

OILGRAM PRICE REPORT

Volume 99 / Number 45 / March 9, 2021 / Prices effective March 8, 2021

US crude inventories expected higher as refinery runs linger near historic lows

- Commercial crude stocks likely up 2.7 million barrels
- Refinery runs expected around 62% of capacity
- US driving activity at par with year-ago levels

New York—The US crude oil inventory build likely extended last week as refinery demand remained stunted by the lingering impacts of severe winter weather in mid-February, an S&P Global Platts analysis showed March 8.

US commercial crude inventories likely climbed 2.7 million barrels to around 487.3 million barrels in the week ended March 5, analysts surveyed by Platts said. The build would leave inventories 3.6% above the five-year average of US Energy Information Administration data, in from 4% the week prior.

The expected increase comes as nationwide refinery runs continue to hold well below normal. Power outages and extreme low temperatures impacted all of Texas' 5.9 million b/d of refinery capacity following a severe winter storm in mid-February, taking as much as 4.4 million b/d of refinery capacity fully offline Feb. 18.

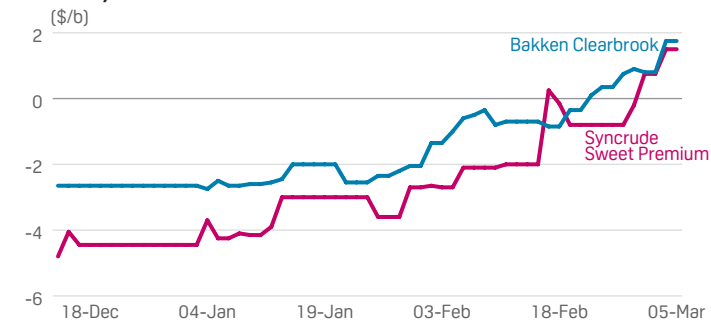
While the bulk of the impacted refineries have seen at least partial restarts, at least six facilities were still operating at low full capacity last week, and at least four facilities comprising a combined 800,000 b/d of capacity had no estimated full restart date. Reduced runs are expected to linger at some large facilities, including Motiva's 607,000 b/d and Total's 225,500 b/d Port Arthur, Texas, refineries, into mid-March.

Refinery net crude inputs and utilization were both the lowest record during the week ended Feb. 26, EIA data showed.

Total refinery utilization is expected to jump 6 percentage points to 62% of capacity last week, analysts said. The expected increase would be the largest one-week jump in utilization since October 2008

[\(continued on page 11\)](#)

BAKKEN, SYNCRUDE GRADES SURGE TO PREMIUMS vs WTI CMA



Source: S&P Global Platts

MARKET ANALYSIS

International crude: Aramco's Asia OSPs higher than expected	2
Americas crude: Argentina's exports jump 75%	7
Gasoline: Run cuts buoy NWE, Asia cracks lower	7
Diesel: Trans-Atlantic flows stall	8
Marine fuel: NWE LSFO supported amid strong 0.5%S MF	8
Jet: East of Suez arrivals in Europe increase	9
Feedstocks: Asian naphtha higher	9
Gas liquids: Asian LPG lags Brent rally	10
Tankers: Americas, West of Suez tankers bank on trans-Atlantic revival	10
Refinery updates	16

NEWS HEADLINES

Saudi discipline pushes OPEC+ crude output to four-month low

- OPEC pumps 24.86 mil b/d in Feb, non-OPEC adds 12.97 million b/d
- Saudi Arabia produces 8.13 mil b/d, fulfilling extra cut pledge
- Russia below cap at 9.17 mil b/d, despite seeking looser quota

London—Saudi Arabia made good on its pledge to cut an additional 1 million b/d of its crude production in February, driving total output by OPEC and its Russia-led allies to a four-month low, according to the latest S&P Global Platts survey.

Strike on key Saudi export hub shows Houthi threat still looms large

- Saudi crude exports normal following missile attacks
- Marks biggest Saudi attack since 2019 Abqaiq incident
- Brent crude spikes above \$70/b in early trading

Dubai—A drone attack on Saudi Arabia's Ras Tanura port failed to damage its critical oil loading and storage facilities, but raises fresh concerns over the security of supplies from the world's biggest crude exporter amid its ongoing proxy war in Yemen against Houthi rebels.

Impact of strong USGC refining margins ripples across other regions

- USGC refinery outages increase USAC imports
- Midwest refiners recovering from cold weather, grid instability

New York—US Gulf Coast refining margins strengthened as refiners moved forward to restart their plants after freezing temperatures forced them offline in mid-February, sending refining margins higher than the year-ago period, an analysis from S&P Global Platts showed March 8.

MARKET ANALYSIS

INTERNATIONAL CRUDE

- **Qua Iboe fully returns, output at 170,795 b/d**
- **Qatar sends condensate to UAE**
- **China independents' bitumen blend imports down 28.3%**

Aramco's Asia OSPs higher than expected

The rise in prices for its Asia-bound light and medium crude grades in April by Saudi Aramco, the largest oil producer in the Middle East, were higher than market expectations, sources told S&P Global Platts.

Aramco on March 8 raised the April official selling price differential for its Arab Super Light crude to \$2.35/b, the highest since August 2020, when it was set at \$2.65/b against Platts Dubai and DME Oman, Platts data showed.

Similarly, the April OSP differentials for Extra Light, Arab Light and Arab Medium were raised by 60 cents/b, 40 cents/b and 20 cents/b, respectively, against Platts Dubai and DME Oman in March.

The OSP for its Arab Heavy grades was kept unchanged against the March OSP at 30 cents/b.

The increase in prices surprised refiners and traders, given the contrasting scenarios of rising oil prices and supply cuts against a persistent bleak Asian demand scenario amid refinery turnarounds and pandemic-induced mobility curbs.

A trader in Singapore said the prices were on the "higher side," and noted "it's a painful time for refineries."

Market participants expected an increase in prices as the cash Dubai-futures spread, a key price indicator for the Middle East sour crude market, averaged a premium of 69 cents/b in February, up from a premium of 48 cents/b in January, Platts data showed.

Additionally, demand for lighter grades saw an uptick in February compared to medium and heavy grades, prompting an expectation of an increase in prices for lighter crudes.

Refining margins for light distillates surged in February, with the second-month 92 RON gasoline swap crack versus Dubai swap averaging \$6.42/b, up from \$5.04/b in January, and the highest since February 2020, when it was \$7.48/b, Platts data showed.

With the release of Aramco's OSPs, the focus now shifts to the release of OSPs by other key producers including Abu Dhabi's ADNOC, Iraq's SOMO and Qatar Petroleum, which are expected early in the coming days.

Downtime

At the OPEC+ meeting last week, Saudi Arabia once again surprised the market by pledging to extend its voluntary cut of 1 million b/d for April, with the rest of the alliance, too, largely agreeing to maintain oil cuts prompted by lingering uncertainty over economic recovery amid uneven vaccine rollouts and stringent lockdown measures.

While sentiment was lifted by the supply curbs, the lingering pandemic effect coupled with refinery downtime season across most Asian economies could lead to muted spot trading activity in the month.

"Refineries can reduce run rates, but those with commitments will still have to buy," said a trader with a South East Asian refinery, adding his refinery currently runs at 70% due to low demand.

DATA INSIDE THIS ISSUE

Product price assessments

Saudi Arabian Official Selling Prices	3
Recent OPEC crude production	12
US Atlantic Coast Refining Margin Averages	14
US Gulf Coast Refining Margin Averages	14
US Midwest Refining Margin Averages	14
USWC Refining Margin Averages	14
Singapore Refining Margin Averages	14
ARA Margin Averages	14
Italy Refining Margin Averages	14
Asia	17
China	17
Fujairah	17
Arab Gulf	17
Asia product premium/discount assessments	17
Platts Index	17
European bulk	18
West Africa products	18
Renewable fuels	18
European feedstocks and blendstocks	18
New York	19
USAC CPL Linden	19
U.S. Buckeye pipeline	20
Chicago pipeline	20
Group Three	20
Marine Fuel	20
U.S. Gulf Coast	21
U.S. Gulf Coast	22
U.S. Gulf Coast pipeline cycles	22
West Coast pipeline	23
West Coast waterborne	23
Latin America	24
Caribbean cargoes	24
Trinidad product postings	24
Gas liquids	24

Crude price assessments

Asia Pacific/Middle East spot crude assessments	25
International	26
Asia	26
North Sea	26
West Africa	26
London	27
Mediterranean	27
Canada	27
Platts Euro denominated crude oil assessments	27
United States	28
US domestic crude assessments London close	28
US crude assessments Singapore close	28
Canadian spot crude assessments	29
Crude oil postings	29
Delivered-Asia spot crude assessments	29
Latin America crude	29
Daily OPEC basket price	29
Spot tanker rates	30
Platts futures assessments Singapore MOC	30
Platts futures assessments	30
Futures settlements	31
Five-Day Rolling Averages	32
US wholesale posted prices effective Mar 8	33
US wholesale posted prices effective Mar 6	34

Arbitrage impacts

The widening of the Brent/Dubai Exchange of Futures for swaps has also stemmed the flow of arbitrage barrels into Asia, further hurting refineries dealing with higher term prices for Middle East crudes.

“A higher EFS means arbitrage close, which is not good for Asian refiners as they have to buy more Middle East crude,” said another trader with a North Asian refinery.

The Exchange of Futures for swaps hit a multi-month high when it was pegged at \$3.18/b on Feb. 23, the highest since Nov. 26, 2019, when it was assessed at a premium of \$3.25/b, Platts data showed.

On the contrary, some sources expect that with arbitrage barrels getting more expensive, refiners will have to opt for Middle East crudes, which, in turn, could see trades at higher spot premiums than previous months.

“Arb differentials have to come off and will be less attractive,” said another trader with a South East Asian refinery. “We probably begin the cycle at OSP plus double-digit premiums.”

As trade for May-loading cargoes awaits official kickoff, eyes will remain on the Asian giants India and China to display a voracious buying appetite.

The rise in oil prices, though, could dent demand from the two Asian economies that remain heavily reliant on crude imports for domestic consumption.

“Product prices in China are not currently adjusting to a level good

enough to cover teapot margins,” said a trader with a North Asian refinery.

Dubai extends gains

Benchmark cash Dubai premium against Dubai futures continued to rise amid heightened supply concerns due to the OPEC+ production curbs and possible disruptions due to the Houthi-led drone attack on a Saudi facility.

S&P Global Platts assessed May cash Dubai at a premium of \$1.35/b to the same-month Dubai futures at the 4.30 pm Singapore close on March 8, up by 7 cents/b from close on March 5.

May cash Oman was valued at a premium of \$1.40/b to same-month Dubai futures, up by 12 cents/b from the previous day's close.

While trade for May-loading barrels is yet to kick off, market participants remain concerned about oil supplies due to the extension of OPEC+ cuts and news of a drone attack on Saudi Arabia's largest oil export terminal at Ras Tanura.

The Platts Market on Close assessment process on March 8 saw a total of 22 partials of 25,000-barrel each traded, consisting of 17 May Dubai partials, 2 May Oman partials and 3 May Murban partials.

The Murban partials were traded with PetroChina on the sell side and Total on the buy side while the PetroChina bought both the Oman partials from Unipet.

The Dubai partials were traded with BP, Shell, Total, Unipet, Reliance and Hengli on the sell side and Trafigura, Lukoil and Petrochina on the buy side.

SAUDI ARABIAN OFFICIAL SELLING PRICES (\$/barrel), MAR 8

Benchmark		APR	Monthly change	MAR	FEB	JAN
US (PGA page 1070)						
Extra Light	ASCI	AAIQZ00	1.50	+ 0.30	1.20	0.90
Arab Light	ASCI	AAIRA00	0.95	+ 0.10	0.85	0.55
Arab Medium	ASCI	AAIRB00	0.25	+ 0.10	0.15	-0.15
Arab Heavy	ASCI	AAIRC00	-0.20	0.00	-0.20	-0.50
Prices FOB Ras Tanura						
Northwest Europe (PGA page 1069)						
Extra Light	ICE Brent	AAIQ000	-1.90	-1.50	-0.40	-1.30
Arab Light	ICE Brent	AAIQR00	-2.20	-1.70	-0.50	-1.40
Arab Medium	ICE Brent	AAIQS00	-2.60	-1.70	-0.90	-1.80
Arab Heavy	ICE Brent	AAIQT00	-3.10	-1.80	-1.30	-2.20
Prices FOB Ras Tanura						
Mediterranean (PGA page 1069)						
Extra Light	ICE Brent	AAWQ000	-1.10	-1.00	-0.10	-0.90
Arab Light	ICE Brent	AAWQL00	-1.90	-1.70	-0.20	-1.00
Arab Medium	ICE Brent	AAWQM00	-2.50	-1.70	-0.80	-1.60
Arab Heavy	ICE Brent	AAWQN00	-3.20	-1.90	-1.30	-2.10
Prices FOB Ras Tanura						
FOB Sidi Kerir (PGA page 1069)						
Extra Light	ICE Brent	AAUCS00	NA	NA NA	0.50	-0.90
Arab Light	ICE Brent	AAUCU00	NA	NA NA	0.40	-1.00
Arab Medium	ICE Brent	AAUCW00	NA	NA NA	-0.20	-1.60
Arab Heavy	ICE Brent	AAUCY00	NA	NA NA	-0.70	-2.10
Asia (PGA page 1068)						
Super Light	(O+D)/2	AAIQU00	2.35	+ 0.50	1.85	1.25
Extra Light	(O+D)/2	AAIQV00	1.20	+ 0.60	0.60	0.10
Arab Light	(O+D)/2	AAIQW00	1.40	+ 0.40	1.00	0.30
Arab Medium	(O+D)/2	AAIQX00	0.95	+ 0.20	0.75	0.35
Arab Heavy	(O+D)/2	AAIQY00	0.30	0.00	0.30	0.10

Prices FOB Ras Tanura

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

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

Saudi exports normal following attacks

Crude exports from Saudi Arabia's oil terminals at Ras Tanura were proceeding normally on March 8, according to commodity data company Kpler, a day after a drone attack targeted the port but did no damage.

Yemen's Iranian-backed Houthi rebels said March 7 they had had launched 14 drones and eight ballistic missiles targeted at Saudi Aramco facilities in Ras Tanura and military targets in Asir, Dammam and Jazan. They followed a series of attacks on Saudi Arabia's west coast last week.

The Saudi Ministry of Energy said one of the petroleum tank farms at the Ras Tanura Port in the Eastern Region, one of the largest oil shipping ports in the world, was attacked in the morning of March 7 by a drone coming from the sea. The attack did not result in any injury or loss of life or property, according to a statement on the Saudi Press Agency.

In a statement to S&P Global Platts, Kpler said its data showed no disruption in loadings at Ras Tanura, with all operations running normally.

During the evening of March 7 there was also an attempt to attack Saudi Aramco's facilities, resulting in shrapnel from a ballistic missile falling near Saudi Aramco's residential area in the city of Dhahran, where thousands of the company's employees and their families from different nationalities live. It did not result in any injury or loss of life or property.

Aramco's international contractors also seemed to be unaffected by the attacks.

"So far, all seems to be blase, so little damage has been done.

It is strictly business as usual, as much as it can be with COVID-19, which represents a much more immediate concern," a US industry source said.

The attacks came with oil prices climbing after the OPEC+ decision last week to rollover supply caps amid recovering demand.

News of the attacks saw May ICE Brent crude futures hit \$71.38/b in early trading, before retracing to \$69/b at 1400 GMT.

S&P Global Platts Analytics sees strong support for Dated Brent around the \$65-\$70/b range, with risk to the upside in the third quarter before easing by the end of 2021.

Saudi Aramco has been a frequent target for Houthi attacks, which have escalated in recent months under a proxy war between Saudi Arabia and Iran, which are on opposing sides of Yemen's civil war.

The most notable occurred in September 2019 when Aramco's Abqaiq crude processing plant and Khurais oil field were hit, temporarily knocking out 5.7 million b/d of production – almost 6% of global crude demand – throwing the oil market into disarray. However, it took just 10 days for Aramco to carry out sufficient repairs for the company's total output to recover to 10 million b/d.

More recently, Saudi Arabia was subject to several missile attacks on its Red Sea coast on March 4, with Houthis saying they had managed to hit Aramco oil facilities in Jeddah.

Qatar exports first condensate to UAE since blockade

Qatar Petroleum on March 3 loaded about 712,000 barrels of condensate destined for the Emirates National Oil Co. in the UAE, the first commercial energy trade since the end of the Gulf blockade in early January, according to data analytics firm Kpler.

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.

Qatar Petroleum shipped the condensate from Ras Laffan for discharge on March 5 at the ENOC condensate refinery in Dubai. The vessel Abu Dhabi III that is owned by Abu Dhabi National Oil Co., the UAE's biggest energy producer, was chartered by ENOC, according to Kpler.

ENOC and Qatar Petroleum weren't immediately available for comment.

ENOC's refinery – the first refinery in Dubai – was established in 1999 and is based at the Jebel Ali Free Zone. It has a capacity to process 140,000 b/d of condensate, which yields refined products such as naphtha, reformate, jet fuel, diesel oil, fuel oil and LPG for local and export markets, according to ENOC's website.

Riyadh, the UAE, Bahrain and Egypt severed ties with Doha in June 2017. The three Gulf states, along with Egypt, accused Qatar of alleged support of terrorism and Iran, among other charges, which Doha has denied. The other members of the GCC are Oman and Kuwait, which mediated to heal the Gulf rift. The commercial blockade of Qatar prompted it to get closer to Turkey and more importantly to Iran, raising the ire of the US and the three Gulf states.

Throughout the blockade, Qatar kept the gas taps to the UAE open, with flows through the Dolphin pipeline averaging 1.8-2 Bcf/day and meeting about 20% of the UAE's gas demand, according to Samer Mosis, S&P Global Platts Analytics team lead for EMEA LNG.

Kyrgyzstan imposes temporary export ban

Kyrgyzstan has banned the export of crude oil and oil products beyond the territory of the Eurasian Economic Union until either the supply situation in the country improves or until there is a common market within the EEU for crude and oil products, according to Kyrgyz and Russian press reports.

The ban, signed by Prime Minister Ulukbek Maripov, is designed to stabilize prices on the domestic market.

The EEA comprises Russia, Belarus, Kazakhstan, Kyrgyzstan and Armenia.

Russia is a key source of imports to Kyrgyzstan.

Kyrgyzneftegaz plans to upgrade its 500,000 mt/year (10,000 b/d) Jalal-Abad refinery, local media reported in September.

The company has issued a tender for the development of a feasibility study.

The refinery processes crude oil as well as small amounts of gas condensate and distillates.

The refinery was built in 1996, according to the company's website. Its strategy involves a unit for secondary processing of fuel oil.

Ekofisk sees demand from outside NWE

The prompt Brent contracts for difference structure returned to backwardation in the North Sea crude market on March 8.

According to broker reports, March 8-12 Brent CFD was trading at an 8 cents/b premium to March 15-19. That compared with a contango of 2 cents/b assessed by S&P Global Platts on March 5.

Both the North Sea paper market and physical cargo markets have been described by traders as quiet.

Looking at recent loadings of Ekofisk, two Aframaxes loaded the grade at the Teesport terminal in the week to March 7, data from cFlow, Platts trade flow software cFlow, showed March 8.

The Dubai Glamour is taking Ekofisk to Port Hawkesbury, Canada, while Nordic Star is on its way to Augusta, Italy.

In addition, the VLCC Astro Chloe arrived at the Hound Point terminal to load Forties on March 6. The tanker was stationary at the terminal with its destination unknown, cFlow data showed.

Products markets remained a mixed picture, after traders said in the week ended March 5 that refinery margins were tightening.

Improving demand in the European gasoline market and a lengthening naphtha market were sending mixed signals for the light ends complex in Northwest Europe.

Meanwhile, flat prices in middle distillates markets have been led higher by moves in the crude futures markets, while demand remained weak and supply looked to be on the rise.

In other news, Saudi Arabia made good on its pledge to cut an additional 1 million b/d of its crude production in February, driving total output by OPEC and its Russia-led allies to a four-month low, according to the latest S&P Global Platts survey.

OPEC's 13 members pumped 24.86 million b/d, a decrease of 840,000 b/d from January, while its nine partners added 12.97 million b/d, a rise of 60,000 b/d.

Despite the surge seen in crude flat price recently, the OPEC+ alliance appears set to keep a tight leash on supply through at least April, warning that the market may not be as strong as it looks, with upcoming seasonal refinery maintenance, still-bloated oil inventories, a largely grounded aviation sector, and continued lockdown measures in many countries.

At its March 4 meeting, the coalition agreed to roll over most quotas for another month, except for a 125,000 b/d rise granted to Russia and a 20,000 b/d increase allowed for Kazakhstan. Saudi Arabia will maintain its voluntary 1 million b/d cut, as well, to continue tightening the market.

CPC Blend, Urals stronger in the Med

Kazakhstan's CPC Blend was heard trending higher in the Med as traders reported buying interest at Dated Brent minus \$2.30/b.

This was stronger than a week ago when the grade was assessed at a \$2.55/b discount, according to Platts data.

"The overhang of supply in March is strong and I think that it is holding CPC back, we saw strong tenders last week. The PKN tender went around \$1.70/b for early April, but I think it may be preemptive. I am not sure we will see that strength in the market. I think pre-April has fallen to minus \$2/b," said one trader

Libya's Es Sider grade was heard under pressure after traders reported an overhang in supply availability with tradable value heard at a discount to the OSP.

However, market participants also saw possible upside to Es Sider as the competitive OSP provided support for the grade.

Azerbaijan's Socar announced its April loading program, with average daily loadings of Azeri Light crude at the Turkish port of Ceyhan in April scheduled to fall 46,613 b/d on the month to 514,484 b/d, according to the program seen by S&P Global Platts March 8. Overall, 15.95 million barrels are scheduled for the month, down from 17.39 million barrels in March. A total of 23 cargoes of the light sweet crude are scheduled to load in April from Ceyhan, the grade's main loading port, down three cargoes from March.

In the Urals market, values strengthened March 8 with discounts in Rotterdam and the Med tightening by 39 and 40 cents/b respectively.

The grade's discount in Rotterdam was \$2.06/b, and \$1.60/b in the Med, according to Platts data.

The spread Northwest European Urals and Urals loading out of the Black Sea port of Novorossiisk was 35-45 cents/b as Baltic sellers looked to the Mediterranean to offload cargoes.

The lack of Asian arbitrage has put pressure on sellers as local demand has been stretched given that alternative grades have been competing for local demand.

In the Platts Market on Close assessment process, Shell bid for a 100,000 mt cargo, basis CIF Rotterdam and loading March 29 to April 2, down to Dated Brent minus \$1.90/b. It was left outstanding at the end of the MOC.

Nigerian output jumps

Nigeria's crude and condensate output rose to a nine-month high of 1.76 million b/d in February, data from the Department of Petroleum Resources shows, as production of key export grade Qua Iboe fully recovered after outages in December and January.

Crude production jumped to 1.42 million b/d in February from 1.36 million b/d the previous month. Condensate production, however, was down slightly, averaging 340,904 b/d compared with 350,332 b/d in January.

Qua Iboe production recovered to 170,795 b/d last month after it averaged 119,774 b/d in January and just 49,947 b/d in December.

Production of Qua Iboe, which is one of Nigeria's largest export grades, had slumped in December as a fire at the export terminal disrupted exports and led to operator ExxonMobil declaring force majeure.

Qua Iboe is very popular among refiners globally, with Canada, India, Indonesia, Italy, the Netherlands, Spain and the US being regular buyers.

OPEC+ cuts

The rebound comes after Africa's largest oil producer was under heavy pressure to make significant cuts to output as part of its OPEC+ obligations in the second half of last year.

Nigeria has the capacity to produce around 2.2 million b/d of crude and condensate, but it pumped around 1.72 million b/d in 2020, according to S&P Global Platts estimates.

That is the lowest output since 2016 when repeated attacks by Niger Delta militants on oil infrastructure pushed production to as low as 1.4 million-1.5 million b/d at points that year.

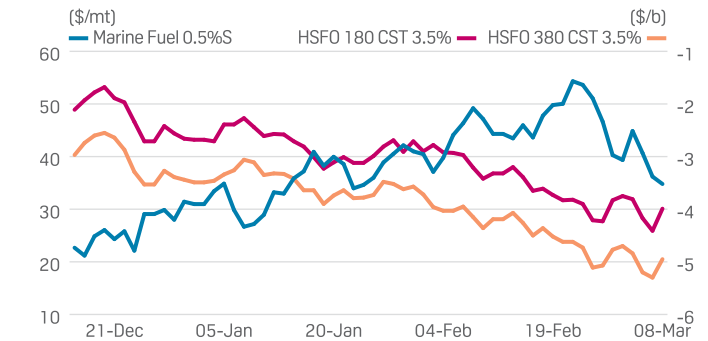
The current output cap for OPEC and its nine non-OPEC allies applies to crude oil, not condensate.

Under the OPEC+ deal, Nigeria has committed to keep its crude output at 1.52 million b/d for the first four months of the year, 313,000 b/d below its baseline under the deal of 1.829 million b/d.

Platts, one of the secondary sources that monitors compliance, includes Agbami in Nigeria's crude oil figure as it is marketed as a crude export blend and not a condensate by the state-owned Nigerian National Petroleum Corp. and international oil companies.

Crude oil inflows from UAE for China's independent refiners rocketed by 650% year on year to 1.98 million mt in February, helping

AL-SHAHEEN'S MARINE FUEL CRACK COMES OFF, HSFO'S MAY HAVE BOTTOMED



vs Al-Shaheen
Source: S&P Global Platts

the Middle East supplier to grab the second spot, while Russia retained the top spot despite a slight drop in volume from January, data collected by S&P Global Platts showed.

On month-on-month basis, crude imports from UAE, 580,000 mt Murban and 1.4 million mt Upper Zakum, were slightly lower from January level of 2.1 million mt.

At the same time, Oman crude imports have surged by 90.1% from January or 398% year on year to 1.96 million mt to overtake ESPO to become the most favorable crude grade.

Last month, about 12 independent refineries and trading companies have received Oman crude, compared with just five in January.

However, there is cloud around the real origins of some of the Middle Eastern arrivals in Shandong that officially reported as Oman or Upper Zakum.

Meanwhile, port sources in Shandong are also alerted to such "Oman" and "Upper Zakum" cargoes with unclear origin, which might prevent to discharge such cargoes in the future.

Malaysia

Crude oil arrivals from Malaysia saw a 27.6% decline in last month to 1.75 million mt in Shandong from January.

Malaysian inflows comprised of bitumen blend and Nemina blend. ChemChina has been the regular buyer of Nemina.

In February, a total 1 million mt of bitumen blend arrived into Shandong in 10 cargoes, mostly imported by trading companies.

The volume continued to retreat from the level of 1.5 million mt in December and fell 28.3% from 1.4 million mt in January amid sufficient crude import quota.

Both Nemina and bitumen blend are blended in Malaysia waters from a basket of crudes from various regions.

But bitumen blend is typically made of heavier grades, like Venezuelan Merey crude, that can be cracked in CDUs to produce asphalt for paving roads.

Norway

Apart from those blended crudes and Middle Eastern grades, Johan Sverdrup continued to stand out last month, with 656,000 mt arrival. It was down by 39.5% on month from January of 1.1 million mt.

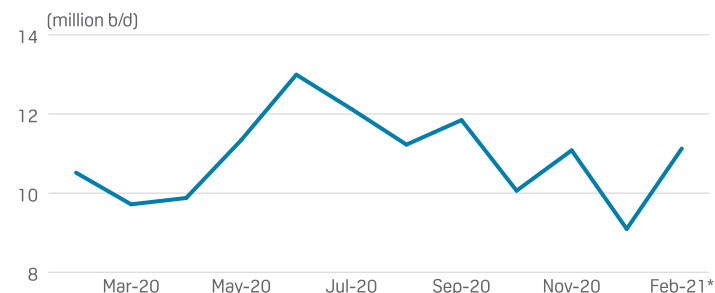
S&P Global Platts collects information covering crude and bitumen

blend imported for independent refineries in Shandong province, Tianjin, Zhoushan and Dalian, including 38 crude import quota holders and non-quota holders.

The barrels include those imported directly by the refiners, as well as cargoes bought by trading companies on behalf of the independent refiners that are discharged into tanks.

The 38 refiners have been awarded a combined total of 104.68 million mt of crude quotas in the first batch, accounting for 88.3% of the county's total allocations for the independent refining sector to date.

CHINA'S CRUDE IMPORTS REBOUND IN JANUARY-FEBRUARY



* GAC did not release monthly imports for Jan and Feb, but Jan-Feb accumulated volume. Source: General Administration of Customs

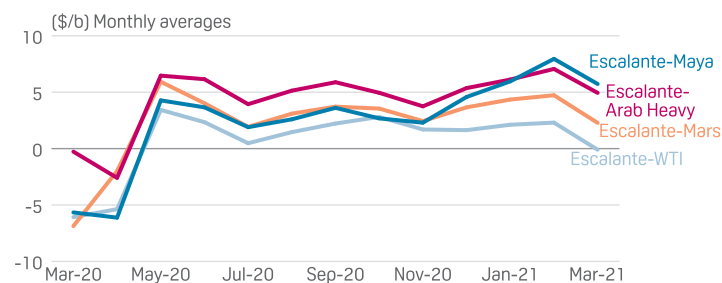
AMERICAS CRUDE

Argentina's exports jump 75%

Argentina's crude oil exports shot up 74.8% in January year on year, as a rise in production and a slow recovery in domestic demand encouraged producers to ship more abroad, Energy Secretariat data showed March 8.

Crude exports averaged 65,542 b/d in January, up from 37,499 b/d in the year-earlier period and 43,782 b/d in December. Escalante, a heavy crude from the San Jorge Gulf basin in the south, was the largest export at 33,581 b/d in January, in line with the level in the year-earlier month and in December.

ARGENTINA'S ESCALANTE MARGINS IN THE USGC TIGHTEN AGAINST COMPETING GRADES



Source: S&P Global Platts

Other heavy varieties of crude were also exported, but most of the growth in January came from shipments of Medanito, a light crude from the Neuquen basin in northern Patagonia. Exports of Medanito, which includes oil from the Vaca Muerta shale play, averaged 24,399 b/d

in January, led by shipments from the province of Neuquen.

Medanito is typically consumed in Argentina, but with production rising and petroleum product demand only slowly recovering from a March-to-November lockdown for the pandemic last year, more supplies were available for export.

Crude production in Neuquen, the biggest source of Medanito, rose 7.2% to 172,865 b/d in January from 161,200 b/d in January 2020 and was 5.4% more than the 163,950 b/d in December 2020, according to data from the Neuquen Ministry of Energy.

The production of Medanito is leading a recovery in Argentina's overall oil output, which totaled 486,929 b/d in January, up from a pandemic-low 445,614 b/d in May 2020. That is still shy of a pre-pandemic 520,000 b/d, a level that is not expected to be reached until demand fully recovers.

Diesel sales were down 7.7% in January on the year. Gasoline sales were down 9.4% and jet fuel sales were down 67.4%, according to Energy Secretariat data.

Despite the sluggish recovery in demand, some refineries still had to import higher-grade products because of a lack of capacity to make them, but in lower amounts. Imports of ultra-low-sulfur diesel fell 35.8% in January year on year.

GASOLINE

Run cuts buoy NWE, Asia cracks lower

Amid a softening of buying interest for surplus cargoes, sources said arbitrage opportunities from the Mediterranean to West Africa were closed, after a prolonged export program to the region supported European refiners ahead of the second-quarter refinery turnaround season.

Around 350,000 barrels of gasoline will be delivered to North Africa during March, down from 670,000 barrels in February, data from energy intelligence provider Kpler showed.

Despite the weakening export-led demand, continued refinery run cuts and expected maintenance turnarounds would help balance the Mediterranean gasoline market which continues to see lackluster local demand and had helped support gasoline's relationship to crude oil.

"The strong gasoline crack spread has been off the back of refinery run cuts," a trader said.

In Northwest Europe, schools reopened fully to pupils in England on March 8, which is expected to boost gasoline demand as personal mobility increases. Further increases are expected when more restrictions are eased in April and May.

In the gasoline paper market, the Northwest European front-month gasoline crack spread to ICE Brent was assessed at \$8.45/b March 5, up 10 cents/b on the day but down \$1.75/b on the week.

The March/April spread was assessed in a \$20/mt contango, while April/May was in a 25 cents/mt backwardation.

In Asia, several refineries in China, including Sinopec's Jinan Petrochemical, CNOOC's Huizhou Petrochemical, as well as Sinopec's Jiujiang Petrochemical were heard to be shutting units for scheduled maintenance in March.

In total, about 50 million mt/year of refining capacity at six state-owned refineries – five owned by Sinopec and one by CNOOC – is

expected to be shut over March-April, with some maintenance planned for May too, latest industry data and information collected by S&P Global Platts showed.

Given the turnaround at the CNOOC refinery, the company was noted to be offering smaller sized cargoes on the spot market.

The state-owned company was heard to have offered up to 15,000 mt of 92 RON gasoline for loading over April 1-2 from its Huizhou CNOOC Donglian terminal.

Prior to the refinery works, CNOOC typically offered MR-sized cargoes via spot tenders, according to open tenders seen by Platts.

The turnarounds failed to support cracks as the 92 RON crack vs Brent slipped to \$4.51/b March 8, down 35 cents/b from the end of last week.

USGC GASOLINE CRACK SWAP CONTINUES TO FIRM



Source: S&P Global Platts

DIESEL

Trans-Atlantic flows stall

In the Mediterranean, offers were lowered due to slight length in the market, with expectations it could increase towards the end of the month, particularly in the east of the region, a trader said. There was very poor demand, he said.

In Northwest Europe, demand was around 15%-16% lower than in January 2020, before the impact of the coronavirus pandemic struck the market, a level which was "not that bad", according to a second trader.

Supply was slightly lower due to a turnaround at the Karlsruhe refinery, but it remained ample, he said.

High flat prices were beginning to have an impact on at-pump prices for diesel, though it was having no impact on demand, the trader said.

ICE LSGO futures weakened slightly, with the front-month contract falling \$1.50/mt to \$546.00/mt. The second month fell \$1.00/mt, taking the prompt intermonth spread to a \$2.25/mt contango from \$1.75/mt previously. The second-month to third-month spread also weakened, down 25 cents/mt to a \$1.25/mt contango.

Trans-Atlantic shipments of ULSD have halted in March, with zero cargoes loaded on the US Gulf Coast to Europe and Europe to US Atlantic Coast routes in the week to March 8, according to cFlow, Platts trade flow software, with traders reporting both arbitrages as closed.

Looking at the approach of the seasonal transition to summer specification ULSD, traders were seeing little to no premium for winter

grade the continued blending of jet fuel into the diesel pool meant there was ample availability of diesel with good cold properties.

"It is not easy to find someone giving extra value for cold properties. But there are still a few places, like if a player is active in the Alps for example," the first trader said.

Elsewhere, India's IOC was offering two cargoes of 10 ppm high speed diesel for March 30-31, with the tender closing March 9, sources said.

The cargoes offered are to be 15,000-16,460 mt and 32,000-35,460 mt at the buyer's option, according to trading sources. Previously, IOC also issued a separate tender offering two cargoes of 10 ppm sulfur gasoil, each 35,000-38,000 mt, for loading from Paradip over March 22-23 and March 28-29, closing March 8.

US offline spikes to near six-year high

Values off the Colonial Pipeline spiked on March 8, rising almost 2 cents/gal to reach a nearly six-year high.

The jump follows weakened production levels on the Gulf Coast, which reached sub-freezing temperatures in February, which has put a strain on supply on the Atlantic Coast.

S&P Global Platts assessed offline ULSD at the NYMEX April ULSD futures contract plus 5.40 cents/gal, up 1.65 cents/gal on the day. This marked the strongest ULSD off the Colonial Pipeline has been since it was assessed at prompt-month futures plus 6.90 cents/gal on March 5, 2015.

While offline diesel saw a jump, ULSD in both the Buckeye Pipeline and barges slipped to begin the week.

Platts assessed Buckeye Pipeline ULSD at April futures minus 50 points/gal, down 50 points/gal day on day. Barge diesel dropped 30 points/gal to be assessed at March futures minus 50 points/gal.

On the Gulf Coast, ULSD fell slightly on the first business day of the 17th prompt shipping cycle on the Colonial Pipeline.

Platts assessed ULSD on the Gulf Coast at April futures minus 2.70 cents/gal, down 30 points/gal on the day. The market was last seen lower on Feb. 16 at prompt-month futures minus 3.15 cents/gal.

In the Midwest, Chicago markets saw a rebound on March 8, while Group 3 X grade slipped after reaching a six-year high on March 5.

Platts assessed Chicago pipeline ULSD at April futures plus 8 cents/gal, up 1.50 cents/gal. Buckeye Complex ULSD rose 1.50 cents/gal to be assessed at April futures plus 8 cents/gal. Wolverine Pipeline ULSD was also assessed at April futures plus 8 cents/gal, up 1.50 cents/gal day on day.

Further south in Group 3, X grade rose dropped 3.25 cents/gal to be assessed at April futures plus 33.50 cents/gal.

MARINE FUEL

NWE LSFO supported amid strong 0.5%S MF

The European low sulfur fuel oil market remained well supported on a confluence of factors, including reduced exports from South America and a strong pull from the 0.5%S marine fuel bunker blending pool, sources said March 8.

Sources pointed towards lower exports of LSFO from Brazil to Singapore, with one source attributing the decline to refinery maintenance.

“[We have seen a strong 0.5%S marine fuel market] in the last month,” a second source said. “With a lot of barrels arbitraging east, [and] 1%S fuel oil has been pulled in as well for blending.”

Traders estimated an increase in LSFO imports into Singapore to at least 3 million mt in March.

Meanwhile, Singapore’s supply of low sulfur bunker fuel remained sufficient to meet demand during the week of March 8, bunker traders said, although the recent volatility in crude oil markers is likely to set the tone for this week.

In shipping news, the Aframax Sarasota A was on subjects to load about 80,000 mt of fuel oil from Novorossiisk on March 15, with options to discharge in Fujairah and Singapore, according to shipping sources.

High sulfur fuel oil demand was quiet, while supply remained hampered by refinery upgrades and reduced runs.

In Asia, India’s March LSFO exports continue to record strong growth, with sales of at least 140,000 mt thus far, as Mangalore Refining and Petrochemical Ltd. sold a second 40,000 mt cargo via tender for loading over March 27-29 to Shell, according to market sources.

MRPL last sold 40,000 mt of marine fuel with maximum 0.5% sulfur for loading over March 12-14 also to Shell, S&P Global Platts reported earlier.

The company’s LSFO exports have increased since January, when they sold 25,000 mt for export.

This was doubled in February and so far in March it has exported 80,000 mt of LSFO, as the company seeks to maximize revenue, while margins are healthy, with official export data expected to show an increase in March export volumes, India’s Petroleum Planning and Analysis Cell data showed.

India’s fuel oil exports in January rose 133% on the month to 112,000 mt.

Fellow producer BPCL exported 60,000 mt of LSFO in March, via sell tenders, with one cargo each sold from its refineries at Mumbai and Kochi, and the first LSFO cargoes that the company has sold in 2021, according to a company source.

JET

East of Suez arrivals in Europe increase

Global scheduled airline capacity has increased 1.4% for the week starting March 8, to 57.9 million seats, driven by Northeast Asia and North American gains, but still 54% below January 2020 levels, according to aviation data company OAG.

In Western Europe, scheduled airline capacity fell 3.7% week on week to 4.24 million seats, meaning the region was at 22% of its January 2020 level, OAG data also showed.

Europe’s largest markets fell, with France’s scheduled capacity dropping 4.3% on the week to 26.8% of January 2020 level, while Germany’s capacity fell 2.6% on the week to 14.9% of the January 2020 level and Spanish capacity fell 7.3% to 22% of the January 2020 level.

Among the biggest airline markets, the strongest week-on-week increase was seen in North America, with a 10.1% jump in scheduled seat capacity to 65.4% of January 2020 levels, while northeast Asia saw capacity rise 3.4% to 77.1% of the January 2020 level.

Despite the gains in capacity for the week ahead, global capacity

scheduled capacity for April had decreased on the week, OAG senior analyst John Grant said in an OAG blog.

“Before we all get carried away though scheduled capacity for April has fallen by some 10 million seats week on week as airlines adjust their schedules to reflect the latest changes in travel restrictions and demand,” Grant said.

“At the same time May has seen a very modest two million additional seats added back,” he said.

The volume of jet fuel arriving into Europe from East of Suez reached their highest since early January last week, according to commodity data firm Kpler, with traders saying they expect higher arrivals across March.

A total of 317,000 mt of jet fuel arrived in the week to March 7, the highest since the first full week of January, according to Kpler.

Arrivals were predicted to fall to 151,000 mt in the week to March 14 before rising to 351,000 mt in the following week, Kpler data showed.

The average weekly volume during February was 169,000 mt and a total 678,000 mt arrived in the month, the data showed.

Sustainable aviation fuel has been slow to take off in Asia but the increased thrust on carbon emissions, a need to maintain reputational goodwill along with ready feedstock availability will likely hasten the momentum toward SAF, industry sources said at the recent S&P Global Platts Asian Refining Virtual Summit.

“The majority of the airline community is very positive about the use of SAF. They want to have it on board, they want to be using it to reduce their carbon footprint,” said Jonathan Pardoe, aviation fuel procurement and hedging specialist at Penthurst Ltd., during a panel discussion.

FEEDSTOCKS

Asian naphtha higher

The week began on a bullish note for the Asian naphtha market March 8, with prices riding on the back of firmer crude prices.

The CFR Japan naphtha physical crack against front month ICE Brent crude futures hit a more than two-and-half year high at \$112.475/mt at the March 5 Asian close, gaining \$5.225/mt, or 4.87%, day on day, driven by positive downstream margins, tight supply and an uptrend in crude oil prices, S&P Global Platts data showed.

The physical crack was last higher on July 31, 2018, at \$114/mt. It has since edged down to \$110.025/mt during midafternoon trading March 8, Platts data showed.

The front-month ICE May Brent crude futures rose \$3.17/b day on day at \$67.67/b at the Asian close March 5, according to Platts data. Crude prices firmed March 5 as OPEC+ announced its plan to keep production largely unchanged through April, and has since driven higher March 8 in Asia by news of a drone attack at Saudi Arabia’s largest oil export terminal, Ras Tanura. The May Brent contract was at \$70.53/b at 3 pm Singapore time (0700 GMT) March 8.

Naphtha feedstock remains in demand by olefins producers due to positive earnings, with end-users still maximizing the use of naphtha since LPG as an alternative feedstock was not yet economically viable.

The key spread between CFR Northeast Asia ethylene and CFR Japan naphtha physical marked a two-year high on March 4, when it

hit \$589/mt. However, the spread narrowed to \$580/mt March 5 due to the continued uptrend in naphtha, Platts data showed.

The typical breakeven spread for non-integrated producers is \$350/mt, and \$250/mt for integrated producers, so the positive margin has pushed olefins producers to maintain full or close to full run rates, sources said. The ethylene-naphtha spread has been above the \$250/mt mark since May 12, 2020, Platts data showed.

Looking at LPG as an alternative petrochemical feedstock to naphtha, the CFR North Asia propane cargo spread to C+F Japan naphtha fell to over a five-month low of minus \$16/mt at the March 5 Asian close, and it was last lower Sept. 25, 2020, at minus \$16.375/mt, Platts data showed.

LPG prices had earlier been boosted by winter heating demand to a premium over naphtha, and still remained supported on a lack of exports from the US Gulf Coast due to the recent winter storm. LPG becomes viable as an alternative steam cracker feedstock to naphtha when it is cheaper by at least \$50/mt to naphtha.

GAS LIQUIDS

Asian LPG lags Brent rally

Asia refrigerated LPG prices inched up March 8, lagging the \$21.2/mt jump in May ICE Brent crude futures from the previous Asian close, as market sentiment turned sour on expectations of Western supply and tepid regional demand.

CFR North Asia first-half April delivery propane was assessed up \$1/mt versus the previous session at \$607/mt March 8.

The premium of H1 April propane to the April CP shrank by \$9/mt from the previous session to \$3/mt March 8.

CFR North Asia second-half April delivery propane was also assessed up \$1/mt from the previous session at \$603/mt March 8, while the differential of H2 April propane to the April CP switched to discount of \$1/mt March 8, from a premium of \$8/mt the previous session.

The discount of April FEI propane swap to the Mean of Platts Japan naphtha assessment deepened by \$14.25/mt versus the previous session to \$43.5/mt. This makes LPG an economical alternate cracker feedstock, prompting Taiwan's Formosa petrochemical to seek via tender less than 46,000 mt of mixed LPG cargo of any propane:butane ratio, for delivery over any laycan in April, DES Mailiao. The tender closes March 9, with same-day validity.

Formosa last bought by tender 22,000 mt of propane in early February for second-half March delivery, DES Mailiao, at a premium of \$20/mt over the March Argus Far East Index. That parcel was for residential usage and not as cracker feedstock, as FEI propane was hovering at a premium to MOPJ naphtha at that time, making LPG uneconomical as alternate feedstock.

In South Korea, SK Advanced will start up its new 400,000 mt/year polypropylene unit at Ulsan around March 20, a company source said.

The company currently owns a 600,000 mt/year propane dehydrogenation plant at Ulsan and it sells propylene feedstock to domestic customers and buyers in China. After the new PP unit comes onstream, the downstream PDH plant will supply propylene feedstock to feed the new PP unit.

In the Middle East, Saudi April propane CP swap was valued March 8 at \$604/mt, up \$10/mt from the previous session, while April/May CP propane swaps backwardation widened by \$2/mt versus the previous session at \$37/mt.

May/June CP propane backwardation widened by \$2/mt from the previous session to \$27/mt on March 8.

TANKERS

Americas, West of Suez tankers bank on trans-Atlantic revival

Shipowners positioned on either side of the Atlantic Basin are hopeful a revival of refined oil product demand could spark a resurgence in the traditional trans-Atlantic trade flow in the near term, with increased vaccine usage now a key talking point to spur on demand growth.

The trans-Atlantic trade flow for gasoline for the UK Continent-US Atlantic Coast arbitrage and the backhaul trade from the US Gulf Coast to the UKC of ultra-low sulfur diesel provides the bedrock for Medium Range tankers – the most abundant tanker class in both EMEA and Americas markets. Recent months have crimped the latter journey of ULSD to the Continent as refinery runs in the USGC slowed in the wake of the coronavirus pandemic and severe weather events in mid-February.

With MR tankers in EMEA having only a fronthaul market and no backhaul options, tonnage lists continually replenished as the region has become the only focal point for outgoing refined product supply in the Western Hemisphere.

Around 770,000 mt of ULSD has been shipped from both Northwest Europe and the Mediterranean to the US Atlantic Coast since the start of 2021, but flows have totaled 2.08 million mt since November 2020.

Despite the increase in outgoing cargoes from EMEA markets in the new year, shipowners have long bemoaned the dissipation of the Americas markets, and hope that the forthcoming quarter will bring better fortunes for trans-Atlantic flows to resemble something of a normality.

“There is a feeling we’re at a turning point right now with the markets in the coming weeks,” a shipowner said. “There are small glimpses of life that seaborne ULSD could come back online from out of the US Gulf, and this could change the picture in the period ahead.”

The arbitrage opportunity for ULSD to flow from the USGC to Northwest Europe was reported trading at minus \$1.88/b March 5, according to Platts Analytics data, having been closed for a majority of time since June 2020.

Freight on the 38,000 mt USGC-UKC route continually traded along the freight floor for the last decade of February and the first week of March, assessed at Worldscale 60, or \$10.36/mt, since Feb. 25, the lowest level observed on the route since Dec. 15, 2020.

Freight increased marginally to w65, or \$11.23/mt, March 5-8 on the back of increased activity out of the USGC, though market participants in the Americas were unsure if the pickup in cargo supply would last with refined product stocks in the USGC having drawn significantly in

the week ending Feb. 26. The Continent market has seen more activity since the start of 2021, though rates have been more volatile, peaking on the 37,000 mt UKC-USAC route at w160, or \$21.12/mt, on Feb. 18. Rates have fallen since, and the route last settled at w120, or \$15.85/mt, on March 8.

Shipping participants on both sides of the Atlantic expect the revitalization of both clean tanker markets are likely to come with the expansion of the vaccine effort and the resurgence of international travel and hence jet fuel demand.

After the polar vortex impact on the wider US Gulf Coast region, ULSD production there plunged to 11-year lows, and also led to the largest regional week-on-week inventory draw in the US, falling 5.71 million barrels to 43.25 million barrels, according to the US Energy Information Administration. Stocks were last seen lower during the week ended Nov. 27, 2020, at 42.21 million barrels.

The EIA reported refinery utilization had fallen to 56% in the US and 40.9% on the USGC in the week ended Feb. 26. Power outages due to extreme cold weather in the week of Feb. 15 led to as much as 4.4 million b/d of refining capacity going offline

Platts reported March 5 multiple refineries across the USGC, totaling around 3.3 million b/d of capacity, affected by the cold weather in February having already returned to operation or due to return by March 16. However, a handful of USGC refineries totaling around 2.2 million b/d of capacity still had uncertain return dates as of March 5.

Market participants expressed uncertainty on whether USGC refineries will ramp up production to compensate on lighter stocks or whether margins remain unfavorable for them to do so.

In addition, USGC refineries were heard to typically embark on yearly turnarounds for maintenance work in this period, which will continue to slow outbound seaborne supply for tankers ex-USGC, and the level of uncertainty here could play a factor for MRs embarking on trans-Atlantic trades in the coming weeks.

NEWS

US crude inventories expected higher as refinery runs linger near historic lows [...from page 1](#)

but would still leave utilization more than 20 percentage points behind pre-storm levels.

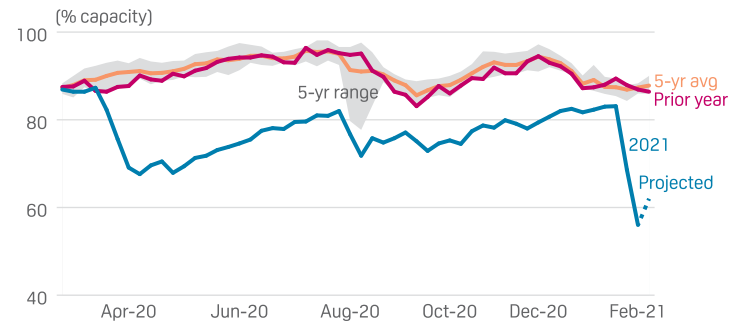
70 million barrels in lost runs

In total, the storm is likely to cost roughly 70 million barrels in lost refinery runs, according to S&P Global Platts Analytics, considerably overshadowing aggregate crude production losses of 20 million-25 million barrels.

Notably, the widespread impact of the storm across all aspects of the crude supply chain contributed to a considerable spread in analysts' survey responses, which ranged from as much as a 6 million-barrel draw to builds of over 11 million barrels.

Those refiners that were operating benefited from stronger margins last week, with USGC WTI MEH cracking margins averaging \$12.61/b compared with \$11.88/b the week earlier, Platts Analytics data showed.

US REFINERY UTILIZATION



Source: S&P Global Platts

But by week's end they began to taper off as more refineries returned to service and the price of crude gained on news OPEC+ plans to keep crude production unchanged in April. As a result, WTI MEH cracking margins, which were calculated at \$12.81 on March 1, dropped to \$11.78/b by March 5.

Total gasoline inventories likely fell 4.8 million barrels to around 238.7 million barrels, analysts said, leaving stocks 3.6% behind the five-year average.

Total distillate stocks are expected to draw 3.8 million barrels to around 139.2 million barrels, the lowest since April and 3.5% behind the five-year average.

Lifting restrictions

While record-low refinery runs have weighed on refined product output in recent weeks, the easing of pandemic restrictions in several states has contributed to rising demand.

Texas Governor Greg Abbott on March 2 issued an executive order rescinding previous pandemic capacity restrictions on businesses and ending a statewide mask mandate. The Texas order is an outlier in terms of scale, however other states, including Mississippi, Massachusetts, South Carolina and New York, have begun partial reopenings in recent weeks.

Apple Mobility data shows US driving activity climbed nearly 5 percentage points to 118.6, the highest since the week ended Oct. 30 and roughly at par with year-ago levels.

— [Chris van Moessner](#)

Saudi discipline pushes OPEC+ crude output to four-month low

- OPEC pumps 24.86 mil b/d in Feb, non-OPEC adds 12.97 million b/d
- Saudi Arabia produces 8.13 mil b/d, fulfilling extra cut pledge
- Russia below cap at 9.17 mil b/d, despite seeking looser quota

London—Saudi Arabia made good on its pledge to cut an additional 1 million b/d of its crude production in February, driving total output by OPEC and its Russia-led allies to a four-month low, according to the latest S&P Global Platts survey.

OPEC's 13 members pumped 24.86 million b/d, a decrease of 840,000 b/d from January, while its nine partners added 12.97 million b/d, a rise of 60,000 b/d.

Combined, the so-called OPEC+ alliance produced 37.83 million b/d,

its lowest since October, the survey found, putting the group's compliance with its quotas at 113.5%. It was the first month-on-month decline since the bloc began tapering its unprecedented production cuts in July, when the global economy took its first tentative steps in recovering from the worst of the coronavirus pandemic.

Taking away Saudi Arabia's voluntary extra cut would still put OPEC+ compliance at a solid 99.5%, according to Platts calculations.

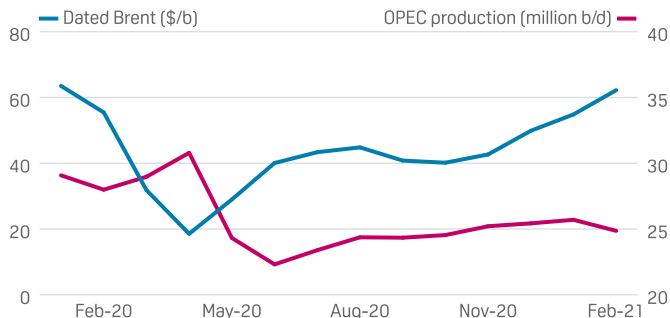
The kingdom, which is the world's largest exporter of crude, averaged 8.13 million b/d of production in February, down from January's 9.11 million b/d and well below its quota of 9.12 million b/d. Saudi crude exports fell in the month, and state oil giant Aramco also drew heavily from its storage volumes, while refinery maintenance depressed crude runs, the survey found.

The collective OPEC+ production restraint has helped power a robust rally in the oil market, with Platts assessing Dated Brent on March 5 at \$69.005/b, its highest since early January 2020.

But despite the price surge, the OPEC+ alliance appears set to keep a tight leash on supply through at least April, warning that the market may not be as strong as it looks, with upcoming seasonal refinery maintenance, still-bloated oil inventories, a largely grounded aviation sector, and continued lockdown measures in many countries.

At its March 4 meeting, the coalition agreed to roll over most quotas for another month, except for a 125,000 b/d rise granted to Russia and a 20,000 b/d increase allowed for Kazakhstan. Saudi Arabia will maintain its voluntary 1 million b/d cut, as well, to continue tightening the market.

OPEC OUTPUT CUTS UNDERPIN OIL PRICE SUPPORT



Source: S&P Global Platts

Russia falls, Kazakhstan gains

Russia, which has frequently chafed at its OPEC+ cap, failed to take advantage of its looser quota in February, with production declining 70,000 b/d from January to 9.18 million b/d, according to the survey.

Russia curbed its crude exports because of tepid demand from its key customers in Europe, where mobility restrictions and lockdowns persist.

Close ally Kazakhstan, another non-OPEC partner, saw the biggest rise among the group, boosting output by 110,000 b/d to 1.50 million b/d, well in excess of its 1.43 million b/d quota.

Among OPEC members, Iraq had the largest increase, with rising exports pushing its production to 3.89 million b/d, slightly above its quota. The country has been under immense pressure from its OPEC+ counterparts to improve its compliance and institute the compensation cuts it owes for previous excess output, which it says it plans to do by July.

RECENT OPEC CRUDE PRODUCTION (MILLION B/D)

	Feb-21	Change	Jan-21	Dec-20	Nov-20	Oct-20
OPEC-10						
Algeria	0.88	0.01	0.87	0.86	0.86	0.86
Angola	1.12	-0.04	1.16	1.20	1.19	1.22
Congo	0.25	-0.01	0.26	0.26	0.27	0.27
Equatorial Guinea	0.11	-0.02	0.13	0.12	0.10	0.11
Gabon	0.18	0.01	0.17	0.19	0.19	0.19
Iraq	3.89	0.07	3.82	3.85	3.80	3.79
Kuwait	2.33	0.01	2.32	2.30	2.30	2.29
Nigeria	1.54	0.07	1.47	1.43	1.50	1.53
Saudi Arabia	8.13	-0.98	9.11	9.01	9.01	8.99
UAE	2.61	0.00	2.61	1.43	1.50	1.53
Total	21.04	-0.88	21.92	20.65	20.72	20.78
Quota exempt						
Iran	2.14	0.00	2.14	2.04	2.02	2.00
Libya	1.13	-0.01	1.14	1.18	1.03	0.46
Venezuela	0.55	0.05	0.5	0.42	0.43	0.41
OPEC-13						
Total	24.86	-0.84	25.7	25.43	25.21	24.54

Source: S&P Global Platts survey

Venezuela, which is exempt from a quota due to severe sanctions levied by the US that have crippled its oil industry, managed a second consecutive month of gains, raising its production to 550,000 b/d, the highest in almost a year. The government has begun using private companies to rehabilitate its wells, particularly in the once prolific Orinoco Belt.

Fellow exempt members Iran and Libya saw their production remain largely flat month-on-month, according to the survey.

Besides Saudi Arabia and Russia, Angola saw the biggest fall, tumbling to 1.12 million b/d in February, the lowest since it joined OPEC in 2007. Severe underinvestment in the West African country's upstream sector has led to dramatic declines, with Angolan production falling 40% in the past five years and rendering its OPEC+ quota mostly meaningless.

The Platts figures are compiled by surveying oil industry officials, traders and analysts, as well as reviewing proprietary shipping, satellite and inventory data.

— [Herman Wang](#); [Eklavya Gupte](#)

Strike on key Saudi export hub shows Houthi threat still looms large

- Saudi crude exports normal following missile attacks
- Marks biggest Saudi attack since 2019 Abqaiq incident
- Brent crude spikes above \$70/b in early trading

Dubai—A drone attack on Saudi Arabia's Ras Tanura port failed to damage its critical oil loading and storage facilities, but raises fresh concerns over the security of supplies from the world's biggest crude exporter amid its ongoing proxy war in Yemen against Houthi rebels.

Iranian-backed Houthi rebels announced late March 7 they had launched 14 drones and eight ballistic missiles, which targeted Aramco facilities in Ras Tanura and military targets in Damman, Asir and Jazan. This followed a series of attacks on the kingdom's west coast last week.

The Saudi Ministry of Energy confirmed that one of the petroleum tank farms at Ras Tanura on the Persian Gulf coast, one of the largest

oil shipping ports in the world, was attacked in the morning by a drone coming from the sea. The attack did not result in any injury or loss of life or property, according to a statement on the official Saudi Press Agency.

The lack of damage was confirmed on March 8, as the port appeared to be operating normally.

In a statement to S&P Global Platts, Kpler, a commodities analytics provider, said its data showed no disruption in loadings at Ras Tanura, and all operations were running normally.

The state oil giant has been a frequent target for Houthi attacks, which have escalated in recent months, under a proxy war between Saudi Arabia and Iran, which are on opposing sides of Yemen's civil war.

The attack on Ras Tanura is the most high-profile target since the September 2019 strike on Aramco's critical Abqaiq crude processing plant and Khurais oil field, which temporarily knocked out 5.7 million b/d of production – almost 6% of global crude demand – throwing the oil market into disarray.

However, it took just 10 days for Aramco to carry out sufficient repairs for the company's total output to recover to 10 million b/d.

More recently, on March 4, Saudi Arabia was subject to several missile attacks on its Red Sea coast, with Houthis claiming they had managed to hit Aramco oil facilities in Jeddah. Most drone attacks on

land-based oil targets are unsuccessful, however, due to key assets being heavily guarded with anti-missile defense units.

Export flows

Aramco, which exported about 6.5 million b/d in December, ships the bulk of its crude from terminals in and around Ras Tanura on the Gulf. The port can handle about 6.5 million b/d, according to the US Energy Information Administration. All of Saudi Arabia's key crude oil grades load from Ras Tanura, along with condensate and products.

The port comprises three terminals: Ras Tanura terminal, Ju'aymah crude terminal and Ju'aymah LPG export terminal.

In January, before Saudi Arabia cut an additional 1 million b/d from production during February and March, Aramco's oil exports from Ras Tanura averaged around 5.84 million b/d, according to Kpler data. Crude storage levels at the port on March 4 stood at around 35.2 million barrels, according to Ursa Space, about 55% of its capacity.

Besides the attempted strike on Ras Tanura, the Saudi energy ministry said shrapnel from a ballistic missile fell near an Aramco residential compound on the evening of March 7 in the city of Dhahran, where thousands of the company's employees and their families from different nationalities live. However, this did not result in any injury or loss of life or property.

International Aramco contractors also seemed to be unaffected by the attacks.

"So far, all seem to be blasé; so little damage has been done," an industry source said. "It's strictly business as usual, as much as it can be with COVID-19, which represents a much more immediate concern."

Market reaction

The attack came as oil prices continue to climb following the OPEC+ decision last week to roll over supply cuts, despite recovering demand, to support prices. News of the attacks pushed Brent crude May prices up to \$71.38/b in early trading on March 8, before losing some ground. S&P Global Platts Analytics sees strong support for Dated Brent prices trading around the \$65-\$70/b range, with risk to the upside in the third quarter before easing by the end of 2021.

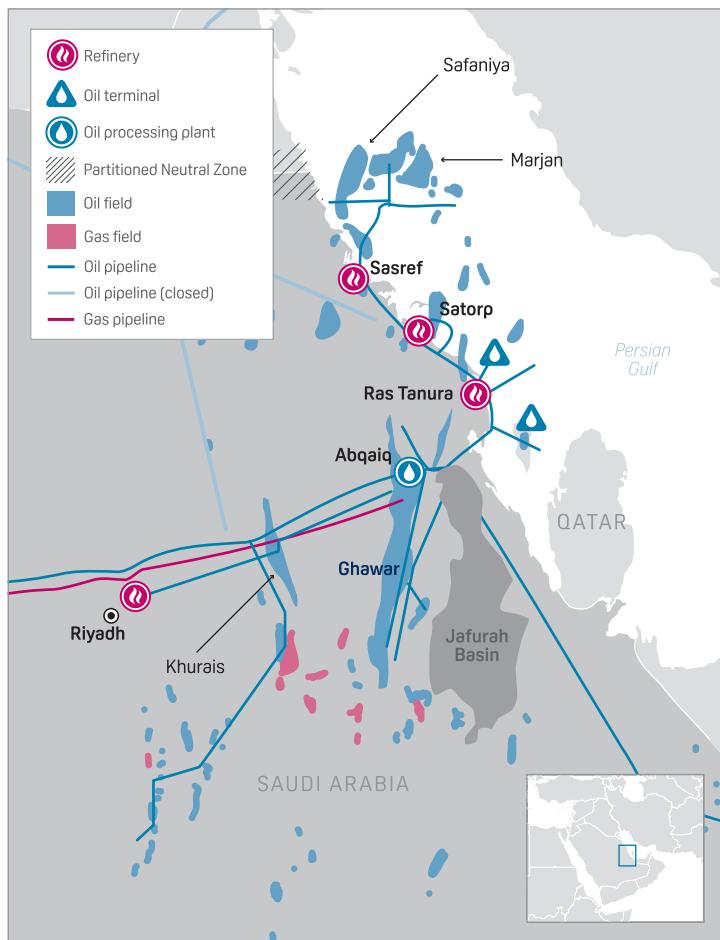
Freight across the Asia-Pacific region moved up sharply on key routes as owners upped their offers immediately after the news about the Ras Tanura attack broke. Market sources said the justification given was that higher bunker prices following the attack were increasing the expenses of shipowners, which had already been difficult to meet prior to the incident.

Shippers have increased their offers for LR1 tankers by up to 10 Worldscale points on the benchmark Persian Gulf-Japan route.

"Rates will increase as bunker prices move higher," said a source with an owner of clean tankers. Most owners said that post-attack, their bunker procurement costs have gone up by almost \$10/mt in Fujairah and Singapore.

Prior to the attack, LR2 owners were earning around \$1,600/day on the Persian Gulf-Japan route, but margins have eroded due to the rise in bunker prices, a Tokyo-based broker said. Depending on fuel consumption, for many owners it is now less than \$1,000/day, another broker said.

SAUDI ARABIA'S EASTERN OIL, GAS INFRASTRUCTURE



Source: S&P Global Platts, EIA

— Katie McQue, Robert Perkins, Sameer Mohindru

Impact of strong USGC refining margins ripples across other regions

- USGC refinery outages increase USAC imports
- Midwest refiners recovering from cold weather, grid instability

New York—US Gulf Coast refining margins strengthened as refiners moved forward to restart their plants after freezing temperatures forced them offline in mid-February, sending refining margins higher than the year-ago period, an analysis from S&P Global Platts showed March 8.

The freeze overwhelmed Texas' stand-alone electricity grid and refiners shut down plants to conserve power for residents to heat their houses, sending USGC refinery utilization to 40.9% for the week ended Feb. 26, the lowest level on record reported by the US Energy Information Administration.

On a weekly basis, USGC refining margins jumped higher across the board for the week ended March 5, with WTI MEH cracking margins averaging \$12.61/b compared with \$11.88/b the week earlier, S&P Global Platts Analytics data showed.

But by week's end they began to taper off as more refineries returned to service and the price of crude gained on news OPEC+ planned to keep crude production unchanged in April. As a result, WTI MEH cracking margins, which were calculated at \$12.81 on March 1, dropped to \$11.78/b by March 5.

Most of the 5 million b/d of Texas refinery capacity offline in mid-February has returned or will return to service over the next week, as calculated from company and regulatory filings by Platts, and the increased output is also pressuring margins.

The ripple effect

But the widespread cold which blanketed much of the nation impacted refinery operations well beyond the USGC. Completion of turnarounds underway were delayed and some refiners took advantage of plant shutdowns to move up planned work, as Delek US did at its 83,000 b/d El Dorado, Arkansas, plant.

The turnaround underway at Calumet's Shreveport, Louisiana, plant was delayed by more than a week, and the company's other two small plants in northwest Louisiana, the 13,020 b/d Cotton Valley and the 8,000 b/d Princeton, were down for about a week, company executives said.

"We had a continuous freeze for over a week in Northwest Louisiana and two major ice events," Calumet CEO Stephen Mawer said March 3. Mawer said these events caused external consequences which hampered production, including a shutdown of truck movements and loss of municipal water supplies.

Midwestern margins also got a boost from USGC outages which shut USGC-to-Midwest pipelines like Explorer.

Particularly hard-hit were Group 3 refiners, where plants including CVR's 74,500 b/d Wynnewood, Oklahoma, plant and its 132,000 Coffeyville, Kansas, facility shut down for about a week due to extreme cold and power grid instability, company executives said.

Although grid instability at that region's Southwest Power Pool was not as prolonged or severe as that at Electric Reliability Council of Texas, it still created refinery snags which were still seen supporting higher margins so far in the current week.

US ATLANTIC COAST REFINING MARGIN AVERAGES (\$/B)

	Bonny Light Cracking	Arab Light Cracking	Bakken Crude Cracking	Forties Cracking
Week ending March 05	8.55	7.51	5.45	6.73
Week ending February 26	8.65	7.96	7.48	6.68
Q1 to date	7.06	6.20	6.17	5.86
Q1-20	2.58	2.54	7.57	2.94
Q4-20	4.18	3.66	3.46	4.31
Q3-20	3.63	1.84	3.62	3.59

Source: S&P Global Platts Analytics

US GULF COAST REFINING MARGIN AVERAGES (\$/B)

	WTI MEH Cracking	Maya Coking	LLS Coking	Mars Coking
Week ending March 05	12.61	9.10	10.80	11.14
Week ending February 26	11.88	7.63	10.04	10.77
Q1 to date	9.37	6.35	7.91	7.63
Q1-20	7.91	8.47	7.47	7.24
Q4-20	5.93	4.73	4.82	4.16
Q3-20	5.09	3.61	3.81	2.84

Source: S&P Global Platts Analytics

US MIDWEST REFINING MARGIN AVERAGES (\$/B)

	Bakken Cracking	WTI Cushing Cracking	Syncrude Cracking	WCS ex-Cushing Coking
Week ending March 05	11.99	12.02	12.63	12.10
Week ending February 26	13.13	12.26	14.66	12.43
Q1 to date	10.16	8.19	10.92	8.08
Q1-20	9.18	6.73	7.36	8.23
Q4-20	6.48	4.43	7.53	4.20
Q3-20	5.65	4.25	5.60	4.18

Source: S&P Global Platts Analytics

USWC REFINING MARGIN AVERAGES (\$/B)

	ANS Cracking	Vasconia Coking	Arab Medium Coking	Napo Coking
Week ending March 05	15.36	18.75	16.45	13.87
Week ending February 26	15.48	18.97	17.00	14.18
Q1 to date	11.75	14.71	12.54	11.31
Q1-20	14.64	14.79	14.81	16.75
Q4-20	10.00	11.59	9.53	9.39
Q3-20	9.66	10.99	7.90	9.63

Source: S&P Global Platts Analytics

SINGAPORE REFINING MARGIN AVERAGES (\$/B)

	Dubai Cracking	Arab Light Cracking	ESPO Cracking	Arab Light Coking
Week ending March 05	-0.58	-0.87	1.31	-0.91
Week ending February 26	-0.05	-0.36	1.74	-0.28
Q1 to date	-0.73	-0.83	1.04	-0.77
Q1-20	-0.77	-3.68	0.17	-3.14
Q4-20	-1.07	-0.45	-1.14	-0.57
Q3-20	-2.06	-2.27	-1.24	-2.62

Source: S&P Global Platts Analytics

ARA MARGIN AVERAGES (\$/B)

	WTI MEH Cracking	Bonny Light Cracking	Arab Light Cracking	Urals Cracking
Week ending March 05	1.13	3.95	0.90	4.19
Week ending February 26	1.21	4.36	1.31	4.21
Q1 to date	1.43	3.25	1.03	2.55
Q1-20	1.52	2.30	3.31	5.08
Q4-20	0.91	1.68	0.38	0.91
Q3-20	0.40	1.68	-0.90	0.51

Source: S&P Global Platts Analytics

ITALY REFINING MARGIN AVERAGES (\$/B)

	Urals Cracking	CPC Blend Cracking	Arab Light Cracking	WTI MEH Cracking
Week ending March 05	3.84	4.93	-0.43	0.18
Week ending February 26	3.60	4.80	-0.21	-0.02
Q1 to date	2.64	3.88	-0.01	0.83
Q1-20	4.33	6.21	2.14	0.46
Q4-20	1.14	2.81	-0.18	0.62
Q3-20	0.28	2.17	-1.78	-0.06

Source: S&P Global Platts Analytics

The Group 3 cracking margin for WTI ex-Cushing reached \$20.60/b on March 5, higher than the week's average of \$19.99/b, Platts Analytics data showed.

The restart of the Explorer Pipeline, combined with a smaller weather-related impact on area plants, tempered Chicago market margins. WTI ex-Cushing dropped to average \$12.02/b for the week ended March 5, compared with \$12.20/b the week earlier.

USAC imports begin to taper off

Lower USGC output cut volumes sent to the US Atlantic Coast, increasing imports of gasoline and distillates into the region while supporting higher margins there and in Europe.

However, as USGC refinery operations were returning to normal, USAC margins were also drifting lower, in tandem with those in Northwest Europe, a main exporter of refined products into the USAC.

Cracking margins for Bonny Light along the USAC dropped 10

cents/b week on week to reach \$8.55/b for the week ended March 5, after starting the week March 1 at \$9.06/b.

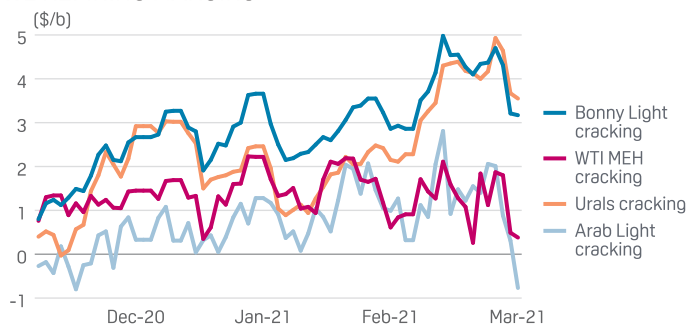
Northwest Europe Bonny Light Cracking margins fell to \$3.95/b from \$4.36/b the week earlier, despite a slight uptick for the week ended March 5 in gasoline and distillates to 131,000 b/d and 123,000 b/d, respectively, according to Kpler commodity tracking data. This compares with exports of 46,000 b/d of gasoline and 123,000 b/d of distillates for the week ended Feb. 26.

However, margins and exports from the Mediterranean into the USAC remained ample. USAC gasoline imports averaged 96,000 b/d for the week ended March 5, well above the four-week average of 44,000 b/d, Kpler data showed.

Cracking margins for CPC Blend rose from \$4.80/b for the week ended Feb. 26 to \$4.93/b the week ended March 5, Platts Analytics data showed. However, margins trended lower at the end of the week to \$4.41/b.

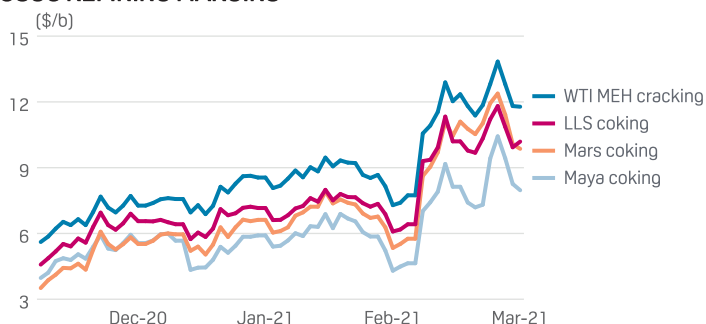
— *Janet McGurty*

NWE REFINING MARGINS



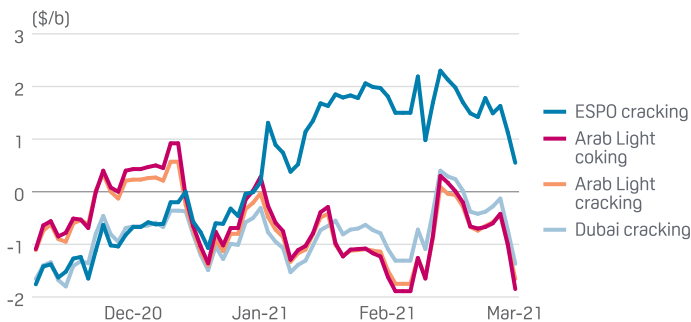
Source: S&P Global Platts Analytics

USGC REFINING MARGINS



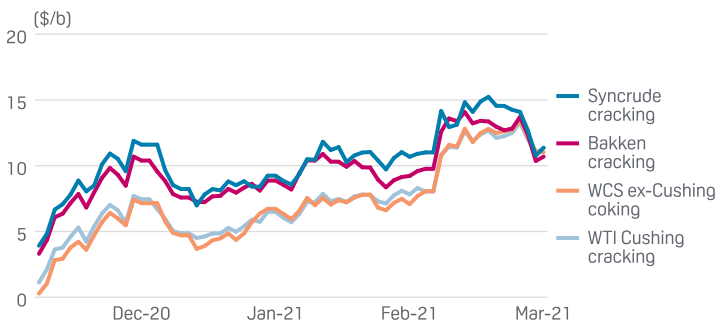
Source: S&P Global Platts Analytics

SINGAPORE REFINING MARGINS



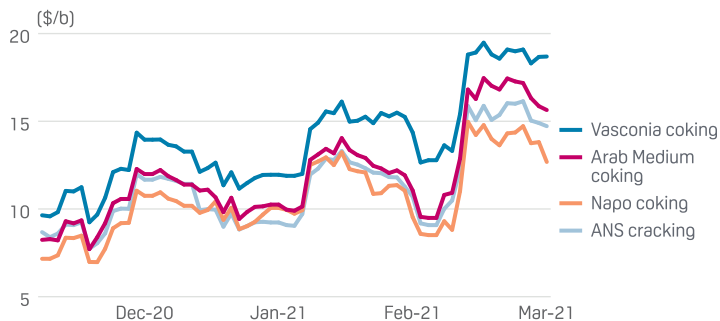
Source: S&P Global Platts Analytics

US MIDWEST REFINING MARGINS



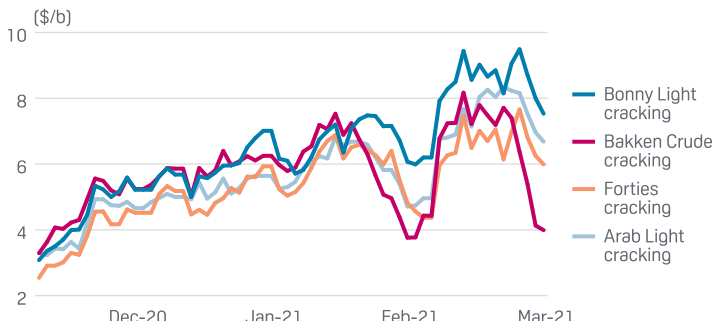
Source: S&P Global Platts Analytics

USWC REFINING MARGINS



Source: S&P Global Platts Analytics

USAC REFINING MARGINS



Source: S&P Global Platts Analytics

Crude prices retreat as firm US dollar provides headwinds

- US dollar strongest since November
- US Senate passes \$1.9 trillion relief bill
- Crude spiked overnight after attacks on Saudi port

New York—Oil prices settled lower March 8 as the US dollar pushed to more than three-month high, offsetting geopolitical risk concerns spurred by an overnight attack on Saudi Arabia oil infrastructure.

NYMEX April WTI settled \$1.04 lower at \$65.05/b, and ICE May Brent declined \$1.12 to \$68.24/b.

A steep rise in the value of the US dollar in recent weeks finally caught up with oil prices, analysts said, driving crude prices lower for the first time in four sessions.

The ICE US dollar index climbed to 92.34 in afternoon trading, from 91.99 on March 5 and on pace for the highest close since late November. The index has rallied roughly 2.4 percentage points since its most recent low in late February.

“The market really shrugged of the Saudi news and is primarily fixated on the move in the dollar, which is really triggering this pullback here,” OANDA senior market analyst Edward Moya said. “We are also starting to see some concern that, while the US outlook is great, Europe and the emerging markets is not there yet, and higher prices could affect that. There is a growing belief that maybe move in oil has been overdone despite fundamentals pointing to higher prices.”

The US Senate on March 6 passed its version of the Biden administration’s \$1.9 trillion pandemic relief bill, sending it back to the House of Representatives for final approval and paving the way for its passage later this month. The prospect of more stimulus, coupled with a steadily improving COVID-19 situation in most states, is supportive for the US dollar in the short term, analysts said, likely adding headwinds to further crude price increases.

The value of the dollar and dollar-denominated commodities, including oil, are typically inversely correlated.

NYMEX April RBOB settled down 1.60 cents at \$2.0487/gal, and April ULSD slipped 3.55 cents to \$1.9085/gal.

Oil prices had spiked overnight as the market eyed attacks on Saudi Arabian oil infrastructure.

Saudi Arabia’s energy ministry reported a drone attack on the morning of March 7 that hit a petroleum storage tank at the Ras Tanura port, one of the world’s largest oil shipping ports, with 33 million barrels of storage capacity and three terminals that export all of Saudi Arabia’s key crude oil grades, in addition to exporting condensates and refined products.

No deaths or injuries were reported but damage included missile shrapnel landing near residences of Saudi Aramco employees, as well as an explosion that shook windows. Meanwhile the export terminal was unscathed by the attacks, which were allegedly launched by Iranian-backed Houthi rebels from Yemen.

Brent futures surged above \$71/b early in the session, while WTI briefly tested the \$68/b level.

— [Chris van Moessner](#)

REFINERY UPDATES

Paraguana, Venezuela

- Owner: PDVSA
- Capacity (b/d): Amuay 645,000 b/d; Cardon 310,000 b/d; 187,000 b/d PLC and 140,000 b/d El Palito
- Duration: Ongoing

Notes: Venezuela’s 955,000 b/d Paraguana Refining Center (CRP) is operating at 122,000 b/d, or 12.2% of its capacity March 8, under the 17.9% rate reported on Feb.25, according to a technical report reviewed by S&P Global Platts.

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

The processing rate dropped due to the lack of crude oil to process and the unscheduled shutdown of distiller number two at the Cardon refinery on Feb. 28 due to leaking seals. The Amuay refinery is currently operating at a rate of 65,000 b/d, or 6.9% of its maximum capacity, according to the report. At Amuay, only one of five distillers is in service. The rest of the processing plants continue to be shut down owing to various breakdowns and the lack of replacement parts, according to the report.

The Cardon refinery is operating at a rate of 57,000 b/d, or 18.4% of its capacity, under the 34.2% rate reported on Feb. 25.

Three of the four distillers at Cardon are out of service for repairs.

Cardon is the only refinery of the four that PDVSA operates in Venezuela in condition to process gasoline, although at insufficient volumes to ease the nation’s acute scarcity of fuels that began in January 2019 when the US applied sanctions.

At Cardon, the catalytic cracker (FCC) which has a 90,000 b/d capacity, has remained in operation at a rate of 45,000 b/d, or 50% of capacity and produces some 22,000 b/d of gasoline.

The 45,000 b/d naphtha reformer at Cardon was restarted on March 3. The unit that was shut down for repairs on Feb. 25, now is operating at 25,000 b/d, and is producing 20,000 b/d of gasoline for the local market, according to a technical report.

However, diesel production at the CRP is only 12,000 b/d, which has forced PDVSA to ration the fuel for public transportation and cargo transport. PDVSA distributes diesel for free, but production is insufficient to cover current demand of 60,000-90,000 b/d, according to unofficial estimates.

Updated official data on actual fuel consumption in the local market is not available.

Venezuela’s refining system nationwide consists of four large refineries: Amuay, Cardon, Puerto La Cruz and El Palito, which together have a capacity of 1.3 million b/d, but is currently operating at only 9.4% of capacity.

The refinery at the 187,000 b/d Puerto La Cruz location was shut down on Jan. 25 for repairs. The El Palito refinery (140,000 b/d capacity) remains closed, according to the technical report.

PDVSA did not respond immediately to request for comments.

Source: Refining technical report

PRODUCT PRICE ASSESSMENTS

ASIA, MAR 8

			Mid	Change
Singapore (PGA page 2002)				
(\$/barrel)				
Naphtha	PAAAP00	69.00-69.04	69.020	+1.260
Jet kerosene	PJABF00	71.00-71.04	71.020	+1.970
Gasoil	POABC00	73.89-73.93	73.910	+1.750
Gasoil 10 ppm	AAOV000	73.89-73.93	73.910	+1.750
Gasoil 50 ppm	AAPPF00	73.76-73.80	73.780	+1.740
Gasoil 0.05% S	AAFEX00	72.78-72.82	72.800	+1.680
Gasoil 0.25% S	AACU000	72.51-72.55	72.530	+1.680
Gasoil 50 ppm disc/prem	AAPP000	-0.36--0.32	-0.340	+0.040
Mogas 92 unl	PGAAY00	74.54-74.58	74.560	+2.030
Mogas 95 unl	PGAEX00	76.37-76.41	76.390	+2.250
Mogas 97 unl	PGAMS00	77.56-77.60	77.580	+2.290
CFR Naphtha	AAOV000		67.690	+1.310
Naphtha pap. (bal month)	AAPLD00	68.28-68.32	68.300	+1.350
Naphtha pap. (Apr)	PAAAQ00	67.08-67.12	67.100	+1.300
Naphtha pap. (May)	PAAAR00	65.93-65.97	65.950	+1.200
Kerosene pap. (bal month)	AAPLE00	71.35-71.39	71.370	+1.940
Kerosene pap. (Apr)	PJABS00	71.71-71.75	71.730	+1.920
Kerosene pap. (May)	PJABT00	72.00-72.04	72.020	+1.940
Gasoil pap. (bal month)	AAPLF00	74.06-74.10	74.08	+1.680
Gasoil pap. (Apr)	POAFC00	74.15-74.19	74.170	+1.720
Gasoil pap. (May)	POAFG00	74.14-74.18	74.160	+1.790
(\$/mt)				
FO 180 CST 2%	PUAXS00	418.48-418.52	418.500	+14.760
HSFO 180 CST	PUADV00	409.27-409.31	409.290	+14.430
180 CST disc/premium	AAGZF00	1.31-1.35	1.330	+0.500

CHINA, MAR 8 (PGA page 2010)

			Mid	Change
(\$/mt)				
South China FOB				
Unl 92 RON	AAICW00	621.25-625.25	623.250	+16.500
South China, C&F				
Jet kerosene	PJABQ00	571.00-575.00	573.000	+15.750
Gasoil	POAFA00	552.75-556.75	554.750	+12.750
Hong Kong				
Fuel oil 380 CST	PUAER00	427.50-428.50	428.000	+14.000

FUJAIRAH, FOB, MAR 8 (PGA page 2018)

			Mid	Change
(\$/mt)				
Naphtha	NFJSA00		627.120	+14.230
HSFO 380 CST	AFUJQ00		395.080	+14.740
(\$/barrel)				
Gasoline 95 unleaded	AFUJA00		77.600	+2.290
Gasoline 92 unleaded	RFJFS00		75.280	+2.280
Kerosene	AFUJF00		70.610	+1.880
Gasoil 10 ppm	AFUJP00		73.080	+1.630
Gasoil	AFUJK00		73.080	+1.630

			Mid	Change
Singapore (continued)(PGA pages 2002 & 2655)				
(\$/mt)				
HSFO 380 CST	PPXDK00	406.44-406.48	406.460	+13.970
HSFO 180 CST pap. (bal month)	AAPML00	409.03-409.07	409.050	+14.200
HSFO 180 CST pap. (Apr)	PUAXZ00	406.48-406.52	406.500	+14.000
HSFO 180 CST pap. (May)	PUAYF00	404.38-404.42	404.400	+14.600
MTBE	PHALF00	713.00-715.00	714.000	+20.000
C&F Japan (PGA page 2006)				
(\$/barrel)				
Jet kerosene	PJAAN00	72.93-72.97	72.950	+1.930
Mogas unl	PGACW00	76.71-76.75	76.730	+2.110
(\$/mt)				
Naphtha	PAAAD00	630.00-635.50	632.750	+12.750
Nph 2nd 1/2 Apr	PAAAE00	639.75-640.25	640.000	+12.750
Nph 1st 1/2 May	PAAAF00	635.00-635.50	635.250	+12.750
Nph 2nd 1/2 May	PAAAG00	630.00-630.50	630.250	+12.750
FOB Japan				
(\$/barrel)				
Gasoil	POJAP00		73.220	+1.700
C+F Australia (PGA page 2004)				
(\$/barrel)				
Mogas 92 unl	AACZF00	77.54-77.58	77.560	+2.130
Mogas 95 unl	AACZH00	79.37-79.41	79.390	+2.350
Jet kerosene	AAFIV00	74.22-74.26	74.240	+2.070
Gasoil 10 ppm	AAQD000	77.31-77.35	77.330	+1.870

ARAB GULF, FOB, MAR 8 (PGA page 2004)

			Mid	Change
(\$/mt)				
Naphtha	PAAAA00	606.78-612.28	609.530	+11.530
Naphtha LR2	AAIDA00	612.50-618.00	615.250	+12.280
HSFO 180 CST	PUABE00	398.23-398.27	398.250	+14.120
HSFO 380 CST	AAIDC00	395.40-395.44	395.420	+13.660
(\$/barrel)				
95 RON unleaded	AAICY00	73.79-73.83	73.810	+2.180
92 RON unleaded	AGGJA00		71.980	+1.960
Kerosene	PJAAA00	69.29-69.33	69.310	+1.890
Gasoil 10 ppm	AAIDT00	72.07-72.11	72.090	+1.660
Gasoil 0.05% S	AAFEZ00	71.87-71.91	71.890	+1.660
Gasoil 0.25% S	AACUA00	71.37-71.41	71.390	+1.660
Gasoil	POAAT00	72.07-72.11	72.090	+1.660

ASIA PRODUCT PREMIUM/DISCOUNT ASSESSMENTS

			Mid	Change
Mar 8				
MOP* Singapore (PGA page 2002)				
(\$/barrel)				
Jet	PJACU00	-0.52/-0.48	-0.500	+0.010
Gasoil 0.25% S	AACQI00	-1.61/-1.57	-1.590	-0.020
Gasoil	POAIC00	-0.23/-0.19	-0.210	+0.050
CFR Naphtha	AAOV000		-0.100	+0.070
(\$/mt)				
380 CST	PPXDL00	3.44/3.48	3.460	+0.210
MOP* Arab Gulf (PGA page 2004)				
(\$/barrel)				
Jet	PJACV00	0.68/0.72	0.700	0.000
Gasoil 10 ppm	AAIDU00	0.73/0.77	0.750	0.000
Gasoil 0.25% S	AACUC00	0.03/0.07	0.050	0.000
Gasoil	POAID00	0.73/0.77	0.750	0.000
380 CST**	PPXDM00	-2.85/-2.81	-2.830	-0.460
(\$/mt)				
HSFO 180 CST	AAJJA00	7.98/8.02	8.000	+1.000
HSFO 380 CST	AAJJB00	3.48/3.52	3.500	+0.500
MOP* Japan (PGA page 2006)				
(\$/barrel)				
Naphtha	PAADI00	11.75/12.25	12.000	0.000
MOP* West India (PGA page 2012)				
(\$/mt)				
Gasoline (92 RON)	AARBQ00		619.460	+16.840
Gasoline (95 RON)	AAQWI00		627.380	+18.490
Naphtha	AAQWK00		610.250	+11.920
Jet kero	AAQWM00		546.760	+15.150
Gasoil (10 ppm)	AAQW000		548.890	+12.920
Gasoil (500 ppm)	AAQWP00		528.060	+12.110
Gasoil (2500 ppm)	AAQWS00		526.050	+12.110
(\$/barrel)				
Gasoline (92 RON)	AARBP00		72.880	+1.980
Gasoline (95 RON)	AAQWH00		74.690	+2.200
Naphtha	AAQWJ00		67.810	+1.330
Jet kero	AAQWL00		69.210	+1.920
Gasoil (10 ppm)	AAQWN00		72.030	+1.690
Gasoil (500 ppm)	AAQWP00		70.880	+1.620
Gasoil (2500 ppm)	AAQWR00		70.610	+1.620

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

PLATTS INDEX, MAR 8 (PGA page 115)

			Change
Platts Jet Fuel Index	PJGL000	196.98	-0.430

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

PRODUCT PRICE ASSESSMENTS

EUROPEAN BULK, MAR 8

(\$/mt)		Mid	Change		Mid	Change
(PGA page 1114)						
Cargoes FOB Med basis Italy			Cargoes CIF Med basis Genoa/Lavera			
Prem unl 10 ppm	AAWZA00	627.50-628.00	627.750	+2.500	AAWZB00	634.75-635.25 635.000 +2.500
Naphtha physical	PAAA100	581.25-581.75	581.500	-6.250	PAAAH00	591.25-591.75 591.500 -6.000
Jet av. fuel	AAIDL00	549.25-549.75	549.500	-1.000	AAZBN00	562.25-562.75 562.500 -0.750
ULSD 10 ppm	AAWY00	540.75-541.25	541.000	-1.250	AAWYZ00	550.00-550.50 550.250 -1.000
Gasoil 0.1%	AAVJ100	535.75-536.25	536.000	-1.250	AAVJ300	545.75-546.25 546.000 -1.000
1% fuel oil	PUAAK00	460.50-461.00	460.750	-1.500	PUAAJ00	473.75-474.25 474.000 -1.250
3.5% fuel oil	PUAAZ00	375.50-376.00	375.750	0.000	PUAAY00	388.50-389.00 388.750 +0.250
(PGA page 1110)						
Cargoes FOB NWE			Cargoes CIF NWE basis ARA			
Gasoline 10 ppm					AAXFQ00	632.75-633.25 633.000 -5.500
Naphtha swaps					PAAA100	593.75-594.25 594.000 -2.750
Naphtha physical					PAAAL00	598.50-599.00 598.750 -6.000
Jet kerosene	PJAAY00	555.50-556.00	555.750	-0.750	PJAAY00	563.75-564.25 564.000 -0.750
ULSD 10 ppm	AAVBF00	538.25-538.75	538.500	-1.250	AAVBF00	548.25-548.75 548.500 -1.250
Diesel 10 ppm NWE	AAWZD00	539.50-540.00	539.750	-1.250	AAWZC00	550.00-550.50 550.250 -1.250
Diesel 10 ppm UK					AAVBH00	551.50-552.00 551.750 -1.250
Diesel 10 ppm UK cargoes					AUKDA00	551.750 -1.250
CIF NWE - original (French) spec						
Gasoil 0.1%	AAWWR00	531.25-531.75	531.500	-1.000	AAWWS00	544.00-544.50 544.250 -1.000
1% fuel oil	PUAAM00	455.75-456.25	456.000	-0.250	PUAAL00	466.00-466.50 466.250 -0.250
3.5% fuel oil	PUABB00	369.75-370.25	370.000	-0.500	PUABA00	383.25-383.75 383.500 -0.500

[\(PGA pages 1112 & 1380\)](#)

Barges FOB Rotterdam						
98 RON unl	AAKOD00	650.75-651.25	651.000	-7.500		
Prem unl	PGABM00	626.75-627.25	627.000	-3.000		
Reformate	AAXPM00		634.000	-7.500		
Eurobob	AAQZV00	613.75-614.25	614.000	-7.500		
E10 Eurobob	AGEFA00		627.000	-3.500		
Naphtha physical	PAAAM00	594.50-595.00	594.750	-6.000		
Jet kerosene	PJABA00	562.00-562.50	562.250	-1.500		
Diesel 10 ppm*	AAJUS00	543.25-543.75	543.500	-1.750		
Gasoil 50 ppm	AAUQC00	542.00-542.50	542.250	-1.750		
Gasoil 0.1%*	AAWWT00	534.75-535.25	535.000	-1.750		
DMA MGO 0.1%*	LGARD00		530.000	-1.000		
1% fuel oil	PUAAP00	454.50-455.00	454.750	-0.250		
3.5% fuel oil	PUABC00	384.75-385.25	385.000	-0.500		
3.5% 500 CST fuel oil	PUAGN00	382.75-383.25	383.000	-0.500		
380 CST	PUAYW00	395.50-396.50	396.000	+1.000		

*FOB Amsterdam-Rotterdam-Antwerp.

WEST AFRICA PRODUCTS (\$/mt), MAR 8

		Mid	Change
West Africa cargoes (PGA page 1122)			
FOB NWE			
Gasoline	AAKUV00	630.000	+0.500
CIF West Africa			
Gasoline	AGNWC00	649.500	+1.750
FOB STS West Africa			
Gasoil 0.3%	AGNWD00	550.000	-1.500

RENEWABLE FUELS (\$/mt), MAR 8 [\(PGA pages 1414, 483 and 2414\)](#)

		Mid	Change
Northwest Europe			
SAF	BJNWA00	1854.448	+2.685
HVO	HVNWA00	1708.486	+1.814
USWC			
SAF w/ credits	ASAF00	1697.062	+2.308
SAF w/o credits	ASAFB00	252.759	-21.448
RD w/ credits	ARDFA00	1608.684	+1.448
RD w/o credits	ARDFB00	-2.939	-24.242
Southeast Asia			
SAF	ASFAA00	1726.300	+4.140
HVO	HVSAB00	1589.210	+4.820

PLATTS EURO DENOMINATED PRODUCT ASSESSMENTS

Mar 8		Mid	Change
Cargoes CIF NWE/basis ARA (PGA page 1116)			
Nap phy	AAQCE00	504.68-505.10	504.891 -2.918
Jet	AAQCF00	475.38-475.80	475.588 +1.367
Cargoes FOB NWE (PGA page 1116)			
1%	AAQCG00	384.31-384.73	384.518 +1.404
Barges FOB Rotterdam (PGA page 1118)			
Prem unl	AAQCH00	528.50-528.92	528.712 -0.300
10 ppm*	AAQCI00	458.09-458.51	458.302 +0.455
Gasoil 0.1%*	AAWY00	450.92-451.35	451.134 +0.424
DMA MGO*	LGARE00		446.918 +1.037
3.50%	AAQCK00	324.44-324.86	324.648 +0.943
3.50% 500 CST	PUAG000	322.75-323.17	322.961 +0.936
		Mid	Change
Cargoes CIF West Africa (PGA page 1116)			
Gasoline	AANWC00		547.685 +3.769
Cargoes FOB NWE West Africa (PGA page 1116)			
Gasoline	AGNWA00		531.242 +2.650
Cargoes FOB STS West Africa (PGA page 1116)			
Gasoil 0.3%	AGNWE00		463.783 +0.688

Euro/US\$ forex rate: 1.1859. Platts Euro denominated European and US product assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time. *FOB Amsterdam-Rotterdam-Antwerp.

EUROPEAN FEEDSTOCKS AND BLENDSTOCKS

		Mid	Change
CIF Northwest Europe cargo (PGF page 1760)			
VGO 0.5-0.6%	AAHMZ00	504.75-505.75	505.250 +1.000
VGO 2%	AAHND00	496.75-497.75	497.250 +0.750
FOB Northwest Europe cargo (PGF page 1760)			
VGO 0.5-0.6%	AAHMX00	491.00-492.00	491.500 +1.000
VGO 2%	AAHNB00	483.00-484.00	483.500 +0.750
Straight Run 0.5-0.7%	PKABA00	489.75-490.75	490.250 +1.250
FOB Black Sea cargo (PGF page 1760)			
VGO 0.8%	ABBAD00		479.500 +0.500
VGO 2%	ABBAC00		472.000 +0.500
CIF Mediterranean cargo (PGF page 1760)			
Straight Run 0.5-0.7%	AAJNT00		495.500 -1.000
VGO 0.8%	ABBAB00		496.000 +1.000
VGO 2%	ABBAA00		488.500 +1.000
FOB Rotterdam barge (PGF page 1760)			
MTBE*	PHALA00	695.75-696.25	696.000 +2.500
VGO 0.5-0.6%	AAHNF00	481.50-482.50	482.000 +1.000
VGO 2%	AAHNI00	473.50-474.50	474.000 +1.000

*FOB Amsterdam-Rotterdam-Antwerp.

PRODUCT PRICE ASSESSMENTS

NEW YORK, MAR 8 (PGA page 152)

		Mid	Change		RVP		Mid	Change		RVP	Mid	Change			
	Cargo (¢/gal)					Barge (¢/gal)					Differentials to NYMEX				
Unl 87	AAMHG00	207.44–207.54	207.490	+2.950	AAMHGRV	13.5									
CBOB						AAWBL00	194.07–194.17	194.120	-1.850	AAWBLRV	13.5	AANYX14	-10.750	-0.250	
Prem CBOB						AAWLC00	207.82–207.92	207.870	-1.850	AAWLCRV	13.5	AANYX16	3.000	-0.250	
Unl RBOB	AAVKS00	195.72–195.82	195.770	-1.850	AAVKSrv	13.5	AAMGV00	194.22–194.32	194.270	-1.850	AAMGVRV	13.5	AANYX15	-10.600	-0.250
Prem RBOB						AAMGY00	207.97–208.07	208.020	-1.850	AAMGYRV	13.5	AANYX17	3.150	-0.250	
Jet fuel						PJAAW00	175.30–175.40	175.350	-2.650			ADIGA00	-15.500	+0.900	
LS jet kero						PJABJ00	194.30–194.40	194.350	-3.550			ADIHA00	3.500	0.000	
ULS kero						AAVTI00	201.05–201.15	201.100	-3.550			ADJKH00	10.250	0.000	
No. 2						POAEG00	169.80–169.90	169.850	-1.550			ADIAO00	-21.000	+2.000	
ULSD						AATGX00	190.30–190.40	190.350	-3.850			ADIZA00	-0.500	-0.300	
ULS heating oil						AAXPX00		175.850	-4.300			ADIAQ00	-15.000	-0.750	
	Cargo ex-duty (¢/gal)*														
Unl 87	AASAA00	190.70–190.80	190.750	+2.420	AASAArv	13.5									
Unl RBOB	AASAF00	179.02–179.12	179.070	-2.370	AASAFrv	13.5									
	(\$/barrel)						Differential vs 1s strip(\$/barrel)								
No. 6 0.3% S hi pr	PUAAE00	83.24–83.26	83.250	-1.140			AAUGA00	14.44–14.46	14.450						
No. 6 0.3% S lo pr	PUAAB00	83.24–83.26	83.250	-1.140			AAUGB00	14.44–14.46	14.450						
No. 6 0.7% S max	PUA AH00	72.73–72.75	72.740	-1.000			AAUGC00	3.93–3.95	3.940						
No. 6 1% S max	PUA AO00	68.55–68.57	68.560	-1.000			AAUGD00	-0.25–0.23	-0.240						
No. 6 1% S max 1s strip	AAUGG00	68.79–68.81	68.800	-1.000											
USAC HSFO	PUAAX00	60.66–60.68	60.670	-1.000			AAUGF00	-8.14–8.12	-8.130						
No. 6 1 S max pap bal M	AARZS00	68.75–68.85	68.80	-1.000											
No. 6 1.0% S pap 1st M	PUAXD00	68.75–68.85	68.800	-1.000											
No. 6 1.0% S pap 2nd M	PUAXF00	68.20–68.30	68.250	-1.000											
No. 6 1.0% S pap qtrly	PUAXG00	68.22–68.32	68.270	-1.000											

*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 8 (PGA page 410)

(¢/gal)		Mid	Change		Differentials to NYMEX	Change	Cycle	RVP			
Unl 87	ACXPW00	205.770	+2.950		AANYX40	0.900	+4.550	ACRQWCY	12	ACRQWRV	13.5
CBOB	ABXPW00	204.770	+2.950		AANYX41	-0.100	+4.550	ABRQWCY	12	ABRQWRV	14.5
RBOB	ADXPW00	205.870	+2.950		AANYX42	1.000	+4.550	ADRQWCY	12	ADRQWRV	13.5
Jet kero 54	AAXPV00	176.600	-1.800		ADIJA00	-14.250	+1.750	AAXPVCY	12		
ULS heating oil	AAXPU00	177.600	-3.300		ADIAR00	-13.250	+0.250	AAXPUCY	11		
ULSD	AAXPW00	196.250	-1.900		ADLAA00	5.400	+1.650	AAXPWCY	11		

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

PRODUCT PRICE ASSESSMENTS

U.S. BUCKEYE PIPELINE, MAR 8 (PGA page 310)

(¢/gal)		Mid	Change	RVP	Differentials to NYMEX	Change
Unl RBOB	AAMHB00	194.22-194.32	194.270	-1.850	AAMHBRV 13.5	AANYX35 -10.600 -0.250
Prem RBOB	AAMHZ00	207.97-208.07	208.020	-1.850	AAMHZRV 13.5	AANYX36 3.150 -0.250
CBOB	AAPSY00	194.07-194.17	194.120	-1.850	AAPSYRV 13.5	AANYX33 -10.750 -0.250
CBOB prem	AAPSZ00	207.82-207.92	207.870	-1.850	AAPSZRV 13.5	AANYX34 3.000 -0.250
ULSD	AATHF00	190.30-190.40	190.350	-4.050		ADIYA00 -0.500 -0.500
Jet fuel	AAJNL00	175.30-175.40	175.350	-2.650		ADIEA00 -15.500 +0.900
LS jet/kero	AAJNN00	194.30-194.40	194.350	-3.550		ADIFA00 3.500 0.000

RVP

Laurel

Unl CBOB	AAUAS00	196.17-196.27	196.220	-1.850	AAUASRV 13.5	AANYX29 -8.650 -0.250
Prem CBOB	AAUAT00	209.92-210.02	209.970	-1.850	AAUATRV 13.5	AANYX30 5.100 -0.250

All RVP references are after ethanol

CHICAGO PIPELINE, MAR 8 (PGA page 160)

(¢/gal)		Mid	Change	RVP	Differentials to NYMEX	Change
Unleaded 87	PGACR00	187.82-187.92	187.870	-3.350	PGACRRV 13.5	AANYX98 -17.000 -1.750
Unleaded 89	PGAAX00	194.92-195.02	194.970	-3.350	PGAAXRV 13.5	
Prem. unl 91	PPASQ00	205.57-205.67	205.620	-3.350	PPASQRV 13.5	AANY100 0.750 -1.750
CBOB	AAREL00	186.82-186.92	186.870	-3.350	AARELRV 13.5	AANY101 -18.000 -1.750
PBOB	AAUEU00	206.82-206.92	206.870	-4.100	AAUEURV 13.5	AANY103 2.000 -2.500
RBOB	PPARH00	188.07-188.17	188.120	-4.100	PPARHRV 13.5	AANY102 -16.750 -2.500
Jet fuel	PJAAF00	184.55-184.65	184.600	-3.550		ADILA00 -6.250 0.000
ULS No. 1	PJACD00	218.80-218.90	218.850	-2.050		
ULSD	AATHA00	198.80-198.90	198.850	-2.050		ADLAI00 8.000 +1.500

CHICAGO BUCKEYE COMPLEX, MAR 8 (PGA page 160)

(¢/gal)		Mid	Change	RVP	Differentials to NYMEX	Change
CBOB	ACBAA00	188.120	-4.100	ACBAARV 13.5	ACBAB00	-16.750 -2.500
RBOB	ACBAC00	188.120	-4.100	ACBACRV 13.5	ACBAD00	-16.750 -2.500
ULSD	ACBAE00	198.850	-2.050		ACBAF00	8.000 +1.500

CHICAGO WOLVERINE PIPELINE, MAR 8 (PGA page 160)

(¢/gal)		Mid	Change	RVP	Differentials to NYMEX	Change
CBOB	AGCWA00	188.370	-1.850	AGCWERV 13.5	AGCWB00	-16.500 -0.250
ULSD	AGCWC00	198.850	-2.050		AGCWD00	8.000 +1.500

GROUP THREE, MAR 8 (PGA page 160)

(¢/gal)		Mid	Change	RVP	Differentials to NYMEX	Change
Sub-octane	AAXIX00	202.07-202.17	202.120	-2.600	AAXIXRV 8.5	AANYX01 -2.750 -1.000
Prem. unleaded	PGABD00	224.32-224.42	224.370	-2.600	PGABDRV 8.5	AANYX02 19.500 -1.000
ULSD	AATHB00	224.30-224.40	224.350	-6.800		ADLAB00 33.500 -3.250
Jet fuel	PJAAI00	185.05-185.15	185.100	-3.550		ADIKA00 -5.750 0.000
No. 1	PJACB00	244.30-244.40	244.350	-6.800		

ATLANTIC RESID/CONTRACT CARGOES POSTED PRICES, MAR 8 (PGA page 564)

(\$/barrel)		No. 4 Fuel
Global		
Boston 0.5%	PRALB00	100.30
Boston 1.0%	PRALD00	95.50
		No. 6 Fuel
Boston 0.5%	PRAMN00	99.10
Boston 1.0%	PRAMD00	88.30

Source: Global Montello Group Corp.

MARINE FUEL (PGA page 30)

		\$/mt	Change
0.5% FOB Singapore cargo	AMFSA00	520.520	+10.750
0.5% FOB Fujairah cargo	AMFFA00	509.990	+4.460
0.5% FOB Rotterdam barge	PUMFD00	492.750	-2.750
0.5% FOB US Gulf Coast barge	AUGMB00	504.250	-7.500
0.5% Divd US Atlantic Coast barge	AUAMB00	513.250	-7.000
0.5% FOB Mediterranean cargo	MFFMM00	495.000	-1.500
0.5% CIF Mediterranean cargo	MFCMM00	506.750	-1.250
		\$/barrel	
0.5% FOB US Gulf Coast barge	AUGMA00	79.410	-1.180
0.5% Divd US Atlantic Coast barge	AUAMA00	80.830	-1.100
		vs FO 380 MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	AMOPA00	117.520	-3.010
		vs MF 0.5% MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	FOFSB00	1.170	-0.330
0.5% FOB Singapore Bal mo	FOFS000	520.100	+10.850
0.5% FOB Singapore M1	FOFS001	518.350	+11.900
0.5% FOB Singapore M2	FOFS002	516.250	+12.050
0.5% FOB Singapore MOPS Strip	FOFSA00	519.350	+11.080

PRODUCT PRICE ASSESSMENTS

U.S. GULF COAST, MAR 8

		Mid	Change		Mid	Change		Mid	Change								
Houston (PGA page 156)																	
		Pipeline (¢/gal)			Differential to NYMEX			Cycle		RVP							
Unl 87	PGACT00	196.07-196.17	196.120	-1.850	AANY105	-8.750	-0.250	PGACTCY	16	PGACTRV	11.5	PGACU00	198.07-198.17	198.120	-1.850	PGACURV	11.5
Unl 89	PGAAY00	200.47-200.57	200.520	-1.950				PGAAYCY	16	PGAAYRV	11.5	PGAAZ00	202.47-202.57	202.520	-1.950	PGAAZRV	11.5
Prem unl 93	PGAJB00	207.07-207.17	207.120	-2.100	AANYX76	2.250	-0.500	PGAJBCY	17	PGAJBRV	9.0	PGAIK00	209.07-209.17	209.120	-2.100	PGAIKRV	9.0
CBOB 87	AARQU00	192.82-192.92	192.870	-1.950	AANYX77	-12.000	-0.350	AARQUCY	16	AARQURV	12.5	AAWES00	194.82-194.92	194.870	-1.950	AAWESRV	12.5
CBOB 93	AARQV00	198.32-198.42	198.370	-2.100	AANYX78	2.250	-0.500	AARQVCY	16	AARQVRV	12.5						
RBOB 83.7	AAMFB00	193.82-193.92	193.870	-1.950	AANYX79	-11.000	-0.350	AAMFBCY	16	AAMFBRV	11.5						
RBOB 91.4	AAMNG00	208.82-208.92	208.870	-1.100	AANYX80	4.000	+0.500	AAMNGCY	16	AAMNGRV	11.5						
Jet/kero 54	PJABO00	171.05-171.15	171.100	-3.800	ADIAS00	-19.750	-0.250	PJABOCY	17			PJABM00	172.55-172.65	172.600	-3.800		
Jet/kero 55	PJABP00	171.55-171.65	171.600	-3.800	ADIAZ00	-19.250	-0.250	PJABPCY	17			PJABN00	173.05-173.15	173.100	-3.800		
ULS Kero	AAVTL00	178.05-178.15	178.100	-3.800	ADICA00	-12.750	-0.250	AAVTLCY	17			AAVTK00	179.55-179.65	179.600	-3.800		
ULSD	AATGY00	188.10-188.20	188.150	-3.850	ADIQAO0	-2.700	-0.300	AATGYCY	17			AATGZ00	189.60-189.70	189.650	-3.600		
No. 2	POAED00	170.80-170.90	170.850	-1.550	ADIAAO0	-20.000	+2.000	POAEDCY	17			POAEE00	175.30-175.40	175.350	-1.550		
ULS Heating Oil	AAXFD00	174.00-174.10	174.050	-4.350	ADIAI00	-16.800	-0.800	AAXFDCY	17								
		Waterborne vs prompt pipeline (¢/gal)															
Jet Spread	AUSGL00		1.500	0.000													
ULSD Spread	AUSGN00		1.500	+0.250													
No. 2 Spread	AUSGM00		4.500	0.000													
		FOB Cargo (¢/gal)			FOB Cargo (\$/mt)												
Export ULSD	AAXRV00	173.900	-4.150		AAXRW00	544.130	-12.990										
		FOB Cargo vs forward pipe strip (¢/gal)															
ULSD Mexico	AUSGH00		1.550	+0.050													
ULSD Brazil	AUSGA00		1.650	-0.100													
ULSD EN590	AUSGB00		1.800	-0.200													
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	+0.150				AAXTACY	16								
Line 3	AAXTB00		0.000	0.000				AAXTBCY	16								
Line 1+3	AAXTC00		-0.600	+0.150				AAXTCCY	16								
		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	68.44-68.46	68.450	-1.100	AAUGS00	9.54-9.56	9.550	-0.100									
No. 6 1.0% S 6 API	PUAAI00	69.22-69.24	69.230	-1.100	AAUGT00	10.32-10.34	10.330	-0.100									
USGC HSFO	PUAFZ00	58.44-58.46	58.450	-1.100	AAUGU00	-0.46--0.44	-0.450	-0.100	AAUGW00	58.89-58.910	58.900	-1.000					
RMG 380	PUBDM00	58.44-58.46	58.450	-1.100	AAUGV00	-0.46--0.44	-0.450	-0.100									
USGC HSFO swap BalMo(Mar)	AARZT00	58.85-58.95	58.90	-1.000													
USGC HSFO swap M1(Apr)	PUAXJ00	58.85-58.95	58.900	-1.000													
USGC HSFO swap M2(May)	PUAXL00	58.50-58.60	58.550	-0.950													
USGC HSFO swap Q1(Q2 21)	PUAXN00	58.43-58.53	58.480	-0.970													
		USGC RVP Adjustments (¢/gal)															
CBOB -1 psi	AGLOB00		0.600	0.000													
Prem CBOB -1 psi	AGLOC00		0.600	0.000													
CBOB +1 psi	AGLOA00		-1.400	-0.050													
Prem CBOB +1 psi	AGHOA00		-1.500	-0.050													

(PGA page 330)

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	154.20-154.30	154.250	-2.500						
FOB Naphtha Cargo (\$/mt)	AAXJU00	582.95-583.05	583.000	-9.500						
Naphtha USGC vs Naphtha MOPJ (\$/mt)	ANAPD00		-12.250	+2.750						
DAP LSR Naphtha Parcel	AAXQK00		155.500	-2.750						
DAP LSR Naphtha Parcel (\$/mt)	AAXQM00		623.560	-11.020						
DAP LSR Naphtha Parcel diff**	AAXQN00		6.000	-0.500						
Naphtha barge	AALPG00	172.57-172.67	172.620	-1.850	AASGZ00	-25.500				
Heavy naphtha barge	AALPI00	176.57-176.67	176.620	-1.850	AASHD00	-21.500				
MTBE	PHAKX00	217.03-217.13	217.080	-0.580						
							Diff vs USGC pipeline 87 (¢/gal)			
Alkylate*	AAXBAA00	207.910	-1.950	AAFIE00	9.000	0.000	AAXB00	11.000	0.000	
Raffinate*	AAXB00	173.910	-1.950	AAJMU00	-25.000	0.000	AAXB00	-23.000	0.000	
Reformate*	AAXBC00	226.910	-1.950	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 8 [\(PGA page 156\)](#)

(¢/gal)		Pipeline	Mid	Cycle	RVP		Pipeline	Mid	Cycle	RVP			
Gasoline													
Unl-87	AAELC00	196.07-196.17	196.120	AAELCCY	16	AAELCRV	11.5	ULSD	AAUJW00	187.80-187.90	187.850	AAUJWCY	18
Unl-87	AAELD00	197.07-197.17	197.120	AAELDCY	17	AAELDRV	9.0	ULSD	AAUJX00	187.50-187.60	187.550	AAUJXCY	19
Unl-87	AAELE00	196.82-196.92	196.870	AAELECY	18	AAELERV	9.0	ULSD	AAUJY00	187.20-187.30	187.250	AAUJYCY	20
Unl-87	AAELF00	196.57-196.67	196.620	AAELFCY	19	AAELFRV	9.0	ULSD	AAUJZ00	186.90-187.00	186.950	AAUJZCY	21
Unl-87	AAELG00	196.32-196.42	196.370	AAELGCV	20	AAELGRV	9.0	ULSD	AAUKD00	186.60-186.70	186.650	AAUKDCY	22
Unl-87	AAELH00	196.07-196.17	196.120	AAELHCY	21	AAELHRV	9.0	No. 2	AAELW00	170.80-170.90	170.850	AAELWCY	17
CBOB 87	AARQW00		194.120	AARQWCY	17	AARQWRV	10.0	ULS heating oil	AAXFJ00	174.00-174.10	174.050	AAXFJCY	17
CBOB 87	AARQX00		193.870	AARQXCY	18	AARQXRV	10.0	ULS heating oil	AAXFK00	173.70-173.80	173.750	AAXFKCY	18
CBOB 87	AARQY00		193.620	AARQYCY	19	AARQYRV	10.0	ULS heating oil	AAXFL00	173.40-173.50	173.450	AAXFLCY	19
CBOB 87	AARQZ00		193.370	AARQZCY	20	AARQZRV	10.0	ULS heating oil	AAXFM00	173.10-173.20	173.150	AAXFMCY	20
CBOB 87	AARQA00		193.120	AARQACY	21	AARQARV	10.0	ULS heating oil	AAXFN00	172.80-172.90	172.850	AAXFNCY	21
								ULS heating oil	AAXFP00	172.50-172.60	172.550	AAXFPCY	22
Distillates								Forward pipeline strip					
Jet kero	AAELQ00	171.05-171.15	171.100	AAELQCY	17			ULSD 15-30 Day	AUSGI00		186.840		
Jet kero	AAELR00	170.55-170.65	170.600	AAELRCY	18			ULSD 21-35 Day	AUSGJ00		186.650		
Jet kero	AAELS00	170.75-170.85	170.800	AAELSCY	19			ULSD 7-21 Day	AUSGK00		187.120		
Jet kero	AAELT00	170.95-171.05	171.000	AAELTCY	20			Jet Fuel 15-30 Day	AUSGE00		170.840		
Jet kero	AAELU00	171.15-171.25	171.200	AAELUCY	21			Jet Fuel 21-35 Day	AUSGF00		170.950		
Jet kero	AAELV00	171.35-171.45	171.400	AAELVCY	22			Jet Fuel 7-21 Day	AUSGG00		170.670		
ULSD	AAUJV00	188.10-188.20	188.150	AAUJVCY	17								

PRODUCT PRICE ASSESSMENTS

WEST COAST PIPELINE, MAR 8 (PGA page 158)

			Mid	Change		RVP			Mid	Change
California										
(¢/gal)		<u>Los Angeles</u>						<u>Differential to NYMEX</u>		
Unl 84	AAUHA00	208.57-208.67	208.620	-1.600	AAUHARV	10.0	AANYX84		3.750	0.000
Prem unl 90	PGABG00	225.07-225.17	225.120	-1.600	PGABGRV	10.0	AANYX85		20.250	0.000
CARBOB	AAKYJ00	209.57-209.67	209.620	-1.600	AAKYJRV	6.0	AANYX00	4.70/4.80	4.750	0.000
CARBOB prem	AAKYL00	226.07-226.17	226.120	-1.600	AAKYLRV	6.0	AANYX86		21.250	0.000
Jet fuel	PJAAP00	177.30-177.40	177.350	-3.550			AANYX00	-13.55/-13.45	-13.500	0.000
ULS (EPA) diesel	POAET00	199.30-199.40	199.350	-3.550			AANVZ00	8.45/8.55	8.500	0.000
CARB diesel	POAAK00	199.30-199.40	199.350	-3.550			AANNA00	8.45/8.55	8.500	0.000
San Francisco										
(¢/gal)		<u>San Francisco</u>						<u>Differential to NYMEX</u>		
Unl 84	PGADG00	204.57-204.67	204.620	-1.600	PGADGRV	13.5	AANYX87		-0.250	0.000
Prem unl 90	PGABO00	222.57-222.67	222.620	-1.600	PGABORV	13.5	AANYX88		17.750	0.000
CARBOB unl	AAKYN00	204.57-204.67	204.620	-1.600	AAKYNRV	6.0	AANYX89		-0.250	0.000
CARBOB prem	AAKYP00	222.57-222.67	222.620	-1.600	AAKYP RV	6.0	AANYX90		17.750	0.000
Jet Fuel	PJABC00	177.30-177.40	177.350	-3.550			ADINA00		-13.500	0.000
ULS (EPA) diesel	POAEY00	191.80-191.90	191.850	-3.550			ADLAE00		1.000	0.000
CARB diesel	POAAL00	191.80-191.90	191.850	-3.550			ADLAF00		1.000	0.000
Other West										
(¢/gal)		<u>Phoenix</u>						<u>Differential to NYMEX</u>		
CBG/RBOB unl	AADDP00	211.32-211.42(a)	211.370	-1.600	AADDP RV	8.0	AANYX91		6.500	0.000
CBG/RBOB prem	PPXDJ00	219.32-219.42(b)	219.370	-1.600	PPXDJ RV	8.0	AANYX92		14.500	0.000
Northwest										
(¢/gal)		<u>Seattle</u>						<u>Differential to NYMEX</u>		
Unl 84	AAJJE00	202.82-202.92	202.870	-1.600	AAJJERV	15.0	AANYX93		-2.000	0.000
Prem unl 90	AAJXF00	221.82-221.92	221.870	-1.600	AAJXFRV	15.0	AANYX94		17.000	0.000
Jet fuel	PJABB00	177.30-177.40	177.350	-3.550			ADIOA00		-13.500	0.000
ULS (EPA) diesel	AAUEX00	193.40-193.50	193.450	-3.550			ADLAH00		-1.150	0.000
(¢/gal)		<u>Portland</u>						<u>Differential to NYMEX</u>		
Unl 84	AAJJC00	202.82-202.92	202.870	-1.600	AAJJCRV	13.5	AANYX95		-2.000	0.000
Prem unl 90	AAJJD00	221.82-221.92	221.870	-1.600	AAJJDRV	13.5	AANYX96		17.000	0.000
ULS (EPA) diesel	AAUEY00	194.55-194.65	194.600	-3.550			ADLAG00		3.750	0.000

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

WEST COAST WATERBORNE, MAR 8 (PGA page 158)

(¢/gal)			Mid	Change
Unl 87	PGADI00	208.57-208.67	208.620	-1.600
Jet fuel	PJABI00	176.30-176.40	176.350	-3.550

PRODUCT PRICE ASSESSMENTS

LATIN AMERICA, FOB, MAR 8 (PGA page 164)

			Mid	Change		
		\$/barrel				
Argentina						
ULSD CIF	AAXWZ00		76.800	-1.490		
Colombia						
FO 1.75% S FOB	PPAR000	60.89-60.91	60.900	-1.000		
Diluent Naphtha Ex-Ship	AAXYB00		64.480	-1.220		
Ecuador						
FO 2.2% S FOB	PPASL00	56.89-56.91	56.900	-1.000		
RON 93 CIF	AAXYC00		79.220	-1.330		
ULSD CIF	AAXWF00		75.910	-1.630		
Peru						
Naphtha FOB	PAAAS00	70.41-70.43	70.420	-1.240		
FO 1.6% S FOB	PPARK00	58.59-58.61	58.600	-1.000		
Natural Gasoline FOB	AAXWD00		59.630	-0.600		
ULSD CIF	AAXWY00		76.160	-1.630		
					Peso/liter Change	
Mexico cargo						
Gasoline CIF Eastern Mexico	AAXWA00		77.620	-0.970	AATFH00	10.470 -0.070
Gasoline CIF Rosarito	AATFA00		80.440	-0.890	AATFK00	10.850 -0.060
Gasoline CIF Lazaro Cardenas	AATFD00		80.150	-0.930	AATFN00	10.810 -0.070
ULSD CIF Eastern Mexico	AAXWE00		73.520	-1.630	AATFI00	9.920 -0.160
ULSD CIF Rosarito	AATFB00		75.170	-1.710	AATFL00	10.140 -0.180
ULSD CIF Lazaro Cardenas	AATFE00		75.700	-1.710	AATFO00	10.210 -0.180
Jet CIF Eastern Mexico	AATFG00		72.860	-1.450	AATFJ00	9.830 -0.140
Jet CIF Rosarito	AATFC00		75.340	-1.490	AATFM00	10.170 -0.140
Jet CIF Lazaro Cardenas	AATFF00		75.600	-1.390	AATFP00	10.200 -0.130

CARIBBEAN CARGOES, FOB, MAR 8 (PGA page 162)

			Mid	Change
		\$/mt		
Jet kerosene	PJAAD00	578.41-578.47	578.440	-11.530
		c/gal		
Jet kerosene	PJAAD10	172.66-172.68	172.670	-3.440
		\$/barrel		
No. 6 2.0% S	PUAAS00	58.73-58.75	58.740	-1.100

TRINIDAD PRODUCT POSTINGS (PGA page 466)

Effective date 05Mar21

		c/gal
Mogas 92 RON Unleaded	PPRAE00	230.00
Mogas 95 RON Unleaded	PPRAF00	235.00
Dual Purpose Kerosene	PPRAB00	187.00
Gascoil 45 Cetane 0.1%S	PPRAC00	200.00
		\$/b
Bunker C Fuel Oil	PPRAA00	70.00

Source: Paria

GAS LIQUIDS (c/gal), MAR 8 (PGA page 780)

			Mid	Change
		Mont Belvieu		
Ethane/propane	PMUDA05	17.450-17.550	17.500	+1.250
Ethane purity	PMUDB05	21.825-21.925	21.875	+0.875
Ethane mo. 2	AAWUC00	22.200-22.300	22.250	+1.000
Propane	PMAAY00	93.575-93.675	93.625	-2.625
Propane LST	PMABQ00	94.200-94.300	94.250	-2.750
Propane mo. 2	AAWUD00	93.325-93.425	93.375	-2.625
Propane mo. 2 LST	AAWUE00	90.950-91.050	91.000	-2.000
Normal butane non-LST	PMAAI00	102.450-102.550	102.500	-4.250
Butane LST	PMABR00	104.700-104.800	104.750	-4.250
N-Butane mo. 2	AAWUF00	99.700-99.800	99.750	-2.500
Isobutane	PMAAB00	99.450-99.550	99.500	-1.500
Natural gasoline LST	AAIVF00	150.700-150.800	150.750	-3.000
Natural Targa	PMABW05	149.825-149.925	149.875	-2.125
Natural non-Targa	PMABY05	149.450-149.550	149.500	-2.250
Nat gasoline mo. 2 non-Targa	AAWUG00	148.450-148.550	148.500	-1.750
		Conway		
Ethane/propane	PMAA000	25.200-25.300	25.250	+0.375
Propane	PMAAT00	88.200-88.300	88.250	-0.500
Normal butane non-LST	PMAAD00	95.450-95.550	95.500	-2.500
Isobutane	PMAAA00	121.950-122.050	122.000	-2.250
Natural gasoline	PMAAQ00	149.200-149.300	149.250	-2.000
		Other hubs		
Hattiesburg propane	AALBC00	93.700-93.800	93.750	-1.250
		(\$/mt)		
Waterborne FOB USGC propane	AAXIM00	502.600-502.620	502.610	-12.290
FOB USGC propane vs. Mt Belvieu	AAXIO00	26.040-26.060	26.050	+7.810
VLGC freight rates Houston to NWE	AAXIQ00	28.990-29.010	29.000	0.000
VLGC freight rates Houston to Japan	AAXIS00	58.990-59.010	59.000	0.000
		(c/gal)		
Waterborne FOB USGC propane	AAXIN00	96.460-96.480	96.470	-2.360
FOB USGC propane vs. Mt Belvieu	AAXIP00	4.950-5.050	5.000	+1.500
VLGC freight rates Houston to NWE	AAXIR00	5.515-5.615	5.565	0.000
VLGC freight rates Houston to Japan	AAXIT00	11.310-11.330	11.320	0.000

CRUDE PRICE ASSESSMENTS

ASIA PACIFIC/MIDDLE EAST SPOT CRUDE ASSESSMENTS (\$/barrel), MAR 8

	Assessment (Asian MOC)				Diffs (Asian MOC)				Diff to Dated Brent (Asian MOC)				Assessment (London MOC)			
		Mid	Change		Mid	Change		Mid	Change	Mid	Change	Mid	Change	Mid	Change	
Condensate																
(PGA page 2212) (PGA page 2213)																
NW Shelf	PCAGX00	71.13-71.17	71.150	+2.240	Diff to Dubai				AAPAI00	1.750	-0.050	AAPAH00	69.980	+0.080		
DFC	ADFCB00	68.43-68.47	68.450	+1.760	ADFCB00	1.45/1.55	1.500	-0.050	ADFCB00	-0.380	-0.510	ADFCB00	67.380	-0.340		
Qatar LSC	AARB000	68.13-68.17	68.150	+1.760	AARB000	1.15/1.25	1.200	-0.050	AARBC00	-0.680	-0.510	AARBA00	67.080	-0.340		
South Pars	AARAV00	63.93-63.97	63.950	+1.760	AARAX00	-3.05/-2.95	-3.000	-0.050	AARAW00	-4.880	-0.510	AARAU00	62.880	-0.340		
Senipah																
	AAE0E00	71.38-71.42	71.400	+2.240	AAE0K00	1.50/1.60	1.550	-0.050	AAPBE00	2.000	-0.050	AAPBD00	70.230	+0.080		
Light																
(PGA page 2214) (PGA page 2215)																
Diff to ICP																
Cossack	PCAGZ00	70.78-70.82	70.800	+2.240					AAPAC00	1.400	-0.050	AAPAB00	69.630	+0.080		
Gippsland	PCACP00	67.93-67.97	67.950	+2.240					AAPAU00	-1.450	-0.050	AAPAT00	66.780	+0.080		
Tapis	PCACB00	70.43-70.47	70.450	+2.290					AAOZV00	1.050	0.000	AAOZV00	69.280	+0.130		
Belida	PCAFI00	68.03-68.07	68.050	+2.240	PCAFM00	0.65/0.75	0.700	-0.050	AAPBQ00	-1.350	-0.050	AAPBP00	66.880	+0.080		
Kutubu	PCAFJ00	71.23-71.27	71.250	+2.240					AAPBE00	1.850	-0.050	AAPAD00	70.080	+0.080		
Handil Mix	PCABE00	69.23-69.27	69.250	+2.240	PCABF00	1.00/1.10	1.050	-0.050	AAPBI00	-0.150	-0.050	AAPBH00	68.080	+0.080		
Attaka	PCAAJ00	67.83-67.87	67.850	+2.240	PCAAK00	-0.20/-0.10	-0.150	-0.050	AAPBC00	-1.550	-0.050	AAPBB00	66.680	+0.080		
Ardjuna	PCACQ00	62.23-62.27	62.250	+2.290	PCACR00	-2.80/-2.70	-2.750	0.000	AAPBG00	-7.150	0.000	AAPBF00	61.080	+0.130		
Banyu Urip	PCAFQ00		71.250	+2.240	PCAQQ00		0.450	-0.050	AAPBU00	1.850	-0.050	AAPBR00	70.080	+0.080		
Sakhalin Blend																
	AARB000	68.28-68.32	68.300	+1.810	AARCN00	1.30/1.40	1.350	0.000	AARDN00	-0.530	-0.460	AAREN00	67.230	-0.290		
Sokol	AASCJ00	69.48-69.52	69.500	+1.810	AASCK00	2.50/2.60	2.550	0.000	AAPAO00	0.670	-0.460	AAPAN00	68.430	-0.290		
Kikeh	AAWH000	71.43-71.47	71.450	+2.290					AAOZY00	2.050	0.000	AAOZY00	70.280	+0.130		
Miri Light	PCABQ00	71.23-71.27	71.250	+2.290					AAPAS00	1.850	0.000	AAPAR00	70.080	+0.130		
Labuan	PCABL00	71.58-71.62	71.600	+2.290					AAPAQ00	2.200	0.000	AAPAP00	70.430	+0.130		
Kimanis	AASCL00		71.850	+2.290					AASCM00	2.450	0.000	AASCN00	70.680	+0.130		
Medium																
(PGA page 2216) (PGA page 2217)																
Nanhai	PCAFR00	63.68-63.72	63.700	+2.290					AAPAG00	-5.700	0.000	AAPAF00	62.530	+0.130		
Minas*	PCAB000		67.180	+1.810					AAPAZ00			AAPAZ00	66.010	-0.350		
Nile Blend	AAPLC00	69.78-69.82	69.800	+2.240					AAPAM00	0.400	-0.050	AAPAL00	68.630	+0.080		
Widuri*	PCAFE00		62.760	+1.735					AAPBN00			AAPBN00	61.590	-0.425		
Daqing	PCAAZ00	65.83-65.87	65.850	+2.290					AAPAW00	-3.550	0.000	AAPAV00	64.680	+0.130		
Cinta*	PCAAV00		64.570	+1.785					AAPB000			AAPB000	63.400	-0.375		
Su Tu Den	AARAR00	70.23-70.27	70.250	+2.290					AARAS00	0.850	0.000	AAPAQ00	69.080	+0.130		
Bach Ho	PCAHY00	72.08-72.12	72.100	+2.290					AAPAK00	2.700	0.000	AAPAJ00	70.930	+0.130		
Heavy																
(PGA page 2218) (PGA page 2219)																
Diff to ICP																
Dar Blend	AARAB00	73.18-73.22	73.200	+2.290					AARAC00	3.800	0.000	AARAA00	72.030	+0.130		
Shengli	PCABY00	71.98-72.02	72.000	+2.290					AAPAY00	2.600	0.000	AAPAX00	70.830	+0.130		
Duri	PCABA00	74.98-75.02	75.000	+2.290	PCABB00	4.40/4.50	4.450	0.000	AAPBM00	5.600	0.000	AAPBL00	73.830	+0.130		
Vincent	AARAK00		82.200	+2.290					AARAL00	12.800	0.000	AARAJ00	81.030	+0.130		
*Market Parity Price.																
(PGA page 2220) (PGA page 2202)																
Spread vs OSP																
Murban M1	AAKNL00	68.83-68.87	68.850	+1.550	AAKUB00	0.30/0.40	0.350	+0.100	AARBZ00	1.900	-0.260					
Murban M2	MBNSA00		68.230	+1.550												
Murban M3	MBNSB00		67.500	+1.480												
Al Shaheen	AAPEV00	68.28-68.32	68.300	+1.880					AAPEW00	1.30/1.40	1.350	+0.070				
Upper Zakum	AAOUQ00	68.28-68.32	68.300	+1.880	AAOUR00	0.05/0.15	0.100	+0.050								
Umm Lulu	AUFAA00		68.750	+1.650	AUFAB00		0.300	+0.100	Assessment (Asian MOC)							
Das Blend	AAOXF00	68.43-68.47	68.450	+1.650	AAAXP00	0.25/0.35	0.300	+0.100	Dubai CFR North Asia							
Qatar Land	AAKNP00	68.23-68.27	68.250	+1.700	AAKUJ00	0.10/0.20	0.150	+0.100	LOOP Sour CFR North Asia							
Qatar Marine	AAKNR00	68.08-68.12	68.100	+1.850	AAKUH00	0.00/0.10	0.050	+0.050	Oman CFR North Asia							
Banoco Arab Medium	AAKNT00	68.08-68.12	68.100	+1.950	AAKUD00	-0.05/0.05	0.000	0.000	Upper Zakum CFR North Asia							
Basrah Light M1	AALZA00	-	68.850	+1.800	AALZE00		-0.150	0.000	Qatar Marine CFR North Asia							
Basrah Light M2	AALZB00	-	68.450	+2.000	AALZF00		-0.050	0.000	Murban CFR North Asia							
Basrah Medium M1	BSMAM01	-	68.650	+1.850	BSMBM01		0.700	0.000	Basrah Light CFR North Asia							
Basrah Medium M2	BSMAM02	-	68.050	+1.850	BSMBM02		0.500	0.000	ESPO CFR North Asia							
Basrah Heavy M1	AALZC00	-	67.700	+1.850	AALZJ00		1.000	0.000	Forties CFR North Asia							
Basrah Heavy M2	AALZD00	-	67.050	+1.850	AALZK00		0.750	0.000	Dalia CFR North Asia							
									WTI MEH CFR North Asia							

CRUDE PRICE ASSESSMENTS

INTERNATIONAL, MAR 8

(\$/barrel)		Mid	Change
(PGA page 2210)			
Dubai (May)	PCAA00	68.29-68.31	68.300 +1.880
Dubai (Jun)	PCAAU00	67.67-67.69	67.680 +1.880
Dubai (Jul)	PCAAV00	66.94-66.96	66.950 +1.810
MEC (May)	AAWSA00	68.29-68.31	68.300 +1.880
MEC (Jun)	AAWSB00	67.67-67.69	67.680 +1.880
MEC (Jul)	AAWSC00	66.94-66.96	66.950 +1.810
Oman (May)	PCABS00	68.34-68.36	68.350 +1.930
Oman (Jun)	AAHZF00	67.72-67.74	67.730 +1.930
Oman (Jul)	AAZH00	66.99-67.01	67.000 +1.860
Oman cash/OSP (May)	PCABT00	1.08-1.12	1.100 +0.410
(PGA page 1212)			
Brent (DTD)	PCAAS00	68.73-68.74	68.735 -0.270
DTD NSL	AAOFD00	68.73-68.74	68.735 -0.270
Dated Brent (CIF)	PCAKM00		69.575 -0.110
Brent (May)	PCAAQ00	69.07-69.09	69.080 +0.230
Brent (Jun)	PCAAAR00	68.49-68.51	68.500 +0.280
Brent (Jul)	PCARR00		67.670 +0.290
North Sea Basket	AAGIZ00	69.02-69.03	69.025 -0.110
(PGA page 218)			
Brent/WTI 1st	AALAU00	3.55/3.57	3.560 +0.140
Brent/WTI 2nd	AALAV00	3.43/3.45	3.440 +0.170
Brent/WTI 3rd	AALAY00		3.250 +0.150
Brent EFP (May)	AAGVX00	0.17/0.19	0.180 +0.100
Brent EFP (Jun)	AAGVY00	0.20/0.22	0.210 +0.100
Brent EFP (Jul)	AAMVY00		0.210 +0.100
Swaps (PGA page 2658)			
Dubai (Apr)	AAHBM00	67.66-67.70	67.680 +1.880
Dubai (May)	AAHBN00	66.93-66.97	66.950 +1.810
Dubai (Jun)	AAHBO00	66.15-66.19	66.170 +1.790
MOG (Apr)	AAHZP00	67.71-67.75	67.730 +1.930
MOG (May)	AAHZR00	66.98-67.02	67.000 +1.860
MOG (Jun)	AAHZT00	66.20-66.24	66.220 +1.840
Oman/Dubai Swap (Apr)	AAIHJ00	0.03/0.07	0.050 +0.050
Oman/Dubai Swap (May)	AAIHL00	0.03/0.07	0.050 +0.050
Oman/Dubai Swap (Jun)	AAIHN00	0.03/0.07	0.050 +0.050

ASIA (\$/barrel), MAR 8 (PGA page 2210)

		Mid	Change
Brent (May)	PCAJG00	70.11-70.15	70.130 +2.350
Brent (Jun)	PCAJI00	69.46-69.50	69.480 +2.230
Brent (Jul)	PCAJ000		68.590 +2.110
Brent (DTD)	AAXPG00		70.285 +2.260
Brent/Dubai	AAJMS00	1.82/1.84	1.830 +0.470
WTI (Apr)	AAFFU00	66.71-66.75	66.730 +2.150
WTI (May)	AAFFW00	66.54-66.58	66.560 +2.180
WTI (Jun)	AAFFY00	66.07-66.11	66.090 +2.180

NORTH SEA, MAR 8 (PGA page 1212)

(\$/barrel)		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Dated Brent Diff				AAXEZ00	0.12/0.14	0.130 -0.410
BNB	AAVJA00	68.73-68.74	68.735 -0.305	AAVJB00	0.12/0.14	0.130 -0.445
Forties	PCADJ00	68.93-68.95	68.940 -0.105	AAGWZ00	0.33/0.34	0.335 -0.245
Oseberg	PCAEU00	69.25-69.26	69.255 -0.010	AAGXF00	0.64/0.66	0.650 -0.150
Ekofisk	PCADT00	69.16-69.18	69.170 -0.015	AAGXB00	0.56/0.57	0.565 -0.155
Troll	AAWEX00	69.30-69.31	69.305 -0.110	AAWEY00	0.69/0.71	0.700 -0.250
Statfjord	PCAE00	68.55-68.56	68.555 -0.010	AAGXD00	-0.06/-0.04	-0.050 -0.150
Flotta Gold	PCACZ00	67.40-67.41	67.405 +0.040	AAGXH00	-1.21/-1.19	-1.200 -0.100
Duc	AAWEZ00	68.80-68.81	68.805 +0.040	AAWFL00	0.19/0.21	0.200 -0.100
Grane Blend	PCALA00		68.005 +0.040	PCALB00		-0.600 +0.100
Johan Sverdrup	AJSVA00		67.505 +0.040	AJSVB00		-1.100 -0.100
Statfjord (CIF)	AASAS00	69.49-69.50	69.495 -0.015	AASAT00	0.89/0.91	0.900 -0.150
Gullfaks (CIF)	AASAU00	69.39-69.40	69.395 -0.015	AASAV00	0.79/0.81	0.800 -0.150
Alvheim (CIF)	ALVHA00		69.845 -0.015	ALVHB00		1.250 -0.150
Asgard (CIF)	ASGCA00		68.095 +0.035	ASGCB00		-0.500 -0.100
North Sea Dated Strip	AAKWH00	68.60-68.61	68.605 +0.140			
(\$/barrel)						
Dated Brent (CIF)	AAVJG00		69.575 -0.110	AAGXJ00		0.980 -0.245
BNB (CIF)	PCAKP00		69.935 -0.245	AAVJC00		1.340 -0.380
Forties (CIF)	PCAKR00		69.575 -0.135	AAHXC00		0.980 -0.270
Oseberg (CIF)	PCAKT00		70.065 +0.035	AAHXD00		1.470 -0.100
Ekofisk (CIF)	PCAKV00		69.880 +0.025	AAHXB00		1.285 -0.110
Troll (CIF)	AAXJO00		70.105 -0.080	AAXJN00		1.510 -0.215
North Sea CIF Dated Strip	AAHXE00		68.595 +0.135			

WEST AFRICA, MAR 8 (PGA pages 1230 and 1232)

(\$/barrel)		Mid	Change	Spread vs fwd DTD Brent	Mid	Change
Nigeria						
Bonny Light	PCAIC00	67.70-67.74	67.720 +0.090	AAGXL00	-0.41/-0.39	-0.400 0.000
Qua Iboe	PCAI00	67.60-67.64	67.620 +0.090	AAGXN00	-0.51/-0.49	-0.500 0.000
Forcados	PCABC00	67.70-67.74	67.720 +0.040	AAGXP00	-0.41/-0.39	-0.400 -0.050
Agbani	AAQZB00	66.85-66.89	66.870 +0.090	AAQZC00	-1.26/-1.24	-1.250 0.000
Escravos	AAEIZ00	67.70-67.74	67.720 +0.090	AAGXR00	-0.41/-0.39	-0.400 0.000
Brass River	AAEJB00	67.50-67.54	67.520 +0.090	AAGXV00	-0.61/-0.59	-0.600 0.000
Akpo	PCNGA00	66.85-66.89	66.870 +0.140	PCNGB00	-1.26/-1.24	-1.250 +0.050
Bonga	PCNGC00	67.70-67.74	67.720 +0.040	PCNGD00	-0.41/-0.39	-0.400 -0.050
Usan	AAXUQ00		67.920 +0.090	AAXUR00		-0.200 0.000
Erha	AAXU000		67.970 +0.090	AAXUP00		-0.150 0.000
Egina	AFONA00		68.320 +0.090	AFONB00		0.200 0.000
Angola						
Cabinda	PCAFD00	67.90-67.94	67.920 +0.090	AAGXT00	-0.21/-0.19	-0.200 0.000
Nemba	AAQYZ00	67.05-67.09	67.070 +0.090	AAQZA00	-1.06/-1.04	-1.050 0.000
Dalia	AAQYX00	68.00-68.04	68.020 +0.090	AAQYY00	-0.11/-0.09	-0.100 0.000
Girassol	AASNL00	68.40-68.44	68.420 +0.090	AASJD00	0.29/0.31	0.300 0.000
Hungo	AASLJ00	67.55-67.59	67.570 +0.090	AASJF00	-0.56/-0.54	-0.550 0.000
Kissanje	AASLK00	68.00-68.04	68.020 +0.090	AASJE00	-0.11/-0.09	-0.100 0.000
Pazflor	PCNGG00	68.20-68.24	68.220 +0.090	PCNGH00	0.09/0.11	0.100 0.000
Plutonio	PCNGI00	67.65-67.69	67.670 +0.090	PCNGJ00	-0.46/-0.44	-0.450 0.000
Ghana						
Jubilee	AAXUS00		67.870 +0.090	AAXUT00		-0.250 0.000
Republic of Congo						
Djeno	PCNGE00	67.10-67.14	67.120 +0.090	PCNGF00	-1.01/-0.99	-1.000 0.000
Chad						
Doba	AAXUU00		69.170 +0.090	AAXUV00		1.050 0.000
30-60 Day Dtd strip	AAXRK00	68.11-68.13	68.120 +0.090			

CRUDE PRICE ASSESSMENTS

LONDON, MAR 8 (PGA page 1214)

(\$/barrel)		Brent CFD	Mid	Change		Dated Swap	Mid	Change
1 wk (Jun)	PCAKA00	0.20/0.22	0.210	-0.110	AAJNV00	68.70/68.72	68.710	+0.170
2 wk (Jun)	PCAKC00	0.16/0.18	0.170	-0.170	AAJOS00	68.66/68.68	68.670	+0.110
3 wk (Jun)	PCAKE00	0.21/0.23	0.220	-0.130	AAJOU00	68.71/68.73	68.720	+0.150
4 wk (Jun)	PCAKG00	0.07/0.09	0.080	-0.100	AAJOW00	68.57/68.59	68.580	+0.180
5 wk (Jun)	AAGLU00	-0.07/-0.05	-0.060	-0.100	AAJPC00	68.43/68.45	68.440	+0.180
6 wk (Jun)	AAGLV00	-0.14/-0.12	-0.130	-0.060	AAJPE00	68.36/68.38	68.370	+0.220
7 wk (Jun)	AALCZ00	-0.24/-0.22	-0.230	-0.060	AALAW00	68.26/68.28	68.270	+0.220
8 wk (Jun)	AALDA00	-0.37/-0.35	-0.360	-0.050	AALAX00	68.13/68.15	68.140	+0.230

MEDITERRANEAN, MAR 8 (PGA pages 1220, 1222, 1234)

(\$/barrel)			Mid	Change		Spread vs fwd DTD Brent	Mid	Change
Med Dtd Strip	AALDF00	68.61-68.63	68.620	+0.120				
BTC Dtd Strip	AAUFI00	68.57-68.58	68.575	+0.120				
15-45 Day Dtd Strip	AALGM00	68.47-68.48	68.475	+0.145				
Urals (Rdam)	PCAFW00	66.55-66.58	66.565	+0.515	AAGXJ00	-2.06/-2.05	-2.055	+0.395
Urals (Med)	PCACE00	67.00-67.04	67.020	+0.520	AAGXX00	-1.61/-1.59	-1.600	+0.400
Urals (Ex-Baltic)	AAGZT00	65.50-65.54	65.520	+0.440	AAHPJ00	-3.11/-3.09	-3.100	+0.320
Urals FOB Novo Suez	AAGZS00	66.08-66.11	66.095	+0.570	AAHPH00	-2.53/-2.52	-2.525	+0.450
Urals FOB Novo Afra	AAOTH00	65.67-65.70	65.685	+0.605	AAOTI00	-2.94/-2.93	-2.935	+0.485
Urals (Primorsk)	AAVWH00	65.47-65.51	65.490	+0.440	AAWVI00	-3.14/-3.12	-3.130	+0.320
Urals (RCMB)	AALIN00	67.12-67.15	67.135	+0.130				
Iranian Light FOB Kharg Island (Med)	AILKA00		67.160	+0.140	AILKB00		-1.460	+0.020
Iranian Heavy FOB Kharg Island (Med)	AIHKA00		65.610	+0.140	AIHKB00		-3.010	+0.020
Es Sider	PCACO00	66.60-66.64	66.620	+0.070	AAGYH00	-2.01/-1.99	-2.000	-0.050
Siberian Lt	AAGZJ00	67.20-67.24	67.220	+0.120	AAHPK00	-1.41/-1.39	-1.400	0.000
Saharan Bld	AAGZY00	68.20-68.24	68.220	+0.120	AAHPN00	-0.41/-0.39	-0.400	0.000
Azeri Lt	AAGZX00	69.36-69.39	69.375	+0.115	AAHPM00	0.79/0.81	0.800	-0.005
Azeri Lt FOB Ceyhan Suez	AAUFM00	68.72-68.74	68.730	+0.115	AAUFN00	0.15/0.16	0.155	-0.005
Azeri Lt FOB Ceyhan Afra	AAUFK00	68.45-68.48	68.465	+0.095	AAUFL00	-0.12/-0.10	-0.110	-0.025
Azeri Lt FOB Supsa	AATHM00	68.13-68.16	68.145	+0.195	AATHN00	-0.44/-0.42	-0.430	+0.075
BTC FOB Ceyhan	AAUFH00	68.58-68.61	68.595	+0.105	AAUFJ00	0.01/0.03	0.020	-0.015
Suez Blend	PCACA00	64.27-64.31	64.290	+0.505	AAGYD00	-4.34/-4.32	-4.330	+0.385
Kirkuk	AAEJD00	67.65-67.69	67.670	+0.320	AAGYF00	-0.96/-0.94	-0.950	+0.200
Syrian Lt	AAHMM00	68.04-68.07	68.055	+0.095	AALOU00	-0.57/-0.56	-0.565	-0.025
Syrian Hvy	AAHMN00	63.46-63.50	63.480	+0.500	AALOV00	-5.15/-5.13	-5.140	+0.380
CPC Blend CIF	AAGZU00	66.35-66.39	66.370	+0.320	AAHPL00	-2.26/-2.24	-2.250	+0.200
CPC Blend FOB Suez	AALVX00	65.54-65.58	65.560	+0.365	AALVZ00	-3.07/-3.05	-3.060	+0.245
CPC Blend FOB Afra	AAOFV00	65.18-65.22	65.200	+0.395	AAOFW00	-3.43/-3.41	-3.420	+0.275
(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	+0.050
Urals Med CFD (May)	UMCM003	-1.11/-1.09	-1.100	0.000	CPC Blend CFD (May)	AAOFZ00	-1.500	+0.100
Urals NWE CFD (Mar)	UNCM001	-1.81/-1.79	-1.800	0.000				
Urals NWE CFD (Apr)	UNCM002	-1.61/-1.59	-1.600	+0.150				
Urals NWE CFD (May)	UNCM003	-1.61/-1.59	-1.600	+0.150				

CANADA, MAR 8 (PGA page 230)

(\$/barrel)			Mid	Change
33-63 Day Dated Strip	AALEJ00	68.07-68.08	68.075	+0.095
Terra Nova	AAJUH00	67.81-67.84	67.825	+0.045
Hibernia	AAJKK00	67.96-67.99	67.975	+0.045
White Rose	AAVJX00	68.71-68.74	68.725	+0.045
		Spread vs fwd DTD Brent	Mid	Change
Terra Nova	AAJUJ00	-0.26/-0.24	-0.250	-0.050
Hibernia	AAJKM00	-0.11/-0.09	-0.100	-0.050
White Rose	AAVJY00	0.64/0.66	0.650	-0.050

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

Mar 8			Mid	Change
Dated Brent	AAPYR00	57.96-57.96	57.960	+0.015
Dated Brent (CIF)	PCAKN00		58.669	+0.154
Urals (Mediterranean)	AAPYS00	56.50-56.53	56.515	+0.675
WTI (Apr)	AAPYT00	55.38-55.40	55.390	+0.290
WTI MEH (Apr)	AAYSAA00		56.657	+0.338
Mars (Apr)	AAPYU00	55.76-55.78	55.770	+0.290

Euro/US\$ forex rate: 1.185. 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

CANADIAN SPOT CRUDE ASSESSMENTS, MAR 8

(PGA pages 230 & 232)	C\$/cu m	Mid	Change
Lloyd Blend	AALRM00 429.506-429.665	429.585	-6.350
Mixed Sweet	AALRT00 495.969-496.129	496.049	-7.578
Light Sour Blend	AALRZ00 493.581-493.741	493.661	-7.577
Midale	AAUCD00 486.418-486.577	486.497	-7.573
Condensates	AALSH00 530.992-531.151	531.072	-7.993
Syncrude Sweet Prem.	AASOL00 527.808-527.967	527.888	-7.594
WCS	AAPP000 425.526-425.685	425.606	-6.347
Cold Lake	AASZY00 424.730-424.889	424.810	-6.347

	\$/barrel	Mid	Change
Lloyd Blend	AALRK00 53.960-53.980	53.970	-0.770
Mixed Sweet	AALRR00 62.310-62.330	62.320	-0.920
Light Sour Blend	AALRX00 62.010-62.030	62.020	-0.920
Midale	AAUCC00 61.110-61.130	61.120	-0.920
Condensates	AALSF00 66.710-66.730	66.720	-0.970
Syncrude Sweet Prem.	AASOK00 66.310-66.330	66.320	-0.920
WCS	AAPPN00 53.460-53.480	53.470	-0.770
Cold Lake	AASZX00 53.360-53.380	53.370	-0.770

	Spread vs Canada Basis	Mid	Change
Lloyd Blend	AALRP00 -10.810/-10.790	-10.800	+0.200
Mixed Sweet	AALRV00 -2.460/-2.440	-2.450	+0.050
Light Sour Blend	AALSD00 -2.760/-2.740	-2.750	+0.050
Midale	AAUCE00 -3.660/-3.640	-3.650	+0.050
Condensates	AALSJ00 1.940/1.960	1.950	0.000
Syncrude Sweet Prem.	AASOM00 1.540/1.560	1.550	+0.050
WCS	AAPP000 -11.310/-11.290	-11.300	+0.200
Cold Lake	AASZZ00 -11.410/-11.390	-11.400	+0.200

*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 69.370	+2.040	WTMSD00 3.200	+0.250
WTI Midland (DES Yeosu)	WTMYA00 69.870	+2.040	WTMYD00 3.700	+0.250

Brazil Delivered-Asia Spot Crudes	Mid	Change	Diff to Dubai	Diff to Asian Dated Brent
	Mid	Change	Mid	Change
Tupi (DES Qingdao)	LUQDA00 70.220	+2.040	LUQDD00 4.050	+0.250

LATIN AMERICA CRUDE (\$/barrel), MAR 8 (PGA page 280)

	FOB Crude	Mid	Change	Diff to WTI strip	Diff to Futures Brent strip	Diff to Dated Brent strip
Oriente	PCADE00 63.97-64.01	63.990	-1.360	PCAGU00 -0.750	AAXBH00 -3.460	AAXBH00 -3.520
Vasconia	PCAGI00 64.63-64.67	64.650	-1.170	PCAGR00 -0.090	AAXCB00 -2.800	AAXBN00 -2.860
Roncador	AAQTL00 64.43-64.47	64.450	-1.170	AAQTK00 -0.290	AAXBT00 -3.000	AAXAY00 -3.060
Escalante	PCAGC00 69.43-69.47	69.450	-0.070	PCAGO00 4.710	AAXBS00 2.000	AAXAX00 1.940
Loreto	PCAGH00 63.07-63.11	63.090	-1.360	PCAGQ00 -1.650	AAXBV00 -4.360	AAXBG00 -4.420
Mesa 30	AAITB00 65.43-65.47	65.450	-1.170	AAITH00 0.710	AAXCC00 -2.000	AAXB000 -2.060
Santa Barbara	AAITD00 67.17-67.21	67.190	-0.710	AAITJ00 2.450	AAXBU00 -0.260	AAXAZ00 -0.320
Marlim	AAITF00 64.48-64.52	64.500	-1.170	AAITL00 -0.240	AAXBY00 -2.950	AAXBJ00 -3.010
Napo	AAMCA00 62.47-62.51	62.490	-1.360	AAMCD00 -2.250	AAXBX00 -4.960	AAXBI00 -5.020
Castilla Blend	AAVEQ00 63.33-63.37	63.350	-1.170	AAVEQ01 -1.390	AAXBZ00 -4.100	AAXBK00 -4.160
Magdalena	AAWFR00 61.73-61.77	61.750	-1.170	AAWF000 -2.990	AAXCA00 -5.700	AAXBL00 -5.760
Liza	ALIZA00 67.600	67.600	-0.920	ALIZD00 2.860	ALIZC00 0.150	ALIZB00 0.090
Latin America WTI strip	AAXB000	64.740	-1.010			
Latin America Futures Brent strip	AAXBQ00	67.450	-1.070			
Latin America Dated Brent strip	AAXB000	67.510	-1.080			

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

05Mar	Change
AAEUQ00 67.050	+2.790

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

US (\$/barrel) (PGA page 250)	Effective date	Effective date	Effective date	Effective date
WTI	PSADF09 61.53*	08MAR21	PSADI09 61.70*	08MAR21
WTS	PSAED09 60.53	08MAR21	PSAEG09 62.04	08MAR21
LLS	PSAMO09 60.03	08MAR21	PSAMQ09 60.03	08MAR21
Ok. Swt.	PSUS191 61.53	08MAR21	PSANX09 61.45	08MAR21
Kansas	PSAPL09 51.88	08MAR21	PSUS112 54.18	08MAR21
Wyo. Swt	PSAQZ09 58.63	08MAR21		
Eugene Island	AALBB00 57.03	08MAR21		
Eagle Ford			PSUS100 61.50	08MAR21
Eagle Fd Cond			PSUS110 60.50	08MAR21
WTI	PSACP09 61.67*	08MAR21	AAUQN00 61.50	08MAR21
WTS	PSADO09 61.53	08MAR21		
LLS	PSAMC09 60.42	08MAR21		
Ok. Swt	PSASL09 61.47	08MAR21		
Kansas				
Wyo. Swt.			PSUS264 58.75	08MAR21
Wyo. Sr.			PSUS261 52.25	08MAR21

*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 8

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	120.00	TCABC00	18.91
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	120.00	TCABX00	15.84
UKC	USGC	PFAMBSZ	37k	PFAMB00	115.00	TCACA00	20.80
BSea	Med	PFABXSZ	30k	PFABX00	140.00	TCAAP00	14.80
(PGT page 2920)							
AG	India	PFABMSZ	35k	PFABM10	190.00	TCAAF00	13.26
AG	Japan	PFABNSZ	35k	PFABN10	135.00	TCAAH00	28.43
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	95.00	TCAAI00	20.01
AG	Japan	PFAMTSZ	75k	PFAMT00	75.00	TCAAJ00	15.80
Dirty							
(PGT page 1962)							
Carib	USGC	PFANZSZ	50k	PFANZ00	140.00	TDABA00	12.73
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	55.00	TDACV00	10.87
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 8 [\(PGA page 703\)](#)

NYMEX RBOB (¢/gal)

Apr	XNRBA01	207.140
May	XNRBA02	206.840
Jun	XNRBA03	205.150

NYMEX NY ULSD (¢/gal)

Apr	XNH0A01	195.200
May	XNH0A02	194.970
Jun	XNH0A03	194.620

PLATTS FUTURES ASSESSMENTS, MAR 8

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

CME 2:30 PM ET settlement		
Apr	AAWS001	65.050
May	AAWS002	64.930
Jun	AAWS003	64.520
Jul	AAWS004	63.940
Platts 2:30 PM ET futures assessment		
Apr	NYCRM01	65.040
May	NYCRM02	64.900
Jun	NYCRM03	64.480
Jul	NYCRM04	63.900
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AAWD001	0.010
May	AAWD002	0.030
Jun	AAWD003	0.040
Jul	AAWD004	0.040

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

CME 2:30 PM ET settlement		
Apr	AARS001	204.870
May	AARS002	204.710
Jun	AARS003	203.200
Platts 2:30 PM ET futures assessment		
Apr	NYRBM01	204.830
May	NYRBM02	204.660
Jun	NYRBM03	203.150
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AARD001	0.040
May	AARD002	0.050
Jun	AARD003	0.050

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

CME 2:30 PM ET settlement		
Apr	AAHS001	190.850
May	AAHS002	190.910
Jun	AAHS003	190.890
Platts 2:30 PM ET futures assessment		
Apr	NYHOM01	190.860
May	NYHOM02	190.910
Jun	NYHOM03	190.890
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AAHD001	-0.010
May	AAHD002	0.000
Jun	AAHD003	0.000

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

Platts 2:30 PM ET futures assessment		
May	AAQB000	68.230
Jun	AAQB000	67.660
Jul	AAZZ000	66.900
Aug	AAVAL00	66.230

FUTURES SETTLEMENTS, MAR 8

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
NYMEX Light sweet crude (\$/barrel) (PGA page 705)								
Apr 21	NMCL001	65.05	-1.04	64.57	67.98	504787	315138	
May 21	NMCL002	64.93	-0.99	64.45	67.79	178631	309331	
Jun 21	NMCL003	64.52	-0.93	64.04	67.29	127988	318896	
Jul 21	NMCL004	63.94	-0.87	63.45	66.61	55350	171640	
Total	NMCL000					1085752		XNCLP00 29324

NYMEX NY ULSD (\$/gal) (PGA page 705)

Apr 21	NMHO001	1.9085	-0.0355	1.8988	1.9868	61319	114377	
May 21	NMHO002	1.9091	-0.0328	1.8989	1.9830	50132	73195	
Jun 21	NMHO003	1.9089	-0.0296	1.8986	1.9778	35986	67327	
Jul 21	NMHO004	1.9084	-0.0273	1.8981	1.9730	14372	25580	
Total	NMHO000					192140		XNHOP00 38576

NYMEX RBOB unleaded gasoline (\$/gal) (PGA page 705)

Apr 21	NMRB001	2.0487	-0.0160	2.0314	2.1119	46703	109249	
May 21	NMRB002	2.0471	-0.0145	2.0302	2.1074	42048	92400	
Jun 21	NMRB003	2.0320	-0.0129	2.0165	2.0838	23964	63346	
Jul 21	NMRB004	2.0076	-0.0121	1.9923	2.0587	12978	30721	
Total	NMRB000					144484		XNRBP00 10253

NYMEX Natural Gas (\$/MMBtu) (PGA page 705)

Apr 21	NMNG001	2.664	-0.04	2.623	2.734	117283	157945	
May 21	NMNG002	2.698	-0.04	2.664	2.770	73984	218180	
Jun 21	NMNG003	2.755	-0.04	2.721	2.820	33501	82196	
Jul 21	NMNG004	2.808	-0.04	2.776	2.869	22200	76985	
Total	NMNG000					355199		XNNGP00 5954

DME Oman crude (\$/barrel) (PGA pages 702 & 2710)**

May 21 Asia	XDOA001	68.35	+1.94			2424		
May 21	DMOQ001	66.53	-1.63	66.53	69.13	2660	3944	
Jun 21	DMOQ002	65.83	-1.65	65.83	65.83	1942	0	
Jul 21	DMOQ003	65.09	-1.73	65.09	65.09	1942	0	
Aug 21	DMOQ004	64.43	-1.64	64.43	64.43	0	0	
Total	DMOQ000					6544		XDOQP00 0

ICE Brent (\$/barrel) (PGA page 704)

May 21	ICLL001	68.24	-1.12	67.80	71.38	964	569041	
Jun 21	ICLL002	67.70	-0.98	67.26	70.67	418	408678	
Jul 21	ICLL003	66.93	-0.90	66.48	69.73	150	264347	
Aug 21	ICLL004	66.27	-0.81	65.80	68.90	141	135304	
Total	ICLL000					1229528		XILLP00 39345

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE BWAVE (Brent weighted futures average)(\$/barrel) (PGA page 704)								
May 21	XIBW001	68.57						
Jun 21	XIBW002	67.99						

BWAVE data refer to previous day.

ICE WTI (\$/barrel) (PGA page 704)

Apr 21	ICIC001	65.05	-1.04	64.59	67.99	15	40510	
May 21	ICIC002	64.93	-0.99	64.47	67.76	35	51061	
Jun 21	ICIC003	64.52	-0.93	64.07	67.26	62	71253	
Jul 21	ICIC004	63.94	-0.87	63.57	66.53	93	26557	
Total	ICIC000					251281		XIICP00 6668

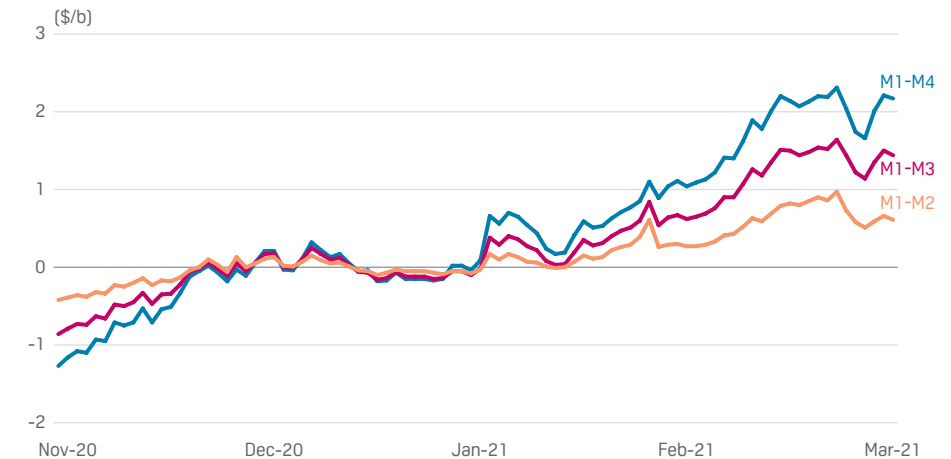
ICE low sulfur Gasoil (\$/mt) (PGA page 704)

Mar 21	ICL0001	546.00	-1.50	538.50	564.50	21	63726	
Apr 21	ICL0002	548.00	-1.25	540.75	566.75	126670	173223	
May 21	ICL0003	549.50	-1.00	542.25	567.50	77477	125116	
Jun 21	ICL0004	550.00	-0.75	543.00	567.75	57952	111002	
Total	ICL0000					401858		XILOP00 5279

*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

ICE BRENT BACKWARDATION



Source: S&P Global Platts

FIVE-DAY ROLLING AVERAGES, FIVE DAYS ENDING MARCH 8

		Conversion		
Naphtha (PGA page 34)		\$/barrel		¢/gal
Singapore	PAAAP00	65.63–65.67	(/ .42)	156.27–156.37
		\$/mt		¢/gal
Japan C/F	PAAAD00	597.45–602.90	(/3.78)	158.06–159.50
Arab Gulf	PAAAA00	575.11–580.56	(/3.78)	152.14–153.59
CIF NWE physical	PAAAL00	587.35–587.85	(/3.78)	155.38–155.52
Rotterdam barge	PAAAM00	583.35–583.85	(/3.78)	154.33–154.46
FOB Med	PAAAI00	569.75–570.25	(/3.78)	150.73–150.86
CIF Genoa	PAAAH00	579.90–580.40	(/3.78)	153.41–153.54
		¢/gal		\$/mt
US Gulf FOB cargo	AAXJP00	151.10–151.20	(*3.54669)	571.30–571.40
US Gulf DAP LSR parcel	AAXQK00	151.40	(*4.0083)	606.86

Jet Kerosene (PGA page 35)

		\$/mt		¢/gal
CIF NWE cargo	PJAAU00	549.40–549.90	(/7.89)	165.79–165.94
Rotterdam barge	PJABA00	547.65–548.15	(/7.89)	165.26–165.41
FOB Med	AAIDL00	534.65–535.15	(/7.89)	161.34–161.49
CIF Genoa	AAZBN00	547.90–548.40	(/7.89)	165.34–165.49
Carib cargo	PJAAD00	569.82–569.88	(/7.7)	176.42–176.43
		¢/gal		\$/mt
US Gulf water	PJABM00	170.20–170.30	(* .42)	564.00–564.33
US Gulf pipe	PJABO00	168.70–168.80	(* .42)	559.02–559.36
NY barge	PJAAW00	171.89–171.99	(* .42)	567.22–567.55
LA pipeline	PJAAP00	175.40–175.50	(* .42)	559.51–559.83
Group 3	PJAAI00	182.05–182.15	(* .42)	603.26–603.60
Chicago	PJAAF00	182.72–182.82	(* .42)	605.48–605.82

Crude Oil, FOB Source

		\$/barrel		
West Texas Int	PCACG00	63.19–63.21		
NYMEX Crude	XNCL001	62.32		
Mars	AMBR00	63.43–63.45		
Brent (DTD)	PCAS00	66.76–66.77		
Brent (First month)	PCAAQ00	66.62–66.64		
Dubai (First Month)	PCAA00	64.09–64.11		
Oman (First Month)	PCABS00	64.10–64.12		
Urals CIF med	PCACE00	64.27–64.31		
WTI Posting Plus	PCACI00	3.71–3.73		

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

(¢/gal)		Unleaded		Premium
US Gulf water	PGACU00	194.74–194.84	PGAIX00	204.64–204.74
US Gulf pipe	PGACT00	192.74–192.84	PGAJB00	202.64–202.74
Group 3			PGABD00	223.24–223.34
LA Pipeline			PGABG00	220.04–220.14
SF Pipeline	PGADG00	201.04–201.14	PGABO00	219.04–219.14
Chicago	PGACR00	185.49–185.59	PPASQ00	203.24–203.34
NYMEX Unl	XNRB001	197.87		

Gasoline, Intl. Market

		Prem (\$/mt)		¢/gal
R'dam Barge Prem unl	PGABM00	617.25–617.75	(/3.51)	175.85–176.00

Gasoi/Heating Oil (PGA page 32)

		\$/barrel		¢/gal
Singapore	POABC00	70.46–70.50	(/ .42)	167.76–167.85
Arab Gulf	POAAT00	68.70–68.74	(/ .42)	163.58–163.67
		\$/mt		¢/gal
0.1 CIF ARA	AAYWS00	530.50–531.00	(/3.133)	169.49–169.65
50 ppm Rotterdam barge	AAUQC00	529.35–529.85	(/3.133)	169.12–169.28
0.1 Rotterdam barge	AAYWT00	522.30–522.80	(/3.133)	166.87–167.03
0.1 FOB NWE	AAYWR00	517.75–518.25	(/3.133)	165.42–165.58
0.1 CIF Med	AAVJJ00	530.35–530.85	(/3.133)	169.44–169.60

(PGA page 33)

		¢/gal		\$/barrel
L.A. LS diesel	POAET00	198.05–198.15	(*3.07)	608.00–608.31
S.F. LS diesel	POAEY00	188.70–188.80	(*3.07)	579.30–579.60
		¢/gal		\$/mt
NY barge	POAEG00	167.65–167.75	(*3.15)	528.08–528.40
US Gulf water	POAEE00	172.65–172.75	(*3.08)	531.75–532.06
US Gulf pipe	POAED00	168.15–168.25	(*3.08)	517.89–518.20
NYMEX NY ULSD	XNH001	186.06	(*3.08)	586.09

Low Sulfur Resid Fuel Oil (PGA page 38)

		\$/mt		\$/barrel
CIF ARA 1%	PUAAL00	451.50–452.00	(/6.35)	71.10–71.18
Rot bar 1%	PUAAP00	440.00–440.50	(/6.35)	69.29–69.37
NWE FOB 1%	PUAAM00	441.25–441.75	(/6.35)	69.49–69.57
Med FOB 1%	PUAAK00	446.45–446.95	(/6.35)	70.31–70.39
		\$/barrel		\$/mt
NY Cargo .3% HP	PUAAE00	81.39–81.41	(*6.7)	545.29–545.42
NY Cargo .3% LP	PUAAB00	81.39–81.41	(*6.7)	545.29–545.42
NY Cargo .7% Max	PUAAH00	71.11–71.13	(*6.5)	462.23–462.36
NY Cargo 1% Max	PUAAO00	66.63–66.65	(*6.5)	433.10–433.23
US Gulf 1%	PUAAI00	67.61–67.63	(*6.11)	427.27–427.40

Hi Sulfur Resid Fuel Oil (PGA page 39)

		\$/mt		\$/barrel
Singapore 180	PUADV00	382.63–382.67	(/6.35)	60.26–60.26
Singapore 380	PPXDK00	379.12–379.16	(/6.35)	59.70–59.71
Arab Gulf 180	PUBAE00	371.71–371.75	(/6.35)	58.54–58.54
CIF ARA 3.5%	PUBAA00	368.85–369.35	(/6.35)	58.09–58.17
NWE FOB 3.5%	PUBBB00	355.35–355.85	(/6.35)	55.96–56.04
Med FOB 3.5%	PUAAZ00	361.45–361.95	(/6.35)	56.92–57.00
CIF Med 3.5%	PUAAY00	374.20–374.70	(/6.35)	58.93–59.01
		\$/barrel		\$/mt
USAC HSFO	PUAAX00	58.79–58.81	(*6.35)	373.32–373.44
USGC HSFO	PUAFZ00	56.84–56.86	(*6.35)	360.91–361.04
Carib 2.0%	PUAAS00	57.12–57.14	(*6.4)	365.58–365.71

US WHOLESALE POSTED PRICES EFFECTIVE MAR 8

PADD 1	Unleaded	Midgrade	Premium	Kerosene	Diesel No.2	ULSD
Albany, NY	DR198ZY 193.90-196.50	DM198ZY 198.90-208.10	DP198ZY 208.90-228.10	DK198ZY 219.50-229.70		DU198ZY 200.50-207.84
Allentown	DR235ZY 193.89-198.10	DM235ZY 200.87-214.87	DP235ZY 209.19-238.77		DH235ZY -	DU235ZY 200.20-204.61
Atlanta	DR048ZY 189.30-214.10	DM048ZY 199.65-214.40	DP048ZY 202.06-245.08			DU048ZY 198.00-202.07
Baltimore (a)	DR123ZY 191.02-200.44	DM123ZY 198.55-212.65	DP123ZY 207.00-251.60	DK123ZY 213.00-231.82	DH123ZY -	DU123ZY 195.52-209.96
Binghamton	DR200ZY 196.30-208.48	DM200ZY 201.96-213.72	DP200ZY 211.05-221.59			DU200ZY 204.53-207.10
Boston (a)	DR121ZY 191.05-194.10	DM121ZY 196.40-199.35	DP121ZY 204.45-206.49	DK121ZY 241.40-241.40		DU121ZY 202.10-205.17
Charleston	DR250ZY 196.30-210.08	DM250ZY 207.00-211.40	DP250ZY 234.95-243.71			DU250ZY 203.35-213.45
Charlotte	DR169ZY 188.70-197.60	DM169ZY 199.42-214.60	DP169ZY 201.29-244.60			DU169ZY 197.65-206.40
Fairfax (a)	DR299ZY 188.32-208.67	DM299ZY 204.36-228.67	DP299ZY 220.05-257.20			DU299ZY 192.19-204.03
Greensboro				DK171ZY 242.00-242.00		DU171ZY 195.26-201.93
Miami					DU039ZY 202.82-206.10	
New Haven (a)	DR034ZY 190.55-199.11	DM034ZY 195.55-207.82	DP034ZY 203.40-228.79	DK034ZY 241.10-241.10	DH034ZY -	DU034ZY 199.80-205.53
New York City (a)	DR204ZY 193.50-193.86	DM204ZY 198.74-199.25	DP204ZY 206.90-207.76			DU204ZY 202.46-220.96
Newark (a)	DR189ZY 187.00-195.06	DM189ZY 192.50-201.28	DP189ZY 197.00-222.28	DK189ZY 230.47-230.47		DU189ZY 196.50-202.31
Norfolk (a)	DR300ZY 191.10-200.60	DM300ZY 200.08-217.60	DP300ZY 223.40-255.67			DU300ZY 195.48-202.83
Orlando	DR041ZY 195.50-205.05	DM041ZY 208.50-220.80	DP041ZY 221.49-253.40			DU041ZY 201.49-206.55
Philadelphia (a)	DR242ZY 190.60-198.69	DM242ZY 196.60-206.63	DP242ZY 205.30-218.53		DH242ZY -	DU242ZY 199.00-211.47
Pittsburgh	DR243ZY 188.00-196.35	DM243ZY 200.50-225.95	DP243ZY 210.74-248.06	DK243ZY -	DH243ZY -	DU243ZY 196.45-213.27
Providence (a)	DR248ZY 191.70-211.20	DM248ZY 197.90-224.20	DP248ZY 205.05-243.45			DU248ZY 203.36-204.74
Portland	DR126ZY 193.55-198.82	DM126ZY 199.25-204.27	DP126ZY 207.05-212.50			DU126ZY 202.80-207.42
Raleigh						DU168ZY 201.35-201.35
Richmond	DR301ZY 189.50-201.90	DM301ZY 201.85-223.67	DP301ZY 211.75-256.90	DK301ZY 243.00-243.00		DU301ZY 196.21-202.77
Savannah	DR054ZY 200.75-206.95	DM054ZY 214.00-223.95	DP054ZY 253.85-253.95			DU054ZY 207.30-208.35
Spartanburg	DR252ZY 187.50-197.70	DM252ZY 195.37-214.70	DP252ZY 201.81-245.70			DU252ZY 196.45-201.82
Tampa					DU045ZY 201.39-206.65	
PADD 2						
Aberdeen	DR253ZY 199.32-209.14	DM253ZY 211.29-219.36	DP253ZY 219.30-227.99			DU253ZY 245.05-261.23
Cape Girardeau	DR144ZY 207.50-215.57		DP144ZY 221.72-287.11			DU144ZY 215.14-221.60
Chattanooga	DR260ZY 188.85-206.99	DM260ZY 203.32-223.99	DP260ZY 207.27-256.99			DU260ZY 196.42-205.00
Chicago (a)	DR075ZY 185.10-195.42	DM075ZY 205.10-207.57	DP075ZY 239.67-245.10	DK075ZY 243.68-285.60		DU075ZY 203.68-208.07
Cleveland	DR212ZY 187.00-196.42	DM212ZY 201.47-208.36	DP212ZY 222.33-249.00	DK212ZY 284.80-284.80		DU212ZY 202.01-208.85
Columbus	DR213ZY 181.41-203.23	DM213ZY 201.73-228.23	DP213ZY 220.93-267.23	DK213ZY 280.75-280.75		DU213ZY 206.65-214.32
Duluth	DR138ZY 206.95-209.75	DM138ZY 216.91-219.26	DP138ZY 234.36-236.91			DU138ZY 242.25-247.80
Des Moines	DR059ZY 196.65-212.33	DM059ZY 204.11-246.33	DP059ZY 209.68-254.33			DU059ZY 235.50-253.70
Detroit	DR130ZY 181.75-195.39	DM130ZY 201.22-221.66	DP130ZY 241.55-253.16	DK130ZY 279.45-279.45		DU130ZY 199.98-208.56
Fargo	DR174ZY 202.75-208.00	DM174ZY 210.00-218.09	DP174ZY 216.75-227.66			DU174ZY 235.13-260.54
Green Bay	DR313ZY 196.25-196.25	DM313ZY -	DP313ZY 231.25-231.25	DK313ZY -		DU313ZY 217.00-217.00
Indianapolis	DR088ZY 179.72-190.74	DM088ZY 196.32-206.00	DP088ZY 215.37-232.00	DK088ZY 283.70-288.88		DU088ZY 201.14-207.54
Kansas City	DR099ZY 194.50-201.59	DM099ZY 204.50-217.67	DP099ZY 235.79-259.35			DU099ZY 235.00-250.52
Knoxville	DR261ZY 188.70-193.99	DM261ZY 198.00-210.85	DP261ZY 206.26-241.81	DK261ZY -		DU261ZY 196.65-202.38
Milwaukee	DR316ZY 189.85-194.50	DM316ZY 200.60-211.30	DP316ZY 216.85-251.30	DK316ZY 286.75-286.75		DU316ZY 208.09-210.90
Minneapolis/St.Paul	DR141ZY 196.00-205.60	DM141ZY 203.50-216.19	DP141ZY 214.75-226.06	DK141ZY 259.55-259.55		DU141ZY 230.65-250.69
Oklahoma City	DR226ZY 193.50-208.20	DM226ZY 203.15-228.49	DP226ZY 208.75-232.00			DU226ZY 235.00-248.35
Omaha	DR185ZY 196.70-207.34	DM185ZY 204.41-242.04	DP185ZY 209.90-246.04			DU185ZY 236.50-254.04
Sioux Falls	DR256ZY 195.60-209.56	DM256ZY 205.06-243.56	DP256ZY 209.97-221.20			DU256ZY 237.75-253.86
St. Louis (a)	DR154ZY 195.11-199.36	DM154ZY 204.00-223.96	DP154ZY 209.20-247.36			DU154ZY 211.95-216.35
PADD 3						
Albuquerque	DR192ZY 222.75-230.00	DM192ZY 241.75-250.00	DP192ZY 264.40-270.00			DU192ZY 248.50-258.50
Amarillo	DR265ZY 205.00-208.40	DM265ZY 221.00-223.15	DP265ZY 242.00-243.40			DU265ZY 239.50-242.65
Baton Rouge	DR115ZY 190.34-200.90	DM115ZY 205.00-216.85	DP115ZY 228.05-241.85			DU115ZY 196.10-198.85
Birmingham	DR003ZY 186.50-200.53	DM003ZY 192.35-218.53	DP003ZY 193.35-259.53	DK003ZY 231.42-231.42		DU003ZY 196.45-201.58
Corpus Christi	DR275ZY 198.74-200.90	DM275ZY 213.74-216.15	DP275ZY 244.74-247.40			DU275ZY 200.01-200.90
Dallas/Ft.Worth (a)	DR276ZY 195.17-201.23	DM276ZY 214.70-233.45	DP276ZY 224.87-249.50			DU276ZY 209.67-215.90
Houston (a)	DR416ZY 191.00-200.82	DM416ZY 203.87-229.13	DP416ZY 219.71-244.85	DK416ZY 234.55-234.55		DU416ZY 201.10-206.49
Little Rock	DR009ZY 186.89-212.91	DM009ZY 203.40-233.97	DP009ZY 220.00-273.54			DU009ZY 202.63-248.86
New Orleans	DR119ZY 188.30-191.80	DM119ZY 207.75-210.60	DP119ZY 226.15-244.80			DU119ZY 194.20-197.29
San Antonio	DR289ZY 199.68-201.45	DM289ZY 214.02-219.30	DP289ZY 236.05-249.35			DU289ZY 208.32-212.15
PADD 4						
Billings (b)	DR162ZY -		DP162ZY 234.29-235.13			DU162ZY 232.00-236.28
Casper (b)	DR321ZY 208.52-208.57		DP321ZY 243.52-243.97		DU321ZY* 240.65-247.15	
Denver	DR028ZY 208.05-220.15	DM028ZY 230.00-240.15	DP028ZY 255.00-260.15			DU028ZY 238.00-257.47
Salt Lake City	DR298ZY 207.29-215.66	DM298ZY 224.12-231.66	DP298ZY 239.96-250.00			DU298ZY 255.52-262.00
PADD 5						
Anacortes	DR305ZY 221.75-226.60	DM305ZY 248.89-255.60	DP305ZY 257.75-262.60			DU305ZY 197.30-202.42
Las Vegas (e)	DR196ZY 219.00-229.00	DM196ZY 229.00-240.00	DP196ZY 236.00-251.00			DU196ZY 213.80-228.00
Los Angeles (e)	DR022ZY 250.00-254.33	DM022ZY 264.31-269.83	DP022ZY 278.32-285.33			DU022ZY 239.50-248.58
Phoenix	DR012ZY 262.50-270.00	DM012ZY 277.50-283.95	DP012ZY 292.50-300.20			DU012ZY 237.00-247.50
Portland	DR233ZY 205.00-219.00	DM233ZY 237.15-240.65	DP233ZY 244.15-254.00			DU233ZY 209.00-225.80
SanFranEBay (e)	DR025ZY 243.25-258.08	DM025ZY 256.50-280.08	DP025ZY 269.10-288.70			DU025ZY 237.00-246.82
Seattle/Tacoma	DR308ZY 208.85-212.15	DM308ZY 237.85-241.15	DP308ZY 244.85-248.15			DU308ZY 200.45-205.35
Spokane	DR309ZY 195.70-199.49	DM309ZY 210.70-218.26	DP309ZY 229.70-245.40			DU309ZY 208.50-213.74

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

US WHOLESALE POSTED PRICES EFFECTIVE MAR 6

PADD 1	Unleaded	Midgrade	Premium	Kerosene	Diesel No.2	ULSD
Albany, NY	DR198ZY 193.90-196.50	DM198ZY 198.90-208.10	DP198ZY 208.90-228.10	DK198ZY 219.50-229.70		DU198ZY 200.50-207.84
Allentown	DR235ZY 193.89-198.10	DM235ZY 200.87-214.87	DP235ZY 209.19-238.77		DH235ZY -	DU235ZY 200.20-204.61
Atlanta	DR048ZY 189.30-214.10	DM048ZY 199.65-214.40	DP048ZY 202.06-245.08			DU048ZY 198.00-202.07
Baltimore (a)	DR123ZY 191.98-200.44	DM123ZY 198.55-212.65	DP123ZY 207.00-251.60	DK123ZY 213.00-234.47	DH123ZY -	DU123ZY 197.20-209.96
Binghamton	DR200ZY 196.30-208.48	DM200ZY 201.96-213.72	DP200ZY 211.05-221.59			DU200ZY 204.53-207.10
Boston (a)	DR121ZY 191.05-194.10	DM121ZY 196.40-199.35	DP121ZY 204.45-206.49	DK121ZY 241.40-241.40		DU121ZY 202.10-205.17
Charleston	DR250ZY 196.30-210.08	DM250ZY 207.00-211.40	DP250ZY 234.95-243.71			DU250ZY 203.35-213.45
Charlotte	DR169ZY 188.70-197.60	DM169ZY 199.42-214.60	DP169ZY 201.29-244.60			DU169ZY 197.65-206.40
Fairfax (a)	DR299ZY 189.61-208.67	DM299ZY 204.36-228.67	DP299ZY 220.05-257.20			DU299ZY 194.84-204.03
Greensboro				DK171ZY 242.00-242.00		DU171ZY 197.48-201.93
Miami					DU039ZY 202.82-206.10	
New Haven (a)	DR034ZY 190.55-199.11	DM034ZY 195.55-207.82	DP034ZY 203.40-228.79	DK034ZY 241.10-241.10	DH034ZY -	DU034ZY 199.80-205.53
New York City (a)	DR204ZY 193.50-193.86	DM204ZY 198.74-199.25	DP204ZY 206.90-207.76			DU204ZY 202.46-220.96
Newark (a)	DR189ZY 187.00-195.06	DM189ZY 192.50-201.28	DP189ZY 197.00-222.28	DK189ZY 230.47-230.47		DU189ZY 196.50-202.31
Norfolk (a)	DR300ZY 191.35-200.60	DM300ZY 200.92-217.60	DP300ZY 223.40-255.67			DU300ZY 197.63-202.83
Orlando	DR041ZY 195.50-205.05	DM041ZY 208.50-220.80	DP041ZY 221.49-253.40			DU041ZY 201.49-206.55
Philadelphia (a)	DR242ZY 190.60-198.69	DM242ZY 196.79-206.63	DP242ZY 205.45-218.53		DH242ZY -	DU242ZY 199.45-211.47
Pittsburgh	DR243ZY 188.00-196.35	DM243ZY 200.50-225.95	DP243ZY 210.74-248.06	DK243ZY -	DH243ZY -	DU243ZY 196.45-213.27
Providence (a)	DR248ZY 191.70-211.20	DM248ZY 197.90-224.20	DP248ZY 205.05-243.45			DU248ZY 203.36-204.74
Portland	DR126ZY 193.55-198.82	DM126ZY 199.25-204.27	DP126ZY 207.05-212.50			DU126ZY 202.80-207.42
Raleigh						DU168ZY 201.35-201.35
Richmond	DR301ZY 189.96-201.90	DM301ZY 202.70-223.67	DP301ZY 212.60-256.90	DK301ZY 243.00-243.00		DU301ZY 197.59-202.77
Savannah	DR054ZY 200.75-206.95	DM054ZY 214.00-223.95	DP054ZY 253.85-253.95			DU054ZY 207.30-208.35
Spartanburg	DR252ZY 187.50-197.70	DM252ZY 195.37-214.70	DP252ZY 201.81-245.70			DU252ZY 196.45-201.82
Tampa					DU045ZY 201.39-206.65	
PADD 2						
Aberdeen	DR253ZY 202.03-209.14	DM253ZY 211.30-219.36	DP253ZY 219.30-228.49			DU253ZY 241.13-261.23
Cape Girardeau	DR144ZY 204.42-218.07		DP144ZY 210.57-287.11			DU144ZY 215.14-224.00
Chattanooga	DR260ZY 188.85-206.99	DM260ZY 203.32-223.99	DP260ZY 207.27-256.99			DU260ZY 196.42-205.00
Chicago (a)	DR075ZY 185.10-195.42	DM075ZY 205.10-207.57	DP075ZY 239.67-245.10	DK075ZY 243.68-285.60		DU075ZY 203.68-208.07
Cleveland	DR212ZY 187.00-196.42	DM212ZY 201.47-208.36	DP212ZY 222.33-249.00	DK212ZY 284.80-284.80		DU212ZY 202.01-208.85
Columbus	DR213ZY 181.41-203.23	DM213ZY 201.73-228.23	DP213ZY 220.93-267.23	DK213ZY 280.75-280.75		DU213ZY 206.65-214.32
Duluth	DR138ZY 204.75-207.75	DM138ZY 214.26-217.26	DP138ZY 231.91-235.87			DU138ZY 240.80-245.18
Des Moines	DR059ZY 197.05-212.33	DM059ZY 204.35-246.33	DP059ZY 213.54-254.33			DU059ZY 234.50-253.70
Detroit	DR130ZY 181.75-195.39	DM130ZY 201.22-221.66	DP130ZY 241.55-253.16	DK130ZY 279.45-279.45		DU130ZY 199.98-208.56
Fargo	DR174ZY 205.25-208.00	DM174ZY 211.50-219.89	DP174ZY 217.28-229.46			DU174ZY 239.25-260.54
Green Bay	DR313ZY 196.25-196.25	DM313ZY -	DP313ZY 231.25-231.25	DK313ZY -		DU313ZY 217.00-217.00
Indianapolis	DR088ZY 179.72-190.74	DM088ZY 196.32-206.00	DP088ZY 215.37-232.00	DK088ZY 283.70-288.88		DU088ZY 201.14-207.54
Kansas City	DR099ZY 195.25-201.59	DM099ZY 204.50-217.67	DP099ZY 232.88-259.35			DU099ZY 234.50-250.52
Knoxville	DR261ZY 188.70-193.99	DM261ZY 198.00-210.85	DP261ZY 206.26-241.81			DU261ZY 196.65-202.38
Milwaukee	DR316ZY 191.30-197.85	DM316ZY 200.60-211.30	DP316ZY 216.85-251.30	DK316ZY 286.75-286.75		DU316ZY 208.09-215.80
Minneapolis/St.Paul	DR141ZY 195.57-205.60	DM141ZY 203.39-217.99	DP141ZY 216.75-227.56	DK141ZY 267.55-267.55		DU141ZY 231.25-250.69
Oklahoma City	DR226ZY 194.27-208.20	DM226ZY 203.30-228.49	DP226ZY 208.97-232.00			DU226ZY 231.50-248.35
Omaha	DR185ZY 196.63-207.34	DM185ZY 207.50-242.04	DP185ZY 210.13-246.04			DU185ZY 235.75-254.04
Sioux Falls	DR256ZY 197.37-209.56	DM256ZY 205.90-243.56	DP256ZY 211.47-223.00			DU256ZY 235.50-253.86
St. Louis (a)	DR154ZY 195.11-199.36	DM154ZY 204.00-223.96	DP154ZY 209.20-247.36			DU154ZY 211.95-216.35
PADD 3						
Albuquerque	DR192ZY 222.75-230.00	DM192ZY 241.75-250.00	DP192ZY 264.40-270.00			DU192ZY 223.91-258.50
Amarillo	DR265ZY 205.00-208.40	DM265ZY 221.00-223.15	DP265ZY 242.00-243.40			DU265ZY 239.50-242.65
Baton Rouge	DR115ZY 190.34-200.90	DM115ZY 205.00-216.85	DP115ZY 228.05-241.85			DU115ZY 196.10-198.85
Birmingham	DR003ZY 186.50-200.53	DM003ZY 192.35-218.53	DP003ZY 193.35-259.53	DK003ZY 231.42-231.42		DU003ZY 196.45-201.58
Corpus Christi	DR275ZY 198.74-200.90	DM275ZY 213.74-216.15	DP275ZY 244.74-247.40			DU275ZY 200.01-200.90
Dallas/Ft.Worth (a)	DR276ZY 195.17-201.23	DM276ZY 214.70-233.45	DP276ZY 224.87-249.50			DU276ZY 209.67-215.90
Houston (a)	DR416ZY 191.00-200.82	DM416ZY 203.87-229.13	DP416ZY 219.71-244.85	DK416ZY 234.55-234.55		DU416ZY 201.10-232.00
Little Rock	DR009ZY 186.89-212.91	DM009ZY 203.40-233.97	DP009ZY 220.00-273.54			DU009ZY 202.63-248.86
New Orleans	DR119ZY 188.30-191.80	DM119ZY 207.75-210.60	DP119ZY 226.15-244.80			DU119ZY 194.20-197.29
San Antonio	DR289ZY 199.68-201.45	DM289ZY 214.02-219.30	DP289ZY 236.05-249.35			DU289ZY 208.32-212.15
PADD 4						
Billings (b)	DR162ZY -		DP162ZY 234.29-235.13			DU162ZY 232.00-236.28
Casper (b)	DR321ZY 208.52-208.57		DP321ZY 243.52-243.97		DU321ZY* 240.65-247.15	
Denver	DR028ZY 209.50-220.15	DM028ZY 230.00-240.15	DP028ZY 255.00-260.15			DU028ZY 239.00-261.47
Salt Lake City	DR298ZY 207.29-215.66	DM298ZY 224.12-231.66	DP298ZY 239.96-250.00			DU298ZY 255.52-262.00
PADD 5						
Anacortes	DR305ZY 221.75-226.60	DM305ZY 248.89-255.60	DP305ZY 257.75-262.60			DU305ZY 197.30-202.42
Las Vegas (e)	DR196ZY 219.00-229.00	DM196ZY 229.00-240.00	DP196ZY 236.00-251.00			DU196ZY 213.80-228.00
Los Angeles (e)	DR022ZY 249.33-250.51	DM022ZY 264.31-267.50	DP022ZY 278.32-280.33			DU022ZY 241.50-248.58
Phoenix	DR012ZY 264.50-270.00	DM012ZY 279.50-283.95	DP012ZY 294.50-300.20			DU012ZY 238.96-247.50
Portland	DR233ZY 205.00-220.00	DM233ZY 239.15-240.65	DP233ZY 246.15-255.00			DU233ZY 209.00-225.80
SanFranEBay (e)	DR025ZY 243.75-258.08	DM025ZY 257.00-280.08	DP025ZY 269.10-288.70			DU025ZY 239.00-246.82
Seattle/Tacoma	DR308ZY 209.65-212.15	DM308ZY 238.65-241.15	DP308ZY 245.65-248.15			DU308ZY 202.45-205.85
Spokane	DR309ZY 195.70-199.49	DM309ZY 210.70-218.26	DP309ZY 229.70-247.40			DU309ZY 208.50-213.74

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