

Crude Oil Marketwire

Volume 44 / Issue 131 / July 6, 2023

Key benchmarks (\$/barrel)

,		Mid	Change
PCAAT00	77.29-77.31	77.300	+1.870
PCAAU00	76.56-76.58	76.570	+1.650
PCAAV00	75.86-75.88	75.870	+1.520
AAWSA00	77.29-77.31	77.300	+1.870
AAWSB00	76.56-76.58	76.570	+1.650
AAWSC00	75.86-75.88	75.870	+1.520
AAJMS00	-0.36/-0.34	-0.350	-0.360
PCAAS00	75.58-75.59	75.585	-1.270
AAOFD00	75.58-75.59	75.585	-1.270
PCAKM00		76.675	-1.270
PCAAQ00	75.38-75.40	75.390	-1.300
PCAAR00	75.12-75.14	75.130	-1.330
PCARR00		74.820	-1.340
AAUXL00		0.20	
AAXDW00		1.6079	
AAXDX00		1.3083	
AAXDY00		1.2021	
AAXDZ00		1.0796	
ATFNB00		2.3165	
ATFNA00		1.8663	
AGSAA00		74.060	+0.310
ADECA00		74.070	+0.130
PCACG00	71.79-71.81	71.800	+0.010
PCACH00		71.790	-0.090
AAGIT00	71.55-71.57	71.560	-0.160
AAXEW00		73.650	+0.060
AAYRY00		73.590	+0.010
AALSM01			+0.760
AALSM02			+0.160
AALSM03			-0.060
AAXPP00		73.020	-0.010
AAYAJ00		72.110	+0.670
AAQHN00	73.54-73.56	73.550	+0.960
AAQH000			+0.360
AAQHP00	71.85-71.87	71.860	+0.140
	PCAAU00 PCAAV00 AAWSA00 AAWSA00 AAWSC00 AAWSC00 AAJMS00 PCAAS00 AAOFD00 PCAKM00 PCAAQ00 PCAAR00 PCAAR00 AAUXL00 AAXDW00	PCAAU00 76.56-76.58 PCAAV00 75.86-75.88 AAWSA00 77.29-77.31 AAWSB00 76.56-76.58 AAWSC00 75.86-75.88 AAJMS00 -0.36/-0.34 PCAAS00 75.58-75.59 PCAKM00 PCAACO 75.88-75.59 PCAKM00 PCAACO 75.12-75.14 PCARR00 AAUXLOO AAXDWOO AAXDWOO AAXDWOO AAXDWOO AAXDWOO ATFNACO ATFNACO TT.79-71.81 PCACHOO 71.79-71.81 PCACHOO 71.78-71.80 AACHOO 71.78-71.80 AACHOO 71.55-71.57 AAXEWOO AALSMO1 AACHNOO 73.54-73.56 AAQHNOO 73.54-73.56 AAQHNOO 72.53-72.55	PCAAT00 77.29-77.31 77.300 PCAAU00 76.56-76.58 76.570 PCAAV00 75.86-75.88 75.870 AAWSA00 77.29-77.31 77.300 AAWSB00 76.56-76.58 76.570 AAWSC00 75.86-75.88 75.870 AAJMS00 -0.36/-0.34 -0.350 PCAAS00 75.58-75.59 75.585 AAOPD00 75.58-75.59 75.585 AAOPD00 75.58-75.59 75.585 PCAKM00 75.12-75.14 75.130 PCARR00 75.12-75.14 75.130 PCACA000 75.12-75.14 75.130 PCACG00 75.12-75.14 75.130 PCACG00 71.79-71.81 71.803 PCACG00 71.79-71.81 71.800 PCACG00 71.79-71.81 71.800 PCACG00 71.78-71.80 71.790 PCACG00 71.78-71.80 71.790 AASDECAGO 73.590 AAYBV00 73.590 AASEW00 73.650 AAYRY00 73.650 AAYRY00 73.650 AAYRP00 73.020 AAYAJ00 73.54-73.56 73.550 AAQHN00 73.54-73.56 73.550

^{*}Americas Crude Marker.

Forward Dated Brent (\$/barrel) (PGA page 1250)

			Mid	Change
North Sea Dated strip	AAKWH00	75.56-75.57	75.565	-1.305
Mediterranean Dated strip	AALDF00	75.56-75.58	75.570	-1.300
33-63 Day Dated strip	AALEJ00	75.07-75.09	75.080	-1.275
BTC Dated strip	AAUFI00	75.52-75.54	75.530	-1.310
15-45 Day Dated strip	AALGM00	75.41-75.43	75.420	-1.345
30-60 Day Dated strip	AAXRK00	75.11-75.12	75.115	-1.265
North Sea CIF Dtd strip	AAHXE00		75.555	-1.300
23-63 Day Dated Strip	ADBRA00		75.145	-1.255

Brent/WTI spreads and EFPs (PGA page 218)

			IVII a	Change
Brent/WTI 1st	AALAU00	4.83/4.85	4.840	+0.090
Brent/WTI 2nd	AALAV00	4.75/4.77	4.760	+0.080
Brent/WTI 3rd	AALAY00		4.690	+0.080
Brent EFP (Sep)	AAGVX00	0.12/0.14	0.130	0.000
Brent EFP (Oct)	AAGVY00	0.12/0.14	0.130	0.000
Brent EFP (Nov)	AAMVY00		0.130	0.000
WTI EFP (Aug)	AAGVT00	-0.01/0.01	0.000	0.000
WTI EFP (Sep)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Oct)	AAGVV00	-0.01/0.01	0.000	

Middle East (\$/barrel)

(PGA page 2210)	-,		Mid	Change
Oman (Sep)	PCABS00	77.39-77.41	77.400	+1.870
Oman (Oct)	AAHZF00	76.66-76.68	76.670	+1.650
Oman (Nov)	AAHZH00	75.96-75.98	75.970	+1.520
Upper Zakum (Sep)	AAOUQ00	77.28-77.32	77.300	+1.870
Murban (Sep)	AAKNL00	77.80-77.84	77.820	+1.790
Murban (Oct)	MBNSA00		77.090	+1.570
Murban (Nov)	MBNSB00		76.390	+1.440
Al Shaheen	AAPEV00	77.30-77.34	77.320	+1.870
	S	Spread vs Dubai		
Dubai	DBDDC00		1.430	+0.350
Oman	DBDOC00		1.530	+0.350
Murban	AARBZ00		1.950	+0.270
Al Shaheen	AAPEW00	1.40-1.50	1.450	+0.350
Upper Zakum	DBDUZ00		1.430	+0.350
	Q	uality Premiums		
Murban QP	AASVA00		0.0000	
(PGA page 2658)				
Dubai Swap (Aug)	AAHBM00	76.55-76.59	76.570	+1.650
Dubai Swap (Sep)	AAHBN00	75.85-75.89	75.870	+1.520
Dubai Swap (Oct)	AAHB000	75.27–75.31	75.290	+1.410

Brent/Dubai cash spread



Market Commentary

Platts Middle East Sour Crude Daily Market **Analysis**

- Market awaits OSP release
- Iran crude output close to 3.1 mil b/d

Trade activity for September-loading barrels was quiet in the regional sour crude market July 6, with the Middle East official selling prices and term allocations yet to be released.

Some August-loading grades such as Oman, Upper Zakum and Murban were still heard available despite recent sales heard to China, India and into Oman's

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Asia Pacific and Middle East crude assessments (\$/barrel)

	API		(Asia MOC)				(Asia MOC)				(Asia close)			(London close	<u>e)</u>
	Gravity	Code		Mid	Change	Code		Mid	Change	Code	Mid	Change	Code	Mid	Change
Condensate										(F	PGA page 2212)	(PGA page 2213)	
							Diff to Dubai			Diff to	Asian Dated	Brent	_		
NW Shelf	61.9	PCAGX00	62.99-63.03	63.010	+1.250		5 to 5 aba.			AAPAI00	-13.300	0.000	AAPAH00	61.860	-1.260
Ichthys FC	48.9	ICFCA00		70.410	+1.250					ICFCB00	-5.900	0.000			
DFC	56.82	ADFCA00	69.40-69.44	69.420	+1.520	ADFCB00	-6.50/-6.40	-6.450	0.000	ADFCC00	-6.890	+0.270	ADFCD00	67.950	-1.020
Qatar LSC	56.9	AARBB00	68.80-68.84	68.820	+1.520	AARBD00	-7.10/-7.00	-7.050	0.000	AARBC00	-7.490	+0.270	AARBA00	67.350	-1.020
South Pars	57.4	AARAV00	64.55-64.59	64.570	+1.520	AARAX00	-11.35/-11.25	-11.300	0.000	AARAW00	-11.740	+0.270	AARAU00	63.100	-1.020
							Diff to ICP								
Senipah	54.4	AAEOE00	60.94-60.98	60.960	+1.250	AAEOK00	-8.35/-8.25	-8.300	0.000	AAPBE00	-15.350	0.000	AAPBD00	59.810	-1.260
	0 11 1	717.20200	00.01 00.00	00.000		7.01201100	0.007 0.20	0.000							200
Light crude											PGA page 2214		_	PGA page 2215)	
							Diff to ICP				Asian Dated				
Cossack	47.7	PCAGZ00	70.19-70.23	70.210	+1.250					AAPAC00	-6.100	0.000	AAPAB00	69.060	-1.260
Tapis	45.2	PCACB00	79.89-79.93	79.910	+1.300					AAOZW00	3.600	+0.050	AAOZV00	78.760	-1.210
Belida	45.1	PCAFL00	64.79-64.83	64.810	+1.250	PCAFM00	-4.85/-4.75	-4.800	0.000	AAPBQ00	-11.500	0.000	AAPBP00	63.660	-1.260
Kutubu	44.3	PCAFJ00	68.54-68.58	68.560	+1.250					AAPAE00	-7.750	0.000	AAPAD00	67.410	-1.260
Attaka	42.3	PCAAJ00	64.69-64.73	64.710	+1.250	PCAAK00	-5.75/-5.65	-5.700	0.000	AAPBC00	-11.600	0.000	AAPBB00	63.560	-1.260
Ardjuna	38	PCACQ00	70.29-70.33	70.310	+1.300	PCACR00	-1.80/-1.70	-1.750	0.000	AAPBG00	-6.000	+0.050	AAPBF00	69.160	-1.210
Banyu Urip	32	PCAFQ00		80.410	+1.300	PCAQQ00		2.250	0.000	AAPBU00	4.100	+0.050	AAPBR00	79.260	-1.210
							Diff to Dubai								
Sakhalin Blend	45.5	AARBN00	62.35-62.39	62.370	+2.020	AARCN00	-13.55/-13.45	-13.500	+0.500	AARDN00	-13.940	+0.770	AAREN00	60.900	-0.520
ESP0 M1	34.8	AARWF00	68.60-68.64	68.620	+1.670	AASEU00	-7.30/-7.20	-7.250	+0.150						
ESPO M2	34.8	AAWFE00	67.92-67.96	67.940	+1.560	AAWFG00	-7.40/-7.30	-7.350	+0.150		0.010	0.770		0 / 000	0.500
Sokol	39.7	AASCJ00	66.35-66.39	66.370	+2.020	AASCK00	-9.55/-9.45	-9.500	+0.500	AAPA000	-9.940	+0.770	AAPAN00	64.900	-0.520
Kikeh	34.9	AAWUH00	82.64-82.68	82.660	+1.300					AAOZY00	6.350	+0.050	AAOZX00	81.510	-1.210
Miri Light	32.3	PCABQ00	82.34-82.38	82.360	+1.300					AAPAS00	6.050	+0.050	AAPAR00	81.210	-1.210
Labuan	32	PCABL00	84.09-84.13	84.110	+1.300					AAPAQ00	7.800	+0.050	AAPAP00	82.960	-1.210 -1.210
Kimanis	38.6	AASCL00		83.810	+1.300					AASCM00	7.500	+0.050	AASCN00	82.660	-1.210
Medium crude										(F	PGA page 2216)		PGA page 2217)	
										Diff to	Asian Dated	Brent			
Su Tu Den	36.8	AARAR00	81.59-81.63	81.610	+1.300					AARAS00	5.300	+0.050	AARAQ00	80.460	-1.210
Bach Ho	40.7	PCAHY00	82.64-82.68	82.660	+1.300					AAPAK00	6.350	+0.050	AAPAJ00	81.510	-1.210
Nanhai	40	PCAFR00	71.64-71.68	71.660	+1.300					AAPAG00	-4.650	+0.050	AAPAF00	70.510	-1.210
Nile Blend	33.9	AAPLC00	74.04-74.08	74.060	+1.250					AAPAM00	-2.250	0.000	AAPAL00	72.910	-1.260
Daqing	32.2	PCAAZ00	73.09-73.13	73.110	+1.250					AAPAW00	-3.200		AAPAV00	71.960	-1.260
Heavy crude										(F	PGA page 2218)	(PGA page 2219)	
							Diff to ICP			Diff to	Asian Dated	Brent			
Dar Blend	25	AARAB00	74.69-74.73	74.710	+1.200					AARAC00	-1.600	-0.050	AARAA00	73.560	-1.310
Shengli	24.2	PCABY00	76.24-76.28	76.260	+1.200					AAPAY00	-0.050	-0.050	AAPAX00	75.110	-1.310
Duri	20.8	PCABA00	79.59-79.63	79.610	+1.200	PCABB00	2.65/2.75	2.700	-0.050	AAPBM00	3.300	-0.050	AAPBL00	78.460	-1.310
Vincent	18.3	AARAK00		81.310						AARAL00	5.000	-0.050	AARAJ00	80.160	-1.310

Delivered - Asia spot crude assessments (\$/barrel) (PGA page 2238)

		Diff to	o Dubai	Diff to A	Asian Dated Brent	
US Delivered - Asia Spot Crudes						
WTI Midland (DES Singapore) wtmsA00	78.790 +1.310	WTMSD00	3.500 -0.100	WTMSB00	2.820 +0.140	
WTI Midland (DES Yeosu) WTMYA00	79.290 +1.310	WTMYD00	4.000 -0.100	WTMYB00	3.320 +0.140	
Brazil Delivered-Asia Spot Crudes						
Tupi (DES Qingdao) LUQDA00	79.540 +1.310	LUQDD00	4.250 -0.100	LUQDB00	3.570 +0.140	

Middle East spot assessments (\$/barrel) (PGA page 2220)

			Mid	Change		Spread vs Dubai Mid	Change		Spread vs OSP	Mid	Change
Umm Lulu	AUFAA00		77.970	+1.790	DBDUL00	2.10	0 +0.270				
Das Blend	AAXOF00	77.10-77.14	77.120	+1.790	DBDDS00	1.25	0 +0.270				
Qatar Land	AAKNP00	76.43-76.47	76.450	+1.800	QALDA00	0.58	0 +0.280	AAKUJ00	0.25/0.35	0.300	+0.150
Qatar Marine	AAKNR00	76.23-76.27	76.250	+1.850	QAMDA00	0.38	0 +0.330	AAKUH00	0.10/0.20	0.150	+0.150
Banoco Arab Medium	AAKNT00	76.98-77.02	77.000	+1.850				AAKUD00	-1.10/-1.00	-1.050	+0.100
Basrah Medium M1	BSMAM01	-	77.000	+2.000				BSMBM01		0.550	+0.100
Basrah Medium M2	BSMAM02	-	76.050	+1.850				BSMBM02		0.300	+0.100
Basrah Heavy M1	AALZC00	-	73.900	+2.000				AALZJ00		0.550	+0.100
Basrah Heavy M2	AALZD00	-	72.950	+1.850				AALZK00		0.300	+0.100

Duqm refinery. Trade details, however, could not be immediately verified.

Iran's crude oil production is just shy of 3.1 million b/d, the country's oil minister Javad Owji said July 5 in rare public comments disclosing its output, as the heavily sanctioned country strives to maintain market share in the face of competition in the region.

Crude production was "more than 3.07 million b/d," Owji told reporters on the sidelines of the OPEC International Seminar in Vienna. Adding condensate brings that total to 3.8 million b/d.

"With more investments and projects outlined, we will increase oil and gas production," Owji added.

Iran has typically been reticent to discuss its production levels since the US reimposed sanctions on its oil sector in 2018. Many independent assessments of Iranian crude production are much lower. The latest Platts OPEC+ survey by S&P Global Commodity Insights, for example, pegged May output at 2.66 million b/d, well below the presanctions peak of about 3.83 million b/d.

Iranian crude export volumes have been rising in recent months, indicating potential slacker US sanctions enforcement and higher production, with Iranian officials saying the country was blending gas condensates in floating storages with heavy oil to target international customers.

Indian refiners may expand inflows of West African and US crude if the recent production cuts by OPEC+

Asian market parity prices (\$/barrel) (PGA page 2280)

	(Asia close)			(London close)		
		Mid	Change		Mid	Change
Minas	PCABO00	72.325	+1.210	AAPAZ00	71.175	-1.300
Cinta	PCAAX00	62.465	+1.075	AAPBJ00	61.315	-1.435
Widuri	PCAFE00	60.630	+0.945	AAPBN00	59.480	-1.565
Cambay	AMPPA00	75.310	+1.405			
Ravva	AMPPB00	80.340	+1.570			
Rajasthan	AMPPC00	75.920	+0.830			

Asian Crude Indices (\$/barrel) (PGA page 2206)

16:30 Singapore	<u>Int</u>	erim Asian Close	Diff to Dated Brent		<u>Final London Close</u>	
Asian Dated Brent (ADB)	AAXPG00	77.115				
ADB Strip Asia	AARBV00	76.310	Į.	AARBX00	75.160	
ADB Strip Middle East	AARBW00	76.310	Į.	AARBY00	74.840	
ADB Strip M3	ADBS003	75.970				

For definitions see http://www.platts.com/IM.Platts.Content/MethodologyReferences/MethodologySpecs/Crude-oil-methodology.pdf

squeezes supplies, although inflows from Russia are expected to dominate the import basket for the rest of the year, analysts and trade sources told S&P Global Commodity Insights.

While the recent cuts have raised concerns on the supply-demand imbalance, Indian refiners are not unduly worried as the move has failed to lift prices, showing that demand revival is not as strong as expected earlier due to global economic growth and inflation concerns, they added.

US crude exports are expected to have slipped the week ended June 30, with S&P Global Commodities at Sea showing the US exporting 4.3 million b/d, down

from 4.8 million b/d the prior week. However, export demand remains strong, with the spot arbitrage for WTI MEH into Europe open versus North Sea Forties crude, S&P Global data showed.

The WTI MEH arbitrage is also open into Singapore vs. Malaysian Tapis crude.

Platts Mideast Sour Crude Daily Rationales & Exclusions

Dubai Mo01 < PCAAT00> assessment rationale: The September cash Dubai assessment July 6 took into consideration bids and offers for cash Dubai partials that traded at \$77.30/b toward the end of the Platts

Market on Close assessment process from S&P Global Commodity Insights.

Oman Blend Mo01 < PCABS00> assessment rationale: The September cash Oman assessment July 6 took into consideration values heard in the broader market.

Exclusions: No data was excluded from the Middle East sour crude MOC.

Platts Oil Mideast Sour Crude Convergences

None reported

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Platts Middle East Sour Crude Bids, Offers, Trades

Bids:

PLATTS DUBAI: SEP23: PHILLIPS 66 BIDS 25KB AT \$77.00

PLATTS DUBAI: SEP23: MITSUI BIDS 25KB AT \$76.90

PLATTS DUBAI: SEP23: EQUINOR NO LONGER BIDS AFTER TRADE

PLATTS DUBAI: SEP23: VITOL NO LONGER BIDS AFTER TRADE

PLATTS DUBAI: SEP23: GUNVOR NO LONGER BIDS AFTER TRADE

PLATTS DUBAI: SEP23: PETROCHINA NO LONGER BIDS 25KB AT \$76.85 AFTER WITHDRAWAL (08:29:26) Offers:

PLATTS DUBAI: SEP23: UNIPEC OFFERS 25KB AT \$77.40

PLATTS DUBAI: SEP23: PETROCHINA OFFERS 25KB AT \$77.40

PLATTS DUBAI: SEP23: TRAFIGURA NO LONGER OFFERS AFTER TRADE

PLATTS DUBAI: SEP23: EXXONMOBIL NO LONGER OFFERS AFTER TRADE

North Sea spot crude assessments (\$/barrel) (PGA page 1212)

			Mid C	Change	<u>Spread</u>	vs fwd Dated Brent	Mid	Change
Dated Brent Diff					AAXEZ00	0.01/0.03	0.020	+0.035
BNB	AAVJA00	75.73-75.75	75.740	-1.300	AAVJB00	0.17/0.18	0.175	+0.005
Forties	PCADJ00	75.75-75.77	75.760	-1.295	AAGWZ00	0.19/0.20	0.195	+0.010
Oseberg	PCAEU00	77.31-77.33	77.320	-1.255	AAGXF00	1.75/1.76	1.755	+0.050
Ekofisk	PCADI00	77.03-77.05	77.040	-1.230	AAGXB00	1.47/1.48	1.475	+0.075
Troll	AAWEX00	78.09-78.11	78.100	-1.255	AAWEY00	2.53/2.54	2.535	+0.050
FOB N Sea WTI Midland	ALNDA00		75.610	-1.275	ALNDB00		0.045	+0.030
Statfjord	PCAEE00	77.31-77.32	77.315	-1.255	AAGXD00	1.74/1.76	1.750	+0.050
Flotta Gold	PCACZ00	76.31–76.32	76.315	-1.255	AAGXH00	0.74/0.76	0.750	+0.050
Duc	AAWEZ00	76.56-76.57	76.565	-1.255	AAWFL00	0.99/1.01	1.000	+0.050
Grane Blend	PCALA00		77.265	-0.955	PCALB00		1.700	+0.350
Johan Sverdrup	AJSVA00		77.150	-1.005	AJSVB00		1.585	+0.300
Statfjord (CIF)	AASAS00	78.40-78.41	78.405	-1.250	AASAT00	2.84/2.86	2.850	+0.050
Gullfaks (CIF)	AASAU00	78.70-78.71	78.705	-1.250	AASAV00	3.14/3.16	3.150	+0.050
Alvheim (CIF)	ALVHA00		78.905	-1.250	ALVHB00		3.350	+0.050
Asgard (CIF)	ASGCA00		76.855	-1.250	ASGCB00		1.300	+0.050
North Sea basket	AAGIZ00	76.46-76.47	76.465	-1.270				
North Sea Dated Strip	AAKWH00	75.56-75.57	75.565	-1.305				
European Sour Crude Index	CSBEA00		77.143	-1.002	CSBEB00		1.578	+0.303
					Spread vs	fwd CIF Dated Brent		
Dated Brent (CIF)	AAVJG00		76.675	-1.270	AAVJF00		1.120	+0.030
BNB (CIF)	PCAKP00		77.825	-1.340	AAVJC00		2.270	-0.040
Forties (CIF)	PCAKR00		77.210	-1.315	AAHXC00		1.655	-0.015
Oseberg (CIF)	PCAKT00		78.640	-1.270	AAHXD00		3.085	+0.030
Ekofisk (CIF)	PCAKV00		78.210	-1.235	AAHXB00		2.655	+0.065
Troll (CIF)	AAXJ000		79.425	-1.275	AAXJN00		3.870	0.025
WTI Midland (CIF)	WMCRD00		76.675	-1.270	WMCRB00		1.120	+0.030
North Sea CIF Dated Strip	AAHXE00		75.555	-1.300				

Freight Adjustment Factors

(\$/barrel)		Change	
Sullom Voe-Rotterdam	FSVRM00	1.6824 0.0000	
Hound Point-Rotterdam	FHPRM00	1.1684 0.0000	
Sture-Rotterdam	FSTRM00	1.0626 0.0000	
Teesside-Rotterdam	FTSRM00	0.9408 0.0000	
Mongstad-Rotterdam	FMGRM00	1.0698 0.0000	
North Sea-Rotterdam	FSFRM00	1.0651 0.0000	
(%)			
FAF Weighting	FAFWA00	0.80	

European US Spot Crude Assessments (\$/barrel) (PGA page 1238)

		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
WTI Midland (DAP Rotterdam)	AWTIC00	76.495	-1.250	AWTID00	1.350	+0.005
WTI Midland (DAP Augusta)	AWTIA00	77.145	-1.250	AWTIB00	2.000	+0.005
Eagle Ford 45 (DAP Rotterdam)	AEFAC00	75.595	-1.250	AEFAD00	0.450	+0.005
Eagle Ford 45 (DAP Augusta)	AEFAA00	76.245	-1.250	AEFAB00	1.100	+0.005

PLATTS DUBAI: SEP23: PHILLIPS 66 NO LONGER OFFERS 25KB AT \$77.35 AFTER WITHDRAWAL (08:26:57)

PLATTS DUBAI: SEP23: RELIANCE NO LONGER OFFERS AFTER TRADE

PLATTS DUBAI: SEP23: BP NO LONGER OFFERS 25KB AT \$77.40 AFTER WITHDRAWAL (08:26:59) PLATTS DUBAI: SEP23: GUNVOR NO LONGER OFFERS AFTER TRADE

PLATTS DUBAI: SEP23: VITOL NO LONGER OFFERS 25KB AT \$77.45 AFTER WITHDRAWAL (08:28:50)

Trades:

PLATTS DUBAI: SEP23: PETROCHINA SELLS TO GUNVOR* 25KB AT \$77.20 (08:26:33)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM TRAFIGURA* 25KB AT \$77.25 (08:26:34)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM EXXONMOBIL* 25KB AT \$77.25 (08:26:35)

PLATTS DUBAI: SEP23: EQUINOR BUYS FROM

PETROCHINA* 25KB AT \$77.30 (08:26:54)
PLATTS DUBAI: SEP23: GUNVOR BUYS FROM

RELIANCE* 25KB AT \$77.35 (08:27:03)

PLATTS DUBAI: SEP23: VITOL BUYS FROM EXXONMOBIL* 25KB AT \$77.35 (08:27:08)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM

PETROCHINA* 25KB AT \$77.35 (08:27:08)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM RELIANCE* 25KB AT \$77.35 (08:27:12)

PLATTS DUBAI: SEP23: EQUINOR BUYS FROM GUNVOR* 25KB AT \$77.40 (08:27:12)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO EQUINOR* 25KB AT \$77.35 (08:27:25)

PLATTS DUBAI: SEP23: GLENCORE SELLS TO EQUINOR* 25KB AT \$77.35 (08:27:31)

PLATTS DUBAI: SEP23: BP SELLS TO EQUINOR* 25KB AT \$77.30 (08:27:47)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO EQUINOR* 25KB AT \$77.25 (08:27:58)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM TRAFIGURA* 25KB AT \$77.35 (08:28:43)

Dated Brent/BFOE swaps (\$/barrel) (PGA page 1214)

Week		Week Date		Brent CFD*	Mid	Change		Dated Brent swap	Mid	Change
CFD Week 1	(Oct)	Jul 10-14	PCAKA00	0.59/0.61	0.600	+0.060	AAJNV00	75.72/75.74	75.730	-1.270
CFD Week 2	(Oct)	Jul 17-21	PCAKC00	0.55/0.56	0.555	+0.015	AAJOS00	75.68/75.69	75.685	-1.315
CFD Week 3	(Oct)	Jul 24-28	PCAKE00	0.44/0.46	0.450	-0.040	AAJOU00	75.57/75.59	75.580	-1.370
CFD Week 4	(Oct)	Jul 31-04	PCAKG00	0.33/0.35	0.340	-0.060	AAJOW00	75.46/75.48	75.470	-1.390
CFD Week 5	(Oct)	Aug 07-11	AAGLU00	0.20/0.22	0.210	-0.110	AAJPC00	75.33/75.35	75.340	-1.440
CFD Week 6	(Oct)	Aug 14-18	AAGLV00	0.11/0.13	0.120	-0.130	AAJPE00	75.24/75.26	75.250	-1.460
CFD Week 7	(Oct)	Aug 21-25	AALCZ00	0.03/0.05	0.040	-0.140	AALAW00	75.16/75.18	75.170	-1.470
CFD Week 8	(Oct)	Aug 28-01	AALDA00	-0.03/-0.01	-0.020	-0.130	AALAX00	75.10/75.12	75.110	-1.460

Brent Swaps Weeks 1 to 8 are differentials to Brent Mo02 (Oct) PCAAR00 found on page 1.

Dated Brent/Brent Frontline Swaps (DFL) (\$/barrel) (PPE page 1614)

		Swaps	Change		DFL	Change	
Balance month* (Jul 23)	BDLBM00	75.570	-1.100	ABWFZ00	0.320	+0.200	
Month 1 (Aug 23)	BDLM001	75.160	-1.260	AAEAA00	0.170	+0.070	
Month 2 (Sep 23)	BDLM002	74.840	-1.290	AAEAB00	0.160	+0.050	
Month 3 (Oct 23)	BDLM003	74.530	-1.300	AAEAC00	0.160	+0.050	
Month 4 (Nov 23)	BDLM004	74.210	-1.330	AAEAD00	0.170	+0.040	

^{*}Balance month swaps are assessed from the 1st through the 20th of the month.

Cash BFOE intraday assessments (\$/barrel) (PGA page 1216)

	Cash BFOE	Change	<u>Inter-Month Spread</u>			
PBCAAM1	76.940	+0.990				
PBCAAM2	76.650	+0.880	Sep/Oct	PBAM1M2	0.290	
PBCAAM3	76.280	+0.810	Oct/Nov	PBAM2M3	0.370	
PBCABM1	76.950	+0.880				
PBCABM2	76.680	+0.800	Sep/Oct	PBBM1M2	0.270	
PBCABM3	76.310	+0.720	Oct/Nov	PBBM2M3	0.370	
PBCACM1	76.410	-0.320				
PBCACM2	76.150	-0.350	Sep/Oct	PBCM1M2	0.260	
PBCACM3	75.780	-0.400	Oct/Nov	PBCM2M3	0.370	
PCAAQ00	75.390	-1.300				
PCAAR00	75.130	-1.330				
PCARR00	74.820	-1.340				
PBCADM1	NA	_				
PBCADM2	NA	_	Sep/Oct	PBDM1M2	NA	
PBCADM3	NA	_	Oct/Nov	PBDM2M3	NA	
	PBCAAM2 PBCAAM3 PBCABM1 PBCABM2 PBCABM3 PBCACM1 PBCACM2 PBCACM3 PCAAQ00 PCAAR00 PCARR00 PBCADM1 PBCADM1 PBCADM1	PBCAAM1 76.940 PBCAAM2 76.650 PBCAAM3 76.280 PBCABM1 76.950 PBCABM2 76.680 PBCABM3 76.310 PBCACM1 76.410 PBCACM2 76.150 PBCACM3 75.780 PCAAQ00 75.390 PCAAR00 75.130 PCARR00 74.820 PBCADM1 NA PBCADM1 NA	PBCAAM1 76.940 +0.990 PBCAAM2 76.650 +0.880 PBCAAM3 76.280 +0.810 PBCABM1 76.950 +0.880 PBCABM2 76.680 +0.800 PBCABM3 76.310 +0.720 PBCACM1 76.410 -0.320 PBCACM2 76.150 -0.350 PBCACM3 75.780 -0.400 PCAAQ00 75.390 -1.300 PCARR00 75.130 -1.330 PCARR00 74.820 -1.340 PBCADM1 NA - PBCADM1 NA -	PBCAAM1 76.940 +0.990 PBCAAM2 76.650 +0.880 Sep/Oct PBCAAM3 76.280 +0.810 Oct/Nov PBCABM1 76.950 +0.880 PBCABM2 76.680 +0.800 Sep/Oct PBCABM3 76.310 +0.720 Oct/Nov PBCACM1 76.410 -0.320 PBCACM2 76.150 -0.350 Sep/Oct PBCACM3 75.780 -0.400 Oct/Nov PCAAQ00 75.390 -1.300 PCARR00 75.130 -1.330 PCARR00 74.820 -1.340 PBCADM1 NA - PBCADM1 NA - PBCADM1 NA - Sep/Oct	PBCAAM1 76.940 +0.990 PBCAAM2 76.650 +0.880 Sep/Oct PBAM1M2 PBCAAM3 76.280 +0.810 Oct/Nov PBAM2M3 PBCABM1 76.950 +0.880 PBCABM2 76.680 +0.800 Sep/Oct PBBM1M2 PBCABM3 76.310 +0.720 Oct/Nov PBBM2M3 PBCACM1 76.410 -0.320 PBCACM1 76.150 -0.350 Sep/Oct PBCM1M2 PBCACM2 76.150 -0.400 Oct/Nov PBCM2M3 PCAAR00 75.780 -0.400 Oct/Nov PBCM2M3 PCAAR00 75.130 -1.330 PCARR00 74.820 -1.340 PBCADM1 NA - PBCADM1 NA - Sep/Oct PBDM1M2	PBCAAM1 76.940 +0.990 PBCAAM2 76.650 +0.880 Sep/Oct PBAM1M2 0.290 PBCAAM3 76.280 +0.810 Oct/Nov PBAM2M3 0.370 PBCABM1 76.950 +0.880 PBCABM2 76.680 +0.800 Sep/Oct PBBM1M2 0.270 PBCABM3 76.310 +0.720 Oct/Nov PBBM2M3 0.370 PBCACM1 76.410 -0.320 PBCACM1 76.150 -0.350 Sep/Oct PBCM1M2 0.260 PBCACM2 76.150 -0.400 Oct/Nov PBCM2M3 0.370 PCAAQ00 75.780 -0.400 Oct/Nov PBCM2M3 0.370 PCAAQ00 75.390 -1.300 PCAAR00 75.130 -1.330 PCARR00 74.820 -1.340 PBCADM1 NA - PBCADM1 NA - Sep/Oct PBDM1M2 NA

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM PETROCHINA* 25KB AT \$77.35 (08:28:45)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM PETROCHINA* 25KB AT \$77.35 (08:29:00)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO EQUINOR* 25KB AT \$77.30 (08:29:10)

PLATTS DUBAI: SEP23: GUNVOR BUYS FROM PETROCHINA* 25KB AT \$77.35 (08:29:12)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO VITOL* 25KB AT \$77.30 (08:29:20)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO EQUINOR* 25KB AT \$77.30 (08:29:32)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO VITOL* 25KB AT \$77.30 (08:29:37)

PLATTS DUBAI: SEP23: PETROCHINA SELLS TO EQUINOR* 25KB AT \$77.30 (08:29:39)

PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO EQUINOR* 25KB AT \$77.30 (08:29:51)

PLATTS DUBAI: SEP23: EQUINOR BUYS FROM TRAFIGURA* 25KB AT \$77.30 (08:29:58)

This assessment commentary applies to the following market data codes: Dubai M1 < PCAAT00>, Oman M1 < PCABS00>

Platts Dubai Derivatives Bids Summary

BIDS ON CLOSE

NO BIDS REPORTED WITHDRAWALS

NO WITHDRAWALS REPORTED

Platts' End-of-Day assessments for Dubai derivatives prices can be found on PPA2606.

Platts Oil Paper Bids, Offers and Trade Page Index found on <PGA4000>

Platts has defined standards for entities it considers to be related and verifies through a variety of inputs whether counterparties in reported trades meet these criteria.

Urals/ESPO spot assessments (\$/barrel) (PGA page 1220)

			Mid	Change	Spre	ead vs fwd Dated Brent	Mid	Change
Urals (Rotterdam)	PCAFW00	58.32-58.36	58.340	-0.830	AAGXJ00	-17.24/-17.22	-17.230	+0.470
Urals (Mediterranean)	PCACE00	58.74-58.78	58.760	-0.870	AAGXX00	-16.82/-16.80	-16.810	+0.430
Urals FOB Novo Suez	AAGZS00	56.05-56.09	56.070	-0.800	AAHPH00	-19.51/-19.49	-19.500	+0.500
Urals FOB Novo Afra	AAOTH00	55.15-55.19	55.170	-0.800	AAOTI00	-20.41/-20.39	-20.400	+0.500
Urals (Ex-Baltic)	AAGZT00	56.05-56.09	56.070	-0.800	AAHPI00	-19.51/-19.49	-19.500	+0.500
Urals (Primorsk)	AAWVH00	56.05-56.09	56.070	-0.800	AAWVI00	-19.51/-19.49	-19.500	+0.500
Urals RCMB (Recombined)	AALIN00	58.76-58.79	58.775	-0.840				
ESPO (FOB Kozmino)	AARWD00	67.29-67.31	67.300	-0.890	AARWE00	-7.55/-7.53	-7.540	+0.400
KEBCO	KBCOA00		76.870	-1.100	KBCOB00		1.300	+0.200
Urals (DAP India)	DWCUA00		67.460	-0.960	DWCUB00		-7.700	+0.300
KEBCO/Russian Urals	AKEBA00		18.110	-0.230				
		Number of days						
Observed Delivery Factor	ΔΩΝΕΔΩΩ	6						

Urals Med/NWE CFD assessments (\$/barrel)

		<u>Urals CFD</u>	Mid	Change
Mediterranean (PPE page 1617)				
Urals Med CFD (Jul)	AAMDU00	-16.82/-16.80	-16.810	+0.430
Urals Med CFD (Aug)	AAMEA00	-16.82/-16.80	-16.810	+0.430
Urals Med CFD (Sep)	UMCM003	-16.82/-16.80	-16.810	+0.430
Northwest Europe (PPE page 1617)				
Urals NWE CFD (Jul)	UNCM001	-17.24/-17.22	-17.230	+0.535
Urals NWE CFD (Aug)	UNCM002	-17.24/-17.22	-17.230	+0.535
Urals NWE CFD (Sep)	UNCM003	-17.24/-17.22	-17.230	+0.535
Mediterranean (PPE page 1617)				
CPC Blend CFD (Jul)	AAOFX00		-1.800	0.000
CPC Blend CFD (Aug)	AAOFY00		-1.950	-0.100
CPC Blend CFD (Sep)	AAOFZ00		-1.800	-0.100

Mediterranean spot crude assessments (\$/barrel)

			Mid	Change	Spread vs fwd Dated Bren		Mid	Change
Azeri and BTC (PGA page 1222)								
Azeri Lt CIF	AAGZX00	79.26-79.30	79.280	-1.160	AAHPM00	3.74/3.76	3.750	+0.150
Azeri Lt FOB Ceyhan Suez	AAUFM00	78.18-78.21	78.195	-1.100	AAUFN00	2.66/2.67	2.665	+0.210
Azeri Lt FOB Ceyhan Afra	AAUFK00	77.78-77.81	77.795	-1.130	AAUFL00	2.26/2.27	2.265	+0.180
Azeri Lt FOB Supsa	AATHM00	76.83-76.87	76.850	-1.095	AATHN00	1.31/1.33	1.320	+0.215
BTC FOB Ceyhan	AAUFH00	77.98-78.01	77.995	-1.115	AAUFJ00	2.46/2.47	2.465	+0.195
Black Sea (PGA page 1220)								
Siberian Light CIF	AAGZW00	60.74-60.78	60.760	-0.870	AAHPK00	-14.82/-14.80	-14.810	+0.430
CPC Blend CIF	AAGZU00	73.41-73.45	73.430	-1.115	AAHPL00	-2.11/-2.09	-2.100	+0.195
CPC Blend FOB Suez	AALVX00	70.86-70.89	70.875	-1.085	AALVZ00	-4.66/-4.65	-4.655	+0.225
CPC Blend FOB Afra	AAOFV00	70.11-70.14	70.125	-1.050	AAOFW00	-5.41/-5.40	-5.405	+0.260
Additional War Risk Premium	AWARA00		1.000	0.000				
Middle East & North Africa (PGA page	e 1234)							
Suez Blend	PCACA00	73.70-73.74	73.720	-1.100	AAGYD00	-1.86/-1.84	-1.850	+0.200
Es Sider	PCAC000	75.61-75.65	75.630	-1.310	AAGYH00	0.09/0.11	0.100	0.000
Kirkuk	AAEJD00	72.75-72.79	72.770	-1.100	AAGYF00	-2.81/-2.79	-2.800	+0.200
Iranian Light FOB Kharg Island (Med)	AILKA00		75.850	-1.500	AILKB00		0.280	-0.200
Iranian Heavy FOB Kharg Island (Med)	AIHKA00		74.150	-1.500	AIHKB00		-1.420	-0.200
Saharan Blend	AAGZY00	76.11-76.15	76.130	-1.210	AAHPN00	0.59/0.61	0.600	+0.100

Platts Dubai Derivatives Offers Summary

OFFERS ON CLOSE

NO OFFERS REPORTED WITHDRAWALS

NO WITHDRAWALS REPORTED

Platts' End-of-Day assessments for Dubai derivatives prices can be found on PPA2606.

Platts Oil Paper Bids, Offers and Trade Page Index found on <PGA4000>

Platts has defined standards for entities it considers to be related and verifies through a variety of inputs whether counterparties in reported trades meet these criteria.

Platts Dubai Derivatives Trades Summary

TRADES SUMMARY

NO TRADES REPORTED

Platts' End-of-Day assessments for Dubai derivatives prices can be found on PPA2606.

Platts Oil Paper Bids, Offers and Trade Page Index found on <PGA4000>

Platts has defined standards for entities it considers to be related and verifies through a variety of inputs whether counterparties in reported trades meet these criteria.

Platts Dubai Derivatives Exclusions

Exclusions: No market data was excluded from the July 6, 2023 Dubai derivatives assessment process.

West African spot crude assessments (\$/barrel) (PGA page 1230)

			Mid	Change	Sprea	d vs fwd Dated Brent	Mid	Change
WAF Index	AWAFA00		76.065	-0.965	AWAFB00		0.950	+0.300
Nigeria Spot Crude Assessm	ents							
Bonny Light	PCAIC00	75.85-75.88	75.865	-0.965	AAGXL00	0.74/0.76	0.750	+0.300
Qua Iboe	PCAID00	75.90-75.93	75.915	-0.965	AAGXN00	0.79/0.81	0.800	+0.300
Forcados	PCABC00	76.05-76.08	76.065	-0.965	AAGXP00	0.94/0.96	0.950	+0.300
Agbami	AAQZB00	73.05-73.08	73.065	-0.965	AAQZC00	-2.06/-2.04	-2.050	+0.300
Escravos	AAEIZ00	76.50-76.53	76.515	-0.965	AAGXR00	1.39/1.41	1.400	+0.300
Brass River	AAEJB00	74.75-74.78	74.765	-0.965	AAGXV00	-0.36/-0.34	-0.350	+0.300
Akpo	PCNGA00	73.05-73.08	73.065	-0.965	PCNGB00	-2.06/-2.04	-2.050	+0.300
Bonga	PCNGC00	76.40-76.43	76.415	-0.965	PCNGD00	1.29/1.31	1.300	+0.300
Usan	AAXUQ00		71.915	-0.965	AAXUR00		-3.200	+0.300
Erha	AAXU000		76.415	-0.965	AAXUP00		1.300	+0.300
Egina	AFONA00		78.165	-0.965	AFONB00		3.050	+0.300
Angola spot crude assessme	ents (\$/barrel) (PGA	page 1232)						
Cabinda	PCAFD00	76.15-76.18	76.165	-1.065	AAGXT00	1.04/1.06	1.050	+0.200
Nemba	AAQYZ00	74.25-74.28	74.265	-1.065	AAQZA00	-0.86/-0.84	-0.850	+0.200
Dalia	AAQYX00	74.95-74.98	74.965	-1.065	AAQYY00	-0.16/-0.14	-0.150	+0.200
Girassol	AASNL00	77.50-77.53	77.515	-1.165	AASJD00	2.39/2.41	2.400	+0.100
Hungo	AASLJ00	74.20-74.23	74.215	-1.065	AASJF00	-0.91/-0.89	-0.900	+0.200
Kissanje	AASLK00	75.15-75.18	75.165	-1.065	AASJE00	0.04/0.06	0.050	+0.200
Pazflor	PCNGG00	74.95-74.98	74.965	-1.065	PCNGH00	-0.16/-0.14	-0.150	+0.200
Plutonio	PCNGI00	73.90-73.93	73.915	-1.065	PCNGJ00	-1.21/-1.19	-1.200	+0.200
Ghana spot crude assessme	nts (PGA page 1230)							
Jubilee	AAXUS00		75.365	-1.065	AAXUT00		0.250	+0.200
Republic of Congo spot crud	e assessments							
Djeno	PCNGE00	73.20-73.23	73.215	-0.965	PCNGF00	-1.91/-1.89	-1.900	+0.300
Chad spot crude assessmen	ts							
Doba	AAXUU00		72.765	-0.965	AAXUV00		-2.350	+0.300

West Africa market parity prices (\$/barrel) (PGA page 1270)

		iviid Change	Spread vs two Dated Brent	Mid Change
Abo Blend	AAXTL00	75.585 -1.120	ABOOM00	0.470 +0.145
Aje	APIRP00	76.000 -0.890	APIRA00	0.885 +0.375
Amenam Blend	AAXTI00	74.850 -0.870	AMENA00	-0.265 +0.395
Antan Blend	APIRQ00	77.860 -1.185	APIRB00	2.745 +0.080
Asaramatoru	AAXTV00	75.515 -0.865	ASARA00	0.400 +0.400
CJ Blend	APIRR00	76.665 -1.230	APIRC00	1.550 +0.035
EA Blend	AAXTJ00	76.675 -1.140	AEABL00	1.560 +0.125
Ebok	APIRS00	72.250 -1.210	APIRD00	-2.865 +0.055
Eremor	APIRT00	74.620 -1.145	APIRE00	-0.495 +0.120
Ima	APIRU00	77.415 - <mark>0.275</mark>	APIRF00	2.300 +0.990
Jones Creek Blend	APIRV00	74.730 -1.085	APIRG00	-0.385 +0.180
Okono Blend	APIRW00	76.555 -1.020	APIRH00	1.440 +0.245
Okoro	APIRX00	75.335 -1.085	APIRI00	0.220 +0.180
Okwori	APIRY00	76.840 -1.220	APIRJ00	1.725 +0.045
Otakikpo	APIRZ00	75.215 -0.815	APIRK00	0.100 +0.450
Oyo	APRIA00	75.000 -0.925	APIRL00	-0.115 +0.340
Pennington	APRIB00	74.230 -1.110	APIRM00	-0.885 +0.155
Rabi Light	ARABA00	74.105 -0.960	ARABB00	-1.010 +0.305
Sankofa	APRIC00	71.995 -0.900	APIRN00	-3.120 +0.365

Mid Change

Spread vs fwd Dated Brent Mid Change

Platts Asia Pacific Sweet Crude Daily Market Analysis

- QatarEnergy offers Sep-loading Low Sulfur Condensate
- Australia's North West Shelf program shorter for Sep

The Asia-Pacific regional crude market saw the issuance of a fresh tender for condensate July 6.

QatarEnergy has issued a tender offering Low Sulfur Condensate for loading in September. The tender closes July 12 with next-day validity.

In its previous tender, QatarEnergy was heard to have sold three 500,000-barrel cargoes of Low Sulfur Condensate loading in August via a spot tender at discounts in the \$6s/b to \$7s/b to Platts frontmonth Dubai crude assessments, FOB, sources said. Subsequently, traders said additional barrels of the condensate also traded at discounts of around \$7s/b against Platts Dubai crude assessment, FOB.

The near-term outlook for Qatari condensates was mixed with some market participants expecting the price of the grades to recover from June levels.

"Reason why level fell too much last month is because there were many cargoes [last month]. This month, value should be higher," said a Singapore-based trader, adding that availability of Qatari condensate for September-loading may not be as much as the previous month.

Others, however, expected the discounts for Qatari condensates to widen.

"Brent-Dubai [spread is] narrower, the advantage Qatari [condensate] has is eroding [as it is Dubai-linked]. Also demand for it will not be too much different [from last month]." said another trader.

The Brent-Dubai Exchange of Futures for Swap spread continue to linger around the \$1/b mark, having finished June at \$1.08/b average, the lowest in over two years, S&P Global Commodity Insights data showed.

West Africa market parity prices (continued)

		Mid Change	Spread vs fwd Dated Brent	Mid Change
TEN	AAXTW00	73.820 -0.99 5	ATENM00	-1.295 +0.270
Ukpokiti	APRID00	76.305 - <mark>0.990</mark>	APIRO00	1.190 +0.275
Yoho Light	AAXTK00	76.890 - <mark>0.965</mark>	AYOHO00	1.775 +0.300
Zafiro	AAXTU00	78.085 -1.200	AZAFB00	2.970 +0.065

US West Coast Crude Assessments (\$/barrel) (PGA page 214)

Mid	Change

				Sprea	d to NYMEX WTI CMA	Mid	Change
ANS/Long Beach	PCAAD00	78.20-78.24	78.220 +0.270	AAGWX00	6.75/6.77	6.760	+0.450
	Spread to ICE BRENT CMA						
ANS/Long Beach				AANSA00		2.402	+0.549

US spot crude assessments (\$/barrel) (PGA pages 210 & 214)

			Mid Change
Mars (Aug)	AAMBR00	73.84-73.86	73.850 +0.760
Mars (Sep)	AAMBU00	72.83-72.85	72.840 +0.160
Mars (Oct)	AAMBX00	72.15-72.17	72.160 -0.060
Mars/WTI (Aug)	AAGWH00	2.04/2.06	2.050 +0.750
Mars/WTI (Sep)	AAKTH00	1.04/1.06	1.050 +0.250
Mars/WTI (Oct)	AAMBO00	0.59/0.61	0.600 +0.100
LOOP/WTI (Aug)	AALOM01		1.950 +0.750
LOOP/WTI (Sep)	AALOM02		0.950 +0.250
LOOP/WTI (Oct)	AALOM03		0.500 +0.100
LOOP/Mars (Aug)	AALPM01		-0.100 0.000
LOOP/Mars (Sep)	AALPM02		-0.100 0.000
LOOP/Mars (Oct)	AALPM03		-0.100 0.000
WTI-Delta	AAEJK00	0.07/0.09	0.080 +0.120
P-Plus WTI	PCACI00	3.45/3.47	3.460 +0.120
P-5 WTI*	AAFEN00		NA NANA

*P-5 WTI is a crude oil postings-based index. Posted prices by the following companies are used in the index: ConocoPhillips, Plains, Energy Transfer, Shell, and Valero. The index will not be calculated until all postings are submitted each day. If a posting is submitted the following day the P-5 WTI Average will update in the database.

			Mid Change		Spread vs 1st line WTI	Mid	Change
WTI (Midland)	PCACJ00	73.44-73.46	73.450 +0.060	AAGVZ0	0 1.64/1.66	1.650	+0.050
WTS (1st month)	PCACK00	72.44-72.46	72.450 +0.060	AAGWB0	0.64/0.66	0.650	+0.050
WTI MEH	AAYRG00		73.650 +0.060	AAYRH0	0	1.850	+0.050
Bonito	PCAIE00	73.69-73.71	73.700 +0.760	AAGWF0	0 1.89/1.91	1.900	+0.750
SGC	AASOI00	73.94-73.96	73.950 +0.760	AASOJ0	0 2.14/2.16	2.150	+0.750
Poseidon	AABHK00	73.54-73.56	73.550 +0.960	AAGWL0	0 1.74/1.76	1.750	+0.950
LLS (1st month)	PCABN00	74.64-74.66	74.650 +0.260	AAGWN0	0 2.84/2.86	2.850	+0.250
HLS (1st month)	PCABD00	74.14-74.16	74.150 +0.260	AAGWP0	0 2.34/2.36	2.350	+0.250
Wyoming Sweet	PCACM00	71.39-71.41	71.400 -0.040	AAGWR0	0 -0.41/-0.39	-0.400	-0.050
Thunder Horse	AAWZK00	75.24-75.26	75.250 +0.810	AAWZL0	0 3.44/3.46	3.450	+0.800

Still on condensate, it was heard that there is only one North West Shelf cargo available for loading in September.

The cargo for loading Sept. 21-25 is being held by Woodside.

In comparison, there were three cargoes scheduled for loading in August.

The shorter program could provide support for the grade, traders said.

However, others noted that with the downstream petrochemicals market continuing to be weak, demand for condensates could be replaced by cheaper alternatives.

Platts Asia Light Sweet Crude Daily Rationale & Exclusions

ESPO FOB Kozmino Mo01 Spore vs Dubai Mo01 <AASEU00> assessment rationale: The ESPO M1 September assessment on July 6 took into consideration latest trade indications heard in the broader market.

Exclusions: No data was excluded from the Asia-Pacific regional crude Platts Market on Close assessment process from S&P Global Commodity Insights.

Platts Asia Light Sweet Crude Bids, Offers, Trades

Bids: NIL Offers: NIL Trades: NIL

This assessment commentary applies to the following market data code: ESPO M1 vs Dubai M2 <AASEU00>

US spot crude assessments (continued)

						Spread vs 2nd lin	e WTI	
WTI MEH (2nd month)	AAXXE00		73.590	+0.010	AAYYA00		1.800	+0.100
WTI Midland (2nd month)	AAYZA00		73.390	-0.040	AAXXF00		1.600	+0.050
WTS (2nd month)	AAURG00	71.83-71.85	71.840	+0.010	AAURH00	0.04/0.06	0.050	+0.100
LLS (2nd month)	AAURC00	74.58-74.60	74.590	+0.310	AAURD00	2.79/2.81	2.800	+0.400
HLS (2nd month)	AAURE00	74.08-74.10	74.090	+0.310	AAURF00	2.29/2.31	2.300	+0.400
					<u>s</u>	pread vs NYMEX W	VTI CMA	
WCS ex-Cushing	AAWTY00	68.71-68.73	68.720	+0.240	AAWTZ00	-3.01/-2.99	-3.000	+0.350
WCS ex-Nederland	AAYAY00		69.870	+0.240	AAYAX00		-1.850	+0.350
Bakken Williston	AAXPP00		73.020	-0.010	AASRX00		1.300	+0.100
Bakken Guernsey	AASRR00	71.41-71.43	71.420	-0.010	AASRV00	-0.31/-0.29	-0.300	+0.100
Bakken Clearbrook	AASRU00	74.96-74.98	74.970	+0.290	AASRW00	3.24/3.26	3.250	+0.400
Bakken USGC Pipe	ABAKA00		73.920	+0.090	ABAKB00		2.200	+0.200
		FOB USGC			FOB US	GC Spread vs NYN	ИEX WTI Strip	
Platts AGS	AGSAA00		74.060	+0.310	AGSAC00	•	2.310	+0.390
Bakken	ABAKC00		74.060	+0.310	ABAKD00		2.310	+0.390
Eagle Ford Crude	AAYAT00		73.160	+0.310	AAYAU00		1.410	+0.390
Eagle Ford Condensate	AAYAR00		71.660	+0.310	AAYAS00		-0.090	+0.390
WTI	AAYBA00		74.060	+0.310	AAYAZ00		2.310	+0.390
					WTI FOR	B USGC vs WTI ME	H (by decade)	
WTI FOB USGC First Decade	ADECB00		74.100	+0.160	ADECD00		0.450	+0.100
WTI FOB USGC Second Decade	ADECE00		74.050	+0.110	ADECG00		0.400	+0.050
WTI FOB USGC Third Decade	ADECH00		74.050	+0.110	ADECJ00		0.400	+0.050
WTI FOB USGC Decades Average	ADECA00		74.070	+0.130				
	FOB USGO	Spread vs Dated Br	ent Strip		WTI FOB US	GC vs Dated Brent	Basis (by dec	ade)
Platts AGS	AGSAB00		-2.590	+0.530	ADECC00		-2.270	+0.310
Bakken	ABAKE00		-2.590	+0.530	ADECF00		-2.320	+0.260
Eagle Ford Crude	AEFCA00		-3.490	+0.530	ADECI00		-2.320	+0.260
Eagle Ford Condensate	AEFCB00		-4.990	+0.530				
WTI	AWTUA00		-2.590	+0.530				
	Globa	l Benchmarks at US (Close		WTI FOB U	SGC vs ICE Brent E	Basis (by deca	ide)
Americas Dated Brent	AAQBF00	76.810-76.830	76.820	-0.140	ADECK00		-2.100	+0.380
					ADECL00		-2.150	+0.330
					ADECM00		-2.150	+0.330

Platts North Sea Crude Daily Market Analysis

- Northwest European sour crude supply outlook precarious
- Brent CFDs return to backwardation as fundamentals firm

Sweet and sour North Sea crude streams moved higher in tandem July 6, with a dearth of high sulfur supply a lifting European demand for light sweet crude and pushing value higher.

Lower volumes of WTI Midland arriving in Northwest Europe and an increasingly constructive downstream outlook have recently lifted differentials across sweeter grades.

Shorter-haul light sweet crudes such as Ekofisk have seen values firm as the soft cap imposed by CIF Rotterdam WTI Midland differentials has crept upwards.

Brent CFDs also swiftly snapped into a backwardated structure though the week after two weeks in a light contango structure. Backwardation in Brent CFDs continued to steepen through the day, according to broker information.

In the sour segment, buying interest continued to outstrip available supply.

Glencore bid for Johan Sverdrup cargoes loading Aug. 1-8 in the Platts Market on Close assessment process at a \$1.95/b premium to Dated Brent, with the bid outstanding at the close.

Sour supply risks remained in focus for Europe as Saudi Aramco chose to raise its crude official selling prices to Northwest Europe shortly after the kingdom extended its voluntary output cut through to at least August.

Traders have cited weaker OPEC+ crude output combined with climbing Middle Eastern official selling prices as a driver of elevated sour differentials in Europe.

Aramco increased the OSP for its flagship Arab Light crude by 80 cents/b to \$3.80/b above ICE Brent for August barrels destined for Northwest Europe. Platts is part of S&P Global Commodity Insights

Platts North Sea Dated Brent, BFOE, CFD Assessment Rationales & Exclusions

Dated Brent < PCAASOO > assessment rationale:

Of the six grades in the Dated Brent basket Ekofisk, Forties and WTI Midland were seen in the Platts Market on Close assessment process. Brent and Forties were assessed higher. Brent and Forties were assessed unchanged July 16 to Aug. 5 with flat structures rolled over back-end dates amid steady fundamentals and in the absence of indications testing the July 5 assessments. Ekofisk was assessed higher. Ekofisk was assessed in a 3 cents/day contango structure July 16-25 using a traded offer July 25. July 25 to Aug. 6 was assessed in a 2.5 cents/day contango structure. Oseberg and Troll were assessed higher. Oseberg and Troll were assessed 5 cents/b higher July 16 to Aug. 5 reflecting the upward move in the Ekofisk differential and in the absence of indications testing the July 5 assessments. Flat structures were rolled

US domestic crude assessments London close (\$/barrel) (PGA page 1240)

					Spread to		
			Mid Change	N'	YMEX light sweet crude	Mid	Change
WTI (Aug)	AAQAR00	70.48-70.50	70.490 -1.350	AAQAS00	-0.01/0.01	0.000	0.000
WTI (Sep)	AAQAT00	70.54-70.56	70.550 -1.390	AAQAU00	-0.01/0.01	0.000	0.000
WTI (Oct)	AAQAV00	70.36-70.38	70.370 -1.410	AAQAW00	-0.01/0.01	0.000	0.000
					Spread to		
				5	same-month cash WTI	Mid	Change
WTI MEH (Aug)	AAYRZ00		72.340 -1.250	AAYTA00		1.850	+0.100
WTI MEH (Sep)	AAXYD00		72.350 -1.290	AAYWA00		1.800	+0.100
LLS (Aug)	AAQBB00	73.33-73.35	73.340 -1.100	AAQBC00	2.84/2.86	2.850	+0.250
LLS (Sep)	AAQBD00	73.34-73.36	73.350 -0.990	AAQBE00	2.79/2.81	2.800	+0.400
MARS (Aug)	AAQAX00	72.68-72.70	72.690 -0.450	AAQAY00	2.19/2.21	2.200	+0.900
MARS (Sep)	AAQAZ00	71.74-71.76	71.750 -0.490	AAQBA00	1.19/1.21	1.200	+0.900

Americas close (\$/barrel) (PGA page 210)

			Mid	Change
Americas Dated Brent	AAQBF00	76.81-76.83	76.820	-0.140

Americas Dated Brent reflects market value for Dated Brent at 2:30pm Eastern Time.

US crude assessments Singapore close (\$/barrel) (PGA page 2208)

		Mid Change
LOOP Sour (Aug)	AAZDA00	73.260 +1.620
LOOP Sour (Sep)	AAZDB00	72.820 +1.830
LLS (Aug)	AAZDC00	74.660 +1.620
LLS (Sep)	AAZDD00	74.520 +1.580
Southern Green Canyon	AAZDE00	73.460 +1.620
WTI MEH (Aug)	AAZDF00	73.860 +1.720
WTI MEH (Sep)	AAZDG00	73.820 +1.580

CFR North Asia Assessments Singapore Close (\$/barrel) (PGA page 2202)

		Mid	Change
		Mid	Change
Dubai CFR North Asia	PCAQA00	79.280	+1.750
Oman CFR North Asia	PCAQJ00	79.370	+1.750
Upper Zakum CFR North Asia	PCAQB00	79.240	+1.760
Qatar Marine CFR North Asia	PCAQC00	78.200	+1.730
Murban CFR North Asia	PCAQE00	79.690	+1.680
Basrah Medium CFR North Asia	BASNA00	78.050	+1.730
ESPO CFR North Asia	PCAQD00	71.190	+1.670
Forties CFR North Asia	PCAQF00	80.985	+1.620
Dalia CFR North Asia	PCAQG00	79.550	+1.370
WTI MEH CFR North Asia	PCAQH00	79.160	+1.700
LOOP Sour CFR North Asia	PCAQI00	77.490	+1.670

over back-end dates. FOB WTI Midland was assessed higher reflecting a higher CIF Rotterdam WTI Midland assessment and an unchanged freight adjustment factor on the day. CIF WTI Midland was assessed unchanged July 18 to Aug. 5 with a flat structure rolled over back-end dates amid steady fundamentals and in the absence of indications testing the July 5 assessments. WTI Midland was the most competitive grade in the Dated Brent assessment July 16-27, while Oseberg was the most competitive grade July 28-31 and . Brent was the most competitive Aug. 1-6.

BFOE (PCAAQ00-PCAAR00,PCARR00> assessment rationale:

September Cash BFOE was assessed using a traded bid. October Cash BFOE was assessed using a September/October EFP roll heard during the day. November Cash BFOE was assessed using an October/ November EFP roll heard during the day.

CFD (PCAKA00-AALDA00) assessment rationale:

July 10-14 was assessed using a July 10-14 versus July 17-21 CFD roll heard during the day. July 17-21 was assessed using an outstanding bid and offer. July 24-28 was assessed using an outstanding bid and offer. July 31 to Aug. 4 was assessed using a traded offer. Aug. 7-11 was assessed using an Aug. 7-11 versus July 31 to Aug. 4 CFD roll heard during the day.

Johan Sverdrup FOB North Sea (AJSVA00, AJSVB00) assessment rationale:

Johan Sverdrup was assessed 30 cents/b higher across the 10-day to month-ahead assessment period using an outstanding bid Aug. 1-8.

Exclusions: None

Platts is part of S&P Global Commodity Insights

Platts North Sea Dated Brent, BFOE, CFD Bids, Offers, Trades

Bids:

NORTH SEA: TRAFI Bids WTI Midland, CIF Rotterdam, Aug. 04 - Aug. 08, at Dtd 1.10;

Canadian spot crude cargo assessments (\$/barrel) (PGA page 230)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Hebron	AHEBA00		75.380	-0.975	AHEBC00	0.300	+0.300
Terra Nova	AAJUH00	75.31-75.35	75.330	-1.125	AAJUJ00 0.24/0.26	0.250	+0.150
Hibernia	AAJKK00	75.86-75.90	75.880	-0.975	AAJKM00 0.79/0.81	0.800	+0.300
White Rose	AAVJX00	76.36-76.40	76.380	-1.125	AAVJY00 1.29/1.31	1.300	+0.150

The published spreads for Canadian cargo assessments reflect the market value at which these grades are trading versus Dated Brent around loading time. The spreads and fixed price assessments reflect a typical forward loading window of 33-63 days forward. For further explanation see www.platts.com.

Canadian spot crude assessments (\$/barrel) (PGA page 230)

			Mid Change	<u>Spr</u>	read vs Canada basis	Mid	Change
Lloyd Blend	AALRK00	61.71-61.73	61.720 -0.610	AALRP00	-10.01/-9.99	-10.000	-0.500
Mixed Sweet	AALRR00	70.86-70.88	70.870 -0.110	AALRV00	-0.86/-0.84	-0.850	0.000
Light Sour Blend	AALRX00	69.71-69.73	69.720 +0.590	AALSD00	-2.01/-1.99	-2.000	+0.700
Midale	AAUCC00	67.61-67.63	67.620 +0.590	AAUCE00	-4.11/-4.09	-4.100	+0.700
Condensates	AALSF00	66.71-66.73	66.720 -0.210	AALSJ00	-5.01/-4.99	-5.000	-0.100
Syncrude Sweet Prem.	AASOK00	75.51-75.53	75.520 -0.060	AASOM00	3.79/3.81	3.800	+0.050
WCS Hardisty	AAPPN00	61.01-61.03	61.020 -0.610	AAPPP00	-10.71/-10.69	-10.700	-0.500
Cold Lake Hardisty	AASZX00	60.86-60.88	60.870 -0.610	AASZZ00	-10.86/-10.84	-10.850	-0.500
WTI CMA (1st mo)	AAVSN00		71.720 -0.110				

Latin American assessments (\$/barrel) (PGA page 280)

				D	iff to	Diff to	5 Futures	Diff to	o Dated
		Mid	Change	WT	l strip	Bre	nt strip	Bren	<u>ıt strip</u>
PCAGC00	74.21-74.26	74.235	-0.245	PCAG000	2.515	AAXBS00	-1.900	AAXAX00	-2.065
AMTOA00		71.235	-0.245	AMTOC00	-0.485	AMTOB00	-4.900	AMTOD00	-5.065
AAITD00	74.60-74.64	74.620	+0.235	AAITJ00	2.900	AAXBU00	-1.515	AAXAZ00	-1.680
PCAGH00	64.85-64.89	64.870	-0.115	PCAGQ00	-6.850	AAXBV00	-11.265	AAXBG00	-11.430
PCADE00	65.75-65.79	65.770	-0.115	PCAGU00	-5.950	AAXBW00	-10.365	AAXBH00	-10.530
AAMCA00	63.75-63.79	63.770	-0.115	AAMCD00	-7.950	AAXBX00	-12.365	AAXBI00	-12.530
ATUPA00		76.635	+0.105	ATUPC00	4.915	ATUPB00	0.500	ATUPD00	0.335
AAITF00	70.96-71.01	70.985	-0.095	AAITL00	-0.735	AAXBY00	-5.150	AAXBJ00	-5.315
AAVEQ00	68.11-68.16	68.135	-0.095	AAVEQ01	-3.585	AAXBZ00	-8.000	AAXBK00	-8.165
PCAGI00	72.11-72.16	72.135	-0.095	PCAGR00	0.415	AAXCB00	-4.000	AAXBN00	-4.165
AAITB00	73.86-73.91	73.885	+0.605	AAITH00	2.165	AAXCC00	-2.250	AAXB000	-2.415
ALIZA00		76.585	-0.145	ALIZD00	4.865	ALIZC00	0.450	ALIZB00	0.285
AAXBP00		71.720							
AAXBQ00		76.135							
AAXBR00		76.300							
	AMTOA00 AAITD00 PCAGH00 PCAGH00 PCADE00 AAMCA00 ATUPA00 AAITF00 AAVEQ00 PCAGI00 AAITB00 AAITB00 AAITB00 AAXBP00 AAXBP00 AAXBQ00	AMTOA00 AAITD00 74.60-74.64 PCAGH00 64.85-64.89 PCADE00 65.75-65.79 AAMCA00 63.75-63.79 ATUPA00 AAITF00 70.96-71.01 AAVEQ00 68.11-68.16 PCAGI00 72.11-72.16 AAITB00 73.86-73.91 ALIZA00 AAXBP00 AAXBQ00	PCAGC00 74.21-74.26 74.235 AMT0A00 71.235 AAITD00 74.60-74.64 74.620 PCAGH00 64.85-64.89 64.870 PCADE00 65.75-65.79 65.770 AANCA00 63.75-63.79 63.770 ATUPA00 76.635 AAITF00 70.96-71.01 70.985 AAVEQ00 68.11-68.16 68.135 PCAGI00 72.11-72.16 72.135 AAITB00 73.86-73.91 73.885 ALIZA00 76.585 AAXBP00 76.135	PCAGC00 74.21-74.26 74.235 -0.245 AMT0A00 71.235 -0.245 AATD00 74.60-74.64 74.620 +0.235 PCAGH00 64.85-64.89 64.870 -0.115 PCADE00 65.75-65.79 65.770 -0.115 AAMCA00 63.75-63.79 63.770 -0.115 ATUPA00 76.635 +0.105 AAITF00 70.96-71.01 70.985 -0.095 AAVEQ00 68.11-68.16 68.135 -0.095 PCAGI00 72.11-72.16 72.135 -0.095 AAITB00 73.86-73.91 73.885 +0.605 ALIZA00 76.585 -0.145 AAXB000 76.135 -	PCAGC00 74.21-74.26 74.235 -0.245 PCAG000 AMTOA00 71.235 -0.245 AMTOC00 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 PCAG000 64.85-64.89 64.87 -0.115 PCAG000 PCADE00 65.75-65.79 65.770 -0.115 PCAG000 PCADE00 63.75-63.79 63.770 -0.115 AAMCD00 ATUPA00 76.635 +0.105 ATUPC00 AAITF00 70.96-71.01 70.985 -0.095 AAITL00 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 PCAGI00 72.11-72.16 72.135 -0.095 PCAGR00 AAITB00 73.86-73.91 73.885 +0.605 AAITH00 ALIZA00 76.585 -0.145 ALIZD00 AAXBP00 76.135 -0.145 ALIZD00	PCAGC00 74.21-74.26 74.235 -0.245 PCAG000 2.515 AMT0A00 74.21-74.26 74.235 -0.245 AMT0C00 -0.485 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 PCAGH00 64.85-64.89 64.870 -0.115 PCAGQ00 -6.850 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AMCA00 63.75-63.79 63.770 -0.115 AAMCD00 -7.950 AITPA00 76.635 +0.105 ATUPC00 4.915 AAITF00 70.96-71.01 70.985 -0.095 AAITL00 -0.735 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 PCAGI00 72.11-72.16 72.135 -0.095 PCAGR00 0.415 AAITB00 73.86-73.91 73.885 +0.605 AAITH00 2.165 ALIZA00 76.585 -0.145 ALIZD00 4.865 AAXB00 71.720 </td <td>PCAGC00 74.21-74.26 74.235 -0.245 PCAGC00 2.515 AAXBS00 AMTOA00 74.21-74.26 74.235 -0.245 AMTOC00 -0.485 AMTOB00 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 PCAGH00 64.85-64.89 64.870 -0.115 PCAGU00 -6.550 AAXBW00 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 AMCA00 63.75-63.79 63.770 -0.115 AAMCD00 -7.950 AAXBW00 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXB200 PCAGI00 72.11-72.16 72.135 -0.095 AAVEQ01 -3.585 AAXC00 ALIZA00 73.86-73.91 73.885 +0.605 AAITH00 2.165 AAXC00 ALIZA00 75.585 -0.145 ALIZD0</td> <td>PCAGC00 74.21-74.26 74.235 -0.245 PCAGC00 2.515 AAXBS00 -1.900 AMT0A00 74.236 -0.245 AMT0C00 -0.485 AMT0B00 -4.900 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 -1.515 PCAGH00 64.85-64.89 64.870 -0.115 PCAGU00 -6.550 AAXBW00 -15.15 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 -10.365 AMCA00 63.75-63.79 63.770 -0.115 PCAGU00 -5.950 AAXBW00 -12.365 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 0.500 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXB200 -8.000 PCAGI00 72.11-72.16 72.135 -0.095 AAVEQ01 -3.585 AAXC00 -2.250 ALIZA00 73.86-73.91 73.885 +0.605</td> <td>PCAGC00 74.21-74.26 74.235 -0.245 PCAGO00 2.515 AAXBS00 -1.900 AAXAX00 AMTOA00 74.21-74.26 74.235 -0.245 PCAGO00 2.515 AAXBS00 -1.900 AAXAX00 AMTOA00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 -1.515 AAXAZ00 PCAGH00 64.85-64.89 64.870 -0.115 PCAGQ00 -6.850 AAXBU00 -1.165 AAXBG00 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 -10.365 AAXBH00 AMCA00 63.75-63.79 63.770 -0.115 PCAGU00 -7.950 AAXBW00 -12.365 AAXBH00 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 -5.150 AAXBB00 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXE000 -5.150 AAXBB00 PCAG100 72.11-72.16 72.135</td>	PCAGC00 74.21-74.26 74.235 -0.245 PCAGC00 2.515 AAXBS00 AMTOA00 74.21-74.26 74.235 -0.245 AMTOC00 -0.485 AMTOB00 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 PCAGH00 64.85-64.89 64.870 -0.115 PCAGU00 -6.550 AAXBW00 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 AMCA00 63.75-63.79 63.770 -0.115 AAMCD00 -7.950 AAXBW00 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXB200 PCAGI00 72.11-72.16 72.135 -0.095 AAVEQ01 -3.585 AAXC00 ALIZA00 73.86-73.91 73.885 +0.605 AAITH00 2.165 AAXC00 ALIZA00 75.585 -0.145 ALIZD0	PCAGC00 74.21-74.26 74.235 -0.245 PCAGC00 2.515 AAXBS00 -1.900 AMT0A00 74.236 -0.245 AMT0C00 -0.485 AMT0B00 -4.900 AAITD00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 -1.515 PCAGH00 64.85-64.89 64.870 -0.115 PCAGU00 -6.550 AAXBW00 -15.15 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 -10.365 AMCA00 63.75-63.79 63.770 -0.115 PCAGU00 -5.950 AAXBW00 -12.365 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 0.500 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXB200 -8.000 PCAGI00 72.11-72.16 72.135 -0.095 AAVEQ01 -3.585 AAXC00 -2.250 ALIZA00 73.86-73.91 73.885 +0.605	PCAGC00 74.21-74.26 74.235 -0.245 PCAGO00 2.515 AAXBS00 -1.900 AAXAX00 AMTOA00 74.21-74.26 74.235 -0.245 PCAGO00 2.515 AAXBS00 -1.900 AAXAX00 AMTOA00 74.60-74.64 74.620 +0.235 AAITJ00 2.900 AAXBU00 -1.515 AAXAZ00 PCAGH00 64.85-64.89 64.870 -0.115 PCAGQ00 -6.850 AAXBU00 -1.165 AAXBG00 PCADE00 65.75-65.79 65.770 -0.115 PCAGU00 -5.950 AAXBW00 -10.365 AAXBH00 AMCA00 63.75-63.79 63.770 -0.115 PCAGU00 -7.950 AAXBW00 -12.365 AAXBH00 ATUPA00 70.96-71.01 70.985 +0.105 ATUPC00 4.915 ATUPB00 -5.150 AAXBB00 AAVEQ00 68.11-68.16 68.135 -0.095 AAVEQ01 -3.585 AAXE000 -5.150 AAXBB00 PCAG100 72.11-72.16 72.135

Latin America market parity prices (\$/barrel) (PGA page 270)

		Mid Change	
Maya	AAYMP00	68.306 -0.039	
Merey 16	AMERA00	67.188 -0.152	

Platts euro-denominated assessments (€/barrel) (PGA page 1252)

Mid Change

European crude oil benchmark	(S			
Dated Brent	AAPYR00	69.590-69.600	69.599 -1.085	
Dated Brent (CIF)	PCAKN00		70.603 -1.084	
Urals (Mediterranean)	AAPYS00	54.090-54.130	54.107 -0.735	
US crude oil benchmarks				
WTI (Aug)	AAPYT00	64.900-64.920	64.908 -1.164	
WTI MEH (Aug)	AAYSA00		66.611 -1.070	
Mars (Aug)	AAPYU00	66.920-66.940	66.934 -0.334	

Euro/US\$ forex rate: 1.0860. Platts Euro denominated crude oil assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time.

GLENCOREUK Bids Johan Sverdrup, FOB Mongstad, Aug. 01 - Aug. 08, at Dtd 1.95; MERCURIASA Bids Ekofisk, FOB Teesside, Jul. 28 -

Aug. 03, at Dtd 1.35;

MERCURIASA Bids Forties, FOB Hound Point, Jul. 26 - Jul. 28, at Dtd 0.00

CASH BFOE: None

BRENT CFDS:

PLATTS BRENT DIFF: JUL10-JUL14 (SEP):

PETROCHINA BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL10-JUL14 (SEP):

TRAFIGURA BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL10-JUL14 (SEP):

MERCURIA BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): DARE

BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): ONYX

BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): DV

TRADING BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL10-JUL14 (SEP):

FREEPOINT BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): MCE BIDS 100KB AT \$0.15

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL

PLATTS BRENT DIFF: JUL17-JUL21 (SEP):

PETROCHINA BIDS 100KB AT \$0.27

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): GUNVOR

BIDS 100KB AT \$0.25

BIDS 100KB AT \$0.29

PLATTS BRENT DIFF: JUL17-JUL21 (SEP):

TRAFIGURA BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL17-JUL21 (SEP):

MERCURIA BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL17-JUL21 (SEP):

FREEPOINT BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DARE

BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): MCE BIDS 100KB AT \$0.15

Ruble-denominated Russian assessments (Rb/barrel) (PGA page 1224)

			Mid	Change	
Russian crude oil benchmarks					
Urals FOB Novorossiysk	AAUJP00	5092.140-5095.780	5093.960	-51.353	
Urals FOB Baltic	AAUJQ00	5092.140-5095.780	5093.960	-51.353	
Urals FOB Novorossiysk 80kt	AAUJR00	5010.380-5014.010	5012.195	-51.691	
Urals CIF Mediterranean	AAUJS00	5336.530-5340.160	5338.346	-56.678	
Urals CIF Rotterdam	AAUJT00	5298.370-5302.010	5300.189	-53.217	

US\$/Ruble forex rate: 90.8500. Platts Ruble denominated crude oil assessments are based on market values and a US\$/Ruble forex rate at 4:30 PM local London time.

Platts CAD-denominated Canada spot crude assessments (C\$/cu m) (PGA page 232)

			IVIIU	Change
Lloyd Blend	AALRM00	518.489-518.657	518.573	-2.204
Mixed Sweet	AALRT00	595.368-595.536	595.452	+2.403
Light Sour Blend	AALRZ00	585.706-585.874	585.790	+8.198
Midale	AAUCD00	568.061-568.229	568.145	+8.099
Condensates	AALSH00	560.499-560.667	560.583	+1.373
Syncrude Sweet	AASOL00	634.437-634.605	634.521	+3.038
WCS Hardisty	AAPP000	512.608-512.776	512.692	-2.236
Cold Lake Hardisty	AASZY00	511.348-511.516	511.432	-2.243

Daily US\$ vs EURO exchange rate (PGA page 1151)

		Mid	Change	
July 6, 2023	AAFCW00	1.0860	-0.001	

Asia close Brent and WTI spot assessments (\$/barrel) (PGA page 2210)

			Mid	Change
Brent (Sep)	PCAJG00	76.93-76.97	76.950	+1.510
Brent (Oct)	PCAJI00	76.67-76.71	76.690	+1.440
Brent (Nov)	PCAJ000		76.330	+1.350
WTI (Aug)	AAFFU00	72.04-72.08	72.060	+1.620
WTI (Sep)	AAFFW00	72.10-72.14	72.120	+1.530
WTI (Oct)	AAFFY00	71.91-71.95	71.930	+1.440

Oman OSPs and derivatives (\$/barrel) (PGA pages 2658 & 2210)

			IVIIU	Change
Oman/Dubai Swap (Aug)	AAIHJ00	0.08/0.12	0.100	0.000
Oman/Dubai Swap (Sep)	AAIHL00	0.08/0.12	0.100	0.000
Oman/Dubai Swap (Oct)	AAIHN00	0.08/0.12	0.100	0.000
Oman Swap (Aug)	AAHZP00	76.65-76.69	76.670	+1.650
Oman Swap (Sep)	AAHZR00	75.95-75.99	75.970	+1.520
Oman Swap (Oct)	AAHZT00	75.37-75.41	75.390	+1.410

Daily OPEC Basket Price (\$/barrel) (PGA page 207)

		Mid	Change
July 5, 2023	AAEUQ00	76.600	+0.420

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV TRADING BIDS 100KB AT \$0.15

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): ONYX BIDS 100KB AT \$0.15

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): TOTAL BIDS 100KB AT \$0.18

PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

EXXONMOBIL BIDS 100KB AT \$0.15

PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

MERCURIA BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

TRAFIGURA BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DV

TRADING BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

FREEPOINT BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DARE BIDS 100KB AT \$0.05

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): MCE BIDS 100KB AT \$0.05

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): ONYX BIDS 100KB AT \$0.05

PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

PETROCHINA BIDS 100KB AT \$0.00

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DV

TRADING BIDS 100KB AT \$0.05

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): MCE BIDS 100KB AT \$0.00

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DARE BIDS 100KB AT \$0.00

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DV TRADING BIDS 100KB AT \$0.30

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): TOTAL BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): MCE BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL31-AUG4 (OCT):

MERCURIA BIDS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DARE BIDS 100KB AT \$0.15

Futures Settlements

	S	ettlement	Change	Low	High	Volume*	Open interest	I	PNT***
NYMEX Light Swe	et crude (\$/barı	r el) (PGA page	705)		-				
Aug 23	NMCL001	71.80	+0.01	70.22	72.34	374173	313288		
Sep 23	NMCL002	71.79	-0.09	70.28	72.37	208177	311673		
Oct 23	NMCL003	71.56	-0.16	70.12	72.15	105888	176393		
Nov 23	NMCL004	71.28	-0.22	69.89	71.84	53037	83906		
otal	NMCL000					936092		XNCLP00	19057
CE Brent (\$/barre	el) (PGA page 704	.)							
Sep 23	ICLL001	76.52	-0.13	75.03	77.09	365196	513089		
Oct 23	ICLL002	76.22	-0.19	74.78	76.77	192920	359787		
Nov 23	ICLL003	75.84	-0.25	74.45	76.40	99923	204658		
Dec 23	ICLL004	75.47	-0.31	74.14	76.04	159771	295184		
otal	ICLL000					1062973		XILLP00	16184
CE WTI (\$/barrel)) (PGA page 704)								
Aug 23	ICIC001	71.80	+0.01	70.23	72.35	53733	68197		
Sep 23	ICIC002	71.79	-0.09	70.30	72.37	64240	99604		
Oct 23	ICIC003	71.56	-0.16	70.18	72.12	46532	55311		
Nov 23	ICIC004	71.28	-0.22	69.94	71.77	31324	27245		
otal	ICIC000					232150		XIICP00	5083
CE BWAVE (\$/bai	rrel) (PGA page 70)4)							
BWAVE data refer									
Sep 23	XIBW001	76.28							
Oct 23	XIBW002	76.00							
ME Oman crude			2710)						
Sep 23	XDOA001	77.32	+1.80			1741			
Sep 23	DMOQ001	77.71	+0.83	76.38	77.71	1902	2733		
Oct 23	DMOQ001 DMOQ002	76.83	+0.42	75.50	76.83	882	10		
Nov 23	DMOQ002	76.29	+0.33	76.29	76.29	881	5		
Dec 23	DMOQ004	75.86	+0.30	75.86	75.86	0	0		
otal Volume	DMOQ000	, 0.00	1 0.00	7 0.00	, 0.00	10255		XD0QP00	0
FAD Murban crud		A page 703)							
Sep 23	AMIFA00	77.820							
лер 23 Murban vs Dubai*		1.950							
NYMEX ULSD (\$/g			0.0120	0 (000	2 5000	20607	67750		
Aug 23	NMHO001	2.4794	-0.0139	2.4323 2.4226	2.5009 2.4881	39607	67756 48719		
Sep 23 Oct 23	NMH0002 NMH0003	2.4685 2.4627	-0.0142 -0.0131	2.4226	2.4881	34614 19014	38179		
Nov 23	NMHO003	2.4541	-0.0131	2.4107	2.4/82	9921	28380		
otal	NMHO004 NMHO000	2.4041	-0.0128	2.4090	2.4043	130580	20300	XNHOP00	4072
		(\$ /aal) (DO ^ :	705\			130000		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4072
NYMEX RBOB unl				0.7000	0.5570	/0700	00077		
Aug 23	NMRB001	2.5438	+0.0255	2.4638	2.5540	46782	90077		
Sep 23	NMRB002	2.4608	+0.0147	2.3922	2.4700	51341	82025		
oct 23	NMRB003	2.2286	+0.0102	2.1678	2.2363	27148	50262		
Nov 23	NMRB004	2.1666	+0.0071	2.1104	2.1735	11561	26410	VNDDDGG	3352
otal Volume	NMRB000	10 A				155672		XNRBP00	3352
NYMEX Natural G			0.075	0.500	0.007	40.745	105005		
Aug 23	NMNG001	2.609	-0.048	2.586	2.687	104710	165837		
Sep 23	NMNG002	2.599	-0.044	2.579	2.678	48696	285105		
Oct 23	NMNG003	2.690	-0.040	2.674	2.769	35070	111020		
Vov 23	NMNG004	3.099	-0.030	3.078	3.163	14766	87719		
Total Volume	NMNG000					256396		XNNGP00	5807

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): FREEPOINT BIDS 100KB AT \$0.15

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): ONYX

BIDS 100KB AT \$0.15

Offers:

NORTH SEA: TRAFI Bids WTI Midland, CIF

Rotterdam, Aug. 04 - Aug. 08, at Dtd 1.10;

GLENCOREUK Bids Johan Sverdrup, FOB

Mongstad, Aug. 01 - Aug. 08, at Dtd 1.95;

MERCURIASA Bids Ekofisk, FOB Teesside, Jul. 28 -

Aug. 03, at Dtd 1.35;

MERCURIASA Bids Forties, FOB Hound Point, Jul. 26 - Jul. 28, at Dtd 0.00

 ${\tt GUNVORSA~Offer~WTI~Midland,CIF~Rotterdam,Jul.}$

18 - Jul. 22, at Dtd 1.30;

GLENCOREUK Offer Forties, FOB Hound Point, Jul.

18 - Jul. 20, at Dtd 0.50

CASH BFOE: None

BRENT CFDS: PLATTS BRENT DIFF: JUL10-JUL14

(SEP): FREEPOINT OFFERS 100KB AT \$0.35

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): BP

OFFERS 100KB AT \$0.35

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): DARE

OFFERS 100KB AT \$0.35

Futures Settlements (continued)

		Settlement	Change	Low	High	Volume*	Open interest	F	NT***
ICE low sulfur gas	soil (\$/mt) (PGA	page 704)							
Jul 23	ICL0001	720.50	-18.50	716.25	740.00	31708	46777		
Aug 23	ICL0002	707.25	-13.25	702.25	722.25	89795	146661		
Sep 23	ICL0003	703.25	-12.50	698.75	717.25	52945	92060		
Oct 23	ICL0004	702.25	-11.75	697.50	715.75	28158	87673		
Total Volume	ICL0000					283759		XILOP00	7611
ICE Midland WTI	American Gulf (Coast (\$/barre	l) (PGA page 70	4)					
Aug 23	IH0U001	73.67	+0.08	72.18	74.16	8897	8103		
Sep 23	IH0U002	73.54	-0.04	72.11	73.95	5046	4912		
Oct 23	IHOU003	73.27	-0.15	71.90	73.35	2099	4317		
Nov 23	IHOU004	72.98	-0.18	72.98	72.98	284	4073		

^{*}Volume, open interest and PNT reflect prior trading day. PNT reflect volume for Privately Negotiated Trades or off-exchange. **Oman settlements are Post Close settlements. ****IFAD Murban spread to 1st Line (Sep 23) Platts Dubai crude futures. ****Privately Negotiated Trade values found on PGA page 710

Futures at Platts' Market on Close (\$/barrel) (PGA page 703)

	Singar	ore*	Lond	on*	Houston*		
ICE Brent							
Sep	XILLA01	76.82	AAYES00	75.26	AAQBG00	76.49	
Oct	XILLA02	76.56	AAYET00	75.00	AAQBH00	76.20	
Nov			AAXZY00	74.69	AAXZZ00	75.84	
Dec			AAYAM00	74.38	AAYAL00	75.47	
Oman							
Sep	XD0A001	77.32					
Volume	XDOAV01	1741					

	Singar	ore*	Lond	on*	Hous	ton*
NYMEX	WTI					
M1	XNCLA01	72.06	AASCR00	70.49	NYCRM01	71.77
M2	XNCLA02	72.12	AASCS00	70.55	NYCRM02	71.76
M3					NYCRM03	71.53
M4					NYCRM04	71.27

*Singapore and London MOC close at precisely 16:30 local time while Houston MOC closes at precisely 13:30 local time. MOC times are usually earlier on the day preceding major local holidays.

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Crude Oil Marketwire

Contact Client Services: ci.support@spglobal.com; Americas: +1-800-752-8878; Europe & Middle East: +44-20-7176-6111; Asia Pacific: +65-6530-6430

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Reported spot cash transactions (PGA page 3)

	Cargo / Spread Dates	Cargo Load Range / CFD Week	CFD Roll Week	Crude Grade(s)	Reported Status	Outright / Diff. Price (\$/barrel)	Basis	Barrels	Seller	Buyer
latts Amer	icas									
/05/2023	August			Thunder Horse	Heard	1.40	Mars			
7/06/2023	September			Alaska North Slope (ANS)	Heard	2.40	ICE Brent CMA			
7/06/2023	September			Alaska North Slope (ANS)	Heard	2.40	ICE Brent CMA			
7/06/2023	August			C5 Fort Saskatchewan	Heard	-5.00	NYMEX WTI CMA			
7/06/2023	August			HLS	Heard	2.50	Cash WTI			
7/06/2023	August			LLS	Heard	2.90	Cash WTI			
7/06/2023				Mars	Heard	2.10	Cash WTI			
7/06/2023	August			Mars	Heard	2.00	Cash WTI			
7/06/2023	August			Mars	Heard	2.20	Cash WTI			
/06/2023				Mars	Heard	2.15	Cash WTI			
/06/2023				Mixed Sweet (MSW) Edmonton	Heard	-0.85	NYMEX WTI CMA			
/06/2023	August			Mixed Sweet (MSW) Edmonton	Heard	-0.30	NYMEX WTI CMA			
/06/2023				Mixed Sweet (MSW) Edmonton	Heard	-1.10	NYMEX WTI CMA			
/06/2023				Mixed Sweet (MSW) Edmonton	Heard	-0.90	NYMEX WTI CMA			
/06/2023				Mixed Sweet (MSW) Edmonton	Heard	-0.25	NYMEX WTI CMA			
/06/2023				SGC (Southern Green Canyon)	Heard	2.00	Cash WTI			
/06/2023				Syncrude Sweet Premium (SSP) Edmonton	Heard	3.80	NYMEX WTI CMA			
/06/2023				WCS Hardisty	Heard	-10.70	NYMEX WTI CMA			
/06/2023				WCS Hardisty	Heard	-10.65	NYMEX WTI CMA			
/06/2023				WTI MEH	Heard	1.85	Cash WTI			
/06/2023				WTI MEH	Heard	1.85	Cash WTI			
/06/2023				WTI MEH	Heard	1.85	Cash WTI			
/06/2023				WTI MEH	Heard	1.85	Cash WTI			
/06/2023				WTI MEH	Heard	1.85	Cash WTI			
/06/2023				WTI Midland	Heard	1.65	Cash WTI			
atts Asia										
6/2023	September			Dubai Partial	Done	77.20		25,000	PetroChina	Gunvor
6/2023	September			Dubai Partial	Done	77.25		25,000	Trafigura	Gunvor
6/2023	September			Dubai Partial	Done	77.30		25,000	Trafigura	Vitol
6/2023	September			Dubai Partial	Done	77.35			PetroChina	Gunvor
6/2023	September							25,000		Gurivor
	'			Dupai Partial	Done			25,000 25.000		
3/2023	September			Dubai Partial Dubai Partial	Done Done	77.30		25,000	Trafigura	Equinor
	September September			Dubai Partial	Done	77.30 77.35		25,000 25,000	Trafigura PetroChina	Equinor Gunvor
6/2023	September			Dubai Partial Dubai Partial	Done Done	77.30 77.35 77.30		25,000 25,000 25,000	Trafigura PetroChina Trafigura	Equinor Gunvor Equinor
6/2023 6/2023	September September			Dubai Partial Dubai Partial Dubai Partial	Done Done Done	77.30 77.35 77.30 77.35		25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore	Equinor Gunvor Equinor Equinor
6/2023 6/2023 6/2023	September September September			Dubai Partial Dubai Partial Dubai Partial Dubai Partial	Done Done Done Done	77.30 77.35 77.30 77.35 77.35		25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina	Equinor Gunvor Equinor Equinor Gunvor
6/2023 6/2023 6/2023 6/2023	September September September September			Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial	Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30		25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore	Equinor Gunvor Equinor Equinor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023	September September September September September			Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial	Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30		25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura	Equinor Gunvor Equinor Equinor Gunvor Equinor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September September September September September September			Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.30		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil	Equinor Gunvor Equinor Equinor Gunvor Equinor Equinor Vitol
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September September September September September September September September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.30 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil	Equinor Gunvor Equinor Equinor Gunvor Equinor Equinor Vitol Gunvor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September September September September September September September September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.30 77.35 77.25		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina	Equinor Gunvor Equinor Equinor Gunvor Equinor Equinor Uitol Gunvor Gunvor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura	Equinor Gunvor Equinor Gunvor Equinor Equinor Equinor Vitol Gunvor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance	Equinor Gunvor Equinor Gunvor Equinor Equinor Equinor Vitol Gunvor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.30 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina	Equinor Gunvor Equinor Equinor Gunvor Equinor Vitol Gunvor Gunvor Equinor Gunvor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.30 77.35 77.30		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina Trafigura	Equinor Gunvor Equinor Equinor Gunvor Equinor Vitol Gunvor Gunvor Equinor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.30 77.35 77.30		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina Trafigura Trafigura Trafigura Trafigura Trafigura	Equinor Gunvor Equinor Equinor Gunvor Equinor Vitol Gunvor Gunvor Gunvor Equinor Gunvor Equinor Gunvor Equinor
5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023 5/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.30 77.35 77.30 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina Trafigura Trafigura Trafigura Trafigura Trafigura	Equinor Gunvor Equinor Equinor Gunvor Equinor Vitol Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor
6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.35 77.30 77.35 77.30 77.35 77.30 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina Trafigura Trafigura Trafigura Trafigura Trafigura Trafigura Trafigura Trafigura Reliance	Equinor Gunvor Equinor Gunvor Equinor Equinor Vitol Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Vitol Equinor Gunvor
6/2023 6/2023	September			Dubai Partial	Done Done Done Done Done Done Done Done	77.30 77.35 77.30 77.35 77.35 77.30 77.30 77.35 77.25 77.35 77.30 77.35 77.30 77.35		25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000	Trafigura PetroChina Trafigura Glencore PetroChina BP Singapore Trafigura ExxonMobil ExxonMobil PetroChina Trafigura Reliance PetroChina Trafigura Trafigura Trafigura Trafigura Trafigura	Equinor Gunvor Equinor Equinor Gunvor Equinor Vitol Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor Gunvor Equinor

Trans. Date	Cargo / Spread Dates	Cargo Range CFD W	/	CFD Roll Crude Week	e Grade(s) Report Status		Outright / Bas Diff. Price (\$/barrel)	sis	Barrels	Seller	Buyer
Platts EMEA											
07/06/2023	July	24	28	Brent CFD	Done	Э	0.20	Cash BFOE Sep	100000	Petraco	TotalEnergies
07/06/2023	July	24	28	Brent CFD	Done	Э	0.2	Cash BFOE Sep	100000	DV Trading	Mercuria
7/06/2023	July	17	21	Brent CFD	Done	Э	0.27	Cash BFOE Sep	100000	DV Trading	TotalEnergies
07/06/2023	July	24	28	Brent CFD	Done	Э	0.20	Cash BFOE Sep	100000	Freepoint	TotalEnergies
7/06/2023	July	17	21	Brent CFD	Done	Э	0.29	Cash BFOE Sep	100000	Mandara	Trafigura
7/06/2023	July	24	28	Brent CFD	Done	Э	0.20	Cash BFOE Sep	100000	PetroChina	TotalEnergies
7/06/2023	July	17	21	Brent CFD	Done	Э	0.3	Cash BFOE Sep	100000	Onyx	TotalEnergies
7/06/2023	July/August	31	4	Brent CFD	Done	Э	0.34	Cash BFOE Oct	100000	Petraco	Mercuria
7/06/2023	July	17	21	Brent CFD	Done	Э	0.3	Cash BFOE Sep	100000	Freepoint	TotalEnergies
7/06/2023	July	17	21	Brent CFD	Done	Э	0.29	Cash BFOE Sep	100000	Dare Global	Trafigura
7/06/2023	July	17	21	Brent CFD	Done	Э	0.29	Cash BFOE Sep	200000	DV Trading	Trafigura
7/06/2023	July	17	21	Brent CFD	Done	Э	0.30	Cash BFOE Sep	100000	DV Trading	TotalEnergies
7/06/2023	July	17	21	Brent CFD	Done	Э	0.27	Cash BFOE Sep	100000	DV Trading	PetroChina
7/06/2023	September			Cash BFOE	Done	Э	75.36		100000	Vitol	Gunvor
7/06/2023	September			Cash BFOE	Done	Э	75.36		100000	Vitol	Mercuria
7/06/2023	September			Cash BFOE	Done	Э	75.36		100000	Vitol	Gunvor
7/06/2023	September			Cash BFOE	Done	Э	75.39		100000	Vitol	Mercuria
7/06/2023	July	24	26	Ekofisk	Done	е	1.5	Dated Brent	700000	BP	Glencore

Please note that all deals that are stated as "Done" were reported and published through the Platts Market on Close assessment process. Deals that are stated as "Reported" were not reported through the MOC, and may reflect transactions that were reported before or after the MOC process. Platts seeks to confirm non-MOC information to the fullest extent possible prior to publication.

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): ONYX OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): DV TRADING OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): MCE OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DARE OFFERS 100KB AT \$0.30

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): PETRACO OFFERS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DV TRADING OFFERS 100KB AT \$0.20

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): ONYX OFFERS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): MCE OFFERS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): FREEPOINT OFFERS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DARE OFFERS 100KB AT \$0.30

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): TOTAL OFFERS 100KB AT \$0.35

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DV TRADING OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): MCE OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DARE OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): FREEPOINT OFFERS 100KB AT \$0.35

PLATTS BRENT DIFF: JUL31-AUG4 (OCT):

PETROCHINA OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DV TRADING OFFERS 100KB AT \$0.45

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): TOTAL OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): ONYX OFFERS 100KB AT \$0.55

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DARE OFFERS 100KB AT \$0.55

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): MCE OFFERS 100KB AT \$0.60

Trades:

NORTH SEA: BP*-GLENCOREUK Ekofisk, FOB Teesside, Jul. 24 - Jul. 26, at Dtd 1.50, [15:25:05] CASH BFOE: PLATTS CASH BFOE: SEP23: VITOL SELLS TO GUNVOR* 100KB AT \$75.36 (15:29:41)

PLATTS CASH BFOE: SEP23: VITOL SELLS TO

MERCURIA* 100KB AT \$75.36 (15:29:45)

PLATTS CASH BFOE: SEP23: VITOL SELLS TO

GUNVOR* 100KB AT \$75.36 (15:29:47)

PLATTS CASH BFOE: SEP23: VITOL SELLS TO MERCURIA* 100KB AT \$75.39 (15:29:51)

BRENT CFDS: PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV TRADING SELLS TO TOTAL* 100KB AT \$0.30 (15:28:33)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV
TRADING SELLS TO TOTAL* 100KB AT \$0.27 (15:28:48)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV TRADING SELLS TO PETROCHINA* 100KB AT \$0.27 (15:29:17)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TRAFIGURA BUYS FROM DV TRADING* 200KB AT \$0.29 (15:29:48)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TRAFIGURA BUYS FROM MCE* 100KB AT \$0.29 (15:29:49)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TRAFIGURA BUYS FROM DARE* 100KB AT \$0.29 (15:29:50)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL BUYS FROM ONYX* 100KB AT \$0.30 (15:29:55)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL BUYS FROM FREEPOINT* 100KB AT \$0.30 (15:29:57)

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): TOTAL BUYS FROM PETRACO* 100KB AT \$0.20 (15:29:39)

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): TOTAL BUYS FROM FREEPOINT* 100KB AT \$0.20 (15:29:40)

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): TOTAL BUYS FROM PETROCHINA* 100KB AT \$0.20 (15:29:42) PLATTS BRENT DIFF: JUL24-JUL28 (SEP):

MERCURIA BUYS FROM DV TRADING* 100KB AT \$0.20 (15:29:50)

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): MERCURIA BUYS FROM PETRACO* 100KB AT \$0.34 (15:29:58)

This assessment commentary applies to the following market data codes: Dated Brent <PCAAS00> CFD Week 1 <PCAKA00> CFD Week 2 <PCAKC00> Brent Mo01 <PCAAQ00> CFD Week 3 <PCAKE00> Brent Mo02 <PCAAR00> CFD Week 4 <PCAKG00> Brent Mo03 <PCARR00> CFD Week 5 <AAGLU00> CFD Week 6 <AAGLV00> CFD Week 7 <AALCZ00> CFD Week 8 <AALDA00> Johan Sverdrup FOB North Sea <AJSVA00> Johan Sverdrup FOB North Sea Dtd Strip <AJSVB00>

Platts WTI Midland Crude DAP Europe Assessment Rationale & Exclusions

WTI Crude DAP Europe <AWTICOO> assessment rationale: WTI DAP Rotterdam was assessed unchanged July 26-Aug. 3, with a 0.5 cent/day contango structure rolled over back-end dates in the absence of indications testing the July 5 assessment. There were no bids, offers or trades in the Platts Market on Close assessment process.

WTI Crude DAP Augusta AWTIA00 assessment rationale: WTI DAP Augusta was assessed unchanged owing to the steadiness of the DAP Rotterdam differential. There were no bids, offers or trades in the MOC.

Exclusions: None

Platts is part of S&P Global Commodity Insights

Platts WTI Midland Crude DAP Europe Bids, Offers, Trades

Bids: None Offers: None Trades: None

This assessment commentary applies to the following market data codes: WTI Midland DAP basis Rotterdam <AWTICOO> WTI Midland DAP basis Rotterdam vs Fwd Dated Brent <AWTIDOO> WTI Midland DAP basis Augusta <AWTIAOO> WTI Midland DAP basis Augusta vs Fwd Dated Brent <AWTIBOO>

Platts Mediterranean & Black Sea Sweet Crude Daily Commentary

- Fears subside over CPC Blend supply after Kazakh power outages
- Azeri Light loadings total 662,000 b/d in June

Traders appeared unconcerned over CPC Blend supply following the slight disruption in Kazakh oil production on July 3-4 following power outages in the country.

Production statistics provided by Kazakhstan's

energy ministry showed a 20% drop in the country's oil production on July 4 and a 13% reduction on July 3. Figures from the ministry show that Kazakhstan typically produces around 250,000 mt, or 1.84 million barrels, on a daily basis.

"The supply-side issue is settled on Kashagan supply and production rate in the prompt," one trader said. "Expected maintenance in Tengiz is likely to be below initial estimate."

Maintenance planned in August is expected to shorten the CPC Blend August-loading program by around 150,000 b/d, some traders previously estimated, making market participants anxious over supply of the light sweet grade.

"Overall, more [CPC Blend] supply is expected for August," the trader added.

In other sweet crude news, loadings of Azerbaijan's flagship Azeri Light crude at the Turkish port of Ceyhan totaled 662,000 b/d in June, according to S&P Global Commodity at Seas data, roughly in line with the scheduled 658,000 b/d shown in a copy of the official loading program seen by S&P Global Commodity Insights May 5.

Azeri Light differentials have generally been climbing throughout June and early July. Platts assessed the grade at a \$3.60/b premium to Dated Brent on July 5, up \$1.20/b on the month.

Values for the light sweet grade have been heard around a \$4/b premium to Dated Brent from traders for late July-loading cargoes.

Demand for Azeri Light has recovered from lows seen in April and May when weak refining margins weighed on the grade. A demand recovery has also been noticed in other Mediterranean sweet crudes, such as CPC Blend which saw differentials climb to a near nine-month high of a \$2/b discount to Dated Brent on June 29.

Azeri Light trading is currently "between cycles," one trader said, with the August-loading program expected to be released July 8.

Platts is part of S&P Global Commodity Insights

Platts NWE and Med Urals Sour Crude Daily Market Analysis

- Urals price highest since November
- Urals loadings at four-month low in June Russia's flagship Urals crude has been nearing the \$60/b price cap as loadings and Russian oil and gas revenues both hit four-month lows.

Platts, part of S&P Global Commodity Insights, assessed Urals on a FOB Primorsk basis at \$56.87/b on July 5, the highest flat price since Nov. 22, before the \$60/b price cap on Russian crude oil was applied.

The sour complex has been supported by news of extended OPEC+ production cuts and Russia's announcement of a 500,000 b/d reduction in exports in August.

According to S&P Global Commodities at Sea data, Russia has already cut back on its export volumes of Urals. The data shows Russia exported 2 million b/d of Urals in June, the lowest export volume since February's 1.9 million b/d.

India remained the top buyer of Urals, taking 1.6 million b/d in June, matching the previous high set in May.

India's crude imports from Russia have soared this year, reaching around 42% of the country's import basket in the second quarter.

Meanwhile, both Turkey and China, the second- and third-largest buyers of Urals, pulled back on their June imports to 203,000 b/d and 92,600 b/d, respectively, CAS figures showed.

Despite the higher prices for Russian Urals, monthly oil and gas revenues in June also hit a four-month low, according to the finance ministry July 4.

June's oil and gas revenues stood at Rb528.6 billion (\$5.75 billion), the lowest since February's Rb521.2 billion. The ministry said that was Rb30.347 billion below expected monthly oil and gas revenues.

Russia's oil and gas revenues have taken a hit

following the implementation of Western sanctions on Russian energy resources, including the \$60/b price cap on Russian oil introduced by G7 nations in December. Monthly revenues have averaged Rb563.6 billion in the first half of 2023, 41.6% below 2022's average monthly revenue of Rb965.5 billion.

In protest against the sanctions, Russia only sells oil to "friendly" countries that do not recognize the price cap, such as India, Turkey and China. However, Russia has had to sell its oil at deep discounts to attract new buyers after being shunned by Western nations.

Prior to the invasion of Ukraine, the discount was less than \$10/b to Dated Brent. Since the conflict started, Urals has at times traded at a discount of more than \$40/b.

Urals has been trading at a discount of around \$20/b to Dated Brent of late, the lowest discount since Feb. 28, 2022, four days after the invasion of Ukraine.

Platts EMEA Urals and Med Brent Crude Daily Rationales & Exclusions

Urals CIF Augusta differential <AAGXX00> assessment rationale: Urals CIF Augusta was assessed 43 cents/b higher. There were no bids or offers in the Platts Market on Close assessment process. The Urals CIF Augusta differential was assessed using a net-forward to the Urals FOB Aframax and Suezmax assessment. The FOB differentials were assessed 50 cents/b higher.

Urals CIF Med <PCACE00> assessment rationale:

The Urals CIF Mediterranean assessment reflected the value of the Mediterranean Dated Brent Strip (AALDF00) plus the Urals CIF Augusta differential assessment (AAGXX00).

Urals RCMB (Recombined) <AALIN00> assessment rationale:

The Urals RCMB (Recombined) assessment reflected the value of the Platts Dated Brent assessment (PCAASOO) plus the Urals CIF Augusta

differential assessment (AAGXX00).

Urals CIF Rdam < PCAFW00> assessment rationale:

Urals CIF Rotterdam was assessed 47 cents/b higher. There were no bids or offers in the Platts Market on Close assessment process. The Urals CIF Rotterdam differential was assessed as a netforward to the Urals FOB Baltic assessment. The FOB differentials were assessed 50 cents/b higher.

Med Dated Brent Strip 13-28 Day <AALDF00> assessment rationale:

The Mediterranean Dated Brent Strip reflected the value of Forward Dated Brent 13-28 days ahead of the day of publication. Forward Dated Brent is assessed as a function of Platts assessments of second-month Cash BFOE (PCAAR00) and BFOE CFD differentials (PCAKA00, PCAKC00, PCAKE00, PCAKG00, AAGLU00, AAGLV00, AALCZ00).

CPC Blend CIF Augusta vs BTC Dtd Strip <AAHPL00> assessment rationale:

CPC Blend was assessed 19.5 cents/b higher. Firm CPC Blend demand in Europe was supporting differentials, with value heard from traders around a \$1.80-2.00/b discount to Dated Brent for Augustloading cargoes.

Exclusions: None

Platts is part of S&P Global Commodity Insights

Platts EMEA Urals & Med Brent Crude Bids, Offers, Trades

Bids: None

Offers: None

Trades: None

This assessment commentary applies to the following market data codes: Urals CIF Med <PCACE00>> Urals CIF Rdam <PCAFW00> ESPO FOB Kozmino Mo01 London <AARWD00> CPC CIF Augusta Diff <AAHPL00>

Platts West African Crude Daily Commentary

- Angolan August-trading sees differentials rise: traders
- Indonesia's Pertamina awards two cargoes of WAF crude

In the West African crude market July 6, traders reported strengthening values across the Angolan complex while Nigerian barrels continued to find homes in Asia.

With provisional September programs expected around the middle of July, August trading thus far in Angola has seen differentials increase across the board, traders said.

"The Angolan program started off strong," one West African trader said. "Buying heavy [grades] and blending with WTI Midland ... medium and heavy grades are clearing well."

August-loading cargoes of Angolan Dalia and Nemba were last traded at parity with dated Brent and at a 50 cent/b discount, respectively, indicating support for the region's crude.

The two grades were last assessed by Platts, part of S&P Global Commodity Insights, at discounts of 35 cents/b and \$1.05/b. respectively, to the benchmark.

"[Let us see] if the next trades will be as strong," the trader said.

A similar story in Nigeria was previously described by traders — rising traded values on the back of softer freight costs and rising demand, though concerns remain over whether the strengthening can be sustained.

"Looks like [Nigeria] is picking up, but I am not too constructive [in the medium term]. Diesel cracks are quite healthy, which is naturally helping," a second trader said.

"There is a lot of hype on the Nigerians currently as people think they will follow the Angolans," the first

trader said, adding that blending with WTI Midland could undercut any Nigerian rally.

Meanwhile, Indonesia's Pertamina awarded two cargoes of West African crude in its latest tender that closed on July 5, sources said. Nigerian Okwuibome and Angolan Cabinda held by Vitol and Chevron, respectively, were agreed for September delivery, the sources said.

The first trader said there was talk the Chevron-held Cabinda stem was taken at close to a \$2.20/b premium to Dated Brent.

Platts West African Crude Daily Rationale & Exclusions

The four crudes in the Nigerian basket were assessed 30 cents/b higher on previously heard indications. Fundamentals remained supportive. There were no bids, offers or trades in the Platts Market on Close assessment process.

Qua Iboe FOB Nigeria <PCAID00> Bonny Light FOB Nigeria London <PCAIC00> Forcados FOB Nigeria <PCABC00> Bonga FOB Nigeria <PCNGC00>

Exclusions: None

Platts is part of S&P Global Commodity Insights

Platts West African Crude Bids, Offers, Trades

Bids: None Offers: None Trades: None

This assessment commentary applies to the following market data code: WAF Index <AWAFB00> The WAF Index is calculated using the following market data codes: Qua Iboe FOB Nigeria <PCAID00> Bonny Light FOB Nigeria London <PCAIC00> Forcados FOB Nigeria <PCABC00> Bonga FOB Nigeria <PCNGC00>

Platts US Pipeline Crude Daily Commentary

- Mars assessed at strongest level since Aug 24, 2020
- Sources point to tight supply, HSFO strength, hiked OSPs, SPR buybacks

A series of factors including tight sour supply, strong high sulfur fuel oil prices, increase in Saudi Arabian official selling prices for export grades and buybacks for the US strategic petroleum reserve supported Mars and other sour crude differentials July 6, sending Mars to a near three-year-high.

Platts assessed Mars crude up 75 cents/b July 6 at a \$2.05/b premium to cash WTI, the strongest frontmonth assessment for the grade since Aug. 24, 2020, when hurricane activity caused high volumes of Gulf of Mexico production to shutter, sending Mars up to a \$2.25/b premium to cash WTI.

Indeed, it is usually during periods of hurricane activity and shuttered production when Mars differentials strengthen to such elevated levels, however, it is not weather-related events that sources have pointed to as driving the strength on sour barrels in the current trade cycle. Instead, a broader tightness has emerged in the sour crude market following the decision early last month by Saudi Arabia to cut 1 million b/d of crude production in July, on top of 3.66 million b/d of collective OPEC+ quota reductions implemented since October 2022. As Saudi Arabia, and OPEC more broadly, produce many sour crude grades, such reductions in output can markedly tighten sour supply globally.

The tighter sour crude supply supported HSFO values, sending values for the fuel in the Gulf Coast to a multi-year high against front-month ICE Brent crude futures on June 30 of a \$4.91/b discount. While HSFO values in the USGC have weakened to just a \$7.17/b discount to ICE Brent on July 7, they remain well above the \$14.07/b discount registered on June 7.

In additional benefit to Mars and other sour crude differentials, Saudi Aramco decided to hike OSPs for nearly all their export crude grades in August to all regions. For deliveries to North America, Aramco hiked their OSPs by 10 cents/b to the Argus Sour Crude Index.

Adding further support to the US sour grades has been the ongoing effort by the US Department of Energy to refill the strategic petroleum reserve after heavy drawdowns in 2022 as part of an effort by the Biden Administration to mitigate near-term supply tightness following Russia's invasion of Ukraine in February 2022. On June 30, the DOE announced that it awarded contracts for the acquisition of 3.2 million barrels of US sour crude for September delivery. The DOE plans to announce on July 7 another Request for Proposal for the purchase of crude for delivery in October and November.

Sweet grades, too, moved stronger July 6, thought not as sharply as sour grades. Light Louisiana Sweet crude was assessed 25 cents/b stronger on the day at a \$2.85/b premium to cash WTI, after the grade was last heard bid at a \$2.80/b premium prior to the 1:30 pm CT assessment deadline.

West Texas Intermediate crude at the Magellan East Houston terminal, meanwhile, was assessed just 5 cents/b stronger at a \$1.85/b premium to cash WTI, the value at which the grade was last heard to trade.

Platts is part of S&P Global Commodity Insights.

Platts US Gulf Coast Export Crude Daily Commentary

- Platts AGS strengthens against Dated Brent, WTI MEH
- US exports average 4.263 million b/d over four weeks ended June 30: EIA

Platts American GulfCoast Select was assessed broadly stronger against the 15- to 45-days forward

NYMEX WTI and Dated Brent strips July 6, while against WTI crude at the Magellan East Houston terminal, Platts AGS strengthened as well.

Platts AGS, which represents Midland-spec WTI crude for export out of the US Gulf Coast on an FOB basis, was assessed 39 cents/b stronger against the forward NYMEX WTI strip at a \$2.31/b premium while against the forward Dated Brent strip, Platts AGS was assessed 53 cents/b stronger at a \$2.59/b discount.

For WTI FOB cargoes loading in the first decade, or first 10 days of August, values were assessed 10 cents/b stronger against WTI MEH at a 45 cents/b premium, while cargoes loading in the second and third decades of August were assessed 5 cents/b stronger against WTI MEH at a 40 cents/b premium.

But while WTI FOB premiums to WTI MEH were raised for August loading cargoes, US crude exports over June rallied from previous months, sending the four-week moving average for US crude exports over the period ended June 30 to 4.263 million b/d, the highest four-week moving average for US crude exports since April 21, when the US Energy Information Administration reported the moving average at 4.339 million b/d. This uptick on the moving average came despite a 1.437 million b/d fall in weekly exports over the week ended June 30 to 3.901 million b/d compared with the previous week.

Kpler, which estimated export flows last week at 4.025 million b/d, showed crude exports to Asia last week averaged 779,000 b/d, while those to Europe averaged 2.381 million b/d. Export volume estimates from ship tracking platforms like Kpler can differ from the EIA reported figure as the ship tracking platforms look at actual vessel movements in and out of US ports, while the EIA relies on customs receipts to calculate its weekly figure.

Platts is part of S&P Global Commodity Insights.

Platts Canadian Pipeline Crude Daily Commentary

- Heavy Canadian crude remains strong
- Healthy refinery activity, OPEC+ supply cuts lift prices

Heavy Canadian crude differentials remained among their strongest assessed values in over two years July 6 as robust refinery demand and a lack of supply stemming from Saudi Arabia's supply cuts supported prices.

Platts assessed August Western Canadian Select at Hardisty, Alberta 50 cents/b weaker over the previous day at WTI CMA minus \$10.70/b, after it was heard to trade there. The heavy crude has not been assessed stronger since April 13, 2021, when it was at WTI CMA minus \$10.55/b.

However, heavy Canadian crude at Cushing and at the US Gulf Coast both climbed 35 cents/b day on day. Platts assessed heavy Canadian crude at Cushing at WTI CMA minus \$3/b, based on market indications, a level of strength not seen since March 2022, and Platts assessed heavy Canadian crude at the US Gulf Coast at WTI CMA minus \$1.85, based on market indications, a level of strength not seen since February 2021.

The sweeter Canadian crude grades saw little change on the day. Platts assessed Syncrude Sweet Premium at Edmonton 5 cents/b stronger at WTI CMA plus \$3.80/b, after it was heard to trade at that level, and Mixed Sweet at Edmonton unchanged at WTI CMA minus 85 cents/b, after it was heard to trade there. The sweet crude was later heard to trade at WTI CMA minus \$1.10/b, but because the indication came after the 1:30 pm deadline, it could not be considered for the day's assessment. Platts assessed Condensate at Fort Saskatchewan 10 cents/b weaker on the day at WTI CMA minus \$5/b, after it was heard to trade at that level.

According to market sources, multiple influences have supported the heavy crude's prices. Because the majority of US refineries have returned from maintenance, refinery runs have increased and crude inventories have decreased, falling to 452.2 million barrels the week ended June 30, according to the US Energy Information Administration data. Additionally, OPEC+ production cuts and output shut-ins from the Alberta wildfires have contributed to a tighter crude supply.

Platts is part of S&P Global Commodity Insights.

Platts Latin American Crude Daily Commentary

- Latin crude prices little changed on signs of slowing economic activity
- Vasconia rises 15 cents on day to \$4/b discount to ICE Brent

Latin American crude prices ended the day mostly little changed on July 6, as benchmark futures remained flat on the day and traders evaluated signs that economic activity may be slowing in China.

Platts assessed Argentina's Medanito crude at a discount of \$4.90/b to the ICE Brent futures strip, unchanged on the day, after the light sweet crude was heard to have traded at around that level.

One trader said Medanito had traded in the high minus \$4s/b range, while another trader cited levels ranging between minus \$4/b and minus \$5/b.

Medanito typically competes with ANS crude delivered into the US West Coast, and stronger ANS values heard July 6 should provide support.

Platts assessed ANS crude for September delivery and the ICE Brent CMA plus \$2.40/b, the strongest level since November 2022, which was higher than the ICE Brent CMA plus 1.85/b level assessed for August ANS barrels.

Heavy Canadian crude on the US Gulf Coast was assessed at discount of \$1.85/b to the NYMEX WTI CMA, the narrowest differential in more than two years on what sources said was combination of factors including stronger HSFO cracking margins. Stronger prices for heavy Canadian crude typically support Colombian crudes that compete on the USGC, including Vasconia and Castilla.

Platts assessed Colombia's Vasconia at a discount of \$4/b to the Ice Brent futures strip, up 15 cents day on day.

Market participants were watching economic activity in China, where the Caixin services PMI fell to 53.9 in June, marking its lowest reading since January. A reading above 50 indicates an expansion, while a reading below 50 points toward a contraction.

While the indications signaled for continued expansions in the near term, analysts pointed out that the marker provided further evidence that China's recovery momentum was losing steam.

Platts is part of S&P Global Commodity Insights.

Subscriber Notes

Platts to include Seaway Texas City Terminal into Brent complex assessment process for June

Platts, part of S&P Global Commodity Insights, will include Seaway Texas City Terminal as a loading terminal for WTI Midland crude oil into its Dated Brent and Cash BFOE Market on Close assessment process for June deliveries.

Sellers would be able to nominate WTI Midland meeting Platts specification loaded from Seaway Texas City Terminal for inclusion into the Dated Brent/Cash BFOE assessment process starting with the June 2023 delivery period.

The terminal, in Texas City, Texas, is wholly owned by Seaway Crude Holdings LLC, L.P., a joint venture

between Enterprise Seaway L.P. and Enbridge Holdings (Seaway) L.L.C.

The terminal has two docks which can fit up to a VLCC size vessel and 4 million barrels of storage capacity for crude oil.

Platts decision to include WTI Midland into the Brent complex, and clarification of the review process by which loading terminals are included in the assessment process, can be found here.

Please send all feedback to

PriceGroup@spglobal.com and Europe_Crude@spglobal.com.

For written comments, please provide a clear indication if they are not intended for publication by Platts for public viewing.

Platts to launch Russian Urals DAP India assessment as differential to Dubai

Platts, part of S&P Global Commodity Insights, will launch a differential for Russian Urals DAP India versus Dubai, Aug. 1, 2023.

The DAP (Delivered At Place) West Coast India (WCI) Russian Urals differential to M1 Dubai [PCAAT00] following market support for an assessment of Urals DAP WCI versus Dubai.

Platts launched DAP WCI Russian Urals assessments as both an outright value and as a differential to M1 forward Dated Brent, Jan. 18, 2023.

Please send all feedback, comments or questions to europe_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available to the public upon request.

Platts publishes outright value of Iraq's Basrah Medium Asia OSP to three decimal points from July 3, 2023

Platts, a part of S&P Global Commodity Insights, has started publishing the outright value of Iraq's Basrah Medium Asia crude oil official selling price to three decimal points from July 3, 2023.

Platts previously published the outright value of the grade's OSP to two decimal points. The outright value of the grade's OSPs is calculated by adding its OSP differential, as issued by Irag's SOMO, to the corresponding monthly average of the OSP benchmark, which is Platts Dubai and Platts Oman.

Platts first announced the change in a subscriber note published May 19: https://www.spglobal.com/ commodityinsights/en/our-methodology/subscribernotes/051923-platts-to-publish-outright-value-ofiraqs-basrah-medium-asia-osp-to-three-decimalpoints-from-july-3-2023.

From July 3, the outright OSP of Basrah Medium Asia is published to three decimal points under the existing symbol BSMAD00. The Basrah Medium Asia outright OSP is published alongside the existing OSPs of SOMO's other crude oil grades on Platts Global Alert page 1059.

Please send all comments and gueries to asia_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts to add additional carbon intensity calculations, carbon offset premiums

Platts, part of S&P Global Commodity Insights, has decided to launch monthly carbon intensity calculations and daily carbon offset premium assessments for 13

additional crude oil fields, eight crude grades and 13 transportation routes, effective July 14, 2023.

Platts proposed to add these new assessments and calculations on June 1, which can be found here: https://www.spglobal.com/commodityinsights/en/ our-methodology/subscriber-notes/060123-plattsproposes-additional-carbon-intensity-calculationscarbon-offset-premiums

These new values will be added to the list of Platts existing carbon intensity calculations, bringing the current total number of fields to 139, up from 126, and increasing transparency on carbon intensities in the global crude market.

The new fields will include:

- -Falah
- -Rashid
- -Upper Zakum
- -Lower Zakum
- -Al-Shaheen
- -Oman Basin
- -Hassi Messaoud
- -Khurais
- -Abu Hadriya
- -Umm Shaif
- -Nasr
- -El Bundua
- -Abu Al Bukhoosh

The new crude grades will include:

- -Dubai Grade
- -Oman Grade
- -Al-Shaheen Grade
- -Upper Zakum Grade
- -Das Blend Grade
- -Arab Light Grade
- -Saharan Blend Grade
- -Murban Grade

Platts upstream crude carbon intensity calculations measure the impact of greenhouse gas emissions in the production lifecycle from production to storage terminal. The methodology guide for Platts upstream

carbon intensity, midstream carbon intensity, and carbon offset premiums is available here: Specifications Guide Carbon Intensity Assessments.

In line with the methodology for the current carbon intensity scores of the 126 crude fields that Platts publishes, the CI of these 13 new field will be calculated using Stanford's Oil Production Greenhouse Gas Emissions Estimator (OPGEE) 2.0 model, combined with proprietary research and data from S&P Global.

Platts carbon intensity premiums for both the upstream and midstream calculations reflect the cost to offset emissions from each of the crudes, in addition to a separate premium reflecting the offsetting cost for each specific transportation route. Crude streams and different transportation routes have a variety of carbon intensities depending on where the crude comes from and the distance to the refinery.

Depending on the carbon intensity of each crude and carbon intensity of the route, the calculation is a \$/b indication of how much it would cost to use carbon removal credits to offset associated GHG emissions from the production of the crude, as well as the route in question.

The 13 new routes will include:

- Falah to Kiire
- Rashid to Kiire
- Upper Zakum to Zhoushan
- Lower Zakum to Sikka
- Al-Shaheen to Singapore
- Oman Basin to Tranmere
- Hassi Messaoud to Tranmere
- Khurais to Ain Sukhna
- Abu Hadriya to Ain Sukhna
- Umm Shaif to Sikka
- Nasr to Sikka
- El Bundug to Sikka
- Abu Al Bukhoosh to Sikka

Please send any further feedback

to Platts_Carbon@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts amends weighted average flat rate for North Sea-Rotterdam route from July 3

Following the Worldscale Association update to flat rates for the port of Hound Point, Platts, part of S&P Global Commodity Insights, has amended the \$/mt weighted average flat rate of the North Sea-Rotterdam Freight Adjustment Factor (FAF), effective July 3, 2023.

The North Sea-Rotterdam FAF is used to netback CIF Rotterdam WTI Midland values to FOB North Sea-equivalent values for Dated Brent.

As a result of the recent Hound Point update, the weighted average flat rate has been updated to \$7.00/mt from July 3, up from \$6.93/mt.

The FAF is calculated from the 10-day rolling freight average of the Dirty Cross-UK/Continent 80,000 mt freight assessment as published in Platts Dirty Tankerwire and in the Platts Pricing Database under code TDUUW00.

Please send all comments or questions to europe_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts launches fallback demurrage mechanism for WTI Midland CIF Rotterdam cargoes basis USGC demurrage rates

Platts, part of S&P Global Commodity Insights, has launched a demurrage fallback mechanism for WTI Midland CIF Rotterdam cargoes traded in the Platts Market on Close assessment process that is based on US Gulf Coast (USGC) demurrage rates, effective June 23.

If no agreement can be reached between buyer and seller on demurrage costs, Platts proposes that counterparties use Platts Aframax USGC demurrage assessment (ADERD00) for the period 22-27 days prior to the delivery laycan. This time period is equivalent to what Platts understands the typical USGC Aframax fixing period to be of 5-10 days prior to USGC loading, assuming a 17-day sailing time to Rotterdam.

Platts understands that currently the standard market practice for demurrage on WTI Midland cargoes to be commensurate with Aframax demurrage rates in the US Gulf Coast.

Please send all feedback, comments or questions to europe_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts reminds subscribers of Middle East crude cargo nomination procedures, laycans

Platts, part of S&P Global Commodity Insights, would like to remind participants in the Middle East Market on Close crude oil price assessment process that for cargoes of Dubai, Oman, Upper Zakum, Al Shaheen or Murban, loading dates starting in the last three calendar days of the month should not be nominated except by mutual agreement between the buyer and the seller.

For Al-Shaheen cargoes, sellers should pass loading dates to buyers as soon as possible and at the latest before the end of the last trading day of the month of trade execution.

For other grades, buyers typically nominate loading dates in the month after trade execution.

In either case, buyers and sellers should not nominate cargoes with loading dates commencing in the last three calendar days of a month.

This is to avoid slippage risk — the risk that endmonth loading dates of a cargo will spill over into the next month with different pricing implications.

For example, a cargo loading in August, which has 31 days, should have its nominated laycan end no later than on Aug. 29, e.g. an Aug. 28-29 loading cargo.

Platts reflects partial cargoes of crude oil in its physical assessments for Dubai, Oman, Upper Zakum, Al-Shaheen and Murban crudes.

Under the partials mechanism, the seller declares a full 500,000-barrel cargo of crude oil to the buyer after a total of 20 partials have been traded for the same loading month between the companies.

For Dubai partials, the seller has the option to deliver a Dubai, Oman, Upper Zakum or Al-Shaheen cargo, or a Murban cargo with a quality premium, to the buyer.

Please send all comments, feedback and questions to <u>Asia_crude@platts.com</u> and <u>pricegroup@platts.com</u>.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts clarifies CPC Blend assessment methodology

Platts, part of S&P Global Commodity Insights, clarifies the CPC Blend assessment methodology relating to emerging market practices for the AWRP cost and the title and risk transfer following Russia's invasion of Ukraine.

AWRP

Platts understands that in current market practice the Additional War Risk Premium (AWRP), an additional insurance product that emerged in the market following Russia's invasion of Ukraine, is for the seller's account.

As such, for CPC delivered Augusta bids, offers and trades in the Platts Market on Close assessment process, Platts will reflect value with the AWRP cost being paid by the seller.

TITLE AND RISK

Platts understands that some buyers of delivered CPC Blend cargoes in the wider market are requesting delayed transfer of title and risk. Platts understands buyers are requesting that the title and risk passes at the point the vessel has passed through the Dardenelles, rather than at loadport.

Platts also understands that while this may not be market practice for every trade, many sellers are willing to agree to delayed title and risk transfer.

As such, Platts will publish bids and offers requiring delayed transfer of title and risk in the MOC, but these may be subject to normalization for assessment purposes.

CERTIFICATE OF ORIGIN

Platts previously announced on Sept. 23, 2022, that cargoes carrying a Russian certificate of origin (COO) would be excluded from CPC Blend assessments from Oct. 3, 2022. As such, bids, offers and trades reported in the MOC will need to be performed upon with cargoes carrying a Kazakh-origin COO.

The subscriber note for that change can be found here:

https://www.spglobal.com/commodityinsights/ en/our-methodology/subscriber-notes/092322-plattsto-exclude-russian-origin-cargoes-from-cpc-blendassessments-amend-fob-netback-calculations

Please send all feedback, comments or questions to europe_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will

make comments not marked as confidential available upon request.

Platts to launch CIF Rotterdam KEBCO, FOB Ust-Luga and Novorossiisk netback assessments

Platts, part of S&P Global Commodity Insights, will launch new KEBCO (Kazakh Export Blend Crude oil) assessments, Aug. 1, 2023.

Platts received consistent market feedback in support of a KEBCO CIF Rotterdam assessment and FOB-netback values for KEBCO Ust-Luga and FOB Novorossijsk.

KEBCO FOB Ust-Luga value will be calculated as a freight netback from the KEBCO CIF Rotterdam assessment.

KEBCO FOB Novorossiisk will be calculated as a freight netback from the CIF Augusta assessment, also taking into account Turkish Strait delays and the Additional War Risk Premium (AWRP).

These assessments will be published as both differentials to the Med Dated Brent strip [AALDF00] and as outright values.

Platts launched a KEBCO CIF Augusta assessment, Nov. 1, 2022.

Please send all feedback, comments or questions to europe_crude@spglobal.com and pricegroup@spglobal.com.

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available to the public upon request.

Platts invites feedback on Global Crude Oil Market Parity Prices methodology

As part of its commitment to open and transparent pricing and product specifications, Platts, part of S&P Global Commodity Insights, would like to invite feedback on its Global Crude Oil Market Parity Prices

methodology.

Platts Market Parity Prices (MPPs) provide a calculation of the equivalent market value of a given crude based on the value of its typical refined product yield, subtracting costs for transport and the refining process, and adjusting the resulting value based on its Gross Product Worth (GPW) benchmarked to a reference basket of relevant crude grades that are actively traded in the regional spot market.

As part of this review, Platts is inviting feedback from stakeholders on possible amendments to the model, including addition of new reference grades; changes to the underlying refinery model and GPW yields used in the calculations; as well as updates to transportation and processing cost for the various grades.

More details on Platts MPP models and methodology are available at: https://www.spglobal.com/commodityinsights/PlattsContent/_assets/_files/en/our-methodology/methodology-specifications/market-parity-prices.pdf

Platts reviews all methodologies annually to ensure they continue to reflect the physical markets under assessment. Platts regularly assesses the relevance of methodologies through continuous contact with the market. Feedback on methodologies is always welcomed by Platts.

Platts is committed to providing advance notice in a clear time frame that gives users sufficient opportunity to analyze and comment on the impact of such proposed changes. Time frames vary depending on Platts analysis of the overall circumstances of a particular change.

Methodology changes that materially alter an assessment and require an update to the methodology specification are preceded by extensive bilateral discussions with market stakeholders and open public forums. Routine changes or clarifications generally do not materially alter an assessment. Platts holds open public forums in which material methodology changes

and feedback are presented, and at which further feedback may be given.

Please send all comments, feedback, and questions to europe_crude@spglobal.com, <a href="mailto:assalar

For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing.

Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts launches WTI Midland FOB USGC assessments by monthly decade basis

Platts, a part of S&P Global Commodity Insights, has launched assessments on a monthly-decade basis for WTI Midland crude oil cargoes loading on an FOB basis out of the US Gulf Coast, effective July 5, 2023.

The prices are published as differentials to the Platts assessment of the first month WTI at the Magellan East Houston Terminal (WTI MEH) and the relevant underlying value of Dated Brent and ICE Brent at the US close for the loading period. Platts publishes the outright values of the three decades as well as a single outright value representing the average of the three decades.

TIMING AND BASIS

The prices reflect values for cargoes loaded within three segments of each calendar month: first decade: 1-10 of a month; second decade: 11-20 of a month; and third decade: 21-end of the month. The assessment month aligns with the US Gulf Coast pipeline schedule and rolls to the new months assessment the first business day following the 25th of each month. For example, from Jan. 26 to Feb. 25 the prompt month

for US domestic pipeline barrels is March. During this time Platts would be publishing values for the first, second and third decades of March loadings, and they would be published against the March WTI MEH pipeline assessment and the March Dated Brent basis. On Feb. 26, the prompt month for US domestic pipeline barrels shifts to April, and Platts assessments would roll to publishing first, second and third decades for April loadings against the April WTI MEH pipeline assessment and the April Dated Brent basis. The Dated Brent basis is formed using the relevant underlying prompt-month ICE Brent futures settle at the US close with the relevant Platts assessment of the Brent DFL financial differential at the time of loading. Dated Brent-related differentials reflect values relative to the value of Dated Brent that prevails at the time of loading. For example, on Feb. 1 Platts would be publishing the first, second and third decade assessments for March. The prompt ICE Brent futures contract for March loadings would be May, so the Dated Brent basis would be formed using the May ICE Brent settle with the March DFL differential. The ICE Brent basis reflects the value of the relevant contract month price of ICE Brent futures settles at the US close.

Specifications

The new assessments of WTI FOB values by domestic pipeline trade-month decades reflects the established specifications from the Platts WTI Midland FOB USGC assessment. The assessments, therefore, reflect the value for an Aframax cargo of Platts WTI Midland-spec crude on an FOB basis loading from locations along the US Gulf Coast, including Corpus Christi, Texas City, Houston, Beaumont, Nederland, and Port Arthur. The most competitive location, on a cargosize normalized adjusted basis, will inform the value

for the WTI FOB USGC assessment. The assessments reflect a typical volume of 700,000 barrels. Bids, offers, and trades that are smaller or larger than the cargosize typical may be normalized to reflect the freight economics of the typical cargo size using that day's US to UK Aframax freight assessment (Platts symbol: TDUCF00). The assessments reflect WTI Midland crude supplied directly from the Permian Basin on one or more of the following designated pipelines: BridgeTex, Longhorn, Midland-to-Echo I/ II, Cactus I/II/III, EPIC, Gray Oak, Permian Express, and Wink-to-Webster.

Crude reflected in this assessment must meet Platts' comprehensive, globally-accepted WTI Midland specifications, which can be found here: https://www.spglobal.com/commodityinsights/en/our-methodology/subscriber-notes/080320-platts-to-implement-comprehensive-platts-wti-midland-specifications.

Additionally, the assessments reflect value loading from terminals that have been approved by Platts for loading WTI Midland crude oil into its Dated Brent and Cash BFOE Market on Close assessment process. Loadings from non-approved terminals may be considered in the assessment, but normalized if appropriate.

Platts will continue to assess WTI Midland FOB USGC loading 15-to-45-days forward on an FOB basis. Please send any feedback or questions to americas_crude@spglobal.com and pricegroup@spglobal.com. For written comments, please provide a clear indication if comments are not intended for publication by Platts for public viewing. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Commodity Insights Analytics US Yields & Netbacks Effective July 6, 2023 (\$/barrel)

US Gulf Coast (PGA page 0833)

US Gulf Coast (PGA page 0841)

	Crack	Yield	Freig	ght	Crack Ne	tback	Crude	Price	Crack N	largin
Agbami	AGGCY00	89.05	AGGFA00	2.66	AGGCN00	86.39	AAQZB00	73.07	AGGCM00	11.56
Arab Berri	BEGCY00	89.15	TDDAC00	1.32	BEGCN00	87.83	AAXCT00	83.15	BEGCM00	4.68
Arab Heavy	AHGCY00	82.57	TDDAJ00	1.39	AHGCN00	81.18	AAXDI00	81.25	AHGCM00	-0.07
Arab Light	LIGCY00	87.04	TDDAR00	1.35	LIGCN00	85.69	AAXCU00	81.00	LIGCM00	4.69
Arab Medium	MEGCY00	83.71	TDDAZ00	1.35	MEGCN00	82.36	AAXDN00	81.70	MEGCM00	0.66
Bakken	BKGCY00	89.00	TDDRP00	7.78	BKGCN00	81.21	AAXPP00	73.02	BKGCM00	8.19
Basrah Medium	BLGCY00	82.24	TDDBS00	2.63	BLGCN00	79.61	BSMAM01	77.00	BLGCM00	6.23
Bonny Light	YLGCY00	91.26	TDDBX00	2.91	YLGCN00	88.35	PCAIC00	75.87	YLGCM00	10.72
Brent	BRGCY00	88.99	TDDCB00	2.72	BRGCN00	86.27	AAVJA00	75.74	BRGCM00	8.77
Cabinda	CBGCY00	86.59	TDDCF00	3.14	CBGCN00	83.45	PCAFD00	76.17	CBGCM00	5.52
Eagle Ford	EAGCY00	89.68					AAYAT00	73.16	EAGCM00	16.52
Escalante	ECGCY00	82.01	TDDCV00	3.97	ECGCN00	78.03	PCAGC00	74.24	ECGCM00	3.26
Forties	FTGCY00	88.47	FTGFA00	2.56	FTGCN00	85.91	PCADJ00	75.76	FTGCM00	8.38
Isthmus	ISGCY00	87.74	TDDDJ00	1.15	ISGCN00	86.59	PDAT009	69.20	ISGCM00	17.39
LLS	LLGCY00	91.05	TDDQW00	0.55	LLGCN00	90.50	PCABN00	74.65	LLGCM00	15.85
Marlim	MLGCY00	85.42	TDDGK00	3.08	MLGCN00	82.34	AAITF00	70.99	MLGCM00	10.82
Mars	MRGCY00	85.40	TDDQY00	0.55	MRGCN00	84.85	AAMBR00	73.85	MRGCM00	11.00
Maya	MYGCY00	75.74	TDDDP00	1.21	MYGCN00	74.53	PDATS09	66.00	MYGCM00	8.53
Mesa	MSGCY00	85.76	TDDDV00	1.96	MSGCN00	83.81	AAITB00	73.89	MSGCM00	9.92
Olmeca	OLGCY00	89.33	TDDDY00	1.16	OLGCN00	88.16	PDATT09	69.45	OLGCM00	18.71
Poseidon	PDGCY00	85.88	PDGFA00	0.00	PDGCN00	85.88	AABHK00	73.55	PDGCM00	12.33
Saharan Blend	SHGCY00	89.36	TDDRD00	2.00	SHGCN00	87.35	AAGZY00	76.13	SHGCM00	9.46
Syncrude	SYGCY00	91.17	SYGFA00	8.52	SYGCN00	82.65	AASOK00	75.52	SYGCM00	7.13
Urals	URGCY00	86.55	TDDFM00	2.90	URGCN00	83.65	AAWVH00	56.07	URGCM00	25.81
WTI	WTGCY00	88.83					AAYRG00	73.65	WTGCM00	15.18
WTS	WSGCY00	87.42	TDDRJ00	6.89	WSGCN00	80.53	PCACK00	72.45	WSGCM00	8.08

	Coke '	Yield	Freig	ght	Coke Ne	tback	Crude	Price	Coke M	argin
Arab Heavy	AHGOY00	85.26	TDDAJ00	1.39	AHGON00	83.88	AAXDI00	81.25	AHGOM00	2.63
Arab Light	LIGOY00	88.29	TDDAR00	1.35	LIGON00	86.94	AAXCU00	81.00	LIGOM00	5.94
Arab Medium	MEGOY00	84.84	TDDAZ00	1.35	MEGON00	83.48	AAXDN00	81.70	MEGOM00	1.78
Basrah Heavy	BHGOY00	82.06	BHGFA00	2.75	BHGON00	79.31	AALZC00	73.90	BHGOM00	10.38
Basrah Medium	BLGOY00	84.36	TDDBS00	2.63	BLGON00	81.73	BSMAM01	77.00	BLGOM00	8.34
Cabinda	CBGOY00	87.28	TDDCF00	3.14	CBGON00	84.14	PCAFD00	76.17	CBGOM00	6.21
Castilla Blend	CSGOY00	81.81	CSGFA00	2.06	CSGON00	79.75	AAVEQ00	68.14	CSGOM00	11.61
LLS	LLG0Y00	90.87	TDDQW00	0.55	LLGON00	90.32	PCABN00	74.65	LLGOM00	15.67
Marlim	MLGOY00	85.65	TDDGK00	3.08	MLGON00	82.58	AAITF00	70.99	MLGOM00	11.05
Mars	MRGOY00	86.73	TDDQY00	0.55	MRGON00	86.18	AAMBR00	73.85	MRGOM00	12.33
Maya	MYGOY00	82.62	TDDDP00	1.21	MYGON00	81.41	PDATS09	66.00	MYGOM00	15.41
Napo	NPGOY00	80.18	NPGFA00	4.80	NPGON00	75.39	AAMCA00	63.77	NPGOM00	10.66
Oriente	ORGOY00	85.22	ORGFA00	4.52	ORGON00	80.70	PCADE00	65.77	ORGOM00	14.03
Urals	URGOY00	87.36	TDDFM00	2.90	URGON00	84.47	AAWVH00	56.07	URGOM00	26.63
Vasconia	VCGOY00	88.33	VCGFA00	2.01	VCGON00	86.32	PCAGI00	72.14	VCGOM00	14.19
WCS ex-Hardisty	WHGOY00	83.52	TDDRS00	8.50	WHGON00	75.02	AAPPN00	61.02	WHGOM00	14.00
WCS ex-Nederland	WNGOY00	83.52	WCGFA00	0.00	WNGON00	83.52	AAYAY00	69.87	WNGOM00	13.65
WTS	WSG0Y00	89.20	TDDRJ00	6.89	WSGON00	82.31	PCACK00	72.45	WSGOM00	9.86

Commodity Insights Analytics US Yields & Netback (\$/barrel) (continued)

US Midwest (PGA page 0823)

	Crack	Yield	Freig	ght	Crack Ne	etback	Crude I	Price	Crack M	largin
Bakken	BKTCY00	87.07	TDDR000	1.68	BKTCN00	85.39	AASRU00	74.97	BKTCM00	10.42
Syncrude	SYTCY00	96.34	TDDFP00	8.20	SYTCN00	80.09	AASOK00	75.52	SYTCM00	4.57
WTI	WTTCY00	87.23	TDDRG00	2.39	WTTCN00	84.84	PCACG00	71.80	WTTCM00	13.04
WTS	WSTCY00	86.40	TDDRI00	3.08	WSTCN00	83.32	PCACK00	72.45	WSTCM00	10.87

US Midwest (PGA page 0821)									
	Coke '	Yield	Freig	ght	Coke Ne	tback	Crude	Price	Coke M	largin
WCS	WCTOY00	82.10	TDDRL00	8.56	WCTON00	73.54	AAPPN00	61.02	WCTOM00	12.52
WTS	WSTOY00	87.42	TDDRI00	3.08	WSTON00	84.34	PCACK00	72.45	WSTOM00	11.89

US West Coast (PGA page 0843)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
ANS	ANWCY00 105.83			PCAAD00 78.22	ANWCM00 27.61
Bakken	BKWCY00 111.37	TDDRT00 11.74	BKWCN00 99.63	AAXPP00 73.02	BKWCM00 26.61

US West Coast (PGA page 0841)

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
ANS	ANWOY00 107.46			PCAAD00 78.22	ANWOM00 29.24
Arab Light	LIWOY00 109.30	TDDAT00 1.35	LIWON00 107.95	AAXCU00 81.00	LIWOM00 26.95
Arab Medium	MEWOY00 104.54	TDDBB00 1.35	MEWON00 103.19	AAXDN00 81.70	MEWOM00 21.49
Basrah Heavy	BHW0Y00 104.54	BHWFA00 2.90	BHWON00 101.64	AALZC00 73.90	вниомоо 33.24
Basrah Medium	BLW0Y00 106.06	TDDBW00 2.77	BLWON00 103.29	BSMAM01 77.00	BLWOM00 30.44
Castilla Blend	CSWOY00 107.87	CSWFA00 6.84	CSWON00 101.03	AAVEQ00 68.14	CSWOM00 31.93
Maya	MYWOY00 103.67	MYWFA00 3.98	MYWON00 99.69	AAUPK00 66.60	MYWOM00 33.09
Napo	NPW0Y00 102.53	NPWFA00 5.79	NPWON00 96.74	AAMCA00 63.77	NPWOM00 32.02
Oriente	ORWOY00 106.89	TDDEC00 5.45	ORWON00 101.43	PCADE00 65.77	ORWOM00 34.77
Vasconia	VCW0Y00 114.42	VCWFA00 6.60	VCWON00 107.81	PCAGI00 72.14	VCWOM00 34.76

US Atlantic Coast (PGA page 0811)

	Crack \	/ield	Freig	ht	Crack Ne	tback	Crude I	Price	Crack M	largin
Agbami	AGACY00	94.47	AGAFA00	2.39	AGACN00	92.08	AAQZB00	73.07	AGACM00	17.25
Arab Light	LIACY00	89.85	TDDAU00	1.35	LIACN00	88.50	AAXCU00	81.00	LIACM00	7.50
Bakken	BKACY00	95.54	TDDRN00	7.20	BKACN00	88.34	AAXPP00	73.02	BKACM00	15.32
Bonny Light	YLACY00	94.91	TDDBZ00	2.62	YLACN00	92.30	PCAIC00	75.87	YLACM00	14.66
Brent	BRACY00	92.70	TDDCC00	2.55	BRACN00	90.15	AAVJA00	75.74	BRACM00	13.18
Cabinda	CBACY00	91.30	TDDCH00	2.85	CBACN00	88.45	PCAFD00	76.17	CBACM00	10.51
CPC Blend	CPACY00	94.94	CPAFA00	3.32	CPACN00	91.62	AALVX00	70.88	CPACM00	19.52
Forties	FTACY00	95.08	FTAFA00	2.45	FTACN00	92.63	PCADJ00	75.76	FTACM00	15.64
Saharan Blend	SHACY00	95.72	SHAFA00	1.67	SHACN00	94.04	AAGZY00	76.13	SHACM00	16.15
Urals	URACY00	89.04	URAFA00	2.23	URACN00	86.82	AAWVH00	56.07	URACM00	28.98

Commodity Insights Analytics European Yields & Netbacks Effective July 6, 2023 (\$/barrel)

Northwest Europe (PGA page 1811)

Crack Yield Freight Crack Netback Crude Price Crack Margin Agbami AGNCY00 90.10 AGNFA00 2.17 AGNCN00 87.92 AAQZB00 73.07 AGNCM00 14.86 Arab Berri BENCY00 89.71 BENFA00 1.32 BENCN00 88.39 AAXDU00 80.12 BENCM00 8.27 Arab Heavy TDDAN00 1.39 AHNCN00 80.26 AAXDH00 76.62 3.64 1.35 85.80 79.52 6.28 Arab Light LINCY00 87.15 TDDAV00 LINCN00 AAXDK00 LINCM00 1.37 82.26 3.24 Arab Medium MENCY00 83.63 TDDBD00 MENCN00 AAXDM00 79.02 MENCM00 Azeri Light 91.06 TDDBI00 2.30 88.76 76.85 10.77 ZLNCY00 ZLNCN00 00MHTAA ZLNCM00 Basrah Medium 82.20 2.06 80.14 77.00 8.25 BLNCY00 TDDBU00 BLNCN00 BSMAM01 2.38 89.43 13.56 Bonny Light YLNFA00 PCAIC00 75.87 Brent TDDCD00 2.15 87.23 75.74 11.49 BRNCY00 89.38 BRNCN00 AAVJA00 BRNCM00 Cabinda CBNCY00 87.11 TDDQR00 2.60 CBNCN00 84.51 PCAFD00 76.17 CBNCM00 8.34 CPC Blend CPNCY00 90.13 CPNFA00 2.93 CPNCN00 87.20 AALVX00 70.88 16.33 Dubai DBNCY00 86.91 DBNFA00 2.03 DBNCN00 84.88 PCAAT00 77.30 8.48 Eagle Ford 4.14 85.69 73.16 13.76 EANCY00 89.83 EANFA00 EANCN00 AAYAT00 Ekofisk 1.42 88.54 77.04 11.50 EKNCY00 89.96 TDDCT00 EKNCN00 PCADI00 EKNCM00 PCADJ00 Forties FTNCY00 89.57 TDDEZ00 1.65 FTNCN00 87.92 75.76 FTNCM00 12.16 TDDDG00 2.13 84.04 74.15 9.23 Iran Heavy BHNCY00 86.17 BHNCN00 AIHKA00 Johan Sverdrup JSNCY00 88.16 JSNFA00 1.76 JSNCN00 86.40 AJSVA00 77.15 9.25 Kirkuk TDDGH00 2.86 83.60 72.77 8.31 KRNCY00 86.46 KRNCN00 AAEJD00 LLS 92.72 LLNFA00 4.32 88.39 AAQBB00 73.34 14.97 LLNCY00 LLNCN00 LLNCM00 Maya MYNCY00 76.66 MYNFA00 4.45 MYNCN00 72.21 AAYXE00 65.37 MYNCM00 6.84 Oman OMNCY00 86.35 2.00 84.35 PCABS00 77.40 7.86 OMNCN00 Saharan Blend 89.83 13.70 SHNCY00 91.67 TDDGI00 1.83 SHNCN00 AAGZY00 76.13 29.96 Urals* 88.30 PCAFW00 58.34 URNCY00 WTI MEH 90.19 4.21 WTNCN00 85.98 AAYRZ00 72.34 WTNCM00 13.56 WTNCY00 WTNFA00

Mediterranean (PGA page 1821)

	Crack	Yield	Freig	ght	Crack Ne	etback	Crude	Price	Crack N	largin
Agbami	AGMCY00	89.51	AGMFA00	2.12	AGMCN00	87.39	AAQZB00	73.07	AGMCM00	14.33
Arab Heavy	AHMCY00	83.21	TDDAI00	1.39	AHMCN00	81.82	AAXDH00	76.62	AHMCM00	5.95
Arab Light	LIMCY00	87.23	TDDAQ00	1.35	LIMCN00	85.88	AAXDK00	79.52	LIMCM00	6.81
Arab Medium	MEMCY00	84.36	TDDAY00	1.37	MEMCN00	82.99	AAXDM00	79.02	MEMCM00	4.22
Azeri Light*	ZLMCY00	90.45	155/1100			02.00	AAGZX00	79.28	ZLMCM00	11.17
Basrah Medium	BLMCY00	83.31	TDDBR00	1.57	BLMCN00	81.74	BSMAM01	77.00	BLMCM00	9.85
Bonny Light	YLMCY00	91.04	YLMFA00	2.31	YLMCN00	88.72	PCAIC00	75.87	YLMCM00	12.86
Cabinda	CBMCY00	86.83	CBMFA00	2.54	CBMCN00	84.29	PCAFD00	76.17	CBMCM00	8.12
CPC Blend*	CPMCY00	89.17					AAGZU00	73.43	CPMCM00	15.74
Eagle Ford	EAMCY00	89.41	TNEIF00	4.45	EAMCN00	84.97	AAYAT00	73.16	EAMCM00	13.04
Forties	FTMCY00	89.01	FTMFA00	2.55	FTMCN00	86.46	PCADJ00	75.76	FTMCM00	10.70
Iran Heavy	BHMCY00	86.63	TDDDF00	1.54	BHMCN00	85.08	AIHKA00	74.15	ВНМСМ00	10.27
Johan Sverdrup	JSMCY00	87.97	JSMFA00	2.72	JSMCN00	85.25	AJSVA00	77.15	JSMCM00	8.10
Kirkuk	KRMCY00	86.56	TDDFF00	1.69	KRMCN00	84.87	AAEJD00	72.77	KRMCM00	9.58
LLS	LLMCY00	91.90	LLMFA00	4.67	LLMCN00	87.23	AAQBB00	73.34	LLMCM00	13.81
Oman	OMMCY00	86.91	OMMFA00	1.42	OMMCN00	85.48	PCABS00	77.40	OMMCM00	8.99
Saharan Blend	SHMCY00	90.36	TDDFG00	1.43	SHMCN00	88.93	AAGZY00	76.13	SHMCM00	12.80
Urals*	URMCY00	87.55					PCACE00	58.76	URMCM00	28.79

Platts Analytics Asian Yields & Netbacks Effective July 6, 2023 (\$/barrel)

Singapore	(PGA	page 2811)	

	Crack	Yield	Freig	ght	Crack Ne	etback	Crude	Price	Crack M	largin
Agbami	AGSCY00	82.01	AGSFA00	2.16	AGSCN00	79.85	AAQZB00	73.07	AGSCM00	5.22
Arab Berri	BESCY00	81.44	BESFA00	1.38	BESCN00	80.06	AAXDV00	79.90	BESCM00	0.16
Arab Heavy	AHSCY00	75.84	TDDA000	1.43	AHSCN00	74.41	AAXDG00	78.15	AHSCM00	-3.74
Arab Light	LISCY00	80.26	TDDAW00	1.41	LISCN00	78.85	AAXDJ00	80.35	LISCM00	-1.50
Arab Medium	MESCY00	76.53	TDDBE00	1.42	MESCN00	75.11	AAXDL00	79.80	MESCM00	-4.69
Basrah Medium	BHSCY00	77.07	BHSFA00	1.42	BHSCN00	75.65	BSMAM01	77.00	BHSCM00	-1.60
Bonny Light	YLSCY00	84.57	YLSFA00	2.33	YLSCN00	82.24	PCAIC00	75.87	YLSCM00	4.82
Cabinda	CBSCY00	83.25	TDDQS00	2.25	CBSCN00	81.00	PCAFD00	76.17	CBSCM00	3.28
Castilla	CSSCY00	71.98	CSSFA00	4.21	CSSCN00	67.77	AAVEQ00	68.14	CSSCM00	-0.70
Dalia	DLSCY00	85.37	DLSFA00	2.33	DLSCN00	83.04	AAQYX00	74.97	DLSCM00	6.52
Dubai	DBSCY00	80.31	TDDCQ00	1.34	DBSCN00	78.97	PCAAT00	77.30	DBSCM00	1.67
Duri	DRSCY00	83.43	TDDCR00	1.23	DRSCN00	82.20	PCABA00	79.61	DRSCM00	2.59
Eagle Ford	EASCY00	81.85	EASFA00	3.65	EASCN00	78.21	AAYAT00	73.16	EASCM00	4.72
ESP0	ESSCY00	82.65	ESSFA00	1.10	ESSCN00	81.55	AARWF00	68.62	ESSCM00	12.93

Singapore (PGA page 2811)

	Crack	Yield	Freig	ght	Crack Ne	tback	Crude	Price	Crack N	1argin
Forties	FTSCY00	80.62	TNEFD00	3.31	FTSCN00	77.31	PCADJ00	75.76	FTSCM00	-0.01
Kimanis	KISCY00	90.36	KISFA00	1.11	KISCN00	89.24	AASCL00	83.81	KISCM00	5.43
LLS	LLSCY00	84.08	LLSFA00	3.80	LLSCN00	80.28	AAZDC00	74.66	LLSCM00	5.30
Mars	MRSCY00	79.12	MRSFA00	3.94	MRSCN00	75.18	AAMBR00	73.85	MRSCM00	1.00
Maya	MYSCY00	74.94	MYSFA00	4.13	MYSCN00	70.81	AAYXG00	69.80	MYSCM00	1.01
Minas	MNSCY00	84.25	TDDDX00	1.12	MNSCN00	83.13	PCAB000	72.33	MNSCM00	10.80
Oman	OMSCY00	77.89	TDDEB00	1.28	OMSCN00	76.61	PCABS00	77.40	OMSCM00	-0.79
Qua lboe	QBSCY00	85.12	QBSFA00	2.33	QBSCN00	82.79	PCAID00	75.92	QBSCM00	5.32
Saharan Blend	SHSCY00	79.67	SHSFA00	2.43	SHSCN00	77.24	AAGZY00	76.13	SHSCM00	-1.05
Tapis	TPSCY00	82.79	TDDE000	1.10	TPSCN00	81.69	PCACB00	79.91	TPSCM00	1.78
Tupi*	LUSCY00	82.87					LUQDA00	79.54	LUSCM00	3.54
Urals	URSCY00	80.25	URSFA00	2.49	URSCN00	77.76	AAGZS00	56.07	URSCM00	20.13
WTI MEH	WTSCY00	81.88	WTSFA00	3.71	WTSCN00	78.17	AAZDF00	73.86	WTSCM00	4.19

^{*}Indicates the crude price is a CIF value

^{*}Indicates the crude price is a CIF value



Crude Carbon Intensity

A daily supplement to Crude Oil Marketwire

Platts crude carbon intensity assessments - grades, July 6, 2023 (PGA/PCR page 4206)

	Daily Carbon Inte	ensity Premium	Mo	onthly Carbor	n Intensity*
	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
North America (PGA/PCR pag	ge 4206)				
WTI Midland	WXTIC00	0.53	WXTIC40	May-23	37.85
Europe (PGA/PCR page 4206)					
Brent	BXREC00	0.82	BXREC40	May-23	58.42
Ekofisk	EXKOC00	0.33	EXK0C40	May-23	23.19
Forties	FXORC00	0.33	FXORC40	May-23	23.21
Oseberg	OXSEC00	1.25	0XSEC40	May-23	88.50
Troll	TXROC00	3.81	TXROC40	May-23	269.85

Upstream CI values are modelled on a marginal basis and are published monthly. CI Premiums are assessed daily.

Details on the Platts methodology can be found at spglobal.com/commodityinsights/.

Platts crude carbon intensity assessments - fields, July 6, 2023 (PGA page 4200)

	Daily Carbon Intensity Premium		Monthly Carbon Intensity*			Daily Transport Carbon Intensity Premium			Monthly Transport Carbon Intensity**		
	Symbol	\$/boe	Symbol	Date	kg CO2 eq/boe	Route	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
Asia Pacific & Middle Eas	t Fields (PGA/PCR page 4	i201)									
China											
Bozhong	BOZHC00	0.44	BOZHC40	May-23	30.93	Bohai Pengbo-Singapore	BOZHC10	0.06	BOZHC50	May-23	4.24
India											
Bombay High	MUMBC00	0.37	MUMBC40	May-23	26.03	Bombay High-Qingdao	MUMBC10	0.10	MUMBC50	May-23	6.80
Iran											
Marun	MARUC00	0.51	MARUC40	May-23	36.10	Kharg Island-Qingdao	MARUC10	0.13	MARUC50	May-23	8.96
Iraq											
Kirkuk	KIRKC00	0.72	KIRKC40	May-23	50.90	Ceyhan-R'dam	KIRKC10	0.06	KIRKC50	May-23	4.55
Rumaila	RUMAC00	0.30	RUMAC40	May-23	21.56	Al Basrah-Sikka	RUMAC10	0.03	RUMAC50	May-23	2.09
West Qurna-2	WESTC00	0.37	WESTC40	May-23	26.16	Al Basrah-Sikka	WESTC10	0.03	WESTC50	May-23	2.22
Zubair	ZUBAC00	0.76	ZUBAC40	May-23	53.82	Al Basrah-Sikka	ZUBAC10	0.03	ZUBAC50	May-23	2.09
Kuwait											
Burgan	BURGC00	0.24	BURGC40	May-23	16.73	Mina-Ulsan	BURGC10	0.13	BURGC50	May-23	9.31
Qatar											
Dukhan	DUKHC00	1.61	DUKHC40	May-23	114.47	Mesaieed-Singapore	DUKHC10	0.07	DUKHC50	May-23	5.03
Saudi Arabia											
Ghawar	GHWRC00	0.25	GHWRC40	May-23	17.57	Ras Tanura-Qingdao	GHWRC10	0.12	GHWRC50	May-23	8.33
Safaniya	SAFAC00	0.22	SAFAC40	May-23	15.56	Ras Tanura-Changxing	SAFAC10	0.13	SAFAC50	May-23	9.53
Zuluf	ZULUC00	0.32	ZULUC40	May-23	22.56	Ras Tanura-Changxing	ZULUC10	0.13	ZULUC50	May-23	9.24

^{*}Upstream marginal CI value is assessed from the field to the storage terminal.

Platts crude carbon intensity assessments - fields (continued) (PGA page 4200)

	Daily Carbon Int	Daily Carbon Intensity Premium		onthly Carbo	n Intensity*	Daily Transport Carbon Intensity Premium			Monthly Transport Carbon Intensity**		
	Symbol	\$/boe	Symbol	Date	kg CO2 eq/boe	Route	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
UAE	·		-				•		,		
Fateh	FATEC00	0.24	FATEC40	May-23	17.12	Fateh-Kiire	FATEC10	0.12	FATEC50	May-23	8.56
Murban	MURBC00	0.28	MURBC40	May-23	19.54	Fujairah-Chiba	MURBC10	0.12	MURBC50	May-23	8.55
Africa Fields (PGA/PCR p						,					
Angola	3450 12027										
Girassol	GRSLC00	0.17	GRSLC40	May-23	11.81	Girassol-Qingdao	GRSLC10	0.19	GRSLC50	May-23	13.18
Libya				., .						., .	
Waha	WAHAC00	0.48	WAHAC40	May-23	34.01	Zawia-Augusta	WAHAC10	0.01	WAHAC50	May-23	0.44
Nigeria	11/11/1000	0.10		may 20	0	Zama nagasta	111111020	0.0.		may 20	
Agbami	AGBAC00	0.37	AGBAC40	May-23	26.03	Agbami-Paradip	AGBAC10	0.15	AGBAC50	May-23	10.25
Bonga	BONGC00	0.17	BONGC40	May-23	12.35	Bonga-R'dam	BONGC10	0.09	BONGC50	May-23	6.20
		0.17	BONGC40	IVIAY 20	12.00	Donga Maani	BONGCIO	0.03	BONGCSe	IVIAY 20	0.20
Europe Fields (PGA/PCR	page 4202)										
Azerbaijan		0.00			40.00			0.00		14 00	
Azeri	AZERC00	0.26	AZERC40	May-23	18.09	Ceyhan-Sarroch	AZERC10	0.03	AZERC50	May-23	1.93
Kazakhstan											
Tengiz	TNGZC00	0.28	TNGZC40	May-23	19.48	Novo-R'dam	TNGZC10	0.07	TNGZC50	May-23	4.62
Norway											
Alvheim	ALVHC00	0.11	ALVHC40	May-23	7.80	Alvheim-Le Havre	ALVHC10	0.01	ALVHC50	May-23	0.85
Brage	BRAGC00	1.07	BRAGC40	May-23	76.15	Sture - Brofjorden	BRAGC10	0.01	BRAGC50	May-23	0.48
Edvard-Grieg	EDVAC00	0.06	EDVAC40	May-23	4.29	Edvard Grieg-Sarroch	EDVAC10	0.04	EDVAC50	May-23	2.97
Ekofisk	EKFSC00	0.39	EKFSC40	May-23	27.32	Teesside-R'dam	EKFSC10	0.01	EKFSC50	May-23	0.36
Embla	EMBLC00	0.08	EMBLC40	May-23	5.34	Teesside-R'dam	EMBLC10	0.01	EMBLC50	May-23	0.36
Fram	FRAMC00	0.35	FRAMC40	May-23	25.01	Mongstad-R'dam	FORTD10	0.01	FORTD50	May-23	0.84
Goliat	GOLIC00	0.03	GOLIC40	May-23	2.14	Goliat-R'dam	GOLIC10	0.02	GOLIC50	May-23	1.73
Grane	GRANC00	0.06	GRANC40	May-23	4.43	Sture-Immingham	GRANC10	0.01	GRANC50	May-23	0.63
Gullfaks	GULLC00	0.21	GULLC40	May-23	15.21	Gullfaks-Brofjorden	GULLC10	0.01	GULLC50	May-23	0.46
Heidrun	HEIDC00	0.17	HEIDC40	May-23	12.25	Heidrun-R'dam	HEIDC10	0.02	HEIDC50	May-23	1.22
Ivar-Aasen	IVARC00	0.03	IVARC40	May-23	2.44	Ivar Aasen-R'dam	IVARC10	0.01	IVARC50	May-23	0.80
Johan Sverdrup	JSVRC00	0.02	JSVRC40	May-23	1.58	Mongstad-R'dam	JSVRC10	0.01	JSVRC50	May-23	0.79
Oseberg	OSEBC00	0.28	OSEBC40	May-23	19.78	Sture-R'dam	OSEBC10	0.01	OSEBC50	May-23	0.69
Snorre	SNORC00	0.20	SNORC40	May-23	13.93	Snorre-Statfjord	SNORC10	0.00	SNORC50	May-23	0.14
Statfjord	STATC00	3.19	STATC40	May-23	226.52	Statfjord-R'dam	STATC10	0.01	STATC50	May-23	0.75
Troll	TROLC00	0.28	TROLC40	May-23	19.71	Mongstad-R'dam	TROLC10	0.01	TROLC50	May-23	0.79
Ula	ULACC00	0.66	ULACC40	May-23	46.97	Teesside-R'dam	ULACC10	0.01	ULACC50	May-23	0.37
Valhall	VALHC00	0.08	VALHC40	May-23	5.47	Valhall-R'dam	VALHC10	0.01	VALHC50	May-23	0.35
United Kingdom											
Alwyn North	ALWYC00	0.07	ALWYC40	May-23	4.84	Sullom Voe-R'dam	ALWYC10	0.01	ALWYC50	May-23	0.81
Arbroath	ARBRC00	0.12	ARBRC40	May-23	8.60	Houndpoint-R'dam	ARBRC10	0.01	ARBRC50	May-23	0.55
Auk	AUKCD00	0.51	AUKCC40	May-23	35.92	Teesside-R'dam	AUKCC10	0.01	AUKCC50	May-23	0.37
Brae	BRAEC00	0.15	BRAEC40	May-23	10.93	Houndpoint-R'dam	BRAEC10	0.01	BRAEC50	May-23	0.56
Bruce	BRUCC00	0.80	BRUCC40	May-23	56.56	Houndpoint-R'dam	BRUCC10	0.01	BRUCC50	May-23	0.56
Buzzard	BZRDC00	0.30	BZRDC40	May-23	20.94	Houndpoint-R'dam	BZRDC10	0.01	BZRDC50	May-23	0.53
Captain	CAPTC00	0.36	CAPTC40	May-23	25.42	Captain-Hamburg	CAPTC10	0.01	CAPTC50	May-23	0.72
Catcher	CATCC00	0.22	CATCC40	May-23	15.24	Catcher-R'dam	CATCC10	0.01	CATCC50	May-23	0.48

Platts crude carbon intensity assessments - fields (continued) (PGA page 4200)

	Daily Carbon Int	Daily Carbon Intensity Premium		onthly Carbo	on Intensity*	Daily Transport Carbon Intensity Premium			Monthly Transport Carbon Intensity**		
	Symbol	\$/boe	Symbol	Date	kg CO2 eq/boe	Route	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
Clair	CLAIC00	0.14	CLAIC40	May-23	10.02	Clair-Stanlow	CLAIC10	0.01	CLAIC50	May-23	0.91
Clyde	CLYDC00	0.33	CLYDC40	May-23	23.16	Teesside-R'dam	CLYDC10	0.01	CLYDC50	May-23	0.37
Cormorant	CORMC00	0.82	CORMC40	May-23	57.96	Sullom Voe-R'dam	CORMC10	0.01	CORMC50	May-23	0.82
Everest	EVERC00	0.20	EVERC40	May-23	14.02	Houndpoint-R'dam	EVERC10	0.01	EVERC50	May-23	0.55
Forties	FORTC00	0.22	FORTC40	May-23	15.33	Houndpoint-R'dam	FORTC10	0.01	FORTC50	May-23	0.56
Gannet	GANNC00	0.24	GANNC40	May-23	17.00	Teesside-R'dam	GANNC10	0.01	GANNC50	May-23	0.38
Golden-Eagle	GOLDC00	0.31	GOLDC40	May-23	22.08	Golden Eagle-Grangemouth		0.00	GOLDC50	May-23	0.14
Joanne	JOANC00	0.08	JOANC40	May-23	5.86	Teesside-R'dam	JOANC10	0.01	JOANC50	May-23	0.3
Judy	JUDYC00	0.37	JUDYC40	May-23	26.40	Teesside-R'dam	JUDYC10	0.01	JUDYC50	May-23	0.38
Kraken	KRAKC00	0.26	KRAKC40	May-23	18.55	Kraken-R'dam	KRAKC10	0.01	KRAKC50	May-23	0.80
Magnus	MAGNC00	0.17	MAGNC40	May-23	12.08	Sullom Voe-R'dam	MAGNC10	0.01	MAGNC50	May-23	0.8
Mariner	MARIC00	0.27	MARIC40	May-23	18.97	Mariner-Pascagoula	MARIC10	0.10	MARIC50	May-23	6.85
Nelson	NELSC00	0.14	NELSC40	May-23	9.58	Houndpoint-R'dam	NELSC10	0.01	NELSC50	May-23	0.55
Ninian	NINIC00	1.99	NINIC40	May-23	141.27	Sullom Voe-R'dam	NINIC10	0.01	NINIC50	May-23	0.83
Schiehallion	SCHIC00	0.25	SCHIC40	May-23	17.61	Schiellhallion-R'dam	SCHIC10	0.01	SCHIC50	May-23	0.85
Scott	SCOTC00	0.15	SCOTC40	May-23	10.67	Houndpoint-R'dam	SCOTC10	0.01	SCOTC50	May-23	0.55
Tiffany	TIFFC00	0.20	TIFFC40	May-23	14.13	Houndpoint-R'dam	TIFFC10	0.01	TIFFC50	May-23	0.55
Toni	TONIC00	0.25	TONIC40	May-23	17.43	Houndpoint-R'dam	TONIC10	0.01	TONIC50	May-23	0.55
Russia											
Samotlor	SAMOC00	0.41	SAMOC40	May-23	29.00	Primorsk-R'dam	SAMOC10	0.03	SAMOC50	May-23	1.97
North America Fields Canada (PGA/PCR page 4	4204)										
Bakken-Canada	BAKKC00	0.51	BAKKC40	May-23	35.88	Canada-USMW	BAKKC10	0.06	BAKKC50	May-23	3.91
Cold Lake	CDLKC00	1.17	CDLKC40	May-23	82.95	W Canada-USMW	CDLKC10	0.07	CDLKC50	May-23	4.86
CVE Christina Lake	CVECC00	0.62	CVECC40	May-23	44.29	Canada-USMW	CVECC10	0.07	CVECC50	May-23	4.86
Foster Creek	FOSTC00	0.83	F0STC40	May-23	58.69	Canada-USGC	FOSTC10	0.08	FOSTC50	May-23	5.69
Hebron	HEBRC00	0.14	HEBRC40	May-23	9.68	Hebron-Canada	HEBRC10	0.13	HEBRC50	May-23	8.89
Hibernia	HIBEC00	0.38	HIBEC40	May-23	27.16	Hibernia-Canada	HIBEC10	0.14	HIBEC50	May-23	9.82
Jackfish	JACKC00	0.95	JACKC40	May-23	67.46	Canada-USMW	JACKC10	0.06	JACKC50	May-23	4.37
MEG Christina Lake	MEGCC00	0.82	MEGCC40	May-23	58.06	Canada-USGC	MEGCC10	0.08	MEGCC50	May-23	5.99
Montney Shale	MONTC00	0.39	MONTC40	May-23	27.58	Montney-Canada	MONTC10	0.01	MONTC50	May-23	0.8
Surmont	SURMC00	0.90	SURMC40	May-23	63.92	Canada-USGC	SURMC10	0.08	SURMC50	May-23	5.54
United States (PGA/PCR	page 4205)										
Bakken	BAKNC00	0.28	BAKNC40	May-23	19.50	Beaumont-R'dam	BAKNC10	0.09	BAKNC50	May-23	6.46
Denver-Julesburg	DENVC00	0.40	DENVC40	May-23	28.37	Denver-USGC	DENVC10	0.04	DENVC50	May-23	2.47
Eagle Ford	EGFDC00	0.24	EGFDC40	May-23	16.89	Houston-Qingdao	EGFDC10	0.18	EGFDC50	May-23	12.8
Mars-Ursa	MRURC00	0.19	MRURC40	May-23	13.72	Mars-Qingdao	MRURC10	0.20	MRURC50	May-23	14.04
Permian Delaware	PRDLC00	0.24	PRDLC40	May-23	17.21	Corpus Christi-R'dam	PRDLC10	0.09	PRDLC50	May-23	6.5
Permian Midland	PRMDC00	0.27	PRMDC40	May-23	18.96	Corpus Christi-R'dam	PRMDC10	0.09	PRMDC50	May-23	6.70
Prudhoe-Bay	PRUDC00	0.45	PRUDC40	May-23	32.03	Alaska-USWC	PRUDC10	0.04	PRUDC50	May-23	2.86
San-Joaquin	SANMC00	2.48	SANMC40	May-23	175.84	San Joaquin-SoCal	SANAC10	0.01	SANAC50	May-23	0.7
SCOOP-STACK	SC00C00	0.46	SC00C40	May-23	32.36	Oklahoma-USGC	SC00C10	0.01	SC00C50	May-23	1.01
Tahiti	TAHIC00	0.23	TAHIC40	May-23	16.53	Tahiti-Yeosu	TAHIC10	0.19	TAHIC50	May-23	13.15

Platts crude carbon intensity assessments - fields (continued) (PGA page 4200)

	Daily Carbon Intensity Premium		Monthly Carbon Intensity*			Daily Transport Carbon Intensity Premium			Monthly Transport Carbon Intensity**		
	Symbol	\$/boe	Symbol	Date	kg CO2 eq/boe	Route	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
Latin America Fields (PG/	A/PCR page 4203)										
Brazil											
Tupi	TUPIC00	0.17	TUPIC40	May-23	12.19	Rio-Qingdao	TUPIC10	0.22	TUPIC50	May-23	15.64
Colombia											
Cusiana	CUSIC00	0.31	CUSIC40	May-23	21.98	Tolu-Houston	CUSIC10	0.03	CUSIC50	May-23	2.28
Ecuador											
Sacha	SACHC00	0.29	SACHC40	May-23	20.36	Esmeraldas-Long Beach	SACHC10	0.06	SACHC50	May-23	4.57
Mexico											
Cantarell	CNTLC00	0.22	CNTLC40	May-23	15.49	Cantarell-Bilbao	CNTLC10	0.10	CNTLC50	May-23	7.22
Venezuela											
Orinoco Oil Belt	ORINC00	3.81	ORINC40	May-23	270.03	Jose-Sikka	ORINC10	0.20	ORINC50	May-23	14.29

Upstream CI values are modelled on a marginal basis and are published monthly. Carbon Intensity Premiums are assessed daily. Venezuela's Orinoco Belt upstream marginal carbon intensity is calculated using only the Hamaca basin.

^{*}Upstream marginal CI number is assessed from the field to the storage terminal. **Transport CI is calculated from storage terminal to refinery gate and for shipping routes assumes an Aframax vessel.

Details on the Platts methodology can be found at spglobal.com/commodityinsights/.