

Argus Crude

Crude market prices and analysis

Issue 21-82 | Wednesday 28 April 2021

MARKET COMMENTARY

Prices climb despite US stock rise

Prices gained further. Towards 4.30pm in London, the Argus July North Sea price was \$67.24/bl, a rise of \$1.74/bl from the same time in the previous session.

US crude stocks boosted by imports

US crude inventories rose by 90,000 bl last week, as imports climbed sharply, according to the Energy Information Administration.

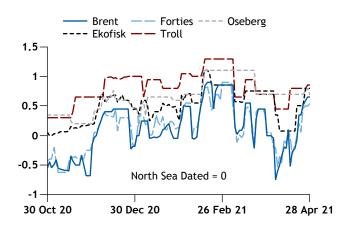
Johan Sverdrup loadings to slow in June

Loadings of the North Sea's largest crude stream, Johan Sverdrup, are expected to average 520,000 b/d in June, down by 3pc from May, according to the latest programmes.

Congolese exports to rise in June

Crude loadings from Congo Brazzaville are scheduled to reach 246,000 b/d in June, up from the 238,000 b/d of May.

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



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PRICE SUMMARY

Price summary					\$/bl
	Basis	Diff	Bid	Ask	±
North Sea					
Dated	Jul	+0.01	67.22	67.28	+1.61
Dated (new)	Jul	-1.91	65.30	65.36	+1.70
Brent	Dated	+0.65	67.87	67.93	+1.61
Forties	Dated	+0.54	67.76	67.82	+1.66
Oseberg	Dated	+0.70	67.92	67.98	+1.51
Ekofisk	Dated	+0.80	68.02	68.08	+1.61
Troll	Dated	+0.85	68.07	68.13	+1.61
Russia-Caspian	Dated	10.03	00.07	00.15	11.01
Urals NWE	Dated	-2.80	64.42	64.48	+1.61
Urals Med Aframax	Dated	-1.55	65.67	65.73	+1.61
BTC Blend	Dated	+0.40	67.62	67.68	+1.61
CPC Blend	Dated	-2.65	64.57	64.63	+1.61
Russia-Caspian fob	Dated	-2.03	04.37	04.03	+1.01
Urals fob Primorsk	Dated	-3.70	63.52	63.58	+1.66
Urals fob Novo Aframax	Dated	-2.61	64.61	64.67	+1.55
CPC fob terminal	Dated	-3.59	63.63	63.69	+1.56
BTC fob Ceyhan	Dated	-0.37	66.85	66.91	+1.54
Mediterranean	Dated	-0.37	00.03	00.71	+1.54
Saharan Blend	Dated	-0.90	66.32	66.38	+1.61
Es Sider	Dated	-2.05	65.17	65.23	+1.61
Kirkuk	Dated	-4.30	62.92	62.98	+1.61
West Africa	Dated	-4.30	02.92	02.90	+1.01
Bonny Light	Dated	-1.00	66.22	66.28	+1.61
, ,		-0.50	66.72	66.78	+1.61
Girassol	Dated Dated	-0.50	65.52	65.58	+1.61
Hungo	Dated	-1.70	65.52	05.56	+1.01
US pipeline	Basis	Diff		VWA	
LLS	Jun WTI	Diff +1.95		65.81	± +0.81
Mars	Jun WTI	+0.18		64.04	+0.73
	Juli W II	+0.10		04.04	+0.73
Argus Sour Crude	lus MTI	.0.00		(2.06	.0.74
ASCI	Jun WTI	+0.00		63.86	+0.74
Canada pipeline	D	Diff	Bid	A =1-	
C	Basis	Diff		Ask	±
Synthetic	CMA Nymex	-1.00	62.42	62.92	+0.96
WCS	CMA Nymex	-12.10	51.27	51.87	+0.96
Americas cargoes	C114.11	2.04	44.53	((()	0.04
ANS	CMA Nymex	+2.91	66.53	66.63	+0.91
Vasconia	Aug WTI	-0.56	62.38	63.38	+0.91
Asia-Pacific	ICD	4.00	(2.05	(4 05	0.00
Minas	ICP	+1.00	63.95	64.05	+0.00
Tapis	Dated	+1.00	68.20	68.30	+1.61
North West Shelf	Dated	-1.15	66.05	66.15	+1.61
Russia Asia-Pacific					
ESPO Blend	Jun Dubai	+2.20	65.17	65.27	+0.21
Sokol	Jun Dubai	+2.90	65.87	65.97	+0.31
Mideast Gulf			40		
Dubai	Jun		63.50	63.60	+0.07
Oman	Jun Dubai	+0.69	63.66	63.76	+0.34
Murban	Jun Adnoc	+0.00	63.88	63.98	+0.20

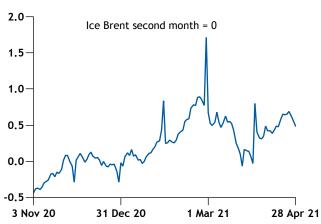


FUTURES AND FORWARD MARKETS

Futures ma	arkets						\$/Ы
	Open	High	Low	S'pore*	London†	Settle	±
Ice Brent							
Jun	66.58	67.85	66.13	66.29	67.59	67.27	+0.85
Jul	66.05	67.37	65.54	65.76	67.09	66.78	+0.91
Aug	65.58	66.92	65.14	65.37	66.65	66.38	+0.91
*4:30pm Singa	pore mir	nute mark	er, †4:30µ	om London	minute mark	ær	
Nymex Light	Sweet						
Jun	63.04	64.53	62.67	62.85	64.23	63.86	+0.92
Jul	62.92	64.37	62.54	62.71	64.08	63.75	+0.95
Aug	62.57	64.02	62.23	62.39	63.73	63.44	+0.96
Sep	62.17	63.52	61.80	62.01	63.26	63.00	+0.94
Dec 21						61.45	+0.77
Dec 22						57.31	+0.39
Dec 23						54.87	+0.20
Dec 24						53.45	+0.12
Dec 25						52.75	+0.08
DME Oman							
Jun				63.71			+0.34
Jul				63.96			+0.84
Aug				63.51			+0.88
Sep				63.16			+0.91
Volume <i>bl</i>				184,000			
IFAD Murban	1						
Jun				63.93			+0.20
Jul				63.91			+0.29
Aug				63.38			+0.30
Sep				63.05			+0.26
Volume <i>bl</i>				1,945,000			
Tocom Mide	ast Gulf	(day ses	sion)				
Jun						63.30	+0.74
Jul						62.79	+0.62
Aug						62.50	+0.61
Sep						62.06	+0.51
Volume bl						1,8	355,183

INE crude f	utures			
Timing	Settle Yuan/bl	±	Settle \$/bl	±
May	395.60	-6.50	61.00	-0.93
Jun	403.80	+5.00	62.26	+0.83
Jul	405.60	+5.10	62.54	+0.85
Aug	406.60	+4.50	62.70	+0.77
Volume <i>bl</i>				72,337,000





Forward markets			\$/bl
	Bid	Ask	±
North Sea, Singapore close			
May	66.91	67.00	+0.07
Jun	66.31	66.37	+0.09
Jul	65.77	65.85	+0.14
Aug	65.38	65.46	+0.16
North Sea, London close			
Dated	67.22	67.28	+1.61
May	68.28	68.36	+1.79
Jun	67.61	67.69	+1.73
Jul	67.21	67.27	+1.74
Aug	66.77	66.85	+1.69
Dubai, Singapore close			
Jun	63.50	63.60	+0.07
Jul	63.47	63.57	+0.31
Aug	62.97	63.07	+0.31
Sep	62.57	62.67	+0.30
Dubai, London close			
Jun	64.82	64.90	+1.71
Jul	64.78	64.88	+1.95
Aug	64.28	64.38	+1.95
Sep	63.88	63.98	+1.94
WTI Cushing, 1:30pm Houston			
Jun	63.84	63.88	+0.92
Jul	63.73	63.77	+0.95
Aug	63.42	63.46	+0.96
Sep	62.98	63.02	+0.94

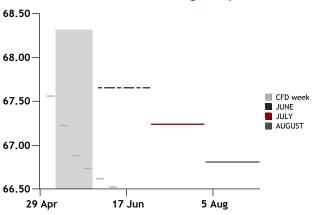
Intermonths	\$/Ы
	Mid
North Sea Singapore close	
May/Jun	+0.62
Jun/Jul	+0.53
Jul/Aug	+0.39
North Sea London close	
May/Jun	+0.68
Jun/Jul	+0.41
Jul/Aug	+0.43

Forward spread		\$/Ы	
	N Sea/Dubai	WTI/N Sea	WTI/Dubai
Jun	+2.790	-3.420	-0.630
Jul	+2.410	-3.160	-0.750
Aug	+2.480	-3.080	-0.600
Sep			-0.670

NORTH SEA DATED

North Sea Dated calculati	on			\$/b
North Sea flat price				
North Sea partial trade	Delivery period	Volume <i>bl</i>		Price
volume weighted average (VWA)	Jul	400,000		67.24
CFD value against relevant bas	is month			
		Basis	٨	Nidpoin
3 May-7 May		Jul		+0.3
10 May-14 May		Jul		-0.0
17 May-21 May		Jul		-0.3
24 May-28 May		Jul		-0.5
31 May-4 Jun		Jul		-0.6
7 Jun-11 Jun		Jul		-0.7
CFD value for 8 May-28 May		Jul		-0.3
North Sea Anticipated Dated c	alculation			
		Month		Pric
VWA of North Sea partial trade	9	Jul		67.2
CFD value for 8 May-28 May		Jul		-0.3
Anticipated Dated				66.9
Physical differentials for 8 May	-28 May			
Grade		Basis	Diff m	nidpoin
Brent		Dated		+0.6
Forties		Dated		+0.5
Oseberg		Dated		+0.7
Ekofisk		Dated		+0.8
Troll		Dated		+0.8
North Sea quality premiums (C	(P) for 8 May-28	May		
Oseberg	-,	•		+0.3
Ekofisk				+0.2
Troll				+0.3
North Sea Dated calculation				
	Anticipated Dated	Add Diff midpoint	Subtract QP	Price
Brent component of Dated	66.94	+0.65		67.5
Forties component of Dated	66.94	+0.54		67.4
Oseberg component of Dated	66.94	+0.70	+0.39	67.2
Ekofisk component of Dated	66.94	+0.80	+0.26	67.4
Troll component of Dated	66.94	+0.85	+0.34	67.4
North Sea Dated is the lowest component				67.2
•				

North Sea forward curve establishing Anticipated Dated \$/bl



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

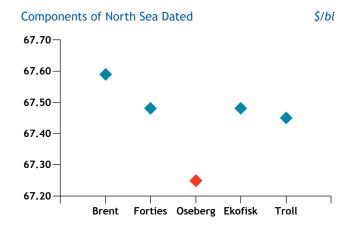
We then look at contracts for difference (CFDs), with which the market anticipates North Sea Dated in the coming weeks at differentials to the forward month. Prices falling between 10 days and a full calendar month ahead are averaged.

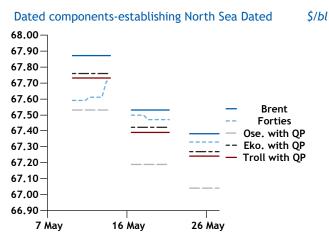
Physical differentials

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

Dated components The combination of the A

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.





NORTH SEA

Benchmark crude values held steady as buying interest in May-loading supplies continued to emerge with two cargoes changing hands in the session.

Forties moved higher, as Glencore and Vitol continued to seek the grade's volumes. Vitol bought a cargo arriving on 11-15 May from Total at North Sea Dated +0.85 cif Rotterdam, which is roughly Dated +0.13 on a fob Hound Point basis. The buyer also bid Dated +0.60 for a 12-18 May Forties parcel, but this sparked no interest. Glencore meanwhile sought an 8-26 May Forties cargo at Dated +0.55 but found no success.

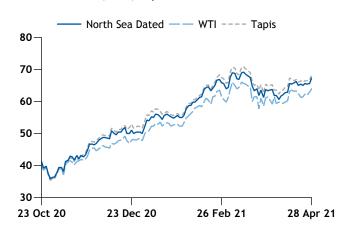
On Forties' selling side, BP struggled to offload a cargo arriving on 14-18 May at Dated +1.10 cif Rotterdam which is roughly Dated +0.38 on a fob basis. The firm also offered another arriving on 19-23 May, as an alternative, at Dated +1.35 cif Rotterdam, which lands around Dated +0.63 on a fob basis, but no buyers stepped up. Total sought to sell a parcel arriving on 14-18 May at Dated +1.20 cif Rotterdam which is around Dated +0.48 on a fob basis, but the firm withdrew its proposal when it struck the deal with Glencore.

Oseberg's value fell slightly after Glencore purchased a 20-22 May cargo from Alta Trading at Dated +0.70. Vitol bid Dated +0.65 for a 20-27 May cargo of the grade, but sellers remained quiet.

A single bid emerged in Brent, with Glencore seeking a 10-27 May parcel at Dated +0.50 without any luck. The firm also struggled to secure volumes of Ekofisk and Troll. It bid Dated +0.65 for an Ekofisk cargo loading on 25-29 May or on 15-19 May, and Dated +0.75 for a Troll cargo loading on 21-27 May. Vitol meanwhile sought a 21-25 May Troll cargo, as an alternative to its Oseberg proposal, at Dated +0.70 but sellers remained quiet.

None of the day's activity could be confirmed.

	North Sea Dated	, WTI, Tapis	\$/bl
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North Sea					\$/bl
	Basis	Diff	Bid	Ask	±
Dated*	Jul	+0.01	67.22	67.28	+1.61
Dated (new)**	Jul	-1.91	65.30	65.36	+1.70
Brent†	Dated	+0.65	67.87	67.93	+1.61
Forties	Dated	+0.54	67.76	67.82	+1.66
Oseberg	Dated	+0.70	67.92	67.98	+1.51
Ekofisk	Dated	+0.80	68.02	68.08	+1.61
Troll	Dated	+0.85	68.07	68.13	+1.61
Statfjord cif Rotterdam	Dated	+1.30	68.52	68.58	+1.61
Statfjord fob platform	Dated	+0.50	67.72	67.78	+1.61
Gullfaks cif Rotterdam	Dated	+1.40	68.62	68.68	+1.61
Gullfaks fob platform	Dated	+0.60	67.82	67.88	+1.61
Flotta Gold	Dated	-1.00	66.22	66.28	+1.61
Grane	Dated	-0.60	66.62	66.68	+1.61
Johan Sverdrup	Dated	-2.75	64.47	64.53	+1.61

*Argus North Sea Dated is the equivalent of Platts dated Brent
**New North Sea Dated incorporates non-North Sea grades delivered into north-

west 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 Brend

•	**	
North Sea EFP		
	Basis	Diff
Jun	Ice	+0.04
hil	Ice	+0.13

Ice minute markers				
			1-minute	±
Jun			67.59	+1.71
Jul			67.09	+1.71
Aug			66.65	+1.65
Dated CFDs, Singapore close				
	Basis	Bid	Ask	±
3 May-7 May	Jul	+0.18	+0.26	+0.02
10 May-14 May	Jul	-0.12	-0.04	-0.03
17 May-21 May	Jul	-0.41	-0.33	-0.08
24 May-28 May	Jul	-0.54	-0.46	-0.10
Dated CFDs, London close				
3 May-7 May	Jul	+0.28	+0.36	+0.10
10 May-14 May	Jul	-0.06	+0.02	+0.06
17 May-21 May	Jul	-0.40	-0.32	+0.01
24 May-28 May	Jul	-0.55	-0.47	-0.01
31 May-4 Jun	Jul	-0.66	-0.58	-0.02
7 Jun-11 Jun	Jul	-0.76	-0.68	-0.02
Delivered northwest Europe assessm	ents			

Delivered northwest Europe	Delivered northwest Europe assessments								
	Basis	Diff	Bid	Ask	±				
CPC Blend cif Rotterdam	Dated	-0.45	66.77	66.83	+1.61				
BTC Blend cif Rotterdam	Dated	+1.75	68.97	69.03	+1.61				
Saharan Blend cif Rotterdam	Dated	+1.65	68.87	68.93	+1.61				
Bonny Light cif Rotterdam	Dated	+1.10	68.32	68.38	+1.61				
Qua Iboe cif Rotterdam	Dated	+1.10	68.32	68.38	+1.61				
Escravos cif Rotterdam	Dated	+1.20	68.42	68.48	+1.61				
WTI cif Rotterdam (period 1)*	Dated	-0.95	66.27	66.33	+1.61				
WTI cif Rotterdam (period 2)*	Dated	-0.95	66.27	66.33	+1.61				

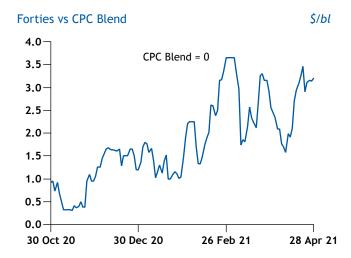
*Period 1 covers cargoes arriving at Rotterdam from 12 days forward to one month ahead + two days. Period 2 covers cargoes arriving at Rotterdam from one month ahead + three days forward to 60 days.

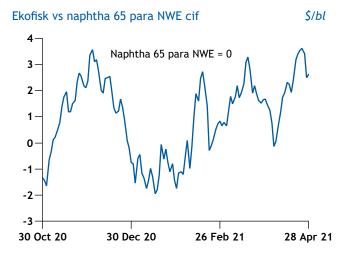
NORTH SEA

Loadings of the North Sea's largest crude stream Johan Sverdrup are expected to average 520,000 b/d in June, down by 3pc from the 535,000 b/d planned in May, according to the latest loading programmes. This will bring the grade's average exports to around 519,000 b/d in the first half of this year compared with 396,000 b/d loaded during the same period last year.

The June programme contains 19 shipments, three of which will be 2mn bl each, while the rest will be Aframaxsized cargoes.

Forward prices gained more ground. The Argus July North Sea price was \$67.24/bl, up by \$1.74/bl, based on 400,000 bl of trade in the minute leading up to the timestamp. CFDs also rose. The front-week 3-7 May CFD gained 10¢/bl to July North Sea +32¢/bl, while the second-week 10-14 May CFD increased by 6¢/bl to July North Sea -2¢/bl.





North Sea				\$/bl
North Sea quality premium	s (QP)			
			Apr	May
Ekofisk			0.18	0.26
Oseberg			0.24	0.39
Troll			0.41	0.34
De-escalators				
Sulphur			+0.09	
North Sea calculations				
			Basis	Price
Volume-weighted average of	traded	Jul	67.24	
Ice Brent marker	Jul	67.09		
Exchange of futures for phys		Jul	+0.13	
North Sea basis (flat price)		Jul	67.24	
Anticipated Dated based or	10 days-month a	head CFD	strip:	
			Price	±
10 May-28 May			66.94	+1.71
Argus Brent component of Da	ated		67.59	+1.71
Argus Forties component of	Dated		67.48	+1.76
Argus Oseberg component of	Dated (QP applied	d)*	67.25	+1.61
Argus Oseberg component of	Dated (no QP app	lied)	67.64	+1.61
Argus Ekofisk component of	Dated (QP applied)		67.48	+1.71
Argus Ekofisk component of	Dated (no QP appli	ed)	67.74	+1.71
Argus Troll component of Da	ted (QP applied)		67.45	+1.71
*the lowest component sets Do	ited			
Argus alternative Dated illu	strations			
	Basis	Diff	Price	±
Argus Dated Average	Jul	+0.41	67.65	+1.70
Argus Dated BFOE*	Jul	+0.01	67.48	+1.76

	Basis	Diff	Price	±
Argus Dated Average	Jul	+0.41	67.65	+1.70
Argus Dated BFOE*	Jul	+0.01	67.48	+1.76
Argus Dated BFO	Jul	+0.01	67.48	+1.76
Argus Dated FOE	Jul	+0.01	67.48	+1.76
0 (1)				

Quality premiums (QP) not applied to above *Argus Dated BFOE is equivalent to North Sea Dated (no OP)

North Sea Dated (no Qr)			
Argus North Sea Reference Price			
Argus North Sea Reference Price (NSRP)		67.59	+1.78
Argus Synthetic Brent (NSRP component)		67.08	+1.78
Dated to Ice Brent frontline, London close			
	Bid	Ask	±
May	-0.05	+0.03	+0.05
Jun	-0.22	-0.14	+0.06
Jul	-0.13	-0.05	+0.05
Aug	-0.09	-0.01	+0.04
3Q21	-0.10	-0.02	+0.05
4Q21	-0.11	-0.03	+0.05
2022	-0.15	-0.09	+0.03
Ice Bwave, 27 Apr 21			
Jul			65.56
Aug			65.15
Sep			64.79
Saudi formula base			64.83

NEW NORTH SEA DATED

New North Sea Dated calc	ulation			\$/bl
North Sea flat price				
North Sea that price	Delivery	Volume		
North Sea partial trade	period	bl		Price
volume weighted average (VWA)	Jul	400,000		67.24
CFD value against relevant basi	s month			
		Basis	M	idpoint
3 May-7 May		Jul		+0.32
10 May-14 May		Jul		-0.02
17 May-21 May		Jul		-0.36
24 May-28 May		Jul		-0.51
31 May-4 Jun		Jul		-0.62
7 Jun-11 Jun		Jul		-0.72
CFD value for 8 May-28 May		Jul		-0.30
North Sea Anticipated Dated ca	lculation			
		Month		Price
VWA of North Sea partial trade		Jul		67.24
CFD value for 8 May-28 May		Jul		-0.30
Anticipated Dated			66.94	
Physical differentials for 8 May-	28 May			
Grade		Basis	Diff m	idpoint
Brent		Dated		+0.65
Forties		Dated		+0.54
Oseberg		Dated		+0.70
Ekofisk		Dated		+0.80
Troll		Dated		+0.85
Bonny Light cif Rotterdam		Dated		+1.10
Qua Iboe cif Rotterdam		Dated		+1.10
WTI cif Rotterdam (period 1)		Dated		-0.95
Freight adjustment				
Five-day average UK-UK contine	ent rate 21-27	Apr		0.66
Five-day average UK-UK contine	ent rate 22-28	Apr		0.67
North Sea quality adjustments	(QA) for 8 May	-28 May		
Oseberg				+1.01
Ekofisk				+0.87
Troll				+0.96
Bonny Light				+0.80
Qua Iboe				+0.79
New North Sea Dated calculation	on			
Components of New North Sea Dated	Anticipated Dated	Add Diff midpoint	Subtract QA and freight	Price
Brent	66.94	+0.65	5	67.59
Forties	66.94	+0.54		67.48
Oseberg	66.94	+0.70	+1.01	66.63
Ekofisk	66.94	+0.80	+0.87	66.87
Troll	66.94	+0.85	+0.96	66.83
Bonny Light	66.94	+1.10	+1.46	66.58
Qua Iboe	66.94	+1.10	+1.45	66.59
WTI	66.94	-0.95	+0.66	65.33
New North Sea Dated is the	00.74	-0.73	. 0.00	
lowest component				65.33

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.

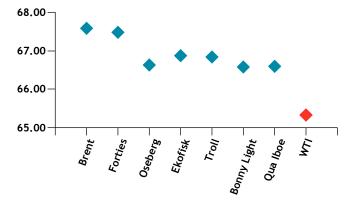
Physical differentials

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 monthahead 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 three 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

Russian producer Surgutneftegaz offloaded five shipments of May-loading Urals crude, while a bulk shipment of the medium sour grade was set for an east-of-Suez voyage.

Market participants indicated that Surgutneftegaz sold three cargoes of May-loading Baltic Urals crude to Total's trading arm Totsa, one parcel to China's Unipec and another shipment to Trafigura via a tender that closed on 28 April. This was not confirmed, and further information was slow to emerge. Surgutneftegaz had originally sought buyers on a fob basis for five 100,000t Urals shipments loading from Primorsk on 16-17 May, 20-21 May, 21-22 May, 23-24 May and 25-26 May.

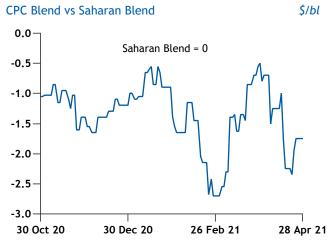
Urals values have come under pressure in northwest Europe in recent sessions. Levels have been weighed by an amply supplied outlook for next month, with deals for mid-May dates struck as low as Dated -2.80 cif Rotterdam this week. But traders suggested that renewed Chinese buying could lend some support over the coming weeks.

Unipec fixed a very large crude carrier (VLCC) to take a 270,000t shipment of crude from the Skaw ship-to-ship (STS) transfer site to Chinese port Ningbo on 1 May, according to port reports. Vortexa data indicate the Unipec-chartered VLCC *Antigone* has undergone STS transfers with the *Sea Calm* and *NS Antarctic* at Skaw, also taking on their respective shipments of Baltic Urals crude over the past 10 days.

Should the *Antigone* sail as planned, it would mark the first VLCC delivery of Baltic-loaded Urals crude headed for the long-haul Asia-Pacific market since the *Dilam* sailed the route in late February. Heavy maintenance turnarounds at Sinopec-operated systems have since dampened buying interest. Much of the firm's remaining Urals demand has been catered to by a term deal providing 1.2mn-6mn t of Rosneft-

Russia-Caspian					\$/bl
	Basis	Diff	Bid	Ask	±
Urals NWE	Dated	-2.80	+64.42	+64.48	+1.61
Urals Med Aframax	Dated	-1.55	65.67	65.73	+1.61
Urals Med Suezmax	Dated	-1.70	65.52	65.58	+1.61
Siberian Light	Dated	-0.80	66.42	66.48	+1.61
CPC Blend	Dated	-2.65	64.57	64.63	+1.61
ВТС	Dated	+0.40	67.62	67.68	+1.61
Azeri Light	Dated	+0.20	67.42	67.48	+1.61
Netbacks					
Urals fob Primorsk	Dated	-3.70	63.52	63.58	+1.66
Urals fob Ust-Luga	Dated	-3.69	63.53	63.59	+1.66
Urals fob Novo (Aframax)	Dated	-2.61	64.61	64.67	+1.55
Urals fob Novo (Suezmax)	Dated	-2.43	64.79	64.85	+1.61
Urals cif Black Sea	Dated	-2.05	65.17	65.23	+1.58
CPC fob terminal	Dated	-3.59	63.63	63.69	+1.56
BTC fob Ceyhan	Dated	-0.37	66.85	66.91	+1.54
Azeri Light fob Supsa	Dated	-0.75	66.47	66.53	+1.56
Retrospective netbacks					
Urals fob Primorsk	Dated	-3.41	63.81	63.87	+1.61
Urals fob Ust-Luga	Dated	-3.41	63.81	63.87	+1.61
Urals fob Novo (Aframax)	Dated	-2.51	64.71	64.77	+1.61
CPC Blend fob	Dated	-3.46	63.76	63.82	+1.61
Turkish straits demurrage					
Delay days					4
Aframax demurrage rate \$/d					19,000
Suezmax demurrage rate \$/d					25,000





RUSSIA-CASPIAN

supplied Baltic Urals with April-September delivery.

In the Mediterranean, the Socar-run Star refinery issued a buy tender for up to 1mn bl of 27°-35° API crude with 20-25 May delivery to Aliaga. With an API of roughly 30°, Baltic and Black Sea-loading Urals is eligible. Star also sought sellers for a 600,000-700,000 bl cargo with an API of 35°-45° for later 25-30 May arrival, for which Azeri light sweet BTC Blend would be suited. Offers into both tenders are due by 4pm Turkish time on 29 April.

Greek refiner Hellenic Petroleum otherwise closed a a tender for an 85,000t shipment of light sour CPC Blend to be delivered to Thessaloniki over 1-3 June. Traders suggested that the firm booked CPC Blend supplies from Azeri staterun Socar, but further information did not surface.

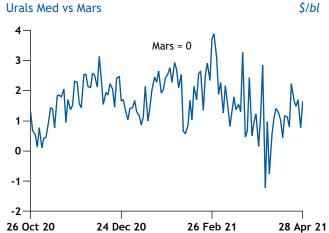
No activity on Urals Azeri crude or CPC Blend was confirmed.

Urals Med vs N	lorth Sea Dated		\$/bl
1.0	North Sea	Dated = 0	
0.5		1	
0.0		1	
-0.5			
-1.0			
-1.5			
-2.0			
30 Oct 20	30 Dec 20	26 Feb 21	28 Apr 21

Druzhba pipeline — Urals (monthly prices)					\$/bl
	Basis	Diff low	Diff high	Low	High
Slovakia					
Mar	Monthly avg of Dated	-3.57	-3.07	61.99	62.49
Feb	Monthly avg of Dated	-2.65	-2.15	59.58	60.08
Jan	Monthly avg of Dated	-1.72	-1.22	53.01	53.51
Hungary					
Mar	Monthly avg of Dated	-3.57	-3.07	61.99	62.49
Feb	Monthly avg of Dated	-2.65	-2.15	59.58	60.08
Jan	Monthly avg of Dated	-1.72	-1.22	53.01	53.51
Poland					
Mar	Monthly avg of Dated	-3.26	-2.76	62.30	62.80
Feb	Monthly avg of Dated	-2.71	-2.41	59.52	59.82
Jan	Monthly avg of Dated	-1.67	-1.27	53.06	53.46
Germany					
Mar	Monthly avg of Dated	-3.98	-2.76	61.58	62.80
Feb	Monthly avg of Dated	-3.25	-2.21	58.98	60.02
Jan	Monthly avg of Dated	-2.30	-1.20	52.43	53.53

North Sea Dated month average	\$/bl
Mar	65.56
Feb	62.23
Jan	54.73





MEDITERRANEAN

Buying interest emerged for Mediterranean sour and sweet crudes with late-May arrival.

Turkish refiner Star — owned by Azerbaijan's state-run Socar — issued a spot buy tender, looking to purchase between 600,000 bl and 1mn bl of 27-35 °API crude for 20-25 May delivery to Aliaga. The refiner also seeks a 600,000-700,000 bl cargo with 35-45 °API gravity, also arriving at Aliaga between 25-30 May. Offers must reach Star by 4pm Turkish time on 29 April and will remain valid until 8pm of the same day.

Market participants had said that Star had previously purchased a cargo of Iraqi Basrah Heavy in a mid-month tender that closed on 16 April, booking the crude for its 200,000 b/d plant. Tender results were not confirmed.

Fellow Turkish refiner Tupras had earlier this week opted against Mediterranean crudes in its tender that closed on 27 April, which had sought volumes with late May to early-June delivery. Tupras instead bought low sulphur Russian Siberian Light and Caspian CPC Blend from two different trading firms. These results were not confirmed.

Algeria's state-owned marketer Sonatrach was still said to have at least one late-May cargo of Saharan Blend available, with the latest offers for Algerian crude heard close to North Sea Dated -0.70. Traders still viewed the grade below that ask price, in line with previous assessments at Dated -0.90. It was not immediately clear how many May-loading cargoes were still on offer on behalf of equity producers of Saharan Blend, who are rewarded in crude for their investments in Algeria's oil sector.

Market participants looked ahead to Sonatrach's release of its official May formula price, which is expected to be circulated over the course of this week. The company typically releases its official price when it has sold out of the majority of its supplies loading over the following month. Sonatrach had previously cut its April price to an 11-month low, setting it at a $45 \, \text{f}$ /bl discount to the North Sea Dated benchmark.

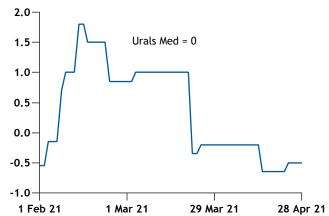
Shipping reports show mid-May Algerian crude is set to leave the Mediterranean. South Korean refining company S-Oil has fixed the *Nordic Breeze* to load 130,000t of crude from Arzew on 12 May, then deliver it to Onsan. The fixture was not confirmed and could still fail. *Argus* tracking data show regular shipments of Saharan Blend have headed for South Korea every month since April last year.

Mediterranean					\$/bl
	Basis	Diff	Bid	Ask	±
Saharan Blend	Dated	-0.90	66.32	66.38	+1.61
Zarzaitine	Dated	-0.80	66.42	66.48	+1.61
Es Sider	Dated	-2.05	65.17	65.23	+1.61
Kirkuk	Dated	-4.30	62.92	62.98	+1.61
Basrah Light cif Augusta	Dated	-2.05	65.17	65.23	+1.61
Basrah Light fob Sidi Kerir	Dated	-1.90	65.32	65.38	+1.61
Basrah Medium cif Augusta	Dated	-2.35	64.87	64.93	+1.61
Basrah Heavy cif Augusta	Dated	-3.40	63.82	63.88	+1.61
Iranian Light fob Sidi Kerir	Dated	-3.12	64.10	64.16	+1.61
Iranian Heavy fob Sidi Kerir	Dated	-5.92	61.30	61.36	+1.61
Suez Blend	Dated	-3.25	63.97	64.03	+1.61

Official formula pr	ices			\$/bl
	Basis			
Algeria		Feb	Mar	Apr
Saharan Blend	Dated	+0.15	+0.20	-0.45
Syria		Aug	Sep	Oct
Syrian Light	Dated	na	na	na
Souedie	Dated	na	na	na
Libya		Feb	Mar	Apr
Al-Jurf	Urals Med	-1.15	-1.15	-1.15
Amna	Dated	-1.35	-1.85	-2.20
Bouri	Urals Med	-2.85	-2.85	-2.85
Brega	Dated	-0.95	-1.45	-1.80
Bu Atiffel	Dated	-0.65	-1.15	-1.40
Es Sider	Dated	-1.40	-2.00	-2.35
Esharara	Dated	-0.50	-0.95	-1.40
Mellitah	Dated	-1.55	-2.00	-2.25
Mesla	Dated	-1.70	-2.00	-2.35
Mesla ex Ras Lanuf	Dated	na	na	na
Sarir	Dated	-3.60	-3.95	-3.95
Sirtica	Dated	-2.10	-2.60	-2.80
Zueitina	Dated	-1.50	-2.00	-2.25

Basrah Light cif Augusta vs Urals Med

\$/bl



WEST AFRICA

June's Congolese loading programme surfaced, while trade in Angolan crude struggled to pick up.

Loadings of crude from Congo Brazzaville were set to average 246,000 b/d in June, up from May's planned 238,000 b/d. The loading programme shows seven 920,000 bl cargoes of flagship Djeno scheduled, unchanged from May. Exports of N'Kossa will also be stable at one 950,000 bl cargo, scheduled to load on 29-30 June, with Italy's integrated Eni listed as marketer. The June tally will be the highest since the 316,000 b/d scheduled in February.

Congo Brazzaville's output cap under its Opec+ commitment is 273,000 b/d in May and 276,000 b/d in June, following the group decision to gradually increase production quotas in May-July.

Meanwhile, May's loadings of Djeno were struggling to clear, traders said, with at least two cargoes still available. The grade was still pegged in a North Sea Dated -1.50/-2 range. Scant demand from China has curtailed the number of available Asia-Pacific outlets for the grade, while Exxon-Mobil's recent decision to shut down its Slagen refinery in Norway might further dampen demand from Europe. The firm plans to convert its 120,000 b/d refinery into a products import terminal, as the slump in fuel demand and the increased competition has made refinery operations uneconomical, said the firm.

The Suezmax *Pecos* discharged a cargo of Djeno at the facility on 9 April, according to Vortexa. Over the past three years, the refinery has received roughly 20mn bl of west African grades such as Nigerian Escravos and Egina, Angolan Nemba and Pazlor, as well as Cameroonian Lokele and Baobab from Ivory Coast.

In Angola, state-run Sonangol was struggling to find buyers for two June spot cargoes. The firm was still seeking an outlet for its 29-30 June cargo of niche Gimboa, despite trimming its official offer by 20¢/bl to Dated -0.20. Sonangol also offered the 28-29 June Olombendo at Dated +1.00, without success.

Elsewhere, Turkey's Star — owned by Azerbaijan's staterun Socar — issued a tender seeking between 600,000 bl and 1mn bl of crude with 27-35°API gravity for 20 May—25 May arrival at Aliaga or between 600,000 bl - 700,000 bl of crude with 35-45°API gravity for 25-30 May delivery at the same port.

The tender will close on 29 April. Star typically buys Mediterranean sweet crude, but several west African grades could meet the requirements.

West Africa					\$/bl
	Basis	Diff	Bid	Ask	±
Agbami	Dated	-1.70	65.52	65.58	+1.61
Amenam	Dated	-1.40	65.82	65.88	+1.61
Bonga	Dated	-0.60	66.62	66.68	+1.61
Bonny Light	Dated	-1.00	66.22	66.28	+1.61
Brass River	Dated	-1.00	66.22	66.28	+1.61
Egina	Dated	+0.70	67.92	67.98	+1.61
Erha	Dated	-0.80	66.42	66.48	+1.61
Escravos	Dated	-0.40	66.82	66.88	+1.61
Forcados	Dated	-0.70	66.52	66.58	+1.61
Qua Iboe	Dated	-1.10	66.12	66.18	+1.61
Usan	Dated	-0.70	66.52	66.58	+1.61
Cabinda	Dated	-0.50	66.72	66.78	+1.61
Dalia	Dated	-0.90	66.32	66.38	+1.61
Girassol	Dated	-0.50	66.72	66.78	+1.61
Hungo	Dated	-1.70	65.52	65.58	+1.61
Kissanje	Dated	-0.90	66.32	66.38	+1.61
Mostarda	Dated	-1.75	65.47	65.53	+1.61
Nemba	Dated	-1.00	66.22	66.28	+1.61
Zafiro	Dated	-0.10	67.12	67.18	+1.61
Jubilee	Dated	-1.00	66.22	66.28	+1.61
Doba	Dated	+0.30	67.52	67.58	+1.61
Djeno	Dated	-1.75	65.47	65.53	+1.61

Nigerian official formula prices \$/bl					
	Basis	Mar	Apr	May	
Abo	Dated	-0.11	-0.15	-0.84	
Agbami	Dated	-0.99	-0.94	-1.59	
Ajapa	Dated	+0.25	-0.01	-0.53	
Aje	Dated	+0.01	-0.29	-0.85	
Akpo	Dated	-1.08	-1.33	-1.70	
Amenam	Dated	-0.67	-0.79	-1.60	
Antan	Dated	+0.15	+0.16	-0.81	
Asaramatoru	Dated	-0.20	-0.43	-1.23	
Bonga	Dated	-0.03	-0.30	-0.81	
Bonny Light	Dated	+0.01	-0.29	-0.90	
Brass River	Dated	-0.02	-0.19	-0.80	
EA	Dated	+1.14	+0.92	-0.22	
Ebok	Dated	+1.35	+1.10	+0.62	
Egina	Dated	+0.70	+0.47	+0.13	
Eremor	Dated	-0.65	-1.23	-2.07	
Erha	Dated	+0.06	-0.04	-0.65	
Escravos	Dated	+0.25	-0.01	-0.53	
Forcados	Dated	+0.11	+0.07	-0.72	
lma	Dated	-1.56	-1.84	-2.20	
Jones Creek	Dated	+0.11	+0.07	-0.67	
Obe	Dated	-0.37	-0.77	-1.57	
Okono	Dated	-0.40	-1.08	-1.59	
Okoro	Dated	+1.36	+0.85	+0.83	
Okwori	Dated	+0.42	+0.01	-1.07	
Okwuibome formula	Dated	-0.08	-0.35	-0.92	
Otakikpo	Dated	+0.01	-0.29	-0.85	
Oyo	Dated	+0.73	+0.66	-0.37	
Pennington	Dated	-0.15	-0.44	-1.19	
Qua Iboe	Dated	-0.08	-0.35	-0.97	
Ukpokiti	Dated	-0.24	-0.64	-1.50	
Usan	Dated	-0.18	-0.34	-0.74	
Yoho	Dated	-0.08	-0.45	-1.02	
Zafiro*	Dated	+0.34	+0.21	+0.29	
Premium for advanced pricing	Dated	+0.07	+0.07	+0.07	
Premium for deferred pricing	Dated	+0.07	+0.07	+0.07	



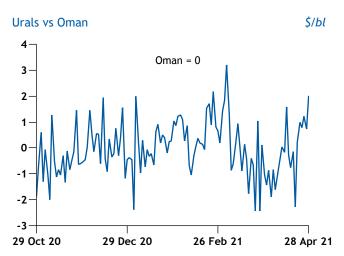
MIDEAST GULF

Trade for June-loading Mideast Gulf crude was winding down as refiners were covered, although some sellers continued to offer spot volumes.

China's Unipec was heard to have offered 75,000-150,000 bl of light sour Abu Dhabi Das loading on 1-25 June at a \$1.25/bl premium to front-month Dubai assessments but did not attract buyers.

The Singapore marker for the front-month June Murban futures contract on IFAD was \$63.93/bl, equivalent to a premium of around 91¢/bl to June Dubai swaps. This was the narrowest premium since the Murban futures contract launched on 29 March.

The Dubai backwardation, or the premium of front-month June Dubai to third-month August prices, narrowed to a fresh two-month low of 53e/bl from a 77e/bl premium in



Oman vs Dubai			\$/bl
1.5	Duba	i = 0	
1.0			
0.5	Λ,	۸.4. ۸	
0.0	Mmy	$\mathbb{A}_{\mathbb{A}_{2}}$	JVWY
-0.5		'	•
-1.0			
2 Nov 20	30 Dec 20	1 Mar 21	28 Apr 2

Mideast Gulf						\$/bl
	Month	Basis	Diff	Bid	Ask	±
Dubai	Jun			63.50	63.60	+0.07
Oman	Jun	Jun*	+0.69	63.66	63.76	+0.34
Murban	Jun	Adnoc	+0.00	63.88	63.98	+0.20
Das	Jun	Adnoc	+0.00	63.53	63.63	+0.20
Upper Zakum	Jun	Adnoc	-0.35	63.38	63.48	+0.20
Umm Lulu	Jul	Adnoc	+0.00	63.83	63.93	+0.20
Qatar Land	Jun	QP	-0.15	63.97	64.07	+0.33
Qatar Marine	Jun	QP	-0.10	64.27	64.37	+0.33
Qatar Al-Shaheen	Jun	Jun*	+1.20	64.17	64.27	+0.31
Banoco Arab Medium	Jun	Aramco	-0.20	64.57	64.67	+0.33
Basrah Light fob Iraq†	May	Somo	-1.00	64.09	64.19	+0.57
Basrah Medium fob Iraq†	May	Somo	+0.30	64.59	64.69	+0.57
Basrah Heavy fob Iraq†	May	Somo	-0.05	62.74	62.84	+0.57
DFC fob Qatar	Jun	Jun*	-0.10	62.87	62.97	+0.31
LSC fob Qatar	Jun	Jun*	-0.40	62.57	62.67	+0.31
*basis is Dubai swaps †As	ia-Pacific	destinatio	n-restrict	ed cargoes		

Differentials to Murban, 4:30pm Singapore \$/bl				
	Month	Basis	Diff	±
Mideast Gulf				
Dubai	Jun	Jun Murban	-0.38	-0.13
Oman	Jun	Jun Murban	-0.22	+0.14
Das	Jun	Jun Murban	-0.35	0.00
Upper Zakum	Jun	Jun Murban	-0.50	0.00
Umm Lulu	Jun	Jun Murban	-0.05	0.00
Qatar Land	Jun	Jun Murban	+0.09	+0.13
Qatar Marine	Jun	Jun Murban	+0.39	+0.13
Qatar Al-Shaheen	Jun	Jun Murban	+0.29	+0.11
Banoco Arab Medium	Jun	Jun Murban	+0.69	+0.13
Basrah Light fob Iraq	May	Jun Murban	+0.21	+0.37
Basrah Medium fob Iraq	May	Jun Murban	+0.71	+0.37
Basrah Heavy fob Iraq	May	Jun Murban	-1.14	+0.37
DFC fob Qatar	Jun	Jun Murban	-1.01	+0.11
LSC fob Qatar	Jun	Jun Murban	-1.31	+0.11
Asian-timestamp WTI Houston	Jun	Jun Murban	-0.29	+0.02
Russia Asia-Pacific				
ESPO Blend		Jun Murban	+1.29	+0.01
Sokol		Jun Murban	+1.99	+0.11
Sakhalin Blend		Jun Murban	+0.99	+0.11
Substitute North Sea Dated		Jun Murban	+2.09	-0.14
Differentials to DME Omai	n futures	s, 4:30pm Sing	apore	\$/bl
	Nonth	Basis	Diff	±
Murban J	lun	Jun DME	+0.22	-0.14
Upper Zakum	lun	Jun DME	-0.28	-0.14

Differentials to DME O	man futur	es, 4:30pm Sir	ngapore	\$/bl		
	Month	Basis	Diff	±		
Murban	Jun	Jun DME	+0.22	-0.14		
Upper Zakum	Jun	Jun DME	-0.28	-0.14		
Das	Jun	Jun DME	-0.13	-0.14		
Dubai	Jun	Jun DME	-0.15	-0.25		
Basrah Light fob Iraq†	Jun	Jun DME	+0.43	+0.23		
Basrah Heavy fob Iraq†	Jun	Jun DME	-0.92	+0.23		
Qatar Land	Jun	Jun DME	+0.31	-0.01		
Qatar Marine	Jun	Jun DME	+0.61	-0.01		
Qatar Al-Shaheen	Jun	Jun DME	+0.51	-0.03		
Banoco Arab Medium	Jun	Jun DME	+0.91	-0.01		
†Asia-Pacific destination-restricted cargoes						

MIDEAST GULF

the previous session. The Dubai backwardation had narrowed amid weaker sentiment on the Mideast Gulf crude market, traders said, as supplies are expected to rise with Opec+ due to ease its production cuts from next month. The prospect of slowing demand due to surging Covid-19 infections and additional lockdown measures in Asia-Pacific also weighed on sentiment.

The June Brent-Dubai EFS, or the spread between June Ice Brent crude futures and Dubai swaps, narrowed to a premium of \$3.27/bl from a premium of \$3.49/bl in the previous session.

June Dubai partials were heard to have traded at \$63.50-63.55/bl today.

Cabinda vs Dub	ai month 1		\$/bl
3.0			
2.5	Dubai mon	th 1 = 0	
2.0-		\mathcal{N}^{V}	ſ
1.5	\mathcal{M}		1
1.0-	, , , , , , , , , , , , , , , , , , ,		1
0.5	/W^	'V [JV
0.0	717	4	M
-0.5-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
-1.0	I	I	
29 Oct 20	29 Dec 20	26 Feb 21	28 Apr 21

Mideast Gulf					\$/bl
			Bid	Ask	±
Dubai forward, 4:30pm Singap	ore				
Jun			63.50	63.60	+0.07
Jul			63.47	63.57	+0.31
Aug			62.97	63.07	+0.31
Sep			62.57	62.67	+0.30
Dubai forward, 4:30pm London	n				
Jun			64.82	64.90	+1.71
Jul			64.78	64.88	+1.95
Aug			64.28	64.38	+1.95
Sep		63.88	63.98	+1.94	
Dubai intermonths, 4:30pm Sin	ngapore				
Jun/Jul				+0.03	-0.24
Jul/Aug				+0.50	+0.00
Aug/Sep				+0.40	+0.01
Dubai swaps, 4:30pm Singapor	·e				
May			63.47	63.57	+0.31
Jun			62.97	63.07	+0.31
Jul			62.57	62.67	+0.30
Aug			62.19	62.29	+0.28
Dubai swaps months are pricing m	nonths				
Dubai EFS, 4:30pm Singapore					
Jun				+3.27	-0.22
Jul				+3.14	-0.16
Aug				+3.13	-0.12
Ice Brent, 4:30pm Singapore					
Jun			66.29		+0.09
Jul			65.76		+0.14
Aug			65.37		+0.16
Sep			65.01		+0.18
Oman forward, 4:30pm Singap	ore				
	Diff	Dubai swaps	Bid	Ask	±
Jun	+0.69	Jun	63.66	63.76	+0.34
Jul	+1.34	Jul	63.91	64.01	+0.84
Aug	+1.27	Aug	63.46	63.56	+0.88

Mideast Gulf

0.0-	νγν	, 'Y	M
-1.0 29 Oct 20	29 Dec 20	26 Feb 21	28 Apr 21
Dubai vs North	Sea Dated, MEG	i freight	\$/bl

1¬	Mideast Gulf-UlDubai vs North	,	
0-	Λ		
-1-			
-2-	North Se	ea Dated = 0	4
-3 Feb 21	Mar 21	Apr 21	May 21

Methodology			\$/bl		
Dubai forward month calculator					
Ice Brent month 1	Jun		66.29		
Dubai EFS month 1	Jun	-	3.27		
Dubai swap month 2*	Jun	=	63.02		
Dubai forward month 3*	Aug	=	63.02		
Dubai intermonth	Jul/Aug	+	0.50		
Dubai forward month 2	Jul	=	63.52		
Dubai intermonth	Jun/Jul	+	0.03		
Dubai forward month 1	Jun	=	63.55		
*Dubai swap month 2 = Dub	ai forward month 3				

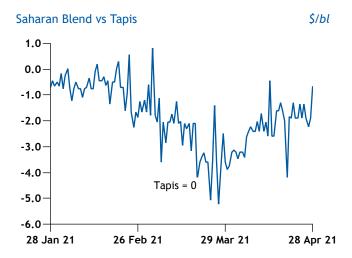
Oman forward	Oman forward month calculator						
	MOG formula	Dubai- Oman spread	Diff to Dubai swaps	Dubai swaps outright	Oman forward midpoint		
Jun	+0.00	+0.69	+0.69	63.02	63.71		
Jul	+0.00	+1.34	+1.34	62.62	63.96		
Aug	+0.00	+1.27	+1.27	62.24	63.51		

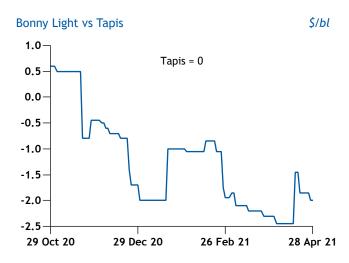
ASIA-PACIFIC

June-loading Asia-Pacific supplies were mostly committed, apart from some limited volumes of heavy sweet crude.

But the wide premium of North Sea Dated to Dubai this month, coupled with a cautious stance by regional refiners due to the continued spread of Covid-19 infections, has dampened spot crude values. Malaysia's state-owned Petronas likely sold June-loading medium sweet Bunga Kekwa at a small discount to Dated, traders said. May-loading Bunga Kekwa had been sold back in March at a premium to Dated.

Incoming arbitrage cargoes have also been sold at lower premiums to Dated. Taiwan's state-owned refiner CPC bought US WTI in its tender seeking sweet crude for July-arrival. It was unclear the WTI volumes that CPC bought, although the price was heard to be a premium of less than \$1/bl to Dated on a cfr basis. In its previous tender, CPC took one very large crude carrier (VLCC) of WTI for June-arrival at a premium above \$2/bl to Dated on a cfr basis.





Asia-Pacific					\$/bl
	Basis	Diff	Bid	Ask	±
Minas	ICP	+1.00	63.95	64.05	0.00
Duri	ICP	+1.00	60.45	60.55	0.00
Cinta	ICP	+0.30	62.95	63.05	0.00
Widuri	ICP	+0.30	63.15	63.25	0.00
Senipah	ICP	+2.00	61.95	62.05	0.00
Attaka	ICP	+1.50	66.95	67.05	0.00
Ardjuna	ICP	+0.00	61.20	61.30	0.00
Belida	ICP	+1.00	62.90	63.00	0.00
Sutu Den	Dated*	+0.95	68.15	68.25	+1.61
Bach Ho	Dated*	+0.95	68.15	68.25	+1.61
Tapis	Dated*	+1.00	68.20	68.30	+1.61
Kikeh	Dated*	+2.10	69.30	69.40	+1.61
Kimanis	Dated*	+1.90	69.10	69.20	+1.61
Labuan	Dated*	+2.10	69.30	69.40	+1.61
Miri Light	Dated*	+2.00	69.20	69.30	+1.61
Kutubu Light	Dated*	-0.80	66.40	66.50	+1.61
Cossack	Dated*	-0.80	66.40	66.50	+1.61
North West Shelf	Dated*	-1.15	66.05	66.15	+1.61
Ichthys	Dated*	+0.28	67.48	67.58	+1.61
Vincent	Dated*	+11.85	79.05	79.15	+1.61
Pyrenees	Dated*	+11.85	79.05	79.15	+1.61
Van Gogh	Dated*	+11.85	79.05	79.15	+1.61
Sudan					
	Basis	Diff	Bid	Ask	±
Nile Blend	Dated*	-0.85	66.35	66.45	+1.61
Dar Blend	Dated*	+3.50	70.70	70.80	+1.61
*when North Sea Do	ated is una	vailable owing to	a UK holida	ay, Substitut	e Dated

Benchmarks	
North Sea Dated	67.25
Substitute Dated	66.02
Tapis Singapore close	67.02

Argus Condensate Index (ACI)	
	\$/bl
ACI, Qatar DFC	63.43
Qatar DFC cfr Singapore	63.43
Australia North West Shelf (NWS) cfr Singapore	65.80
DFC cfr differential to NWS cfr	-2.37
	\$/t
VLCC Qatar-Singapore freight	4.26
Aframax northwest Australia-Singapore freight	6.26

Argus Japanese Crude Cocktail Index					
	Nov	Dec	Jan	Feb	Mar
Argus JCC (fixed)	42.3124	44.4645	50.1177	55.8599	
Argus JCC (preliminary)					61.6141

will be used

ASIA-PACIFIC

Delivered China

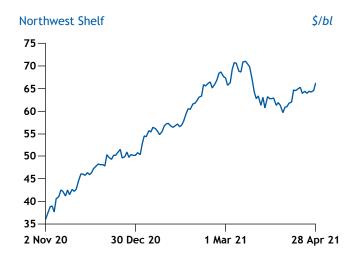
Spot premiums for key grades were steady on a delivered ex-ship (des) Shandong basis.

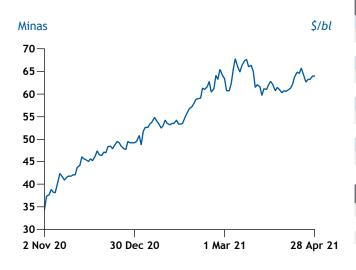
Offers for May-delivery Tupi were below \$1/bl premium to July Ice Brent with Tupi cargoes to delivered in June were offered at \$1.10-1.50/bl premium to August Ice Brent. Iracema for delivery in June was offered at above \$1.50/bl premium to August Ice Brent.

The premium for June-delivery Johan Sverdrup was stable as offers were below a 70¢/bl premium to August Ice Brent.

June-delivery ESPO Blend was offered below \$1.50/bl premium to August Ice Brent.

There were limited offers for June-delivery Djeno, while July-delivery medium sour Oman remained competitive relative to sweet crudes.





Delivered Northeast Asia							\$/bl
	Month	n Basis		Diff	Bid	Ask	±
WTI del NE Asia	Jul	Jun Dub	ai	+2.70	65.67	65.77	0.31
Delivered ex-	ship Shar	ndong prio	es				\$/bl
Grade	Timing	Basis	Diff Mid	Low	High	Price	±
ESPO Blend	Jun	Aug Ice Brent	+1.10	66.42	66.52	66.47	+0.16
Djeno	Jun	Aug Ice Brent	+0.60	65.67	66.27	65.97	+0.16
Lula	Jun	Aug Ice Brent	+1.00	66.32	66.42	66.37	+0.16
Johan Sverdrup	Jun	Aug Ice Brent	+0.60	65.92	66.02	65.97	+0.16
Oman	Jul	Sep Ice Brent	+0.30	65.11	65.51	65.31	+0.18

Mideast Gulf a	nd Atlantic	basin cruc	le cfr Asia	(fob plus f	reight)
		Singapo	ore	China	
	Month	\$/bl	±	\$/bl	±
Mideast Gulf					
Dubai	Jun	64.17	+0.07	64.48	+0.07
Oman	Jun	64.32	+0.34	64.63	+0.34
Murban	Jun	64.52	+0.20	64.81	+0.20
Upper Zakum	Jun	64.04	+0.20	64.34	+0.20
Umm Zulu	Jul	64.46	+0.20	64.75	+0.20
Qatar Marine	Jun	64.92	+0.33	65.22	+0.33
Al-Shaheen	Jun	64.84	+0.31	65.15	+0.31
Basrah Light	May	64.75	+0.57	65.06	+0.57
Basrah Medium	May	65.27	+0.57	65.58	+0.57
Basrah Heavy	May	63.44	+0.57	63.76	+0.57
West Africa					
Cabinda	Dtd	66.82	+0.18	67.13	+0.21
Girassol	Dtd	66.83	+0.18	67.14	+0.21
Bonny Light	Dtd	66.30	+0.02	66.61	+0.06
Qua Iboe	Dtd	66.18	+0.17	66.49	+0.21
Escravos	Dtd	66.90	+0.17	67.21	+0.20
North Sea					
Forties	Dtd			68.59	+0.04
US Gulf coast					
WTI	Prompt	65.48	+0.23	65.93	+0.23
Mars	Jun	65.74	+0.50	66.26	+0.50
WCS	Jun	61.80	+0.30	62.35	+0.30

US Gulf coast markers for Asia-Pacific, 4:30pm Singapore						
WTI Houston, Asian timestamp						
Jun		63.64				
Jul		63.71				
WTI Midland, Asian timestamp						
Jun		63.15				
Jul		63.21				
LLS, Asian timestamp						
Jun		64.91				
Jul		64.76				
Mars, Asian timestamp						
Jun		63.22				
Jul		62.91				
Differential to Dubai swaps	Basis	\$/Ы				
WTI Houston, Asian timestamp (Jun)	Jun	+0.62				
WTI Midland, Asian timestamp (Jun)	Jun	+0.13				
LLS, Asian timestamp (Jun)	Jun	+1.89				
Mars, Asian timestamp (Jun)	Jun	+0.20				

RUSSIA ASIA-PACIFIC

ESPO Blend premiums dipped with the majority of Juneloading cargoes already sold.

June-loading ESPO Blend has traded at premiums of \$1.95-2.53/bl to front-month Dubai assessments on a fob Kozmino basis. Two companies sold two June-loading ESPO Blend cargoes on 27-28 April.

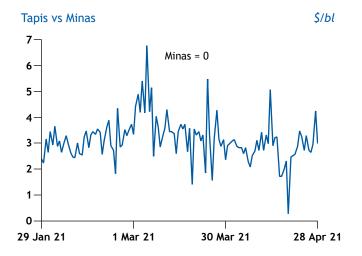
China remained the main destination for ESPO Blend loading from Kozmino in April, although some cargoes also headed to Singapore, Malaysia, South Korea, Japan and the US, according to oil analytics firm Vortexa.

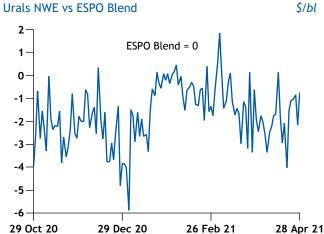
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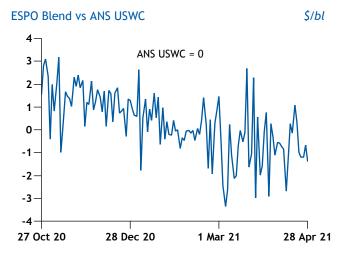
ESPO Blend fob Kozmino (PA0007196) is assessed on the basis of transactions, as and when these are identified in the market commentary, in accordance with the methodology.

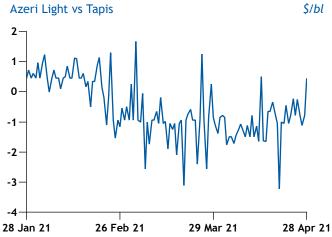
Russia Asia-Pacific \$/bl							
	Basis		Diff	Bid	Ask	±	
ESPO Blend	Jun	Dubai swaps	+2.20	65.17	65.27	+0.21	
ESPO Blend*	Jun	Ice Brent	-1.07	65.17	65.27	+0.21	
Sokol	Jun	Dubai swaps	+2.90	65.87	65.97	+0.31	
Sakhalin Blend	Jun	Dubai swaps	+1.90	64.87	64.97	+0.31	
*Jun-loading cargo	es						
Russia-Caspian crude cif basis Singapore							
				Bid	Ask	±	
BTC Blend				69.46	69.52	+1.54	
Urals (Black Sea)				67.52	67.58	+1.61	

Dirty freight rates from Kozmino (ESPO) 100,000t	\$/Ы
	Rate
To Yosu	0.44
To north China	0.55
To Chiba	0.55
To Singapore	0.57









OFFICIAL PRICES

			\$/b
Basis			
	Mar	Apr	Ma
	4.00	4.50	
			+1.6
			+0.8
			+0.1
	-0.20	-0.20	-0.5
	+2 50	+2 80	+2.9
			+2.1
			+1.4
ASCI	+1.10	+1.10	+1.0
ppe: fob Ras Tanura*			
Ice Brent Settlement	-0.40	-1.90	-1.9
Ice Brent Settlement	-0.50	-2.20	-2.4
Ice Brent Settlement	-0.90	-2.60	-2.6
Ice Brent Settlement	-1.30	-3.10	-3.1
ranean: fob Sidi Kerir*			
Ice Brent Settlement	+0.50	-0.50	-0.8
			-1.5
	-0.20		-1.9
	-0.70	-2.60	-2.6
	0.40	1.10	4.4
			-1.4 -2.1
			-2.1
			-3.2
	-1.30	-3.20	-3.2
	+1 85	+2 35	+2.5
			+1.6
•			+1.8
Oman/Dubai avg	+0.75	+0.95	+1.4
Oman/Dubai avg	+0.30	+0.30	+0.8
	Mar	Apr	Ma
fob Sidi Kerir			
Ice Bwave	na	na	n
Ice Bwave	na	na	n
Ice Bwave	na	na	n
			-3.5
			-4.9
			-4.8
			-8.9
	-6.90	-8.80	-8.9
	4 55	2.25	2.6
			-3.6 -4.9
			-4.9
	2.75	7.03	7.0
	+0.85	+1.25	+1.6
•	+0.05	+0.25	+0.6
-	+0.15	+0.35	+0.7
Oman/Dubai avg	-3.35	-3.35	-2.8
Oman/Dubai avg	-3.35	-3.35	-2.8
	Mar	Apr	Ma
Oman/Dubai avg	+0.65	+0.90	+1.3
-			
	.0.45	+0.25	+0.1
ASCI	+0.15	+0.23	•••
ASCI Arab Medium	+0.00	+0.00	
Arab Medium			+0.0
Arab Medium n Dated Dated	+0.00	+0.00	+0.00 -2.09 -1.49
Arab Medium n Dated	+0.00	+0.00	+0.00
	lce Brent Settlement lce Brent	Ras Tanura ASCI +1.20 ASCI +0.85 ASCI +0.15 ASCI -0.20 vered US Gulf ASCI +2.50 ASCI +1.45 ASCI +1.10 Dee: fob Ras Tanura* Ice Brent Settlement -0.40 Ice Brent Settlement -0.90 Ice Brent Settlement -0.90 Ice Brent Settlement -0.00 Ice Bwave -0	Ras Tanura ASCI

Official formula prices (continued) \$/bl						
·	Basis					
Dubai			May	Jun	Jul	
Dubai fob	Oman	MOG OSP	-0.15	-0.15	-0.30	
Yemen fob Salif/Ash	Shihr					
Marib Light	Dated		na	na	na	
Masila	Dated		na	na	na	
Iraq			Mar*	Apr*	May†	
Iraq to Europe						
Kirkuk (fob Ceyhan)	Dated		+0.60	-0.80	-1.15	
Basrah Light	Dated		-0.60	-2.50	-3.00	
Basrah Medium	Dated		-2.05	-3.75	-3.94	
Basrah Heavy	Dated		-3.50	-5.30	-5.35	
Iraq to US						
Kirkuk (fob Ceyhan)	ASCI		+0.95	+0.95	+0.95	
Basrah Light	ASCI		+0.25	+0.15	+0.05	
Basrah Medium	ASCI		-0.50	-0.40	-0.45	
Basrah Heavy	ASCI		-1.50	-1.60	-1.70	
Iraq to Asia-Pacific						
Basrah Light	Oman	'Dubai avg	+1.15	+1.30	+1.40	
Basrah Medium	Oman.	'Dubai avg	-0.15	+0.10	+0.60	
Basrah Heavy	Oman,	'Dubai avg	-1.40	-1.40	-0.90	
*OSPs for pre-2021 exp	ort strean	15				
†Somo-issued Decembe	er referend	e OSPs for	its 2021 quality o	rude expor	t streams	
Ει	ırope	US	Asia-Pag	fic		

, -	,	,	, , ,
	Europe	US	Asia-Pacfic
Basrah Light	Dated -0.60	ASCI +0.20	Oman/Dubai average -0.35
Basrah Medium	Dated -1.90	ASCI -0.60	Oman/Dubai average -1.15
Basrah Heavy	Dated -3.00	ASCI -1.40	Oman/Dubai average -2.10

Official selling prices			\$/bl
Abu Dhabi	Mar	Apr	May
Murban premium to Dubai	+0.75	+1.05	+1.40
Murban	65.16	na	na
Das premium to Murban	-0.35	-0.35	-0.35
Umm Lulu premium to Murban	-0.05	-0.05	-0.05
Upper Zakum premium to Murban	+0.00	-0.15	-0.15
Qatar	Mar	Apr	May
Dukhan/Land premium to Oman/Dubai avg	+0.35	+0.75	+0.80
Marine premium to Oman/Dubai avg	+0.65	+0.90	+1.05
Oman	Mar	Apr	May
Oman	54.79	60.85	64.43
Indonesia	Jan	Feb	Mar
Minas	54.41	61.42	64.06
Duri	58.91	66.52	70.66
Widuri	53.25	60.26	62.90
Belida	53.00	60.40	63.97
Attaka	53.08	60.47	63.97
Ardjuna	51.00	58.17	61.46
Cinta	52.70	59.71	62.35
Senipah	54.73	62.33	65.25
Malaysia	Jan	Feb	Mar
Tapis	55.83	63.68	66.59
MCO Alpha Premium	+2.25	+2.70	+2.00
Labuan	57.09	64.92	67.63
Miri	57.09	64.92	67.63
Kikeh	57.09	64.92	67.63
Bintulu	56.49	64.29	67.19
Dulang	57.65	65.26	68.31
Brunei	Dec	Jan	Feb
Seria Light	49.29	55.83	63.68

Reference prices			\$/Dl			
Opec reference basket monthly avg	Jan	Feb	Mar			
Opec	54.38	61.05	64.56			
Argus Japanese Crude Cocktail Index	Dec	Jan	Feb			
Argus JCC	44.46	50.12	55.86			
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.						

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US GULF COAST AND MIDCONTINENT

WTI				MATE C)4(T) (D.U.				\$/b
	Timing	Low	High	WTI formula basis price	WTI formula basis MTD	Roll to next month				
WTI Cushing	Jun	63.84	63.88	63.86	62.90	-0.11				
WTI Cushing	Jul	63.73	63.77	63.75		-0.31				
WTI Cushing	Aug	63.42	63.46			-0.44				
WTI Cushing	Sep	62.98	63.02							
	Timing	Price	WTII	Nymex spread						
CMA Nymex	Jun	63.67		+0.19						
CMA Nymex	Jul	63.27		+0.48						
CMA Nymex	Aug	62.83								
CMA Nymex	Sep	62.31			Diff	Diff MTD			W-:-bd	мт
	Timing	Basis	Diff low	Diff high	weighted average	weighted average	Low	High	Weighted average	weighte averag
Argus AGS Marker	Jun						64.55	64.84	64.62	63.6
Argus AGS	Jun	Jun WTI	+0.69	+0.74	+0.72	+0.77	64.55	64.60	64.58	
WTI Houston	Jun	Jun WTI	+0.75	+0.80	+0.78	+0.83	64.61	64.66	64.64	
WTI Houston	Jul	Jul WTI	+0.90	+0.95	+0.93	+1.00	64.65	64.70	64.68	
WTI Midland	Jun	Jun WTI	+0.20	+0.30	+0.25	+0.32	64.06	64.16	64.11	
WTI Midland	Jul	Jul WTI	+0.40	+0.50	+0.45	+0.52	64.15	64.25	64.20	
WTI Midland Enterprise	Jun	Jun WTI	+0.20	+0.30	+0.25	+0.32	64.06	64.16	64.11	
WTI diff to CMA Nymex	Jun	CMA	+0.23	+0.26	+0.25	+0.24				
WTI postings-plus	Jun	Postings	+3.61	+3.64	+3.63	+3.62				
Midcontinent										\$/£
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	
Bakken Clearbrook	Jun	CMA Nymex	-0.35	-0.25			63.32	63.42		
Bakken Cushing	Jun	Jun WTI	+0.50	+0.60	+0.55	+0.56	64.36	64.46	64.41	
White Cliffs	Jun	Jun WTI	-0.60	-0.55	-0.58	-0.50	63.26	63.31	63.28	
Niobrara	Jun	Jun WTI	+0.60	+0.80	+0.70	+0.70	64.46	64.66	64.56	
WCS Cushing	Jun	CMA Nymex	-4.10	-4.05	-4.07	-4.11	59.57	59.62	59.60	
Texas										\$/£
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	
WTL Midland	Timing Jun	Basis Jun WTI	Diff low	Diff high	weighted	weighted	Low 63.56	High 63.66	_	
Bakken Beaumont/				-	weighted average	weighted average		, i	average	
Bakken Beaumont/ Nederland	Jun	Jun WTI CMA Nymex + Argus	-0.30	-0.20	weighted average -0.25	weighted average -0.20	63.56	63.66	average 63.61	
Bakken Beaumont/ Nederland WTS	Jun Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA	-0.30 +0.90	-0.20 +1.15	weighted average -0.25 +1.03	weighted average -0.20 +1.04	63.56 64.82	63.66 65.07	63.61 64.95	
Bakken Beaumont/ Nederland WTS WTS	Jun Jun Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI	-0.30 +0.90 +0.50	-0.20 +1.15 +0.55	weighted average -0.25 +1.03 +0.52	weighted average -0.20 +1.04 +0.64	63.56 64.82 64.36	63.66 65.07 64.41	63.61 64.95 64.38	
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon	Jun Jun Jun Jul	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI	-0.30 +0.90 +0.50 +0.25	-0.20 +1.15 +0.55 +0.30	weighted average -0.25 +1.03 +0.52 +0.28	weighted average -0.20 +1.04 +0.64 +0.32	63.56 64.82 64.36 64.00	63.66 65.07 64.41 64.05	63.61 64.95 64.38 64.03	
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston	Jun Jun Jun Jul Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20	-0.20 +1.15 +0.55 +0.30 -0.10	weighted average -0.25 +1.03 +0.52 +0.28 -0.15	weighted average -0.20 +1.04 +0.64 +0.32 -0.21	63.56 64.82 64.36 64.00 63.66	63.66 65.07 64.41 64.05 63.76	63.61 64.95 64.38 64.03 63.71	\$/8
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston	Jun Jun Jun Jul Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex	-0.30 +0.90 +0.50 +0.25 -0.20	-0.20 +1.15 +0.55 +0.30 -0.10	weighted average -0.25 +1.03 +0.52 +0.28 -0.15	weighted average -0.20 +1.04 +0.64 +0.32 -0.21	63.56 64.82 64.36 64.00 63.66	63.66 65.07 64.41 64.05 63.76	63.61 64.95 64.38 64.03 63.71	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston	Jun Jun Jun Jul Jun Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted	63.56 64.82 64.36 64.00 63.66 60.52	63.66 65.07 64.41 64.05 63.76 60.57	63.61 64.95 64.38 64.03 63.71 60.54	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana	Jun Jun Jun Jul Jun Jun Jun Timing	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average	63.56 64.82 64.36 64.00 63.66 60.52	63.66 65.07 64.41 64.05 63.76 60.57	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS	Jun Jun Jun Jul Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS HLS	Jun Jun Jun Jul Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jul WTI Jul WTI Jul WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95 +1.40	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05 +1.60	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00 +1.50	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06 +1.47	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70 65.26	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80 65.46	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75 65.36	\$/!
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS HLS HLS Thunder Horse	Jun Jun Jun Jul Jun Jun Jun Jun Jun Jun Jun Jun Jul Jun Jun Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jul WTI Jul WTI Jul WTI Jul WTI Jul WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95 +1.40 +1.10	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05 +1.60 +1.20	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00 +1.50 +1.15	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06 +1.47 +1.19	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70 65.26 64.96	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80 65.46	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75 65.36 65.01	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS HLS Thunder Horse Bonito	Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jul WTI Jul WTI Jul WTI Jul WTI Jun WTI Jun WTI Jun WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95 +1.40 +0.50	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05 +1.60 +1.20 +0.60	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00 +1.50 +1.15 +0.55	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06 +1.47 +1.19 +0.64	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70 65.26 64.96 64.36	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80 65.46 65.06 64.46	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75 65.36 65.01 64.41	\$/£
Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS HLS Thunder Horse Bonito Poseidon	Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jul WTI Jul WTI Jul WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95 +1.40 +1.10 +0.50 -0.55	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05 +1.60 +1.20 +0.60 -0.52	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00 +1.50 +1.15 +0.55 -0.53	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06 +1.47 +1.19 +0.64 -0.46	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70 65.26 64.96 64.36 63.31	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80 65.46 65.06 64.46 63.34	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75 65.36 65.01 64.41 63.33	\$/6
WTL Midland Bakken Beaumont/ Nederland WTS WTS Southern Green Canyon WCS Houston Louisiana LLS LLS HLS Thunder Horse Bonito Poseidon Mars Mars	Jun	Jun WTI CMA Nymex + Argus WTI diff to CMA Jun WTI Jul WTI Jun WTI CMA Nymex Basis Jun WTI Jul WTI Jul WTI Jul WTI Jul WTI Jun WTI Jun WTI Jun WTI Jun WTI	-0.30 +0.90 +0.50 +0.25 -0.20 -3.15 Diff low +1.90 +1.95 +1.40 +0.50	-0.20 +1.15 +0.55 +0.30 -0.10 -3.10 Diff high +2.00 +2.05 +1.60 +1.20 +0.60	weighted average -0.25 +1.03 +0.52 +0.28 -0.15 -3.13 Diff weighted average +1.95 +2.00 +1.50 +1.15 +0.55	weighted average -0.20 +1.04 +0.64 +0.32 -0.21 -3.06 Diff MTD weighted average +2.04 +2.06 +1.47 +1.19 +0.64	63.56 64.82 64.36 64.00 63.66 60.52 Low 65.76 65.70 65.26 64.96 64.36	63.66 65.07 64.41 64.05 63.76 60.57 High 65.86 65.80 65.46 65.06 64.46	63.61 64.95 64.38 64.03 63.71 60.54 Weighted average 65.81 65.75 65.36 65.01 64.41	\$/b



US GULF COAST AND MIDCONTINENT

Refinery utilization rates have grown to an annual record as *Argus* has recorded monthly Domestic Sweet (DSW) trade volumes at an all-time high.

Commercial US Gulf coast crude stocks fell by over 5mn bl to about 280mn bl during the week ending 23 April, according to the US Energy Information Administration (EIA) data released on Wednesday. Imports were down by 414,000 b/d at almost 1.2mn b/d. Meanwhile, refinery runs rose in the region by 315,000 b/d to nearly 8.5mn b/d. This increased the refinery utilization rate to 89.5pc, the highest since the week ending 20 March 2020.

In Louisiana, grades remain in backwardation from prompt to second-month delivery.

June Mars was at a 14¢/bl premium to July Mars, although down by 17¢/bl from Tuesday's premium.

June LLS fell to a 6¢/bl premium to July LLS, down by 9¢/bl from Tuesday.

Prompt Mars was at a 1.77/bl discount to LLS, with the gap widening by 4/bl.

The *Argus* AGS Marker firmed for the fourth consecutive session, gaining $95 \, \text{¢}/\text{bl}$ from Tuesday to reflect a volume-weighted average of \$64.62/bl. The AGS index meanwhile eased by $1 \, \text{¢}/\text{bl}$ to a $72 \, \text{¢}/\text{bl}$ premium to the Nymex light sweet crude futures contract.

Total AGS trade month volume fell by roughly 83,000 b/d, or 18pc, to 373,297 b/d during the May trade month that ended Friday. The AGS Marker averaged an outright value of \$61.86/bl, or 3pc lower than the April trade month average, amid signs of a potential bottleneck at the US Gulf coast.

The AGS index differential to the traditional US crude benchmark at Cushing, Oklahoma, fell by 30¢/bl to an 86¢/bl premium during May trade.

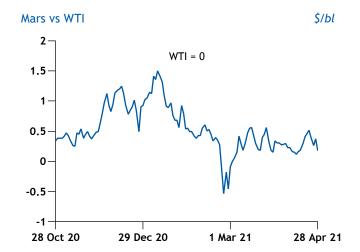
Further inland, nearly 100,000 b/d of DSW traded on Wednesday at a premium to the CMA Nymex between 23-26¢/bl. Spot trade levels have been rising. In the May trade month, 1.85mn b/d of DSW transactions went into the *Argus* WTI differential to CMA Nymex assessment, the most reported to *Argus*.

Increasing refinery runs are likely contributing to the increase in the spot market activity. But spot volumes have risen over the last year, potentially connected to greater uncertainty in refinery demand and production supply amid the Covid-19 pandemic, pushing activity into the spot market from longer-term agreements.

Rockies grade Saddlehorn Light traded at a 60 / bl discount to the Cushing benchmark, widening from Tuesday's 50 / bl discount.

The heavier pipeline specification Saddlehorn Crude has

Argus Sour Crude Index (ASCI™) \$//					
	Month	Basis	Diff	Price	
ASCI	Jun	Jun WTI	+0.00	63.86	
ASCI 2	Jun	CMA Nymex + Argus WTI diff to CMA	+0.00	63.92	



also increased in liquidity. The grade was reported trading at a 50 e/bl premium to Cushing.

The 190,000 b/d Saddlehorn pipeline from the DJ basin to Cushing includes three quality specifications. Saddlehorn Crude Oil is defined as 35-44° API crude with less than 0.40pc sulfur, and Saddlehorn Light Crude Oil is defined as 44-53° API crude with less than 0.15pc sulfur. Saddlehorn Intermediate Crude Oil, defined as 42-46° API crude, with less than 0.40pc sulfur became effective in September 2019.

Assessment rationale

The minimum volume was met and volume-weighted average calculated according to the methodology for LLS, Mars, Poseidon, 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.



US WATERBORNE



Freight rate	\$ lumpsum
Route	Daily Worldscale
USGC Aframax reverse lightering	215,000

WTI fob Houston fell by 5¢/bl as the offer level surfaced at a \$1.80/bl discount to August Ice Brent this session, down from a \$1.70/bl discount on Tuesday, while May cargoes remained unsold.

Taiwanese refiner CPC was heard purchasing at least one cargo of WTI in its recent tender seeking sweet crude cargoes delivered in July to Kaohsiung, or Sha-Lung, Taiwan. The state-owned company was heard buying the Midland crude at a delivered premium to Dated Brent of less than \$1/bl, down more than \$1/bl compared to the level at which they were heard purchasing a 2mn bl cargo of WTI in a tender for June deliveries.

A \$1/bl premium to Dated Brent would reflect a roughly \$1.95/bl discount to August Ice Brent on an equivalent fob basis at the US Gulf coast this session after subtracting estimated reverse lightering costs typical for long-haul shipments.

Delivered values for US crude have been falling in both Europe and Asia-Pacific this month as Covid-19 lockdown measures erode demand, while Libyan and Iranian supplies have edged out marginal barrels.

The US is planning to revisit trade talks with Beijing near-

US Gulf coast waterborne \$/bb					
	Timing	Basis	Diff low/high	Low/High	
WTI fob Houston	Prompt	Jun CMA Nymex	+0.76/+0.91	64.43-64.58	
	Prompt	Jun WTI Houston	-0.21/-0.06		
	Prompt	Aug Ice	-1.95/-1.80		
Bakken fob Beaumont/ Nederland	Prompt	Jun CMA Nymex	+0.66/+1.01	64.33-64.68	
	Prompt	Jun WTI Houston	-0.31/+0.04		
	Prompt	Aug Ice	-2.05/-1.70		

US Gulf coast pri	ces vs gl	obal benchmarks		\$/bl
	Timing	Basis	Price	Differential
WTI Houston	Jun	Jun Dubai swaps*	63.64	+0.62
	Jun	Sep Ice Brent		-1.34
	Jun	Sep Dubai		+2.02
WTI Midland	Jun	Jun Dubai swaps*	63.15	+0.13
	Jun	Sep Ice Brent		-1.87
	Jun	Sep Dubai		+1.49
LLS	Jun	Jun Dubai swaps*	64.91	+1.89
	Jun	Sep Ice Brent		-0.17
	Jun	Sep Dubai		+3.19
Mars	Jun	Jun Dubai swaps*	63.22	+0.20
	Jun	Sep Ice Brent		-1.94
	Jun	Sep Dubai		+1.42
Bakken Beaumont/ Nederland	Jun	Sep Ice Brent		-1.03
	Jun	Sep Dubai		+2.33

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.

term to review how China implemented its interim trade deal with Washington under the previous administration. China had agreed to increase its purchases of crude, LNG and other US commodities by \$69bn in 2020-21, but fell well short of that target despite more than tripling its US crude imports year-on-year from 2019.

Separately, US Gulf coast refinery runs increased by 315,000 b/d to 8.46mn b/d in the week ended 23 April, while stocks in the region fell by 5.07mn bl to 280mn bl, according to the latest available statistics published by the US Energy

Anticipated US crude export cargoes — 15-45 days forward						
Tanker name	Approximate volume '000 <i>bl</i>	Estimated grade	Load window	Load port	Chartered destination	ЕТА
Esteem Explorer	2,100	WTI or Mars	16 May	tbd	Ningbo, China	10 Jul
C. Passion	2,100	WTI or Mars	23 May	tbd	South Korea	17 Jul
Karvounis	1,000	WTI	13 May	tbd	western India	tbd

US WATERBORNE

Information Administration (EIA) this session.

June WTI Houston changed hands in the US Gulf coast physical pipeline market this session at premiums to the Nymex light sweet crude futures contract from 75¢/bl to 80¢/bl, reflecting a roughly \$1.70/bl discount to August Ice Brent as June Nymex held a \$2.52/bl discount to the European marker.

WTI fob Corpus Christi was discussed at a premium to Houston-based cargoes this session as May cargoes struggled to find outlets, indicating a range of possible trade at discounts to August Ice Brent between roughly \$1.85/bl and \$1.70/bl.

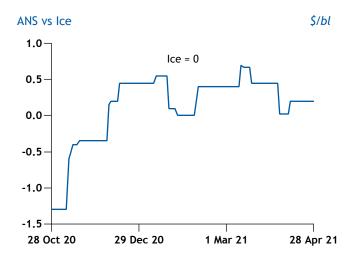
Assessment rationale

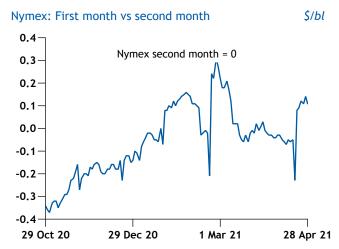
The ANS assessment against CMA Nymex WTI was adjusted to maintain the spread to CMA Ice Brent established when the grade last traded.

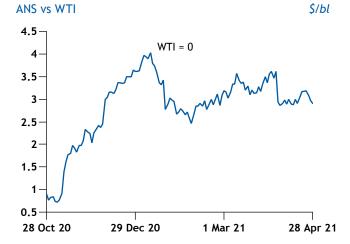
US west coast pipe	\$/Ы		
	Basis	Diff to Ice Brent	Outright
Light postings avg	Jun	+0.36	66.78
Heavy postings avg	Jun	-3.66	62.76

US west coast waterborne \$/bl					
	Timing	Basis	Diff low/high	Low/High	
ANS del	Jun	CMA Nym	+2.86/+2.96	66.53-66.63	
	Jun	CMA Ice	+0.15/+0.25		
ANS del concurrent	Jun	Jun WTI	+2.86/+2.96	66.72-66.82	

ANS del USWC mo	nthly volume-weighted average	\$/Ы
	Basis	Diff
Mar	Ice CMA	+0.35
Apr	Ice CMA	+0.28
May	Ice CMA	+0.64
Jun MTD	Ice CMA	+0.08







LATIN AMERICA

Hess expects to sell two 1mn bl cargoes of medium sweet Liza crude in the second quarter of the year, down by one from the first quarter, and five cargoes in the second half of 2021.

This as production from Guyana's offshore Stabroek block, where Hess holds a 30pc stake, is expected to hold around 100,000-110,000 b/d the next three months while equipment repairs impacting the *Liza Destiny FPSO*'s name-plate 120,000 b/d capacity are underway.

Longer term, output from Guyana is poised for growth. Hess announced the prior session a discovery at the Uaru-2 well, which adds 9mn bl of oil equivalent (boe) to the Stabroek block's gross discovered recoverable resource estimate.

The startup of "Phase 2" of the Liza field development remains on track for 2022, with 90pc of the overall work completed and the new 220,000 b/d *Liza Unity* FPSO preparing to sail from Singapore to Guyana mid-year.

Separately, shipping fixtures Wednesday indicate Valero plans to charter the Aframax *Grimstad* from Mexico's east coast to the US Gulf coast starting 29 April. Repsol placed on subjects the Suezmax *Cap Corpus Christi* from Mexico's east coast to Europe starting 8 May.

And Colombia's state-run Ecopetrol fixed the VLCC *Birdie* from Coveñas, Colombia, to India's west coast starting 15 May. The tanker could be loading from the company's upgraded export infrastructure.

The two-way TLU-2 monobuoy operated by Ecopetrol's pipeline company Ocensa has a loading capacity of 50,000-60,000 bl per hour, the company said. The new platform is expected to debut in a few days with the loading of heavy sour Castilla blend onto a VLCC, Ecopetrol said.

Colombian neighbor Ecuador's state-owned PetroEcuador will next week close a pair of two large tenders offering heavy sour Napo and medium sour Oriente crudes.

The company will accept bids until 4 May for six 360,000 bl cargoes of Napo and six 360,000 bl of Oriente cargoes expected to load in May. Bids are set to expire 6 May.

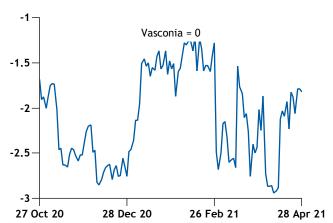
Six companies placed bids in PetroEcuador's previous set of tenders offering April-loading parcels of Oriente and Napo. Trafigura bid the highest for Oriente at a \$1.67/bl discount to Nymex WTI. And Tipco for Napo at a \$2.98/bl discount to the US light sweet benchmark, effectively creating about a \$1.30/bl spread between the two Ecuadorean grades, wider from the just more than \$1/bl spread established in last month's tender for the crudes.

South America				\$/Ы
	Timing	Basis	Diff low/high	Low/High
Colombia				
Vasconia	Prompt	Aug WTI	-1.06/-0.06	62.38-63.38
		Aug Ice	-4.00/-3.00	
Castilla	Prompt	Aug WTI	-2.71/-1.71	60.73-61.73
		Aug Ice	-5.65/-4.65	
Argentina				
Escalante	Prompt	Aug WTI	+3.14/+3.94	66.58-67.38
		Aug Ice	+0.20/+1.00	

Mexico				\$/bl
	Timing	Basis	Diff	Price
Maya				
Excluding USWC	Apr	Jun Nymex	-2.80	61.06
USWC	Apr	Jun Nymex	-2.85	61.01
Europe	Apr	Jul Nymex	-5.18	62.07
Asia-Pacific	Apr	Jun Dubai	-3.97	59.58
Isthmus				
Excluding USWC	Apr	Jun Nymex	-0.70	63.16
USWC	Apr	Jun Nymex	-1.70	62.16
Europe	Apr	Jul Nymex	-4.33	62.92
Asia-Pacific	Apr	Jun Dubai	-3.32	60.23
Olmeca				
Americas	Apr	Jun Nymex	+0.40	64.26
Europe	Apr	Jul Nymex	-1.03	66.22

Mexico K-factors		\$/bl
	Timing	K-factor
Maya USGC	Apr	-4.50
Maya USWC	Apr	-4.55
Maya Europe	Apr	-5.20
Maya Asia	Apr	-4.05
Isthmus USGC	Apr	-2.40
Isthmus USWC	Apr	-3.40
Isthmus Europe	Apr	-4.35
Isthmus Asia	Apr	-3.40
Olmeca USGC	Apr	-1.30
Olmeca Europe	Apr	-1.05







CANADA

Canada domestic	Canada domestic \$/									
	Timing	Basis	Diff low	Diff high	Diff weighted average	Diff MTD weighted average	Low	High	Weighted average	
Syncrude (SSP)	Jun	CMA Nym	-1.25	-0.75	-1.00	-1.00	62.42	62.92	62.67	
WCS	Jun	CMA Nym	-12.40	-11.80	-12.10	-12.00	51.27	51.87	51.57	
WCS Cushing	Jun	CMA Nym	-4.10	-4.05	-4.07	-4.11	59.57	59.62	59.60	

Canada dom	estic			\$/bl
	Timing	Basis	Diff low/high	Low/High
Condensate	Jun	CMA Nym	+0.15/+0.65	63.82/64.32
MSW	Jun	CMA Nym	-5.00/-4.00	58.67/59.67
LSB	Jun	CMA Nym	-5.00/-4.00	58.67/59.67
LLB	Jun	CMA Nym	-12.15/-10.15	51.52/53.52

Canadian crude markets were quiet in the third-last session before the start of the June trade window.

Heavy sour crude at Hardisty, Alberta, was assessed at a \$12.10/bl discount to the June basis in Wednesday's session. This is unchanged day-over-day for Western Canadian Select (WCS) which has hovered around that level for the better part of two weeks since becoming prompt on 19 April.

Syncrude Sweet Premium (SSP) at Edmonton, Alberta, remains assessed at a \$1/bl discount to the June Nymex WTI CMA. This is the widest since 17 February when a \$2/bl discount was recorded.

In upstream news, Canadian synthetic crude operators continued their robust production in January, posting the second-highest output on record.

Synthetic operators in Alberta's oil sands pumped out an average of 1.29mn b/d in January, one month after hitting an all-time high of 1.32mn b/d, according to Alberta Energy Regulator (AER) data released this week. The decline was the first in five months, but production was still historically high.

The combined output among the four major projects was 100,000 b/d higher than the same month last year and 30,000 b/d lower than December. Compared to January 2020, three projects made notable gains, led by the Athabasca Oil Sands Project (AOSP).

The AOSP averaged 328,000 b/d of production in January, up by 46,000 b/d from the same month last year and up by 6,000 b/d from December. The AOSP is a joint venture between Canadian Natural Resources (CNRL), Chevron and Shell and includes the oil sands mines in northeast Alberta along with the 320,000 b/d Scotford upgrader near Edmonton, Alberta.

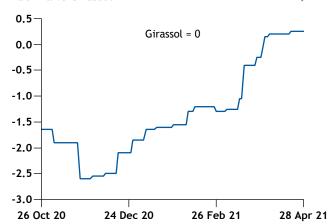
Canada waterborne prices							
	Timing	Basis	Diff low/high	Low/High			
Hibernia	Dated	North Sea	-0.35/-0.15	66.90/67.10			
Terra Nova	Dated	North Sea	-0.55/-0.15	66.70/67.10			



\$/bl







Assessment rationale

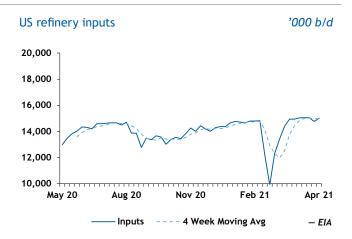
The minimum volume was met and volume-weighted average calculated according to the methodology WCS Cushing and WCS Houston.

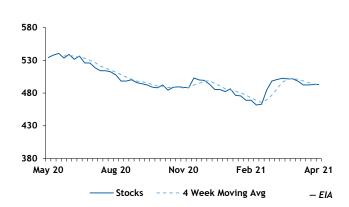


EIA WEEKLY DATA

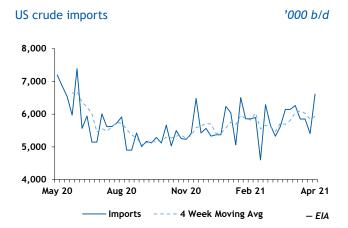
Industry statistics		'000 b/d
	EIA	Change
Production	10,900	-100
Imports	6,616	1,211
Total Stocks	493,107	90
Runs	15,018	253
Percent Utilization	85.4%	0.4
Stocks Padd 1	9,471	1,607
Stocks Padd 2	132,393	2,671
Stocks Padd 3	279,994	-5,067
Stocks Padd 4	24,827	740
Stocks Padd 5	46,423	139
Imports Padd 1-4	4,781	143
Imports Padd 1	571	-16
Imports Padd 2	2,657	406
Imports Padd 3	1,154	-414
Imports Padd 4	399	167
Imports Padd 5	1,834	1,068
Runs Padd 1	626	64
Runs Padd 2	3,362	-115
Runs Padd 3	8,463	315
Runs Padd 4	521	12
Runs Padd 5	2,047	-22

– EIA





US crude inventories



mn bl

DEALS DONE

Argus AGS deals done							\$/bl
					ted	Volume	
	Differential	Reported		AGS index	AGS Marker		
Location	basis	differential	price	differential	price	b/d	ы
ECHO Houston			64.43	+0.58	64.43		2,000
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	2,000	
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	1,000	
Magellan East Houston	Jun WTI	+0.80		+0.74	64.60	1,000	
Magellan East Houston	Jun WTI	+0.80		+0.74	64.60	1,000	
Magellan East Houston	Jun WTI	+0.80	64.90	+0.74	64.84	1,000	
Magellan East Houston	Jun WTI	+0.80	64.90	+0.74	64.84	2,000	
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	1,000	
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	1,000	
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	1,000	
Magellan East Houston	Jun WTI	+0.75		+0.69	64.55	1,000	
Magellan East Houston	Jun WTI	+0.80		+0.74	64.60	3,000	
Magellan East Houston	Jun WTI	+0.80		+0.74	64.60	1,000	

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

Grade	Location	Trade month	Basis month	Differential basis	Differential	Price \$/bl	Volume b/a
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.23		3,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.23		10,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.24		2,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.24		10,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		1,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		2,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		2,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		2,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		3,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		3,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		4,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		4,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		4,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		5,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		5,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		6,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.25		10,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		1,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		1,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		1,400
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		2,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		3,500
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		5,000
WTI	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	+0.26		10,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		1,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		2,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		2,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		2,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		2,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		2,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		3,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		3,000

DEALS DONE (CONTINUED)

North America pipeli	ne deals done						
Grade	Location	Trade month	Basis month	Differential basis	Differential	Price \$/bl	Volume b/d
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		5,000
WTI	Midland Enterprise	Jun	Jun	WTI	+0.25		5,000
Cold Lake Cushing	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	-4.10		3,333
Cold Lake Cushing	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	-4.05		1,000
Cold Lake Cushing	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	-4.05		1,000
Cold Lake Cushing	Cushing Oklahoma	Jun	Jun	CMA Nymex trade days	-4.05		2,333
Cold Lake Houston	Houston area	Jun	Jun	CMA Nymex trade days	-3.15		3,333
Cold Lake Houston	Houston area	Jun	Jun	CMA Nymex trade days	-3.15		3,333
Cold Lake Houston	Houston area	Jun	Jun	CMA Nymex trade days	-3.10		3,333
Cold Lake Houston	Houston area	Jun	Jun	CMA Nymex trade days	-3.10		3,333
LLS	St. James Louisiana	Jun	Jun	WTI	+1.95		2,000
LLS	St. James Louisiana	Jun	Jun	WTI	+1.95		2,000
LLS	St. James Louisiana	Jun	Jun	WTI	+1.95		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.15		3,000
				WTI	+0.15		•
Mars	Clovelly Louisiana	Jun	Jun				4,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.20		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.20		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.20		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.20		3,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		1,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		2,000
Mars	Clovelly Louisiana	Jun	Jun	WTI	+0.25		2,000
Poseidon	Houma Louisiana	Jun	Jun	Mars	-0.70		1,000
Poseidon	Houma Louisiana	Jun	Jun	Mars	-0.70		5,000
Poseidon	Houma Louisiana	Jun	Jun	WTI	-0.55		2,000
Poseidon	Houma Louisiana	Jun	Jun	WTI	-0.55		2,000
Saddlehorn Light	Cushing Oklahoma	Jun	Jun	WTI	-0.60		1,000
Saddlehorn Light	Cushing Oklahoma	Jun	Jun	WTI	-0.60		2,000
Saddlehorn Light	Cushing Oklahoma	Jun	Jun	WTI	-0.60		2,000
Saddlehorn Light	Cushing Oklahoma	Jun	Jun	WTI	-0.60		3,000
Saddlehorn Light	Cushing Oklahoma	Jun	Jun	WTI	-0.60		8,000
Southern Green Canyon	Nederland / Texas City	Jun	Jun	WTI	-0.15		5,000
Thunder Horse	Clovelly Louisiana	Jun	Jun	WTI	+1.15		1,000
Thunder Horse	Clovelly Louisiana	Jun	Jun	WTI	+1.15		5,000
WTL Midland	Midland Texas	Jun	Jun	WTI Midland	-0.50		1,000
WTL Midland	Midland Texas	Jun	Jun	WTI Midland	-0.50		1,000
WTL Midland	Midland Texas	Jun	Jun	WTI Midland	-0.50		1,000
WTL Midland	Midland Texas	Jun	Jun	WTI Midland	-0.50		2,000
WTL Midland	Midland Texas	Jun	Jun	WTI Midland	-0.50		2,000
WTS	Midland Texas	Jun	Jun	WTI Midland	+0.25		1,000
WTS	Midland Texas		Jun	WTI Midland	+0.25		2,000
WTS		Jun			+0.25		
	Midland Texas	Jun	Jun	WTI Midland			3,000
WTS	Midland Texas	Jun	Jun	WTI Midland	+0.30		3,000



DEALS DONE (CONTINUED)

Global crude de	als									\$/£
Region	Grade	Deal date	Delivery period	Volume bl	Price	Diff timing	Diff basis		Loading from	Loading to
Northwest Europe	North Sea	28 Apr 21	Jul	200,000	67.24					
Northwest Europe	North Sea	28 Apr 21	Jul	100,000	67.25					
Northwest Europe	North Sea	28 Apr 21	Jul	100,000	67.24					
Northwest Europe	North Sea	28 Apr 21	Jun	300,000		Jul	North Sea	+0.38		
Northwest Europe	North Sea Dated CFD	28 Apr 21		200,000		Jul	North Sea	-0.02	10 May 21	14 May 21
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.03	10 May 21	14 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.05	10 May 21	14 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	+0.00	10 May 21	14 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		200,000		Jul	North Sea	-0.35	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.35	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.35	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.35	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.35	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.33	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.33	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		200,000		Jul	North Sea	-0.33	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.30	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.30	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.25	17 May 21	21 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		100,000		Jul	North Sea	-0.50	24 May 21	28 May 2
Northwest Europe	North Sea Dated CFD	28 Apr 21		200,000			CFD	+0.26	17 May 21	21 May 2



DAILY NETBACKS

Northwest Europe (28 Apr)								\$/bl
		Com	plex			Sim	ple	
	Yield	Freight	Netback	± 27 Apr	Yield	Freight	Netback	± 27 Apr
Arab Light	67.59	0.75	66.84	+1.40	66.65	0.75	65.90	+1.54
Arab Heavy	65.15	0.78	64.37	+1.34	63.77	0.78	62.99	+1.52
Azeri	70.56	1.08	69.48	+1.41	69.72	1.08	68.64	+1.53
Basrah Light (pre-2021)	64.90	0.77	64.13	+1.35	63.91	0.77	63.14	+1.53
Bonny Light	71.26	1.09	70.17	+1.47	70.45	1.09	69.36	+1.64
Brass River	70.81	1.05	69.76	+1.44	70.06	1.05	69.01	+1.43
Brent	69.51	0.67	68.84	+1.40	68.29	0.67	67.62	+1.52
Es Sider	68.84	1.07	67.77	+1.30	68.01	1.07	66.94	+1.40
Forties	68.77	0.66	68.11	+1.35	67.83	0.66	67.17	+1.47
Iranian Light	67.83	0.75	67.08	+1.36	66.77	0.75	66.02	+1.48
Kirkuk	66.84	0.75	66.09	+1.36	65.92	0.75	65.17	+1.52
Kuwait	65.66	0.77	64.89	+1.34	64.52	0.77	63.75	+1.51
Murban	68.85	0.72	68.13	+1.38	67.82	0.72	67.10	+1.49
Saharan Blend	69.08	1.02	68.06	+1.28	68.22	1.02	67.20	+1.35
Urals	68.21	0.00	68.21	+1.37	67.12	0.00	67.12	+1.53
Zueitina	68.99	1.06	67.93	+1.36	67.83	1.06	66.77	+1.51

Singapore (28 Apr)	Singapore (28 Apr) \$/bl										
		Com	plex			Simple					
	Yield	Freight	Netback	± 27 Apr	Yield	Freight	Netback	± 27 Apr			
Arab Light	67.04	0.94	66.10	+0.28	62.30	0.94	61.36	+0.22			
Arab Heavy	65.61	0.98	64.63	+0.25	59.95	0.98	58.97	+0.17			
Basrah Light (pre-2021)	65.74	0.97	64.77	+0.24	60.95	0.97	59.98	+0.18			
Dubai	67.45	0.96	66.49	+0.27	61.95	0.96	60.99	+0.21			
ESPO Blend	67.61	0.57	67.04	+0.31	61.31	0.57	60.74	+0.22			
Iranian Heavy	66.62	0.97	65.65	+0.29	60.52	0.97	59.55	+0.20			
Minas	66.91	1.21	65.70	+0.33	59.90	1.21	58.69	+0.23			
Murban	67.56	0.90	66.66	+0.32	62.71	0.90	61.81	+0.26			
Oman	66.63	0.96	65.67	+0.28	60.24	0.96	59.28	+0.19			

US Gulf coast (28 Apr) \$/bl													
	Complex					Simple							
	Yield	Freight	Netback	± 27 Apr	Yield	Freight	Netback	± 27 Apr					
Arab Light	74.66	0.82	73.84	+1.22	70.76	0.82	69.94	+0.86					
Arab Medium	73.58	0.83	72.75	+1.27	69.12	0.83	68.29	+0.77					
Basrah Light (pre-2021)	67.62	0.85	66.77	-3.39	67.45	0.85	66.60	+0.64					
Bonny Light	78.57	1.28	77.29	+1.47	71.06	1.28	69.78	+1.53					
LLS	76.74	0.00	76.74	+1.35	72.97	0.00	72.97	+1.05					
Mars	73.16	0.00	73.16	+0.60	69.03	0.00	69.03	+0.69					
Maya	67.48	2.70	64.78	+0.83	62.68	2.70	59.98	+0.19					
WTI	77.16	0.00	77.16	+1.48	73.86	0.00	73.86	+1.13					

US west coast (28 Apr) \$//											
	Complex					Simple					
	Yield	Freight	Netback	± 27 Apr	Yield	Freight	Netback	± 27 Apr			
ANS	81.28	0.00	81.28	+1.64	69.32	0.00	69.32	+0.71			
Oriente	78.17	2.67	75.50	+1.22	70.91	2.67	68.24	+0.74			
Oriente implied fob*			62.67	+0.45							

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



INFRASTRUCTURE NEWS

Sullom Voe strike threatens Brent output

Exports of the UK's Brent crude stream, one of the five grades that underpin the North Sea Dated benchmark, could be disrupted by a strike at the Sullom Voe onshore oil processing and storage terminal on the Shetland Islands next month.

The Unite trade union said dozens of its tug and towage workers have voted in favour of strike action in a dispute with the local council over long-service pay awards. "Industrial action is planned for the middle of May, which could result in a significant shock to oil processing and supplies," Unite said. The union did not say how long the strike would last.

Sullom Voe is one of the largest oil terminals in Europe, acting as a buffer between offshore fields and tankers waiting to ship crude to refineries. The terminal receives oil from several North Sea fields through the Brent and Ninian pipelines, which is commingled to produce the Brent stream. It also receives crude from the Clair field west of Shetlands.

Even before the Sullom Voe strike was announced, loading programmes showed a steep, maintenance-led decline in exports of the five North Sea benchmark crude grades — Brent, Forties, Oseberg, Ekofisk and Troll — to 639,000 b/d next month from 780,000 b/d in April. The planned strike will precede the start of major maintenance work on the Forties Pipeline System (FPS) on 27 May, which will crimp output of fellow North Sea benchmark grade Forties for three weeks.

Brent accounts for 58,000 b/d of May's scheduled loadings. The strike will have a limited impact on next month's Brent supplies, as only one cargo of the grade is due to load in the second half of May. By comparison, the disruption to Forties supplies caused by the FPS shutdown and other maintenance will be on a greater scale. Forties loadings are scheduled at around 135,000 b/d next month, down by nearly 50pc from April's 260,000 b/d. Only three Forties

ANNOUNCEMENT

Proposed 12 May early timestamp for some crude prices

Argus proposes an early timestamp of 12:30pm Singapore time for its Asia-Pacific, Russia Asia-Pacific and most Mideast Gulf crude assessments on 12 May, ahead of the Eid al-Fitr public holiday in Singapore on 13 May, because of a potential lack of physical market liquidity to underpin price assessments. To provide feedback and comments on this proposal, please contact Azlin Ahmad at azlin.ahmad@argusmedia.com

cargoes are due to load in the second half of May, compared with eight in the second half of April.

By Riyan Zerrouki

Covid-19 surge disrupts Indian turnarounds

Indian refiners have postponed maintenance plans, while others face delays with restarts, as the country struggles to contain the spread of its Covid-19 outbreak.

Indian state-controlled refiner Bharat Petroleum (BPCL) will postpone its maintenance planned for this month as the country's outbreak worsens. BPCL had plans for maintenance in April at its 240,000 b/d Mumbai refinery but decided to postpone it following the surge in Covid-19 cases.

It is impossible to complete any refinery turnarounds currently because of strict lockdown restrictions as the maintenance require a large number of people to gather, which is currently not permitted, said an Indian refiner.

The date of the BPCL Mumbai turnaround is yet to be determined. But there should be some clarity in early May as the government is expected to announce new rules then, said a market participant.

Indian private-sector refiner Reliance Industries also postponed a turnaround at the 1.8mn t/yr paraxylene unit at its Jamnagar refining complex because of the surge in Covid-19 cases. The unit was expected to have a one-month turnaround in May.

Indian state-controlled refiner Hindustan Petroleum (HPCL) managed to start work as planned during April at its 150,000 b/d Mumbai refinery, although its faces a two-day delay to the restart of its crude distillation unit.

State-controlled refiner IOC has plans for a scheduled turnaround at its 300,000 b/d Paradip refinery in August. But this could face delays as well, depending on how the outbreak evolves, said market participants, although this could not be confirmed with IOC.

India's Covid-19 outbreak has slashed transportation demand resulting in more fuel exports than expected, according to *Argus* tender data. Domestic private-sector refiner Nayara has offered about 50,000 b/d of gasoline for May loading compared with around 35,000 b/d normally, while IOC has offered a rare 30,000t (254,000 bl) spot gasoline cargo from Kandla as inventories build with falling demand. *By Aldric Chew and Mahua Chakravarty*

Shell Puget Sound reports start-up work

Shell reported increased flaring associated with start-up work of a hydrotreater unit and a sulphur recovery (SRU) unit yesterday at its 147,000 b/d Puget Sound refinery in



Consultation regarding North Sea methodology

Argus proposes to amend its North Sea Dated and New North Sea Dated methodology because of recent changes in the way the North Sea market operates and the development of delivered-Rotterdam trade.

Cif Rotterdam

Argus proposes to change the way it includes offers, bids and deals for Brent, Forties, Oseberg, Ekofisk and Troll on a cif Rotterdam basis in its existing fob North Sea assessments. Cif Rotterdam market information will be adjusted for freight to derive a fob North Sea price. The freight adjustment used will be 80pc of the cost of freight between Rotterdam and the loading point based on the average of the Argus UK-UK continent freight rate in the 10 previous publishing days.

Cif arrival periods will be adjusted by two days for translation into a fob price for price assessment purposes. Any cif offers or deals will take precedence over fob activity on those specified days.

North Sea forward prices

Argus proposes to change the way in which it assesses North Sea forward prices. Under this proposal, Ice Brent prices and an assessment of the exchange for physical (EFP) market will replace the current use of forward partials trade.

The front-month *Argus* North Sea price will be assessed using the equivalent Ice Brent futures one-minute marker combined with the equivalent EFP. All other North Sea forward prices will be assessed using this front-month price combined with intermonth forward spreads as assessed by *Argus*.

Anticipated Dated

Argus proposes to change the way in which its Anticipated Dated price is constructed. Argus will use weekly CFD prices to assess a separate CFD value for each day in the 10-day to month-ahead loading window, including on weekends. Weekend days are not currently included in the calculation of Anticipated Dated.

North Sea Dated

Argus proposes to change the final calculation used to establish North Sea Dated and New North Sea Dated. Under this proposal, the price will be the average of the lowest-priced benchmark grade on each day in the 10-day to month-ahead period, instead of the lowest priced single grade over the whole of the period. As a result of this proposal, two or more of the benchmark grades can form the basis of the final assessment.

Timing

Argus proposes to introduce cut-off times for any North Sea offers or bids to be considered for inclusion in the assessment, as follows:

- New cif bids or offers 3.45pm London time
- New fob bids or offers 4.10pm London time
- Changes to bids or offers 4.25pm London time
- Trades 4.30pm London time

Argus will accept comments on these proposals until 14 May 2021. To discuss these proposals, please contact Michael Carolan at michael.carolan@argusmedia.com or on +44 20 7780 4200. Formal comments should be marked as such and may be submitted by email to londoncrude@argusmedia.com and received by 14 May 2021. Please note, formal comments will be published after the consultation period unless confidentiality is specifically requested



INFRASTRUCTURE NEWS

Anacortes, Washington.

Start-up operations were reported on 27 April, according to a filing to state environmental regulators.

Hydrotreaters remove impurities such as sulphur from refinery streams. SRUs help to remove sulphur and other impurities from refinery products and gas streams.

Planned flaring today at Marathon Los Angeles

A planned flaring event is scheduled to start today at Marathon Petroleum's 363,500 b/d Los Angeles, California, refinery.

Flaring in the Carson end of the complex is scheduled to start at 11pm ET and will last until 2:59am ET on 1 May, according to a filing to regional air quality monitors.

The event is associated with process unit start-up/shut-down operations, according to the filing.

Marathon Petroleum does not comment on refinery operations.

PBF Torrance reports planned flaring event

PBF Energy will start flaring tomorrow at its 155,000 b/d refinery in Torrance, California.

Flaring is planned to commence at 1am ET on 29 April and is scheduled to conclude on 4 May at 2:59am ET, according to a filing to state regulators.

The refiner did not identify process unit or units involved.

INDUSTRY NEWS

Saudis may sell 1pc of Aramco to foreign investor

Saudi Arabia's Crown Prince Mohammad bin Salman has said that discussions are underway to sell a 1pc stake in statecontrolled Saudi Aramco to a large foreign investor.

"There is currently discussion about an acquisition of 1pc [of Aramco] by a leading company in the world, and this will be a very important deal that will enhance Aramco's sales in the particular country in which that company is present," the crown prince said in a televised interview. "I cannot mention its name, but it is a huge country, and if it acquires 1pc [of Aramco] that will enhance Aramco's industries as well as demand on Aramco's products in that country and also the company itself."

Prince Mohammad's public disclosure suggests that the prospective buyer is one of China's state-owned oil companies. He said that there is a possibility that the deal could be announced "very soon."

"Aramco has an opportunity to be one of the largest industrial companies in the world," he said, referencing the company's plans to use up to 3mn b/d of its crude output as feedstock for petrochemicals and further downstream industries by 2030.

Prince Mohammad, who is in overall charge of the Saudi economy, added that discussions are ongoing with other companies to buy "different portions of Aramco equity", with the proceeds to be transferred to the sovereign wealth Public Investment Fund (PIF). He said that sales to other international investors could be announced "within the coming one or two years."

Prince Mohammad revealed in late January that Aramco would list more shares over the next few years to help boost the PIF's funds to 4 trillion riyals (\$1.06 trillion) by 2025. He did not specify how much of Aramco's equity the government plans to sell over the next few years, nor did he say

how much the government plans to keep hold of, but it is likely to retain a controlling share.

The government owns just over 98pc of Aramco's shares, since a partial initial public offering (IPO) of the company on the Saudi stock exchange in late 2019 that earned the company just under \$30bn.

The crown prince appears to be using Aramco as a cash cow to fund the PIF's activities and investments, which he hopes will help diversify the Saudi economy away from its dependence on the oil revenues earned by Aramco. The oil company, at the government's behest, bought the state's 70pc stake in petrochemicals firm Sabic last year. It will pay the PIF \$69.1bn for the purchase, in installments until 2028.

"We aim to boost the PIF's assets to SR10 trillion by 2030, and the current purpose of the fund is to achieve growth," said the crown prince, who heads the PIF. But he pointed out that the PIF is expected to bolster Saudi government revenues, adding that it will spend SR160bn within the country this year. The PIF's return on investment is 6-7pc, he said.

A tripling of value-added tax (VAT) to 15pc last year, to help the government deal with the double blow of the collapse in oil prices and the economic fallout of the Covid-19 pandemic, is a temporary measure that will be reversed, said the crown prince.

By Samira Kawar

Urals crude VLCC likely to sail to China

A very large crude carrier (VLCC) is due to depart for China at the start of next month, likely with a shipment of Baltic Urals crude.

Unipec, the trading arm of China's state-owned Sinopec, has



chartered a VLCC to take a 270,000t shipment of crude from the Skaw to Ningbo in China on 1 May, according to port reports. Vortexa data indicate the Unipec-chartered VLCC *Antigone* has undergone ship-to-ship (STS) transfers with the *Sea Calm* and *NS Antarctic* at the Skaw, adding their respective shipments of Baltic Urals crude to its own, over the past ten days.

Should the *Antigone* sail as planned, it would mark the first VLCC delivery of Baltic-loaded Urals crude to depart to Asia-Pacific since the *Dilam* in late-February.

Heavy maintenance turnarounds at Sinopec-operated refineries have since dampened buying interest. Much of the firm's remaining demand for the grade has since been catered to by a term deal for 1.2mn-6mn t of Rosneft-supplied Baltic Urals to be delivered over April-September.

Urals values in northwest Europe slid to a \$2.80/bl discount against benchmark North Sea Dated during the previous session, but market participants suggested that renewed Chinese buying could lend support in the coming days. By Felix Todd

Russian oil firms face up to tax blow

Russian oil producers hit by the loss of some upstream tax breaks this year are adapting their investment and production plans to minimise the negative impact.

Gazpromneft, Russia's third-largest crude producer, is revising the development plan for its flagship 1.8bn bl Novoportovskoye field in Yamal-Nenets after the finance ministry revised the pilot profit-based tax model. The ministry made changes to the profit-based system to recoup unexpected budget losses resulting from the transfer to the scheme of Novoportovskoye and other greenfields.

It will take three years to overcome the negative consequences for what had been one of Gazpromneft's most efficient and fastest-growing projects, according to the head of the department for work with state authorities, Pavel Karchevsky.

"We are changing [Novoportovskoye's] development programme, there is a big gas component as well as oil — the oil part will probably be scaled back," he told the National Oil and Gas Forum-2021 in Moscow on 27 April, without giving figures. Novoportovskoye crude output had been scheduled to reach a peak of 160,000 b/d this year, but production will be below the 153,500 b/d reached in 2020, Gazpromneft said in December.

Russia's fifth-largest producer, Tatneft, will reduce planned upstream investment by Rbs225bn (\$3bn) in 2021-30 as a result of losing tax concessions for its high-viscosity crude projects, deputy general director Azat Yagafarov told the forum. A cumulative 98mn t (715mn bl) of output could be lost by 2030, according to Yagafarov's presentation. Tatneft's 65,000 b/d

high viscosity oil Ashalchinskoye field in Tatarstan accounts for around 10pc of the company's overall output — rising Ashalchinskoye production drove output growth for several years.

Lukoil and Tatneft, Russia's main high-viscosity crude operators, have suspended investment in these projects this year. And some industry analysts warn that both firms will have no choice but to shut down projects of this type unless they secure new incentives, or a more supportive tax model soon.

The Tatneft presentation suggests that the loss of upstream tax concessions would lead to a Rbs1 trillion decline in tax payments over the 2021-30 period.

But deputy finance minister Alexei Sazanov insists that Tatneft's forecast is overly pessimistic. Without Opec+ restrictions on crude output, Russian oil companies' first-quarter profits could have been higher than in same periods of 2019-20, despite the withdrawal of tax breaks and lower oil demand, he says.

Mixed messages

Sazanov reiterated that the transfer of high-viscosity oil projects to the profit-based tax model is unlikely before 2024 — an option proposed by producers.

But President Vladimir Putin recently ordered the government to devise new upstream incentives by 1 May for high-viscosity and hard-to-recover crude, as well as oil production from depleted fields with high water cut.

Separately, the finance ministry is happy with Rosneft's implementation of the investment agreement signed with the government for its 3.3bn bl Samotlor brownfield in western Siberia in 2018, Sazanov says. The company was granted unprecedented mineral extraction tax (MET) concessions worth \$600mn/yr for 10 years, in return for increased spending at the field.

The tax breaks helped Rosneft to stabilise Samotlor output in 2018-19 after several years of natural decline. But production was down by 5.7pc at 364,000 b/d last year, despite Rosneft's commitment to spare only Samotlor from Opec+cuts. The company recently secured similar MET concessions for its 3.45bn bl Priobskoye brownfield in west Siberia. By Oksana Yablokova

Russian refinery output down in 1Q

Russian refining activity was lower in first-quarter 2021 than a year earlier, reflecting reduced products demand at home and in export markets because of the Covid-19 pandemic. Crude runs were down by nearly 7pc on the year at of 5.55mn b/d in January-March, as all of Russia's large refiners cut throughputs, according to data from CDU TEK — a branch of FGBU 'REA', Russian Energy Ministry \odot .

Top-refiner Rosneft's Ufa complex showed the steepest



fall, with a 12.4pc drop in crude runs — the 480,000 b/d Ufa refineries, operated by subsidiary Bashneft, is listed separately in the data — followed by the country's second-largest refiner, Lukoil, with an 8pc drop and Rosneft itself at 6.8pc. Of the top-three companies, Gazpromneft crude runs were a relatively modest 2.5pc lower than in first-quarter 2020.

But throughputs rose at several individual refineries, including Gazpromneft's 240,000 b/d Moscow plant, 132,000 b/d Ilsky in southern Russia, as well as Rosneft's 240,000 b/d Tuapse, 191,000 b/d Novokuibyshev and 132,000 b/d Novoil refineries — the latter part of the Ufa group.

Covid-19's negative impact of products demand was particularly noticeable for jet fuel — Russian production was nearly 15pc lower on the year at 2.54mn t in January-March, reflecting acutely reduced air traffic compared with pre-pandemic levels. International traffic in Russian airspace remained 24pc down on the year last month and 52pc lower than in March 2019.

Russian gasoline production fell by 4pc to 10mn t. A nearly 9pc drop in output of A-92 gasoline was partly offset by an almost 12pc rise A-95 production — the increase reflecting refinery upgrades and growing demand for higher-quality product. Gasoline output was notably higher at some refineries, including the Ufa complex and Gazpromneft's plants — up by 20.8pc and 4.3pc, respectively.

A-92 remains the mostly widely used grade in Russia. Total domestic gasoline demand was around 5pc higher on the year at an average of around 643,000 t/week in the first quarter, according to CDU-TEK.

Production of gasoil and diesel fell by almost 9pc to 22.6mn t, but output of winter-grade products bucked the overall trend, rising by 5.6pc on the year in January-March. The sharp overall drop partly reflected reduced demand on export markets, while domestic diesel consumption was nearly 5pc lower on the year at 712,000 t/week in January-March. Seaborne Russian exports fell by around 13pc on the year to 12.13mn t, data from oil analytics firm Vortexa show.

Vacuum gasoil (VGO) output increased by 0.8pc on the year to 4.36mn t. Demand for Russian VGO on export markets has proved resilient in recent months, as weak product margins relative to crude have encouraged refiners to raise cracking unit throughputs — for which VGO is a key feedstock. Refinery maintenance also played a role in the increase — VGO production from Lukoil's 290,000 b/d Volgograd refinery nearly 529pc higher at 290,400t during work on the plant's hydrocracker. And the rise in VGO output may also reflect reduced secondary processing at Russian refineries to produce gasoil and diesel.

By Harry Riley-Gould

TechnipFMC sees recovery driving 2021 prospects

Services firm TechnipFMC today gave an optimistic reading of its prospects for this year, seeing the potential for integrated project awards to more then double from 2020.

The firm said it based this on the "potential for a global economic recovery that is more sustainable than previous cycles".

TechnipFMC's inbound orders rose by 11pc year on year in the first quarter, to \$1.72bn. This is the first reporting period since the firm partially span-off its energies division, which covers biofuels, LNG and petrochemicals, a move that left the legacy company as a subsea and surface technologies business.

The latter division was affected by the slowdown in US onshore activity, leaving the former to account for 88pc of overall inbound orders in the first three months of the year. TechnipFMC today reiterated its outlook for new business in the subsea division to top \$4bn this year.

The company made a profit of \$368mn in the first quarter, compared with a loss of \$3.26bn a year earlier. The year-earlier figure had been affected by large non-cash impairment and other charges, and this year's profit was boosted by a gain relating to the spin-off of Technip Energies By Ben Winkley

Johan Sverdrup exports to edge down in June

Loadings of the North Sea's largest crude stream Johan Sverdrup are expected to average 520,000 b/d in June, down by a marginal 3pc from the 535,000 b/d planned in May, according to the latest loading programmes.

This will bring the grade's average exports to around 519,000 b/d in the first half of this year compared with 396,000 b/d loaded during the same period last year.

The June programme contains 19 shipments, three of which will be 2mn bl each, while the rest will be Aframax-sized loads.

Johan Sverdrup's production is thought to be reaching its next increase in phase 1 capacity to 535,000 b/d in May, but output from the field is expected to continue growing as the second phase, which will lift capacity to 720,000 b/d, is due on stream in the fourth quarter of 2022. By Andy Devine

Exxon to convert Norway refinery into terminal

ExxonMobil has decided to turn its 120,000 b/d Slagen refinery in Norway into a products import terminal.

"The continued Slagen refinery operation is not economically viable over the long term" as the current environment is characterised by "strong competition, evolving regulatory measures, and falling demand leading to overcapacity in the market," ExxonMobil said.



Slagen mainly processes North Sea crude, and around 60pc of its products output goes to export. No timeline was specified for its conversion, after which ExxonMobil said it will ensure fuel supply for its customers through imports.

Exxon announced earlier this month it was considering the conversion, following in the footsteps of many other refiners which have closed plants as a result of a Covid-induced fuel demand slump. ExxonMobil previously noted that demand has fallen for road fuels in Norway, where take-up of electric vehicles has been strong.

By Rowena Edwards

Congolese exports scheduled higher in June

Loadings of crude grades from Congo Brazzaville are scheduled to average 246,000 b/d in June, up from May's planned 238,000 b/d.

Congo Brazzaville's June loading programme shows seven 920,000 bl cargoes of flagship Djeno scheduled in the month, unchanged from May.

Exports of N'Kossa will also be stable at one 950,000 bl cargo, scheduled to load on 29-30 June, with Italy's integrated Eni listed as marketer.

The June tally will be the highest since the 316,000 b/d scheduled in February.

Congo Brazzaville's output cap under its Opec+ commitment is 273,000 b/d in May and 276,000 b/d in June, following the group's decision to gradually increase production quotas in May-July.

By Nicola De Sanctis

Sinopec profit, crude runs rise in 1Q

China's biggest refiner state-controlled Sinopec raised crude throughputs in the first quarter to take advantage of strong gasoline and petrochemical markets and build product stocks ahead of a heavy turnaround season in April-May.

The company made a profit of 18.54bn yuan (\$2.8bn) in January-March, a sharp improvement from a loss of Yn19.22bn a year earlier when China was grappling with its initial Covid-19 outbreak. Revenue rose by 4.1pc to Yn576.98bn over the period, the company said in its quarterly results filing today.

Crude throughputs increased by around 17pc from a year earlier to 62.52mn t (5.11mn b/d). Gasoline yields jumped by 27pc to 1.54mn b/d, which was also up by 8.5pc from October-December last year. The company's refining segment made a pre-tax profit of Yn19.9bn, recovering from a big loss of Yn25.8bn in the same period last year.

Sinopec's petrochemical operations recorded a pre-tax

profit of Yn8.9bn, with ethylene and synthetic resins output rising by 11.7pc to 3.38mn t and by 11.5pc to 4.79mn t respectively. The sector achieved its "historical best" performance in February-March as product prices soared, Sinopec officials said in a conference call last month.

Sinopec's domestic crude output was 680,000 b/d in January-March, edging down by 1.4pc from the same period last year.

Sinopec's capital expenditure totalled Yn23bn in the quarter, around 40pc of which went to the upstream sector including shale gas developments at the Fuling and Weirong fields and LNG terminal expansions at Tianjin and Qingdao. Another Yn9.4bn was spent on refining and petrochemical operations, including an upgrade at its 180,000 b/d Anqing refinery and an expansion of the 460,000 b/d Zhenhai plant.

Japanese weekly refinery runs rise

Japanese refinery runs averaged 68.4pc in the week to 24 April, up by a percentage point from a week earlier.

Crude throughput increased by 1.5pc to 2.4mn b/d, while operational capacity rose by 6.3pc to 2.7mn b/d, according to the Petroleum Association of Japan (PAJ).

The higher operational capacity reflected the restart of Eneos' 129,000 b/d Chiba refinery on 22 April after a turnaround that started on 5 February. The company also resumed operations of the 170,000 b/d No.2 crude distillation unit (CDU) at its 247,000 b/d Kawasaki refinery on 25 April following unexpected maintenance, although this was too late to be reflected in the latest data.

Eneos' 95,200 b/d No.2 CDU at its 200,200 b/d Mizushima B refinery is expected to restart in mid-May, changed from the original schedule of late April. The company is also planning to resume operations at its 127,500 b/d Wakayama refinery late May, after a fire on 29 March.

Output of refined oil products fell by 1.3pc to 2.2mn b/d during the latest week. Production of jet fuel and gasoil dropped by 13pc to 129,000 b/d and by 2.7pc to 555,000 b/d respectively.

Oil product exports dropped by 23.6pc to 208,000 b/d. Japan sold no gasoline cargoes over the latest week after exporting 53,000 b/d a week earlier. Exports of high-sulphur marine diesel also dropped by 83.6pc to just 3,000 b/d.

Inventories of refined oil products edged lower by 0.9pc to 61.7mn bl during the latest week. Stocks of naphtha and kerosine fell by 8.9pc to 8.8mn bl and by 3.1pc to 8.9mn bl respectively.

Stocks of unfinished products increased by 1.7pc to 40.8mn bl, while crude stocks dropped by 7.5pc to 67.8mn bl.

By Maiko Nakashima



US crude stocks inch higher

US crude inventories moved slightly higher last week amid a sharp rise in imports, according to the Energy Information Administration (EIA).

Domestic crude stocks rose by 90,000 bl to 493.1mn bl in the week ended 23 April.

Stocks at the Cushing hub in Oklahoma increased from the prior week by about 720,000 bl to 46.1mn bl.

Crude inventories at the US Strategic Petroleum Reserve (SPR) fell by 1.4mn bl to 634.5mn bl. SPR stocks are not included in the overall EIA commercial crude inventory figures.

US crude imports rose from the prior week by 1.2mn b/d to 6.6mn b/d.

Domestic crude output fell to 10.9mn b/d, down by 100,000 b/d from the prior week and down by 1.2mn b/d from the same week last year.

US production started a steep decline in the spring of 2020 as operators curtailed output in response to the Covid-19 pandemic's impact on global demand.

The EIA predicts that US crude output will stay below prepandemic levels through 2022. Domestic crude production will average 11.04mn b/d this year, and 11.86mn b/d in 2022, the agency said in its most recent Short-Term Energy Outlook (STEO).

US refiners processed 15mn b/d of crude last week, up by 253,000 b/d from the previous week. The processing rate trailed the same week of 2019 by almost 9pc.

US crude exports held steady with the prior week at 2.5mn b/d but were down by 760,000 b/d compared with a year earlier.

Domestic gasoline stockpiles held steady last week as estimated domestic and export demand of the fuel fell. US diesel stockpiles, meanwhile, drew down on stronger domestic consumption.

By Eunice Bridges

Hess can to move crude if Dakota pipeline shuts

Hess Midstream will have "no problem" fulfilling its crude contracts if the 570,000 b/d Dakota Access oil pipeline (DAPL) is shut, the company said today.

Hess Midstream will be able to move Bakken crude to other pipes and by rail if DAPL is constrained or shut, the company said while reporting first quarter earnings.

DAPL, the largest pipeline out of the Bakken shale, is facing a possible shut down order by a federal court in a case surrounding its environmental permitting. In the latest development, a federal judge asked the US Army Corps of Engineers to take a position by 3 May on whether to shut the line while it conducts a new environmental review.

US midstream giant Energy Transfer, majority owner and

operator of DAPL, will likely appeal any shut down order. DAPL has been in service since 2017.

Hess has an integrated system of pipelines, terminals and rail assets that gives it multiple options if DAPL shuts. Its facilities can access DAPL and Enbridge pipelines, as well as the Tioga rail terminal. Tioga connects directly to BNSF's tracks, and Hess Midstream owns 550 newly constructed DOT-117 rail-cars.

Hess Midstream also reported today that its crude gathering volumes fell by about 22pc in the first quarter compared with year-earlier levels because of reduced drilling activity and the impact of severe winter weather in February.

Oil gathering volumes averaged 117,000 b/d in the first quarter, down from 150,000 b/d a year earlier.

Third parties comprised about 15pc of crude gathering in the first quarter.

Parent company Hess reported earlier today that it added a second operated rig in the Bakken in February and is considering a third and fourth rig if prices remain high. By Eunice Bridges

Guyana gains pace Hess' 1Q production

Hess' net oil production — excluding Libya — grew by 6pc during the first quarter of 2021 from the prior quarter, led by gains in Guyana as Bakken output declined.

Hess produced 177,000 b/d of crude during the first quarter, up by 10,000 b/d compared to the fourth quarter of 2020 but down by 7pc from the first quarter of 2020, the company said today while reporting quarterly earnings.

The company's oil production in the Liza field of Guyana's deepwater Stabroek block averaged 31,000 b/d during the first quarter, more than double the production rate from one year prior and up by 20pc from the fourth quarter. Hess holds a 30pc stake of Stabroek.

The *Liza Destiny* floating production, storage and offloading (FPSO) unit produced 120,000 b/d during the first quarter after reaching its nameplate capacity for the first time in December, Hess said.

The FPSO's output is expected to fall in the second quarter following a leak detected on 11 April in the flash gas compressor discharge silencer that shut in production for several days. Production on the platform will remain around 100,000-110,000 b/d for the next three months while repair work continues.

An upgraded flash gas compression system is expected to be installed during the fourth quarter, lined up with planned optimization work.

Hess expects to sell two 1mn bl cargoes of crude from the *Liza Destiny* during the second quarter, down by one from the first quarter, and five cargoes in the second half of



2021.

Longer term, output from Guyana is poised for growth. Hess announced yesterday a discovery at the Uaru-2 well, which adds 9mn bl of oil equivalent (boe) to the Stabroek block's gross discovered recoverable resource estimate.

The startup of "Phase 2" of the Liza field development remains on track for 2022, with 90pc of the overall work completed and the new 220,000 b/d *Liza Unity* FPSO preparing to sail from Singapore to Guyana mid-year.

A third development, Payara, will add 220,000 b/d of gross production on the *Prosperity* FPSO, at which first oil is expected in 2024, and the newly identified Yellowtail development in Stabroak is planned to start in 2025.

Hess plans to have at least six FPSOs in the Stabroek block by 2027 and up to 10 longer term.

Bakken performance pales

Hess' Bakken production in North Dakota fell below its previous guidance, with just 84,000 b/d of crude produced in the first quarter compared to 97,000 b/d in the fourth quarter of 2020 and 114,000 b/d one year prior.

Production declines were partially a result of power outages and freezing conditions for two weeks in February. Temperatures fell below safe operating conditions and led to higher non-productive time on drilling rigs, higher workover backlogs and lower non-operated production.

Net production from the Bakken averaged 158,000 boe/d, down by 32,000 boe/d, or 16.8pc, compared to the prior-year quarter. Hess projected an average 155,000 boe/d in the second quarter and 155,000-165,000 b/d in the second half of 2021.

Hess earlier this month announced the sale of its Little Knife and Murphy Creek non-strategic interests in the Bakken, effective 1 March, but expects the Bakken to remain a core part of its portfolio.

The company drilled 11 wells, completed 10 and brought four on line during the first quarter. Hess increased the number of operated rigs from one to two in February as the price of US benchmark West Texas Intermediate (WTI) surpassed \$50/bl.

Hess officials are considering the addition of a third and fourth rig if prices remain high. The company hedged 120,000 b/d of WTI at \$55/bl and 30,000 b/d of European benchmark Brent at \$60/bl to manage downside risk in 2021. By Amanda Hilow

Continental Resources restores dividend

Continental Resources is restoring quarterly payments to shareholders as a rising cash flow outlook from higher oil and gas prices outweighs a drop in first-quarter production.

Dividend payments, which were suspended a year ago as

the Covid-19 pandemic sapped fuel demand and forced oil and gas producers to cut output, will resume next month at 11¢ a share, the company said today.

Cash flow from operations this year is expected to be \$3.1bn, up by about 30pc from the company's prior forecast. In addition to restoring the dividend, Continental plans to use the higher cash generation to pay down debt.

The Bakken shale and Oklahoma-focused producer maintained its 2021 capital spending forecast of \$1.4bn as well as its crude production outlook of 160,000-165,000 b/d.

First-quarter oil production averaged 151,852 b/d, down from 200,671 b/d a year earlier. The company's average net sales price for crude rose to \$53.09/bl, up by 34pc from a year earlier.

Total revenue in the quarter climbed to \$1.22bn, up from \$880.8mn a year earlier. The company posted a profit of \$259.6mn, compared with a loss of \$185.7mn in the first quarter last year.

By Jack Kaskey

US to review China trade deal progress

US president Joe Biden's administration is reviewing how China has implemented the interim trade deal with the US and could hold trade talks with Beijing soon, US trade representative Katherine Tai said today.

Under the so-called "phase one" agreement, China agreed to increase its purchases of crude, LNG and other US energy commodities by \$69bn in 2020-21, from a 2017 baseline. Chinese purchases of US crude last year more than tripled from 2019, but they remain well below the dollar targets set in the phase one deal.

The US Trade Representative's office (USTR) is conducting a comprehensive review of US-China trade relations, including the phase one deal, Tai told a Senate Appropriations Committee panel today.

"We are in the process of examining their performance and are scrutinizing all of the aspects of what they have done and what they have yet to do and what they have not done at the levels that they promised," Tai said, adding: "The picture is more nuanced than you might think by just looking at the trade data."

The agreement sets a six-month schedule for consultations between the top trade officials of both countries, but Biden's administration chose not to adhere to that schedule, opting not to hold a meeting in mid-February as it had not yet formulated its trade approach to China. "I will be having my first contact with my Chinese counterpart, which I am looking forward to, at the right time," Tai said.

Senators from both parties urged Tai to reconsider the tariffs imposed against imports from China in 2018-19 under



former president Donald Trump, arguing that retaliatory tariffs imposed by Beijing have hurt US manufacturers and agricultural producers.

But USTR is not making any promises given the overall background of US complaints against China's trade practices and industrial policies. "The tariffs and this agreement will be very critical parts of the top-to-bottom China review," Tai said. By Haik Gugarats

US west coast stocks steady as imports surge

Alaskan oil output rose last week, while competing imports to the US west coast spiked by 139pc to hold crude stock levels steady in the region.

Weekly-average Alaskan North Slope (ANS) oil production rose by over 8,000 b/d to 477,000 b/d as of 23 April, down by 20,000 b/d from the same week last year and lower by nearly 30,000 b/d from two years ago, according to the Alaska Department of Revenue.

US west coast refinery runs ebbed by 22,000 b/d to 2.05mn b/d in the week ended 23 April, compared to the week prior, according to the latest available statistics from the US Energy Information Administration (EIA).

Crude stock levels at the US west coast were at 46.42mn bl in the latest week, a roughly 140,000 bl increase from the prior week.

At the same time, competing imports at the US west coast rose by 1.07mn b/d to 1.83mn b/d, while ANS shipments to the region fell by 191,000 bl, or by less than 5pc, to 4.25mn bl.

ANS for June delivery to the US west coast has sold three times at mixed differentials to the benchmark CMA Ice Brent between a 10¢/bl discount and a 20¢/bl premium since the start of the trade month on 6 April.

In shipping news, the US flagged *Alaskan Legend* discharged a cargo of April loaded ANS at Kiire, Japan, this week as domestic demand falls for Jones Act compliant vessels.

The Suezmax *Stena Suede* is laden with a cargo of ANS since 17 April and signaling Dalian, China, for arrival around 5 May. *By Benjamin Peyton*

Mexico reforms drain investment: Chamber

Mexico's recent legislative reforms in energy have sapped investment and the government should have been more open to dialogue, one of the country's largest business chambers said today.

"Halting investment is the only thing it has done," said Carlos Salazar, head of the CCE.

Authorities should have allowed for negotiations with the private sector over reforms to fuel permitting as they did with a recently passed law on outsourcing jobs, Salazar said

at a private equity event.

"We could have discussed our country's energy problems around a table and made better decisions," he said.

Lawmakers passed a bill first presented by President Andres Manuel Lopez Obrador that amends Mexico's hydrocarbons laws to make it easier for the energy regulatory commission (CRE) and the energy ministry (Sener) to cancel operating permits along the fuel value chain.

The senate is considering another bill that would end asymmetric limits on state-owned Pemex meant to open more space for competition. The legislative period ends on 30 April.

Lopez Obrador also backed a power sector reform that seeks to prioritize dispatch generated by state power company CFE, revoke self-supply permits and review all long-term power purchase agreements with independent power producers.

Business leaders in Mexico have warned of an increasingly uncertain business climate as the Lopez Obrador government enacts policies harming private sector companies in areas such as energy.

The private sector was able to somewhat water down an initial proposal to ban outsourcing jobs after holding months of talks with government authorities. Mexico's senate approved a revised bill last week.

By Jens Erik Gould

Mexican independent crude output hits high

Mexican crude output from independent operators grew by 16pc to 58,210 b/d in March compared with 50,250 b/d in March last year, a record production high.

Output also increased by 12pc from 51,960 b/d of crude produced in February, according to oil regulator CNH.

Of March's output, companies that won production-sharing or license contracts following the 2014 energy reform produced 23,060 b/d, up by 17pc on the prior month's 19,800 b/d and up by 39pc on the 16,650 b/d produced in March 2020.

Output from the Ogarrio and Cardenas Mora farm-outs — associations between an independent operator and Pemex — hit 10,700 b/d in March, down by 16pc on the 12,770 b/d produced during the same month in 2020 and almost flat from 10,730 b/d produced in February.

Production from the Santuario, Ebano, Mision and Miquetla contracts — migrated to production-sharing contracts with private-sector operators from 2017-2018 — reached 24,450 b/d in March, up by 17pc from the 20,830 b/d in March a year earlier and up by 14pc from the 21,440 b/d produced in February.

Natural gas output from the contracts hit 49.4mn cf/d in March, up from 42.8mn cf/d in March last year.

Gas output from the farm-outs declined to 27.6mn cf/d in



March compared with 30.4mn cf/d in March a year earlier.

Output from the migrated contracts was 128.8mn cf/d in March, compared with 156.2mn cf/d produced in March 2020, and total gas output from independent operators reached 206.5mn cf/d in March.

Pemex produced 1.64mn b/d of crude and 4.62 Bcf/d of natural gas in March, down from 1.7mn b/d of crude and 4.69 Bcf/d of gas in March a year earlier. Output was up against 1.61mn b/d of crude produced in February but down against 4.64 Bcf/d of gas.

Members of Mexico's private oil industry association Amexhi have pledged to increase crude output to 280,000 b/d by 2024 but the Covid-19 pandemic has forced some operators to delay production programs amid volatile crude prices and supply chain interruptions. CNH extended the suspension of work commitment deadlines in exploration and production contracts for a further three months on 23 April amid the ongoing Covid-19 pandemic.

Independent operators fell 32pc short of the 75,000 b/d year-end 2020 target.

By Rebecca Conan

Petrobras crude exports drop 37pc in 1Q

Brazil's state-controlled Petrobras exported 511,000 b/d of crude in first quarter 2021, down by 36.6pc from a year earlier, mainly reflecting lower production.

The January-March 2021 exports fell by 17.3pc from the previous quarter, according to operational data released by the company this evening.

Petrobras' domestic oil production dropped to around 2.196mn b/d in first quarter 2021 from 2.320mn b/d in the same period a year earlier, just before the Covid-19 pandemic upended global energy markets.

The decrease in domestic oil flows mainly reflected a 16pc decline in post-salt flows, which dropped to 521,000 b/d in the first quarter from 620,000 b/d in first quarter 2020.

Onshore and shallow-water production plunged by 30.6pc to 109,000 b/d in first quarter 2021, mainly because of field closures at the start of the pandemic.

The declines offset a modest 1.6pc increase in pre-salt production, which climbed to 1.567mn b/d in January-March from 1.543mn b/d a year earlier.

The end of scheduled maintenance, a ramp-up at the Atapu field and the planned third quarter start of the Sepia pre-salt field should boost domestic production as the year progresses.

"In terms of oil exports, the focus remains on developing new markets for Buzios oil and new customers were added to the portfolio in 1Q21. In addition, we started to export a new production stream, Atapu oil, with the sale of two cargoes in the quarter," Petrobras said.

Brazil's top oil producer and exporter, Brazil expects crude exports to remain close to the 713,000 b/d dispatched in 2020.

Total production, including liquids and natural gas in Brazil and abroad, was 2.765mn b/d of oil equivalent (boe/d) in the first quarter, a 3.1pc increase over the fourth quarter but down by 5pc year on year.

The first quarter drop in crude exports also stemmed from a 7.8pc increase in domestic diesel production, on the year. Petrobras said a 20pc increase in domestic diesel sales between the first quarter 2021 and a year earlier was the result of "higher competitiveness in relation to sales by third parties."

Throughput at the company's 13 refineries dipped by less than 1pc year on year to 1.821mn b/d in the first quarter, and by 4.1pc from fourth quarter 2020. Utilization rates averaged 82pc, up from 80pc on the year, but down 2pc from the previous period. By Nathan Walters

Brazil fails to award pre-salt oil marketing deal

Brazil's state-owned pre-salt firm PPSA failed to award a five-year crude marketing contract in a landmark auction today, underscoring the oil industry's push to change the underlying terms.

Brazil's state-controlled Petrobras, Norway's Equinor and France's Total each registered to participate, but did not place bids for the contract covering around 4mn bl of Tupi crude. Other companies that had been expected to compete, such as Shell and traders Glencore and Trafigura, were noticeably absent.

"It was a business decision by the participating companies and can occur in any bidding process. We will evaluate the scenarios and decide which model we will adopt to market the government's oil," PPSA director of administration, finance and marketing Samir Awad said of today's results.

The auction was aimed at contracting an agent to handle all trading facets, including identifying buyers, offloading, transportation, contracting insurance, independent inspection and hedge positions. Crude covered by the contract had an estimated value of \$218mn, PPSA says.

PPSA holds a 0.551pc non-equity stake in a unitized portion of Tupi, the Santos basin field that produces around 1mn b/d of 28°API crude, making it Brazil's top-producing deposit. The firm currently receives around 2,800 b/d from the field.

Petrobras holds a 65pc operating stake in the BM-S-11 block where Tupi is located. Shell holds a 25pc interest and Portugal's Galp the remaining 10pc.

This is not the first failed attempt to find a marketer for



the crude that belongs to the federal government under production-sharing contracts. A May 2018 auction for Mero, Sapinhoa and Tupi crude also failed to attract bids. A follow-up auction in August 2018 with adjusted terms succeeded in awarding 12 and 36-month supply contracts to Petrobras and Total for the three grades.

Existential matter

Established in 2013 to represent the federal government in the production-sharing contracts that govern pre-salt assets, PPSA expects to generate around \$75.3bn from crude sales in 2021-30, with around 80pc of that amount in the late 2020s as production rises.

PPSA has kept open the possibility of selling directly to clients such as refiners in China, already the top destination for Brazilian crude. But that route would require massive logistics investments to keep pace with the government's expected share of pre-salt production over the next 10 years from the 17 PSCs it manages.

PSC critics will likely use today's result to argue for adopting a more straightforward concession model contract preferred by the oil industry.

But concession terms would carve out PPSA altogether, since it only plays a role in PSC contracts.

The failed round will also strengthen the hand of influential finance minister Paulo Guedes and other government officials who are pushing to privatize PPSA and other stateowned companies this year.

By Nathan Walters

ANNOUNCEMENT

Argus successfully completes annual losco assurance review

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

Petrobras wins more time to sell refineries

Brazil's state-controlled Petrobras secured extra time from anti-trust agency Cade to sign sales agreements for refinery and natural gas assets originally scheduled to be inked by year-end 2020.

Petrobras now has until 31 July to sign deals for the 208,000 b/d Alberto Pasqualini refinery (REFAP), 46,000 b/d Isaac Sabba refinery (REMAN), and the 8,000 b/d lubricants facility Lubnor; 30 October for the 6,000 b/d SIX shale processing unit, 166,000 b/d Gabriel Passos refinery (REGAP), and 130,000 b/d Abreu e Lima refinery (RNEST); and 31 December for the 208,000 b/d Presidente Getulio Vargas refinery (REPAR).

In a 2019 agreement with Cade, Petrobras was supposed to have signed sales agreements for eight refineries by the end of 2020. Although the 31 December 2021 deadline for the closing of the sales has not been changed, a series of new dates has been set for sales agreements for seven of the eight

ANNOUNCEMENT

Argus Sour Crude Index ("ASCI")

Proportional assessment

Following the end of the first trading quarter of 2021 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 February 2021 and ending 25 May 2021 Each grade has been assigned the following percentage values:

Mars: 67pcPoseidon: 27pcSGC: 6pc

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.



downstream assets. Petrobras has only reached one deal so far, a \$1.65bn agreement signed in March with Abu Dhabi's state-owned investment fund Mubadala for the 333,000 b/d Landulpho Alves refinery (RLAM) in Brazil's northeast—a deal that oil labor unions are challenging in federal court.

In January, Cade and Petrobras agreed to extend the deadline for the sales agreements to 30 April from 31 December 2020. The change followed a four-month suspension of activities in mid-2020 because of pandemic-related movement restrictions.

"Petrobras submitted to Cade a request to readjust the sales schedule in view of the progress of divestment processes, which meet many requirements yes, and the economic scenario resulting from the pandemic," Cade said of the change.

Cade maintained a 30 April deadline for the signing of a sales agreement for Petrobras' remaining 10pc stake in the 2,048km (1,272 mi) NTS natural gas pipeline and delayed the deadline for the sale of the company's controlling stake in the distributor Gaspetro until 30 June.

A controversial management overhaul since mid-February has raised concerns that investors might sour on the refinery sales. A 16 April pledge from Petrobras' new chief executive, former army general Joaquim Silva e Luna, to respect import price parity for fuel has been well received by the market. By Nathan Walters

Canada synthetic output held near record in Jan

Canadian synthetic crude operators continued their robust production in January, posting the second-highest output on record.

Synthetic operators in Alberta's oil sands pumped out an average of 1.29mn b/d in January, one month after hitting an

all-time high of 1.32mn b/d, according to Alberta Energy Regulator (AER) data released this week. The decline was the first in five months, but production was still historically high.

The combined output among the four major projects was 100,000 b/d higher than the same month last year and 30,000 b/d lower than December. Compared to January 2020, three projects made notable gains, led by the Athabasca Oil Sands Project (AOSP).

The AOSP averaged 328,000 b/d of production in January, up by 46,000 b/d from the same month last year and up by 6,000 b/d from December. The AOSP is a joint venture between Canadian Natural Resources (CNRL), Chevron and Shell and includes the oil sands mines in northeast Alberta along with the 320,000 b/d Scotford upgrader near Edmonton, Alberta.

The 350,000 b/d Syncrude joint venture continues to operate above nameplate capacity, pumping out 365,000 b/d in January. This is up by 37,000 b/d from January 2020 and little changed from December. Production was just shy of the record 371,000 b/d set in December 2018.

CNRL's 250,000 b/d Horizon project produced an average of 250,000 b/d in January, up by 35,000 b/d from January 2020 but down by 19,000 b/d from December.

Suncor's 350,000 Base Mine was the only project where January production was lower than a year earlier. Output averaged 344,000 b/d during the month, about 17,000 b/d lower than both January 2020 and December.

Canadian synthetic crude production has been largely unfazed by the Covid-19 pandemic, averaging 1.1mn b/d across 2020. This was down by only 18,000 b/d from the record high set in 2019.

By Brett Holmes



ANNOUNCEMENTS

Stoppage of Canadian trade data codes

Argus is proposing to stop publishing trade data points for Syncrude and WCS.

Under this proposal, Argus would stop publishing cumulative no of trades for Canadian Syncrude (PA0008309) and WCS (PA0008321) and cumulative volume for Canadian Syncrude (PA0008310), and WCS (PA0008322).

Also under this proposal, Argus would stop publishing cumulative (trade month average) weighted averages for Canadian Syncrude (PA0031945) and WCS (PA0031946).

Argus is proposing these changes following a recent methodology change to replace its MTD VWAs with monthly arithmetic averages.

For a complete list of affected pricing database (PA) codes, please contact datahelp@argusmedia.com.

Argus will be accepting comments on this proposal until 6 May 2021. To discuss comments on this proposal, please contact Gus Vasquez at gustavo.vasquez@argusmedia.com or +1 713 968 0014.

Formal comments should be marked as such. Because of work-from-home limitations, Argus will only accept formal comments sent electronically by email to houstoncrude@ argusmedia.com and received by 6 May 2021. Please note, formal comments will be published after the consultation period unless confidentiality is specifically requested.

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.



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 MyArgus may access the database here.

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



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