

## BAKKEN SHALE

### Bakken Producers Scramble to Prepare for Life Without DAPL

Producers in North Dakota's Bakken Shale play are beginning to come to grips with operating without the Dakota Access Pipeline (DAPL) that is now under court order to shut down and be drained by early August.

The immediate challenges are how to move up to 300,000 b/d to Gulf Coast refineries, and longer term up to 500,000 b/d, said Justin Kringstad, director of the North Dakota Pipeline Authority.

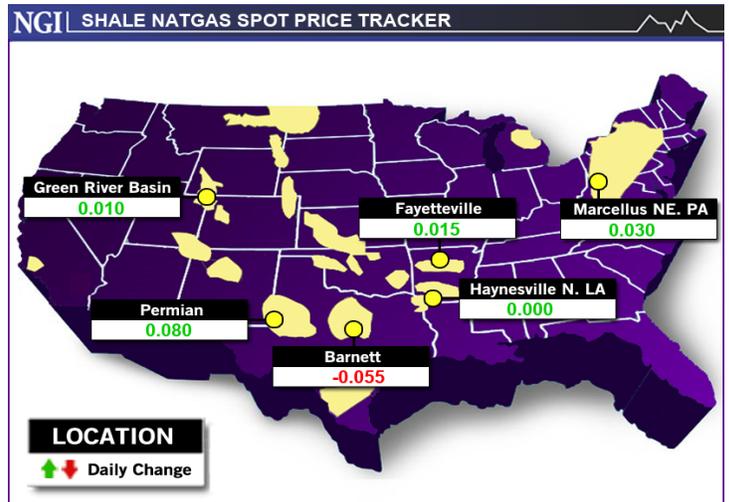
Bakken producers are grappling with the aftermath of an order from the U.S. District Court for the District of Columbia directing Energy Transfer LP to temporarily halt operations on the 1,172-mile, four-state ...cont' pg. 2

## ANALYSIS

### U.S. Supply Curtailments Could Return by 3Q if WTI Crude Prices Hold Near \$40/Bbl

If current West Texas Intermediate (WTI) crude oil prices of around \$40/bbl are sustained, all previously curtailed U.S. production would return by the end of September, according to Morgan Stanley researchers.

In a mid-year outlook issued Wednesday, the Morgan Stanley team, led by Equity Analysts & Commodities Strategist Devin McDermott, said the industry is in the first of a three-phase recovery. This first phase — reversal of curtailments — requires a WTI crude oil price of \$25-30, while the second phase of production stabilization would require a WTI price of roughly \$40 in order to hold 4Q2020 production levels flat. The final phase, according to Morgan Stanley, is the resumption of growth, ...cont' pg. 4



Trade Date: Jul 08; Flow Date(s): Jul 09

Basin/Region	Range	Avg	Chg	Vol	Deals
<b>Gulf Coast</b>					
Barnett	1.650-1.705	1.675	-0.055	20	6
Eagle Ford	1.750-1.805	1.775	0.000	342	62
Haynesville - E. TX	1.720-1.780	1.740	0.020	1,053	160
Haynesville - N. LA	1.750-1.800	1.760	0.000	201	28
Permian1	1.350-1.650	1.490	0.080	1,544	257
Tuscaloosa Marine Shale	1.765-1.810	1.785	0.010	517	79
<b>Midcontinent</b>					
Arkoma - Woodford	1.750-1.800	1.770	0.015	71	14
Canva - Woodford	1.650-1.690	1.680	0.005	92	17
Fayetteville	1.755-1.790	1.760	0.015	128	13
Granite Wash*	1.600-1.655	1.630	0.005	215	37
<b>Northeast</b>					
Marcellus - NE PA2	1.380-1.450	1.420	0.030	288	63
Marcellus - NE PA: Other3	1.380-1.450	1.425	0.030	218	49
Marcellus - NE PA: Tenn4	1.390-1.410	1.400	0.025	71	14
Marcellus - SW PA/WV	1.270-1.710	1.450	0.040	1,943	308
Utica5	1.340-1.600	1.490	0.000	136	35
<b>Rocky Mountains / West</b>					
Bakken	--	--	--	--	--
Green River Basin*	1.600-1.660	1.645	0.010	874	170
Niobrara-DJ6	1.620-1.660	1.645	0.005	539	86
Piceance Basin*	1.630-1.650	1.640	0.015	242	46
Uinta Basin*	1.630-1.645	1.640	0.030	25	6
San Juan Basin*	1.570-1.700	1.620	-0.025	685	132

Notes: Table represents fixed-price delivered-to-pipeline transactions in USD/MMBtu. These data are comprised of deals that NGI believe represent trading activity in the respective resource plays and may contain gas that was produced from conventional formations. \* Denotes a tight sands formation. Details on additional footnotes are available [here](#). Volumes may not total due to rounding. For more information, please see [NGI's Shale Price Methodology](#).

## PIPELINES

### Marten Hills Crude Pipeline System Comes Online in Rare Corner of Canada

Texas-based Rangeland Energy announced this week that its Marten Hills Pipeline System has entered service in a rare corner of the northern Alberta bitumen belt where heavy oil flows without costly artificial stimulation of wells.

Subsidiary Rangeland Midstream Canada Ltd. gained

a foothold in the country early last year when it [announced the project](#). Construction of the 53-mile crude oil and condensate system [started last October](#) and the project entered service on schedule.

“Operators in the region are resuming previously shut-in production as they benefit from improved ...cont' pg. 6

**REGULATORY****New Mexico Regulator Fines DCP for Emissions Violations as States Demand Action on Methane**

The New Mexico Environment Department (NMED) said Tuesday it has fined an affiliate of DCP Midstream Partners LP \$5.3 million for air quality violations.

The watchdog said that between December 2017 and June 2019, DCP Operating Co. LP submitted 367 excess emission reports for eight New Mexico facilities, totaling over 2.1 million pounds of pollutants.

“Matters like these absolutely confirm the need for the department to finish developing its methane and ozone emission regulations for the oil and natural gas industry,” said NMED Cabinet Secretary James Kenney. “It is not enough to develop rules and issue permits; a strong and robust compliance program is essential to protect both air quality and communities.”

DCP’s footprint in the Permian Basin of West Texas and southeastern New Mexico includes four active natural gas processing plants in the Delaware sub-basin with 620 MMcf/d of net active capacity and a 6,500-mile gathering network.

In the Midland sub-basin, DCP has six active plants with 580 MMcf/d of net active capacity and 9,000 miles of gathering infrastructure.

DCP on Monday said that it was partnering with Kairos Aerospace, Inc. to conduct a series of methane surveys across DCP’s operations in Texas, New Mexico and Colorado.

The surveys, which DCP said comprise the largest ever industry-led initiative of its kind, “will use Kairos’ sophisticated airborne methane monitoring techniques and advanced data analytics to digitally enable DCP’s goals of operational excellence and sustainability.”

DCP, among the largest producers of natural gas liquids and processors of natural gas in the United States, said in a June investor presentation that it is committed to “reducing our contribution to and mitigating the impacts of climate change.”

The company said its efforts include monitoring its facilities “with innovative technologies, such as infrared cameras to find and repair leaks,” as well as participating in iPIPE, “a nationally recognized coalition focused on leak detection and prevention.”

Gov. Michelle Lujan Grisham in 2019 directed NMED and the New Mexico Energy, Minerals and Natural Resources Department to “jointly develop a statewide, enforceable regulatory framework to secure reductions in oil and gas sector methane emissions and to prevent waste from new and existing sources and enact such rules as soon as practicable.”

New Mexico was one of 16 states, along with the Environmental Defense Fund (EDF), to file a motion on Monday in the U.S. District Court for the District of Columbia demanding the Environmental Protection Agency (EPA) take regulatory action to limit methane pollution from existing oil and gas sources.

“For almost four years now, Trump’s EPA has been shirking its duty to protect people from one of our most dangerous types of climate pollution, without offering any legitimate reason why,” said EDF senior attorney Rosalie Winn, adding that “cost-effective solutions are at hand, and everyone from states to major oil and gas producers recognize the importance of EPA standards for existing oil and gas sources.” ■

**Bakken Producers Scramble to Prepare for Life Without DAPL**

*Continued from Page 1*

DAPL within the next 30 days while an environmental impact statement (EIS) is completed. The EIS may take more than a year.

Earlier in the year, before all the shut-ins caused by the coronavirus and the crash in global energy demand, 69% of the Bakken’s 1 million-plus b/d were shipped by pipeline and 21% went by rail, Kringstad told *NGI’s Shale Daily*. “Refining and trucking in Canada made up the remaining 10%.”

Ron Ness, president of the North Dakota Producers

Council, called the federal district order “judicial overreach” and warned it would have profound economic and safety impacts.

“Shutting down the pipeline will have a greater negative impact on safety than any environmental benefit the court is claiming to gain, putting more trucks on our roads and more rail cars on the tracks, nearly 900 railcars a day,” Ness said.

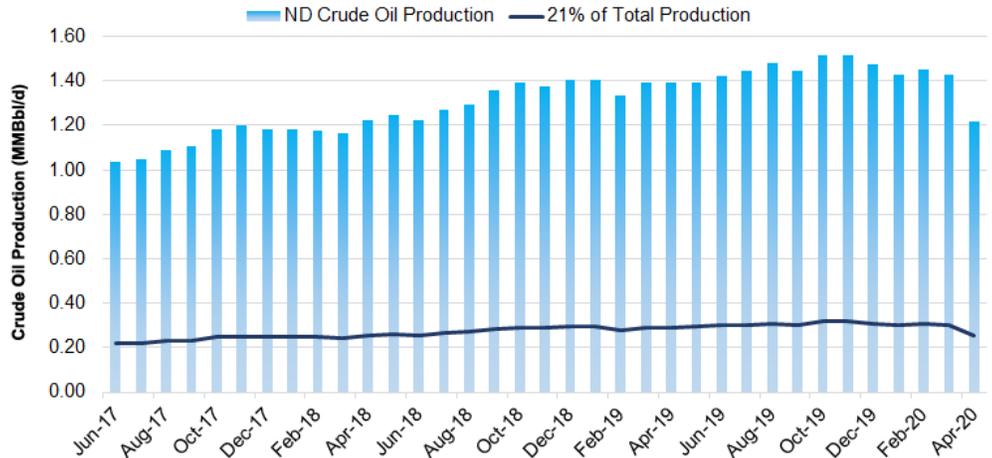
North Dakota Gov. Doug Burgum said he expects the decision to be appealed given the “devastating ...cont’ pg. 3

effects” he sees for the state’s economy and the nation’s energy security. Burgum said if a single judge can shutdown a pipeline that has been running safely for more than three years, then it could have a “chilling effect on America’s ability to build, modernize and improve our critical infrastructure.”

“For all practical purposes, rail will be the only feasible option,” said Kringstad, who added that any trucking just goes north to a Canadian pipeline. “From a

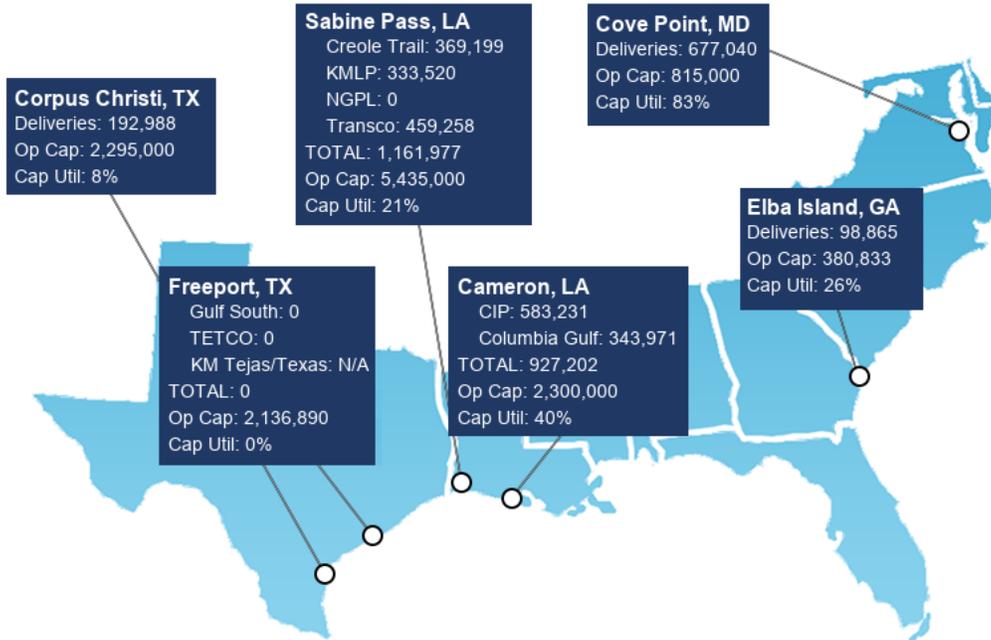
...cont' pg. 4

**Monthly North Dakota Crude Oil Production, Jun 2017–Apr 2020**

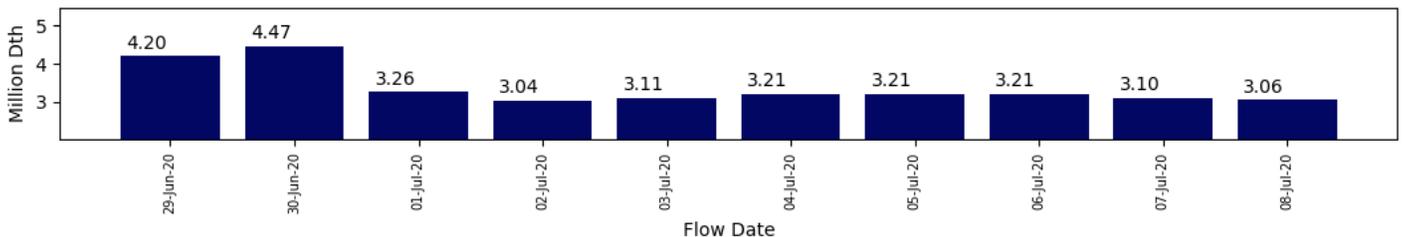


Source: North Dakota DMR, NGI calculations

**NGI's LNG INSIGHT U.S. LNG EXPORT TRACKER 08-Jul-2020**



Daily Summary (Volumes Listed in Dekatherms)	
Total Deliveries to U.S. LNG Export Facilities:	3,058,072
Previous Day:	3,105,000
Change:	-46,928



Note: Figures are NGI's estimates of gas delivered to each respective LNG liquefaction facility, listed in dekatherms, and based on best available cycle as of the morning of each listed gas day.

Source: Pipeline EBBs, NGI calculations

large-scale perspective, rail would be the option.

“By my calculations, initially there will be about 300,000 b/d that will need to get on rail cars, assuming all other pipe options are full,” he said. “But if you assume the Bakken will continue to recover, there will be another 200,000 b/d going by rail by early to mid-2021 on top of the initial 300,000 b/d.”

Kringstad said North Dakota’s attorney general is looking at the state’s legal options, and he is prepared to

support whatever option is chosen. North Dakota earlier filed an amicus brief in the case, seeking to avoid the ultimate negative ruling.

“I think most of the industry was somewhat surprised by the decision, and right now there is a whole lot of work being done to determine the next steps of what this will look like going forward, and how barrels will need to shuffle.” ■

### U.S. Supply Curtailments Could Return by 3Q if WTI Crude Prices Hold Near \$40/Bbl

Continued from Page 1

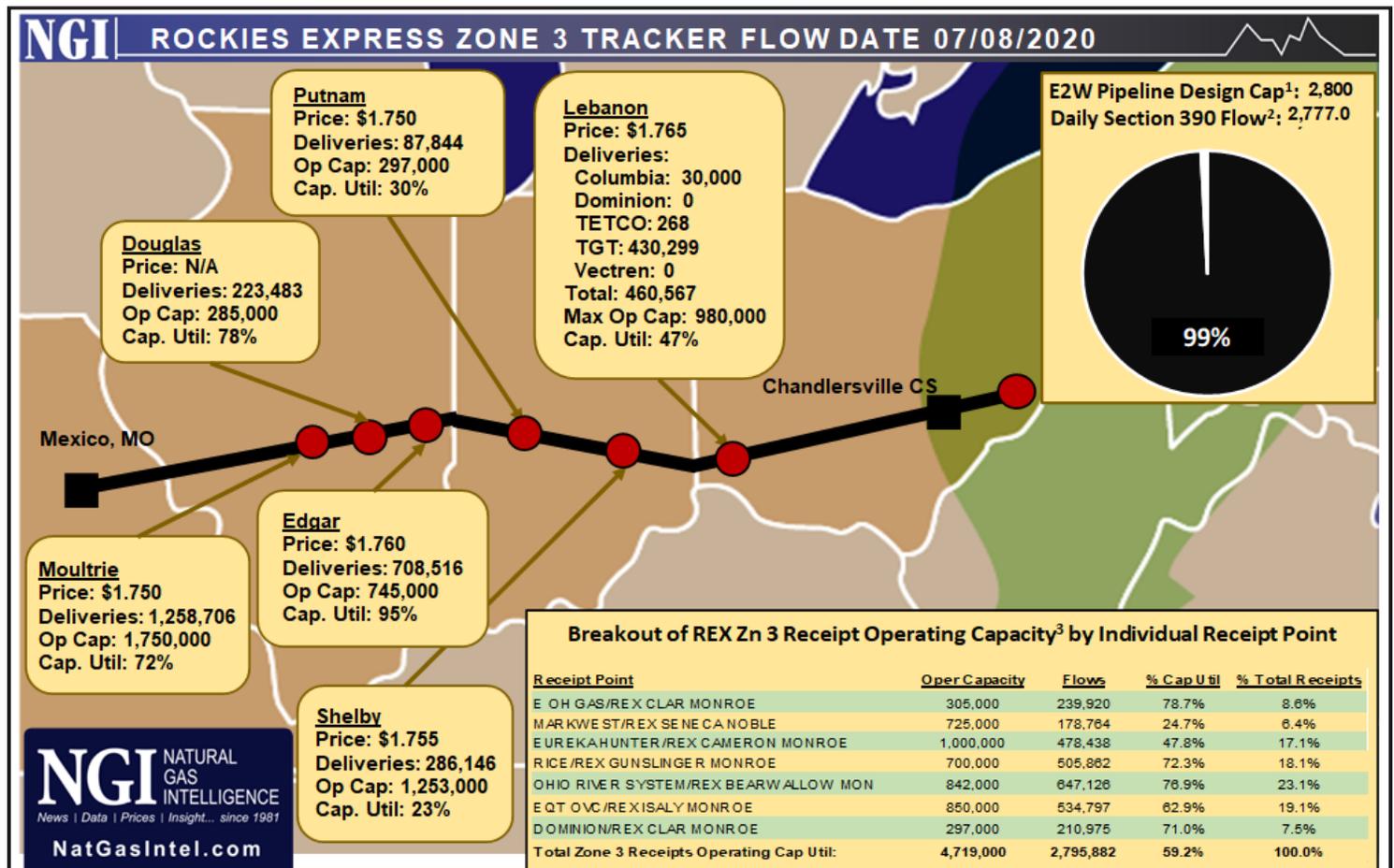
which needs WTI prices to be around \$40-50.

“With WTI now back around \$40/bbl, pipeline flows suggest around 1 million b/d of curtailments have been reversed over the past few weeks,” researchers said. “If current prices hold, we believe effectively all curtailed volumes will return by the end of 3Q.”

On average, Morgan Stanley’s 2020 and 2021 WTI price outlook remains unchanged at \$38 and \$40, respectively, while its 2022 estimate is down to \$42, versus \$44

prior. Researchers see Henry Hub natural gas prices falling 10% to \$1.94/MMBtu for 2020 and declining 3% to \$2.65 in 2021. The team maintains their long-term assumptions of \$42.50 WTI and \$2.75 Henry Hub.

On Tuesday, the Energy Information Administration (EIA) updated its own price forecast, knocking down Henry Hub prices for 2020 another 11 cents from the previous outlook to \$1.93. In the latest [Short-Term Energy Outlook](#) (STEO), EIA said it expects the Henry ...cont' pg. 5



Source: Tallgrass Energy LP, NGI calculations. For more info and daily 10am ET updates of this chart, go to [natgasintel.com/rextracker](http://natgasintel.com/rextracker)

Hub price to average \$3.10 in 2021, 2 cents higher than forecast in the previous STEO, as falling production levels continue to exert upward price pressures.

In a note to clients on Wednesday, Enverus said that

after bottoming in May, natural gas pipeline data indicates that production has started to flatten, and in some areas, has shown gains. The pipeline sample, which represents 74% of the total gas produced in the United States, declined from 71 Bcf/d in January to 65.7 Bcf/d in May. As of June 23, production averaged 65.1 Bcf/d.

Pipeline scrapes show gas production June to date in some key plays trending higher compared to May, including in Appalachia and the Permian, Anadarko, Powder River and Williston basins.

“Despite these gains, production for the U.S. is still down in June,” Enverus analysts said. “However, it shows how U.S. operators can be resilient even during times when most of these areas are not economical.”

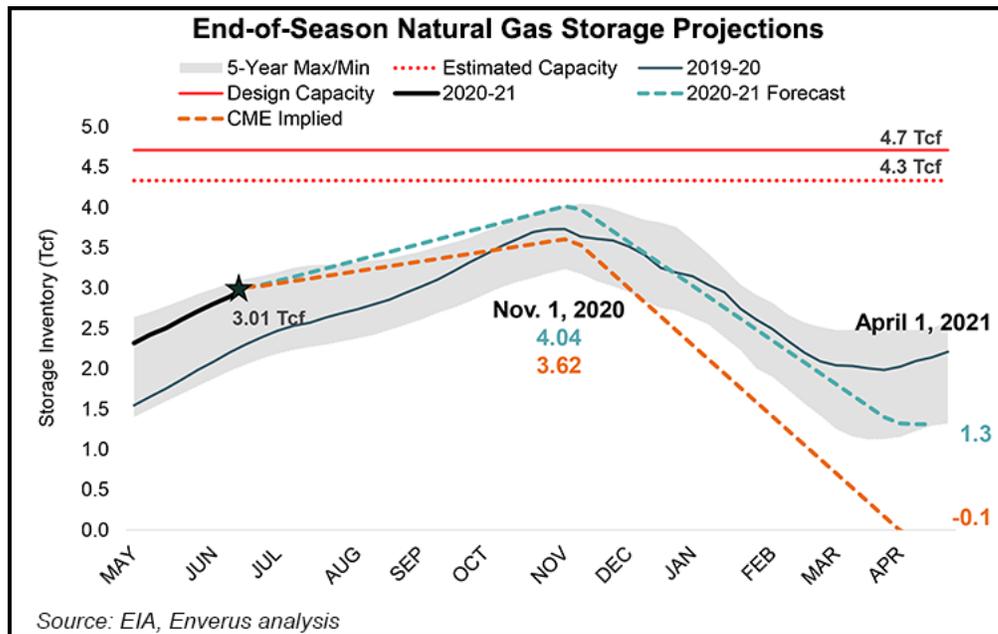
After plunging deep into negative territory in April, higher WTI prices have incentivized [some producers](#) to turn back on the taps. However, Enverus pointed out that this price level still leaves only a handful of areas with gas breakevens under \$5/MMBtu, most predominantly in the Marcellus/Utica and Haynesville shales.

Nevertheless, the risk of ending the traditional storage season at “significantly” above-average levels is high, Enverus said, due to expectations that demand destruction from Covid-19 mitigation efforts would initially outpace production shut-ins. [Lower 48 inventories](#) already are tracking well ahead of historical levels, sitting at 3.012 Tcf as of June 19, which is 466 Bcf above the five-year average, according to EIA.

However, by the start of the withdrawal season, and with production declines taking hold, storage inventories may decline rapidly as demand normalizes and the winter season gets under way.

“Using current forward prices as of June 24, inventories would reach a record low of -0.1 Tcf by the end of winter 2020-21,” Enverus said. The firm therefore expects a price response that would push Henry Hub to \$3.90/MMBtu for winter 2020-21.

“This price response will affect forecasted production, power demand and liquefied natural gas exports in order to balance the market in summer 2021,” analysts said. ■



# LNG HAS CHANGED THE NATURAL GAS MARKET

UNDERSTAND HOW WITH

## NGI's LNG INSIGHT

Bringing a North American Focus to International LNG

- EUROPEAN STORAGE DATA
- US ARBITRAGE CURVES TO EUROPE & ASIA
- GOM, CANADA & MEXICO NETBACKS
- GLOBAL LNG & NATURAL GAS FUTURES
- EUROPEAN SPARK/DARK SPREADS
- OIL-LINKED ASIA PARITY PRICES
- LATIN AMERICAN DES PRICES
- EUROPEAN LNG REGAS TERMINAL STORAGE
- US LNG EXPORT DESTINATIONS

FOR MORE INFORMATION, VISIT [NATGASINTEL.COM/LNGINSIGHT](http://NATGASINTEL.COM/LNGINSIGHT)

**Marten Hills Crude Pipeline System Comes Online in Rare Corner of Canada***Continued from Page 1*

economics and a stronger demand for their products, said Rangeland Canada's Briton Speer, vice president of business development. "Our goal is to stay ahead of our customers' needs by alleviating infrastructure bottlenecks, providing safe, reliable and high-quality transportation, and offering access to the best markets."

The Marten Hills system extends from north-central Alberta to an interconnect with Plains Midstream Canada's Rainbow Pipeline System, which serves the Edmonton, Alberta, hub and refining market. The system is underpinned by long-term transportation agreements with three of the region's largest crude oil producers, who have made

a combined minimum volume commitment representing 40% of the system's capacity.

Marten Hills is a rare location, in a vast but technically difficult Alberta deposit known as the Clearwater formation, where oil flows into horizontal wells without costly hydraulic fracturing or natural gas-fired steam injections.

Recent earth sciences advances uncovered the sweet spot in a geological structure that has been known for a century. Development of Marten Hills remains in early stages, with the industry still evaluating the production area's size and output volume potential. ■

**NGI**

Intelligence Press, Inc.

**NGI's SHALE DAILY™****THURSDAY,  
JULY 9, 2020  
VOL. 10, No. 191**

ISSN 2158-8023 (PRINT)

Shale Daily is published daily, each business day by Intelligence Press, Inc. (703) 318-8848.

For breaking natural gas and shale news and more detailed pricing data, please visit us at: <http://naturalgasintel.com>

For a listing of all our premium newsletters and data services, please visit: <http://naturalgasintel.com/premiumservices>

**Executive Publisher:** Dexter Steis ([dexter.steis@natgasintel.com](mailto:dexter.steis@natgasintel.com)). **Editor-In-Chief:** Alex Steis ([alex.steis@natgasintel.com](mailto:alex.steis@natgasintel.com)).

**Managing Editor:** Carolyn L. Davis ([carolyn.davis@natgasintel.com](mailto:carolyn.davis@natgasintel.com)). **Analysts/ Price Editors:** Patrick Rau, CFA ([pat.rau@natgasintel.com](mailto:pat.rau@natgasintel.com)), Nathan Harrison ([nathan.harrison@natgasintel.com](mailto:nathan.harrison@natgasintel.com)), Josiah Clinedinst ([josiah.clinedinst@natgasintel.com](mailto:josiah.clinedinst@natgasintel.com)). **Markets Editor:** Jeremiah Shelor ([jeremiah.shelor@natgasintel.com](mailto:jeremiah.shelor@natgasintel.com)). **Senior Editor - Markets:** Leticia Gonzales ([leticia.gonzales@natgasintel.com](mailto:leticia.gonzales@natgasintel.com)). **Senior Editor - LNG:** Jamison Cocklin ([jamison.cocklin@natgasintel.com](mailto:jamison.cocklin@natgasintel.com)). **Senior Editor - Mexico and Latin America:** Christopher Lenton ([christopher.lenton@natgasintel.com](mailto:christopher.lenton@natgasintel.com)).

**Assistant Managing Editor:** David Bradley ([david.bradley@natgasintel.com](mailto:david.bradley@natgasintel.com)). **Associate Editor:** Andrew Baker ([andrew.baker@natgasintel.com](mailto:andrew.baker@natgasintel.com)).

**Correspondents:** Richard Nemeč ([rich.nemec@natgasintel.com](mailto:rich.nemec@natgasintel.com)), Gordon Jaremko ([gordon.jaremko@natgasintel.com](mailto:gordon.jaremko@natgasintel.com)), Ronald Buchanan ([ronald.buchanan@natgasintel.com](mailto:ronald.buchanan@natgasintel.com)), Eduardo Prud'homme ([eduardo.prudhomme@natgasintel.com](mailto:eduardo.prudhomme@natgasintel.com)), Adam Williams ([adam.williams@natgasintel.com](mailto:adam.williams@natgasintel.com)).

Contact us: **EDITORIAL:** [editorial@natgasintel.com](mailto:editorial@natgasintel.com); **PRICING:** [prices@natgasintel.com](mailto:prices@natgasintel.com); **SUPPORT/SALES:** [info@natgasintel.com](mailto:info@natgasintel.com);

**ADVERTISE:** [adv@natgasintel.com](mailto:adv@natgasintel.com).

Intelligence Press, Inc. © Copyright 2020. Contents may not be reproduced, stored in a retrieval system, accessed by computer, or transmitted by any means without a site license or prior written permission of the publisher.

**DISCLAIMERS, LIMITATION OF WARRANTY AND LIABILITY:** The information contained in this newsletter (our Content) is intended as a professional reference tool. You are responsible for using professional judgment and for confirming and interpreting the data reported in our Content before using or relying on such information. OUR CONTENT IS PROVIDED "AS IS" AND WE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR YOUR PARTICULAR PURPOSE. Although we believe our Content to be complete and accurate as described therein, we make no representations regarding completeness or accuracy. We will not be liable for any damage or loss of any kind arising out of or resulting from access or lack of access to or use of our Content, including but not limited to your reliance on it, errors in the data it contains, and data loss or corruption, regardless of whether such liability is based in tort, contract or otherwise. NGI's full Subscriber Agreement is available here: [naturalgasintel.com/TOC](http://naturalgasintel.com/TOC).