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Argus Crude

Crude market prices and analysis

Issue 20-22 | Friday 31 January 2020

MARKET COMMENTARY

Prices end week lower

Prices weakened further in the week's final session. Towards 4.30pm in London, the Argus April North Sea price was $56.87/bl, a fall of 89¢/bl from the same time in the previous session.

Shell lifts Bonny Light force majeure

Shell lifted its force majeure restrictions on Nigeria's Bonny Light exports, which were put in place following the closure of the 150,000 b/d Nembe Creek Trunk Line (NCTL) earlier in January.

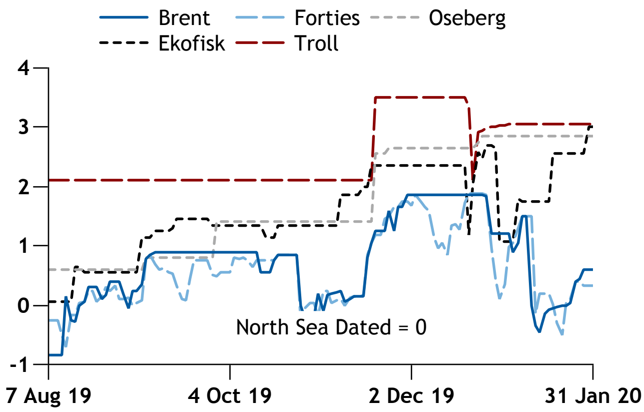
Sinopec makes China supply pledge

Chinese state-controlled oil firm Sinopec is responding to the government's call for state-controlled firms to help the city of Wuhan in the wake of the deadly coronavirus outbreak.

Ghanaian loadings to slow in March

Export loadings of Ghanaian crude will fall in March to 153,000 b/d from February's planned 197,000 b/d, with exports of both Jubilee and Ten Blend set to fall.

Brent, Forties, Oseberg, Ekofisk vs Dated $/bl



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PRICE SUMMARY

Price summary					$/bl
	Basis	Diff	Bid	Ask	±
North Sea					
Dated	Apr	-0.23	56.61	56.67	-1.10
Dated (new)	Apr	-0.23	56.61	56.67	-1.10
Brent	Dated	+0.60	57.21	57.27	-1.10
Forties	Dated	+0.34	56.95	57.01	-1.09
Oseberg	Dated	+2.85	59.46	59.52	-1.10
Ekofisk	Dated	+3.00	59.61	59.67	-1.10
Troll	Dated	+3.05	59.66	59.72	-1.10
Russia-Caspian					
Urals NWE	Dated	-1.00	55.61	55.67	-0.85
Urals Med 80,000t	Dated	+0.65	57.26	57.32	-0.05
BTC Blend	Dated	+6.50	63.11	63.17	-1.10
CPC Blend	Dated	-1.00	55.61	55.67	-0.80
Russia-Caspian fob netbacks					
Urals fob Primorsk	Dated	-2.38	54.23	54.29	-0.85
Urals fob Novo 80,000t	Dated	-0.77	55.84	55.90	+0.13
CPC fob terminal	Dated	-2.44	54.17	54.23	-0.80
BTC fob Ceyhan	Dated	+5.60	62.21	62.27	-1.03
Mediterranean					
Saharan Blend	Dated	+2.70	59.31	59.37	-1.20
Es Sider	Dated	-0.10	56.51	56.57	-1.10
Kirkuk	Dated	-4.40	52.21	52.27	-1.10
West Africa					
Bonny Light	Dated	+2.00	58.61	58.67	-1.40
Girassol	Dated	+1.70	58.31	58.37	-1.10
Hungo	Dated	+0.20	56.81	56.87	-1.10
US pipeline					
	Basis	Diff		VWA	±
LLS	Mar WTI	+3.90		55.46	-0.68
Mars	Mar WTI	+0.92		52.48	-0.53
Argus Sour Crude Index (ASCI™)					
ASCI	Mar WTI	+0.93		52.49	-0.52
Canada pipeline					
	Basis	Diff	Bid	Ask	±
Synthetic	CMA Nymex	-4.20	47.31	47.71	-0.53
WCS	CMA Nymex	-20.68	30.91	31.16	-0.46
Americas cargoes					
ANS	CMA Nymex	+7.16	58.82	58.92	-0.58
Vasconia	May WTI	-0.05	51.47	51.97	-0.58
Asia-Pacific					
Minas	ICP	+1.00	56.72	56.82	+0.11
Tapis	Dated	+8.00	64.59	64.69	-1.10
North West Shelf	Dated	-0.70	55.89	55.99	-1.50
Russia Asia-Pacific					
ESPO Blend	Mar Dubai swaps	+5.39	61.91	62.01	+0.30
Sokol	Mar Dubai swaps	+6.30	62.82	62.92	+0.30
Mideast Gulf					
Dubai	Mar		57.92	58.02	+0.49
Oman	Mar Dubai swaps	+3.09	59.61	59.71	+1.49
Murban	Mar Adnoc	-0.60	60.28	60.38	+0.30

FUTURES AND FORWARD MARKETS

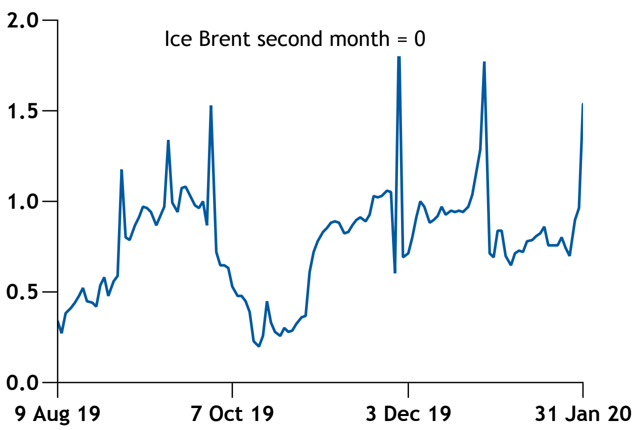
Futures markets $/bl

	Open	High	Low	S'pore*	London†	Settle	±
Ice Brent							
Mar	59.30	59.45	57.94	58.97	58.12	58.16	-0.13
Apr	58.20	58.58	55.93	57.91	56.66	56.62	-0.71
May	58.02	58.21	55.80	57.59	56.47	56.42	-0.58
**4:30pm Singapore minute marker, †4:30pm London minute marker*							
Nymex Light Sweet							
Mar	52.92	53.36	50.97	52.85	51.61	51.56	-0.58
Apr	52.97	53.42	51.09	52.92	51.72	51.68	-0.55
May	52.98	53.43	51.18	52.95	51.81	51.77	-0.50
Jun	52.99	53.36	51.22	52.88	51.85	51.80	-0.43
Dec 20						50.80	-0.18
Dec 21						49.78	-0.10
Dec 22						49.76	-0.03
Dec 23						50.33	+0.06
Dec 24						51.01	+0.10
DME Oman							
Mar						59.66	+1.49
Apr						57.88	+1.23
May						57.09	+1.32
Jun						56.32	+1.35
Volume *bl*							135,000
Tocom Mideast Gulf (day session)							
Mar						56.96	+0.61
Apr						56.43	+0.63
May						55.89	+0.69
Jun						55.38	+0.82
Volume *bl*							1,485,027

INE crude futures

Timing	Settle Yuan/*bl*	±	Settle $/*bl*	±
na	na	na	na	na
na	na	na	na	na
na	na	na	na	na
na	na	na	na	na
Volume *bl*				na

Ice Brent: First month vs second month $/bl



Forward markets $/bl

	Bid	Ask	±
North Sea, Singapore close			
Mar	58.99	59.05	+0.10
Apr	57.92	58.00	-0.02
May	57.60	57.68	+0.14
Jun	57.31	57.39	-
North Sea, London close			
Dated	56.61	56.67	-1.10
Mar	57.88	57.96	-0.90
Apr	56.84	56.90	-0.89
May	56.66	56.74	-0.65
Jun	56.49	56.57	-
Dubai, Singapore close			
Mar	57.92	58.02	+0.49
Apr	56.91	57.01	+0.26
May	56.52	56.62	+0.30
Jun	56.07	56.17	+0.31
Dubai, London close			
Mar	56.83	56.91	-0.51
Apr	55.81	55.91	-0.74
May	55.42	55.52	-0.70
Jun	54.97	55.07	-0.69
WTI Cushing, 1:30pm Houston			
Mar	51.54	51.58	-0.58
Apr	51.66	51.70	-0.55
May	51.75	51.79	-0.50
Jun	51.78	51.82	-0.43

Intermonths $/bl

	Mid
North Sea Singapore close	
Mar/Apr	+1.06
Apr/May	+0.32
May/Jun	+0.29
North Sea London close	
Mar/Apr	+1.05
Apr/May	+0.17
May/Jun	+0.17

Forward spreads 4:30pm London $/bl

	N Sea/Dubai	WTI/N Sea	WTI/Dubai
Mar	+1.050	-6.310	-5.260
Apr	+1.010	-5.150	-4.140
May	+1.230	-4.890	-3.660
Jun	+1.510	-4.680	-3.170

NORTH SEA DATED

North Sea Dated calculation				*$/bl*
North Sea flat price				
North Sea partial trade	**Delivery period**	**Volume *bl***		**Price**
volume weighted average (VWA)	Apr	400,000		56.87
CFD value against relevant basis month				
		Basis		**Midpoint**
3 Feb-7 Feb		Apr		-0.41
10 Feb-14 Feb		Apr		-0.48
17 Feb-21 Feb		Apr		-0.58
24 Feb-28 Feb		Apr		-0.65
2 Mar-6 Mar		Apr		-0.79
9 Mar-13 Mar		Apr		-0.84
CFD value for 10 Feb-29 Feb		Apr		-0.57
North Sea Anticipated Dated calculation				
		Month		**Price**
VWA of North Sea partial trade		Apr		56.87
CFD value for 10 Feb-29 Feb		Apr		-0.57
Anticipated Dated				56.30
Physical differentials for 10 Feb-29 Feb				
Grade		**Basis**		**Diff midpoint**
Brent		Dated		+0.60
Forties		Dated		+0.34
Oseberg		Dated		+2.85
Ekofisk		Dated		+3.00
Troll		Dated		+3.05
North Sea quality premiums (QP) for 10 Feb-29 Feb				
Oseberg				+0.77
Ekofisk				+0.56
Troll				+1.13
North Sea Dated calculation				
	Anticipated Dated	**Add Diff midpoint**	**Subtract QP**	**Price**
Brent component of Dated	56.30	+0.60		56.90
Forties component of Dated	56.30	+0.34		56.64
Oseberg component of Dated	56.30	+2.85	+0.77	58.38
Ekofisk component of Dated	56.30	+3.00	+0.56	58.74
Troll component of Dated	56.30	+3.05	+1.13	58.22
North Sea Dated is the lowest component				**56.64**

North Sea flat price

Argus derives a flat price from trade of a month-ahead forward contract for the delivery of Brent, Forties, Oseberg, Ekofisk or Troll, taking a weighted average of trade between 4:29pm and 4:30pm in London. In the absence of trade, a combination of the Ice Brent futures one-minute marker and the exchange of futures for physical (EFP) market is used.

Anticipated Dated

We then look at contracts for difference (CFDs), with which the market anticipates North Sea Dated in the coming weeks at differentials to the forward month. Prices falling between 10 days and a full calendar month ahead are averaged.

Physical differentials

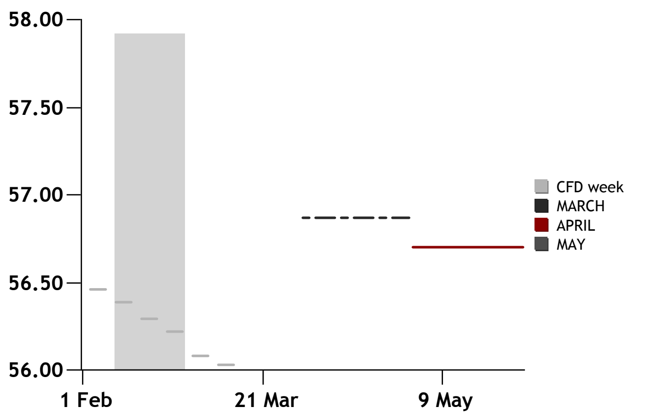
Argus assesses trade in physical cargoes of Brent, Forties, Oseberg, Ekofisk and Troll crude, assigning differentials to North Sea Dated to each grade for the 10-days to month-ahead range.

Dated components

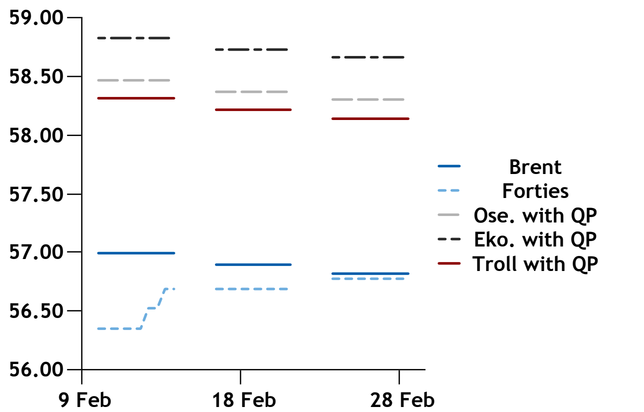
The combination of the Anticipated Dated and the physical values gives each grade's component of North Sea Dated. Quality premiums are deducted from Oseberg, Ekofisk and Troll for benchmarking purposes. The lowest-priced of the five components is used to set the price of North Sea Dated.

Components of North Sea Dated *$/bl*

North Sea forward curve establishing Anticipated Dated *$/bl*



Dated components-establishing North Sea Dated *$/bl*



NORTH SEA

Shell continued to seek buyers for cargoes of Forties on a delivered basis for the third consecutive session, placing three unsuccessful offers.

The firm attempted to sell a cargo of Forties at North Sea Dated +1.30 on a cif Rotterdam basis, for on arrival 12-16 February. The offer would have translated to roughly Dated +0.36 on a fob basis, with the cargo loading around 10 February.

Shell also offered a 20-24 February arrival cargo of the grade on the same basis at Dated +1.55, which would have equated to a fob price of around Dated +0.61, with loading dates around 18 February.

Shell's third and final offer during the session was for a 22-26 February arrival cargo at Dated +1.60, also on a cif Rotterdam basis. The fob equivalent would be roughly Dated +0.66, with a loading start date around 20 February.

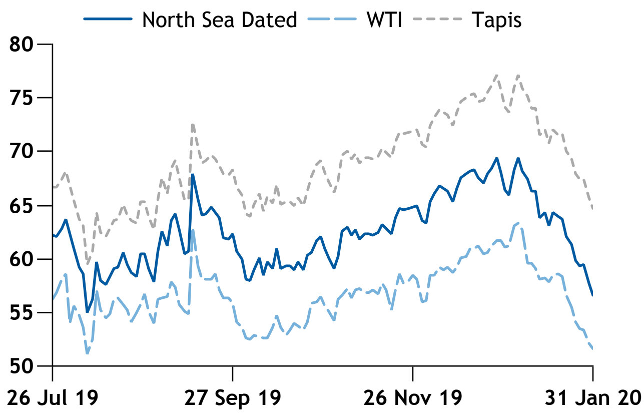
Only one fob offer emerged during the session. Trading firm Trafigura confirmed it attempted to sell a 20-22 February Forties at Dated +1.15, although the firm decided to withdraw the indication before any deals could have been struck.

The only buying attempt during the Friday session came from Vitol. The firm unsuccessfully tried to secure a 16-20 February Forties cargo by bidding Dated +0.20, on a fob basis. The bid came in 10¢/bl below the Dated +0.30 paid by the firm to Petroineos to purchase a cargo of the grade loading on earlier 13-15 February dates, in the previous session. Vitol has already booked the VLCC *Lita* to complete a delivery from Hound Point to China on 15 February.

Meanwhile, Norway-focused independent Lundin Petroleum has raised its production guidance for the next few years despite trimming its stake in the North Sea's giant Johan Sverdrup oil field.

The company said today that it expects to produce 145,000-165,000 b/d of oil equivalent (boe/d) in 2020, up

North Sea Dated, WTI, Tapis $/bl



North Sea					$/bl
	Basis	Diff	Bid	Ask	±
Dated*	Apr	-0.23	56.61	56.67	-1.10
Dated (new)**	Apr	-0.23	56.61	56.67	-1.10
Brent†	Dated	+0.60	57.21	57.27	-1.10
Forties	Dated	+0.34	56.95	57.01	-1.09
Oseberg	Dated	+2.85	59.46	59.52	-1.10
Ekofisk	Dated	+3.00	59.61	59.67	-1.10
Troll	Dated	+3.05	59.66	59.72	-1.10
Statfjord cif Rotterdam	Dated	+3.30	59.91	59.97	-1.10
Statfjord fob platform	Dated	+1.75	58.36	58.42	-1.10
Gullfaks cif Rotterdam	Dated	+3.95	60.56	60.62	-1.10
Gullfaks fob platform	Dated	+2.77	59.38	59.44	-1.10
Flotta Gold	Dated	-1.00	55.61	55.67	-1.10
Grane	Dated	+0.35	56.96	57.02	-1.10

**Argus North Sea Dated is the equivalent of Platts dated Brent*
***New North Sea Dated incorporates non-North Sea grades delivered into northwest Europe. A full explanation can be found on p6*
†Argus Brent is the price of physical Brent calculated using Argus North Sea Dated plus the Dated-related market differential for Brent

North Sea EFP		
	Basis	Diff
Mar	Ice	-0.27
Apr	Ice	+0.14

Ice minute markers		
	1-minute	±
Mar	58.12	-0.61
Apr	56.66	-0.95
May	56.47	-0.72

Dated CFDs, Singapore close				
	Basis	Bid	Ask	±
3 Feb-7 Feb	Apr	-0.18	-0.10	-0.12
10 Feb-14 Feb	Apr	-0.29	-0.21	-0.17
17 Feb-21 Feb	Apr	-0.39	-0.31	-0.21
24 Feb-28 Feb	Apr	-0.50	-0.42	-0.23

Dated CFDs, London close				
3 Feb-7 Feb	Apr	-0.45	-0.37	-0.27
10 Feb-14 Feb	Apr	-0.52	-0.44	-0.23
17 Feb-21 Feb	Apr	-0.62	-0.54	-0.23
24 Feb-28 Feb	Apr	-0.69	-0.61	-0.19
2 Mar-6 Mar	Apr	-0.83	-0.75	-0.17
9 Mar-13 Mar	Apr	-0.88	-0.80	-0.10

Delivered northwest Europe assessments					
	Basis	Diff	Bid	Ask	±
CPC Blend cif Rotterdam	Dated	+3.00	59.61	59.67	-1.10
BTC Blend cif Rotterdam	Dated	+5.80	62.41	62.47	-1.10
Saharan Blend cif Rotterdam	Dated	+3.50	60.11	60.17	-1.10
Bonny Light cif Rotterdam	Dated	+6.50	63.11	63.17	-1.10
Qua Iboe cif Rotterdam	Dated	+6.50	63.11	63.17	-1.10
Escravos cif Rotterdam	Dated	+6.80	63.41	63.47	-1.10
WTI cif Rotterdam (period 1)*	Dated	+2.65	59.26	59.32	-1.10
WTI cif Rotterdam (period 2)*	Dated	+2.65	59.26	59.32	-1.10

**Period 1 covers cargoes arriving at Rotterdam from 12 days forward to one month ahead + two days. Period 2 covers cargoes arriving at Rotterdam from one month ahead + three days forward to 60 days.*

NORTH SEA

from 93,300 boe/d last year. Its previous guidance was to reach over 150,000 boe/d once the first phase of Johan Sverdrup hits plateau this summer.

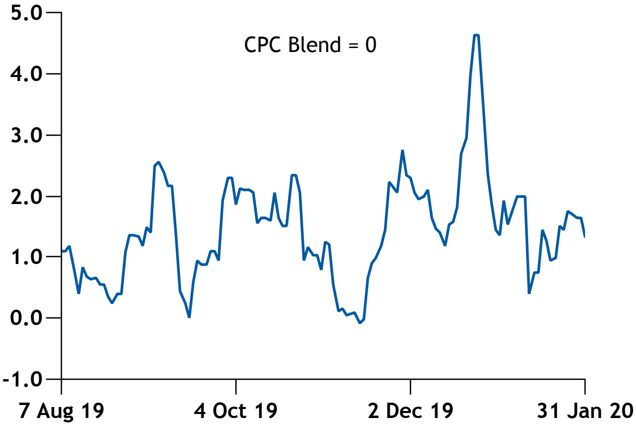
The UK's crude and condensate production was little changed in December. The UK produced around 999,0000 b/d of crude oil in December, a slight change from 1mn b/d the previous month.

The figure suggests that the UK's total liquids output for December was 1.06mn b/d, down by a marginal 0.37pc from November's six-month high of 1.07mn b/d.

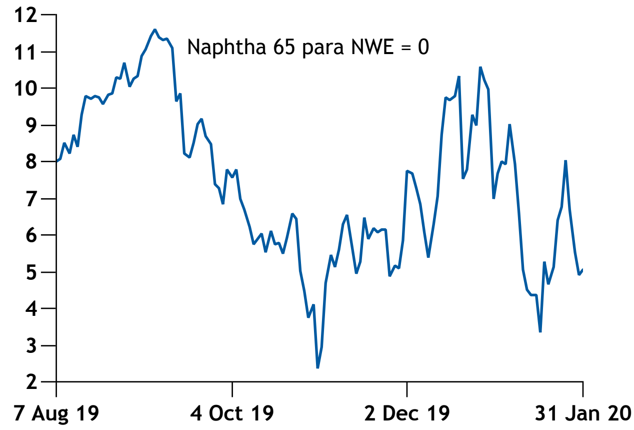
Crude and condensate production also averaged 1.06mn b/d for the whole of 2019, up by 1.6pc from the previous year and the highest level since 2011.

The April North Sea price fell by 89¢/bl to $56.87/bl, based on 400,000 bl of trade. The first-week 3-7 February CFD fell by 27¢/bl to April North Sea -41¢/bl, while the second week 10.14 February CFD dropped 23¢/bl to April North Sea -48¢/bl.

Forties vs CPC Blend $/bl



Ekofisk vs naphtha 65 para NWE cif $/bl



North Sea				$/bl
North Sea quality premiums (QP)				
			Jan	Feb
Ekofisk			0.78	0.56
Oseberg			0.72	0.77
Troll			1.18	1.13
De-escalators				
Sulphur				+0.41
North Sea calculations				
			Basis	Price
Volume-weighted average of North Sea partial traded			Apr	56.87
Ice Brent marker			Apr	56.66
Exchange of futures for physical (EFP)			Apr	+0.14
North Sea basis (flat price)			Apr	56.87
Anticipated Dated based on 10 days-month ahead CFD strip:				
			Price	±
10 Feb-28 Feb			56.30	-1.11
Argus Brent component of Dated			56.90	-1.11
Argus Forties component of Dated*			56.64	-1.10
Argus Oseberg component of Dated (QP applied)			58.38	-1.11
Argus Oseberg component of Dated (no QP applied)			59.15	-1.11
Argus Ekofisk component of Dated (QP applied)			58.74	-1.11
Argus Ekofisk component of Dated (no QP applied)			59.30	-1.11
Argus Troll component of Dated (QP applied)			58.22	-1.11
**the lowest component sets Dated*				
Argus alternative Dated illustrations				
	Basis	Diff	Price	±
Argus Dated Average	Apr	+1.40	58.27	-1.11
Argus Dated BFOE*	Apr	-0.23	56.64	-1.10
Argus Dated BFO	Apr	-0.23	56.64	-1.10
Argus Dated FOE	Apr	-0.23	56.64	-1.10
*Quality premiums (QP) not applied to above *Argus Dated BFOE is equivalent to North Sea Dated (no QP)*				
Argus North Sea Reference Price				
Argus North Sea Reference Price (NSRP)			57.94	-1.13
Argus Synthetic Brent (NSRP component)			56.33	-1.14
Dated to Ice Brent frontline, London close				
		Bid	Ask	±
Feb		-0.49	-0.41	-0.27
Mar		-0.65	-0.57	-0.28
Apr		-0.52	-0.44	-0.19
May		-0.45	-0.37	-0.15
2Q20		-0.47	-0.39	-0.14
3Q20		-0.53	-0.45	-0.06
2021		-0.53	-0.47	-0.03
Ice Bwave, 30 Jan 20				
Apr				57.57
May				57.16
Jun				56.83
Saudi formula base				63.99

NEW NORTH SEA DATED

New North Sea Dated calculation				$/bl
North Sea flat price				
North Sea partial trade	**Delivery period**	**Volume bl**		**Price**
volume weighted average (VWA)	Apr	400,000		56.87
CFD value against relevant basis month				
		Basis		**Midpoint**
3 Feb-7 Feb		Apr		-0.41
10 Feb-14 Feb		Apr		-0.48
17 Feb-21 Feb		Apr		-0.58
24 Feb-28 Feb		Apr		-0.65
2 Mar-6 Mar		Apr		-0.79
9 Mar-13 Mar		Apr		-0.84
CFD value for 10 Feb-29 Feb		Apr		-0.57
North Sea Anticipated Dated calculation				
		Month		**Price**
VWA of North Sea partial trade		Apr		56.87
CFD value for 10 Feb-29 Feb		Apr		-0.57
Anticipated Dated				56.30
Physical differentials for 10 Feb-29 Feb				
Grade		**Basis**		**Diff midpoint**
Brent		Dated		+0.60
Forties		Dated		+0.34
Oseberg		Dated		+2.85
Ekofisk		Dated		+3.00
Troll		Dated		+3.05
Bonny Light cif Rotterdam		Dated		+6.50
Qua Iboe cif Rotterdam		Dated		+6.50
WTI cif Rotterdam (period 1)		Dated		+2.65
Freight adjustment				
Five-day average UK-UK continent rate 24-30 Jan				1.25
Five-day average UK-UK continent rate 27-31 Jan				1.18
North Sea quality adjustments (QA) for 10 Feb-29 Feb				
Oseberg				+1.08
Ekofisk				+0.87
Troll				+1.44
Bonny Light				+1.79
Qua Iboe				+2.06
New North Sea Dated calculation				
Components of New North Sea Dated	**Anticipated Dated**	**Add Diff midpoint**	**Subtract QA and freight**	**Price**
Brent	56.30	+0.60		56.90
Forties	56.30	+0.34		56.64
Oseberg	56.30	+2.85	+1.08	58.07
Ekofisk	56.30	+3.00	+0.87	58.43
Troll	56.30	+3.05	+1.44	57.91
Bonny Light	56.30	+6.50	+3.04	59.76
Qua Iboe	56.30	+6.50	+3.31	59.49
WTI	56.30	+2.65	+1.25	57.70
New North Sea Dated is the lowest component				**56.64**

North Sea flat price

Argus derives a flat price from trade of a month-ahead forward contract for the delivery of Brent, Forties, Oseberg, Ekofisk or Troll, taking a weighted average of trade between 4:29pm and 4:30pm in London. In the absence of trade, a combination of the Ice Brent futures one-minute marker and the exchange of futures for physical (EFP) market is used.

Anticipated Dated

We then look at contracts for difference (CFDs), with which the market anticipates North Sea Dated in the coming weeks at differentials to the forward month. Prices falling between 10 days and a full calendar month ahead are averaged.

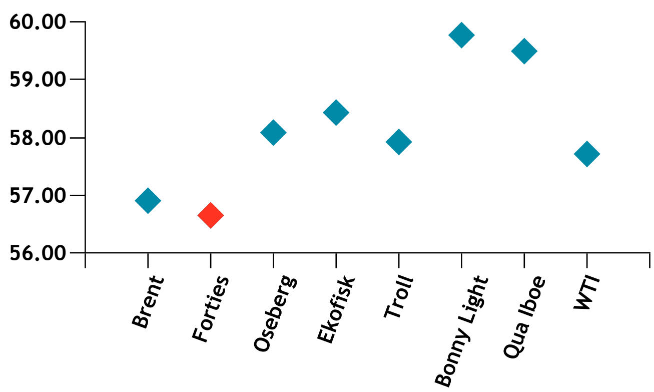
Physical differentials

Argus assesses fob trade in physical cargoes of Brent, Forties, Oseberg, Ekofisk and Troll crude, assigning differentials to North Sea Dated to each grade for the 10-days to month-ahead range. Argus then assesses cif Rotterdam trade in Bonny Light, Qua Iboe and WTI. Prices falling between 12 days and a calendar month ahead — plus two days — are then averaged. Then a freight value based on a five-day average of the Argus UK-UK Continent rate is applied to the cif values in order to construct virtual North Sea fob values for the six non-North Sea grades.

Dated components

The combination of the Anticipated Dated and the physical values gives each grade's component of North Sea Dated. Quality adjustments are deducted from Oseberg, Ekofisk, Troll, Bonny Light and Qua Iboe for benchmarking purposes. The lowest-priced of the eight components is used to set the price of North Sea Dated.

Dated components on a fob Nsea basis



RUSSIA-CASPIAN

Medium and light sour grades firmed against the North Sea Dated benchmark, amid keen buying interest in dwindling February supplies.

Shell sought February cargoes of medium sour Russian export blend in both northwest Europe and the Mediterranean. The major bid for a 100,000t Baltic Urals cargo loading on 14-18 February from Primorsk at Dated -1.05 cif Rotterdam, but no selling interest emerged. Shell had found no joy bidding for the same dates in the previous session at Dated -1.30 cif Rotterdam.

Shell also bid for a 80,000t Black Sea cargo loading on 15-19 February from Novorossiysk at Dated +0.60 cif Augusta, to similar avail. Traders reckoned no 80,000t cargoes remained available for those dates, and suggested values for cargoes loading later in February were significantly lower. One trader reported picking up a 140,000t Urals cargo at closer to Dated -0.40 cif Augusta earlier in the week.

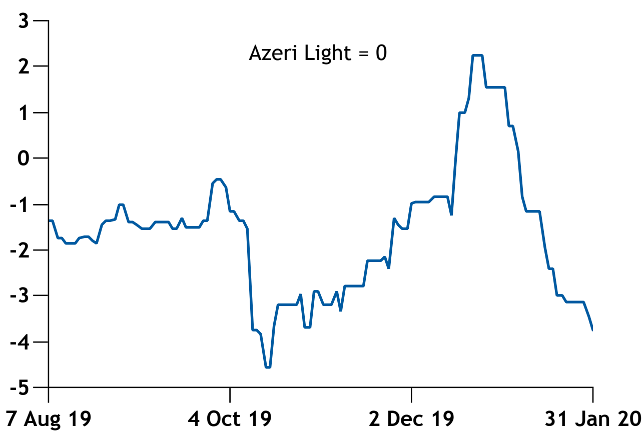
Chinese buying has underpinned January and early-February Urals values. Nearly 550,000 b/d of January Urals loading from Baltic and Black Sea ports is either en route for China or worked into bulk shipments for delivery to China, tracking shows. Around 450,000 b/d of that consists of Baltic volumes — two very large crude carriers (VLCCs) are heading for Qingdao and Zhoushan, while a third is in the midst of ship-to-ship transfers off Skaw. Four Suezmax tankers are taking combined cargoes of January Baltic Urals to China, along with one Aframax tanker that is heading directly to Tianjin.

Those Urals flows east of Suez could ease, as Chinese demand looks set to slip in the wake of this month's coronavirus outbreak in Wuhan. Chinese refiners have cut refining runs by around 800,000 b/d month-on-month to roughly 13mn b/d in January, according to *Argus* data. Refinery run cuts have been intensifying in the later part of January.

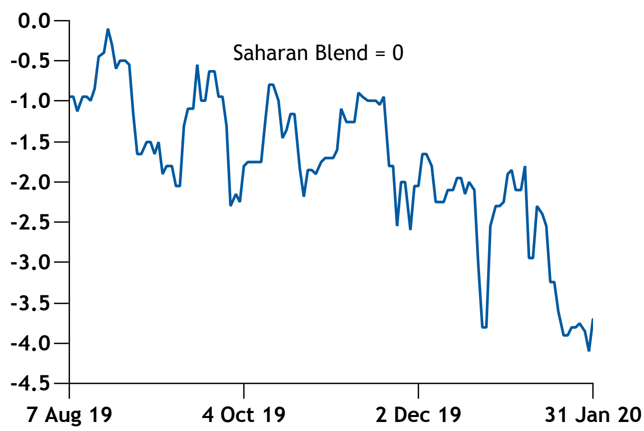
Normal loading operations were underway at Russian Baltic and Black Sea ports, although weather related disruptions

Russia-Caspian	Basis	Diff	Bid	Ask	±
					$/bl
Urals NWE	Dated	-1.00	55.61	55.67	-0.85
Urals Med 80,000t	Dated	+0.65	57.26	57.32	-0.05
Urals Med 140,000t	Dated	+0.35	56.96	57.02	-0.05
Siberian Light	Dated	+1.50	58.11	58.17	-1.10
CPC Blend	Dated	-1.00	55.61	55.67	-0.80
Tengiz	Dated	-0.90	55.71	55.77	-0.80
BTC	Dated	+6.50	63.11	63.17	-1.10
Azeri Light	Dated	+5.75	62.36	62.42	-1.10
Netbacks					
Urals fob Primorsk	Dated	-2.38	54.23	54.29	-0.85
Urals fob Ust-Luga	Dated	-2.38	54.23	54.29	-0.85
Urals fob Novo (80kt)	Dated	-0.77	55.84	55.90	+0.13
Urals fob Novo (140kt)	Dated	-1.17	55.44	55.50	+0.00
Urals cif Black Sea	Dated	-0.12	56.49	56.55	+0.08
CPC fob terminal	Dated	-2.44	54.17	54.23	-0.80
BTC fob Ceyhan	Dated	+5.60	62.21	62.27	-1.03
Azeri Light fob Supsa	Dated	+4.43	61.04	61.10	-0.93
Retrospective netbacks					
Urals fob Primorsk	Dated	-3.90	52.71	52.77	-1.08
Urals fob Ust-Luga	Dated	-3.89	52.72	52.78	-1.07
Urals fob Novo (80kt)	Dated	-3.12	53.49	53.55	-1.00
CPC Blend fob	Dated	-2.67	53.94	54.00	-1.08
Turkish straits demurrage					
Delay *days*					7
Aframax demurrage rate *$/d*					30,000
Suezmax demurrage rate *$/d*					55,000

Bonny Light vs Azeri Light $/bl



CPC Blend vs Saharan Blend $/bl



RUSSIA-CASPIAN

loomed. Primorsk port will no longer be allowing small vessel traffic because of ice formations in and around the port, effective from 1 February 2020. Tankers have not yet been affected. In the Black Sea, two 80,000t January parcels of Urals were deferred into the February Novorossiysk plan, after adverse weather conditions earlier in the month. Otherwise, a storm was forecast to hit Novorossiysk on the evening of 31 January, according to pipeline operator Transneft.

On light Caspian sour CPC Blend, BP bid as high as Dated -1.10 cif Augusta for an 85,000t cargo loading across 21-25 February. No deal was struck. Traders reckoned the February plan had sold out days ago, and no cargoes remained available. CPC Blend most recently changed hands at closer to Dated -1 cif Augusta, traders said. A preliminary March programme is only expected to surface by 12 February.

Little emerged on Azeri crude. The latest February BTC Blend offers were coming in close to Dated +7 cif Augusta, although traded levels were heard at narrower premiums to the benchmark. A cargo changed hands at close to Dated +6.20 cif Augusta last week. Some traders suggested a deal may have been concluded closer to Dated +6.50 cif Augusta, although this was unconfirmed and no details surfaced.

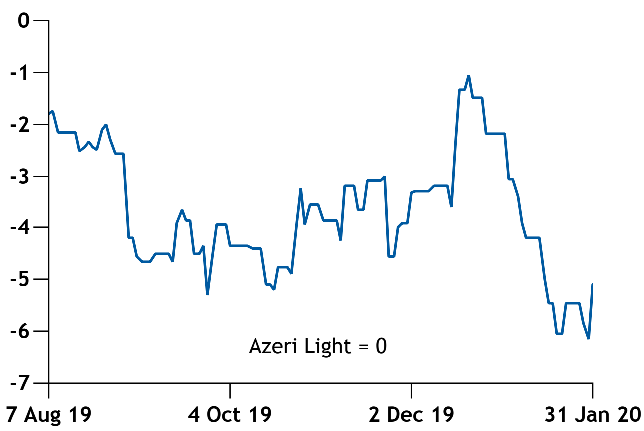
No activity on Urals, CPC Blend or Azeri crude was confirmed.

Druzhba pipeline — Urals (monthly prices)					*$/bl*
	Basis	Diff low	Diff high	Low	High
Slovakia					
Dec	Monthly avg of Dated	-4.65	-4.15	62.18	62.68
Nov	Monthly avg of Dated	-1.65	-1.15	61.46	61.96
Oct	Monthly avg of Dated	-3.65	-3.15	56.08	56.58
Hungary					
Dec	Monthly avg of Dated	-4.65	-4.15	62.18	62.68
Nov	Monthly avg of Dated	-1.65	-1.15	61.46	61.96
Oct	Monthly avg of Dated	-3.65	-3.15	56.08	56.58
Poland *					
Dec	Monthly avg of Dated	-4.13	-3.73	62.70	63.10
Nov	Monthly avg of Dated	-1.19	-0.79	61.92	62.32
Oct	Monthly avg of Dated	-2.59	-2.19	57.14	57.54
Germany *					
Dec	Monthly avg of Dated	-5.05	-3.75	61.78	63.08
Nov	Monthly avg of Dated	-2.28	-0.81	60.83	62.30
Oct	Monthly avg of Dated	-3.85	-2.21	55.88	57.52

**there was no trading activity in Germany and Poland in May owing to contamination issues on the Druzhba pipeline*

North Sea Dated month average	*$/bl*
Dec	66.83
Nov	63.11
Oct	59.80

Urals Med vs Azeri Light *$/bl*



Urals NWE assessment

Argus will include crude loading from the Russian port of Ust-Luga in its Urals NWE price assessment from 21 November 2019. Crude from Ust-Luga was temporarily suspended from the assessment on 26 April following significant price discrepancy between trade at Ust-Luga and trade at Primorsk related to market concerns around crude contamination. In accordance with the Argus Crude methodology, *Argus* subjects all market information to several tests in determining its relevance to the price assessment process, including testing for prices that deviate significantly from the mean of all transactions, and those that are outside the generally accepted lows and highs that operated throughout the trading day. *Argus* will continue to monitor the situation and will provide further updates as required.

MEDITERRANEAN

Algerian light sweet Saharan Blend retreated slightly, as buying interest softened in the face of rising offer levels.

Traders said Algeria's state-owned Sonatrach was now seeking buyers for March-loading supplies at North Sea Dated +3.00, with France's Total also offering February-loading equity supplies at around the same level. Traders said Algerian crude was unlikely to change hands at these levels, with one pegging the grade no higher than Dated +2.50, while another assessed Saharan Blend at Dated +2.50/+2.80.

Saharan Blend had reached a high of Dated +2.80 ealier in the week — the grade's strongest since September 2011, with competing Azeri BTC Blend recently offered as high as Dated +7.00 cif Augusta, according to traders.

Saharan Blend has been supported by production disruptions to all rival Libyan grades. Libyan crude production has stayed below 300,000 b/d for the first half of this week, and was on track to drop to around 70,000 b/d, as local storage capacity is depleted. Libyan export terminals and some fields were shut in under the instructions of Khalifa Haftar's Libyan National Army militia group.

Traders had first expected the conflict to be resolved by end of last week, but the outlook is increasingly uncertain. The country's state-owned NOC has yet to issue its official formula prices for February, which are typically released at the end of the month that precedes loading. NOC has previously issued formula prices even in the absence of crude availabilities in the short term.

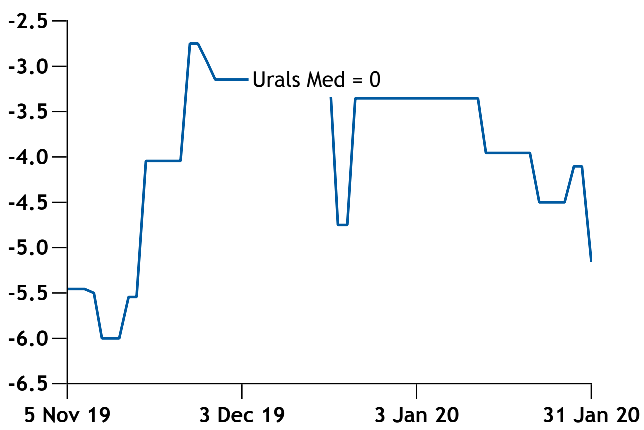
Despite support from the Libyan crisis, traders said Algerian crude could soon be pressured by rising flows of US crude to Europe. US crude shipments — primarily comprising light sweet WTI — have picked up in recent months, with oil analytics firm Vortexa showing combined sailings of US crude to Europe and the Mediterranean as high as 1.45mn b/d in December.

Saudi state-owned Aramco was expected to release its official formula prices for March-loading supplies early next week. Traders said Aramco will raise its March prices by as much as $2/bl for northwest European and Mediterranean clients, following a recent recovery for rival Russian Urals crude.

Mediterranean					$/bl
	Basis	Diff	Bid	Ask	±
Saharan Blend	Dated	+2.70	59.31	59.37	-1.20
Zarzaitine	Dated	+2.60	59.21	59.27	-1.20
Es Sider	Dated	-0.10	56.51	56.57	-1.10
Kirkuk	Dated	-4.40	52.21	52.27	-1.10
Basrah Light cif Augusta	Dated	-4.50	52.11	52.17	-1.10
Basrah Light fob Sidi Kerir	Dated	-4.35	52.26	52.32	-1.10
Basrah Heavy cif Augusta	Dated	-6.25	50.36	50.42	-1.10
Iranian Light fob Sidi Kerir	Dated	-0.92	55.69	55.75	-0.05
Iranian Heavy fob Sidi Kerir	Dated	-3.72	52.89	52.95	-0.05
Suez Blend	Dated	-1.05	55.56	55.62	-0.05

Official formula prices				$/bl
	Basis			
Algeria		**Dec**	**Jan**	**Feb**
Saharan Blend	Dated	+1.20	+1.90	+2.46
Syria		**Aug**	**Sep**	**Oct**
Syrian Light	Dated	na	na	na
Souedie	Dated	na	na	na
Libya		**Nov**	**Dec**	**Jan**
Al-Jurf	Urals Med	-0.35	-0.35	-0.55
Amna	Dated	+0.25	+0.55	+0.40
Bouri	Urals Med	-2.05	-2.05	-2.30
Brega	Dated	-0.25	+0.05	-0.05
Bu Atiffel	Dated	+1.05	+1.20	+1.10
Es Sider	Dated	+0.40	+0.70	+0.25
Esharara	Dated	+0.20	+0.60	+0.30
Mellitah	Dated	-0.80	-0.35	-0.45
Mesla	Dated	-0.35	-0.15	-0.30
Mesla ex Ras Lanuf	Dated	na	na	na
Sarir	Dated	-2.00	-1.80	-2.05
Sirtica	Dated	-0.90	-0.70	-0.95
Zueitina	Dated	-0.15	+0.15	+0.00

Basrah Light cif Augusta vs Urals Med $/bl



WEST AFRICA

Shell has lifted force majeure on exports of Bonny Light, while Nigerian values weakened further on oversupply in the Atlantic basin and weak demand.

Shell Petroleum Development Company, which operates the Bonny Light export terminal, lifted force majeure on the terminal after an 11-day shutdown of the 150,000 b/d Nembe Creek Trunk Line (NCTL), operated by local company Aiteo.

The NCTL is one of two pipelines that transport Bonny Light to the export terminal. The other one, the Trans Niger Pipeline (TNP), has continued operating during the NCTL shutdown. The Suezmax *Violando* left the Bonny Light terminal on 27 January laden with 950,000 bl. It is en route to the Polish port of Gdansk. A similar-sized tanker, *Malibu*, completed loading operations at the terminal on 30 January and was expected to head for Asia-Pacific.

In Nigeria, values for all the key grades weakened amid poor buying interest. Traders said very few March cargoes had traded and that most of the programme could still be unsold by the time the April schedule emerges.

March-loading cargoes were expected to trade more than 50¢/bl below the levels achieved for February cargoes. Flagship Qua Iboe was heard changing hands at around North Sea Dated +2.00, with heavier Forcados assessed at similar levels. Values for other medium to light-sweet grades such as Bonga, Bonny Light, Escravos and Brass River were also assessed at around Dated +2.00, and may weaken further in the coming sessions, one trader said.

Little was heard on spot trade for Angolan cargoes, after a series of public offers and deals were observed in the previous session.

Meanwhile in Ghana, crude loadings were pencilled in at 153,000 b/d for March, down from February's planned 197,000 b/d. Lower exports for both Jubilee and Ten Blend will drive the month-on-month fall. Jubilee loadings will average 61,000 b/d across two cargoes, down from three in February, while only one 950,000 bl parcel of Ten Blend will load in March, down from two in the previous month. Exports of Sankofa are scheduled higher on the month at 61,000 b/d, up from February's 33,000 b/d.

Germany's Uniper has fixed the Suezmax *Maran Plato* to take a cargo of Chad's Doba to Fujairah on 20-21 February, although this was not confirmed.

West Africa *$/bl*

	Basis	Diff	Bid	Ask	±
Agbami	Dated	+0.10	56.71	56.77	-1.20
Amenam	Dated	+0.40	57.01	57.07	-1.20
Bonga	Dated	+2.10	58.71	58.77	-1.40
Bonny Light	Dated	+2.00	58.61	58.67	-1.40
Brass River	Dated	+1.90	58.51	58.57	-1.30
Erha	Dated	+2.10	58.71	58.77	-1.40
Escravos	Dated	+2.10	58.71	58.77	-1.40
Forcados	Dated	+2.00	58.61	58.67	-1.60
Qua Iboe	Dated	+2.00	58.61	58.67	-1.40
Usan	Dated	+0.00	56.61	56.67	-1.35
Cabinda	Dated	+1.80	58.41	58.47	-1.10
Dalia	Dated	+1.10	57.71	57.77	-1.10
Girassol	Dated	+1.70	58.31	58.37	-1.10
Hungo	Dated	+0.20	56.81	56.87	-1.10
Kissanje	Dated	+0.90	57.51	57.57	-1.10
Nemba	Dated	+0.40	57.01	57.07	-1.10
Zafiro	Dated	+1.20	57.81	57.87	-1.10
Jubilee	Dated	+0.60	57.21	57.27	-1.10
Doba	Dated	+0.80	57.41	57.47	-1.10

Nigerian official formula prices *$/bl*

	Basis	Dec	Jan	Feb
Abo	Dated	+1.76	+3.00	+2.72
Agbami	Dated	-0.32	+0.39	+0.20
Ajapa	Dated	+1.84	+3.14	+2.82
Aje	Dated	+1.38	+2.51	+2.47
Akpo	Dated	-1.03	-0.17	-0.58
Amenam	Dated	+0.06	+0.70	+0.48
Antan	Dated	+1.57	+2.94	+3.74
Asaramatoru	Dated	+2.05	+3.21	+3.02
Bonga	Dated	+1.44	+2.52	+2.26
Bonny Light	Dated	+1.28	+2.51	+2.32
Brass River	Dated	+1.20	+2.28	+1.98
EA	Dated	+4.39	+5.43	+5.18
Ebok	Dated	+0.79	+1.01	+1.83
Egina	Dated	+2.34	+4.35	+3.96
Eremor	Dated	-4.11	-3.25	-1.27
Erha	Dated	+1.35	+2.72	+2.42
Escravos	Dated	+1.89	+3.19	+2.77
Forcados	Dated	+1.71	+2.96	+2.70
Ima	Dated	-0.15	+1.00	+0.20
Jones Creek	Dated	+1.71	+2.96	+2.70
Obe	Dated	+0.96	+2.21	+2.34
Okono	Dated	+2.05	+3.16	+2.50
Okoro	Dated	+4.01	+3.50	+2.20
Okwori	Dated	+2.99	+4.10	+3.91
Okwuibome formula	Dated	+4.22	+5.76	+4.64
Otakikpo	Dated	+1.38	+2.51	+2.47
Oyo	Dated	+3.80	+4.82	+4.64
Pennington	Dated	+2.34	+3.41	+2.74
Qua Iboe	Dated	+1.50	+2.66	+2.37
Ukpokiti	Dated	+2.05	+3.12	+2.71
Usan	Dated	+0.54	+1.21	+0.70
Yoho	Dated	+1.45	+2.56	+2.27
Zafiro*	Dated	+1.61	+2.64	+2.42
Premium for advanced pricing	Dated	+0.07	+0.07	na
Premium for deferred pricing	Dated	+0.07	+0.07	na

**Equatorial Guinea, priced by NNPC*

MIDEAST GULF

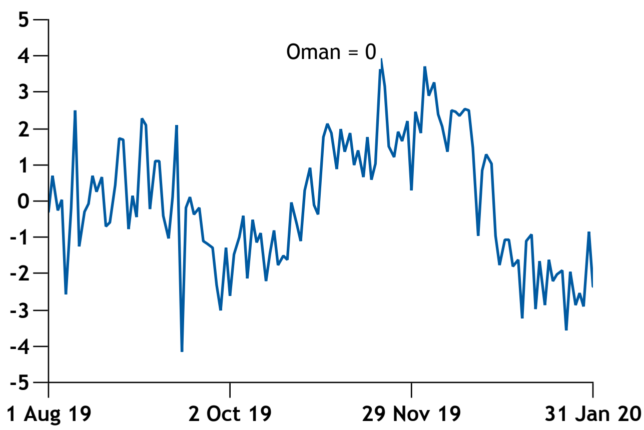
Late demand emerged for Mideast Gulf Oman crude, with Taiwan's Formosa Petrochemical issuing a tender seeking a cargo for April delivery.

Offers into the tender are due to be submitted by 3 February with same-day validity.

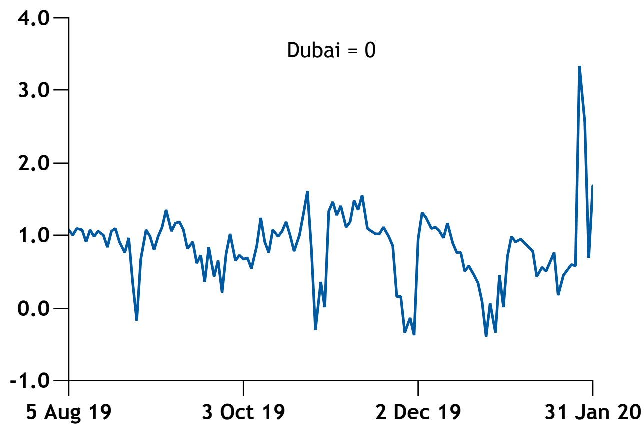
Mideast Gulf producers were expected to cut their official prices following an easing of prompt Dubai prices. The front-month Dubai contract was priced $2.02/bl above the third-month contract in January, narrower by 61¢/bl from December, as the spreading coronavirus outbreak in China sparked demand concerns.

Saudi Arabia's state-controlled Saudi Aramco could reduce the March formula price of its flagship Arab Light crude to Asia-Pacific by around 50¢/bl, traders said. It may also cut the price of Arab Extra Light by at least $1/bl, following a decline in light distillates' margins. But Aramco may keep unchanged or reduce slightly the March Asia-Pacific prices of Arab Medium and Arab Heavy as supplies of medium and heavy sour crude remained tight.

Urals vs Oman $/bl



Oman vs Dubai $/bl



Mideast Gulf						$/bl
	Month	Basis	Diff	Bid	Ask	±
Dubai	Mar			57.92	58.02	+0.49
Oman	Mar	Mar*	+3.09	59.61	59.71	+1.49
Murban	Mar	Adnoc	-0.60	60.28	60.38	+0.30
Das	Mar	Adnoc	-0.65	59.53	59.63	+0.30
Upper Zakum	Mar	Adnoc	-0.75	59.13	59.23	+0.30
Qatar Land	Mar	QP	-0.60	59.93	60.03	+0.30
Qatar Marine	Mar	QP	-0.25	59.43	59.53	+0.30
Qatar Al-Shaheen	Mar	Mar*	+2.60	59.12	59.22	+0.30
Banoco Arab Medium	Mar	Aramco	+0.00	60.52	60.62	+0.90
Basrah Light fob Iraq†	Mar	Somo	+0.15	60.77	60.87	+0.90
Basrah Heavy fob Iraq†	Mar	Somo	+1.20	58.22	58.32	+0.90
DFC fob Qatar	Mar	Mar*	+2.80	59.32	59.42	+0.30
LSC fob Qatar	Mar	Mar*	+2.10	58.62	58.72	+0.30

**basis is Dubai swaps †Asia-Pacific destination-restricted cargoes*

Differentials to DME Oman futures, 4:30pm Singapore				$/bl
	Month	Basis	Diff	±
Murban	Mar	Mar DME	+0.67	-1.19
Upper Zakum	Mar	Mar DME	-0.48	-1.19
Das	Mar	Mar DME	-0.08	-1.19
Dubai	Mar	Mar DME	-1.70	-1.00
Basrah Light fob Iraq†	Mar	Mar DME	+1.16	-0.59
Basrah Heavy fob Iraq†	Mar	Mar DME	-1.39	-0.59
Qatar Land	Mar	Mar DME	+0.32	-1.19
Qatar Marine	Mar	Mar DME	-0.18	-1.19
Qatar Al-Shaheen	Mar	Mar DME	-0.49	-1.19
Banoco Arab Medium	Mar	Mar DME	+0.91	-0.59

†Asia-Pacific destination-restricted cargoes

Methodology			$/bl
Dubai forward month calculator			
Ice Brent month 1	Mar		58.97
Dubai EFS month 1	Mar	-	2.40
Dubai swap month 2*	Mar	=	56.57
Dubai forward month 3*	May	=	56.57
Dubai intermonth	Apr/May	+	0.39
Dubai forward month 2	Apr	=	56.96
Dubai intermonth	Mar/Apr	+	1.01
Dubai forward month 1	Mar	=	57.97

**Dubai swap month 2 = Dubai forward month 3*

Oman forward month calculator

	MOG formula	Dubai-Oman spread	Diff to Dubai swaps	Dubai swaps outright	Oman forward midpoint
Mar	+0.00	+3.09	+3.09	56.57	59.66
Apr	+0.00	+1.76	+1.76	56.12	57.88
May	+0.00	+1.40	+1.40	55.69	57.09

MIDEAST GULF

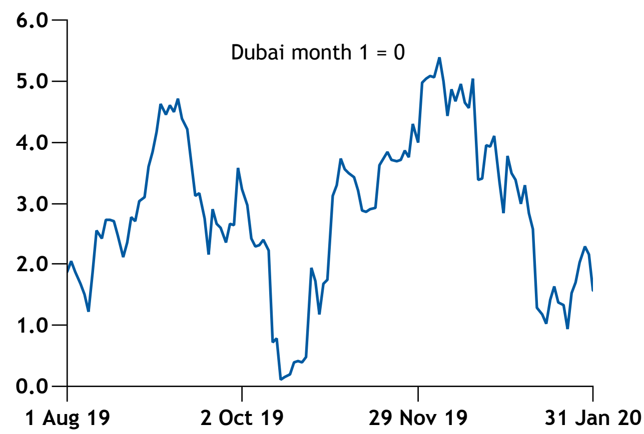
The March official selling price (OSP) for Oman crude has been calculated at $64.89/bl, lower by 60¢/bl from the February OSP. March's OSP is the monthly average of the daily Singapore marker prices for the front-month March Oman futures contract on the DME in January.

On the last trading day of the month, 21 March Dubai partials traded in the Singapore trading window at around $58.40-58.50/bl, with Petrochina, Gunvor, Shell, Lukoil, BP and Mercuria buying from Reliance, Unipec and Hengli. The prices for the Dubai partials were higher by about 70¢/bl compared with the previous day, although March Ice Brent rose by only 11¢/bl in the same period.

One March Oman partial also traded in the Singapore window at $58.45/bl.

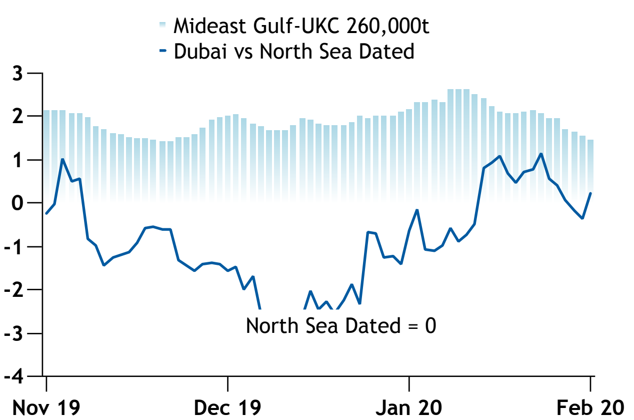
The front-month Brent-Dubai EFS narrowed to $2.40/bl from $2.59/bl the previous session. April's EFS was $1.79/bl, down from $2.11/bl.

Cabinda vs Dubai month 1 *$/bl*

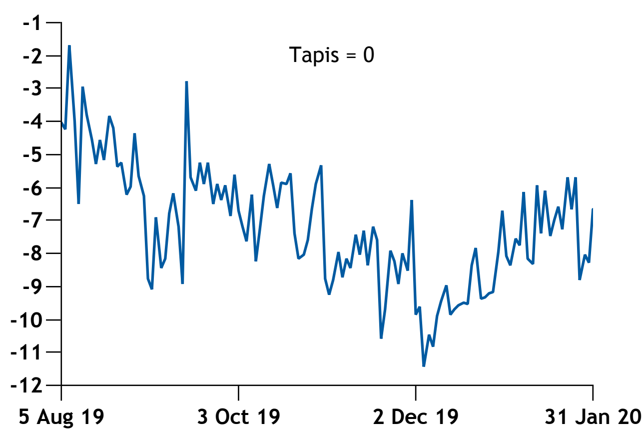


Mideast Gulf					*$/bl*
			Bid	Ask	±
Dubai forward, 4:30pm Singapore					
Mar			57.92	58.02	+0.49
Apr			56.91	57.01	+0.26
May			56.52	56.62	+0.30
Jun			56.07	56.17	+0.31
Dubai forward, 4:30pm London					
Mar			56.83	56.91	-0.51
Apr			55.81	55.91	-0.74
May			55.42	55.52	-0.70
Jun			54.97	55.07	-0.69
Dubai intermonths, 4:30pm Singapore					
Mar/Apr				+1.01	+0.23
Apr/May				+0.39	-0.04
May/Jun				+0.45	-0.01
Dubai swaps, 4:30pm Singapore					
Feb			56.91	57.01	+0.26
Mar			56.52	56.62	+0.30
Apr			56.07	56.17	+0.31
May			55.64	55.74	+0.35
Dubai swaps months are pricing months					
Dubai EFS, 4:30pm Singapore					
Mar				+2.40	-0.19
Apr				+1.79	-0.32
May				+1.90	-0.20
Ice Brent, 4:30pm Singapore					
Mar			+58.97		+0.11
Apr			+57.91		-0.01
May			+57.59		+0.15
Jun			+57.30		+0.24
Oman forward, 4:30pm Singapore					
	Diff	Dubai swaps	Bid	Ask	±
Mar	+3.09	Mar	59.61	59.71	+1.49
Apr	+1.76	Apr	57.83	57.93	+1.23
May	+1.40	May	57.04	57.14	+1.32

Dubai vs North Sea Dated, MEG freight *$/bl*



Dubai vs Tapis *$/bl*



ASIA-PACIFIC

Indonesia's state-owned Pertamina bought Australian North West Shelf (NWS) condensate for its TPPI splitter at a premium of about $1.50/bl to North Sea Dated on a cfr Tuban basis, traders said.

The cargo will arrive on 1-3 April. Traders valued March-loading NWS at a discount of 50¢-$1/bl to Dated on a fob basis, weaker from earlier this month when the grade was valued at a discount of below 50¢/bl.

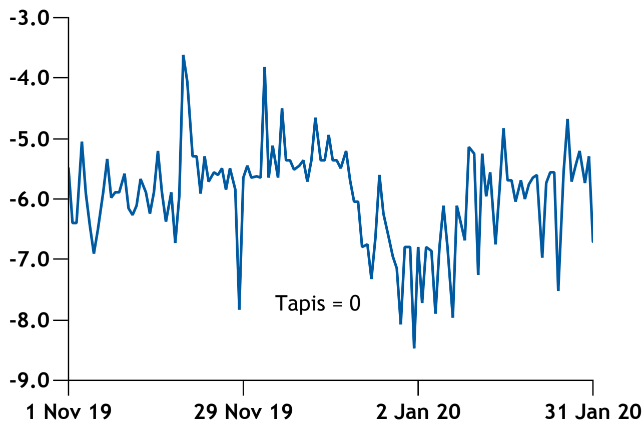
China's Fuhaichuang Petrochemical last week closed a tender to buy sweet and sour condensate arriving in April at Gulei for its 127,000 b/d splitter. It was unclear if Fuhaichuang awarded a previous tender seeking just sour condensate arriving in April.

Asia-Pacific					$/bl
	Basis	Diff	Bid	Ask	±
Minas	ICP	+1.00	56.72	56.82	+0.11
Duri	ICP	+1.00	53.22	53.32	+0.11
Cinta	ICP	+0.30	55.72	55.82	+0.11
Widuri	ICP	+0.30	55.92	56.02	+0.11
Senipah	ICP	+2.00	54.72	54.82	+0.11
Attaka	ICP	+1.50	59.72	59.82	+0.11
Ardjuna	ICP	+0.00	53.97	54.07	+0.11
Belida	ICP	+1.00	55.67	55.77	+0.11
Sutu Den	Dated*	+7.20	63.79	63.89	-1.10
Bach Ho	Dated*	+7.20	63.79	63.89	-1.10
Tapis	Dated*	+8.00	64.59	64.69	-1.10
Kikeh	Dated*	+9.30	65.89	65.99	-1.10
Kimanis	Dated*	+9.40	65.99	66.09	-1.10
Labuan	Dated*	+9.60	66.19	66.29	-1.10
Miri Light	Dated*	+9.30	65.89	65.99	-1.10
Kutubu Light	Dated*	+0.95	57.54	57.64	-1.10
Cossack	Dated*	+2.50	59.09	59.19	-1.10
North West Shelf	Dated*	-0.70	55.89	55.99	-1.50
Ichthys	Dated*	+2.50	59.09	59.19	0.00
Vincent	Dated*	+8.10	64.69	64.79	-1.10
Pyrenees	Dated*	+30.50	87.09	87.19	-1.10
Van Gogh	Dated*	+27.80	84.39	84.49	-1.10
Sudan					
	Basis	Diff	Bid	Ask	±
Nile Blend	Dated*	+2.90	59.49	59.59	-1.10
Dar Blend	Dated*	+6.20	62.79	62.89	-1.10

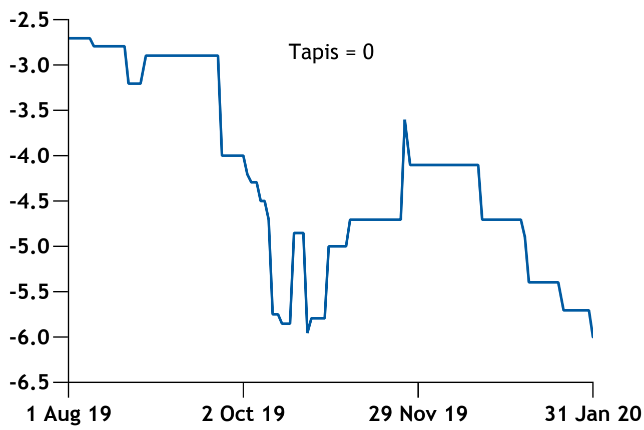
**when North Sea Dated is unavailable owing to a UK holiday, Substitute Dated will be used*

Benchmarks	
North Sea Dated	56.64
Substitute Dated	58.04
Tapis Singapore close	66.04

Saharan Blend vs Tapis $/bl



Bonny Light vs Tapis $/bl

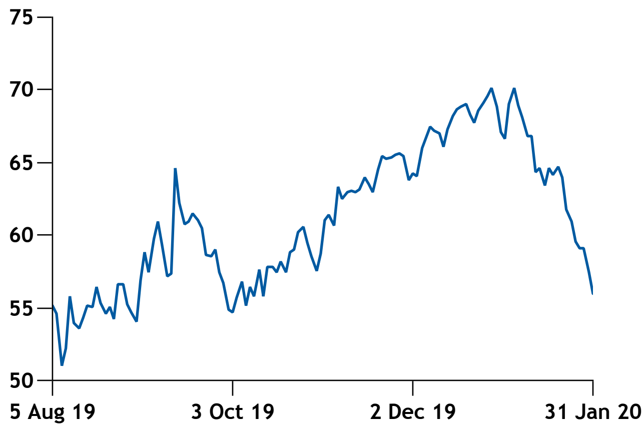


Argus Condensate Index (ACI)	
	$/bl
ACI, North West Shelf	59.64
Qatar DFC cfr Singapore	60.40
Australia North West Shelf (NWS) cfr Singapore	59.64
DFC cfr differential to NWS cfr	0.76
	$/t
VLCC Qatar-Singapore freight	8.68
Aframax northwest Australia-Singapore freight	13.42

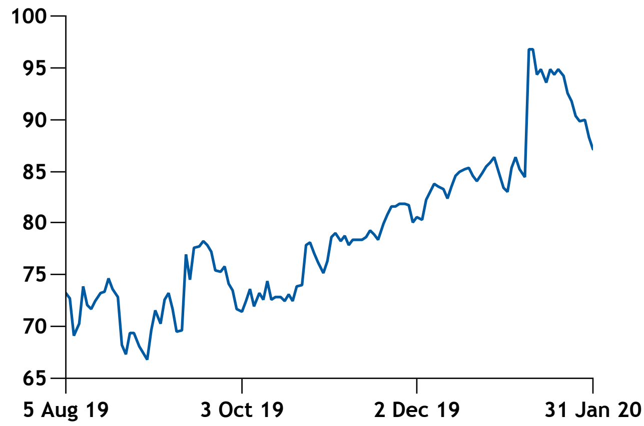
Argus Japanese Crude Cocktail Index					$/bl
	Aug	Sep	Oct	Nov	Dec
Argus JCC (fixed)	67.3902	64.3002	65.0880	64.9383	
Argus JCC (preliminary)					67.1238

ASIA-PACIFIC

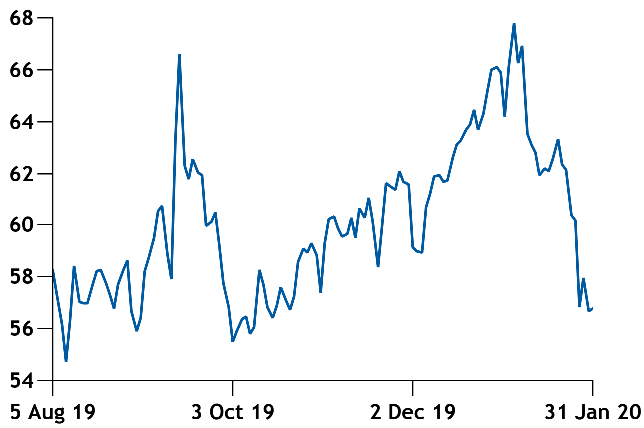
Northwest Shelf *$/bl*



Pyrenees *$/bl*



Minas *$/bl*



Delivered Northeast Asia						*$/bl*
	Month	Basis	Diff	Bid	Ask	±
WTI del NE Asia	Apr	Mar Dubai	+7.00	63.52	63.62	0.3000

Delivered ex-ship Shandong prices								*$/bl*
Grade	Timing	Basis	Diff Low	Diff High	Diff Mid	Low	High	Price
ESPO Blend	na		na	na	na	na	na	na
Djeno	na		na	na	na	na	na	na
Lula	na		na	na	na	na	na	na
Oman	na		na	na	na	na	na	na

Mideast Gulf and Atlantic basin crude cfr Asia (fob plus freight)					
		Singapore		China	
	Month	*$/bl*	±	*$/bl*	±
Mideast Gulf					
Dubai	Feb	59.23	0.33	59.88	0.26
Oman	Feb	60.90	1.33	61.55	1.27
Murban	Feb	61.53	0.15	62.15	0.09
Upper Zakum	Feb	60.42	0.15	61.06	0.08
Qatar Marine	Feb	60.70	0.15	61.33	0.08
Al-Shaheen	Feb	60.43	0.14	61.08	0.07
Basrah Light	Feb	62.09	0.74	62.74	0.67
Basrah Heavy	Feb	59.59	0.74	60.27	0.66
West Africa					
Cabinda	Dtd	62.42	-0.58	63.07	-0.59
Girassol	Dtd	62.34	-0.58	62.99	-0.60
Bonny Light	Dtd	62.89	-0.28	63.52	-0.29
Qua Iboe	Dtd	62.86	-0.27	63.49	-0.28
Escravos	Dtd	63.00	-0.28	63.64	-0.29
North Sea					
Forties	Dtd			62.61	-0.61
US Gulf coast					
WTI	Jan	60.23	-0.62	60.75	-0.63
Mars	Mar	58.54	-0.74	59.06	-0.74
WCS	Mar	52.83	-0.99	53.38	-0.99

US Gulf coast markers for Asia-Pacific, 4:30pm Singapore	*$/bl*
WTI Houston, Asian timestamp	
Mar	56.15
Apr	55.87
WTI Midland, Asian timestamp	
Mar	53.62
Apr	53.97
LLS, Asian timestamp	
Mar	56.85
Apr	56.47
Mars, Asian timestamp	
Mar	53.72
Apr	53.67

Differential to Dubai swaps	Basis	*$/bl*
WTI Houston, Asian timestamp (Mar)	Mar	-0.42
WTI Midland, Asian timestamp (Mar)	Mar	-2.95
LLS, Asian timestamp (Mar)	Mar	+0.28
Mars, Asian timestamp (Mar)	Mar	-2.85

RUSSIA ASIA-PACIFIC

Russian pipeline and terminal operator Transneft expects a 2.4pc rise in ESPO Blend loadings to 34mn t in 2020, although exports may exceed this as the Kozmino terminal has capacity for 36mn t/yr.

ESPO Blend loadings increased to 33.2mn t (675,000 b/d) in 2019, up by 9pc from 2018 and 1.8mn t more than originally scheduled by Transneft. Exports rose because of higher crude production in east Siberia, as well as the eastbound redirection of crude from west Siberia, during second-quarter disruption to westbound flows through the Druzhba pipeline, caused by problems with excessive organic chloride in the system.

China remained the key destination for Kozmino exports in 2019 followed by South Korea and Japan.

Traders continued to wait for second-quarter ESPO Blend offers to emerge.

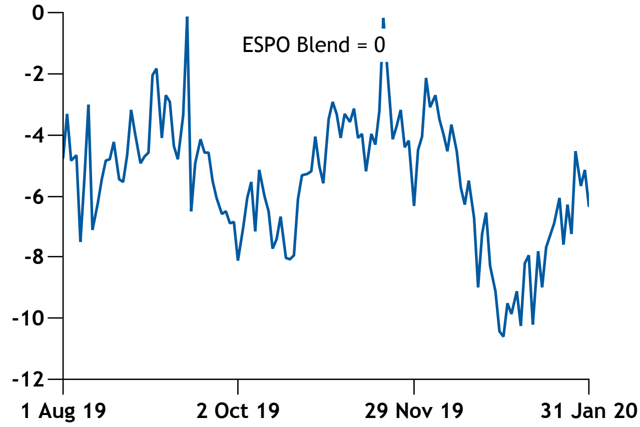
Assessment rationale

ESPO Blend fob Kozmino (PA0007196) is assessed on the basis of transactions, as and when these are identified in the market commentary, in accordance with the methodology.

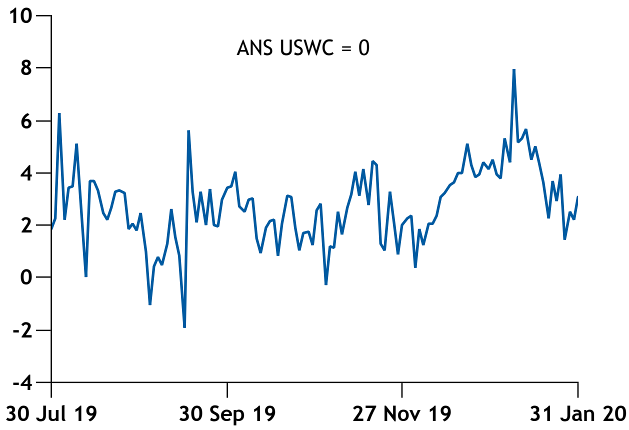
Russia Asia-Pacific						$/bl
	Basis		Diff	Bid	Ask	±
ESPO Blend	Mar	Dubai swaps	+5.39	61.91	62.01	+0.30
ESPO Blend*	Mar	Ice Brent	+2.99	61.91	62.01	+0.30
Sokol	Mar	Dubai swaps	+6.30	62.82	62.92	+0.30
Sakhalin Blend	Mar	Dubai swaps	+4.50	61.02	61.12	+0.30
*Mar-loading cargoes						
Russia-Caspian crude cif basis Singapore						
				Bid	Ask	±
BTC Blend				66.36	66.42	-1.03
Urals (Black Sea)				59.77	59.83	+0.00

Dirty freight rates from Kozmino (ESPO) 100,000t	$/bl
	Rate
To Yosu	0.90
To north China	1.02
To Chiba	1.02
To Singapore	1.09

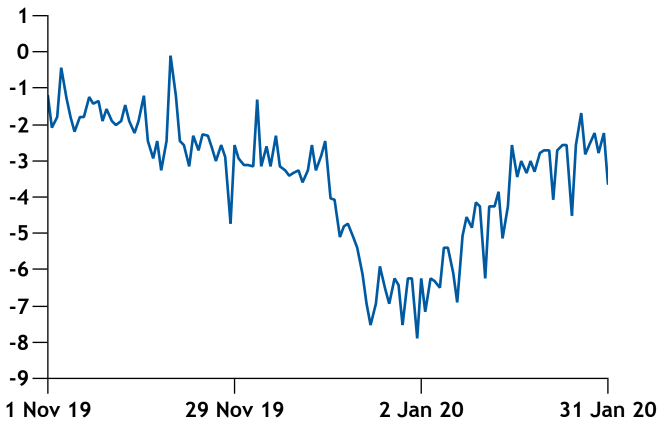
Urals NWE vs ESPO Blend $/bl



ESPO Blend vs ANS USWC $/bl



Azeri Light vs Tapis $/bl



OFFICIAL PRICES

Official formula prices $/bl

	Basis			
Saudi Arabia		**Dec**	**Jan**	**Feb**
Saudi Arabia to US: fob Ras Tanura				
Berri (Extra Light)	ASCI	+5.00	+5.10	+5.10
Arab Light	ASCI	+3.35	+3.35	+3.55
Arab Medium	ASCI	+1.55	+1.55	+1.75
Arab Heavy	ASCI	+0.80	+0.80	+1.00
Saudi Arabia to US: delivered US Gulf				
Berri (Extra Light)	ASCI	+6.30	+6.40	+6.40
Arab Light	ASCI	+4.65	+4.65	+4.85
Arab Medium	ASCI	+2.85	+2.85	+3.05
Arab Heavy	ASCI	+2.10	+2.10	+2.30
Saudi Arabia to NW Europe: fob Ras Tanura*				
Berri (Extra Light)	Ice Brent Settlement	+3.30	+2.10	-0.40
Arab Light	Ice Brent Settlement	-0.05	-1.85	-4.05
Arab Medium	Ice Brent Settlement	-3.40	-5.50	-7.50
Arab Heavy	Ice Brent Settlement	-6.20	-8.70	-10.30
Saudi Arabia to Mediterranean: fob Sidi Kerir*				
Berri (Extra Light)	Ice Brent Settlement	+3.55	+3.95	+0.55
Arab Light	Ice Brent Settlement	+0.10	-0.35	-3.15
Arab Medium	Ice Brent Settlement	-2.80	-3.35	-6.05
Arab Heavy	Ice Brent Settlement	-5.15	-6.05	-8.45
Saudi Arabia to Mediterranean: fob Ras Tanura*				
Berri (Extra Light)	Ice Brent Settlement	+3.45	+3.90	+0.40
Arab Light	Ice Brent Settlement	+0.00	-0.40	-3.30
Arab Medium	Ice Brent Settlement	-2.90	-3.40	-6.20
Arab Heavy	Ice Brent Settlement	-5.25	-6.10	-8.60
Saudi Arabia to Asia-Pacific: fob Ras Tanura				
Arab (Super Light)	Oman/Dubai avg	+6.75	+8.45	+7.85
Berri (Extra Light)	Oman/Dubai avg	+5.10	+5.80	+4.60
Arab Light	Oman/Dubai avg	+3.40	+3.70	+3.70
Arab Medium	Oman/Dubai avg	+2.15	+2.05	+2.45
Arab Heavy	Oman/Dubai avg	+0.45	-0.15	+0.55
Iran		**Dec**	**Jan**	**Feb**
Iran to Mediterranean: fob Sidi Kerir				
Iranian Light	Ice Bwave	na	na	na
Iranian Heavy	Ice Bwave	na	na	na
Foroozan Blend	Ice Bwave	na	na	na
Iran to Mediterranean: fob Kharg Island				
Iranian Light	Ice Bwave	-3.45	-3.60	-6.40
Iranian Heavy	Ice Bwave	-7.70	-7.95	-10.50
Foroozan Blend	Ice Bwave	-7.55	-7.80	-10.35
Soroush	Ice Bwave	-12.50	-12.75	-15.15
Nowruz	Ice Bwave	-12.50	-12.75	-15.15
Iran to NW Europe: fob Kharg Island				
Iranian Light	Ice Bwave	-2.70	-4.35	-6.45
Iranian Heavy	Ice Bwave	-7.10	-8.70	-10.55
Foroozan Blend	Ice Bwave	-6.95	-8.55	-10.40
Iran to Asia-Pacific: fob Kharg Island				
Iranian Light	Oman/Dubai avg	+2.90	+3.25	+3.35
Iranian Heavy	Oman/Dubai avg	+0.45	+0.40	+0.90
Foroozan Blend	Oman/Dubai avg	+0.60	+0.55	+1.05
Soroush	Oman/Dubai avg	-7.50	-7.95	-7.15
Nowruz	Oman/Dubai avg	-7.50	-7.95	-7.15
Kuwait		**Dec**	**Jan**	**Feb**
Kuwait to Asia-Pacific				
Kuwait	Oman/Dubai avg	+1.65	+1.55	+1.95
Kuwait to US				
Kuwait	ASCI	+1.55	+1.55	+1.75
Kuwait	Arab Medium	+0.00	+0.00	+0.00
Kuwait to Mediterranean				
fob Kuwait	Dated	-3.30	-3.70	-6.40
fob Sidi Kerir	Dated	-2.85	-3.40	-6.10
Kuwait to northwest Europe				
fob Kuwait	Dated	-4.75	-6.55	-8.55

Official formula prices (continued) $/bl

	Basis			
Dubai		**Feb**	**Mar**	**Apr**
Dubai fob	Oman MOG OSP	-0.45	-0.25	-0.20
Yemen fob Salif/Ash Shihr				
Marib Light	Dated	na	na	na
Masila	Dated	na	na	na
Iraq		**Dec**	**Jan**	**Feb**
Iraq to Europe				
Kirkuk (fob Ceyhan)	Dated	-2.35	-2.75	-4.20
Basrah Light	Dated	-3.35	-4.25	-5.80
Basrah Heavy	Dated	-7.90	-9.40	-10.85
Iraq to US				
Kirkuk (fob Ceyhan)	ASCI	+0.70	+0.60	+0.70
Basrah Light	ASCI	+1.50	+1.50	+1.60
Basrah Heavy	ASCI	-1.05	-1.05	-0.95
Iraq to Asia-Pacific				
Basrah Light	Oman/Dubai avg	+2.25	+2.10	+2.55
Basrah Heavy	Oman/Dubai avg	-1.25	-1.70	-1.05

*months prior to July were priced against Ice Bwave

Official selling prices $/bl

Abu Dhabi	**Oct**	**Nov**	**Dec**
Murban	63.60	66.60	69.25
Das	62.90	65.90	68.55
Umm Lulu	63.90	66.90	69.55
Upper Zakum	62.25	65.10	68.25
Qatar	**Oct**	**Nov**	**Dec**
Dukhan/Land	62.80	65.95	68.90
Premium to Dubai	+3.43	+3.98	+4.01
Marine	61.75	64.85	68.05
Premium to Dubai	+2.38	+2.88	+3.16
Oman	**Jan**	**Feb**	**Mar**
Oman	62.81	65.49	64.89
Indonesia	**Oct**	**Nov**	**Dec**
Minas	59.98	63.64	67.61
Duri	67.19	70.70	75.38
Widuri	58.90	62.56	66.45
Belida	61.48	64.49	68.25
Attaka	62.06	64.53	68.34
Ardjuna	60.51	64.06	67.89
Cinta	58.75	62.41	65.90
Senipah	56.59	61.20	65.26
Malaysia	**Oct**	**Nov**	**Dec**
Tapis	64.42	68.92	73.92
MCO Alpha Premium	+6.10	+7.30	+8.30
Labuan	65.82	70.32	75.32
Miri	65.82	70.32	75.32
Kikeh	65.82	70.32	75.32
Bintulu	64.42	68.92	73.92
Dulang	65.42	69.91	74.92
Brunei	**Aug**	**Sep**	**Oct**
Seria Light	63.30	67.17	64.45
Champion	63.35	67.22	64.50

Reference prices $/bl

Opec reference basket monthly avg	**Oct**	**Nov**	**Dec**
Opec	59.88	62.94	66.48
Argus Japanese Crude Cocktail Index	**Sep**	**Oct**	**Nov**
Argus JCC	64.30	65.09	64.94

The Argus Japanese Crude Cocktail Index is created by Argus based on data published by the Customs and Tariff Bureau of Japan's Ministry of Finance.

US GULF COAST AND MIDCONTINENT

WTI										$/bl
	Timing	Low	High	WTI formula basis price	WTI formula basis MTD	Roll to next month				
WTI Cushing	Mar	51.54	51.58	51.56	52.73	+0.12				
WTI Cushing	Apr	51.66	51.70	51.68		+0.09				
WTI Cushing	May	51.75	51.79			+0.03				
WTI Cushing	Jun	51.78	51.82							
	Timing	Price								
CMA Nymex	Mar	51.71								
CMA Nymex	Apr	51.78								
CMA Nymex	May	51.78								
CMA Nymex	Jun	51.70								
	Timing	Basis		Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
WTI Houston	Mar	Mar WTI		+3.30	+3.40	+3.36	+3.37	54.86	54.96	54.92
WTI Houston	Apr	Apr WTI		+2.90	+3.00	+2.95	+3.02	54.58	54.68	54.63
WTI Midland	Mar	Mar WTI		+0.65	+0.70	+0.68	+0.76	52.21	52.26	52.24
WTI Midland	Apr	Apr WTI		+0.95	+1.05	+1.00	+1.02	52.63	52.73	52.68
WTI Midland Enterprise	Mar	Mar WTI		+0.65	+0.70	+0.68	+0.75	52.21	52.26	52.24
WTI diff to CMA Nymex	Mar	CMA		-0.12	-0.10	-0.11	-0.05			
WTI postings-plus	Mar	Postings		+3.26	+3.28	+3.27	+3.33			

Midcontinent									$/bl
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
Bakken Clearbrook	Mar	CMA Nymex	-6.00	-5.50			45.71	46.21	
Bakken Cushing	Mar	Mar WTI	+0.80	+0.90	+0.85	+0.81	52.36	52.46	52.41
White Cliffs	Mar	Mar WTI	-0.30	-0.20	-0.25	-0.24	51.26	51.36	51.31
Niobrara	Mar	Mar WTI	+1.10	+1.25	+1.18	+1.16	52.66	52.81	52.74
WCS Cushing	Mar	CMA Nymex	-6.55	-6.50	-6.54	-6.04	45.16	45.21	45.17

Texas									$/bl
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
WTL Midland	Mar	Mar WTI	-0.10	-0.05	-0.07	+0.01	51.46	51.51	51.49
Bakken Beaumont/Nederland	Mar	CMA Nymex + Argus WTI diff to CMA	+2.90	+3.00	+2.95	+2.93	54.50	54.60	54.55
WTS	Mar	Mar WTI	+0.10	+0.15	+0.13	+0.19	51.66	51.71	51.69
WTS	Apr	Apr WTI	+0.35	+0.45	+0.40	+0.38	52.03	52.13	52.08
Southern Green Canyon	Mar	Mar WTI	+0.95	+1.05	+1.00	+1.04	52.51	52.61	52.56
WCS Houston	Mar	CMA Nymex	-4.55	-4.45	-4.50	-4.06	47.16	47.26	47.21

Louisiana									$/bl
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
LLS	Mar	Mar WTI	+3.85	+3.95	+3.90	+3.94	55.41	55.51	55.46
LLS	Apr	Apr WTI	+3.50	+3.60	+3.55	+3.64	55.18	55.28	55.23
HLS	Mar	Mar WTI	+3.30	+3.40	+3.35	+3.48	54.86	54.96	54.91
Thunder Horse	Mar	Mar WTI	+2.65	+2.90	+2.78	+2.77	54.21	54.46	54.34
Bonito	Mar	Mar WTI	+2.20	+2.30	+2.27	+2.27	53.76	53.86	53.83
Poseidon	Mar	Mar WTI	-0.40	+0.05	-0.18	+0.02	51.16	51.61	51.38
Mars	Mar	Mar WTI	+0.85	+0.95	+0.92	+1.03	52.41	52.51	52.48
Mars	Apr	Apr WTI	+0.75	+0.85	+0.80	+0.87	52.43	52.53	52.48
LOOP Sour	Mar	Mar WTI	+0.70	+0.80	+0.77	+0.71	52.26	52.36	52.33

Export arbitrage opportunities for US light sweet pipeline grades are still being established with all eyes on freight rates and Asia-Pacific demand, keeping US prices stable against benchmark prices.

At the Texas Gulf coast, the March WTI Houston premium to the Cushing benchmark was about 5¢/bl stronger

US GULF COAST AND MIDCONTINENT

at $3.36/bl. Its discount to May Ice Brent narrowed by about the same amount to $1.50/bl. March Bakken at Beaumont was steady at a $2.95/bl premium to the Cushing basis.

Dirty freight rates from the US fell amid ample supply as the US lifted sanctions on all Cosco Shipping subsidiaries. The sanctions had been supportive of oil tanker prices since September. Meanwhile, Chinese demand is down with the novel coronavirus outbreak limiting travel and commerce. Preliminary *Argus* data suggest that Chinese refinery throughputs may be down by about 840,000 b/d this month to 12.9mn b/d from a record 13.8mn b/d record in December.

In west Texas, March WTI Midland weakened by about 10¢/bl against the Cushing benchmark to a 68¢/bl premium. It is averaging about 75¢/bl over the basis, about the same as the final February trade month average. April WTI Midland traded at a $1/bl premium to the April Cushing price.

Heavy sour Canadian prices dropped further against the CMA Nymex basis on Friday.

WCS Houston fell by roughly 25¢/bl to a $4.50/bl discount to CMA and WCS Cushing fell by roughly 15¢/bl to a discount of roughly $6.55/bl against the basis.

Fuel oil has reportedly become increasingly profitable to import from areas like Russia and Iraq, encouraging Gulf refiners to turn to the fuel product in lieu of heavy crude to improve their coking margins. The competition adds to increased volumes at the US Gulf coast as railed crude supplies from Canada rise.

In Louisiana, March Mars rose 5¢/bl to a premium of roughly 90¢/bl over Cushing but March LLS fell 10¢/bl to a premium of roughly $3.90/bl.

Assessment rationale

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

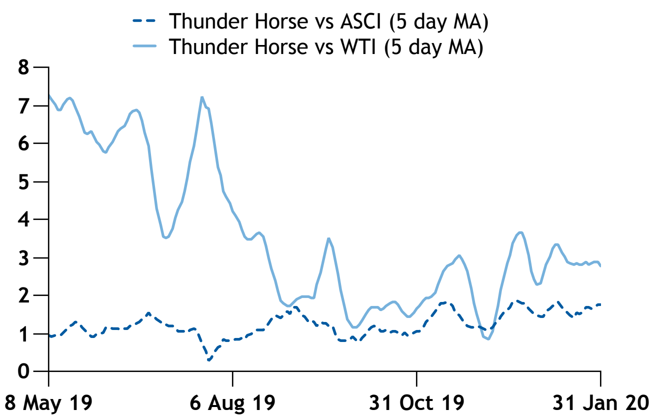
The Bakken at Clearbrook assessment was left unchanged as no fresh trade or market discussion emerged.

No Poseidon trades were reported. The grade was assessed roughly at the midpoint of bids and offers versus Mars, with the bids and offers applied to the Mars range.

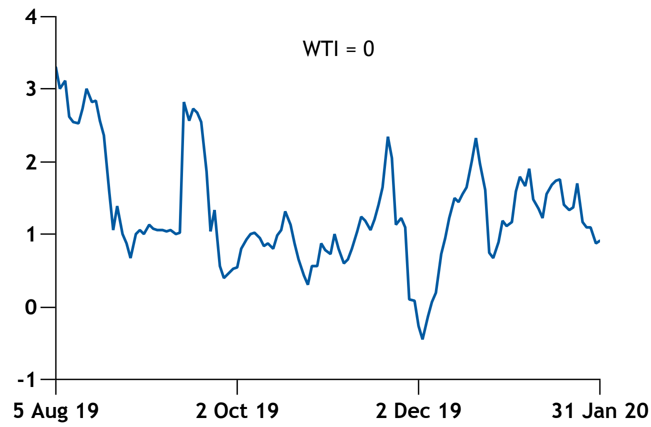
Argus Sour Crude Index (ASCI™) *$/bl*

	Month	Basis	Diff	Price
ASCI	Mar	Mar WTI	+0.93	52.49

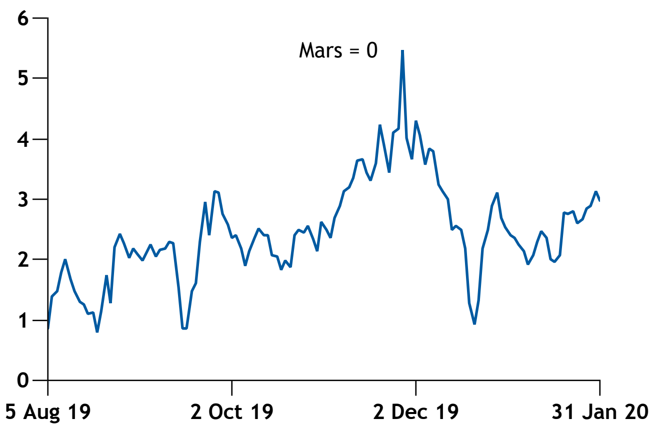
Thunder vs ASCI, Thunder vs WTI *$/bl*



Mars vs WTI *$/bl*

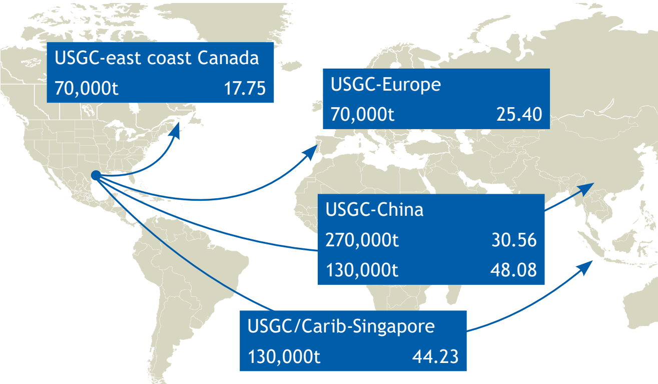


LLS vs Mars *$/bl*



US WATERBORNE

Dirty freight rates $/t



Freight rate	$ lumpsum
Route	**Daily Worldscale**
USGC Aframax reverse lightering	345,000

The US Treasury Department this session removed sanctions on all subsidiaries of China-based Cosco Shipping, reversing course on an action that has put upward pressure on oil tanker rates since September.

Treasury imposed sanctions on a subset of Cosco entities in September, as a penalty for their alleged involvement in transporting Iranian crude to China. Washington did not aim to target Cosco's parent company, a major crude and LNG fleet operator with 137 tankers on its fleet. But Cosco's complicated ownership structure sent its global partners scrambling to limit their exposure to the measure.

As a result, crude tanker rates on key routes climbed to all-time highs in October last year as uncertainty over the financial ties between the sanctioned subsidiaries and the parent company caused oil traders to avoid all Cosco tankers. Research firm Alphatanker said this month the lifting of Cosco sanctions would exert "enormous downward pressure" on rates.

A further drop in VLCC rates would support the arbitrage for US crude sales to Asia-Pacific destinations, though flows to China currently remain at a trickle in large part because of the recent outbreak of the novel coronavirus across central China that could potentially put a cap on oil demand. The coronavirus is counteracting bullish expectations set earlier this month when Beijing and Washington signed an interim trade deal that would boost US crude flows to China in 2020 and 2021.

WTI fob Houston was assessed at a roughly $1.35/bl discount to May Ice Brent this session, which would reflect a roughly $2.60/bl premium to the benchmark on a delivered China basis.

Bakken fob Beaumont was assessed 10¢/bl lower than waterborne WTI at an assessed discount to May Ice Brent between

US Gulf coast waterborne				$/bl
	Timing	**Basis**	**Diff low/high**	**Low/High**
WTI fob Houston	Prompt	Mar CMA Nymex	+3.31/+3.46	55.02-55.17
	Prompt	Mar WTI Houston	+0.10/+0.25	
	Prompt	May Ice	-1.40/-1.25	
Bakken fob Beaumont/ Nederland	Prompt	Mar CMA Nymex	+3.21/+3.36	54.92-55.07
	Prompt	Mar WTI Houston	0.00/+0.15	
	Prompt	May Ice	-1.50/-1.35	

US Gulf coast prices vs global benchmarks				$/bl
	Timing	**Basis**	**Price**	**Differential**
WTI Houston	Mar	Mar Dubai swaps*	56.15	-0.42
	Mar	Jun Ice Brent		-1.32
	Mar	Jun Dubai		-1.20
WTI Midland	Mar	Mar Dubai swaps*	53.62	-2.95
	Mar	Jun Ice Brent		-4.00
	Mar	Jun Dubai		-3.88
LLS	Mar	Mar Dubai swaps*	56.85	+0.28
	Mar	Jun Ice Brent		-0.78
	Mar	Jun Dubai		-0.66
Mars	Mar	Mar Dubai swaps*	53.72	-2.85
	Mar	Jun Ice Brent		-3.76
	Mar	Jun Dubai		-3.64
Bakken Beaumont/ Nederland	Mar	Jun Ice Brent		-1.69
	Mar	Jun Dubai		-1.57

*Argus uses today's US pipeline outright prices at Nymex settlement to calculate spreads to today's Ice Brent settlement and Argus Dubai prices three months forward, to account for travel time from the US to Asia-Pacific. *Outright prices are calculated by applying the previous day's US pipeline differentials to today's Singapore Nymex WTI 4.30pm timestamp, to then calculate spreads to Dubai swaps at that timestamp.*

Anticipated US crude export cargoes — 15-45 days forward						
Tanker name	**Approximate volume '000 *bl***	**Estimated grade**	**Load window**	**Load port**	**Chartered destination**	**ETA**
B. Kasturi Tiga	2,000	WTI	26 Feb	tbd	Singapore	12 Apr
Sara	2,000	WTI	15 Feb	Corpus Christi, Texas	Asia-Pacific	tbd
Ellinis	2,000	WTI and Eagle Ford/Mars	25 Feb	tbd	South Korea	22 Mar
Vinga	1,000	Bakken	8-18 Feb	tbd	Thailand	7 Apr
Front Classic	1,000	Eagle Ford	15 Feb	Corpus Christi, Texas	Brazil	8 Mar
DHT Leopard	950	WTI	6-8 Mar	tbd	Cilicap, Indonesia	1-10 Apr
Agios Nikolas	2,000	WTI	8 Mar	tbd	Singapore	23 Apr

US WATERBORNE

$1.50/bl and $1.35/bl this session.

Offers were meanwhile due this session for a mini-term tender issued this week by Indian state-controlled refiner IOC and for two tenders issued by smaller state-run Hindustan Petroleum (HPCL).

Eligible grades in HPCL's tender, which was seeking 10-20 April deliveries to the Visakhapatnam refinery on the eastern coast of India, included WTI and 37.2°API Wyoming Sweet.

IOC was seeking May deliveries to the Paradip terminal on the eastern coast of India, June deliveries to Mundra on the western coast and July deliveries to the western Vadinar port. Eligible grades included Bakken, WTI, 45°API Eagle Ford, Light Louisiana Sweet (LLS), Mars, Southern Green Canyon (SGC), Poseidon, Eugene Island, Thunder Horse, Bonito Sour and Alaskan North Slope (ANS).

ANS was steady at a $2.45/bl premium to Ice Brent in a quiet session to reflect the level at which it was last reported trading for March delivery to the US west coast.

The grade has sold in five reported deals so far for March delivery, changing hands at premiums to the international benchmark between $2.45/bl and $3/bl for a preliminary monthly average of $2.84/bl.

This reflects a 31¢/bl increase against CMA Ice Brent compared to the average $2.53/bl premium to Brent established during the February trade cycle, when four deals were reported at premiums from $2.50/bl to $2.60/bl.

Assessment rationale

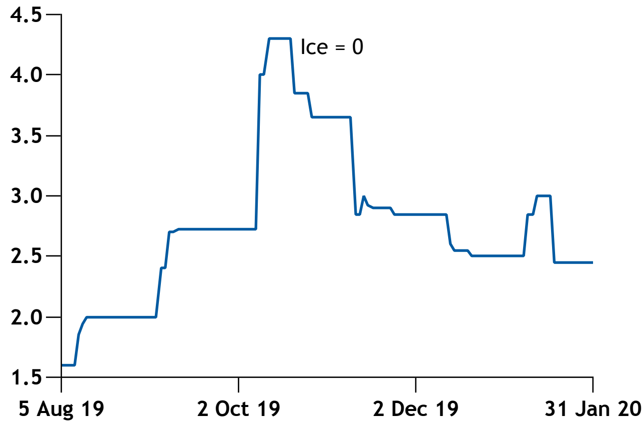
The ANS assessment against CMA Nymex WTI was adjusted to maintain the spread to CMA Ice Brent established when the grade last traded.

US west coast pipeline, 30 Jan			$/bl
	Basis	Diff to Ice Brent	Outright
Light postings avg	Mar	+1.50	59.79
Heavy postings avg	Mar	-3.27	55.02

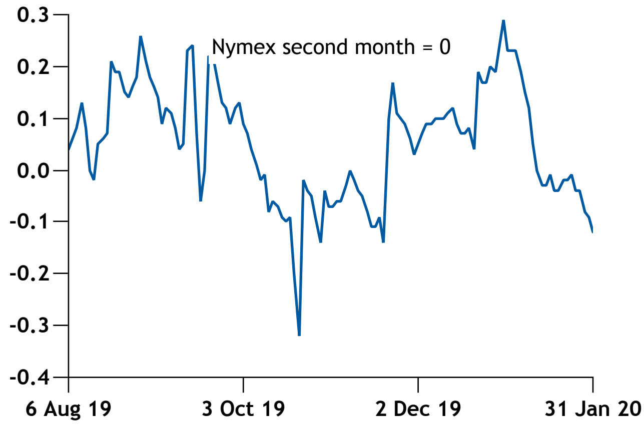
US west coast waterborne				$/bl
	Timing	Basis	Diff low/high	Low/High
ANS del	Mar	CMA Nym	+7.11/+7.21	58.82-58.92
	Mar	CMA Ice	+2.40/+2.50	
ANS del concurrent	Mar	Mar WTI	+7.11/+7.21	58.67-58.77

ANS del USWC monthly volume-weighted average		$/bl
	Basis	Diff
Dec	Ice CMA	+4.08
Jan	Ice CMA	+2.92
Feb	Ice CMA	+2.53
Mar MTD	Ice CMA	+2.84

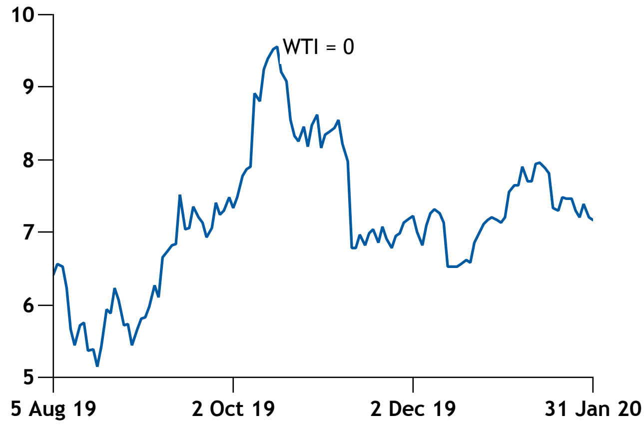
ANS vs Ice $/bl



Nymex: First month vs second month $/bl



ANS vs WTI $/bl



LATIN AMERICA

Guyana's first cargo of its new Liza crude underwent a ship-to-ship transfer this session in the US Gulf coast.

The crude aboard the Suezmax *Yannis P* partially offloaded into the Aframax *Kapten Caroq* Friday in Texas' Galveston Offshore Lightering Area (Gola), according to oil analytics firm Vortexa. Both tankers are signalling Galveston as their destination. The *Yannis P* reached US waters Thursday, according to vesseltracking, and the 1mn bl on it are destined for processing in the ExxonMobil refining system.

This is the first lifting of the 32.1°API crude with 0.51pc sulfur and is being processed in the Exxon refining system to insure future pricing and quality for the crude. The first commercial/spot crude lifting of Liza, awarded in December, is expected to load next month with Shell Western Supply and Trading expected to take delivery.

ExxonMobil started production of Liza crude from the deepwater Stabroek block in December. The Liza field is projected to reach 120,000 b/d in the first quarter of 2020, while the Stabroek block as a whole will produce at least 750,000 b/d in 2025. The joint-venture comprises ExxonMobil with a 45pc stake, US independent Hess with 30pc and Chinese state-owned CNOOC unit Nexen with 25pc. Under the revenue-sharing agreement between ExxonMobil and Guyana, 75pc of oil production will initially be allocated to the company and its partners for cost recovery of investments made in oil infrastructure, according to the government. The remaining 25pc will be split on a 50:50 basis with Guyana.

The contract includes a royalty of 2pc on gross earnings, leading the government to receive 14.5pc of initial oil revenues.

But ExxonMobil's growing oil discoveries offshore Guyana are amplifying domestic calls for a review of production-sharing contract (PSC) terms on the eve of the South American country's first elections as an oil exporter.

Opposition political parties vying to unseat the ruling coalition in 2 March parliamentary elections contend that the existing PSC terms are "generous" to foreign oil companies.

South America *$/bl*

	Timing	Basis	Diff low/high	Low/High
Colombia				
Vasconia	Prompt	May WTI	-0.30/+0.20	51.47-51.97
		May Ice	-4.95/-4.45	
Castilla	Prompt	May WTI	-4.35/-3.85	47.42-47.92
		May Ice	-9.00/-8.50	
Argentina				
Escalante	Prompt	May WTI	+4.85/+5.40	56.62-57.17
		May Ice	+0.20/+0.75	

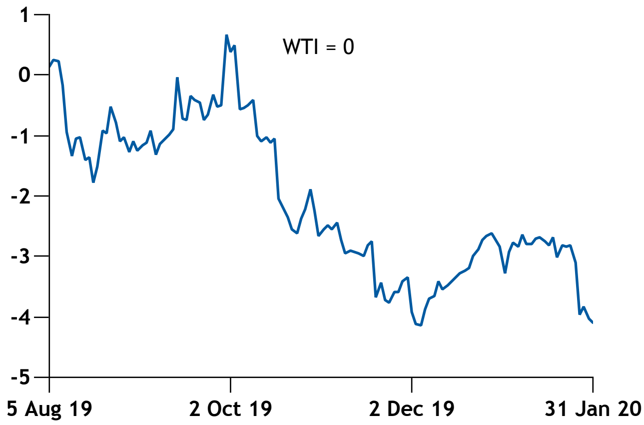
Mexico *$/bl*

	Timing	Basis	Diff to Nymex	Price
Maya				
Excluding USWC	Jan	Mar	-3.51	48.05
USWC	Jan	Mar	-2.16	49.40
Isthmus				
Excluding USWC	Jan	Mar	+0.09	51.65
USWC	Jan	Mar	+0.14	51.70
Olmeca				
Americas	Jan	Mar	+2.54	54.10

Mexico K-factors *$/bl*

	Timing	K-factor
Maya USGC	Jan	-8.00
Maya USWC	Jan	-6.65
Maya Europe	Jan	-10.05
Maya Asia	Jan	-6.35
Isthmus USGC	Jan	-4.40
Isthmus USWC	Jan	-4.35
Isthmus Europe	Jan	-4.60
Isthmus Asia	Jan	-1.50
Olmeca USGC	Jan	-1.95
Olmeca Europe	Jan	-1.85

Castilla vs WTI *$/bl*



CANADA

Canada domestic									$/bl
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average
Syncrude (SSP)	Mar	CMA Nym	-4.40	-4.00	-4.20	-4.20	47.31	47.71	47.51
WCS	Mar	CMA Nym	-20.80	-20.55	-20.68	-20.68	30.91	31.16	31.03
WCS Cushing	Mar	CMA Nym	-6.55	-6.50	-6.54	-6.04	45.16	45.21	45.17

Canada domestic				$/bl
	Timing	Basis	Diff low/high	Low/High
Condensate	Mar	CMA Nym	-3.35/-2.35	48.36/49.36
MSW	Mar	CMA Nym	-10.10/-9.60	41.61/42.11
LSB	Mar	CMA Nym	-10.85/-9.65	40.86/42.06
LLB	Mar	CMA Nym	-20.40/-20.15	31.31/31.56

Canadian crude assessments were steady day-over-day in a quiet session on the eve of the March trade cycle.

March Western Canadian Select (WCS) was assessed $20.68/bl under the CMA, up by 7¢/bl from the session before. The heavy sour benchmark's outright price slipped by 45¢/bl on account of a falling basis, settling at $31.04/bl.

WCS in Hardisty narrowed its discount to the same grade in Houston by 31¢/bl, settling at $16.18/bl. This is the tightest spread since 10 December when $15.69/bl was recorded.

In output news, Imperial Oil's 2019 crude production was up by 4pc on the year as its Syncrude joint venture matched a 10-year high.

Annual production averaged 398,000 b/d in 2019, up from 383,000 b/d in 2018 despite grappling with a province-wide curtailment order that began in January 2019.

The 325,000 b/d Syncrude project had annual production of 73,000 b/d, net to Imperial, matching the highest level reported since 2010. Syncrude reached that level even with a planned turnaround in the final quarter of the year.

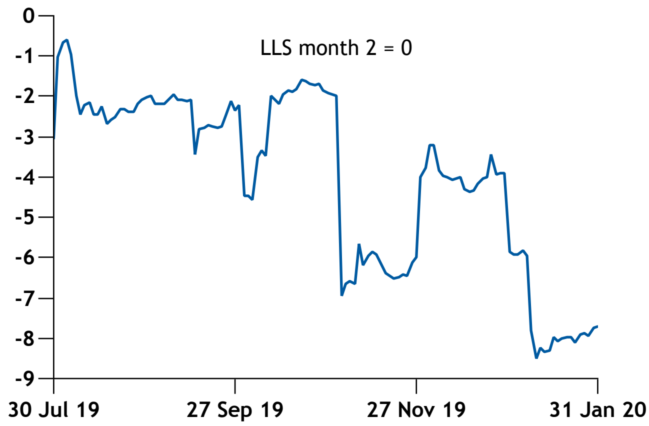
Syncrude provided Imperial with 66,000 b/d of crude in the fourth quarter, down by 23,000 b/d from a year earlier. Imperial owns a 25pc stake of Syncrude, a mining operation that produces synthetic crude oil.

The company's Kearl project showed production of 205,000 b/d across 2019, comparable to the year before. At 208,000 b/d, the fourth quarter was down by 9,000 b/d from the same period in 2018 on account of a planned turnaround.

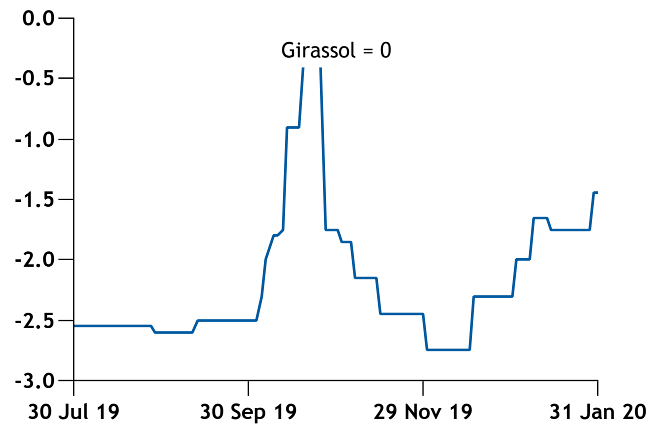
Imperial expects that supplemental crushing facilities will reduce downtime, improve reliability and enable Kearl to achieve 240,000 b/d in 2020. Imperial owns 71pc of the Kearl project while ExxonMobil owns the remaining 29pc.

Canada waterborne prices				$/bl
	Timing	Basis	Diff low/high	Low/High
Hibernia	Dated	North Sea	-0.25/+0.75	56.39/57.39
Terra Nova	Dated	North Sea	-0.35/+0.65	56.29/57.29

Canadian Synthetic vs LLS month 2 $/bl



Hibernia vs Girassol $/bl



Assessment rationale

The minimum volume was met and volume-weighted average calculated according to the methodology for WCS Cushing and WCS Houston.

DEALS DONE

North America pipeline deals done							
Grade	Location	Trade month	Basis month	Differential basis	Differential	Price *$/bl*	Volume *b/d*
WTI	Cushing Oklahoma	Mar	Mar	CMA Nymex trade days	-0.11		5,000
WTI	Cushing Oklahoma	Mar	Mar	WTI Nymex Settlement	+0.00		9,677
WTI	Cushing Oklahoma	Mar	Mar	WTI Nymex Settlement	+0.00		9,677
WTI	Magellan East Houston	Mar	Mar	WTI	+3.30		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		3,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		3,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		3,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		3,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		5,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		5,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.35		6,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.40		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.40		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.40		1,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.40		2,000
WTI	Magellan East Houston	Mar	Mar	WTI	+3.40		2,000
WTI	Midland Enterprise	Apr	Apr	WTI	+1.00		3,333
WTI	Midland Enterprise	Apr	Apr	WTI	+1.00		10,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		3,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.65		5,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		1,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		2,000
WTI	Midland Enterprise	Mar	Mar	WTI	+0.70		3,226
Bakken	Beaumont / Nederland	Mar	Mar	WTI	+2.95		5,000
Bakken	Cushing Oklahoma	Mar	Mar	WTI	+0.85		3,000
Bakken	Cushing Oklahoma	Mar	Mar	WTI	+0.85		15,000
Bonito sour	St. James Louisiana	Mar	Mar	Mars	+1.35		1,000
Cold Lake Houston	Houston area	Mar	Mar	CMA Nymex trade days	-4.50		1,935
Cold Lake Houston	Houston area	Mar	Mar	CMA Nymex trade days	-4.50		3,226
HLS	Empire Louisiana	Mar	Mar	WTI	+3.35		1,000
LLS	St. James Louisiana	Mar	Mar	WTI	+3.90		2,000
LLS	St. James Louisiana	Mar	Mar	WTI	+3.90		2,000
LLS	St. James Louisiana	Mar	Mar	WTI	+3.90		3,000
LOOP Sour	Clovelly Louisiana	Mar	Mar	Mars	-0.15		3,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.85		1,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.90		1,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.90		2,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.90		2,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.95		2,000
Mars	Clovelly Louisiana	Mar	Mar	WTI	+0.95		3,000

DEALS DONE (CONTINUED)

North America pipeline deals done							
Grade	Location	Trade month	Basis month	Differential basis	Differential	Price *$/bl*	Volume *b/d*
Southern Green Canyon	Nederland / Texas City	Mar	Mar	WTI	+1.00		2,000
WCS Cushing	Cushing Oklahoma	Mar	Mar	CMA Nymex trade days	-6.55		1,290
WCS Cushing	Cushing Oklahoma	Mar	Mar	CMA Nymex trade days	-6.55		3,226
WCS Cushing	Cushing Oklahoma	Mar	Mar	CMA Nymex trade days	-6.50		1,613
WTL Midland	Midland Texas	Mar	Mar	WTI Midland	-0.75		5,000
WTS	Midland Texas	Mar	Mar	WTI Midland	-0.55		2,000

Global crude deals										*$/bl*
Region	Grade	Deal date	Delivery period	Volume *bl*	Price	Diff timing	Diff basis	Diff price	Loading from	Loading to
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	EFP	31 Jan 20	Apr	600,000	0.13					
Northwest Europe	North Sea	31 Jan 20	Apr	100,000	56.90					
Northwest Europe	North Sea	31 Jan 20	Apr	100,000	56.88					
Northwest Europe	North Sea	31 Jan 20	Apr	100,000	56.87					
Northwest Europe	North Sea	31 Jan 20	Apr	100,000	56.82					
Northwest Europe	North Sea	31 Jan 20	Mar	600,000		Apr	North Sea	+1.05		
Northwest Europe	North Sea	31 Jan 20	Mar	600,000		Apr	North Sea	+1.05		
Northwest Europe	North Sea	31 Jan 20	Mar	600,000		Apr	North Sea	+1.05		
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.42	3 Feb 20	7 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.42	3 Feb 20	7 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.55	10 Feb 20	14 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.50	10 Feb 20	14 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		200,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		200,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.60	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		200,000		Apr	North Sea	- 0.65	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		200,000		Apr	North Sea	- 0.64	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.62	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.62	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		200,000		Apr	North Sea	- 0.62	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000		Apr	North Sea	- 0.62	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		300,000			CFD	+0.08	3 Feb 20	7 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		500,000			CFD	+0.08	3 Feb 20	7 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		300,000			CFD	+0.08	3 Feb 20	7 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		500,000			CFD	+0.29	17 Feb 20	21 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000			CFD	+0.10	24 Feb 20	28 Feb 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000			CFD	+0.12	2 Mar 20	6 Mar 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		100,000			CFD	+0.12	2 Mar 20	6 Mar 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		250,000			CFD	+0.10	2 Mar 20	6 Mar 20
Northwest Europe	North Sea Dated CFD	31 Jan 20		250,000			CFD	+0.10	2 Mar 20	6 Mar 20

DAILY NETBACKS

Northwest Europe (31 Jan)								$/bl
	Complex				Simple			
	Yield	Freight	Netback	± 30 Jan	Yield	Freight	Netback	± 30 Jan
Arab Light	58.00	1.46	56.54	-0.79	57.84	1.46	56.38	-0.86
Arab Heavy	51.72	1.52	50.20	-0.90	51.67	1.52	50.15	-0.94
Azeri	63.82	1.41	62.41	-0.84	63.82	1.41	62.41	-0.84
Basrah Light	50.82	1.51	49.31	-0.84	50.81	1.51	49.30	-0.84
Bonny Light	64.46	2.26	62.20	-0.55	64.46	2.26	62.20	-0.55
Brass River	63.37	2.19	61.18	-0.42	63.42	2.19	61.23	-0.42
Brent	62.19	0.96	61.23	-0.88	62.20	0.96	61.24	-0.88
Es Sider	62.24	1.40	60.84	-0.87	62.24	1.40	60.84	-0.88
Forties	59.89	0.95	58.94	-0.80	59.79	0.95	58.84	-0.90
Iranian Light	58.10	1.46	56.64	-0.72	58.05	1.46	56.59	-0.74
Kirkuk	55.36	1.45	53.91	-0.69	55.34	1.45	53.89	-0.71
Kuwait	52.89	1.49	51.40	-0.93	52.91	1.49	51.42	-0.89
Murban	60.74	1.40	59.34	-0.71	60.53	1.40	59.13	-0.83
Saharan Blend	61.44	1.33	60.11	-0.65	61.43	1.33	60.10	-0.66
Urals	58.47	0.00	58.47	-1.08	58.38	0.00	58.38	-1.16
Zueitina	61.65	1.39	60.26	-0.93	61.56	1.39	60.17	-0.94

Singapore (31 Jan)								$/bl
	Complex				Simple			
	Yield	Freight	Netback	± 30 Jan	Yield	Freight	Netback	± 30 Jan
Arab Light	62.12	1.78	60.34	-0.11	55.53	1.78	53.75	-0.48
Arab Heavy	58.81	1.85	56.96	-0.30	50.78	1.85	48.93	-0.72
Basrah Light	59.10	1.84	57.26	-0.32	52.35	1.84	50.51	-0.67
Dubai	62.23	1.81	60.42	-0.11	54.61	1.81	52.80	-0.45
ESPO Blend	63.16	1.09	62.07	-0.15	54.39	1.09	53.30	-0.55
Iranian Heavy	60.61	1.83	58.78	-0.19	52.00	1.83	50.17	-0.57
Minas	62.48	2.23	60.25	-0.19	52.71	2.23	50.48	-0.47
Murban	63.56	1.71	61.85	+0.05	56.85	1.71	55.14	-0.24
Oman	60.79	1.82	58.97	-0.15	51.79	1.82	49.97	-0.60

US Gulf coast (31 Jan)								$/bl
	Complex				Simple			
	Yield	Freight	Netback	± 30 Jan	Yield	Freight	Netback	± 30 Jan
Arab Light	62.55	1.87	60.68	+0.85	61.27	1.87	59.40	+0.76
Arab Medium	60.30	1.90	58.40	+0.68	58.97	1.90	57.07	+0.87
Basrah Light	58.78	1.93	56.85	+0.56	56.86	1.93	54.93	+0.94
Bonny Light	65.83	2.76	63.07	+0.91	65.78	2.76	63.02	+1.31
LLS	63.87	0.00	63.87	+0.33	63.87	0.00	63.87	+0.51
Mars	62.44	0.00	62.44	+0.88	60.90	0.00	60.90	+0.75
Maya	56.82	2.94	53.88	+1.91	55.40	2.94	52.46	+1.80
WTI	62.70	0.00	62.70	+0.13	62.69	0.00	62.69	+0.38

US west coast (31 Jan)								$/bl
	Complex				Simple			
	Yield	Freight	Netback	± 30 Jan	Yield	Freight	Netback	± 30 Jan
ANS	69.52	0.00	69.52	-1.50	64.66	0.00	64.66	-1.53
Oriente	65.66	4.58	61.08	-1.22	60.96	4.58	56.38	-0.59
Oriente implied fob*			51.34	-0.26				

**This price takes the Oriente complex netback and subtracts a USWC refining margin for a grade of similar quality.*

INFRASTRUCTURE NEWS

Shell lifts Bonny Light force majeure

Shell has lifted force majeure on Nigerian Bonny Light crude exports.

The company, which operates the Bonny Light export terminal, declared force majeure on loadings of the light sweet grade on 20 January following the closure of the 150,000 b/d Nembe Creek Trunk Line (NCTL) by the pipeline's operator Aiteo.

The NCTL is one of two pipelines that transport Bonny Light to the export terminal. The other one, the Trans Niger Pipeline (TNP), has continued operating during the NCTL shutdown.

The Suezmax *Violando* left the Bonny Light terminal on 27 January laden with 950,000 bl. It is on route towards the Polish port of Gdansk. A similar-sized tanker, *Malibu,* completed loading operations at the terminal on 30 January and is expected to head for Asia-Pacific, according to ship tracking data.

By Nicola De Sanctis

Total shuts down Donges CDU

The crude distillation unit (CDU) at Total's 222,000 b/d Donges refinery in France shut down yesterday because of a technical fault. The unit will be off line until 8 February at least.

Donges is among the French refineries that have been affected by intermittent strike action over government pension reform plans since early December. Most recently, the CDU at Donges was out of action earlier this month after strikes by port workers at Saint-Nazaire blocked crude deliveries to the refinery. Strikes at the refinery itself prolonged the shutdown, which lasted from 12 to 17 January.

The latest disruption at Donges could raise Total's buying interest in vacuum gasoil (VGO), as there is no sign that the company will shut down the cracking units that take VGO as a feedstock.

European refining capacity is being constrained after a strong return from maintenance programmes at the start of the year. Russian firm Lukoil has shut down the fluid catalytic cracker (FCC) at its 320,000 b/d Priolo refinery in Sicily. Poland's Grupa Lotos has taken the delayed coker unit (DCU) off line at its 210,000 b/d Gdansk refinery for maintenance, which it says it planned to coincide with weak middle distillate margins.

Diesel margins fell to a 31-month low of $10.25/bl in northwest Europe earlier this week.

Total's 105,000 b/d Feyzin refinery in France will be fully shut down from mid-February until the end of April for planned maintenance.

By Benedict George and Robert Harvey

Milazzo shuts FCC, catalytic reformer

A fluid catalytic cracker (FCC) and a catalytic reformer were temporarily shut down during the past week at the 235,000 b/d Milazzo refinery operated by Italy's Eni and Kuwait's state-owned KPC.

It is likely that both units have now restarted after several days offline.

The FCC converts low-sulphur vacuum gasoil (VGO) to gasoline primarily. The catalytic reformer converts heavy naphtha to reformate, a gasoline blendstock. The economics of gasoline production have been exceptionally weak over the past month. Traders have said that FCCs around Europe have struggled to turn a profit.

Mediterranean gasoline cargoes have been assessed at a discount to low-sulphur VGO cargoes since 4 December, with that discount averaging $4.78/bl in January so far.

Another challenge to refining economics in the Mediterranean is the spike in the price of light sweet crudes. The spike has been partly caused by the closure of Libya's central and eastern ports on the orders of the Libyan National Army (LNA) military group. The disruption has restricted supply of Libyan crude, inflating regional light sweet crude prices.

The Milazzo refinery sometimes procures Azeri BTC Blend crude, a competitor of Libyan supplies. Mediterranean gasoline cargoes were assessed at an average premium of $1.51/bl to Azeri BTC in the two weeks to 29 January, down from $3.96/bl in the previous two weeks. Gasoline cargoes fell to a discount to Azeri BTC on 27-28 January.

It could not be confirmed whether any other units at the refinery were running reduced rates. Eni did not respond to a request for comment.

Lukoil has taken an FCC offline at its 320,000 b/d Priolo refining complex. That shutdown could also be related to the weak economics of gasoline production. Restrictions on Mediterranean refining capacity are beginning to mount — Total will carry out a full maintenance turnaround at the 105,000 b/d Feyzin refinery from mid-February until the end of April.

Refiners in northern Europe are also responding to weak clean product margins. Poland's Grupa Lotos said it scheduled this week's maintenance shutdown of its delayed coker unit to coincide with the low price of diesel, the product primarily made by the DCU.

By Benedict George and Ruxandra Iordache

INDUSTRY NEWS

ExxonMobil 2019 output rises as capex jumps

ExxonMobil increased output last year by 3pc, driven by its unconventional Permian operations, as the US oil major stepped up spending to complete large projects that will boost future production.

Output in 2019 rose to 3.95mn b/d of oil equivalent (boe/d) from 3.83mn boe/d a year earlier. While production failed to meet the company's 4mn boe/d target for the year, fourth quarter output rose to 4.02mn boe/d from 4.01mn boe/d a year earlier.

The increase was driven by liquids, which rose to 2.44mn b/d in the quarter against 2.35mn b/d a year earlier. Natural gas volumes, on the other hand, fell to 9.5mn cf/d from 9.9mn cf/d.

The trajectory of production increases is set to remain strong in coming quarters as the company ramps up output from a massive offshore project in Guyana, which came online in December, helping feed global demand for crude.

"Growth in demand for the products that underpin our businesses remains strong," chief executive Darren Woods said. "We remain focused on improving our base businesses."

As ExxonMobil ramped up spending on major projects in Guyana, the US and elsewhere, 2019 capital expenditures (capex) surged to $31.15bn, a 20pc increase from a year earlier. Spending in the last three months rose to $8.5bn, an 8pc boost from the year earlier quarter.

In the deepwater Stabroek block in Guyana, the major today reiterated production is expected to reach its capacity of 120,000 b/d "in coming months." The company anticipates that by 2025, at least five floating production, storage and offloading vessels will be producing more than 750,000 b/d from the project. ExxonMobil earlier this week increased its estimate for recoverable resources in the block to more than 8bn barrels of oil equivalent (boe) following its 16th oil discovery.

In the Permian region of Texas and New Mexico, ExxonMobil increased 2019 production by 79pc to 272,000 boe/d, with fourth-quarter output rising to 294,000 boe/d. The company continues to lower costs and improve productivity from the Permian while building out infrastructure to move oil to the Gulf coast for refining and export.

ExxonMobil completed the sale of its non-operated upstream assets in Norway to Vår Energi for $4.5bn, part of a plan to divest about $15bn in non-strategic assets by 2021. ExxonMobil's legacy assets in the North Sea, Australia and the US Gulf are among those struggling to compete for investment against a new generation of more profitable projects that include the US Permian basin, deepwater fields offshore Guyana and Brazil, and LNG projects in Mozambique and Papua New Guinea.

The company's profit for the year fell to $14.4bn from $20.8bn in 2018, and earnings in the last three months of the year declined to $5.7bn from $6bn a year earlier. The declines were in line with ExxonMobil's 6 January guidance that said weak margins from its downstream and chemicals business could reduce fourth-quarter earnings by as much as $1.3bn.
By Manash Goswami

Chevron reports record output in 2019

Chevron's oil and gas production reached a record high in 2019, exceeding 3mn b/d of oil equivalent (boe/d) for the first time. But weaker market conditions resulted in hefty upstream impairments in the fourth quarter.

Chevron grew production by more than 4pc last year, to 3.06mn boe/d from 2.93mn boe/d in 2018. Output averaged 3.08mn boe/d in the October-December quarter, little changed from a year earlier.

Excluding inventory effects, Chevron made a loss of $6.6bn in the fourth quarter, compared with a profit of $3.7bn a year earlier.

"Included in the current quarter were previously announced upstream impairments and write-offs totalling $10.4bn associated with Appalachia shale, Kitimat LNG, Big Foot and other projects," Chevron said. It made a $1.2bn gain on the sale of its UK Central North Sea assets in the fourth quarter.

Chevron made a profit of $2.9bn last year, including $8.7bn of net charges for special items. That compares with a profit of $14.8bn in 2018, on $1.2bn of one-offs.

Chief executive Michael Wirth said the company delivered on all its "financial priorities" last year.

"We paid $9bn in dividends, repurchased $4bn of shares, funded our capital program and successfully captured several inorganic investment opportunities, all while reducing debt by more than $7bn," he said. Operating cash flow fell to $27.3bn from $30.6bn.

Chevron said it added about 494mn boe of proven reserves last year, subject to a final review, with the largest additions from LNG projects in Australia and deepwater fields in the Gulf of Mexico.

Chevron's refinery runs averaged 1.551mn b/d in the fourth quarter, compared with 1.583mn b/d a year earlier. For the whole of 2019, they averaged 1.564mn b/d, down from 1.611mn b/d in 2018.
By Konstantin Rozhnov

US expands travel restrictions for China

The US administration is expanding the scope of restrictions for recent travelers to China, adding to measures that are affecting jet fuel demand.

As of 5pm ET on 2 February, the US will institute manda-

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tory two-week quarantines for any US citizen and permanent resident who visited the Hubei province in China in the previous 14 days, where the outbreak was first detected.

US citizens and permanent residents who have visited elsewhere in China in the past 14 days will undergo a proactive health screening and up to two weeks of "monitored self-quarantine". Foreign nationals who traveled to China in the previous two weeks will be denied entry into the US.

All flights to the US from China will be routed through the main international airports in New York City, Chicago, San Francisco, Los Angeles, Atlanta, Seattle and Honolulu.

"This is a serious health situation in China, but the risk to the US public is low," US Centers for Disease Control and Prevention Robert Redfield said today. "Our concern is to keep it that way."

The World Health Organization yesterday declared the coronavirus outbreak in China a public health emergency of international concern but warned other countries against instituting excessive travel restrictions.

The US State Department yesterday already issued an advisory against travel to China. "The actions we take complement the work of China and the WHO to contain the outbreak," health and human services secretary Alex Azar said today.

US and international airlines have reduced or suspended flights to and from China amid the rapid spread of the coronavirus.

"There is no travel ban," assistant transportation secretary Joel Szabat said. "All of the three US carriers flying to China announced they are taking down passenger flights even before our announcement." The US is working with Chinese aviation authorities and with Chinese airlines about their flights to the US, Szabat said.

Attempts to slow the spread of the coronavirus may cut projected oil demand growth considerably this year, and add to expected global oversupply.

The coronavirus had killed 213 people in China as of yesterday, up from 170 a day earlier, with almost 10,000 confirmed cases, the Chinese government said today. The US as of today has six confirmed cases and no fatalities.
By Haik Gugarats

Ukraine calls for US oil and gas investment

Ukraine is keen to secure the participation of US oil and natural gas companies in developing the country's upstream potential, President Volodymyr Zelenskiy said today.

"We invite big American business to develop infrastructure of Ukraine and participation in road and bridge constructions as well as projects on natural gas and oil development," Zelenskiy said in Kyiv at a joint press conference with US secretary of state Mike Pompeo. "We expect the participation of American companies and tenders to develop the Black Sea offshore."

Ukraine plans to hold new upstream licensing rounds and production-sharing agreement tenders this year, potentially offering 23 new oil and gas fields with probable and possible reserves of 3.3bn m^3 (116 Bcf).

US companies already have pursued upstream opportunities in Ukraine. And Washington has been working with Kyiv for years to update the country's laws and regulations, reform its gas transmission system and eliminate corruption in its energy sector as a way to improve the business environment for foreign investors.

But US domestic politics in recent months has overshadowed much of that cooperation. Pompeo is highest-ranking US official to visit Ukraine after the beginning of the congressional investigation into President Donald Trump's apparent request that Zelenskiy launch an investigation into a top US Democratic presidential contender, former vice-president Joe Biden.

Biden's son Hunter sat on the board of private Ukrainian energy company Burisma Holding while his father was vice-president — an episode that Trump presents as an example of corruption that Ukraine needs to eliminate.

The congressional investigation, based on testimonies by senior White House National Security Council and State Department officials, concluded that Trump pressed Zelenskiy to reopen an investigation into Burisma in hopes of finding evidence that would tarnish Biden's electoral chances. Trump in June 2019 ordered a halt on military aid to Ukraine and held back the prospect of a White House visit for Zelenskiy to accomplish that goal, according to the investigation.

The Democratic-controlled House of Representatives impeached Trump last month on charges of abuse of power and obstructing Congress. But the impeachment trial in the Republican-led Senate is moving toward its final stages and Trump appears likely to be acquitted on a party line basis.

Trump casts the impeachment as an attempt by the Democrats to nullify the results of the 2016 election. Nearly every Republican in the Senate opposes attempts to invite testimony from senior Trump aides and other witnesses, including Ukrainian-American businessman Lev Parnas, whose interest in Ukraine's energy sector precipitated the events that led to Trump's impeachment.

Parnas and his business partner Igor Fruman, who had only tangential energy sector experience, appear to have blamed then-US ambassador in Ukraine Marie Yovanovitch for their inability to secure seats on the board of state-

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owned oil and gas company Naftogaz, according to impeachment testimonies. Parnas and Fruman hired Trump's personal lawyer Rudy Giuliani to lobby for Yovanovitch's removal from post. Yovanovitch was recalled from her post in May 2019.

Giuliani then allegedly played an intermediary between US officials and Zelenskiy's team to secure a White House meeting in exchange for a pledge to resume investigation of Burisma and the Bidens. A whistleblower report in August 2019 exposed the discussions, prompting House Democrats to start their investigation.

Zelenskiy today said he hoped the impeachment trial would not color Trump's perception of the country. "This is our strategic ally and we are doing everything in our power to step up our cooperation," Zelenskiy said.

Trump released the hold on aid to Ukraine and met with Zelenskiy at the UN General Assembly in September, after the congressional probe began. But Zelenskiy's request for a White House meeting has still not been met.

"We will get that piece of it in the right place as time moves on," Pompeo said.
By Haik Gugarats

Russia, Saudi Arabia lead China import mix

Russia moved ahead of Saudi Arabia to become China's top crude supplier in December, customs data show. But Saudi imports rose by almost 50pc in 2019 as whole, supported by new demand from private-sector refiners.

China imported 1.73mn b/d of crude from Russia in December, compared to 1.65mn b/d from Saudi Arabia, detailed figures from the general administration of customs (GAC) show.

Russian imports were down by 6.8pc from November's all-time high of 1.86mn b/d but up by 4.6pc from a year earlier. Saudi imports fell by 17.6pc from a record 2mn b/d in November and were slightly higher than 1.64mn b/d in December 2018.

Long-haul freight rates surged in the first half of October, which pushed up delivered crude premiums and discouraged most refiners from buying long-haul crudes for delivery in December.

Independent refiners in Shandong province, which run Russian crude as one of their main feedstocks, increased purchases in a bid to use up their crude import quotas for 2019. Russian crude imports to Shandong rose by 16.6pc from November to 541,000 b/d in December, accounting for 31pc of China's total Russian imports. The rise was partly offset a drop in arrivals to other provinces.

Private-sector Rongsheng sharply reduced its December-delivery imports from Saudi Arabia for its new 400,000 b/d ZPC refinery at Zhoushan, which delayed the start-up of its second 200,000 b/d crude unit to late December from the end of November as prevously planned. A single very large crude carrier (VLCC) with around 1.9mn bl of Saudi crude discharged at the Brightoil terminal in Zhoushan, home to ZPC's refinery, data from oil analytics company Vortexa show. But fellow private-sector refiner Hengli took delivery of five VLCCs carrying around 9.7mn bl of Saudi crude for its new 400,000 b/d refinery at Dalian in December. The companies each received four VLCCs of Saudi crude in November.

State-controlled refiners also cut Saudi imports in December. The amount of Saudi crude imported by Beijing-registered firms — likely Sinopec, PetroChina, CNOOC and Sinochem — fell by 26.9pc from November to 834,000 b/d, the GAC data show.

Angola was China's third-largest supplier with 1.12mn b/d in December, followed by Iraq with 1.11mn b/d and Oman with 979,000 b/d.

China did not import any crude from the US in December, after taking 63,000 b/d in November. US crude imports are still subject to a 5pc tariff under the two countries' trade war.

Crude imports from Iran dropped to 95,000 b/d of last month, from 133,000 b/d in November and 504,000 b/d a year earlier.

Arrivals from Malaysia, which has served as a ship-to-ship transit point for imports from other sources, were 224,000 b/d - up by 4.2pc from November but lower than 239,000 b/d a year earlier.

The customs data showed no imports of Venezuelan crude in December, as was the case in November, compared with 272,000 b/d in December 2018.

Sinopec makes supply pledge after virus outbreak

Chinese state-controlled oil firm Sinopec is responding to the government's call for state-controlled firms to help the city of Wuhan in the wake of the deadly coronavirus outbreak.

The World Health Organisation has declared the coronavirus outbreak in China a public health emergency of international concern.

Sinopec said it will guarantee 160,000 b/d of oil products supplied to retail stations in Hubei province in the near future. A combined approximately 2,000 of retail outlets operated by its Wuhan and Hubei branches are currently operating normally, it said, having last week clarified these units were still supplying retail outlets in Wuhan.

The company also started sending small volumes of diesel and machinery lubricants to the construction site of the Leishenshan hospital on 30 January free of charge. The Leishenshan hospital is one of two treatment hospitals the government has ordered to be built within weeks to cater to the rising number

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of people being hospitalised because of the outbreak.

Sinopec is pulling diesel supplies out of the Yangluo oil depot in Wuhan but gave no indication whether operations at its main 170,000 b/d Wuhan refinery supplying the city have been affected. Its Wuhan and 112,000 b/d Jingmen refineries were planned to operate at a 90pc run rate this month but the coronavirus outbreak will likely cut oil demand.

The company promised not to raise prices and ensure uninterrupted supply of products at some 30,000 retail outlets its operates. But it did not specify for what time period and if this refers to retail prices or non-fuel product sales or both. Sinopec operated over 30,670 service stations nationwide as of last September.

The Chinese government put Wuhan city under lockdown during the lunar new year holiday to slow the spread of the virus, which has killed over 170 people in China, and extended the 24-30 holiday break to 2 February. Hubei, the epicentre of the outbreak, will extend the holiday unit 13 February. Jiangxi, Heilongjiang, Shandong, Zhejiang, Jiangsu and Guangdong provinces have extended holiday closures until 9 February.
By Karen Teo

Ghana's crude exports to fall in March

Export loadings of Ghanaian crude will fall in March.

The schedule shows 153,000 b/d, down from February's planned 197,000 b/d.

Lower exports for Jubilee and Ten Blend will drive the month-on-month fall. Jubilee exports are scheduled at 61,000 b/d on two cargoes, down from three in February. Just one 950,000 bl cargo of Ten Blend will load in March, down from two in the previous month.

Exports of Sankofa will rise to 61,000 b/d from 33,000 b/d.
By Nicola De Sanctis

Lundin raises output guidance

Norway-focused independent Lundin Petroleum has raised its production guidance for the next few years despite trimming its stake in the North Sea's giant Johan Sverdrup oil field.

The firm sold 2.6pc of Johan Sverdrup to Norway's state-controlled Equinor last summer, just a few months before the field's 440,000 b/d first phase came on stream. The deal cut Lundin's interest in the project to 20pc but it has not resulted in a production downgrade.

The company said today that it expects to produce 145,000-165,000 b/d of oil equivalent (boe/d) in 2020, up from 93,300 boe/d last year. Its previous guidance was to reach over 150,000 boe/d once the first phase of Johan Sverdrup hits plateau this summer.

Lundin has also updated its longer-term output guidance to 160,000-170,000 boe/d from 2021 onwards and it has added "a target of over 200,000 boe/d from upsides from existing fields", without giving a timeframe. The company said previously that it would exceed 170,000 boe/d once the 220,000 b/d second phase of Johan Sverdrup reaches plateau in 2023.

"The updated long-term guidance reflects the sale of a 2.6pc interest in Johan Sverdrup during 2019, which is offset by an extension of the Edvard Grieg plateau period," the company said.

Lundin has budgeted to spend $895mn on development activity this year, a third more than last year. The rise is driven by ongoing work at Johan Sverdrup and tie-back projects in the Edvard Grieg area.

The firm is in a strong position to raise investment in 2020 after higher production and proceeds from the Johan Sverdrup stake sale helped it to deliver record free cash flow of $1.27bn last year. Lundin plans to reward shareholders with a 22pc hike in divdends this year.

The company made a profit of $825mn in 2019, around $600mn higher than in 2018, with the sharp increase underpinned by an accounting gain on the Johan Sverdrup stake sale. Adjusted profit, which strips out exceptional items, fell to just under $253mn last year from around $295mn in 2018, mainly a result of lower oil prices.
By James Keates

S-Oil refining profit margins to rebound

South Korean refiner S-Oil expects profit margins in its core refining business to recover this year after plunging to a decade low in last year's final quarter, with the implementation of new International Maritime Organisation (IMO) marine fuel rules and an easing of US-China trade tensions accelerating demand growth.

Global demand growth for refined fuels will rise to 1.23mn b/d in 2020, outpacing a 1.03mn b/d increase in refining capacity, S-Oil said. Demand growth slowed to less than 1mn b/d last year and was overtaken by a 1.39mn b/d gain in refining capacity.

Such a supply-demand imbalance was prevalent in last year's final quarter, when Asia-Pacific's variable cost refining margin benchmark the Singapore GRM fell to just $0.20/bl, S-Oil said. New Chinese refineries added to excess supplies, while demand for high-sulphur fuel oil (HSFO) slumped as shipping firms prepared for implementation of new IMO rules on 1 January.

Tough fourth-quarter market conditions capped a difficult year for South Korean refiners, which saw exports to their largest overseas market China drop by 6.8pc to 288,000 b/d. South Korean refineries operated at an average 85.4pc

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of capacity in 2019, down from 92.1pc the previous year.

S-Oil's full-year operating profit slid by 30pc to 449.2bn won ($378mn) as its refining business posted a W25.3bn loss, including a W79.7bn loss in the fourth quarter. Petrochemical profits fell by 27pc to W255bn.

Aromatics profit margins were squeezed in the fourth quarter as a new Chinese paraxylene (PX) plant came on stream in an already oversupplied market. Global PX capacity additions totalled 6.1mn t/yr in 2019, with an additional 5.6mn t/yr expected to be added this year. PX profit margins in the final quarter dropped by 56pc from the previous year to average $242/t, S-Oil said.

Olefins margins fell on oversupply and the US-China trade war. The average fourth-quarter profit on polypropylene (PP) slid by 31pc to $408/t. Nearly 6.7mn t/yr of global PP production capacity will be added this year, keeping margins down even as easing trade tensions boost demand, S-Oil said.

Rising demand for IMO-compliant maritime fuels will drive the average profit margin on very low-sulphur fuel oil (VLSFO) to $17.50/bl in the current quarter from $12.30/bl in the previous three months, S-Oil said. Low-sulphur gasoil will sell at an forecast profit of $18/bl, up from $14.20/bl in the previous quarter.

The average premium for VLSFO over HSFO will rise to $43.80/bl in the current quarter, S-Oil said, compared with $11.30/bl in last year's third quarter when stockpiling of IMO-compliant fuels began. The company also sees WTI prices being boosted, narrowing the spread between the US crude benchmark and Dubai crude because demand for light, sweet grades is rising amid the shift to low-sulphur maritime fuels.
By Tony Cox

UK liquids production steady in December

The UK's crude and condensate production was little changed in December.

The UK produced around 999,000 b/d of crude in December, down slightly from 1mn b/d the previous month.

The figure suggests that the UK's liquids output was 1.06mn b/d for December, down marginally from November's six-month high of 1.07mn b/d.

Crude and condensate production averaged 1.06mn b/d for 2019, up by 1.6pc from the previous year and the highest since 2011.
By Riyan Zerrouki

Japan's crude imports fall to 50-year low in 2019

Japanese crude imports extended their steady decline last year, hitting the lowest level in 50 years, while its dependence on Middle East oil continued to rise.

The country's demand for crude and oil products has been falling because of its shrinking population and continued shift towards energy efficiency.

Japan imported 3mn b/d of crude last year, down by 1pc from 2018, according to data released today by the country's trade and industry ministry (Meti). Imports declined for a seventh consecutive year after reaching a high of 3.7mn b/d in 2012, when Japan temporarily boosted crude imports to make up for shortages triggered by the 2011 March earthquake and tsunamis and subsequent nuclear power crisis.

Last year's level is the lowest since 1969, when imports climbed by 18pc from the previous year to 2.9mn b/d. Japan's crude imports increased by nearly 20pc/yr between the late 1960s and early 1970s to fuel the country's strong economic growth.

Japan imported 1.1mn b/d of crude from Saudi Arabia in 2019, down by 8pc from a year earlier. The UAE supplied around 902,000 b/d, up by 16pc from 2018. Qatar and Kuwait exported around 268,000 b/d and 253,000 b/d, respectively, to Japan, up by 9pc each.

Crude imports from Iran dropped by 63pc on the year to around 47,000 b/d in 2019. Japan has halted Iranian imports since May 2018 to avoid US sanctions. Iran previously supplied around 5pc of Japan's total crude imports.

Japan's Middle East crude dependence grew to 88.9pc last year from 88.2pc in 2018. This marks the fourth consecutive year of rise in dependence on Middle East crude from a low of 81.8pc in 2015.

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Japanese defence minister Taro Kono earlier this month ordered the deployment of two patrol planes and a naval destroyer to the Middle East as part of efforts to protect Japanese merchant ships in the region, while continuing diplomatic efforts to safeguard oil supplies and ensure regional stability.

Japan also imported around 154,000 b/d of crude from Russia last year, up by 13pc from 2018. Its imports of US crude also increased by 22pc to 64,000 b/d, according to the Meti data.

Domestic output of refined oil products edged up by 0.2pc on the year to 2.9mn b/d in 2019, supported by strong export demand. Domestic shipments of oil products declined by 3pc to 2.8mn b/d, while oil products exports rose by 12pc to 587,000 b/d.

Imports of crude increased for the first time in five months to 3.2mn b/d in December, up by 8pc from a year earlier. Shipments from Saudi Arabia declined by 13pc to 1.1mn b/d, while purchases from the UAE were up by 34pc to 985,000 b/d.

Japan's domestic oil products output edged down by 0.2pc on the year to 3.1mn b/d in December. Domestic sales of oil products also declined by 3pc to 3.2mn b/d during the month.
By Rieko Suda

CFTC advances proposal for weaker position limits

The US Commodity Futures Trading Commission (CFTC) today voted to propose a new position limits rule for energy, metals and agricultural contracts, with revisions that critics worry could tie the agency's hands in preventing price distortions.

The proposal, approved in a contentious 3-2 vote, marks the CFTC's fifth attempt to finish a requirement in the 2010 Dodd-Frank financial law to set position limits to curb "excessive" speculation in key commodities. But the latest proposal departs from earlier versions of the rule by offering new exemptions and limiting when position limits would apply.

CFTC chairman Heath Tarbert said today that limiting speculation could cut down on "chaotic price swings" in economically important commodities and ensure markets reflect actual supply and demand. But he said he wanted to minimize regulatory burdens and still allow energy companies, farmers and other businesses to hedge against their risks.

The latest proposal would prevent a company from holding more than 2,000 spot-month futures or swaps for key contracts for natural gas, heating oil and gasoline. The position limit for crude would be a maximum of 6,000 spot-month contracts. The CFTC contends those limits are low enough that a trader would struggle to execute a "corner" or "squeeze" that distorts prices.

But the CFTC in this proposal scrapped its earlier plans to set position limits for all other months. The agency says executing a corner or squeeze in non-spot months is not possible, and speculative activity in those months could play an important role in providing liquidity to commercial businesses that are trying to hedge against their risks.

Oil producers, refiners and other non-financial businesses trying to hedge would have many ways to avoid bumping up against those position limits. The CFTC proposed to retain the "bona fide" exemptions it offered in past versions of the rules and create new ones, including one for future oil and gas royalties and another that would apply to anticipated purchase or sales of a commodity.

The CFTC's proposal to create a streamlined process to allow commodity exchanges to approve new hedging exemptions drew complaints from the agency's two Democrats, who both voted against the proposal, and one of the agency's Republicans. Under this new process, the CFTC would only have 10 business days, or as few as 2 business days for "sudden" hedging needs, to object to a new exchange-approved exemption.

CFTC member Dan Berkovitz, a Democrat, said the agency is demoting itself from its role as "head coach" to second-guessing exchanges. CFTC member Dawn Stump, a Republican, said the review process is not workable because it is "too long" for traders trying to hedge and "too short" for the agency to conduct a meaningful review.

CFTC member Russ Behnam, a Democrat, predicted most hedging exemptions would be approved by default because 10 days is not enough time for the agency to conduct a thorough review. And he said the agency's plan to eliminate its so-called "Form 204" that collects data from traders on hedging positions would make it difficult for the agency to oversee markets.

Another potential problem with the proposal is the CFTC's decision to make a "necessity finding" justifying its decision to set a position limit for each commodity. Berkovitz said that is a departure from decades of past practice and argued it would create new burdens on the agency and make the rule "more vulnerable" in court, since critics can attack its reasoning.

The rule will be subject to a 90-day public comment period. Tarbert said the agency will try to finalize the rule later this year.
By Chris Knight

LyondellBasell raises non-crude processing

LyondellBasell has increased high sulfur fuel oil processing this month after an unidentified issue cut crude unit rates at its 268,000 b/d refinery in Houston, Texas, the company said today.

The refiner can run 20,000 b/d to 40,000 b/d of high sulfur fuel oil as an alternative feedstock to crude, chief executive Bob Patel said on a quarterly earnings call. But the company

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still preferred crude during the fourth quarter ahead of "some external events" that caused a crude unit malfunction this month. LyondellBasell's 268,000 b/d refinery in Houston, Texas, ran at near maximum capacity through the fourth quarter.

Refiners have expected reductions to global marine fuel sulfur specifications that began this year to drive up prices for low sulfur diesel and widen discounts for sulfurous feedstocks including heavy crude and former bunker fuel components. Sanctions on Venezuela and Iran and transportation constraints from other sources have limited the expected drop in high sulfur feedstocks, but prices have widened. Diesel margins have shrunk, which other refiners attributed to ample stockpiles ahead of the rule change.

LyondellBasell expects to see more of those benefits in the second quarter.

"While we have been disappointed that we have not seen some response yet, we do believe that we will see it," Patel said.

The refining segment's loss narrowed to $19mn in the fourth quarter from a $139mn loss in the same quarter of 2018. The refinery recorded a $240mn loss for the year, widening from a $28mn loss in 2018.
By Elliott Blackburn

US removes Cosco Shipping sanctions

The US Treasury Department today removed sanctions on all subsidiaries of China-based Cosco Shipping, reversing course on an action that has put upward pressure on oil tanker rates since September.

Treasury imposed sanctions on a subset of Cosco entities in September, as a penalty for their alleged involvement in transporting Iranian crude to China. Washington did not aim to target Cosco's parent company, a major crude and LNG fleet operator with 137 tankers on its fleet. But Cosco's complicated ownership structure sent its global partners scrambling to limit their exposure to the measure.

As a result, crude tanker rates on key routes climbed to all-time highs in October last year as uncertainty over the financial ties between the sanctioned subsidiaries and the parent company caused oil traders to avoid all Cosco tankers. Research firm Alphatanker said this month the lifting of Cosco sanctions would exert “enormous downward pressure” on rates.

Today's action removes Cosco Shipping Tanker Dalian and Dalian Ocean Shipping from the US sanctions list. Those entities operated a tanker fleet that included very large crude carriers *Yuan Qiu Hu*, *Yuan Hua Hu*, *Yuan Chun Hu* and *Yuan Yue Hu*. Cosco Shipping Tanker Dalian already has transferred its 50pc stake in China LNG Shipping (CLNG) to its parent company to exempt 12 LNG carriers from US sanctions.

Treasury's sanctions enforcement arm, the Office of Foreign Assets Control (OFAC), had granted two waivers from sanctions to mitigate the unintended consequences of its action on global tanker chartering market. The latest waiver was due to expire on 4 February. US officials hoped the extension would give sufficient time to obtain guarantees that Cosco and its entities will not engage in transporting Iranian crude.

China continues to take Iranian crude despite a US sanctions regime that threatens financial and criminal penalties for foreign companies engaged in such trade. But import volumes have been trending lower in recent months. Crude imports from Iran dropped to 95,000 b/d of December, from 133,000 b/d in November and 504,000 b/d a year earlier, latest Chinese customs data show.

The US administration has come to accept that some Iranian crude will continue to flow to China despite a US policy of "zero exports" from Iran. The significant year-over-year decline in Chinese imports and the non-involvement of state-controlled companies in such trade means the US does not have to resort to severe sanctions against China's banking system, according to a source. But the administration says it will continue targeting any Chinese buyer and freight provider involved in such trade.

How much crude and condensate Iran is selling is difficult to determine, because of its reliance on its own tanker fleet and measures it takes to cloak those tankers' movements. The IEA estimates recent Iranian exports at 300,000 b/d.
By Haik Gugarats

US output hits record in November: EIA

US crude output rose to a record high of about 12.9mn b/d in November led by gains in Texas, New Mexico, Alaska and offshore production.

The US total was up from about 12.7mn b/d in October, the previous record high, according to the latest monthly data from the Energy Information Administration (EIA). The November total is up by about 900,000 b/d from a year earlier.

The EIA also reported that the US remained a net exporter of "crude oil and petroleum products" in November after reaching that designation in September for the first time in decades of monthly data. The broad category includes crude, petroleum products such as gasoline and distillate fuel oil, and natural gas liquids such as ethane and propane. The US is still a net importer of crude by a large margin.

In Texas, the top-producing state, crude output in November rose from the prior month by about 1pc to 5.3mn b/d. Texas production is nearly 10pc higher than a year earlier. The state is home to the bulk of the Permian basin,

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where production has been growing amid strong interest in moving US oil to the Gulf coast for export. Texas also encompasses the Eagle Ford shale.

New Mexico output in November increased from October by 6pc to 1.1mn b/d. Production in that state, which includes a portion of the Permian, is up by 34pc from year-earlier levels.

Crude production in Alaska rose from the prior month by about 2pc to 485,000 b/d, the EIA said. In the US Gulf of Mexico, offshore production increased by about 5pc to 2mn b/d.

In North Dakota, which includes most of the Bakken shale, November production was nearly flat to the prior month, staying at about 1.5mn b/d.

The EIA monthly data is based on a methodology that includes a direct survey of oil producers in 15 states.

The agency separately estimates weekly US crude production. Domestic output averaged 13mn b/d in the week ended 24 January, the agency said in its most recent report.
By Eunice Bridges

US rig count falls by 4 to 790: Baker Hughes

The US drilling rig count fell by four to 790 this week, continuing a declining trend.

Oil rigs eased by one to 675, according to Baker Hughes data released today. Rigs looking for natural gas fell by three to 112.

Texas and Louisiana lost the most rigs, at two each.

The number of US rigs drilling horizontally rose by 1 to 711, while those drilling vertically fell by three to 34, Baker Hughes said. The number of directional rigs eased by two to 45.

The overall US rig count dropped sharply last year as many operators remain under pressure to cap spending, lower costs and improve margins. But crude production continued to rise to record levels as operators work through their inventory of drilled but uncompleted (DUC) wells.

The Energy Information Administration said today that US crude output rose to a record high of about 12.9mn b/d in November led by gains in Texas, New Mexico, Alaska and offshore production.
By Eunice Bridges

Phillips 66 adds storage at Texas terminal

Phillips 66 Partners is adding 2.2mn bl of crude storage at its Beaumont, Texas, terminal.

The new storage will be completed in the first quarter of 2020, the company said today while reporting earnings. The terminal will have 16.8mn bl of crude and products storage after the expansion is complete.

Phillips 66 is also adding a 200,000 b/d dock at the terminal, boosting capacity to 800,000 b/d by the third quarter.

The US is seeing a large buildout in storage terminals and docks along the US Gulf Coast to feed growing demand for crude exports.
By Eunice Bridges

Imperial gets boost from Syncrude in 2019

Imperial Oil's 2019 crude production was up by 4pc on the year as its Syncrude joint venture matched a 10-year high.

Annual production averaged 398,000 b/d in 2019, up from 383,000 b/d in 2018 despite grappling with a province-wide curtailment order that began in January 2019.

The 325,000 b/d Syncrude project had annual production of 73,000 b/d, net to Imperial, matching the highest level since reported since 2010. Syncrude reached that level even with a planned turnaround in the final quarter of the year.

Syncrude provided Imperial with 66,000 b/d of crude in the fourth quarter, down by 23,000 b/d from a year earlier. Imperial owns a 25pc stake of Syncrude, a mining operation that produces synthetic crude oil.

The company's Kearl project showed production of 205,000 b/d across 2019, comparable to the year before. At 208,000 b/d, the fourth quarter was down by 9,000 b/d from the same period in 2018 on account of a planned turnaround.

Imperial expects that supplemental crushing facilities will reduce downtime, improve reliability and enable Kearl to achieve 240,000 b/d in 2020. Imperial owns 71pc of the Kearl project while ExxonMobil owns the remaining 29pc.

Production at Cold Lake was down by 9,000 b/d in 2019, with the company citing reservoir performance for the fall. Output averaged 140,000 b/d in both 2019 and during the fourth quarter.

Downstream throughputs averaged 353,000 b/d during 2019, down by 39,000 b/d when compared to 2018. Imperial pointed to an increase in turnaround activity along with a fractionation tower incident at Sarnia as the causes.

Crude-by-rail economics continue to be "very volatile" as a result of the province's quota system, said Brad Corson, president and chief executive. Imperial was shipping zero volumes originating from its Edmonton rail terminal in October, but responded to a pipeline upset in November by ramping up crude-by-rail shipments to 88,000 b/d in December.

Imperial said crude-by-rail shipments are north of 100,000 b/d in January, which represents nearly one quarter of industry movements as other shippers have also ramped up rail activity. Shippers are looking to capitalize on high Alberta inventories and the increasingly attractive arbitrage to US markets.

Other companies have planned to install diluent recovery units in Hardisty and Edmonton. Imperial said the

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economics are not favorable for it to pursue one itself, but said it would kept the door open.

Imperial Oil posted a profit of C$2.2bn ($1.7bn) in 2019, down from a C$2.3mn profit the year before.

By Brett Holmes

Texas Supreme Court rules for Enterprise

The Texas Supreme Court today upheld a lower court ruling which vacated a $536mn judgment against Enterprise Products Partners in a dispute with Energy Transfer.

The Supreme Court affirmed the ruling by the Court of Appeals for the Fifth District of Texas at Dallas that Enterprise did not breach a contract with Energy Transfer when it canceled a planned Cushing, Oklahoma, to Houston crude pipeline in 2011. The July 2017 court of appeals decision overturned a more than $536mn judgment a Dallas jury awarded Energy Transfer in 2014.

The Texas Supreme Court said that Texas law allows parties to conclusively agree that “no partnership will exist unless certain conditions are satisfied” and that “the parties here made such an agreement.”

Enterprise praised the ruling saying that it “correctly reaffirmed the importance of written contracts,” according to the company’s lawyer David Keltner.

Energy Transfer did not immediately respond to a request for comment.

Energy Transfer filed the original lawsuit in 2011 after Enterprise ended the companies' joint plan to build the Double E pipeline largely on repurposed Energy Transfer natural gas lines. Enterprise pulled out of that agreement and formed a partnership with Canadian pipeline company Enbridge to eventually reverse the 400,000 b/d Seaway pipeline from Cushing to Houston. Seaway is now a 950,000 b/d twin system.

A district court jury agreed with Energy Transfer, but the appellate court found that the three agreements between the two Double E developers did not constitute a partnership and that Enterprise never waived the nonbinding nature of their deals.

By Eunice Bridges

US to end most fines for migratory bird kills

President Donald Trump’s administration is seeking to make permanent a policy that has largely exempted oil and gas companies, wind farms and developers from the threat of prosecution for killing migratory birds.

The administration yesterday proposed a rule to remove the threat of penalties or jail time under the Migratory Bird Treaty Act, unless a company or person “intentionally” harms or kills birds. Critics say the rule would eviscerate a law that has given industry a strong incentive to take steps to prevent accidental bird deaths.

US interior assistant secretary for fish and wildlife Rob Wallace said the pending rule will “bring regulatory certainty” to the public. The Trump administration already adopted the policy in 2017 by issuing a legal opinion without going through the formal rule-making process. By proposing a rule and soliciting feedback from the public, the rule change would become more difficult for a subsequent administration to reverse.

Purposefully harming migratory birds, such as shooting them, would still be prohibited. But the rule would allow nearly all incidental deaths, such as those that occur when birds fly into uncovered oil waste pits or when wind farms are built along bird migration routes. Environmentalists say the policy is meant to shield powerful industries that have bristled at both the expense of protecting birds and the threat of prosecution.

"This mean-spirited rule is pure politics and birds will pay the price," National Audubon Society chief executive David Yarnold said.

BP paid $100mn in fines for the death of thousands of birds killed in the wake of the 2010 *Deepwater Horizon* oil spill. But under the administration's new interpretation of the law, the oil company would not be liable for such penalties because it did not intentionally set out to kill the birds.

Oil industry groups have cheered the policy but say they are committed to protecting birds. National Ocean Industries Association president Erik Milito, who represents offshore oil producers and offshore wind farms, said the administration’s plan would reflect the original intent of the law and stymie lawsuits that have held "reasonable and responsible activities, including wind energy development, hostage."

States and environmentalists have sued to throw out the 2017 policy. Two weeks ago they filed legal motions asking a federal judge in New York to find the administration’s policy conflicts with the plain text of the Migratory Bird Treaty Act. Even if they prevail in their lawsuits, the administration could still proceed with its regulatory initiative.

By Chris Knight

Argentina shale stimulus piques interest

Argentina’s new government is preparing legislation to stimulate upstream investment in the Vaca Muerta shale formation, where some oil companies are repositioning in anticipation of growth opportunities.

In recent days, Chevron and Shell met with Argentina’s new government authorities and the provincial government of Neuquen, which encompasses most of Vaca Muerta. Although many oil companies have interests in the vaunted

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shale play, over the past decade development has been driven mainly by Argentina's state-controlled YPF, as other companies await policy signals in a country known for state intervention on hydrocarbons pricing, macroeconomic distortions, transportation bottlenecks and labor strife.

Although the government has not specified the bill's provisions, Neuquen congressman Dario Martinez says the broad goal is to establish clear rules that would transcend politics.

The initiative, which the production ministry says will be presented to the congress in February, would potentially allow long-restricted profit repatriation, while also giving oil companies unfettered access to the foreign exchange market.

While he was a candidate last year, center-left president Alberto Fernandez often highlighted Vaca Muerta as key to lifting Argentina out of economic recession.

Among the companies monitoring Argentina's evolving above-ground conditions is Chevron. The US major is close to completing two of eight shale exploration wells at its El Trapial block, which it has operated as a conventional area for years.

Neuquen governor Omar Gutierrez met this week with Clay Neff, head of Chevron Africa and Latin America exploration and production. Neff also met with Argentina's new energy secretary Sergio Lanziani.

Chevron was an early mover in Argentinian shale. The company is a 50pc partner with operator YPF in the Loma Campana block, which produced 42,916 b/d of crude and 2.18mn m3/d of natural gas in January-November 2019, according to energy secretariat data.

The US firm also holds a 50pc non-operating stake in YPF's shale oil exploration project in the Narambuena block.

This week, Lanziani also met with the head of Shell Argentina, Sean Rooney, to discuss the upcoming bill.

"We are working on the hydrocarbons law to bring predictability, establishing rules that are clear and equal for all," Lanziani said after the Shell meeting.

The shale formation drove a modest rise in Argentina's production last year. Oil production grew by 3.9pc year on year to 507,861 b/d in the first 11 months of 2019, according to energy secretariat data. Gas output increased 5.5pc to 135.98mn m3/d (4.8bn cf/d).

Acquisition signal

In a sign of renewed interest from foreign oil companies, Shell and Equinor picked up more shale acreage with the acquisition oil services giant Schlumberger's 49pc stake in the YPF-operated Bandurria Sur block.

In the 1 January transaction announced today, each European company paid $177.5mn for a 24.5pc stake in the 56,000-acre block. Shell and Equinor agreed with YPF to acquire another 11pc stake apiece. Once approved, the deal will result in Equinor and Shell each holding 30pc in Bandurria Sur. YPF will continue as operator with 40pc.

Bandurria Sur is in the late pilot phase of development and currently produces around 10,000 b/d of oil equivalent (boe/d).

The block is adjacent to the Shell-operated Bajada de Añelo block, in which YPF has a 50pc stake.

Shell began exploring for unconventional resources in Argentina in 2012 and currently operates three blocks. It also holds stakes in two blocks operated by France's Total and another one by Pan American Energy, a 50:50 joint venture between BP and Bridas. It also holds stakes in two offshore areas.

For its part, Equinor has an interest in the YPF-operated Bajo del Toro block, and a 90pc stake in the neighboring Bajo del Toro Este and Aguila Mora Noreste blocks. Neuquen's provincially owned Gas y Petroleo de Neuquen (GyP) holds the balance. The Norwegian firm also has stakes in eight offshore assets, six as operator and four in partnership with YPF.
By Daniel Politi

Ghana's crude exports to fall in March

Export loadings of Ghanaian crude will fall in March.

The schedule shows 153,000 b/d, down from February's planned 197,000 b/d.

Lower exports for Jubilee and Ten Blend will drive the month-on-month fall. Jubilee exports are scheduled at 61,000 b/d on two cargoes, down from three in February. Just one 950,000 bl cargo of Ten Blend will load in March, down from two in the previous month.

Exports of Sankofa will rise to 61,000 b/d from 33,000 b/d.
By Nicola De Sanctis

Peru seeks to balance preservation, drilling

Peru's government is seeking to reconcile a planned marine reserve with fledgling offshore oil drilling.

The government has been working on the creation of the 116,000-hectare Peruvian Pacific Tropical Sea Reserve Zone off the northern coast since 2015.

The plan has drawn fire from the hydrocarbons sector because the reserve would overlap existing production and exploration blocks, including block Z-38, where the country's first deepwater drilling is underway.

Environment minister Fabiola Munoz said yesterday the reserve and oil drilling could coexist.

"We believe that different activities can work together if the rules are clear," said Munoz in response to a question from *Argus*. "We have examples of this in the Peruvian jungle, where hydrocarbon activities exist alongside nature reserves."

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Munoz said other activities in the zone, including a growing whale-watching industry for tourists, could pose even greater risks than hydrocarbons.

The ministry undertook a lengthy consultation process for the reserve that included the participation of 148 institutions, from fishing organizations to oil and gas companies.

Once created, the reserve would overlap parts of 179,000-hectare block Z-1 operated by Canadian independent Frontera, and 130,000ha block Z-2B, operated by the Colombian-South Korean firm Savia. Block Z-1 produced 1,300 b/d in 2019, while Z-2B pumped around 7,200 b/d.

Of greater concern to the oil industry is the potential impact on exploration. The future marine reserve would overlap part of the 487,000ha block Z-38 operated by Australia's Karoon and 54,000ha block Z-64 operated by the UK's Tullow. Tullow is also a junior partner in Z-38.

Karoon spud a first exploration well at the Marina prospect on block Z-38 on 28 January, using the Stena Forth drillship in 3,000m of water. The $80mn exploration well marks Peru's deepwater exploration debut. Karoon told *Argus* that "the Marina prospect has a pre-drill estimate of approximately 250mn barrels of oil. Success in the Marina-1 well has the potential to de-risk follow-on opportunities, however its important to remember no wells have been drilled in these deeper waters off-shore Peru."

Karoon expects the drilling operation to last for 30 days.

While the environment ministry says it has not formally discussed the reserve with Karoon, deputy ministers met this week with Tullow's Peru representatives. A ministry spokesperson said Tullow informed them of its experience in other protected areas outside of Peru.

Tullow was unavailable for comment.

By Lucien Chauvin

Announcement: Argus Sour Crude Index ("ASCI")

Proportional assessment

Following the end of the fourth trading quarter of 2019 and in accordance with the ASCI price methodology, Argus has revised the proportionality assigned to Mars, Poseidon and SGC to be used in the event that the combined volume minimum of 6,000 b/d is not met in any given trade day. The latest proportional assessment values are based on the volume of trade over the last six trade months and will be applicable for the next three trade months starting 26 November 2019 and ending 25 February 2020. Each grade has been assigned the following percentage values:

Mars: 70pc
Poseidon: 15pc
SGC: 15pc

A table containing a history of the proportional assessment values can be found in the ASCI price methodology, which is available at http://www.argusmedia.com/asci. If you have any questions or would like to comment on these changes, please contact Gustavo Vasquez at gustavo.vasquez@argusmedia.com and (713) 968-0014, or Amanda Smith at amanda.smith@argusmedia.com and (713) 968-0013.

Argus Assessment Rationale Database

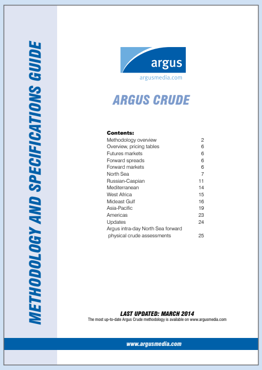
For prices used in financial benchmarks, Argus publishes daily explanations of the assessment rationale with supporting data. This information is available to permissioned subscribers and other stakeholders.

Subscribers to this report via *Argus* Direct or My*Argus* may access the database here.

Other subscribers may request access here or contact us by email at sales@argusmedia.com.

Argus Crude Methodology

Argus uses a precise and transparent methodology to assess prices in all the markets it covers. The latest version of the Argus Crude Methodology can be found at: www.argusmedia.com/methodology.



For a hard copy, please email info@argusmedia.com, but please note that methodogies are updated frequently and for the latest version, you should visit the internet site.

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