

Crude Oil Marketwire

Volume 44 / Issue 130 / July 5, 2023

Key benchmarks (\$/barrel)

			Mid	Change
(PGA page 2210)				
Dubai (Sep)	PCAT00	75.42–75.44	75.430	+0.235
Dubai (Oct)	PCAU00	74.91–74.93	74.920	+0.230
Dubai (Nov)	PCAAV00	74.34–74.36	74.350	+0.220
MEC (Sep)	AAWSA00	75.42–75.44	75.430	+0.235
MEC (Oct)	AAWSB00	74.91–74.93	74.920	+0.230
MEC (Nov)	AAWSC00	74.34–74.36	74.350	+0.220
Brent/Dubai (Sep)	AAJMS00	0.00/0.02	0.010	-0.105
(PGA page 1212)				
Brent (Dated)	PCAS00	76.85–76.86	76.855	+0.860
Dated North Sea Light	AAOFD00	76.85–76.86	76.855	+0.860
Dated Brent (CIF)	PCAKM00		77.945	+0.880
Brent (Sep)	PCAAQ00	76.68–76.70	76.690	+0.610
Brent (Oct)	PCAR00	76.45–76.47	76.460	+0.600
Brent (Nov)	PCARR00		76.160	+0.580
Sulfur de-escalator	AAUXL00		0.20	
Oseberg QP (Jul)	AAXDW00		1.6079	
Oseberg QP (Aug)	AAIDX00		1.3083	
Ekofisk QP (Jul)	AAXDY00		1.2021	
Ekofisk QP (Aug)	AAXDZ00		1.0796	
Troll QP (Jul)	ATFNB00		2.3165	
Troll QP (Aug)	ATFNA00		1.8663	
(PGA page 210)				
Platts AGS	AGSAA00		73.750	+1.210
WTI FOB USGC Decades Avg	ADECA00		73.940	NANA
WTI (Aug)	PCACG00	71.78–71.80	71.790	+1.080
WTI (Sep)	PCACH00	71.87–71.89	71.880	+1.100
WTI (Oct)	AAGIT00	71.71–71.73	71.720	+1.000
Light Houston Sweet	AAXEW00		73.590	+1.180
Light Houston Sweet M2	AAYRY00		73.580	+1.150
LOOP Sour (Aug)	AALSM01		72.990	+1.080
LOOP Sour (Sep)	AALSM02		72.580	+1.400
LOOP Sour (Oct)	AALSM03		72.120	+1.400
Bakken	AAXPP00		73.030	+1.420
Eagle Ford Marker	AAYA00		71.440	+0.810
ACM* (Aug)	AAQH00	72.58–72.60	72.590	+1.080
ACM* (Sep)	AAQH00	72.17–72.19	72.180	+1.400
ACM* (Oct)	AAQHP00	71.71–71.73	71.720	+1.400

*Americas Crude Marker.

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

			Mid	Change
North Sea Dated strip	AAKWH00	76.86–76.88	76.870	+0.760
Mediterranean Dated strip	AALDF00	76.86–76.88	76.870	+0.755
33-63 Day Dated strip	AALEJ00	76.35–76.36	76.355	+0.475
BTC Dated strip	AAUFI00	76.83–76.85	76.840	+0.750
15-45 Day Dated strip	AALGM00	76.76–76.77	76.765	+0.740
30-60 Day Dated strip	AAXRK00	76.37–76.39	76.380	+0.470
North Sea CIF Dtd strip	AAHXE00		76.855	+0.750
23-63 Day Dated Strip	ADBRA00		76.400	+0.475

Brent/WTI spreads and EFPs (PGA page 218)

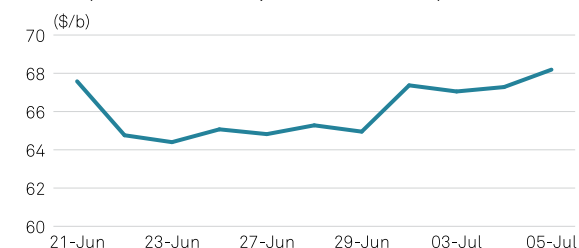
			Mid	Change
Brent/WTI 1st	AALAU00	4.74/4.76	4.750	-0.080
Brent/WTI 2nd	AALAV00	4.67/4.69	4.680	-0.060
Brent/WTI 3rd	AALAY00		4.610	-0.070
Brent EFP (Sep)	AAGVX00	0.12/0.14	0.130	+0.110
Brent EFP (Oct)	AAGVY00	0.12/0.14	0.130	+0.110
Brent EFP (Nov)	AAMVY00		0.130	+0.110
WTI EFP (Aug)	AAGVT00	-0.01/0.01	0.000	-0.070
WTI EFP (Sep)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Oct)	AAGVV00	-0.01/0.01	0.000	0.000

Middle East (\$/barrel)

			Mid	Change
(PGA page 2210)				
Oman (Sep)	PCABS00	75.52–75.54	75.530	+0.250
Oman (Oct)	AAHZF00	75.01–75.03	75.020	+0.250
Oman (Nov)	AAHZH00	74.44–74.46	74.450	+0.240
Upper Zakum (Sep)	AAOUQ00	75.41–75.45	75.430	+0.235
Murban (Sep)	AAKNL00	76.01–76.05	76.030	+0.300
Murban (Oct)	MBNSA00		75.520	+0.300
Murban (Nov)	MBNSB00		74.950	+0.290
Al Shaheen	AAPEV00	75.43–75.47	75.450	+0.220
Spread vs Dubai				
Dubai	DBDDC00		1.080	+0.015
Oman	DBDOC00		1.180	+0.030
Murban	AARBZ00		1.680	+0.080
Al Shaheen	AAPEW00	1.05–1.15	1.100	0.000
Upper Zakum	DBDUZ00		1.080	+0.015
Quality Premiums				
Murban QP	AASVA00		0.0000	

(PGA page 2658)				
Dubai Swap (Aug)	AAHBM00	74.90–74.94	74.920	+0.230
Dubai Swap (Sep)	AAHBN00	74.33–74.37	74.350	+0.220
Dubai Swap (Oct)	AAHBO00	73.86–73.90	73.880	+0.220

ESPO (FOB Kozmino, London Close)



Source: S&P Global Commodity Insights

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Market Commentary

Platts Middle East Sour Crude Daily Market Analysis

- Ceypetco awards September-delivery tender
- August-delivery Far East Russian ESPO Blend trades

Tender results and trades emerged in the regional sour crude oil complex July 5.

Market participants have adopted a conservative approach for Middle East's upcoming term nominations in light of Saudi Arabia's extended voluntary production cuts.

"The cuts are supportive for sour crude on

(continued on page 3)

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

(Asia MOC)					(Asia MOC)			(Asia close)			(London close)		
API Gravity	Code		Mid	Change	Code	Mid	Change	Code	Mid	Change	Code	Mid	Change
Condensate					Diff to Dubai			(PGA page 2212)			(PGA page 2213)		
NW Shelf	61.9	PCAGX00	61.74–61.78	61.760	Diff to Asian Dated Brent			AAPAI00	-13.300	-0.050	AAPAH00	63.120	+0.430
Ichthys FC	48.9	ICFCA00		69.160	ICFCB00			ICFCB00	-5.900	-0.100	ADFCD00	68.970	+0.310
DFC	56.82	ADFC00	67.88–67.92	67.900	ADFCB00	-6.50/-6.40	-6.450	ADFC00	-7.160	-0.170	AARBA00	68.370	+0.310
Qatar LSC	56.9	AARBB00	67.28–67.32	67.300	AARBD00	-7.10/-7.00	-7.050	AARBC00	-7.760	-0.170	AARAU00	64.120	+0.310
South Pars	57.4	AARAV00	63.03–63.07	63.050	AARAX00	-11.35/-11.25	-11.300	AARAW00	-12.010	-0.170			
					Diff to ICP			(PGA page 2214)			(PGA page 2215)		
Senipah	54.4	AAEOE00	59.69–59.73	59.710	AAEOK00	-8.35/-8.25	-8.300	AAPBE00	-15.350	-0.050	AAPBD00	61.070	+0.430
Light crude					Diff to ICP			Diff to Asian Dated Brent					
Cossack	47.7	PCAGZ00	68.94–68.98	68.960	Diff to Asian Dated Brent			AAPAC00	-6.100	-0.100	AAPAB00	70.320	+0.380
Tapis	45.2	PCACB00	78.59–78.63	78.610	PCAFM00	-4.85/-4.75	-4.800	AAOZW00	3.550	0.000	AAOV00	79.970	+0.480
Belida	45.1	PCAF00	63.54–63.58	63.560	PCAAK00	-5.75/-5.65	-5.700	AAPBQ00	-11.500	-0.100	AAPBP00	64.920	+0.380
Kutubu	44.3	PCAFJ00	67.29–67.33	67.310	PCACR00	-1.80/-1.70	-1.750	AAPAE00	-7.750	-0.100	AAPAD00	68.670	+0.380
Attaka	42.3	PCAAJ00	63.44–63.48	63.460	PCAQQ00		2.250	AAPBC00	-11.600	-0.100	AAPBB00	64.820	+0.380
Ardjuna	38	PCACQ00	68.99–69.03	69.010	Diff to Dubai			AAPBG00	-6.050	0.000	AAPBF00	70.370	+0.480
Banyu Urip	32	PCAFQ00		79.110	AARCN00	-14.05/-13.95	-14.000	AAPBU00	4.050	0.000	AAPBR00	80.470	+0.480
					AASEU00	-7.45/-7.35	-7.400						
Sakhalin Blend	45.5	AARBN00	60.33–60.37	60.350	AAWFG00	-7.55/-7.45	-7.500	AARDN00	-14.710	+0.380			
ESPO M1	34.8	AARWF00	66.93–66.97	66.950	AASCK00	-10.05/-9.95	-10.000				AAPAN00	65.420	+0.860
ESPO M2	34.8	AAWFE00	66.36–66.40	66.380				AAOZY00	6.300	0.000	AAOZX00	82.720	+0.480
Sokol	39.7	AASCJ00	64.33–64.37	64.350				AAPAS00	6.000	0.000	AAPAR00	82.420	+0.480
Kikeh	34.9	AAWUH00	81.34–81.38	81.360				AAPAQ00	7.750	0.000	AAPAP00	84.170	+0.480
Miri Light	32.3	PCABQ00	81.04–81.08	81.060				AASCM00	7.450	0.000	AASCN00	83.870	+0.480
Labuan	32	PCABL00	82.79–82.83	82.810				(PGA page 2216)			(PGA page 2217)		
Kimanis	38.6	AASCL00		82.510				Diff to Asian Dated Brent					
Medium crude								AARAS00	5.250	0.000	AARAQ00	81.670	+0.480
Su Tu Den	36.8	AARAR00	80.29–80.33	80.310				AAPAK00	6.300	0.000	AAPAJ00	82.720	+0.480
Bach Ho	40.7	PCAHY00	81.34–81.38	81.360				AAPAG00	-4.700	0.000	AAPAF00	71.720	+0.480
Nanhai	40	PCAFR00	70.34–70.38	70.360				AAPAM00	-2.250	0.000	AAPAL00	74.170	+0.480
Nile Blend	33.9	AAPLC00	72.79–72.83	72.810				AAPAW00	-3.200	0.000	AAPAV00	73.220	+0.480
Daqing	32.2	PCAAZ00	71.84–71.88	71.860				(PGA page 2218)			(PGA page 2219)		
Heavy crude					Diff to ICP			Diff to Asian Dated Brent					
Dar Blend	25	AARAB00	73.49–73.53	73.510				AARAC00	-1.550	0.000	AARAA00	74.870	+0.480
Shengli	24.2	PCABY00	75.04–75.08	75.060				AAPAY00	0.000	0.000	AAPAX00	76.420	+0.480
Duri	20.8	PCABA00	78.39–78.43	78.410	PCABB00	2.70/2.80	2.750	AAPBM00	3.350	0.000	AAPBL00	79.770	+0.480
Vincent	18.3	AARAK00		80.110				AARAL00	5.050	0.000	AARAJ00	81.470	+0.480

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

US Delivered - Asia Spot Crudes				Diff to Dubai			Diff to Asian Dated Brent			
WTI Midland (DES Singapore)	WTMSA00	77.480	+0.370	WTMSD00	3.600	+0.150	WTMSB00	2.680	+0.020	
WTI Midland (DES Yeosu)	WTMYA00	77.980	+0.370	WTMYD00	4.100	+0.150	WTMYB00	3.180	+0.020	
Brazil Delivered-Asia Spot Crudes										
Tupi (DES Qingdao)	LUQDA00	78.230	+0.520	LUQDD00	4.350	+0.300	LUQDB00	3.430	+0.170	

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

		Mid	Change	Spread vs Dubai		Mid	Change	Spread vs OSP		Mid	Change
Umm Lulu	AUFAA00	76.180	+0.300	DBDUL00		1.830	+0.080				
Das Blend	AAXOF00	75.330	+0.300	QBDDS00		0.980	+0.080				
Qatar Land	AAKNP00	74.63-74.67	+0.300	QALDA00		0.300	+0.080	AAKUJ00	0.10/0.20	0.150	0.000
Qatar Marine	AAKNR00	74.38-74.42	+0.250	QAMDA00		0.050	+0.030	AAKUJ00	-0.05/0.05	0.000	0.000
Banoco Arab Medium	AAKNT00	75.13-75.17	+0.250					AAKUD00	-1.20/-1.10	-1.150	0.000
Basrah Medium M1	BSMAM01	-	+0.250					BSMBM01		0.450	0.000
Basrah Medium M2	BSMAM02	-	+0.250					BSMBM02		0.200	0.000
Basrah Heavy M1	AALZC00	-	+0.250					AALZJ00		0.450	0.000
Basrah Heavy M2	AALZD00	-	+0.250					AALZK00		0.200	0.000

the surface for sure, but the market has grown increasingly skeptical until there's visible impact," said a crude trader.

Refiners may be forced to allocate full nominations regardless of an increased OSP differential, depending on their respective inventory levels, the trader added.

Sri Lanka's Ceypetco was heard to have purchased 700,000 barrels of Murban crude for delivery Sept. 24-27 via a tender, at a premium of \$4.99/b to the ADNOC September OSP on a DAP basis from BB Energy.

Ceypetco had last bought a similar-sized cargo of Murban for delivery Aug. 20-24 at a premium of \$5.39/b over ADNOC August OSP on a DAP basis from Vitol.

Meanwhile, August-delivery barrels of Far East Russian ESPO Blend were heard purchased at a discount of \$4.05/b to ICE October Brent futures on a delivered basis to Shandong.

Some market participants had valued August-delivery barrels of the grade at discounts around \$4-\$4.20/b to ICE October Brent futures, while trade of September-delivery barrels have yet to start.

In other news, China's Unipet was heard to have purchased a cargo of West African Djeno crude for September delivery from Chevron, while Shenghong was heard to have purchased Oman crude from TotalEnergies for delivery over the same period. Price levels for the trades were not yet heard.

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

		(Asia close)		(London close)	
		Mid	Change		
Minas	PCAB000	71.115	+0.580	AAPAZ00	72.475 +0.720
Cinta	PCAX00	61.390	+0.675	AAPBJ00	62.750 +0.815
Widuri	PCAFE00	59.685	+0.750	AAPBN00	61.045 +0.890
Cambay	AMPPA00	73.905	+0.285		
Ravva	AMPPB00	78.770	+0.520		
Rajasthan	AMPPC00	75.090	-0.015		

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

16:30 Singapore		Interim Asian Close	Diff to Dated Brent	Final London Close
Asian Dated Brent (ADB)	AAXPG00	75.355		
ADB Strip Asia	AARBV00	75.060	AARBX00	76.420
ADB Strip Middle East	AABW00	75.060	AARBY00	76.130
ADB Strip M3	ADBS003	74.800		

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

Platts Mideast Sour Crude Daily Rationales & Exclusions

Dubai Mo01 <PCAAT00> assessment rationale: The September cash Dubai assessment July 5 took into consideration cash Dubai partials trades, including offers at \$75.43/b that traded at the end of the Platts Market on Close assessment process and shortly during extension.

Oman Blend Mo01 <PCABS00> assessment rationale:
The September cash Oman assessment July 5 took into consideration values heard in the broader market.

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

Platts Oil Mideast Sour Crude Convergences

None reported

Platts Middle East Sour Crude Bids, Offers, Trades

Bids:

PLATTS DUBAI: SEP23: VITOL BIDS 25KB AT \$75.40

PLATTS DUBAI: SEP23: EQUINOR BIDS 25KB

AT \$75.40

PLATTS DUBAI: SEP23: PETROCHINA BIDS 25KB
AT \$75.35

PLATTS DUBAI: SEP23: MITSUI BIDS 25KB
AT \$75.30

PLATTS DUBAI: SEP23: GUNVOR NO LONGER BIDS
AFTER TRADE

Offers:
PLATTS DUBAI: SEP23: RELIANCE OFFERS 25KB AT
\$75.43 AND TRADES DURING EXTENSION

PLATTS DUBAI: SEP23: PETROCHINA OFFERS 25KB
AT \$75.45

PLATTS DUBAI: SEP23: BP OFFERS 25KB AT \$75.50
PLATTS DUBAI: SEP23: UNIPEC OFFERS 25KB

AT \$75.50
PLATTS DUBAI: SEP23: TRAFIGURA OFFERS 25KB

AT \$75.55
PLATTS DUBAI: SEP23: VITOL OFFERS 25KB

AT \$75.70
PLATTS DUBAI: SEP23: EXXONMOBIL NO LONGER
OFFERS AFTER TRADE

Trades:
PLATTS DUBAI: SEP23: TRAFIGURA SELLS TO
EQUINOR* 25KB AT \$75.35 (08:27:56)

PLATTS DUBAI: SEP23: PETROCHINA SELLS TO
EQUINOR* 25KB AT \$75.40 (08:29:13)

PLATTS DUBAI: SEP23: RELIANCE SELLS TO
GUNVOR* 25KB AT \$75.40 (08:29:17)

PLATTS DUBAI: SEP23: PETROCHINA SELLS TO
EQUINOR* 25KB AT \$75.40 (08:29:40)

PLATTS DUBAI: SEP23: SHELL BUYS FROM
RELIANCE* 25KB AT \$75.43 (08:29:52)

PLATTS DUBAI: SEP23: PETROCHINA SELLS TO
GUNVOR* 25KB AT \$75.40 (08:29:55)

PLATTS DUBAI: SEP23: EQUINOR BUYS FROM
EXXONMOBIL* 25KB AT \$75.43 (08:30:00)

PLATTS DUBAI: SEP23: SHELL BUYS FROM
RELIANCE* 25KB AT \$75.43 (08:30:02)

This assessment commentary applies to the
following market data codes: Dubai M1 <PCAT00>,
Oman M1 <PCABS00>

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

			Mid	Change	Spread vs fwd Dated Brent		Mid	Change
Dated Brent Diff					AAXEZ00	-0.02/-0.01	-0.015	+0.100
BNB	AAVJA00	77.03-77.05	77.040	+0.760	AAVJB00	0.16/0.18	0.170	0.000
Forties	PCADJ00	77.05-77.06	77.055	+0.770	AAGWZ00	0.18/0.19	0.185	+0.010
Oseberg	PCAEU00	78.57-78.58	78.575	+0.760	AAGXF00	1.70/1.71	1.705	0.000
Ekofisk	PCADI00	78.26-78.28	78.270	+0.785	AAGXB00	1.39/1.41	1.400	+0.025
Troll	AAWEX00	79.35-79.36	79.355	+0.760	AAWEY00	2.48/2.49	2.485	0.000
FOB N Sea WTI Midland	ALNDA00		76.885	+0.890	ALNDB00		0.015	+0.130
Statfjord	PCAE00	78.56-78.58	78.570	+0.760	AAGXD00	1.69/1.71	1.700	0.000
Flotta Gold	PCACZ00	77.56-77.58	77.570	+0.760	AAGXH00	0.69/0.71	0.700	0.000
Duc	AAWEZ00	77.81-77.83	77.820	+0.760	AAWFL00	0.94/0.96	0.950	0.000
Grane Blend	PCALA00		78.220	+0.760	PCALB00		1.350	0.000
Johan Sverdrup	AJSVA00		78.155	+0.760	AJSVB00		1.285	0.000
Statfjord (CIF)	AASAS00	79.65-79.66	79.655	+0.750	AASAT00	2.79/2.81	2.800	0.000
Gullfaks (CIF)	AASAU00	79.95-79.96	79.955	+0.750	AASAV00	3.09/3.11	3.100	0.000
Alvheim (CIF)	ALVHA00		80.155	+0.750	ALVHB00		3.300	0.000
Asgard (CIF)	ASGCA00		78.105	+0.750	ASGCB00		1.250	0.000
North Sea basket	AAGIZ00	77.73-77.74	77.735	+0.770				
North Sea Dated Strip	AAKWH00	76.86-76.88	76.870	+0.760				
European Sour Crude Index	CSBEA00		78.145	+0.760	CSBEB00		1.275	0.000
Spread vs fwd CIF Dated Brent								
Dated Brent (CIF)	AAVJG00		77.945	+0.880	AAVJF00		1.090	+0.130
BNB (CIF)	PCAKP00		79.165	+0.830	AAVJC00		2.310	+0.080
Forties (CIF)	PCAKR00		78.525	+0.810	AAHXC00		1.670	+0.060
Oseberg (CIF)	PCAKT00		79.910	+0.800	AAHXD00		3.055	+0.050
Ekofisk (CIF)	PCAKV00		79.445	+1.035	AAHXB00		2.590	+0.285
Troll (CIF)	AAXJ000		80.700	+0.800	AAXJN00		3.845	0.050
WTI Midland (CIF)	WMCRD00		77.945	+0.880	WMCRB00		1.090	+0.130
North Sea CIF Dated Strip	AAHXE00		76.855	+0.750				

Freight Adjustment Factors

(\$/barrel)		Change
Sullom Voe-Rotterdam	FSVRM00	1.6824 -0.0059
Hound Point-Rotterdam	FHPRM00	1.1684 -0.0040
Sture-Rotterdam	FSTRM00	1.0626 -0.0036
Teesside-Rotterdam	FTSRM00	0.9408 -0.0031
Mongstad-Rotterdam	FMGRM00	1.0698 -0.0036
North Sea-Rotterdam	FSFRM00	1.0651 -0.0036
(%)		
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	77.745	+0.630	AWTID00		1.345	+0.155
WTI Midland (DAP Augusta)	AWTIA00	78.395	+0.630	AWTIB00		1.995	+0.155
Eagle Ford 45 (DAP Rotterdam)	AEFAC00	76.845	+0.630	AEFAD00		0.445	+0.155
Eagle Ford 45 (DAP Augusta)	AEFAA00	77.495	+0.630	AEFAB00		1.095	+0.155

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.

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

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 03-07	PCAKA00	0.53/0.55	0.540 +0.210	AAJNV00	76.99/77.01	77.000 +0.810
CFD Week 2	(Oct)	Jul 10-14	PCAKC00	0.53/0.55	0.540 +0.210	AAJOS00	76.99/77.01	77.000 +0.810
CFD Week 3	(Oct)	Jul 17-21	PCAKE00	0.48/0.50	0.490 +0.210	AAJOU00	76.94/76.96	76.950 +0.810
CFD Week 4	(Oct)	Jul 24-28	PCAKG00	0.39/0.41	0.400 +0.125	AAJOW00	76.85/76.87	76.860 +0.725
CFD Week 5	(Oct)	Jul 31-04	AAGLU00	0.31/0.33	0.320 +0.160	AAJPC00	76.77/76.79	76.780 +0.760
CFD Week 6	(Oct)	Aug 07-11	AAGLV00	0.24/0.26	0.250 +0.140	AAJPE00	76.70/76.72	76.710 +0.740
CFD Week 7	(Oct)	Aug 14-18	AALCZ00	0.17/0.19	0.180 +0.140	AALAW00	76.63/76.65	76.640 +0.740
CFD Week 8	(Oct)	Aug 21-25	AALDA00	0.10/0.12	0.110 +0.140	AALAX00	76.56/76.58	76.570 +0.740

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	76.670 +0.510	ABWFZ00	0.120 +0.010
Month 1 (Aug 23)	BDLM001	76.420 +0.480	AAEAA00	0.100 -0.010
Month 2 (Sep 23)	BDLM002	76.130 +0.480	AAEAB00	0.110 +0.010
Month 3 (Oct 23)	BDLM003	75.830 +0.450	AAEAC00	0.110 -0.010
Month 4 (Nov 23)	BDLM004	75.540 +0.440	AAEAD00	0.130 -0.010

*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	Inter-Month Spread
10:30 London Time			
BFOE M1 (Sep)	PBCAAM1	75.950 +0.410	
BFOE M2 (Oct)	PBCAAM2	75.770 +0.430	Sep/Oct PBAM1M2 0.180
BFOE M3 (Nov)	PBCAAM3	75.470 +0.430	Oct/Nov PBAM2M3 0.300
12:30 London Time			
BFOE M1 (Sep)	PBCABM1	76.070 +0.300	
BFOE M2 (Oct)	PBCABM2	75.880 +0.330	Sep/Oct PBBM1M2 0.190
BFOE M3 (Nov)	PBCABM3	75.590 +0.320	Oct/Nov PBBM2M3 0.290
14:30 London Time			
BFOE M1 (Sep)	PBCACM1	76.730 +0.940	
BFOE M2 (Oct)	PBCACM2	76.500 +0.920	Sep/Oct PBCM1M2 0.230
BFOE M3 (Nov)	PBCACM3	76.180 +0.870	Oct/Nov PBCM2M3 0.320
16:30 London Time			
BFOE M1 (Sep)	PCAAQ00	76.690 +0.610	
BFOE M2 (Oct)	PCAAAR00	76.460 +0.600	
BFOE M3 (Nov)	PCARR00	76.160 +0.580	
19:30 London Time			
BFOE M1 (Sep)	PBCADM1	NA -	
BFOE M2 (Oct)	PBCADM2	NA -	Sep/Oct PBDM1M2 NA
BFOE M3 (Nov)	PBCADM3	NA -	Oct/Nov PBDM2M3 NA

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 5, 2023 Dubai derivatives assessment process.

Platts Asia Pacific Sweet Crude Daily Market Analysis

- Outcome of Pertamina's condensate tender awaited
- Indonesia, Brunei issue fresh OSPs

Market participants in the Asia Pacific sweet crude market were awaiting the outcome of Pertamina's tender seeking, on behalf of TPPI, condensate for September delivery. The tender closed July 3 and is valid until July 5.

There were some expectations that the North West Shelf condensate cargo, for loading over Aug. 29-Sept. 2, that was previously purchased by a trader would be considered in the tender.

However some noted that there are plenty of different condensates available for Pertamina's choosing.

"TPPI may or may not buy [Australia's] North West Shelf [condensate]... there are a few cargoes [of different condensate grades] around, [and] last time they took Wheatstone," said a Singapore-based trader.

In its previous tender, Pertamina was heard to have purchased a cargo of Australia's Wheatstone condensate for delivery over Aug. 1-3 from oil major Chevron at discounts ranging from \$4/b to \$7/b to Platts Dated Brent crude assessments, DAP Tuban,

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

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Urals (Rotterdam)	PCAFW00	59.15–59.19	59.170	+0.820	AAGXJ00	-17.71/-17.69	-17.700 +0.065
Urals (Mediterranean)	PCACE00	59.61–59.65	59.630	+0.755	AAGXX00	-17.25/-17.23	-17.240 0.000
Urals FOB Novo Suez	AAGZS00	56.85–56.89	56.870	+0.755	AAHPH00	-20.01/-19.99	-20.000 0.000
Urals FOB Novo Afra	AAOTH00	55.95–55.99	55.970	+0.755	AAOTI00	-20.91/-20.89	-20.900 0.000
Urals (Ex-Baltic)	AAGZT00	56.85–56.89	56.870	+0.755	AAHPI00	-20.01/-19.99	-20.000 0.000
Urals (Primorsk)	AAWVH00	56.85–56.89	56.870	+0.755	AAWVI00	-20.01/-19.99	-20.000 0.000
Urals RCMB (Recombined)	AALIN00	59.60–59.63	59.615	+0.860			
ESPO (FOB Kozmino)	AARWD00	68.18–68.20	68.190	+0.910	AARWE00	-7.95/-7.93	-7.940 +0.430
KEBCO	KBCOA00		77.970	+0.755	KBCOB00		1.100 0.000
Urals (DAP India)	DWCUA00		68.420	+0.480	DWCUB00		-8.000 0.000
KEBCO/Russian Urals	AKEBA00		18.340	0.000			
Number of days							
Observed Delivery Factor	AODFA00		6				

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

			Urals CFD	Mid	Change
Mediterranean (PPE page 1617)					
Urals Med CFD (Jul)	AAMDU00	-17.25/-17.23	-17.240	0.000	
Urals Med CFD (Aug)	AAMEA00	-17.25/-17.23	-17.240	0.000	
Urals Med CFD (Sep)	UMCM003	-17.25/-17.23	-17.240	0.000	
Northwest Europe (PPE page 1617)					
Urals NWE CFD (Jul)	UNCM001	-17.77/-17.76	-17.765	0.000	
Urals NWE CFD (Aug)	UNCM002	-17.77/-17.76	-17.765	0.000	
Urals NWE CFD (Sep)	UNCM003	-17.77/-17.76	-17.765	0.000	
Mediterranean (PPE page 1617)					
CPC Blend CFD (Jul)	AAOFX00		-1.800	0.000	
CPC Blend CFD (Aug)	AAOFY00		-1.850	0.000	
CPC Blend CFD (Sep)	AAOFZ00		-1.700	0.000	

Mediterranean spot crude assessments (\$/barrel)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Azeri and BTC (PGA page 1222)							
Azeri Lt CIF	AAGZX00	80.42–80.46	80.440	+0.850	AAHPM00	3.59/3.61	3.600 +0.100
Azeri Lt FOB Ceyhan Suez	AAUFM00	79.28–79.31	79.295	+0.820	AAUFN00	2.45/2.46	2.455 +0.070
Azeri Lt FOB Ceyhan Afra	AAUFK00	78.91–78.94	78.925	+0.850	AAUFL00	2.08/2.09	2.085 +0.100
Azeri Lt FOB Supsa	AATHM00	77.93–77.96	77.945	+0.850	AATHN00	1.10/1.11	1.105 +0.100
BTC FOB Ceyhan	AAUFH00	79.09–79.13	79.110	+0.835	AAUFJ00	2.26/2.28	2.270 +0.085
Black Sea (PGA page 1220)							
Siberian Light CIF	AAGZW00	61.61–61.65	61.630	+0.755	AAHPK00	-15.25/-15.23	-15.240 0.000
CPC Blend CIF	AAGZU00	74.53–74.56	74.545	+0.850	AAHPL00	-2.30/-2.29	-2.295 +0.100
CPC Blend FOB Suez	AALVX00	71.94–71.98	71.960	+0.850	AALVZ00	-4.89/-4.87	-4.880 +0.100
CPC Blend FOB Afra	AAOFV00	71.16–71.19	71.175	+0.850	AAOFW00	-5.67/-5.66	-5.665 +0.100
Additional War Risk Premium	AWARA00		1.000	0.000			
Middle East & North Africa (PGA page 1234)							
Suez Blend	PCACA00	74.80–74.84	74.820	+0.755	AAGYD00	-2.06/-2.04	-2.050 0.000
Es Sider	PCACO00	76.92–76.96	76.940	+0.850	AAGYH00	0.09/0.11	0.100 +0.100
Kirkuk	AAEJD00	73.85–73.89	73.870	+0.755	AAGYF00	-3.01/-2.99	-3.000 0.000
Iranian Light FOB Kharg Island (Med)	ATLKA00		77.350	+0.745	ATLKB00		0.480 -0.010
Iranian Heavy FOB Kharg Island (Med)	ATHKA00		75.650	+0.745	ATHKB00		-1.220 -0.010
Saharan Blend	AAGZY00	77.32–77.36	77.340	+0.750	AAHPN00	0.49/0.51	0.500 0.000

sources said.

Another trader said that Pertamina may or may not award the tender depending on the prices offered in the tender.

“Maybe Pertamina is still evaluating whether to push ahead with turnaround or buy if condensates are cheap enough,” said the second Singapore-based trader.

“They may not be seriously buying, probably just looking at valuations.”

Elsewhere, Indonesia's Ministry of Energy and Mineral Resources set the price for Minas crude in June at \$73.27/b, down 4 cents/b from May, according to the monthly selling price notice seen by S&P Global Commodity Insights July 5.

With the Dated Brent benchmark averaging \$74.70/b in July, Minas' alpha, or differential, for the month was at a discount of \$1.43/b.

For Indonesia's other main grades, the June Indonesian crude price for Banyu Urip crude was 61 cents/b lower on the month at \$79.52/b.

Brunei Shell, meanwhile, lowered the official selling prices of its Seria Light and Champion crudes loaded in May by \$7.79/b from April.

The May OSP for Seria Light was set at \$79.87/b while Champion was set at \$80.27/b, the sources said.

The differential between Seria Light and Champion crude remains at 40 cents/b, where it has been since January. Prior to that, Seria Light was set at 10 cents/b lower than Champion from January 2021 to December 2022.

The May OSP for Seria Light was set at parity to the May OSP for Malaysia's Tapis Blend crude, S&P Global data showed. Seria Light is typically priced at a fixed price differential to Tapis crude.

Platts Asia Light Sweet Crude Daily Rationale & Exclusions

ESPO FOB Kozmino Mo01 Spore vs Dubai Mo01 <AASEU00> assessment rationale: The ESPO M1

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

			Mid	Change	Spread vs fwd Dated Brent		Mid	Change
WAF Index	AWAFA00		77.030	+0.745	AWAFB00		0.650	+0.275
Nigeria Spot Crude Assessments								
Bonny Light	PCAIC00	76.81-76.85	76.830	+0.770	AAGXL00	0.44/0.46	0.450	+0.300
Qua Iboe	PCATD00	76.86-76.90	76.880	+0.770	AAGXN00	0.49/0.51	0.500	+0.300
Forcados	PCABC00	77.01-77.05	77.030	+0.770	AAGXP00	0.64/0.66	0.650	+0.300
Agbami	AAQZB00	74.01-74.05	74.030	+0.770	AAQZC00	-2.36/-2.34	-2.350	+0.300
Escravos	AAEIZ00	77.46-77.50	77.480	+0.770	AAGXR00	1.09/1.11	1.100	+0.300
Brass River	AAEJB00	75.71-75.75	75.730	+0.770	AAGXV00	-0.66/-0.64	-0.650	+0.300
Akpo	PCNGA00	74.01-74.05	74.030	+0.770	PCNGB00	-2.36/-2.34	-2.350	+0.300
Bonga	PCNGC00	77.36-77.40	77.380	+0.670	PCNGD00	0.99/1.01	1.000	+0.200
Usan	AAXUQ00		72.880	+0.770	AAXUR00		-3.500	+0.300
Erha	AAXUO00		77.380	+0.670	AAXUP00		1.000	+0.200
Egina	AFONA00		79.130	+0.770	AFONB00		2.750	+0.300
Angola spot crude assessments (\$/barrel) (PGA page 1232)								
Cabinda	PCAFD00	77.21-77.25	77.230	+0.420	AAGXT00	0.84/0.86	0.850	-0.050
Nemba	AAQYZ00	75.31-75.35	75.330	+0.470	AAQZA00	-1.06/-1.04	-1.050	0.000
Dalia	AAQYX00	76.01-76.05	76.030	+0.470	AAQYY00	-0.36/-0.34	-0.350	0.000
Girassol	AASNL00	78.66-78.70	78.680	+0.420	AASJD00	2.29/2.31	2.300	-0.050
Hungo	AASLJ00	75.26-75.30	75.280	+0.470	AASJF00	-1.11/-1.09	-1.100	0.000
Kissanje	AASLK00	76.21-76.25	76.230	+0.470	AASJE00	-0.16/-0.14	-0.150	0.000
Pazflor	PCNGG00	76.01-76.05	76.030	+0.470	PCNGH00	-0.36/-0.34	-0.350	0.000
Plutonio	PCNGI00	74.96-75.00	74.980	+0.470	PCNGJ00	-1.41/-1.39	-1.400	0.000
Ghana spot crude assessments (PGA page 1230)								
Jubilee	AAXUS00		76.430	+0.570	AAXUT00		0.050	+0.100
Republic of Congo spot crude assessments								
Djeno	PCNGE00	74.16-74.20	74.180	+0.470	PCNGF00	-2.21/-2.19	-2.200	0.000
Chad spot crude assessments								
Doba	AAXUU00		73.730	+0.470	AAXUV00		-2.650	0.000

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

		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Abo Blend	AAXTL00	76.705	+1.100	ABOOM00	0.325	+0.630
Aje	APIRP00	76.890	+0.820	APIRA00	0.510	+0.350
Amenam Blend	AAXTI00	75.720	+0.685	AMENA00	-0.660	+0.215
Antan Blend	APIRQ00	79.045	+0.830	APIRB00	2.665	+0.360
Asaramatoru	AAXTV00	76.380	+0.775	ASARA00	0.000	+0.305
CJ Blend	APIRR00	77.895	+1.340	APIRC00	1.515	+0.870
EA Blend	AAXTJ00	77.815	+1.110	AEABL00	1.435	+0.640
Ebok	APIRS00	73.460	+0.055	APIRD00	-2.920	-0.415
Eremor	APIRT00	75.765	-0.645	APIRE00	-0.615	-1.115
Ima	APIRU00	77.690	-0.085	APIRF00	1.310	-0.555
Jones Creek Blend	APIRV00	75.815	-0.045	APIRG00	-0.565	-0.515
Okono Blend	APIRW00	77.575	+0.955	APIRH00	1.195	+0.485
Okoro	APIRX00	76.420	+1.120	APIRI00	0.040	+0.650
Okwori	APIRY00	78.060	+1.300	APIRJ00	1.680	+0.830
Otakikpo	APIRZ00	76.030	+0.750	APIRK00	-0.350	+0.280
Oyo	APIRIA00	75.925	+0.655	APIRL00	-0.455	+0.185
Pennington	APRTB00	75.340	+1.170	APIRM00	-1.040	+0.700
Rabi Light	ARABA00	75.065	+0.055	ARABB00	-1.315	-0.415
Sankofa	APRIC00	72.895	+0.370	APIRN00	-3.485	-0.100

September assessment July 5 took into consideration the latest trade indications heard in the broader market.

Exclusions: No market data was excluded from the Asia Pacific Crude Market on Close assessment process.

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>

Platts North Sea Crude Daily Market Analysis

- Sweet crude demand picking up within the Atlantic Basin
- OPEC+ cuts to sway crude market soon: Saudi Prince Abdulaziz

There was growing support through the light sweet crude complex with North Sea values showing emergent strength for the first time in several weeks, sources said July 5.

Contrary to earlier expectations, the volume of WTI Midland landing in Europe in June fell month on month, according to Kpler shipping data, by almost 350,000 b/d to just over 1 million b/d, following the record high seen in May.

The downturn will likely have allowed more space for other Europe-focused grades in the market.

Light sweet Ekofisk has continued to see significant advancements in load dates. Parcel C13156 of BP equity was advanced four days to July 24-26 on the day, making it the fifth July-loading cargo — almost half the program — to see load dates advanced by four

West Africa market parity prices (continued)

		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
TEN	AAXTW00	74.815	+0.760	ATENM00	-1.565	+0.290
Ukpokiti	APRID00	77.295	+0.925	APIRO00	0.915	+0.455
Yoho Light	AAXTK00	77.855	+0.925	AYOH000	1.475	+0.455
Zafiro	AAXTU00	79.285	+0.780	AZAFB00	2.905	+0.310

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

			Mid	Change				
					Spread to NYMEX WTI CMA	Mid	Change	
ANS/Long Beach	PCAAD00	77.93-77.97	77.950	+0.840	AAGWX00	6.30/6.32	6.310	-0.040
					Spread to ICE BRENT CMA			
ANS/Long Beach					AANSA00		1.853	+0.001

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

			Mid	Change
Mars (Aug)	AAMBR00	73.08-73.10	73.090	+1.080
Mars (Sep)	AAMBU00	72.67-72.69	72.680	+1.400
Mars (Oct)	AAMBX00	72.21-72.23	72.220	+1.400
Mars/WTI (Aug)	AAGWH00	1.29/1.31	1.300	0.000
Mars/WTI (Sep)	AAKTH00	0.79/0.81	0.800	+0.300
Mars/WTI (Oct)	AAMBO00	0.49/0.51	0.500	+0.400
LOOP/WTI (Aug)	AALOM01		1.200	0.000
LOOP/WTI (Sep)	AALOM02		0.700	+0.300
LOOP/WTI (Oct)	AALOM03		0.400	+0.400
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	-0.05/-0.03	-0.040	+0.010
P-Plus WTI	PCACI00	3.33/3.35	3.340	+0.010
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	73.38-73.40	73.390	+1.180	AAGVZ00	1.59/1.61	1.600	+0.100
WTS (1st month)	PCACK00	72.38-72.40	72.390	+1.180	AAGWB00	0.59/0.61	0.600	+0.100
WTI MEH	AAYRG00		73.590	+1.180	AAYRH00		1.800	+0.100
Bonito	PCAIE00	72.93-72.95	72.940	+1.080	AAGWF00	1.14/1.16	1.150	0.000
SGC	AASOI00	73.18-73.20	73.190	+1.080	AASOJ00	1.39/1.41	1.400	0.000
Poseidon	AABHK00	72.58-72.60	72.590	+1.080	AAGWL00	0.79/0.81	0.800	0.000
LLS (1st month)	PCABN00	74.38-74.40	74.390	+1.080	AAGWN00	2.59/2.61	2.600	0.000
HLS (1st month)	PCABD00	73.88-73.90	73.890	+1.080	AAGWP00	2.09/2.11	2.100	0.000
Wyoming Sweet	PCACM00	71.43-71.45	71.440	+1.080	AAGWR00	-0.36/-0.34	-0.350	0.000
Thunder Horse	AAWZK00	74.43-74.45	74.440	+1.080	AAWZL00	2.64/2.66	2.650	0.000

days or more.

In adjacent markets, traders have also noted growing support for light sweet Nigerian barrels in Europe, reflecting fair demand and a downturn in freight costs. Meanwhile, Forties has continued to find July-loading demand in East Asia with Kpler data showing one full VLCC fixed to load July 11.

In OPEC+ news, recent production cuts, led by Saudi Arabia, will soon begin to sway the market as evidence emerges of tightening fundamentals, the kingdom's energy minister said.

Global oil demand is rising, central bankers are working to tame inflation, and OPEC+ output restraint will turn the tide of "exaggerated negativity" that has flooded the market, Prince Abdulaziz bin Salman told the OPEC International Seminar in Vienna.

"You cannot change a negativity that is emanating from let's say 10 million traders," he told industry officials and market participants. "I am very optimistic," the prince said. "People should be in their comfort zone that this market will not be left unattended."

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

Dated Brent <PCAAS00> assessment rationale:

Of the six grades in the Dated Brent basket Ekofisk and WTI Midland were seen in the Platts Market on Close assessment process. Brent, Oseberg and Troll were assessed unchanged. Brent, Oseberg and Troll were assessed unchanged July 15 to Aug. 4 with flat structures rolled over back-end dates amid steady fundamentals and in the absence of indications testing the July 4 assessments. Ekofisk and Forties were assessed higher. Ekofisk and Forties were assessed unchanged July 15-Aug. 4 with flat structures rolled over back-end dates amid steady fundamentals and in the absence of indications testing the July 4 assessments. FOB WTI Midland was assessed higher reflecting a higher CIF Rotterdam WTI Midland assessment and lower freight adjustment factor on

US spot crude assessments (continued)

				<u>Spread vs 2nd line WTI</u>			
WTI MEH (2nd month)	AAXXE00	73.580	+1.150	AAYYA00	1.700	+0.050	
WTI Midland (2nd month)	AAYZA00	73.430	+1.250	AAXXF00	1.550	+0.150	
WTS (2nd month)	AAURG00	71.82-71.84	+1.200	AAURH00	-0.06/-0.04	-0.050	+0.100
LLS (2nd month)	AAURC00	74.27-74.29	+1.150	AAURD00	2.39/2.41	2.400	+0.050
HLS (2nd month)	AAURE00	73.77-73.79	+1.150	AAURF00	1.89/1.91	1.900	+0.050
				<u>Spread vs NYMEX WTI CMA</u>			
WCS ex-Cushing	AAWTY00	68.47-68.49	+1.070	AAWTZ00	-3.36/-3.34	-3.350	0.000
WCS ex-Nederland	AAYAY00	69.630	+1.070	AAYAX00		-2.200	0.000
Bakken Williston	AAXPP00	73.030	+1.420	AASRX00		1.200	+0.350
Bakken Guernsey	AASRR00	71.42-71.44	+1.070	AASRV00	-0.41/-0.39	-0.400	0.000
Bakken Clearbrook	AASRU00	74.67-74.69	+1.070	AASRW00	2.84/2.86	2.850	0.000
Bakken USGC Pipe	ABAKA00	73.830	+1.170	ABAKB00		2.000	+0.100
<u>FOB USGC</u>				<u>FOB USGC Spread vs NYMEX WTI Strip</u>			
Platts AGS	AGSAA00	73.750	+1.210	AGSAC00		1.920	+0.100
Bakken	ABAKC00	73.750	+1.210	ABAKD00		1.920	+0.100
Eagle Ford Crude	AAYAT00	72.850	+1.210	AAYAU00		1.020	+0.100
Eagle Ford Condensate	AAYAR00	71.350	+1.210	AAYAS00		-0.480	+0.100
WTI	AAYBA00	73.750	+1.210	AAYAZ00		1.920	+0.100
				<u>WTI FOB USGC vs WTI MEH (by decade)</u>			
WTI FOB USGC First Decade	ADECB00	73.940	NANA	ADECD00		0.350	NANA
WTI FOB USGC Second Decade	ADECE00	73.940	NANA	ADECG00		0.350	NANA
WTI FOB USGC Third Decade	ADECH00	73.940	NANA	ADECJ00		0.350	NANA
WTI FOB USGC Decades Average	ADECA00	73.940	NANA				
<u>FOB USGC Spread vs Dated Brent Strip</u>				<u>WTI FOB USGC vs Dated Brent Basis (by decade)</u>			
Platts AGS	AGSAB00	-3.120	-0.220	ADECC00		-2.580	NANA
Bakken	ABAKE00	-3.120	-0.220	ADECF00		-2.580	NANA
Eagle Ford Crude	AEFCA00	-4.020	-0.220	ADECI00		-2.580	NANA
Eagle Ford Condensate	AEFCB00	-5.520	-0.220				
WTI	AWTUA00	-3.120	-0.220				
<u>Global Benchmarks at US Close</u>				<u>WTI FOB USGC vs ICE Brent Basis (by decade)</u>			
Americas Dated Brent	AAQBF00	76.950-76.970	+2.000	ADECK00		-2.480	NANA
				ADECL00		-2.480	NANA
				ADECM00		-2.480	NANA

the day. CIF WTI Midland was assessed in a 4 cents/b contango structure July 17-31 using a traded bid July 31 to Aug. 2. Aug. 2-5 was assessed in a flat structure. WTI Midland was the most competitive grade in the Dated Brent assessment July 15-26, while Oseberg was the most competitive grade July 27-31 and Brent was the most competitive Aug. 1-5.

BFOE (PCAAQ00-PCAR00,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 offer. July 31 to Aug. 4 was assessed using a July 31 to Aug. 4 versus July 24-28 CFD roll heard during the day. 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 unchanged across the 10-day to month-ahead assessment period reflecting steady sour market fundamentals and in the absence of indications testing the July 4 assessment.

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. 03 - Aug. 07, at Dtd 1.20;

MERCURIASA Bids Ekofisk, FOB Teesside, Jul. 28 - Aug. 03, at Dtd 1.30

CASH BFOE: None

BRENT CFDS:

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

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

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

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

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

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

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): UNIEPEC BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): MCE BIDS 100KB AT \$0.05

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): EQUINOR BIDS 100KB AT \$0.25

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): UNIEPEC BIDS 100KB AT \$0.25

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

			Mid	Change	Spread to NYMEX light sweet crude			Mid	Change
WTI (Aug)	AAQAR00	71.83-71.85	71.840	+1.070	AAQAS00	-0.01/0.01		0.000	0.000
WTI (Sep)	AAQAT00	71.93-71.95	71.940	+1.050	AAQAU00	-0.01/0.01		0.000	0.000
WTI (Oct)	AAQAV00	71.77-71.79	71.780	+0.960	AAQAW00	-0.01/0.01		0.000	0.000
					Spread to same-month cash WTI			Mid	Change
WTI MEH (Aug)	AAYRZ00		73.590	+1.120	AAYTA00			1.750	+0.050
WTI MEH (Sep)	AAXYD00		73.640	+1.100	AAYWA00			1.700	+0.050
LLS (Aug)	AAQBB00	74.43-74.45	74.440	+1.070	AAQBC00	2.59/2.61		2.600	0.000
LLS (Sep)	AAQBD00	74.33-74.35	74.340	+1.100	AAQBE00	2.39/2.41		2.400	+0.050
MARS (Aug)	AAQAX00	73.13-73.15	73.140	+1.070	AAQAY00	1.29/1.31		1.300	0.000
MARS (Sep)	AAQAZ00	72.23-72.25	72.240	+0.950	AAQBA00	0.29/0.31		0.300	-0.100

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

			Mid	Change
Americas Dated Brent	AAQBF00	76.95-76.97	76.960	+2.000
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		71.640	+0.110
LOOP Sour (Sep)	AAZDB00		70.990	+0.140
LLS (Aug)	AAZDC00		73.040	+0.110
LLS (Sep)	AAZDD00		72.940	+0.140
Southern Green Canyon	AAZDE00		71.840	+0.110
WTI MEH (Aug)	AAZDF00		72.140	+0.110
WTI MEH (Sep)	AAZDG00		72.240	+0.140

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

			Mid	Change
Dubai CFR North Asia	PCAQA00		77.530	+0.255
Oman CFR North Asia	PCAQJ00		77.620	+0.270
Upper Zakum CFR North Asia	PCAQB00		77.480	+0.245
Qatar Marine CFR North Asia	PCAQC00		76.470	+0.270
Murban CFR North Asia	PCAQE00		78.010	+0.320
Basrah Medium CFR North Asia	BASNA00		76.320	+0.270
ESPO CFR North Asia	PCAQD00		69.520	+0.380
Forties CFR North Asia	PCAQF00		79.365	+0.315
Dalia CFR North Asia	PCAQG00		78.180	+0.415
WTI MEH CFR North Asia	PCAQH00		77.460	+0.110
LOOP Sour CFR North Asia	PCAQI00		75.820	+0.110

PLATTS BRENT DIFF: JUL17-JUL21 (SEP):
 PETROCHINA BIDS 100KB AT \$0.20
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP):
 TRAFIGURA BIDS 100KB AT \$0.20
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP):
 EXXONMOBIL BIDS 100KB AT \$0.20
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP):
 FREEPOINT BIDS 100KB AT \$0.20
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV
 TRADING BIDS 100KB AT \$0.10
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DARE
 BIDS 100KB AT \$0.00
 PLATTS BRENT DIFF: JUL17-JUL21 (SEP): MCE BIDS
 100KB AT \$-0.05
 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):
 EXXONMOBIL BIDS 100KB AT \$0.10
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP): UNIEPEC
 BIDS 100KB AT \$0.10
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP):
 FREEPOINT BIDS 100KB AT \$0.10
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP): ONYX
 BIDS 100KB AT \$0.05
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DV
 TRADING BIDS 100KB AT \$0.05
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DARE
 BIDS 100KB AT \$0.00
 PLATTS BRENT DIFF: JUL24-JUL28 (SEP): MCE
 BIDS 100KB AT \$-0.05
 PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DV
 TRADING BIDS 100KB AT \$0.05
 PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DARE
 BIDS 100KB AT \$0.00
 PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DV
 TRADING BIDS 100KB AT \$0.15
 PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DARE
 BIDS 100KB AT \$0.15

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

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Hebron	AHEBA00		76.355	+1.110	AHEBC00	0.000	+0.050
Terra Nova	AAJU00	76.44-76.47	76.455	+1.110	AAJUJ00	0.09/0.11	0.100 +0.050
Hibernia	AAJKB00	76.84-76.87	76.855	+1.110	AAJKB00	0.49/0.51	0.500 +0.050
White Rose	AAVJX00	77.49-77.52	77.505	+1.110	AAVJY00	1.14/1.16	1.150 +0.050

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	Spread vs Canada basis	Mid	Change
Lloyd Blend	AALRK00	62.32-62.34	62.330	+2.320	AALRP00	-9.51/-9.49	-9.500 +1.250
Mixed Sweet	AALRR00	70.97-70.99	70.980	+0.720	AALRV00	-0.86/-0.84	-0.850 -0.350
Light Sour Blend	AALRX00	69.12-69.14	69.130	+0.920	AALSD00	-2.71/-2.69	-2.700 -0.150
Midale	AAUCC00	67.02-67.04	67.030	+0.920	AAUCE00	-4.81/-4.79	-4.800 -0.150
Condensates	AALSF00	66.92-66.94	66.930	+0.870	AALSJ00	-4.91/-4.89	-4.900 -0.200
Syncrude Sweet Prem.	AASOK00	75.57-75.59	75.580	-0.230	AASOM00	3.74/3.76	3.750 -1.300
WCS Hardisty	AAPPN00	61.62-61.64	61.630	+2.320	AAPPP00	-10.21/-10.19	-10.200 +1.250
Cold Lake Hardisty	AASZX00	61.47-61.49	61.480	+2.320	AASZZ00	-10.36/-10.34	-10.350 +1.250
WTI CMA (1st mo)	AAVSNO0		71.830	+1.070			

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

			Mid	Change	Diff to WTI strip	Diff to Futures Brent strip	Diff to Dated Brent strip
Escalante	PCAGC00	74.46-74.50	74.480	+1.110	PCAGO00	2.645	AAXAX00 -2.000
Medanito	AMTOA00		71.480	+1.110	AMTOC00	-0.355	AMTOD00 -5.000
Santa Barbara	AAITD00	74.36-74.41	74.385	+1.070	AAITJ00	2.550	AAXBUB00 -1.995
Loreto	PCAGH00	64.96-65.01	64.985	+1.070	PCAGQ00	-6.850	AAXBV00 -11.395
Oriente	PCADE00	65.86-65.91	65.885	+1.070	PCAGU00	-5.950	AAXBW00 -10.495
Napo	AAMCA00	63.86-63.91	63.885	+1.070	AAMCD00	-7.950	AAXBX00 -12.495
Tupi	ATUPA00		76.530	+1.010	ATUPC00	4.695	ATUPB00 0.150
Marlim	AAITF00	71.06-71.10	71.080	+1.110	AAITL00	-0.755	AAXBY00 -5.300
Castilla Blend	AAVEQ00	68.21-68.25	68.230	+1.110	AAVEQ01	-3.605	AAXBZ00 -8.150
Vasconia	PCAGI00	72.21-72.25	72.230	+1.110	PCAGR00	0.395	AAXCB00 -4.150
Mesa 30	AAITB00	73.26-73.30	73.280	+1.060	AAITH00	1.445	AAXCC00 -3.100
Liza	ALIZA00		76.730	+1.260	ALIZD00	4.895	ALIZC00 0.350
Latin America WTI strip	AAXBPO0		71.835				
Latin America Futures Brent strip	AAXBQ00		76.380				
Latin America Dated Brent strip	AAXBR00		76.480				

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

		Mid	Change
Maya	AAYMP00	68.345	+1.050
Merrey 16	AMERA00	67.340	+1.254

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

			Mid	Change
European crude oil benchmarks				
Dated Brent	AAPYR00	70.680-70.690	70.684	+0.957
Dated Brent (CIF)	PCAKN00		71.687	+0.979
Urals (Mediterranean)	AAPYS00	54.820-54.860	54.842	+0.823
US crude oil benchmarks				
WTI (Aug)	AAPYT00	66.060-66.080	66.072	+1.223
WTI MEH (Aug)	AAYSA00		67.681	+1.274
Mars (Aug)	AAPYU00	67.260-67.280	67.268	+1.227

Euro/US\$ forex rate: 1.0873. Platts Euro denominated crude oil assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time.

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

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): ONYX
BIDS 100KB AT \$0.10

PLATTS BRENT DIFF: JUL31-AUG4 (OCT):
MERCURIA BIDS 100KB AT \$0.10

Offers:

NORTH SEA: None

CASH BFOE: PLATTS CASH BFOE: SEP23:
PETROINEOS OFFERS 100KB AT \$76.70

BRENT CFDS: PLATTS BRENT DIFF: JUL10-JUL14
(SEP): DV TRADING OFFERS 100KB AT \$0.60

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): DARE
OFFERS 100KB AT \$0.60

PLATTS BRENT DIFF: JUL10-JUL14 (SEP): MCE
OFFERS 100KB AT \$0.80

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DARE
OFFERS 100KB AT \$0.27

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): ONYX
OFFERS 100KB AT \$0.85

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): MCE
OFFERS 100KB AT \$0.85

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

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): DV
TRADING OFFERS 100KB AT \$0.18

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

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

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): ONYX
OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: JUL24-JUL28 (SEP): MCE
OFFERS 100KB AT \$0.50

PLATTS BRENT DIFF: AUG7-AUG11 (OCT): DV
TRADING OFFERS 100KB AT \$0.30

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

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

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

			Mid	Change
Russian crude oil benchmarks				
Urals FOB Novorossiysk	AAUJP00	5143.500-5147.120	5145.313	+94.963
Urals FOB Baltic	AAUJQ00	5143.500-5147.120	5145.313	+94.963
Urals FOB Novorossiysk 80kt	AAUJR00	5062.080-5065.700	5063.886	+94.536
Urals CIF Mediterranean	AAUJS00	5393.210-5396.830	5395.024	+96.274
Urals CIF Rotterdam	AAUJT00	5351.600-5355.220	5353.406	+101.906

US\$/Ruble forex rate: 90.4750. 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)

			Mid	Change
Lloyd Blend	AALRM00	520.693-520.860	520.777	+21.242
Mixed Sweet	AALRT00	592.965-593.132	593.049	+8.191
Light Sour Blend	AALRZ00	577.508-577.675	577.592	+9.799
Midale	AAUCD00	559.962-560.130	560.046	+9.734
Condensates	AALSH00	559.127-559.294	559.210	+9.314
Syncrude Sweet	AASOL00	631.399-631.566	631.483	+0.426
WCS Hardisty	AAPPO00	514.845-515.012	514.928	+21.220
Cold Lake Hardisty	AASZY00	513.591-513.758	513.675	+21.216

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

		Mid	Change
July 5, 2023	AAFCW00	1.0873	-0.003

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

			Mid	Change
Brent (Sep)	PCAJG00	75.42-75.46	75.440	+0.130
Brent (Oct)	PCAJI00	75.23-75.27	75.250	+0.120
Brent (Nov)	PCAJO00		74.980	+0.130
WTI (Aug)	AAFFU00	70.42-70.46	70.440	+0.110
WTI (Sep)	AAFFW00	70.57-70.61	70.590	+0.140
WTI (Oct)	AAFFY00	70.47-70.51	70.490	+0.160

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

			Mid	Change
Oman/Dubai Swap (Aug)	AAIHJ00	0.08/0.12	0.100	+0.020
Oman/Dubai Swap (Sep)	AAIHL00	0.08/0.12	0.100	+0.020
Oman/Dubai Swap (Oct)	AAIHN00	0.08/0.12	0.100	+0.020
Oman Swap (Aug)	AAHZP00	75.00-75.04	75.020	+0.250
Oman Swap (Sep)	AAHZR00	74.43-74.47	74.450	+0.240
Oman Swap (Oct)	AAHZT00	73.96-74.00	73.980	+0.240

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

		Mid	Change
July 4, 2023	AAEUQ00	76.180	+0.060

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): ONYX OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): PETROCHINA OFFERS 100KB AT \$0.40

PLATTS BRENT DIFF: JUL31-AUG4 (OCT): DARE OFFERS 100KB AT \$0.40

Trades:

NORTH SEA: VITOL-GLENCOREUK* WTI Midland, CIF Rotterdam, Jul. 30 - Aug. 03, at Dtd 1.30, [15:25:18]

CASH BFOE: PLATTS CASH BFOE: SEP23: VITOL SELLS TO MERCURIA* 100KB AT \$76.69 (15:29:37)

PLATTS CASH BFOE: SEP23: MERCURIA BUYS FROM PETROINEOS* 100KB AT \$76.70 (15:29:50)

BRENT CFDS: PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DARE SELLS TO EQUINOR* 100KB AT \$0.25 (15:29:10)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): EQUINOR BUYS FROM DARE* 100KB AT \$0.25 (15:29:17)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL BUYS FROM DARE* 100KB AT \$0.25 (15:29:21)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TOTAL BUYS FROM DV TRADING* 100KB AT \$0.25 (15:29:24)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): PETROCHINA BUYS FROM DARE* 100KB AT \$0.25 (15:29:27)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): UNIPPEC BUYS FROM DV TRADING* 100KB AT \$0.25 (15:29:33)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): MERCURIA BUYS FROM DV TRADING* 100KB AT \$0.25 (15:29:41)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): TRAFIGURA BUYS FROM GUNVOR* 100KB AT \$0.25 (15:29:44)

PLATTS BRENT DIFF: JUL17-JUL21 (SEP): DV TRADING SELLS TO MERCURIA* 100KB AT \$0.25 (15:29:52)

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

Futures Settlements

	Settlement	Change	Low	High	Volume*	Open interest	PNT****
NYMEX Light Sweet crude (\$/barrel) (PGA page 705)							
Aug 23	NMCL001	71.79	+2.00	69.90	72.17	426323	314808
Sep 23	NMCL002	71.88	+1.97	70.03	72.25	192738	306545
Oct 23	NMCL003	71.72	+1.92	69.93	72.07	84001	171255
Nov 23	NMCL004	71.50	+1.88	69.79	71.82	41909	86384
Total	NMCL000				953832		XNCLP00 6666
ICE Brent (\$/barrel) (PGA page 704)							
Sep 23	ICLL001	76.65	+0.40	75.30	76.95	327494	526879
Oct 23	ICLL002	76.41	+0.36	75.13	76.70	158840	345440
Nov 23	ICLL003	76.09	+0.32	74.87	76.38	77801	197962
Dec 23	ICLL004	75.78	+0.30	74.58	76.06	120418	296090
Total	ICLL000				842653		XILLP00 30142
ICE WTI (\$/barrel) (PGA page 704)							
Aug 23	ICIC001	71.79	+0.35	70.39	72.17	53453	70582
Sep 23	ICIC002	71.88	+0.57	70.55	72.25	72859	99090
Oct 23	ICIC003	71.72	+0.62	70.46	72.08	48899	54280
Nov 23	ICIC004	71.50	+0.63	70.30	71.81	26367	28888
Total	ICIC000				244418		XIICP00 9470
ICE BWAWE (\$/barrel) (PGA page 704)							
BWAWE data refer to previous day.							
Sep 23	XIBW001	75.71					
Oct 23	XIBW002	75.40					
DME Oman crude (\$/barrel)** (PGA pages 702 & 2710)							
Sep 23	XDOA001	75.52	+0.25			3942	
Sep 23	DMOQ001	76.88	+1.82	75.20	76.88	3980	1181
Oct 23	DMOQ002	76.41	+1.55	74.83	76.41	2453	7
Nov 23	DMOQ003	75.96	+1.55	75.96	75.96	2443	0
Dec 23	DMOQ004	75.56	+1.55	75.56	75.56	0	0
Total Volume	DMOQ000					529	XDOQP00 1435
IFAD Murban crude (\$/barrel) (PGA page 703)							
Sep 23	AMIFA00	76.010					
Murban vs Dubai***	AMIFB00	1.660					
NYMEX ULSD (\$/gal) (PGA page 705)							
Aug 23	NMHO001	2.4933	+0.1160	2.3850	2.5053	55898	70527
Sep 23	NMHO002	2.4827	+0.1076	2.3832	2.4951	46045	46998
Oct 23	NMHO003	2.4758	+0.1017	2.3834	2.4873	22724	38942
Nov 23	NMHO004	2.4669	+0.0963	2.3907	2.4764	14917	27748
Total	NMHO000					173535	XNHOP00 4642
NYMEX RBOB unleaded gasoline (\$/gal) (PGA page 705)							
Aug 23	NMRB001	2.5183	+0.0559	2.4736	2.5574	47378	92192
Sep 23	NMRB002	2.4461	+0.0550	2.4022	2.4776	48280	79910
Oct 23	NMRB003	2.2184	+0.0573	2.1724	2.2372	22066	48410
Nov 23	NMRB004	2.1595	+0.0548	2.1200	2.1722	13806	25307
Total Volume	NMRB000					153486	XNRBP00 7281
NYMEX Natural Gas (\$/MMBtu) (PGA page 705)							
Aug 23	NMNG001	2.657	-0.052	2.648	2.793	118265	168170
Sep 23	NMNG002	2.643	-0.059	2.630	2.780	50452	283070
Oct 23	NMNG003	2.730	-0.054	2.716	2.856	32837	112121
Nov 23	NMNG004	3.129	-0.040	3.114	3.237	17637	87811
Total Volume	NMNG000					263037	XNNGP00 3262

Mo02 <PCAR00> 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 vs North Sea Dtd Strip
<AJSVB00>

Platts WTI Midland Crude DAP Europe
Assessment Rationale & Exclusions

WTI Crude DAP Europe <AWTIC00> assessment
rationale:

WTI DAP Rotterdam was assessed 15 cents/b higher
from July 25 to Sept. 2, with a 0.5 cent/day contango
structure rolled over back-end dates owing to strength
seen in the European delivered sweet market.

WTI Crude DAP Augusta <AWTIA00> assessment
rationale:

WTI DAP Augusta was assessed higher owing to the
strengthening in the DAP Rotterdam differential. There
were no bids, offers or trades in the Platts Market on
Close assessment process.

Exclusions: None

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Futures Settlements (continued)

	Settlement	Change	Low	High	Volume*	Open interest	PNT****
ICE low sulfur gasoil (\$/mt) (PGA page 704)							
Jul 23	ICL0001	739.00	+21.25	713.25	740.75	38889	52761
Aug 23	ICL0002	720.50	+12.50	703.00	723.25	109183	147896
Sep 23	ICL0003	715.75	+10.75	699.75	718.50	62522	91136
Oct 23	ICL0004	714.00	+10.00	698.75	716.50	29336	85367
Total Volume	ICL0000				323115		XILOP00 3214
ICE Midland WTI American Gulf Coast (\$/barrel) (PGA page 704)							
Aug 23	IHOU001	73.59	+0.47	72.21	73.87	10642	7466
Sep 23	IHOU002	73.58	+0.43	72.22	73.86	3663	4846
Oct 23	IHOU003	73.42	+0.41	72.11	73.60	1785	4289
Nov 23	IHOU004	73.16	+0.34	73.16	73.16	204	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)

Singapore*			London*		Houston*		Singapore*			London*		Houston*	
ICE Brent							NYMEX WTI						
Sep	XILLA01	75.42	AAYES00	76.56	AAQBG00	76.66	M1	XNCLA01	70.44	AASCR00	71.84	NYCRM01	71.79
Oct	XILLA02	75.23	AAYET00	76.33	AAQBH00	76.42	M2	XNCLA02	70.59	AASCS00	71.94	NYCRM02	71.89
Nov			AAXZY00	76.03	AAXZZ00	76.11	M3					NYCRM03	71.73
Dec			AAYAM00	75.73	AAYAL00	75.80	M4					NYCRM04	71.51
Oman							*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.						
Sep	XDOA001	75.52											
Volume	XDOAV01	3942											

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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)

Trans. Date	Cargo / Spread Dates	Cargo Load Range / CFD Week	CFD Roll Week	Crude Grade(s)	Reported Status	Outright / Diff. Price (\$/barrel)	Basis	Barrels	Seller	Buyer
Platts Americas										
07/05/2023	August			Bakken Williston (DAPL)	Heard	1.20	NYMEX WTI CMA			
07/05/2023	August			C5 Fort Saskatchewan	Heard	-4.90	NYMEX WTI CMA			
07/05/2023	August			C5 Fort Saskatchewan	Heard	-4.95	NYMEX WTI CMA			
07/05/2023	August			HLS	Heard	2.15	Cash WTI			
07/05/2023	August			LLS	Heard	2.50	Cash WTI			
07/05/2023	August			Mars	Heard	1.40	Cash WTI			
07/05/2023	August			Mixed Sweet (MSW) Edmonton	Heard	-0.85	NYMEX WTI CMA			
07/05/2023	August			Poseidon	Heard	1.10	Cash WTI			
07/05/2023	August			Synthetic Sweet Blend (SYN) Edmonton	Heard	3.75	NYMEX WTI CMA			
07/05/2023	August			Thunder Horse	Heard	3.00	Cash WTI			
07/05/2023	August			WCS Hardisty	Heard	-10.20	NYMEX WTI CMA			
07/05/2023	August			WTI MEH	Heard	1.80	Cash WTI			
Platts Asia										
7/5/2023	September			Dubai Partial	Done	75.40		25,000	PetroChina	Equinor
7/5/2023	September			Dubai Partial	Done	75.43		25,000	ExxonMobil	Equinor
7/5/2023	September			Dubai Partial	Done	75.35		25,000	Trafigura	Equinor
7/5/2023	September			Dubai Partial	Done	75.43		25,000	Reliance	Shell
7/5/2023	September			Dubai Partial	Done	75.40		25,000	Reliance	Gunvor
7/5/2023	September			Dubai Partial	Done	75.43		25,000	Reliance	Shell
7/5/2023	September			Dubai Partial	Done	75.40		25,000	PetroChina	Equinor
7/5/2023	September			Dubai Partial	Done	75.40		25,000	PetroChina	Gunvor
7/5/2023	September	24	27	Murban	Heard	4.99	OSP	700,000	BB Energy	Ceypetco
Platts EMEA										
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	Gunvor	Trafigura
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	DV Trading	TotalEnergies
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	Dare Global	PetroChina
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	DV Trading	Mercuria
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	Dare Global	TotalEnergies
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	DV Trading	Unipet
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	Dare Global	Equinor
07/05/2023	July	17	21	Brent CFD	Done	0.25	Cash BFOE Sep	100000	Dare Global	Equinor
07/05/2023	September			Cash BFOE	Done	76.69		100000	Vitol	Mercuria
07/05/2023	September			Cash BFOE	Done	76.7		100000	Petrolneous	Mercuria
07/05/2023	July/August	30	3	WTI Midland	Done	1.3	Dated Brent	700000	Vitol	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 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 <AWTIC00> WTI Midland DAP basis Rotterdam vs Fwd Dated Brent <AWTID00> WTI Midland DAP basis Augusta <AWTIA00> WTI Midland DAP basis Augusta vs Fwd Dated Brent <AWTIB00>

Platts Mediterranean & Black Sea Sweet Crude Daily Commentary

- Intake into CPC pipeline resumes after power issues
- Kazakh oil output down 20% on July 4: ministry

The operator of Kazakhstan's main crude export pipeline, the Caspian Pipeline Consortium, said July 5 that intake of crude oil into its system had resumed after power issues affecting the west of the country disrupted operation of pipeline pumping stations.

Separately, the operator of Kazakhstan's largest crude oil producer, the Chevron-led Tengizchevroil consortium, said its production continued as normal and had not been affected.

Earlier, the Caspian Pipeline Consortium said three of its pumping stations in western Kazakhstan had suffered power outages, including the pumping station at the start of the route at the Tengiz field, normally the largest source for CPC Blend crude.

The consortium said that "after stabilization of the voltage in the external electricity supply" the Atyrau and Tengiz pumping stations had been reactivated and "reception of crude oil from suppliers has resumed."

Tengizchevroil, meanwhile, said: "Tengizchevroil is aware of the power outage that occurred in the Western Region of Kazakhstan. TCO's production operations were not interrupted by the power outage

and all of its production units at Tengiz are currently operating in normal mode."

The CPC route provides around 1.5 million b/d of mainly Kazakh CPC Blend crude, accounting for the bulk of Kazakh oil exports.

CPC Blend, which is light and relatively sweet, typically trades at a modest discount to the North Sea Dated Brent benchmark.

Platts, part of S&P Global Commodity Insights, assessed CPC Blend at a \$2.40/b discount to Dated Brent on July 4, unchanged on the day.

Kazakhstan has been grappling with a major power outage in the west of the country, home to much of its oil and gas industry, after the emergency shutdown of a 130-MW unit at the MAEK thermal power plant earlier in July.

Production statistics for July 4 provided by Kazakhstan's energy ministry continued to show a drop in the country's oil production of around 20% from levels prior to the disruption, up from a reduction of 13% on July 3.

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Platts NWE and Med Urals Sour Crude Daily Market Analysis

- Kazakhstan to ship 250,000 mt KEBCO to Germany via Russia
- Russia's lower exports "more meaningful" than output cuts: Saudi minister

Russian pipeline operator Transneft expects to ship 250,000 mt of KEBCO — Kazakhstan Export Blend Crude Oil, and a sour grade — from Kazakhstan in July.

Kazakhstan is supplying the oil to Germany via the Druzhba pipeline, which previously carried Russian Urals crude to Germany until the start of 2023. Germany has now completely replaced Russian crude in response to the invasion of Ukraine.

Kazakhstan's pipeline operator Kaztransoil was not available for comment on volumes in June and

July. It said June 30 that 290,000 mt of crude oil from Kazakhstan has been shipped to Germany since the beginning of 2023.

Transneft said it shipped 100,000 mt of Kazakh crude via Druzhba in June.

KEBCO is a medium sour crude which used to be marketed as Urals — Russia's flagship crude — until Kazakhstan rebranded it to avoid the impact of western sanctions on Russia.

In other news, Saudi Arabia's energy minister said he expected OPEC+ cuts will swing the oil market's pendulum very soon, once evidence emerges of tightening fundamentals.

On July 3, the kingdom said it would extend its 1 million b/d production cut for August, along with a concurrent commitment from Russia to lower its crude exports by 500,000 b/d and Algeria to rein in 20,000 b/d of output.

Global oil demand was rising, central bankers were working to tame inflation, and OPEC+ output restraint will turn the tide of "exaggerated negativity" that has flooded the market, Prince Abdulaziz bin Salman told the OPEC International Seminar in Vienna.

As for Russian supply, the Saudi minister said Moscow's declaration of its intent to cut 500,000 b/d of its crude exports will be trackable by trade flow monitors, as a "more meaningful" metric to the market than production cuts, which could be obscured by refinery runs or inputs into storage.

Platts EMEA Urals and Med Brent Crude Daily Rationales & Exclusions

Urals CIF Augusta differential <AAGXX00> assessment rationale:

Urals CIF Augusta was assessed unchanged. 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 unchanged.

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 (PCAAS00) plus the Urals CIF Augusta differential assessment (AAGXX00).

Urals CIF Rdam <PCAFW00> assessment rationale:

Urals CIF Rotterdam was assessed 6.5 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 net-forward to the Urals FOB Baltic assessment. The FOB differentials were assessed unchanged.

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 10 cents/b higher. Firm CPC Blend demand in Europe was supporting differentials. Disruption to Kazakh oil production due to power outages did not seem to have significantly impacted CPC Blend supply.

Exclusions: None

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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

- Focus on Nigerian trading, Angolan activity slows
 - Nigerian June crude exports total 45.9 mil barrels
- In the West African crude market July 5, traders continued to report strengthening differentials across the Nigerian complex amid softening freight costs and rising demand.

Spot market activity involving August-loading Nigerian crude continued to move at a fair pace, according to sources, while Angolan activity has slowed after healthy activity in earlier parts of the trading cycle.

“There is not much Angolan [activity] this week. The focus is really on Nigeria,” one West African trader said, while a second said Angolan grade Pazflor has yet to see a single August-loading trade despite September programs being expected in around 10 days.

Lower freight rates continued to be a significant factor behind firming differentials, with Platts assessing the Dirty West Africa-UK Continent 130,000 mt fixture at Worldscale 93 on July 4, from a recent peak of w140 on June 20.

Falling shipping costs typically see differentials priced on an FOB basis increase, such as crude out of West Africa.

The first trader was bullish over the current

direction of Nigerian sentiment, saying: “Cargoes are changing hands and differentials are very constructive”, while also noting improving middle distillate cracks would likely lend support.

Nigerian crude exports reached 45.9 million barrels in June, or an average 1.53 million b/d, with India and the US the top destinations, according to S&P Global Commodities at Sea data.

There were 48 export cargoes in June, CAS data showed, with India and the US taking 5.8 million barrels each, followed by France and Indonesia at 4.9 million barrels each. CAS data showed 2 million barrels were exported to India in May.

Forcados exports stood at 7.7 million barrels in June, the most of any Nigerian grade, followed by Escravos and Qua Iboe at 4.3 million barrels and 3.8 million barrels, respectively.

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Platts West African Crude Daily Rationale & Exclusions

Of the four crudes in the Nigerian basket, Qua Iboe, Bonny Light and Forcados were assessed 30 cents/b higher while Bonga was assessed 20 cents/b higher using previously heard indications. Freight rates continued to soften while demand for Nigerian crude remained firm. There were no bids, offer 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

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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

- US Gulf Coast sweet crude edges higher
- Oil futures settle higher on OPEC announcement

US Gulf Coast crude differentials edged slightly higher July 5 against the backdrop of rising futures.

S&P Global Commodity Insights assessed physical West Texas Intermediate crude at Midland up 10 cents from the previous session to cash WTI plus \$1.60/b.

WTI crude at the Magellan East Houston terminal also rose 10 cents day on day to \$1.80/b, based on a paper trade at that level.

On the sour side, Platts assessed July Mars barrels at WTI plus \$1.30/b, unchanged from the previous session.

Crude oil futures settled up as the complex saw marginal gains over OPEC's recent announcement to extend voluntary production cuts into August.

NYMEX front-month crude settled \$2 higher at \$71.79/b, while ICE front-month Brent rose 40 cents to \$76.65/b.

OPEC announced July 3 that Saudi Arabia and Russia will extend voluntary production cuts through August to balance oil markets that have recently been bogged down by global recession fears as recent US and Chinese data missed the mark on reaching inflation and recovery goals.

The announcement of output curbs prior to the OPEC+ meeting meant supply side considerations have already been priced into the market, SPI Asset Management's Managing Partner Stephen Innes said.

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Platts US Gulf Coast Export Crude Daily Commentary

- Platts AGS opens trading week on the rise
- US crude exports trending downward

Platts American GulfCoast Select (AGS) rose slightly July 5, amid weaker crude exports.

S&P Global Commodity Insights assessed Platts AGS up \$1.21 to \$73.75/b.

Platts AGS was assessed at a \$1.92/b premium to the NYMEX WTI strip, up 10 cents/b from the previous session.

The AGS discount to the forward Dated Brent strip widened by 22 cents, from \$2.90/b to \$3.12/b.

NYMEX front-month crude settled \$2 higher at \$71.79/b, while ICE front-month Brent settled up 40 cents at \$76.65/b.

US crude exports fell nearly 1 million b/d for the week ending June 30, according to Platts cFlow ship and commodity tracking software from S&P Global Commodity Insights. Last week's total of 4.004 million b/d was down 926,000 b/d from the cFlow estimate for the week prior, and down 1.334 million b/d from the reported figure from the US Energy Information Administration for the same period.

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Platts Canadian Pipeline Crude Daily Commentary

- WCS at Hardisty climbs to over two-year high
- Strong demand expected at USGC

The differential for Western Canadian Select jumped to its strongest assessed value in over two years July 5 as high sulfur fuel oil crack spreads remained elevated and US refinery runs held firm.

Platts assessed August Western Canadian Select at Hardisty, Alberta \$1.25/b stronger day on day at

WTI CMA minus \$10.20/b, after the first trade of the August cycle was heard. The heavy crude has not been assessed stronger since April 9, 2021, when it was at WTI CMA minus \$10.15/b.

In contrast, the sweeter Canadian crude grades all saw pressure over the previous day. Platts assessed Syncrude Sweet Premium at Edmonton \$1.30/b weaker at WTI CMA plus \$3.75/b, based on market indications, and Mixed Sweet at Edmonton 35 cents/b weaker at WTI CMA minus 85 cents/b, after it was heard to trade there. Condensate at Fort Saskatchewan also softened, with Platts assessing it at WTI CMA minus \$4.90/b, after it was heard to trade at that level.

Although the US Gulf Coast HSFO crack spread has softened since reaching a near two-year high June 30, it continues to provide support to heavy Canadian differentials. In addition, strong export demand and steady refinery activity in the US is expected to result in lower crude inventories during the week ended June 30, further pushing up prices. S&P Global Commodity Insights analysts forecast that refinery outages will be between 700,000 b/d and 800,000 b/d in the following months, and, barring any unplanned closures, outages should be at their lowest levels in July and August.

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Platts Latin American Crude Daily Commentary

- Latin crude values rise after OPEC cut extension
- Petroecuador says it is meeting production targets

Latin American crude prices rose July 5 as they followed benchmark futures higher in the wake of OPEC's announcement to extend production cuts into August.

On an outright basis, most Latin crudes gained more than \$1/b, as NYMEX front-month crude settled \$2 higher at \$71.79/b and as ICE front-month Brent ended up 40 cents at \$76.65/b. OPEC on July 3

said Saudi Arabia and Russia will extend voluntary production cuts through August.

In Argentina, Platts assessed the differential for light sweet Medanita crude unchanged at a discount of \$4.90/b to ICE Brent. Neuquén, the leading oil and natural gas province in Argentina, exported 2.19 million barrels of crude in May, an 8% month-on-month decline from April, the local Ministry of Energy and Natural Resources said July 5.

The Neuquén government has set targets of reaching 400,000 b/d in total crude production by the end of this year and 1 million b/d by 2027 or 2028.

In Ecuador, state oil company Petroecuador said July 3 it has reached 99% of its production target after bringing online four new oil wells in the eastern Amazon jungle.

Petroecuador, which was producing 391,881 b/d of crude through June 30, added a total of 8,268 b/d from the Ishpingo B-044, B-048 and A-012 wells in the Block 43-ITT fields and the Sacha-409 well in the Sacha field in the Oriente Basin, the company said in a statement.

Platts is part of S&P Global Commodity Insights.

Subscriber Notes

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 cargo-size 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 cargo-size 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.

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-platts-proposes-additional-carbon-intensity-calculations-carbon-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 Bunduq
- 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 Bunduq 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 europa_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 end-month 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 Asia_crude@platts.com and pricegroup@platts.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 europa_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 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 europa_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 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-platts-to-exclude-russian-origin-cargoes-from-cpc-blend-assessments-amend-fob-netback-calculations>

Please send all feedback, comments or questions to europa_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 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 Iraq'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/subscriber-notes/051923-platts-to-publish-outright-value-of-iraqs-basrah-medium-asia-osp-to-three-decimal-points-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 queries 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 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 Novorossiisk.

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 europa_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 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 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 europa_crude@spglobal.com, 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.

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Commodity Insights Analytics US Yields & Netbacks Effective July 5, 2023 (\$/barrel)

US Gulf Coast (PGA page 0833)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGGCY00	88.60	AGGFA00	2.60	AGGCN00	86.01	AAQZB00	74.03	AGGCM00	11.34
Arab Berri	BEGCY00	89.06	TDDAC00	1.32	BEGCN00	87.74	AAXT00	82.39	BEGCM00	5.35
Arab Heavy	AHGCY00	82.67	TDDAJ00	1.39	AHGCN00	81.28	AAXDI00	80.49	AHGCM00	0.79
Arab Light	LIGCY00	86.94	TDDAR00	1.35	LIGCN00	85.59	AAXCU00	80.24	LIGCM00	5.35
Arab Medium	MEGCY00	83.62	TDDAZ00	1.35	MEGCN00	82.26	AAXDN00	80.94	MEGCM00	1.32
Bakken	BKGCY00	88.57	TDDRP00	7.78	BKGCN00	80.79	AAXPP00	73.03	BKGCM00	7.76
Basrah Medium	BLGCY00	82.30	TDDBS00	2.66	BLGCN00	79.64	BSMAM01	75.00	BLGCM00	7.01
Bonny Light	YLGCY00	90.88	TDDBX00	2.83	YLGCN00	88.05	PCATIC00	76.83	YLGCM00	10.58
Brent	BRGCY00	88.88	TDDCB00	2.88	BRGCN00	86.00	AAVJA00	77.04	BRGCM00	8.32
Cabinda	CBGCY00	85.93	TDDCF00	3.06	CBGCN00	82.87	PCAFD00	77.23	CBGCM00	5.01
Eagle Ford	EAGCY00	89.27					AAAT00	72.85	EAGCM00	16.42
Escalante	ECGCY00	81.03	TDDCV00	4.30	ECGCN00	76.73	PCAGC00	74.48	ECGCM00	1.71
Forties	FTGCY00	88.22	FTGFA00	2.71	FTGCN00	85.51	PCADJ00	77.06	FTGCM00	7.81
Isthmus	ISGCY00	87.64	TDDDJ00	1.15	ISGCN00	86.49	PDAT009	69.21	ISGCM00	17.28
LLS	LLGCY00	90.96	TDDQW00	0.55	LLGCN00	90.41	PCABN00	74.39	LLGCM00	16.02
Marlim	MLGCY00	85.38	TDDGK00	3.32	MLGCN00	82.06	AAITF00	71.08	MLGCM00	10.44
Mars	MRGCY00	85.34	TDDQY00	0.55	MRGCN00	84.79	AAMBR00	73.09	MRGCM00	11.70
Maya	MYGCY00	76.16	TDDDP00	1.21	MYGCN00	74.96	PDATS09	66.01	MYGCM00	8.95
Mesa	MSGCY00	85.87	TDDDV00	1.95	MSGCN00	83.91	AAITB00	73.28	MSGCM00	10.63
Olmecca	OLGCY00	88.92	TDDDY00	1.16	OLGCN00	87.76	PDATT09	69.46	OLGCM00	18.30
Poseidon	PDGCY00	85.68	PDGFA00	0.00	PDGCN00	85.68	AABHK00	72.59	PDGCM00	13.09
Saharan Blend	SHGCY00	88.89	TDDRD00	2.14	SHGCN00	86.75	AAGZY00	77.34	SHGCM00	8.77
Syncrude	SYGCY00	90.69	SYGFA00	8.52	SYGCN00	82.17	AASOK00	75.58	SYGCM00	6.59
Urals	URGCY00	86.48	TDDFM00	3.07	URGCN00	83.41	AAWVH00	56.87	URGCM00	25.91
WTI	WTGCY00	88.46					AAARG00	73.59	WTGCM00	14.87
WTS	WSGCY00	87.26	TDDRJ00	6.89	WSGCN00	80.38	PCACK00	72.39	WSGCM00	7.99

US Gulf Coast (PGA page 0841)

	Coke Yield		Freight		Coke Netback		Crude Price		Coke Margin	
Arab Heavy	AHGOY00	84.90	TDDAJ00	1.39	AHGN00	83.52	AAXDI00	80.49	AHGOM00	3.03
Arab Light	LIGOY00	87.84	TDDAR00	1.35	LIGN00	86.49	AAXCU00	80.24	LIGOM00	6.25
Arab Medium	MEGOY00	84.45	TDDAZ00	1.35	MEGN00	83.09	AAXDN00	80.94	MEGOM00	2.15
Basrah Heavy	BHGOY00	81.72	BHGFA00	2.78	BHGN00	78.94	AALZC00	71.90	BHGOM00	10.76
Basrah Medium	BLGOY00	84.06	TDDBS00	2.66	BLGN00	81.40	BSMAM01	75.00	BLGOM00	8.77
Cabinda	CBGOY00	86.81	TDDCF00	3.06	CBGN00	83.75	PCAFD00	77.23	CBGOM00	5.88
Castilla Blend	CSGOY00	81.32	CSGFA00	2.06	CSGN00	79.26	AAVEQ00	68.23	CSGOM00	11.03
LLS	LLGOY00	90.60	TDDQW00	0.55	LLGN00	90.05	PCABN00	74.39	LLGOM00	15.66
Marlim	MLGOY00	85.42	TDDGK00	3.32	MLGN00	82.09	AAITF00	71.08	MLGOM00	10.48
Mars	MRGOY00	86.33	TDDQY00	0.55	MRGN00	85.78	AAMBR00	73.09	MRGOM00	12.69
Maya	MYGOY00	82.20	TDDDP00	1.21	MYGN00	81.00	PDATS09	66.01	MYGOM00	14.99
Napo	NPGOY00	79.75	NPGFA00	4.80	NPGN00	74.96	AAMCA00	63.89	NPGOM00	10.12
Oriente	ORGOY00	84.85	ORGFA00	4.52	ORGN00	80.32	PCADE00	65.89	ORGOM00	13.54
Urals	URGOY00	87.03	TDDFM00	3.07	URGN00	83.96	AAWVH00	56.87	URGOM00	26.45
Vasconia	VCGOY00	87.95	VCGFA00	2.01	VCGN00	85.94	PCAGI00	72.23	VCGOM00	13.71
WCS ex-Hardisty	WHGOY00	83.12	TDDRS00	8.50	WHGN00	74.62	AAPPN00	61.63	WHGOM00	12.99
WCS ex-Nederland	WNGOY00	83.12	WCGFA00	0.00	WNGN00	83.12	AAYAY00	69.63	WNGOM00	13.49
WTS	WSGOY00	88.78	TDDRJ00	6.89	WSGN00	81.89	PCACK00	72.39	WSGOM00	9.50

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

US Midwest (PGA page 0823)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Bakken	BKTCY00	87.23	TDDRO00	1.68	BKTCN00	85.55	AASRU00	74.68	BKTCM00	10.87
Syncrude	SYTCY00	88.68	TDDFP00	8.20	SYTCN00	80.48	AASOK00	75.58	SYTCM00	4.90
WTI	WTTCY00	87.63	TDDRG00	2.39	WTTCN00	85.24	PCACG00	71.79	WTTCM00	13.45
WTS	WSTCY00	86.65	TDDRI00	3.08	WSTCN00	83.57	PCACK00	72.39	WSTCM00	11.18

US West Coast (PGA page 0843)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
ANS	ANWCY00	105.38					PCAAD00	77.95	ANWCM00	27.43
Bakken	BKWCY00	110.84	TDDRT00	11.74	BKWCN00	99.09	AAXPP00	73.03	BKWCM00	26.06

US Atlantic Coast (PGA page 0811)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGACY00	94.26	AGAF00	2.34	AGACN00	91.92	AAQZB00	74.03	AGACM00	17.25
Arab Light	LIACY00	89.82	TDDAU00	1.35	LIACN00	88.47	AAXCU00	80.24	LIACM00	8.23
Bakken	BKACY00	95.27	TDDRN00	7.20	BKACN00	88.07	AAXPP00	73.03	BKACM00	15.04
Bonny Light	YLACY00	94.81	TDDBZ00	2.55	YLACN00	92.26	PCAIC00	76.83	YLACM00	14.79
Brent	BRACY00	92.82	TDDCC00	2.45	BRACN00	90.37	AAVJA00	77.04	BRACM00	13.23
Cabinda	CBACY00	90.94	TDDCH00	2.78	CBACN00	88.15	PCAFD00	77.23	CBACM00	10.29
CPC Blend	CPACY00	94.66	CPAFA00	2.60	CPACN00	92.06	AALVX00	71.96	CPACM00	20.00
Forties	FTACY00	94.79	FTAFA00	2.35	FTACN00	92.44	PCADJ00	77.06	FTACM00	15.29
Saharan Blend	SHACY00	95.46	SHAF00	1.78	SHACN00	93.69	AAGZY00	77.34	SHACM00	15.71
Urals	URACY00	89.01	URAF00	2.36	URACN00	86.65	AAWVH00	56.87	URACM00	29.14

US Midwest (PGA page 0821)

	Coke Yield		Freight		Coke Netback		Crude Price		Coke Margin	
WCS	WCTOY00	82.29	TDDRL00	8.56	WCTON00	73.73	AAPPN00	61.63	WCTOM00	12.10
WTS	WSTOY00	87.63	TDDRI00	3.08	WSTON00	84.54	PCACK00	72.39	WSTOM00	12.15

US West Coast (PGA page 0841)

	Coke Yield		Freight		Coke Netback		Crude Price		Coke Margin	
ANS	ANWOY00	107.03					PCAAD00	77.95	ANWOM00	29.08
Arab Light	LIWOY00	108.84	TDDAT00	1.35	LIWON00	107.49	AAXCU00	80.24	LIWOM00	27.25
Arab Medium	MEWOY00	104.14	TDDBB00	1.35	MEWON00	102.78	AAXDN00	80.94	MEWOM00	21.84
Basrah Heavy	BHWOY00	104.10	BHWFA00	2.92	BHWON00	101.18	AALZC00	71.90	BHWOM00	33.54
Basrah Medium	BLWOY00	105.61	TDDBW00	2.80	BLWON00	102.82	BSMAM01	75.00	BLWOM00	30.73
Castilla Blend	CSWOY00	107.10	CSWFA00	6.84	CSWON00	100.26	AAVEQ00	68.23	CSWOM00	31.07
Maya	MYWOY00	103.19	MYWFA00	3.98	MYWON00	99.21	AAUPK00	66.61	MYWOM00	32.60
Napo	NPWOY00	102.04	NPWFA00	5.79	NPWON00	96.25	AAMCA00	63.89	NPWOM00	31.41
Oriente	ORWOY00	106.35	TDDEC00	5.45	ORWON00	100.90	PCADE00	65.89	ORWOM00	34.11
Vasconia	VCWOY00	113.85	VCWFA00	6.60	VCWON00	107.25	PCAGI00	72.23	VCWOM00	34.09

Commodity Insights Analytics European Yields & Netbacks Effective July 5, 2023 (\$/barrel)

Northwest Europe (PGA page 1811)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGNCY00	91.32	AGNFA00	2.12	AGNCN00	89.20	AAQZB00	74.03	AGNCM00	15.17
Arab Berri	BENCY00	91.11	BENFA00	1.32	BENCN00	89.79	AAXDUB00	80.25	BENCM00	9.54
Arab Heavy	AHNCY00	82.71	TDDAN00	1.39	AHNCN00	81.33	AAXDH00	76.75	AHNCM00	4.58
Arab Light	LINCY00	88.44	TDDAV00	1.35	LINCN00	87.09	AAAXDK00	79.65	LINCM00	7.44
Arab Medium	MENCY00	84.74	TDDBD00	1.37	MENCN00	83.38	AAAXDM00	79.15	MENCM00	4.23
Azeri Light	ZLNCY00	92.54	TDDBI00	2.41	ZLNCN00	90.12	AATHM00	77.95	ZLNCM00	11.01
Basrah Medium	BLNCY00	83.37	TDDBU00	2.29	BLNCN00	81.08	BSMAM01	75.00	BLNCM00	7.92
Bonny Light	YLNCY00	93.32	YLNFA00	2.32	YLNCN00	91.00	PCAIC00	76.83	YLNCM00	14.17
Brent	BRNCY00	90.55	TDDCD00	2.19	BRNCN00	88.35	AAVJA00	77.04	BRNCM00	11.31
Cabinda	CBNCY00	88.57	TDDQR00	2.54	CBNCN00	86.03	PCAFD00	77.23	CBNCM00	8.80
CPC Blend	CPNCY00	91.34	CPNFA00	2.99	CPNCN00	88.35	AALVX00	71.96	CPNCM00	16.39
Dubai	DBNCY00	88.08	DBNFA00	2.25	DBNCN00	85.83	PCAAAT00	75.43	DBNCM00	8.60
Eagle Ford	EANCY00	91.09	EANFA00	4.28	EANCN00	86.81	AAAYAT00	72.85	EANCM00	14.06
Ekofisk	EKNCY00	91.39	TDDCT00	1.45	EKNCN00	89.94	PCADI00	78.27	EKNCM00	11.67
Forties	FTNCY00	90.85	TDDZE00	1.68	FTNCN00	89.17	PCADJ00	77.06	FTNCM00	12.12
Iran Heavy	BHNCY00	87.32	TDDDG00	2.38	BHNCN00	84.94	AIHKA00	75.65	BHNCM00	8.63
Johan Sverdrup	JSNCY00	88.93	JSNFA00	1.79	JSNCN00	87.14	AJSVA00	78.16	JSNCM00	8.99
Kirkuk	KRNCY00	87.74	TDDGH00	2.92	KRNCN00	84.82	AAEJD00	73.87	KRNCM00	8.27
LLS	LLNCY00	94.16	LLNFA00	4.46	LLNCN00	89.70	AAQBB00	74.44	LLNCM00	15.41
Maya	MYNCY00	77.52	MYNFA00	4.60	MYNCN00	72.92	AAAYXE00	65.50	MYNCM00	7.42
Oman	OMNCY00	87.43	OMNFA00	2.21	OMNCN00	85.22	PCABS00	75.53	OMNCM00	7.90
Saharan Blend	SHNCY00	92.87	TDDGI00	1.87	SHNCN00	91.00	AAGZY00	77.34	SHNCM00	13.66
Urals*	URNCY00	89.54					PCAFW00	59.17	URNCM00	30.37
WTI MEH	WTNCY00	91.51	WTNFA00	4.35	WTNCN00	87.16	AAAYRZ00	73.59	WTNCM00	13.67

*Indicates the crude price is a CIF value

Mediterranean (PGA page 1821)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGMCY00	90.86	AGMFA00	2.07	AGMCN00	88.79	AAQZB00	74.03	AGMCM00	14.76
Arab Heavy	AHMCY00	84.38	TDDAI00	1.39	AHMCN00	82.99	AAAXDH00	76.75	AHMCM00	6.99
Arab Light	LIMCY00	88.50	TDDAQ00	1.35	LIMCN00	87.15	AAAXDK00	79.65	LIMCM00	7.95
Arab Medium	MEMCY00	85.54	TDDAY00	1.37	MEMCN00	84.18	AAAXDM00	79.15	MEMCM00	5.28
Azeri Light*	ZLMCY00	91.82					AAGZX00	80.44	ZLMCM00	11.38
Basrah Medium	BLMCY00	84.62	TDDBR00	1.74	BLMCN00	82.87	BSMAM01	75.00	BLMCM00	9.71
Bonny Light	YLMCY00	92.44	YLMFA00	2.26	YLMCN00	90.18	PCAIC00	76.83	YLMCM00	13.35
Cabinda	CBMCY00	88.22	CBMFA00	2.48	CBMCN00	85.74	PCAFD00	77.23	CBMCM00	8.51
CPC Blend*	CPMCY00	90.33					AAGZU00	74.55	CPMCM00	15.78
Eagle Ford	EAMCY00	90.74	TNEIF00	4.60	EAMCN00	86.14	AAAYAT00	72.85	EAMCM00	13.39
Forties	FTMCY00	90.21	FTMFA00	2.60	FTMCN00	87.61	PCADJ00	77.06	FTMCM00	10.56
Iran Heavy	BHMCY00	87.78	TDDDF00	1.71	BHMCN00	86.07	AIHKA00	75.65	BHMCM00	9.76
Johan Sverdrup	JSMCY00	88.65	JSMFA00	2.78	JSMCN00	85.88	AJSVA00	78.16	JSMCM00	7.72
Kirkuk	KRMCY00	87.83	TDDFF00	1.73	KRMCN00	86.10	AAEJD00	73.87	KRMCM00	9.55
LLS	LLMCY00	93.25	LLMFA00	4.83	LLMCN00	88.42	AAQBB00	74.44	LLMCM00	14.13
Oman	OMMCY00	87.96	OMMFA00	1.56	OMMCN00	86.41	PCABS00	75.53	OMMCM00	9.09
Saharan Blend	SHMCY00	91.49	TDDFG00	1.46	SHMCN00	90.04	AAGZY00	77.34	SHMCM00	12.70
Urals*	URMCY00	88.64					PCACE00	59.63	URMCM00	29.01

Platts Analytics Asian Yields & Netbacks Effective July 5, 2023 (\$/barrel)

Singapore (PGA page 2811)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGSCY00	80.36	AGSFA00	2.31	AGSCN00	78.06	AAQZB00	74.03	AGSCM00	5.17
Arab Berri	BESCY00	79.88	BESFA00	1.43	BESCN00	78.44	AAAXDV00	78.03	BESCM00	0.41
Arab Heavy	AHSCY00	74.77	TDDA000	1.49	AHSCN00	73.28	AAAXDG00	76.28	AHSCM00	-3.00
Arab Light	LISCY00	78.80	TDDAW00	1.46	LISCN00	77.34	AAAXDJ00	78.48	LISCM00	-1.14
Arab Medium	MESCY00	75.24	TDDBE00	1.47	MESCN00	73.76	AAAXDL00	77.93	MESCM00	-4.17
Basrah Medium	BHSCY00	75.92	BHSFA00	1.48	BHSCN00	74.45	BSMAM01	75.00	BHSCM00	-0.93
Bonny Light	YLSCY00	82.95	YLSFA00	2.48	YLSCN00	80.47	PCAIC00	76.83	YLSCM00	4.78
Cabinda	CBSCY00	81.96	TDDQS00	2.40	CBSCN00	79.57	PCAFD00	77.23	CBSCM00	3.48
Castilla	CSSCY00	71.48	CSSFA00	4.26	CSSCN00	67.21	AAVEQ00	68.23	CSSCM00	0.22
Dalia	DLSCY00	84.23	DLSFA00	2.48	DLSCN00	81.75	AAQYX00	76.03	DLSCM00	6.86
Dubai	DBSCY00	78.97	TDDCQ00	1.39	DBSCN00	77.58	PCAAAT00	75.43	DBSCM00	2.15
Duri	DRSCY00	82.60	TDDCR00	1.24	DRSCN00	81.36	PCABA00	78.41	DRSCM00	2.95
Eagle Ford	EASCY00	80.29	EASFA00	3.69	EASCN00	76.59	AAAYAT00	72.85	EASCM00	4.98
ESPO	ESSCY00	81.27	ESSFA00	1.11	ESSCN00	80.16	AARWF00	66.95	ESSCM00	13.21

*Indicates the crude price is a CIF value

Singapore (PGA page 2811)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Forties	FTSCY00	79.09	TNEFD00	3.46	FTSCN00	75.63	PCADJ00	77.06	FTSCM00	-0.29
Kimanis	KISCY00	88.64	KISFA00	1.13	KISCN00	87.52	AASCL00	82.51	KISCM00	5.01
LLS	LLSCY00	82.42	LLSFA00	3.85	LLSCN00	78.57	AAZDC00	73.04	LLSCM00	5.42
Mars	MRSCY00	77.78	MRSFA00	3.99	MRSCN00	73.80	AAMBR00	73.09	MRSCM00	1.95
Maya	MYSCY00	74.07	MYSFA00	4.18	MYSCN00	69.89	AAAYXG00	67.93	MYSCM00	1.96
Minas	MNSCY00	82.99	TDDDX00	1.13	MNSCN00	81.86	PCABO00	71.12	MNSCM00	10.74
Oman	OMSCY00	76.63	TDDEB00	1.33	OMSCN00	75.30	PCABS00	75.53	OMSCM00	-0.23
Qua lboe	QBSCY00	83.47	QBSFA00	2.48	QBSCN00	80.98	PCAID00	76.88	QBSCM00	5.24
Saharan Blend	SHSCY00	78.05	SHSFA00	2.60	SHSCN00	75.45	AAGZY00	77.34	SHSCM00	-1.36
Tapis	TPSCY00	81.16	TDDEO00	1.11	TPSCN00	80.05	PCACB00	78.61	TPSCM00	1.44
Tupi*	LUSCY00	81.49					LUQDA00	78.23	LUSCM00	5.03
Urals	URSCY00	78.83	URSFA00	2.67	URSCN00	76.16	AAGZS00	56.87	URSCM00	20.43
WTI MEH	WTSCY00	80.32	WTSFA00	3.75	WTSCN00	76.57	AAZDF00	72.14	WTSCM00	4.22

Crude Carbon Intensity

A daily supplement to Crude Oil Marketwire

Platts crude carbon intensity assessments - grades, July 5, 2023 (PGA/PCR page 4206)

	Daily Carbon Intensity Premium		Monthly Carbon Intensity*		
	Symbol	\$/b	Symbol	Date	kg CO2 eq/b
North America (PGA/PCR page 4206)					
WTI Midland	WXTIC00	0.54	WXTIC40	May-23	37.85
Europe (PGA/PCR page 4206)					
Brent	BXREC00	0.83	BXREC40	May-23	58.42
Ekofisk	EXKOC00	0.33	EXKOC40	May-23	23.19
Forties	FXORC00	0.33	FXORC40	May-23	23.21
Oseberg	OXSEC00	1.26	OXSEC40	May-23	88.50
Troll	TXROC00	3.83	TXROC40	May-23	269.85

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

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

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

Platts crude carbon intensity assessments - fields, July 5, 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 East Fields (PGA/PCR page 4201)											
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	0.07	KIRKC50	May-23	4.55
Rumaila	RUMAC00	0.31	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	1.63	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	0.14	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

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
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 page 4202)											
Angola											
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											
Agbami	AGBAC00	0.37	AGBAC40	May-23	26.03	Agbami-Paradip	AGBAC10	0.15	AGBAC50	May-23	10.25
Bonga	BONGC00	0.18	BONGC40	May-23	12.35	Bonga-R'dam	BONGC10	0.09	BONGC50	May-23	6.26
Europe Fields (PGA/PCR page 4202)											
Azerbaijan											
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	1.08	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	0.36	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	0.03	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	0.22	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	0.04	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	3.22	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	0.67	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	0.16	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 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
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	GOLDC10	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	0.37
Judy	JUDYC00	0.38	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	0.81
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	2.01	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 4204)											
Bakken-Canada	BAKKC00	0.51	BAKKC40	May-23	35.88	Canada-USMW	BAKKC10	0.06	BAKKC50	May-23	3.91
Cold Lake	CDLKC00	1.18	CDLKC40	May-23	82.95	W Canada-USMW	CDLKC10	0.07	CDLKC50	May-23	4.86
CVE Christina Lake	CVECC00	0.63	CVECC40	May-23	44.29	Canada-USMW	CVECC10	0.07	CVECC50	May-23	4.86
Foster Creek	FOSTC00	0.83	FOSTC40	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	0.39	HIBEC40	May-23	27.16	Hibernia-Canada	HIBEC10	0.14	HIBEC50	May-23	9.82
Jackfish	JACKC00	0.96	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	0.09	MEGCC50	May-23	5.99
Montney Shale	MONTC00	0.39	MONTC40	May-23	27.58	Montney-Canada	MONTC10	0.01	MONTC50	May-23	0.81
Surmont	SURMC00	0.91	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	12.85
Mars-Ursa	MRURC00	0.20	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	6.51
Permian Midland	PRMDC00	0.27	PRMDC40	May-23	18.96	Corpus Christi-R'dam	PRMDC10	0.10	PRMDC50	May-23	6.70
Prudhoe-Bay	PRUDC00	0.46	PRUDC40	May-23	32.03	Alaska-USWC	PRUDC10	0.04	PRUDC50	May-23	2.86
San-Joaquin	SANMC00	2.50	SANMC40	May-23	175.84	San Joaquin-SoCal	SANAC10	0.01	SANAC50	May-23	0.77
SCOOP-STACK	SCOOC00	0.46	SCOOC40	May-23	32.36	Oklahoma-USGC	SCOOC10	0.01	SCOOC50	May-23	1.01
Tahiti	TAHIC00	0.24	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 (PGA/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	0.07	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	3.83	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/.

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