

OILGRAM PRICE REPORT

Volume 99 / Number 46 / March 10, 2021 / Prices effective March 9, 2021

Cairn exits UK North Sea fields, buys Egyptian assets from Shell in focus shift

- Sells stakes in Catcher, Kraken fields for \$460 million
- Buys gas-rich Western Desert assets for \$323 million
- Shell to focus on remaining assets in Egypt

London—Cairn Energy has agreed to sell its producing assets in the UK North Sea and buy a clutch of upstream positions in Egypt’s Western Desert from Shell in deals marking a new shift of regional focus for the London-listed explorer.

Cairn said it agreed the sale of its entire interests in the UK’s Catcher and Kraken fields to privately held Waldorf Production for \$460 million, with a further consideration dependent on oil price and production performance.

Cairn holds a 20% non-operated interest in Catcher and a 29.5% non-operated interest in Kraken, which it acquired in 2017 providing production and cash flow to Cairn.

Net oil production to Cairn from the Catcher and Kraken fields in 2019 averaged 23,000 b/d, and in 2020 net production is estimated to be 19,000-23,000 b/d.

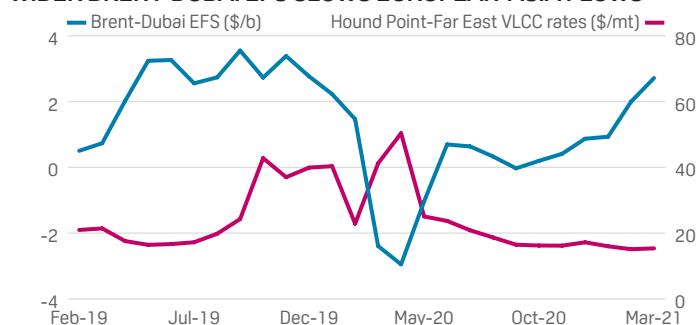
“The divestment of our UK producing assets as they move into decline phase will further strengthen our ability to pursue Cairn’s strategic goals and position the company robustly for the decade ahead,” Cairn CEO Simon Thomson said in a statement.

Separately, Shell said Cairn will buy half of its upstream assets in Egypt’s Western Desert as the major focus on other operations in the North African country.

Shell Egypt and one of its affiliates will sell the assets to subsidiaries of Cheiron Petroleum Corp. and Cairn Energy for a base consideration of \$646 million and additional payments of up to \$280 million between 2021 and 2024, depending on the oil price and result of

[\(continued on page 10\)](#)

WIDER BRENT-DUBAI EFS SLOWS EUROPEAN-ASIA FLOWS



Source: S&P Global Platts

MARKET ANALYSIS

International crude: Russia’s ESPO premiums ease	2
Americas crude: Chevron maintains Permian growth plans	5
Gasoline: Indian demand faces hurdles as prices soar	5
Diesel: Singapore cash crack dips	6
Marine fuel: Linde eyes North Sea hydrogen bunker supply	7
Jet: Singapore to pilot IATA Travel Pass	7
Feedstocks: US naphtha exports to NWE to increase	8
Gas liquids: Asia LPG weakens ahead of US cargoes	9
Tankers: East of Suez VLCCs lower	9
Refinery updates	14

NEWS HEADLINES

EIA revises Brent, WTI price outlooks higher amid tightened 2021 supply outlook

- Brent, WTI prices forecast 14% higher
- Global stock draws to reverse in 2H 2021
- US 2022 crude production seen 500,000 b/d higher

New York—The US Energy Information Administration revised its crude price forecast higher in its monthly Short-Term Energy Outlook released March 9 amid tightened first-quarter supply outlooks.

Northern Lights CCS project gets go-ahead as partners eye direct CO2 capture

- Europe’s first industrial-scale CCS pilot project
- Crucial to Norway’s continued oil and gas ambitions
- Norway in talks with eight additional CO2 emitters

London—Norway’s petroleum and energy ministry has approved Northern Lights, Europe’s first industrial-scale carbon storage project, and the partners are also looking to expand the venture to include direct air CO2 capture technology.

Crude extends slide as market eyes US inventory report

- US dollar retreats from 3.5-month highs
- RBOB crack strongest since August 2017
- EIA revises 2021 Brent, WTI forecasts 14% higher

New York—Crude oil futures settled lower for a second straight session March 9 as the market looked to the US inventory report March 10 for next direction.

MARKET ANALYSIS

INTERNATIONAL CRUDE

- **Unsold ESPO cargoes weigh on differentials**
- **NOC hopes to pump 1.6 million b/d in two years**
- **Myanmar-China pipeline flows steady**

Russia's ESPO premiums ease

Unsold prompt barrels of Far East Russia's ESPO Blend crude could put pressure on the upcoming trading cycle for May-loading barrels while demand eases from key buyers in China, trade sources told S&P Global Platts March 9.

Spot differentials for end-April loading cargoes have witnessed a steady decline since trading at premiums within \$1.90-\$2/b to Platts first line Dubai crude assessments on an FOB basis.

Traders said an ESPO cargo loading April 20-30 was most recently heard sold by Gazpromneft to a China-based buyer at a premium of around 70 cents/b to Platts Dubai crude assessments, FOB.

"Half of the April ESPO program is still struggling to find home," said a source with a north Asian refinery.

Russia's exports of ESPO Blend crude oil are expected to total 2.8 million mt in April, according to the latest monthly loading program seen by Platts.

The April loading program for the medium sweet crude grade runs from March 30 to May 1, and will comprise 27 cargoes in total with mostly 100,000 mt cargoes, except for three 140,000 mt cargoes.

In comparison, the March-loading program offered 26 cargoes, reflecting a slightly longer program for April.

State-owned Rosneft and Russia's Surgutneftegaz both offered eight 100,000 mt cargoes each, while Paramount offered seven such cargoes.

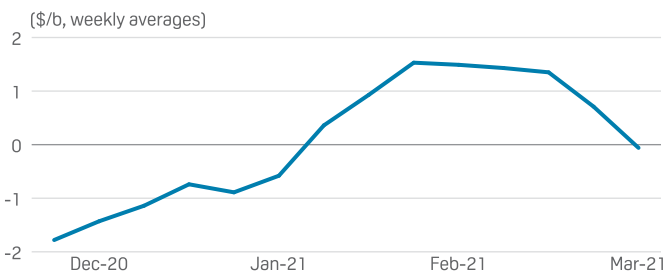
Apart from the April 20-30 loading cargo, Gazpromneft also held a 100,000 mt loading for April 9-12 while Lukoil held two 140,000 mt cargoes for loading April 4-7 and April 19-22.

Traders said premiums of ESPO crude have dipped below Brazil's Tupi crude, another preferred grade for Chinese independent refiners, as buying intent for the Russian grade has been weak.

"ESPO is cheaper than Tupi this year as teapots cannot absorb all of the ESPO [cargoes] as margins are not good," said a trader with a north Asian refinery.

Premiums for Tupi crude for May delivery barrels were last heard

ESPO REFINING MARGINS FALL NEGATIVE IN CHINA, DEMAND RETREATS



Values reflect Visbreaking, FCC, HCU refining setups in China
Source: S&P Global Platts

DATA INSIDE THIS ISSUE

Product price assessments

Asia	15
China	15
Fujairah	15
Arab Gulf	15
Asia product premium/discount assessments	15
Platts Index	15
European bulk	16
West Africa products	16
Renewable fuels	16
European feedstocks and blendstocks	16
New York	17
USAC CPL Linden	17
U.S. Buckeye pipeline	18
Chicago pipeline	18
Group Three	18
Marine Fuel	18
U.S. Gulf Coast	19
U.S. Gulf Coast	20
U.S. Gulf Coast pipeline cycles	20
West Coast pipeline	21
West Coast waterborne	21
Latin America	22
Caribbean cargoes	22
Trinidad product postings	22
Gas liquids	22

Crude price assessments

Asia Pacific/Middle East spot crude assessments	23
International	24
Asia	24
North Sea	24
West Africa	24
London	25
Mediterranean	25
Canada	25
Platts Euro denominated crude oil assessments	25
United States	26
US domestic crude assessments London close	26
US crude assessments Singapore close	26
Canadian spot crude assessments	27
Crude oil postings	27
Delivered-Asia spot crude assessments	27
Latin America crude	27
Daily OPEC basket price	27
Spot tanker rates	28
Platts futures assessments Singapore MOC	28
Platts futures assessments	28
Futures settlements	29
Five-Day Rolling Averages	30
US wholesale posted prices effective Mar 9	31
Feeder crudes: March 1-March 5	32
Feeder crudes	33
Feeder crudes	34
Weekly crude assessments	34

traded at \$2/b over ICE Brent futures, DES Qingdao basis, Platts had reported.

Benchmark cash Dubai premium against Dubai futures edged marginally lower at the Asia close on March 9, as rising oil prices pinch refinery margins and curb demand.

S&P Global Platts assessed May cash Dubai at a premium of \$1.32/b to the same-month Dubai futures at the 4.30 pm Singapore close on March 9, down 3 cents/b from close on March 8.

May cash Oman too dipped to a premium of \$1.37/b to same-month Dubai futures, also down by 3 cents/b from close on the previous day.

Rising oil prices could hurt Asian economies especially countries like India and China which rely largely on crude oil imports for domestic consumption, source say.

“Don’t see much buying from China [this month],” said a trader in Singapore. “They [refiners] have quotas and they will use those when margins are pitiful and flat price is high.”

With production curbs by OPEC+ still in place and rise in official selling prices by Saudi Aramco, Asian buyers also have to deal with low demand and shrinking margins as run rates reduce.

“Pain is for the end user. When prices rally, cracks won’t keep up. Margins were never that good and now they will be pressured further,” said the trader.

On March 9, Exxon offered 500,000 barrels of Abu Dhabi Upper Zakum crude in the Platts Market on Close assessment process loading from FOB Zirku Island for May 1-25 basis bill of lading month pricing. Exxon lowered the offer from Front-month Dubai plus \$1.50/b to Front-month Dubai plus \$1.35/b at the end of the MOC process without attracting any buying interest.

The Platts Market on Close assessment process on March 9 saw a total of 8 partials of 25,000-barrels traded, consisting of 7 May Dubai partials and 1 May Oman partial.

The Dubai partials were traded with Shell, Vitol Reliance and Hengli on the sell side and Trafigura, Lukoil and Petrochina on the buy side while the Oman partial was sold by Unipet to Petrochina.

Myanmar supply to Yunnan steady

PetroChina’s Yunnan Petrochemical continues to receive a steady supply of feedstock through the cross-border China-Myanmar crude oil pipeline despite logistical constraints arising from the political crisis in the Southeast Asian nation and the US’ targeted sanctions on Myanmar’s military leaders.

“The crude pipeline transmission is going smoothly, not affected by the disturbance,” a refining source with Yunnan Petrochemical said March 8.

The 13 million mt/year refinery gradually resumed operations in late January after maintenance. Its run rate was 77% in February, according to S&P Global Platts data.

The VLCC Xin Run Yang discharged 1.97 million barrels of Kuwaiti crude over March 2-5 at Kyaukpyu, Maday Island, in Myanmar, from which the China-Myanmar pipeline begins, data intelligence from Kpler showed. The 22 million mt/year transnational pipeline connects with China’s domestic pipeline to carry feedstock to the refinery located in Anning city, Kunming.

This was the fourth cargo discharged at Kyaukpyu since early February when the military coup was staged, bringing overall

discharged volumes to about 7 million barrels since then, according to Kpler data. Two more VLCC cargoes are scheduled to arrive at Kyaukpyu in March, each loaded with Saudi crude and Iraq’s Basrah light.

Threat lingers

However, another source with PetroChina warned that the uncertainties in Myanmar remain a threat to the supply of crude to Yunnan Petrochemical.

The China-Myanmar pipeline, which was launched in April 2017, is seen as a strategic channel for China to meet its energy needs. It allows China to bypass the busy Straits of Melaka and transport oil from the Middle East, Europe and Africa via the Bay of Bengal, reducing the shipping time by more than a third.

The land-locked Yunnan Petrochemical, PetroChina’s youngest refinery launched in August 2017, relies heavily on crude supplied through the pipeline.

A disagreement over tariff payments for the cross-border pipeline with Myanmar had reportedly been a hurdle to its startup.

The situation in Myanmar has been uncertain for foreign companies with operations in the country since the military seized power from its civilian government in the week ended Feb. 6. Protests have erupted in towns and cities, and there is a strong likelihood of sanctions against the military government.

LIBYA'S POST-CIVIL WAR OIL PRODUCTION TURMOIL



Source: S&P Global Platts

Libya is looking to increase its crude oil production to 1.45 million b/d by the end of 2021, the chairman of state-owned National Oil Corporation said March 9.

That level will be contingent on NOC receiving its full annual budget along with improved security at its oil infrastructure, Mustafa Sanalla said.

“In September we were producing 70,000 b/d and today we produce more than 1.30 million b/d,” Sanalla said in an interview on Bloomberg TV. “Our target is to produce 1.45 million b/d by the end of this year, [which is based] on two barometers 0- the budget and a little [better] security.”

The rise will also be caused by the start-up of two oil fields – one in the Sirte basin and the other in Ghadames Basin, he said.

Political instability along with a lack of finance allocated for maintenance and repairs has made it difficult for NOC to maintain the assets, keeping a lid on output.

A large part of Libya’s aging infrastructure has been wrecked by civil war, militant and terrorist attacks, and ensuing general neglect

over the past decade.

Libya produced just over 1.20 million b/d of crude and condensate in February, according to S&P Global Platts estimates.

Longer term, NOC has the ambition of increasing production to 1.60 million b/d within two years and 2.10 million b/d within 3-4 years, Sanalla said.

Risks persist

Libya formed a Government of National Unity (GNU) along with the help of the UN, with elections planned for December.

The relative stability has come after almost three years of a prolonged civil war between the Government of National Accord and the self-styled Libyan National Army, which resulted in a sharp fall in the country's production last year.

But most analysts still expect many risks to Libya's oil supply due to continued volatility on the ground and threats to terminals.

"While the appointment of an interim government on Feb. 5 was a positive step, we expect bullish disruption risks to oil supply to persist as diplomatic processes are unlikely to shift the military balance of power on the ground or prevent Petroleum Facilities Guards from threatening export blockades as in February," S&P Global Platts Analytics said in a recent note.

Libya has managed to add more than 1 million b/d since September after its two warring factions – the UN-backed Government of National Accord and the self-styled Libyan National Army – agreed to a peace deal.

Libya holds Africa's largest proven reserves of oil and its main light sweet Es Sider and Sharara export crudes yield a large proportion of

gasoline and middle distillates, making them popular with refineries in Europe and China.

Urals discount tightens

Urals values rose with the sour grade finding support after hitting an 11-month low recently, sources said March 9.

The CIF Rotterdam discount narrowed to \$1.98/b vs Dated Brent, compared to a \$2.06/b discount the day before, according to Platts data.

In the Platts Market on Close assessment process, Shell bid for a 100,000 mt cargo, basis CIF Rotterdam and loading March 30 to April 3, up to Dated Brent minus \$1.85/b, where it was sold to by Total.

In Belarus, the 240,000 b/d Mozyr refinery has resumed deliveries of Russian crude oil via the Druzhba pipeline, Russia's crude pipeline operator said March 9.

The refinery stopped receiving Druzhba deliveries at the start of March due to the arrival of Azeri crude.

Azeri crude typically arrives via the Black Sea at the Pivdenniy oil terminal near Odessa.

Belarus uses Ukraine's Odessa-Brody pipeline, which was reversed in late 2010 to take oil to Brody, a Ukrainian city near the border with Poland, where it links with a section of the Druzhba pipeline that flows to Belarus and the Mozyr refinery.

PKN Orlen inks supply deal with ExxonMobil

PKN Orlen, Poland's largest refiner, said March 9 it had signed its first supply deal with ExxonMobil to receive around 1 million mt of WTI crude oil over the 12-month period of the contract for its refineries in

S&P Global
Platts

OILGRAM PRICE REPORT

ISSN: 0163-1292

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

Managing Editor
James Bambino, james.bambino@spglobal.com

Senior Editor
Benjamin Morse, benjamin.morse@spglobal.com

Oil Manager, US
Richard Swann

Oil Manager, London
Joel Hanley

Head of Pricing & Market Insight
Dave Ernsberger

Platts President
Saugata Saha

Manager, Advertising Sales
Bob Botelho

Advertising
Email: advertising@spglobal.com; Tel: +1-720-264-6618

Oilgram Price Report is published every business day in New York and Houston by Platts, a division of S&P Global, registered office: 55 Water Street, 37th Floor, New York, N.Y. 10038.

Officers of the Corporation: Richard E. Thornburgh, Non-Executive Chairman; Doug Peterson, President and Chief Executive Officer; Ewout Steenberg, Executive Vice President, Chief Financial Officer; Steve Kemps, Executive Vice President, General Counsel

© 2021 S&P Global Platts, a division of S&P Global Inc. All rights reserved.

The names "S&P Global Platts" and "Platts" and the S&P Global Platts logo are trademarks of S&P Global Inc. Permission for any commercial use of the S&P Global Platts logo must be granted in writing by S&P Global Inc.

You may view or otherwise use the information, prices, indices, assessments and other related information, graphs, tables and images ("Data") in this publication only for your personal use or, if you or your company has a license for the Data from S&P Global Platts and you are an authorized user, for your company's internal business use only. You may not publish, reproduce, extract, distribute, retransmit, resell, create any derivative work from and/or otherwise provide

access to the Data or any portion thereof to any person (either within or outside your company, including as part of or via any internal electronic system or intranet), firm or entity, including any subsidiary, parent, or other entity that is affiliated with your company, without S&P Global Platts' prior written consent or as otherwise authorized under license from S&P Global Platts. Any use or distribution of the Data beyond the express uses authorized in this paragraph above is subject to the payment of additional fees to S&P Global Platts.

S&P Global Platts, its affiliates and all of their third-party licensors disclaim any and all warranties, express or implied, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use as to the Data, or the results obtained by its use or as to the performance thereof. Data in this publication includes independent and verifiable data collected from actual market participants. Any user of the Data should not rely on any information and/or assessment contained therein in making any investment, trading, risk management or other decision. S&P Global Platts, its affiliates and their third-party licensors do not guarantee the adequacy, accuracy, timeliness and/or completeness of the Data or any component thereof or any communications (whether written, oral, electronic or in other format), and shall not be subject to any

damages or liability, including but not limited to any indirect, special, incidental, punitive or consequential damages (including but not limited to, loss of profits, trading losses and loss of goodwill).

ICE index data and NYMEX futures data used herein are provided under S&P Global Platts' commercial licensing agreements with ICE and with NYMEX. You acknowledge that the ICE index data and NYMEX futures data herein are confidential and are proprietary trade secrets and data of ICE and NYMEX or its licensors/suppliers, and you shall use best efforts to prevent the unauthorized publication, disclosure or copying of the ICE index data and/or NYMEX futures data.

Permission is granted for those registered with the Copyright Clearance Center (CCC) to copy material herein for internal reference or personal use only, provided that appropriate payment is made to the CCC, 222 Rosewood Drive, Danvers, MA 01923, phone +1-978-750-8400. Reproduction in any other form, or for any other purpose, is forbidden without the express prior permission of S&P Global Inc. For article reprints contact: The YGS Group, phone +1-717-505-9701 x105 (800-501-9571 from the U.S.).

For all other queries or requests pursuant to this notice, please contact S&P Global Inc. via email support@platts.com.

Poland, Lithuania and the Czech Republic, as the company seeks to diversify away from Russian oil.

“We are continuing the process of diversifying oil supplies, expanding out portfolio with additional American volumes,” CEO Daniel Obajtek said.

“Over the past three years, we have successfully strengthened relations with the world’s largest oil producers, including Saudi Aramco, and secured new supply routes, for example from West Africa. In this way we also increased the energy security of the entire region, reducing dependence on one supplier,” he said.

PKN sources most of its crude oil feedstock via long-term contracts with Tatneft and Rosneft, although more than 40% of the total now comes from non-Russian suppliers, including a 300,000 mt/month supply deal for Arabian Extra Light with Saudi Aramco. The company has also bought spot cargoes from Angola, Nigeria, Norway, Saudi Arabia and the US.

CPC Blend sees interest from India, South Korea

Kazakhstan’s CPC Blend saw an uptick in late March loading cargoes as the naphtha-rich crude blend bounced back from 11-month lows, with market participants also reported flows heading east.

“[The CPC market rebound was supported by Korea and India], I saw about 4 million-5 million cargoes sold there for late March and early April loading,” said one trader.

Chinese buyers were heard looking elsewhere as the strength of Dated Brent over Dubai softened their interest. “For China, the [CPC] arb is still not open since the EFS is still wide, the freight is increasing. [It’s] not valuable for us to look there, we may take Sakhalin or other condensate from PG, Dubai linked,” said a market source.

Azerbaijan’s Azeri Light was heard seeing some support after traders reported an increase in freight costs with CFR grade seeing stronger benefit over FOB grades.

“Considering it’s CFR and trading on a similar timing/pattern as Urals then [we’re] likely to get value from there,” said a trader.

Market participants reported trades for later loading cargoes at Dated Brent plus 95 cents/b.

AMERICAS CRUDE

Chevron maintains Permian growth plans

Chevron will continue to take it slow in the Permian Basin for now after altering its growth timeline a bit, but the basin’s production leader still plans to easily exceed 1 million boe/d from the region by the middle of the decade, executives said March 9 during the company’s annual investor meeting.

Chevron’s Permian production has recovered to about 600,000 boe/d, higher than it was before the coronavirus pandemic, thanks to the nearly \$5 billion acquisition of Noble Energy and the return of wells that were shut in during the peak of pandemic lockdowns.

While Chevron had previously planned to hit a plateau of 1.2 million boe/d by 2024, the timeline for exceeding 1 million boe/d is pushed back to 2025 as Chevron continues to maintain just five drilling rigs and two completions crews in the region, down from 17 rigs early last year.

But Chevron executives made it clear the company plans to lean heavily on the Permian for growth in the years to come, with its high rates of returns, low acreage royalties and relatively lower emissions.

“Over the next five years, we expect to flex our activity higher as supply and demand come into balance,” Executive Vice President Jay Johnson said of the Permian. “We will ramp up when the conditions are right.”

There may be a muted level of Permian decline in the short term before volumes rise again for the foreseeable future, he said.

While front-month NYMEX WTI has risen, currently trading above \$63/b, Chevron said it is sticking with a global capital spending budget of \$14 billion to \$16 billion through 2025. That is down from a pre-pandemic range of \$19 billion to \$22 billion.

Worldwide, Chevron is producing more than 3 million boe/d.

“We’re not betting on higher prices to bail us out,” said Chevron CEO Michael Wirth.

Because less than 10% of its Permian footprint is on federal lands, Wirth said he is not particularly concerned about any potential pullbacks on leasing activities during the Biden administration.

“It’s actually one of the lowest-emitting basins we have, and we’re looking to take emissions lower,” Wirth said of the Permian. “We don’t flare there.”

While Chevron does not have any net-zero emissions goals like some of its peers, the company aims to reduce its carbon intensity 35% by 2028 and to eliminate routine flaring by 2030.

In other shale plays, Wirth said he anticipates growth in Colorado’s DJ Basin, especially with the new Noble position, as well as ongoing exploration and appraisals in Argentina, and he maintains optimism about the potential for Canada’s Duvernay Shale.

“We’re still very early in the Duvernay,” Wirth said.

Gulf of Mexico

While there is some nervousness about the regulatory environment in the US Gulf of Mexico, Wirth said the area remains an attractive part of Chevron’s growth portfolio.

In the US Gulf, Chevron has several large producing platforms that include the Tahiti, St. Jack/Malo and Big Foot fields. It is also developing the Anchor deepwater discovery, which was made in 2015 at an initial cost of \$5.7 billion and is targeted for 2024 startup.

An expansion of the St. Malo field is expected to come online this year, and its Whale discovery with Shell is on track for a final investment decision by the end of 2021.

Chevron’s Ballymore discovery is slated for FID in 2022, Johnson said.

GASOLINE

Indian demand faces hurdles as prices soar

Indian refiners have begun to face new challenges in their domestic sales of motor fuels, with soaring retail prices of gasoline eating into what was healthy demand, industry sources told S&P Global Platts.

Rising retail gasoline prices have pulled down driving activity in India from near 100% above baseline levels in January to 62% above baseline levels by Feb. 28, mobility data from Apple showed.

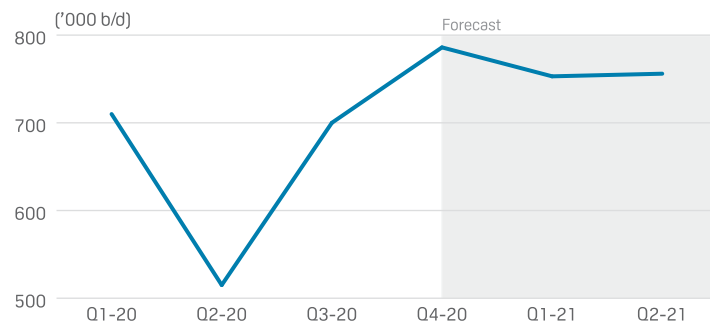
“There was a good increase in domestic demand as more people were choosing to take private transportation, but now as pump prices have spiked, we are seeing more hesitation to come out and drive,” one India-based source said.

Gasoline prices in India track global fuel prices, with the recent uptrend in the latter pushing up Indian motor fuel prices. Domestic retail gasoline prices have surged since October, with prices in most cities crossing over Rupees 90/liter, according to data compiled by local fuel retailers.

In the week ended Feb. 14, gasoline prices in India had already jumped 2.81% month on month, on track to record its fourth consecutive month of increases, the data showed.

“India’s mobility index is showing sign of slowing with higher fuel prices,” said JY Lim, oil markets adviser at S&P Global Platts Analytics said, who also noted the country’s manufacturing PMI eased to 57.5 in February, down from a three-month high of 57.7 in January.

INDIA'S GASOLINE CONSUMPTION



Source: S&P Global Platts Analytics

Rising inventories

With the challenge of slowing gasoline demand recovery, Indian refiners could face rising inventory levels, as run rates have now returned to near or at pre-pandemic levels, sources said.

According to Platts Analytics, gasoline demand in H1 2021 was forecast to rise 23.2% compared to the same period a year earlier.

Average capacity utilization for all categories of Indian refineries rose from 99% in December to 103% in January, according to data from the Indian oil ministry.

State-owned refiners, who supply most of India’s domestic market, led this increase, with Indian Oil Corp., or IOC, recording an average 106% combined run rate at its nine standalone refineries, up from 101% in December. Bharat Petroleum Corp. Ltd., or BPCL, India’s No. 2 state-run refiner, registered a 124% run in January, up from 108% in December.

“Indian refiners are not swimming with supply as of yet, but the slowing demand for refined oil products will prove to be a challenge should the demand slowdown continue,” a second industry source said.

Platts Analytics, however, does not expect this trend to stay. It sees India’s 2021 oil demand recovering slightly above 2019 levels, with growth of 480,000 b/d in the year from a decline of 470,000 b/d in 2020.

Higher exports

One solution for state-owned refiners who face an unwanted build in inventories is to shift cargoes into the export market. IOC has offered two 30,000 mt cargoes of 92 RON gasoline for March, making its first appearance in the export market since June 2020, Platts reported earlier.

“It can be quite good to export cargoes now,” an industry source said. “European cargoes are heading to the US, which leaves opportunities for Indian cargoes to fill up the gaps in the Middle East and Africa.”

Another export route for Indian sellers of gasoline could be Australia, which since mid-2020 has ramped up its demand for Indian gasoline barrels.

In December 2020, India was the third-largest gasoline supplier to Australia, exporting 759,428 barrels to the country, in contrast to none in December 2019, data from the Department of Industry, Science, Energy and Resources showed.

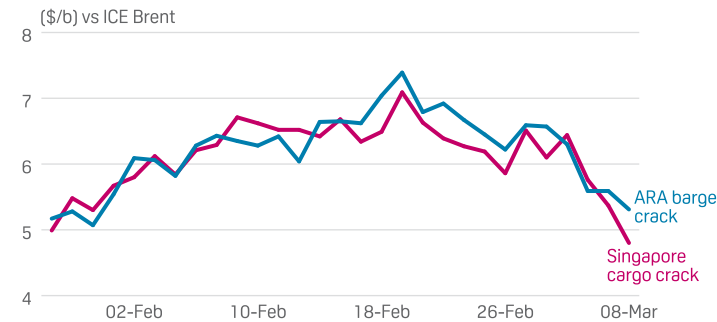
Going forward, Australia is set to raise its gasoline and gasoil imports, sources said. This comes as BP plans to close Kwinana, Australia’s largest refinery, by the middle of the year, wiping out one-fifth of the country’s refining capacity, while ExxonMobil is also set to shut the 80,000 b/d Altona refinery in Melbourne and convert it into a fuel terminal.

DIESEL

Singapore cash crack dips

The Singapore physical 10 ppm sulfur gasoil crack spread to front month cash Dubai has fallen to more than a five-week low, weighed down by healthy supply balances, which has dampened market sentiment, trade sources said.

SINGAPORE ULSD CRACK FALL ACCELERATES



Source: S&P Global Platts

At the Asian close on March 8, the benchmark Asian ultra low sulfur diesel physical crack to front month cash Dubai fell 13 cents/b to \$5.61/b, the lowest since Jan. 27, 2021, when it was assessed at \$5.28/b.

The slump in the crack marks an abrupt U-turn for the middle distillate, which just two weeks ago, had been coasting at multi-month highs. Platts data showed that the physical gasoil crack to front month

cash Dubai, as recently as Feb. 23, was assessed near a 10-month high of \$8.29/b. The crack was last higher on April 30, 2020, at \$9.53/b.

Trade participants said the weakening crack is reflective of supply concerns – Chinese gasoil exports in particular, which are being eyed warily.

Platts previously reported that China's March gasoil exports could touch an 11-month high of 2.29 million mt, with the surge coming on the back of high domestic inventories, which have been building steadily. Some Asian gasoil market participants said, however, that China's March export volumes could be even more, as estimates have climbed to as high as 2.6 million mt.

Earlier, a period of poor European demand fundamentals had worked to close arbitrage lanes to move Asian gasoil barrels to the West, leading Persian Gulf and India-origin gasoil barrels to point East instead. Industry sources estimated that Asia may receive around 1 million mt of gasoil for March-arrival, much more than the 700,000-800,000 mt sent over in February.

Still, some traders and analysts said the current lull that the Asian gasoil market is experiencing could be a shoulder period of sorts, as upcoming refinery turnarounds is expected to provide some support.

In a report released late March 5, S&P Global Platts Analytics noted the cool off in the Asian gasoil market as well, adding, however, that while, "Chinese gasoil exports [were] seen trending higher in March... the impact will be dulled by lower refinery run rates in the region."

A Singapore-based trader agreed that the weaker Asian gasoil cracks was not providing much incentive for refiners to raise runs.

"With cracks looking so much weaker, I don't see refiners raising runs alot," he said.

In its Global Refining Outlook report released early March, Platts Analytics said refinery downtime for Asia, excluding China and India, remains relatively high.

"The rest of Asia (excluding China, India) is expected to see CDU outages and run cuts totaling 4.1 million b/d in March, about flat with February. This equates to a utilization rate of about 71% versus nameplate capacity," the report said.

MARINE FUEL

Linde eyes North Sea hydrogen bunker supply

Engineering company Linde plans to supply green liquid hydrogen and related infrastructure to the world's first hydrogen-powered ferry in 2022, the company said in a statement March 8.

The hydrogen is to supply Norwegian ferry operator Norled's ship. Once supply starts the fuel cell-powered ferry will reduce its annual carbon emissions by up to 95%, Linde said.

Liquid hydrogen will be supplied from Linde's new 24 MW electrolyzer at the Leuna Chemical Complex in Germany, which will use proton exchange membrane technology to produce green hydrogen. Linde will also build and install onshore and onboard hydrogen storage, distribution and safety equipment, the statement said.

S&P Global Platts last assessed the cost of producing green hydrogen in the Netherlands via PEM electrolysis at Eur3.78/kg,

including capital expenditures, March 5.

Linde said it is a global leader in the production, processing, storage and distribution of hydrogen and has the largest liquid hydrogen capacity and distribution system in the world.

The shipping industry is trying to find ways to cut emissions ahead of climate goals by the International Maritime Organization. The IMO is targeting a 50% reduction in greenhouse gases from the sector by 2050, compared with 2008 levels, and 40% reduction in carbon intensity by 2030 rising to 70% in 2050.

Hydrogen and downstream ammonia are emerging as the leading choices for shipping to meet longer-term climate targets.

The International Energy Agency forecasts biofuels, ammonia and hydrogen to meet more than 80% of shipping fuel needs by 2070, using around 13% of the world's hydrogen production, with ammonia the outright leader.

"More than 60% of the emissions reductions in 2070 come from technologies that are not commercially available today," the Paris-based agency said.

S&P Global Platts Analytics has said alternative shipping fuels are in the early phase of development and that oil-based fuels could remain the dominant choice for many years to come.

As such, more work is needed to support development of green hydrogen and ammonia. Commodity trader Trafigura, shipping companies DFDS, CMB and Viking Cruises, along with industry association Hydrogen Europe and NGO Transport and Environment, sent a joint letter March 4 to the EU in support of the European Green Deal for shipping, with a particular focus on developing green hydrogen and ammonia for the industry.

The scale of capital investment needed globally to develop green hydrogen and ammonia for shipping amounts to Eur1.4 trillion (\$1.7 trillion), the group said.

JET

Singapore to pilot IATA Travel Pass

The FOB Singapore jet fuel/kerosene complex saw a slight rebound amid mild optimism on the Asian aviation front.

The balance March-April jet fuel/kerosene derivative spread remained in a contango structure and was assessed at minus 36 cents/b at the 0830 GMT Asian close on March 8, but at the 0300 GMT March 9, brokers assessed the spread narrower at minus 32 cents/b.

According to a statement by local flagship carrier Singapore Airlines Group on March 8, SIA will be the world's first airline to pilot the International Air Transport Association's Travel Pass mobile application for digital health verification, starting with passengers traveling from Singapore to London from March 15 to 28, 2021.

This marks the second phase of SIA's digital health verification process trials, which is based on the IATA Travel Pass framework, and if successful, the pilot will pave the way for the integration of the entire digital health verification process into the SingaporeAir mobile app from around mid-2021, again using IATA's Travel Pass framework.

China rolls out vaccine passport

China launched a digital health certificate program on March 9 that could allow travelers more freedom by displaying their related health information, according to a senior Chinese official.

The scheme would “promote world economic recovery and facilitate cross-border travel,” Deputy Director of the Chinese Ministry of Foreign Affairs Information Department, Zhao Lijian said at a press conference.

Specifically, the certificate would display the holder’s recorded NAT and IgG antibody test results and vaccination status, Lijian said.

The airline market would be one of the largest beneficiaries of this scheme in terms of a recovery in demand as vaccines are rolled out, sources said.

Lijian said there were plans to co-operate with other countries to develop cross-border travel.

“China stands ready to discuss with other countries on establishing mutual recognition mechanisms for health codes information... This will facilitate the issuance of visas, thus making cross-border travel much easier,” he said.

The certificate is currently only available for Chinese citizens and is being distributed through social media platform WeChat. A paper version is also available.

The US and the European Commission are among those also said to be considering similar certificates.

US Gulf Coast weakens on RVO strength

The S&P Global Platts benchmark value for US Gulf Coast jet fuel edged down to a 10-month low on March 8, erasing gains seen throughout much of the pandemic as the Renewable Volume Obligation surged to an assessment-high.

Platts assessed the region’s jet differential at NYMEX April ULSD futures minus 19.75 cents/gal, in line with two deals seen in the Platts Market on Close assessment process.

While the differential dropped just 25 points on the day, the decline was enough to push the discount to the lowest level since May 11, when Platts assessed the differential at front-month futures minus 20.25 cents/gal.

In the period since May 11, Platts saw the differential as high as minus 7.50 cents/gal, though value weakened after this mid-October rise.

Weaker value on March 8 came as the Renewable Obligation Volume cost rose 52 points on the day to 15.0187 cents/gal, an all-time high in Platts assessment history.

A stronger RVO was seen ahead of the US Department of Agriculture’s World Agricultural Supply and Demand Estimates report, expected on March 9, which includes soybean statistics.

Harvest delays and lower yield and stock forecasts have supported a stronger soybean complex in recent months, thereby supporting a stronger RVO.

Despite a weaker differential, outright value for Gulf Coast jet fuel was at just a two-day low on March 8, falling 3.80 cents/gal on the day to \$1.7110/gal.

When the differential was last lower on May 11, outright value at the time was seen at 66.62 cents/gal.

FEEDSTOCKS

US naphtha exports to NWE to increase

Exports from the US Gulf Coast to Northwest Europe are expected to jump higher month on month in March as export operations resume following severe disruptions due to freezing weather.

About 213,000 mt of naphtha are expected to make the voyage from the US Gulf Coast to Northwest Europe this month, according to commodity flow data from energy intelligence provider Kpler published March 9, up 87,000 mt on February volumes.

This is partly due to the delays in loading naphtha cargoes on the US Gulf Coast after a polar vortex brought Arctic weather to the southern states in mid-February. Many cargoes expecting to make the voyage across the Atlantic were deferred until a later date, sources said.

“There’s a bunch of cargoes moving over into Northwest Europe,” a market sources said.

The market has lengthened in Northwest Europe in recent weeks on the back of increased flows from the US but also other regions such as the Mediterranean.

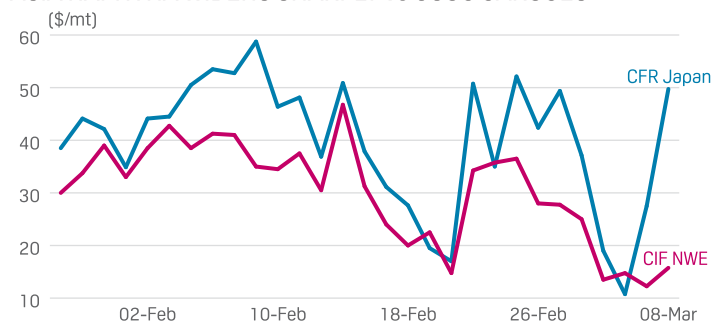
Adding to a possible bearish outlook, demand for naphtha as a petrochemical feedstock has diminished in Northwest Europe.

“Cheap propane versus naphtha is diminishing appetite for cracking naphtha,” a second source said.

Naphtha crack margins have fallen over the last week to be assessed at minus \$1.60/b March 9, a fall of \$1.85/b since Feb. 26.

Furthermore, a weaker Asian naphtha market has meant greater volumes of naphtha have been sent to Europe on the back of more favorable netbacks for Atlantic voyages.

ASIA NAPHTHA WIDENS SHARPLY vs USGC CARGOES



Source: S&P Global Platts

This was driven by weakened demand from the East, with the “traditional USG to Far East flow dried out,” a third source said.

The arbitrage of naphtha from the US Gulf Coast to either Europe or the Far East forms a typical part of global flows of naphtha which supply petrochemical crackers in the destination regions.

The April East-West spread – the premium of the CFR Japan naphtha cargo swap over the CIF NWE equivalent – was assessed at \$13.75/mt, down 25 cents/mt, with May up 25 cents/mt at \$13.75/mt.

GAS LIQUIDS

Asia LPG weakens ahead of US cargoes

Asia refrigerated LPG prices retreated March 9 to an one-week low, and differentials flipped to discounts as demand was seen at low price levels in anticipation of ample Western supply.

CFR North Asia H1 April delivery propane was assessed down \$16/mt day on day at \$591/mt March 9.

The differential of H1 April propane to the April CP turned into a \$5/mt discount March 9, versus a premium of \$3/mt the previous session.

CFR North Asia H2 April delivery propane was also assessed down \$16/mt day on day at \$587/mt March 9, while the discount of H2 April propane to April CP widened to \$9/mt March 9 from \$1/mt the previous session.

The discount of April FEI propane swap to the Mean of Platts Japan naphtha assessment narrowed \$5.50/mt day on day at \$38.50/mt on March 9. Taiwan's Formosa Petrochemical bought via tender a 22,000 mt evenly-split LPG parcel for April delivery at a discount in the low \$30s to the MOPJ naphtha assessment, DES Mailiao.

In China, Zhejiang Shaoxing Sanyuan Petrochemical will shut its propane dehydrogenation plant in Shaoxing by this weekend for regular turnaround, earlier than the originally planned March 15 date, a company source said.

The dehydro unit can produce 450,000 mt/year of propylene and will shut for 20-30 days.

In shipping, the pickup in US loading after winter disruptions in the Houston Ship Channel has helped halt the downtrend in Very Large Gas Carrier rates, shipping sources said, with the Persian Gulf to Japan rates holding steady around \$28/mt March 9.

The price has been steadily falling since hitting recent high at \$60/mt at the end of January, according to Platts data.

TANKERS

East of Suez VLCCs lower

The East of Suez VLCC market was under further pressure on account of lower fixture done, sources said March 9.

Among the overnight fixtures, the Zakum was placed on subjects by CPC basis March 23 loading of 270,000 mt crude on the PG-China route at w29, sources said. The ship was an ADNOC relet, they said. Despite some sources highlighting the vessel done at a lower rate on CPC's cargo has some limitations to clear with other charterers, most market indications were moving lower on March 9.

The lower fixture was done right after the drone attacks on Saudi Arabia's Ras Tanura oil export terminal on March 7.

It has testified the weak fundamental in the crude tanker market and the owners are viewing the geopolitical tension in the PG as new normal, given that owners' are not particularly asking for higher rate, a shipping chartering executive said.

Among the fresh cargoes heard, NSRP was heard seeking tonnage for March 25 loading from PG-Vietnam.

The Suezmax market saw higher rate done but sources are skeptical to view it as the market level as the loading demand

continues to be slow, according to a Suezmax broker.

"VLCC and OPEC+ cuts are going to bring the Suezmax rates back to where they were," another Suezmax broker said.

Fixture wise, in a tender cargo Glasford was working, the Maran Homer was placed on subjects by the charterer basis March 23 loading of 130,000 mt crude on the the Das Island-East route at w65. Unipet was heard seeking tonnage for March 27 loading, basis 130,000 mt crude from Bashayer to China.

The Aframax market in the Persian Gulf continues to remain quiet with no cargoes being worked on at the moment. In the Red Sea, the solitary Bashayer-China cargo will be a good indicator of where the market is, a broker said.

In the Far East, there are a healthy number of cargoes, a charterer said, with two Indonesia-Australia and one Australia-Up cargo being worked on. The Turbo Asia Bukit Tua to Brisbane cargo was covered at w85 on a relet ship from ST shipping, with one broker saying the rate was slightly high due to the low flat rate for this run.

Another broker said that as the cargo was heated crude, there was an additional heating cost which was included in the freight rate. The Indonesia-North market saw Chemchina quote a Linggi- China cargo other than that there was nothing else being worked for the Indonesia-North market.

The MR market continues to remain quiet with sentiment stable for now. A Vizag/Singapore cargo done at \$250,000 was the only cargo being worked at and is a good indicator of where the MR market is at the moment.

Mediterranean Aframaxes gain traction

West of Suez fixing activity for dirty tankers continued to be active on Aframaxes and Handysizes on March 9, with less fresh activity reported on other market segments.

No fresh VLCC cargoes were reported out of West Africa, and Total was reported having received eight offers on its cargo and having countered at w30.5.

On the Suezmax market side, Petrogal and Sahara were reported having paid w67 and w67.5, respectively, for runs discharging in the UK Continent, and the West Africa-to-UK Continent run was assessed up w5 points at w67.5.

"West Africa is a bubble around the 24th given tonnage unavailability," a first broker said. "I think it will come off again with the ballasters coming in end of this month."

The Mediterranean market was reported quiet, with some older fixtures coming out throughout the day. The Black Sea-to-Mediterranean run basis 135,000 mt was assessed flat at w75, or last done on the run.

One size below, on the Mediterranean Aframax market, the sentiment was bullish, with fresh fixtures from the Black Sea reported done above last done level. ENI was reported having placed the Syror Warrior on subjects at w110 on a CPC-to-Mediterranean run, and the Black Sea-to-Mediterranean run was assessed up w2.5 points at w110.

"The market lost w30 and bounced back a couple of points amid tonnage tightness," an owner said. "It should hold for the rest of the week if cargo activity continues as the sentiment is good."

ENI also placed on subjects the Almi Star on a La Skhirra-to-Trieste run at w90, with minimum flat rate Trieste, which caused market

participants to revise expectations up for the rest of the week started March 7 amid the good flat rate.

North Sea Aframaxes repeated w105 levels on the cross-UK Continent run, and the run was assessed flat.

“The fundamentals are good, but there is a gap in the Baltic program for a couple of days, which is putting a cap on the increase,” a second broker said. “However, tonnage lists are tight, and the market should begin picking up.”

Fixing activity on the Mediterranean Handysize market accelerated, with numerous fixtures reported on both the cross-Mediterranean and Black Sea-to-Mediterranean market.

“The market is very busy,” a charterer said. “If it continues at this pace, next levels should already be higher.”

PG-Japan LR tankers firm

The East of Suez LR tankers rose March 9 to their highest level so far this year due to fresh demand for a few ships with similar laycan and owners pressing hard to get rates in line with the increase in their expenses.

In the LR2s, which have languished at abysmally low rates for most part of this year, there were fresh gains, mainly driven by demand during the March 20-25 loading window.

Among the LR fixtures heard, the STI Nautilus was placed on subjects by Idemitsu at w85 for March 20 naphtha loading on the Persian Gulf-Japan route, sources said. In another fixture with the same laycan, the STI Park was taken by YNCC at w85 for naphtha loading on the Persian Gulf-South Korea route, they said. The route typically commands a five Worldscale points premium to the benchmark PG-Japan route.

Chevron is also seeking LR2 tonnage on the same route, sources added.

“This is really a good move,” said a broker in north Asia. Earnings of brokers have also been hit due to low rates this year.

Owners are now trying for even higher rates, sources among them said.

“Now the rates are moving up big time,” said a source with a clean oil tankers’ owner.

“Bunkers are expensive but cargoes are also more in the same [loading] window,” the same source said.

The freight across the Asia-Pacific region jumped on key routes as owners upped their offers immediately after news about the Ras Tanura attack. Owners said higher bunker prices following the attack are increasing their expenses, which were already difficult to meet prior to the incident.

Following the attack, owners increased their offers for LR1 tankers by up to 10 Worldscale points on the benchmark Persian Gulf-Japan route. Most owners said post the attack, their bunker procurement costs have gone up almost \$10/mt in Fujairah and Singapore.

Prior to the attack, LR2 owners were earning around \$1,600/d on the Persian Gulf-Japan route but a large part of this earning had got eroded due to the rise in bunker prices. They have now offset it by the latest increase in rates.

In the LR1s, the STI Excellence was placed on subjects by Vitol at w97.5 for March 17 naphtha loading on the Mumbai-Japan route, sources said.

In the MRs, cargoes rolled over from the previous week and charterers are still struggling to cover their requirements, said a broker in Singapore.

An improvement in rates is expected to hold as owners are putting up resistance for longhaul voyages, the broker said. In Southeast Asia, replacement fixtures are keeping the market busy and charterers are privately quoting cargoes for loading in the third decade of March, he said. Rates are also supported by a steady market in Persian Gulf and west coast India, he added.

NEWS

Cairn exits UK North Sea fields, buys Egyptian assets from Shell in focus shift [...from page 1](#)

further exploration, Shell said in a statement.

The assets include Shell Egypt’s interest in 13 onshore concessions and the company’s stake in Badr El-Din Petroleum Co., it added. The transaction is subject to regulatory and government approvals and is expected to be finalized by the second half of 2021.

Cairn will acquire 50% of the portfolio of oil and gas exploration, development and production interests being sold by Shell, which includes 13 concessions and five exploration concessions. The deal will increase Cairn’s expected 2021 production by of 33,000-38,000 b/d of oil equivalent, Cairn said, or which 66% is gas.

Cash flow pressure

Cairn has been under pressure since the oil price collapse last year compounded the impact of a run of poor Norwegian drilling results in 2019. The company, which slashed its capital expenditure last year, drilled four exploration wells offshore Norway in 2019, all of which came up dry. It sold its remaining Norwegian assets and its stake in Senegal’s Sangomar offshore block last year.

“Cairn Energy has had a history of selling down assets and building up new core areas,” Wood Mackenzie’s Europe upstream analyst Neivan Boroujerdi said in a note “The sale of UK assets to Waldorf Energy, on the same day it announces an entry into Egypt, is very much on brand.”

“The deals will help shift its hydrocarbon split towards gas while retaining its balance sheet strength.”

Investment bank Jefferies said it sees the acquisitions as “positive” for Cairn allowing it to evolve its upstream portfolio with a larger production base.

“Peers have shown the operational reality of life in Egypt can be tougher than the acquisition slides but Shell assets come with a certain pedigree,” Jefferies said in a note.

Shell sale

Shell Egypt recently acquired seven new offshore concessions in the West Mediterranean, the Red Sea and in the West Nile Delta.

The deal “will enable Shell to concentrate on its offshore exploration and integrated value chain in Egypt, including seven new blocks in the Nile Delta, West Mediterranean and Red Sea,” said Wael Sawan, Shell’s upstream director. “It will help Egypt maximize

the potential of its onshore assets through new investment, helping secure energy and revenue for years to come.”

Shell has estimated its 2020 reserves replacement ratio would be minus 53%, reflecting lower prices, postponed investment decisions and asset sales, it said Feb. 4. For the first quarter, Shell expects its upstream output would be in a range of 2.40 million-2.60 million boe/d, up from fourth-quarter 2020 levels of 2.37 million boe/d, but well below the Q4 2019 level of 2.76 million boe/d, it added.

The company plans to slim down its future upstream and refining operations and direct more spending to grow its low-carbon businesses, the company said Oct. 29, flagging for the first time that its oil production has likely already peaked

Shell wants to pursue more “value over volume” by simplifying its upstream assets to nine core positions: Brazil, Brunei, the Gulf of Mexico, Kazakhstan, Malaysia, Nigeria, Oman, Permian and the UK North Sea.

— [Robert Perkins, Dania Saadi](#)

EIA revises Brent, WTI price outlooks higher amid tightened 2021 supply outlook

- Brent, WTI prices forecast 14% higher
- Global stock draws to reverse in 2H 2021
- US 2022 crude production seen 500,000 b/d higher

New York—The US Energy Information Administration revised its crude price forecast higher in its monthly Short-Term Energy Outlook released March 9 amid tightened first-quarter supply outlooks.

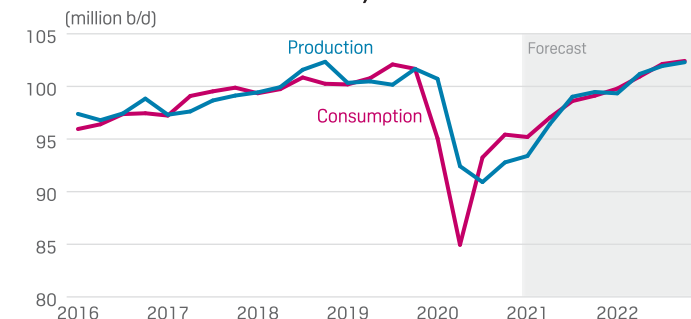
The EIA now expects Brent crude prices to average \$60.67/b in 2021, up \$7.47/b from its February forecast, and \$58.51/b in 2022; and the WTI spot price to average \$57.24/b in 2021, up \$7.03/b from February, and \$54.75/b in 2022.

The upward revisions stem from tightened supply outlooks during the first half of the year after the OPEC+ group March 4 unexpectedly extended the bulk of their output cuts through April.

Crude prices are expected to come under pressure in the second half of the year as increased supply comes online to balance markets. Global crude inventories are expected to decline 1.2 million b/d in the first half of 2021, EIA said, but then grow 400,000 b/d during the second half of the year.

The EIA expects the OPEC+ quota extension to push Brent prices to around \$65-70/b during March and April, up more than \$10/b from

GLOBAL LIQUIDS FUELS OUTPUT, CONSUMPTION ON THE RISE



Source: US Energy Information Administration

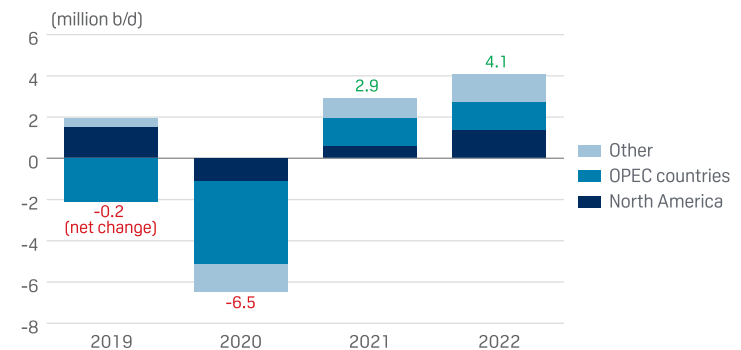
its previous month forecast, but expects prices will fall back to around \$58/b for the back half of the year as rising supply slows global inventory draws.

Supply and demand are expected to reach balance for most of 2022, EIA said.

Global liquid fuels consumption is now slated to average 97.5 million b/d in 2021, a downward revision of 200,000 b/d from last month's forecast but 5.3 million b/d above 2020 levels. Meanwhile, 2022 demand is now expected to climb 3.8 million b/d to 101.3 million b/d, an increase from the February forecast calling for a 3.5 million b/d increase.

US crude production averaged 10.4 million b/d in February, down 500,000 b/d from January output. The decline was due mostly to shut-ins caused by extreme low temperatures across the US south, particularly Texas. The winter weather is likely to lead to aggregate crude production losses of 20 million-25 million barrels, according to S&P Global Platts Analytics.

NORTH AMERICA TO LEAD OIL PRODUCTION GROWTH BY 2022



Source: US Energy Information Administration

But expectations of higher crude prices are likely to see more US production come online over the next two years, EIA said. Its outlook for 2021 production was revised 100,000 b/d higher to 11.1 million, and 2022 output is now seen averaging 12 million b/d in 2022, an upward revision of 500,000 b/d from the February report.

Notably, this month's STEO is the first to incorporate a moratorium on new leases for oil and natural gas exploration on federal lands enacted by the Biden administration. The order is not expected to have an impact in 2021, but in 2022 it is expected to reduce US output by less than 100,000 b/d on average.

— [Chris van Moessner](#)

Northern Lights CCS project gets go-ahead as partners eye direct CO2 capture

- Europe's first industrial-scale CCS pilot project
- Crucial to Norway's continued oil and gas ambitions
- Norway in talks with eight additional CO2 emitters

London—Norway's petroleum and energy ministry has approved Northern Lights, Europe's first industrial-scale carbon storage project, and the partners are also looking to expand the venture to include direct air CO2 capture technology.

Northern Lights is the storage component of a broader collaboration dubbed Longship by the Norwegian authorities, aimed at capturing CO₂ from industrial processes such as cement manufacture and transporting it by ship to a site in western Norway, from where it will be sent by pipeline for injection into a North Sea reservoir.

A joint venture between state-controlled Equinor, Shell and Total, the project aims to start storing CO₂ from industries in northern Europe in 2024.

The project is Europe's leading full-scale pilot project for carbon capture and storage aimed at capturing emissions from industrial processes, rather than existing capture of emissions from offshore fields such as Snohvit in the Barents Sea.

It is a crucial component in Norway's ambitions to keep producing oil and gas for many years, as Western Europe's largest oil and gas producer, even as the country aims to achieve net-zero emissions in 2050 and Equinor targets net-zero emissions from its operations by 2030.

Northern Lights is due to become operational in 2024, with an initial capacity to sequester 1.5 million mt/year of CO₂ and subsequent plans to increase this to 5 million mt/year.

Separately, Northern Lights and Swiss-based CO₂ capture technology developer Climeworks said they have agreed to explore the realization of a full-chain CO₂ removal project in Norway using direct air capture technology combined with permanent storage provided by Northern Lights.

"There is growing awareness of the need to build capacity to remove CO₂ from the atmosphere to achieve net-zero by 2050," managing director of Northern Lights Borre Jacobsen said in a statement "Combined with safe and permanent storage, direct air capture has the potential to get the carbon cycle back in balance."

Climeworks' direct air capture technology can reach a net CO₂ removal efficiency of more than 90%, taking into account full life-cycle emissions, according to the company.

Government support

The International Energy Agency has called for governments to step up support for CCS projects in the wake of the pandemic to help put the global energy system on track for future net-zero emissions.

CCS could contribute in four main ways: tackling emissions from existing energy infrastructure, such as power and industrial plants; providing a solution for some of the most challenging emissions from heavy industries like cement and chemicals; offering a cost-effective pathway for low-carbon hydrogen production; and direct removal of CO₂ from the atmosphere.

Phase 1 of the Northern Lights project is expected to be able to store 37.5 million mt of CO₂ in two subsea formations known as Johansen and Cook, with a shale sealing cap expected to prevent seepage.

"The operator considers it probable that up to 100 million mt of CO₂ could be stored inside the exploitation license in a potential second phase of the project, but the uncertainty [over] the build-up of pressure and the lack of well data mean further maturation is required," the ministry said. "Experience from the operation of Phase 1 will be decisive in determining how much CO₂ can be stored in total in the reservoir."

Norway is subsidizing the overall Longship project to the tune

of some \$17 billion, around two-thirds of the expected total. The storage component is expected to cost NOK6 billion (\$710 million) in investment, with annual running costs of \$370 million, the ministry said in its statement March 9.

Beyond two Norwegian industrial producers of CO₂, the ministry said memorandums of understanding had been signed with another eight companies interested in using the facilities.

"I believe more [companies] will want to connect to the storage now that the project has been approved," the ministry quoted petroleum and energy minister Tina Bru as saying.

— [Nick Coleman](#), [Robert Perkins](#)

Crude extends slide as market eyes US inventory report

- US dollar retreats from 3.5-month highs
- RBOB crack strongest since August 2017
- EIA revises 2021 Brent, WTI forecasts 14% higher

New York—Crude oil futures settled lower for a second straight session March 9 as the market looked to the US inventory report March 10 for next direction.

NYMEX April WTI declined \$1.04 to \$64.01/b, and ICE May Brent finished lower 72 cents at \$67.52/b.

"The bullish rally with WTI crude appears to be running out of gas, but it seems unlikely a major pullback will occur unless a major disruption to the US reopening of the economy occurs," OANDA senior market analyst Edward Moya said in a note. "It has been a while since crude prices slumped alongside a weaker dollar, so today's choppy trade could reflect hesitancy to have a big position before the EIA weekly crude oil inventory report."

The ICE US dollar index fell below 92 in afternoon trading, retreating from a three-and-a-half month high of 92.334 on March 8.

The widespread impact of February's severe winter weather across all aspects of the US Gulf Coast crude supply chain has added considerable uncertainty to the weekly inventory report.

US commercial crude stocks are expected to have increased 2.7 million barrels to around 487.3 million barrels in the week ended March 5, according to analysts surveyed by S&P Global Platts. But a recent Reuters poll pointed to a decline in US inventories last week, according to media reports.

US crude production averaged 10.4 million b/d in February, down 500,000 b/d from January output, the US Energy Information Administration said in its monthly Short-Term Energy Outlook released March 9, due in large part to winter-storm related shut ins. The severe weather is likely to lead to aggregate crude production losses of 20-25 million barrels, according to S&P Global Platts Analytics.

NYMEX April RBOB settled 15 points higher at \$2.0502/gal, while April ULSD finished 12 points lower at \$1.9073/gal.

Divergent RBOB and crude futures drove gasoline cracks to more than three-year highs.

The ICE New York Harbor front month RBOB crack versus Brent rallied to around \$18.39/b in afternoon trading, on pace for the highest close since Aug. 31, 2017.

EIA revises crude prices higher

The EIA now expects Brent crude prices to average around \$60.67/b in 2021, up \$7.47/b from its February forecast, and at \$58.51/b in 2022, and the WTI spot price to average around \$57.24/b in 2021, up \$7.03/b from its most recent report, and at \$54.75/b in 2022.

The upward revision stems from tightened supply outlooks during the first half of the year after the OPEC+ group unexpectedly extended the bulk of their output cuts through April at the March 4 meeting.

The EIA expects the OPEC+ quota extension to push Brent prices to around \$65-\$70/b during March and April, up more than \$10/b from its previous month forecast, but prices will fall back to around \$58/b for the back half of the year as rising supply slows global inventory draws.

— [Chris van Moessner](#)

IMO to launch more initiatives to address environmental challenges in shipping

- Ramp up funding for long-term projects
- Hasten decarbonization
- Tackle marine biofouling, plastic litter

Singapore—The International Maritime Organization’s Department for Partnerships and Projects, or DPP, is set to launch more initiatives to address environmental challenges including climate change, marine litter and biodiversity in international shipping, the IMO.

“Despite the challenges of the global pandemic, in 2020 we mobilized approximately \$13 million, bringing the total funding for long-term projects to around \$45 million,” DPP chief Jose Matheickal said in a statement March 8. “In 2021, we want to go further and even double this portfolio.”

As part of the plan, the GHG-SMART project will be commissioned to build capacity among small-island developing states and least-developed countries to implement the Initial GHG Strategy, the IMO said. Under this strategy, IMO member states have pledged to cut annual greenhouse gas, or GHG, emissions from international shipping by at least half by 2050 from 2008 levels, and work toward phasing out GHG emissions from shipping entirely as soon as possible in this century.

A new global project will also be launched to assist developing countries in implementing electronic exchange of information in ports for ship clearance, the IMO said.

During its first 12 months, the DPP established a Global Industry Alliance to address marine biofouling, to help protect marine biodiversity and support energy efficiency in shipping, the IMO said.

Pilot countries have been recruited for the GloLitter project to combat marine plastic litter and the GreenVoyage2050 project to move shipping towards a low-carbon future.

Decarbonization

Eleven states—Azerbaijan, Belize, China, Cook Islands, Ecuador, Georgia, India, Kenya, Solomon Islands, South Africa and Sri Lanka—are partnering with the IMO-Norway GreenVoyage2050 Project, which is supporting the path to decarbonization in the shipping sector, in line with the IMO Initial Strategy.

The project partners are aiming to strengthen their MARPOL Annex VI compliance, facilitate sharing of operational best practices, catalyze

the uptake of energy-efficient technologies and explore opportunities for low- and zero-carbon fuels, the IMO said separately March 5.

The project includes supporting states to draft legislation to implement MARPOL Annex VI into national law, undertake assessments of maritime emissions, develop policy frameworks and national action plans to address GHG emissions from ships, assess emissions, and develop port-specific emission reduction strategies.

It also aims to identify opportunities and deliver pilot projects through public-private sector partnerships and the mobilization of financial resources and access funding and investments into low-carbon solutions, among other steps, it added.

— [Surabhi Sahu](#)

Export of Belarusian oil products via Russian ports begins

- March deliveries at 7,000 mt so far
- Intergovernmental deal envisages shipments of 3.5 mil mt in 2021
- Three-year deal covers fuel oil, gasoline, diesel, gasoil deliveries

Moscow—Russia has begun exporting Belarusian oil products via its Baltic ports, a spokesman for the Federal Agency for Maritime and River Transport, a branch of the Russian Transport Ministry said March 9.

Belarus moved to redirect oil products exports away from its traditional route via Lithuania last year, suspending exports via Klaipėda in mid-December. This followed Lithuania’s decision to introduce sanctions against Belarus in response to allegations that presidential elections were not free and fair and a subsequent crackdown on protests against the results.

Russian transport minister Vitaly Saveliev said March 9 that the Mozyr refinery in Belarus shipped 7,000 mt of Belarusian oil products to the Russian port of Ust-Luga at the beginning of March, Russian media reported.

“On March 5 the Mozyr refinery loaded 3,400 mt of gasoline for shipping to operator Portenergo in the port of Ust-Luga,” Saveliev said, according to the Prime news agency.

He added that on March 6 a second shipment of 3,600 mt of fuel oil from Mozyr was shipped to operator Petersburg Oil Terminal at the port of St. Petersburg.

The products were transported via rail by operator Federal Freight Company, Saveliev said, according to the report.

In mid-February Belarus and Russia signed an intergovernmental agreement on shipments of Belarusian oil products exports via Russian ports, envisaging delivery of total volumes of 9.8 million mt through 2023.

Belarus will use Russian ports on the Baltic Sea, including Ust-Luga and St. Petersburg, to export fuel oil, gasoline, diesel and gasoil, according to the intergovernmental deal with Russia.

In 2021, volumes of Belarusian oil products exported via Russia will reach 3.5 million mt, while exports in 2022 and 2023 will total 3.2 million mt and 3.1 million mt.

The agreement was signed for three years, but provides for automatic prolongation, Saveliev said at the time, according to a ministry statement.

S&P Global Platts uses Klaipeda as one of the load ports for assessing diesel FOB Le Havre in Northwest Europe.

Platts Analytics expects no significant impact on global or European product balances from redirection of the shipments.

Belarus exports residual fuel oil, gasoil/diesel and gasoline, with monthly volumes averaging around 120,000 b/d, according to Platts Analytics. In January to September 2020, Belarus exported 1.157 million mt, or around 35,174 b/d, of gasoline and 1.834 million mt, or around 49,866 b/d, of diesel, according to the Belarusian state statistics

— [Rosemary Griffin](#)

REFINERY UPDATES

Pasadena, Texas

- Owner: Chevron
- Capacity: 112,229 b/d
- Duration: 6 am CT March 8 through 6 am CT March 11

Notes: Chevron said it began restarting its 112,229 b/d Pasadena, Texas, refinery on at 6 am CT March 8 and expected the restart process to last through 6 am CT March 11, according to a filing with state regulators March 8.

“Planned startup following severe weather that resulted in state and federal emergency declaration for Texas,” said the filing made with the Texas Commission on Environmental Quality.

Chevron shut the refinery in mid-February after extreme cold in the state caused prolonged power outage issues. Almost all of Texas’ 5.86 million b/d of refining capacity was impacted by the cold and power grid instability which resulted from the cold freeze which swept through the state the week of Feb. 15.

According to the filing, Chevron expects flaring to stop when the plant is restarted which it estimates to be March 11.

Source: regulatory filing

Khabarovsk, Russia

- Owner: IPC (formerly Alliance Oil)
- Capacity: 5 million mt/year (100,000 b/d)

Notes: Russia’s Khabarovsk refinery in the Far East is planning works in April, according to sources.

It was not immediately available to comment.

The refinery had a shutdown in January when it replaced some of the equipment on the reformer and has been running at full capacity since early February.

Source: market sources

Rayong, Thailand

- Owner: IRPC Public Co. Ltd
- Overall capacity: 215,000 b/d
- Units affected: No. 2 Atmospheric Distillation Unit and Atmospheric residue desulphurization unit
- Unit Capacity: 150,000 b/d (No.2 ADU)
- Duration: 10-days in February (No.2 ADU), mid-January to mid-February (ARDS)

Notes: Thai oil and petrochemical company IRPC Public Co. Ltd has restarted several units after turnaround in February and is raising operating rates in line with the restart of various units, industry sources with close knowledge of the refinery operations told S&P Global Platts on March 8.

The units that had undergone maintenance were the No. 2 Atmospheric Distillation Unit, which was offline for around 10-days in mid-February, as well as the atmospheric residue desulphurization unit, which was shut for around a month from mid-January to mid-February.

The units were shut for scheduled maintenance, Platts reported earlier.

Maintenance at the No. 2 ADU was noted to have commenced following work done at the refinery’s smaller 65,000 b/d No. 1 ADU, which was offline for around 13-days in January.

Although IRPC could not be immediately reached to confirm its current operating rate, industry sources told Platts previously that the company had planned to run the Rayong refinery at an average of 200,000 b/d in 2021, accounting for around 93% of total capacity.

Against the backdrop of rising run rates, domestic demand for gasoline has recovered from January lows, as new COVID-19 infections across the country eased.

According to mobility data from Apple, driving activity, a proxy for gasoline demand, reached around 10% above baseline levels in late February, the highest thus far in 2021.

Source: market source

PRODUCT PRICE ASSESSMENTS

ASIA, MAR 9

	Mid	Change
Singapore (PGA page 2002)		
(\$/barrel)		
Naphtha	66.91-66.95	66.930 -2.090
Jet kerosene	69.08-69.12	69.100 -1.920
Gasoil	71.90-71.94	71.920 -1.990
Gasoil 10 ppm	71.90-71.94	71.920 -1.990
Gasoil 50 ppm	71.77-71.81	71.790 -1.990
Gasoil 0.05% S	70.97-71.01	70.990 -1.810
Gasoil 0.25% S	70.66-70.70	70.680 -1.850
Gasoil 50 ppm disc/prem	-0.37--0.33	-0.350 -0.010
Mogas 92 unl	72.37-72.41	72.390 -2.170
Mogas 95 unl	74.20-74.24	74.220 -2.170
Mogas 97 unl	75.39-75.43	75.410 -2.170
CFR Naphtha		65.670 -2.020
Naphtha pap. (bal month)	66.18-66.22	66.200 -2.100
Naphtha pap. (Apr)	65.33-65.37	65.350 -1.750
Naphtha pap. (May)	64.43-64.47	64.450 -1.500
Kerosene pap. (bal month)	69.46-69.50	69.480 -1.890
Kerosene pap. (Apr)	69.77-69.81	69.790 -1.940
Kerosene pap. (May)	70.08-70.12	70.100 -1.920
Gasoil pap. (bal month)	72.07-72.11	72.09 -1.990
Gasoil pap. (Apr)	72.17-72.21	72.190 -1.980
Gasoil pap. (May)	72.19-72.23	72.210 -1.950
(\$/mt)		
FO 180 CST 2%	410.64-410.68	410.660 -7.840
HSFO 180 CST	401.60-401.64	401.620 -7.670
180 CST disc/premium	1.56-1.60	1.580 +0.250

CHINA, MAR 9 (PGA page 2010)

	Mid	Change
South China FOB		
Unl 92 RON	602.75-606.75	604.750 -18.500
South China, C&F		
Jet kerosene	556.00-560.00	558.000 -15.000
Gasoil	538.00-542.00	540.000 -14.750
Hong Kong		
Fuel oil 380 CST	419.50-420.50	420.000 -8.000

FUJAIRAH, FOB, MAR 9 (PGA page 2018)

	Mid	Change
(\$/mt)		
Naphtha	608.540	-18.580
HSFO 380 CST	385.250	-9.830
(\$/barrel)		
Gasoline 95 unleaded	75.220	-2.380
Gasoline 92 unleaded	72.900	-2.380
Kerosene	68.620	-1.990
Gasoil 10 ppm	70.970	-2.110
Gasoil	70.970	-2.110

	Mid	Change
Singapore (continued)(PGA pages 2002 & 2655)		
(\$/mt)		
HSFO 380 CST	396.79-396.83	396.810 -9.650
HSFO 180 CST pap. (bal month)	401.63-401.67	401.65 -7.400
HSFO 180 CST pap. (Apr)	398.08-398.12	398.100 -8.400
HSFO 180 CST pap. (May)	395.48-395.52	395.500 -8.900
MTBE	684.00-686.00	685.000 -29.000
C&F Japan (PGA page 2006)		
(\$/barrel)		
Jet kerosene	71.03-71.07	71.050 -1.900
Mogas unl	74.54-74.58	74.560 -2.170
(\$/mt)		
Naphtha	611.25-616.75	614.000 -18.750
Nph 2nd 1/2 Apr	621.00-621.50	621.250 -18.750
Nph 1st 1/2 May	616.25-616.75	616.500 -18.750
Nph 2nd 1/2 May	611.25-611.75	611.500 -18.750
FOB Japan		
(\$/barrel)		
Gasoil	71.240	-1.980
C+F Australia (PGA page 2004)		
(\$/barrel)		
Mogas 92 unl	75.37-75.41	75.390 -2.170
Mogas 95 unl	77.20-77.24	77.220 -2.170
Jet kerosene	72.30-72.34	72.320 -1.920
Gasoil 10 ppm	75.32-75.36	75.340 -1.990

ARAB GULF, FOB, MAR 9 (PGA page 2004)

	Mid	Change
(\$/mt)		
Naphtha	586.81-592.31	589.560 -19.970
Naphtha LR2	590.84-596.34	593.590 -21.660
HSFO 180 CST	390.56-390.60	390.580 -7.670
HSFO 380 CST	385.75-385.79	385.770 -9.650
(\$/barrel)		
95 RON unleaded	71.54-71.58	71.560 -2.250
92 RON unleaded		69.730 -2.250
Kerosene	67.29-67.33	67.310 -2.000
Gasoil 10 ppm	70.00-70.04	70.020 -2.070
Gasoil 0.05% S	69.80-69.84	69.820 -2.070
Gasoil 0.25% S	69.30-69.34	69.320 -2.070
Gasoil	70.00-70.04	70.020 -2.070

ASIA PRODUCT PREMIUM/DISCOUNT ASSESSMENTS

	Mid	Change
Mar 9		
MOP* Singapore (PGA page 2002)		
(\$/barrel)		
Jet	-0.54/-0.50	-0.520 -0.020
Gasoil 0.25% S	-1.48/-1.44	-1.460 +0.130
Gasoil	-0.24/-0.20	-0.220 -0.010
CFR Naphtha		-0.150 -0.050
(\$/mt)		
380 CST	2.95/2.99	2.970 -0.490
MOP* Arab Gulf (PGA page 2004)		
(\$/barrel)		
Jet	0.68/0.72	0.700 0.000
Gasoil 10 ppm	0.68/0.72	0.700 -0.050
Gasoil 0.25% S	-0.02/0.02	0.000 -0.050
Gasoil	0.68/0.72	0.700 -0.050
380 CST**	-4.83/-4.79	-4.810 -1.980
(\$/mt)		
HSFO 180 CST	6.98/7.02	7.000 -1.000
HSFO 380 CST	2.98/3.02	3.000 -0.500
MOP* Japan (PGA page 2006)		
(\$/barrel)		
Naphtha	11.75/12.25	12.000 0.000
MOP* West India (PGA page 2012)		
(\$/mt)		
Gasoline (92 RON)	600.610	-18.850
Gasoline (95 RON)	608.740	-18.640
Naphtha	590.660	-19.590
Jet kero	531.180	-15.580
Gasoil (10 ppm)	533.320	-15.570
Gasoil (500 ppm)	514.170	-13.890
Gasoil (2500 ppm)	511.860	-14.190
(\$/barrel)		
Gasoline (92 RON)	70.660	-2.220
Gasoline (95 RON)	72.470	-2.220
Naphtha	65.630	-2.180
Jet kero	67.240	-1.970
Gasoil (10 ppm)	69.990	-2.040
Gasoil (500 ppm)	69.020	-1.860
Gasoil (2500 ppm)	68.710	-1.900

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

PLATTS INDEX, MAR 9 (PGA page 115)

	Change
Platts Jet Fuel Index	194.74 -2.240

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

NEW YORK, MAR 9 [\(PGA page 152\)](#)

		Mid	Change		RVP		Mid	Change		RVP	Mid	Change			
	Cargo (¢/gal)					Barge (¢/gal)					Differentials to NYMEX				
Unl 87	AAMHG00	205.19-205.29	205.240	-2.250	AAMHGRV	13.5									
CBOB						AAWBL00	194.37-194.47	194.420	+0.300	AAWBLRV	13.5	AANYX14	-10.600	+0.150	
Prem CBOB						AAWLC00	208.12-208.22	208.170	+0.300	AAWLCRV	13.5	AANYX16	3.150	+0.150	
Unl RBOB	AAVKS00	195.87-195.97	195.920	+0.150	AAVKS RV	13.5	AAMGV00	194.37-194.47	194.420	+0.150	AAMGVRV	13.5	AANYX15	-10.600	0.000
Prem RBOB						AAMGY00	208.12-208.22	208.170	+0.150	AAMGYRV	13.5	AANYX17	3.150	0.000	
Jet fuel						PJAAW00	175.93-176.03	175.980	+0.630			ADIGA00	-14.750	+0.750	
LS jet kero						PJABJ00	194.18-194.28	194.230	-0.120			ADIHA00	3.500	0.000	
ULS kero						AAVTI00	200.93-201.03	200.980	-0.120			ADJKH00	10.250	0.000	
No. 2						POAEG00	169.68-169.78	169.730	-0.120			ADIAO00	-21.000	0.000	
ULSD						AATGX00	189.68-189.78	189.730	-0.620			ADIZA00	-1.000	-0.500	
ULS heating oil						AAXPX00		174.730	-1.120			ADIAQ00	-16.000	-1.000	
	Cargo ex-duty (¢/gal)*				RVP										
Unl 87	AASAA00	187.80-187.90	187.850	-2.900	AASAA RV	13.5									
Unl RBOB	AASAF00	178.51-178.61	178.560	-0.510	AASAF RV	13.5									
	(\$/barrel)					Differential vs 1s strip(\$/barrel)									
No. 6 0.3% S hi pr	PUAAE00	82.35-82.37	82.360	-0.890		AAUGA00	14.40-14.42	14.410							
No. 6 0.3% S lo pr	PUAAB00	82.35-82.37	82.360	-0.890		AAUGB00	14.40-14.42	14.410							
No. 6 0.7% S max	PUAAH00	71.95-71.97	71.960	-0.780		AAUGC00	4.00-4.02	4.010							
No. 6 1% S max	PUAAO00	67.70-67.72	67.710	-0.850		AAUGD00	-0.25--0.23	-0.240							
No. 6 1% S max 1s strip	AAUGG00	67.94-67.96	67.950	-0.850											
USAC HSFO	PUAAX00	59.76-59.78	59.770	-0.900		AAUGF00	-8.19--8.17	-8.180							
No. 6.1 S max pap bal M	AARZS00	67.90-68.00	67.95	-0.850											
No. 6 1.0% S pap 1st M	PUAXD00	67.90-68.00	67.950	-0.850											
No. 6 1.0% S pap 2nd M	PUAXF00	67.35-67.45	67.400	-0.850											
No. 6 1.0% S pap qtrly	PUAXG00	67.37-67.47	67.420	-0.850											

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

USAC CPL LINDEN*, MAR 9 [\(PGA page 410\)](#)

(¢/gal)		Mid	Change		Differentials to NYMEX	Change	Cycle	RVP			
Unl 87	ACXPW00	203.520	-2.250		AANYX40	-1.500	-2.400	ACRQWCV	12	ACRQWRV	13.5
CBOB	ABXPW00	202.520	-2.250		AANYX41	-2.500	-2.400	ABRQWCY	12	ABRQWRV	14.5
RBOB	ADXPW00	203.620	-2.250		AANYX42	-1.400	-2.400	ADRQWCY	12	ADRQWRV	13.5
Jet kero 54	AAXPV00	176.480	-0.120		ADIJA00	-14.250	0.000	AAXPVCY	12		
ULS heating oil	AAXPU00	177.480	-0.120		ADIAR00	-13.250	0.000	AAXPUCY	11		
ULSD	AAXPW00	197.480	+1.230		ADLAA00	6.750	+1.350	AAXPWCY	11		

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

PRODUCT PRICE ASSESSMENTS

U.S. BUCKEYE PIPELINE, MAR 9 (PGA page 310)

(¢/gal)			Mid	Change	RVP	Differentials to NYMEX	Change
Unl RBOB	AAMHB00	194.37-194.47	194.420	+0.150	AAMHBRV 13.5	AANYX35	-10.600 0.000
Prem RBOB	AAMHZ00	208.12-208.22	208.170	+0.150	AAMHZRV 13.5	AANYX36	3.150 0.000
CBOB	AAPSY00	194.37-194.47	194.420	+0.300	AAPSYRV 13.5	AANYX33	-10.600 +0.150
CBOB prem	AAPSZ00	208.12-208.22	208.170	+0.300	AAPSZRV 13.5	AANYX34	3.150 +0.150
ULSD	AATHF00	189.68-189.78	189.730	-0.620		ADIYA00	-1.000 -0.500
Jet fuel	AAJNL00	175.93-176.03	175.980	+0.630		ADIEA00	-14.750 +0.750
LS jet/kero	AAJNN00	194.18-194.28	194.230	-0.120		ADIFA00	3.500 0.000

RVP

Laurel

Unl CBOB	AAUAS00	196.47-196.57	196.520	+0.300	AAUASRV 13.5	AANYX29	-8.500 +0.150
Prem CBOB	AAUAT00	210.22-210.32	210.270	+0.300	AAUATRV 13.5	AANYX30	5.250 +0.150

All RVP references are after ethanol

CHICAGO PIPELINE, MAR 9 (PGA page 160)

(¢/gal)			Mid	Change	RVP	Differentials to NYMEX	Change
Unleaded 87	PGACR00	185.97-186.07	186.020	-1.850	PGACRRV 13.5	AANYX98	-19.000 -2.000
Unleaded 89	PGAAX00	193.07-193.17	193.120	-1.850	PGAAXRV 13.5		
Prem. unl 91	PPASQ00	203.72-203.82	203.770	-1.850	PPASQRV 13.5	AANY100	-1.250 -2.000
CBOB	AAREL00	184.97-185.07	185.020	-1.850	AARELRV 13.5	AANY101	-20.000 -2.000
PBOB	AAUEU00	205.47-205.57	205.520	-1.350	AAUEURV 13.5	AANY103	0.500 -1.500
RBOB	PPARH00	186.72-186.82	186.770	-1.350	PPARHRV 13.5	AANY102	-18.250 -1.500
Jet fuel	PJAAF00	184.43-184.53	184.480	-0.120		ADILA00	-6.250 0.000
ULS No. 1	PJACD00	218.93-219.03	218.980	+0.130			
ULSD	AATHA00	198.93-199.03	198.980	+0.130		ADLAI00	8.250 +0.250

CHICAGO BUCKEYE COMPLEX, MAR 9 (PGA page 160)

(¢/gal)			Mid	Change	RVP	Differentials to NYMEX	Change
CBOB	ACBAA00		186.770	-1.350	ACBAARV 13.5	ACBAB00	-18.250 -1.500
RBOB	ACBAC00		186.770	-1.350	ACBACRV 13.5	ACBAD00	-18.250 -1.500
ULSD	ACBAE00		198.980	+0.130		ACBAF00	8.250 +0.250

CHICAGO WOLVERINE PIPELINE, MAR 9 (PGA page 160)

(¢/gal)			Mid	Change	RVP	Differentials to NYMEX	Change
CBOB	AGCWA00		185.020	-3.350	AGCWERV 13.5	AGCWB00	-20.000 -3.500
ULSD	AGCWC00		199.230	+0.380		AGCWD00	8.500 +0.500

GROUP THREE, MAR 9 (PGA page 160)

(¢/gal)			Mid	Change	RVP	Differentials to NYMEX	Change
Sub-octane	AAXIX00	202.47-202.57	202.520	+0.400	AAXIXRV 8.5	AANYX01	-2.500 +0.250
Prem. unleaded	PGABD00	224.72-224.82	224.770	+0.400	PGABDRV 8.5	AANYX02	19.750 +0.250
ULSD	AATHB00	208.18-208.28	208.230	-16.120		ADLAB00	17.500 -16.000
Jet fuel	PJAAI00	187.68-187.78	187.730	+2.630		ADIKAO0	-3.000 +2.750
No. 1	PJACB00	215.93-216.03	215.980	-28.370			

ATLANTIC RESID/CONTRACT CARGOES POSTED PRICES, MAR 9 (PGA page 564)

(\$/barrel)		No. 4 Fuel
Global		
Boston 0.5%	PRALB00	99.00
Boston 1.0%	PRALD00	94.30
		No. 6 Fuel
Boston 0.5%	PRAMN00	98.00
Boston 1.0%	PRAMD00	87.30

Source: Global Montello Group Corp.

MARINE FUEL (PGA page 30)

		\$/mt	Change
0.5% FOB Singapore cargo	AMFSA00	505.780	-14.740
0.5% FOB Fujairah cargo	AMFFA00	495.340	-14.650
0.5% FOB Rotterdam barge	PUMFD00	485.500	-7.250
0.5% FOB US Gulf Coast barge	AUGMB00	498.750	-5.500
0.5% Divd US Atlantic Coast barge	AUAMB00	507.750	-5.500
0.5% FOB Mediterranean cargo	MFFMM00	485.250	-9.750
0.5% CIF Mediterranean cargo	MFCMM00	497.000	-9.750
		\$/barrel	
0.5% FOB US Gulf Coast barge	AUGMA00	78.540	-0.870
0.5% Divd US Atlantic Coast barge	AUAMA00	79.960	-0.870
		vs FO 380 MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	AMOPA00	111.940	-5.580
		vs MF 0.5% MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	FOFSB00	1.180	+0.010
0.5% FOB Singapore Bal mo	FOFS000	505.300	-14.800
0.5% FOB Singapore M1	FOFS001	503.750	-14.600
0.5% FOB Singapore M2	FOFS002	502.000	-14.250
0.5% FOB Singapore MOPS Strip	FOFSA00	504.600	-14.750

PRODUCT PRICE ASSESSMENTS

U.S. GULF COAST, MAR 9

		Mid	Change		Mid	Change				Mid	Change				
Houston (PGA page 156)															
		Pipeline (¢/gal)			Differential to NYMEX			Cycle	RVP	Waterborne (¢/gal)			RVP		
Unl 87	PGACT00	198.47-198.57	198.520	+2.400	AANY105	-6.500	+2.250	PGACTCY 17	PGACTRV 9.0	PGACU00	200.47-200.57	200.520	+2.400	PGACURV 9.0	
Unl 89	PGAAY00	201.87-201.97	201.920	+1.400				PGAAYCY 17	PGAAYRV 9.0	PGAAZ00	203.87-203.97	203.920	+1.400	PGAAZRV 9.0	
Prem unl 93	PGAJB00	206.97-207.07	207.020	-0.100	AANYX76	2.000	-0.250	PGAJBCY 17	PGAJBRV 9.0	PGATX00	208.97-209.07	209.020	-0.100	PGATXRV 9.0	
CBOB 87	AARQU00	195.97-196.07	196.020	+3.150	AANYX77	-9.000	+3.000	AARQUCY 17	AARQURV 10.0	AAWES00	197.97-198.07	198.020	+3.150	AAWESRV 10.0	
CBOB 93	AARQV00	201.47-201.57	201.520	+3.150	AANYX78	2.000	-0.250	AARQVCY 17	AARQVRV 10.0						
RBOB 83.7	AAMFB00	202.22-202.32	202.270	+8.400	AANYX79	-2.750	+8.250	AAMFBCY 17	AAMFBRV 7.4						
RBOB 91.4	AAMNG00	217.22-217.32	217.270	+8.400	AANYX80	12.250	+8.250	AAMNGCY 17	AAMNGRV 7.4						
Jet/kero 54	PJABO00	170.93-171.03	170.980	-0.120	ADIAS00	-19.750	0.000	PJABOCY 17		PJABM00	172.43-172.53	172.480	-0.120		
Jet/kero 55	PJABP00	171.43-171.53	171.480	-0.120	ADIAZ00	-19.250	0.000	PJABPCY 17		PJABN00	172.93-173.03	172.980	-0.120		
ULS Kero	AAVTL00	177.93-178.03	177.980	-0.120	ADICA00	-12.750	0.000	AAVTLCY 17		AAVTK00	179.43-179.53	179.480	-0.120		
ULSD	AATGY00	187.98-188.08	188.030	-0.120	ADIQA00	-2.700	0.000	AATGYCY 17		AATGZ00	189.48-189.58	189.530	-0.120		
No. 2	POAED00	170.68-170.78	170.730	-0.120	ADIAA00	-20.000	0.000	POAEDCY 17		POAEE00	175.18-175.28	175.230	-0.120		
ULS Heating Oil	AAXFD00	173.28-173.38	173.330	-0.720	ADIAI00	-17.400	-0.600	AAXFDCY 17							
		Waterborne vs prompt pipeline (¢/gal)													
Jet Spread	AUSGL00		1.500	0.000											
ULSD Spread	AUSGN00		1.500	0.000											
No. 2 Spread	AUSGM00		4.500	0.000											
		FOB Cargo (¢/gal)			FOB Cargo (\$/mt)										
Export ULSD	AAXRV00		173.090	-0.810	AAXRW00		541.600	-2.530							
		FOB Cargo vs forward pipe strip (¢/gal)													
ULSD Mexico	AUSGH00		1.550	0.000											
ULSD Brazil	AUSGA00		1.650	0.000											
ULSD EN590	AUSGB00		1.800	0.000											
Jet A	AUSGC00		1.500	0.000											
Jet A-1	AUSGD00		2.000	0.000											
		Colonial Pipeline Gasoline Line Space (¢/gal)							Cycle						
Line 1	AAXTA00		-0.600	0.000				AAXTACY 17							
Line 3	AAXTB00		0.000	0.000				AAXTBCY 17							
Line 1+3	AAXTC00		-0.600	0.000				AAXTCCY 17							
		Colonial Pipeline Distillates Line Space (¢/gal)													
Line 2	AAXTD00		-0.750	0.000				AAXTDCY 17							
Line 3	AAXTE00		0.000	0.000				AAXTECY 17							
Line 2+3	AAXTG00		-0.750	0.000				AAXTGCY 17							
		(\$/barrel)			Differential vs USGC HSFO strip (\$/barrel)						USGC HSFO Strip (\$/barrel)				
Slurry Oil	PPAPW00	67.54-67.56	67.550	-0.900	AAUGS00	9.54-9.56	9.550	0.000							
No. 6 1.0% S 6 API	PUAAI00	68.37-68.39	68.380	-0.850	AAUGT00	10.37-10.39	10.380	+0.050							
USGC HSFO	PUAFZ00	57.54-57.56	57.550	-0.900	AAUGU00	-0.46--0.44	-0.450	0.000		AAUGW00	57.99-58.010	58.000	-0.900		
RMG 380	PUBDM00	57.54-57.56	57.550	-0.900	AAUGV00	-0.46--0.44	-0.450	0.000							
USGC HSFO swap BalMo(Mar)	AARZT00	57.95-58.05	58.000	-0.900											
USGC HSFO swap M1(Apr)	PUAXJ00	57.95-58.05	58.000	-0.900											
USGC HSFO swap M2(May)	PUAXL00	57.75-57.85	57.800	-0.750											
USGC HSFO swap Q1(Q2 21)	PUAXN00	57.67-57.77	57.720	-0.760											
(PGA page 330)															
		USGC RVP Adjustments (¢/gal)													
CBOB -1 psi	AGLOB00		2.100	+1.500											
Prem CBOB -1 psi	AGLOC00		2.250	+1.650											
CBOB +1 psi	AGLOA00		-1.300	+0.100											
Prem CBOB +1 psi	AGHOA00		-1.400	+0.100											

PRODUCT PRICE ASSESSMENTS

U.S. GULF COAST

		Mid	Change		Mid	Change		Mid	Change	
(PGF page 760)										
		Waterborne (¢/gal)			Diff vs USGC waterborne 87 (¢/gal)					
FOB Naphtha Cargo	AAXJP00	150.95	-151.05	151.000		-3.250				
FOB Naphtha Cargo (\$/mt)	AAXJU00	570.70	-570.80	570.750		-12.250				
Naphtha USGC vs Naphtha MOPJ (\$/mt)	ANAPD00			-18.250		-6.000				
DAP LSR Naphtha Parcel	AAXQK00			153.750		-1.750				
DAP LSR Naphtha Parcel (\$/mt)	AAXQM00			616.540		-7.020				
DAP LSR Naphtha Parcel diff**	AAXQN00			5.750		-0.250				
Naphtha barge	AALPG00	174.97	-175.07	175.020	AASGZ00		-25.500			
Heavy naphtha barge	AALPI00	178.97	-179.07	179.020	AASHD00		-21.500			
MTBE	PHAKX00	217.18	-217.28	217.230		+0.150				
								Diff vs USGC pipeline 87 (¢/gal)		
Alkylate*	AAXBAA00	208.730	+0.820		AAFIE00	9.000	0.000	AAXB00	11.000	0.000
Raffinate*	AAXB00	174.730	+0.820		AAJMU00	-25.000	0.000	AAXB00	-23.000	0.000
Reformate*	AAXBC00	227.730	+0.820		AAJMV00	28.000	0.000	AAXBF00	30.000	0.000

LSR = Light Straight Run. *=DAP barge. **= Diff to Mont Belvieu non-Targa 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, MAR 9 [\(PGA page 156\)](#)

(¢/gal)		Pipeline	Mid		Cycle	RVP		Pipeline	Mid		Cycle	RVP			
Gasoline															
Unl-87	AAELC00	198.47	-198.57	198.520	AAELCCY	17	AAELCRV	9.0	ULSD	AAUJW00	187.73	-187.83	187.780	AAUJWCY	18
Unl-87	AAELD00	197.97	-198.07	198.020	AAELDCY	18	AAELDRV	9.0	ULSD	AAUJX00	187.53	-187.63	187.580	AAUJXCY	19
Unl-87	AAELE00	197.47	-197.57	197.520	AALECY	19	AAELERV	9.0	ULSD	AAUJY00	187.18	-187.28	187.230	AAUJYCY	20
Unl-87	AAELF00	196.97	-197.07	197.020	AAELFCY	20	AAELFRV	9.0	ULSD	AAUJZ00	186.83	-186.93	186.880	AAUJZCY	21
Unl-87	AAELG00	196.47	-196.57	196.520	AAELGCV	21	AAELGRV	9.0	ULSD	AAUKD00	186.48	-186.58	186.530	AAUKDCY	22
Unl-87	AAELH00	195.97	-196.07	196.020	AAELHCY	22	AAELHRV	9.0	No. 2	AAELW00	170.68	-170.78	170.730	AAELWCY	17
CBOB 87	AARQW00			195.520	AARQWCY	18	AARQWRV	10.0	ULS heating oil	AAXFJ00	173.28	-173.38	173.330	AAXFJCY	17
CBOB 87	AARQX00			195.020	AARQXCY	19	AARQXRV	10.0	ULS heating oil	AAXFK00	173.03	-173.13	173.080	AAXFKCY	18
CBOB 87	AARQY00			194.520	AARQYCY	20	AARQYRV	10.0	ULS heating oil	AAXFL00	172.83	-172.93	172.880	AAXFLCY	19
CBOB 87	AARQZ00			194.020	AARQZCY	21	AARQZRV	10.0	ULS heating oil	AAXFM00	172.48	-172.58	172.530	AAXFMCY	20
CBOB 87	AARQA00			193.520	AARQACY	22	AARQARV	10.0	ULS heating oil	AAXFN00	172.13	-172.23	172.180	AAXFNCY	21
									ULS heating oil	AAXFP00	171.78	-171.88	171.830	AAXFPCY	22
Distillates															
Jet kero	AAELQ00	170.93	-171.03	170.980	AAELQCY	17			Forward pipeline strip						
Jet kero	AAELR00	170.43	-170.53	170.480	AAELRCY	18			ULSD 15-30 Day	AUSGI00			186.570		
Jet kero	AAELS00	170.53	-170.63	170.580	AAELSCY	19			ULSD 21-35 Day	AUSGJ00			186.300		
Jet kero	AAELT00	170.63	-170.73	170.680	AAELTCY	20			ULSD 7-21 Day	AUSGK00			186.960		
Jet kero	AAELU00	170.73	-170.83	170.780	AAELUCY	21			Jet Fuel 15-30 Day	AUSGE00			170.670		
Jet kero	AAELV00	170.83	-170.93	170.880	AAELVCY	22			Jet Fuel 21-35 Day	AUSGF00			170.740		
ULSD	AAUJV00	187.98	-188.08	188.030	AAUJVCY	17			Jet Fuel 7-21 Day	AUSGG00			170.550		

PRODUCT PRICE ASSESSMENTS

WEST COAST PIPELINE, MAR 9 (PGA page 158)

			Mid	Change		RVP			Mid	Change
California										
(¢/gal)		<u>Los Angeles</u>						<u>Differential to NYMEX</u>		
Unl 84	AAUHA00	206.97-207.07	207.020	-1.600	AAUHARV	10.0	AANYX84		2.000	-1.750
Prem unl 90	PGABG00	223.47-223.57	223.520	-1.600	PGABGRV	10.0	AANYX85		18.500	-1.750
CARBOB	AAKYJ00	207.97-208.07	208.020	-1.600	AAKYJRV	6.0	AANYX00	2.95/3.05	3.000	-1.750
CARBOB prem	AAKYL00	224.47-224.57	224.520	-1.600	AAKYLRV	6.0	AANYX86		19.500	-1.750
Jet fuel	PJAAP00	176.68-176.78	176.730	-0.620			AANYX00	-14.05/-13.95	-14.000	-0.500
ULS (EPA) diesel	POAET00	197.68-197.78	197.730	-1.620			AANVZ00	6.95/7.05	7.000	-1.500
CARB diesel	POAAK00	197.68-197.78	197.730	-1.620			AANNA00	6.95/7.05	7.000	-1.500
(¢/gal)		<u>San Francisco</u>						<u>Differential to NYMEX</u>		
Unl 84	PGADG00	204.72-204.82	204.770	+0.150	PGADGRV	13.5	AANYX87		-0.250	0.000
Prem unl 90	PGABO00	222.72-222.82	222.770	+0.150	PGABORV	13.5	AANYX88		17.750	0.000
CARBOB unl	AAKYN00	204.72-204.82	204.770	+0.150	AAKYNRV	6.0	AANYX89		-0.250	0.000
CARBOB prem	AAKYP00	222.72-222.82	222.770	+0.150	AAKYPRV	6.0	AANYX90		17.750	0.000
Jet Fuel	PJABC00	176.68-176.78	176.730	-0.620			ADINA00		-14.000	-0.500
ULS (EPA) diesel	POAEY00	193.68-193.78	193.730	+1.880			ADLAE00		3.000	+2.000
CARB diesel	POAAL00	193.68-193.78	193.730	+1.880			ADLAF00		3.000	+2.000
Other West										
(¢/gal)		<u>Phoenix</u>						<u>Differential to NYMEX</u>		
CBG/RBOB unl	AADDP00	209.72-209.82(a)	209.770	-1.600	AADDP RV	8.0	AANYX91		4.750	-1.750
CBG/RBOB prem	PPXDJ00	217.72-217.82(b)	217.770	-1.600	PPXDJRV	8.0	AANYX92		12.750	-1.750
Northwest										
(¢/gal)		<u>Seattle</u>						<u>Differential to NYMEX</u>		
Unl 84	AAJJE00	202.97-203.07	203.020	+0.150	AAJJERV	15.0	AANYX93		-2.000	0.000
Prem unl 90	AAJXF00	221.97-222.07	222.020	+0.150	AAJXFRV	15.0	AANYX94		17.000	0.000
Jet fuel	PJABB00	176.68-176.78	176.730	-0.620			ADIOA00		-14.000	-0.500
ULS (EPA) diesel	AAUEX00	193.53-193.63	193.580	+0.130			ADLAH00		-1.150	0.000
(¢/gal)		<u>Portland</u>						<u>Differential to NYMEX</u>		
Unl 84	AAJJC00	202.97-203.07	203.020	+0.150	AAJJCRV	13.5	AANYX95		-2.000	0.000
Prem unl 90	AAJJD00	221.97-222.07	222.020	+0.150	AAJJDRV	13.5	AANYX96		17.000	0.000
ULS (EPA) diesel	AAUEY00	194.68-194.78	194.730	+0.130			ADLAG00		4.000	+0.250

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

WEST COAST WATERBORNE, MAR 9 (PGA page 158)

(¢/gal)			Mid	Change
Unl 87	PGADI00	206.97-207.07	207.020	-1.600
Jet fuel	PJABI00	175.68-175.78	175.730	-0.620

CRUDE PRICE ASSESSMENTS

INTERNATIONAL, MAR 9

(\$/barrel)		Mid	Change
(PGA page 2210)			
Dubai (May)	PCAAAT00	66.35-66.37	66.360 -1.940
Dubai (Jun)	PCAAU00	65.66-65.68	65.670 -2.010
Dubai (Jul)	PCAAV00	65.03-65.05	65.040 -1.910
MEC (May)	AAWSA00	66.35-66.37	66.360 -1.940
MEC (Jun)	AAWSB00	65.66-65.68	65.670 -2.010
MEC (Jul)	AAWSC00	65.03-65.05	65.040 -1.910
Oman (May)	PCABS00	66.40-66.42	66.410 -1.940
Oman (Jun)	AAHZF00	65.71-65.73	65.720 -2.010
Oman (Jul)	AAHZH00	65.08-65.10	65.090 -1.910
Oman cash/OSP (May)	PCABT00	0.56-0.60	0.580 -0.520
(PGA page 1212)			
Brent (DTD)	PCAAS00	67.25-67.26	67.255 -1.480
DTD NSL	AAOFD00	67.25-67.26	67.255 -1.480
Dated Brent (CIF)	PCAKM00		68.070 -1.505
Brent (May)	PCAAQ00	67.79-67.81	67.800 -1.280
Brent (Jun)	PCAAAR00	67.35-67.37	67.360 -1.140
Brent (Jul)	PCARR00		66.650 -1.020
North Sea Basket	AAGIZ00	67.59-67.61	67.600 -1.425
(PGA page 218)			
Brent/WTI 1st	AALAU00	3.67/3.69	3.680 +0.120
Brent/WTI 2nd	AALAV00	3.55/3.57	3.560 +0.120
Brent/WTI 3rd	AALAY00		3.360 +0.110
Brent EFP (May)	AAGVX00	0.17/0.19	0.180 0.000
Brent EFP (Jun)	AAGVY00	0.20/0.22	0.210 0.000
Brent EFP (Jul)	AAMVY00		0.210 0.000
Swaps (PGA page 2658)			
Dubai (Apr)	AAHBM00	65.65-65.69	65.670 -2.010
Dubai (May)	AAHBN00	65.02-65.06	65.040 -1.910
Dubai (Jun)	AAHBO00	64.35-64.39	64.370 -1.800
MOG (Apr)	AAHZP00	65.70-65.74	65.720 -2.010
MOG (May)	AAHZR00	65.07-65.11	65.090 -1.910
MOG (Jun)	AAHZT00	64.40-64.44	64.420 -1.800
Oman/Dubai Swap (Apr)	AAIHJ00	0.03/0.07	0.050 0.000
Oman/Dubai Swap (May)	AAIHL00	0.03/0.07	0.050 0.000
Oman/Dubai Swap (Jun)	AAIHN00	0.03/0.07	0.050 0.000

ASIA (\$/barrel), MAR 9 (PGA page 2210)

		Mid	Change
Brent (May)	PCAJG00	68.20-68.24	68.220 -1.910
Brent (Jun)	PCAJI00	67.70-67.74	67.720 -1.760
Brent (Jul)	PCAJ000		66.980 -1.610
Brent (DTD)	AAXPG00		67.875 -2.410
Brent/Dubai	AAJMS00	1.85/1.87	1.860 +0.030
WTI (Apr)	AAFFU00	64.80-64.84	64.820 -1.910
WTI (May)	AAFFW00	64.70-64.74	64.720 -1.840
WTI (Jun)	AAFFY00	64.32-64.36	64.340 -1.750

NORTH SEA, MAR 9 (PGA page 1212)

(\$/barrel)		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Dated Brent Dtd				AAXEZ00	-0.02/0.00	-0.010 -0.140
BNB	AAVJA00	67.26-67.27	67.265 -1.470	AAVJB00	-0.01/0.01	0.000 -0.130
Forties	PCADJ00	67.43-67.44	67.435 -1.505	AAGWZ00	0.16/0.18	0.170 -0.165
Oseberg	PCAEU00	67.86-67.87	67.865 -1.390	AAGXF00	0.59/0.61	0.600 -0.050
Ekofisk	PCADT00	67.83-67.84	67.835 -1.335	AAGXB00	0.56/0.58	0.570 +0.005
Troll	AAWEX00	67.96-67.98	67.970 -1.335	AAWEY00	0.70/0.71	0.705 +0.005
Statfjord	PCAE000	67.21-67.22	67.215 -1.340	AAGXD00	-0.06/-0.04	-0.050 0.000
Flotta Gold	PCACZ00	66.01-66.02	66.015 -1.390	AAGXH00	-1.26/-1.24	-1.250 -0.050
Duc	AAWEZ00	67.46-67.47	67.465 -1.340	AAWFL00	0.19/0.21	0.200 0.000
Grane Blend	PCALA00		66.615 -1.390	PCALB00		-0.650 -0.050
Johan Sverdrup	AJSVA00		66.115 -1.390	AJSVB00		-1.150 -0.050
Statfjord (CIF)	AASAS00	68.15-68.16	68.155 -1.340	AASAT00	0.89/0.91	0.900 0.000
Gullfaks (CIF)	AASAU00	68.05-68.06	68.055 -1.340	AASAV00	0.79/0.81	0.800 0.000
Alvheim (CIF)	ALVHA00		68.455 -1.390	ALVHB00		1.200 -0.050
Asgard (CIF)	ASGCA00		66.755 -1.340	ASGCB00		-0.500 0.000
North Sea Dated Strip	AAKWH00	67.26-67.27	67.265 -1.340			
(\$/barrel)				Spread vs fwd CIF Dated Brent		
Dated Brent (CIF)	AAVJG00		68.070 -1.505	AAVJF00		0.815 -0.165
BNB (CIF)	PCAKP00		68.445 -1.490	AAVJC00		1.190 -0.150
Forties (CIF)	PCAKR00		68.070 -1.505	AAHX000		0.815 -0.165
Oseberg (CIF)	PCAKT00		68.675 -1.390	AAHXD00		1.420 -0.050
Ekofisk (CIF)	PCAKV00		68.545 -1.335	AAHXB00		1.290 +0.005
Troll (CIF)	AAXJ000		68.775 -1.330	AAXJN00		1.520 +0.010
North Sea CIF Dated Strip	AAHXE00		67.255 -1.340			

WEST AFRICA, MAR 9 (PGA pages 1230 and 1232)

(\$/barrel)		Mid	Change	Spread vs fwd DTD Brent	Mid	Change
Nigeria						
Bonny Light	PCAIC00	66.47-66.50	66.485 -1.235	AAGXL00	-0.41/-0.39	-0.400 0.000
Qua Iboe	PCAI000	66.37-66.40	66.385 -1.235	AAGXN00	-0.51/-0.49	-0.500 0.000
Forcados	PCABC00	66.47-66.50	66.485 -1.235	AAGXP00	-0.41/-0.39	-0.400 0.000
Agbani	AAQZB00	65.62-65.65	65.635 -1.235	AAQZC00	-1.26/-1.24	-1.250 0.000
Escravos	AAEIZ00	66.47-66.50	66.485 -1.235	AAGXR00	-0.41/-0.39	-0.400 0.000
Brass River	AAEJB00	66.27-66.30	66.285 -1.235	AAGXV00	-0.61/-0.59	-0.600 0.000
Akpo	PCNGA00	65.62-65.65	65.635 -1.235	PCNGB00	-1.26/-1.24	-1.250 0.000
Bonga	PCNGC00	66.47-66.50	66.485 -1.235	PCNGD00	-0.41/-0.39	-0.400 0.000
Usan	AAXUQ00		66.685 -1.235	AAXUR00		-0.200 0.000
Erha	AAXU000		66.735 -1.235	AAXUP00		-0.150 0.000
Egina	AFONA00		67.085 -1.235	AFONB00		0.200 0.000
Angola						
Cabinda	PCAFD00	66.67-66.70	66.685 -1.235	AAGXT00	-0.21/-0.19	-0.200 0.000
Nemba	AAQYZ00	65.82-65.85	65.835 -1.235	AAQZA00	-1.06/-1.04	-1.050 0.000
Dalia	AAQYX00	66.77-66.80	66.785 -1.235	AAQYY00	-0.11/-0.09	-0.100 0.000
Girassol	AASNL00	67.17-67.20	67.185 -1.235	AASJD00	0.29/0.31	0.300 0.000
Hungo	AASLJ00	66.32-66.35	66.335 -1.235	AASJF00	-0.56/-0.54	-0.550 0.000
Kissanje	AASLK00	66.77-66.80	66.785 -1.235	AASJE00	-0.11/-0.09	-0.100 0.000
Pazflor	PCNGG00	66.97-67.00	66.985 -1.235	PCNGH00	0.09/0.11	0.100 0.000
Plutonio	PCNGI00	66.42-66.45	66.435 -1.235	PCNGJ00	-0.46/-0.44	-0.450 0.000
Ghana						
Jubilee	AAXUS00		66.635 -1.235	AAXUT00		-0.250 0.000
Republic of Congo						
Djeno	PCNGE00	65.87-65.90	65.885 -1.235	PCNGF00	-1.01/-0.99	-1.000 0.000
Chad						
Doba	AAXUU00		67.935 -1.235	AAXUV00		1.050 0.000
30-60 Day Dtd strip	AAXRK00	66.88-66.89	66.885 -1.235			

CRUDE PRICE ASSESSMENTS

LONDON, MAR 9 (PGA page 1214)

(\$/barrel)		Brent CFD	Mid	Change		Dated Swap	Mid	Change
1wk (Jun)	PCAKA00	0.02/0.04	0.030	-0.180	AAJNV00	67.38/67.40	67.390	-1.320
2wk (Jun)	PCAKC00	-0.02/0.00	-0.010	-0.180	AAJOS00	67.34/67.36	67.350	-1.320
3wk (Jun)	PCAKE00	0.02/0.04	0.030	-0.190	AAJOU00	67.38/67.40	67.390	-1.330
4wk (Jun)	PCAKG00	-0.12/-0.10	-0.110	-0.190	AAJOW00	67.24/67.26	67.250	-1.330
5wk (Jun)	AAGLU00	-0.25/-0.23	-0.240	-0.180	AAJPC00	67.11/67.13	67.120	-1.320
6wk (Jun)	AAGLV00	-0.31/-0.29	-0.300	-0.170	AAJPE00	67.05/67.07	67.060	-1.310
7wk (Jun)	AALCZ00	-0.37/-0.35	-0.360	-0.130	AALAW00	66.99/67.01	67.000	-1.270
8wk (Jun)	AALDA00	-0.45/-0.43	-0.440	-0.080	AALAX00	66.91/66.93	66.920	-1.220

MEDITERRANEAN, MAR 9 (PGA pages 1220, 1222, 1234)

(\$/barrel)			Mid	Change		Spread vs fwd DTD Brent	Mid	Change
Med Dtd Strip	AALDF00	67.27-67.28	67.275	-1.345				
BTC Dtd Strip	AAUFI00	67.23-67.24	67.235	-1.340				
15-45 Day Dtd Strip	AALGM00	67.14-67.15	67.145	-1.330				
Urals (Rdam)	PCAFW00	65.29-65.31	65.300	-1.265	AAGXJ00	-1.98/-1.97	-1.975	+0.080
Urals (Med)	PCACE00	65.76-65.79	65.775	-1.245	AAGXX00	-1.51/-1.49	-1.500	+0.100
Urals (Ex-Baltic)	AAGZT00	64.24-64.27	64.255	-1.265	AAHPJ00	-3.03/-3.01	-3.020	+0.080
Urals FOB Novo Suez	AAGZS00	64.78-64.81	64.795	-1.300	AAHPH00	-2.49/-2.47	-2.480	+0.045
Urals FOB Novo Afra	AAOTH00	64.32-64.34	64.330	-1.355	AAOTI00	-2.95/-2.94	-2.945	-0.010
Urals (Primorsk)	AAWVH00	64.21-64.24	64.225	-1.265	AAWVI00	-3.06/-3.04	-3.050	+0.080
Urals (RCMB)	AALIN00	65.74-65.77	65.755	-1.380				
Iranian Light FOB Kharg Island (Med)	AILKA00		65.965	-1.195	AILKB00		-1.310	+0.150
Iranian Heavy FOB Kharg Island (Med)	AIHKA00		64.415	-1.195	AIHKB00		-2.860	+0.150
Es Sider	PCAC000	65.26-65.29	65.275	-1.345	AAGYH00	-2.01/-1.99	-2.000	0.000
Siberian Lt	AAGZJ00	66.06-66.09	66.075	-1.145	AAHPK00	-1.21/-1.19	-1.200	+0.200
Saharan Bld	AAGZY00	66.86-66.89	66.875	-1.345	AAHPN00	-0.41/-0.39	-0.400	0.000
Azeri Lt	AAGZX00	68.02-68.05	68.035	-1.340	AAHPM00	0.79/0.81	0.800	0.000
Azeri Lt FOB Ceyhan Suez	AAUFM00	67.38-67.40	67.390	-1.340	AAUFN00	0.15/0.16	0.155	0.000
Azeri Lt FOB Ceyhan Afra	AAUFL00	67.11-67.14	67.125	-1.340	AAUFL00	-0.12/-0.10	-0.110	0.000
Azeri Lt FOB Supsa	AATHM00	66.69-66.71	66.700	-1.445	AATHN00	-0.54/-0.53	-0.535	-0.105
BTC FOB Ceyhan	AAUFH00	67.24-67.27	67.255	-1.340	AAUFJ00	0.01/0.03	0.020	0.000
Suez Blend	PCACA00	63.03-63.06	63.045	-1.245	AAGYD00	-4.24/-4.22	-4.230	+0.100
Kirkuk	AAEJD00	66.31-66.34	66.325	-1.345	AAGYF00	-0.96/-0.94	-0.950	0.000
Syrian Lt	AAHMM00	66.70-66.72	66.710	-1.345	AALOU00	-0.57/-0.56	-0.565	0.000
Syrian Hvy	AAHMN00	62.22-62.25	62.235	-1.245	AALOV00	-5.05/-5.03	-5.040	+0.100
CPC Blend CIF	AAGZU00	65.01-65.04	65.025	-1.345	AAHPL00	-2.26/-2.24	-2.250	0.000
CPC Blend FOB Suez	AALVX00	64.15-64.18	64.165	-1.395	AALVZ00	-3.12/-3.10	-3.110	-0.050
CPC Blend FOB Afra	AAOFV00	63.74-63.77	63.755	-1.445	AAOFW00	-3.53/-3.51	-3.520	-0.100
(PPE page 1616)								
Urals Med CFD (Mar)	AAMDU00	-1.41/-1.39	-1.400	0.000	CPC Blend CFD (Mar)	AAOFX00	-1.900	0.000
Urals Med CFD (Apr)	AAMEA00	-1.11/-1.09	-1.100	0.000	CPC Blend CFD (Apr)	AAOFY00	-1.700	0.000
Urals Med CFD (May)	UMCM003	-1.11/-1.09	-1.100	0.000	CPC Blend CFD (May)	AAOFZ00	-1.500	0.000
Urals NWE CFD (Mar)	UNCM001	-2.01/-1.99	-2.000	-0.200				
Urals NWE CFD (Apr)	UNCM002	-1.76/-1.74	-1.750	-0.150				
Urals NWE CFD (May)	UNCM003	-1.61/-1.59	-1.600	0.000				

CANADA, MAR 9 (PGA page 230)

(\$/barrel)			Mid	Change
33-63 Day Dated Strip	AALEJ00	66.85-66.86	66.855	-1.220
Terra Nova	AAJUH00	66.59-66.62	66.605	-1.220
Hibernia	AAJKK00	66.74-66.77	66.755	-1.220
White Rose	AAVJX00	67.49-67.52	67.505	-1.220
		Spread vs fwd DTD Brent	Mid	Change
Terra Nova	AAJUJ00	-0.26/-0.24	-0.250	0.000
Hibernia	AAJKM00	-0.11/-0.09	-0.100	0.000
White Rose	AAVJY00	0.64/0.66	0.650	0.000

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

Mar 9			Mid	Change
Dated Brent	AAPYR00	56.56-56.57	56.565	-1.395
Dated Brent (CIF)	PCAKN00		57.255	-1.414
Urals (Mediterranean)	AAPYS00	55.31-55.34	55.325	-1.190
WTI (Apr)	AAPYT00	53.96-53.97	53.965	-1.425
WTI MEH (Apr)	AAYS00		55.228	-1.429
Mars (Apr)	AAPYU00	54.25-54.27	54.260	-1.510

Euro/US\$ forex rate: 1.188. 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), MAR 9 (PGA pages 210, 214 & 230)

			Mid	Change
Platts AGS	AGSAA00		66.120	-0.640
WTI (Apr)	PCACG00	64.00-64.02	64.010	-1.040
WTI (May)	PCACH00	63.98-64.00	63.990	-0.940
WTI (Jun)	AAGT000	63.68-63.70	63.690	-0.830
WTI EFP (Apr)	AAGVT00	-0.01/0.01	0.000	0.000
WTI EFP (May)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Jun)	AAGVV00	-0.01/0.01	0.000	0.000
Light Houston Sweet	AAXEW00		65.410	-1.140
Light Houston Sweet M2	AAYRY00		65.440	-0.840
LOOP Sour (Apr)	AALSM01		64.110	-1.190
LOOP Sour (May)	AALSM02		64.040	-1.090
LOOP Sour (Jun)	AALSM03		63.740	-0.980
Eagle Ford Marker	AAYA300		66.020	-0.900
Mars (Apr)	AAMBR00	64.20-64.22	64.210	-1.190
Mars (May)	AAMBU00	64.13-64.15	64.140	-1.090
Mars (Jun)	AAMBX00	63.83-63.85	63.840	-0.980
Mars/WTI (Apr)	AAGWH00	0.19/0.21	0.200	-0.150
Mars/WTI (May)	AAKTH00	0.14/0.16	0.150	-0.150
Mars/WTI (Jun)	AAMBO00	0.14/0.16	0.150	-0.150
LOOP/WTI (Apr)	AALOM01		0.100	-0.150
LOOP/WTI (May)	AALOM02		0.050	-0.150
LOOP/WTI (Jun)	AALOM03		0.050	-0.150
LOOP/Mars (Apr)	AALPM01		-0.100	0.000
LOOP/Mars (May)	AALPM02		-0.100	0.000
LOOP/Mars (Jun)	AALPM03		-0.100	0.000
Dated Brent	AAQBF00	67.16-67.18	67.170	-0.900
P-Plus WTI	PCACI00	3.50/3.52	3.510	-0.150
P-5 WTI	AAFEN00		60.540	-1.040
WTI-Delta	AAEJK00	0.12/0.14	0.130	-0.150
Kern River	PCABJ00	64.97-64.99	64.980	-1.750

US DOMESTIC CRUDE ASSESSMENTS LONDON CLOSE

		\$/barrel	Mid	Change
WTI (Apr)	AAQAR00	64.15-64.17	64.160	-1.530
WTI (May)	AAQAT00	64.11-64.13	64.120	-1.400
WTI (Jun)	AAQAV00	63.79-63.81	63.800	-1.260
WTI MEH (Apr)	AAYZR00		65.660	-1.530
WTI MEH (May)	AAXYD00		65.670	-1.200
LLS (Apr)	AAQBB00	66.30-66.32	66.310	-1.530
LLS (May)	AAQBD00	66.51-66.53	66.520	-1.250
Mars (Apr)	AAQAX00	64.50-64.52	64.510	-1.630
Mars (May)	AAQAZ00	64.46-64.48	64.470	-1.450

		Spread	Mid	Change
WTI (Apr)	AAQAS00	-0.01/0.01	0.00	0.000
WTI (May)	AAQAU00	-0.01/0.01	0.000	0.000
WTI (Jun)	AAQAW00	-0.01/0.01	0.000	0.000
WTI MEH (Apr)	AAQTA00		1.500	0.000
WTI MEH (May)	AAYWA00		1.550	+0.200
LLS (Apr)	AAQBC00	2.14/2.16	2.150	0.000
LLS (May)	AAQBE00	2.39/2.41	2.400	+2.400
Mars (Apr)	AAQAY00	0.34/0.36	0.350	-0.100
Mars (May)	AAQBA00	0.34/0.36	0.350	-0.050

			Mid	Change		Spread vs WTI	Mid	Change
WTI Midland	PCACJ00	64.85-64.87	64.860	-1.140	AAGVZ00	0.84/0.86	0.850	-0.100
WTI Midland (2nd month)	AAYZA00		64.790	-1.040	AAXF000		0.800	-0.100
LLS (1st month)	PCABN00	66.20-66.22	66.210	-0.990	AGWH000	2.19/2.21	2.200	+0.050
LLS (2nd month)	AAURC00	66.43-66.45	66.440	-0.740	AAURD00	2.44/2.46	2.450	+0.200
HLS (1st month)	PCABD00	65.85-65.87	65.860	-0.990	AAGWP00	1.84/1.86	1.850	+0.050
HLS (2nd month)	AAURE00	66.08-66.10	66.090	-0.740	AAURF00	2.09/2.11	2.100	+0.200
WTS (1st month)	PCACK00	64.35-64.37	64.360	-1.140	AAGWB00	0.34/0.36	0.350	-0.100
WTS (2nd month)	AAURG00	64.38-64.40	64.390	-1.140	AAURH00	0.39/0.41	0.400	-0.200
WTI MEH	AAVRG00		65.410	-1.140	AAYRH00		1.400	-0.100
WTI MEH (2nd month)	AAXXE00		65.440	-0.840	AAYYA00		1.450	+0.100
Poseidon	AABHK00	63.45-63.47	63.460	-1.190	AAGWL00	-0.56/-0.54	-0.550	-0.150
Eugene Island	PCAF000	64.55-64.57	64.560	-1.190	AGWD000	0.54/0.56	0.550	-0.150
Thunder Horse Blend	AAWZK00	65.55-65.57	65.560	-1.190	AAWZL00	1.54/1.56	1.550	-0.150
Wyoming Sweet	PCACM00	64.65-64.67	64.660	-0.890	AAGWP00	0.64/0.66	0.650	+0.150
Basrah Light	AAEJH00	67.29-67.31	67.300	-0.740	AAGWF00	3.30/3.32	3.310	+0.200
Bonito	PCAI000	64.55-64.57	64.560	-1.190	AAGWF00	0.54/0.56	0.550	-0.150
SGC	AASOJ00	63.50-63.52	63.510	-1.190	AASOJ00	-0.51/-0.49	-0.500	-0.150

			Mid	Change	Spread vs NYMEX WTI CMA		Mid	Change
ANS (Cal)	PCAAD00	67.40-67.44	67.420	-0.600	AAGWX00	3.53/3.55	3.540	+0.290
WCS ex-Cushing	AAWTY00	60.62-60.64	60.630	-0.890	AAWTZ00	-3.26/-3.24	-3.250	0.000
WCS ex-Nederland	AAYAY00		61.430	-0.890	AAVAX00		-2.450	0.000
Bakken Williston	AAVPP00		64.730	-1.290	AASRX00		0.850	-0.400
Bakken Guernsey	AASRR00	64.67-64.69	64.680	-0.890	AASRV00	0.79/0.81	0.800	0.000
Bakken Clearbrook	AASRU00	65.22-65.24	65.230	-1.290	AASRW00	1.34/1.36	1.350	-0.400
Bakken USGC Pipe	ABAKA00		65.530	-1.140	ABAKB00		1.650	-0.250
Americas Crude Marker (Apr)	AAQHN00	63.45-63.47	63.460	-1.190				
Americas Crude Marker (May)	AAQH000	63.38-63.40	63.390	-1.090				
Americas Crude Marker (Jun)	AAQHP00	63.08-63.10	63.090	-0.980				
Thums	PCACD00	66.59-66.61	66.600	-1.750				
Line 63	PCABM00	69.32-69.36	69.340	-1.850				
P-Plus Line 63	PCAFV00	2.39/2.41	2.400	0.000				

			Mid	Change	Spread vs Eagle Ford Yield		Mid	Change
Eagle Ford postings avg.	AAVAH00		60.970	-1.020	AAVAI00		-5.050	-0.120
		FOB USGC			FOB USGC Spread vs NYMEX WTI Strip			
Platts AGS	AGSAA00		66.120	-0.640	AGSAC00		2.210	+0.290
Bakken	ABAKC00		65.920	-0.640	ABAKD00		2.010	+0.290
Eagle Ford Crude	AAVAT00		65.620	-0.640	AAVAU00		1.710	+0.290
Eagle Ford Condensate	AAVAP00		64.670	-0.640	AAVAS00		0.760	+0.290
WTI	AAVBA00		66.120	-0.640	AAVAZ00		2.210	+0.290

			Mid	Change
Platts AGS	AGSAB00		-0.930	+0.120
Bakken	ABAKE00		-1.130	+0.120
Eagle Ford Crude	AEFCA00		-1.430	+0.120
Eagle Ford Condensate	AEFCB00		-2.380	+0.120
WTI	AWTUA00		-0.930	+0.120

US CRUDE ASSESSMENTS SINGAPORE CLOSE

		Mid	Change
<i>(PGA page 2208)</i>			
LOOP Sour (Apr)	AAZDA00	65.070	-2.010
LOOP Sour (May)	AAZDB00	64.920	-2.040
LLS (Apr)	AAZDC00	66.970	-1.910
LLS (May)	AAZDD00	66.970	-1.590
Southern Green Canyon	AAZDE00	64.470	-2.010
WTI MEH (Apr)	AAZDF00	66.320	-1.860
WTI MEH (May)	AAZDG00	66.070	-1.940

CRUDE PRICE ASSESSMENTS

CANADIAN SPOT CRUDE ASSESSMENTS, MAR 9

(PGA pages 230 & 232)		C\$/cu m	Mid	Change
Lloyd Blend	AALRM00	423.187-423.346	423.267	-6.318
Mixed Sweet	AALRT00	489.186-489.345	489.265	-6.784
Light Sour Blend	AALRZ00	486.800-486.959	486.880	-6.781
Midale	AAUCD00	479.644-479.803	479.723	-6.774
Condensates	AALSH00	523.378-523.537	523.458	-7.614
Syncrude Sweet Prem.	AASOL00	527.751-527.910	527.831	-0.057
WCS	AAPP000	419.211-419.370	419.291	-6.315
Cold Lake	AASZY00	418.416-418.575	418.496	-6.314

		\$/barrel		
			Mid	Change
Lloyd Blend	AALRK00	53.220-53.240	53.230	-0.740
Mixed Sweet	AALRR00	61.520-61.540	61.530	-0.790
Light Sour Blend	AALRX00	61.220-61.240	61.230	-0.790
Midale	AAUCC00	60.320-60.340	60.330	-0.790
Condensates	AALSF00	65.820-65.840	65.830	-0.890
Syncrude Sweet Prem.	AASOK00	66.370-66.390	66.380	+0.060
WCS	AAPPN00	52.720-52.740	52.730	-0.740
Cold Lake	AASZX00	52.620-52.640	52.630	-0.740

Spread vs Canada Basis

Lloyd Blend	AALRP00	-10.660/-10.640	-10.650	+0.150
Mixed Sweet	AALRV00	-2.360/-2.340	-2.350	+0.100
Light Sour Blend	AALSD00	-2.660/-2.640	-2.650	+0.100
Midale	AAUCE00	-3.560/-3.540	-3.550	+0.100
Condensates	AALSJ00	1.940/1.960	1.950	0.000
Syncrude Sweet Prem.	AASOM00	2.490/2.510	2.500	+0.950
WCS	AAPPP00	-11.160/-11.140	-11.150	+0.150
Cold Lake	AASZZ00	-11.260/-11.240	-11.250	+0.150

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

DELIVERED-ASIA SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 2238)

US Delivered-Asia Spot Crudes		Mid	Change		Diff to Dubai	Diff to Asian Dated Brent			
				Mid	Change	Mid	Change		
WTI Midland (DES Singapore)	WTMSA00	67.770	-1.600	WTMSD00	3.400	+0.200	WTMSB00	1.340	+0.020
WTI Midland (DES Yeosu)	WTMYA00	68.270	-1.600	WTMYD00	3.900	+0.200	WTMYB00	1.840	+0.020

Brazil Delivered-Asia Spot Crudes

Tupi (DES Qingdao)	LUQDA00	68.620	-1.600	LUQDD00	4.250	+0.200	LUQDB00	2.190	+0.020
--------------------	---------	--------	--------	---------	-------	--------	---------	-------	--------

LATIN AMERICA CRUDE (\$/barrel), MAR 9 (PGA page 280)

		FOB Crude		Mid	Change		Diff to WTI strip	Diff to Futures Brent strip	Diff to Dated Brent strip	
Oriente	PCADE00	62.92-62.97	62.945	-1.045	PCAGU00	-0.900	AAXBH00	-3.895	AAXBH00	-3.850
Vasconia	PCAGI00	64.02-64.06	64.040	-0.610	PCAGR00	0.195	AAXCB00	-2.800	AAXBN00	-2.755
Roncador	AAQTL00	63.82-63.86	63.840	-0.610	AAQTK00	-0.005	AAXBT00	-3.000	AAXAY00	-2.955
Escalante	PCAGC00	68.82-68.86	68.840	-0.610	PCAG000	4.995	AAXBS00	2.000	AAXAX00	2.045
Loreto	PCAGH00	62.02-62.07	62.045	-1.045	PCAGQ00	-1.800	AAXBV00	-4.795	AAXBG00	-4.750
Mesa 30	AAITB00	64.32-64.36	64.340	-1.110	AAITH00	0.495	AAXCC00	-2.500	AAXB000	-2.455
Santa Barbara	AAITD00	66.42-66.47	66.445	-0.745	AAITJ00	2.600	AAXBU00	-0.395	AAXAZ00	-0.350
Marlim	AAITF00	63.87-63.91	63.890	-0.610	AAITL00	0.045	AAXBY00	-2.950	AAXBJ00	-2.905
Napo	AAMCA00	60.92-60.97	60.945	-1.545	AAMCD00	-2.900	AAXBX00	-5.895	AAXBI00	-5.850
Castilla Blend	AAVEQ00	62.72-62.76	62.740	-0.610	AAVEQ01	-1.105	AAXBZ00	-4.100	AAXBK00	-4.055
Magdalena	AAWFR00	61.12-61.16	61.140	-0.610	AAWF000	-2.705	AAXCA00	-5.700	AAXBL00	-5.655
Liza	ALIZA00		66.990	-0.610	ALIZD00	3.145	ALIZC00	0.150	ALIZB00	0.195
Latin America WTI strip	AAXB000		63.845	-0.895						
Latin America Futures Brent strip	AAXBQ00		66.840	-0.610						
Latin America Dated Brent strip	AAXBR00		66.795	-0.715						

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

08Mar	AAEUQ00	Change
		68.170
		+1.140

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 OIL POSTINGS

		Effective date		Effective date		Effective date		Effective date		
US (\$/barrel) (PGA page 250)										
		Plains		Shell		Sunoco		Valero		
WTI	PSADF09	60.49*	09MAR21	PSADI09	60.60*	60.50*	09MAR21	PSACS09	60.50*	09MAR21
WTS	PSAED09	59.49	09MAR21	PSAEG09	60.94	55.50	09MAR21			
LLS	PSAM009	58.99	09MAR21	PSAMQ09	58.99	59.00	09MAR21	PSATF09	62.63	09MAR21
Ok. Swt.	PSUS191	60.49	09MAR21	PSANX09	60.35	60.50	09MAR21			
Kansas	PSAPL09	50.84	09MAR21	PSUS112	53.08			PSAPE09	59.50	09MAR21
Wyo. Swt	PSAQZ09	57.59	09MAR21							
Eugene Island	AALBB00	55.99	09MAR21							
Eagle Ford						PSUS100	60.50			09MAR21
Eagle Fd Cond						PSUS110	59.50			09MAR21
		Phillips66		FlintHls					Coffey	
WTI	PSACP09	60.63*	09MAR21	AAUQN00	60.50			PSUS066	60.75	09MAR21
WTS	PSADO09	60.49	09MAR21							
LLS	PSAMC09	59.38	09MAR21							
Ok. Swt	PSASL09	60.43	09MAR21					PSUS064	60.50	09MAR21
Kansas								PSUS060	54.25	09MAR21
Wyo. Swt.				PSUS264	57.75					
Wyo. Sr.				PSUS261	51.25					

*P-5 WTI is a crude oil postings-based index as of 5:30 p.m. local New York time. Posted prices by the following companies are used in the index: Phillips66, Plains, Sunoco, Shell, and Valero. Postings available at presstime. Companies listed are representative of key crude oil purchasers.

SPOT TANKER RATES, MAR 9

From	Route	To	Size (mt)	WS	Rate (\$/mt)		
Clean							
(PGT page 1910)							
Med	UKC	PFADCSZ	30k	PFADC10	130.00	TCABA00	14.40
Med	USAC	PFACWSZ	37k	PFACW10	115.00	TCABC00	18.12
Med	Med	PFADBSZ	30k	PFADB10	120.00	TCAAY00	6.60
UKC	UKC	PFALYSZ	22k	PFALY00	163.75	TCABV00	8.60
UKC	USAC	PFAMASZ	37k	PFAMA00	115.00	TCABX00	15.18
UKC	USGC	PFAMBSZ	37k	PFAMB00	110.00	TCACA00	19.90
BSea	Med	PFABXSZ	30k	PFABX00	135.00	TCAAP00	14.27
(PGT page 2920)							
AG	India	PFABMSZ	35k	PFABM10	195.00	TCAAF00	13.61
AG	Japan	PFABNSZ	35k	PFABN10	140.00	TCAAH00	29.48
Sing	Japan	PFAEBSZ	30k	PFAEB10	150.00	TCABP00	15.59
Sing	HK	PFAKWSZ	30k	PFAKW10	360.00*	TCADI00	12.00
(PGT page 2922)							
AG	Japan	PFAEYSZ	55k	PFAEY10	100.00	TCAAI00	21.06
AG	Japan	PFAMTSZ	75k	PFAMT00	87.50	TCAAJ00	18.43
Dirty							
(PGT page 1962)							
Carib	USGC	PFANZSZ	50k	PFANZ00	145.00	TDABA00	13.18
Carib	USAC	PFALTSZ	70k	PFALT10	187.50	TDAAY00	17.76
(PGT page 1960)							
Med	Med	PFAJPSZ	80k	PFAJP10	102.50	TDABL00	8.11
Med	USGC	PFAJOSZ	80k	PFAJ010	65.00	TDABU00	12.60
UKC	UKC	PFAKDSZ	80k	PFAKD10	105.00	TDACD00	7.17
UKC	USAC	PFAKESZ	80k	PFAKE10	70.00	TDACG00	9.67
(PGT page 1970)							
WAF	USGC	PFAIASZ	130k	PFAIA10	60.00	TDACV00	11.86
UKC	USGC	PFAHNSZ	135k	PFAHN10	45.00	TDACH00	8.17
Med	USGC	PFAHGSZ	135k	PFAHG10	45.00	TDABS00	8.73
(PGT page 2970)							
AG	Asia	PFAJDSZ	80k	PFAJD10	87.50	TDAAC00	15.00
(PGT page 2980)							
AG	Asia	PFAOCSZ	270k	PFAOC00	29.00	TDAAB00	5.74
AG	USGC	PFAOGSZ	280k	PFAOG00	18.00	TDAAN00	6.69

*values are in lumpsum

PLATTS FUTURES ASSESSMENTS SINGAPORE MOC, MAR 9 [\(PGA page 703\)](#)

NYMEX RBOB (¢/gal)

Apr	XNRBA01	204.160
May	XNRBA02	203.870
Jun	XNRBA03	202.430

NYMEX NY ULSD (¢/gal)

Apr	XNH0A01	190.340
May	XNH0A02	190.310
Jun	XNH0A03	190.310

PLATTS FUTURES ASSESSMENTS, MAR 9

NYMEX light sweet crude (\$/barrel) [\(PGA page 701\)](#)

CME 2:30 PM ET settlement		
Apr	AAWS001	64.010
May	AAWS002	63.990
Jun	AAWS003	63.690
Jul	AAWS004	63.200
Platts 2:30 PM ET futures assessment		
Apr	NYCRM01	64.020
May	NYCRM02	64.000
Jun	NYCRM03	63.690
Jul	NYCRM04	63.180
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AAWD001	-0.010
May	AAWD002	-0.010
Jun	AAWD003	0.000
Jul	AAWD004	0.020

NYMEX RBOB (¢/gal) [\(PGA page 701\)](#)

CME 2:30 PM ET settlement		
Apr	AARS001	205.020
May	AARS002	204.810
Jun	AARS003	203.210
Platts 2:30 PM ET futures assessment		
Apr	NYRBM01	205.070
May	NYRBM02	204.820
Jun	NYRBM03	203.210
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AARD001	-0.050
May	AARD002	-0.010
Jun	AARD003	0.000

NYMEX NY ULSD (¢/gal) [\(PGA page 701\)](#)

CME 2:30 PM ET settlement		
Apr	AAHS001	190.730
May	AAHS002	190.590
Jun	AAHS003	190.410
Platts 2:30 PM ET futures assessment		
Apr	NYHOM01	190.760
May	NYHOM02	190.620
Jun	NYHOM03	190.410
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AAHD001	-0.030
May	AAHD002	-0.030
Jun	AAHD003	0.000

ICE Brent crude (\$/barrel) [\(PGA page 703\)](#)

Platts 2:30 PM ET futures assessment		
May	AAQB000	67.530
Jun	AAQB000	67.050
Jul	AAZZ000	66.350
Aug	AAVAL00	65.740

FUTURES SETTLEMENTS, MAR 9

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
NYMEX Light sweet crude (\$/barrel) (PGA page 705)								
Apr 21	NMCL001	64.01	-1.04	63.76	65.98	512860	284085	
May 21	NMCL002	63.99	-0.94	63.76	65.87	248529	315940	
Jun 21	NMCL003	63.69	-0.83	63.42	65.46	174393	328019	
Jul 21	NMCL004	63.20	-0.74	62.93	64.86	77993	175141	
Total	NMCL000					1224414		XNCLP00 33089

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
NYMEX NY ULSD (\$/gal) (PGA page 705)								
Apr 21	NMHO001	1.9073	-0.0012	1.8945	1.9362	51061	102558	
May 21	NMHO002	1.9059	-0.0032	1.8948	1.9352	35177	76962	
Jun 21	NMHO003	1.9041	-0.0048	1.8966	1.9341	31200	65920	
Jul 21	NMHO004	1.9027	-0.0057	1.8968	1.9326	9204	25046	
Total	NMHO000					140693		XNHOP00 12591

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
NYMEX RBOB unleaded gasoline (\$/gal) (PGA page 705)								
Apr 21	NMRB001	2.0502	+0.0015	2.0338	2.0859	42510	102283	
May 21	NMRB002	2.0481	+0.0010	2.0321	2.0828	46385	99914	
Jun 21	NMRB003	2.0321	+0.0001	2.0169	2.0656	26785	62942	
Jul 21	NMRB004	2.0067	-0.0009	1.9947	2.0396	12892	32209	
Total	NMRB000					139167		XNRBP00 9657

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
NYMEX Natural Gas (\$/MMBtu) (PGA page 705)								
Apr 21	NMNG001	2.662	+0.00	2.624	2.690	89282	154623	
May 21	NMNG002	2.696	+0.00	2.660	2.724	54390	219682	
Jun 21	NMNG003	2.752	+0.00	2.716	2.778	30968	85721	
Jul 21	NMNG004	2.807	+0.00	2.771	2.831	22444	79656	
Total	NMNG000					254276		XNNGP00 6535

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
DME Oman crude (\$/barrel)** (PGA pages 702 & 2710)								
May 21 Asia	XDOA001	66.42	-1.93			3090		
May 21	DMOQ001	66.35	-0.18	66.35	66.52	2424	4821	
Jun 21	DMOQ002	65.71	-0.12	65.71	65.71	2129	0	
Jul 21	DMOQ003	65.07	-0.02	65.07	65.07	2129	0	
Aug 21	DMOQ004	64.44	+0.01	64.44	64.44	0	0	
Total	DMOQ000					6682		XDOQP00 0

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE Brent (\$/barrel) (PGA page 704)								
May 21	ICLL001	67.52	-0.72	67.25	69.33	394356	550474	
Jun 21	ICLL002	67.05	-0.65	66.78	68.76	283540	422463	
Jul 21	ICLL003	66.35	-0.58	66.09	67.96	136803	268618	
Aug 21	ICLL004	65.74	-0.53	65.48	67.27	84955	137184	
Total	ICLL000					1114637		XILLP00 23016

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE BWAVE (Brent weighted futures average)(\$/barrel) (PGA page 704)								
May 21	XIBW001	69.30						
Jun 21	XIBW002	68.62						
BWAVE data refer to previous day.								

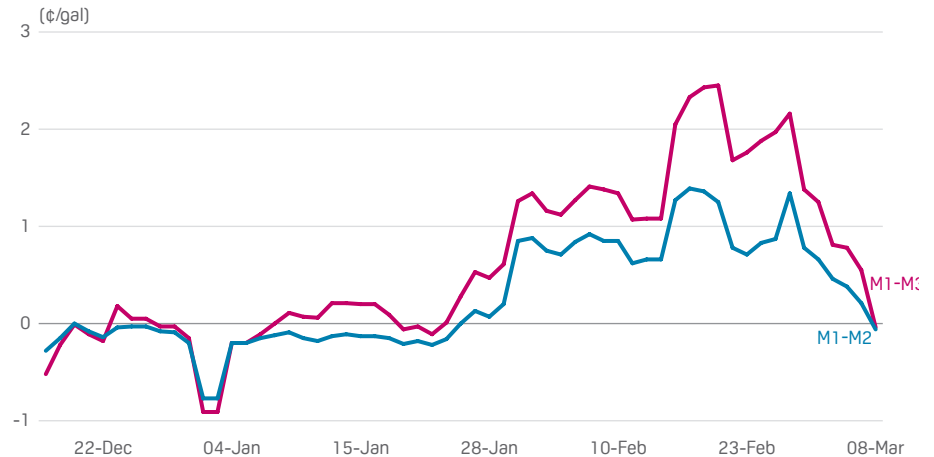
		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE WTI (\$/barrel) (PGA page 704)								
Apr 21	ICIC001	64.01	-1.04	63.78	65.98	29320	39137	
May 21	ICIC002	63.99	-0.94	63.77	65.83	61676	51451	
Jun 21	ICIC003	63.69	-0.83	63.48	65.32	66134	71086	
Jul 21	ICIC004	63.20	-0.74	63.00	64.73	41736	26888	
Total	ICIC000					273195		XIICP00 6119

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE low sulfur Gasoil (\$/mt) (PGA page 704)								
Mar 21	ICLO001	537.75	-8.25	535.50	548.50	61607	45859	
Apr 21	ICLO002	540.00	-8.00	537.75	550.50	125765	182745	
May 21	ICLO003	541.75	-7.75	539.25	552.00	58697	131287	
Jun 21	ICLO004	542.25	-7.75	540.00	552.75	52840	117324	
Total	ICLO000					361446		XILOP00 5472

*Volume, open interest and PNT reflect prior trading day. PNT reflect volume for Privately Negotiated Trades or off-exchange.
Oman settlements are Post Close settlements. *Privately Negotiated Trade values found on PGA page 710

Source: CQG

NYMEX ULSD FALLS BACK INTO CONTANGO



Source: S&P Global Platts

FIVE-DAY ROLLING AVERAGES, FIVE DAYS ENDING MARCH 9

		Conversion		
Naphtha (PGA page 34)				
		\$/barrel		¢/gal
Singapore	PAAAP00	66.30–66.34	(/3.78)	157.86–157.96
		\$/mt		¢/gal
Japan C/F	PAAAD00	604.30–609.80	(/3.78)	159.87–161.32
Arab Gulf	PAAAA00	581.47–586.97	(/3.78)	153.83–155.28
CIF NWE physical	PAAAL00	591.30–591.80	(/3.78)	156.43–156.56
Rotterdam barge	PAAAM00	587.30–587.80	(/3.78)	155.37–155.50
FOB Med	PAAAI00	573.95–574.45	(/3.78)	151.84–151.97
CIF Genoa	PAAAH00	583.95–584.45	(/3.78)	154.48–154.62
		¢/gal		\$/mt
US Gulf FOB cargo	AAXJP00	152.60–152.70	(*3.54669)	576.95–577.05
US Gulf DAP LSR parcel	AAXQK00	153.55	(*4.0083)	615.47

Jet Kerosene (PGA page 35)

		\$/mt		¢/gal
CIF NWE cargo	PJAAU00	554.50–555.00	(/7.89)	167.33–167.48
Rotterdam barge	PJABA00	552.80–553.30	(/7.89)	166.82–166.97
FOB Med	AAIDL00	539.95–540.45	(/7.89)	162.94–163.09
CIF Genoa	AAZBN00	553.00–553.50	(/7.89)	166.88–167.03
Carib cargo	PJAAD00	575.34–575.40	(/7.7)	178.13–178.14
		¢/gal		\$/mt
US Gulf water	PJABM00	171.83–171.93	(*4.2)	569.41–569.74
US Gulf pipe	PJABO00	170.33–170.43	(*4.2)	564.44–564.77
NY barge	PJAAW00	174.07–174.17	(*4.2)	574.43–574.76
LA pipeline	PJAAP00	176.78–176.88	(*4.2)	563.93–564.25
Group 3	PJAAI00	184.58–184.68	(*4.2)	611.66–611.99
Chicago	PJAAP00	184.20–184.30	(*4.2)	610.40–610.73

Crude Oil, FOB Source

		\$/barrel		
West Texas Int	PCACG00	64.04–64.06		
NYMEX Crude	XNCL001	63.20		
Mars	AMBR00	64.30–64.32		
Brent (DTD)	PCAS00	67.40–67.41		
Brent (First month)	PCAAQ00	67.44–67.46		
Dubai (First Month)	PCAA00	65.09–65.11		
Oman (First Month)	PCABS00	65.11–65.13		
Urals CIF med	PCACE00	65.17–65.20		
WTI Posting Plus	PCACI00	3.67–3.69		

Gasoline, U.S. Market (PGA page 36)

		Unleaded		Premium
(\$/gal)				
US Gulf water	PGACU00	196.72–196.82	PGAI00	206.92–207.02
US Gulf pipe	PGACT00	194.72–194.82	PGAJ00	204.92–205.02
Group 3			PGAB00	224.07–224.17
LA Pipeline			PGABG00	221.87–221.97
SF Pipeline	PGADG00	202.87–202.97	PGABO00	220.87–220.97
Chicago	PGACR00	186.27–186.37	PPASQ00	204.02–204.12
NYMEX Unl	XNRB001	199.99		

		Conversion		
Gasoline, Intl. Market				
		Prem (\$/mt)		¢/gal
R'dam Barge Prem unl	PGABM00	621.00–621.50	(/3.51)	176.92–177.07
		\$/barrel		¢/gal
Singapore	POABC00	71.21–71.25	(/3.78)	169.55–169.64
Arab Gulf	POAAT00	69.42–69.46	(/3.78)	165.29–165.38
		\$/mt		¢/gal
0.1 CIF ARA	AAYS00	534.95–535.45	(/3.133)	170.91–171.07
50 ppm Rotterdam barge	AAUC00	533.85–534.35	(/3.133)	170.56–170.72
0.1 Rotterdam barge	AAWT00	525.90–526.40	(/3.133)	168.02–168.18
0.1 FOB NWE	AAWR00	522.20–522.70	(/3.133)	166.84–167.00
0.1 CIF Med	AAVJ00	535.60–536.10	(/3.133)	171.12–171.28

(PGA page 33)

		¢/gal		\$/barrel
L.A. LS diesel	POAET00	199.13–199.23	(*3.07)	611.33–611.64
S.F. LS diesel	POAEY00	191.08–191.18	(*3.07)	586.62–586.92
		¢/gal		\$/mt
NY barge	POAEG00	169.08–169.18	(*3.15)	532.60–532.92
US Gulf water	POAEE00	174.28–174.38	(*3.08)	536.78–537.09
US Gulf pipe	POAED00	169.78–169.88	(*3.08)	522.92–523.23
NYMEX NY ULSD	XNH001	187.85	(*3.08)	591.71

Low Sulfur Resid Fuel Oil (PGA page 38)

		\$/mt		\$/barrel
CIF ARA 1%	PUAAL00	455.05–455.55	(/6.35)	71.66–71.74
Rot bar 1%	PUAAP00	443.65–444.15	(/6.35)	69.87–69.94
NWE FOB 1%	PUAAM00	444.85–445.35	(/6.35)	70.06–70.13
Med FOB 1%	PUAAK00	447.70–448.20	(/6.35)	70.50–70.58
		\$/barrel		\$/mt
NY Cargo .3% HP	PUAAE00	82.26–82.28	(*6.7)	551.16–551.29
NY Cargo .3% LP	PUAAB00	82.26–82.28	(*6.7)	551.16–551.29
NY Cargo .7% Max	PUAAH00	71.88–71.90	(*6.5)	467.19–467.32
NY Cargo 1% Max	PUAAO00	67.54–67.56	(*6.5)	439.01–439.14
US Gulf 1%	PUAAI00	68.36–68.38	(*6.11)	432.06–432.19

Hi Sulfur Resid Fuel Oil (PGA page 39)

		\$/mt		\$/barrel
Singapore 180	PUADV00	389.36–389.40	(/6.35)	61.32–61.32
Singapore 380	PPXDK00	385.72–385.76	(/6.35)	60.74–60.75
Arab Gulf 180	PUABE00	378.38–378.42	(/6.35)	59.59–59.59
CIF ARA 3.5%	PUABA00	373.70–374.20	(/6.35)	58.85–58.93
NWE FOB 3.5%	PUABB00	360.25–360.75	(/6.35)	56.73–56.81
Med FOB 3.5%	PUAAZ00	366.00–366.50	(/6.35)	57.64–57.72
CIF Med 3.5%	PUAAY00	378.90–379.40	(/6.35)	59.67–59.75
		\$/barrel		\$/mt
USAC HSFO	PUAAX00	59.67–59.69	(*6.35)	378.90–379.03
USGC HSFO	PUAFZ00	57.57–57.59	(*6.35)	365.59–365.72
Carib 2.0%	PUAAS00	57.87–57.89	(*6.4)	370.37–370.48

US WHOLESALE POSTED PRICES EFFECTIVE MAR 9

PADD 1	Unleaded	Midgrade	Premium	Kerosene	Diesel No.2	ULSD
Albany, NY	DR198ZY 191.95-196.70	DM198ZY 197.45-208.58	DP198ZY 207.30-225.95	DK198ZY 215.50-225.20		DU198ZY 197.00-203.65
Allentown	DR235ZY 191.80-195.25	DM235ZY 198.89-212.21	DP235ZY 207.21-236.62		DH235ZY -	DU235ZY 196.75-200.63
Atlanta	DR048ZY 188.60-212.40	DM048ZY 197.40-212.40	DP048ZY 199.08-243.52			DU048ZY 194.15-198.73
Baltimore (a)	DR123ZY 190.13-199.03	DM123ZY 197.05-211.04	DP123ZY 205.50-250.04	DK123ZY 209.00-230.32	DH123ZY -	DU123ZY 193.76-206.40
Binghamton	DR200ZY 194.25-197.90	DM200ZY 199.23-212.68	DP200ZY 209.05-220.88			DU200ZY 200.72-203.25
Boston (a)	DR121ZY 189.50-192.65	DM121ZY 194.25-197.90	DP121ZY 202.55-204.95	DK121ZY 236.90-236.90		DU121ZY 198.25-202.32
Charleston	DR250ZY 195.00-208.10	DM250ZY 205.35-210.10	DP250ZY 232.60-241.77			DU250ZY 199.45-209.90
Charlotte	DR169ZY 187.80-195.85	DM169ZY 199.05-212.85	DP169ZY 199.53-242.85			DU169ZY 193.91-200.50
Fairfax (a)	DR299ZY 187.80-206.94	DM299ZY 202.96-226.94	DP299ZY 219.20-255.45			DU299ZY 190.69-200.20
Greensboro				DK171ZY 238.50-238.50		DU171ZY 193.76-197.83
Miami					DU039ZY 199.30-204.09	
New Haven (a)	DR034ZY 188.55-196.11	DM034ZY 193.40-206.15	DP034ZY 201.60-227.12	DK034ZY 236.60-236.60	DH034ZY -	DU034ZY 196.45-201.95
New York City (a)	DR204ZY 190.86-191.85	DM204ZY 195.99-197.55	DP204ZY 205.25-205.51			DU204ZY 198.99-217.16
Newark (a)	DR189ZY 184.00-192.06	DM189ZY 189.83-199.96	DP189ZY 194.00-220.96	DK189ZY 227.21-227.21		DU189ZY 193.50-200.51
Norfolk (a)	DR300ZY 189.00-198.85	DM300ZY 202.01-215.85	DP300ZY 221.76-253.94			DU300ZY 192.79-199.40
Orlando	DR041ZY 194.00-202.75	DM041ZY 205.64-218.55	DP041ZY 219.50-251.84			DU041ZY 197.70-204.34
Philadelphia (a)	DR242ZY 188.23-197.56	DM242ZY 194.25-205.49	DP242ZY 203.27-216.79		DH242ZY -	DU242ZY 195.63-205.76
Pittsburgh	DR243ZY 185.10-190.50	DM243ZY 198.30-224.45	DP243ZY 207.50-246.59	DK243ZY -	DH243ZY -	DU243ZY 192.63-207.77
Providence (a)	DR248ZY 188.96-210.00	DM248ZY 195.95-223.00	DP248ZY 203.15-242.25			DU248ZY 199.56-200.55
Portland	DR126ZY 191.90-197.81	DM126ZY 197.70-203.25	DP126ZY 205.50-211.09			DU126ZY 199.65-203.61
Raleigh						DU168ZY 197.80-197.80
Richmond	DR301ZY 188.15-200.15	DM301ZY 203.78-221.94	DP301ZY 213.68-255.15	DK301ZY 239.00-239.00		DU301ZY 194.45-198.15
Savannah	DR054ZY 199.05-205.20	DM054ZY 212.45-222.20	DP054ZY 252.10-252.20			DU054ZY 203.75-205.85
Spartanburg	DR252ZY 186.02-195.95	DM252ZY 194.85-212.95	DP252ZY 199.84-243.95			DU252ZY 192.90-199.82
Tampa					DU045ZY 197.60-202.68	
PADD 2						
Aberdeen	DR253ZY 198.00-204.41	DM253ZY 207.60-217.00	DP253ZY 215.60-225.00			DU253ZY 237.50-246.19
Cape Girardeau	DR144ZY 207.50-217.50		DP144ZY 223.20-297.00			DU144ZY 211.24-217.35
Chattanooga	DR260ZY 189.60-199.41	DM260ZY 200.90-216.41	DP260ZY 218.40-249.41			DU260ZY 192.57-200.50
Chicago (a)	DR075ZY 181.10-191.73	DM075ZY 201.10-204.01	DP075ZY 236.11-241.10	DK075ZY 241.57-283.55		DU075ZY 200.50-205.52
Cleveland	DR212ZY 186.35-193.68	DM212ZY 203.02-205.63	DP212ZY 223.55-246.35	DK212ZY 282.75-282.75		DU212ZY 198.33-206.30
Columbus	DR213ZY 178.80-200.21	DM213ZY 194.20-225.21	DP213ZY 215.26-264.21	DK213ZY 278.70-278.70		DU213ZY 202.05-213.43
Duluth	DR138ZY 200.50-205.23	DM138ZY 208.96-215.39	DP138ZY 224.66-232.54			DU138ZY 236.36-241.85
Des Moines	DR059ZY 194.80-207.76	DM059ZY 201.30-241.76	DP059ZY 206.71-249.76			DU059ZY 226.50-253.70
Detroit	DR130ZY 180.20-192.60	DM130ZY 196.87-218.57	DP130ZY 212.51-250.07	DK130ZY 277.40-277.40		DU130ZY 198.39-205.03
Fargo	DR174ZY 199.04-205.40	DM174ZY 205.47-212.84	DP174ZY 211.91-220.86			DU174ZY 230.40-249.05
Green Bay	DR313ZY 195.25-195.25	DM313ZY -	DP313ZY 230.25-230.25	DK313ZY -		DU313ZY 215.75-215.75
Indianapolis	DR088ZY 178.13-189.15	DM088ZY 192.39-210.32	DP088ZY 211.90-231.37	DK088ZY 281.65-283.33		DU088ZY 202.24-208.78
Kansas City	DR099ZY 192.76-198.25	DM099ZY 201.26-215.42	DP099ZY 232.42-257.10			DU099ZY 231.00-250.52
Knoxville	DR261ZY 186.30-192.43	DM261ZY 197.40-209.23	DP261ZY 203.93-242.23	DK261ZY -		DU261ZY 193.00-198.54
Milwaukee	DR316ZY 185.85-191.25	DM316ZY 197.10-206.80	DP316ZY 213.35-246.80	DK316ZY 284.70-284.70		DU316ZY 205.54-208.50
Minneapolis/St.Paul	DR141ZY 189.50-202.84	DM141ZY 197.00-211.07	DP141ZY 208.25-220.48	DK141ZY 257.45-257.45		DU141ZY 224.06-243.89
Oklahoma City	DR226ZY 192.00-205.60	DM226ZY 200.97-226.39	DP226ZY 207.17-229.75			DU226ZY 224.50-248.35
Omaha	DR185ZY 195.50-205.47	DM185ZY 205.08-242.47	DP185ZY 210.34-246.47			DU185ZY 228.50-254.04
Sioux Falls	DR256ZY 194.41-206.99	DM256ZY 200.90-240.99	DP256ZY 209.90-218.76			DU256ZY 227.00-253.86
St. Louis (a)	DR154ZY 192.86-197.60	DM154ZY 202.00-222.20	DP154ZY 204.45-245.60			DU154ZY 210.90-215.75
PADD 3						
Albuquerque	DR192ZY 220.75-227.00	DM192ZY 239.75-247.00	DP192ZY 261.15-267.00			DU192ZY 244.75-254.83
Amarillo	DR265ZY 202.00-204.31	DM265ZY 218.00-219.06	DP265ZY 239.00-239.31			DU265ZY 233.00-233.60
Baton Rouge	DR115ZY 189.00-198.90	DM115ZY 202.75-215.20	DP115ZY 225.70-240.20			DU115ZY 192.64-196.55
Birmingham	DR003ZY 185.42-194.95	DM003ZY 190.10-214.90	DP003ZY 191.00-253.95	DK003ZY 228.12-228.12		DU003ZY 192.85-198.27
Corpus Christi	DR275ZY 196.08-199.35	DM275ZY 211.08-214.60	DP275ZY 242.08-245.85			DU275ZY 196.16-197.35
Dallas/Ft.Worth (a)	DR276ZY 193.08-199.00	DM276ZY 207.45-231.45	DP276ZY 225.42-247.75			DU276ZY 205.97-212.55
Houston (a)	DR416ZY 190.15-200.32	DM416ZY 203.48-227.03	DP416ZY 223.22-242.60	DK416ZY 230.75-230.75		DU416ZY 197.61-206.44
Little Rock	DR009ZY 187.96-217.00	DM009ZY 201.15-234.40	DP009ZY 217.70-275.92			DU009ZY 199.05-248.86
New Orleans	DR119ZY 186.52-187.41	DM119ZY 202.52-208.50	DP119ZY 223.85-239.52			DU119ZY 190.35-193.44
San Antonio	DR289ZY 196.80-199.80	DM289ZY 212.27-216.60	DP289ZY 231.80-247.60			DU289ZY 204.47-208.30
PADD 4						
Billings (b)	DR162ZY -		DP162ZY 234.29-235.13			DU162ZY 235.92-239.25
Casper (b)	DR321ZY 209.83-209.88		DP321ZY 244.83-245.27		DU321ZY* 243.50-245.27	
Denver	DR028ZY 208.40-222.00	DM028ZY 227.00-236.40	DP028ZY 252.00-257.90			DU028ZY 231.50-248.95
Salt Lake City	DR298ZY 211.02-220.71	DM298ZY 227.21-236.71	DP298ZY 243.69-254.00			DU298ZY 257.15-267.00
PADD 5						
Anacortes	DR305ZY 220.25-224.60	DM305ZY 247.64-253.60	DP305ZY 256.25-260.60			DU305ZY 194.50-200.62
Las Vegas (e)	DR196ZY 221.00-229.00	DM196ZY 231.00-240.00	DP196ZY 238.00-251.00			DU196ZY 210.30-228.00
Los Angeles (a)	DR022ZY 247.91-251.83	DM022ZY 262.72-267.33	DP022ZY 276.74-282.83			DU022ZY 236.00-244.27
Phoenix	DR012ZY 260.50-272.20	DM012ZY 275.50-286.95	DP012ZY 290.50-303.20			DU012ZY 232.61-247.70
Portland	DR233ZY 205.00-219.00	DM233ZY 236.40-237.65	DP233ZY 243.40-254.00			DU233ZY 206.25-217.09
SanFranEBay (e)	DR025ZY 239.00-256.83	DM025ZY 255.25-278.83	DP025ZY 268.50-287.45			DU025ZY 236.50-245.22
Seattle/Tacoma	DR308ZY 208.10-210.15	DM308ZY 237.10-239.15	DP308ZY 244.10-246.15			DU308ZY 198.95-201.60
Spokane	DR309ZY 191.70-199.70	DM309ZY 209.98-214.70	DP309ZY 225.62-243.90			DU309ZY 205.50-212.06

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

FEEDER CRUDES: MARCH 1-MARCH 5, 2021

	<u>Cracking yield</u>		<u>Coking yield</u>		<u>Freight</u>		<u>Cracking netback</u>		<u>Coking netback</u>		<u>Spot</u>	
Summer												
US Gulf (PGA page 834)												
Arab Berri	FYAAL00	70.768	FYAAJ00	71.314	TDDAC00	0.870	FNAAL00	69.898	FNAAJ00	70.444	AAIGY00	63.618
Arab Heavy	FYABR00	66.394	FYABP00	68.342	TDDAJ00	0.930	FNABR00	65.464	FNABP00	67.412	AAIGV00	62.218
Arab Light	FYACP00	68.370	FYACN00	69.714	TDDAR00	0.890	FNACP00	67.480	FNACN00	68.824	AAIGP00	63.268
Arab Medium	FYADV00	67.006	FYADT00	68.852	TDDAZ00	0.908	FNADV00	66.098	FNADT00	67.944	AAIGS00	62.568
Bakken	FYASG00	72.042			TDDRP00	7.920	FNASG00	64.122			AASRU04	63.156
BCF 22	FYAFB00	67.346	FYAEZ00	69.608	TDDBL00	2.260	FNAFB00	65.086	FNAEZ00	67.348		
BCF 24	FYAFJ00	67.980	FYAFH00	70.158	TDDBO00	2.240	FNAFJ00	65.740	FNAFH00	67.918		
Basrah Light	FYAGD00	68.616	FYAGB00	69.560	TDDBS00	1.920	FNAGD00	66.696	FNAGB00	67.640	AAXD004	63.496
Bonny Light	FYAGR00	74.496			TDDBX00	0.482	FNAGR00	74.014			PCAA000	64.605
Brent	FYAHT00	72.270	FYAHR00	71.278	TDDCB00	1.960	FNAHT00	70.310	FNAHR00	69.318	PCAAP10	66.143
Cabinda	FYAIJ00	76.014	FYAID00	71.816	TDDCF00	1.420	FNAIJ00	74.594	FNAID00	70.396	PCAFD10	64.845
Eagle Ford	FYASC00	71.328			TDDRQ00	1.420	FNASC00	69.908			AAYAJ04	64.398
Escalante	FYAKJ00	79.576	FYAKH00	70.534	TDDCV00	5.350	FNAKJ00	74.226	FNAKH00	65.184	AAIIN00	66.040
Forcados	FYAKX00	76.106			TDDCY00	0.512	FNAKX00	75.594			PCABC10	64.655
Isthmus	FYAMR00	70.274	FYAMP00	70.972	TDDDJ00	0.830	FNAMR00	69.444	FNAMP00	70.142	PCADY00	62.214
Kuwait	FYANL00	67.704	FYANJ00	69.128	TDDDL00	1.098	FNANL00	66.606	FNANJ00	68.030	PCABK00	63.931
LLS	FYANP00	74.046	FYANN00	73.070	TDDQW00	0.950	FNANP00	73.096	FNANN00	72.120	AAIIQ00	64.588
Marlim	FYAUG00	76.442	FYAUJ00	71.932	TDDGK00	2.300	FNAUG00	74.142	FNAUJ00	69.632	AAITF04	61.570
Mars	FYA0B00	68.682	FYANZ00	70.226	TDDQY00	0.360	FNA0B00	68.322	FNANZ00	69.866	AAIIM00	62.418
Maya	FYA0J00	63.762	FYA0H00	67.366	TDDDP00	0.890	FNA0J00	62.872	FNA0H00	66.476	PCADB10	60.414
Merey	FYA0Z00	65.072	FYA0X00	68.578	TDDDT00	2.370	FNA0Z00	62.702	FNA0X00	66.208		
Mesa	FYAPL00	72.150	FYAPJ00	71.070	TDDDV00	2.150	FNAPL00	70.000	FNAPJ00	68.920	AAIZY00	62.470
Olmecca	FYAQF00	70.864	FYAQD00	70.940	TDDDY00	0.900	FNAQF00	69.964	FNAQD00	70.040	AAIJS00	62.964
Troll	FYATL00	74.106	FYATJ00	72.700	TDDEP00	1.740	FNATL00	72.366	FNATJ00	70.960	AAIJD00	66.568
Ural	FYAUK00	69.230	FYAUI00	70.924	TDDFM00	1.832	FNAUK00	67.398	FNAUI00	69.092	PCACE10	63.042
WCS	FYASI00	67.738	FYASJ00	67.738	TDDRS00	8.570	FNASI00	59.168	FNASJ00	59.168	AAPPN04	50.536
WTI	FYATX00	72.224	FYATV00	70.908	TDDRH00	1.620	FNATX00	70.604	FNATV00	69.288	PCACG10	62.318
US Atlantic Coast (PGA page 814)												
Arab Heavy	FYABN00	66.642	FYABL00	68.078	TDDAM00	0.910	FNABN00	65.732	FNABL00	67.168	AAIGV00	62.218
Arab Light	FYA0L00	68.402	FYACJ00	69.592	TDDAU00	0.870	FNACL00	67.532	FNACJ00	68.722	AAIGP00	63.268
Arab Medium	FYADR00	67.158	FYADP00	68.618	TDDBC00	0.888	FNADR00	66.270	FNADP00	67.730	AAIGS00	62.568
Bakken	FYASE00	71.706			TDDRN00	7.500	FNASE00	64.206			AASRU04	63.156
Bonny Light	FYAGP00	73.692			TDDBZ00	1.234	FNAGP00	72.458			PCAA000	64.605
Brass River	FYAHB00	71.426			TDDEW00	1.166	FNAHB00	70.260			PCAEB00	64.405
Brent	FYAHP00	71.978	FYAHN00	71.442	TDDCC00	0.940	FNAHP00	71.038	FNAHN00	70.502	PCAAP10	66.143
Cabinda	FYAIJ00	75.742	FYAHZ00	71.752	TDDCH00	1.340	FNAIJ00	74.402	FNAHZ00	70.412	PCAFD10	64.845
Ekofisk	FYAKB00	73.104	FYAJZ00	71.852	TDDCS00	0.870	FNAKB00	72.234	FNAJZ00	70.982	PCADH00	66.330
Forcados	FYAKV00	75.016			TDDDA00	1.250	FNAKV00	73.766			PCABC10	64.655
Hibernia	FYALT00	72.664	FYALR00	71.622	TDDDE00	0.980	FNALT00	71.684	FNALR00	70.642	AAJJK04	65.005
Oriente	FYAQR00	68.304	FYAQP00	69.050	TDDED00	2.210	FNAQR00	66.094	FNAQP00	66.840	PCADE10	61.004
Stratford	FYASN00	72.480	FYASL00	71.660	TDDEL00	0.940	FNASN00	71.540	FNASL00	70.720	AAIIP00	65.748
Troll	FYATH00	73.846	FYATF00	72.778	TDDEQ00	0.860	FNATH00	72.986	FNATF00	71.918	AAIJD00	66.568
US West Coast (PGA page 844)												
ANS	FYAAD00	76.492	FYAAB00	75.076			FNAAD00	76.492	FNAAB00	75.076	PCAAA10	65.120
Bakken	FYASK00	76.756			TDDRT00	6.500	FNASK00	70.256			AASRU04	63.156
Basrah Light	FYAGL00	73.854	FYAGJ00	73.434	TDDBW00	1.220	FNAGL00	72.634	FNAGJ00	72.214	AAXD004	63.496

FEEDER CRUDES (CONTINUED)

	Cracking yield		Coking yield		Freight		Cracking netback		Coking netback		Spot	
Summer												
US West Coast (PGA page 844)												
Escalante	FYAKN00	86.432	FYAKL00	74.704	TDDCW00	4.970	FNAKN00	81.462	FNAKL00	69.734	AAIIN00	66.040
Kern River	FYAMV00	82.348	FYAMT00	78.284	TDDGM00	1.710	FNAMV00	80.638	FNAMT00	76.574	AAIIR00	62.040
Line 63	FYANX00	78.552	FYANV00	75.228	TDDGN00	0.150	FNANX00	78.402	FNANV00	75.078	AAIJT00	68.404
Minas	FYATC00	82.362	FYATA00	77.102	TDDG000	3.590	FNATC00	78.772	FNATA00	73.512	PCAB010	62.061
Mixed Lt Swt	FYARD00	75.712	FYARB00	74.118	TDDGP00	2.070	FNARD00	73.642	FNARB00	72.048	AALRR04	59.556
Oriente	FYAQV00	74.014	FYAQT00	72.982	TDDEC00	2.196	FNAQV00	71.818	FNAQT00	70.786	PCADE10	61.004
THUMS	FYASZ00	77.218	FYASX00	75.918	TDDGQ00	0.000	FNASZ00	77.218	FNASX00	75.918	AAIUU00	63.662
US Midcontinent (PGA page 824)												
Bakken	FYASA00	71.148			TNASA00	3.480	FNASA00	67.668			AASRU04	63.156
Bow River			FYAGV00	69.580	TDDR000	4.190			FNAGV00	65.390		
LLS	FYANT00	73.412	FYANR00	72.912	TNANT00	1.020	FNANT00	72.392	FNANR00	71.892	AAIIQ00	64.588
Mixed Lt Sr	FYAPX00	67.222	FYAPV00	69.154	TNAPX00	2.420	FNAPX00	64.802	FNAPV00	66.734		
Mixed Lt Swt	FYAQZ00	71.406	FYAQX00	71.594	TNAQZ00	4.000	FNAQZ00	67.406	FNAQX00	67.594	AALRR04	59.556
Syncrude	FYAUR00	73.140			TNAUR00	4.000	FNAUR00	69.140			AASOK04	62.816
WCS			FYAVG00	66.214	TDDR000	4.190			FNAVG00	62.024	AAPPN04	50.536
WTI	FYAUB00	70.976	FYATZ00	70.458	TNAUB00	1.880	FNAUB00	69.096	FNATZ00	68.578	PCACG10	62.318
WTS	FYAUJ00	67.960	FYAUH00	70.344	TNAUJ00	2.640	FNAUJ00	65.320	FNAUH00	67.704	PCACK10	62.818
Caribbean (PGA page 806)												
BCF 22	FYAET00	62.658	FYAER00	64.158	TDBN000	0.398	FNAET00	62.260	FNAER00	63.760		
BCF 24	FYAFF00	63.384	FYAFD00	64.808	TDBQ000	0.394	FNAFF00	62.990	FNAFD00	64.414		
Escalante	FYAKE00	73.316	FYAKC00	65.678	TDDEY00	4.210	FNAKE00	69.106	FNAKC00	61.468	AAIIN00	66.040
Isthmus	FYAMN00	65.394	FYAML00	66.440	TDDDK00	0.642	FNAMN00	64.752	FNAML00	65.798	PCADY00	62.214
Maya	FYAOF00	60.312	FYAOD00	62.324	TDDDR00	0.662	FNAOF00	59.650	FNAOD00	61.662	PCADB10	60.414
Merey	FYAOV00	61.288	FYAOT00	62.440	TDDDU00	0.538	FNAOV00	60.750	FNAOT00	61.902		
Mesa	FYAPD00	65.578	FYAPB00	66.326	TDDFB00	0.488	FNAPD00	65.090	FNAPB00	65.838	AAIZY00	62.470
Olmecca	FYAQB00	65.682	FYAPZ00	67.062	TDDEA00	0.618	FNAQB00	65.064	FNAPZ00	66.444	AAIJS00	62.964
Singapore (PGA page 2814)												
Al Shaheen	TYEAA04	65.788			TNEFA00	0.562	TNEAA04	65.226			AAALS04	63.282
Arab Heavy	FYABH00	64.298			TDDA000	0.522	FNABH00	63.776			AAIGX00	63.581
Arab Light	FYACF00	65.252			TDDAW00	0.502	FNACF00	64.750			AAIGR00	64.281
Arab Medium	FYADL00	64.430			TDDBE00	0.512	FNADL00	63.918			AAIGU00	64.031
Attaka	FYADX00	66.480			TDDBG00	2.084	FNADX00	64.396			PCAAJ10	62.758
Das Blend	FYDSH00	65.742			TDDCQ00	0.476	FNDSH00	65.266			AAXOF04	63.270
Dubai	FYAJN00	66.154			TDDCQ00	0.476	FNAJN00	65.678			PCAAT10	63.279
Duri	FYAJR00	75.224			TDDCR00	1.386	FNAJR00	73.838			PCABA10	69.838
Forties	TYEAD04	65.972			TNEFD00	2.274	TNEAD04	63.698			PCADJ10	66.216
Kuwait	FYANF00	64.746			TDDDN00	0.460	FNANF00	64.286			PCABK00	63.931
Minas	FYAPR00	70.850			TDDDX00	1.268	FNAPR00	69.582			PCAB010	62.061
Murban	FYAPY00	66.076			TDDCQ00	0.476	FNAPY00	65.600			PCAD000	63.648
Oman	FYAQL00	65.448			TDDEB00	0.450	FNAQL00	64.998			PCABS10	63.282
Qatar Dukhan	FYARA00	65.782			TDDBE00	0.512	FNARA00	65.270			PCADQ00	63.100
Qatar Marine	FYARE00	66.120			TDDBE00	0.512	FNARE00	65.608			PCADR00	63.130
Tapis	FYAST00	66.774			TDDE000	0.910	FNAST00	65.864			AAIIW00	65.208
Upper Zakum	TYEAG04	65.428			TNEFR00	0.468	TNEAG04	64.960			AAUZU04	63.279

FEEDER CRUDES (CONTINUED)

	Cracking yield	Coking yield	Freight	Cracking netback	Coking netback	Spot
Summer						
Italy (PGA page 1824)						
Arab Heavy	FYABD00 65.768		TDDAI00 0.642	FNABD00 65.126		AAIGW00 64.012
Arab Light	FYACB00 66.584		TDDAQ00 0.612	FNACB00 65.972		AAIGQ00 64.812
Azeri Light	FYAEF00 71.316		TDBBH00 0.708	FNAEF00 70.608		AAEIX00 66.322
Eagle Ford	TYEAC04 65.850		TNEIF00 1.740	TNEAC04 64.110		AAEF004 63.214
Es Sider	FYAKD00 68.864		TDDCU00 0.536	FNAKD00 68.328		PCACO10 63.626
Iran Heavy	FYALZ00 67.150		TDDDF00 0.142	FNALZ00 67.008		AIHKA04 62.366
Iran Light	FYAMH00 67.490		TDDDH00 0.138	FNAMH00 67.352		AILKA04 63.916
Kirkuk	FYAMU00 66.878		TDDFF00 0.784	FNAMU00 66.094		AAIIX00 64.346
Light Houston Sweet	TYEAF04 67.654		TDIRF00 -0.110	TNEAE04 67.764		AALHS04 63.698
Saharan Blend	FYAR000 67.182		TDDFG00 0.470	FNAR000 66.712		PCABU00 65.096
Suez Blend	FYAU000 66.782		TDDRF00 1.626	FNAU000 65.156		PCACA10 60.742
Urals	FYATR00 67.406		TDESE00 0.930	FNATR00 66.476		AAIJU00 63.042
WCS		TYEAI04 65.106	TDYFR00 10.702		TNEAI04 54.404	AAPPN04 50.536
Zuetina	FYAUL00 68.692		TDEEU00 0.626	FNAUL00 68.066		PCACN00 64.243
Amsterdam-Rotterdam-Antwerp (PGA page 1814)						
Arab Heavy	FYAAV00 66.376		TDDAN00 0.650	FNAAV00 65.726		AAIGW00 64.012
Arab Light	FYABT00 67.946		TDDAV00 0.620	FNABT00 67.326		AAIGQ00 64.812
Arab Medium	FYACZ00 66.890		TDDBD00 0.632	FNACZ00 66.258		AAIGT00 64.412
Azeri Light	FYAEB00 72.610		TDDBI00 1.250	FNAEB00 71.360		AAEIX00 66.322
Basrah Light	FYAFP00 68.168		TDDBU00 1.200	FNAFP00 66.968		AAXD004 63.496
Brass River	FYATS00 69.522		TDDRE00 1.130	FNATS00 68.392		PCAEB00 64.405
Brent	FYAHF00 70.246		TDDCD00 1.184	FNAHF00 69.062		PCAAP10 66.143
Eagle Ford	TYEAB04 66.922		TNEBF00 1.244	TNEAB04 65.678		AAEF004 63.214
Ekofisk	FYAJV00 71.220		TDDCT00 0.876	FNAJV00 70.344		PCADH00 66.330
Flotta Gold	FYAKP00 68.428		TDDCX00 0.938	FNAKP00 67.490		PCACY00 64.528
Forties	FYALB00 68.636		TDEZ00 1.204	FNALB00 67.432		PCADJ10 66.216
Gullfaks	FYALF00 71.604		TDDDC00 0.838	FNALF00 70.766		AAIJA00 66.587
Iran Heavy	FYALV00 67.986		TDDDG00 0.270	FNALV00 67.716		AIHKA04 62.366
Iran Light	FYAMD00 68.806		TDDDI00 0.266	FNAMD00 68.540		AILKA04 63.916
Kirkuk	FYATU00 68.164		TDDGH00 1.880	FNATU00 66.284		AAIIX00 64.346
Light Houston Sweet	TYEAE04 69.102		TDEFR00 3.322	TNEAF04 65.780		AALHS04 63.698
Kuwait	FYAMX00 67.376		TDDDM00 0.668	FNAMX00 66.708		PCABK00 63.931
Murban	FYATQ00 69.022		TDDR000 0.600	FNATQ00 68.422		PCAD000 63.648
Saharan Blend	FYATY00 68.730		TDDGI00 1.206	FNATY00 67.524		PCABU00 65.096
Statfjord	FYASD00 70.870		TDEK00 1.186	FNASD00 69.684		AAIIP00 65.748
Urals	FYATN00 68.372		TDEET00 1.068	FNATN00 67.304		PCACE10 63.042
Zuetina	FYAUC00 70.548		TDDGJ00 1.206	FNAUC00 69.576		PCACN00 64.243

WEEKLY CRUDE ASSESSMENTS, MAR 9 (PGA page 1805)

	Change		Change		Change
Amna	PCADW00 64.393 -0.004	Gippsland*	PCACP10 62.858 -0.360	Nemba	AALAP00 63.995 +0.267
Brega	PCADX00 64.793 -0.004	Sarir	PCABW00 62.263 +0.116	Girassol	AALAR00 65.345 +0.267
Cinta*	PCAAX10 59.327 -1.287	Sirtica	PCABZ00 63.643 -0.004		
Daqing*	PCAAZ10 60.688 -0.370	Suez Blend*	PCACA10 60.742 +0.372		

This table provides weekly \$/barrel assessments for those crudes in the previous version of the Feeder Crudes table that are not in the current version. Crudes with (*) represent the five-day average of grades assessed daily. Other crudes are set as differentials to five-day averages of key benchmarks.*-Average of daily assessments.