

Argus Americas Crude

Crude market prices and analysis

Issue 23-208 | Tuesday 31 October 2023

OVERVIEW

WTI crude futures fell by nearly 1.5pc on a strengthening US dollar, record high crude production in the US and Chinese data suggesting a faltering manufacturing sector. December Nymex WTI fell by \$1.29/bl to \$81.02/bl.

Bakken Patoka's first trades for December delivery were much lower than the prior trade month's average, following Bakken DAPL lower month-on-month.

Spot assessments for WTI fob weakened further this session against Ice Brent amid lagging global demand for gasoline and turnaround activity in the US.

• Colombian heavy sour Castilla Blend continued to trend lower amid bearish sentiment caused by expectations of higher competing supply out of Venezuela.

• December Canadian heavy crude firmed relative to the basis ahead of the trade cycle, but November discounts widened with pipelines apportioned.

IN THE NEWS

Infrastructure

- Marathon starts Galveston turnaround early
- Marathon Carson refinery begins work
- ExxonMobil Joliet refinery reports unit upset

Industry

- US crude output at record high in August: EIA
- Enterprise pipeline, terminal flows at record
- Enterprise converting Seminole oil line to NGL
- WTI premiums tight on rising gasoline stocks
- US warns Venezuela over opposition crackdown
- Petroecuador to end Unipec, PTT oil deals

KEY PRICES

All-day weighted average assessments								
	Diff to WTI	Diff to LLS	Price	±				
LLS St James	+2.20		83.22	-1.19				
WTI Cushing		-2.20	81.02	-1.29				
WTI Midland	+0.65	-1.55	81.67	-1.29				
WTI Houston	+0.81	-1.39	81.83	-1.38				
Mars Clovelly	-0.53	-2.73	80.49	-1.33				
WCS Hardisty	-24.85	-27.76	55.46	-0.83				
WCS Cushing	-8.99	-11.90	71.32	-1.12				
WCS Houston	-7.95	-10.86	72.36	-1.08				
Forward curve: Locational spreads								

	WTI/Brent 4:30pm London	WTI/Brent 1:30pm Houston	LLS/Brent 1:30pm Houston
Dec	-5.29	-6.39	-4.19
Jan	-4.56	-4.52	-2.42
Feb	-4.56	-4.49	-2.39
1:30pm Houston	LLS/WTI	Mars/WTI	Mars/LLS
Dec	+2.20	-0.55	-2.75
Jan	+2.10	-0.80	-2.90

+2 10

-0.80

-2 90

160		12.10	-0.00	-2.70					
Forward curve: T	Forward curve: Time spreads								
1:30pm Houston	ICE Brent	CME WTI	LLS	Mars					
Dec/Jan	+2.39	+0.52	+0.62	+0.77					
Jan/Feb	+0.57	+0.54	+0.54	+0.54					
Feb/Mar	+0.56	+0.54	+0.54	+0.54					
Forward curve: C	Outright prices	;		\$/bl					
Forward curve: C 1:30pm Houston	Outright prices	LLS	WTI Midland	\$/bl Mars					
	Outright prices		WTI Midland 81.67						
1:30pm Houston	Outright prices	LLS		Mars					
1:30pm Houston Dec	Outright prices	LLS 83.22	81.67	Mars 80.47					

*Tables include hyperlinks to those values maintained in the Argus database.

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WTI											\$/bl
	Timing		Low	High	WTI formula basis price	WTI formula basis MTD	Roll to next month	Argus do	Argus documentation links:		
WTI Cushing	Dec		81.00	81.04	81.02	83.02	-0.52	Al gus us	cumenta		
WTI Cushing	Jan		80.48	80.52	80.50		-0.54	Argus An	nericas C	rude Metho	odology
WTI Cushing	Feb		79.94	79.98			-0.54	and Spec			57
WTI Cushing	Mar		79.40	79.44							
•	Timing		Price	WTU	Nymex spread			Argus Glo	obal Com	pliance Po	licy
CMA Nymex	Dec		80.31		+0.71			Argue Me	dia Edita	orial Code	of
CMA Nymex	Jan		79.78		+0.72			Conduct		in lui Coue	J
CMA Nymex	Feb		79.25					Conduct			
CMA Nymex	Mar		78.79								
	Timing	Basis		Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	MTD Weighted Average
Argus AGS Marker	Dec					•	2	81.77	81.82	81.78	83.84
Argus AGS	Dec	Dec WTI		+0.75	+0.80	+0.76	+0.82	81.77	81.82	81.78	
WTI Houston	Dec	Dec WTI		+0.80	+0.85	+0.81	+0.87	81.82	81.87	81.83	
WTI Houston	Jan	Jan WTI		+0.90	+1.10	+1.00	+1.05	81.40	81.60	81.50	
WTI Midland	Dec	Dec WTI		+0.60	+0.70	+0.65	+0.67	81.62	81.72	81.67	
WTI Midland	Jan	Jan WTI		+0.75	+0.85	+0.80	+0.84	81.25	81.35	81.30	
WTI Midland Enterprise	Dec	Dec WTI		+0.60	+0.70	+0.65	+0.67	81.62	81.72	81.67	
WTI diff to CMA Nymex	Dec	CMA		+0.74	+0.94	+0.88	+1.00				
WTI postings-plus	Dec	Postings		+4.12	+4.32	+4.26	+4.38				
Midcontinent											\$/bl
						Diff	Diff MTD			Watabbad	Cumulativa

	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	Cumulative MTD VWA
Bakken DAPL	Dec	CMA Nym	-2.10	-2.00	-2.05	-1.97	78.21	78.31	78.26	-1.98
Bakken Patoka	Dec	CMA Nym	+1.95	+2.00	+1.98	+2.25	82.26	82.31	82.29	+1.98
Bakken Clearbrook	Dec	CMA Nym	-0.45	-0.35			79.86	79.96		
Bakken Cushing	Dec	Dec WTI	+0.40	+0.50	+0.45	+0.53	81.42	81.52	81.47	
Light Sweet Guernsey	Dec	CMA Nym	-2.00	-1.90	-1.95	-2.14	78.31	78.41	78.36	-2.15
DJ Light	Dec	Dec WTI	-0.30	-0.10	-0.20	-0.41	80.72	80.92	80.82	
White Cliffs	Dec	Dec WTI	-0.30	-0.10	-0.20	-0.41	80.72	80.92	80.82	
Niobrara	Dec	Dec WTI	+0.80	+0.90	+0.85	+0.90	81.82	81.92	81.87	
WCS Cushing Canadian High TAN	Dec	CMA Nym	-9.00	-8.90	-8.99	-8.86	71.31	71.41	71.32	
Cushing	Dec	CMA Nym	-9.65	-9.55	-9.60	-9.50	70.66	70.76	70.71	

Texas										\$/DI
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	
WTL Midland	Dec	Dec WTI	-0.20	-0.15	-0.19	-0.17	80.82	80.87	80.83	
Bakken Beaumont- Nederland	Dec	CMA Nymex + Argus WTI diff to CMA	+1.05	+1.10	+1.08	+1.13	82.24	82.29	82.27	
WTS	Dec	Dec WTI	-1.60	-0.85	-1.23	-1.50	79.42	80.17	79.79	
WTS	Jan	Jan WTI	-1.00	-0.50	-0.75	-0.74	79.50	80.00	79.75	
Southern Green Canyon	Dec	Dec WTI	-1.00	-0.80	-0.93	-0.98	80.02	80.22	80.09	
WCS Houston	Dec	CMA Nym	-8.00	-7.90	-7.95	-7.85	72.31	72.41	72.36	
Canadian High TAN Houston	Dec	CMA Nym	-8.65	-8.55	-8.60	-8.61	71.66	71.76	71.71	

Louisiana										\$/bl
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	
LLS	Dec	Dec WTI	+2.15	+2.25	+2.20	+2.08	83.17	83.27	83.22	
LLS	Jan	Jan WTI	+1.95	+2.20	+2.08	+2.04	82.45	82.70	82.58	
HLS	Dec	Dec WTI	+2.00	+2.10	+2.05	+2.01	83.02	83.12	83.07	
Thunder Horse	Dec	Dec WTI	+1.95	+2.05	+2.00	+1.80	82.97	83.07	83.02	
Poseidon	Dec	Dec WTI	-1.10	-0.90	-1.00	-0.91	79.92	80.12	80.02	
Mars	Dec	Dec WTI	-0.60	-0.50	-0.53	-0.47	80.42	80.52	80.49	
Mars	Jan	Jan WTI	-0.85	-0.80	-0.83	-0.82	79.65	79.70	79.67	

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US GULF COAST AND MIDCONTINENT

Bakken Patoka's first trades for December delivery were much lower than the prior trade month's average, following Bakken DAPL lower month-on-month.

Bakken at the Patoka, Illinois, refining hub traded at premiums to the CMA Nymex WTI between \$1.95-\$2/bl. In November trade, Bakken Patoka averaged \$3.39/bl premium to the CMA Nymex, while its cumulative-weighted average of trade during the month was \$3.56/bl over the basis.

Bakken near production in North Dakota has also started December trade weaker than the prior month. So far, Bakken DAPL is averaging a \$1.97/bl discount to the CMA Nymex as of this session's close, compared with a \$1.13 average discount in November.

In Cushing, Oklahoma, Bakken traded at a $45 \notin$ /bl premium to the light sweet Cushing benchmark, translating to around a \$1.15/bl premium to the CMA Nymex WTI.

Growing output could be weighing on Bakken's price at the US midcontinent.

US crude output hit a new monthly high in August on gains from New Mexico, Texas and North Dakota. Output averaged 13.05mn b/d in August, up from 12.96mn b/d in July, the Energy Information Administration (EIA) said on Tuesday in its *Petroleum Supply Monthly* report. This surpasses the previous high of 13mn b/d set in November 2019. Operators in North Dakota pumped out 1.22mn b/d across August, up by 37,000 b/d from the month before.

US medium sour crude grades maintained their strength this session relative to benchmark prices and prior month averages.

Mars' discount to Cushing held roughly steady this session at a 53¢/bl weighted-average discount, compared to the grade's \$1.52/bl average discount in November.

Southern Green Canyon (SGC) has so far averaged a $98 \notin bl$ discount to Cushing, while its average gap was \$1.54/bl in the prior month of trade.

Assessment rationale

The minimum volume was met and volume-weighted average calculated according to the methodology for Bakken Cushing month, LLS, Mars, Southern Green Canyon, WCS Cushing, WTI Diff to CMA Nymex, WTI Houston, WTI Midland Enterprise, WTI Midland and WTL Midland.

The Bakken Clearbrook assessment reflected reported trade. In the absence of sufficient transaction information for Poseidon, WTS and WCS Houston, market value was assessed using intelligent judgment according to the methodology.

ANNOUNCEMENT

Argus successfully completes annual losco assurance review

Argus has completed the 12th external assurance review of its price benchmarks covering crude oil, oil products, LPG, chemicals, thermal and coking coal, natural gas, biofuels, biomass, metals, fertilizers and agricultural markets. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group losco's Principles for Oil Price Reporting Agencies, and losco encourages extension of the reviews to non-oil benchmarks. For more information and to download the review visit our website https://www.argusmedia.com/en/about-us/governance-compliance



ARGUS AGS

Midland-quality WTI at the US Gulf coast fell with crude futures on a strengthening US dollar and record high crude production.

The AGS Marker fell by \$1.38/bl to a volume-weighted average of \$81.78/bl, reflecting its lowest flat price since 28 August. The AGS index differential to Nymex meanwhile declined by 9¢/bl to a 76¢/bl premium.

Liquidity was based at the Magellan East Houston (MEH) terminal, where six deals totaling 22,000 b/d were transacted at premiums to the Nymex light sweet crude futures contract from 80¢/bl to 85¢/bl.

WTI deals at MEH set the WTI Houston pipeline index and are also normalized to Enterprise Products' nearby Echo terminal in a separate process for inclusion in AGS.

A strengthening US dollar weighed on WTI with the greenback rising by 0.5pc against a basket of international currencies to about 106.6 this session. The US DXY dollar index is near its highest level year-to-date, making dollar-denominated commodities such as oil more expensive for holders of foreign currency.

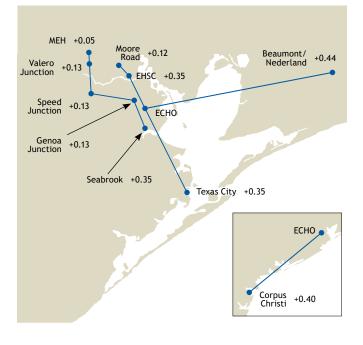
Meanwhile, US crude output continues to rise, hitting a new monthly high on gains from New Mexico, Texas and North Dakota. Output averaged 13.05mn b/d in August, up from 12.96mn b/d in July, the Energy Information Administration (EIA) said this session in its Petroleum Supply Monthly report. This surpasses the previous high of 13mn b/d set in November 2019.

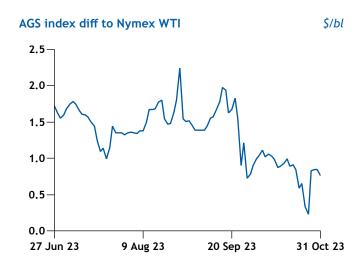
New Mexico posted the largest gain at 40,000 b/d to reach 1.8mn b/d of crude production in August, while Texas output rose by 25,000 b/d to a record high of 5.63mn b/d.

Argus AGS					\$/bl
	Timing		Low/high	VWA	VWA MTD
Argus AGS Marker	Dec		81.77/81.82	81.78	83.84
Argus AGS	Dec		81.77/81.82	81.78	
	Timing	Basis	Diff low/high	VWA	VWA MTD
Argus AGS	Dec	Dec WTI	+0.75/+0.80	+0.76	+0.82

AGS locational differentials vs Echo

\$/Ы

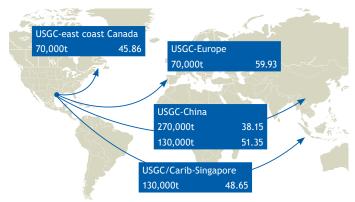






US WATERBORNE

Freight snapshot (full view in Argus Tanker Freight) \$/t



Freight rates are five-day rolling averages.

The full range of tanker freight rates, including Jones Act assessments is available in Argus Tanker Freight.

Freight rate	\$ lumpsum
	Five-day rolling average
USGC Aframax reverse lightering	719,000

Spot assessments for WTI fob weakened further this session against Ice Brent amid lagging global gasoline demand and turnaround activity in the US.

WTI loading 15-45 days forward at the US Gulf coast declined by 20¢/bl this session to discounts between \$2.05/bl and \$1.75/bl, equating to roughly 70¢/bl above WTI Houston.

An Aframax cargo of WTI loading in the first decade was offered at a \$1.60/bl discount to February Ice Brent early in the trading session.

US Gulf coast waterborne \$/bl							
	Timing	Basis	Diff low/high	Low/High			
WTI fob USGC	Prompt	Dec CMA Nymex	+2.09/+2.39	82.40-82.70			
	Prompt	Dec WTI Houston	+0.57/+0.87				
	Prompt	Feb Ice	-2.05/-1.75				
Bakken fob Beau- mont/Nederland	Prompt	Dec CMA Nymex	+2.29/+2.59	82.60-82.90			
	Prompt	Dec WTI Houston	+0.77/+1.07				
	Prompt	Feb Ice	-1.85/-1.55				

WTI intramonth spreads							
Load window (dates)	Timing	Basis	Diff low/high	Diff midpoint			
1-10 M1	Dec	Dec WTI Houston	+0.55/+0.85	+0.70			
	Dec	Feb Ice	-2.07/-1.77	-1.92			
11-20 M1	Dec	Dec WTI Houston	+0.40/+0.75	+0.58			
	Dec	Feb Ice	-2.22/-1.87	-2.05			
21-31 M1	Dec	Dec WTI Houston	+0.20/+0.55	+0.38			
	Dec	Feb Ice	-2.42/-2.07	-2.25			

Workspaces:

Below Workspaces combine content from Argus Americas Crude and Argus Tanker Freight and may require additional subscriptions full functionality. Please contact support@argusmedia.com for access support.

Russian-origin Crude + Freight - Global
WTI Arbitrages + Freight - Global
Crude Imports + Freight - China
Crude + Freight - Atlantic Basin
Crude Exports + Freight - US

- Crude Imports + Freight India

These Workspaces are curated by the Freight editorial team For general information about Workspaces and Markets, please visit this link.

Anticipated US cru	ude export carg	oes — 15-45 days forw	vard			
Tanker name	Approximate volume '000 bl	Estimated grade	Load window	Load port	Chartered destination	ΕΤΑ
Daba	2100	WTI	13-18 Nov	Galveston lightering	China	15 Jan
New Renown	2100	WTI	16 Nov	tbd	China	18 Nov
Habrut	2100	WTI	16-17 Nov	Corpus Christi, Texas	Europe	tbd
Almi Atlas	2100	WTI	16 Nov	tbd	Europe	tbd
Pantanassa	2100	WTI and/or WTL	17 Nov	Corpus Christi, Texas	China	tbd
Gem No 5	2100	WTI and/or WTL	17 Nov	tbd	South Korea	17 Jan
Barakah	2100	WTI and/or Mars	18-19 Nov	tbd	China	18 Jan
New Energy	2100	WTI	20 Nov	Galveston lightering	China	22 Jan
Das	2100	WTI and/or WTL	20 Nov	Corpus Christi, Texas	Thailand	10 Jan
Olympic Lyra	2100	WTI	23-25 Nov	tbd	Asia-Pacific	tbd
Seaduchess	2100	WTI	23-25 Nov	tbd	Europe	tbd
Sea Ruby	2100	WTI and/or Mars	25-30 Nov	tbd	China	tbd
Qamran	2100	WTI and/or WTL	28 Nov	tbd	China	30 Jan
C. Glory	2100	WTI and/or WTL	1 Dec	tbd	South Korea	1 Feb
Olympic Lion	2100	WTI and/or WTL	12 Dec	tbd	South Korea	12 Feb



Decade spreads were widened this session. Second and third decades were assessed slightly lower on three-pack offers that surfaced this session.

Three-pack offers - an all or nothing offer for one Aframax cargo loading in each decade - were at premiums to WTI Houston of 35¢/bl and 45¢/bl with the former loading out of Nederland, Texas.

VLCCs of WTI loading in early December were on offer at premiums between $60 \notin 1/bl$ above WTI Houston.

A VLCC cargo of West Texas Light (WTL) loading in mid-December was offered at a \$2.20/bl discount to February Ice Brent. Third decade WTL was meanwhile offered at 40¢/bl discount to WTI Houston.

Bids for WTI arriving in Europe between 12 November - 3 December surfaced between premiums of \$2.45/bl and \$2.80/ bl to North Sea Dated cif Rotterdam. An offer for WTI aboard the Aframax *Green Adventure* arriving in Europe 23-27 November was offered at a premium of \$3.20/bl.

WTI fob prices weakened alongside US pipeline benchmarks as domestic markets pointed towards a greater availability of crude. December Nymex light sweet crude futures' discount to February Ice Brent widened by 12¢/bl to \$3.43/bl, while WTI Houston's premium to Nymex weakened by 9¢/bl to a volumeweighted average of 81¢/bl.

US crude output rose by 1pc in August to a new monthly high on gains from New Mexico, Texas and North Dakota.

Output averaged 13.05mn b/d in August, up from 12.96mn b/d in July, the Energy Information Administration (EIA) said today in its Petroleum Supply Monthly report. This surpasses the previous high of 13mn b/d set in November 2019.

Marathon Petroleum has accelerated the schedule for maintenance originally planned for early 2024, prompted by ongoing repairs at its fire-damaged unit at its 593,000 b/d Galveston Bay, Texas, refinery, the company said in an earnings call this session.

Marathon Petroleum started repairs on the catalytic reformer unit at the refinery about three months after the 15 May fire that damaged the unit.

Repairs are progressing as planned and Marathon expects the reformer unit to start up in mid-November and the refin-

US west coast pipeline, 30 Oct					
	Basis	Diff to Ice Brent	Outright		
Light postings avg	Dec	-0.13	87.32		
Heavy postings avg	Dec	-3.97	83.48		

US west coast waterborne \$/bl							
	Timing	Basis	Diff low/high	Low/High			
ANS del	Dec	CMA Nym	+8.39/+8.49	88.70-88.80			
	Dec	CMA Ice	+4.25/+4.35				
ANS del concurrent	Dec	Dec WTI	+8.39/+8.49	89.41-89.51			

ANS del USWC	monthly volume-weighted average	\$/bl
	Basis	Diff
Sep	Ice CMA	+2.35
Oct	Ice CMA	+3.03
Nov	Ice CMA	+3.88
Dec	Ice CMA	+4.30

ery to achieve full rates in mid-December.

The maintenance will add to the fall turnaround season already underway at the US Gulf coast, resulting in additional availability of crude to store or export.

In addition to lower refinery runs and higher production in the US, refinery runs in China may drop by 300,000 b/d to 15.2mn b/d in October from September levels, according to *Argus* estimates on the back of poor refining margins and a shortage of product export quotas.

Separately, Enterprise moved a record 988,000 b/d at its crude oil marine terminals in the third quarter, up by 21pc from the previous quarter and nearly 20pc higher than a year earlier. Volumes at the Enterprise Hydrocarbons Terminal (EHT) on the Houston Ship Channel increased by 200,000 b/d in the third quarter from a year earlier, the company said.

Assessment rationale

The ANS assessment against CMA Nymex WTI was adjusted to maintain the spread to CMA Ice Brent established when the grade last traded.



LATIN AMERICA

Colombian heavy sour Castilla Blend continued to trend lower amid bearish sentiment caused by expectations of higher competing supply out of Venezuela.

Market participants valued the Colombian crude this session at discounts to February Ice Brent, weakening the *Argus*assessed midpoint of possible trade by nearly 90¢/bl to reflect a roughly \$9.50/bl discount to the international basis. Medium sour Vasconia was meanwhile assessed 15¢/bl than in the previous session to reflect a range of possible trade at discounts to February Ice Brent between \$3.70/bl and \$3.20/bl.

Latin sours have been trending lower after the US government recently lifted its sanctions on Venezuela's oil and gas sector, allowing state-owned PdV to resume oil exports to the US and other destinations and earn payments from its sales rather than having to use crude to repay debt. PdV now can freely choose where to sell its crude based on arbitrage economics.

The country is expected to increase its crude output by an estimated 200,000 b/d by the end of the year, suggesting that volume will compete directly with other spot cargoes currently trading out of Latin America, which are mostly loading in December.

Much of the Venezuelan crude sold since the US imposed sanctions in 2019 has been transported to Asia, mainly to China's independent refiners, but Chinese refiners appear in no rush to accumulate more Venezuelan cargoes in the near-term amid worsening margins and ample supply of cheap Iranian crude.

Historically, Venezuelan crude exports have largely comprised 16°API Merey, extra heavy oil from the Orinoco belt and diluted crude oil (DCO), which some Chinese refiners favored because it had the advantage of being imported as a product under the "diluted bitumen" category.

Merey crude was last heard pegged at a roughly \$21/bl discount to Ice Brent, though that value could rise as more global refiners begin purchasing cargoes. Competing Iranian heavy was last offered about \$2/bl stronger over concerns about supply during the Hamas-Israel conflict.

Separately, Petroecuador this week said it will not renew its oil supply deals with state-owned Thai company PTT and China's Unipec after they expire in December 2023, allowing the company to sell an additional 18.8mn-19.2mn bl per year in spot tenders.

	Timing			
	THINING	Basis	Diff low/high	Low/High
Colombia				
Vasconia	Prompt	Feb WTI	+0.79/+1.29	80.75-81.25
		Feb Ice	-3.70/-3.20	
Castilla	Prompt	Feb WTI	-5.46/-4.51	74.50-75.45
		Feb Ice	-9.95/-9.00	
Argentina				
Escalante	Prompt	Feb WTI	+1.09/+2.09	81.05-82.05
		Feb Ice	-3.40/-2.40	
Medanito	Prompt	Feb WTI	+2.24/+2.79	82.20-82.75
		Feb Ice	-2.25/-1.70	
Ecuador				
Oriente	Prompt	Feb WTI	-1.65/-1.05	78.31-78.91
		Feb Ice	-6.14/-5.54	
Napo	Prompt	Feb WTI	-7.25/-7.05	72.71-72.91
		Feb Ice	-11.74/-11.54	

Mexico				\$/Ы
	Timing	Basis	Diff	Price
Maya				
Excluding USWC	Oct	Dec Nymex	-4.83	76.19
USWC	Oct	Dec Nymex	-4.68	76.34
Europe	Oct	Jan Dated Bren	t -9.30	79.56
India	Oct	Jan Dated Bren	t -10.25	78.61
Asia-Pacific	Oct	Dec Dubai	-6.38	82.11
Isthmus				
Excluding USWC	Oct	Dec Nymex	-0.28	80.74
USWC	Oct	Dec Nymex	-1.88	79.14
Europe	Oct	Jan Dated Bren	t -9.25	79.61
India	Oct	Jan Dated Bren	t -9.45	79.41
Asia-Pacific	Oct	Dec Dubai	-5.68	82.81
Olmeca				
Excluding USWC	Oct	Dec Nymex	-0.23	80.79
USWC	Oct	Dec Nymex	-1.33	79.69
Europe	Oct	Jan Dated Bren	t -6.05	82.81
India	Oct	Jan Dated Bren	t -7.45	81.41
Asia-Pacific	Oct	Dec Dubai	-3.33	85.16
Zapoteco				
Excluding USWC	Oct	Dec Nymex	-1.68	79.34
USWC	Oct	Dec Nymex	+0.02	81.04
Europe	Oct	Jan Dated Bren	t -9.25	79.61
India	Oct	Jan Dated Bren	t -7.90	80.96
Asia-Pacific	Oct	Dec Dubai	-3.98	84.51
Mexico K-factors				\$/Ы
Timi	ng US	GC USWC Eu	ırope India	Asia

	Timing	USGC	USWC	Europe	India	Asia
Maya	Oct	-7.60	-7.45	-7.85	-8.80	-6.40
Isthmus	Oct	-3.05	-4.65	-7.80	-8.00	-5.70
Olmeca	Oct	-3.00	-4.10	-4.60	-6.00	-3.35
Zapoteco	Oct	-4.45	-2.75	-7.80	-6.45	-4.00



Canada do	mestic									\$/bl
		Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
Syncrude (SS	SP)	Dec	CMA Nym	+0.75	+1.30	+1.03	+1.28	81.06	81.61	81.34
WCS Hardist	у	Dec	CMA Nym	-25.10	-24.60	-24.85	-24.04	55.21	55.71	55.46
WCS Cushing	ł	Dec	CMA Nym	-9.00	-8.90	-8.99	-8.86	71.31	71.41	71.32
Canada do	mestic			\$/bl	Canada	waterborne	prices			\$/bl
	Timing	Basis	Diff low/high	Low/High		Timing	g Basis	Diff l	ow/high	Low/High
AWB	Dec	CMA Nym	-26.70/-26.00	53.61-54.31	Hibernia	Dated	North Sea	+4.6	60/+4.90	93.46-93.76
CDB	Dec	CMA Nym	-27.60/-26.90	52.71-53.41				_	_	

CME Nymex light sweet

Open

82.59

81.96

81.29

80.65

Low

80.74

80.26

79.74

79.21

Timing

Dec

Jan

Feb

Mar

CDD	Dec	CMA NyIII	-27.007-20.70	JZ.71-JJ.41
Cold Lake	Dec	CMA Nym	-25.55/-25.05	54.76-55.26
Condensate	Dec	CMA Nym	-2.15/-1.75	78.16-78.56
MSW	Dec	CMA Nym	-7.30/-7.00	73.01-73.31
LSB	Dec	CMA Nym	-6.25/-5.70	74.06-74.61
LLB	Dec	CMA Nym	-24.85/-24.30	55.46-56.01

CANADA

December Canadian heavy crude was valued stronger relative to the basis ahead of the trade cycle, but November discounts widened with pipelines apportioned.

The Western Canadian Select (WCS) financial December contract (TMW) was heard at a discount of \$24.85/bl to CMA Nymex WTI ahead of Wednesday's first day of the December trade cycle. In the prior session, it was heard trading at a \$25.15/bl discount for December.

November WCS was heard trading on Tuesday at CMA Nymex -26.65 with pipeline apportionment up for delivery during the month. During the November trade cycle dates, the *Argus* WCS Hardisty assessment averaged CMA Nymex -19.15.

Congestion on Canadian pipeline operator Enbridge's giant 3mn b/d Mainline pipeline network has risen for the last three months with higher Canadian crude output.

Enbridge had notified shippers that 22pc of light crude nominations flowing through Kerrobert, Saskatchewan, were apportioned for November, while 24pc of heavy crude flows through Superior, Wisconsin, were also apportioned for November.

Condensate was trading at Fort Saskatchewan at CMA Nymex -1.75. That set the high end of the day's *Argus* Canadian condensate assessment of CMA Nymex -2.15/-1.75. In the prior session, condensate was heard trading at CMA Nymex -1.25. Condensate is used as diluent to move bitumen production and more is needed in the winter months when it is colder, but

Ice Brent						\$/bl
Timing	Open	Low	High	4:30pm London	1:30pm Houston settle	±
Dec	87.90	87.40	88.61	87.76	87.41	-0.04
Jan	86.66	84.77	87.39	86.43	85.02	-1.33
Feb	85.86	84.22	86.71	85.79	84.45	-1.17

there is only limited outbound pipeline space.

December Bakken at Clearbrook, Minnesota, was reported trading at CMA Nymex -0.75, widening its discount by $35 \notin /bl$ from the prior day. In the prior day, Bakken Clearbrook moved to a discount for the first time since December last year.

Conventional December Mixed Sweet Blend (MSW) was trading in the physical market at CMA Nymex -7.15.

Assessment rationale

The minimum volume was met and volume-weighted average calculated according to the methodology for WCS Cushing. In the absence of sufficient transaction information for WCS Houston, market value was assessed using intelligent judgment according to the methodology.



\$/Ы

-1.29

-1.18

-1.03

-0.92

±

1:30pm

Houston

settle

81.02

80.50

79.96

79.42

4:30pm

London

82.47

81.87

81.23

80.62

High

83.37

82.77

82.11

81.47

DEALS DONE

Argus AGS deals done						\$/Ы	
				Adjus	ted		
	Differential	Reported		AGS index	AGS Marker	Volume	
Location	basis	differential	price	differential	price	b/d	ы
Magellan East Houston	Dec WTI	+0.85		+0.80	81.82	2,000	
Magellan East Houston	Dec WTI	+0.80		+0.75	81.77	1,000	
Magellan East Houston	Dec WTI	+0.80		+0.75	81.77	2,000	
Magellan East Houston	Dec WTI	+0.85		+0.80	81.82	2,000	
Magellan East Houston	Dec WTI	+0.80		+0.75	81.77	10,000	
Magellan East Houston	Dec WTI	+0.80		+0.75	81.77	5,000	

*Table shows deals as reported and also normalized values for the calculation of VWAs

North America pipeline deals done

Grade	Location	Trade month	Basis month	Differential basis	Differential	Price \$/bl	Volume <i>b/d</i>
HLS	Empire Louisiana	Dec	Dec	WTI	+2.05		2,000
HLS	Empire Louisiana	Dec	Dec	WTI	+2.05		2,000
HLS	Empire Louisiana	Dec	Dec	WTI	+2.05		2,000
HLS	Empire Louisiana	Dec	Dec	WTI	+2.05		3,000
HLS	Empire Louisiana	Dec	Dec	WTI	+2.05		3,226
LLS	St. James Louisiana	Dec	Dec	WTI	+2.20		5,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.60		1,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.60		1,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.60		2,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.55		2,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.55		2,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.50		1,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.50		2,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.50		3,000
Mars	Clovelly Louisiana	Dec	Dec	WTI	-0.50		6,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-1.00		3,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-0.95		1,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-0.95		2,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-0.95		2,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-0.90		3,000
Southern Green Canyon	Nederland / Texas City	Dec	Dec	WTI	-0.80		2,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.74		1,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.74		3,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.77		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.78		1,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.79		2,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.81		2,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.87		10,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.88		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.88		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.88		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.89		2,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.89		4,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.89		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.90		3,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.90		15,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.92		2,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.93		5,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.94		1,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.94		3,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.94		7,000
WTI	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	+0.94		10,000



DEALS DONE (CONTINUED)

North America pipeline deals done							
Grade	Location	Trade month	Basis month	Differential basis	Differential	Price \$/bl	Volume <i>b/d</i>
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		1,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		1,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		1,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		1,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		2,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		2,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		2,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		2,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		3,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		3,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		4,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		4,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		5,000
WTI	Midland Enterprise	Dec	Dec	WTI	+0.65		6,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		1,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		1,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		2,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		2,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		3,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		3,000
Thunder Horse	Clovelly Louisiana	Dec	Dec	WTI	+2.00		5,000
Bakken	-	Dec	Dec		+0.45		5,000
	Cushing Oklahoma			CMA Nymex + Argus WTI Diff to CMA			
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		3,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		3,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		5,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		5,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		5,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		5,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		10,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		10,000
Bakken	Cushing Oklahoma	Dec	Dec	WTI	+0.45		22,000
Niobrara Cushing	Cushing Oklahoma	Dec	Dec	WTI	+0.85		2,000
Niobrara Cushing	Cushing Oklahoma	Dec	Dec	WTI	+0.85		3,000
Niobrara Cushing	Cushing Oklahoma	Dec	Dec	WTI	+0.85		5,000
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		1,065
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		1,613
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		1,613
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		1,613
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		1,613
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		3,226
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-9.00		3,226
Cold Lake Cushing	Cushing Oklahoma	Dec	Dec	CMA Nymex trade days	-8.90		1,613
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.85		1,000
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.85		2,000
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.85		2,000
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.85		2,000
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.85		5,000
WTL Midland	Midland Texas	Dec	Dec	WTI Midland	-0.80		5,000
Light Sweet Guernsey	Guernsey Wyoming	Dec	Dec	CMA Nymex trade days	-2.00		1,000
Light Sweet Guernsey	Guernsey Wyoming	Dec	Dec	CMA Nymex trade days	-1.90		1,000
Bakken	Patoka Illinois	Dec	Dec	CMA Nymex trade days	+1.95		3,226
Bakken	Patoka Illinois	Dec	Dec	CMA Nymex trade days	+2.00		3,226
Bakken	DAPL North Dakota	Dec	Dec	CMA Nymex trade days	-2.10		1,000
Bakken	DAPL North Dakota	Dec	Dec	CMA Nymex trade days	-2.10		1,000
Bakken	DAPL North Dakota		Dec	CMA Nymex trade days	-2.10		1,000
		Dec					
Bakken	DAPL North Dakota	Dec	Dec	CMA Nymex trade days	-2.00		1,000



INFRASTRUCTURE NEWS

Marathon starts Galveston turnaround early

Marathon Petroleum has accelerated the schedule for maintenance originally planned for early 2024 as it repairs a fire-damaged unit at its 593,000 b/d Galveston Bay, Texas, refinery.

Marathon started repairs on the catalytic reformer unit at the refinery about three months after the 15 May fire that damaged the unit. That work prompted the company to bring forward a planned first quarter 2024 turnaround into the third and fourth quarter of this year, the company said on an earnings call today.

Repairs are progressing as planned and Marathon expects the reformer unit to start up in mid-November and the refinery to achieve full rates in mid-December.

Marathon ran its refineries at approximately 94pc in the third quarter with crude throughputs of 2.8mn b/d. Utilization rates were down by four percentage points from the same period in 2022.

Marathon expects crude throughputs of 2.6mn b/d and \$300mn of planned turnaround costs in the fourth quarter. Throughputs will be 70,000 b/d lower than the fourth quarter of 2022 and turnaround expenses will be down by \$142mn. By Nathan Risser

Marathon Carson refinery begins work

Marathon Petroleum began unit startup/shutdown activities at the Carson, California, side of its 363,000 b/d Los Angeles refinery on Monday, a day later than expected.

Maintenance began at 5:45am ET, resulting in excess flaring, according to a Marathon filing to local environmental regulators. Work on the unit is expected to be completed by 10 November.

Unit maintenance was originally scheduled to start on 29 October, according to a previous notice.

Affected units were not disclosed.

The Carson side of Marathon's Los Angeles refinery previously underwent unit startup/shutdown activities on 19-25 October and reported unrelated, unplanned flaring on 26 October.

By Gordon Pollock

ExxonMobil Joliet refinery reports unit upset

ExxonMobil's 251,800 b/d Joliet refinery in Channahon, Illinois, reported a unit upset on 27 October.

A process upset occurred at 9pm ET, according to a filing

submitted by ExxonMobil with state environmental regulators, resulting in flaring and excess sulphur dioxide emissions. Affected units were not disclosed.

Emissions reported at Shell Norco refinery

Shell's 227,900 b/d Norco, Louisiana, refinery had excess emissions and heavy smoke beginning on 23 October.

Heavy smoke and chemical odors possibly related to a leak on a unit were reported via an emergency services call log on the National Response Center database maintained by the US Coast Guard (USCG).

It remains unclear which units were affected and how much of an impact the release would have on refinery operations.

A spokesperson for Shell declined to comment.

PBF Torrance refinery flares

PBF Energy reported unplanned flaring at its 160,000 b/d Torrance, California, refinery today.

Emergency flaring in response to unplanned operational conditions began at 1:28pm ET, according to a filing submitted by PBF with local environmental regulators.

Affected units were not disclosed.

PBF began a major turnaround at the Torrance refinery in late September, that was originally expected to last around 50 days and is ongoing, according to regulatory filings. By Gordon Pollock

Phillips 66 Wilmington refinery flares

Phillips 66 reported flaring at the Wilmington, California side of its 139,000 b/d Los Angeles refinery on 27 October.

Flaring began at 5pm ET, according to a filing submitted by Phillips 66 with state regulators, resulting in excess sulphur oxide emissions.

The incident was reported to the Los Angeles City Fire Department, and no evacuations or injuries were reported. Affected units were not disclosed.

CVR plans spring Oklahoma refinery turnaround

US independent refiner CVR Energy is planning a spring 2024 turnaround at it's 75,000 b/d Wynnewood, Oklahoma, refinery according to an earnings release today.

CVR's 132,000 b/d Coffeyville, Kansas, refinery will next undergo maintenance in 2025, the company said today. By Nathan Risser.





INFRASTRUCTURE NEWS

CHS Laurel refinery compressor malfunctions

Cooperative refiner and agribusiness company CHS reported a compressor malfunction at its 62,500 b/d Laurel, Montana, refinery on 26 October.

A compressor at the refinery tripped at 9pm ET, according to an emergency services call log from the National Response Center database managed by the US Coast Guard, resulted in excess hydrogen sulfide emissions.

The caller stated the affected unit would need to be restarted to reduce emissions to the appropriate level.

INDUSTRY NEWS

US crude output at record high in August: EIA

US crude output rose by 1pc in August to a new monthly high on gains from New Mexico, Texas and North Dakota.

Output averaged 13.05mn b/d in August, up from 12.96mn b/d in July, the Energy Information Administration (EIA) said today in its *Petroleum Supply Monthly* report. This surpasses the previous high of 13mn b/d set in November 2019.

New Mexico led the gains with 1.8mn b/d of production in August, up by 40,000 b/d from the month prior. This halts a three-month slide for the state that shares the prolific Permian basin with Texas, where heavyweights ExxonMobil and Chevron plan to expand into North American shale.

Texas, the largest producing state, gained 25,000 b/d in August to reach record high output of 5.63mn b/d. This is up by 539,000 b/d from the same month last year.

Operators in North Dakota pumped out 1.22mn b/d across August, up by 37,000 b/d from the month before. North Dakota has received a notable boost from companies tapping into drilled but uncompleted (DUC) wells in the Bakken region over the course of the summer, but the state regulator said earlier this month that inventory has been depleted.

Offshore US Gulf of Mexico output fell by 2pc to 1.89mn b/d in August from the previous month.

The *Petroleum Supply Monthly* report is based on a methodology that includes a direct survey of oil producers in 15 states. *By Brett Holmes*

Enterprise pipeline, terminal flows at record

Enterprise Products Partners posted record volumes on its crude oil pipelines and marine terminals in the third quarter, with rising outflows from its key Houston Ship Channel export facility. Crude oil pipeline transportation volumes increased to a record 2.56mn b/d in the third quarter, up by 8pc from the previous quarter and 18pc higher than a year earlier. Flows on two of Enterprise's three main pipeline systems — its West Texas and Midland-to-Echo systems — increased in the quarter, while flows on its South Texas system decreased.

Enterprise moved a record 988,000 b/d at its crude oil marine terminals in the third quarter, up by 21pc from the previous quarter and nearly 20pc higher than a year earlier. Volumes at the Enterprise Hydrocarbons Terminal (EHT) on the Houston Ship Channel increased by 200,000 b/d in the third quarter from a year earlier, the company said.

EHT volumes set a record high in October at about 868,000 b/d, according to Vortexa data, and the terminal eclipsed the Enbridge Ingleside Energy Center (EIEC) in Corpus Christi, Texas, that month to be the largest single exporting terminal on the US Gulf coast. Enbridge logged record exports of 977,000 b/d in September at EIEC, and flows there fell to about 816,000 b/d in October, according to Vortexa data. EIEC had consistently led the pack of US export terminals in recent months because of its connections to large-diameter crude pipelines from the Permian basin and its ability to partially load very large crude carriers (VLCCs).

Enterprise is pressing ahead with plans to market capacity for a new crude export terminal it hopes to build off the coast of Texas with international customers and expects to secure needed permits by the end of the year.

Enterprise secured a key favorable decision for the proposed Sea Port Oil Terminal (SPOT) off the coast of Freeport, late in 2022, but still must complete other permitting requirements before it can obtain a deepwater port license needed to start construction. Enterprise should be able to secure a key



license to begin construction by the end of 2023, Enterprise co-chief executive Jim Teague said today.

"We're having some productive negotiations with producers and large trading houses on SPOT and frankly I am getting more optimistic by the day," Teague said. Enterprise's current spending plans envision SPOT construction ending in 2027.

The SPOT terminal would be capable of fully loading VLCCs, which can hold up to 2mn bl. It would include two single-point mooring buoys that will be able to load oil at a rate of about 85,000 bl/hr. The project also involves building two crude pipelines running from the port to shore. By Chris Baltimore

Enterprise converting Seminole oil line to NGL

Enterprise Products Partners will convert its 210,000 b/d Seminole crude pipeline back to natural gas liquids (NGL) service in December to meet an increased need for takeaway capacity in the Permian basin.

The Houston-based midstream operator projects US NGL production in the Permian region is on track to increase by more than 200,000 b/d in 2023 and reach almost 4mn b/d by year-end 2030. Seminole was first switched from NGLs to crude back in 2019.

Enterprise also said today it plans to build the 600,000 b/d Bahia NGL pipeline by the first half of 2025, running 550 miles from the Delaware and Midland basins in Texas to Enterprise's Mont Belvieu, Texas, fractionation complex. The pipeline will include a 24-inch diameter segment in the Delaware basin and connect to a 30-inch diameter segment spanning the Midland basin to Chambers County.

The Bahia project will replace the previously-announced expansion of the Shin Oak pipeline, which transports raw NGLs from the Permian to Mont Belvieu. Chief executive Jim Teague said the Shin Oak expansion was scrapped because it would be too costly and not provide enough added capacity.

Enterprise's 195,000 b/d fractionator 14 at Mont Belvieu is scheduled to be completed during the second half of 2025, and will include an associated deisobutanizer (DIB) unit with the capability to separate up to 100,000 b/d of butane.

Enterprise reported third quarter LPG exports out of its Houston, Texas, export facility rose to a record 2.1mn b/d, from 1.7mn b/d a year prior. Teague said dock space next year is expected to remain tight as Enterprise and its competitors continue to work to expand export capacity at their terminals.

Enterprise's NGL fractionation volumes reached 1.5mn b/d in the third quarter, up from 1.4mn b/d a year earlier, also a record high. Despite higher production, Enterprise's NGL margins during the quarter were mitigated by two fractionator turnarounds and increased electricity costs caused by higher temperatures during the quarter.

Enterprise reported a profit of \$1.35bn in the third quarter, down from \$1.39bn a year earlier. By Abby Downing-Beaver

WTI premiums tight on rising gasoline stocks

Premiums for physical West Texas Intermediate (WTI) crude to the Nymex crude futures benchmark have remained narrow in recent weeks, pushed in part by growing US Gulf coast gasoline stocks.

Premiums for WTI at Houston and Midland, Texas, have fallen to their lowest average monthly levels the benchmark since the end of the June trade month. Volume-weighted premiums slipped from highs in mid-September of \$1.99/bl in Houston and \$1.80/bl in Midland to \$0.80/bl and \$0.65/bl premiums, respectively, today.

The differentials were even narrower earlier this month, at the end of the November physical trade month, falling on 25 October to an average of \$0.27/bl in Houston and flat in Midland. But much of that narrowing can be attributed to end of trade cycle volatility as traders exit or roll positions.

The persistence of the narrower premiums is likely due to rising US Gulf coast gasoline stocks, which are diminishing demand for domestic crude. Gulf coast gasoline stocks have grown by 9.32pc since 1 September to 86mn bl and are 7.5pc above the same time a year ago, according to Energy Information Administration (EIA) data. Crude stocks have grown 4.79pc to 242.5mn bl since the beginning of September.

Gulf coast refiners have reduced operating rates in response to swelling gasoline stocks, according to market participants in quarterly earnings calls last week. Refineries in the region are running at an average of 86.1pc in the week ending 20 October, according to EIA data, down from 94.4pc in the middle of August.

Some utilization reduction can be attributed to seasonal maintenance and turnarounds, but only three Gulf coast refineries - which collectively make up 9pc of Gulf coast capacity, much lower than the proportion of refineries in other regions currently undergoing heavy maintenance - are currently wrap-





ping up major turnarounds.

Falling premiums have also been supported by weakening US Gulf Coast refining margins, which are pinched by seasonal factors, including last week's shift to cheaper winter-grade gasolines.

By Gordon Pollock

US warns Venezuela over opposition crackdown

Early signs of a renewed crackdown on opposition parties by Venezuelan president Nicolas Maduro's government will test Washington's resolve to keep oil sanctions against the South American Opec producer lifted.

A Venezuelan court on 30 October suspended the results of a presidential primary held by the government's political opposition ahead of elections next year, which resulted in a resounding win by former lawmaker Maria Corina Machado.

The US administration on 18 October lifted sanctions on Venezuela's oil and gas sector for a period of six months, conditioned on Maduro's pledge to work with the opposition parties toward a free election next year. A deal between Maduro and the Unitary Platform opposition alliance called for carrying out primary elections and allowing international observers in next year's election.

The US administration will snap back the sanctions "if the [Maduro)] regime has in fact violated the agreement that it reached," US secretary of state Tony Blinken told a Senate panel today. "They're not getting a free pass for actions that they take that are in contradiction to the commitments that they've made to move toward free and fair elections."

Blinken would not say if the court action against Machado violates the agreement. US officials previously said that they view Machado's eligibility to participate in next year's election as a critical part of the conditions for future renewal of the sanctions waiver, which is set to expire on 18 April 2024. The Maduro government has disqualified Machado from running in national elections.

The latest twist in Venezuela's domestic politics provides a reminder of how tenuous the relief of US sanctions is. In effect, the US has extracted a promise from Maduro to hold a free election next year that he could lose — a prospect he has resisted for years, before giving a half-hearted agreement earlier this month.

Oil markets are still trying to absorb Venezuela's sudden return to the fold. US refiners and market analysts suggested

that some of the 310,000 b/d of Venezuelan crude discharged in China last year could end up being diverted to its previous top destination, the US. Chevron was the only company allowed to import oil from Venezuela to the US since last November, and only from its joint ventures with state-owned PdV.

US crude imports from Venezuela averaged 120,000 b/d in January-August, according to the Energy Information Administration.

By Haik Gugarats

US adds sanctions against Myanmar's Moge

The US administration today added another layer of economic restrictions against state-owned Myanmar Oil and Gas (Moge) with a prohibition for US-affiliated companies to provide financial services to the company.

Moge is still not directly subject to US sanctions, even though US officials have urged foreign oil companies of possible sanctions risks involved in doing business with Moge. Washington in January imposed sanctions against senior Moge executives.

The prohibition on provision of financial services for USbased or affiliated companies is likely to affect trade in any oil Moge sells to foreign buyers.

The action aims to disrupt the Myanmar government's access to the US financial system and curtail its ability to perpetrate atrocities, the State Department said today.

The US has avoided directly targeting Moge because some of the gas fields it partially owns also supply Thailand. Thailand's state-controlled oil firm PTTEP last year took over as operator of Myanmar's 770mn cf/d (7.95bn m³/yr) Yadana gas field after TotalEnergies exited the project.

Moge also owns minority stakes in Myanmar's other large offshore natural gas fields — Yetagun, Zawtika and Shwe. These are operated by Malaysia's state-owned Petronas, PTTEP and South Korea's Posco respectively. By Haik Gugarats

Groups threaten to sue EPA over GHG cap

A coalition of environmental groups, states, and an Arizona tribe say they will sue the US Environmental Protection Agency (EPA) if it does not act on a longstanding request to set a nationwide cap on greenhouse gas (GHG) emissions.

The Center for Biological Diversity and 350.org in 2009 pe-



titioned the agency to designate CO_2 and other GHGs as criteria air pollutants under the Clean Air Act and to subsequently set nationwide caps on their release. EPA under former president Donald Trump denied the request, but after US President Joe Biden took office, the agency said it would take another look and "consider the important issues" in the request.

The environmental groups, now joined by the states of Minnesota and Oregon and the San Carlos Apache Tribe, on Monday filed a notice of intent to sue on the grounds that EPA has taken too long to respond. Absent action from the agency, the groups say they plan to sue after six months.

"Although we appreciate this administration's attention to the climate crisis, and its ongoing efforts to address power plant emissions, under current policies the nation will not reach President Biden's goal of net-zero emissions by 2050," the notice says.

EPA declined to comment on potential litigation.

The agency currently sets national ambient air quality standards (NAAQS) for air pollutants like ozone and particulate matter – setting primary standards at levels to protect human health and secondary standards based on environmental impacts and aesthetic concerns – but it does not do so currently for CO₂.

Setting NAAQS for new pollutants would kick off a process that requires states to submit plans for meeting the standards and could ultimately compel EPA to enact new federal regulations affecting power plants, industry, automobiles, and more.

Other efforts to rein in GHGs have run into problems with the US Supreme Court, which curtailed the agency's authority to regulate power plant CO_2 emissions last year. But advocates of a nationwide GHG cap contend that decision, which faulted the agency for basing an expansive regulation on a little-used part of the Clean Air Act, did not necessarily foreclose the possibility of CO_2 limits based on the NAAQS.

"It is one thing for Congress to authorize regulated sources to use trading to comply with a preset cap, or a cap that must be based on some scientific, objective criterion, such as the NAAQS. It is quite another to simply authorize EPA to set the cap itself wherever the agency sees fit," chief justice John Roberts wrote in the majority opinion. By Cole Martin

Petroecuador to end Unipec, PTT oil deals

Petroecuador will not renew its oil supply deals with stateowned Thai company PTT and China's Unipec, which expire in December 2023, Petroecuador's chief executive Reinaldo Armijos said. The end of the contracts will allow Petroecuador to sell around 18.8mn-19.2mn b/yr of Oriente and Napo crude in spot tenders. The Ecuadorian company sold 17mn b/yr to PTT and 1.8mn-2.2mn b/yr to Unipec.

Those agreements required Petroecuador to sell dozens of millions of barrels through several years to those companies calculating the price of crude with specific and complicated formulas that result in lower prices compared with spot sales, Armijos said.

From January-October, Petroecuador sold Oriente and Napo crude at an average discount of \$12/bl and \$17/bl to WTI crude, respectively, under the long-term oil supply deals, it said.

In the same period, Petroecuador sold Oriente and Napo crude at an average discount of \$7/bl and \$11/bl to the WTI, respectively, in spot tenders.

The Ecuadorian company will also terminate one of three oil supply contracts that expire in April 2024 with Petrochina, Armijos said. The company did not specify that contract's volumes. The other two agreements expire in December 2027 and require Petroecuador to sell 13mn b/yr to Petrochina.

The oil supply agreements with PTT, Unipec and Petrochina have been in force since 2010-2012 and have been renewed every 2-4 years. In exchange, the deals were tied to credits or advance payments.

Favoring spot tenders over long-term oil supply deals more than doubles Petroecuador's supply available for spot sales. The company will be able to sell 64.7mn bl in the spot market in 2024 from 29.7mn bl in 2023, Armijos said.

Petroecuador expects to export around 96mn bl of Oriente and Napo crude in 2023, a 4pc drop from 100.5mn bl in 2022. *By Alberto Araujo*

Colombia oil royalty swap plan gains traction

Hydrocarbon companies operating in Colombia plans to speed up solar, road, school and other infrastructure projects that qualify for a government program that lets the firms deduct the spending from oil royalty payments.

Oil, gas and mining companies operating in Colombia have spent about Ps1.9 trillion Colombian pesos (\$475mn) in more than 240 infrastructure projects in 14 departments as part of the works-for-taxes program since it was created in 2017. Under the plan, companies with an annual income over Ps1trillion can pay 50pc of their tax obligations through the funding of approved infrastructure and services in certain rural areas



hurt by armed conflict, according to the government's National Planning Department (DNP).

The infrastructure projects mostly focus on construction of solar plants, roads, sewage systems, schools and providing technology equipment for student, according to the government's Territory Renewal Agency (ART) which approves the projects.

Companies in the program can spend up to Ps800bn (\$200mn) combined, up from the Ps480bn quota for 2022 because of the level of uptake by companies, the finance ministry said.

Ecopetrol, the largest taxpayer in the country, plans to build photovoltaic solar generation for users in rural areas in La Guajira and Putumayo provinces. In addition, it plans to build, upgrade and refurbish 51.5km of roads in the hydrocarbons-producing departments of Arauca, Tolima, Boyaca, Valle del Cauca and Sucre, while it will build schools in Tolima, Arauca, Sucre and Antioquia. Ecopetrol built 39 infrastructure projects in 2018-mid 2023, worth Ps725 billion.

In May, ART approved an additional 27 Ecopetrol projects worth Ps167bn.

Canadian oil company Parex plans to invest about Ps400 billion in the plan by 2025, Daniel Ferreiro, Parex president and country manager, said during an energy conference in Cartagena last week. Parex has projects underway worth Ps260 billion, mainly building schools, improving sewage systems and providing potable water, mainly in the eastern province of Arauca and in Cesar. Parex produces a net 55,000 b/d of oil equivalent.

Independent E&P Latin American company Geopark has invested more than \$3mn in infrastructure works in several municipalities of the southern province of Putumayo to provide furniture and equipment for a child development center of the Colombian family welfare institute. Platform fire hurts Pemex emissions efforts

Mexico's state-owned Pemex cut its third quarter greenhouse gas (GHG) emissions by 18pc to 15.2mn t of CO2 equivalent (CO2e) from a year earlier, but emissions remained higher by 4.8pc from the previous quarter following an offshore platform fire in July.

While Pemex had made progress on reducing emissions in previous quarters, July's fire on the Nohoch offshore platform and delays to gas infrastructure in the Tupilco Profundo field – one of Pemex's highest producing gas fields – caused the uptick in emissions, Pemex said.

Pemex has made renewed efforts to reduce its GHG emissions amid investor pressure over the last two years in the face of the operator's poor record on unchecked gas flaring.

Pemex flared 393mn cf/d of gas during the third quarter, down by 20pc from the same quarter last year but up by 35pc from the previous quarter.

Gas flaring releases methane and CO2. Cutting methane emissions through a reduction in gas flaring is seen as one of the most effective ways to limit global warming and improve air quality in the near term.

The operator has "focused on increasing associated gas usage in exploration and production processes and the continuous operation of compression systems in gas processing centers," Pemex said.

Efforts to reduce gas flaring are part of the company's long-term sustainability plan that it expects to publish by yearend, Pemex director Octavio Romero said.

The operator identified emissions reductions projects across all operating areas during the third quarter and hopes to increase gas usage rates to 98pc by the end of next year, up from 92pc between July and September. By Rebecca Conan

By Diana Delgado

ANNOUNCEMENTS

Correction

Incorrect prices were published for Bakken Patoka on 27 October. The correct prices are as follows:Wtd avg diffWtd avg priceMTD diff+2.3586.75+2.34





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