Propane	58.750	1.125	28.2504	6.463	47.5953	Propane
N. Butane	72.500	1.750	37.9442	7.044	58.7346	N. Butane
Isobutane	82.000		48.8132	8.288	66.4309	Isobutane
N. Gasoline	113.813	0.812	75.1896	10.337	92.2033	N. Gasoline
Ethane (in E-P)	21.500	1.563				Purity Ethane

Percentage of Crude 5-Year Rolling Average

Market	Product	% Crude	5-Yr Avg
Mont Belvieu TET	Propane	51.4435	44.3710
Mont Belvieu Non-TET	N. Butane	62.2283	60.6843
Mont Belvieu Non-TET	N. Gasoline	92.1020	91.6074
Mont Belvieu	Purity Ethane	20.1521	14.9401
Conway In-Well	Propane	47.5953	41.5662
	-		

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\$/mmbtu % Crude

6.828

7.948

8.389

10.848

4.117

50.2789

66.2790

67.2410

96.7603

22.1774

Frac

Spread

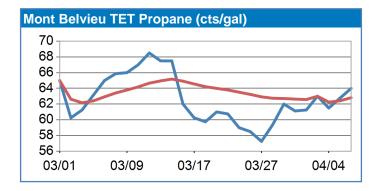
31.5629

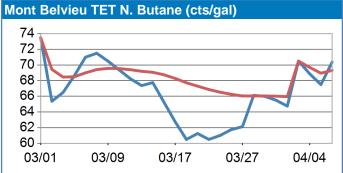
47.2567

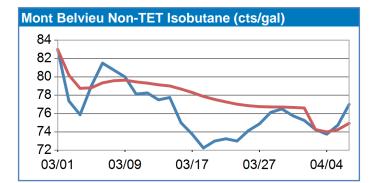
49.8132

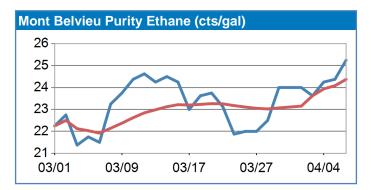
80.8146

5.2771

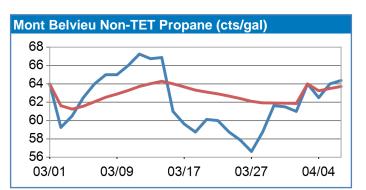






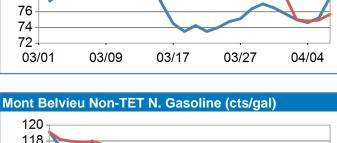


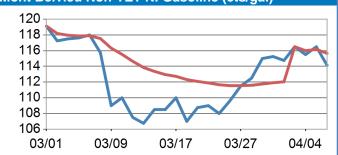
Daily Average and Month-to-Date Average Prices

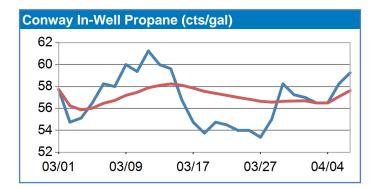


86 84 82 80 78 76 74

Mont Belvieu Non-TET N. Butane (cts/gal)







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.

in the San Francisco area was 74.375cts-80.375cts/gal, flat from yesterday. The Bakersfield propane range was 75.375cts-78.375cts/gal, steady from yesterday.

Normal butane prices in Los Ángeles and San Francisco advanced with the Mt. Belvieu market. Los Angeles and San Francisco prices were quoted at 63.75cts- 64cts/gal, rising from 61.75cts-62.25cts/gal Wednesday. The prices are estimated at a 13 cents discount to Mt. Belvieu.

Los Angeles and San Francisco isobutane prices were seen at 95.875cts- 96.125cts/gal, from 94.125cts-94.625cts yesterday with a 20 cents premium to Mt. Belvieu.

Bakersfield natural gasoline was assessed at 89.125cts-90.375cts/gal, rising from 88.125cts-89.25cts/gal Wednesday as the WTI average edged up to \$51.69 from \$51.24.

--Tom Galatola, tgalatola@opisnet.com

FOB U.S. Gulf Coast propane markets appeared quiet Thursday, with netbacks largely treading water.

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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OPIS assessed resale differentials holding 5-6cts over Mont Belvieu, in line with market feedback.

Heightened ship volume was noted in the U.S. Gulf Coast, with five VLGCs seen at rest offshore Houston Thursday and a further six gas carriers of differing sizes also waiting to load. Berths were also occupied by six more gas ships.

In NW Europe, a deal on propane was seen, whilst butane was bid and offered without apparent conclusion. An option inside the propane deal sees the chance for another cargo to come from the U.S. into Europe; whilst two VLGC's are to load in the North Sea over the coming days, maintaining a likely in/out scenario for cargo in the region.

Propane swaps for April were gauged at \$372/t inside the 4:00-4:30 pm GMT timeframe. April/May slipped narrower, from +\$6/t to +\$3/t in early hours trading. The spread had already narrowed from +\$9/t at the start of the week.

In physical discussions, a Norwegian major offered a 22-26 April delivery basis ToT terms at \$372/t on the Clipper Sun or substitute, which was booked by a trader. Two further bids were seen, one from a U.K. major seeking cargo for earlier 16-20 April delivery at \$374/t and April quotes flat, the other from a Spain based trader on similar 22-26 April dates at \$373/t and April quotes -\$5/t, equating to -\$2/t to April.

The deal marked the day for propane, with OPIS assessing the market at flat to April or \$372/t.

Outside the public arena, the market for ToT's was tested earlier in the day, with the bid/offer range put at -1/+3, according to a broking source.

As the VLGC Clipper Sun was once again included inside the days deal (or substitute), the April/May spread narrowed further underlining the potential easing of the supply situation going forward.

In the North Sea, the BW Aries having finished discharging her U.S. cargo into the ARA region was tracked making for Karsto to load.

The chance of extra propane supply coming into the region, would likely suit petrochemicals as the propane/naphtha spread for April appeared to have settled into a triple digit discount for propane against naphtha. The spread for April ended Thursday at -\$102/t, whilst the remainder of Q2 was showing a similar level of spread, with June slipping \$4/t narrower, to -\$99/t.

The prospects seen for feedstock prices, has not been lost on petrochemical producers. Margins for making ethylene and propylene from naphtha, were seen in March at their highest for chemical manufacturers since August 2015, according to an update by OPIS parent IHS Markit. A ton of ethylene experienced a EUR 70/t cost reduction, whilst the monomer itself saw a EUR 30/t price increase (February-on-March), which lead to an overall EUR 100/t margin increase according to the report.

The deepened discount for propane to naphtha is leading feed flexible/coastal crackers towards a further EUR 70-80/t increased cost advantage in April over March, as feedstock intake swings more to the light end. The report was released on Monday.

Large-cargo butane was offered and bid and though price ideas were largely in-tune - quantity and timing appeared out of

(Continued on Page 7)

(Continued from page 6)

synch and no deals were seen. A Norwegian major offered a 16-20 April cargo of 8-12kt mixed butanes with minimum 20 pct iso-butane content at \$373/t. A petrochemical importer then bid for a 20-24 April delivery basis 10-12kt and North Sea spec at \$374/t and April quotes -\$2/t.

OPIS assessed the market up half a point at 78.5 per cent to naphtha.

The Asia LPG market remained upbeat on Thursday as demand strengthened over May, amid ongoing interests from players.

The May CP swaps value retreated \$5 to around \$380/mt, with the May-Jun timespread narrowing to a backwardation of around \$2/mt.

In the CFR forward market, a European trading house tabled a bid for a 23,000-mt propane lot for H2 May at plus \$4/mt to May Far East quotes, working out to be \$401/mt.

No deal was concluded, with a fellow European trading house offering a similar H2 May parcel at plus \$10/mt to May Far East quotes, worked out to be \$407/mt.

For evenly split cargoes, a Korean importer offered a 23,000mt parcel for H2 May at plus \$10/mt to May Far East quotes.

The bid for H2 May evenly split parcel however was seen at minus \$9/mt to balance Apr Far East quotes, coming from a European oil major.

Propane assessments for H1 May, H2 May and H1 Jun slid to \$408/mt, \$403/mt and \$395/mt, with the LPG assessments dipping to \$433/mt, \$424/mt and \$408.50/mt respectively, weigh down by the lower swaps value.

Sentiments in the CFR market had been more bullish recently as demand strengthened for May delivery cargoes.

For instance, it was heard that a South China importer had secured one 23,000-mt propane parcel for H1 May from a Western oil major. In addition, a mixed cargo rumoured to be 33,000-mt from Africa might have also traded hands between these two parties, according to sources.

The premium were heard to be linked to May CP and/or Far East quotes, seemingly at slightly below the market value seen lately but details were vague and could not be determined at time of writing.

Previously, Chinese buyers were also rumoured to have snapped up cargoes for H2 May, coupled with the recent deal of plus \$14/mt to May Far East quotes for a H1 May parcel, the surge in demand for May had caught some by surprise, commented one source.

Furthermore, interests for May cargoes had also strengthened, with some South Chinese importers seemingly still having appetite for H1 May cargoes.

While on the petrochemical front the improved LPG cracking margins have also garnered interests from petrochemical players from Korea and Taiwan, with two Korean companies expressing interests for H2 May cargoes.

Additionally, PDH plants were perceived to have room for May spot cargoes, given that the propane-propylene margins had also improved.

With propylene prices into China at mid-\$800's/mt level, slightly under double of that for CFR propane prices, the healthy margins are expected to keep run-rates high at the PDH plants.

As such, some PDH operators will likely have room for May delivery cargoes on spot basis, commented one source.

Meanwhile, Formosa Petrochemical Corp. (FPCC) has emerged in the market seeking a 23,000-mt propane parcel for May 1-10 delivery into Mailiao.

The tender was heard to have been awarded at mid to high \$60's/mt discount to May Japan naphtha quotes but other details were not known at time of writing.

The Taiwanese importer was likely prompted to seek its first spot cargo via tender this year by the healthy LPG cracking margins against naphtha.

Naphtha prices had been rising steadily while LPG prices head the opposite direction, thus not surprising that FPCC is looking to crack LPG in May, said one source.

Considering the number of sellers seen lately, FPCC had likely received several offers for its tender, commented another source.

The agreed price for the deal was comparable or slightly higher to the H1 May CFR price, according to another source.

The company last secured a similar parcel for Dec 21-31 delivery into Mailiao at around low-to-mid-\$50's/mt discount to Dec Japan naphtha quotes.

On the shipping front , rates on the major route from Middle East to Japan dipped 50 cents to \$34.58/mt.

Chartering rates for Algeria, West Africa and Houston to Japan (via Panama) were approximated at around \$56/mt, \$46/mt and \$61/mt, respectively.

IN THE NEWS...

CHS Inc. on Wednesday reported income before income taxes of \$16.6 million for its Energy segment for the fiscal second quarter ended Feb. 28 (Q2 2017), compared to a loss before income taxes of \$63.1 million in the corresponding prior-year period.

CHS said the improvement stemmed from improved refining margins and a \$46.1 million non-cash charge to reduce its inventory to market value in Q2 2016, which did not reoccur in the most recent quarter.

The company's refining assets comprise the 56,000-b/d Laurel, Mont., refinery and the 85,000-b/d McPherson, Kan., refinery.

Energy segment revenues in Q2 2017 of \$1.4 billion (after elimination of intersegment revenues) increased by \$373.0 million (35%) versus Q2 2016. The Energy segment recorded revenues from sales to the company's Ag segment during Q2 2017 and Q2 2016 of \$89.1 million and \$67.2 million, respectively, which are eliminated as part of the consolidation process.

Refined fuels revenues versus Q2 2016 increased by \$231.5 million (28%), of which \$227.2 million was related to higher prices, with the remaining increase attributed to higher volumes. The sales price of refined fuels increased by \$0.35/gal (27%), and volumes increased by approximately 1% when compared to the same period of the prior year.

"We expect to utilize cash and cash equivalents, along with cash generated by operating activities, to fund our fiscal 2017 capital expenditures," CHS said. For fiscal 2017, CHS expects its total capital expenditures to be approximately \$604.0 million. Included in that amount is approximately \$259.0 million for the acquisition of property, plant and equipment and major repairs at the Laurel and McPherson refineries.

In fiscal 2013, CHS began a \$366.6 million expansion at the McPherson refinery, which was completed and operational in the first quarter of fiscal 2017. CHS incurred \$5.2 million of costs related to the expansion during the first two quarters of fiscal 2017 and \$49.2 million during fiscal 2016.

CHS noted that it is subject to the Renewable Fuels Standard, which requires all refiners to blend renewable fuels into their finished transportation fuels or purchase renewable energy credits, known as Renewable Identification Numbers (RINs), in lieu of blending.

CHS is the operator of two ethanol plants -- in Rochelle and Annawan, Ill. - - each with a capacity of approximately 130 million gal per year.

"We generate RINs under the RFS in our renewable fuels operations and through our blending activities at our terminals, however we cannot generate enough RINs to meet the needs of our refining capacity and therefore RINs must be purchased on the open market," CHS said.

The company noted that the RINs market price increased during fiscal Q1 2017 following EPA's release in November 2016 of the final 2017 Renewable Volume Obligations (RVOs).

"Subsequently, the price of RINs declined in our second fiscal quarter. Neither the increase nor decrease materially impacted our financial results," CHS said.

CHS reported that earnings from its renewable fuels marketing and production operations increased by \$5.4 million in Q2 2017 versus Q2 2016, primarily because of higher margins.

Renewable fuels revenue from the company's marketing and production operations increased by \$3.2 million in Q2 2017 versus Q2 2016. The higher revenues were driven by an increase of \$38.6 million (1%) stemming from higher average selling prices, which was mostly offset by a decrease in volume of \$35.4 million (10%).

Propane revenues increased by \$51.2 million (26%) in Q2 2017 versus Q2 2016. The increase included \$50.7 million related to higher net average selling prices when compared to the same period in fiscal 2016. The average selling price of propane increased by \$0.16/gal (26%) when compared to the same period of the prior year.