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News

Crude futures little changed as market eyes stronger US Dollar, China growth concerns

- ICE US Dollar Index hits fresh 10-month high
- Golden Week holiday demand eyed

A stronger US Dollar and growing global demand concerns added headwinds to crude futures Sept. 25.

NYMEX November WTI settled 35 cents lower at $89.68/b while ICE November Brent climbed 2 cents to $93.29/b.

"Crude prices aren't doing much of anything, slightly down as global growth prospects are feeling the pinch from the resumption of the global bond market selloff," ONADA Senior Market Analyst Ed Moya said in a Sept. 25 note.

The US dollar has pushed to fresh highs in recent days after the US Federal Reserve Chairman Jerome Powell reaffirmed the banks hawkish monetary policy stance and suggested that interest rates would remain elevated well into 2024.

The ICE US Dollar Index climbed to 105.95 in afternoon trading, on pace to close at the highest level since November 2022.

NYMEX October RBOB settled down 1.79 cents at $2.5439/gal and October ULSD fell 4.40 cents to $3.2622/gal.

The sideways trading action at the start of the week comes ahead of the closely watched Golden Week holiday in China starting Oct. 1.

"Demand expectations could get a lift this week with China travel expected to pick up," SAXO's APAC Strategy Team said in a Sept. 25 note.

Nevertheless, the fate of China's critical property sector, a key driver of crude and oil product demand, remains in the balance.

"China's property rout somewhat eased amid the

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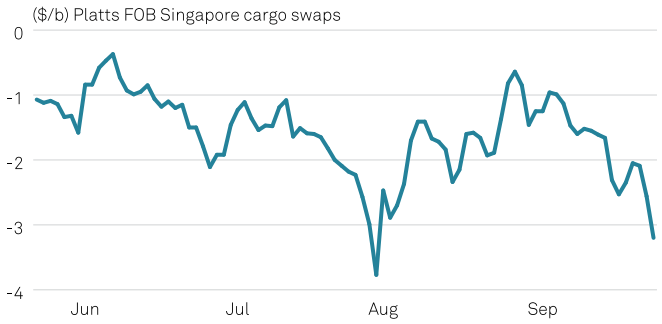
Platts Singapore jet fuel weakens sharply against ULSD



Source: S&P Global Commodity Insights

Market analysis

International Crude

Platts Middle East Sour Crude Daily Market Analysis

- Asia pivot back to Mideast sour crude as arbitrage economics narrows
- Ceypetco seeks term Murban for Jan-June 2024

Narrowing arbitrage economics on a widening Brent-Dubai spread as well as rising freight rates saw Asian refiners pivot their spot buying back to Middle East grades — lending support to cash differentials, according to trade sources Sept. 25.

At 0700 GMT, the spread between cash Brent and Dubai for November swung back to positive and was valued at 5 cents/b, up from minus 82 cents/b at the 0830 GMT Asian close on Sept. 22.

The spread has been negative since June 19, except July 4-5 and Sept. 19, S&P Global Commodity Insights data showed.

November Brent-Dubai Exchange of Futures for Swaps also widened to $2.46/b at 0700 GMT, from $1.72/b at the previous close.

South Korea's S-Oil bought 1 million barrels of the light sour Das Blend grade for November loading at a premium in the $3.10s/b to Dubai on FOB basis.

The refiner also bought 1 million barrels of the medium sour Oman crude for November loading at a premium in the $2.50s/b to Dubai, FOB. This was up from previous trades said to be at a premium in the $2.30s/b to Dubai, into Japan, and Upper Zakum at a premium in the $2.40s/b to Dubai, FOB.

Sri Lanka's Ceylon Petroleum Corp. has issued two tenders, each seeking 2.1 million barrels of Murban crude on three 700,000-barrel cargoes, for Jan. 15 to June 14, 2024, delivery to SPBM1 at Colombo. One of the tenders is seeking the crude under ex-storage modality agreement and the other tender is seeking the crude under 30 days letter of credit basis. Both tenders close on Oct. 10 and offers are to remain valid for three months.

Oman's August crude oil production was little changed on the month averaging 801,783 b/d, with almost all of the shipments going to China, according to the government's monthly statistical bulletin dated Sept. 20.

Crude production averaged 801,783 b/d in August, compared with 800,903 b/d in July, with exports to China at 743,374 b/d.

Shipments to China this year to August were 11.8% higher on the year, the only destination showing growth for the year. Over the same period, oil shipments were down 12% to Japan, 78% to South Korea and 91% to India, according to the report. Total oil exports were down 5% on the year and Oman's average oil price

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was off by 16% at $79.80/b.

Oman's production is about in line with its quota of 801,000 b/d within the OPEC+ alliance. Production of condensates, which are not included in the OPEC+ quotas, was also little changed at 239,171 b/d in August comared to 237,597 b/d in July.

— Irene Tang

CRUDE MOC: Sour crude complex strengthens; two convergences declared

The Middle East sour crude complex strengthened on Sept. 25 with two convergences declared during the Platts Market on Close assessment process.

Platts, part of S&P Global Commodity Insights, assessed November cash Dubai at a premium of $2.87/b to same-month Dubai futures, up 36 cents/b from the previous session.

Platts assessed November cash Oman at a premium of $2.88/b at market close Sept. 25, up 34 cents/b from the previous session.

Sentiment in the wider market has been buoyed by narrowing arbitrage economics, as the Brent-Dubai spread widens amid rising freight rates.

Narrowing arbitrage economics on a widening Brent-Dubai spread and rising freight rates saw Asian refiners pivot their spot buying back to Middle East grades — lending support to cash differentials, according to trade sources.

The spread between cash Brent and Dubai for November stood at minus 7 cents/b at the 0830 GMT Asian close, up from minus 82 cents/b at the previous close, after having briefly turned positive to 5 cents/b at 0700 GMT.

The spread has been negative since June 19, except July 4-5 and Sept. 19, S&P Global data showed.

November Brent-Dubai Exchange of Futures for Swaps also widened to $2.70/b, from $1.72/b at the previous close.

During the Platts MOC process, 13 Dubai partials changed hands, compared with 19 in the previous session.

The sellers were PetroChina, Reliance and ExxonMobil, and the buyers were Gunvor and Vitol.

This brought the total number of partials traded in September so far to 97, all of which were Dubai partials.

ExxonMobil declared a cargo of November Upper Zakum crude to Gunvor following the convergence of 20 partials in Platts cash Dubai. Reliance declared a cargo of November Upper Zakum crude to Gunvor following the convergence of 20 partials in Platts cash Dubai.

A convergence occurs when 20 partials are traded between two counterparties, resulting in a full 500,000-barrel physical cargo being declared from the seller to the buyer.

— Irene Tang

Seven October-loading North Sea Ekofisk crude cargoes deferred owing to field outage

- Loading postponed by 4 days
- Two each of BP and ConocoPhillips equity

The loading of seven North Sea Ekofisk crude cargoes in October was deferred late Sept. 25 by four days owing to a field outage, according to an updated loading program seen by S&P Global Commodity Insights.

This included two each of BP and ConocoPhillips equity, while one each of ENI, TotalEnergies and Shell equity.

The deferrals were due to a "prolonged field outage," according to a note accompanying the program from operator ConocoPhillips. ConocoPhillips, which operates the Teesside terminal from which Ekofisk crude loads, could not be immediately reached for comment.

An eighth cargo, parcel C13178 of ENI was also heard deferred by one day to Oct. 7-9, however, this was not listed as directly affected by the outage.

Ekofisk, the oldest field complex in the North Sea, is one of the six crude grades that can demonstrate value for the Dated Brent benchmark.

The grade is produced within Norwegian territorial waters and sent by pipeline to the Teesside oil terminal in Northeast England.

— Sam Angell

Platts Mediterranean & Black Sea Sweet Crude Daily Commentary

- Two Azeri Light cargoes sold in Platts MOC at $6.35/b premium to Dated Brent
- Demand for remaining October-loading cargoes continues to retreat in Med

Traders continued to see a cooling in some Mediterranean sweet crudes, particularly Azeri Light, to start the week as demand dries up for cargoes loading in the second half of October.

The Azerbaijani grade have fallen from multi-month highs on the back of a weaker demand and softening refining margins. Platts assessed Azeri Light 60 cents/b lower on the day, Sept. 22, down from a $6.90/b premium to Dated Brent which represented the largest premium for the grade since January.

"We have cargoes throughout second and third decades, but demand is very weak in the prompt," one trader said.

"Demand is covered before Oct. 16, so you would have to be floating [remaining prompt cargoes] into deferred demand," a second trader added.

The weaker demand for prompt cargoes has led some traders to propose that value for any remaining cargoes in the first half of October would likely trade at a discount to the two Oct. 21-25 loading cargoes which Socar sold to Vitol and Saras during the Platts Market on Close assessment process on Sept. 25 at a $6.35/b premium to Dated Brent.

There is also a sense of weakening demand in Kazakhstan's CPC Blend crude, according to some market participants, most likely linked to the softening refining margins.

"There is no demand for third decade [of October] cargoes," a third trader said.

Traders have offered mixed sentiment over the value of CPC Blend in recent days, with trades for second half of October cargoes said to be at a discount of 10-65 65 cents/b to Dated Brent.

Platts is part of S&P Global Commodity Insights

— Luke Stuart

Platts West African Crude Daily Commentary

- Distillate-rich Nigerian crude strong
- Escravos to load 3.8 mil barrels in November

Some West African crudes have started the November-loading trading cycle on a bullish note, traders indicated Sept. 25, despite competition from across the Atlantic and unsold October barrels.

"I think middle distillate-rich grades are very strong," one trader said in reference to Nigerian grades Bonga,Egina, Escravos and Forcados, which have benefited from strong global refining margins.

"However, the lighter ones ... are struggling a bit," they said, citing "big competition" from WTI Midland.

US barrels have landed competitively in Northwest Europe across recent weeks amid high US export volumes and softer trans-Atlantic freight.

A second trader said some initial Angolan offers were "very strong" while there were "a fair few October-loading cargoes [unsold], so it is hard to pick a direction [for sentiment]."

Other market participants mirrored that uncertainty. "We heard one [Angolan] cargo traded [at a high level] but I believe this was a very specific demand, and does not necessarily reflect the whole market," a third trader said.

The cargo was a Sonangol-held Dalia stem, which was initially offered at a $2.50/b premium to Dated Brent, according to market participants.

Nigeria will export 3.8 million barrels of its Escravos crude in November, the same volume as has been penciled for loading in October, according to a copy of the loading program seen by S&P Global Commodity Insights.

The program indicated four cargoes of 950,000 barrels will load, averaging 126,667 b/d.

— Joey Daly

Americas Crude

US crude inventories likely fall 2.2 million barrels: analysis

- Steady export demand, declining runs weigh on inventories
- Crude exports, production reach record annual averages
- Refined product inventories to extend previous week's draws

US commercial crude inventories likely fell in the week ended Sept. 22 according to analysts surveyed by S&P Global Commodity insights Sept. 25, despite a continued dip in refinery runs marking the end of summer peak season against still-growing exports.

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Total commercial crude stocks likely declined 2.2 million barrels in the week to Sept. 22, analysts said, to a new multiyear low of 415.3 million barrels, US Energy Information Administration data showed. The draw would leave stocks nearly 4% behind the five-year average of EIA data.

EIA data showed Cushing crude inventories had fallen 2 million barrels for the week ended Sept. 15, despite a dip in PADD 2 refinery runs. The data marked a continuation in a downward trend seen since early August. Looking ahead, analysts at S&P Global forecast a draw of 1 million barrels in the region.

Climbing exports weigh on crude inventories

The latest draws were partly driven by climbing crude exports.

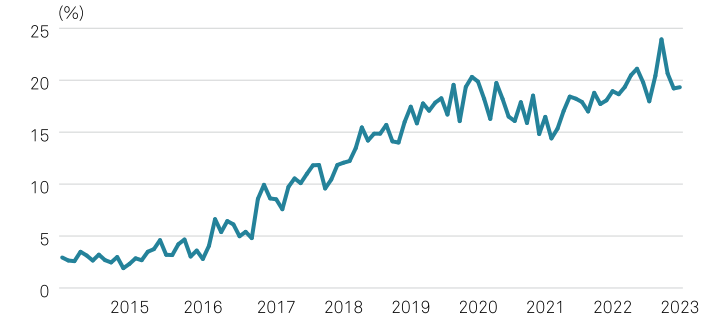
US crude exports returned to an seven-week high of 5.1 million b/d during the week ended Sept. 15, according to latest data published by the US Energy Information Administration. Exports were last seen stronger in late July.

S&P Global Analyst Anthony Starkey noted however that "inherent logistical volatility of tanker arrivals, port congestion and weather," made for drastic weekly fluctuations and were "not indicative of a trend."

Despite the volatility of weekly figures however, US crude exports reached a record annual average of 4.8 million b/d in 2023 so far, compared with 4 million b/d in 2022 and 3 million b/d in 2019, EIA data showed.

While exports appeared to be on an overall upward trajectory, Starkey still noted that they had "plateaued at around 20% of total supply over the past few years."

US Crude exports as percentage of supply



Source: S&P Global Commodity Insights

Multiple factors have contributed to the leveling of crude exports, such as domestic pipeline capacity and growing competition in overseas transportation.

During the first quarter of this year, the four pipelines that deliver crude from the Permian Basin to Corpus Christi were operating at approximately 100% of 2.56 million b/d nameplate capacity, S&P Global data showed. Corpus Christi accounts for most US crude oil exports.

The US is in progress to grow pipeline capacity through projects such as Enbridge's 200,000 b/d expansion of the Gray Oak pipeline expected later this year, which could provide much-needed wiggle room to Corpus-bound crude flows.

Crude production averaging at record-highs

In terms of supply, EIA data showed US crude output for the week ended Sept. 15 at 12.9 million b/d. Output was last seen in the same range during March 2020 at a peak of 12.8 million b/d, before COVID-19-related lockdowns led to an 8% decline in the annual average, the largest drop recorded by the EIA.

US crude production recovered those losses this year, reaching a new record annual average high of 12.3 million b/d in 2023, slimly ahead of the pre-pandemic record high of 12.2 million b/d in 2019, according to EIA data. Production is expected to remain steady at record levels with a 400,000 b/d increase anticipated in the second half of the year despite a recent decline in rig counts.

S&P Global analysts anticipate production to remain steady at 12.9 million b/d for the week ended Sept. 22.

US refinery utilization likely averaged at 0.73% on the week, at 91.7% of capacity as oil markets transition into the fall and see more planned outages and maintenance to 16.2 million b/d last week.

Refined products

Gasoline inventories likely fell 780,000 barrels, according to analysts surveyed. This would bring stocks down to around 218.7 million barrels, almost 4% below the five-year average.

Meanwhile, distillate stocks are expected to see a 1.1 million-barrel drop to around 119 million barrels, around 14% behind the five-year average.

The expected draw is minor compared to the previous weeks dip, falling 2.9 million barrels to the week ended Sept. 15. The drop came just ahead of Russia's export ban on products, which came into effect Sept. 21.

The ban is expected to remove around 1 million b/d of diesel from the global market or around 3.4% of global demand, and gasoline exports of around 150,000 b/d, further tightening an already short supply environment.

— Binish Azhar, Catherine Kellogg

Gasoline

Platts Asia and Middle Eastern Gasoline Daily Market Analysis

- US gasoline demand expected to soften ahead of winter
- Taiwan's Formosa heard selling 9,000 mt of alkylate

The Asian gasoline complex softened Sept. 25 tracking a narrowing US-RBOB Brent crack spread, moving into the winter period, sources said.

The US RBOB-Brent crack was pegged at $14.51/b at 0300 GMT intraday Sept. 25, narrowing from the Platts assessment of $16.58/b at the Asian close Sept. 22.

The narrowing US-RBOB Brent crack comes as the US domestic gasoline demand is expected to soften on the back of the winter period, sources said.

However, Mexican demand for Asian cargoes is expected to remain firm in September amid low refinery output, sources said.

Some market participants expect Asian gasoline exports to Mexico to total between 10-11 MRs for September.

Singapore exported a total of 46,902 mt of gasoline to Mexico in the week ended Sept. 20, Enterprise Singapore data released Sept. 21 showed.

Brokers pegged the front-month FOB Singapore 92 RON gasoline swap crack against Brent swaps in the range of $7.70-$7.75/b at 0300 GMT, down on the day from the Platts assessment of $8.30/b at the Asian close Sept. 22.

Brokers pegged the physical FOB Singapore 92 RON gasoline crack against front-month ICE Brent crude futures in the range of $9.30-$9.35/b at 0300 GMT, down on the day from the Platts assessment of $10.27/b at the Asian close Sept. 22.

Taiwan's Formosa was heard selling up to 9,000 mt of minimum 95 RON alkylate at a premium of around $20/b to Mean of Platts Singapore 92 RON gasoline assessments, FOB, sources said.

Platts is part of S&P Global Commodity Insights.

— Joshua Ong

Platts European Gasoline Daily Market Analysis

- Low demand in barge market
- Russian terms ammended

European gasoline markets fell on the day, extending the decline seen at the end of last week, sources said Sept. 25, with no barge trades heard and no deals in the window.

Four gasoline cargoes seen on subject on the day out of the Northwest European market, with a combination of Mediterranean, trans-Atlantic and West African options. No cargoes were heard out of the Mediterranean.

An FOB Mediterranean cargo was offered in the Platts Market On Close assessment process. In the barge market, there were no trades heard, and wide bid-offer spreads.

Sources continued to point to a relatively depressed picture in the barge market. No trades were heard throughout the day in barges.

Bid-offer spreads showed a much wider difference between summer and winter E5 gasoline than E10, said to be due to the distillation differences between the two grades. E10 may strengthen as a result, according to sources.

In other news, Russia clarified its ban on oil product exports, saying that the ban only applied to Euro 5 gasoline and diesel.

The initial document included a ban on the export of finished grade gasoline with an octane number of 80 RON and higher, along with gasoil, diesel and bunker fuel.

Russia also said that exports can process where they were already committed.

The October FOB AR Eurobob barge swap was down $18.75/mt to $876.75/mt. The front-month FOB ARA Eurobob gasoline barge crack was down $1.36/b to $13.69/b.

The October/November spread fell $2/mt to $39.75/mt, and the November/December spread was in a $32.5/mt backwardation, up 75 cents/mt on the day.

The Med/North gasoline differential — the spread between the FOB Mediterranean 10 ppm cargo swap and the equivalent FOB Amsterdam-Rotterdam Eurobob barge — was assessed down 50 cents/mt at $13/mt October, while the November differential was unchanged at $15/mt.

— Matthew Tracey-cook

Jet

Platts European Jet Daily Market Analysis

- Jet fuel differentials fall as demand recedes
- Russian diesel export ban seen inconsequential

The European jet fuel market weakened Sept. 25, partly on fading concerns following Russia's recent ban on exports of diesel and gasoil.

"Who cares if Russia is not exporting diesel any more. They were not supplying Europe anyway," one market source said.

There had been talk late last week that Russia's export ban could be bullish for jet. "[But] refineries were already maximizing diesel over jet. It won't have an impact," one source said.

The CIF NWE jet fuel cargo differential fell $3.25/mt on the day, while front-month ICE low sulfur gasoil futures were assessed down $16.75/mt.

On the demand side, "it is natural after summer for demand to come off but there is still healthy demand around. Shorts need to be covered," the source said.

On the supply side, September and October will see fewer imports from East of Suez than earlier July and August but not worryingly so. The jet market remained fairly balanced, according to sources.

In airport news, Gatwick was canceling flights amid a shortage of air traffic control workers following COVID infections. Around 82 departures were scheduled to be canceled, according to the airport.

In refinery news, Petronor's 220,000 b/d Bilbao refinery said it was restarting its G3 diesel desulfurization unit in plant 1 for maintenance. The unit was taken offline Sept. 7 and was due back by Sept, 28. The refinery also restarted a furnace in Plant 3 Sept. 20, which had been offline since mid-August, it said. Plant 3 is where the conversion units are located.

— Sasha Foss

Diesel

Russia diesel export curbs to exacerbate tight supply in Asia in Q4

- Arab Gulf gasoil cash differential at 7-month high
- Ban coincides with winter stockpiling activities

Russia's move to temporarily ban diesel exports to ease surging domestic fuel prices could see more barrels moving from

the Persian Gulf to the West, with market participants expecting tight supply conditions in Asia to exacerbate in Q4 if the ban is not lifted.

The ban which comes into effect Sept. 21, is expected to remove around 1 million b/d of diesel from the global market or around 3.4% of global demand, and gasoline exports of around 150,000 b/d, S&P Global Commodity Insights reported earlier.

The curb on Russian diesel outflows would see buyers who have benefitted from the Russian price cap, compete for diesel from other regional exporters.

Some market participants said this ban could be temporary and estimated that Russia could take 10 days to restock diesel and around 60 days to beef up its gasoline inventories.

"The immediate effect would be buyers in Africa will be pulling more barrels from the Persian Gulf but if Arab Gulf cash differentials rise, Singapore cash differentials will soon follow," said a regional gasoil trader.

The cash differential for FOB Arab Gulf 10 ppm sulfur gasoil cargoes against Mean of Platts Arab Gulf gasoil assessments widened 10 cents/b on the day to a more than seven-month high of $5.10/b at the Asian close Sept. 22, S&P Global data showed. The differential was last higher Feb. 13 at $5.35/b.

Meanwhile, the cash differential for the benchmark 10 ppm sulfur gasoil grade against the Mean of Platts Singapore gasoil assessment, rose 24 cents/b to a near one-month high of $3.03/b, S&P Global data showed. The differential was last higher on Aug. 30 at $3.15/b.

"I am surprised the market has reacted so much when there were rumors about a possible diesel and gasoline export ban around end-August. I thought the market would have priced this in by now," a second trader said.

Diesel inventories remain low

Industry sources highlighted that the ban comes at a time when refinery production and supplies are hard to increase, especially since production rates are already high.

"I hope [the ban] is temporary. Otherwise, it makes traders', not refiners' lives much harder if there is no length in the market," said a third trader.

"Inventories are mostly tight and global refining capacity has remained largely unchanged since 2019, with new capacity [is] offset by longer-term closures. This is happening at a time when demand continues to grow, leaving markets tight," Warren Patterson, ING's head of commodities strategy said.

Reflecting the tight supply, the front-month Singapore gasoil swap crack against Dubai crude swaps rose 77 cents/b on the day to $31.54/b at the Asian close Sept. 22. At this level, the refinery margin for gasoil is trading at a premium of $2.56/b to jet fuel kerosene and $23.59/b higher than gasoline, S&P Global data showed.

"Given that part of the issue is due to constraints in refining capacity as well as tightness in the medium sour crude market, the ability to significantly increase run rates and increase middle distillate supply could be difficult," ING's Patterson added.

Ban coincides with seasonal demand

On the demand side, the Northern hemisphere is heading into the heating season with winter stockpiling activity is expected to happen over the coming weeks.

"The Asian gasoil market could become very bullish with the ban. There are heavy turnarounds happening in Europe and the US, so buyers in Europe will likely have to pull barrels from Asia or the Arab Gulf," said a fourth trader, adding that supply is expected to be tight in Asia in the fourth quarter even without the Russian ban.

The October exchange of futures for swaps spread was assessed at minus $59.23/mt at the Asian close Sept. 22, widening $6.41/mt on the day from minus $52.82/mt, S&P Global data showed, reflecting improving incentives to send barrels from East to West.

Europe's shortfall in diesel, which has been exacerbated by reduced stockpiles and refinery maintenance, could improve East-West arbitrage economics in the coming weeks, trade sources said. Furthermore, the upcoming cold season is the region's first winter without relying on Russian cargoes.

The Platts-assessed FOB Singapore front month derivative time spread, a measure of near-term sentiment, rose 47 cents/b on the day to $4.27/b at the Asian close Sept. 22, S&P Global data showed.

Further, along the derivatives curve, the Q4 2023/Q1 2024 time spread, an indicator of medium-term sentiment, widened 44 cents/b on the day to $7.14/b at the Asian close Sept. 22.

— Amy Tan, Clarice Chiam, Ernest Puey

Platts Asia and Middle Eastern Gasoil Daily Market Analysis

- Arab Gulf gasoil cash differential at 7-month high
- ARA diesel and gasoil stocks largely stable on week

Russia's temporary ban on exports of diesel and gasoline from Sept. 21 continues to underpin strength in the Asian ultra low sulfur gasoil complex Sept. 25, with traders expecting the announcement to exacerbate tight supply in Asia in Q4.

"The immediate effect would be buyers in Africa will be pulling more barrels from the Persian Gulf but if Arab Gulf cash differentials rise, Singapore cash differentials will soon follow," said a regional gasoil trader.

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Brokers pegged the October-November Singapore gasoil swap time spread at plus $4.27/b at intraday trading Sept. 25, unchanged from the Asian close Sept. 22.

Industry sources highlighted that the ban comes at a time when refinery production and supplies are hard to increase, especially since production rates are already high.

"Inventories are mostly tight and global refining capacity has remained largely unchanged since 2019, with new capacity [is] offset by longer-term closures. This is happening at a time when demand continues to grow, leaving markets tight," Warren Patterson, ING's head of commodities strategy, said.

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On the demand side, the Northern hemisphere is heading into the heating season with winter stockpiling activity is expected to happen over the coming weeks.

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Diesel and gasoil stocks in the Amsterdam-Rotterdam-Antwerp refining hub were little changed week on week at 1.912 million mt on Sept. 21, according to Insights Global data.

While stock levels were 13% higher on the year and have risen off an eight-month low reached at the end of August, current levels were still considered low, especially with a tight winter expected, S&P Global reported earlier.

The sideways move on stocks has been attributed to tepid demand, with September being a shoulder month between the off-peak tail end of summer and the winter months.

— Amy Tan

Marine Fuel

INTERVIEW: EU urged to impose green requirements on bunker suppliers

- Fuel suppliers also responsible for green transition: ECSA
- Current EU rules focus on compliance of shipping firms
- RED III could translate into green supply quotas for fuel sellers

The EU should put more onus on marine fuel suppliers to provide green alternatives to conventional oil-based fuels in its efforts to promote the shipping industry's low-carbon transition, said Sotiris Raptis, secretary-general of the European Community Shipowners' Associations (ECSA).

Brussels is scheduled to extend the EU Emissions Trading System to cover maritime transportation from 2024 and introduce the FuelEU Maritime regulations on the greenhouse gas intensity of bunker fuels from 2025, and the two regulations mainly apply to ship operators involved in trading with the bloc.

Raptis, whose organization represents 20 shipowners' associations in EU member states and Norway, said the new rules are positive for the energy transition but the EU also should have "more robust requirements" for bunker suppliers.

Based on FuelEU Maritime, vessel operators have a 2% target for renewable fuels of non-biological origin in their bunker mix in 2034 if their usage does not reach 1% by 2031.

"We need to see more [regulatory requirements on fuel suppliers] ...if we're serious about pushing [them] to make these fuels available in the market," he told S&P Global Commodity Insights in a recent interview.

Separately, EU institutions are hammering out the final text of the updated Renewable Energy Directive, which has been adopted by the European Parliament and awaited approval from the Council of the EU.

According to European lawmakers' text, EU member states with maritime ports should ensure RBNBOs account for at least 1.2% of marine energy supply from 2030 to "kickstart the fuel shift" in shipping. This could later translate into a quota system in national laws obliging suppliers to provide such renewable fuels.

While green marine fuels are currently much more expensive than conventional fuels, a supply quota would "effectively push [their] prices down," Raptis said.

Green premiums

Among RBNBOs, some industry research suggested e-methanol and e-ammonia have the greatest potential to emerge as future marine fuels to decarbonize shipping.

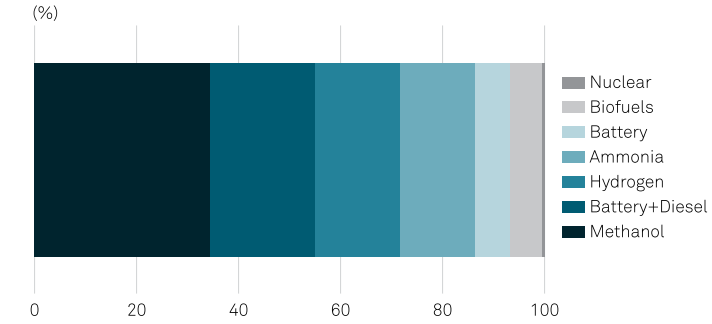
In its reference case, S&P Global expects methanol to make up 34.3% of low-carbon bunker supplies in 2030, sitting at the pole position.

Separately, demand for low-carbon ammonia from the maritime industry will reach 166 million mt in 2050 due to decarbonization requirements, according to S&P Global.

But the current production of "green" methanol and ammonia is small, and many industry participants said high prices and limited availability could delay their uptake.

Platts, part of S&P Global, last assessed the price of 0.5%S marine fuel — the most prevalent bunker fuel — at $620/mt in Rotterdam on Sept. 22. On a cargo basis without the energy density adjustment, Platts assessed FOB Rotterdam e-methanol at $2,543.484/mt.

Alternative shipping fuels outlook - 2030



Source: S&P Global Commodity Insights

Financial incentives

When enlarging its ETS to include shipping, the EU has also decided to earmark the income from future sales of 20 million emission allowances to fund maritime decarbonization projects via its Innovation Fund.

Having hit an all-time high of Eur100.23/mtCO2e Feb. 27, the nearest-December EUA contract price was at Eur85.65/mtCO2e ($90.89/mtCO2e) Sept. 22, according to Platts assessments.

"Until the EU adopts requirements for the fuel suppliers, we can use the money that is earmarked for shipping under the Innovation Fund to attempt partially bridge the price gap," Raptis said.

"This can be used, for instance, under [a] carbon contract for difference to encourage the fuel suppliers to make...green fuels available to the market," said Raptis, adding that the current policy debates should be focused on the financing mechanisms.

— Max Lin

Resid

Platts European Fuel Oil Daily Market Analysis

- European HSFO fundamentals steady
- Al Zour VLSFO exports to East Asia undercut European arbitrage

Ongoing supply tightness looked set to keep the European high sulfur fuel oil market well supported towards the year's end, but market sources said Sept. 25 most of the upside has been priced in for now.

Saudi Arabia and Russia are both key producers of crude oil globally, and the refined products market were taken off guard by their decisions to extend their production cuts to the end of the year as announced earlier in September, which would have a more pronounced bullish impact on the HSFO supply balances.

While those sour crude cut announcements did cause a significant price spike at the time for HSFO, the Hi-5 and hi-lo spreads have recovered somewhat since then and market sources have said that the upside has mostly been priced in.

Looking ahead, the outlook for European HSFO could be softer as the market was already trending downwards prior to the crude production cut announcements while the crude sweet sour spread has also shown signs of rallying in recent weeks.

Meanwhile, European HSFO trading at an atypical premium to Asian HSFO could facilitate in more cargoes heading towards Europe from the East, further relieving European HSFO balances.

While the European physical Hi-5 barge spread has shown signs of recovery, closing the week to Sept. 22 with a rebound after three consecutive weeks of narrowing, more of that upside looks to be coming from the HSFO leg of the differential easing.

European very low sulfur fuel oil seemed steady, but the lack of arbitrage opportunities in the East looks to be the main cap of any upside.

Ample supply of VLSFO in the region was expected to exert some pressure on the Asian market, while sluggish demand from end-users in the bunker segment is likely to cap any significant upside potential to upstream valuations.

In addition, the arrival of VLSFO replenishment shipments sourced from Kuwait's Al-Zour refinery might weigh on supply fundamentals in the first half of October, fueling uncertainties among players if front-month cash premiums could backpedal despite the recent uptick, traders said.

— Eugene Poon

Feedstocks

Platts European Naphtha Daily Market Analysis

- Market weaker on day
- Strong petchem demand in Sept

The European naphtha market's backwardation was narrower on the day but supply market remained tight, sources said Sept. 25.

Demand remained somewhat strong, following a trend seen throughout September on the back of restocking activity by petrochemical companies, with big players said to be buying on the spot market.

Nevertheless, crackers remained running at low rates, around 67%-70% depending on their configuration, amid poor margins

and long downstream markets, sources said.

In Asia, sentiment in the paper market was weaker, as brokers pegged the front month October-November Mean of Platts Japan swap time spread at $4.50/mt from $4.75/mt at the previous close, S&P Global Commodity Insights data showed.

Players were monitoring the impact of Russia's ban on diesel and gasoline exports, which could affect naphtha supply in Asia.

The front-month European crack fell 75 cents/b on the day to minus $13.30/b.

The front-month CIF NWE naphtha swap fell $14.50/mt to $696.50/mt. The October/November spread fell $1/mt to $3/mt and the November/December fell 50 cents/mt to $4/mt.

In blending, the front-month CIF NWE naphtha swap discount to the equivalent gasoline swaps fell $4.25/mt to $180.25/mt.

In petrochemical feedstocks, the front-month CIF NWE propane swap discount to the equivalent naphtha swap was up $4.75/mt to $131.75/mt.

The front-month East-West spread — the spread between the CFR Japan naphtha cargo swap and the CIF NWE equivalent — rose 25 cents/mt to $6.75/mt, while the November spread rose 50 cents/mt to $6.50/mt.

Bio-naphtha was steady on the day at a $1,400/mt premium to the Platts naphtha CIF NWE cargoes.

— Vinicius eduardo Maffei

Gas Liquids

Platts Asian LPG Daily Commentary

- CFR North Asia LPG prices inch higher ignoring Brent drop
- Oct FEI propane discount to MOPJ naphtha widens $1.5/mt to $8/mt

CFR North Asia LPG prices edged up Sept. 25, shrugging off December ICE Brent crude futures' $2.72/mt dip from the previous Asian close, as demand sentiment held steady.

Platts assessed front-cycle CFR North Asia H2 October delivery propane at $714/mt Sept. 25, up $1/mt from the previous session.

The premium of H2 October CFR North Asia propane against the October CP was valued Sept. 25 at $144/mt, unchanged from the previous session.

The premium of H1 November CFR North Asia propane against the November CP was valued at $133.5/mt Sept. 25, up 50 cents/mt compared with the previous session.

The premium of October butane compared with propane widened by $1/mt from the previous session to $14/mt on Sept. 25.

Two bids and no offer were seen in the physical market Sept. 25, with no trade heard.

Wellbred bid for 23,000 mt of propane for H2 October delivery, at October FEI plus $3.5/mt, which equated to $707.5/mt. The bid was standing at the close.

The discount of October FEI propane to MOPJ naphtha widened by $1.5/mt from the previous session to $8/mt on Sept. 25.

Platts is part of S&P Global Commodity Insights.

— Ramthan Hussain

Platts Western Mediterranean LPG Daily Commentary

- West Mediterranean coaster prices slip
- Some 4 mil mt butane exported from Africa

The West Mediterranean butane coaster market softened Sept. 25 amid muted activity.

"As Algeria improves its operations, annual exports from Africa are forecast to increase and longer term, Nigeria and Libya will also contribute to the growth," analysts at S&P Global Commodity Insights said.

"Historically, Europe was Africa's primary market, but going forward Africa will face growing consumption from the United States for the Northwest Europe market."

Increased competition will force African LPG producers to ship their growing propane surplus to Asia, primarily to China and to a few other Asian countries, the analysts said.

Meanwhile on the butane side, the analysts pointed to around 4 million mt of butane being exported from Africa, primarily to other African countries. However, these exports have declined in recent years. Morocco and Egypt were still seen as the major markets in the region.

While the strong production from the US has intensified the competition between Africa and US in the propane market, Africa will continue to serve the European markets in the Mediterranean for butane owing to its proximity.

In the FOB Med butane coaster market, no trades, offers or bids were heard. In the absence of competitive indications, the market was assessed on trader sentiment.

The West Mediterranean FOB butane market was assessed at $639/mt, down $9/mt on the day and unchanged as a percentage to naphtha at 91%. This kept West Mediterranean butane coasters at a $7/mt discount to the FOB seagoing Northwest European market.

Coaster freight from Lavera to Mohammedia was assessed unchanged at $65/mt, pending fresh market feedback.

The West Mediterranean FOB propane market was assessed at $646.25/mt, down $7.75/mt on the day.

In Morocco, the CIF very large cargo freight forward was calculated at $570.50/mt for delivery 45-60 days forward, down $2.25/mt on the day.

— Cari Kiddie

Tankers

Platts Americas Dirty Tanker Daily Commentary

- 145,000 mt USGC-UKC freight holds steady at w45 for sixth session
- 70,000 mt USGC-UKC FFA contracts shed w8 across the board

The VLCC segment continued to drive business in the Americas dirty tanker market on Sept. 25 amid a lull in midsize tanker chartering that carried over from the previous week.

"Owners will be hoping for further activity in the US Gulf Coast and South America in order to help cement levels and keep owners in the driver's seat," a shipbroker report said.

Platts assessed the benchmark 270,000 mt USGC-China route at $8.4 million, shedding $100,000 day on day, as ideas of achievable rates at $8.5 million seen Sept. 22 failed to materialize.

Unipec booked a replacement deal on the Kalamos at $8.3 million for a USGC-China run loading Oct. 25-30. Market participants deemed freight for the deal under the market due to the ship coming fresh out of dry dock. Reports of a ship booked by BP also at $8.3 million also lowered market participant ideas of next-done levels, however the deal was said to have been done in the week ended Sept. 22 and was not representative of the current market.

In the Brazilian export VLCC market, Petrobras solidified rates for east-bound runs after placing the Front Tana on subjects at w50.5 for a Brazil-Qingdao run for loading Oct. 29-30.

Platts assessed freight for the route at the achieved w50.5 mark, shedding w0.5 on the day.

Midsize tankers steadiness continues

Freight for both Aframaxes and Suezmaxes held at last-done levels after the Suezmax market confirmed freight was rangebound for trans-Atlantic runs.

ST Shipping repeated the w45 level for Suezmaxes lifting 145,000 mt of crude on USGC-UKC/Mediterranean routes. The charterer booked the Almi Globe to make the voyage on Oct. 6-8.

Platts assessed freight for the corresponding voyage at the tested w45 mark, unchanged at that level for the sixth consecutive trading session.

BP and Eni reportedly came out in the market midday Sept. 25, looking to book either a Suezmax or an Aframax for trans-Atlantic voyages out of the region.

Platts assessed the benchmark 70,000 mt USGC-UKC run at w90, also steady on the day, unchanged since Sept. 19. Local freight rates also held with the 70,000 mt East Coast Mexico-USGC run at w80. News of a deal done in late trading Sept. 22 emerged wherein P66 booked the Ionic Aspis for an East Coast Mexico-USGC run at w80.

The forward freight agreement market softened over the day despite the spot market remaining stable, and all contract rates fell w8 day on day. The October contract for the 70,000 mt USGC-UKC run clocked in at w123, while a November-December contract traded at a w151.5 equivalent.

Platts is part of S&P Global Commodity Insights.

— Catherine Kellogg

Platts Americas Clean Tanker Daily Commentary

- MR freight skyrockets amid ever-tightening position list
- MR USGC-Chile rate jumps $425,000 amid rush of fixing

Freight skyrocketed for the Americas clean Medium Range tanker class Sept. 25, as a lack of available tonnage coupled with a rush of fixing activity to push the advantage firmly to shipowners.

One shipbroker report listed only seven MRs were available to load on the US Gulf Coast five days out from Sept. 25, and only two were available for prompt loading.

"Yeah [the list] is really tight, especially for a Monday," a shipbroker said.

Market participants saw the lack of tonnage availability wreak havoc on freight at the start of trading, with Vibra placing the Torm Hardrada on subjects for a US Gulf Coast Brazil run at w235, set to load Sept. 28-30.

Pilot then booked the STI Onyx for a USGC-Peru run at $2.7 million, with options to discharge in the Caribbean at $1.05 million, in Brazil at w255 and in Europe at w165.

Finally, Turbo Asia placed the STI Marvel on subjects for a USGC-Caribbean run at $1.1 million, with options to discharge in Europe at w167.5, in Brazil at w257.5 and in Chile at $3.1 million.

Shipbroker and shipowner indications were heard pushing past the last-done levels by Turbo Asia as freight continued to push higher amid increasing fixing activity that ate away at the position list further.

Platts assessed freight for the 38,000 mt USGC-Brazil and USGC-UK Continent routes both surging w45 to w260 and w170, respectively.

The local USGC-Caribbean route also saw testing by Marathon, which booked the Zoilo for a Sept. 28-30 loading run at $1.075 million. However, with the ship's unfavorable trading history, market participants were quick to deem the traded level slightly discounted.

The MR USGC-Caribbean route finished the day climbing $250,000 to $1.125 million.

With active indications for the USGC-Chile route also heard pushing past the $3.1 million level, freight for the route was assessed jumping $425,000 to $3.125 million.

"Fixture by fixture [freight] is increasing right now," a shipowner said.

Platts is part of S&P Global Commodity Insights.

— Catherine Rogers

Platts East of Suez Clean Tanker Daily Commentary

- LR 1 tanker rates mostly decline
- MR rates under pressure in Persian Gulf

East of Suez Long Range I, or LR 1, tanker rates were mostly lower Sept. 25, with many charterers on the sidelines anticipating further declines.

"There is a major refinery turnaround going on in the Persian Gulf and therefore the number of cargoes for loading are few during the first week of October," said a chartering executive with a global commodity trading company.

There was market chatter that fixtures have already been done at lower rates, but no details were available.

However, owners have pinned their hopes on demand ahead of holidays across Asia.

"Let us hope for a preholiday rush," said a source with a clean oil tanker owner. The number of fixtures were expected to be relatively fewer in the week starting Oct. 2, and some of that maybe offset this week.

A broker in North Asia said, "this week is likely to be active due to long holidays in some of the countries."

Among LR 2 fixtures, the Swarna Jayanti was yet to be fully fixed. It had been placed on subjects in the week ended Sept. 22 at w130 by Admic on the Persian Gulf-Japan route.

Sometimes trading companies such as Admic and ATC need subjects for a longer duration because of clearances required for various discharge ports where the ship is expected to discharge.

In the Medium Range tanker market, rates came under pressure in the Persian Gulf, with a slight shift in demand toward East Asia, market participants said.

South Africa's Engen was heard sourcing three MR cargoes from Singapore and an MR each was also placed on subjects by Vitol and ATC — all for loading by the end of the current week.

South Africa typically buys cargoes from the Persian Gulf, and with lower demand, rates were sliding down. To generate similar earnings that MRs were fetching on the Singapore-Durban route, freight for Singapore-Australia needed to be higher than the last done fixture, a chartering source said.

Demand for deliveries Down Under has been limited, dragging down the rates in North Asia. The Grand Winner 2 was placed on subjects by BP at w241 for Oct. 12 diesel loading on the North Asia-New Zealand route.

Platts is part of S&P Global Commodity Insights.

— Sameer C. Mohindru

News

Carbon capture projects in limbo as economics, policy remain ambiguous

- Developers need assurance of value
- Government backing helped Alberta project

While there is tremendous uncertainty about the economics of carbon capture, use and sequestration (CCUS) projects, carbon capture systems are still being designed and built to meet lower-carbon emissions goals, experts on a panel at the World Petroleum Congress said to a packed audience.

"Everyone wants policy certainty," said Peter Findlay, director of CCUS economics at oil and gas consulting firm Wood Mackenzie, at the Sept. 20 session. The industry would benefit from a "standard carbon price that's kind of bankable."

"Theoretically there should be some price to emit or credit for not emitting," Findlay said. "But that's the unknown and that just increases the cost of capital ... what developers and users need is reassurance that captured carbon will be worth something."

Wood Mackenzie is tracking more than 800 carbon capture projects around the world, Findlay said, and the clearest trend from the tracker is that most projects have yet to receive a final investment decision from their sponsors. "That next kind of level of investment, the level you need for board approval, they haven't really got to. So they're kind of stuck."

What is it worth?

For companies trying to quantify the impacts of their environmental, social and governance goals and net-zero targets, the key question is "what's it worth to us to reduce emissions?" Findlay said. "We're spending shareholder capital here and they're expecting a return."

Financial support for carbon capture projects can come from various sources, Findlay said. Those sources include tax credits and government payouts for captured carbon; payments by customers for the service; and income derived from end-use processes such as enhanced oil recovery.

The Alberta Carbon Trunk Line, a carbon capture and storage project that is creating a carbon hub in western Canada, got up and running with strong government backing, an executive with developer and operator Wolf Midstream Canada said.

The trunk line connects two large industrial emitters northeast of Edmonton with storage or enhanced oil recovery users 240 kilometers south around Calgary. The trunk line includes a high-pressure 16-inch steel pipeline built specifically to move CO2.

Alberta's provincial government put up $500 million in capital and operating grants to fund the project, said Jeff Pearson, the president of Wolf's carbon unit. The federal government provided further funding, reducing the immediate uncertainty that the project would be built and put into operation.

That backing helped Wolf to build and evaluate a whole system — from emitters, to capture, to end use or storage.

Government support

"Super strong support from the government to fund the entire system rather than just a piece of the system" helped the company to make the project a reality, Pearson said. "We had to get the whole thing off the ground to make it work."

The operator has plans to expand to handle carbon from Air

Products & Chemicals Inc.'s new Zero Hydrogen Energy Complex facility near Edmonton, according to Pearson.

The connector to Air Products is expected to manage 7 million metric tons of CO2 per year. The current system is moving 1.6 million mt/year of carbon from the two early customers and has a capacity of nearly 15 million mt/year, Pearson said.

Developing new networks like this is an iterative process that allows the market to mature and allows operators to gather information on how to size and plan their projects, he said.

"We need to build one. Learn from it. Build another one. Learn from it. We can't build 10 of them at the same time and expect to learn from each project, as we're doing the same thing at the same time," Pearson said. "Start to get the economics behind some of the early projects so that you can learn from them, and everybody can take that to drive costs down and make them more commercial."

S&P Global Commodity Insights reporter Bill Holland produces content for distribution on Capital IQ Pro.

— Bill Holland

INTERVIEW: APPO sees any revision to African countries' OPEC+ quotas as temporary

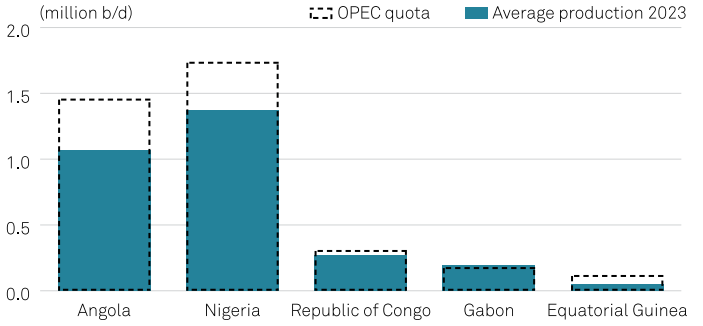
- Volume revision should not affect upstream investment
- Sees foreign divestment in African energy projects as 'a blessing'
- Meeting on Central African pipeline to be held in Nov

Any revision to African countries' production quotas under the OPEC+ crude production agreement would be temporary and should not affect upstream investment, Secretary General of the African Petroleum Producers' Organization Omar Farouk Ibrahim told S&P Global Commodity Insights Sept. 21.

Some sub-Saharan African OPEC members, including Congo-Brazzaville, Nigeria, Angola, and Equatorial Guinea, face a reduction in their quotas after producing under target in recent years. The group has been given until November to demonstrate that its output can increase.

"Even if there are cuts in production for African OPEC-member countries, they are going to be temporary, because there will definitely be increasing demand in the future," Ibrahim said.

OPEC's African members are missing their production quotas



Source: Platts OPEC Survey, S&P Global Commodity Insights

He did not comment, however, on the likelihood that such cuts will be introduced, or potential volumes that could be affected.

African OPEC delegates told S&P Global after June's meeting that they were confident of averting quota downgrades by boosting production, but with just two months to go, none have demonstrated significant output increases.

"Whoever has money to invest in the industry should continue to invest, because prices will continue to rise. When they go down, it's going to be very temporary, then it will rise again," he said.

Oil prices have risen significantly in recent months, as OPEC+ countries stick to a strategy of significant supply cuts. Platts, part of S&P Global, assessed Dated Brent at $94.225/b Sept. 22, up from around $75/b at the start of the summer.

OPEC+ continues to cut output despite forecasts of a major supply deficit in the fourth quarter. In the longer term, producers have warned that a lack of investment will lead to further supply shortages.

Investment instability

For Africa, a major problem is investment instability. Foreign investors that have traditionally financed large energy projects are divesting from upstream African projects, particularly onshore crude assets, as pressure mounts on them to accelerate their transition to cleaner fuels.

International oil companies, including ExxonMobil and Chevron, have pulled out of oil projects in mature West African basins in favor of less carbon-intensive projects, such as LNG, and frontier basins like Namibia and Guyana.

Ibrahim said that this is "a blessing" as it is forcing African countries to look for domestic sources of financing.

"The bottom line, seriously, is that for as long as you believe you're just producing oil and gas for external markets, then you have to always look outside for the markets. If on the other hand, you believe that this is something you need for your people, then you have no choice but to rethink your source of funding of the industry," he said.

One new potential source of financing is the African Energy Bank, which is being set up with Afreximbank and has a starting capital of $5 billion. Afreximbank and APPO are seeking backing from national oil companies, governments, and sovereign wealth funds, particularly in rich Gulf states, provided they share their vision that Africa will not end fossil fuel use in the foreseeable future.

Growing concerns about energy security following Russia's invasion of Ukraine launched in February 2022 have seen some foreign investors rethink their plans to avoid investment in Africa.

"The very countries that were saying that they're not going to help us find funds to do projects came back to say that they are ready to do it almost immediately," Ibrahim said.

One major project that has seen renewed interest among foreign investors since Russia invaded Ukraine is the Central African Pipeline Project, an ambitious string of storage depots, LNG terminals, refineries, and gas-fired power plants stretching

6,500 km through 11 countries by 2035.

Leaders of the countries that the pipeline would run through are planning to meet for a summit on the project in November in Chad's capital N'Djamena, Ibrahim said.

"I believe a number of heads of state are coming for the meeting, hopefully, to be able to take a final decision on the way forward for the project. APPO is fully in support of it," Ibrahim said.

He added that, if an agreement is reached, construction could begin in 2025. A well-placed source in the industry told S&P Global that China and India had expressed an interest in funding the project.

Successful implementation of the project could depend on security issues. There have been military coups in the last two years in Gabon and Chad, two of the countries that have signed up for the project. Analysts see risks of further unrest in the region in the future.

Ibrahim said that this should not affect countries' energy development plans.

"Irrespective of which government comes to office, I mean, whether it's a democracy or a military regime, nobody can afford not to go on with the production of oil and gas, because this is essentially the mainstay of the economies of those countries that have oil and gas and depend on it," he said.

— Rosemary Griffin

Russia clarifies export ban for some fuel, already committed exports

- Ban lifted on some type of bunker fuel, gasoil
- Product with approved transport can proceed to export

Russia's government has slightly amended the export ban on gasoline and diesel it published at the end of last week.

According to a document approved and published Sept. 23, it removes the ban on the export of heavy distillates such as gasoil as well as marine diesel.

The ban therefore includes only Euro 5 gasoline and diesel.

The initial document included the export of finished grade gasoline, with octane number of 80 RON and higher, summer, intermediate, winter and arctic diesel, marine diesel bunker fuel as well as gasoil.

However, marine diesel and gasoil have been subsequently removed from the list.

Russia has also clarified the cases when exports can proceed for already committed volumes.

Those include products already approved by customs, and also accepted by Russian Railways and pipeline operator Transneft, as well as product with sea transport arranged.

Transneft suspended midnight Sept. 21 all diesel exports arriving by pipeline to the Baltic Sea port of Primorsk and the Black Sea port of Novorossiisk.

"The Russian export ban would affect Long-Range vessels, as it means increased ton-miles for shipping products to replace the lost Russian barrels," a shipping sources said, adding that the ban would be "bullish for the bigger size ship freight rate."

— Elza Turner, Rich Laverick-brown, Lei Zhong

Gulf Keystone oil sales in northern Iraq continue to climb amid suspended exports

- Starting up some wells after shutdown
- Local sales have been climbing since July
- Crude being sent via pipeline to Kurdish refinery

Gulf Keystone Petroleum, which produces oil in northern Iraq at the Shaikan field, has now increased local sales to 33,000 b/d after an average of 28,800 b/d over Sept. 1-24, at an average price of $30/b, more than making up for its estimated monthly costs of $6 million for the second half of 2023.

The continuity of local sales "remains uncertain," the company said in a Sept. 25 statement.

Crude oil exports from the Kurdish region in northern Iraq via Turkey have been suspended since March 25. As a result, the company curtailed production and put remaining volumes into storage prior to a full shut-in of production on April 13.

The company began partially resuming oil production in July and started selling oil to domestic buyers with average sales volumes of about 4,900 b/d in July and 17,200 b/d in August.

Following recent agreements with buyers, Gulf Keystone has stopped trucking operations and is injecting all crude sales into a pipeline for transportation to a local refinery in the Kurdish region, and is receiving advance payments of a net entitlement of 36% of gross sales revenue, the company said in the statement.

The company wants to increase local sales as it is starting up some wells that have been shut for several months, it said.

— Claudia Carpenter

Crude futures little changed as market eyes stronger US Dollar, China growth concerns ...from page 1

government's rescue policies," noted CMC Market's market analyst Tina Teng Sept. 25.

A slate of measures rolled out by Beijing helped ease regulatory restrictions on the property sector in a bid to prop up the embattled sector.

However, Chinese property giant, Evergrade, revealed Sept. 24 that it was unable to issue new debt due to ongoing investigations into one of its subsidiaries.

The slump in China's property and construction industries have not only dampened the outlook for oil demand, but also dented broader confidence in the country's economic recovery from its pandemic slowdown.

"This week, China's manufacturing and services PMIs for September will have a major impact on commodity prices, such as crude oil," CMC's Teng added.

— Christopher Vanmoessner

Refinery updates

REFINERY NEWS: Phillips 66 sees no supply issues from Friday's fire at Los Angeles-area plant

Refinery: Wilmington, California
Capacity: 139,000 b/d
Owner: Phillips 66
Duration: Began 2:00 pm PT Sept. 22
Notes: Phillips 66 reported a fire at its Los Angeles-area refinery in Wilmington, California, Sept. 22, but said there was no impact on supply, the company said in a Sept. 25 statement.

Phillips 66 emergency responders extinguished the fire and its cause is under investigation, the emailed statement said. "Our standard business operations remain unaffected, and there have been no impacts to the supply of gasoline or any other refinery products."

No injuries were reported and fence line monitoring showed no air quality impacts in the area.

Phillips 66 said Sept. 20 it would begin planned work at the plant Sept. 21, which would last through Oct. 31, according to a filing made with the South Coast Air Quality Management District, a local regulatory agency.

The filing cited "essential operational need" as the reason for the planned work.

Including the current filing, Phillips 66 has filed 13 unplanned events for the refinery with the SCAQMD.

Sources: Phillips 66, California's Hazardous Materials Report, and SCAQMD

— Janet Mcgurty

REFINERY NEWS: Bilbao restarting desulfurization unit

Refinery: Petronor, Bilbao, Spain
Owner: Repsol (Petronor)
Overall capacity: 220,000 b/d
Units affected: Desulfurization unit G3; furnace in plant 3
Unit capacity: Not specified
Duration: Sept. 7-25
Notes: Petronor's Bilbao refinery said it was restarting its G3 diesel desulfurization unit in plant 1 for maintenance. The unit was taken offline Sept. 7 and was due back by Sept, 28.

The refinery also restarted a furnace in Plant 3 Sept. 20, which had been offline since mid-August, it said. Plant 3 is where the conversion units are located.

The refinery has been running at full throughput since August following a fire in plant 1 at the end of July. No other major maintenance is expected for the remainder of the year, senior management said July 27.

Source: Company statement

— Gianluca Baratti

REFINERY NEWS: Production at Iran's Bandar Abbas not impacted following fire incident

Refinery: Bandar Abbas, Iran
Owner: National Iranian Oil Refining and Distribution Co.
Overall capacity: 350,000 b/d
Note: Production has not been affected at Iran's Bandar Abbas refinery following a fire during an emergency overhaul in an operational unit, oil ministry news service Shana reported Sept. 25.

The incident occurred Sept. 22 during the course of an emergency repair of a processing unit. One worker died and four were injured, Shana cited the refinery's public relations statement.

This incident had no impact on the plant's production and the production is steadily continuing, the statement added.

According to a state television report, an explosion caused the fire due to a short circuit problem in the unit 18 of Bandar Abbas refinery.

Source: Reports

— Aresu Eqbali

REFINERY NEWS: Portugal's Sines takes FID on advanced biofuels unit, HVO

Refinery: Sines, Portugal
Owner: Galp Energia
Overall capacity: 226,000 b/d
Unit capacity: 270,000 mt/yr for HVO/SAF; 100 MW for electrolyzer
Duration: start-up expected in 2025
Notes: Galp's Sines refinery will go ahead with two large-scale decarbonization projects, the company said Sept. 25, after making final investment decisions on a new advanced biofuels unit and a new hydrogen electrolyzer.

Both projects are expected to start up during 2025, Galp said, with a combined cost of Eur650 million.

The advanced biofuels unit, which will have a capacity of 270,000 mt/yr, above 260,000 mt/yr announced previously, will be developed in partnership with Mitsui. The capacity for SAF should be around 193,000 mt/yr, the company added.

The Portuguese Environment Agency had cleared the HVO plant project July 17.

The green hydrogen unit, which was cleared June 16, could produce up to 14,000 mt/yr of hydrogen, according to the specifications published.

Meanwhile, the refinery is due to carry out 50-day maintenance in October and November, the company said earlier in September, impacting the atmospheric distillation unit and FCC in Q4, among other units.

It is planning to hold its next major turnaround in 2025.

Source: regulatory filing

— Gianluca Baratti

REFINERY NEWS: Phillips 66 reports FCCU, SRU flaring at Borger, Texas, plant after planned work

Refinery: Borger, Texas
Capacity: 149,000 b/d
Owner: WRB Refining (50% Cenovus and 50% Phillips 66)
Duration: Began Sept. 22-23
Notes: Phillips 66 reported flaring the gasoline-making FCCU and the SRU from its Borger, Texas, refinery began on Sept. 22, according to a filing made with state regulators on Sept. 25.

"A release of SO2 and H2S to the air at the Phillips 66 Borger Refinery exceeded 500 lbs. and 100 lbs. respectively. The event began at approximately 12:45 pm on September 22, 2023. The event is on-going. Operations personnel is working to minimize emissions," said the filing made with the Texas Commission on Environmental Quality.

A company spokesperson was not immediately available for comment about whether the flaring was related to completion of planned work at the plant.

Phillips 66 started a week's work of planned work on the FCCU unit 40 on Sept. 15 with expectations the work would end Sept. 21 after repairs were completed, according to a Sept. 15 filing with the TCEQ.

Source: TCEQ

— Janet Mcgurty

REFINERY NEWS: Chevron reports flaring at Los Angeles-area plant

Refinery: El Segundo, California
Capacity: 269,000 b/d
Owner: Chevron
Duration: Began Sept. 22 at 2:27 pm CDT
Notes: Chevron reported flaring at its El Segundo, California, Sept. 22, but the company continued to meet customer supply, a company spokesperson said Sept. 25.

"We had a mechanical issue at the El Segundo, which necessitated brief flaring. [The] flaring stopped once the issue was corrected. Day-to-day operations are unaffected and we continue to supply our customers," Chevron company spokesperson Ross Allen said in an email.

According to the South Coast Air Quality Management District's Flare Management System map, there was no flaring at the plant during the morning of Sept. 25.

Supplies of gasoline and diesel are tight along the US West Coast, because of both planned and unplanned maintenance, including planned work on the FCCU and alkylation unit at PBF's Torrance plant and a brief fire and some "essential operational work" at Phillips 66's Wilmington refinery.

Source: Company, SCAQMD

— Janet Mcgurty

REFINERY NEWS: PBF reports flaring from San Francisco-area refinery

Refinery: Martinez, California
Capacity: 156,400 b/d
Owner: PBF Energy
Duration: Began Sept. 22
Notes: PBF reported flaring at its 156,400 b/d Martinez, California, refinery Sept. 22, according to the Martinez Refining Co.'s Facebook page.

"The Martinez Refining Company is experiencing flaring that may be heard offside and is visible...," said the Sept. 23 Facebook post. "We apologize for impacting some of our neighbors and thank our employees who are safely responding to resolve the equipment issue that is causing the flaring."

A company spokesperson was not immediately available to comment on whether the incident was ongoing and what units were involved.

Source: Facebook

— Janet Mcgurty

REFINERY NEWS: Production, exports from Kuwait's Mina al-Ahmadi not affected by fire

Refinery: Mina al-Ahmadi, Kuwait
Owner: Kuwait National Petroleum Co.
Overall capacity: 346,000 b/d
Notes: Production and exports were not affected by a fire at Kuwait's Mina al-Ahmadi refinery and continued as usual, the company was quoted as saying by the Kuna news agency.

The fire, which occurred late in the night of Sept. 22, broke out in unit No. 35 of the refinery. It was fully controlled by the company's firefighters.

The Mina Abdullah and Mina al-Ahmadi refineries have been combined into a single 800,000 b/d complex following an upgrade.

Source: Kuna

— Elza Turner

REFINERY NEWS: PDVSA operating CRP complex falls to 15.2% of capacity

Refineries: Amuay, Cardon, Puerto La Cruz and El Palito, Venezuela
OWNER: PDVSA
CAPACITY: Paraguana Refining Center (Amuay 645,000 b/d; Cardon 310,000 b/d); Puerto La Cruz 187,000 b/d; and El Palito 140,000 b/d)
Units affected: All
Unit capacities: Details below
Duration: Ongoing
Venezuela's 955,000 b/d Paraguana Refining Center was operating at 145,000 b/d, or 15.2 % of capacity as of Sept. 25,

from 16.3% reported Sept. 20, according to a PDVSA technical report reviewed by S&P Global Commodity Insights.

Located in northwestern Venezuela, CRP includes the 310,000 b/d Cardon and the 645,000 b/d Amuay refining facilities. It also includes the 16,000 b/d Bajo Grande asphalt plant, which has been out of service for several years.

In addition to the shortage of crude for processing that the CRP has been experiencing since August, the crude that refineries are receiving from the production fields is now out of specification and therefore not useful due to its high water and sediment content, according to the report.

The lowest processing rate this year was 11.7% reported Aug. 22, according to previous reports.

Also, gasoline production for the local market continues to be affected by low vacuum gasoil inventories. The VGO shortage also is a consequence of the low processing rate in the refinery distillers from the lack of crude oil, according to previous reports.

Despite the gasoline shortage in its local market, state-owned PDVSA exported to Matanzas, Cuba, 150,000 barrels of 91 RON blendstock Sept. 14, according to the report. Crude oil inventories at the CRP totaled 742,000 barrels as of Sept. 25.

Amuay

The Amuay refinery was operating at a rate of 69,000 b/d, or 10.7% of its capacity as of Sept. 25, down from 18.1% reported Sept.20, according to the PDVSA technical report.

At Amuay, four of five distillers are out of service. The rest of the processing plants continue to be shut because of various breakdowns and a lack of replacement parts, according to the report.

The 108,000 b/d catalytic cracking unit remained shut as of Sept. 25 because of low VGO inventories, the report said.

The Amuay catalytic cracking unit, combined with the Cardon refinery's FCC and naphtha reformer unit, is a key unit for supplying the Venezuelan local market, which has a chronic shortage from a lack of supply and the suspension of imports following US sanctions in February 2019.

Cardon

The Cardon refinery was operating at 76,000 b/d, or 24.5% capacity as of Sept. 25 up from 12.6% reported Sept. 20, according to the PDVSA technical report.

At Cardon, two of four distillers are out of service, but the 105,000 b/d FCC at the Cardon refinery was operating at 53,000 b/d, or 50.5% capacity, as of Sept. 25.

The 55,000 b/d naphtha hydrotreating unit was operating at 35,000 b/d, or 63.5% of capacity, and the 45,000 b/d naphtha reformer was operating at 28,000 b/d, or 62.2% of capacity as of Sept.25.

Other refineries

The 140,000 b/d El Palito refinery continued to operate at 70,000 b/d or 50% capacity as of Sept.25, according to the report. El Palito is located in Carabobo state in north-central Venezuela.

Updated information was not available for Puerto La Cruz, located in the east.

PDVSA did not respond immediately to a request for comment.

Source: PDVSA Refining technical report

- Mery Mogollon, support@platts.com

— Mery Mogollon

Subscriber Notes

Platts to resume US Midwest seasonal ULSK assessments Oct. 2

Platts, part of S&P Global Commodity Insights, will resume its seasonal assessments for ultra-low sulfur kerosene in the US Midwest markets Group 3 and Chicago, effective Oct. 2, 2023.

The publication will be suspended again in the spring.

These assessments appear on PGA pages 160, 420, 480, as well as in US Marketscan and Oilgram Price Report under the code PJACB00 for Group 3 and PJACD00 for Chicago.

Please send comments to americas_products@spglobal.com and pricegroup@spglobal.com.

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

Platts corrects Sept. 21 DME Oman marker price

Platts, part of S&P Global Commodity Insights, has corrected the Sept. 21 DME Oman marker price, which should read as follows:

DME OMAN < XDOA001> $93.11

The assessment appears in Platts Global Alert and Platts Crude Oil Alert pages 702 and 703, and in the Crude Oil Marketwire under the code above.

No Canadian crude assessments to be published Oct. 9

Platts will not publish Canadian crude oil assessments Oct. 9, 2023, because of the Canadian Thanksgiving Holiday.

Canadian crude assessments appear on Platts Global Alert pages 230-233. Commentaries for pipeline grades appear on Platts Global Alert page 298.

No Canadian crude oil assessments will appear in Crude Oil Marketwire, North American Crude and Products Scan, or Oilgram Price Report. Normal publication will resume Oct. 10.

For full details of the Platts publishing schedule and services affected, refer to the holiday schedule.

No Canadian crude assessments to be published Oct. 2

Platts will not publish Canadian crude oil assessments on Oct. 2, 2023, because of Canada's National Day of Truth and Reconciliation.

Canadian crude assessments appear on Platts Global Alert pages 230-233. Commentaries for pipeline grades appear on Platts Global Alert page 298.

No Canadian crude oil assessments will appear in Crude Oil Marketwire, North American Crude and Products Scan, or Oilgram

Price Report. Normal publication will resume Oct. 3.

For full details of the Platts publishing schedule and services affected, refer to the holiday schedule.

Platts proposes to launch USGC-Tampa/Port Everglades Medium Range clean tanker Jones Act freight assessments Nov. 1

Platts, part of S&P Global Commodity Insights, proposes to launch two daily spot-equivalent 38,000 mt Medium Range clean tanker Jones Act freight assessments on the US Gulf Coast-to-Tampa/Port Everglades routes, effective Nov. 1, to provide transparency into domestic maritime shipping markets.

Since Jones Act freight trading is almost exclusively transacted on a term charter basis, the freight assessments will reflect spot-equivalent lump sum and $/mt freight values based on transactional term charter rates adding roundtrip bunker and port costs from the USGC to Tampa, West Coast Florida, and Port Everglades, East Coast Florida.

The load port basket and discharge ports, average port charges, vessel speed, and bunker consumption to be utilized in the spot-equivalent freight assessments are arrived at by extensive market survey and reflect market practice.

On the 38,000 mt USGC-Tampa and USGC-Port Everglades routes, the spot-equivalent freight assessments will factor in

- Term charter rates on a $/day basis multiplied by the number of roundtrip voyage days
- Voyage distance on a roundtrip basis
- Average load port costs at Houston, Lake Charles, New Orleans and Pascagoula
- Discharge port costs at Tampa and Port Everglades, respectively
- Average delivered 0.1% sulfur marine gas oil bunker costs at the main bunkering ports of Houston and New Orleans as assessed by Platts on a daily basis under the codes AAWWX00 and AAWYA00, respectively
- Voyage speed of 14 knots for both laden and ballast legs at a bunker consumption of 32 mt/d and 30 mt/d, respectively
- Bunker consumption of 5 mt/d for two loading days and one idle day per roundtrip, and 18 mt/d during two days of discharge

Please send all comments or questions by Sep. 29, 2023 to shipping@spglobal.com and pricegroup@spglobal.com.

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

Platts launches Northwest European bionaphtha assessments Sept. 1

Platts, part of S&P Global Commodity Insights, has launched bionaphtha assessments in Northwest Europe, effective Sept. 1, 2023.

Platts has observed growing supply and consumption of bionaphtha in Northwest Europe on the back of a rapid expansion in European biorefining capacity.

The growth in demand for bionaphtha is driven in part by the transition to lower carbon fuels where bionaphtha is used as a gasoline blending component, as well as increasing usage from chemical crackers that in turn supply bio-based feedstocks for consumer plastics production.

The launch of Platts Northwest European bionaphtha assessments follows a decision published Aug. 2 which can be found here:

https://www.spglobal.com/commodityinsights/en/our-methodology/subscriber-notes/080223-platts-to-launch-northwest-european-bionaphtha-assessments-sept-1

The assessments reflect parcels of 1,000-2,000 mt of bionaphtha, loading five to 15 days forward on an FOB ARA (Amsterdam-Rotterdam-Antwerp) basis. Other locations within Northwest Europe may be considered for the assessment but may be normalized to reflect loadings basis ARA.

Platts will publish the bionaphtha assessment on an outright basis and also as a differential to the benchmark Platts CIF NWE naphtha cargo assessment (PAAAL00), reflecting typical trading practices. The assessments will be published in both $/mt and Eur/mt, time-stamped at 1630 London time.

The bionaphtha assessments exclude material produced from palm-based feedstock and mirror applicable specifications set out in the Platts CIF NWE naphtha methodology, reflecting open specification material with a minimum 65% paraffin content and a typical density of 0.69 kg/l to 0.735 kg/l.

Certification Requirements:

The new assessments reflect material accompanied with International Sustainability & Carbon Certification Plus (ISCC+) issued by a European Commission-approved auditing body. The ISCC+ is a voluntary sustainability certification for circular and bio-based products, renewables, food, feed & biofuels, for non-regulated markets outside of the European Union Renewable Energy Directive (RED II) framework. Market feedback received suggest requests for ISCC+ certification for bionaphtha used as chemical feedstock to be prevailing market practice and typical. Where applicable, material accompanied with ISCC EU compliant certification and sustainability documentation showing a minimum greenhouse gas saving of 50% under RED II framework may be considered for the assessments, subject to normalization.

Platts understands while it is typical for buyers to request for additional Kosher or Halal certifications for bionaphtha used as chemical feedstock, especially for consumer plastics or food packaging production, material adhering to these additional certification may command a premium and may be normalized for the purpose of these assessments.

The new bionaphtha assessments are published on Platts LPGaswire, Oilgram Price Report, APAGscan, EUMarketscan and USMarketWire, Platts alerts fixed pages PGA0034, PGA1110, PGA1111, PGA1310, PGA1311, PGA1775 and Platts Dimensions Pro.

Description	Daily Assessment	Monthly Assessment
Platts Bio-Naphtha FOB NWE USD/mt	PAAAU00	PAAAU03
Platts Bio-Naphtha FOB NWE Eur/mt	PAABU00	PAABU03
Platts Bio-Naphtha FOB NWE Premium USD/mt	PAADU00	PAADU03
Platts Bio-Naphtha FOB NWE Premium Eur/mt	PAAEU00	PAAEU03

Please send any comments or feedback to europe_products@spglobal.com, MRTS_biofuelsandfeedstocks@spglobal.com,petchems@spglobal.com and pricegroup@spglobal.com.

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

Platts to discontinue Mesa 30 and Santa Barbara crude price assessments

Platts, a part of S&P Global Commodity Insights, will discontinue publishing price assessments for Venezuela's Mesa 30 and Santa Barbara crudes effective Nov. 1 due to declining production and a lack of spot market activity.

Platts understands there is no spot-market activity for the Venezuelan grades Santa Barbara and Mesa 30. US sanctions have curtailed Venezuela production and trading activity, and market participants do not anticipate normal activity to resume. Market sources indicate there has been no spot trade of these grades in nearly a decade.

The discontinuation will affect the following codes:

	Outright	Diff to Dated Brent	Diff to Brent Strip	Diff to WTI Strip
Mesa 30	AAITB00	AAXBO00	AAXCC00	AAITH00
Santa Barbara	AAITD00	AAXAZ00	AAXBU00	AAITJ00

The prices appear on Platts Global Alert page 280 and in Latin Wire, Crude Oil Marketwire and Oilgram Price Report.

Please send any feedback or questions to Americas_crude@spglobal.com and pricegroup@spglobal.com.

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

Platts proposes including Afton's AvGuard SDA in Singapore gasoil

Following a review of recognized additives contained in the FOB Singapore gasoil assessment process, Platts, part of S&P Global Commodity Insights, proposes to begin reflecting AvGuard Static Dissipating Additive by Afton Chemical.

The list of Platts gasoil recognized additives is intended to provide clarity to market participants regarding which additives are generally considered to be merchantable and accepted for cargoes delivered through the Platts Market on Close assessment process in Singapore.

Platts does not align its FOB Singapore additives acceptance to any particular importing country.

For the full list of previously identified additives, please see http://plts.co/V0Ax30ru2Yi

Please send all feedback, comments or questions by Oct. 31, 2023, to asia_oilproducts@spglobal.com and pricegroup@spglobal.com.

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

EIA weekly summary, Sep 20 (PGA page 95)

		15Sep23	Change on week	16Sep22
PADD 1 stocks (million barrels)				
Crude	EIAWB00	7.363	+0.189	8.524
Total mogas	EIAIC00	57.623	-0.158	56.437
Conventional mogas	EIAJK00	3.113	+0.317	3.096
Blending components	EIAKC00	54.506	-0.475	53.336
Kero Jet	EIALS00	11.274	+0.198	9.466
Dist \<15 ppm	EIAMH00	27.506	-0.263	25.493
Dist \>15\<500 ppm	EIAMQ00	0.546	-0.001	0.657
Dist \>500 ppm	EIAMZ00	1.159	+0.119	1.767
Dist \>500 ppm New England	EIANA00	0.000		0.000
Distillate	EIALY00	29.211	-0.145	27.917
Resid	EIANI00	6.121	+0.058	4.925
PADD 2 stocks (million barrels)				
Crude	EIAWC00	101.497	-3.165	106.915
Crude Cushing, Oklahoma	EIAHW00	22.901	-2.064	24.991
Total mogas	EIAIG00	45.385	-0.153	43.664
Conventional mogas	EIAJL00	3.858	+0.306	4.655
Blending components	EIAKD00	41.527	-0.459	39.009
Kero Jet	EIALT00	7.596	+0.008	7.046
Dist \<15 ppm	EIAML00	32.912	-0.430	27.637
Dist \>15\<500 ppm	EIAMU00	0.370	+0.046	0.203
Dist \>500 pp	EIAND00	0.342	-0.035	0.274
Distillate	EIAMC00	33.623	-0.419	28.113
Resid	EIANM00	1.311	-0.089	0.857
PADD 3 stocks (million barrels)				
Crude	EIAWE00	239.077	+0.378	244.654
Total mogas	EIAIH00	81.278	-0.772	82.435
Conventional mogas	EIAJM00	6.839	+0.625	7.631
Blending components	EIAKE00	74.439	-1.397	74.804
Kero Jet	EIALU00	13.719	+0.903	12.933
Dist \<15 ppm	EIAMM00	34.765	-2.849	38.552
Dist \>15\<500 ppm	EIAMV00	0.919	-0.072	1.555
Dist \>500 pp	EIANE00	5.694	-0.193	5.258
Distillate	EIAMD00	41.378	-3.114	45.364
Resid	EIANN00	16.920	+1.609	18.030

		15Sep23	Change on week	16Sep22
PADD 4 stocks (million barrels)				
Crude	EIAWF00	23.880	-0.074	23.141
Total mogas	EIAII00	6.908	+0.165	6.299
Conventional mogas	EIAJN00	1.036	+0.012	0.864
Blending components	EIAKF00	5.872	+0.154	5.434
Kero Jet	EIALV00	0.862	-0.010	0.799
Dist \<15 ppm	EIAMN00	3.724	+0.021	3.482
Dist \>15\<500 ppm	EIAMW00	0.161	+0.002	0.131
Dist \>500 pp	EIANF00	0.044	+0.001	0.062
Distillate	EIAME00	3.930	+0.024	3.675
Resid	EIANO00	0.191	+0.003	0.189
PADD 5 stocks (million barrels)				
Crude	EIAWI00	46.640	+0.538	47.539
Total Mogas	EIAIJ00	28.282	+0.088	25.775
Conventional mogas	EIAJO00	1.804	-0.057	2.086
Blending components	EIAKG00	26.464	+0.148	23.661
Kero Jet	EIALW00	8.875	-0.063	8.942
Dist \<15 ppm	EIAMO00	10.792	+0.803	11.402
Dist \>15\<500 ppm	EIAMX00	0.217	-0.014	0.238
Dist \>500 pp	EIANG00	0.515	-0.002	0.541
Distillate	EIAMF00	11.524	+0.787	12.181
Resid	EIANP00	4.252	+0.020	5.374
Total US stocks (million barrels)				
Crude	EIAWA00	418.456	-2.136	430.774
Total mogas	EIAIB00	219.476	-0.831	214.610
Conventional mogas	EIAJJ00	16.650	+1.202	18.331
Blending components	EIAKB00	202.808	-2.030	196.245
Kero Jet	EIALR00	42.326	+1.036	39.186
Dist \<15 ppm	EIAMG00	109.698	-2.719	106.565
Dist \>15\<500 ppm	EIAMP00	2.214	-0.039	2.783
Dist \>500 ppm	EIAMY00	7.754	-0.109	7.902
Distillate	EIALX00	119.666	-2.867	117.250
Resid	EIANH00	28.796	+1.602	29.375
Total US inputs, imports, production (million b/d) (PGA page 88)				
Crude inputs	EIABT00	16.304	-0.496	16.355
Crude imports	EIAOE00	6.517	-1.065	6.947
Mogas imports	EIAOL00	0.511	-0.388	0.775
Distillate imports	EIASD00	0.083	-0.102	0.107
Mogas production	EIADX00	9.711	+0.499	9.459
Distillate production	EIAGL00	4.782	-0.229	5.236

Product price assessments

Asia, Sep 25

			Mid	Change
Singapore (PGA page 2002)				
($/barrel)				
Naphtha	PAAAP00	75.36–75.40	75.380	-0.540
Jet kerosene	PJABF00	122.92–122.96	122.940	-1.610
Gasoil	POABC00	127.09–127.13	127.110	-0.760
Gasoil 10 ppm	AAOVC00	127.09–127.13	127.110	-0.760
Gasoil 50 ppm	AAPPF00	126.61–126.65	126.630	-0.760
Gasoil 0.05% S	AAFEX00	123.92–123.96	123.940	-0.760
Gasoil 0.25% S	AACUE00	123.17–123.21	123.190	-0.760
Gasoil 50 ppm disc/prem	AAPPH00	2.62–2.66	2.640	+0.090
Mogas 92 unl	PGAEY00	102.07–102.11	102.090	-1.690
Mogas 95 unl	PGAEZ00	107.53–107.57	107.550	-1.690
Mogas 97 unl	PGAMS00	109.13–109.17	109.150	-1.690
CFR Naphtha	AAOVF00		78.170	-0.800
Naphtha pap. (bal month)	AAPLD00	NA–NA	NA	NANA
Naphtha pap. (Oct)	PAAAQ00	74.98–75.02	75.000	-0.550
Naphtha pap. (Nov)	PAAAR00	74.58–74.62	74.600	-0.400
Kerosene pap. (bal month)	AAPLE00	123.24–123.28	123.260	-1.230
Kerosene pap. (Oct)	PJABS00	121.06–121.10	121.080	-1.060
Kerosene pap. (Nov)	PJABT00	118.30–118.34	118.320	-0.790
Gasoil pap. (bal month)	AAPLF00	126.54–126.58	126.56	-0.290
Gasoil pap. (Oct)	POAFC00	124.26–124.30	124.280	-0.420
Gasoil pap. (Nov)	POAFG00	119.82–119.86	119.840	-0.590
($/mt)				
FO 180 CST 2%	PUAXS00	539.42–539.46	539.440	+3.210
HSFO 180 CST	PUADV00	527.55–527.59	527.570	+3.140
180 CST disc/premium	AAGZF00	4.23–4.27	4.250	+0.500

China, Sep 25 (PGA page 2010)

($/mt)			Mid	Change
South China FOB				
Unl 92 RON	AAICW00	902.25–906.25	904.250	-14.500
South China, C&F				
Jet kerosene	PJABQ00	980.75–984.75	982.750	-11.500
Gasoil	POAFA00	945.25–949.25	947.250	-5.500
Hong Kong				
Fuel oil 380 CST	PUAER00	544.50–545.50	545.000	0.000

Fujairah, FOB, Sep 25 (PGA page 2018)

($/mt)		Mid	Change
Naphtha	NFJSA00	681.620	-6.550
HSFO 380 CST	AFUJQ00	499.590	-0.170
($/barrel)			
Gasoline 95 unleaded	AFUJA00	110.950	-2.210
Gasoline 92 unleaded	RFJFS00	102.760	-2.180
Kerosene	AFUJF00	122.080	-1.270
Gasoil 10 ppm	AFUJP00	124.280	-0.740
Gasoil	AFUJK00	124.280	-0.740

			Mid	Change
Singapore (continued) (PGA pages 2002 & 2655)				
($/mt)				
HSFO 380 CST	PPXDK00	516.88–516.92	516.900	+2.090
HSFO 180 CST pap. (bal month)	AAPML00	526.98–527.02	527.00	+0.800
HSFO 180 CST pap. (Oct)	PUAXZ00	523.73–523.77	523.750	+3.250
HSFO 180 CST pap. (Nov)	PUAYF00	517.23–517.27	517.250	+2.350
MTBE	PHALF00	1045.06–1047.06	1046.060	-18.000
C&F Japan (PGA page 2006)				
($/barrel)				
Jet kerosene	PJAAN00	123.96–124.00	123.980	-1.440
Mogas unl	PGACW00	106.44–106.48	106.460	-1.670
($/mt)				
Naphtha	PAAAD00	713.25–714.75	714.000	-4.750
Nph 1st 1/2 Nov	PAAAE00	715.75–716.25	716.000	-4.750
Nph 2nd 1/2 Nov	PAAAF00	714.25–714.75	714.500	-4.750
Nph 1st 1/2 Dec	PAAAG00	713.25–713.75	713.500	-4.750
FOB Japan				
($/barrel)				
Gasoil	POJAP00		124.740	-0.750
C+F Australia (PGA page 2004)				
($/barrel)				
Mogas 92 unl	AACZF00	108.66–108.70	108.680	-1.640
Mogas 95 unl	AACZH00	114.12–114.16	114.140	-1.640
Jet kerosene	AAFIY00	130.01–130.05	130.030	-1.550
Gasoil 10 ppm	AAQUD00	134.61–134.65	134.630	-0.700

Arab Gulf, FOB, Sep 25 (PGA page 2004)

($/mt)			Mid	Change
Naphtha	PAAAA00	663.64–665.14	664.390	-3.180
Naphtha LR2	AAIDA00	672.92–674.42	673.670	-4.750
HSFO 180 CST	PUABE00	507.26–507.30	507.280	+3.140
HSFO 380 CST	AAIDC00	496.59–496.63	496.610	+2.090
($/barrel)				
95 RON unleaded	AAICY00	103.30–103.34	103.320	-1.650
92 RON unleaded	AAGJA00		97.860	-1.650
Kerosene	PJAAA00	119.34–119.38	119.360	-1.500
Gasoil 10 ppm	AAIDT00	123.29–123.33	123.310	-0.650
Gasoil 0.05% S	AAFEZ00	120.69–120.73	120.710	-0.750
Gasoil 0.25% S	AACUA00	119.08–119.12	119.100	-0.660
Gasoil	POAAT00	123.29–123.33	123.310	-0.650

Asia product premium/discount assessments

Sep 25			Mid	Change
MOP* Singapore (PGA page 2002)				
($/barrel)				
Jet	PJACU00	2.02/2.06	2.040	-0.270
Gasoil 0.25% S	AACQI00	-0.82/-0.78	-0.800	+0.090
Gasoil	POAIC00	3.10/3.14	3.120	+0.090
CFR Naphtha	AAOVG00		3.200	-0.200
($/mt)				
380 CST	PPXDL00	2.81/2.85	2.830	+0.010
MOP* Arab Gulf (PGA page 2004)				
($/barrel)				
Jet	PJACV00	5.53/5.57	5.550	+0.050
Gasoil 10 ppm	AAIDU00	5.28/5.32	5.300	+0.200
Gasoil 0.25% S	AACUC00	1.07/1.11	1.090	+0.190
Gasoil	POAID00	5.28/5.32	5.300	+0.200
380 CST**	PPXDM00	-10.69/-10.65	-10.670	-1.050
($/mt)				
HSFO 180 CST	AAXJA00	12.98/13.02	13.000	0.000
HSFO 380 CST	AAXJB00	11.98/12.02	12.000	0.000
MOP* Japan (PGA page 2006)				
($/barrel)				
Naphtha	PAADI00	3.25/3.75	3.500	-0.500
MOP* West India (PGA page 2012)				
($/mt)				
Gasoline (92 RON)	AARBQ00		839.740	-14.050
Gasoline (95 RON)	AAQWI00		886.150	-14.050
Naphtha	AAQWK00		670.440	-4.170
Jet kero	AAQWM00		943.200	-12.410
Gasoil (10 ppm)	AAQWO00		918.940	-5.350
Gasoil (500 ppm)	AAQWQ00		895.320	-5.360
Gasoil (2500 ppm)	AAQWS00		889.740	-5.350
($/barrel)				
Gasoline (92 RON)	AARBP00		98.790	-1.660
Gasoline (95 RON)	AAQWH00		104.250	-1.660
Naphtha	AAQWJ00		74.490	-0.470
Jet kero	AAQWL00		119.390	-1.570
Gasoil (10 ppm)	AAQWN00		123.350	-0.720
Gasoil (500 ppm)	AAQWP00		120.180	-0.720
Gasoil (2500 ppm)	AAQWR00		119.430	-0.720

*Mean of Platts. **=Differential to FOB Arab Gulf HSFO 180 CST.

Platts Index, Sep 25 (PGA page 115)

			Change
Platts Jet Fuel Index	PJGLO00	354.19	-4.130

The Platts Jet Fuel Index is calculated using daily assessments of Jet fuel spot prices in relevant regional centers. These values are compared with average spot prices in the base period (Index value of year 2000 = 100%) to generate a percentage figure reflecting the overall rise or fall in markets compared to the base period.

Product price assessments

European bulk, Sep 25

($/mt)

(PGA page 1114)

		Cargoes FOB Med basis Italy	Mid	Change		Cargoes CIF Med basis Genoa/Lavera	Mid	Change
Prem unl 10 ppm	AAWZA00	914.75–915.25	915.000	-29.000	AAWZB00	938.00–938.50	938.250	-30.000
Naphtha physical	PAAAI00	648.75–649.25	649.000	-8.750	PAAAH00	679.50–680.00	679.750	-9.750
Jet av. fuel	AAIDL00	979.25–979.75	979.500	-18.750	AAZBN00	1021.25–1021.75	1021.500	-20.000
ULSD 10 ppm	AAWYY00	949.00–949.50	949.250	-15.750	AAWYZ00	971.75–972.25	972.000	-16.750
Gasoil 0.1%	AAVJI00	934.00–934.50	934.250	-17.750	AAVJJ00	955.25–955.75	955.500	-18.500
1% fuel oil	PUAAK00	564.75–565.25	565.000	-10.250	PUAAJ00	584.25–584.75	584.500	-9.000
3.5% fuel oil	PUAAZ00	540.00–540.50	540.250	-4.250	PUAAY00	559.25–559.75	559.500	-3.250

(PGA page 1110)

		Cargoes FOB NWE				Cargoes CIF NWE basis ARA		
Gasoline 10 ppm					AAXFQ00	983.25–983.75	983.500	-19.250
Naphtha swaps					PAAAJ00	696.25–696.75	696.500	-14.500
Naphtha physical					PAAAL00	701.50–702.00	701.750	-10.500
Jet kerosene	PJAAV00	1005.50–1006.00	1005.750	-20.500	PJAAU00	1022.75–1023.25	1023.000	-20.000
ULSD 10 ppm	AAVBF00	969.75–970.25	970.000	-21.250	AAVBG00	981.00–981.50	981.250	-21.000
Diesel 10 ppm NWE	AAWZD00	969.75–970.25	970.000	-21.250	AAWZC00	983.25–983.75	983.500	-21.000
Diesel 10 ppm UK					AAVBH00	981.00–981.50	981.250	-25.750
Diesel 10 ppm UK cargoes CIF NWE - original (French) spec					AUKDA00		986.750	-20.750
Gasoil 0.1%	AAYWR00	928.50–929.00	928.750	-19.500	AAYWS00	950.00–950.50	950.250	-19.000
1% fuel oil	PUAAM00	556.25–556.75	556.500	-9.000	PUAAL00	571.50–572.00	571.750	-8.000
3.5% fuel oil	PUABB00	541.50–542.00	541.750	-4.250	PUABA00	555.25–555.75	555.500	-3.500

(PGA pages 1112 & 1380)

		Barges FOB Rotterdam		
98 RON unl	AAKOD00	963.50–964.00	963.750	-24.250
Prem unl	PGABM00	929.25–929.75	929.500	-21.250
Reformate	AAXPM00		1029.000	-18.250
Eurobob	AAQZV00	908.50–909.00	908.750	-21.250
E10 Eurobob	AGEFA00		907.000	-19.000
Naphtha physical	PAAAM00	697.50–698.00	697.750	-10.500
Jet kerosene	PJABA00	1021.00–1021.50	1021.250	-23.500
Diesel 10 ppm*	AAJUS00	966.25–966.75	966.500	-19.500
Gasoil 50 ppm	AAUQC00	954.75–955.25	955.000	-16.750
Gasoil 0.1%*	AAYWT00	947.75–948.25	948.000	-18.500
DMA MGO 0.1%*	LGARD00		939.000	-11.000
1% fuel oil	PUAAP00	560.25–560.75	560.500	-11.000
3.5% fuel oil	PUABC00	556.25–556.75	556.500	-3.500
3.5% 500 CST fuel oil	PUAGN00	553.25–553.75	553.500	-3.500
380 CST	PUAYW00	586.50–587.50	587.000	+2.000

*FOB Amsterdam-Rotterdam-Antwerp.

West Africa products ($/mt), Sep 25

West Africa cargoes (PGA page 1122)		Mid	Change
	FOB NWE		
Gasoline	AAKUV00	863.250	-22.000
	CIF West Africa		
Gasoline	AGNWC00	902.250	-23.000
	FOB STS West Africa		
Gasoil 0.3%	AGNWD00	991.750	-16.750

Renewable fuels ($/mt), Sep 25 (PGA pages 1414, 483 and 2414)

			Change
Northwest Europe			
SAF Cost of Production	BJNWA00	1949.227	+12.869
HVO	HVNWA00	1795.804	+9.413
USWC			
SAF Cost of Production w/ credits	ASAFA00	1899.974	-5.685
SAF Cost of Production w/o credits	ASAFB00	722.629	+40.558
RD w/ credits	ARDFA00	1847.323	-3.363
RD w/o credits	ARDFB00	769.910	+45.626
Southeast Asia			
SAF Cost of Production (PFAD)	ASFAA00	1536.900	+16.560
HVO (PFAD)	HVSAB00	1420.070	+13.640
North Asia			
SAF Cost of Production (UCO)	ASFAC00	1799.070	+5.720
HVO (UCO)	HVNAA00	1658.670	+4.200

Platts Euro denominated product assessments

Sep 25			Mid	Change
Cargoes CIF NWE/basis ARA (€/mt) (PGA page 1116)				
Nap phy	AAQCE00	662.61–663.08	662.841	-5.499
Jet	AAQCF00	966.04–966.52	966.279	-12.420
Cargoes FOB NWE (PGA page 1116)				
1%	AAQCG00	525.41–525.88	525.645	-4.992
Barges FOB Rotterdam (€/mt) (PGA page 1118)				
Prem unl	AAQCH00	877.73–878.20	877.964	-14.173
10 ppm*	AAQCI00	912.68–913.15	912.912	-12.301
Gasoil 0.1%*	AAYWY00	895.20–895.67	895.438	-11.478
DMA MGO*	LGARE00		886.937	-4.496
3.50%	AAQCK00	525.41–525.88	525.645	+0.169
3.50% 500 CST	PUAGO00	522.58–523.05	522.811	+0.150
			Mid	Change
Cargoes CIF West Africa (€/mt) (PGA page 1116)				
Gasoline	AANWC00		852.224	-15.985
Cargoes FOB NWE West Africa (€/mt) (PGA page 1116)				
Gasoline	AGNWA00		815.387	-15.288
Cargoes FOB STS West Africa (€/mt) (PGA page 1116)				
Gasoil 0.3%	AGNWE00		936.762	-9.564

Euro/US$ forex rate: 1.0587. Platts Euro denominated European and US product assessments are based on market values and a Euro/US$ forex rate at 4:30 PM local London time. *FOB Amsterdam-Rotterdam-Antwerp.

European feedstocks and blendstocks

				Change
CIF Northwest Europe cargo ($/mt) (PGF page 1760)				
VGO 0.5-0.6%	AAHMZ00	713.75–714.75	714.250	-3.750
VGO 2%	AAHND00	700.75–701.75	701.250	-3.750
FOB Northwest Europe cargo ($/mt)				
VGO 0.5-0.6%	AAHMX00	692.50–693.50	693.000	-5.250
VGO 2%	AAHNB00	679.50–680.50	680.000	-5.250
Straight Run 0.5-0.7%	PKABA00	579.50–580.50	580.000	-8.000
FOB Black Sea cargo ($/mt)				
VGO 0.8%	ABBAD00		703.250	-6.500
VGO 2%	ABBAC00		693.500	-6.500
CIF Mediterranean cargo ($/mt)				
Straight Run 0.5-0.7%	AAJNT00		597.500	-5.750
VGO 0.8%	ABBAB00		728.000	-5.000
VGO 2%	ABBAA00		718.000	-5.250
FOB Rotterdam barge ($/mt)				
MTBE*	PHALA00	1536.00–1536.50	1536.250	-10.000
VGO 0.5-0.6%	AAHNF00	687.75–688.75	688.250	-5.250
VGO 2%	AAHNI00	674.75–675.75	675.250	-5.250

*FOB Amsterdam-Rotterdam-Antwerp.

Product price assessments

New York, Sep 25 (PGA page 152)

			Mid	Change												
	Cargo (¢/gal)					RVP	Barge (¢/gal)					RVP	Differentials to NYMEX			
Unl 87	AAMHG00	273.99–274.09	274.040	-2.140	AAMHGRV	13.5										
CBOB							AAWBL00	254.39–254.49	254.440	-1.940	AAWBLRV	13.5	AANYX14	0.050	-0.150	
Prem CBOB							AAWLC00	319.34–319.44	319.390	-1.790	AAWLCRV	13.5	AANYX16	65.000	0.000	
Unl RBOB	AAVKS00	255.39–255.49	255.440	-1.940	AAVKSRV	13.5	AAMGV00	254.39–254.49	254.440	-1.940	AAMGVRV	13.5	AANYX15	0.050	-0.150	
Prem RBOB							AAMGY00	319.34–319.44	319.390	-1.790	AAMGYRV	13.5	AANYX17	65.000	0.000	
Jet fuel							PJAAW00	313.17–313.27	313.220	-4.400			ADIGA00	-13.000	0.000	
LS jet kero							PJABJ00	314.17–314.27	314.220	-4.400			ADIHA00	-12.000	0.000	
ULS kero							AAVTI00	362.17–362.27	362.220	-4.400			ADJKH00	36.000	0.000	
No. 2							POAEG00	290.42–290.52	290.470	-4.400			ADIAO00	-35.750	0.000	
ULSD							AATGX00	325.77–325.87	325.820	-4.400			ADIZA00	-0.400	0.000	
ULS heating oil							AAXPX00		313.470	-3.150			ADIAQ00	-12.750	+1.250	

	Cargo ex-duty (¢/gal)*					RVP
Unl 87	AASAA00	258.81–258.91	258.860	-1.120	AASAARV	13.5
Unl RBOB	AASAF00	240.23–240.33	240.280	-0.920	AASAFRV	13.5

	($/barrel)				Differential vs 1s strip($/barrel)		
No. 6 1% S max	PUAAO00	88.75–88.77	88.760	-0.080	AAUGD00	1.05–1.07	1.060
No. 6 1% S max 1s strip	AAUGG00	87.69–87.71	87.700	-0.080			
USAC HSFO	PUAAX00	86.04–86.06	86.050	-1.130	AAUGF00	-1.66–-1.64	-1.650
No. 6.1 S max pap bal M	AFOAB00		NA	NANA			
No. 6 1.0% S pap 1st M	AFOAM01		87.250	+0.100			
No. 6 1.0% S pap 2nd M	AFOAM02		85.350	+0.100			

*These assessments reflect gasoline cargoes sold on a delivered, ex-duty basis New York, excluding import duty and import taxes/fees.

USAC CPL Linden*, Sep 25 (PGA page 410)

(¢/gal)		Mid	Change	Differentials to NYMEX		Change	Cycle		RVP
Unl 87	ACXPW00	279.640	-2.140	AANYX40	25.250	-0.350	ACRQWCY	52	ACRQWRV	11.5
CBOB	ABXPW00	258.390	-2.140	AANYX41	4.000	-0.350	ABRQWCY	52	ABRQWRV	12.5
RBOB	ADXPW00	256.890	-2.140	AANYX42	2.500	-0.350	ADRQWCY	52	ADRQWRV	13.5
Jet kero 54	AAXPV00	313.220	-4.400	ADIJA00	-13.000	0.000	AAXPVCY	52		
ULS heating oil	AAXPU00	313.220	-3.150	ADIAR00	-13.000	+1.250	AAXPUCY	52		
ULSD	AAXPW00	326.120	-4.400	ADLAA00	-0.100	0.000	AAXPWCY	52		

*Assessments reflect shipments on the next full pipeline cycle after the prompt cycle

Product price assessments

U.S. Buckeye pipeline, Sep 25 (PGA page 310)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX		Change
Unl RBOB	AAMHB00	254.39–254.49	254.440	-1.840	AAMHBRV	13.5	AANYX35	0.050	-0.050
Prem RBOB	AAMHZ00	319.34–319.44	319.390	-1.790	AAMHZRV	13.5	AANYX36	65.000	0.000
CBOB	AAPSY00	254.39–254.49	254.440	-1.840	AAPSYRV	13.5	AANYX33	0.050	-0.050
CBOB prem	AAPSZ00	319.34–319.44	319.390	-1.790	AAPSZRV	13.5	AANYX34	65.000	0.000
ULSD	AATHF00	325.77–325.87	325.820	-4.400			ADIYA00	-0.400	0.000
Jet fuel	AAJNL00	313.17–313.27	313.220	-4.400			ADIEA00	-13.000	0.000
LS jet/kero	AAJNN00	314.17–314.27	314.220	-4.400			ADIFA00	-12.000	0.000
						RVP			
Laurel									
Unl CBOB	AAUAS00	256.84–256.94	256.890	-1.790	AAUASRV	13.5	AANYX29	2.500	0.000
Prem CBOB	AAUAT00	317.84–317.94	317.890	-1.790	AAUATRV	13.5	AANYX30	63.500	0.000

All RVP references are after ethanol

Chicago pipeline, Sep 25 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX		Change
Prem. unl 91	PPASQ00	337.79–337.89	337.840	-9.840	PPASQRV	13.5	AANY100	87.500	-4.000
CBOB	AAREL00	241.29–241.39	241.340	-9.840	AARELRV	13.5	AANY101	-9.000	-4.000
PBOB	AAUEU00	338.79–338.89	338.840	-9.840	AAUEURV	13.5	AANY103	88.500	-4.000
RBOB	PPARH00	242.29–242.39	242.340	-9.840	PPARHRV	13.5	AANY102	-8.000	-4.000
Jet fuel	PJAAF00	281.96–282.06	282.010	-9.610			ADILA00	-38.000	+1.000
ULSD	AATHA00	279.46–279.56	279.510	-3.610			ADLAI00	-40.500	+7.000

Chicago Buckeye Complex, Sep 25 (PGA page 160)

(¢/gal)		Mid	Change		RVP	Differentials to NYMEX		Change
CBOB	ACBAA00	241.340	-7.340	ACBAARV	13.5	ACBAB00	-9.000	-1.500
RBOB	ACBAC00	242.340	-7.340	ACBACRV	13.5	ACBAD00	-8.000	-1.500
ULSD	ACBAE00	287.010	-3.610			ACBAF00	-33.000	+7.000

Chicago Wolverine Pipeline, Sep 25 (PGA page 160)

(¢/gal)		Mid	Change		RVP	Differentials to NYMEX		Change
CBOB	AGCWA00	241.340	-9.840	AGCWERV	13.5	AGCWB00	-9.000	-4.000
ULSD	AGCWC00	283.760	-3.610			AGCWD00	-36.250	+7.000

Group Three, Sep 25 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX		Change
Sub-octane	AAXIX00	252.59–252.69	252.640	-5.790	AAXIXRV	10.0	AANYX01	-1.750	-4.000
Prem. unleaded	PGABD00	283.34–283.44	283.390	-5.790	PGABDRV	10.0	AANYX02	29.000	-4.000
ULSD	AATHB00	325.17–325.27	325.220	-6.400			ADLAB00	-1.000	-2.000
Jet fuel	PJAAI00	322.42–322.52	322.470	-3.400			ADIKA00	-3.750	+1.000

Atlantic resid/contract cargoes posted prices, Sep 25 (PGA page 564)

($/barrel)		No. 4 Fuel
Global		
Boston 0.5%	PRALB00	139.90
Boston 1.0%	PRALD00	135.70
		No. 6 Fuel
Boston 0.5%	PRAMN00	118.10
Boston 1.0%	PRAMD00	106.80

Source: Global Montello Group Corp.

Marine Fuel (PGA page 30)

		$/mt	Change
0.5% FOB Singapore cargo	AMFSA00	649.000	-0.640
0.5% FOB Fujairah cargo	AMFFA00	639.560	-2.350
0.5% FOB Rotterdam barge	PUMFD00	590.000	-8.000
0.5% FOB US Gulf Coast barge	AUGMB00	631.000	-0.500
0.5% Dlvd US Atlantic Coast barge	AUAMB00	631.250	-0.500
0.5% FOB Mediterranean cargo	MFFMM00	590.500	-6.750
0.5% CIF Mediterranean cargo	MFCMM00	607.750	-5.750
		$/barrel	
0.5% FOB US Gulf Coast barge	AUGMA00	99.370	-0.080
0.5% Dlvd US Atlantic Coast barge	AUAMA00	99.410	-0.080
		vs FO 380 MOPS strip ($/mt)	
0.5% FOB Singapore cargo	AMOPA00	134.930	-2.720
		vs MF 0.5% MOPS strip ($/mt)	
0.5% FOB Singapore cargo	FOFSB00	8.940	+0.330
0.5% FOB Singapore Bal mo	FOFS000	647.750	-0.960
0.5% FOB Singapore M1	FOFS001	640.750	+0.040
0.5% FOB Singapore M2	FOFS002	630.250	-0.750
0.5% FOB Singapore MOPS Strip	FOFSA00	640.060	-0.970

Product price assessments

U.S. Gulf Coast, Sep 25

Houston (PGA page 156)

		Mid	Change		Mid	Change						Mid	Change		
	Pipeline (¢/gal)			Differential to NYMEX			Cycle		RVP		Waterborne (¢/gal)				RVP
Unl 87	PGACT00	274.29–274.39	274.340	-0.350	AANY105	24.000	+0.500	PGACTCY	55	PGACTRV	11.5	PGACU00	277.04–277.14	277.090	-0.350	PGACURV	11.5
Unl 89	PGAAY00	285.69–285.79	285.740	-0.350				PGAAYCY	55	PGAAYRV	11.5	PGAAZ00	288.64–288.74	288.690	-0.350	PGAAZRV	11.5
Prem unl 93	PGAJB00	302.79–302.89	302.840	-0.350	AANYX76	52.500	+ 0.500	PGAJBCY	55	PGAJBRV	11.5	PGAIX00	306.04–306.14	306.090	-0.350	PGAIXRV	11.5
CBOB 87	AARQU00	246.54–246.64	246.590	-2.350	AANYX77	-3.750	-1.500	AARQUCY	55	AARQURV	12.5	AAWES00	249.04–249.14	249.090	-2.350	AAWESRV	12.5
CBOB 93	AARQV00	285.04–285.14	285.090	-2.350	AANYX78	52.500	+ 0.500	AARQVCY	55	AARQVRV	12.5						
RBOB 83.7	AAMFB00	244.79–244.89	244.840	-2.350	AANYX79	-5.500	-1.500	AAMFBCY	55	AAMFBRV	13.5						
RBOB 91.4	AAMNG00	289.79–289.89	289.840	-2.350	AANYX80	39.500	-1.500	AAMNGCY	55	AAMNGRV	13.5						
Jet/kero 54	PJABO00	301.21–301.31	301.260	-3.720	ADIAS00	-18.750	0.000	PJABOCY	55			PJABM00	306.21–306.31	306.260	-3.720		
Jet/kero 55	PJABP00	302.21–302.31	302.260	-3.720	ADIAZ00	-17.750	0.000	PJABPCY	55			PJABN00	307.21–307.31	307.260	-3.720		
ULS Kero	AAVTL00	312.21–312.31	312.260	-3.720	ADICA00	-7.750	0.000	AAVTLCY	55			AAVTK00	317.21–317.31	317.260	-3.720		
ULSD	AATGY00	317.71–317.81	317.760	-4.620	ADIQA00	-2.250	-0.900	AATGYCY	55			AATGZ00	320.21–320.31	320.260	-4.620		
No. 2	POAED00	294.21–294.31	294.260	-3.970	ADIAA00	-25.750	-0.250	POAEDCY	55			POAEE00	295.21–295.31	295.260	-3.970		
ULS Heating Oil	AAXFD00	305.11–305.21	305.160	-3.570	ADIAI00	-14.850	+0.150	AAXFDCY	55								
	Waterborne vs prompt pipeline (¢/gal)																
Jet Spread	AUSGL00		5.000	0.000													
ULSD Spread	AUSGN00		2.500	0.000													
No. 2 Spread	AUSGM00		1.000	0.000													
	FOB Cargo (¢/gal)				FOB Cargo ($/mt)												
Export ULSD	AAXRV00		306.620	-4.270	AAXRW00	959.410	-13.360										
	FOB Cargo vs forward pipe strip (¢/gal)																
ULSD Mexico	AUSGH00		2.750	0.000													
ULSD Brazil	AUSGA00		4.250	0.000													
ULSD EN590	AUSGB00		4.500	0.000													
Jet A	AUSGC00		5.000	0.000													
Jet A-1	AUSGD00		6.500	0.000													
	Colonial Pipeline Gasoline Line Space (¢/gal)							Cycle									
Line 1	AAXTA00		2.750	0.000				AAXTACY	55								
Line 3	AAXTB00		0.000	0.000				AAXTBCY	55								
Line 1+3	AAXTC00		2.750	0.000				AAXTCCY	55								
	Colonial Pipeline Distillates Line Space (¢/gal)																
Line 2	AAXTD00		-0.500	0.000				AAXTDCY	55								
Line 3	AAXTE00		0.000	0.000				AAXTECY	55								
Line 2+3	AAXTG00		-0.500	0.000				AAXTGCY	55								
	($/barrel)				Differential vs USGC HSFO strip ($/barrel)							USGC HSFO Strip ($/barrel)					
Slurry Oil	PPAPW00	110.00–110.02	110.010	-1.140	AAUGS00	28.31–28.33	28.320	0.000									
No. 6 1.0% S 6 API	PUAAI00	88.38–88.40	88.390	-0.240	AAUGT00	6.69–6.71	6.700	+0.900									
USGC HSFO	PUAFZ00	81.00–81.02	81.010	-1.140	AAUGU00	-0.69–-0.67	-0.680	0.000				AAUGW00	81.68–81.700	81.690	-1.140		
RMG 380	PUBDM00	81.00–81.02	81.010	-1.140	AAUGV00	-0.69–-0.67	-0.680	0.000									
USGC HSFO swap BalMo(Sep)	AWATB00		NA	NANA													
USGC HSFO swap M1(Oct)	AWATM01		80.750	-0.800													
USGC HSFO swap M2(Nov)	AWATM02		77.800	-0.650													

(PGA page 330)

	USGC RVP Adjustments (¢/gal)		
CBOB -1 psi	AGLOB00	6.200	0.000
Prem CBOB -1 psi	AGLOC00	6.200	0.000
CBOB +1 psi	AGLOA00	-1.500	+0.500
Prem CBOB +1 psi	AGHOA00	-1.500	+0.500

Product price assessments

U.S. Gulf Coast

(PGF page 760)

		Waterborne (¢/gal)	Mid	Change		Diff vs NYMEX (¢/gal)	Mid	Change		Diff vs USGC waterborne 87 (¢/gal)	Mid	Change		Diff vs USGC pipeline 87 (¢/gal)	Mid	Change
FOB Naphha Cargo	AAXJP00	171.08–171.18	171.130	0.000												
FOB Naphha Cargo ($/mt)	AAXJU00	646.80–646.90	646.850	0.000												
Naphtha USGC vs Naphtha MOPJ ($/mt)	ANAPD00		-54.750	+7.000												
DAP LSR Naphtha Parcel	AAXQK00		173.130	-0.250												
DAP LSR Naphtha Parcel ($/mt)	AAXQM00		694.230	-1.000												
DAP LSR Naphtha Parcel diff**	AAXQN00		4.500	+1.250												
Naphtha barge	AALPG00	177.29–177.39	177.340	-0.850	AREFD00	-73.000	0.000		AASGZ00	-99.750						
Heavy naphtha barge	AALPI00	185.29–185.39	185.340	-0.850	AREFC00	-65.000	0.000		AASHD00	-91.750						
MTBE	PHAKX00	385.04–385.14	385.090	-9.040												
Alkylate*	AAXBA00		327.590	-0.850	AREFA00	77.250	0.000		AAFIE00	50.500	-0.500		AAXBD00	59.380	+1.680	
Raffinate*	AAXBB00		177.590	-0.850	AREFB00	-72.750	0.000		AAJMU00	-99.500	-0.500		AAXBE00	-90.620	+1.680	
Reformate*	AAXBC00		361.590	-0.850	AREFE00	111.250	0.000		AAJMV00	84.500	-0.500		AAXBF00	93.380	+1.680	

LSR = Light Straight Run. *=DAP barge. **= Diff to Mont Belvieu Enterprise natural gasoline.

Note: Platts line space assessments reflect the physical trade of gasoline or distillates at two locations agreed upon by the parties along the Colonial Pipeline between Pasadena, Texas, and Linden, New Jersey. The assessments represent the premium or discount paid by a buyer while taking refined product off the line at one location while giving product to the seller at another.

U.S. Gulf Coast pipeline cycles, Sep 25 (PGA page 156)

(¢/gal)		Pipeline	Mid		Cycle		RVP
Gasoline							
Unl-87	AAELC00	274.29–274.39	274.340	AAELCCY	55	AAELCRV	11.5
Unl-87	AAELD00	271.54–271.64	271.590	AAELDCY	56	AAELDRV	11.5
Unl-87	AAELE00	268.54–268.64	268.590	AAELECY	57	AAELERV	11.5
Unl-87	AAELF00	265.54–265.64	265.590	AAELFCY	58	AAELFRV	11.5
Unl-87	AAELG00	262.29–262.39	262.340	AAELGCY	59	AAELGRV	11.5
Unl-87	AAELH00	259.04–259.14	259.090	AAELHCY	60	AAELHRV	11.5
CBOB 87	AARQW00		246.840	AARQWCY	56	AARQWRV	12.5
CBOB 87	AARQX00		246.590	AARQXCY	57	AARQXRV	12.5
CBOB 87	AARQY00		245.840	AARQYCY	58	AARQYRV	12.5
CBOB 87	AARQZ00		245.090	AARQZCY	59	AARQZRV	12.5
CBOB 87	AARQA00		243.840	AARQACY	60	AARQARV	12.5
Distillates							
Jet kero	AAELQ00	301.21–301.31	301.260	AAELQCY	55		
Jet kero	AAELR00	301.06–301.16	301.110	AAELRCY	56		
Jet kero	AAELS00	300.91–301.01	300.960	AAELSCY	57		
Jet kero	AAELT00	300.76–300.86	300.810	AAELTCY	58		
Jet kero	AAELU00	300.61–300.71	300.660	AAELUCY	59		
Jet kero	AAELV00	300.46–300.56	300.510	AAELVCY	60		
ULSD	AAUJV00	317.71–317.81	317.760	AAUJVCY	55		

		Pipeline	Mid		Cycle	RVP
ULSD	AAUJW00	316.91–317.01	316.960	AAUJWCY	56	
ULSD	AAUJX00	316.21–316.31	316.260	AAUJXCY	57	
ULSD	AAUJY00	313.96–314.06	314.010	AAUJYCY	58	
ULSD	AAUJZ00	311.71–311.81	311.760	AAUJZCY	59	
ULSD	AAUKD00	309.46–309.56	309.510	AAUKDCY	60	
No. 2	AAELW00	294.21–294.31	294.260	AAELWCY	55	
ULS heating oil	AAXFJ00	305.11–305.21	305.160	AAXFJCY	55	
ULS heating oil	AAXFK00	304.31–304.41	304.360	AAXFKCY	56	
ULS heating oil	AAXFL00	303.61–303.71	303.660	AAXFLCY	57	
ULS heating oil	AAXFM00	301.36–301.46	301.410	AAXFMCY	58	
ULS heating oil	AAXFN00	299.11–299.21	299.160	AAXFNCY	59	
ULS heating oil	AAXFP00	296.86–296.96	296.910	AAXFPCY	60	
Forward pipeline strip						
ULSD 15-30 Day	AUSGI00		311.700			
ULSD 21-35 Day	AUSGJ00		309.320			
ULSD 7-21 Day	AUSGK00		315.120			
Jet Fuel 15-30 Day	AUSGE00		299.870			
Jet Fuel 21-35 Day	AUSGF00		297.680			
Jet Fuel 7-21 Day	AUSGG00		303.260			

Product price assessments

West Coast pipeline, Sep 25 (PGA page 158)

			Mid	Change		RVP			Mid	Change
California										
(¢/gal)		Los Angeles						Differential to NYMEX		
Unl 84	AAUHA00	388.29–388.39	388.340	+4.160	AAUHARV	10.0	AANYX84		138.000	+10.000
Prem unl 90	PGABG00	417.29–417.39	417.340	+4.160	PGABGRV	10.0	AANYX85		167.000	+10.000
CARBOB	AAKYJ00	390.29–390.39	390.340	+4.160	AAKYJRV	6.0	AANVX00	139.95/140.05	140.000	+10.000
CARBOB prem	AAKYL00	419.29–419.39	419.340	+4.160	AAKYLRV	6.0	AANYX86		169.000	+10.000
Jet fuel	PJAAP00	355.96–356.06	356.010	+6.390			AANVY00	35.95/36.05	36.000	+17.000
ULS (EPA) diesel	POAET00	374.96–375.06	375.010	+11.030			AANVZ00	54.95/55.05	55.000	+14.750
CARB diesel	POAAK00	374.96–375.06	375.010	+11.030			AANWA00	54.95/55.05	55.000	+14.750
(¢/gal)		San Francisco						Differential to NYMEX		
Unl 84	PGADG00	337.29–337.39	337.340	-0.850	PGADGRV	11.5	AANYX87		87.000	0.000
Prem unl 90	PGABO00	364.29–364.39	364.340	-0.850	PGABORV	11.5	AANYX88		114.000	0.000
CARBOB unl	AAKYN00	351.29–351.39	351.340	-0.850	AAKYNRV	6.0	AANYX89		101.000	0.000
CARBOB prem	AAKYP00	378.29–378.39	378.340	-0.850	AAKYPRV	6.0	AANYX90		128.000	0.000
Jet Fuel	PJABC00	355.96–356.06	356.010	+6.390			ADINA00		36.000	+17.000
ULS (EPA) diesel	POAEY00	394.96–395.06	395.010	-3.720			ADLAE00		75.000	0.000
CARB diesel	POAAL00	394.96–395.06	395.010	-3.720			ADLAF00		75.000	0.000
Other West										
(¢/gal)		Phoenix						Differential to NYMEX		
CBG/RBOB unl	AADDP00	410.29–410.39(a)	410.340	+4.160	AADDPRV	8.0	AANYX91		160.000	10.000
CBG/RBOB prem	PPXDJ00	439.29–439.39(b)	439.340	+4.160	PPXDJRV	8.0	AANYX92		189.000	+10.000
Northwest										
(¢/gal)		Seattle						Differential to NYMEX		
Unl 84	AAXJE00	310.84–310.94	310.890	-1.790	AAXJERV	11.5	AANYX93		56.500	0.000
Prem unl 90	AAXJF00	340.84–340.94	340.890	-1.790	AAXJFRV	11.5	AANYX94		86.500	0.000
Jet fuel	PJABB00	355.96–356.06	356.010	+6.390			ADIOA00		36.000	+17.000
ULS (EPA) diesel	AAUEX00	333.27–333.37	333.320	-13.900			ADLAH00		-1.150	0.000
(¢/gal)		Portland						Differential to NYMEX		
Unl 84	AAXJC00	312.34–312.44	312.390	-1.790	AAXJCRV	11.5	AANYX95		58.000	0.000
Prem unl 90	AAXJD00	342.34–342.44	342.390	-1.790	AAXJDRV	11.5	AANYX96		88.000	0.000
ULS (EPA) diesel	AAUEY00	334.42–334.52	334.470	-13.900			ADLAG00		8.250	-9.500

(a)=84 octane; (b)=90 octane

West Coast waterborne, Sep 25 (PGA page 158)

(¢/gal)			Mid	Change
Unl 87	PGADI00	388.29–388.39	388.340	+4.160
Jet fuel	PJABI00	354.96–355.06	355.010	+6.390

Product price assessments

Latin America, FOB, Sep 25 (PGA page 164)

		$/barrel	Mid	Change
Argentina				
ULSD CIF	AAXWZ00		137.430	+0.250
Colombia				
FO 1.75% S FOB	PPARO00	85.39–85.41	85.400	-1.140
Diluent Naphtha Ex-Ship	AAXYB00		72.890	-0.050
Ecuador				
FO 2.2% S FOB	PPASL00	80.39–80.41	80.400	-1.140
RON 93 CIF	AAXYC00		115.870	+1.580
ULSD CIF	AAXWF00		135.200	-0.140
Peru				
ULSD CIF	AAXWY00		136.700	+0.110

				Peso/liter	Change
Mexico cargo					
Gasoline CIF Eastern Mexico	AAXWA00	108.350	-0.030	AATFH00	11.850	+0.150
Gasoline CIF Rosarito	AATFA00	113.270	+0.640	AATFK00	12.380	+0.220
Gasoline CIF Lazaro Cardenas	AATFD00	112.800	+0.630	AATFN00	12.330	+0.220
ULSD CIF Eastern Mexico	AAXWE00	131.220	-0.920	AATFI00	14.350	+0.090
ULSD CIF Rosarito	AATFB00	136.650	-0.020	AATFL00	14.940	+0.190
ULSD CIF Lazaro Cardenas	AATFE00	136.120	-0.020	AATFO00	14.880	+0.180
Jet CIF Eastern Mexico	AATFG00	132.470	-1.030	AATFJ00	14.480	+0.070
Jet CIF Rosarito	AATFC00	137.560	-0.220	AATFM00	15.040	+0.170
Jet CIF Lazaro Cardenas	AATFF00	137.060	-0.220	AATFP00	14.990	+0.170

Trinidad product postings (PGA page 466)

Effective date 19Sep23

		¢/gal
Mogas 92 RON Unleaded	PPRAE00	320.00
Mogas 95 RON Unleaded	PPRAF00	325.00
Dual Purpose Kerosene	PPRAB00	358.00
Gasoil 45 Cetane 0.1%S	PPRAC00	355.00
		$/b
Bunker C Fuel Oil	PPRAA00	95.00

Source: Paria

Gas liquids (¢/gal), Sep 25 (PGA page 780)

			Mid	Change
		Enterprise Mt Belvieu		
Ethane/propane	PMUDA05	23.575–23.675	23.625	-0.125
Ethane purity	PMUDB05	27.825–27.925	27.875	-0.125
Ethane mo. 2	AAWUC00	27.700–27.800	27.750	-0.250
Propane	PMAAY00	70.450–70.550	70.500	-0.750
Propane mo. 2	AAWUD00	71.325–71.425	71.375	-0.750
N-Butane	PMAAI00	85.950–86.050	86.000	+0.750
N-Butane mo. 2	AAWUF00	86.325–86.425	86.375	+1.000
Isobutane	PMAAB00	96.950–97.050	97.000	-1.000
Natural gasoline	PMABY05	167.825–167.925	167.875	-1.625
Natural gasoline mo. 2	AAWUG00	168.575–168.675	168.625	-1.500
		Energy Transfer Mt Belvieu		
Propane	PMABQ00	70.700–70.800	70.750	0.000
Propane mo. 2	AAWUE00	71.200–71.300	71.250	0.000
N-Butane	PMABR00	72.950–73.050	73.000	+0.750
Natural gasoline	AAIVF00	167.700–167.800	167.750	-2.250
		Targa Mt Belvieu		
Natural gasoline	PMABW05	167.700–167.800	167.750	-2.250
		Conway		
Ethane/propane	PMAAO00	20.700–20.800	20.750	+0.250
Propane	PMAAT00	66.950–67.050	67.000	-1.000
N-Butane	PMAAD00	85.700–85.800	85.750	-0.250
Isobutane	PMAAA00	106.950–107.050	107.000	-5.000
Natural gasoline	PMAAQ00	184.950–185.050	185.000	-6.000
		Other hubs		
Hattiesburg propane	AALBC00	71.200–71.300	71.250	-1.750
		($/mt)		
Waterborne FOB USGC propane	AAXIM00	434.140–434.160	434.150	+1.300
FOB USGC propane vs. Mt Belvieu	AAXIO00	62.510–62.530	62.520	0.000
Waterborne FOB USGC butane	ABTNB00		438.910	+1.720
FOB USGC butane vs. Mt Belvieu	ABTND00		45.300	0.000
VLGC freight rates Houston to NWE	AAXIQ00	146.990–147.010	147.000	+2.000
VLGC freight rates Houston to Japan	AAXIS00	250.990–251.010	251.000	+1.000
		(¢/gal)		
Waterborne FOB USGC propane	AAXIN00	83.320–83.340	83.330	+0.250
FOB USGC propane vs. Mt Belvieu	AAXIP00	11.950–12.050	12.000	0.000
Waterborne FOB USGC butane	ABTNA00		96.890	+0.380
FOB USGC butane vs. Mt Belvieu	ABTNC00		10.000	0.000
VLGC freight rates Houston to NWE	AAXIR00	28.165–28.265	28.215	+0.385
VLGC freight rates Houston to Japan	AAXIT00	48.170–48.190	48.180	+0.200

Crude price assessments

Asia Pacific/Middle East spot crude assessments ($/barrel), Sep 25

		Assessment (Asian MOC)			Diffs (Asian MOC)				Diff to Dated Brent (Asian MOC)			Assessment (London MOC)		
			Mid	Change			Mid	Change		Mid	Change		Mid	Change
Condensate									(PGA page 2212)			(PGA page 2213)		
						Diff to Dubai								
NW Shelf	PCAGX00	85.96–86.00	85.980	-0.290					AAPAI00	-6.300	-0.100	AAPAH00	85.300	-1.000
Ichthys FC	ICFCA00		95.480	+0.210					ICFCB00	3.200	+0.400			
DFC	ADFCA00	89.61–89.65	89.630	-0.660	ADFCB00	-1.65/-1.55	-1.600	-0.100	ADFCC00	-2.650	-0.470	ADFCD00	88.950	-1.370
Qatar LSC	AARBB00	89.01–89.05	89.030	-0.660	AARBD00	-2.25/-2.15	-2.200	-0.100	AARBC00	-3.250	-0.470	AARBA00	88.350	-1.370
South Pars	AARAV00	84.56–84.60	84.580	-0.660	AARAX00	-6.70/-6.60	-6.650	-0.100	AARAW00	-7.700	-0.470	AARAU00	83.900	-1.370
						Diff to ICP								
Senipah	AAEOE00	82.51–82.55	82.530	-0.290	AAEOK00	-5.50/-5.40	-5.450	-0.050	AAPBE00	-9.750	-0.100	AAPBD00	81.850	-1.000
Light									(PGA page 2214)			(PGA page 2215)		
						Diff to ICP								
Cossack	PCAGZ00	90.61–90.65	90.630	-0.290					AAPAC00	-1.650	-0.100	AAPAB00	89.950	-1.000
Tapis	PCACB00	98.51–98.55	98.530	-0.290					AAOZW00	6.250	-0.100	AAOZV00	97.850	-1.000
Belida	PCAFL00	85.21–85.25	85.230	-0.290	PCAFM00	-2.95/-2.85	-2.900	-0.050	AAPBQ00	-7.050	-0.100	AAPBP00	84.550	-1.000
Kutubu	PCAFJ00	90.86–90.90	90.880	-0.290					AAPAE00	-1.400	-0.100	AAPAD00	90.200	-1.000
Attaka	PCAAJ00	85.11–85.15	85.130	-0.290	PCAAK00	-3.65/-3.55	-3.600	-0.050	AAPBC00	-7.150	-0.100	AAPBB00	84.450	-1.000
Ardjuna	PCACQ00	89.06–89.10	89.080	-0.290	PCACR00	-0.90/-0.80	-0.850	-0.050	AAPBG00	-3.200	-0.100	AAPBF00	88.400	-1.000
Banyu Urip	PCAFQ00		99.080	-0.290	PCAQQ00		3.450	-0.050	AAPBU00	6.800	-0.100	AAPBR00	98.400	-1.000
						Diff to Dubai								
Sakhalin Blend	AARBN00	81.81–81.85	81.830	-0.660	AARCN00	-9.45/-9.35	-9.400	-0.100	AARDN00	-10.450	-0.470	AAREN00	81.150	-1.370
Sokol	AASCJ00	87.16–87.20	87.180	-0.660	AASCK00	-4.10/-4.00	-4.050	-0.100	AAPAO00	-5.100	-0.470	AAPAN00	86.500	-1.370
Kikeh	AAWUH00	101.76–101.80	101.780	-0.290					AAOZY00	9.500	-0.100	AAOZX00	101.100	-1.000
Miri Light	PCABQ00	101.46–101.50	101.480	-0.290					AAPAS00	9.200	-0.100	AAPAR00	100.800	-1.000
Labuan	PCABL00	105.26–105.30	105.280	-0.290					AAPAQ00	13.000	-0.100	AAPAP00	104.600	-1.000
Kimanis	AASCL00		103.630	-0.290					AASCM00	11.350	-0.100	AASCN00	102.950	-1.000
Medium									(PGA page 2216)			(PGA page 2217)		
Nanhai	PCAFR00	90.31–90.35	90.330	-0.290					AAPAG00	-1.950	-0.100	AAPAF00	89.650	-1.000
Minas*	PCABO00		88.475	-0.370								AAPAZ00	87.795	-1.080
Nile Blend	AAPLC00	90.31–90.35	90.330	-0.090					AAPAM00	-1.950	+0.100	AAPAL00	89.650	-0.800
Widuri*	PCAFE00		73.485	-0.275								AAPBN00	72.805	-0.985
Daqing	PCAAZ00	92.56–92.60	92.580	-0.090					AAPAW00	0.300	+0.100	AAPAV00	91.900	-0.800
Cinta*	PCAAX00		76.210	-0.350								AAPBJ00	75.530	-1.060
Su Tu Den	AARAR00	99.46–99.50	99.480	-0.290					AARAS00	7.200	-0.100	AARAQ00	98.800	-1.000
Bach Ho	PCAHY00	102.41–102.45	102.430	-0.290					AAPAK00	10.150	-0.100	AAPAJ00	101.750	-1.000
Heavy									(PGA page 2218)			(PGA page 2219)		
						Diff to ICP								
Dar Blend	AARAB00	89.81–89.85	89.830	-0.090					AARAC00	-2.450	+0.100	AARAA00	89.150	-0.800
Shengli	PCABY00	94.81–94.85	94.830	-0.090					AAPAY00	2.550	+0.100	AAPAX00	94.150	-0.800
Duri	PCABA00	98.16–98.20	98.180	-0.090	PCABB00	3.70/3.80	3.750	+0.050	AAPBM00	5.900	+0.100	AAPBL00	97.500	-0.800
Vincent	AARAK00		101.630	-0.090					AARAL00	9.350	+0.100	AARAJ00	100.950	-0.800

*Market Parity Price.

					(PGA page 2220)				(PGA page 2202)			
					Diff to Dubai				Assessment (Asian MOC)			
Murban M1	AAKNL00	94.66–94.70	94.680	-0.800	AARBZ00		3.450	-0.240				
Murban M2	MBNSA00		93.370	-0.970					Dubai CFR North Asia	PCAQA00	95.900	-0.200
Murban M3	MBNSB00		91.810	-1.160					LOOP Sour CFR North Asia	PCAQI00	93.720	+0.220
Al Shaheen	AAPEV00	94.19–94.23	94.210	-0.200	AAPEW00	2.93/3.03	2.980	+0.360	Oman CFR North Asia	PCAQJ00	95.900	-0.220
Upper Zakum	AAOUQ00	94.08–94.12	94.100	-0.200	DBDUZ00		2.870	+0.320	Upper Zakum CFR North Asia	PCAQB00	95.860	-0.200
Umm Lulu	AUFAA00		95.190	-0.800	DBDUL00		3.960	-0.240	Qatar Marine CFR North Asia	PCAQC00	95.220	-0.200
Das Blend	AAXOF00	94.47–94.51	94.490	-0.800	DBDDS00		3.260	-0.240	Murban CFR North Asia	PCAQE00	96.370	-0.800
						Spread vs OSP						
Basrah Medium M1	BSMAM01	–	95.300	-0.120	BSMBM01		0.700	+0.300	Basrah Medium CFR North Asia	BASNA00	95.440	-0.220
Basrah Medium M2	BSMAM02	–	93.630	-0.220	BSMBM02		0.350	+0.100	ESPO CFR North Asia	PCAQD00	90.020	-0.210
Basrah Heavy M1	AALZC00	–	92.300	-0.100	AALZJ00		1.100	+0.300	Forties CFR North Asia	PCAQF00	98.045	+0.675
Basrah Heavy M2	AALZD00	–	90.600	-0.200	AALZK00		0.750	+0.100	Dalia CFR North Asia	PCAQG00	97.300	+0.810
									WTI MEH CFR North Asia	PCAQH00	98.350	+0.770
Banoco Arab Medium	AAKNT00	94.38–94.42	94.400	-0.200	AAKUD00	-0.50/-0.40	-0.450	+0.100				
									Diff to Dubai			
										Mid	Change	
Qatar Land	AAKNP00	93.48–93.52	93.500	-0.650	AAKUJ00	0.45/0.55	0.500	-0.100	QALDA00	2.270	-0.090	
Qatar Marine	AAKNR00	93.43–93.47	93.450	-0.200	AAKUH00	0.45/0.55	0.500	+0.100	QAMDA00	2.220	+0.360	

Crude price assessments

International, Sep 25

($/barrel)			Mid	Change
(PGA page 2210)				
Dubai (Nov)	PCAAT00	94.09–94.11	94.100	-0.200
Dubai (Dec)	PCAAU00	92.78–92.80	92.790	-0.370
Dubai (Jan)	PCAAV00	91.22–91.24	91.230	-0.560
MEC (Nov)	AAWSA00	94.09–94.11	94.100	-0.200
MEC (Dec)	AAWSB00	92.78–92.80	92.790	-0.370
MEC (Jan)	AAWSC00	91.22–91.24	91.230	-0.560
Oman (Nov)	PCABS00	94.10–94.12	94.110	-0.220
Oman (Dec)	AAHZF00	92.79–92.81	92.800	-0.390
Oman (Jan)	AAHZH00	91.23–91.25	91.240	-0.580
Dubai cash/Futures	DBDDC00		2.870	+0.360
Oman cash/Futures	DBDOC00		2.880	+0.340
(PGA page 1212)				
Brent (DTD)	PCAAS00	93.39–93.41	93.400	-0.825
DTD NSL	AAOFD00	93.39–93.41	93.400	-0.825
Dated Brent (CIF)	PCAKM00		94.440	-0.820
Brent (Nov)	PCAAQ00	92.99–93.01	93.000	-0.780
Brent (Dec)	PCAAR00	91.66–91.68	91.670	-0.940
Brent (Jan)	PCARR00		90.240	-1.070
North Sea Basket	AAGIZ00	95.07–95.09	95.080	-0.850
(PGA page 218)				
Brent/WTI 1st	AALAU00	3.41/3.43	3.420	-0.160
Brent/WTI 2nd	AALAV00	3.69/3.71	3.700	-0.200
Brent/WTI 3rd	AALAY00		3.810	-0.220
Brent EFP (Nov)	AAGVX00	0.01/0.03	0.020	-0.080
Brent EFP (Dec)	AAGVY00	0.05/0.07	0.060	-0.050
Brent EFP (Jan)	AAMVY00		0.060	-0.050
Swaps(PGA page 2658)				
Dubai (Oct)	AAHBM00	92.77–92.81	92.790	-0.370
Dubai (Nov)	AAHBN00	91.21–91.25	91.230	-0.560
Dubai (Dec)	AAHBO00	89.74–89.78	89.760	-0.720
MOG (Oct)	AAHZP00	92.78–92.82	92.800	-0.390
MOG (Nov)	AAHZR00	91.22–91.26	91.240	-0.580
MOG (Dec)	AAHZT00	89.75–89.79	89.770	-0.740
Oman/Dubai Swap (Oct)	AAIHJ00	-0.01/0.03	0.010	-0.020
Oman/Dubai Swap (Nov)	AAIHL00	-0.01/0.03	0.010	-0.020
Oman/Dubai Swap (Dec)	AAIHN00	-0.01/0.03	0.010	-0.020

Asia ($/barrel), Sep 25 (PGA page 2210)

			Mid	Change
Brent (Nov)	PCAJG00	94.01–94.05	94.030	+0.550
Brent (Dec)	PCAJI00	92.52–92.56	92.540	+0.100
Brent (Jan)	PCAJ000		91.040	-0.200
Brent(DTD)	AAXPG00		94.475	+0.605
Brent/Dubai	AAJMS00	-0.08/-0.06	-0.070	+0.750
WTI (Oct)	AAFFU00	91.67–91.71	91.690	+0.950
WTI (Nov)	AAFFW00	90.57–90.61	90.590	+0.650
WTI (Dec)	AAFFY00	88.79–88.83	88.810	+0.230

North Sea, Sep 25 (PGA page 1212)

($/barrel)			Mid	Change	Spread vs fwd Dated Brent		Mid	Change
Dated Brent Diff					AAXEZ00	0.56/0.57	0.565	+0.045
BNB	AAVJA00	94.22–94.23	94.225	-0.855	AAVJB00	1.38/1.40	1.390	+0.015
Forties	PCADJ00	93.39–93.41	93.400	-0.825	AAGWZ00	0.56/0.57	0.565	+0.045
Oseberg	PCAEU00	96.38–96.40	96.390	-0.855	AAGXF00	3.55/3.56	3.555	+0.015
Ekofisk	PCADI00	96.30–96.32	96.310	-0.855	AAGXB00	3.47/3.48	3.475	+0.015
Troll	AAWEX00	96.80–96.82	96.810	-0.855	AAWEY00	3.97/3.98	3.975	+0.015
FOB N Sea WTI Midland	ALNDA00		94.345	-0.845	ALNDB00		1.510	+0.025
Statfjord	PCAEE00	96.23–96.24	96.235	-0.870	AAGXD00	3.39/3.41	3.400	0.000
Flotta Gold	PCACZ00	94.03–94.04	94.035	-0.870	AAGXH00	1.19/1.21	1.200	0.000
Duc	AAWEZ00	95.48–95.49	95.485	-0.870	AAWFL00	2.64/2.66	2.650	0.000
Grane Blend	PCALA00		94.685	-0.870	PCALB00		1.850	0.000
Johan Sverdrup	AJSVA00		94.665	-0.870	AJSVB00		1.830	0.000
Statfjord (CIF)	AASAS00	97.31–97.32	97.315	-0.870	AASAT00	4.49/4.51	4.500	0.000
Gullfaks (CIF)	AASAU00	97.91–97.92	97.915	-0.870	AASAV00	5.09/5.11	5.100	0.000
Alvheim (CIF)	ALVHA00		97.915	-0.820	ALVHB00		5.100	+0.050
Asgard (CIF)	ASGCA00		95.765	-0.870	ASGCB00		2.950	0.000
North Sea Dated Strip	AAKWH00	92.83–92.84	92.835	-0.870				
European Sour Crude Index	CSBEA00		94.640	-0.870	CSBEB00		1.805	0.000
($/barrel)					Spread vs fwd CIF Dated Brent			
Dated Brent (CIF)	AAVJG00		94.440	-0.820	AAVJF00		1.625	+0.050
BNB (CIF)	PCAKP00		95.710	-0.855	AAVJC00		2.895	+0.015
Forties (CIF)	PCAKR00		94.440	-0.820	AAHXC00		1.625	+0.050
Oseberg (CIF)	PCAKT00		97.330	-0.855	AAHXD00		4.515	+0.015
Ekofisk (CIF)	PCAKV00		97.150	-0.855	AAHXB00		4.335	+0.015
Troll (CIF)	AAXJO00		97.760	-0.850	AAXJN00		4.945	+0.020
WTI Midland (CIF)	WMCRD00		95.110	-0.850	WMCRB00		2.295	+0.020
North Sea CIF Dated Strip	AAHXE00		92.815	-0.870				

West Africa, Sep 25 (PGA pages 1230 and 1232)

($/barrel)			Mid	Change	Spread vs fwd DTD Brent		Mid	Change
Nigeria								
Bonny Light	PCAIC00	94.41–94.45	94.430	-0.990	AAGXL00	2.59/2.61	2.600	0.000
Qua Iboe	PCAID00	95.66–95.70	95.680	-0.990	AAGXN00	3.84/3.86	3.850	0.000
Forcados	PCABC00	96.61–96.65	96.630	-0.790	AAGXP00	4.79/4.81	4.800	+0.200
Agbami	AAQZB00	91.26–91.30	91.280	-0.990	AAQZC00	-0.56/-0.54	-0.550	0.000
Escravos	AAEIZ00	97.71–97.75	97.730	-0.790	AAGXR00	5.89/5.91	5.900	+0.200
Brass River	AAEJB00	94.01–94.05	94.030	-0.990	AAGXV00	2.19/2.21	2.200	0.000
Akpo	PCNGA00	91.26–91.30	91.280	-0.990	PCNGB00	-0.56/-0.54	-0.550	0.000
Bonga	PCNGC00	97.46–97.50	97.480	-0.790	PCNGD00	5.64/5.66	5.650	+0.200
Usan	AAXUQ00		90.780	-0.990	AAXUR00		-1.050	0.000
Erha	AAXUO00		96.880	-0.790	AAXUP00		5.050	+0.200
Egina	AFONA00		98.430	-0.790	AFONB00		6.600	+0.200
Angola								
Cabinda	PCAFD00	94.36–94.40	94.380	-0.990	AAGXT00	2.54/2.56	2.550	0.000
Nemba	AAQYZ00	92.06–92.10	92.080	-0.990	AAQZA00	0.24/0.26	0.250	0.000
Dalia	AAQYX00	93.21–93.25	93.230	-0.790	AAQYY00	1.39/1.41	1.400	+0.200
Girassol	AASNL00	95.61–95.65	95.630	-0.890	AASJD00	3.79/3.81	3.800	+0.100
Hungo	AASLJ00	92.56–92.60	92.580	-0.890	AASJF00	0.74/0.76	0.750	+0.100
Kissanje	AASLK00	93.36–93.40	93.380	-0.990	AASJE00	1.54/1.56	1.550	0.000
Pazflor	PCNGG00	93.21–93.25	93.230	-0.690	PCNGH00	1.39/1.41	1.400	+0.300
Plutonio	PCNGI00	92.86–92.90	92.880	-0.990	PCNGJ00	1.04/1.06	1.050	0.000
Ghana								
Jubilee	AAXUS00		94.130	-0.990	AAXUT00		2.300	0.000
Republic of Congo								
Djeno	PCNGE00	91.71–91.75	91.730	-0.890	PCNGF00	-0.11/-0.09	-0.100	+0.100
Chad								
Doba	AAXUU00		90.830	-0.940	AAXUV00		-1.000	+0.050
30-60 Day Dtd strip	AAXRK00	91.82–91.84	91.830	-0.990				

Crude price assessments

London, Sep 25 (PGA page 1214)

($/barrel)		Brent CFD	Mid	Change		Dated Swap	Mid	Change
1wk (Dec)	PCAKA00	1.42/1.44	1.430	0.000	AAJNV00	93.09/93.11	93.100	-0.940
2wk (Dec)	PCAKC00	1.32/1.34	1.330	+0.120	AAJOS00	92.99/93.01	93.000	-0.820
3wk (Dec)	PCAKE00	1.26/1.28	1.270	+0.120	AAJOU00	92.93/92.95	92.940	-0.820
4wk (Dec)	PCAKG00	1.12/1.14	1.130	+0.100	AAJOW00	92.79/92.81	92.800	-0.840
5wk (Dec)	AAGLU00	0.90/0.92	0.910	+0.070	AAJPC00	92.57/92.59	92.580	-0.870
6wk (Dec)	AAGLV00	0.63/0.65	0.640	+0.060	AAJPE00	92.30/92.32	92.310	-0.880
7wk (Dec)	AALCZ00	0.34/0.36	0.350	+0.070	AALAW00	92.01/92.03	92.020	-0.870
8wk (Dec)	AALDA00	0.07/0.09	0.080	+0.070	AALAX00	91.74/91.76	91.750	-0.870

Mediterranean, Sep 25 (PGA pages 1220, 1222, 1234)

($/barrel)			Mid	Change		Spread vs fwd DTD Brent	Mid	Change
Med Dtd Strip	AALDF00	92.83–92.84	92.835	-0.885				
BTC Dtd Strip	AAUFI00	92.76–92.77	92.765	-0.905				
15-45 Day Dtd Strip	AALGM00	92.53–92.54	92.535	-0.945				
Urals (Rdam)	PCAFW00	82.59–82.62	82.605	-0.885	AAGXJ00	-10.24/-10.22	-10.230	0.000
Urals (Med)	PCACE00	83.84–83.86	83.850	-0.885	AAGXX00	-8.99/-8.98	-8.985	0.000
Urals (Ex-Baltic)	AAGZT00	80.12–80.15	80.135	-0.885	AAHPI00	-12.71/-12.69	-12.700	0.000
Urals FOB Novo Suez	AAGZS00	80.32–80.35	80.335	-0.885	AAHPH00	-12.51/-12.49	-12.500	0.000
Urals FOB Novo Afra	AAOTH00	80.02–80.05	80.035	-0.885	AAOTI00	-12.81/-12.79	-12.800	0.000
Urals (Primorsk)	AAWVH00	80.12–80.15	80.135	-0.885	AAWVI00	-12.71/-12.69	-12.700	0.000
Urals (RCMB)	AALIN00	84.40–84.43	84.415	-0.825				
KEBCO (CIF Augusta)	KBCOA00		93.335	-0.885	KBCOB00		0.500	0.000
KEBCO (CIF Rotterdam)	KBCOC00		93.335	-0.885	KBCOD00		0.500	0.000
KEBCO (FOB Novo)	KBCOE00		89.520	-0.885	KBCOF00		-3.315	0.000
KEBCO (FOB Ust-Luga)	KBCOG00		90.770	-0.885	KBCOH00		-2.065	0.000
Iranian Light FOB Kharg Island (Med)	AILKA00		94.105	-0.985	AILKB00		1.270	-0.100
Iranian Heavy FOB Kharg Island (Med)	AIHKA00		91.605	-0.985	AIHKB00		-1.230	-0.100
Es Sider	PCACO00	94.30–94.33	94.315	-0.955	AAGYH00	1.54/1.56	1.550	-0.050
Siberian Lt	AAGZW00	85.84–85.86	85.850	-0.885	AAHPK00	-6.99/-6.98	-6.985	0.000
Saharan Bld	AAGZY00	93.45–93.48	93.465	-0.955	AAHPN00	0.69/0.71	0.700	-0.050
Azeri Lt	AAGZX00	99.04–99.07	99.055	-0.915	AAHPM00	6.28/6.30	6.290	-0.010
Azeri Lt FOB Ceyhan Suez	AAUFM00	98.24–98.27	98.255	-0.885	AAUFN00	5.48/5.50	5.490	+0.020
Azeri Lt FOB Ceyhan Afra	AAUFK00	97.76–97.78	97.770	-0.915	AAUFL00	5.00/5.01	5.005	-0.010
Azeri Lt FOB Supsa	AATHM00	97.06–97.08	97.070	-0.915	AATHN00	4.30/4.31	4.305	-0.010
BTC FOB Ceyhan	AAUFH00	98.00–98.02	98.010	-0.900	AAUFJ00	5.24/5.25	5.245	+0.005
Suez Blend	PCACA00	92.22–92.25	92.235	-0.885	AAGYD00	-0.61/-0.59	-0.600	0.000
Kirkuk	AAEJD00	91.22–91.25	91.235	-0.885	AAGYF00	-1.61/-1.59	-1.600	0.000
CPC Blend CIF	AAGZU00	92.10–92.13	92.115	-0.955	AAHPL00	-0.66/-0.64	-0.650	-0.050
CPC Blend FOB Suez	AALVX00	89.32–89.34	89.330	-0.955	AALVZ00	-3.44/-3.43	-3.435	-0.050
CPC Blend FOB Afra	AAOFV00	88.52–88.54	88.530	-0.955	AAOFW00	-4.24/-4.23	-4.235	-0.050
Additional War Risk Premium	AWARA00		1.700	0.000				

(PPE page 1617)

Urals Med CFD (Oct)	AAMDU00	-8.99/-8.98	-8.985	0.000	CPC Blend CFD (Oct)	AAOFX00	-0.780	0.000
Urals Med CFD (Nov)	AAMEA00	-8.99/-8.98	-8.985	0.000	CPC Blend CFD (Nov)	AAOFY00	-0.900	0.000
Urals Med CFD (Dec)	UMCM003	-8.99/-8.98	-8.985	0.000	CPC Blend CFD (Dec)	AAOFZ00	-0.950	0.000
Urals NWE CFD (Oct)	UNCM001	-10.29/-10.27	-10.280	0.000				
Urals NWE CFD (Nov)	UNCM002	-10.29/-10.27	-10.280	0.000				
Urals NWE CFD (Dec)	UNCM003	-10.29/-10.27	-10.280	0.000				

Canada, Sep 25 (PGA page 230)

($/barrel)			Mid	Change
33-63 Day Dated Strip	AALEJ00	91.70–91.71	91.705	-1.005
Hebron	AHEBA00		91.305	-0.805
Terra Nova	AAJUH00	93.69–93.72	93.705	-0.805
Hibernia	AAJKK00	93.94–93.97	93.955	-0.805
White Rose	AAVJX00	94.69–94.72	94.705	-0.805
		Spread vs fwd DTD Brent	Mid	Change
Hebron	AHEBC00		-0.400	+0.200
Terra Nova	AAJUJ00	1.99/2.01	2.000	+0.200
Hibernia	AAJKM00	2.24/2.26	2.250	+0.200
White Rose	AAVJY00	2.99/3.01	3.000	+0.200

Platts Euro denominated crude oil assessments (€/barrel) (PGA page 1252)

Sep 25			Mid	Change
Dated Brent	AAPYR00	88.21–88.23	88.221	-0.195
Dated Brent (CIF)	PCAKN00		89.204	-0.183
Urals (Mediterranean)	AAPYS00	79.19–79.21	79.201	-0.310
WTI (Oct)	AAPYT00	85.50–85.52	85.511	-0.160
WTI MEH (Oct)	AAYSA00		86.361	-0.577
Mars (Oct)	AAPYU00	83.38–83.39	83.385	-0.175

Euro/US$ forex rate: 1.058. Platts Euro denominated crude oil assessments are based on market values and a Euro/US$ forex rate at 4:30 PM local London time.

Crude price assessments

United States ($/barrel), Sep 25 (PGA pages 210, 214 & 230)

			Mid	Change
Platts AGS	AGSAA00		91.880	-0.900
WTI FOB USGC Decades Avg	ADECA00		92.130	-0.900
WTI (Oct)	PCACG00	90.67–90.69	90.680	-0.450
WTI (Nov)	PCACH00	89.67–89.69	89.680	-0.350
WTI (Dec)	AAGIT00	88.16–88.18	88.170	-0.180
WTI EFP (Oct)	AAGVT00	NA/NA	NA	NA0.000
WTI EFP (Nov)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Dec)	AAGVV00	-0.01/0.01	0.000	0.000
Light Houston Sweet	AAXEW00		91.580	-0.900
Light Houston Sweet M2	AAYRY00		90.880	-0.450
LOOP Sour (Oct)	AALSM01		87.980	-0.800
LOOP Sour (Nov)	AALSM02		87.780	-0.950
LOOP Sour (Dec)	AALSM03		86.520	-0.980
Eagle Ford Marker	AAYAJ00		87.830	-0.480
Mars (Oct)	AAMBR00	88.07–88.09	88.080	-0.800
Mars (Nov)	AAMBU00	87.87–87.89	87.880	-0.950
Mars (Dec)	AAMBX00	86.61–86.63	86.620	-0.980
Mars/WTI (Oct)	AAGWH00	-2.61/-2.59	-2.600	-0.350
Mars/WTI (Nov)	AAKTH00	-1.81/-1.79	-1.800	-0.600
Mars/WTI (Dec)	AAMBO00	-1.56/-1.54	-1.550	-0.800
LOOP/WTI (Oct)	AALOM01		-2.700	-0.350
LOOP/WTI (Nov)	AALOM02		-1.900	-0.600
LOOP/WTI (Dec)	AALOM03		-1.650	-0.800
LOOP/Mars (Oct)	AALPM01		-0.100	0.000
LOOP/Mars (Nov)	AALPM02		-0.100	0.000
LOOP/Mars (Dec)	AALPM03		-0.100	0.000
Dated Brent	AAQBF00	93.70–93.72	93.710	-0.110
P-Plus WTI	PCACI00	4.85/4.87	4.860	-0.150
P-5 WTI*	AAFEN00		86.250	-0.300
WTI-Delta	AAEJK00	1.47/1.49	1.480	-0.150

US domestic crude assessments London close

(PGA page 1240)		$/barrel	Mid	Change
WTI (Oct)	AAQAR00	90.52–90.54	90.530	-0.770
WTI (Nov)	AAQAT00	89.57–89.59	89.580	-0.620
WTI (Dec)	AAQAV00	87.96–87.98	87.970	-0.740
WTI MEH (Oct)	AAYRZ00		91.430	-1.220
WTI MEH (Nov)	AAXYD00		90.780	-0.770
LLS (Oct)	AAQBB00	91.92–91.94	91.930	-0.870
LLS (Nov)	AAQBD00	91.52–91.54	91.530	-0.670
Mars (Oct)	AAQAX00	88.27–88.29	88.280	-0.770
Mars (Nov)	AAQAZ00	88.12–88.14	88.130	-0.870
		Spread	Mid	Change
WTI (Oct)	AAQAS00	NA/NA	NA	NA0.000
WTI (Nov)	AAQAU00	-0.01/0.01	0.000	0.000
WTI (Dec)	AAQAW00	-0.01/0.01	0.000	0.000
WTI MEH (Oct)	AAYTA00		0.900	-0.450
WTI MEH (Nov)	AAYWA00		1.200	-0.150
LLS (Oct)	AAQBC00	1.39/1.41	1.400	-0.100
LLS (Nov)	AAQBE00	1.94/1.96	1.950	1.950
Mars (Oct)	AAQAY00	-2.26/-2.24	-2.250	0.000
Mars (Nov)	AAQBA00	-1.46/-1.44	-1.450	-0.250

			Mid	Change
WTI Midland	PCACJ00	91.37–91.39	91.380	-1.400
WTI Midland (2nd month)	AAYZA00		90.680	-0.650
LLS (1st month)	PCABN00	92.07–92.09	92.080	-0.550
LLS (2nd month)	AAURC00	91.62–91.64	91.630	-0.400
HLS (1st month)	PCABD00	90.72–90.74	90.730	-0.550
HLS (2nd month)	AAURE00	90.27–90.29	90.280	-0.400
WTS (1st month)	PCACK00	90.67–90.69	90.680	-1.400
WTS (2nd month)	AAURG00	89.92–89.94	89.930	-0.900
WTI MEH	AAYRG00		91.580	-0.900
WTI MEH (2nd month)	AAXXE00		90.880	-0.450
Poseidon	AABHK00	87.02–87.04	87.030	-0.850
Thunder Horse Blend	AAWZK00	91.17–91.19	91.180	-0.800
Wyoming Sweet	PCACM00	87.62–87.64	87.630	-0.150
Bonito	PCAIE00	87.92–87.94	87.930	-0.800
SGC	AASOI00	88.17–88.19	88.180	-1.650
ANS (Cal)	PCAAD00	94.31–94.35	94.330	-0.080
WCS ex-Cushing	AAWTY00	80.62–80.64	80.630	+0.260
WCS ex-Nederland	AAYAY00		81.680	+0.310
Bakken Williston	AAXPP00		87.180	-0.140
Bakken Guernsey	AASRR00	87.62–87.64	87.630	-0.140
Bakken Clearbrook	AASRU00	89.57–89.59	89.580	-0.140
Bakken USGC Pipe	ABAKA00		91.130	-0.440
Americas Crude Marker (Oct)	AAQHN00	87.02–87.04	87.030	-0.850
Americas Crude Marker (Nov)	AAQHO00	86.82–86.84	86.830	-1.000
Americas Crude Marker (Dec)	AAQHP00	85.56–85.58	85.570	-1.030
		FOB USGC		
Platts AGS	AGSAA00		91.880	-0.900
Bakken	ABAKC00		91.880	-0.900
Eagle Ford Crude	AAYAT00		90.980	-0.900
Eagle Ford Condensate	AAYAR00		89.480	-0.900
WTI	AAYBA00		91.880	-0.900
		FOB USGC Spread vs Dated Brent Strip		
Platts AGS	AGSAB00		-0.970	-0.680
Bakken	ABAKE00		-0.970	-0.680
Eagle Ford Crude	AEFCA00		-1.870	-0.680
Eagle Ford Condensate	AEFCB00		-3.370	-0.680
WTI	AWTUA00		-0.970	-0.680

		Spread vs WTI	Mid	Change
	AAGVZ00	0.69/0.71	0.700	-0.950
	AAXXF00		1.000	-0.300
	AAGWN00	1.39/1.41	1.400	-0.100
	AAURD00	1.94/1.96	1.950	-0.050
	AAGWP00	0.04/0.06	0.050	-0.100
	AAURF00	0.59/0.61	0.600	-0.050
	AAGWB00	-0.01/0.01	0.000	-0.950
	AAURH00	0.24/0.26	0.250	-0.550
	AAYRH00		0.900	-0.450
	AAYYA00		1.200	-0.100
	AAGWL00	-3.66/-3.64	-3.650	-0.400
	AAWZL00	0.49/0.51	0.500	-0.350
	AAGWR00	-3.06/-3.04	-3.050	+0.300
	AAGWF00	-2.76/-2.74	-2.750	-0.350
	AASOJ00	-2.51/-2.49	-2.500	-1.200
		Spread vs NYMEX WTI CMA		
	AAGWX00	6.64/6.66	6.650	+0.060
	AAWTZ00	-7.06/-7.04	-7.050	+0.400
	AAYAX00		-6.000	+0.450
	AASRX00		-0.500	0.000
	AASRV00	-0.06/-0.04	-0.050	0.000
	AASRW00	1.89/1.91	1.900	0.000
	ABAKB00		3.450	-0.300
		Spread vs ICE BRENT CMA		
	AANSA00		3.900	0.000
		FOB USGC Spread vs NYMEX WTI Strip		
	AGSAC00		3.120	-0.490
	ABAKD00		3.120	-0.490
	AAYAU00		2.220	-0.490
	AAYAS00		0.720	-0.490
	AAYAZ00		3.120	-0.490
		WTI FOB USGC vs WTI MEH (by decade)		
	ADECD00		0.550	0.000
	ADECG00		0.550	0.000
	ADECJ00		0.550	0.000
		WTI FOB USGC vs Dated Brent Basis (by decade)		
	ADECC00		-1.040	-0.950
	ADECF00		-1.040	-0.950
	ADECI00		-1.040	-0.950
		WTI FOB USGC vs ICE Brent Basis (by decade)		
	ADECK00		0.240	-0.850
	ADECL00		0.240	-0.850
	ADECM00		0.240	-0.850

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Crude price assessments

Canadian spot crude assessments, Sep 25

(PGA pages 230 & 232)		C$/cu m	Mid	Change
Lloyd Blend	AALRM00	599.577–599.747	599.662	+1.397
Mixed Sweet	AALRT00	710.987–711.156	711.072	-2.146
Light Sour Blend	AALRZ00	713.952–714.122	714.037	-2.151
Midale	AAUCD00	699.126–699.295	699.211	-2.130
Condensates	AALSH00	740.640–740.809	740.724	-2.187
Syncrude Sweet Prem.	AASOL00	773.258–773.427	773.342	-2.231
WCS	AAPPO00	593.647–593.816	593.732	+1.405
Cold Lake	AASZY00	592.376–592.546	592.461	+1.407
		$/barrel		
Lloyd Blend	AALRK00	70.770–70.790	70.780	+0.260
Mixed Sweet	AALRR00	83.920–83.940	83.930	-0.140
Light Sour Blend	AALRX00	84.270–84.290	84.280	-0.140
Midale	AAUCC00	82.520–82.540	82.530	-0.140
Condensates	AALSF00	87.420–87.440	87.430	-0.140
Syncrude Sweet Prem.	AASOK00	91.270–91.290	91.280	-0.140
WCS	AAPPN00	70.070–70.090	70.080	+0.260
Cold Lake	AASZX00	69.920–69.940	69.930	+0.260
		Spread vs Canada Basis		
Lloyd Blend	AALRP00	-16.910/-16.890	-16.900	+0.400
Mixed Sweet	AALRV00	-3.760/-3.740	-3.750	0.000
Light Sour Blend	AALSD00	-3.410/-3.390	-3.400	0.000
Midale	AAUCE00	-5.160/-5.140	-5.150	0.000
Condensates	AALSJ00	-0.260/-0.240	-0.250	0.000
Syncrude Sweet Prem.	AASOM00	3.590/3.610	3.600	0.000
WCS	AAPPP00	-17.610/-17.590	-17.600	+0.400
Cold Lake	AASZZ00	-17.760/-17.740	-17.750	+0.400

*Canada Basis: See explanation at http://www.platts.com/

US crude assessments Singapore close

($/barrel) (PGA page 2208)		Mid	Change
LOOP Sour (Oct)	AAZDA00	89.340	+0.100
LOOP Sour (Nov)	AAZDB00	89.290	+0.200
LLS (Oct)	AAZDC00	93.190	+0.950
LLS (Nov)	AAZDD00	92.590	+0.550
Southern Green Canyon	AAZDE00	90.390	+0.200
WTI MEH (Oct)	AAZDF00	93.040	+0.650
WTI MEH (Nov)	AAZDG00	91.890	+0.500

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

				Diff to Dubai		Diff to Asian Dated Brent		
US Delivered-Asia Spot Crudes		Mid	Change		Mid	Change		Mid	Change
WTI Midland (DES Singapore)	WTMSA00	95.560	-0.820	WTMSD00	5.800	-0.100	WTMSB00	4.660	-0.340
WTI Midland (DES Yeosu)	WTMYA00	96.060	-0.820	WTMYD00	6.300	-0.100	WTMYB00	5.160	-0.340
Brazil Delivered-Asia Spot Crudes									
Tupi (DES Qingdao)	LUQDA00	94.210	-0.820	LUQDD00	4.450	-0.100	LUQDB00	3.310	-0.340

Latin America crude ($/barrel), Sep 25 (PGA page 280)

		FOB Crude	Mid	Change		Diff to WTI strip		Diff to Futures Brent strip		Diff to Dated Brent strip
Oriente	PCADE00	85.06–85.11	85.085	-0.355	PCAGU00	-3.150	AAXBW00	-5.660	AAXBH00	-7.095
Vasconia	PCAGI00	86.72–86.77	86.745	-0.355	PCAGR00	-1.490	AAXCB00	-4.000	AAXBN00	-5.435
Escalante	PCAGC00	88.62–88.67	88.645	-0.205	PCAGO00	0.410	AAXBS00	-2.100	AAXAX00	-3.535
Medanito	AMTOA00		86.245	-0.205	AMTOC00	-1.990	AMTOB00	-4.500	AMTOD00	-5.935
Loreto	PCAGH00	84.16–84.21	84.185	-0.355	PCAGQ00	-4.050	AAXBV00	-6.560	AAXBG00	-7.995
Mesa 30	AAITB00	88.12–88.17	88.145	-0.905	AAITH00	-0.090	AAXCC00	-2.600	AAXBO00	-4.035
Santa Barbara	AAITD00	91.71–91.76	91.735	-0.455	AAITJ00	3.500	AAXBU00	0.990	AAXAZ00	-0.445
Tupi	ATUPA00		92.145	-0.055	ATUPC00	3.910	ATUPB00	1.400	ATUPD00	-0.035
Marlim	AAITF00	86.07–86.12	86.095	-0.355	AAITL00	-2.140	AAXBY00	-4.650	AAXBJ00	-6.085
Napo	AAMCA00	81.91–81.96	81.935	-0.355	AAMCD00	-6.300	AAXBX00	-8.810	AAXBI00	-10.245
Castilla Blend	AAVEQ00	83.22–83.27	83.245	-0.355	AAVEQ01	-4.990	AAXBZ00	-7.500	AAXBK00	-8.935
Liza	ALIZA00		93.280	-0.065	ALIZD00	5.045	ALIZC00	2.535	ALIZB00	1.100
Unity Gold	AUNIA00		93.480	-0.065	AUNIC00	5.245	AUNIB00	2.735	AUNID00	1.300
Latin America WTI strip	AAXBP00		88.235	-0.355						
Latin America Futures Brent strip	AAXBQ00		90.745	-0.205						
Latin America Dated Brent strip	AAXBR00		92.180	-0.065						

Daily OPEC basket price ($/barrel) (PGA page 207)

			Change
22Sep	AAEUQ00	95.730	+0.720

The daily OPEC basket price represents an index of the following 11 grades: Algeria's Saharan Blend, Indonesia's Minas, Iranian Heavy, Iraq's Basra Light, Kuwait's Export, Libya's Es Sider, Nigeria's Bonny Light,Qatar's Marine, Saudi Arabia's Arab Light, Murban of the UAE and Venezuela's BCF 17.

Crude price assessments

Crude oil postings

US ($/barrel) (PGA page 250)

		Plains	Effective date		Shell	Effective date		Energy Transfer	Effective date		Valero	Effective date
WTI	PSADF09	86.16*	25SEP23	PSADI09	86.30*	25SEP23	PSADG09	86.25*	25SEP23	PSACS09	86.25*	25SEP23
WTS	PSAED09	85.56	25SEP23	PSAEG09	86.64	25SEP23	PSAEE09	81.25	25SEP23			
LLS	PSAMO09	84.66	25SEP23	PSAMQ09	84.66	25SEP23	PSAMP09	84.75	25SEP23	PSATF09	88.85	25SEP23
Ok. Swt.	PSUS191	86.16	25SEP23	PSANX09	86.05	25SEP23	PSANW09	86.25	25SEP23			
Kansas	PSAPL09	76.51	25SEP23	PSUS112	78.78	25SEP23				PSAPE09	85.25	25SEP23
Wyo. Swt	PSAQZ09	83.26	25SEP23									
Eugene Island	AALBB00	81.66	25SEP23									
Eagle Ford							PSUS100	86.25	25SEP23			
Eagle Fd Cond							PSUS110	66.00	30JUN23			
		Phillips66			FlintHls						Coffey	
WTI	PSACP09	86.30*	25SEP23	AAUQN00	86.50	22SEP23				PSUS066	0.00	25SEP23
WTS	PSADO09	86.51	25SEP23									
LLS	PSAMC09	85.05	25SEP23									
Ok. Swt	PSASL09	86.10	25SEP23							PSUS064	86.00	25SEP23
Kansas										PSUS060	80.00	25SEP23
Wyo. Swt.				PSUS264	86.25	22SEP23						
Wyo. Sr.				PSUS261	74.00	22SEP23						

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Spot tanker rates, Sep 25

From	To	Route	Size (mt)		WS		Rate ($/mt)
Clean							
(PGT page 1910)							
Med	UKC	PFADCSZ	30k	PFADC10	300.00	TCABA00	42.87
Med	USAC	PFACWSZ	37k	PFACW10	187.50	TCABC00	38.14
Med	Med	PFADBSZ	30k	PFADB10	290.00	TCAAY00	21.58
UKC	UKC	PFALYSZ	22k	PFALY00	266.00	TCABV00	17.42
UKC	USAC	PFAMASZ	37k	PFAMA00	187.50	TCABX00	31.99
UKC	USGC	PFAMBSZ	37k	PFAMB00	182.50	TCACA00	43.44
BSea	Med	PFABXSZ	30k	PFABX00	340.00	TCAAP00	29.65
(PGT page 2920)							
AG	West Coast India	PFABMSZ	35k	PFABM10	242.50	TCAAF00	22.41
AG	Japan	PFABNSZ	35k	PFABN10	187.50	TCAAH00	51.75
Sing	Japan	PFAEBSZ	30k	PFAEB10	233.00	TCABP00	31.69
Sing	HK	PFAKWSZ	30k	PFAKW10	650.00*	TCADI00	21.67
(PGT page 2922)							
AG	Japan	PFAEYSZ	55k	PFAEY10	157.50	TCAAI00	42.43
AG	Japan	PFAMTSZ	75k	PFAMT00	134.00	TCAAJ00	36.98
Dirty							
(PGT page 1962)							
Carib	USGC	PFANZSZ	50k	PFANZ00	130.00	TDABA00	14.46
Carib	USAC	PFALTSZ	70k	PFALT10	77.50	TDAAY00	8.55
(PGT page 1960)							
Med	Med	PFAJPSZ	80k	PFAJP10	112.50	TDABL00	11.72
Med	USGC	PFAJOSZ	80k	PFAJO10	75.00	TDABU00	21.41
UKC	UKC	PFAKDSZ	80k	PFAKD10	92.50	TDACD00	8.63
UKC	USAC	PFAKESZ	80k	PFAKE10	67.50	TDACG00	12.31
(PGT page 1970)							
WAF	USGC	PFAIASZ	130k	PFAIA10	62.50	TDACV00	16.94
UKC	USGC	PFAHNSZ	135k	PFAHN10	55.00	TDACH00	13.36
Med	USGC	PFAHGSZ	135k	PFAHG10	50.00	TDABS00	14.28
(PGT page 2970)							
AG	Asia	PFAJDSZ	80k	PFAJD10	121.00	TDAAC00	27.87
(PGT page 2980)							
AG	Asia	PFAOCSZ	270k	PFAOC00	49.50	TDAAB00	12.94
AG	USGC	PFAOGSZ	280k	PFAOG00	28.00	TDAAN00	13.80

*values are in lumpsum

Platts futures assessments Singapore MOC, Sep 25 (PGA page 703)

NYMEX RBOB (¢/gal)		
Oct	XNRBA01	257.290
Nov	XNRBA02	252.560
Dec	XNRBA03	245.950

NYMEX NY ULSD (¢/gal)		
Oct	XNHOA01	333.180
Nov	XNHOA02	326.470
Dec	XNHOA03	313.500

Platts futures assessments, Sep 25

NYMEX light sweet crude ($/barrel) (PGA page 701)		
	CME 2:30 PM ET settlement	
Nov	AAWS001	89.680
Dec	AAWS002	88.170
Jan	AAWS003	86.700
Feb	AAWS004	85.290
	Platts 2:30 PM ET futures assessment	
Nov	NYCRM01	89.680
Dec	NYCRM02	88.180
Jan	NYCRM03	86.710
Feb	NYCRM04	85.300
	CME 2:30 PM vs Platts 2:30 PM spread	
Nov	AAWD001	0.000
Dec	AAWD002	-0.010
Jan	AAWD003	-0.010
Feb	AAWD004	-0.010

NYMEX RBOB (¢/gal) (PGA page 701)		
	CME 2:30 PM ET settlement	
Oct	AARS001	254.390
Nov	AARS002	250.340
Dec	AARS003	243.880
	Platts 2:30 PM ET futures assessment	
Oct	NYRBM01	254.520
Nov	NYRBM02	250.220
Dec	NYRBM03	243.990
	CME 2:30 PM vs Platts 2:30 PM spread	
Oct	AARD001	-0.130
Nov	AARD002	0.120
Dec	AARD003	-0.110

NYMEX NY ULSD (¢/gal) (PGA page 701)		
	CME 2:30 PM ET settlement	
Oct	AAHS001	326.220
Nov	AAHS002	320.010
Dec	AAHS003	309.080
	Platts 2:30 PM ET futures assessment	
Oct	NYHOM01	326.250
Nov	NYHOM02	320.070
Dec	NYHOM03	309.180
	CME 2:30 PM vs Platts 2:30 PM spread	
Oct	AAHD001	-0.030
Nov	AAHD002	-0.060
Dec	AAHD003	-0.100

ICE Brent crude ($/barrel) (PGA page 703)		
	Platts 2:30 PM ET futures assessment	
Nov	AAQBG00	93.290
Dec	AAQBH00	91.890
Jan	AAXZZ00	90.490
Feb	AAYALOO	89.230

Futures settlements, Sep 25

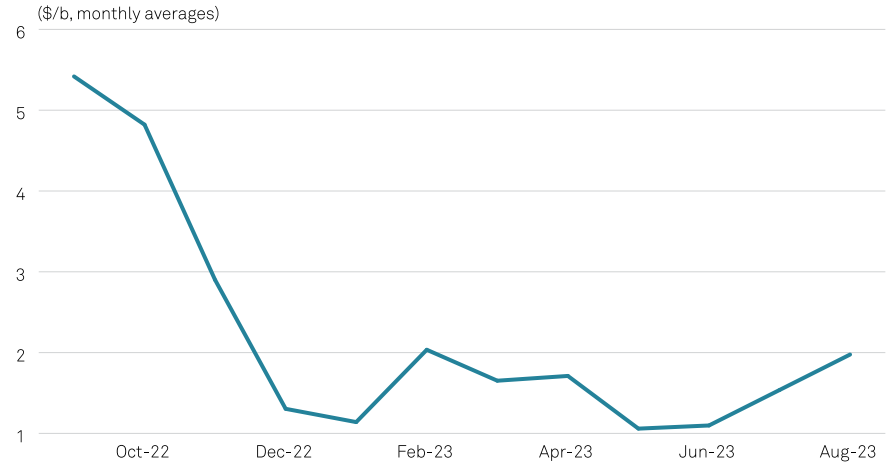
		Settlement	Change	Low	High	Volume*	Open interest		PNT****
NYMEX Light sweet crude ($/barrel) (PGA page 705)									
Nov 23	NMCL001	89.68	-0.35	89.03	90.83	309059	364188		
Dec 23	NMCL002	88.17	-0.18	87.52	89.07	152031	262392		
Jan 24	NMCL003	86.70	-0.06	86.05	87.39	73982	136480		
Feb 24	NMCL004	85.29	-0.04	84.65	85.85	38046	70538		
Total	NMCL000					718283		XNCLP00	11907
NYMEX NY ULSD ($/gal) (PGA page 705)									
Oct 23	NMHO001	3.2622	-0.0440	3.2491	3.3482	16513	31755		
Nov 23	NMHO002	3.2001	-0.0372	3.1855	3.2806	49693	84144		
Dec 23	NMHO003	3.0908	-0.0211	3.0782	3.1488	33558	53042		
Jan 24	NMHO004	3.0368	-0.0104	3.0227	3.0774	16346	42449		
Total	NMHO000					142504		XNHOP00	5652
NYMEX RBOB unleaded gasoline ($/gal) (PGA page 705)									
Oct 23	NMRB001	2.5439	-0.0179	2.5294	2.5871	19130	40772		
Nov 23	NMRB002	2.5034	-0.0085	2.4814	2.5386	57715	127533		
Dec 23	NMRB003	2.4388	-0.0095	2.4178	2.4729	29623	76911		
Jan 24	NMRB004	2.4062	-0.0114	2.3869	2.4334	10638	44891		
Total	NMRB000					129333		XNRBP00	14851
ICE Midland WTI American Gulf Coast ($/barrel) (PGA page 704)									
Nov 23	IHOU001	90.87	-0.44	90.23	92.09	2837	5902		
Dec 23	IHOU002	89.34	-0.25	88.69	90.24	1346	4839		
Jan 24	IHOU003	87.83	-0.20	87.75	88.49	203	3928		
Feb 24	IHOU004	86.42	-0.22	86.42	86.42	21	3798		
NYMEX Natural Gas ($/MMBtu) (PGA page 705)									
Oct 23	NMNG001	2.639	+0.00	2.606	2.671	32008	25006		
Nov 23	NMNG002	2.906	+0.03	2.862	2.937	96519	291458		
Dec 23	NMNG003	3.341	+0.04	3.289	3.363	30397	86979		
Jan 24	NMNG004	3.612	+0.06	3.548	3.625	29882	123245		
Total	NMNG000					251607		XNNGP00	9481
DME Oman crude ($/barrel)** (PGA pages 702 & 2710)									
Nov 23 Asia	XDOA001	94.19	-0.09			1012			
Nov 23	DMOQ001	93.69	-0.39	93.50	94.76	1067	18932		
Dec 23	DMOQ002	92.31	-0.41	92.31	92.37	969	18		
Jan 24	DMOQ003	91.00	-0.62	91.00	91.00	968	8		
Feb 24	DMOQ004	89.73	-0.94	89.73	89.73	0	0		
Total	DMOQ000					6046		XDOQP00	0
IFAD Murban crude ($/barrel) (PGA page 703)									
Nov 23	AMIFA00	94.630							
Murban vs Dubai***	AMIFB00	3.400							
ICE Brent ($/barrel) (PGA page 704)									
Nov 23	ICLL001	93.29	+0.02	92.54	94.25	207610	227988		
Dec 23	ICLL002	91.88	-0.08	91.20	92.73	391490	597314		
Jan 24	ICLL003	90.47	-0.11	89.82	91.25	160485	320804		
Feb 24	ICLL004	89.20	-0.14	88.58	89.92	83110	170632		
Total	ICLL000					1110744		XILLP00	31127

		Settlement	Change	Low	High	Volume*	Open interest		PNT***
ICE BWAVE (Brent weighted futures average)($/barrel) (PGA page 704)									
Nov 23	XIBW001	93.75							
Dec 23	XIBW002	92.62							
BWAVE data refer to previous day.									
ICE WTI ($/barrel) (PGA page 704)									
Nov 23	ICIC001	89.68	-0.35	89.02	90.83	49492	83621		
Dec 23	ICIC002	88.17	-0.18	87.52	89.07	43294	111615		
Jan 24	ICIC003	86.70	-0.06	86.09	87.34	25741	51052		
Feb 24	ICIC004	85.29	-0.04	85.02	85.82	18134	31791		
Total	ICIC000					174395		XIICP00	6032
ICE low sulfur Gasoil ($/mt) (PGA page 704)									
Oct 23	ICLO001	965.00	-17.50	958.75	987.50	56575	130261		
Nov 23	ICLO002	935.75	-13.75	930.25	953.50	86862	136967		
Dec 23	ICLO003	902.75	-10.50	898.25	915.25	55933	124304		
Jan 24	ICLO004	886.00	-9.00	882.00	895.50	18270	55510		
Total	ICLO000					261654		XILOP00	7075

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

Source: CQG

Dubai M1-M3 Structure



Source: S&P Global Commodity Insights

Five-Day Rolling Averages, five days ending September 25

Naphtha (PGA page 34)			Conversion	
		$/barrel		¢/gal
Singapore	PAAAP00	75.11–75.15	(/.42)	178.84–178.94
		$/mt		¢/gal
Japan C/F	PAAAD00	712.30–713.80	(/3.78)	188.44–188.84
Arab Gulf	PAAAA00	661.59–663.09	(/3.78)	175.02–175.42
CIF NWE physical	PAAAL00	712.55–713.05	(/3.78)	188.51–188.64
Rotterdam barge	PAAAM00	708.55–709.05	(/3.78)	187.45–187.58
FOB Med	PAAAI00	658.30–658.80	(/3.78)	174.15–174.29
CIF Genoa	PAAAH00	689.95–690.45	(/3.78)	182.53–182.66
		¢/gal		$/mt
US Gulf FOB cargo	AAXJP00	171.88 –171.98	(*3.54669)	649.83 –649.93
US Gulf DAP LSR parcel	AAXQK00	173.73	(*4.0083)	696.35

Jet Kerosene (PGA page 35)				
		$/mt		¢/gal
CIF NWE cargo	PJAAU00	1041.80–1042.30	(/7.89)	314.38–314.53
Rotterdam barge	PJABA00	1038.80–1039.30	(/7.89)	313.48–313.63
FOB Med	AAIDL00	997.20–997.70	(/7.89)	300.92–301.07
CIF Genoa	AAZBN00	1040.30–1040.80	(/7.89)	313.93–314.08
		¢/gal		$/mt
US Gulf water	PJABM00	312.95–313.05	(*.42)	1037.05–1037.39
US Gulf pipe	PJABO00	307.95–308.05	(*.42)	1020.48–1020.82
NY barge	PJAAW00	320.29–320.39	(*.42)	1056.96–1057.29
LA pipeline	PJAAP00	353.85–353.95	(*.42)	1128.78–1129.10
Group 3	PJAAI00	326.64–326.74	(*.42)	1082.43–1082.76
Chicago	PJAAF00	292.85–292.95	(*.42)	970.45–970.78

Crude Oil, FOB Source		
		$/barrel
West Texas Int	PCACG00	90.73–90.75
NYMEX Crude	XNCL001	90.52
Mars	AAMBR00	88.92–88.94
Brent (DTD)	PCAAS00	94.94–94.95
Brent (First month)	PCAAQ00	94.13–94.15
Dubai (First Month)	PCAAT00	94.13–94.15
Oman (First Month)	PCABS00	94.14–94.16
Urals CIF med	PCACE00	84.96–84.98
WTI Posting Plus	PCACI00	4.67 –4.69

Gasoline, U.S. Market (PGA page 36)				
(¢/gal)		Unleaded		Premium
US Gulf water	PGACU00	281.04–281.14	PGAIX00	309.74–309.84
US Gulf pipe	PGACT00	278.29–278.39	PGAJB00	306.49–306.59
Group 3			PGABD00	300.76–300.86
LA Pipeline			PGABG00	406.40–406.50
SF Pipeline	PGADG00	332.59–332.69	PGABO00	359.59–359.69
Chicago			PPASQ00	349.30–349.40
NYMEX Unl	XNRB001	263.14		

Gasoline, Intl. Market			Conversion	
		Prem ($/mt)		¢/gal
R'dam Barge Prem unl	PGABM00	963.35–963.85	(/3.51)	274.46–274.60

Gasoil/Heating Oil (PGA page 32)				
		$/barrel		¢/gal
Singapore	POABC00	125.98–126.02	(/.42)	299.95–300.04
Arab Gulf	POAAT00	122.10–122.14	(/.42)	290.71–290.81
		$/mt		¢/gal
0.1 CIF ARA	AAYWS00	967.40–967.90	(/3.133)	309.07–309.23
50 ppm Rotterdam barge	AAUQC00	969.55–970.05	(/3.133)	309.76–309.92
0.1 Rotterdam barge	AAYWT00	964.15–964.65	(/3.133)	308.04–308.19
0.1 FOB NWE	AAYWR00	946.25–946.75	(/3.133)	302.32–302.48
0.1 CIF Med	AAVJJ00	974.25–974.75	(/3.133)	311.26–311.42

(PGA page 33)				
		¢/gal		$/barrel
L.A. LS diesel	POAET00	367.60–367.70	(*3.07)	1128.53–1128.84
S.F. LS diesel	POAEY00	399.07–399.17	(*3.07)	1225.15–1225.46
		¢/gal		$/mt
NY barge	POAEG00	296.94–297.04	(*3.15)	935.37–935.68
US Gulf water	POAEE00	302.13–302.23	(*3.08)	930.55–930.86
US Gulf pipe	POAED00	301.13–301.23	(*3.08)	927.47–927.78
NYMEX NY ULSD	XNHO001	333.26	(*3.08)	1049.78

Low Sulfur Resid Fuel Oil (PGA page 38)				
		$/mt		$/barrel
CIF ARA 1%	PUAAL00	577.85–578.35	(/6.35)	91.00–91.08
Rot bar 1%	PUAAP00	571.45–571.95	(/6.35)	89.99–90.07
NWE FOB 1%	PUAAM00	563.45–563.95	(/6.35)	88.73–88.81
Med FOB 1%	PUAAK00	572.60–573.10	(/6.35)	90.17–90.25
		$/barrel		$/mt
NY Cargo 1% Max	PUAAO00	89.33–89.35	(*6.5)	580.65–580.78
US Gulf 1%	PUAAI00	89.77–89.79	(*6.11)	567.35–567.47

Hi Sulfur Resid Fuel Oil (PGA page 39)				
		$/mt		$/barrel
Singapore 180	PUADV00	521.84–521.88	(/6.35)	82.18–82.19
Singapore 380	PPXDK00	510.83–510.87	(/6.35)	80.45–80.45
Arab Gulf 180	PUABE00	501.92–501.96	(/6.35)	79.04–79.05
CIF ARA 3.5%	PUABA00	557.30–557.80	(/6.35)	87.76–87.84
NWE FOB 3.5%	PUABB00	544.20–544.70	(/6.35)	85.70–85.78
Med FOB 3.5%	PUAAZ00	545.75–546.25	(/6.35)	85.94–86.02
CIF Med 3.5%	PUAAY00	563.10–563.60	(/6.35)	88.68–88.76
		$/barrel		$/mt
USAC HSFO	PUAAX00	86.30–86.32	(*6.35)	547.98–548.11
USGC HSFO	PUAFZ00	81.99–82.01	(*6.35)	520.64–520.76

US wholesale posted prices effective Sep 25

PADD 1	Unleaded		Midgrade		Premium		Kerosene		Diesel No.2		ULSD	
Albany, NY	DR198ZY	250.47–260.00	DM198ZY	270.35–284.20	DP198ZY	307.89–320.95	DK198ZY	397.49–405.28			DU198ZY	337.25–346.58
Allentown	DR235ZY	252.40–272.18	DM235ZY	277.60–298.42	DP235ZY	314.33–352.60			DH235ZY	–	DU235ZY	337.85–359.32
Atlanta	DR048ZY	243.80–251.22	DM048ZY	270.75–288.41	DP048ZY	304.20–329.92					DU048ZY	326.65–332.35
Baltimore (a)	DR123ZY	251.90–264.75	DM123ZY	277.07–294.75	DP123ZY	320.40–340.77	DK123ZY	404.53–408.00	DH123ZY	–	DU123ZY	328.45–338.50
Binghamton	DR200ZY	265.50–267.28	DM200ZY	287.17–297.28	DP200ZY	325.78–330.50					DU200ZY	336.63–343.53
Boston (a)	DR121ZY	251.80–259.00	DM121ZY	271.80–280.00	DP121ZY	311.80–318.00	DK121ZY	428.81–428.81			DU121ZY	337.02–339.61
Charleston	DR250ZY	252.95–264.98	DM250ZY	276.45–278.15	DP250ZY	323.10–355.65					DU250ZY	342.25–345.20
Charlotte	DR169ZY	244.50–254.95	DM169ZY	265.44–282.08	DP169ZY	304.00–330.78					DU169ZY	328.20–332.14
Fairfax (a)	DR299ZY	247.78–254.94	DM299ZY	270.82–286.51	DP299ZY	304.90–334.84					DU299ZY	324.39–332.67
Greensboro							DK171ZY	499.90–499.90			DU171ZY	328.38–336.90
Miami									DU039ZY	334.70–342.54		
New Haven (a)	DR034ZY	249.05–258.36	DM034ZY	270.80–283.63	DP034ZY	308.80–331.16	DK034ZY	391.05–616.51	DH034ZY	–	DU034ZY	334.55–340.47
New York City (a)	DR204ZY	262.36–262.36	DM204ZY	287.30–287.30	DP204ZY	332.16–332.16					DU204ZY	261.00–339.27
Newark (a)	DR189ZY	243.36–249.55	DM189ZY	266.36–280.44	DP189ZY	304.68–326.78	DK189ZY	–			DU189ZY	330.94–338.50
Norfolk (a)	DR300ZY	248.90–252.94	DM300ZY	271.17–283.58	DP300ZY	313.85–336.84					DU300ZY	328.83–333.10
Orlando	DR041ZY	252.39–260.00	DM041ZY	274.95–288.00	DP041ZY	305.90–327.79					DU041ZY	339.45–346.00
Philadelphia (a)	DR242ZY	249.15–269.62	DM242ZY	273.97–292.78	DP242ZY	310.00–327.52			DH242ZY	–	DU242ZY	330.25–339.05
Pittsburgh	DR243ZY	247.40–272.41	DM243ZY	273.85–297.55	DP243ZY	322.40–370.64	DK243ZY	–	DH243ZY	–	DU243ZY	315.53–357.05
Providence (a)	DR248ZY	248.16–251.48	DM248ZY	268.07–276.40	DP248ZY	306.46–314.40					DU248ZY	336.47–338.46
Portland	DR126ZY	253.70–255.67	DM126ZY	275.82–298.60	DP126ZY	316.52–316.55			DH126ZY	–	DU126ZY	338.15–342.68
Raleigh											DU168ZY	332.60–332.60
Richmond	DR301ZY	246.56–250.93	DM301ZY	271.62–288.57	DP301ZY	307.15–334.84	DK301ZY	455.00–455.00			DU301ZY	325.61–332.41
Savannah	DR054ZY	268.50–268.60	DM054ZY	298.50–298.60	DP054ZY	363.50–363.60					DU054ZY	352.05–352.13
Spartanburg	DR252ZY	245.40–252.88	DM252ZY	269.20–288.29	DP252ZY	308.11–328.99					DU252ZY	327.55–331.97
Tampa									DU045ZY	335.30–339.10		
PADD 2												
Aberdeen	DR253ZY	254.19–269.56	DM253ZY	268.44–290.56	DP253ZY	279.23–305.31					DU253ZY	345.77–351.35
Cape Girardeau	DR144ZY	246.00–266.38			DP144ZY	327.91–336.00					DU144ZY	329.66–341.40
Chattanooga	DR260ZY	245.13–259.70	DM260ZY	262.83–299.83	DP260ZY	295.50–331.26					DU260ZY	327.90–331.90
Chicago (a)	DR075ZY	245.05–264.70	DM075ZY	273.38–282.30	DP075ZY	325.30–330.05	DK075ZY	332.12–341.50			DU075ZY	291.12–304.25
Cleveland	DR212ZY	248.85–263.24	DM212ZY	280.52–309.22	DP212ZY	343.85–358.81	DK212ZY	357.95–357.95			DU212ZY	308.95–323.08
Columbus	DR213ZY	242.85–248.55	DM213ZY	274.52–304.88	DP213ZY	337.85–371.45	DK213ZY	357.05–357.05			DU213ZY	315.48–327.88
Duluth	DR138ZY	264.50–272.15	DM138ZY	284.18–292.10	DP138ZY	307.72–322.66					DU138ZY	342.05–347.25
Des Moines	DR059ZY	250.49–261.47	DM059ZY	267.08–297.94	DP059ZY	277.84–319.75					DU059ZY	334.66–346.29
Detroit	DR130ZY	240.45–261.11	DM130ZY	272.12–304.32	DP130ZY	335.45–363.65	DK130ZY	347.80–347.80			DU130ZY	292.80–300.63
Fargo	DR174ZY	260.39–275.10	DM174ZY	278.42–286.20	DP174ZY	291.31–312.10					DU174ZY	343.21–352.06
Green Bay	DR313ZY	272.00–272.00	DM313ZY	–	DP313ZY	366.00–366.00	DK313ZY	–			DU313ZY	315.00–315.00
Indianapolis	DR088ZY	232.50–245.25	DM088ZY	262.50–300.58	DP088ZY	316.93–358.31	DK088ZY	354.23–355.20			DU088ZY	298.00–306.92
Kansas City	DR099ZY	250.43–260.33	DM099ZY	269.77–281.25	DP099ZY	317.84–343.50					DU099ZY	335.62–344.25
Knoxville	DR261ZY	244.70–259.71	DM261ZY	268.58–283.80	DP261ZY	305.75–331.80	DK261ZY	–			DU261ZY	328.00–343.66
Milwaukee	DR316ZY	246.05–257.00	DM316ZY	275.22–279.44	DP316ZY	333.55–337.60	DK316ZY	356.20–356.20			DU316ZY	295.27–302.50
Minneapolis/St.Paul	DR141ZY	251.98–261.02	DM141ZY	268.45–280.16	DP141ZY	288.68–308.16	DK141ZY	407.80–407.80			DU141ZY	334.97–346.85
Oklahoma City	DR226ZY	249.08–263.83	DM226ZY	268.42–283.00	DP226ZY	282.23–305.25					DU226ZY	332.15–343.81
Omaha	DR185ZY	250.73–262.38	DM185ZY	267.03–289.00	DP185ZY	278.10–319.15					DU185ZY	334.81–347.39
Sioux Falls	DR256ZY	248.85–261.74	DM256ZY	267.28–296.02	DP256ZY	279.45–306.02					DU256ZY	334.93–344.41
St. Louis (a)	DR154ZY	246.50–255.28	DM154ZY	266.50–266.50	DP154ZY	324.75–324.75					DU154ZY	292.63–300.00
PADD 3												
Albuquerque	DR192ZY	279.00–295.86	DM192ZY	299.00–317.00	DP192ZY	320.00–345.86					DU192ZY	362.50–373.28
Amarillo	DR265ZY	289.79–290.86	DM265ZY	305.79–306.86	DP265ZY	334.79–335.86					DU265ZY	360.29–360.83
Baton Rouge	DR115ZY	244.49–256.47	DM115ZY	266.62–279.22	DP115ZY	298.55–323.72					DU115ZY	327.70–334.70
Birmingham	DR003ZY	243.20–257.72	DM003ZY	256.55–296.36	DP003ZY	295.60–324.03	DK003ZY	461.07–461.07			DU003ZY	328.31–335.20
Corpus Christi	DR275ZY	262.18–263.38	DM275ZY	280.18–281.38	DP275ZY	323.68–326.38					DU275ZY	324.35–326.55
Dallas/Ft.Worth (a)	DR276ZY	267.39–272.10	DM276ZY	292.10–305.37	DP276ZY	321.89–339.75					DU276ZY	326.95–337.00
Houston (a)	DR416ZY	254.10–261.34	DM416ZY	277.43–297.97	DP416ZY	322.53–330.65	DK416ZY	380.36–380.36			DU416ZY	327.39–332.33
Little Rock	DR009ZY	247.37–273.28	DM009ZY	261.25–307.90	DP009ZY	277.37–348.49					DU009ZY	332.25–350.16
New Orleans	DR119ZY	241.45–258.80	DM119ZY	276.35–283.80	DP119ZY	294.70–338.37					DU119ZY	325.66–331.14
San Antonio	DR289ZY	264.87–280.01	DM289ZY	289.82–304.83	DP289ZY	320.25–340.90					DU289ZY	324.50–330.13
PADD 4												
Billings (b)	DR162ZY	–			DP162ZY	350.81–352.72					DU162ZY	392.88–394.12
Casper (b)	DR321ZY	262.55–265.62			DP321ZY	297.90–301.75			DU321ZY*	375.45–376.30		
Denver	DR028ZY	269.66–285.61	DM028ZY	286.66–301.86	DP028ZY	316.06–332.19					DU028ZY	347.35–358.00
Salt Lake City	DR298ZY	299.95–304.00	DM298ZY	315.54–320.26	DP298ZY	332.13–339.00					DU298ZY	358.87–366.00
PADD 5												
Anacortes	DR305ZY	354.00–354.60	DM305ZY	381.60–385.00	DP305ZY	387.35–395.00					DU305ZY	391.75–412.70
Las Vegas (e)	DR196ZY	337.35–399.54	DM196ZY	357.35–417.08	DP196ZY	372.35–441.00					DU196ZY	367.30–399.01
Los Angeles(e)	DR022ZY	457.00–464.76	DM022ZY	482.00–489.69	DP022ZY	498.75–506.94					DU022ZY	425.75–434.55
Phoenix	DR012ZY	410.00–439.00	DM012ZY	451.00–474.00	DP012ZY	485.00–516.94					DU012ZY	367.00–406.65
Portland	DR233ZY	316.00–327.80	DM233ZY	334.00–356.70	DP233ZY	355.45–367.70					DU233ZY	350.95–387.50
SanFranEBay (e)	DR025ZY	385.70–391.91	DM025ZY	400.70–407.84	DP025ZY	417.70–423.55					DU025ZY	420.75–429.29
Seattle/Tacoma	DR308ZY	355.75–358.65	DM308ZY	382.46–383.75	DP308ZY	391.51–396.75					DU308ZY	396.65–414.70
Spokane	DR309ZY	379.93–379.93	DM309ZY	394.93–394.93	DP309ZY	419.93–419.93					DU309ZY	414.10–414.10

All prices are provided by DTN. Discounts or temporary allowances offered by individual companies are not included in posted prices. Prices are unbranded unless noted. Prices are conventional gasoline unless noted. All prices in cts/gal. (a)=RFG. (b)=Branded postings (e)=CARB gasoline/No.2 oil *=Low Sulfur Diesel

US wholesale posted prices effective Sep 23

PADD 1	Unleaded		Midgrade		Premium		Kerosene		Diesel No.2		ULSD	
Albany, NY	DR198ZY	250.47–260.00	DM198ZY	270.35–284.20	DP198ZY	307.89–320.95	DK198ZY	397.49–405.28			DU198ZY	337.25–346.58
Allentown	DR235ZY	252.40–272.18	DM235ZY	277.60–298.42	DP235ZY	314.33–352.60			DH235ZY	–	DU235ZY	337.85–359.32
Atlanta	DR048ZY	243.80–251.22	DM048ZY	270.75–288.41	DP048ZY	304.20–329.92					DU048ZY	328.04–332.35
Baltimore (a)	DR123ZY	251.90–264.75	DM123ZY	277.07–294.75	DP123ZY	320.40–340.77	DK123ZY	404.90–408.00	DH123ZY	–	DU123ZY	328.45–338.50
Binghamton	DR200ZY	265.50–267.28	DM200ZY	287.17–297.28	DP200ZY	325.78–330.50					DU200ZY	336.63–343.53
Boston (a)	DR121ZY	251.80–259.00	DM121ZY	271.80–280.00	DP121ZY	311.80–318.00	DK121ZY	428.81–428.81			DU121ZY	337.02–339.61
Charleston	DR250ZY	252.95–264.98	DM250ZY	276.45–278.15	DP250ZY	323.10–355.65					DU250ZY	342.25–345.20
Charlotte	DR169ZY	244.50–254.95	DM169ZY	265.44–282.08	DP169ZY	304.00–330.78					DU169ZY	328.35–332.14
Fairfax (a)	DR299ZY	247.78–257.14	DM299ZY	270.82–286.51	DP299ZY	304.90–334.84					DU299ZY	329.46–332.67
Greensboro							DK171ZY	499.90–499.90			DU171ZY	328.38–336.90
Miami									DU039ZY	334.70–342.54		
New Haven (a)	DR034ZY	249.05–258.36	DM034ZY	270.80–283.63	DP034ZY	308.80–331.16	DK034ZY	391.05–616.51	DH034ZY	–	DU034ZY	334.55–340.47
New York City (a)	DR204ZY	262.36–262.36	DM204ZY	287.30–287.30	DP204ZY	332.16–332.16					DU204ZY	261.00–339.27
Newark (a)	DR189ZY	243.36–249.55	DM189ZY	266.36–280.44	DP189ZY	304.68–326.78	DK189ZY	–			DU189ZY	330.94–338.50
Norfolk (a)	DR300ZY	248.90–252.94	DM300ZY	271.17–283.83	DP300ZY	313.85–336.84					DU300ZY	329.37–333.10
Orlando	DR041ZY	252.39–260.00	DM041ZY	274.95–288.00	DP041ZY	305.90–327.79					DU041ZY	339.45–346.00
Philadelphia (a)	DR242ZY	249.15–269.62	DM242ZY	273.97–292.78	DP242ZY	310.00–327.52			DH242ZY	–	DU242ZY	330.25–339.05
Pittsburgh	DR243ZY	247.40–272.41	DM243ZY	273.85–297.55	DP243ZY	322.40–370.64	DK243ZY	–	DH243ZY	–	DU243ZY	315.53–357.05
Providence (a)	DR248ZY	248.16–251.48	DM248ZY	268.07–276.40	DP248ZY	306.46–314.40					DU248ZY	336.47–338.46
Portland	DR126ZY	253.70–255.67	DM126ZY	275.82–298.60	DP126ZY	316.52–316.55			DH126ZY	–	DU126ZY	338.15–342.68
Raleigh											DU168ZY	332.60–332.60
Richmond	DR301ZY	247.32–250.93	DM301ZY	271.62–288.57	DP301ZY	307.15–334.84	DK301ZY	455.00–455.00			DU301ZY	328.57–332.41
Savannah	DR054ZY	268.50–268.60	DM054ZY	298.50–298.60	DP054ZY	363.50–363.60					DU054ZY	352.05–352.13
Spartanburg	DR252ZY	245.40–252.88	DM252ZY	269.20–288.29	DP252ZY	308.11–328.99					DU252ZY	328.10–331.97
Tampa									DU045ZY	335.30–339.10		
PADD 2												
Aberdeen	DR253ZY	254.19–269.56	DM253ZY	268.44–290.56	DP253ZY	279.23–305.39					DU253ZY	348.77–352.29
Cape Girardeau	DR144ZY	246.00–266.38			DP144ZY	331.73–345.11					DU144ZY	335.50–341.40
Chattanooga	DR260ZY	245.13–259.70	DM260ZY	262.83–299.83	DP260ZY	295.50–331.26					DU260ZY	328.15–331.90
Chicago (a)	DR075ZY	245.05–264.70	DM075ZY	273.38–282.30	DP075ZY	325.30–330.05	DK075ZY	332.12–341.50			DU075ZY	291.12–304.25
Cleveland	DR212ZY	248.85–263.24	DM212ZY	280.52–309.22	DP212ZY	343.85–358.81	DK212ZY	357.95–357.95			DU212ZY	308.95–323.08
Columbus	DR213ZY	242.85–248.55	DM213ZY	274.52–304.88	DP213ZY	337.85–371.45	DK213ZY	357.05–357.05			DU213ZY	315.48–330.53
Duluth	DR138ZY	264.50–272.15	DM138ZY	284.18–292.10	DP138ZY	307.72–322.66					DU138ZY	342.05–347.25
Des Moines	DR059ZY	250.94–264.55	DM059ZY	267.08–297.94	DP059ZY	278.25–319.75					DU059ZY	338.00–346.29
Detroit	DR130ZY	240.45–261.11	DM130ZY	272.12–304.32	DP130ZY	335.45–363.65	DK130ZY	347.80–347.80			DU130ZY	292.80–300.63
Fargo	DR174ZY	263.65–275.10	DM174ZY	278.68–286.20	DP174ZY	292.02–312.10					DU174ZY	344.80–352.23
Green Bay	DR313ZY	272.00–272.00	DM313ZY	–	DP313ZY	366.00–366.00	DK313ZY	–			DU313ZY	315.00–315.00
Indianapolis	DR088ZY	232.50–245.25	DM088ZY	262.50–300.58	DP088ZY	316.93–358.31	DK088ZY	354.23–355.20			DU088ZY	298.00–306.92
Kansas City	DR099ZY	251.39–262.94	DM099ZY	270.73–281.25	DP099ZY	318.91–343.50					DU099ZY	338.76–344.25
Knoxville	DR261ZY	244.70–259.71	DM261ZY	268.58–283.80	DP261ZY	305.75–331.80	DK261ZY	–			DU261ZY	328.65–343.66
Milwaukee	DR316ZY	246.05–257.00	DM316ZY	275.22–279.44	DP316ZY	333.55–337.60	DK316ZY	356.20–356.20			DU316ZY	295.27–302.50
Minneapolis/St.Paul	DR141ZY	254.07–261.02	DM141ZY	268.68–280.16	DP141ZY	288.68–308.16	DK141ZY	407.80–407.80			DU141ZY	335.92–346.85
Oklahoma City	DR226ZY	250.04–267.15	DM226ZY	269.38–283.00	DP226ZY	283.19–305.25					DU226ZY	334.71–343.81
Omaha	DR185ZY	250.90–265.61	DM185ZY	267.03–289.00	DP185ZY	278.61–319.15					DU185ZY	337.82–347.39
Sioux Falls	DR256ZY	249.80–265.48	DM256ZY	267.28–296.02	DP256ZY	280.05–306.02					DU256ZY	339.08–344.41
St. Louis (a)	DR154ZY	246.50–255.28	DM154ZY	266.50–266.50	DP154ZY	324.75–324.75					DU154ZY	292.63–335.92
PADD 3												
Albuquerque	DR192ZY	279.00–295.86	DM192ZY	299.00–317.00	DP192ZY	320.00–345.86					DU192ZY	362.50–373.28
Amarillo	DR265ZY	289.79–290.86	DM265ZY	305.79–306.86	DP265ZY	334.79–335.86					DU265ZY	360.29–360.83
Baton Rouge	DR115ZY	244.49–256.47	DM115ZY	266.62–279.22	DP115ZY	298.55–323.72					DU115ZY	327.70–334.70
Birmingham	DR003ZY	243.20–257.72	DM003ZY	256.55–296.36	DP003ZY	295.60–324.03	DK003ZY	461.07–461.07			DU003ZY	328.31–335.20
Corpus Christi	DR275ZY	262.18–263.38	DM275ZY	280.18–281.38	DP275ZY	323.68–326.38					DU275ZY	324.35–326.55
Dallas/Ft.Worth (a)	DR276ZY	267.39–272.10	DM276ZY	292.10–305.37	DP276ZY	321.89–339.75					DU276ZY	326.95–337.00
Houston (a)	DR416ZY	254.10–261.34	DM416ZY	277.43–297.97	DP416ZY	322.53–330.65	DK416ZY	380.36–380.36			DU416ZY	327.39–332.33
Little Rock	DR009ZY	247.37–277.58	DM009ZY	261.25–307.90	DP009ZY	277.37–352.38					DU009ZY	332.25–350.16
New Orleans	DR119ZY	241.45–258.80	DM119ZY	276.35–283.80	DP119ZY	294.70–338.37					DU119ZY	325.66–331.14
San Antonio	DR289ZY	264.87–280.01	DM289ZY	289.82–304.83	DP289ZY	320.25–340.90					DU289ZY	324.50–330.13
PADD 4												
Billings (b)	DR162ZY	–			DP162ZY	350.81–352.72					DU162ZY	392.88–394.12
Casper (b)	DR321ZY	262.55–265.62			DP321ZY	297.90–301.75			DU321ZY*	375.45–376.30		
Denver	DR028ZY	269.66–285.61	DM028ZY	286.66–301.86	DP028ZY	316.06–332.19					DU028ZY	347.35–358.00
Salt Lake City	DR298ZY	299.95–304.00	DM298ZY	315.54–320.26	DP298ZY	332.13–339.00					DU298ZY	358.87–366.00
PADD 5												
Anacortes	DR305ZY	354.00–354.60	DM305ZY	381.60–385.00	DP305ZY	387.35–395.00					DU305ZY	394.75–412.70
Las Vegas (e)	DR196ZY	337.35–399.54	DM196ZY	357.35–417.08	DP196ZY	372.35–441.00					DU196ZY	367.30–399.01
Los Angeles(e)	DR022ZY	457.00–464.76	DM022ZY	482.00–489.69	DP022ZY	498.75–506.94					DU022ZY	427.50–434.55
Phoenix	DR012ZY	420.00–463.94	DM012ZY	451.00–483.94	DP012ZY	485.00–516.94					DU012ZY	367.00–406.65
Portland	DR233ZY	314.25–327.80	DM233ZY	330.00–356.70	DP233ZY	348.00–367.70					DU233ZY	350.95–387.50
SanFranEBay (e)	DR025ZY	385.70–391.91	DM025ZY	400.70–407.84	DP025ZY	417.70–423.55					DU025ZY	422.50–429.29
Seattle/Tacoma	DR308ZY	355.75–358.65	DM308ZY	382.46–383.75	DP308ZY	391.51–396.75					DU308ZY	399.65–414.70
Spokane	DR309ZY	379.93–379.93	DM309ZY	394.93–394.93	DP309ZY	419.93–419.93					DU309ZY	414.10–414.10

All prices are provided by DTN. Discounts or temporary allowances offered by individual companies are not included in posted prices. Prices are unbranded unless noted. Prices are conventional gasoline unless noted. All prices in cts/gal. (a)=RFG. (b)=Branded postings (e)=CARB gasoline/No.2 oil *=Low Sulfur Diesel

Commodity Insights Analytics Weekly Feeder Crudes: September 18 - September 22, 2023

US Gulf Coast (PGA page 0837)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGGCY04	113.66	AGGFA04	2.57	AGGCN04	111.10	AAQZB04	92.94	AGGCM04	17.93
Arab Berri	BEGCY04	113.28	TDDAC04	1.32	BEGCN04	111.96	AAIGY00	98.91	BEGCM04	13.05
Arab Heavy	AHGCY04	100.89	TDDAJ04	1.39	AHGCN04	99.50	AAIGV00	97.01	AHGCM04	2.49
Arab Light	LIGCY04	109.23	TDDAR04	1.35	LIGCN04	107.88	AAIGP00	96.76	LIGCM04	11.12
Arab Medium	MEGCY04	103.85	TDDAZ04	1.35	MEGCN04	102.49	AAIGS00	97.46	MEGCM04	5.03
Bakken	BKGCY04	112.34	TDDRP04	7.78	BKGCN04	104.56	AAXPP04	87.64	BKGCM04	16.91
Basrah Medium	BLGCY04	101.65	TDDBS04	2.13	BLGCN04	99.51	BSMAM41	95.40	BLGCM04	9.65
Bonny Light	YLGCY04	115.64	TDDBX04	2.80	YLGCN04	112.84	PCAAO00	96.13	YLGCM04	16.48
Brent	BRGCY04	111.93	TDDCB04	2.48	BRGCN04	109.45	AAVJA04	96.06	BRGCM04	13.16
Cabinda	CBGCY04	109.01	TDDCF04	3.00	CBGCN04	106.01	PCAFD10	96.12	CBGCM04	9.66
Eagle Ford	EAGCY04	112.65					AAEFO04	92.06	EAGCM04	20.59
Escalante	ECGCY04	101.89	TDDCV04	3.09	ECGCN04	98.81	AAIIN00	89.66	ECGCM04	8.25
Forties	FTGCY04	111.28	FTGFA04	2.28	FTGCN04	109.00	PCADJ10	95.51	FTGCM04	13.25
Isthmus	ISGCY04	109.72	TDDDJ04	1.01	ISGCN04	108.71	PCADY00	89.13	ISGCM04	19.58
LLS	LLGCY04	115.99	TDDQW04	0.55	LLGCN04	115.44	AAIIQ00	92.55	LLGCM04	22.89
Marlim	MLGCY04	106.73	TDDGK04	2.47	MLGCN04	104.26	AAITF04	87.40	MLGCM04	15.97
Mars	MRGCY04	106.09	TDDQY04	0.55	MRGCN04	105.54	AAIIM00	89.51	MRGCM04	16.03
Maya	MYGCY04	92.25	TDDDP04	1.05	MYGCN04	91.20	PCADB10	86.38	MYGCM04	4.83
Mesa	MSGCY04	107.54	TDDDV04	1.48	MSGCN04	106.06	AAIZY00	89.63	MSGCM04	16.44
Olmeca	OLGCY04	112.59	TDDDY04	1.02	OLGCN04	111.58	AAIJS00	89.18	OLGCM04	22.40
Poseidon	PDGCY04	105.79	PDGFA04	0.00	PDGCN04	105.79	AABHK04	88.51	PDGCM04	17.28
Saharan Blend	SHGCY04	112.65	TDDRD04	1.98	SHGCN04	110.67	PCABU00	95.21	SHGCM04	15.23
Syncrude	SYGCY04	115.98	SYGFA04	8.52	SYGCN04	107.46	AASOK04	91.84	SYGCM04	15.62
Urals	URGCY04	108.28	TDDFM04	2.64	URGCN04	105.63	AAWVH04	81.85	URGCM04	23.55
WTI	WTGCY04	112.34					AAYRG04	92.54	WTGCM04	19.80
WTS	WSGCY04	108.94	TDDRJ04	6.89	WSGCN04	102.05	PCACK10	91.75	WSGCM04	10.29

US Atlantic Coast (PGA page 0813)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGACY04	114.42	AGAFA04	2.27	AGACN04	112.15	AAQZB04	92.94	AGACM04	18.98
Arab Light	LIACY04	109.70	TDDAU04	1.35	LIACN04	108.35	AAIGP00	96.76	LIACM04	11.59
Bakken	BKACY04	114.12	TDDRN04	7.20	BKACN04	106.92	AAXPP04	87.64	BKACM04	19.28
Bonny Light	YLACY04	116.40	TDDBZ04	2.48	YLACN04	113.92	PCAAO00	96.13	YLACM04	17.56
Brent	BRACY04	113.19	TDDCC04	2.25	BRACN04	110.94	AAVJA04	96.06	BRACM04	15.55
Cabinda	CBACY04	109.75	TDDCH04	2.68	CBACN04	107.07	PCAFD10	96.12	CBACM04	10.72
CPC Blend	CPACY04	113.11	CPAFA04	2.77	CPACN04	110.34	AALVX04	90.96	CPACM04	20.05
Forties	FTACY04	112.72	FTAFA04	2.07	FTACN04	110.65	PCADJ10	95.51	FTACM04	15.80
Saharan Blend	SHACY04	114.09	SHAFA04	1.70	SHACN04	112.38	PCABU00	95.21	SHACM04	16.94
Urals	URACY04	109.08	URAFA04	2.08	URACN04	107.00	AAWVH04	81.85	URACM04	24.92

US Gulf Coast (PGA page 0835)

	Coke Yield		Coke Freight		Coke Netback		Crude Price		Coke Margin	
Arab Heavy	AHGOY04	108.96	TDDAJ04	1.39	AHGON04	107.57	AAIGV00	97.01	AHGOM04	10.56
Arab Light	LIGOY04	111.71	TDDAR04	1.35	LIGON04	110.36	AAIGP00	96.76	LIGOM04	13.60
Arab Medium	MEGOY04	107.85	TDDAZ04	1.35	MEGON04	106.50	AAIGS00	97.46	MEGOM04	9.04
Basrah Heavy	BHGOY04	105.79	BHGFA04	2.22	BHGON04	103.57	AALZC04	92.40	BHGOM04	17.75
Basrah Medium	BLGOY04	107.88	TDDBS04	2.13	BLGON04	105.74	BSMAM41	95.40	BLGOM04	15.88
Cabinda	CBGOY04	110.51	TDDCF04	3.00	CBGON04	107.51	PCAFD10	96.12	CBGOM04	11.15
Castilla Blend	CSGOY04	103.21	CSGFA04	1.54	CSGON04	101.66	AAVEQ04	84.55	CSGOM04	17.12
LLS	LLGOY04	116.22	TDDQW04	0.55	LLGON04	115.67	AAIIQ00	92.55	LLGOM04	23.11
Marlim	MLGOY04	111.07	TDDGK04	2.47	MLGON04	108.60	AAITF04	87.40	MLGOM04	20.31
Mars	MRGOY04	109.97	TDDQY04	0.55	MRGON04	109.42	AAIIM00	89.51	MRGOM04	19.91
Maya	MYGOY04	105.20	TDDDP04	1.05	MYGON04	104.15	PCADB10	86.38	MYGOM04	17.77
Napo	NPGOY04	101.37	NPGFA04	3.21	NPGON04	98.15	AAMCA04	83.02	NPGOM04	14.28
Oriente	ORGOY04	108.45	ORGFA04	3.05	ORGON04	105.40	PCADE10	85.37	ORGOM04	19.23
Urals	URGOY04	111.15	TDDFM04	2.64	URGON04	108.51	AAWVH04	81.85	URGOM04	26.42
Vasconia	VCGOY04	113.30	VCGFA04	1.51	VCGON04	111.79	PCAGI04	88.05	VCGOM04	23.74
WCS ex-Hardisty	WHGOY04	106.13	TDDRS04	8.50	WHGON04	97.63	AAPPN04	70.20	WHGOM04	27.42
WCS ex-Nederland	WNGOY04	106.13	WCGFA04	0.00	WNGON04	106.13	AAYAY04	81.43	WNGOM04	24.69
WTS	WSGOY04	113.07	TDDRJ04	6.89	WSGON04	106.18	PCACK10	91.75	WSGOM04	14.42

Commodity Insights Analytics Weekly Feeder Crudes (continued)

US West Coast (PGA page 0847)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
ANS	ANWCY04 142.78			PCAAA10 95.18	ANWCM04 47.60
Bakken	BKWCY04 153.16	TDDRT04 11.74	BKWCN04 141.42	AAXPP04 87.64	BKWCM04 53.78

US Midwest (PGA page 0827)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Bakken	BKTCY04 107.04	TDDRO04 1.68	BKTCN04 105.36	AASRU04 90.14	BKTCM04 15.22
Syncrude	SYTCY04 109.57	TDDFP04 8.20	SYTCN04 101.37	AASOK04 91.84	SYTCM04 9.52
WTI	WTTCY04 107.22	TDDRG04 2.39	WTTCN04 104.83	PCACG10 90.90	WTTCM04 13.93
WTS	WSTCY04 105.06	TDDRI04 3.08	WSTCN04 101.97	PCACK10 91.75	WSTCM04 10.22

Northwest Europe (PGA page 1812)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGNCY04 114.98	AGNFA04 2.20	AGNCN04 112.78	AAQZB04 92.94	AGNCM04 19.84
Arab Berri	BENCY04 114.44	BENFA04 1.32	BENCN04 113.13	AAIGZ00 101.17	BENCM04 11.95
Arab Heavy	AHNCY04 103.95	TDDAN04 1.39	AHNCN04 102.57	AAIGW00 95.67	AHNCM04 6.89
Arab Light	LINCY04 111.48	TDDAV04 1.35	LINCN04 110.13	AAIGQ00 99.57	LINCM04 10.55
Arab Medium	MENCY04 106.43	TDDBD04 1.36	MENCN04 105.07	AAIGT00 98.37	MENCM04 6.69
Azeri Light	ZLNCY04 115.83	TDDBI04 2.21	ZLNCN04 113.62	AATHM04 99.40	ZLNCM04 13.45
Basrah Medium	BLNCY04 105.70	TDDBU04 2.88	BLNCN04 102.82	BSMAM41 95.40	BLNCM04 8.47
Bonny Light	YLNCY04 117.15	YLNFA04 2.40	YLNCN04 114.75	PCAAO00 96.13	YLNCM04 18.62
Brent	BRNCY04 112.85	TDDCD04 1.98	BRNCN04 110.87	AAVJA04 96.06	BRNCM04 14.81
Cabinda	CBNCY04 109.27	TDDQR04 2.60	CBNCN04 106.66	PCAFD10 96.12	CBNCM04 10.54
CPC Blend	CPNCY04 113.54	CPNFA04 2.66	CPNCN04 110.88	AALVX04 90.96	CPNCM04 19.92
Dubai	DBNCY04 110.27	DBNFA04 2.70	DBNCN04 107.57	PCAAT10 94.36	DBNCM04 11.60
Eagle Ford	EANCY04 113.98	EANFA04 3.22	EANCN04 110.76	AAEFO04 92.06	EANCM04 18.03
Ekofisk	EKNCY04 114.33	TDDCT04 1.31	EKNCN04 113.02	PCADH00 98.02	EKNCM04 15.00
Forties	FTNCY04 112.97	TDDEZ04 1.50	FTNCN04 111.47	PCADJ10 95.51	FTNCM04 15.96
Iran Heavy	BHNCY04 109.33	TDDDG04 2.84	BHNCN04 106.49	AIHKA04 93.49	BHNCM04 12.11
Johan Sverdrup	JSNCY04 111.39	JSNFA04 1.59	JSNCN04 109.80	AJSVA04 96.33	JSNCM04 13.48
Kirkuk	KRNCY04 110.27	TDDGH04 2.63	KRNCN04 107.63	AAIIX00 92.85	KRNCM04 11.27
LLS	LLNCY04 118.49	LLNFA04 3.37	LLNCN04 115.13	AAQBB04 93.55	LLNCM04 21.91
Maya	MYNCY04 98.06	MYNFA04 3.45	MYNCN04 94.61	AAYXE04 85.62	MYNCM04 8.99
Oman	OMNCY04 109.36	OMNFA04 2.66	OMNCN04 106.70	PCABS10 94.37	OMNCM04 10.74
Saharan Blend	SHNCY04 114.69	TDDGI04 1.72	SHNCN04 112.97	PCABU00 95.21	SHNCM04 17.76
Urals*	URNCY04 112.11			PCAFW04 84.32	URNCM04 27.79
WTI MEH	WTNCY04 113.93	WTNFA04 3.27	WTNCN04 110.66	AAYRZ04 93.50	WTNCM04 17.45

*Indicates the crude price is a CIF value

US West Coast (PGA page 0845)

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
ANS	ANWOY04 147.81			PCAAA10 95.18	ANWOM04 52.63
Arab Light	LIWOY04 150.68	TDDAT04 1.35	LIWON04 149.33	AAIGP00 96.76	LIWOM04 52.56
Arab Medium	MEWOY04 144.27	TDDBB04 1.35	MEWON04 142.92	AAIGS00 97.46	MEWOM04 45.46
Basrah Heavy	BHWOY04 143.77	BHWFA04 2.68	BHWON04 141.09	AALZC04 92.40	BHWOM04 56.18
Basrah Medium	BLWOY04 145.67	TDDBW04 2.57	BLWON04 143.10	BSMAM41 95.40	BLWOM04 54.14
Castilla Blend	CSWOY04 147.37	CSWFA04 4.47	CSWON04 142.90	AAVEQ04 84.55	CSWOM04 57.49
Maya	MYWOY04 142.90	MYWFA04 2.63	MYWON04 140.27	AAUPK04 86.18	MYWOM04 54.10
Napo	NPWOY04 141.34	NPWFA04 3.92	NPWON04 137.41	AAMCA04 83.02	NPWOM04 53.54
Oriente	ORWOY04 146.98	TDDEC04 3.71	ORWON04 143.27	PCADE10 85.37	ORWOM04 57.09
Vasconia	VCWOY04 157.62	VCWFA04 4.33	VCWON04 153.29	PCAGI04 88.05	VCWOM04 64.42

US Midwest (PGA page 0825)

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
WCS	WCTOY04 101.22	TDDRL04 8.56	WCTON04 92.66	AAPPN04 70.20	WCTOM04 22.46
WTS	WSTOY04 107.57	TDDRI04 3.08	WSTON04 104.49	PCACK10 91.75	WSTOM04 12.74

Mediterranean (PGA page 1822)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGMCY04 112.86	AGMFA04 2.10	AGMCN04 110.76	AAQZB04 92.94	AGMCM04 17.82
Arab Heavy	AHMCY04 102.71	TDDAI04 1.39	AHMCN04 101.32	AAIGW00 95.67	AHMCM04 7.00
Arab Light	LIMCY04 109.52	TDDAQ04 1.35	LIMCN04 108.17	AAIGQ00 99.57	LIMCM04 9.84
Arab Medium	MEMCY04 104.75	TDDAY04 1.37	MEMCN04 103.39	AAIGT00 98.37	MEMCM04 6.07
Azeri Light*	ZLMCY04 113.70			AAEIX00 101.16	ZLMCM04 12.54
Basrah Medium	BLMCY04 103.86	TDDBR04 2.16	BLMCN04 101.70	BSMAM41 95.40	BLMCM04 7.35
Bonny Light	YLMCY04 114.88	YLMFA04 2.30	YLMCN04 112.58	PCAAO00 96.13	YLMCM04 16.45
Cabinda	CBMCY04 107.55	CBMFA04 2.50	CBMCN04 105.05	PCAFD10 96.12	CBMCM04 8.93
CPC Blend*	CPMCY04 111.23			AAGZU04 93.76	CPMCM04 17.47
Eagle Ford	EAMCY04 112.10	TNEIF04 3.43	EAMCN04 108.66	AAEFO04 92.06	EAMCM04 15.93
Forties	FTMCY04 110.95	FTMFA04 1.91	FTMCN04 109.04	PCADJ10 95.51	FTMCM04 13.52
Iran Heavy	BHMCY04 107.68	TDDDF04 2.11	BHMCN04 105.57	AIHKA04 93.49	BHMCM04 11.18
Johan Sverdrup	JSMCY04 109.88	JSMFA04 2.03	JSMCN04 107.86	AJSVA04 96.33	JSMCM04 11.53
Kirkuk	KRMCY04 108.36	TDDFF04 1.54	KRMCN04 106.82	AAIIX00 92.85	KRMCM04 10.46
LLS	LLMCY04 116.17	LLMFA04 3.59	LLMCN04 112.58	AAQBB04 93.55	LLMCM04 19.36
Oman	OMMCY04 107.85	OMMFA04 1.94	OMMCN04 105.91	PCABS10 94.37	OMMCM04 9.95
Saharan Blend	SHMCY04 112.16	TDDFG04 1.33	SHMCN04 110.84	PCABU00 95.21	SHMCM04 15.63
Urals*	URMCY04 108.91			AAIJU00 85.33	URMCM04 23.58

Commodity Insights Analytics Weekly Feeder Crudes (continued)

Singapore (PGA page 2812)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGSCY04	106.76	AGSFA04	2.30	AGSCN04	104.46	AAQZB04	92.94	AGSCM04	12.23
Arab Berri	BESCY04	105.30	BESFA04	1.38	BESCN04	103.92	AAIHA00	96.92	BESCM04	7.01
Arab Heavy	AHSCY04	94.66	TDDAO04	1.42	AHSCN04	93.23	AAIGX00	95.97	AHSCM04	-2.73
Arab Light	LISCY04	102.90	TDDAW04	1.40	LISCN04	101.50	AAIGR00	97.87	LISCM04	3.63
Arab Medium	MESCY04	97.43	TDDBE04	1.42	MESCN04	96.01	AAIGU00	97.72	MESCM04	-1.70
Basrah Medium	BHSCY04	97.12	BHSFA04	1.48	BHSCN04	95.64	BSMAM41	95.40	BHSCM04	-0.13
Bonny Light	YLSCY04	109.44	YLSFA04	2.47	YLSCN04	106.96	PCAAO00	96.13	YLSCM04	11.54
Cabinda	CBSCY04	105.68	TDDQS04	2.38	CBSCN04	103.30	PCAFD10	96.12	CBSCM04	7.89
Castilla	CSSCY04	86.13	CSSFA04	4.22	CSSCN04	81.90	AAVEQ04	84.55	CSSCM04	-2.60
Dalia	DLSCY04	107.68	DLSFA04	2.47	DLSCN04	105.21	AAQYX04	94.60	DLSCM04	11.32
Dubai	DBSCY04	102.40	TDDCQ04	1.33	DBSCN04	101.07	PCAAT10	94.36	DBSCM04	6.71
Duri	DRSCY04	103.97	TDDCR04	1.53	DRSCN04	102.44	PCABA10	98.32	DRSCM04	4.12
Eagle Ford	EASCY04	105.98	EASFA04	3.68	EASCN04	102.30	AAEFO04	92.06	EASCM04	10.27
ESPO	ESSCY04	105.45	ESSFA04	1.39	ESSCN04	104.06	AARWF04	87.81	ESSCM04	16.25

*Indicates the crude price is a CIF value

Singapore (PGA page 2812)

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Forties	FTSCY04	104.15	TNEFD04	3.22	FTSCN04	100.93	PCADJ10	95.51	FTSCM04	6.13
Kimanis	KISCY04	117.00	KISFA04	1.39	KISCN04	115.61	AASCL04	103.72	KISCM04	11.89
LLS	LLSCY04	109.08	LLSFA04	3.83	LLSCN04	105.26	AAZDC04	92.66	LLSCM04	12.74
Mars	MRSCY04	100.51	MRSFA04	3.96	MRSCN04	96.55	AAIIM00	89.51	MRSCM04	7.08
Maya	MYSCY04	92.04	MYSFA04	4.16	MYSCN04	87.88	AAYXG04	87.97	MYSCM04	-0.09
Minas	MNSCY04	107.24	TDDDX04	1.40	MNSCN04	105.84	PCABO10	88.82	MNSCM04	17.02
Oman	OMSCY04	98.69	TDDEB04	1.27	OMSCN04	97.42	PCABS10	94.37	OMSCM04	3.05
Qua Iboe	QBSCY04	110.01	QBSFA04	2.48	QBSCN04	107.53	PCAID04	97.38	QBSCM04	10.86
Saharan Blend	SHSCY04	103.66	SHSFA04	2.37	SHSCN04	101.29	PCABU00	95.21	SHSCM04	5.97
Tapis	TPSCY04	107.43	TDDEO04	1.37	TPSCN04	106.06	AAIIW00	98.71	TPSCM04	7.35
Tupi*	LUSCY04	105.70					LUQDA04	95.00	LUSCM04	11.27
Urals	URSCY04	102.74	URSFA04	2.46	URSCN04	100.28	AAGZS04	82.05	URSCM04	18.93
WTI MEH	WTSCY04	105.63	WTSFA04	3.74	WTSCN04	101.90	AAZDF04	92.60	WTSCM04	9.39

Commodity Insights Analytics Monthly Average Yields & Netbacks, August 2023

US Gulf Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGGCY03 109.34	AGGFA03 2.37	AGGCN03 106.92	AAQZB03 84.23	AGGCM03 21.74
Arab Berri	BEGCY03 108.90	TDDAC03 1.32	BEGCN03 107.59	AAISO00 91.52	BEGCM03 16.07
Arab Heavy	AHGCY03 98.22	TDDAJ03 1.39	AHGCN03 96.83	AAISL00 89.62	AHGCM03 7.21
Arab Light	LIGCY03 105.28	TDDAR03 1.35	LIGCN03 103.93	AAISF00 89.37	LIGCM03 14.56
Arab Medium	MEGCY03 100.52	TDDAZ03 1.35	MEGCN03 99.17	AAISI00 90.07	MEGCM03 9.10
Bakken	BKGCY03 108.84	TDDRP03 7.78	BKGCN03 101.06	AAXPP03 80.57	BKGCM03 20.49
Basrah Medium	BLGCY03 98.32	TDDBS03 2.25	BLGCN03 95.85	BSMAM31 86.92	BLGCM03 13.77
Bonny Light	YLGCY03 111.82	TDDBX03 2.58	YLGCN03 109.20	PCAIF03 86.73	YLGCM03 21.52
Brent	BRGCY03 108.08	TDDCB03 2.47	BRGCN03 105.60	AAVJA03 86.34	BRGCM03 18.30
Cabinda	CBGCY03 105.60	TDDCF03 2.78	CBGCN03 102.77	PCAFD03 87.66	CBGCM03 14.17
Eagle Ford	EAGCY03 109.48			AAYAT03 82.65	EAGCM03 26.84
Escalante	ECGCY03 99.54	TDDCV03 3.79	ECGCN03 95.74	PCAGC03 82.54	ECGCM03 12.30
Forties	FTGCY03 107.59	FTGFA03 2.26	FTGCN03 105.30	PCADJ03 86.26	FTGCM03 18.10
Isthmus	ISGCY03 105.92	TDDDJ03 1.25	ISGCN03 104.67	PDATO39 79.61	ISGCM03 25.07
LLS	LLGCY03 111.63	TDDQW03 0.55	LLGCN03 111.08	PCABN03 84.01	LLGCM03 27.06
Marlim	MLGCY03 102.79	TDDGK03 3.02	MLGCN03 99.77	AAITG00 80.81	MLGCM03 18.06
Mars	MRGCY03 102.35	TDDQY03 0.55	MRGCN03 101.80	AAMBS00 82.12	MRGCM03 19.68
Maya	MYGCY03 88.64	TDDDP03 1.31	MYGCN03 87.33	PDATS39 77.01	MYGCM03 10.32
Mesa	MSGCY03 103.39	TDDDV03 1.92	MSGCN03 101.47	AAITC00 82.03	MSGCM03 19.44
Olmeca	OLGCY03 108.54	TDDDY03 1.26	OLGCN03 107.28	PDATT39 79.66	OLGCM03 27.62
Poseidon	PDGCY03 102.88	PDGFA03 0.00	PDGCN03 102.88	AABHL00 81.57	PDGCM03 21.31
Saharan Blend	SHGCY03 109.25	TDDRD03 1.81	SHGCN03 107.41	AAJIB00 85.38	SHGCM03 21.08
Syncrude	SYGCY03 111.51	SYGFA03 8.52	SYGCN03 103.06	AASOK03 83.24	SYGCM03 19.82
Urals	URGCY03 104.43	TDDFM03 2.63	URGCN03 101.79	AAWVH03 71.57	URGCM03 29.27
WTI	WTGCY03 108.64			AAYRG03 83.03	WTGCM03 25.61
WTS	WSGCY03 105.53	TDDRJ03 6.89	WSGCN03 98.64	PCACK03 82.25	WSGCM03 16.40

US Gulf Coast

	Coke Yield	Coke Freight	Coke Netback	Crude Price	Coke Margin
Arab Heavy	AHGOY03 104.32	TDDAJ03 1.39	AHGON03 102.94	AAISL00 89.62	AHGOM03 13.32
Arab Light	LIGOY03 107.69	TDDAR03 1.35	LIGON03 106.34	AAISF00 89.37	LIGOM03 16.97
Arab Medium	MEGOY03 103.66	TDDAZ03 1.35	MEGON03 102.31	AAISI00 90.07	MEGOM03 12.24
Basrah Heavy	BHGOY03 100.52	BHGFA03 2.35	BHGON03 97.96	AALZC03 83.85	BHGOM03 19.78
Basrah Medium	BLGOY03 103.43	TDDBS03 2.25	BLGON03 100.97	BSMAM31 86.92	BLGOM03 18.89
Cabinda	CBGOY03 106.52	TDDCF03 2.78	CBGON03 103.71	PCAFD03 87.66	CBGOM03 15.11
Castilla Blend	CSGOY03 99.37	CSGFA03 2.02	CSGON03 97.35	AAVEQ03 77.96	CSGOM03 19.39
LLS	LLGOY03 111.86	TDDQW03 0.55	LLGON03 111.31	PCABN03 84.01	LLGOM03 27.30
Marlim	MLGOY03 105.33	TDDGK03 3.02	MLGON03 102.32	AAITG00 80.81	MLGOM03 20.61
Mars	MRGOY03 105.97	TDDQY03 0.55	MRGON03 105.42	AAMBS00 82.12	MRGOM03 23.30
Maya	MYGOY03 100.67	TDDDP03 1.31	MYGON03 99.36	PDATS39 77.01	MYGOM03 22.35
Napo	NPGOY03 97.56	NPGFA03 3.73	NPGON03 93.83	AAMCC00 74.05	NPGOM03 18.93
Oriente	ORGOY03 104.21	ORGFA03 3.52	ORGON03 100.69	PCADE03 76.20	ORGOM03 23.68
Urals	URGOY03 107.05	TDDFM03 2.63	URGON03 104.39	AAWVH03 71.57	URGOM03 31.88
Vasconia	VCGOY03 108.18	VCGFA03 1.97	VCGON03 106.21	PCAGI03 80.92	VCGOM03 25.28
WCS ex-Hardisty	WHGOY03 101.94	TDDRS03 8.50	WHGON03 93.49	AAPPN03 63.87	WHGOM03 29.63
WCS ex-Nederland	WNGOY03 101.94	WCGFA03 0.00	WNGON03 101.99	AAYAY03 74.03	WNGOM03 27.96
WTS	WSGOY03 109.04	TDDRJ03 6.89	WSGON03 102.15	PCACK03 82.25	WSGOM03 19.91

US Atlantic Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGACY03 112.83	AGAFA03 2.10	AGACN03 110.68	AAQZB03 84.23	AGACM03 25.50
Arab Light	LIACY03 107.39	TDDAU03 1.35	LIACN03 106.04	AAISF00 89.37	LIACM03 16.67
Bakken	BKACY03 113.52	TDDRN03 7.20	BKACN03 106.32	AAXPP03 80.57	BKACM03 25.75
Bonny Light	YLACY03 114.13	TDDBZ03 2.29	YLACN03 111.78	PCAIF03 86.73	YLACM03 24.10
Brent	BRACY03 110.87	TDDCC03 2.32	BRACN03 108.51	AAVJA03 86.34	BRACM03 22.11
Cabinda	CBACY03 108.66	TDDCH03 2.49	CBACN03 106.12	PCAFD03 87.66	CBACM03 17.51
CPC Blend	CPACY03 112.86	CPAFA03 2.74	CPACN03 110.07	AALVY00 81.34	CPACM03 28.68
Forties	FTACY03 112.67	FTAFA03 2.14	FTACN03 110.49	PCADJ03 86.26	FTACM03 24.19
Saharan Blend	SHACY03 113.42	SHAFA03 1.56	SHACN03 111.82	AAJIB00 85.38	SHACM03 25.49
Urals	URACY03 106.58	URAFA03 2.06	URACN03 104.49	AAWVH03 71.57	URACM03 31.97

Commodity Insights Analytics Monthly Average Yields & Netbacks (continued)

US Midwest

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Bakken	BKTCY03 105.29	TDDRO03 1.68	BKTCN03 103.61	AASRU13 81.98	BKTCM03 21.63
Syncrude	SYTCY03 108.53	TDDFP03 8.20	SYTCN03 100.28	AASOK03 83.24	SYTCM03 17.04
WTI	WTTCY03 105.04	TDDRG03 2.39	WTTCN03 102.64	PCACG03 81.47	WTTCM03 21.18
WTS	WSTCY03 102.73	TDDRI03 3.08	WSTCN03 99.65	PCACK03 82.25	WSTCM03 17.41

US West Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
ANS	ANWCY03 123.79			PCAAD03 87.17	ANWCM03 36.62
Bakken	BKWCY03 131.29	TDDRT03 11.74	BKWCN03 119.55	AAXPP03 80.57	BKWCM03 38.98

Northwest Europe

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGNCY03 110.39	AGNFA03 2.06	AGNCN03 108.33	AAQZB03 84.23	AGNCM03 24.10
Arab Berri	BENCY03 109.49	BENFA03 1.32	BENCN03 108.17	AAISP00 89.50	BENCM03 18.64
Arab Heavy	AHNCY03 99.63	TDDAN03 1.39	AHNCN03 98.25	AAISM00 86.00	AHNCM03 12.21
Arab Light	LINCY03 106.46	TDDAV03 1.35	LINCN03 105.11	AAISG00 88.90	LINCM03 16.17
Arab Medium	MENCY03 102.09	TDDBD03 1.36	MENCN03 100.73	AAISJ00 88.40	MENCM03 12.29
Azeri Light	ZLNCY03 110.89	TDDBI03 1.98	ZLNCN03 108.90	AATHM03 87.58	ZLNCM03 20.42
Basrah Medium	BLNCY03 101.08	TDDBU03 2.82	BLNCN03 98.06	BSMAM31 86.92	BLNCM03 14.21
Bonny Light	YLNCY03 111.96	YLNFA03 2.25	YLNCN03 109.71	PCAIF03 86.73	YLNCM03 22.98
Brent	BRNCY03 108.41	TDDCD03 2.06	BRNCN03 106.35	AAVJA03 86.34	BRNCM03 20.01
Cabinda	CBNCY03 105.09	TDDQR03 2.45	CBNCN03 102.64	PCAFD03 87.66	CBNCM03 14.98
CPC Blend	CPNCY03 109.40	CPNFA03 2.63	CPNCN03 106.77	AALVY00 81.34	CPNCM03 25.42
Dubai	DBNCY03 105.83	DBNFA03 2.66	DBNCN03 103.01	PCAAT03 86.47	DBNCM03 15.72
Eagle Ford	EANCY03 109.47	EANFA03 4.00	EANCN03 105.47	AAYAT03 82.65	EANCM03 22.85
Ekofisk	EKNCY03 109.49	TDDCT03 1.34	EKNCN03 108.16	PCADI03 87.71	EKNCM03 20.45
Forties	FTNCY03 108.67	TDDEZ03 1.55	FTNCN03 107.12	PCADJ03 86.26	FTNCM03 20.86
Iran Heavy	BHNCY03 104.84	TDDDG03 2.79	BHNCN03 101.90	AIHKA03 84.76	BHNCM03 16.32
Johan Sverdrup	JSNCY03 106.77	JSNFA03 1.64	JSNCN03 105.13	AJSVA03 86.21	JSNCM03 18.92
Kirkuk	KRNCY03 105.53	TDDGH03 2.60	KRNCN03 102.93	AAEJG00 83.97	KRNCM03 16.26
LLS	LLNCY03 113.26	LLNFA03 4.20	LLNCN03 109.07	AAQBB13 84.02	LLNCM03 25.03
Maya	MYNCY03 93.99	MYNFA03 4.31	MYNCN03 89.69	AAYXE03 75.40	MYNCM03 14.25
Oman	OMNCY03 104.79	OMNFA03 2.61	OMNCN03 102.04	PCABS03 86.59	OMNCM03 14.65
Saharan Blend	SHNCY03 111.01	TDDGI03 1.68	SHNCN03 109.32	AAJIB00 85.38	SHNCM03 23.94
Urals*	URNCY03 107.47			PCAFW03 74.04	URNCM03 33.43
WTI MEH	WTNCY03 109.54	WTNFA03 4.07	WTNCN03 105.48	AAYRZ03 83.05	WTNCM03 22.44

*Indicates the crude price is a CIF value

US Midwest

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
WCS	WCTOY03 99.47	TDDRL03 8.56	WCTON03 90.88	AAPPN03 63.87	WCTOM03 27.02
WTS	WSTOY03 105.72	TDDRI03 3.08	WSTON03 102.64	PCACK03 82.25	WSTOM03 20.39

US West Coast

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
ANS	ANWOY03 126.91			PCAAD03 87.17	ANWOM03 39.74
Arab Light	LIWOY03 129.31	TDDAT03 1.35	LIWON03 127.96	AAISF00 89.37	LIWOM03 38.59
Arab Medium	MEWOY03 124.41	TDDBB03 1.35	MEWON03 123.06	AAISI00 90.07	MEWOM03 32.99
Basrah Heavy	BHWOY03 123.73	BHWFA03 2.84	BHWON03 120.89	AALZC03 83.85	BHWOM03 43.60
Basrah Medium	BLWOY03 125.09	TDDBW03 2.72	BLWON03 122.37	BSMAM31 86.92	BLWOM03 41.19
Castilla Blend	CSWOY03 125.78	CSWFA03 5.11	CSWON03 120.68	AAVEQ03 77.96	CSWOM03 41.85
Maya	MYWOY03 122.85	MYWFA03 2.95	MYWON03 119.90	AAUPK03 76.71	MYWOM03 43.19
Napo	NPWOY03 121.90	NPWFA03 4.46	NPWON03 117.44	AAMCC00 74.05	NPWOM03 42.53
Oriente	ORWOY03 126.10	TDDEC03 4.21	ORWON03 121.89	PCADE03 76.20	ORWOM03 44.89
Vasconia	VCWOY03 136.15	VCWFA03 4.93	VCWON03 131.22	PCAGI03 80.92	VCWOM03 49.47

Mediterranean

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGMCY03 108.91	AGMFA03 1.98	AGMCN03 106.93	AAQZB03 84.23	AGMCM03 22.70
Arab Heavy	AHMCY03 98.22	TDDAI03 1.39	AHMCN03 96.84	AAISM00 86.00	AHMCM03 11.30
Arab Light	LIMCY03 105.00	TDDAQ03 1.35	LIMCN03 103.65	AAISG00 88.90	LIMCM03 15.02
Arab Medium	MEMCY03 100.45	TDDAY03 1.37	MEMCN03 99.09	AAISJ00 88.40	MEMCM03 10.75
Azeri Light*	ZLMCY03 109.53			AAJIA00 89.46	ZLMCM03 20.07
Basrah Medium	BLMCY03 98.91	TDDBR03 2.10	BLMCN03 96.67	BSMAM31 86.92	BLMCM03 12.82
Bonny Light	YLMCY03 110.49	YLMFA03 2.16	YLMCN03 108.33	PCAIF03 86.73	YLMCM03 21.60
Cabinda	CBMCY03 104.01	CBMFA03 2.36	CBMCN03 101.65	PCAFD03 87.66	CBMCM03 14.00
CPC Blend*	CPMCY03 107.66			AAJHY00 83.96	CPMCM03 23.70
Eagle Ford	EAMCY03 108.22	TNEIF03 4.25	EAMCN03 103.98	AAYAT03 82.65	EAMCM03 21.36
Forties	FTMCY03 107.17	FTMFA03 2.26	FTMCN03 104.91	PCADJ03 86.26	FTMCM03 18.66
Iran Heavy	BHMCY03 103.50	TDDDF03 2.06	BHMCN03 101.30	AIHKA03 84.76	BHMCM03 15.72
Johan Sverdrup	JSMCY03 105.83	JSMFA03 2.41	JSMCN03 103.42	AJSVA03 86.21	JSMCM03 17.22
Kirkuk	KRMCY03 103.97	TDDFF03 1.52	KRMCN03 102.45	AAEJG00 83.97	KRMCM03 15.78
LLS	LLMCY03 111.72	LLMFA03 4.45	LLMCN03 107.28	AAQBB13 84.02	LLMCM03 23.24
Oman	OMMCY03 103.88	OMMFA03 1.89	OMMCN03 101.84	PCABS03 86.59	OMMCM03 14.45
Saharan Blend	SHMCY03 108.91	TDDFG03 1.31	SHMCN03 107.61	AAJIB00 85.38	SHMCM03 22.22
Urals*	URMCY03 104.97			PCACE03 74.52	URMCM03 30.45

Commodity Insights Analytics Monthly Average Yields & Netbacks (continued)

Singapore

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Agbami	AGSCY03	101.03	AGSFA03	2.36	AGSCN03	98.67	AAQZB03	84.23	AGSCM03	14.45
Arab Berri	BESCY03	100.11	BESFA03	1.38	BESCN03	98.73	AAISQ00	89.08	BESCM03	9.65
Arab Heavy	AHSCY03	92.21	TDDAO03	1.43	AHSCN03	90.79	AAISN00	87.53	AHSCM03	3.26
Arab Light	LISCY03	98.38	TDDAW03	1.41	LISCN03	96.97	AAISH00	89.73	LISCM03	7.25
Arab Medium	MESCY03	93.68	TDDBE03	1.42	MESCN03	92.26	AAISK00	89.18	MESCM03	3.08
Basrah Medium	BHSCY03	94.03	BHSFA03	1.48	BHSCN03	92.55	BSMAM31	86.92	BHSCM03	5.62
Bonny Light	YLSCY03	103.71	YLSFA03	2.54	YLSCN03	101.17	PCAIF03	86.73	YLSCM03	14.45
Cabinda	CBSCY03	100.10	TDDQS03	2.45	CBSCN03	97.65	PCAFD03	87.66	CBSCM03	10.01
Castilla	CSSCY03	86.31	CSSFA03	4.33	CSSCN03	81.99	AAVEQ03	77.96	CSSCM03	4.02
Dalia	DLSCY03	102.69	DLSFA03	2.54	DLSCN03	100.16	AAQYX03	85.88	DLSCM03	14.31
Dubai	DBSCY03	98.31	TDDCQ03	1.33	DBSCN03	96.98	PCAAT03	86.47	DBSCM03	10.51
Duri	DRSCY03	98.24	TDDCR03	1.29	DRSCN03	96.95	AAFZE00	88.96	DRSCM03	8.06
Eagle Ford	EASCY03	100.34	EASFA03	3.75	EASCN03	96.59	AAYAT03	82.65	EASCM03	14.00
ESPO	ESSCY03	100.41	ESSFA03	1.16	ESSCN03	99.24	AARWF03	78.64	ESSCM03	20.64

*Indicates the crude price is a CIF value

Singapore

	Crack Yield		Freight		Crack Netback		Crude Price		Crack Margin	
Forties	FTSCY03	98.85	TNEFD03	3.34	FTSCN03	95.51	PCADJ03	86.26	FTSCM03	9.28
Kimanis	KISCY03	111.13	KISFA03	1.18	KISCN03	109.95	AASCL03	94.76	KISCM03	15.24
LLS	LLSCY03	103.44	LLSFA03	3.91	LLSCN03	99.54	AAZDC03	83.85	LLSCM03	15.53
Mars	MRSCY03	96.65	MRSFA03	4.05	MRSCN03	92.61	AAMBS00	82.12	MRSCM03	10.49
Maya	MYSCY03	90.57	MYSFA03	4.25	MYSCN03	86.33	AAYXG03	79.53	MYSCM03	6.80
Minas	MNSCY03	101.35	TDDDX03	1.18	MNSCN03	100.17	AAFZH00	81.52	MNSCM03	18.68
Oman	OMSCY03	95.07	TDDEB03	1.27	OMSCN03	93.80	PCABS03	86.59	OMSCM03	7.21
Qua Iboe	QBSCY03	104.36	QBSFA03	2.55	QBSCN03	101.82	PCAIG03	88.03	QBSCM03	13.80
Saharan Blend	SHSCY03	97.93	SHSFA03	2.16	SHSCN03	95.78	AAJIB00	85.38	SHSCM03	9.61
Tapis	TPSCY03	101.71	TDDEO03	1.16	TPSCN03	100.55	AAFZK00	90.19	TPSCM03	10.39
Tupi*	LUSCY03	100.37					LUQDA03	88.55	LUSCM03	12.27
Urals	URSCY03	98.36	URSFA03	2.24	URSCN03	96.12	AAJHV00	71.61	URSCM03	24.59
WTI MEH	WTSCY03	100.06	WTSFA03	3.81	WTSCN03	96.25	AAZDF03	82.86	WTSCM03	13.24

Weekly asphalt cement assessments, Sep 22 (PGA page 580)

Market		$/ton	Mid	Change
Arkansas	PPARP00	580.00–590.00	585.000	-10.000
Colorado	PPARU00	555.00–565.00	560.000	-10.000
Montana	PPASM00	555.00–565.00	560.000	-10.000
California	PPARW00	610.00–620.00	615.000	-10.000
Illinois	PPARX00	570.00–580.00	575.000	-10.000
Georgia	PPARQ00	645.00–655.00	650.000	-10.000
Minneapolis/St. Paul	PPARR00	560.00–570.00	565.000	-10.000
Ohio	PPARY00	560.00–570.00	565.000	-10.000
Oklahoma	AAUQO00	575.00–585.00	580.000	-10.000
Kansas	PPARZ00	590.00–600.00	595.000	-10.000
Texas	PPART00	560.00–570.00	565.000	-10.000
Louisiana	PPALA00	570.00–580.00	575.000	-10.000
MidAtlantic	AAWIC00	615.00–625.00	620.000	-10.000
Tampa	AAWID00	580.00–590.00	585.000	-10.000

Monthly spot lube assessments, August 2023 (PGA page 1146)

		$/mt	Mid	Change
USGC				
150 SN	PLAAB00	1055.00–1075.00	1065.000	+55.000
500 SN	PLAAE00	1475.00–1495.00	1485.000	+80.000
Bright Stock	PLAAH00	1890.00–1910.00	1900.000	+100.000
Europe				
150 SN	PLAAC00	760.00–780.00	770.000	+40.000
500 SN	PLAAF00	985.00–1005.00	995.000	+50.000
Bright Stock	PLAAI00	1310.00–1330.00	1320.000	+70.000
Asia				
150 SN	PLAAA00	740.00–760.00	750.000	+40.000
500 SN	PLAAD00	895.00–915.00	905.000	+50.000
Bright Stock	PLAAG00	1160.00–1180.00	1170.000	+65.000

US crude pipeline averages 26Jul23 - 25Aug23

($/barrel)			Mid	Change		Spread vs WTI	Mid	Change
(PGA pages 212 & 216)								
WTI (Sep)	AAFCV00	81.23–81.25	81.239	+7.328				
WTI (Oct)	AAFCX00	80.64–80.66	80.646	+6.805				
WTI (Nov)	AAGIU00	80.20–80.22	80.209	+6.562				
Mars (1st mth)	AAMBS02	81.89–81.91	81.904	+6.568	AAGWK02	0.66/0.68	0.665	-0.760
Mars (2nd mth)	AAMBV02	80.94–80.96	80.953	+6.260	AAKTI02	0.30/0.32	0.307	-0.546
Mars (3rd mth)	AAMBY02	80.36–80.368	80.368	+6.286	AAMBP02	0.15/0.17	0.159	-0.276
P-Plus WTI	AAFCT00	4.12/4.14	4.126	+0.616				
WTI-Delta	AAEJK03	0.74/0.76	0.746	+0.616				
WTI Midland	AAFCY00	82.60–82.62	82.613	+7.282	AAGWA02	1.36/1.38	1.374	-0.046
LLS (1st mth)	AAFCO00	83.79–83.81	83.796	+7.305	AAGWO02	2.55/2.57	2.557	-0.023
LLS (2nd mth)	AAURC03	82.73–82.75	82.744	+6.483	AAURD03	2.09/2.11	2.098	-0.322
HLS (1st mth)	AAFCK00	83.44–83.46	83.446	+7.315	AAGWQ02	2.20/2.22	2.207	-0.013
HLS (2nd mth)	AAURE03	82.38–82.40	82.394	+6.493	AAURF03	1.74/1.76	1.748	-0.312
WTS (1st mth)	AAFCS00	81.96–81.98	81.972	+7.368	AAGWC02	0.72/0.74	0.733	+0.040
WTS (2nd mth)	AAURG03	81.08–81.10	81.087	+6.839	AAURH03	0.43/0.45	0.441	+0.033
Poseidon	AAFCQ00	81.36–81.38	81.365	+6.491	AAGWM02	0.12/0.14	0.126	-0.837
Thunder Horse Bld	AAWZK02	83.61–83.63	83.624	+6.925	AAWZL02	2.38/2.40	2.385	-0.403
Wyoming Sweet	PCACL03	80.06–80.08	80.070	+6.951	AAGWS02	-1.18/-1.16	-1.170	-0.377
Bonito	AAFCI00	81.74–81.76	81.754	+6.568	AAGWG02	0.51/0.53	0.515	-0.760
SGC	AASOI02	82.05–82.07	82.063	+7.147	AASOJ02	0.81/0.83	0.824	-0.181
ACM (Sep)*	AAQHN03	81.33–81.35	81.341	+6.662				
ACM (Oct)*	AAQHO03	80.38–80.40	80.390	+6.354				
ACM (Nov)*	AAQHP03	79.80–79.82	79.805	+6.381				
London close ($/barrel)(PGA page 1242)								
WTI (Sep)	AAQAR03	81.26–81.28	81.271	+7.516				
WTI (Oct)	AAQAT03	80.66–80.68	80.671	+6.940				
WTI (Nov)	AAQAV03	80.21–80.23	80.222	+6.686				
LLS (Sep)	AAQBB03	83.82–83.84	83.825	+7.515	AAQBC03	2.54/2.56	2.554	-0.001
LLS (Oct)	AAQBD03	82.75–82.77	82.764	+6.633	AAQBE03	2.08/2.10	2.093	-0.307
MARS (Sep)	AAQAX03	81.94–81.96	81.945	+6.782	AAQAY03	0.66/0.68	0.674	-0.734
MARS (Oct)	AAQAZ03	80.97–80.99	80.984	+6.445	AAQBA03	0.30/0.32	0.313	-0.495

*=Americas Crude Marker assessed at the Americas market close at 2:30pm Eastern Time.

European monthly averages, August 2023

($/mt)			Mid	Change			Mid	Change
(PGA page 1115)								
	Cargoes FOB Med basis Italy				Cargoes CIF Med basis Genoa/Lavera			
Prem unl 10 ppm	AAWZA03	947.716-948.216	947.966	+67.299	AAWZB03	963.170-963.670	963.420	+68.801
Naphtha physical*	PAAAI03	606.273-606.773	606.523	+63.368	PAAAH03	626.693-627.193	626.943	+65.419
Jet av. fuel	AAIDM00	947.591-948.091	947.841	+139.912	AAZBN03	975.659-976.159	975.909	+142.623
10ppm ULSD	AAWYY03	900.807-901.307	901.057	+122.093	AAWYZ03	916.045-916.545	916.295	+123.593
Gasoil 0.1%	AAVJI03	891.136-891.636	891.386	+129.791	AAVJJ03	905.318-905.818	905.568	+131.187
1% fuel oil	PUAAK03	552.682-553.182	552.932	+50.253	PUAAJ03	565.670-566.170	565.920	+50.206
3.5% fuel oil	PUAAZ03	509.250-509.750	509.500	+34.929	PUAAY03	522.091-522.591	522.341	+34.770
*Naphtha FOB Med is basis East Med								
(PGA page 1111)								
	Cargoes FOB NWE				Cargoes CIF NWE basis ARA			
Gasoline 10 ppm					AAXFQ03	1021.443-1021.943	1021.693	+97.907
Naphtha physical					PAAAL03	641.784-642.284	642.034	+66.713
Naphtha swaps					PAAAJ00	643.318 -643.818	643.568	+60.997
Jet kerosene	PJAAV03	960.932-961.432	961.182	+139.515	PJAAU03	977.159-977.659	977.409	+142.623
10ppm ULSD	AAVBF03	910.636-911.136	910.886	+127.065	AAVBG03	921.318-921.818	921.568	+129.128
Diesel 10 ppm NWE	AAWZD03	910.739-911.239	910.989	+127.191	AAWZC03	923.500-924.000	923.750	+129.583
Diesel 10 ppm UK					AAVBH03	924.818-925.318	925.068	+130.139
Diesel 10ppm UK cargoes CIF NWE - original (French) spec	AUKDA03		926.761	+130.082				
Gasoil 0.1%	AAYWR03	890.114-890.614	890.364	+130.554	AAYWS03	910.375-910.875	910.625	+134.327
1% fuel oil	PUAAM03	537.568-538.068	537.818	+56.985	PUAAL03	551.966-552.466	552.216	+56.954
3.5% fuel oil	PUABB03	517.852-518.352	518.102	+71.531	PUABA03	531.034-531.534	531.284	+71.474
0.5%-0.7% straight run	PKABA03	572.261-573.261	572.761	+54.642				
(PGA pages 1113 & 1381)								
	Barges FOB Rotterdam							
98 RON unl	AAKOE00	1063.375-1063.875	1063.625	+99.208				
Prem unl	PGABM03	978.795-979.295	979.045	+94.533				
Eurobob	AAQZV03	975.148-975.648	975.398	+88.386				
MTBE*	PHBFZ03	1335.966-1336.466	1336.216	+203.918				
Naphtha physical	PAAAM03	637.784-638.284	638.034	+66.713				
Jet kerosene	PJABA03	974.886-975.386	975.136	+140.160				
Diesel 10 ppm*	AAJUW00	911.216-911.716	911.466	+128.121				
Gasoil 50 ppm	AAUQC03	903.330-903.830	903.580	+133.747				
Gasoil 0.1%*	AAYWT03	888.000-888.500	888.250	+130.440				
1% fuel oil	PUAAP03	547.864-548.364	548.114	+60.959				
3.5% fuel oil	PUABC03	536.034-536.534	536.284	+71.474				
3.5% 500 CST fuel oil	PUAGN03	534.034-534.534	534.284	+71.474				
380 CST	PUAYW03	561.500-562.500	562.000	+71.429				
*FOB Amsterdam-Rotterdam-Antwerp								

Saudi Arabian Official Selling Prices ($/barrel), Sep 6

	Benchmark		OCT	Monthly change	SEP	AUG	JUL
US(PGA page 1070)							
Extra Light	ASCI	AAIQZ00	9.60	+ 0.20	9.40	9.40	9.30
Arab Light	ASCI	AAIRA00	7.45	+ 0.20	7.25	7.25	7.15
Arab Medium	ASCI	AAIRB00	8.15	+ 0.20	7.95	7.95	7.85
Arab Heavy	ASCI	AAIRC00	7.70	+ 0.20	7.50	7.50	7.40
Prices FOB Ras Tanura							
Northwest Europe(PGA page 1069)							
Extra Light	ICE Brent	AAIQQ00	7.30	-0.10	7.40	4.40	3.60
Arab Light	ICE Brent	AAIQR00	5.70	-0.10	5.80	3.80	3.00
Arab Medium	ICE Brent	AAIQS00	4.50	-0.10	4.60	3.30	2.50
Arab Heavy	ICE Brent	AAIQT00	1.80	-0.10	1.90	0.90	0.10
Prices FOB Ras Tanura							
Mediterranean(PGA page 1069)							
Extra Light	ICE Brent	AAWQK00	6.20	-0.10	6.30	4.80	3.80
Arab Light	ICE Brent	AAWQL00	4.40	-0.10	4.50	3.50	2.50
Arab Medium	ICE Brent	AAWQM00	3.40	-0.10	3.50	3.20	2.20
Arab Heavy	ICE Brent	AAWQN00	0.40	-0.10	0.50	0.40	-0.70
Prices FOB Ras Tanura							
FOB Sidi Kerir(PGA page 1069)							
Extra Light	ICE Brent	AAUCS00	NA	NA NA	6.35	4.80	3.85
Arab Light	ICE Brent	AAUCU00	NA	NA NA	4.55	3.50	2.55
Arab Medium	ICE Brent	AAUCW00	NA	NA NA	3.55	3.20	2.25
Arab Heavy	ICE Brent	AAUCY00	NA	NA NA	0.55	0.40	-0.65
Asia(PGA page 1068)							
Super Light	(O+D)/2	AAIQU00	5.45	+ 0.50	4.95	4.35	4.75
Extra Light	(O+D)/2	AAIQV00	2.85	+ 0.30	2.55	2.55	2.55
Arab Light	(O+D)/2	AAIQW00	3.60	+ 0.10	3.50	3.20	3.00
Arab Medium	(O+D)/2	AAIQX00	3.45	+ 0.10	3.35	2.65	2.45
Arab Heavy	(O+D)/2	AAIQY00	1.70	+ 0.10	1.60	1.00	0.80
Prices FOB Ras Tanura							

ASCI=Argus Sour Crude Index; BWAVE=ICE Brent Weighted Average; (O+D)/2=Average of Platts Oman and Dubai assessments

Sources: Saudi Aramco OSP differentials prior to July 2017 were set against BWAVE.