

CRUDE OIL MARKETWIRE

Volume 36 / Issue 189 / September 25, 2015

KEY BENCHMARKS (\$/barrel)

			Mid	Change
<i>(PGA page 2210)</i>				
Dubai (Nov)	PCAA00	43.78-43.80	43.790	-1.550
Dubai (Dec)	PCAAU0	45.50-45.52	45.510	-1.440
Dubai (Jan)	PCAAV0	46.38-46.40	46.390	-1.300
MEC (Nov)	AAWSA0	43.78-43.80	43.790	-1.550
MEC (Dec)	AAWSB0	45.50-45.52	45.510	-1.440
MEC (Jan)	AAWSC0	46.38-46.40	46.390	-1.300
Brent/Dubai (Nov)	AAJMS0	4.08/4.10	4.090	+0.390
<i>(PGA page 1212)</i>				
Brent (Dated)	PCAA50	47.23-47.24	47.235	+0.095
Dated North Sea Light	AAOFD0	47.23-47.24	47.235	+0.095
Brent (Oct)	PCAAP0	47.15-47.17	47.160	+0.360
Brent (Nov)	PCAAQ0	48.03-48.05	48.040	+0.360
Brent (Dec)	PCAA00	48.54-48.56	48.550	+0.290
Brent (Jan)	PCARR0		49.270	+0.290
<i>(PGA page 210)</i>				
Sulfur de-escalator	AAUXL0		0.15	
Oseberg QP (Sep)	AAXDW0		0.4184	
Oseberg QP (Oct)	AAIDX0		0.7770	
Ekofisk QP (Sep)	AAXDY0		0.2768	
Ekofisk QP (Oct)	AAXDZ0		0.5265	
<i>(PGA page 210)</i>				
WTI (Oct)	PCACG0	45.51-45.53	45.520	+0.640
WTI (Nov)	PCACH0	45.58-45.60	45.590	+0.600
WTI (Dec)	AAGIT0	46.06-46.08	46.070	+0.510
Light Houston Sweet	AAXEW0		46.470	+0.640
Bakken	AAXPP0		43.150	+0.550
Eagle Ford Marker	AAAJ00		48.000	+1.770
ACM* (Oct)	AAQHN0	41.51-41.53	41.520	+0.990
ACM* (Nov)	AAQH00	41.88-41.90	41.890	+0.550
ACM* (Dec)	AAQHP0	42.26-42.28	42.270	+0.460

*Americas Crude Marker.

FORWARD DATED BRENT (\$/barrel) *(PGA page 1250)*

			Mid	Change
North Sea Dated strip	AAKWH0	47.43-47.44	47.435	+0.310
Mediterranean Dated strip	AALDF0	47.41-47.42	47.415	+0.285
Canada Dated strip	AALDJ0	47.70-47.71	47.705	+0.300
BTC Dated strip	AAUFI0	47.44-47.46	47.450	+0.285
15-45 Day Dated strip	AALGM0	47.56-47.57	47.565	+0.290
30-60 Day Dated strip	AAXRK0	48.08-48.10	48.090	+0.360

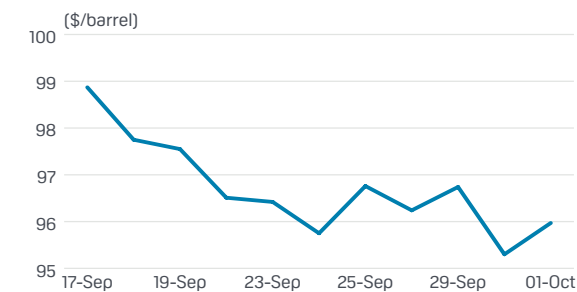
BRENT/WTI SPREADS AND EFPS *(PGA page 218)*

			Mid	Change
Brent/WTI 1st	AALAT00	4.42/4.44	4.430	0.000
Brent/WTI 2nd	AALAU00	2.36/2.38	2.370	-0.630
Brent/WTI 3rd	AALAV00	2.39/2.41	2.400	-0.600
Brent/WTI 4th	AALAY00		2.520	-0.500
Brent EFP (Oct)	AAGVW00	NA/NA	NA	NA
Brent EFP (Nov)	AAGVX00	-0.34/-0.32	-0.330	-0.020
Brent EFP (Dec)	AAGVY00	-0.50/-0.48	-0.490	-0.050
Brent EFP (Jan)	AAMVY00		-0.490	-0.050
WTI EFP (Oct)	AAGVT00	NA/NA	NA	NA
WTI EFP (Nov)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Dec)	AAGVV00	-0.01/0.01	0.000	0.000

MIDDLE EAST (\$/barrel)

			Mid	Change
<i>(PGA page 2210)</i>				
Oman (Nov)	PCABS00	44.39-44.41	44.400	+0.100
Oman (Dec)	AAHZF00	46.09-46.11	46.100	+0.250
Oman (Jan)	AAHZH00	46.84-46.86	46.850	+0.200
Upper Zakum (Nov)	AAOUQ00	43.87-43.91	43.890	+0.100
<i>(PGA page 2658)</i>				
Dubai Swap (Oct)	AAHBM00	45.72-45.76	45.740	+0.230
Dubai Swap (Nov)	AAHBN00	46.60-46.64	46.620	+0.230
Dubai Swap (Dec)	AAHBO00	47.16-47.20	47.180	+0.190

ESPO (FOB KOZIMO, LONDON CLOSE)



Source: Platts

MARKET COMMENTARY

Middle East Sour

Market analysis: *(PGA page 2298)* The Asian sour crude market was largely quiet Friday, with trading in November-loading Middle East barrels near its end. Taiwan's CPC was heard to have decided against buying any sour crude in a tender that closed Wednesday. The cancellation of the buy tender was likely because of lower crude requirement by the CPC refinery at Kaohsiung, sources said. A key crude oil pipeline at the refinery was heard to be damaged, leading to a slowdown in crude flows to the refinery and a cut in run rates. Spot values for November-loading Middle East grades like Murban and Oman have improved from their lows earlier this month while premiums for Russian ESPO Blend and Sokol have jumped sharply from last month on the back of a recovery in Asian demand. Oil major Chevron earlier this week sold a November-loading cargo of Murban crude to ChinaOil at a premium of 20 cents/b to the grade's

[\(continued on page 3\)](#)

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ASIA PACIFIC AND MIDDLE EAST CRUDE ASSESSMENTS (\$/barrel)

		(Asia MOC)			
API Gravity	Code	Mid	Change		
Condensate					
NW Shelf	61.9 PCAGX00	46.22-46.26	46.240	-1.260	
Ras Gas	57.0 AAPET00	46.97-47.01	46.990	-1.300	
DFC	56.82 ADFCA00	46.97-47.01	46.990	-1.300	
Qatar LSC	56.9 AARB00	46.17-46.21	46.190	-1.300	
South Pars	57.4 AARAV00	44.02-44.06	44.040	-1.300	
Senipah	54.4 AAEOE00	47.07-47.11	47.090	-1.260	
Light crude					
Cossack	47.7 PCAGZ00	47.02-47.06	47.040	-1.260	
Gippsland	48.7 PCACP00	45.72-45.76	45.740	-1.260	
Tapis	45.2 PCACB00	48.92-48.96	48.940	-1.110	
Belida	45.1 PCAFL00	44.22-44.26	44.240	-1.090	
Kutubu	44.3 PCAFJ00	47.12-47.16	47.140	-1.260	
Handil Mix	43.9 PCABE00	45.72-45.76	45.740	-1.240	
Attaka	42.3 PCAAJ00	44.02-44.06	44.040	-1.090	
Ardjuna	38.0 PCACQ00	41.62-41.66	41.640	-1.140	
Vityaz	41.6 AARAN00	48.92-48.96	48.940	-1.300	
Sakhalin Blend	45.5 AARB00	48.92-48.96	48.940	-1.300	
ESPO M1	34.8 AARWF00	46.24-46.28	46.260	-1.440	
ESPO M2	34.8 AAMWF00	47.97-48.01	47.990	-1.200	
Sokol	39.7 AASCJ00	50.10-50.14	50.120	-1.130	
Kikeh	34.9 AAMUH00	50.27-50.31	50.290	-1.110	
Miri Light	32.3 PCABQ00	51.02-51.06	51.040	-1.110	
Labuan	32.0 PCABL00	50.97-51.01	50.990	-1.110	
Medium crude					
Su Tu Den	36.8 AARAR00	48.42-48.46	48.440	-1.110	
Bach Ho	40.7 PCAHY00	48.92-48.96	48.940	-1.110	
Nanghai	40.0 PCAFR00	43.92-43.96	43.940	-1.160	
Minas	35.3 PCABO00	40.87-40.91	40.890	-1.240	
Nile Blend	33.9 AAPLC00	40.17-40.21	40.190	-1.240	
Widuri	33.2 PCAFE00	40.07-40.11	40.090	-1.240	
Daqing	32.2 PCAAZ00	38.72-38.76	38.740	-1.240	
Cinta	31.1 PCAAX00	39.87-39.91	39.890	-1.240	
Heavy crude					
Dar Blend	25.0 AARAB00	39.87-39.91	39.890	-1.260	
Shengli	24.2 PCABY00	37.32-37.36	37.340	-0.940	
Duri	20.8 PCABA00	37.22-37.26	37.240	-0.940	
Stybarrow	22.8 AARAH00	46.840		-1.160	
Enfield	22.0 AARAE00	47.740		-1.160	
Vincent	18.3 AARAK00	45.540		-1.160	

(Asia MOC)			
Code	Mid	Change	
Diff to Dubai			
AAPU00	0.55/0.65	0.600	0.000
ADFCB00	0.55/0.65	0.600	0.000
AARBD00	-0.25/-0.15	-0.200	0.000
AARAX00	-2.40/-2.30	-2.350	0.000
Diff to ICP			
AAEOK00	-2.90/-2.80	-2.850	0.000
Diff to ICP			
PCAFM00	-0.05/0.05	0.000	+0.050
PCABF00	0.75/0.85	0.800	0.000
PCAAK00	-0.25/-0.15	-0.200	+0.050
PCACR00	0.00/0.10	0.050	NA NA
Diff to Dubai			
AARAP00	2.50/2.60	2.550	0.000
AARCN00	2.50/2.60	2.550	0.000
AASEU00	0.70/0.80	0.750	0.000
AAMFG00	1.55/1.65	1.600	+0.100
Diff to Oman/Dubai			
AASCK00	3.55/3.65	3.600	+0.150
Diff to OSP			
AARAT00	-1.65/-1.55	-1.600	+0.150
Diff to ICP			
PCABP00	-0.35/-0.25	-0.300	0.000
AAPEX00	-1.05/-0.95	-1.000	0.000
PCAFF00	-0.95/-0.85	-0.900	0.000
PCAAZ00	-0.95/-0.85	-0.900	0.000
Diff to ICP			
PCABB00	-0.85/-0.75	-0.800	0.000

(Asia close)		
Code	Mid	Change
(PGA page 2212)		
Diff to Asian Dated Brent		
AAPAI00	-1.80	0.000
AARAZ00	-1.050	-0.040
ADFC00	-1.050	-0.040
AARBC00	-1.850	-0.040
AARAW00	-4.000	-0.040
AAPBE00	-0.950	0.000
(PGA page 2214)		
Diff to Asian Dated Brent		
AAPAC00	-1.000	0.000
AAPAU00	-2.300	0.000
AAOZH00	0.900	+0.150
AAPBQ00	-3.800	+0.170
AAPAE00	-0.900	0.000
AAPBI00	-2.300	+0.020
AAPBC00	-4.000	+0.170
AAPBG00	-6.400	+0.120
AARAO00	0.900	-0.040
AARDN00	0.900	-0.040
AAPAO00	2.080	+0.130
AAOZY00	2.250	+0.150
AAPAS00	3.000	+0.150
AAPAQ00	2.950	+0.150
(PGA page 2216)		
Diff to Asian Dated Brent		
AARAS00	0.400	+0.150
AAPAK00	0.900	+0.150
AAPAG00	-4.100	+0.100
AAPBA00	-7.150	+0.020
AAPAM00	-7.850	+0.020
AAPB00	-7.950	+0.020
AAPAW00	-9.300	+0.020
AAPBK00	-8.150	+0.020
(PGA page 2218)		
Diff to Asian Dated Brent		
AARAC00	-8.150	0.000
AAPAY00	-10.700	+0.320
AAPBM00	-10.800	+0.320
AARAI00	-1.200	+0.100
AARAF00	-0.300	+0.100
AARAL00	-2.500	+0.100

(London close)		
Code	Mid	Change
(PGA page 2213)		
AAPAH00	46.380	-1.000
AARAY00	47.130	-1.040
ADFC00	47.130	-1.040
AARBA00	46.330	-1.040
AARAU00	44.180	-1.040
AAPBD00	47.230	-1.000
(PGA page 2215)		
AAPAB00	47.180	-1.000
AAPAT00	45.880	-1.000
AAOZ00	49.080	-0.850
AAPBP00	44.380	-0.830
AAPAD00	47.280	-1.000
AAPBH00	45.880	-0.980
AAPBB00	44.180	-0.830
AAPBF00	41.780	-0.880
AARAM00	49.080	-1.040
AAREN00	49.080	-1.040
AAPAN00	50.260	-0.870
AAOZX00	50.430	-0.850
AAPAR00	51.180	-0.850
AAPAP00	51.130	-0.850
(PGA page 2217)		
AARAQ00	48.580	-0.850
AAPAJ00	49.080	-0.850
AAPAF00	44.080	-0.900
AAPAZ00	41.030	-0.980
AAPAL00	40.330	-0.980
AAPBN00	40.230	-0.980
AAPAV00	38.880	-0.980
AAPBJ00	40.030	-0.980
(PGA page 2219)		
AARAA00	40.030	-1.000
AAPAX00	37.480	-0.680
AAPBL00	37.380	-0.680
AARAG00	46.980	-0.900
AARAD00	47.880	-0.900
AARAJ00	45.680	-0.900

official selling price, FOB Fujairah/Jebel Dhanna, in the Platts MOC. Spot differentials for Murban have improved steadily this month on the back of a widening Brent/Dubai spread and rising freight rates, which are making it less profitable for refiners to arbitrage rival barrels from outside the region, including from West Africa and the North Sea. Murban spot differentials have flipped into a premium to its OSP from a discount last month as traders say Dubai's steep discount to Brent is drawing buying interest from Asian refiners. The trade in the Dubai MOC comes amid an ongoing review by Platts to add the light sour grade in the basket of crude oils reflected in its Dubai and Oman crude oil benchmarks. The price reporting agency and commodity information provider earlier this month said it is asking for industry comment by October 30 on the inclusion of Qatar's Al-Shaheen and Abu Dhabi's Murban in the basket of crude oils reflected in its Dubai and Oman benchmarks. The company said it is also asking for comment on a possible quality premium for deliveries of Murban. OPEC's crude oil exports, excluding those from Angola and Ecuador, are expected to average 23.86 million b/d over the four weeks to October 10, up by 200,000 b/d from the previous four-week period, UK-based tanker tracker Oil Movements said Thursday. But compared with the same period last year, the latest forecast from Oil Movements shows a fall in OPEC's crude exports of 380,000 b/d.

Dubai Mo01 assessment rationale: (PGA page 2295)

November cash Dubai was assessed at \$43.79/b Friday. The assessment took into consideration Gunvor's offer to sell a cash Dubai partial at \$43.80/b.

The above commentary applies to the following market data code: PCAAT00

Oman Blend Mo01 assessment rationale: (PGA page 2295)

November cash Oman was assessed at \$44.30/b Friday. The assessment reflected a discount of \$2.09/b to front-month November Dubai swaps.

The above commentary applies to the following market data code: PCABS00

MIDDLE EAST SPOT ASSESSMENTS (\$/barrel) (PGA page 2220)

			Mid	Change		Spread vs OSP	Mid	Change
Murban	AAKNL00	48.23-48.27	48.250	+0.200	AAKUB00	0.15/0.25	0.200	0.000
Das Blend	AAXDF00	47.73-47.77	47.750	+0.200	AAXPF00	0.10/0.20	0.150	0.000
Qatar Land	AAKNP00	47.08-47.12	47.100	+0.200	AAKUJ00	-0.15/-0.05	-0.100	0.000
Qatar Marine	AAKNR00	44.08-44.12	44.100	+0.050	AAKUH00	-1.05/-0.95	-1.000	-0.050
Banoco Arab Medium	AAKNT00	43.92-43.96	43.940	+0.040	AAKUD00	-0.95/-0.85	-0.900	-0.050
Al Shaheen	AAPEV00	43.95-43.99	43.970	+0.130	AAPEW00	-2.70/-2.60*	-2.650	-0.100

* Differential to Dubai

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	47.340	
ADB Strip Asia	AARBV00	48.040	AARBX00 48.180
ADB Strip Middle East	AARBW00	48.040	AARBY00 48.180
Asian Crude Index (ACX)	AAXIL00	45.352	
Asian Heavy Sweet (AHS)	AAXQC00	46.710	AAPDP00 -1.330 AAPDO00 46.850

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

Middle East Sour bids/offers/trades: (PGA page 2296)

- ME SOUR CRUDE MOC: OUTSTANDING INTEREST: BIDS:
 - Platts Dubai Partial Nov15: Vitol withdraws bid at \$43.55/b for 25kb (4:28:08).
- ME SOUR CRUDE MOC: OUTSTANDING INTEREST: OFFERS:
 - Platts Dubai Partial Nov15: Gunvor offers at \$43.80/b for 25kb; Platts Dubai Partial Nov15: Trafigura offers at \$43.85/b for 25kb; Platts Dubai Partial Nov15: Shell offers at \$44.45/b for 25kb; Platts Dubai Partial Nov15: Unipecc offers at \$44.65/b for 25kb; Platts Dubai Partial Nov15: Vitol offers at \$44.75/b for 25kb; Platts Dubai Partial Nov15: ChinaOil offers at \$44.75/b for 25kb; Platts Crude : Upper Zakum: Nov 1-30: FOB Zirku Island: 500kb +/-5%: Shell offers at -\$0.50/b to OSP.
- ME SOUR CRUDE: DEALS SUMMARY: No trades.

Middle East Sour exclusions: (PGA page 2296) No market data was excluded from the September 25, 2015, Middle East sour crude assessment process.

Asia Pacific Sweet

Market analysis: (PGA page 2299) November-loading sweet crude cargoes in the Asia Pacific region continued to trade

at firmer cash differentials compared to the previous month, amid supportive crack values and steady demand. Vietnamese crudes were faring well, with Unipecc mopping up most of the cargoes for the month. "The light sweet [segment] is healthy due to recovering margins. Vietnam is supported thanks to strong Chinese interest this month," said a Singapore-based trader. Apart from the Ruby and Rang Dong cargoes, Unipecc was also heard to have bought two 200,000-barrel cargoes of Thang Long crude from PV Oil via tender, which closed earlier this week. Traded levels, however, were not immediately known. The Chinese state-owned company was also slated to win both Chim Sao cargoes for November loading, adding another 600,000 barrels of Vietnamese crudes to their purchases for the month. Market sources said that the stronger buying interest was reflective of steady end-user demand. The cargoes were most likely to meet demand in "China ... including their own system," a sweet crudes trader based in Singapore said. PV Oil has another two cargoes outstanding for November -- 300,000 barrels each of Bach Ho and Bunga Orkid crude. But it is offering just one cargo of Bach Ho crude for November 18-25 loading -- the closes Monday. PV Oil typically offers two cargoes of heavy Bach Ho crude in its monthly tender. Last month, PV Oil sold two

300,000-barrel cargoes for October loading at discounts of \$0.65-\$1/b to Dated Brent crude. With Te Giac Trang crude also missing from the spot market as the barrels were absorbed by domestic refinery system requirements, the total volume of Vietnamese cargoes tendered for November was 570,000 barrels less than the 3.67 million barrels in October. PV Oil also issued a tender offering a 300,000-barrel cargo of Bunga Orkid loading November 16-22. The tender closes Friday, with validity until September 30. PV Oil last sold 350,000 barrels of the crude loading September 7-13 to BP at a premium of 30-70 cents/b to Dated Brent. In Malaysia, cash differentials were also firming, with Petroleum Brunei's Kimanis cargo heard awarded at higher levels than last month. The 600,000-barrel Kimanis crude cargo, loading November 22-26, was heard awarded at a premium ranging between \$2.10/b and \$2.50/b to Dated Brent. Last month, it had sold an October-loading Kimanis cargo at a premium of around \$1.3/b to Dated Brent. The buyer of the November cargo could not be immediately confirmed, though several traders said a western trading house could have bagged the cargo. "Regional [crude differentials] are recovering this month. [The market is] moving fast and [regional suppliers have] cleared almost all [of their November cargoes] amid healthy distillate cracks," said a Southeast Asian trader.

ESPO FOB Kozmino Mo01 Spore vs Dubai Mo01

assessment rationale: (PGA page 2292) The ESPO M1 differential to Dubai was assessed at a premium of \$0.75/barrel Friday. There were no bids or offers for ESPO.

The above commentary applies to the following market data code: AASEU00

Asia Pacific Sweet bids/offers/trades: (PGA page 2293)

- ASIA LIGHT CRUDE MOC: DEAL SUMMARY: No deals.
- ASIA LIGHT CRUDE MOC: OUTSTANDING INTEREST: None.

Asia Pacific Sweet exclusions: (PGA page 2293) No market data was excluded from the September 25 Asia Light Crude assessment process.

NORTH SEA SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 1212)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change	
Dated Brent Diff					AAXEZ00	-0.21/-0.19	-0.200	-0.215
BNB	AAVJA00	47.23-47.24	47.235	-0.060	AAVJB00	-0.21/-0.19	-0.200	-0.370
Forties	PCADJ00	47.45-47.46	47.455	+0.310	AAGWZ00	0.01/0.03	0.020	0.000
Oseberg	PCAEU00	48.35-48.37	48.360	+0.310	AAGXF00	0.92/0.93	0.925	0.000
Ekofisk	PCADI00	48.03-48.04	48.035	+0.310	AAGXB00	0.59/0.61	0.600	0.000
Statfjord	PCAE00	47.46-47.47	47.465	+0.310	AAGXD00	0.02/0.04	0.030	0.000
Flotta Gold	PCACZ00	46.71-46.72	46.715	+0.310	AAGXH00	-0.73/-0.71	-0.720	0.000
Troll	AAWEX00	49.62-49.63	49.625	+0.310	AAWEY00	2.18/2.20	2.190	0.000
Duc	AAWEZ00	48.28-48.29	48.285	+0.310	AAWFL00	0.84/0.86	0.850	0.000
Statfjord (CIF)	AASAS00	48.72-48.73	48.725	+0.310	AASAT00	1.28/1.30	1.290	0.000
Gullfaks (CIF)	AASAU00	49.52-49.53	49.525	+0.310	AASAV00	2.08/2.10	2.090	0.000
North Sea basket	AAGIZ00	47.76-47.78	47.770	+0.215				

DATED BRENT/BFOE SWAPS (\$/barrel) (PGA page 1214)

Week	Week Date	Brent CFD*	Mid	Change	Dated Brent swap	Mid	Change		
CFD Week 1	(Nov) Sep 28-02	PCAKA00	-0.73/-0.71	-0.720	-0.010	AAJNV00	47.31/47.33	47.320	+0.350
CFD Week 2	(Nov) Oct 05-09	PCAKC00	-0.69/-0.67	-0.680	-0.040	AAJOS00	47.35/47.37	47.360	+0.320
CFD Week 3	(Nov) Oct 12-16	PCAKE00	-0.67/-0.65	-0.660	-0.090	AAJOU00	47.37/47.39	47.380	+0.270
CFD Week 4	(Nov) Oct 19-23	PCAKG00	-0.57/-0.55	-0.560	-0.100	AAJOW00	47.47/47.49	47.480	+0.260
CFD Week 5	(Nov) Oct 26-30	AAGLU00	-0.45/-0.43	-0.440	-0.090	AAJPC00	47.59/47.61	47.600	+0.270
CFD Week 6	(Nov) Nov 02-06	AAGLV00	-0.31/-0.29	-0.300	-0.080	AAJPE00	47.73/47.75	47.740	+0.280
CFD Week 7	(Nov) Nov 09-13	AALCZ00	-0.15/-0.13	-0.140	-0.070	AALAW00	47.89/47.91	47.900	+0.290
CFD Week 8	(Nov) Nov 16-20	AALDA00	0.02/0.04	0.030	-0.070	AALAX00	48.06/48.08	48.070	+0.290

Brent Swaps Week 1 to 8 are differentials to Brent Mo02 (Nov) PCAAQ00 found on page 61.

North Sea

Market analysis: (PGA page 1299) NORTH SEA CRUDE: The North Sea market was mostly steady Friday with physical barrels continuing to trade slowly outside Platts Market On Close assessment process. Following the softer sentiment seen at the start of the week, talk of a VLCC of Forties loading around mid-October buoyed the North Sea swaps market and stemmed the aggressive selling interest seen on Forties in recent sessions. The fixture, heard late Thursday, saw the CFD curve open stronger in morning trade, with the Week 2-3 roll flipping into backwardation in the brokered market on expectations Trafigura was looking for -- or had fixed -- a VLCC co-load around October 15-20, said to be being co-loaded by the Swiss-trader for Unipeac. "I think they sold something to Unipeac," a trader said. The CFD rally was mild however, failing to point conclusively to VLCC hedging activities. There was not really anything in

CFDs that suggested a VLCC had been fixed, a second trader said, adding: "[But] we have rallied a decent bit". Brent blend saw a sharp sell-off on the back of a traded Vitol October 15-17 cargo offer of Dated Brent minus \$0.20/b that took traders by surprise and saw the grade dip \$0.22/b below Forties on a differential basis, setting the Dated Brent assessment throughout the period. Platts kept the Forties sulfur de-escalator unchanged at \$0.15/b for cargoes loading from October onwards, with no significant and sustained trend in sulfur value evidenced month on month. Meanwhile, there were two cargoes kept from chains and one date change. Shell equity Brent cargo B1005 loading October 25-27 was kept from chains by Vitol. That left Vitol with two October-loading Brent cargoes, following its sale of the October 15-17 cargo to Total in the Platts MOC Friday at Dated Brent minus \$0.20/b, Platts tracking of the Brent October program showed Vitol also kept a Hess equity Ekofisk cargo loading October 25-27. Conoco equity

Ekofisk cargo C11830 previously loading October 19-21 was deferred to October 22-24 and seen offered as an OCO in Platts MOC, though withdrawn quickly after being offered.

Dated Brent assessment rationale: (PGA page 1297) Of the four BFOE grades, Brent, Forties and Ekofisk were seen in Platts Market On Close assessment process Friday. Brent blend was assessed \$0.37/b lower at Forward Dated Brent minus \$0.20/b. October 16 was assessed at Forward Dated Brent minus \$0.20/b on a competitive traded October 15-17 cargo offer of Forward Dated Brent minus \$0.20/b. A \$0.02/b per day contango structure was applied, with the market proven weaker. Forties was assessed unchanged at Forward Dated Brent plus \$0.02/b, with no competitive transactional interest seen in the MOC. The contango structure was not rolled forward, with the decline in Brent indicating the North Sea complex had weakened. Ekofisk was assessed unchanged at Forward Dated Brent plus \$0.60/b, with no competitive transactional interest seen in the MOC. Oseberg was assessed unchanged at Dated Brent plus \$0.925/b, with no competitive transactional interest seen in the MOC. Within the assessed range of October 5-27, Brent was the most competitive grade. Dated Brent was therefore assessed \$0.215/b lower at Dated Brent minus \$0.20/b.

The above commentary applies to the following market data code: PCAAS00

BFOE assessment rationale: (PGA page 1297) October cash was assessed at \$47.16/b using the frozen October/ November cash spread of minus \$0.88/b. November cash BFOE was assessed at \$48.04/b on a competitive traded bid that traded in tandem with December cash partials, defining a November/December spread. This proved a minus \$0.33/b November EFP, higher than that heard in the day. December was assessed at \$48.55/b on four traded bids and one traded offer. Platts assessed above the last competitive traded offer of \$48.53/b, which did not demonstrate repeatable value. This proved a minus \$0.49/b December EFP, lower than that heard in the day. January

was assessed at \$49.27/b on a flat EFP roll, with the contango roll heard in the day across all three months disproved by trading in Platts MOC.

The above commentary applies to the following market data codes: PCAAP00, PCAAQ00, PCAAR00, PCARR00

CFD assessment rationale: (PGA page 1297) The October 5-9 Brent CFD was assessed at November minus \$0.68/b, or December minus \$1.19/b, immediately above an outstanding bid seen in the Platts Market On Close assessment process at December minus \$1.20/b. The outstanding bid proved value higher than eight earlier trades, all at December minus \$1.20/b or below. October 12-16 was assessed at November minus \$0.66/b, or December minus \$1.17/b, in line with five trades seen in the MOC from offers. A higher trade at December minus \$1.15/b from an offer did not test this level, while value was proved higher than four lower trades by an outstanding bid at December minus \$1.20/b. October 19-23 was assessed at November minus \$0.56/b, or December minus \$1.07/b, between an outstanding bid at December minus \$1.15/b and an outstanding offer at December minus \$1.00/b. October 26-30 was assessed at November minus \$0.44/b, or December minus \$0.95/b, between an outstanding bid of December minus \$1.05/b and an outstanding offer of December minus \$0.80/b.

The above commentary applies to the following market data codes: PCAKA00, PCAKC00, PCAKE00, PCAKG00, AAGLU00, AAGLV00, AALCZ00, AALDA00

North Sea bids/offers/trades: (PGA page 1290)

- NSEA CRUDE MOC: DEAL SUMMARY: Vitol-Total Brent Oct 15-17 Dtd -20 cts.
- NSEA CRUDE MOC: OUTSTANDING: BP offers Forties Oct 19-21 Dtd +40 cts; Total bids Ekofisk Oct 19-23 Dtd +50 cts; Unipet bids Forties Oct 16-22 Dtd -10 cts.
- NSEA CRUDE: MOC: WITHDRAWN: OCO Trafigura offers Ekofisk Oct 19-21 Eko Dtd +80 cts OR Ekofisk Oct 22-24 Dtd +85 cts.
- BFOE CFD: MOC DEAL SUMMARY: Oct 12-16 Dec-1.25 x100

Suncor-SCB; Oct 5-Oct 9 Dec-1.3 x100 Mandara-Chevron; Oct 12-16 Dec-1.2 x100 Vitol-Hartree; Oct 12-16 Dec-1.2 x100 Socar-SCB; Oct 12-16 Dec-1.17 x100 Vitol-Hartree; Oct 12-16 Dec-1.17 x100 Vitol-Noble; Oct 5-Oct 9 Dec-1.25 x100 Vitol-Gunvor; Oct 5-Oct 9 Dec-1.25 x100 Mercuria-Noble; Oct 12-16 Dec-1.17 x100 Vitol-MS; Oct 12-16 Dec-1.15 x100 Mercuria-Noble; Oct 12-16 Dec-1.17 x100 Vitol-Noble; Oct 12-16 Dec-1.17 x100 Vitol-BP; Oct 5-Oct 9 Dec-1.2 x100 Vitol-BP; Oct 5-Oct 9 Dec-1.2 x100 Vitol-Gunvor; Oct 12-16 Dec-1.2 x400 Vitol-SCB; Oct 5-Oct 9 Dec-1.2 x100 Mercuria-Chevron; Oct 5-Oct 9 Dec-1.2 x100 JP Morgan-Chevron; Oct 5-Oct 9 Dec-1.2 x100 Vitol-Chevron.

- BFOE CFD: OUTSTANDING: Oct 5-9 (Dec): Chevron bids -1.20; OMV offers -1.10; Oct 12-16 (Dec): SCB bids -1.20; Mercuria bids -1.22; Statoil bids -1.25; OMV offers -1.15; Vitol offers -1.15; Phillips 66 offers -1.10; Unipet offers -1.10; Oct 19-23 (Dec): Statoil bids -1.15; SCB bids -1.15; Hartree bids -1.20; Mercuria bids -1.20; Mercuria offers -1.00; Socar offers -1.00; OMV offers -1.00; Phillips 66 offers -0.95; Oct 26-30 (Dec): Mercuria bids -1.05; Unipet bids -1.10; OMV bids -1.10; Mercuria offers -0.80; Unipet offers -0.80; OMV offers -0.80; BP offers -0.80.
- CASH BFOE: MOC DEAL SUMMARY: Dec 48.6 x100 Vitol-Total; Dec 48.55 x100 Vitol-Total; Dec 48.55 x100 Vitol-Total; Dec 48.55 x100 Vitol-Total; ; Nov 48.04 x100 Noble-Vitol; Dec 48.55 x100 Vitol-Total; Dec 48.55 x100 Vitol-Total; Dec 48.53 x100 Vitol-Total.
- CASH BFOE: OUTSTANDING: NOV: Shell bids 47.98.

North Sea exclusions: (PGA page 1290) No market data was excluded from the September 25 North Sea crude assessment.

Mediterranean Light/Sweet (PGA page 1295)

CPC Blend and Saharan Blend remained elevated to close the week, though market sources said there was evidence demand for naphtha-rich crude grades could be peaking. November cargoes of Saharan were heard from Dated Brent plus \$0.60-\$0.80/b Friday, though traders said at least one

cargo has been sold lower than that this week. "I do not think the market has really turned," a crude trader said, adding there has been some move to re-market October barrels of Saharan Blend at slightly lower levels. Both Saharan Blend and Kazakhstan's CPC Blend have been reported to be trading at seven-month highs relative to Dated Brent over the past week, due to a combination of a persistently strong gasoline market in Europe despite the winding down of the peak season, and demand for lighter grades to blend with Basrah from Iraq, both Heavy and Light. CPC Blend, in particular, has found support over the first half of the October trading cycle, traders said, due to its facility as a blend grade with Basrah for many end-users in Europe. CPC Blend was heard between Dated Brent plus \$0.60/b and \$0.90/b this week, despite the record provisional loading program scheduled to load in October. A final version, which could see yet more volume injected, was expected to be released late next week. By contrast, more distillate-rich grades like Azerbaijan's Azeri Light and Russia's Siberian Light crude have not found the same support, despite the upcoming peak distillate season, market sources said. While Azeri Light has ticked upward over the week -- levels have been indicated from Dated Brent plus \$2.20-\$2.50/b -- an unexpectedly long Siberian Light program was expected to lead to a further downturn in traded levels for the grade. The provisional loading program for Novorossiisk contained six Siberian Light cargoes in October, four of them clustered in the second half of the schedule.

Mediterranean Sour

Market analysis: (PGA page 1296) Urals differentials tumbled further in European trading Friday, particularly in the Mediterranean, where the much longer loading program in Europe weighed on prices. In the Platts Market on Close assessment process, OMV offered an 80,000 mt Urals cargo, ex-Novorossiisk, loading October 6-10 CIF basis Augusta, to Dated Brent minus \$1.20/barrel without attracting a buyer. Traders said the drop in differentials was

RUSSIAN URALS/ESPO SPOT ASSESSMENTS (\$/barrel) (PGA page 1220)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Urals (Rotterdam)	PCAFW00	45.75-45.78	45.765	+0.235	AAGXJ00	-1.66/-1.64	-1.650 -0.050
Urals (Mediterranean)	PCACE00	46.19-46.21	46.200	-0.090	AAGXX00	-1.22/-1.21	-1.215 -0.375
Urals (Ex-Novorossiisk)	AAGZS00	44.85-44.87	44.860	-0.090	AAHPH00	-2.56/-2.55	-2.555 -0.375
Urals (Ex-Novo) FOB 80kt	AAOTH00	45.21-45.24	45.225	-0.090	AAOTI00	-2.20/-2.18	-2.190 -0.375
Urals (Ex-Baltic)	AAGZT00	44.91-44.93	44.920	+0.235	AAHPI00	-2.50/-2.49	-2.495 -0.050
Urals (Primorsk)	AAVH00	44.87-44.90	44.885	+0.235	AAWVI00	-2.54/-2.52	-2.530 -0.050
Urals RCMB (Recombined)	AALIN00	46.01-46.03	46.020	-0.280			
ESPO (FOB Kozmino)	AARWD00	46.37-46.39	46.380	+0.300	AARWE00	-1.20/-1.18	-1.190 +0.010

URALS MED/NWE CFD ASSESSMENTS (\$/barrel)

				Urals CFD	Mid	Change
Mediterranean (PPE page 1616)						
Urals Med CFD (Oct)				AAMDU00	-1.11/-1.09	-1.100 0.000
Urals Med CFD (Nov)				AAMEA00	-0.96/-0.94	-0.950 0.000
Urals Med CFD (Dec)				UMCM003	-0.96/-0.94	-0.950 0.000
Northwest Europe (PPE page 1618)						
Urals NWE CFD (Oct)				UNCM001	-1.83/-1.81	-1.820 -0.120
Urals NWE CFD (Nov)				UNCM002	-1.81/-1.79	-1.800 -0.100
Urals NWE CFD (Dec)				UNCM003	-1.81/-1.79	-1.800 -0.100

MEDITERRANEAN SPOT CRUDE ASSESSMENTS (\$/barrel)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Azeri and BTC (PGA page 1222)							
Azeri Lt CIF	AAGZX00	49.73-49.77	49.750	+0.235	AAHPM00	2.29/2.31	2.300 -0.050
Azeri Lt FOB Ceyhan	AAUFM00	48.69-48.72	48.705	+0.210	AAUFN00	1.25/1.26	1.255 -0.075
Azeri Lt FOB Ceyhan 80KT	AAUFL00	48.99-49.02	49.005	+0.235	AAUFL00	1.55/1.56	1.555 -0.050
Azeri Lt FOB	AALWD00	48.53-48.56	48.545	+0.235	AALWF00	1.09/1.10	1.095 -0.050
Azeri Lt FOB 80KT	AATHM00	48.86-48.89	48.875	+0.235	AATHN00	1.42/1.43	1.425 -0.050
BTC FOB Ceyhan	AAUFH00	48.84-48.87	48.855	+0.220	AAUFJ00	1.40/1.41	1.405 -0.065
Black Sea (PGA page 1220)							
Siberian Light CIF	AAGZW00	47.65-47.68	47.665	+0.135	AAHPK00	0.24/0.26	0.250 -0.150
CPC Blend CIF	AAGZU00	48.15-48.18	48.165	+0.335	AAHPL00	0.74/0.76	0.750 +0.050
CPC Blend FOB	AALVX00	46.96-46.99	46.975	+0.335	AALVZ00	-0.45/-0.43	-0.440 +0.050
CPC FOB 80KT	AAOFV00	47.28-47.31	47.295	+0.335	AAOFW00	-0.13/-0.11	-0.120 +0.050
Kumkol	AAHMP00	47.80-47.83	47.815	+0.235	AALOW00	0.39/0.41	0.400 -0.050
Middle East & North Africa (PGA page 1234)							
Suez Blend	PCACA00	43.57-43.59	43.580	-0.090	AAGYD00	-3.84/-3.83	-3.835 -0.375
Es Sider	PCACO00	45.55-45.58	45.565	+0.285	AAGYH00	-1.86/-1.84	-1.850 0.000
Kirkuk	AAEJD00	42.10-42.13	42.115	+0.235	AAGYF00	-5.31/-5.29	-5.300 -0.050
Iranian Light (Sidi Kerir)	PCABI00	46.03-46.06	46.045	+0.275	AAGXZ00	-1.38/-1.36	-1.370 -0.010
Iranian Heavy (Sidi Kerir)	PCABH00	44.63-44.66	44.645	+0.275	AAGYB00	-2.78/-2.76	-2.770 -0.010
Saharan Blend	AAGZY00	48.15-48.18	48.165	+0.235	AAHPN00	0.74/0.76	0.750 -0.050
Zarzaitine	AAHM000	48.15-48.18	48.165	+0.235	AALOY00	0.74/0.76	0.750 -0.050
Syrian Light FOB	AAHMM00	47.59-47.61	47.600	-0.090	AALOU00	0.18/0.19	0.185 -0.375
Syrian Heavy FOB	AAHMN00	43.79-43.81	43.800	-0.090	AALOV00	-3.62/-3.61	-3.615 -0.375

not unexpected given the additional volume currently scheduled to load in October -- the provisional program, released mid-way through European trading Thursday, is currently set to be 610,000 mt and 127,186 b/d longer than September -- particularly given the steady stream of heavy, sour crude from Iraq that has been moving into the Mediterranean. Traders said there was still a heavy supply of Iraqi Basrah -- both Light and Heavy -- available in Europe and at prices still highly competitive with Urals. Basrah Light is reportedly being sold at premiums of between \$0.10/b and \$0.20/b to the October OSP, down from premiums of more than a dollar seen just last month, while cargoes of Basrah Heavy continue to be offered at discounts of approximately \$1.50/b to the October OSP. Traders said that while margins in Europe remain well-supported, the quantity of available volume could lead to a weaker Urals market throughout the early October trading cycle. In the Northwest European Urals market, differentials for CIF Augusta cargoes were heard to be holding largely steady in European trading Friday, holding above Dated Brent minus \$1.70/b. "There is a general feeling that the market is on the longer side," a crude trader said. "The [Northwest European Urals] market has been rangebound for so long -- for the last three months we really haven't seen much movement." The October loading program out of the Baltic Sea is currently 100,000 mt longer than in September, with total exports out of Primorsk and Ust-Luga at 6.404 million mt. In other news, traders said Russia's Surgutneftegaz is offering two Urals cargoes -- an October 12-13 and October 16 out of Ust-Luga -- via tender closing Monday.

Urals CIF Augusta differential assessment rationale: (PGA page 1287) URALS MED: CIF Augusta Urals cargoes fell \$0.375/b from Thursday's close to Dated Brent minus \$1.215/b. In the Platts Market On Close assessment process, an OMV offer for an 80,000 mt Urals cargo, ex-Novorossiisk, loading October 6-10, CIF basis Augusta, was left outstanding at the close at Dated Brent minus \$1.20/b. The offer was seen to test the market and a value of minus \$1.25/b was used on October 9, the most competitive date of the laycan

with an available cargo. A contango of \$0.01 b/d was applied across the full 10-25 day Platts assessment process.

The above commentary applies to the following market data code: AAGXX00

Urals CIF Med assessment rationale: (PGA page 1287) The Urals CIF Med assessment reflected the value of the Mediterranean Dated Brent Strip (AALDF00) plus the Urals CIF Augusta differential assessment (AAGXX00).

The above commentary applies to the following market data code: PCACE00

Urals RCMB (Recombined) assessment rationale: (PGA page 1287) The Urals RCMB (Recombined) assessment reflected the value of the Platts Dated Brent assessment (PCAAS00) plus the Urals CIF Augusta differential assessment (AAGXX00). The above commentary applies to the following market data code: AALIN00.

The above commentary applies to the following market data code: AALIN00

Urals CIF Rdam assessment rationale: (PGA page 1287) URALS NWE: CIF Rotterdam Urals cargoes fell \$0.05/b from Thursday's close. The full provisional loading program for October is slightly longer than September, belying market concerns of a shorter schedule after the first 10 days proved to be significantly shorter out of Primorsk. However, demand in Northwest Europe has remained consistent amid strong refinery margins and a limited maintenance season in the region. There were no bids or offers in the Platts Market On Close Assessment Process.

The above commentary applies to the following market data code: PCAFW00

ESPO FOB Kozmino Mo01 London assessment rationale: (PGA page 1286) The ESPO FOB Kozmino Mo01 London time assessment was derived using the following assessments: Third month Cash BFOE London: \$48.55/barrel. Code PCAAR00. Third month Cash BFOE Asia: \$48.43/barrel. Code PCAJ100. Second month Cash Dubai: \$45.51/barrel.

Code PCAAU00. ESPO differential Asia Mo01: \$0.75/barrel. Code AASEU00. Forward Dated Brent 15-45 days ahead (the 15-45 Day Dated Strip) \$47.565/barrel. Code AALGM00. The ESPO FOB Kozmino Mo01 London time assessment was derived using the following calculation: The sum of Third month Cash BFOE London: \$48.55/barrel and Third month Cash BFOE Asia: \$48.43/barrel equals: \$0.12/barrel. The sum of Second month Cash Dubai: \$45.51/barrel and \$0.12/barrel equals: \$45.63/barrel. The sum of the ESPO differential Asia Mo01: \$0.75/barrel and \$45.63/barrel equals the ESPO outright price assessment of \$46.38/barrel. The sum of the ESPO outright assessment and forward Dated Brent 15-45 days ahead (the 15-45 Day Dated Strip) equals the ESPO London time differential.

The above commentary applies to the following market data code: AARW000

Med Dated Brent Strip 13-28 Day assessment rationale:

(PGA page 1287) 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 and BFOE CFD differentials.

The above commentary applies to the following market data code: AALDF00

Urals Mediterranean bids/offers/trades: (PGA page 1288)

- URALS MED MOC: DEAL SUMMARY: No deals.
- URALS MED MOC: OUTSTANDING INTEREST: OMV OFFERS Urals Med CIF Crg Novo - bss Augusta 10-25, October 6-October 10 100% Dated Brent Dated Brent BL+5 \$-1.20 for 80000-80000 "Payment 30 days from B/L, vessel Lady M"
- URALS MED MOC: WITHDRAWN: None.
- URALS NWE MOC: DEAL SUMMARY: No deals.
- URALS NWE MOC: OUTSTANDING INTEREST: None.
- URALS NWE MOC: WITHDRAWN: None.

Urals Mediterranean exclusions: (PGA page 1288) No market data was excluded from the September 25 assessment process.

West Africa (PGA page 1294)

WEST AFRICA: Trading was muted to end the week in the West African crude markets. Thin spot trading continued to be the theme of the week as a result of multiple tenders out in the market as well as increased freight rates, which also curbed interest in WAF barrels, said traders. Freight rates in particular were slowing down spot trading, said trading sources. Suezmax rates on West Africa to UK Continent routes were assessed at Worldscale 100 Wednesday and Thursday, more than w20 higher than Tuesday's assessment. The sharp increase was as a result of strong demand for ships in the WAF region, as well as continued issues and delays over the 'letter of comfort' required for ships loading in Nigeria. "It all has to do with the letters of comfort -- once there are delays, rates go up," said one crude trader. While Nigerian and Angolan differentials have remained relatively stable over the past week, if freight rates remain high, it could put pressure on value, said traders. "Value could drop if [WAF] levels remain strong -- so it's to be followed as direction is not totally clear," said one European crude trader. VLCC rates have also gone up in recent weeks, said traders -- particularly on the popular WAF-Far East route, which has increased from w40 September 1 to w63.5 September 24 -- a more gradual increase than that seen in Suezmaxes. "VLCCs have gone up in the last couple of weeks," said one trader. "WAF is now \$1 more per barrel going east than last month," he said, adding that it could encourage Far East traders to look locally for November buying. Despite a slower start to buying for Angola's November program, several spot market transactions were seen in Angola to end the week, said traders, with major buyer Unipet said to have picked up three spot cargoes. Additionally, Angola's Sonangol has allocated nine crude oil cargoes for November loading to five term buyers, with term volume reaching 8.6 million barrels, or 16.2% of the total November volume, trading sources said. Unipet has been allocated five cargoes on term, comprising 4.8 million barrels, traders said, while Indonesia's Pertamina, China National Offshore Oil Corp.

WEST AFRICAN SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 1230)

			Mid	Change	Spread vs fwd Dated Brent		Mid	Change
Nigeria Spot Crude Assessments								
Bonny Light	PCAI00	49.17-49.21	49.190	+0.360	AAGX00	1.09/1.11	1.100	0.000
Qua Iboe	PCAI00	49.32-49.36	49.340	+0.360	AAGX00	1.24/1.26	1.250	0.000
Forcados	PCABC00	49.22-49.26	49.240	+0.360	AAGXP00	1.14/1.16	1.150	0.000
Agbami	AAQZ00	47.47-47.51	47.490	+0.360	AAQZ00	-0.61/-0.59	-0.600	0.000
Escravos	AAEIZ00	48.52-48.56	48.540	+0.360	AAGXR00	0.44/0.46	0.450	0.000
Brass River	AAEJB00	47.67-47.71	47.690	+0.360	AAGXV00	-0.41/-0.39	-0.400	0.000
Akpo	PCNGA00	47.47-47.51	47.490	+0.360	PCNGB00	-0.61/-0.59	-0.600	0.000
Bonga	PCNGC00	48.92-48.96	48.940	+0.360	PCNGD00	0.84/0.86	0.850	0.000
Usan	AAUQ00		46.090	+0.360	AAUR00		-2.000	0.000
Erha	AAUO00		49.240	+0.360	AAUP00		1.150	0.000
Angola spot crude assessments (\$/barrel) <small>(PGA page 1232)</small>								
Cabinda	PCAFD00	46.67-46.71	46.690	+0.360	AAGT00	-1.41/-1.39	-1.400	0.000
Nemba	AAQYZ00	46.22-46.26	46.240	+0.360	AAQZA00	-1.86/-1.84	-1.850	0.000
Dalia	AAQYX00	44.82-44.86	44.840	+0.360	AAQYY00	-3.26/-3.24	-3.250	0.000
Girassol	AASNL00	47.52-47.56	47.540	+0.360	AASJD00	-0.56/-0.54	-0.550	0.000
Hungo	AASLJ00	44.22-44.26	44.240	+0.360	AASJF00	-3.86/-3.84	-3.850	0.000
Kissanje	AASLK00	46.67-46.71	46.690	+0.360	AASJE00	-1.41/-1.39	-1.400	0.000
Pazflor	PCNGG00	44.82-44.86	44.840	+0.360	PCNGH00	-3.26/-3.24	-3.250	0.000
Plutonio	PCNGI00	45.92-45.96	45.940	+0.360	PCNGJ00	-2.16/-2.14	-2.150	0.000
Ghana spot crude assessments <small>(PGA page 1230)</small>								
Jubilee	AAUS00		47.790	+0.360	AAUT00		-0.300	0.000
Republic of Congo spot crude assessments								
Djeno	PCNGE00	43.87-43.91	43.890	+0.260	PCNGF00	-4.21/-4.19	-4.200	-0.100
Chad spot crude assessments								
Doba	AAUU00		40.740	+0.360	AAUV00		-7.350	0.000

US SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA pages 210 & 214)

			Mid	Change			Mid	Change
Mars (Oct)	AAMBR00	41.81-41.83	41.820	+0.640				
Mars (Nov)	AAMBU00	42.18-42.20	42.190	+0.200				
Mars (Dec)	AAMBX00	42.56-42.58	42.570	+0.110				
Mars/WTI (Oct)	AAGNH00	-3.71/-3.69	-3.700	0.000				
Mars/WTI (Nov)	AAKTH00	-3.41/-3.39	-3.400	-0.400				
Mars/WTI (Dec)	AAMBO00	-3.51/-3.49	-3.500	-0.400				
WTI-Delta	AAEJK00	-0.24/-0.22	-0.230	+0.070				
P-Plus WTI	PCACI00	3.14/3.16	3.150	+0.070				
P-5 WTI	AAFEN00		42.290	+0.810				
P-5 WTI is a crude oil postings-based index as of 5:30 p.m. local New York time. Posted prices by the following companies are used in the index: Phillips66, Plains, Sunoco, Shell, and Valero.								
			Mid	Change	Spread vs 1st line WTI		Mid	Change
WTI (Midland)	PCACJ00	46.26-46.28	46.270	+0.570	AAGV00	0.74/0.76	0.750	-0.070
WTS (1st month)	PCACK00	47.36-47.38	47.370	+0.640	AAGWB00	1.84/1.86	1.850	0.000
WTI MEH	AAVRG00		46.470	+0.640	AAVRH00		0.950	0.000
Eugene	PCAF00	42.86-42.88	42.870	+0.640	AAGWD00	-2.66/-2.64	-2.650	0.000
Bonito	PCAF00	42.86-42.88	42.870	+0.640	AAGWF00	-2.66/-2.64	-2.650	0.000
SGC	AASOI00	42.96-42.98	42.970	+0.590	AASOJ00	-2.56/-2.54	-2.550	-0.050
Poseidon	AABHK00	41.51-41.53	41.520	+0.990	AAGWL00	-4.01/-3.99	-4.000	+0.350
LLS (1st month)	PCABN00	48.34-48.36	48.350	+1.470	AAGWN00	2.82/2.84	2.830	+0.830
HLS (1st month)	PCABD00	45.86-45.88	45.870	+1.490	AAGWP00	0.34/0.36	0.350	+0.850
Wyoming Sweet	PCACM00	44.61-44.63	44.620	+0.640	AAGWR00	-0.91/-0.89	-0.900	0.000
Thunder Horse	AAWZ00	43.01-43.03	43.020	+0.190	AAWZL00	-2.51/-2.49	-2.500	-0.450

(CNOOC) and US oil companies Phillips 66 and Valero were allocated one term cargo each. Angola's Dalia was heard offered at Dated Brent minus \$2.50/barrel. Elsewhere in the region, values for October cargoes of Congolese grade Djeno were heard at Dated Brent minus 4.50/b. Djeno was one of the grades that IOC took in its most recent tender, said traders. A source with knowledge of the matter said Total won the tender with a VLCC of Nigeria's Erha and Congo's Djeno.

US MOC Commentary (PGA pages 291 & 287)

Non-MOC Trades Reported: LLS: Oct heard traded between WTI + \$2.80/b and + \$2.85/b (31,000 bls X 5) LLS: Oct heard traded at WTI + \$2.85/b (31,000 bls)(Last) LLS: Nov heard traded at WTI + \$2.85/b (31,000 bls)(Last) LLS: Oct/Nov Box heard traded at + \$0.05/b (31,000 bls)(Last) WTI MIDLAND: Oct heard traded between WTI + \$0.70/b and + \$0.75/b (31,000 bls X 10) WTI MIDLAND: Oct heard traded at WTI + \$0.75/b (31,000 bls)(Last)

Non-MOC Trades Reported: THUNDER HORSE: Oct heard traded at WTI -\$2.5/b (31,000 bls)(Last) SGC: Oct heard traded at WTI -\$2.5/b (31,000 bls)(Last) WTS MIDLAND: Oct heard traded at WTI +\$1.85/b (31,000 bls)(Last)

US Gulf Coast (PGA pages 290 & 292)

The US Gulf Coast crude market concluded the October cash trading month for physical crude oil amid a lower rig count and an upward revision of the US GDP, triggering a upswing in future contracts, Platts data showed. October WTI cash at Cushing rose 65 cents/b to be assessed at \$45.52/b Friday, with the discount to the November contract narrowing by 4 cents/b to be assessed at 7 cents/b. The November WTI gained 35 cents/b against Brent crude futures to settle the spread at \$2.94/b. WTI crude ex-Midland, Texas, dropped 7 cents/b to be assessed at WTI cash plus 75 cents/b amid the looming Basin pipeline maintenance 10-day period in November. Midland quality

US SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA pages 210 & 214)

			Mid	Change		Mid	Change
Spread vs 2nd line WTI							
WTS (2nd month)	AAURG00	47.03-47.05	47.040	+0.600	AAURH00	1.44/1.46	1.450 0.000
LLS (2nd month)	AAURC00	48.43-48.45	48.440	+0.550	AAURD00	2.84/2.86	2.850 -0.050
HLS (2nd month)	AAURE00	45.91-45.93	45.920	+2.330	AAURF00	0.32/0.34	0.330 +1.730
Basrah Light*	AAEJH00	40.12-40.14	40.130	-0.150	AAGWV00	-5.47/-5.45	-5.460 -0.750

* The assessment is for waterborne barrels of Iraqi Basrah light delivered into the US gulf.

			Mid	Change		Mid	Change
Spread vs Eagle Ford Marker							
Eagle Ford Postings Avg.	AAVAH00		40.900	+0.760	AAVAI00		-7.096 -1.007

Eagle Ford Marker represents the gross product weight of a 47 API Eagle Ford crude barrel adjusted for spot values. The specific product assessments and yield percentages used to calculate the Eagle Ford Marker can be found at <http://www.platts.com/MethodologyAndSpecifications/Oil>. Eagle Ford Postings Average is the daily average of four posted prices for Eagle Ford crude from the following companies: Sunoco, Plains, Flint Hills, and Enterprise.

			Mid	Change		Mid	Change
Spread vs 1st line WTI CMA							
WCS ex-Cushing	AAWTY00	35.40-35.50	35.450	+0.450	AAWTZ00	-10.80/-10.70	-10.750 -0.050
Bakken	AAAPP00		43.150	+0.550	AASRP00		-3.050 +0.050
Bakken Blend Ex-Guernsey	AASRR00	45.74-45.76	45.750	+0.500	AASRV00	-0.46/-0.44	-0.450 0.000
Bakken Blend Ex-Clearbrook	AASRU00	44.69-44.71	44.700	+0.550	AASRW00	-1.51/-1.49	-1.500 +0.050

Bakken Blend ex-Guernsey reflects 38-40 API and 0.2% sulfur. Bakken Blend ex-Clearbrook reflects 38-40 API and 0.2% sulfur. Both grades are assessed versus calendar month average of 1st month NYMEX WTI futures at 3:15 pm ET.

CALIFORNIA SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 214)

			Mid	Change		Mid	Change
Spread to cash WTI							
Line 63/Hynes	PCABM00	48.01-48.05	48.030	+2.040			
Thums/Long Beach	PCACD00	41.87-41.89	41.880	+0.270			
Kern River	PCABJ00	39.57-39.59	39.580	+0.170			
P-Plus Line 63	PCAFV00	1.64/1.66	1.650	-0.100			
ANS/Long Beach	PCAAD00	47.76-47.80	47.780	+0.760	AAGWX00	2.07/2.09	2.080 +0.180

US DOMESTIC CRUDE ASSESSMENTS LONDON CLOSE (\$/barrel) (PGA page 1240)

			Mid	Change		Mid	Change
Spread to NYMEX light sweet crude							
WTI (Oct)	AAQAR00	45.59-45.61	45.600	+1.040	AAQAS00	-NA/NA	NANA NA
WTI (Nov)	AAQAT00	45.66-45.68	45.670	+0.990	AAQAU00	--0.01/0.01	0.000 0.000
WTI (Dec)	AAQAV00	46.14-46.16	46.150	+0.890	AAQAW00	--0.01/0.01	0.000 0.000
Spread to same-month cash WTI							
LLS (Oct)	AAQBB00	47.59-47.61	47.600	+0.590	AAQBC00	1.99/2.01	2.000 -0.450
LLS (Nov)	AAQBD00	48.56-48.58	48.570	+1.190	AAQBE00	2.89/2.91	2.900 +0.200
MARS (Oct)	AAQAX00	41.89-41.91	41.900	+1.440	AAQAY00	-3.71/-3.69	-3.700 +0.400
MARS (Nov)	AAQAZ00	42.66-42.68	42.670	+1.740	AAQBA00	-3.01/-2.99	-3.000 +0.750

AMERICA CLOSSES (\$/barrel) (PGA page 210)

			Mid	Change
Americas Dated Brent	AAQBF00	47.39-47.41	47.400	-0.030

Americas Dated Brent reflects market value for Dated Brent at 3:15pm Eastern Time. Value of Brent futures contracts at US MOC close. *These assessments reflect the value of futures at precisely 1:30 pm ET on the business day preceding the following holidays: Christmas Day, New Years Day, Fourth of July, and Thanksgiving Day.

WTI has been under pressure in September, coming off a September 2 high of plus \$2.35/b. WTI Midland traded 10 times between at WTI cash plus 70 cents/b and plus 75 cents/b, trading last at the latter premium. The Midland sweet discount to its sour counterpart widened by 7 cents/b to \$1.10/b. Midland quality WTI crude grade at Houston terminals remained unchanged to be assessed at front-month WTI cash plus 0.95 cents/b, widening the Midland-Houston spread by 7 cents/b to 20 cents/b. Offshore crude Light Louisiana Sweet gained 83 cents/b to be assessed at WTI cash plus \$2.83/b. The LLS contango was assessed at 2 cents/b as October and November barrels converge. LLS traded five times between at WTI cash plus \$2.80/b and plus \$2.85/b, trading last at plus \$2.85/b. LLS buying interest was left outstanding at plus \$2.50/b while sellers offered on at plus \$3/b before the Platts close. The LLS discount to the ICE Brent futures contract narrowed by \$1.22/b to 18 cents/b, while the LLS-HLS spread narrowed by 2 cents/b to \$2.48/b. The sweet-sour US Gulf Coast spread as represented by the LLS-Mars spread widened by 83 cents/b to \$6.53/b, while the Louisiana-Houston spread, as represented by LLS-LHS also widened by 83 cents/b to \$1.88/b. Heavy Louisiana Sweet gained 85 cents/b to be assessed at WTI cash plus 35 cents/b. HLS was left bid at plus 30 cents/b and offered at plus \$1/b before the Platts close.

Medium sour Mars was left unchanged to be assessed at WTI cash minus \$3.70 cents/b while its market contango widened by 40 cents/b to 30 cents/b, Platts data showed. Buying interest was left at minus \$3.75/b and offered at minus \$3.55/b before the Platts close. Mars coking netback margin against that of Mexico's Maya crude fell from an 11 cents/b premium to a 19 cents/b discount, Platts data showed. Poseidon added 35 cents/b to be assessed at WTI cash minus \$4/b. The Poseidon-Mars spread narrowed by 35 cents/b to 30 cents/b. The Poseidon-LLS spread widened by 48 cents/b to \$6.83/b. Thunder Horse shed 45 cents/b to be assessed at WTI cash minus \$2.50/b. The Thunder Horse-Mars spread narrowed by 45 cents/b to

CANADIAN SPOT CRUDE CARGO ASSESSMENTS (\$/barrel) (PGA page 230)

			Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Terra Nova	AAJU00	47.75-47.86	47.805	+0.300	0.05/0.15	0.100	0.000
Hibernia	AAJK00	47.85-47.96	47.905	+0.300	0.15/0.25	0.200	0.000
White Rose	AAVJ00	48.55-48.66	48.605	+0.300	0.85/0.95	0.900	0.000

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 42-56 days forward.

For further explanation see www.platts.com > Oil > Specifications > Crude oil specifications.

CANADIAN SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 230)

			Mid	Change	Spread vs Canada basis	Mid	Change
Lloyd Blend	AALRK00	32.10-32.20	32.150	+0.450	-14.10/-14.00	-14.050	-0.050
Mixed Sweet	AALRR00	43.15-43.25	43.200	+0.450	-3.05/-2.95	-3.000	-0.050
Light Sour Blend	AALRX00	41.70-41.80	41.750	+0.450	-4.50/-4.40	-4.450	-0.050
Midale	AAUC00	38.40-38.50	38.450	+0.450	-7.80/-7.70	-7.750	-0.050
Condensates	AALSF00	45.35-45.45	45.400	+0.500	-0.85/-0.75	-0.800	0.000
Syncrude Sweet Prem.	AASOK00	45.70-45.80	45.750	+0.450	-0.50/-0.40	-0.450	-0.050
WCS Hardisty	AAPP00	32.20-32.30	32.250	+0.450	-14.00/-13.90	-13.950	-0.050
Cold Lake Hardisty	AASZX00	30.95-31.05	31.000	+0.450	-15.25/-15.15	-15.200	-0.050
WTI CMA (1st mo)	AAVSN00		46.200	+0.500			

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	40.66-40.71	40.685	+0.050	-5.325	-8.700	-7.475
Roncador	AAQTL00	41.56-41.61	41.585	-0.150	-4.425	-7.800	-6.575
Santa Barbara	AAITD00	52.89-52.93	52.910	+0.535	6.900	3.525	4.750
Loreto	PCAGH00	39.24-39.28	39.260	+0.335	-6.750	-10.125	-8.900
Oriente	PCADE00	38.99-39.03	39.010	+0.335	-7.000	-10.375	-9.150
Napo	AAMCA00	34.24-34.28	34.260	+0.335	-11.750	-15.125	-13.900
Marlim	AAITF00	42.06-42.11	42.085	-0.150	-3.925	-7.300	-6.075
Castilla Blend	AAVEQ00	38.06-38.11	38.085	-0.150	-7.925	-11.300	-10.075
Magdalena	AAWFR00	37.71-37.76	37.735	-0.150	-8.275	-11.650	-10.425
Vasconia	PCAGI00	41.21-41.26	41.235	-0.150	-4.775	-8.150	-6.925
Mesa 30	AAITB00	46.71-46.76	46.735	-0.150	-0.405	-2.650	-1.425
Latin America WTI strip	AAXB00		46.010				
Latin America Futures Brent strip	AAXBQ00		49.385				
Latin America Dated Brent strip	AAXBR00		48.160				

PLATTS EURO-DENOMINATED ASSESSMENTS (€/barrel) (PGA page 1252)

			Mid	Change
European crude oil benchmarks				
Dated Brent	AAPYR00	42.160-42.170	42.165	+0.355
Urals (Mediterranean)	AAPYS00	41.230-41.250	41.240	+0.185
US crude oil benchmarks				
WTI (Oct)	AAPYT00	40.700-40.720	40.710	+1.190
Mars (Oct)	AAPYU00	37.400-37.410	37.405	+1.520

Euro/US\$ forex rate: 1.1202. Platts Euro denominated crude oil assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time.

\$1.20/b. Thunder Horse was left bid at WTI minus \$2.75/b. Southern Green Canyon lost 5 cents/b to be assessed at WTI cash minus \$2.55 cents/b, narrowing the SGC-Mars spread narrowed by 5 cents/b to \$1.15/b. SGC traded at minus \$2.50/b but then re-offered at the same level before the Platts close. WTS at Midland was left unchanged at WTI cash plus \$1.85/b, where it traded.

US Shale [\(PGA page 295\)](#)

Bakken crude differentials were nearly unchanged Friday, at the end of a quiet week. Bakken at Guernsey remained flat at the NYMEX calendar-month average minus 45 cents/b. Bakken at Clearbrook was assessed 5 cents/b higher at minus \$1.55/b, following market indications. US active oil rigs fell by four to 640 for the week ended Friday, Baker Hughes said in its weekly report. Total oil and gas rigs are down by 1,093, or 57%, the same week last year.

US West Coast [\(PGA page 294\)](#)

Alaska North Slope crude was unchanged Friday, assessed at a \$1.90/b premium over the October calendar monthly average NYMEX light crude futures contract. However, the differential was normalized to reflect the WTI CMA value at 3:15 pm EDT, resulting in an upswing of 18 cents/b to a \$2.08/b premium over the Platts 3:15 pm EDT October WTI CMA assessment. Two cargoes of Alaska North Slope were reported Thursday after the close, one for 735,000 barrels at the calendar month average for November ICE Brent crude futures minus \$1.60/b and the other for 300,000 barrels at the calendar month average for November NYMEX light crude plus \$2/b. Both cargoes were done delivered into the US West Coast for the month of November. The front-month Dubai-WTI swaps spread narrowed Friday, ending the week down 47 cents/b at 5 cents/b, Platts data showed. A weakening Dubai swap is indicative of lower demand in Asia and this typically drives WTI differentials lower. Crude oil stocks on the West Coast fell 2.5 million barrels to 50.634 million barrels for the week

RUBLE-DENOMINATED RUSSIAN ASSESSMENTS (Rb/barrel) [\(PGA page 1224\)](#)

			Mid	Change
Russian crude oil benchmarks				
Urals FOB Novorossiysk	AAUJP00	2940.860-2942.170	2941.515	-42.580
Urals FOB Ventspils	AAUJQ00	2944.790-2946.110	2945.450	-21.055
Urals FOB Novorossiysk 80kt	AAUJR00	2964.460-2966.430	2965.445	-42.880
Urals CIF Mediterranean	AAUJS00	3028.720-3030.040	3029.380	-43.675
Urals CIF Rotterdam	AAUJT00	2999.870-3001.840	3000.855	-21.745

US\$/Ruble forex rate: 65.5710. 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	269.02-269.86	269.441	+3.239
Mixed Sweet	AALRT00	361.63-362.47	362.049	+3.054
Light Sour Blend	AALRZ00	349.48-350.32	349.897	+3.078
Midale	AAUCD00	321.82-322.66	322.240	+3.133
Condensates	AALSH00	380.07-380.91	380.486	+3.436
Syncrude Sweet	AASOL00	383.00-383.84	383.420	+3.011
WCS Hardisty	AAPPO00	269.86-270.70	270.279	+3.237
Cold Lake Hardisty	AASZY00	259.38-260.22	259.804	+3.259

DAILY US\$ VS EURO EXCHANGE RATE [\(PGA page 1151\)](#)

		Mid	Change
September 25, 2015	AAF000	1.1202	-0.007

ASIA CLOSE BRENT AND WTI SPOT ASSESSMENTS (\$/barrel) [\(PGA page 2210\)](#)

			Mid	Change
Brent (Oct)	PCAJE00	47.06-47.10	47.080	+0.080
Brent (Nov)	PCAJG00	47.94-47.98	47.960	+0.080
Brent (Dec)	PCAJI00	48.43-48.47	48.450	+0.020
Brent (Jan)	PCAJ000		49.160	+0.010
WTI (Nov)	AAFFU00	45.30-45.34	45.320	+0.420
WTI (Dec)	AAFFW00	45.37-45.41	45.390	+0.250
WTI (Jan)	AAFFY00	45.85-45.89	45.870	+0.180

OMAN OSPS AND DERIVATIVES (\$/barrel) [\(PGA pages 2658 & 2210\)](#)

			Mid	Change
Oman/Dubai Swap (Oct)	AAIHJ00	0.34/0.38	0.360	+0.020
Oman/Dubai Swap (Nov)	AAIHL00	0.21/0.25	0.230	-0.030
Oman/Dubai Swap (Dec)	AAIHN00	0.21/0.25	0.230	-0.030
Oman cash/OSP (Nov)	PCABT00	-1.36/-1.32	-1.340	+0.080
Oman Swap (Oct)	AAHZP00	46.08-46.12	46.100	+0.250
Oman Swap (Nov)	AAHZR00	46.83-46.87	46.850	+0.200
Oman Swap (Dec)	AAHZT00	47.39-47.43	47.410	+0.160

DAILY OPEC BASKET PRICE (\$/barrel) [\(PGA page 207\)](#)

		Mid	Change
September 24, 2015	AAEUQ00	44.480	-0.210

ended September 18, according to the most recent data from the US Energy Information Administration.

Canada (PGA pages 296 & 298)

East Coast Canadian crude differentials held steady Friday as the November Brent-WTI crude spread marginally narrowed by 3 cents. More than half of the November cargoes have been sold, according to a market source. In other news, Baker Hughes in its weekly report said the Canadian rig count is down by six from last week to 176. The falling rig count likely precedes a dip in overall production, which could help support future differentials. Hibernia, White Rose and Terra Nova were assessed at Dated Brent plus 20 cents/b, plus 90 cents/b and plus 10 cents/b, respectively, with the November ICE Brent-NYMEX spread widening 80 cents/b to \$3.31/b to be assessed by Platts at 10:30 am CDT.

A shrinking November ICE Brent-NYMEX light crude oil futures contract pushed differentials for West Canada crude grades lower during a quiet Friday. The Brent-WTI crude spread narrowed by 35 cents/b to be assessed by Platts at \$2.94 at 2:15 pm CDT. Regional heavy crude benchmark Western Canadian Select shed 5 cents to be assessed at the calendar month average of the front-month NYMEX light crude oil futures contract (WTI CMA) minus \$13.95/b. Following suite, Cold Lake and Lloyd Blend fell by the same amount to minus \$15.20 and minus \$14.05/b. Light crude regional benchmark Syncrude Sweet Premium similarly fell 5 cents and was assessed at WTI CMA minus 45 cents/b. Mixed Sweet, Light Sour Blend and Midale increased by the same amount to minus \$3/b, minus \$4.45/b and minus \$7.75/b, respectively.

Latin America (PGA page 288)

Latin American crudes were lower Friday, dragged down by lower overall demand, rising crude stocks in the US Gulf Coast and a weakening Dubai swap value.

FUTURES SETTLEMENTS

	Settlement	Change	Low	High	Volume	Open interest	PNT***
NYMEX Light Sweet crude (\$/barrel) (PGA page 705)							
Nov 15	NMCL001	45.70	+0.79	44.86	46.38	310095	455137
Dec 15	NMCL002	46.19	+0.71	45.42	46.88	100700	256231
Jan 16	NMCL003	46.80	+0.62	46.17	47.47	49890	108776
Feb 16	NMCL004	47.44	+0.55	46.88	48.05	18535	76552
Total	NMCL000					565943	XNCLP00 14472
ICE Brent (\$/barrel) (PGA page 704)							
Nov 15	ICLL001	48.60	+0.43	47.86	49.10	215519	258565
Dec 15	ICLL002	49.27	+0.41	48.52	49.76	143408	367462
Jan 16	ICLL003	49.99	+0.40	49.23	50.46	56943	201947
Feb 16	ICLL004	50.71	+0.39	50.00	51.16	30220	118983
Total	ICLL000					560560	XILLP00 11593
ICE WTI (\$/barrel) (PGA page 704)							
Nov 15	ICIC001	45.70	+0.79	44.88	46.35	45071	82590
Dec 15	ICIC002	46.19	+0.71	45.50	46.83	38809	94168
Jan 16	ICIC003	46.80	+0.62	46.26	47.41	17397	26792
Feb 16	ICIC004	47.44	+0.55	46.90	48.03	7322	8265
Total	ICIC000					122895	XIICP00 4096
ICE Middle East Sour crude (\$/barrel) (PGA page 704)							
Nov 15	ICOQ001	45.28	+0.43	45.28	45.28	0	0
Dec 15	ICOQ002	46.43	+0.43	46.43	46.43	0	0
Jan 15	ICOQ003	47.30	+0.43	47.30	47.30	0	0
Feb 15	ICOQ004	48.15	+0.43	48.15	48.15	0	0
Total Volume	ICOQ000					0	XIQP00
ICE BWAWE (\$/barrel) (PGA page 704)							
BWAWE data refer to previous day.							
Nov 15	XIBW001	47.96					
Dec 15	XIBW002	48.65					
DME Oman crude (\$/barrel) (PGA pages 702 & 2710)							
Nov 15	XDOA001	44.32	-0.20			2871	
Nov 15	DMOQ001	44.52	-0.18	43.56	45.01	3276	20924
Dec 15	DMOQ002	45.57	+0.09	45.49	46.50	29	216
Jan 15	DMOQ003	46.48	+0.30	46.48	46.48	5	5
Feb 15	DMOQ004	47.10	+0.22	47.10	47.10	0	10
Total Volume	DMOQ000					6510	XDOQP00 4100
NYMEX ULSD (\$/gal) (PGA page 705)							
Oct 15	NMHO001	1.5225	-0.0012	1.5046	1.5457	19585	24055
Nov 15	NMHO002	1.5456	+0.0016	1.5267	1.5667	48635	89571
Dec 15	NMHO003	1.5649	+0.0030	1.5463	1.5842	24137	66297
Jan 15	NMHO004	1.5849	+0.0042	1.5658	1.6021	14411	39458
Total	NMHO000					127067	XNHOP00 10220
NYMEX RBOB unleaded gasoline (\$/gal) (PGA page 705)							
Oct 15	NMRB001	1.3959	+0.0307	1.3590	1.4005	27942	28959
Nov 15	NMRB002	1.3793	+0.0280	1.3445	1.3838	49536	131933
Dec 15	NMRB003	1.3541	+0.0257	1.3206	1.3580	24482	69078
Jan 15	NMRB004	1.3558	+0.0256	1.3231	1.3583	11490	35205
Total Volume	NMRB000					136033	XNRBP00 13527

Colombian medium sour Vasconia crude oil fell 40 cents/b to be assessed at the Platts Latin American Brent futures strip value minus \$8.15/b, tracking a similar move by November Mars crude oil barrels in the US Gulf Coast. Vasconia may soon look for outlets in other markets, one trader said, mentioning Europe as the likely alternative as the NYMEX light crude futures contract gained 35 cents/b over Brent. Crude stocks in the US Gulf Coast rose last week by 2.8 million barrels to 230.5 million barrels as US refinery turnarounds reduced crude inputs by 310,000 b/d to 16.2 million b/d, US Energy Information Administration data showed. On the Pacific side, Ecuadorian Oriente crude oil fell 20 cents/b to Platts Latin American WTI futures strip value minus \$7/b, as the front-month Dubai-WTI swaps spread narrowed Friday, ending the week down 47 cents/b at 5 cents/b, Platts data showed. Likewise, Argentinian Escalante crude oil fell as much as Oriente to Platts Latin American Brent futures strip value minus \$8.70/b, following the overall bearish sentiment.

FUTURES SETTLEMENTS

	Settlement	Change	Low	High	Volume	Open interest	PNT***
NYMEX Natural Gas (\$/MMBtu) (PGA page 705)							
Oct 15	NMNG001	2.564	-0.027	2.529	2.607	73238	28472
Nov 15	NMNG002	2.631	-0.043	2.600	2.687	124139	294895
Dec 15	NMNG003	2.802	-0.039	2.773	2.852	41622	107546
Jan 16	NMNG004	2.918	-0.040	2.890	2.967	41579	122470
Total Volume	NMNG000					336894	XNNGP00 4460
ICE low sulfur gasoil (\$/mt) (PGA page 704)							
Oct 15	ICL0001	467.00	+1.75	463.00	474.50	52572	124557
Nov 15	ICL0002	469.75	+1.75	465.75	477.00	83817	154571
Dec 15	ICL0003	471.75	+1.75	467.75	478.75	55219	121228
Jan 16	ICL0004	475.75	+1.75	471.75	482.25	18646	52228
Total Volume	ICL0000					243030	XILOP00 15321

*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. ***Privately Negotiated Trade values found on PGA page 710

FUTURES AT PLATTS' MARKET ON CLOSE (\$/barrel)

Singapore*		London*		Houston*		Singapore*		London*		Houston*	
ICE Brent						NYMEX WTI					
Nov	XILLA01 94.81	AAYES00 95.65	AAQB000 94.11	M1	XNCLA01 91.55	AASCR00 92.64	NYCRM01 90.70				
Dec	XILLA02 95.45	AAYET00 96.25	AAQBH00 94.76	M2	XNCLA02 90.69	AASC500 91.63	NYCRM02 89.74				
Jan		AAZY00 96.73	AAZZ00 95.27	M3			NYCRM03 89.13				
Feb		AAYAM00 97.16	AAVAL00 95.73	M4			NYCRM04 88.68				
ICE Brent NX						Oman					
Nov		AAZL00 95.65		Dec	XDOA001 94.04						
Dec		AAZM00 96.25		Volume	XDOAV01 1162						
Jan		AAZN00 96.73									
Feb		AAYAP00 97.16									

*Singapore and London MOC close at precisely 16:30 local time while Houston MOC closes at precisely 14:15 local time. MOC times are usually earlier on the day preceding major local holidays.



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Editorial: Richard Swann, Editorial Director, Americas Oil: +1-713-658-3273; Jonty Rushforth, Editorial Director, Asia & Middle East: +65-6530-6581; Christian Schmollinger, Senior Managing Editor, Asia & Middle East, Oil Products, +65-6530-6429; Daniel Colover, Managing Editor, Asia & Middle East, Crude Oil, +65-6530-6501; Andrew Bonnington, Editorial Director, Europe, +44-20-7176-6164; Benno Spencer, Managing Editor, Europe, Crude Oil, +44-20-7176-6299.

Client services information: North America: 800-PLATTS8 (800-752-8878); direct: +1-212-904-3070, Europe & Middle East: +44-20-7176-6111, Asia Pacific: +65-6530-6430, Latin America: +54-11-4121-4810, E-mail: support@platts.com

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NEWS (PGA page 100)**Myanmar's oil import infrastructure building picks up pace as demand rises**

Myanmar is looking to build a slew of new oil storage terminals and jetties near its former capital Yangon as its small and ageing refineries cannot keep up with rapidly rising demand for refined products. The lifting of several international sanctions in 2012 has led to a sharp rise in cars being imported and sold in the country. With motorcycles and mopeds still banned on Yangon's roads, a city of over 5 million people, the effects of limited investment in transportation infrastructure are being felt with traffic jams that are now on par with other Asian cities such as Bangkok and Jakarta. To cope with the rising demand for oil products, the government, through the Ministry of Energy and private sector companies, has been increasing fuel imports. Myanmar's three ageing state-owned refineries with a total capacity of 51,000 b/d, are all running substantially below capacity and are only able to supply a part of the country's daily fuel requirements. A source close to state-owned Myanma Petrochemical Enterprise, which operates the refineries, said that current operating rates were around 20,000 b/d. While there have been some upgrades at the refineries in recent years through foreign assistance, including help from India, in the short term rising oil products demand is most likely to be met through higher imports, sources in the country said. "Product demand is there and it is a growing [shortage]," an industry source said. "Myanmar [shows] great growth potential." However, there are a number of hurdles still when doing business in Myanmar as the political and economic environment remains complex. Participants both inside and outside the country are waiting to see what happens after the elections that are to be held in November. Data on oil product demand, sales or imports is hard to come by as it is not released on a regular basis by the government. In August, a source close to the Ministry of Energy said that the government sector's monthly sales of

REPORTED SPOT CASH TRANSACTIONS (PGA page 3)

Trans. Date	Cargo month	Spread month	Cargo load range/CFD week	CFD roll week	Crude grade(s)	Reported Status	Outright Price (\$/barrel)	Differential grade/month	Diff. Price (\$/barrel)	Barrels (barrel)	Seller	Buyer
London crude window deals												
1-Oct	Oct	Oct	20 24		Brent CFD	Done		December	-1.2	100000	Petrobras	Total
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.25	100000	Glencore	Total
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.25	100000	Statoil	Total
1-Oct	Oct	Oct	27 31		Brent CFD	Done		December	-1.1	100000	Vitol	Mercuria
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.3	100000	Shell	Total
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.3	100000	Shell	Total
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.3	100000	Shell	Total
1-Oct	Oct	Oct	20 24		Brent CFD	Done		December	-1.3	100000	Vitol	Mercuria
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.35	100000	Statoil	Mercuria
1-Oct	Oct	Oct	13 17		Brent CFD	Done		December	-1.35	100000	Statoil	Mercuria
1-Oct	Dec	Dec			Cash BFOE	Done	96.11			100000	Vitol	Hetco
1-Oct	Dec	Dec			Cash BFOE	Done	96.1			100000	Shell	Arcadia
1-Oct	Nov	Nov			Cash BFOE	Done	95.5			100000	Trafigura	Chevron
1-Oct	Dec	Dec			Cash BFOE	Done	96.1			100000	Shell	Hetco
1-Oct	Nov	Nov			Cash BFOE	Done	95.5			100000	Trafigura	Chevron
1-Oct	Nov	Nov			Cash BFOE	Done	95.52			100000	Noble	Chevron
1-Oct	Nov	Nov			Cash BFOE	Done	95.52			100000	Total	Chevron
North Sea, Mediterranean and West African deals												
1-Oct	Oct	Oct	11 15		Urals	Done		Dated Brent	-1.3	578400	Vitol	Litasco
1-Oct	Oct	Oct	13 17		Brent CFD	reported		December	-1.26	100000	Glencore	Petroineos
1-Oct	Oct	Oct	20 24		Brent CFD	reported		December	-1.15	100000	Statoil	BNP
1-Oct	Oct	Oct	20 24		Brent CFD	reported		December	-1.15	200000	ENI	BNP
1-Oct	Oct	Oct	20 24		Brent CFD	reported		December	-1.2	200000	ENI	BNP
1-Oct	Oct	Oct	20 24		Brent CFD	reported		December	-1.28	200000	Glencore	Gunvor
1-Oct	Oct	Oct	20 24		Brent CFD	reported		December	-1.3	100000	Litasco	Gunvor
1-Oct	Oct	Oct	27 31		Brent CFD	reported		December	-1.08	100000	Petroineos	Gunvor
1-Oct	Oct	Oct	13 17	20 24	Brent CFD	reported			-0.08	300000	Trafigura	Noble
PG/Asia Pacific Rim deals												
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Unipecc	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Unipecc	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil
1-Oct	Dec				Dubai Partial	Done	93.5			25000	Shell	Chinaoil

gasoil amounted to 6 million gal/month or around 4,600 b/d. Gasoline imports by the ministry are less regular. Production of naphtha at the three state-owned refineries stood around 7 million gal/month or 5,400 b/d, he added. Private sector sales of diesel are higher, around 16 million gal/month or 12,300 b/d, while sales of gasoline around 13 million gal/month or around 10,000 b/d, the source said. Separately, local media, citing data from the Myanmar Port Authority, reported in July that fuel imports rose 47.7% year on year to 3.47 million mt, or 74,628 b/d, for the financial year that ended in March 2015. Recently, the Myanmar Petroleum Products Enterprise, which is part of the Ministry of Energy, awarded a tender to import 752,000 barrels of gasoil over October 2015 to January 2016 into Yangon to Trafigura, traders said.

Mothballed Caribbean refineries draw interest as oil prices stay low

Low crude prices have rekindled interest in the possibility of reviving two mothballed refineries in the Caribbean, the massive Hovensa plant on the US Virgin Islands and Valero's 235,000 b/d Aruba refinery. A source familiar with the Aruba deal said Friday a memorandum of understanding was inked between the government of Aruba and Citgo, a unit of Venezuela's state oil company PDVSA, to restart the plant. "The memorandum was signed on September 22 in Houston between Citgo CEO Nelson Martinez and [the] minister of energy and environment of Aruba, Mike de Meza," the source said. No further details were provided, though the source said the possibility of leasing the refinery is being contemplated. PDVSA has such an agreement with the government of neighboring Curacao for the Isla refinery there. A spokesman for PDVSA said only that Citgo had not yet made any announcement about a possible deal for the Aruba refinery. A Valero spokesman declined comment on the deal, adding Valero still owns the refinery equipment. "We have been working with the government to explore options, including a sale, for several years," Valero spokesman Bill Day said via email. He said Valero ceased

production in 2012 because of very high operating costs compared with more competitive Gulf Coast refineries. The Aruba refinery was shut in part because it used fuel oil to run process units, making it difficult to compete with the much cheaper natural gas used by US refiners. However, the price of a cargo of fuel oil into the Caribbean has come down in line with crude prices. In 2011, it averaged \$89.75/b. So far in 2015, it has averaged \$37.08/b, Platts data shows. US Gulf refiners also pay less to power their plants. Henry Hub natural gas has averaged \$16.17/b so far this year, down from \$23.21/b in 2011 and \$51.57/b in 2008. "If the gap between the price of fuel oil and natural gas is small enough it becomes less of a hurdle," Chris Barber, oil market analyst at Massachusetts-based ESAI Energy, said about the economics of fueling the refinery's process units. Barber also noted that when Aruba was up and running, it made feedstock for Valero's Gulf Coast refineries, notably its Port Arthur, Texas, refinery. Hovensa and Aruba were shut in 2012 and became storage terminals just as the fracking boom was taking off in the US, missing out on the surge of cheap crude from the horizontal drilling in the shale oil formations which other US and Canadian refiners enjoyed.

Russian oil producers, energy ministry united against tax change

Russian oil producers and the Energy Ministry have criticized the Finance Ministry's proposal to increase the tax burden on crude producers, appealing to President Vladimir Putin not to approve measures that they describe as poorly thought out and likely to affect crude output. Producers had been expected to react negatively to the ministry's plan to increase their mineral extraction tax (MET) payments as it attempts to meet state budget requirements. Producers say the changes could lead to losses of 100 million mt of forecast crude output over the next three years, bankruptcies, and poor refinery economics. Alexander Dyukov, CEO of Russia's fourth-biggest crude producer Gazprom Neft, was vocal in his opposition to the proposal,

which he described as "poorly thought out." "This will lead to a reduction in investment," Dyukov said during a meeting with representatives of other companies and Energy Minister Alexander Novak Thursday. Russian oil producers have to some extent been protected from low oil prices by a taxation system that sees the government take most of the hit, as well as the ruble's devaluation against the US dollar. While they receive payment for oil exports in US dollars, most of their costs remain in rubles. This has allowed them to maintain output levels and proceed with necessary investment in production projects. Dyukov's comments came alongside reports that the country's leading energy companies wrote to Putin to criticize the proposal and outline key potential negative consequences, Prime News Agency reported, citing the letter. The companies warned that the plan could lead to a 10 million mt decrease in crude output in 2016-2018 as well as growth in domestic crude prices, causing refineries to become uneconomic and possibly close down, the letter said. All producers are expected to see their debt obligations increase, which could lead to bankruptcies. Investment in the sector would also decline, dropping by Rb2 trillion in 2016-2018 and leading to losses across the industry as a whole of over Rb7 trillion by 2025. The plan would have a negative knock-on effect on related sectors and employment levels, Prime reported, citing the letter.

Angola's Sonangol allocates nine November crude cargoes: traders

Angola's Sonangol has allocated nine crude oil cargoes for November loading to five term buyers, with term volume reaching 8.6 million barrels, or 16.2% of the total November volume, trading sources said Friday. Unipec, the trading arm of Chinese state-owned company Sinopec has been allocated five cargoes on term, comprising 4.8 million barrels, traders said. Alongside Unipec, Indonesia's Pertamina, China National Offshore Oil Corp. (CNOOC) and US oil companies Phillips 66 and Valero were allocated one term cargo each. Sources said two cargoes each of Cabinda and

Hungo grades were allocated as term cargoes as well as one cargo each of Dalia, Girassol, Nemba, Pazflor and Saturno. Loadings of Angolan crude oil for November are set to total 53 million barrels, according to a preliminary loading schedule received by Platts. A total of 56 cargoes will load in November, the same number as scheduled for October. Sonangol typically allocates 10-12 cargoes/month to companies holding term-supply contracts, with the price determined at a later date. Companies holding an Angolan term contract can nominate a contractually agreed number of cargoes to buy on term from Sonangol in any given month. After negotiations with Sonangol, the term buyer will be allocated the number of cargoes specified in the contract, although these will not necessarily be the same cargoes as those nominated by the buyer. Some Angolan lifters other than Sonangol also allocate cargoes on a term basis.

CHINA DATA: August crude, oil product stocks slip from July

China's commercial crude oil inventories edged down 0.12% at the end of August from a month earlier, China Petroleum Stockpile Statistics compiled by state-owned news agency Xinhua showed Friday. At end July, crude stocks had gone up by 1.05% on month. The commercial crude oil inventory data excludes the national Strategic Petroleum Reserves stocks, Xinhua noted. No volumes were provided in Xinhua's monthly report, which compares changes in stock levels from the previous month in percentage terms. China's crude inventories were estimated at 33.48 million mt as at end-August, down 5.5% on year, according to Platts calculations based on the original absolute volumes published by Xinhua in 2010. Overall oil product stocks at

end-August fell 7.82% from a month earlier according to Xinhua. Separately, gasoil, gasoline and jet fuel stocks fell 7.64%, 9.68% and 2.56%, respectively, from their levels seen in end-July, Xinhua said. At end July, stocks of the three products had gone up 3.07% on month. The stocks for the three products were estimated to be 12.13 million mt, 6.57 million mt and 2.17 million mt, respectively, at end-August, Platts calculations based on Xinhua's data showed. More travelling during the summer and high temperatures were said to have helped drive up domestic demand for gasoline in August, Xinhua noted. Xinhua's CPSS statistics serve as a reference indicator for overall changes in China's commercial petroleum stocks. They do not include volumes in China's strategic petroleum reserves.

CORRECTIONS

Platts corrects Sep 23 Cash BFOE M+4 assessment rationale

Platts has augmented the September 23, 2015, Cash BFOE M+4 assessment rationale with additional information. This correction only affects the rationale, not the assessment. The additional

section of the Cash BFOE M+4 assessment rationale should read as: "January Cash BFOE was assessed at \$50.29/b, in line with the Platts 16:30 ICE Brent Futures assessment and a flat December/January EFP roll, with the contango roll heard in the day across all

three months disproved by trading in Platts MOC." This rationale is published on Platts Global Alert page 1297, and in Platts Crude Oil Marketwire. For questions or comments, please email europa_crude@platts.com.

SUBSCRIBER NOTES (PGA page 1500)

Platts discontinues Zarzaitine crude oil assessments

Platts confirms that it will discontinue its FOB La Skhirra Zarzaitine outright and differential assessments effective December 1, 2015, as proposed in a note published April 23. Platts is discontinuing these assessments due to low export volumes and low spot market liquidity for the grade. Platts currently assesses FOB La Skhirra Zarzaitine on a daily basis, reflecting cargoes of between 60,000-140,000 mt loading out of the Mediterranean port of La Skhirra, in Tunisia. Currently, Platts publishes both a FOB La Skhirra Zarzaitine differential assessment (AALOY00) and an outright assessment (AAHM000). These assessments currently appear on Platts Global Alert page MH1234, and in the Platts Crude Oil Marketwire and Platts Oilgram Price Report. Zarzaitine, which is produced in Algeria, is delivered via pipeline to the Tunisian port of La Skhirra in the Mediterranean where it is then loaded for export. Loadings of the grade currently stand at around 30,000 b/d, equivalent to around a single cargo per month. The grade is currently traded via tender approximately a full month in advance of loading and is not regularly traded on a spot basis. Please send any further comments or questions to europa_crude@platts.com and pricegroup@platts.com. For written comments, please provide a clear indication if comments are not intended for publication by Platts. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts to publish DFL values for 36 months ahead from Oct 1

In line with increasing transparency in the Dated Brent to Brent Frontline Swap (DFL) market, Platts will publish assessments for DFLs and the corresponding forward Dated Brent values for 36 months ahead of the date of publication, starting from October 1, 2015. Platts currently publishes DFLs and the corresponding Forward Dated Brent values for seven months ahead of the date of publication, including the balance month contract. In addition, Platts will publish assessments for all quarterly DFL and Forward

Dated Brent values falling within the period of 36 months from the date of publication. Platts currently publishes six quarterly and three annual DFL and Forward Dated Brent assessments DFL. There would be no change to the number of annual DFL and Forward Dated Brent assessments. The publication of a longer and more granular forward DFL and Forward Dated Brent assessment is aimed at increasing visibility in both markets, and will move the assessment into line with other Platts London time assessments of Brent-related crude oil swaps markets. Please send any comments and queries to europa_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 to discontinue Kumkol crude oil assessments

Platts confirms that it will discontinue its CIF Augusta Kumkol outright and differential assessments effective October 1, 2015, as proposed in a note published on February 27. Platts is discontinuing these assessments due to the conclusion of Kumkol exports out of the Black Sea. Platts currently assesses CIF Augusta Kumkol on a daily basis, reflecting cargoes of between 30,000-100,000 mt loading out of the Black Sea and delivered into the Mediterranean. Currently, Platts publishes both a CIF Augusta Kumkol differential assessment (AALOW00) and an outright assessment (AAHMP00). These assessments currently appear on Platts Global Alert page MH1220 and in the Platts Crude Oil Marketwire. Kumkol, which is produced in Kazakhstan, was previously delivered via rail to the Black Sea port of Batumi in the Black Sea where it was then loaded for export. Loadings of the grade once averaged some 170,000 mt a month, but volumes have been gradually declining over the last several years and have been averaging below 30,000 mt per month for more than a year. Exports of the grade are expected to halt

completely in 2015. Please send any further comments or questions to europa_products@platts.com and pricegroup@platts.com. For written comments, please provide a clear indication if comments are not intended for publication by Platts. Platts will consider all comments received and will make comments not marked as confidential available upon request.

Platts to keep Forties de-escalator unchanged at \$0.15/b for Oct

Effective October 1, 2015, the sulfur de-escalator to be applied to Forties cargoes and related instruments in the Platts North Sea assessment process will be \$0.15/barrel per 0.1% weight of sulfur over the 0.6% weight standard, unchanged from September. The de-escalator should apply to cargoes loading from October 1, 2015. Platts has assessed this de-escalator level after reviewing the change in outright crude value, the differential between low and high sulfur products, as well as the difference in value between North Sea crudes and comparable heavy, sourer crudes, such as Urals. A rationale for this decision will be available shortly on the Platts website, www.platts.com. Platts guidelines for its sulfur de-escalator use three significant figures for determination of sulfur-related payment. The test reflecting this figure should be the ASTM-D2622. Forties cargoes and all related instruments, including BFOE cash forwards, bid or offered through the Platts system must adhere to this standard. In addition, Platts will publish the sulfur de-escalator, representing the dollar value per 0.1% weight of sulfur, in its crude oil publications. Please send comments to oilgroup@platts.com and pricegroup@platts.com.

Platts updates certain refining margin calculations

Effective September 15, 2015, Platts made the following changes to its daily crude refining margin calculations, following a period of feedback. Platts made these changes to improve the accuracy of its margins. 1. All Brent refining margins are calculated using the Platts Brent Ninian Blend spot crude assessment (AAVJA00),

SUBSCRIBER NOTES (PGA page 1500)

replacing the Platts Dated Brent assessment (PCAAS00), which is itself a reflection of the most competitive of four grades of crude -- BNB, Forties, Oseberg and Ekofisk. Platts publishes Brent refining margins for the US Atlantic Coast, US Gulf Coast, the Caribbean, Northwest Europe and Italy. 2. The Northwest Europe Gullfaks margins are calculated by subtracting the Gullfaks spot price assessment from Gullfaks yields, which are determined at the refinery itself, instead of subtracting the spot assessment from the Gullfaks netbacks, which reflect FOB loading. Platts made this change because the current primary Gullfaks spot assessment is CIF Rotterdam. 3. The Northwest Europe Urals margins are calculated with the FOB Primorsk Urals spot assessment (AAVH00), which replace the CIF Rotterdam assessment (PCAFW00) previously used in the calculations. The Italy Urals margins are calculated using the FOB Novorossisk spot assessment (AAGZS00), which replaces the CIF Mediterranean spot assessment (PCACE00). 4. The Italy CPC margin are calculated with the CPC FOB 80kt spot assessment (AAOFV00), which replaced the CPC CIF Augusta (AAGZU00) assessment. 5. The US Atlantic Coast Statfjord margins are calculated using the FOB Statfjord spot assessment (PCAE00), which replaced the CIF Statfjord assessment (AASAS00). 6. The Northwest Europe and Italy Azeri margins are calculated using the Azeri FOB Supsa spot assessment (AALWD00), which replaced the Azeri CIF assessment (AAGZX00). 7. The US Atlantic Coast, US Midwest, US Gulf Coast, and US West Coast Bakken margins are calculated with the Bakken spot crude assessment (AAXPP00), which replaced the Bakken ex-Clearbrook assessment (AASRU00). Platts made this change because the Bakken spot assessment reflects Bakken crude delivered into North Dakota terminals with rail and rail/pipeline loading capabilities. These prices are published on Platts Global Alert pages 802, 804, 806, 810, 812, 814, 820, 830, 832, 834, 820, 822, 824, and 840. The daily prices are also published in the Crude Oil Marketwire. The prices are also published in Platts Market Data.

Platts proposes to reflect sales of pre-loaded oil in Med Urals crude MOC

In line with changing trading practices and market conditions in the Mediterranean CIF Urals crude market, Platts proposes to amend the conditions under which Mediterranean Urals crude cargoes can be sold against specific loading dates in the Platts Market on Close assessment process. Platts proposes to allow pre-loaded oil to be

sold into bids. In line with current methodology, offering pre-loaded oil on a buyer-acceptable vessel is specifically excluded from this proposal. Platts currently allows sellers of Mediterranean CIF crude oil cargoes in the MOC to deliver cargoes whose bill of lading falls within a minimum five-day date range specified in a bid by the buyer or within the deemed "slippage day" period. For example, in Mediterranean Urals and in line with current Platts methodology, a company purchasing a CIF Urals crude cargo for March 11-15 loading dates could receive a cargo loading March 10-11 through March 15-16. Platts' proposal would allow sellers to deliver a cargo that loaded prior to the specific dates bid, provided it meets all other Platts guidelines and the seller covers any additional costs incurred by the buyer, such as demurrage. Using the same example as above, the company could also receive a cargo loading, for example, March 7-8 or even earlier. Platts Mediterranean crude oil assessments would continue to reflect crude oil that has been recently loaded at one of the normal terminals of origin for the specific grade; assessments would continue to reflect only crude oil that remains in its original condition, and Platts' existing ship approval methodology would still apply. The changes described would apply to Platts assessments for Urals Mediterranean crude only, and Platts is proposing that they become effective January 4, 2016. This proposal will not apply to Urals loading from the Baltic or Platts' other suite of Mediterranean crude assessments. Platts is specifically seeking feedback on a number of the mechanics involved in transactions of this nature, namely: pricing, freight and deviation costs, and short-options. Please send any comments and queries to europa_crude@platts.com and pricegroup@platts.com by August 7, 2015. 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 proposes to reduce repeat order timing in Dubai MOC

Platts is proposing to shorten the time allowed for participants to repeat a bid or offer, following a trade, in the Middle East sour crude partials Market On Close assessment process. Currently, market participants have up to 60 seconds to repeat their bid or offer following a trade. Platts proposes to shorten this to 15 seconds to align with the increment timing guidelines for physical Dubai, Upper Zakum and Oman partials and partials spreads. The

change will not affect the increment guidelines, which allow market participants to improve their bid or offer by up to 10 cents a barrel every 15 seconds. Platts proposes to implement the new timing guidelines for repeat orders from November 1 onwards. Please send any feedback or questions by October 1 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 proposes to change delivery period in ANS crude

Platts proposes to update the delivery timing reflected in its Alaska North Slope crude oil assessment to reflect a trend in the market towards trading the crude oil for delivery further forward in time. Platts currently assesses ANS for delivery to Long Beach, California, in the front month time period. As an example, under current methodology, during the month of February, Platts' ANS assessment reflects crude delivered in March. From March 1, the assessment reflects crude delivered in April. Under this proposal, Platts would roll its assessments forward to reflect deliveries in the second calendar month forward from the first publishing day on or after the 10th of each month. So Platts' ANS assessment would reflect crude delivered in March from January 10 onwards, and until February 9; from February 10, the assessment would reflect crude delivered in April (and until March 9). The change would be implemented with effect from April 1, 2016. All assessments would continue to be published as an outright value and as a differential to the Calendar Month Average for cash WTI. The differential assessed and published would always reflect the CMA value of WTI crude versus the month reflected for delivery. Platts ANS assessment is published as an outright value under Platts database code PCAAD00, and as a differential under Platts database code AAGX00. It is also published in Platts Crude Oil Marketwire, North American Crude and Products Scan and on Platts Global Alert pages 210 and 214. Please send any comments, questions or feedback to americas_crude@platts.com and copy pricegroup@platts.com by October 15, 2015. 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.

SUBSCRIBER NOTES [\(PGA page 1500\)](#)**Calculation changes in Brent Frontline Houston swaps calendar**

Platts confirms it will update calculation changes for the Brent Frontline Houston swaps assessments effective November 2, 2015. The methodology change was proposed in a previous subscriber note published on August 4, 2015, which invited comment on the proposal by the end of August. The change in calculation methodology follows the adoption of the month-ahead standards by ICE for its Brent crude futures contracts, starting with the March 2016 contract. The month-ahead standards were implemented by the physical North Sea Brent crude market in March 2015. Under current methodology, Platts calculates daily Brent frontline swaps using mean adjusted values for the number of trading days that each futures contract spends as the front month. This is done by calculating the exact number of trading days within each month, which will vary according to the calendar month. Under new expiry rules, the ICE Brent Futures contract will expire on the last working day of each month. As a result, Platts will continue to calculate daily Brent Frontline Swaps based on the number of trading days that each futures contract spends as the front month. As a result, the typical weighting of any Platts Brent Frontline Swap assessment will alter, with the weighting given to the front-month ICE Brent Futures contract increasing, and the weighting given to the second month decreasing. For example, in February 2016, the front-month ICE Brent Futures contract will be April 2016, and this contract will expire February 29. There are 21 trading days in February 2016. The February Brent Frontline Swap will therefore consist of 20 days of the April ICE Brent Futures contract and one

day of the May ICE Brent Futures contract for February 29 (the April contract's expiry date). Platts existing methodology for Frontline Houston crude swaps already excludes from the monthly calculation the front month contract on the day of expiry. Please send any feedback, comments and queries to americas_crude@platts.com and pricegroup@platts.com.

Platts to maintain current European freight-based oil assessment methodology

In August, 2015, Platts published a proposal note indicating that it was considering including additional Worldscale differentials in its European freight-based oil assessments in 2016. These differentials were created by the Worldscale Association to reflect higher fixed costs for vessels operating in the Emission Control Areas (ECA), and may have had an impact on a number of Platts net-backs and net-forward assessments across the oil and refined product markets. However, the Worldscale Association has issued a circular stating that these higher fixed differentials will now be included in the base Worldscale rate and so no further cost additions would be required. As a result, Platts will not include any additional differentials in its European freight-based oil assessments in 2016. Platts will continue to calculate its freight-derived cargo assessments by using the \$/mt Worldscale flat rates in 2016 or until a market change dictates a different approach. The Worldscale Association is maintaining the additional differentials applicable for transit through or in an ECA for 2015; however, Platts is not reflecting these in its oil or refined product assessments. Platts wishes to clarify that this extends to all published freight-based oil assessments in Europe,

including in refined oil products: ULSD 10 ppm FOB NWE Cargo, ULSD 10 ppm FOB NWE Le Havre Cargo, Diesel 10 ppm CIF UK, Diesel 10 ppm CIF NWE, Gasoil 0.1% FOB NWE Cargo, HSFO 3.5% FOB NWE Cargo, CIF MED naphtha, FOB MED naphtha and Jet FOB MED and FOB NWE. In crude oil, assessments affected include; Urals (Ex-Baltic) and Urals (Primorsk). Throughout 2015, Platts tanker assessments have not reflected the additional costs associated with using low sulfur fuels in ECA zones, as clarified in subscriber notes published by Platts in October and December 2014. Platts tanker assessments will continue to reflect the repeatable Worldscale- or lumpsum-based value of the various vessel classes and routes at 16:30 London time, as per Platts existing assessment methodology. Currently Platts normalizes two of its freight routes, which are affected by the existing ECA differential, namely the Baltic-UK Continent assessment, basis 30,000 mt and the UKC-UKC assessment, basis 22,000 mt. Platts normalizes these routes from the ECA-inclusive rates traded in the market to reflect non-ECA inclusive values, in line with existing Platts methodology. Such normalization will no longer be required in 2016 once the ECA differential is included in the Worldscale rate and as the general freight market adjusts to the new rules. Platts will notify the market of any subsequent clarifications of its methodology regarding this matter. Please send any comments or queries to europa_products@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.

US AND CARIBBEAN YIELDS AND NETBACKS EFFECTIVE SEPTEMBER 25, 2015 (\$/barrel)

Caribbean Winter Specifications (PGA page 802)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
Arab Berri	TYAAH00	55.31	TDDAH00	2.06	TNAAH00	53.25	AAXCT00	46.470	TNAAHMR	6.780
Arab Heavy	TYABB00	47.94	TDDAP00	2.21	TNABB00	45.73	AAXDI00	41.470	TNABMR	4.260
Arab Light	TYABZ00	52.53	TDDAX00	2.11	TNABZ00	50.42	AAXCU00	43.370	TNABZMR	7.050
Arab Medium	TYADF00	49.98	TDDBF00	2.15	TNADF00	47.83	AAXDN00	41.770	TNADFMR	6.060
Basrah Light	TYAFV00	55.24	TDDBV00	1.62	TNAFV00	53.62	AAXDO00	37.370	TNAFVMR	16.250
BCF 22	TYAET00	48.90	TDDBN00	0.54	TNAET00	48.36				
BCF 24	TYAFF00	50.41	TDDBQ00	0.54	TNAFF00	49.87				
Bonny Light	TYAGN00	60.64	TDDEV00	2.39	TNAGN00	58.25	PCAIC00	49.190	TNAGNMR	9.060
Brass River	TYAGZ00	58.36	TDDEW00	2.51	TNAGZ00	55.85	AAEJB00	47.690	TNAGZMR	8.160
Brent	TYAHL00	56.63	TDDCE00	1.27	TNAHL00	55.36	PCAAS00	47.235	TNAHLMR	8.125
Cabinda	TYAHX00	54.57	TDDCI00	2.53	TNAHX00	52.04	PCAFD00	46.690	TNAHXMR	5.350
Escalante	TYAKE00	44.69	TDDEY00	4.45	TNAKE00	40.24	PCAGC00	40.685	TNAKEMR	-0.445
Forcados	TYAKT00	58.32	TDDFA00	2.42	TNAKT00	55.90	PCABC00	49.240	TNAKTMR	6.660
Isthmus	TYAMN00	56.42	TDDK00	1.17	TNAMN00	55.25	PDAT009	47.640	TNAMNMR	7.610
Kuwait	TYAND00	52.77	TDDO000	2.14	TNAND00	50.63	AAXDQ00	42.695	TNANDMR	7.935
Maya	TYAOF00	41.35	TDDRR00	1.23	TNAOF00	40.12	PDATS09	39.320	TNAOFMR	0.800
Merey	TYAOV00	42.72	TDDU000	0.57	TNAOV00	42.15				
Mesa	TYAPD00	54.55	TDDFB00	0.52	TNAPD00	54.03	AAITB00	46.735	TNAPDMR	7.295
Olmecca	TYAQB00	57.56	TDDEA00	1.17	TNAQB00	56.39	PDATT09	49.900	TNAQBMR	6.490
Statfjord	TYASJ00	58.14	TDDEM00	1.66	TNASJ00	56.48	AASAS00	48.725	TNASJMR	7.755
Troll	TYATD00	58.58	TDDER00	1.71	TNATD00	56.87	AAWEX00	49.625	TNATDMR	7.245

Caribbean Winter Specifications (PGA page 804)

	Coke Yield		Freight		Coke Netback		Spot Price		Coke Margin	
Arab Berri	TYAAF00	57.50	TDDAH00	2.06	TNAAF00	55.44	AAXCT00	46.470	TNAAFMR	8.970
Arab Heavy	TYAAZ00	54.80	TDDAP00	2.21	TNAAZ00	52.59	AAXDI00	41.470	TNAAZMR	11.120
Arab Light	TYABX00	56.09	TDDAX00	2.11	TNABX00	53.98	AAXCU00	43.370	TNABXMR	10.610
Arab Medium	TYADD00	55.00	TDDBF00	2.15	TNADD00	52.85	AAXDN00	41.770	TNADDMR	11.080
Basrah Light	TYAFT00	55.84	TDDBV00	1.62	TNAFT00	54.22	AAXDO00	37.370	TNAFTMR	16.850
BCF 22	TYAER00	56.84	TDDBN00	0.54	TNAER00	56.30				
BCF 24	TYAFD00	57.32	TDDBQ00	0.54	TNAFD00	56.78				
Brent	TYAHJ00	58.28	TDDCE00	1.27	TNAHJ00	57.01	PCAAS00	47.235	TNAHJMR	9.775
Cabinda	TYAHV00	60.09	TDDCI00	2.53	TNAHV00	57.56	PCAFD00	46.690	TNAHVMR	10.870
Escalante	TYAKC00	60.23	TDDEY00	4.45	TNAKC00	55.78	PCAGC00	40.685	TNAKCMR	15.095
Isthmus	TYAML00	56.74	TDDK000	1.17	TNAML00	55.57	PDAT009	47.640	TNAMLMR	7.930
Kuwait	TYANB00	56.33	TDDO000	2.14	TNANB00	54.19	AAXDQ00	42.695	TNANBMR	11.495
Maya	TYAOD00	54.44	TDDRR00	1.23	TNAOD00	53.21	PDATS09	39.320	TNAODMR	13.890
Merey	TYAOT00	56.19	TDDU000	0.57	TNAOT00	55.62				
Mesa	TYAPB00	56.61	TDDFB00	0.52	TNAPB00	56.09	AAITB00	46.735	TNAPBMR	9.355
Olmecca	TYAPZ00	57.39	TDDEA00	1.17	TNAPZ00	56.22	PDATT09	49.900	TNAPZMR	6.320
Statfjord	TYASH00	59.09	TDDEM00	1.66	TNASH00	57.43	AASAS00	48.725	TNASHMR	8.705
Troll	TYATB00	63.16	TDDER00	1.71	TNATB00	61.45	AAWEX00	49.625	TNATBMR	11.825

US Atlantic Coast Winter Specifications (PGA page 810)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
Arab Heavy	TYABN00	49.90	TDDAM00	2.44	TNABN00	47.46	AAXDI00	41.470	TNABNMR	5.990
Arab Light	TYACL00	53.88	TDDAU00	2.33	TNACL00	51.55	AAXCU00	43.370	TNACLMR	8.180
Arab Medium	TYADR00	51.55	TDDBC00	2.38	TNADR00	49.17	AAXDN00	41.770	TNADRMR	7.400
Bakken	TYASE00	58.19	TDDRN00	14.00	TNASE00	44.19	AASRU00	44.700	TNASEMR	1.040
Bonny Light	TYAGP00	59.78	TDDBZ00	2.77	TNAGP00	57.01	PCAIC00	49.190	TNAGPMR	7.820
Brass River	TYAHB00	58.68	TDDEW00	2.51	TNAHB00	56.17	AAEJB00	47.690	TNAHBMR	8.480
Brent	TYAHP00	56.84	TDDCC00	1.33	TNAHP00	55.51	PCAAS00	47.235	TNAHPMR	8.275
Cabinda	TYAIB00	54.26	TDDCH00	2.91	TNAIB00	51.35	PCAFD00	46.690	TNAIBMR	4.660
Ekofisk	TYAKB00	56.89	TDDCS00	1.34	TNAKB00	55.55	PCADI00	48.035	TNAKBMR	7.515
Forcados	TYAKV00	59.93	TDDA000	2.65	TNAKV00	57.28	PCABC00	49.240	TNAKVMR	8.040
Gulfaks	TYALP00	57.87	TDDDB00	1.33	TNALP00	56.54	AASAU00	49.525	TNALPMR	7.015
Hibernia	TYALT00	55.87	TDDDE00	1.40	TNALT00	54.47	AAJJK00	47.905	TNALTMR	6.565
Oriente	TYAQR00	48.24	TDDDE00	2.09	TNAQR00	46.15	PCADE00	39.010	TNAQMR	7.140
Statfjord	TYASN00	57.38	TDDEL00	1.40	TNASN00	55.98	AASAS00	48.725	TNASNMR	8.515
Troll	TYATH00	59.05	TDDEQ00	1.37	TNATH00	57.68	AAWEX00	49.625	TNATHMR	8.055

US Atlantic Coast Winter Specifications (PGA page 812)

	Coke Yield		Freight		Coke Netback		Spot Price		Coke Margin	
Arab Heavy	TYABL00	57.07	TDDAM00	2.44	TNABL00	54.63	AAXDI00	41.470	TNABLMR	13.160
Arab Light	TYACJ00	58.44	TDDAU00	2.33	TNACJ00	56.11	AAXCU00	43.370	TNACJMR	12.740
Arab Medium	TYADP00	57.36	TDDBC00	2.38	TNADP00	54.98	AAXDN00	41.770	TNADPMR	13.210
Brent	TYAHN00	59.63	TDDCC00	1.33	TNAHN00	58.30	PCAAS00	47.235	TNAHNMR	11.065
Cabinda	TYAHZ00	60.74	TDDCH00	2.91	TNAHZ00	57.83	PCAFD00	46.690	TNAHZMR	11.140
Ekofisk	TYAJZ00	60.08	TDDCS00	1.34	TNAJZ00	58.74	PCADI00	48.035	TNAJZMR	10.705
Gulfaks	TYALN00	60.89	TDDDB00	1.33	TNALN00	59.56	AASAU00	49.525	TNALNMR	10.035
Hibernia	TYALR00	60.31	TDDDE00	1.40	TNALR00	58.91	AAJJK00	47.905	TNALRMR	11.005
Oriente	TYAQP00	58.27	TDDDE00	2.09	TNAQP00	56.18	PCADE00	39.010	TNAQPMR	17.170
Statfjord	TYASL00	59.86	TDDEL00	1.40	TNASL00	58.46	AASAS00	48.725	TNASLMR	10.995
Troll	TYATF00	62.06	TDDEQ00	1.37	TNATF00	60.69	AAWEX00	49.625	TNATFMR	11.065

US YIELDS AND NETBACKS (\$/barrel)

US Midwest Winter Specifications (PGA page 820)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
Arab Berri	TYAAP00	65.11	TDDAD00	3.30	TNAAP00	61.81	AAXCT00	46.470	TNAAPMR	15.340
Arab Light	TYACT00	59.71	TDDAS00	3.35	TNACT00	56.36	AAXCU00	43.370	TNACTMR	12.990
Bakken	TYASA00	66.79	TDDRO00	1.60	TNASA00	65.19	AASRU00	44.700	TNASAMR	22.040
LLS	TYANT00	67.85	TDDQV00	0.96	TNANT00	66.89	PCABN00	48.350	TNANTMR	18.540
Mixed Lt Sour	TYAPX00	61.91	TDDQZ00	3.86	TNAPX00	58.05	AALRX00	41.750	TNAPXMR	16.300
Mixed Lt Sweet	TYAQZ00	67.08	TDDRA00	3.58	TNAQZ00	63.50	AALRR00	43.200	TNAQZMR	20.300
Syncrude	TYAUR00	65.54	TDDFP00	3.58	TNAUR00	61.96	AASOK00	45.750	TNAURMR	16.210
WTI	TYAUB00	64.92	TDDRG00	1.44	TNAUB00	63.48	PCACG00	45.520	TNAUBMR	17.960
WTS	TYAUJ00	62.90	TDDRIO0	2.16	TNAUJ00	60.74	PCACK00	47.370	TNAUJMR	13.370

US Midwest Winter Specifications (PGA page 822)

	Coke Yield		Freight		Coke Netback		Spot Price		Coke Margin	
Arab Berri	TYAAN00	69.16	TDDAD00	3.30	TNAAN00	65.86	AAXCT00	46.470	TNAANMR	19.390
Arab Light	TYACR00	67.80	TDDAS00	3.35	TNACR00	64.45	AAXCU00	43.370	TNACRMR	21.080
Bow River	TYAGV00	66.87	TDDRL00	4.03	TNAGV00	62.84	PCABN00	48.350	TNANRMR	21.530
LLS	TYANR00	70.84	TDDQV00	0.96	TNANR00	69.88	AALRX00	41.750	TNAPVMR	21.390
Mixed Lt Sour	TYAPV00	67.00	TDDQZ00	3.86	TNAPV00	63.14	AALRR00	43.200	TNAQXMR	23.060
Mixed Lt Sweet	TYAQX00	69.84	TDDRA00	3.58	TNAQX00	66.26	AAPPN00	32.250	TNAVGMR	26.260
WCS	TYAVG00	62.54	TDDRL00	4.03	TNAVG00	58.51	PCACG00	45.520	TNATZMR	22.450
WTI	TYATZ00	69.41	TDDRG00	1.44	TNATZ00	67.97	PCACK00	47.370	TNAUHRM	19.450
WTS	TYAUH00	68.98	TDDRIO0	2.16	TNAUH00	66.82				

US Gulf Coast Winter specifications (PGA page 830)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
Arab Berri	TYAAL00	55.49	TDDAC00	1.88	TNAAL00	53.61	AAXCT00	46.470	TNAALMR	7.140
Arab Heavy	TYABR00	48.16	TDDAJ00	2.01	TNABR00	46.15	AAXDI00	41.470	TNABRMR	4.680
Arab Light	TYACP00	51.76	TDDAR00	1.92	TNACP00	49.84	AAXCU00	43.370	TNACPMR	6.470
Arab Medium	TYADV00	49.53	TDDAZ00	1.96	TNADV00	47.57	AAXDN00	41.770	TNADVMR	5.800
Bakken	TYASG00	56.71	TDDRP00	13.00	TNASG00	43.71	AASRU00	44.700	TNASGMR	0.560
Basrah Light	TYAGD00	52.13	TDDBS00	2.76	TNAGD00	49.37	AAXDO00	37.370	TNAGDMR	12.000
BCF 22	TYAFB00	46.85	TDDBL00	1.86	TNAFB00	44.99				
BCF 24	TYAFJ00	48.43	TDDBO00	1.84	TNAFJ00	46.59				
Bonny Light	TYAGR00	57.84	TDDBX00	2.53	TNAGR00	55.31	PCAIC00	49.190	TNAGRMR	6.120
Brass River	TYAHD00	57.64	TDDCA00	2.31	TNAHD00	55.33	AAEJB00	47.690	TNAHDMR	7.640
Brent	TYAHT00	54.66	TDDCB00	1.84	TNAHT00	52.82	PCAAS00	47.235	TNAHTMR	5.585
Cabinda	TYAIF00	51.86	TDDCF00	3.42	TNAIF00	48.44	PCAFD00	46.690	TNAIFMR	1.750
Eagle Ford	TYASC00	54.45	TDDRQ00	1.31	TNASC00	53.14	AAYAJ00	48.000	TNASCMR	5.140
Escalante	TYAKJ00	44.16	TDDCV00	5.70	TNAKJ00	38.46	PCAGC00	40.685	TNAKJMR	-2.225
Forcados	TYAKX00	58.09	TDDCY00	2.45	TNAKX00	55.64	PCABC00	49.240	TNAKXMR	6.400
Isthmus	TYAMR00	53.94	TDDDJ00	0.94	TNAMR00	53.00	PDATO09	47.640	TNAMRMR	5.360
Kuwait	TYANL00	50.93	TDDDL00	1.95	TNANL00	48.98	AAXDQ00	42.695	TNANLMR	6.285
LLS	TYANP00	57.62	TDDQW00	0.99	TNANP00	56.63	PCABN00	48.350	TNANPMR	8.280
Marlim	TYAUG00	48.48	TDDGK00	1.89	TNAUG00	46.59	AAITF00	42.085	TNAUGMR	4.505
Mars	TYAOB00	51.27	TDDYQ00	1.01	TNAOB00	50.26	AAMBR00	41.820	TNAOBMR	8.440
Maya	TYAOJ00	41.97	TDDDP00	0.98	TNAOJ00	40.99	PDAT509	39.320	TNAOJMR	1.670
Meray	TYAOZ00	41.49	TDDDT00	1.94	TNAOZ00	39.55				
Mesa	TYAPL00	52.13	TDDDV00	1.77	TNAPL00	50.36	AAITB00	46.735	TNAPLMR	3.625
Olmecca	TYAQF00	56.34	TDDDY00	0.93	TNAQF00	55.41	PDATT09	49.900	TNAQFMR	5.510
Saharan Blend	TYAVB00	55.07	TDDR000	2.07	TNAVBR00	53.00	AAGZY00	48.165	TNAVBRM	4.835
Statfjord	TYASR00	55.15	TDDEN00	1.85	TNASR00	53.30	AASAS00	48.725	TNASRMR	4.575
Troll	TYATL00	56.82	TDDPE00	1.92	TNATL00	54.90	AAWEX00	49.625	TNATLMR	5.275
Urals	TYAUK00	52.10	TDDFM00	2.24	TNAUK00	49.86	AAWVH00	44.885	TNAUKMR	4.975
WTI	TYATX00	55.25	TDDRH00	4.00	TNATX00	51.25	PCACG00	45.520	TNATXMR	5.730
WTS	TYAUF00	53.66	TDDRJ00	4.72	TNAUF00	48.94	PCACK00	47.370	TNAUFMR	1.570

US Gulf Coast Winter specifications (PGA page 832)

	Coke Yield		Freight		Coke Netback		Spot Price		Coke Margin	
Arab Berri	TYAAJ00	57.71	TDDAC00	1.88	TNAAJ00	55.83	AAXCT00	46.470	TNAAJMR	9.360
Arab Heavy	TYABP00	55.00	TDDAJ00	2.01	TNABP00	52.99	AAXDI00	41.470	TNABPMR	11.520
Arab Light	TYACN00	56.35	TDDAR00	1.92	TNACN00	54.43	AAXCU00	43.370	TNACNMR	11.060
Arab Medium	TYADT00	55.36	TDDAZ00	1.96	TNADT00	53.40	AAXDN00	41.770	TNADTMR	11.630
Basrah Light	TYAGB00	56.19	TDDBS00	2.76	TNAGB00	53.43	AAXDO00	37.370	TNAGBMR	16.060
BCF 22	TYAEZ00	55.98	TDDBL00	1.86	TNAEZ00	54.12				
BCF 24	TYAFH00	56.44	TDDBO00	1.84	TNAFH00	54.60				
Brent	TYAHR00	57.73	TDDCB00	1.84	TNAHR00	55.89	PCAAS00	47.235	TNAHRMR	8.655
Cabinda	TYAID00	58.28	TDDCF00	3.42	TNAID00	54.86	PCAFD00	46.690	TNAIDMR	8.170
Escalante	TYAKH00	57.57	TDDCV00	5.70	TNAKH00	51.87	PCAGC00	40.685	TNAKHMR	11.185
Isthmus	TYAMP00	57.22	TDDDJ00	0.94	TNAMP00	56.28	PDATO09	47.640	TNAMPMR	8.640
Kuwait	TYANJ00	55.55	TDDDL00	1.95	TNANJ00	53.60	AAXDQ00	42.695	TNANJMR	10.905
LLS	TYANN00	59.19	TDDQW00	0.99	TNANN00	58.20	PCABN00	48.350	TNANNMR	9.850
Marlim	TYAUE00	57.67	TDDGK00	1.89	TNAUE00	55.78	AAITF00	42.085	TNAUEMR	13.695
Mars	TYANZ00	56.37	TDDYQ00	1.01	TNANZ00	55.36	AAMBR00	41.820	TNANZMR	13.540
Maya	TYAOH00	53.90	TDDDP00	0.98	TNAOH00	52.92	PDAT509	39.320	TNAOHMR	13.600
Meray	TYAOX00	54.61	TDDDT00	1.94	TNAOX00	52.67				
Mesa	TYAPJ00	57.16	TDDDV00	1.77	TNAPJ00	55.39	AAITB00	46.735	TNAPJMR	8.655
Olmecca	TYAQD00	57.54	TDDDY00	0.93	TNAQD00	56.61	PDATT09	49.900	TNAQDMR	6.710
Statfjord	TYASP00	57.90	TDDEN00	1.85	TNASP00	56.05	AASAS00	48.725	TNASPMR	7.325
Troll	TYATJ00	59.86	TDDPE00	1.92	TNATJ00	57.94	AAWEX00	49.625	TNATJMR	8.315
Urals	TYAUI00	57.11	TDDFM00	2.24	TNAUI00	54.87	AAWVH00	44.885	TNAUIMR	9.985
WCS	TYASI00	53.99	TDRS00	10.80	TNASI00	43.19	AAPPN00	32.250	TNASIMR	10.940
WTI	TYATV00	57.59	TDDRH00	4.00	TNATV00	53.59	PCACG00	45.520	TNATVMR	8.070
WTS	TYAUD00	57.30	TDDRJ00	4.72	TNAUD00	52.58	PCACK00	47.370	TNAUDMR	5.210

US YIELDS AND NETBACKS (\$/barrel)

US West Coast Winter specifications (PGA page 840)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
ANS	TYAAD00	56.39	TDDGL00	0.00	TNAAD00	56.39	PCAAD00	47.780	TNAADM	8.610
Arab Berri	TYAAT00	61.50	TDDAE00	3.36	TNAAT00	58.14	AAACT00	46.470	TNAATMR	11.670
Arab Light	TYACX00	56.85	TDDAT00	3.43	TNACX00	53.42	AAACU00	43.370	TNACXMR	10.050
Arab Medium	TYADY00	54.32	TDDBB00	3.50	TNADY00	50.82	AAADN00	41.770	TNADYMR	9.050
Bakken	TYASK00	62.00	TDDRT00	13.00	TNASK00	49.00	AASRU00	44.700	TNASKMR	5.850
Basrah Light	TYAGL00	57.51	TDDBW00	3.40	TNAGL00	54.11	AAXD000	37.370	TNAGLMR	16.740
Escalante	TYAKN00	47.92	TDDCW00	6.00	TNAKN00	41.92	PCAGC00	40.685	TNAKNMR	1.235
Kern River	TYAMV00	52.69	TDDGM00	1.38	TNAMV00	51.31	PCABJ00	39.580	TNAMVMR	11.730
Line 63	TYANX00	55.41	TDDGN00	0.14	TNANX00	55.27	PCABM00	48.030	TNANXMR	7.240
Marlim	TYAVC00	53.14	TDDQX00	7.34	TNAVC00	45.80	AAITF00	42.085	TNAVCMR	3.715
Minas	TYATC00	59.95	TDDGO00	4.45	TNATC00	55.50	PCABO00	40.890	TNATCMR	14.610
Mixed Lt Sweet	TYARD00	61.53	TDDGP00	2.64	TNARD00	58.89	AALRR00	43.200	TNARDMR	15.690
Oriente	TYAQV00	50.04	TDDEC00	2.63	TNAQV00	47.41	PCADE00	39.010	TNAQVMR	8.400
Thums	TYASZ00	53.29	TDDGQ00	0.00	TNASZ00	53.29	PCACD00	41.880	TNASZMR	11.410

US West Coast Winter specifications (PGA page 842)

	Coke Yield		Freight		Coke Netback		Spot Price		Coke Margin	
ANS	TYAAB00	64.29	TDDGL00	0.00	TNAAB00	64.29	PCAAD00	47.780	TNAABMR	16.510
Arab Berri	TYAAR00	64.34	TDDAE00	3.36	TNAAR00	60.98	AAACT00	46.470	TNAARMR	14.510
Arab Light	TYACV00	62.58	TDDAT00	3.43	TNACV00	59.15	AAACU00	43.370	TNACVMR	15.780
Arab Medium	TYADW00	61.90	TDDBB00	3.50	TNADW00	58.40	AAADN00	41.770	TNADWMR	16.630
Basrah Light	TYAGJ00	62.65	TDDBW00	3.40	TNAGJ00	59.25	AAXD000	37.370	TNAGJMR	21.880
Escalante	TYAKL00	64.85	TDDCW00	6.00	TNAKL00	58.85	PCAGC00	40.685	TNAKLMR	18.165
Kern River	TYAMT00	63.04	TDDGM00	1.38	TNAMT00	61.66	PCABJ00	39.580	TNAMTMR	22.080
Line 63	TYANV00	64.50	TDDGN00	0.14	TNANV00	64.36	PCABM00	48.030	TNANVMR	16.330
Marlim	TYAVD00	65.38	TDDQX00	7.34	TNAVD00	58.04	AAITF00	42.085	TNAVDMR	15.955
Minas	TYATA00	67.16	TDDGO00	4.45	TNATA00	62.71	PCABO00	40.890	TNATAMR	21.820
Mixed Lt Sweet	TYARB00	63.18	TDDGP00	2.64	TNARB00	60.54	AALRR00	43.200	TNARBMR	17.340
Oriente	TYAQT00	62.72	TDDEC00	2.63	TNAQT00	60.09	PCADE00	39.010	TNAQTMR	21.080
Thums	TYASX00	61.01	TDDGQ00	0.00	TNASX00	61.01	PCACD00	41.880	TNASXMR	19.130

EUROPEAN YIELDS AND NETBACKS EFFECTIVE SEPTEMBER 25, 2015 (\$/barrel)

Northwest Europe Winter Specifications (PGA page 1810)

	Crack Yield		Freight		Crack Netback		Spot Price		Crack Margin	
Arab Heavy**	TYAAV00	47.53	TDDAN00	1.50	TNAAV00	46.03	AAAXD00	41.510	TNAAVMR	4.490
Arab Light**	TYABT00	51.14	TDDAV00	1.44	TNABT00	49.70	AAAXD00	44.910	TNABTMR	4.770
Arab Medium**	TYACZ00	49.10	TDDBD00	1.47	TNACZ00	47.63	AAAXD00	43.510	TNACZMR	4.100
Azeri Light	TYAEB00	54.52	TDDBI00	2.06	TNAEB00	52.46	AAGZX00	49.750	TNAEBMR	3.915
Basrah Light	TYAFP00	50.85	TDDBU00	1.97	TNAFP00	48.88	AAXD000	37.370	TNAFPMR	11.510
Brass River	TYATS00	56.32	TDDRE00	2.44	TNATS00	53.88	AAEJB00	47.690	TNATSMR	6.190
Brent	TYAHF00	53.63	TDDCD00	0.82	TNAHF00	52.81	PCAS000	47.235	TNAHFMR	5.575
Cabinda	TYAVK00	50.60	TDDQR00	2.91	TNAVK00	47.69	PCAFD00	46.690	TNAVKMR	1.000
Ekofisk	TYAJV00	53.45	TDDCT00	0.58	TNAJV00	52.87	PCADI00	48.035	TNAJVMR	4.835
Flotta Gold	TYAKP00	52.47	TDDCX00	0.71	TNAKP00	51.76	PCACZ00	46.715	TNAKPMR	5.045
Forties	TYALB00	53.07	TDDEZ00	0.84	TNALB00	52.23	PCADJ00	47.455	TNALBMR	4.775
Gulfaks	TYALF00	54.44	TDDCC00	0.70	TNALF00	53.74	AASAU00	49.525	TNALFMR	4.915
Hungo	TYAVI00	47.50	TDDQU00	2.94	TNAVI00	44.56	AASLJ00	44.240	TNAVIMR	0.320
Iran Heavy	TYALV00	50.61	TDDG000	1.20	TNALV00	49.41	PCABH00	44.645	TNALVMR	4.765
Iran Light	TYAMD00	52.10	TDDDI00	1.18	TNAMD00	50.92	PCABI00	46.045	TNAMDMR	4.875
Kirkuk	TYATU00	51.59	TDDGH00	1.44	TNATU00	50.15	AAEJD00	42.115	TNATUMR	8.035
Kuwait	TYAMX00	49.35	TDDM000	1.50	TNAMX00	47.85	AAXDQ00	42.695	TNAMXMR	5.155
Murban	TYATQ00	53.87	TDDR000	1.38	TNATQ00	52.49	AAKNL00	48.050	TNATQMR	4.440
Oseberg	TYAVJ00	55.37	TDDRC00	0.71	TNAVJ00	54.66	PCAEU00	48.360	TNAVJMR	6.300
Saharan Blend	TYATY00	54.24	TDDGI00	0.92	TNATY00	53.32	AAGZY00	48.165	TNATYMR	5.155
Statfjord	TYASD00	53.96	TDDEK00	0.96	TNASD00	53.00	AASAS00	48.725	TNASDMR	4.275
Urals	TYATN00	51.32	TDDET00	0.92	TNATN00	50.40	PCAFW00	45.765	TNATNMR	5.515
Zuetina	TYAUC00	54.60	TDDGJ00	1.64	TNAUC00	52.96	AAAXD00	47.235	TNAUCMR	5.725

Northwest Europe Winter Specifications (PGA page 1812)

	Visbreak Yield		Freight		Visbreak Netback		Spot Price		Visbreak Margin	
Arab Heavy**	TYAAX00	45.11	TDDAN00	1.50	TNAAX00	43.61	AAAXD00	41.510	TNAAXMR	1.780
Arab Light**	TYABV00	48.87	TDDAV00	1.44	TNABV00	47.43	AAAXD00	44.910	TNABVMR	2.160
Arab Medium**	TYADB00	46.66	TDDBD00	1.47	TNADB00	45.19	AAAXD00	43.510	TNADBMR	1.330
Azeri Light	TYAED00	51.10	TDDBI00	2.06	TNAED00	49.04	AAGZX00	49.750	TNAEDMR	0.495
Basrah Light	TYAFR00	48.41	TDDBU00	1.97	TNAFR00	46.44	AAXD000	37.370	TNAFRMR	9.070
Brent	TYAHH00	50.62	TDDCD00	0.82	TNAHH00	49.80	PCAS000	47.235	TNAHHMR	2.565
Ekofisk	TYAJX00	50.27	TDDCT00	0.58	TNAJX00	49.69	PCADI00	48.035	TNAJXMR	1.655
Flotta Gold	TYAKR00	49.62	TDDCX00	0.71	TNAKR00	48.91	PCACZ00	46.715	TNAKMR	2.195
Forties	TYALD00	50.25	TDDEZ00	0.84	TNALD00	49.41	PCADJ00	47.455	TNALDMR	1.955
Gulfaks	TYALH00	51.12	TDDCC00	0.70	TNALH00	50.42	AASAU00	49.525	TNALHMR	1.595
Iran Heavy	TYALX00	47.84	TDDG000	1.20	TNALX00	46.64	PCABH00	44.645	TNALXMR	1.995
Iran Light	TYAMF00	49.27	TDDDI00	1.18	TNAMF00	48.09	PCABI00	46.045	TNAMFMR	2.045
Kuwait	TYAMZ00	46.74	TDDM000	1.50	TNAMZ00	45.24	AAAXD00	42.695	TNAMZMR	2.545
Statfjord	TYASF00	51.12	TDDEK00	0.96	TNASF00	50.16	AASAS00	48.725	TNASFMR	1.435
Urals	TYATP00	48.48	TDDET00	0.92	TNATP00	47.56	PCAFW00	45.765	TNATPMR	2.675

EUROPEAN YIELDS AND NETBACKS (\$/barrel)

Italy Winter Specifications (PGA page 1820)

	Crack Yield	Freight	Crack Netback	Spot Price	Crack Margin
Arab Heavy**	TYABD00 47.10	TDDAI00 2.44	TNABD00 44.66	AAXDH00 41.510	TNABDMR 3.040
Arab Light**	TYACB00 50.54	TDDAQ00 2.33	TNACB00 48.21	AAXDK00 44.910	TNACBMR 3.260
Arab Medium**	TYADH00 48.60	TDDAY00 2.37	TNADH00 46.23	AAXDM00 43.510	TNADHMR 2.640
Azeri Light	TYAEF00 53.33	TDDBH00 1.41	TNAEF00 51.92	AAGZX00 49.750	TNAEFMR 3.375
Basrah Light	TYAFX00 50.15	TDDBR00 1.35	TNAFX00 48.80	AAXDO00 37.370	TNAFXMR 11.430
CPC Blend	TYAVN00 51.34	TDDQT00 1.36	TNAVN00 49.98	AAGZU00 48.165	TNAVNMR 2.685
Es Sider	TYAKD00 52.09	TDDCU00 0.89	TNAKD00 51.20	PCACO00 45.565	TNAKDMR 5.635
Iran Heavy	TYALZ00 49.63	TDDDF00 1.06	TNALZ00 48.57	PCABH00 44.645	TNALZMR 3.925
Iran Light	TYAMH00 51.18	TDDDH00 1.04	TNAMH00 50.14	PCABI00 46.045	TNAMHMR 4.095
Kirkuk	TYAMU00 50.69	TDDFF00 1.30	TNAMU00 49.39	AAEJD00 42.115	TNAMUMR 7.275
Saharan Blend	TYAR000 52.53	TDDFG00 0.73	TNAR000 51.80	AAGZY00 48.165	TNAROMR 3.635
Suez Blend	TYAU000 49.35	TDDRF00 1.07	TNAU000 48.28	PCACA00 43.580	TNAUOMR 4.700
Urals	TYATR00 50.50	TDDSE00 1.54	TNATR00 48.96	PCACE00 46.200	TNATMR 2.760
Zuetina	TYAUL00 53.07	TDEU00 1.00	TNAUL00 52.07	AAXDT00 47.235	TNAULMR 4.835

Italy Winter Specifications (PGA page 1822)

	Visbreak Yield	Freight	Visbreak Netback	Spot Price	Visbreak Margin
Arab Heavy**	TYABF00 43.94	TDDAI00 2.44	TNABF00 41.50	AAXDH00 41.510	TNABFMR -0.230
Arab Light**	TYACD00 47.69	TDDAQ00 2.33	TNACD00 45.36	AAXDK00 44.910	TNACDMR 0.300
Arab Medium**	TYADJ00 45.66	TDDAY00 2.37	TNADJ00 43.29	AAXDM00 43.510	TNADJMR -0.420
Azeri Light	TYAEH00 49.90	TDDBH00 1.41	TNAEH00 48.49	AAGZX00 49.750	TNAEHMR -0.055
Basrah Light	TYAFZ00 47.32	TDDBR00 1.35	TNAFZ00 45.97	AAXDO00 37.370	TNAFZMR 8.600
Es Sider	TYAKF00 49.33	TDDCU00 0.89	TNAKF00 48.44	PCACO00 45.565	TNAKFMR 2.875
Iran Heavy	TYAMB00 46.58	TDDDF00 1.06	TNAMB00 45.52	PCABH00 44.645	TNAMBMR 0.875
Iran Light	TYAMJ00 48.30	TDDDH00 1.04	TNAMJ00 47.26	PCABI00 46.045	TNAMJMR 1.215
Kirkuk	TYAMW00 48.25	TDDFF00 1.30	TNAMW00 46.95	AAEJD00 42.115	TNAMWMR 4.835
Saharan Blend	TYARQ00 51.19	TDDFG00 0.73	TNARQ00 50.46	AAGZY00 48.165	TNARQMR 2.295
Suez Blend	TYAUP00 46.28	TDDRF00 1.07	TNAUP00 45.21	PCACA00 43.580	TNAUPMR 1.630
Urals	TYATT00 47.48	TDDSE00 1.54	TNATT00 45.94	PCACE00 46.200	TNATTMR -0.260
Zuetina	TYAUN00 50.71	TDEU00 1.00	TNAUN00 49.71	AAXDT00 47.235	TNAUNMR 2.475

**Arab proxy spot values are calculated by adding monthly Saudi OSP differentials to daily numbers: ICE BWAVE for European OSPs (PGA1069), Mars for US OSPs (PGA1070) and Oman/Dubai average Asian OSPs (PGA1068). ICE BWAVE is published after current day yields & netbacks are calculated. Therefore, Arab proxy spot prices and margins in Northwest Europe and Italy are effective the previous business day.

ASIAN YIELDS AND NETBACKS EFFECTIVE SEPTEMBER 2, 2014 (\$/barrel)

Singapore Winter Specifications (PGA page 2810)

	Crack Yield	Freight	Crack Netback	Spot Price	Crack Margin
Arab Heavy	TYABH00 99.36	TDDA000 0.94	TNABH00 98.42	AAXDG00 97.465	TNABHMR 0.935
Arab Light	TYACF00 101.97	TDDAW00 0.90	TNACF00 101.07	AAXDJ00 102.215	TNACFMR -1.155
Arab Medium	TYADL00 100.16	TDDBE00 0.92	TNADL00 99.24	AAXDL00 100.215	TNADLMR -0.995
Attaka	TYADX00 106.85	TDDBG00 2.79	TNADX00 104.06	PCAAJ00 100.190	TNADXMR 3.930
Cabinda	TYAVF00 102.82	TDDQ000 2.92	TNAV000 99.90	PCAFD00 98.925	TNAV000 0.975
Das Blend	TYDSH00 103.00	TDDCQ00 0.85	TNDSH00 102.15	AAXOF00 101.890	TNDSHMR 0.260
Dubai	TYAJN00 103.14	TDDCQ00 0.85	TNAJN00 102.29	PCAA000 100.190	TNAJNMR 2.080
Duri	TYAJR00 98.50	TDDCR00 1.41	TNAJR00 97.09	PCABA00 96.440	TNAJMR 0.690
Kuwait	TYANF00 100.58	TDDN000 0.95	TNANF00 99.63	AAXDQ00 99.765	TNANFMR -0.155
Minas	TYAPR00 103.65	TDDX000 1.29	TNAPR00 102.36	PCAB000 98.540	TNAPMR 3.850
Murban	TYAPY00 103.89	TDDCQ00 0.85	TNAPY00 103.04	AAKNL00 102.690	TNAPYMR 0.350
Oman	TYAQL00 102.28	TDEB000 0.79	TNAQL00 101.49	PCABS00 100.940	TNAQLMR 0.550
Qatar Land	TYARA00 103.70	TDDBE00 0.92	TNARA00 102.78	AAKNP00 101.640	TNARAMR 1.140
Qatar Marine	TYARE00 103.68	TDDBE00 0.92	TNARE00 102.76	AAKNR00 99.990	TNAREMR 2.770
Tapis	TYAST00 106.36	TDEE000 1.25	TNAST00 105.11	PCACB00 105.420	TNASTMR -0.310

Singapore Winter Specifications (PGA page 2812)

	Visbreak Yield	Freight	Visbreak Netback	Spot Price	Visbreak Margin
Arab Heavy	TYABJ00 96.27	TDDA000 0.94	TNABJ00 95.33	AAXDG00 97.465	TNABJMR -2.175
Arab Light	TYACH00 98.57	TDDAW00 0.90	TNACH00 97.67	AAXDJ00 102.215	TNACHMR -4.575
Arab Medium	TYADN00 96.93	TDDBE00 0.92	TNADN00 96.01	AAXDL00 100.215	TNADNMR -4.235
Attaka	TYADZ00 105.86	TDDBG00 2.79	TNADZ00 103.07	PCAAJ00 100.190	TNADZMR 2.930
Das Blend	TYDSJ00 98.91	TDDCQ00 0.85	TNDSJ00 98.06	AAXOF00 101.890	TNDSJMR -3.850
Dubai	TYAJP00 98.67	TDDCQ00 0.85	TNAJP00 97.82	PCAA000 100.190	TNAJPMR -2.400
Duri	TYAJT00 94.04	TDDCR00 1.41	TNAJT00 92.63	PCABA00 96.440	TNAJTMR -3.810
Kuwait	TYANH00 97.14	TDDN000 0.95	TNANH00 96.19	AAXDQ00 99.765	TNANHMR -3.605
Minas	TYAPT00 98.08	TDDX000 1.29	TNAPT00 96.79	PCAB000 98.540	TNAPTMR -1.730
Murban	TYAQ000 100.58	TDDCQ00 0.85	TNAQ000 99.73	AAKNL00 102.690	TNAQMR -2.960
Oman	TYAQN00 98.83	TDEB000 0.79	TNAQN00 98.04	PCABS00 100.940	TNAQMR -2.900
Qatar Land	TYARC00 99.62	TDDBE00 0.92	TNARC00 98.70	AAKNP00 101.640	TNARCMR -2.950
Qatar Marine	TYARG00 99.39	TDDBE00 0.92	TNARG00 98.47	AAKNR00 99.990	TNARGMR -1.540
Tapis	TYASV00 103.21	TDEE000 1.25	TNASV00 101.96	PCACB00 105.420	TNASVMR -3.460