

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2020
or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number: 1-13283



**PENN VIRGINIA
CORPORATION**

PENN VIRGINIA CORPORATION
(Exact name of registrant as specified in its charter)

Virginia

(State or other jurisdiction of
incorporation or organization)

23-1184320

(I.R.S. Employer
Identification Number)

**16285 PARK TEN PLACE, SUITE 500
HOUSTON, TX 77084**

(Address of principal executive offices) (Zip Code)
(713) 722-6500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act

Title of each class

Trading Symbol(s)

Name of each exchange on which registered

Common Stock, \$0.01 Par Value

PVAC

Nasdaq Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

Accelerated Filer

Non-accelerated Filer

Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Exchange Act subsequent to the distribution of securities under a plan confirmed by a court. Yes No

As of May 1, 2020, 15,157,919 shares of common stock of the registrant were outstanding.

PENN VIRGINIA CORPORATION
QUARTERLY REPORT ON FORM 10-Q
For the Quarterly Period Ended March 31, 2020
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Part I. FINANCIAL INFORMATION

Item 1. *Financial Statements.*

PENN VIRGINIA CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS – unaudited
(in thousands, except per share data)

	Three Months Ended March 31,	
	2020	2019
Revenues		
Crude oil	\$ 86,308	\$ 94,812
Natural gas liquids	1,893	5,548
Natural gas	2,690	4,277
Gain on sales of assets, net	6	25
Other revenues, net	482	566
Total revenues	91,379	105,228
Operating expenses		
Lease operating	10,532	11,004
Gathering, processing and transportation	5,444	3,929
Production and ad valorem taxes	6,154	5,692
General and administrative	7,230	7,065
Depreciation, depletion and amortization	40,718	38,870
Total operating expenses	70,078	66,560
Operating income	21,301	38,668
Other income (expense)		
Interest expense	(8,180)	(9,478)
Derivatives	151,119	(68,017)
Other, net	(8)	106
Income (loss) before income taxes	164,232	(38,721)
Income tax (expense) benefit	(1,138)	24
Net income (loss)	\$ 163,094	\$ (38,697)
Net income (loss) per share:		
Basic	\$ 10.76	\$ (2.56)
Diluted	\$ 10.76	\$ (2.56)
Weighted average shares outstanding – basic	15,152	15,098
Weighted average shares outstanding – diluted	15,160	15,098

See accompanying notes to condensed consolidated financial statements.

PENN VIRGINIA CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME – unaudited
(in thousands)

	<u>Three Months Ended March 31,</u>	
	<u>2020</u>	<u>2019</u>
Net income (loss)	\$ 163,094	\$ (38,697)
Other comprehensive loss:		
Change in pension and postretirement obligations, net of tax	(1)	(1)
	<u>(1)</u>	<u>(1)</u>
Comprehensive income (loss)	<u>\$ 163,093</u>	<u>\$ (38,698)</u>

See accompanying notes to condensed consolidated financial statements.

PENN VIRGINIA CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS – unaudited
(in thousands, except share data)

	March 31, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 55,331	\$ 7,798
Accounts receivable, net of allowance for credit losses	34,652	70,716
Derivative assets	233,442	4,131
Income taxes receivable	2,471	1,236
Other current assets	4,765	4,458
Total current assets	330,661	88,339
Property and equipment, net (full cost method)	1,160,559	1,120,425
Derivative assets	10,963	2,750
Other assets	6,764	6,724
Total assets	\$ 1,508,947	\$ 1,218,238
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 105,863	\$ 105,824
Derivative liabilities	103,092	23,450
Total current liabilities	208,955	129,274
Other liabilities	8,616	8,382
Deferred income taxes	3,744	1,424
Derivative liabilities	10,689	3,385
Long-term debt, net	592,624	555,028
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock of \$0.01 par value – 5,000,000 shares authorized; none issued	—	—
Common stock of \$0.01 par value – 45,000,000 shares authorized; 15,157,919 and 15,135,598 shares issued as of March 31, 2020 and December 31, 2019, respectively	152	151
Paid-in capital	201,222	200,666
Retained earnings	483,005	319,987
Accumulated other comprehensive loss	(60)	(59)
Total shareholders' equity	684,319	520,745
Total liabilities and shareholders' equity	\$ 1,508,947	\$ 1,218,238

See accompanying notes to condensed consolidated financial statements.

PENN VIRGINIA CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS – unaudited
(in thousands)

	Three Months Ended March 31,	
	2020	2019
Cash flows from operating activities		
Net income (loss)	\$ 163,094	\$ (38,697)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation, depletion and amortization	40,718	38,870
Derivative contracts:		
Net (gains) losses	(151,119)	68,017
Cash settlements, net	(269)	4,394
Deferred income tax expense	2,320	1,212
Gain on sales of assets, net	(6)	(25)
Non-cash interest expense	823	921
Share-based compensation	856	1,038
Other, net	8	13
Changes in operating assets and liabilities, net	16,048	(6,484)
Net cash provided by operating activities	<u>72,473</u>	<u>69,259</u>
Cash flows from investing activities		
Capital expenditures	(62,015)	(86,486)
Proceeds from sales of assets, net	75	18
Net cash used in investing activities	<u>(61,940)</u>	<u>(86,468)</u>
Cash flows from financing activities		
Proceeds from credit facility borrowings	46,000	12,000
Repayment of credit facility borrowings	(9,000)	(8,000)
Net cash provided by financing activities	<u>37,000</u>	<u>4,000</u>
Net increase (decrease) in cash and cash equivalents	47,533	(13,209)
Cash and cash equivalents – beginning of period	7,798	17,864
Cash and cash equivalents – end of period	<u>\$ 55,331</u>	<u>\$ 4,655</u>
Supplemental disclosures:		
Cash paid for:		
Interest, net of amounts capitalized	\$ 7,442	\$ 8,413
Reorganization items, net	\$ —	\$ 79
Non-cash investing and financing activities:		
Changes in accrued liabilities related to capital expenditures	\$ 18,660	\$ 13,569

See accompanying notes to condensed consolidated financial statements

PENN VIRGINIA CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS – unaudited
For the Quarterly Period Ended March 31, 2020
(in thousands, except per share amounts or where otherwise indicated)

1. Nature of Operations

Penn Virginia Corporation (together with its consolidated subsidiaries, unless the context otherwise requires, “Penn Virginia,” the “Company,” “we,” “us” or “our”) is an independent oil and gas company engaged in the onshore exploration, development and production of oil, natural gas liquids (“NGLs”) and natural gas. Our current operations consist of drilling unconventional horizontal development wells and operating our producing wells in the Eagle Ford Shale (the “Eagle Ford”) in Gonzales, Lavaca, Fayette and DeWitt Counties in South Texas. We operate in and report our financial results and disclosures as one segment, which is the exploration, development and production of crude oil, NGLs and natural gas.

2. Basis of Presentation

Our unaudited Condensed Consolidated Financial Statements include the accounts of Penn Virginia and all of our subsidiaries. Intercompany balances and transactions have been eliminated. Our Condensed Consolidated Financial Statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). Preparation of these statements involves the use of estimates and judgments where appropriate. In the opinion of management, all adjustments, consisting of normal recurring accruals, considered necessary for a fair presentation of our Condensed Consolidated Financial Statements, have been included. Our Condensed Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and Notes included in our Annual Report on Form 10-K for the year ended December 31, 2019. Operating results for the three months ended March 31, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020.

Adoption of Recently Issued Accounting Pronouncements

Effective January 1, 2020, we adopted and began applying the relevant guidance provided in the Financial Accounting Standards Board’s (“FASB”) Accounting Standards Update (“ASU”) 2016–13, *Measurement of Credit Losses on Financial Instruments* (“ASU 2016–13”). We adopted ASU 2016–13 using the optional transition approach with a charge to the beginning balance of retained earnings as of January 1, 2020 (see Note 4 for the impact and disclosures associated with the adoption of ASU 2016–13). Comparative periods and related disclosures have not been restated for the application of ASU 2016–13.

Risks and Uncertainties

As an oil and gas exploration and development company, we are exposed to a number of risks and uncertainties that are inherent to our industry. In addition to such industry-specific risks, the global public health crisis associated with the novel coronavirus (“COVID-19”) has, and is anticipated to continue to have, an adverse effect on global economic activity for the immediate future and has resulted in travel restrictions, business closures and the institution of quarantining and other restrictions on movement in many communities. The slowdown in global economic activity attributable to COVID-19 has resulted in a dramatic decline in the demand for energy, which directly impacts our industry and the Company. In addition, global crude oil prices experienced a collapse starting in early March 2020 as a direct result of failed negotiations between the Organization of the Petroleum Exporting Countries (“OPEC”) and Russia. In response to the global economic slowdown, OPEC had recommended a decrease in production levels in order to accommodate reduced demand. Russia rejected the recommendation of OPEC as a concession to U.S. producers. After the failure to reach an agreement, Saudi Arabia, a dominant member of OPEC, and other Persian Gulf OPEC members announced intentions to increase production and offer price discounts to buyers in certain geographic regions.

As the breadth of the COVID-19 health crisis expanded throughout the month of March 2020 and governmental authorities implemented more restrictive measures to limit person-to-person contact, global economic activity continued to decline commensurately. The associated impact on the energy industry has been adverse and continued to be exacerbated by the unresolved conflict regarding production. In the second week of April, OPEC, Russia and certain other petroleum producing nations (“OPEC+”), reconvened to discuss the matter of production cuts in light of unprecedented disruption and supply and demand imbalances that expanded since the failed negotiations in early March 2020. Tentative agreements were reached to cut production by up to 10 million barrels of oil per day with allocations to be made among the OPEC+ participants. If effected, these production cuts, however, may not offset near-term demand loss attributable to the COVID-19 health crisis and related economic slowdown, and the tentative agreement has not resulted in increased commodity prices.

Despite a significant decline in drilling by U.S. producers starting in mid-March 2020, domestic supply is exceeding demand which has led to significant operational stress with respect to capacity limitations associated with storage, pipeline and refining infrastructure, particularly within the Gulf Coast region. The combined effect of the aforementioned factors is anticipated to have an adverse impact on the industry in general and our operations specifically.

During March and April 2020, we initiated several actions to mitigate the anticipated adverse economic conditions for the immediate future and to support our financial position and liquidity. The more significant actions that we took in March/April 2020 included: (i) suspending our drilling and completion program, (ii) substantially expanding the scope and range of our commodity derivatives portfolio, (iii) initiating actions to pursue certain liquidity-related provisions of the Coronavirus Aid, Relief and Economic Security Act (the “CARES Act”) and related regulations. These actions are discussed further in Notes 5, 8 and 12 that follow.

Going Concern Presumption

Our unaudited Condensed Consolidated Financial Statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities and other commitments in the normal course of business.

Subsequent Events

Management has evaluated all of our activities through the issuance date of our Condensed Consolidated Financial Statements and has concluded that, with the exception of the re-determination of the borrowing base and related amendments to our credit agreement (“Credit Facility”), as disclosed in Note 7, no subsequent events have occurred that would require recognition in our Condensed Consolidated Financial Statements or disclosure in the Notes thereto.

3. Acquisitions

Eagle Ford Working Interests

In 2019, we acquired working interests in certain properties for which we are the operator from our joint venture partners therein for cash consideration of approximately \$6.5 million. Funding for this acquisition was provided by borrowings under the Credit Facility.

4. Accounts Receivable and Revenues from Contracts with Customers

Accounts Receivable and Major Customers

The following table summarizes our accounts receivable by type as of the dates presented:

	March 31,	December 31,
	2020	2019
Customers	\$ 27,004	\$ 63,165
Joint interest partners	7,872	6,929
Other	—	674
	<u>34,876</u>	<u>70,768</u>
Less: Allowance for credit losses	(224)	(52)
	<u>\$ 34,652</u>	<u>\$ 70,716</u>

For the three months ended March 31, 2020, four customers accounted for \$66.5 million, or approximately 73%, of our consolidated product revenues. The revenues generated from these customers during the three months ended March 31, 2020, were \$22.6 million, \$15.7 million, \$15.7 million and \$12.5 million, or 25%, 17%, 17% and 14% of the consolidated total, respectively. As of March 31, 2020 and December 31, 2019, \$22.0 million and \$52.7 million, or approximately 82% and 83%, respectively, of our consolidated accounts receivable from customers was related to these customers. For the three months ended March 31, 2019, three customers accounted for \$69.0 million, or approximately 66%, of our consolidated product revenues. No significant uncertainties exist related to the collectability of amounts owed to us by any of these customers. As of March 31, 2020 and December 31, 2019, the allowance for credit losses is entirely attributable to receivables from joint interest partners.

Credit Losses and Allowance for Credit Losses

Adoption of ASU 2016–13

Effective January 1, 2020, we adopted ASU 2016–13 and have applied the guidance therein to our portfolio of accounts receivable including those from our customers and our joint interest partners. We have adopted ASU 2016–13 using the modified retrospective method resulting in an adjustment of less than \$0.1 million to the beginning balance of retained earnings and a corresponding increase to the allowance for credit losses as of January 1, 2020.

Accounting Policies for Credit Losses

We monitor and assess our portfolio of accounts receivable, including those from our customers, our joint interest partners and others, when applicable, for credit losses on a monthly basis as we originate the underlying financial assets. Our review process and related internal controls take into appropriate consideration (i) past events and historical experience with the identified portfolio segments, (ii) current economic and related conditions within the broad energy industry as well as those

factors with broader applicability and (iii) reasonable supportable forecasts consistent with other estimates that are inherent in our financial statements. In order to facilitate our processes for the review and assessment of credit losses, we have identified the following portfolio segments which are described below: (i) customers for our commodity production and (ii) joint interest partners which are further stratified into the following sub-segments: (a) mutual operators which includes joint interest partners with whom we are a non-operating joint interest partner in properties for which they are the operator, (b) large partners consisting of those legal entities that maintain a working interest of at least 10 percent in properties for which we are the operator and (c) all others which includes legal entities that maintain working interests of less than 10 percent in properties for which we are the operator as well as legal entities with whom we no longer have an active joint interest relationship, but continue to have transactions, including joint venture audit settlements, that from time-to-time give rise to the origination of new accounts receivable.

Customers. We sell our commodity products to approximately 20 customers. A substantial majority of these customers are large, internationally recognized refiners and marketers in the case of our crude oil sales and large domestic processors and interstate pipelines with respect to our NGL and natural gas sales. As noted in our disclosures regarding major customers above, a significant portion of our outstanding customer accounts receivable are concentrated within a group of up to five customers at any given time. Due primarily to the historical market efficiencies and generally timely settlements associated with commodity sale transactions for crude oil, NGLs and natural gas, we have assessed this portfolio segment at zero risk for credit loss upon the adoption of ASU 2016-13 and for each of the three-months included in the period ended March 31, 2020. Historically, we have never experienced a credit loss with such customers including the periods during the 2008-2009 financial crisis and the more recent periods of significant commodity price declines. While we believe that the receivables that originated in March 2020 will be fully collected despite the ongoing uncertainty associated with the COVID-19 health crisis and the related global energy market disruptions, future originations of customer receivables will be assessed with a greater emphasis on current economic conditions and reasonable supportable forecasts.

Mutual Operators. As of March 31, 2020, we had mutual joint interest partner relationships with two upstream producers that also operate properties within the Eagle Ford for which we have non-operated working interests. Historically we have had full and timely collection experiences with these entities and we ourselves are timely with respect to our payments to them of joint venture costs. Upon adoption of ASU 2016-13, we had assessed this portfolio segment at zero risk for credit loss; however, in light of the potential for liquidity concerns due to current economic conditions in the near-term, we have assessed receivables originating in March 2020 with a de minimus one percent risk.

Large Partners. As of March 31, 2020, four legal entities had working interests of 10 percent or greater in properties that we operate. These entities are primarily passive investors. Historically we have had full and timely collection experiences with these entities. Upon adoption of ASU 2016-13, we had assessed this portfolio segment at a de minimus risk of one percent for credit loss; however, in light of the potential for liquidity concerns due to current economic conditions in the near-term, we have increased the assessed receivables originating in March 2020 to a two percent risk.

All Others. As of March 31, 2020, approximately thirty legal entities had working interests of less than 10 percent in properties that we operate. Historically, this is the only portfolio segment with whom we have experienced credit losses. Generally, this group includes passive investors and smaller producers that may not have the wherewithal or alternative sources of liquidity to settle their obligations to us in the event of individual challenges unique to smaller entities as well as adverse economic conditions in general. Upon adoption of ASU 2016-13, we had assessed this portfolio segment at a risk of five percent for credit loss; however, in light of the potential for liquidity concerns due to current economic conditions in the near-term, we have increased the assessed receivables originated in March 2020 to a 10 percent risk. As of March 31, 2020, approximately \$0.1 million of accounts receivables attributable to this portfolio segment was past due, or over 60 days.

Supplemental Disclosures

The following table summarizes the activity in our allowance for credit losses, by portfolio segment, for the three months ended March 31, 2020:

	Joint Interest Partners				Total
	Customers	Mutual Operators	Large Partners	All Others	
Balance at beginning of period	\$ —	\$ —	\$ —	\$ 52	\$ 52
Adjustment upon adoption	—	—	60	16	76
Provision for expected credit losses	—	24	53	19	96
Write-offs and recoveries	—	—	—	—	—
Balance at end of period	\$ —	\$ 24	\$ 113	\$ 87	\$ 224

5. Derivative Instruments

We utilize derivative instruments, typically swaps, put options and call options which are placed with financial institutions that we believe are acceptable credit risks, to mitigate our financial exposure to commodity price volatility associated with anticipated sales of our future production and volatility in interest rates attributable to our variable rate debt instruments. Our derivative instruments are not formally designated as hedges in the context of GAAP. While the use of derivative instruments limits the risk of adverse commodity price and interest rate movements, such use may also limit the beneficial impact of future product revenues and interest expense from favorable commodity price and interest rate movements. From time to time, we may enter into incremental derivative contracts in order to increase the notional volume of production we are hedging, restructure existing derivative contracts or enter into other derivative contracts resulting in modification to the terms of existing contracts. In accordance with our internal policies, we do not utilize derivative instruments for speculative purposes.

Commodity Derivatives

The following is a general description of the commodity derivative instruments we have employed:

Swaps. A swap contract is an agreement between two parties pursuant to which the parties exchange payments at specified dates on the basis of a specified notional amount, or the swap price, with the payments calculated by reference to specified commodities or indexes. The counterparty to a swap contract is required to make a payment to us based on the amount of the swap price in excess of the settlement price multiplied by the notional volume if the settlement price for any settlement period is below the swap price for such contract. We are required to make a payment to the counterparty based on the amount of the settlement price in excess of the swap price multiplied by the notional volume if the settlement price for any settlement period is above the swap price for such contract.

Put Options. A put option has a defined strike, or floor price. We have entered into put option contracts in the roles of buyer and seller depending upon our particular hedging objective. The buyer of the put option pays the seller a premium to enter into the contract. When the settlement price is below the floor price, the seller pays the buyer an amount equal to the difference between the settlement price and the strike price multiplied by the notional volume. When the settlement price is above the floor price, the put option expires worthless. Certain of our purchased put options have deferred premiums. For the deferred premium puts, we agree to pay a premium to the counterparty at the time of settlement.

Call Options. A call option has a defined strike, or ceiling price. We have entered into call option contracts in the roles of buyer and seller depending upon our particular hedging objective. The buyer of the call option pays the seller a premium to enter into the call option. When the settlement price is above the ceiling price, the seller pays the buyer an amount equal to the difference between the settlement price and the strike price multiplied by the notional volume. When the settlement price is below the ceiling price, the call option expires worthless.

We typically combine swaps, purchased put options, purchased call options, sold put options and sold call options in order to achieve various hedging objectives. Certain of these objectives result in combinations that operate as collars which include purchased put options and sold call options, three-way collars which include purchased put options, sold put options and sold call options, and enhanced swaps, which include either sold put options or sold call options with the associated premiums rolled into an enhanced fixed price swap, among others.

We determine the fair values of our commodity derivative instruments using industry-standard models that consider various assumptions, including current market value and contractual prices for the underlying instruments, implied volatilities, time value and nonperformance risk. For the current market prices, we use third-party quoted forward prices, as applicable, for NYMEX West Texas Intermediate ("NYMEX WTI"), Magellan East Houston ("MEH") crude oil and NYMEX Henry Hub ("NYMEX HH") natural gas closing prices as of the end of the reporting period. Nonperformance risk is incorporated by utilizing discount rates adjusted for the credit risk of our counterparties if the derivative is in an asset position, and our own credit risk if the derivative is in a liability position.

The following table sets forth our commodity derivative positions, presented on a net basis by period of maturity, as of March 31, 2020:

	2Q2020	3Q2020	4Q2020	1Q2021	2Q2021
NYMEX WTI Crude Swaps					
Average Volume Per Day (barrels)	13,209	8,630	9,804	5,000	4,945
Weighted Average Swap Price (\$/barrel)	\$ 52.06	\$ 55.20	\$ 55.18	\$ 51.60	\$ 51.60
NYMEX WTI Purchased Puts/Sold Calls					
Average Volume Per Day (barrels)	5,297	6,891	2,000	4,167	4,121
Weighted Average Purchased Put Price (\$/barrel)	\$ 52.36	\$ 52.97	\$ 48.00	\$ 43.60	\$ 43.60
Weighted Average Sold Call (\$/barrel)	\$ 57.60	\$ 58.03	\$ 57.10	\$ 46.84	\$ 46.84
NYMEX WTI Purchased Puts					
Average Volume Per Day (barrels)	3,297				
Weighted Average Purchased Put (\$/barrel)	\$ 23.00				
Weighted Average Purchased Put Deferred Premium (\$/barrel)	\$ 2.11				
NYMEX WTI Purchased Puts					
Average Volume Per Day (barrels)	8,242				
Weighted Average Purchased Put (\$/barrel)	\$ 30.00				
Weighted Average Purchased Put Deferred Premium (\$/barrel)	\$ 3.19				
NYMEX WTI Put Spread					
Average Volume Per Day (barrels)		5,435			
Weighted Average Put Spread Purchased Put (\$/barrel)		\$ 30.00			
Weighted Average Put Spread Sold Put (\$/barrel)		\$ 20.00			
Weighted Average Put Spread Deferred Premium (\$/barrel)		\$ 1.84			
NYMEX WTI Cap Offset					
Average Volume Per Day (barrels)	3,297				
Weighted Average Cap Offset Purchased Call (\$/barrel)	\$ 57.90				
Weighted Average Cap Offset Deferred Premium (\$/barrel)	\$ 0.10				
NYMEX WTI Sold Puts					
Average Volume Per Day (barrels)	912		5,087	9,167	9,066
Weighted Average Sold Put Price (\$/barrel)	\$ 44.00		\$ 43.50	\$ 37.36	\$ 37.36
MEH Crude Swaps					
Average Volume Per Day (barrels)	2,000	2,000	2,000		
Weighted Average Swap Price (\$/barrel)	\$ 61.03	\$ 61.03	\$ 61.03		
HH Purchased Puts/Sold Calls					
Average Volume Per Day (MMBtus)	12,901	12,804	12,804		
Weighted Average Floor (\$/MMBtu)	\$ 2.00	\$ 2.00	\$ 2.00		
Weighted Average Cap (\$/MMBtu)	\$ 2.21	\$ 2.21	\$ 2.21		

As of March 31, 2020, we were unhedged with respect to NGL production.

Interest Rate Derivatives

We have entered into a series of interest rate swap contracts (the "Interest Rate Swaps") to establish fixed interest rates on a portion of our variable interest rate indebtedness under the Credit Facility and Second Lien Credit Agreement dated as of September 29, 2017 (the "Second Lien Facility"). The notional amount of the Interest Rate Swaps totals \$300 million, with us paying a weighted average fixed rate of 1.36% on the notional amount, and the counterparties paying a variable rate equal to a customary London interbank offered rate ("LIBOR") through May 2022.

Financial Statement Impact of Derivatives

The impact of our derivative activities on income is included in the “Derivatives” caption on our Condensed Consolidated Statements of Operations. The effects of derivative gains and (losses) and cash settlements are reported as adjustments to reconcile net income to net cash provided by operating activities. These items are recorded in the “Derivative contracts” section of our Condensed Consolidated Statements of Cash Flows under “Net (gains) losses” and “Cash settlements, net.”

The following table summarizes the effects of our derivative activities for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Interest rate swap gains (losses) recognized in the Consolidated Statements of Operations	\$ (6,683)	\$ —
Commodity gains (losses) recognized in the Consolidated Statements of Operations	157,802	(68,017)
	<u>\$ 151,119</u>	<u>\$ (68,017)</u>
Interest rate cash settlements recognized in the Consolidated Statements of Cash Flows	\$ 68	\$ —
Commodity cash settlements recognized in the Consolidated Statements of Cash Flows	(337)	4,394
	<u>\$ (269)</u>	<u>\$ 4,394</u>

The following table summarizes the fair values of our derivative instruments presented on a gross basis, as well as the locations of these instruments on our Condensed Consolidated Balance Sheets as of the dates presented:

Type	Balance Sheet Location	March 31, 2020		December 31, 2019	
		Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Interest rate contracts	Derivative assets/liabilities - current	\$ 40	\$ 2,890	\$ —	\$ —
Commodity contracts	Derivative assets/liabilities – current	233,402	100,202	4,131	23,450
Interest rate contracts	Derivative assets/liabilities - noncurrent	—	3,900	—	—
Commodity contracts	Derivative assets/liabilities – noncurrent	10,963	6,789	2,750	3,385
		<u>\$ 244,405</u>	<u>\$ 113,781</u>	<u>\$ 6,881</u>	<u>\$ 26,835</u>

As of March 31, 2020, we reported net commodity derivative assets of \$137.4 million and net Interest Rate Swap liabilities of \$6.8 million. The contracts associated with these positions are with nine counterparties for commodity derivatives and four counterparties for Interest Rate Swaps, all of which are investment grade financial institutions and are participants in the Credit Facility. This concentration may impact our overall credit risk in that these counterparties may be similarly affected by changes in economic or other conditions.

The agreements underlying our derivative instruments include provisions for the netting of settlements with the counterparties for contracts of similar type. We have neither paid to, nor received from, our counterparties any cash collateral in connection with our derivative positions. Furthermore, our derivative contracts are not subject to margin calls or similar accelerations. No significant uncertainties exist related to the collectability of amounts that may be owed to us by these counterparties.

6. Property and Equipment

The following table summarizes our property and equipment as of the dates presented:

	March 31, 2020	December 31, 2019
Oil and gas properties:		
Proved	\$ 1,487,868	\$ 1,409,219
Unproved	53,878	53,200
Total oil and gas properties	1,541,746	1,462,419
Other property and equipment	27,355	25,915
Total properties and equipment	1,569,101	1,488,334
Accumulated depreciation, depletion and amortization	(408,542)	(367,909)
	<u>\$ 1,160,559</u>	<u>\$ 1,120,425</u>

Unproved property costs of \$53.9 million and \$53.2 million have been excluded from amortization as of March 31, 2020 and December 31, 2019, respectively. We transferred \$1.4 million and less than \$0.1 million of undeveloped leasehold costs associated with acreage unlikely to be drilled or associated with proved undeveloped reserves, including capitalized interest, from unproved properties to the full cost pool during the three months ended March 31, 2020 and 2019, respectively. We capitalized internal costs of \$0.8 million and \$1.0 million and interest of \$0.7 million and \$1.2 million during the three months ended March 31, 2020 and 2019, respectively, in accordance with our accounting policies. Average depreciation, depletion and amortization per barrel of oil equivalent of proved oil and gas properties was \$16.73 and \$17.49 for the three months ended March 31, 2020 and 2019, respectively.

At the end of each quarterly reporting period, the unamortized cost of our oil and gas properties, net of deferred income taxes, is limited to the sum of the estimated discounted future net revenues from proved properties adjusted for costs excluded from amortization and related income taxes (the "Ceiling Test"). As of March 31, 2020, the carrying value of our proved oil and gas properties was below the limit determined by the Ceiling Test by approximately \$350 million. Because the Ceiling Test utilizes commodity prices based on a trailing twelve month average, it does not, as of March 31, 2020, fully reflect the substantial decline in commodity prices due to the economic impact of the COVID-19 health crisis and the ongoing disruption in global energy markets. If current commodity prices continue at depressed levels or decline further, it is likely that we will experience a Ceiling Test write-down in the carrying value of our oil and gas properties at some point during the year ended December 31, 2020.

7. Long-Term Debt

The following table summarizes our debt obligations as of the dates presented:

	March 31, 2020		December 31, 2019	
	Principal	Unamortized Discount and Deferred Issuance Costs ^{1,2}	Principal	Unamortized Discount and Deferred Issuance Costs ^{1,2}
Credit facility	\$ 399,400		\$ 362,400	
Second lien term loan	200,000	\$ 6,776	200,000	\$ 7,372
Totals	599,400	\$ 6,776	562,400	\$ 7,372
Less: Unamortized discount ²	(2,219)		(2,415)	
Less: Unamortized deferred issuance costs ^{1,2}	(4,557)		(4,957)	
Long-term debt, net	<u>\$ 592,624</u>		<u>\$ 555,028</u>	

¹ Excludes issuance costs of the Credit Facility, which represent costs attributable to the access to credit over its contractual term, that have been presented as a component of Other assets (see Note 10) and are being amortized over the term of the Credit Facility using the straight-line method.

² Discount and issuance costs of the Second Lien Facility are being amortized over the term of the underlying loan using the effective-interest method.

Credit Facility

In April 2020, we entered into the Borrowing Base Redetermination Agreement and Amendment No. 7 to Credit Agreement (the “Seventh Amendment”). The Seventh Amendment, which became effective on April 30, 2020, provides a \$1.0 billion revolving commitment and a \$400 million borrowing base, reduced from \$500 million, including a \$25 million sublimit for the issuance of letters of credit. Furthermore, the Seventh Amendment provides for an additional decrease in the borrowing base to \$375 million effective July 1, 2020 and, effective October 1, 2020, limits availability under the Credit Facility to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. Availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base, provided that effective October 1, 2020, availability under the Credit Facility is limited to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. The borrowing base under the Credit Facility is redetermined semi-annually, generally in April and October of each year. Additionally, the Credit Facility lenders may, at their discretion, initiate a redetermination at any time during the six-month period between scheduled redeterminations. The Credit Facility is available to us for general corporate purposes, including working capital. We had \$0.4 million in letters of credit outstanding as of March 31, 2020 and December 31, 2019.

The Credit Facility is scheduled to mature in May 2024; provided that on June 30, 2022, unless we have either extended the maturity date of the Second Lien Facility described below to a date that is at least 91 days after May 7, 2024 or have repaid our Second Lien Facility in full, the maturity date of the Credit Facility will mean June 30, 2022.

The outstanding borrowings under the Credit Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate plus an applicable margin ranging from 1.50% to 2.50% (0.50% to 1.50% prior to the Seventh Amendment), determined based on the utilization level under the Credit Facility or (b) a Eurodollar rate, including LIBOR through 2021, plus an applicable margin ranging from 2.50% to 3.50% (1.50% to 2.50% prior to the Seventh Amendment), determined based on the utilization level under the Credit Facility. Interest on reference rate borrowings is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on Eurodollar borrowings is payable every one, three or six months, at the election of the borrower, and is computed on the basis of a year of 360 days. As of March 31, 2020, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 3.20%. Unused commitment fees are charged at a rate of 0.50% (0.375% to 0.50% prior to the Seventh Amendment).

The Credit Facility is guaranteed by us and all of our subsidiaries (the “Guarantor Subsidiaries”). The guarantees under the Credit Facility are full and unconditional and joint and several. Substantially all of our consolidated assets are held by the Guarantor Subsidiaries. There are no significant restrictions on our ability or any of the Guarantor Subsidiaries to obtain funds through dividends, advances or loans. The obligations under the Credit Facility are secured by a first priority lien on substantially all of our assets.

The Credit Facility requires us to maintain (1) a minimum current ratio (as defined in the Credit Facility, which considers the unused portion of the total commitment as a current asset), measured as of the last day of each fiscal quarter of 1.00 to 1.00 and (2) a maximum leverage ratio (consolidated indebtedness to adjusted earnings before interest, taxes, depreciation, depletion, amortization and exploration expenses, both as defined in the Credit Facility), measured as of the last day of each fiscal quarter of 3.50 to 1.00 (4.00 to 1.00 prior to the Seventh Amendment).

The Credit Facility also contains customary affirmative and negative covenants, including as to compliance with laws (including environmental laws, ERISA and anti-corruption laws), maintenance of required insurance, delivery of quarterly and annual financial statements, oil and gas engineering reports and budgets, weekly cash balance reports, maintenance and operation of property (including oil and gas properties), restrictions on the incurrence of liens and indebtedness, merger, consolidation or sale of assets, payment of dividends, and transactions with affiliates and other customary covenants. In addition, the Credit Facility contains certain anti-cash hoarding provisions, including the requirement to repay outstanding loans and cash collateralize outstanding letters of credit on a weekly basis in the amount of any cash on the balance sheet (subject to certain exceptions) in excess of \$25 million.

The Credit Facility contains customary events of default and remedies for credit facilities of this nature. If we do not comply with the financial and other covenants in the Credit Facility, the lenders may, subject to customary cure rights, require immediate payment of all amounts outstanding under the Credit Facility.

As of March 31, 2020, and through the date upon which the Condensed Consolidated Financial Statements were issued, we were in compliance with all of the covenants under the Credit Facility.

Second Lien Facility

On September 29, 2017, we entered into the Second Lien Facility. We received net proceeds of \$187.8 million from the Second Lien Facility net of an original issue discount (“OID”) of \$4.0 million and issue costs of \$8.2 million. The proceeds from the Second Lien Facility were used to fund a significant acquisition and related fees and expenses. The maturity date under the Second Lien Facility is September 29, 2022.

The outstanding borrowings under the Second Lien Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate based on the prime rate plus an applicable margin of 6.00% or (b) a customary LIBOR rate plus an applicable margin of 7.00%. As of March 31, 2020, the actual interest rate of outstanding borrowings under the Second Lien Facility was 8.00%. Amounts under the Second Lien Facility were borrowed at a price of 98% with an initial interest rate of 8.34%, resulting in an effective interest rate of 9.89%. Interest on reference rate borrowings is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on eurocurrency borrowings is payable every one or three months (including in three-month intervals if we select a six-month interest period), at our election and is computed on the basis of a 360-day year. We have the right, to the extent permitted under the Credit Facility and an intercreditor agreement between the lenders under the Credit Facility and the lenders under the Second Lien Facility, to prepay loans under the Second Lien Facility at any time, subject to the following prepayment premiums (in addition to customary "breakage" costs with respect to eurocurrency loans): 101% of the amount being prepaid through September 2020; and thereafter, no premium. The Second Lien Facility also provides for a 101% prepayment premium in the event of a change in control that results in an offer of prepayment that is accepted by the lenders under the Second Lien Facility through September 2020, but no prepayment premium thereafter.

The Second Lien Facility is collateralized by substantially all of the Company's and its subsidiaries' assets with lien priority subordinated to the liens securing the Credit Facility. The obligations under the Second Lien Facility are guaranteed by us and the Guarantor Subsidiaries.

The Second Lien Facility has no financial covenants, but contains customary affirmative and negative covenants, including as to compliance with laws (including environmental laws, ERISA and anti-corruption laws), maintenance of required insurance, delivery of quarterly and annual financial statements, oil and gas engineering reports and budgets, maintenance and operation of property (including oil and gas properties), restrictions on the incurrence of liens and indebtedness, merger, consolidation or sale of assets, payment of dividends and transactions with affiliates and other customary covenants.

As illustrated in the table above, the OID and issue costs of the Second Lien Facility are presented as reductions to the outstanding term loans. These costs are subject to amortization using the interest method over the five-year term of the Second Lien Facility.

As of March 31, 2020, and through the date upon which the Consolidated Financial Statements were issued, we were in compliance with all of the covenants under the Second Lien Facility.

8. Income Taxes

We recognized a federal and state income tax expense for the three months ended March 31, 2020 at the blended rate of 21.7%. The federal and state tax expense was offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of 0.7%, which is fully attributable to the State of Texas. The provision also reflects a reclassification of \$1.2 million from deferred tax assets to the current income tax receivable for our remaining refundable alternative minimum tax ("AMT") credit carryforwards that were accelerated due to certain income tax provisions provided in the CARES Act. As of March 31, 2020, we have a receivable of \$2.5 million for the aforementioned AMT credit carryforwards for which we have applied for an immediate refund in April 2020. Our net deferred income tax liability balance of \$3.7 million as of March 31, 2020 is fully attributable to the State of Texas and primarily related to property and equipment.

We recognized a federal and state income tax benefit for the three months ended March 31, 2019 at the blended rate of 21.6%; however, the federal and state tax expense was offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of less than 0.1%.

We had no liability for unrecognized tax benefits as of March 31, 2020. There were no interest and penalty charges recognized during the periods ended March 31, 2020 and 2019. Tax years from 2015 forward remain open to examination by the major taxing jurisdictions to which the Company is subject; however, net operating losses originating in prior years are subject to examination when utilized.

9. Leases

Lease Arrangements and Supplemental Disclosures

We generally have lease arrangements for office facilities and certain office equipment, certain field equipment including compressors, drilling rigs, land easements and similar arrangements for rights-of-way, and certain gas gathering and gas lift assets. Our short-term leases included in the disclosures below are primarily comprised of our contractual arrangements with certain vendors for operated drilling rigs and our field compressors. During April 2020, we released our drilling rigs. Our primary variable lease was represented by our field gas gathering and gas lift agreement with a midstream service provider and the lease payments are charged on a volumetric basis at a contractual fixed rate.

The following table summarizes the components of our total lease cost for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Operating lease cost	\$ 210	\$ 163
Short-term lease cost	11,296	11,571
Variable lease cost	5,657	5,095
Less: Amounts charged as drilling costs ¹	(10,621)	(10,851)
Total lease cost recognized in the Condensed Consolidated Statement of Operations ²	\$ 6,542	\$ 5,978

¹ Represents the combined gross amounts paid and (i) capitalized as drilling costs for our working interest share and (ii) billed to joint interest partners for their working interest share for short-term leases of operated drilling rigs.

² Includes \$2.8 million and \$2.1 million recognized in Gathering, processing and transportation, \$ 3.5 million and \$3.7 million recognized in Lease operating and \$ 0.2 million and \$0.2 million recognized in G&A for the three months ended March 31, 2020 and 2019, respectively.

The following table summarizes supplemental cash flow information related to leases for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 218	\$ 39
ROU assets obtained in exchange for lease obligations:		
Operating leases ¹	\$ 306	\$ 2,572

¹ Includes \$2.5 million recognized upon the adoption of Accounting Standards Codification Topic 842 ("ASC842") in 2019.

The following table summarizes supplemental balance sheet information related to leases as of the dates presented:

	March 31,	December 31,
	2020	2019
ROU assets - operating leases	\$ 2,928	\$ 2,740
Current operating lease obligations	\$ 927	\$ 847
Noncurrent operating lease obligations	2,335	2,232
Total operating lease obligations	\$ 3,262	\$ 3,079
Weighted-average remaining lease term		
Operating leases	3.8 Years	4.1 Years
Weighted-average discount rate		
Operating leases	3.26 %	5.97 %
Remaining maturities of operating lease obligations as of March 31, 2020:		
2020	\$ 689	
2021	894	
2022	874	
2023	873	
2024 and thereafter	144	
Total undiscounted lease payments	3,474	
Less: imputed interest	(212)	
Total operating lease obligations	\$ 3,262	

10. Supplemental Balance Sheet Detail

The following table summarizes components of selected balance sheet accounts as of the dates presented:

	March 31, 2020	December 31, 2019
Other current assets:		
Tubular inventory and well materials	\$ 2,959	\$ 2,989
Prepaid expenses	1,806	1,469
	<u>\$ 4,765</u>	<u>\$ 4,458</u>
Other assets:		
Deferred issuance costs of the Credit Facility, net of amortization	\$ 3,725	\$ 3,952
Right-of-use assets – operating leases	2,928	2,740
Other	111	32
	<u>\$ 6,764</u>	<u>\$ 6,724</u>
Accounts payable and accrued liabilities:		
Trade accounts payable	\$ 44,482	\$ 30,098
Drilling costs	23,260	18,832
Royalties	29,317	44,537
Production, ad valorem and other taxes	3,444	3,244
Compensation	2,246	5,272
Interest	644	730
Current operating lease obligations	927	847
Other	1,543	2,264
	<u>\$ 105,863</u>	<u>\$ 105,824</u>
Other liabilities:		
Asset retirement obligations	\$ 5,082	\$ 4,934
Noncurrent operating lease obligations	2,335	2,232
Defined benefit pension obligations	843	873
Postretirement health care benefit obligations	356	343
	<u>\$ 8,616</u>	<u>\$ 8,382</u>

11. Fair Value Measurements

We apply the authoritative accounting provisions included in GAAP for measuring the fair value of both our financial and nonfinancial assets and liabilities. Fair value is an exit price representing the expected amount we would receive upon the sale of an asset or that we would expect to pay to transfer a liability in an orderly transaction with market participants at the measurement date.

Our financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, derivatives and our Credit Facility and Second Lien Facility borrowings. As of March 31, 2020, the carrying values of all of these financial instruments approximated fair value.

Recurring Fair Value Measurements

Certain financial assets and liabilities are measured at fair value on a recurring basis on our Condensed Consolidated Balance Sheets. The following tables summarize the valuation of those assets and (liabilities) as of the dates presented:

Description	March 31, 2020			
	Fair Value	Fair Value Measurement Classification		
	Measurement	Level 1	Level 2	Level 3
Assets:				
Interest rate swap assets – current	\$ 40	\$ —	\$ 40	\$ —
Interest rate swap assets – noncurrent	\$ —	\$ —	\$ —	\$ —
Commodity derivative assets – current	\$ 233,402	\$ —	\$ 233,402	\$ —
Commodity derivative assets – noncurrent	\$ 10,963	\$ —	\$ 10,963	\$ —
Liabilities:				
Interest rate swap liabilities – current	\$ (2,890)	\$ —	\$ (2,890)	\$ —
Interest rate swap liabilities – noncurrent	\$ (3,900)	\$ —	\$ (3,900)	\$ —
Commodity derivative liabilities – current	\$ (100,202)	\$ —	\$ (100,202)	\$ —
Commodity derivative liabilities – noncurrent	\$ (6,789)	\$ —	\$ (6,789)	\$ —

Description	December 31, 2019			
	Fair Value	Fair Value Measurement Classification		
	Measurement	Level 1	Level 2	Level 3
Assets:				
Commodity derivative assets – current	\$ 4,131	\$ —	\$ 4,131	\$ —
Commodity derivative assets – noncurrent	\$ 2,750	\$ —	\$ 2,750	\$ —
Liabilities:				
Commodity derivative liabilities – current	\$ (23,450)	\$ —	\$ (23,450)	\$ —
Commodity derivative liabilities – noncurrent	\$ (3,385)	\$ —	\$ (3,385)	\$ —

Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one level of the fair value hierarchy to another level. In such instances, the transfer is deemed to have occurred at the beginning of the quarterly period in which the event or change in circumstances that caused the transfer occurred. There were no transfers during the three months ended March 31, 2020 and 2019.

We used the following methods and assumptions to estimate fair values for the financial assets and liabilities described below:

- *Commodity derivatives:* We determine the fair values of our commodity derivative instruments using industry-standard models that consider various assumptions including current market and contractual prices for the underlying instruments, implied volatilities, time value and non-performance risk. For the current market prices, we use third-party quoted forward prices, as applicable, for NYMEX WTI, MEH crude oil and NYMEX HH natural gas closing prices as of the end of the reporting periods. Each of these is a Level 2 input.
- *Interest rate swaps:* We determine the fair values of our interest rate swaps using an income approach valuation technique that connects future cash flows to a single discounted value. We estimate the fair value of the swaps based on published interest rate yield curves as of the date of the estimate. Each of these is a Level 2 input.

Non-Recurring Fair Value Measurements

The most significant non-recurring fair value measurements utilized in the preparation of our Condensed Consolidated Financial Statements are those attributable to the initial determination of AROs associated with the ongoing development of new oil and gas properties. The determination of the fair value of AROs is based upon regional market and facility specific information. The amount of an ARO and the costs capitalized represent the estimated future cost to satisfy the abandonment obligation using current prices that are escalated by an assumed inflation factor after discounting the future cost back to the date that the abandonment obligation was incurred using a rate commensurate with the risk, which approximates our cost of funds. Because these significant fair value inputs are typically not observable, we have categorized the initial estimates as Level 3 inputs.

12. Commitments and Contingencies

Drilling and Completion Commitments

In March 2020, we provided termination notices releasing our contracted drilling rigs in connection with the suspension of our drilling and completion program. There were no material charges associated with the rig releases. In April 2020, we rescinded one of the termination notices and entered into a new agreement to maintain one rig in place for a minimal daily rate providing us with the option to either restart drilling operations on seven days notice or release the rig altogether for demobilization. We also have a one-year agreement that became effective January 1, 2020, which can be terminated with 30 days' notice by either party, for certain frac services and related materials, with no minimum commitment. While this agreement remains in effect, we are not incurring any costs thereunder after April 10, 2020 due to the suspension of the drilling and completion program.

Gathering and Intermediate Transportation Commitments

We have long-term agreements with Nuevo Dos Gathering and Transportation, LLC ("Nuevo G&T") and Nuevo Dos Marketing, LLC ("Nuevo Marketing" and together with Nuevo G&T, collectively "Nuevo") to provide gathering and intermediate pipeline transportation services for a substantial portion of our crude oil and condensate production in South Texas as well as volume capacity support for certain downstream interstate pipeline transportation.

Nuevo is obligated to gather and transport our crude oil and condensate from within a dedicated area in the Eagle Ford via a gathering system and intermediate takeaway pipeline connecting to a downstream interstate pipeline operated by a third party through 2041. We have a minimum volume commitment ("MVC") of 8,000 gross barrels of oil per day to Nuevo through 2031 under the gathering agreement.

Under a marketing agreement, we have a commitment to sell 8,000 barrels per day of crude oil (gross) to Nuevo, or to any third party, utilizing Nuevo Marketing's capacity on a downstream interstate pipeline through 2026.

Under each of the agreements with Nuevo, credits for deliveries of volumes in excess of the volume commitment may be applied to any deficiency arising in the succeeding 12-month period.

Excluding the application of existing credits that we have earned during the preceding 12-month period ended March 31, 2020 for deliveries of volumes in excess of the volume commitment, and the potential impact of the effects of price escalation from commodity price changes, if any, the minimum fee requirements attributable to the MVC under the gathering and transportation agreement are as follows: \$9.7 million for the remainder of 2020, \$13.0 million for 2021 through 2025, \$7.4 million for 2026, \$3.8 million per year for 2027 through 2030 and \$2.2 million for 2031.

Legal and Environmental Compliance

We are involved, from time to time, in various legal proceedings arising in the ordinary course of business. While the ultimate results of these proceedings cannot be predicted with certainty, our management believes that these claims will not have a material effect on our financial position, results of operations or cash flows. As of March 31, 2020, we had a reserve in the amount of \$0.3 million included in "Accounts payable and accrued liabilities" for the estimated settlement of a dispute with a partner regarding certain transactions that occurred in prior years. As of March 31, 2020, we had AROs of approximately \$5.1 million attributable to the plugging of abandoned wells.

13. Shareholders' Equity

The following tables summarize the components of our shareholders' equity and the changes therein as of and for the quarterly periods in 2020 and 2019.

	Common Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance as of December 31, 2019	\$ 151	\$ 200,666	\$ 319,987	\$ (59)	\$ 520,745
Net income	—	—	163,094	—	163,094
Cumulative effect of change in accounting principle ¹	—	—	(76)	—	(76)
All other changes ²	1	556	—	(1)	556
Balance as of March 31, 2020	\$ 152	\$ 201,222	\$ 483,005	\$ (60)	\$ 684,319

¹ Attributable to the adoption of ASU 2016-13 as of January 1, 2020 (see Note 4).

² Includes equity-classified share-based compensation of \$0.9 million during the three months ended March 31, 2020. During the three months ended March 31, 2020, 22,321 shares of common stock were issued in connection with the vesting of certain time-vested restricted stock units ("RSUs"), net of shares withheld for income taxes.

	Common Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total Shareholders' Equity
Balance as of December 31, 2018	\$ 151	\$ 197,630	\$ 249,492	\$ 82	\$ 447,355
Net loss	—	—	(38,697)	—	(38,697)
Cumulative effect of change in accounting principle ¹	—	—	(94)	—	(94)
All other changes ²	—	381	—	(1)	380
Balance as of March 31, 2019	\$ 151	\$ 198,011	\$ 210,701	\$ 81	\$ 408,944

¹ Attributable to the adoption of ASC Topic 842 as of January 1, 2019 (see Note 9).

² Includes equity-classified share-based compensation of \$1.0 million during the three months ended March 31, 2019. During the three months ended March 31, 2019, 24,657 shares of common stock were issued in connection with the vesting of certain RSUs, net of shares withheld for income taxes.

14. Share-Based Compensation and Other Benefit Plans

Share-Based Compensation

We recognize share-based compensation expense related to our share-based compensation plans as a component of G&A expenses in our Condensed Consolidated Statements of Operations.

We reserved a total of 1,424,600 shares of common stock for issuance under the Penn Virginia Corporation Management Incentive Plan for share-based compensation awards. A total of 584,497 RSUs and 201,491 performance-based restricted stock units ("PRSUs") have been granted to employees and directors as of March 31, 2020.

We recognized \$0.9 million and \$1.0 million of expense attributable to the RSUs and PRSUs for the three months ended March 31, 2020 and 2019, respectively.

A total of 223,882 RSUs were granted during the three months ended March 31, 2020 with an average grant-date fair value of \$2.78. No equity awards were granted during the three months ended March 31, 2019. The RSUs are being charged to expense on a straight-line basis over a range of two to five years. In the three months ended March 31, 2020 and 2019, 22,321 and 24,657 shares were issued upon vesting/settlement of equity awards, net of shares withheld for income taxes, respectively.

During the three months ended March 31, 2020, 87,899 PRSUs were granted. No PRSUs were granted during the three months ended March 31, 2019. PRSUs were granted collectively in two to three separate tranches with individual three-year performance periods beginning in January 2017, 2018 and 2019, respectively for the pre-2019 grants. For the 2019 and 2020 grants, the performance period is 2020 through 2022. Vesting of the PRSUs can range from zero to 200 percent of the original grant based on the performance of our common stock relative to an industry index or, for the 2019 and 2020 grants, a defined peer group. Due to their market condition, the PRSUs are being charged to expense using graded vesting over a maximum of five years. The fair value of each PRSU award was estimated on their applicable grant date using a Monte Carlo simulation with a range of \$47.70 to \$65.28 per PRSU for the 2017 grants, \$34.02 per PRSU for the 2019 grants and \$2.40 per PRSU for the 2020 grants.

The ranges for the assumptions used in the Monte Carlo model for the PRSUs granted during 2020, 2019 and 2017 are presented as follows:

	2020	2019	2017
Expected volatility	101.32 %	49.9 %	59.63% to 62.18%
Dividend yield	0.0 %	0.0 %	0.0 %
Risk-free interest rate	0.51 %	1.66 %	1.44% to 1.51%

Other Benefit Plans

We maintain the Penn Virginia Corporation and Affiliated Companies Employees 401(k) Plan (the “401(k) Plan”), a defined contribution plan, which covers substantially all of our employees. We recognized \$0.2 million of expense attributable to the 401(k) Plan for each of the three months ended March 31, 2020 and 2019, respectively. The charges for the 401(k) Plan are recorded as a component of G&A expenses in our Condensed Consolidated Statements of Operation.

We maintain unqualified legacy defined benefit pension and defined benefit postretirement plans that cover a limited number of former employees, all of whom retired prior to 2000. The combined expense recognized with respect to these plans was less than \$0.1 million for each of the three months ended March 31, 2020 and 2019. The charges for these plans are recorded as a component of “Other income (expense)” in our Condensed Consolidated Statements of Operation.

15. Interest Expense

The following table summarizes the components of interest expense for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Interest on borrowings and related fees	\$ 8,045	\$ 9,711
Accretion of original issue discount ¹	196	180
Amortization of debt issuance costs	627	741
Capitalized interest	(688)	(1,154)
	\$ 8,180	\$ 9,478

¹ Attributable to the Second Lien Facility (see Note 7).

16. Earnings per Share

The following table provides a reconciliation of the components used in the calculation of basic and diluted earnings per share for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Net income (loss) – basic and diluted	\$ 163,094	\$ (38,697)
Weighted-average shares – basic	15,152	15,098
Effect of dilutive securities	8	—
Weighted-average shares – diluted	15,160	15,098

¹ For the three months ended March 31, 2019, approximately 0.2 million potentially dilutive securities, represented by RSUs and PRSUs, had the effect of being anti-dilutive and were excluded from the calculation of diluted earnings per share.

Forward-Looking Statements

Certain statements contained herein that are not descriptions of historical facts are “forward-looking” statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. We use words such as “anticipate,” “guidance,” “assumptions,” “projects,” “estimates,” “expects,” “continues,” “intends,” “plans,” “believes,” “forecasts,” “future,” “potential,” “may,” “possible,” “could” and variations of such words or similar expressions to identify forward-looking statements. Because such statements include risks, uncertainties and contingencies, actual results may differ materially from those expressed or implied by such forward-looking statements. These risks, uncertainties and contingencies include, but are not limited to, the following:

- the decline in, sustained market uncertainty of, and volatility of commodity prices for crude oil, natural gas liquids, or NGLs, and natural gas, including the recent dramatic decline of such prices;
- risks related to and the impact of actual or anticipated world health events such as the novel coronavirus, or COVID-19, pandemic;
- risks related to completed acquisitions, including our ability to realize their expected benefits;
- our ability to satisfy our short-term and long-term liquidity needs, including our inability to generate sufficient cash flows from operations or to obtain adequate financing, including access to the capital markets, to fund our capital expenditures and meet working capital needs;
- negative events or publicity adversely affecting our ability to maintain our relationships with our suppliers, service providers, customers, employees, and other third parties;
- plans, objectives, expectations and intentions contained in this report that are not historical;
- our ability to execute our business plan in volatile and depressed commodity price environments;
- our ability to develop, explore for, acquire and replace oil and gas reserves and sustain production;
- our ability to generate profits or achieve targeted reserves in our development and exploratory drilling and well operations;
- our ability to meet guidance, market expectations and internal projections, including type curves;
- any impairments, write-downs or write-offs of our reserves or assets;
- the projected demand for and supply of oil, NGLs and natural gas;
- our ability to contract for drilling rigs, frac crews, materials, supplies and services at reasonable costs;
- our ability to renew or replace expiring contracts on acceptable terms;
- our ability to obtain adequate pipeline transportation capacity or other transportation for our oil and gas production at reasonable cost and to sell our production at, or at reasonable discounts to, market prices;
- the uncertainties inherent in projecting future rates of production for our wells and the extent to which actual production differs from that estimated in our proved oil and gas reserves;
- use of new techniques in our development, including choke management and longer laterals;
- drilling, completion and operating risks, including adverse impacts associated with well spacing and a high concentration of activity;
- our ability to compete effectively against other oil and gas companies;
- leasehold terms expiring before production can be established and our ability to replace expired leases;
- environmental obligations, costs and liabilities that are not covered by an effective indemnity or insurance;
- the timing of receipt of necessary regulatory permits;
- the effect of commodity and financial derivative arrangements with other parties and counterparty risk related to the ability of these parties to meet their future obligations;
- the occurrence of unusual weather or operating conditions, including force majeure events;
- our ability to retain or attract senior management and key employees;
- our reliance on a limited number of customers and a particular region for substantially all of our revenues and production;
- compliance with and changes in governmental regulations or enforcement practices, especially with respect to environmental, health and safety matters;
- physical, electronic and cybersecurity breaches;
- uncertainties relating to general domestic and international economic and political conditions;
- the impact and costs associated with litigation or other legal matters;
- sustainability initiatives; and
- other factors set forth in our filings with the Securities and Exchange Commission, or SEC, including the risks set forth in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 and in Part II, Item 1A of this Form 10-Q.

The effects of the COVID-19 pandemic may give rise to risks that are currently unknown or amplify the risks associated with many of these factors.

Additional information concerning these and other factors can be found in our press releases and public filings with the SEC. Many of the factors that will determine our future results are beyond the ability of management to control or predict. Readers should not place undue reliance on forward-looking statements, which reflect management’s views only as of the date hereof. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. We undertake no obligation to revise or update any forward-looking statements, or to make any other forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable law.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of the financial condition and results of operations of Penn Virginia Corporation and its consolidated subsidiaries ("Penn Virginia," the "Company," "we," "us" or "our") should be read in conjunction with our Condensed Consolidated Financial Statements and Notes thereto included in Part I, Item 1, "Financial Statements." All dollar amounts presented in the tables that follow are in thousands unless otherwise indicated. Also, due to the combination of different units of volumetric measure, the number of decimal places presented and rounding, certain results may not calculate explicitly from the values presented in the tables. References to "quarters" represent the three months ended March 31, 2020 or 2019, as applicable.

Overview and Executive Summary

We are an independent oil and gas company engaged in the onshore exploration, development and production of crude oil, natural gas liquids, or NGLs, and natural gas. Our current operations consist of drilling unconventional horizontal development wells and operating our producing wells in the Eagle Ford Shale, or the Eagle Ford, in Gonzales, Lavaca, Fayette and DeWitt Counties in South Texas.

Industry Environment and Recent Operating and Financial Highlights

Commodity Price and Other Economic Conditions

The global public health crisis associated with the novel coronavirus, or COVID-19, has and is anticipated to continue to have an adverse effect on global economic activity for the immediate future and has resulted in travel restrictions, business closures and the institution of quarantining and other restrictions on movement in many communities. The slowdown in global economic activity attributable to COVID-19 has resulted in a dramatic decline in the demand for energy which directly impacts our industry and the Company. In addition, global crude oil prices experienced a collapse starting in early March 2020 as a direct result of failed negotiations between the Organization of the Petroleum Exporting Countries, or OPEC, and Russia. In response to the global economic slowdown, OPEC had recommended a decrease in production levels in order to accommodate reduced demand. Russia rejected the recommendation of OPEC as a concession to U.S. producers. After the failure to reach an agreement, Saudi Arabia, a dominant member of OPEC, and other Persian Gulf OPEC members announced intentions to increase production and offer price discounts to buyers in certain geographic regions.

As the breadth of the COVID-19 health crisis expanded throughout the month of March 2020 and governmental authorities implemented more restrictive measures to limit person-to-person contact, global economic activity continued to decline commensurately. The associated impact on the energy industry has been adverse and continued to be exacerbated by the unresolved conflict regarding production. In the second week of April, OPEC, Russia and certain other petroleum producing nations, or OPEC+, reconvened to discuss the matter of production cuts in light of unprecedented disruption and supply and demand imbalances that expanded since the failed negotiations in early March 2020. Tentative agreements were reached to cut production by up to 10 million barrels of oil per day, or BOPD, with allocations to be made among the OPEC+ participants. If effected, these production cuts, however, may not offset near-term demand loss attributable to the COVID-19 health crisis and related economic slowdown, and the tentative agreement has not resulted in increased commodity prices.

The combined effect of COVID-19 and the energy industry disruptions led to a decline in NYMEX West Texas Intermediate, or NYMEX WTI, crude oil prices of approximately 67 percent from the beginning of January 2020, when prices were approximately \$62 per barrel, through the end of March 2020, when they were just above \$20 per barrel. During late March NYMEX WTI crude oil prices declined below \$20 per barrel as uncertainty regarding geopolitical factors expanded. Overall crude oil price volatility has continued despite apparent agreement among OPEC+ regarding production cuts and for the week ending May 1, 2020, the average NYMEX WTI crude oil price was approximately \$16 per barrel.

Despite a significant decline in drilling by U.S. producers starting in mid-March 2020, domestic supply continues to exceed demand which has led to significant operational stress with respect to capacity limitations associated with storage, pipeline and refining infrastructure, particularly within the Gulf Coast region. The combined effect of the aforementioned factors is anticipated to have a continuing adverse impact on the industry in general and our operations specifically.

In order to mitigate the impact of COVID-19 and the economic effects of the unprecedented decline in economic activity and global energy markets, we undertook several actions in March and April 2020 in support of our liquidity and the efficient continuity of our operations. These actions are described in greater detail in the discussions for *Key Developments* that follow as well as Notes 2, 5, 8 and 12 to the Condensed Consolidated Financial Statements included in Part I, Item 1, "Financial Statements."

Capital Expenditures and Development Progress

On March 17, 2020, in response to the substantial decrease in crude oil prices, we initially adjusted our drilling and completion program for the remainder of the year. Subsequently, we suspended our drilling and completion program altogether in the second week of April 2020 and released our contracted drilling rigs.

During the first quarter of 2020, we incurred capital expenditures of approximately \$79 million with 96 percent directed to drilling and completion projects. We drilled and completed a total of 13 gross (11.0 net) wells, all of which were turned to sales during the quarter. At the time of the suspension in April, we had a total of eight gross (7.6 net) wells that were drilled but not completed and remained uncompleted as of May 7, 2020.

Sequential Quarterly Analysis

The following summarizes our key operating and financial highlights for the three months ended March 31, 2020, with comparison to the three months ended December 31, 2019 as presented in the table that follows. The year-over-year highlights for the quarterly periods ended March 31, 2020 and 2019 are addressed in further detail in the discussions for *Financial Condition* and *Results of Operations* that follow.

- Daily production decreased nine percent to 26,740 barrels of oil equivalent per day, or BOEPD, from 29,314 BOEPD due primarily to the timing of wells turned to sales during the first quarter of 2020, which included five gross (3.6 net) wells that were turned to sales in the last week of March 2020 for which we realized only minimal volume for the quarterly period. Total production decreased 10 percent to 2,433 thousand barrels of oil equivalent, or MBOE, from 2,697 MBOE due primarily to the issue of timing referenced above during the quarter ended March 31, 2020.
- Product revenues declined approximately 26 percent to \$90.9 million from \$123.2 million due primarily to 19 percent lower crude oil prices, or \$19.7 million, and eight percent lower crude oil volume, or \$9.2 million. NGL revenues were 53 percent lower due to 43 percent lower prices, or \$1.4 million, and 17 percent lower volume, or \$0.7 million. Natural gas revenues declined 32 percent due to 22 percent lower prices, or \$0.8 million, and 13 percent lower volume, or \$0.5 million.
- Production and lifting costs (consisting of Lease operating expenses, or LOE, and Gathering, processing and transportation expenses, or GPT) decreased marginally on an absolute basis to \$16.0 million from \$16.1 million and increased on a per unit basis to \$6.57 per BOE from \$5.98 per BOE due primarily to the effect of lower volume. Lower GPT expenses and compression charges associated with the lower production volume were substantially offset by higher water disposal costs associated with protective measures from offset stimulation activities and higher chemical product and labor costs.
- Production and ad valorem taxes decreased on an absolute and per unit basis to \$6.2 million and \$2.53 per BOE from \$7.4 million and \$2.74 per BOE, respectively, due to the overall effects of lower volume and product pricing.
- General and administrative, or G&A, expenses increased on an absolute and per unit basis to \$7.2 million and \$2.97 per BOE from \$5.3 million and \$1.97 per BOE, respectively, due primarily to the effect of substantially lower benefits costs in the fourth quarter of 2019 as compared to first quarter of 2020 as well as higher consulting and information technology costs partially offset by lower incentive and share-based compensation costs in the first quarter of 2020.
- Depreciation, depletion and amortization, or DD&A, decreased on an absolute basis to \$40.7 million from \$44.9 million due primarily to lower volume. DD&A increased marginally on a per unit basis to \$16.73 per BOE from \$16.64 per BOE.
- Operating income decreased to \$21.3 million from \$50.2 million due to the combined impact of the matters noted in the bullets above.

The following table sets forth certain historical summary operating and financial statistics for the periods presented:

	Three Months Ended		
	March 31,	December 31,	March 31,
	2020	2019	2019
Total production (MBOE)	2,433	2,697	2,222
Average daily production (BOEPD)	26,740	29,314	24,692
Crude oil production (MBbl)	1,881	2,043	1,652
Crude oil production as a percent of total	77%	76%	74%
Product revenues	\$ 90,891	\$ 123,196	\$ 104,637
Crude oil revenues	\$ 86,308	\$ 115,252	\$ 94,812
Crude oil revenues as a percent of total	95%	94%	91%
Realized prices:			
Crude oil (\$ per Bbl)	\$ 45.90	\$ 56.40	\$ 57.39
NGLs (\$ per Bbl)	\$ 6.16	\$ 10.74	\$ 17.60
Natural gas (\$ per Mcf)	\$ 1.83	\$ 2.34	\$ 2.79
Aggregate (\$ per BOE)	\$ 37.35	\$ 45.68	\$ 47.08
Prices adjusted for derivatives:			
Crude oil (\$ per Bbl)	\$ 54.15	\$ 55.70	\$ 56.37
Natural gas (\$ per Mcf)	\$ 1.90	\$ 2.34	\$ 2.79
Aggregate (\$ per BOE)	\$ 43.78	\$ 45.15	\$ 46.32
Production and lifting costs:			
Lease operating (\$ per BOE)	\$ 4.33	\$ 3.65	\$ 4.95
Gathering, processing and transportation (\$ per BOE)	\$ 2.24	\$ 2.32	\$ 1.77
Production and ad valorem taxes (\$ per BOE)	\$ 2.53	\$ 2.74	\$ 2.56
General and administrative (\$ per BOE) ¹	\$ 2.97	\$ 1.97	\$ 3.18
Depreciation, depletion and amortization (\$ per BOE)	\$ 16.73	\$ 16.64	\$ 17.49
Capital expenditure program costs ²	\$ 79,220	\$ 64,623	\$ 101,288
Cash provided by operating activities ³	\$ 72,473	\$ 75,981	\$ 69,259
Cash paid for capital expenditures ⁴	\$ 62,015	\$ 71,010	\$ 86,486
Cash and cash equivalents at end of period	\$ 55,331	\$ 7,798	\$ 4,655
Debt outstanding at end of period, net ⁵	\$ 592,624	\$ 555,028	\$ 515,919
Credit available under credit facility at end of period ⁶	\$ 100,200	\$ 137,200	\$ 124,600
Net development wells drilled and completed	11.0	9.9	7.8

¹ Includes combined amounts of \$0.35, \$0.36 and \$0.79 per BOE for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively, attributable to equity-classified share-based compensation and significant charges, including acquisition, divestiture and strategic transaction and other costs, as described in the discussion of "Results of Operations - General and Administrative" that follows.

² Includes amounts accrued and excludes capitalized interest and capitalized labor.

³ Includes net cash received (paid) for derivative settlements of \$(0.3) million, \$0.2 million and \$4.4 million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively. Reflects changes in operating assets and liabilities of \$16.0 million, \$(12.7) million and \$(6.5) million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively.

⁴ Represents actual cash paid for capital expenditures including capitalized interest and capitalized labor.

⁵ Represents amounts net of unamortized discount and deferred issue costs of \$6.8 million, \$7.4 million and \$9.1 million as of March 31, 2020, December 31, 2019 and March 31, 2019, respectively.

⁶ The borrowing base under the credit agreement, or Credit Facility, was reduced to \$400 million effective April 30, 2020 through June 30, 2020 at which time it will decrease further to \$375 million, and effective October 1, 2020, availability will be decreased to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. Based on the amended borrowing base, our credit availability would have been \$0.2 million had the amendment been in effect as of March 31, 2020.

Key Developments

The following general business developments had or may have a significant impact on our results of operations, financial position and cash flows:

Actions to Address the Economic Impact of COVID-19 and Decline in Commodity Prices

During March and April 2020, we initiated and began pursuit of several actions to mitigate the anticipated adverse economic conditions for the immediate future and to support our financial position, liquidity and the efficient continuity of our operations as follows:

Drilling and Completion Program. We suspended our drilling and completion program altogether in April 2020. All of our contracted operated rigs were released from drilling activities in early April 2020.

Derivatives. We substantially expanded the scope and range of our commodity derivatives portfolio and restructured certain oil hedge positions to move hedge positions from the second half of 2021 into the second and the fourth quarters of 2020. In April 2020, we received over \$14 million in proceeds from settlements of our commodity derivatives.

Federal Relief. We have initiated a number of liquidity and income tax measures made available under the Coronavirus Aid, Relief and Economic Security Act, or the CARES Act and related regulations, including the application for an accelerated refund of our remaining alternative minimum tax, or ATM, credits of approximately \$2.5 million that would have otherwise been payable to us over the next two years.

Working Capital. We have negotiated more favorable payment terms with certain of our larger vendors and are continuing to increase our diligence in collecting and managing our portfolio of joint venture receivables.

Cost Containment. We initiated a hiring freeze in March 2020 and eliminated annual cost-of-living and similar adjustments to our salaries and wages for 2020. We are also reviewing our operations to reduce or otherwise defer certain costs consistent with the anticipated level of business activity and changes to the timing of certain action plans.

Operations Considerations. In anticipation of continued excess domestic supply, we: (i) have secured supplemental storage capacity for our crude oil production for up to six months beginning in May 2020, (ii) have shut in certain producing wells beginning in April 2020 and continue to evaluate other opportunities to do so if the price environment remains depressed for an extended period and (iii) are enhancing the integrity of our producing wells and reserves in place in the event a larger scale curtailment condition is necessary. In April 2020, we rescinded the release of one rig and entered into a new agreement to maintain the rig in place for a minimal daily rate providing us with the option to either restart drilling operations on seven days notice or release the rig altogether for demobilization.

Borrowing Base Redetermination

On April 30, 2020, we entered into the Borrowing Base Redetermination Agreement and Amendment No. 7 to Credit Agreement, or the Seventh Amendment. The Seventh Amendment provides for a \$1.0 billion revolving commitment and a \$400 million borrowing base, reduced from \$500 million, including a \$25 million sublimit for the issuance of letters of credit. Furthermore, the Seventh Amendment provides for an additional decrease in the borrowing base to \$375 million effective July 1, 2020 and, effective October 1, 2020, limits availability under the Credit Facility to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. In addition, the Seventh Amendment provides for: (i) an increase of 100 basis points to the applicable margin ranges for outstanding borrowings, (ii) a decrease to the maximum leverage ratio from 4.00 times to 3.50 times, (iii) implementation of certain anti-cash hoarding provisions, including the requirement to repay outstanding loans and cash collateralize outstanding letters of credit on a weekly basis in the amount of any cash on the balance sheet (subject to certain exceptions) in excess of \$25 million and (iv) further limitations on dividends and share repurchases until Spring 2021 borrowing base determination.

Production and Development Plans

Total production for the first quarter of 2020 was 2,433 BOE, or 26,740 barrels of oil equivalent per day, or BOEPD, with approximately 77 percent, or 1,881 MBbls, of production from crude oil, 13 percent from NGLs and 10 percent from natural gas, respectively.

We drilled and turned 13 gross (11.0 net) wells to sales during the first quarter of 2020. At the time we suspended our drilling and completion program and continuing through to May 1, 2020, we had a total of eight gross (7.6 net) wells in process that were substantially drilled and waiting on completion.

As of May 1, 2020, we had approximately 99,300 gross (86,600 net) acres in the Eagle Ford, net of expirations. Approximately 92 percent of our acreage is held by production and substantially all is operated by us.

Commodity and Interest Rate Hedging Program

As of April 30, 2020, we have hedged a portion of our estimated future crude oil and natural gas production from May 1, 2020 through the first half of 2021. We are currently unhedged with respect to NGL production. The following table summarizes our hedge positions for the periods presented:

Swaps	WTI - Oil Volumes		WTI Average Price		MEH - Oil Volumes		MEH Average Price	
	(Barrels per day)		(\$ per barrel)		(Barrels per day)		(\$ per barrel)	
2Q - 2020	13,209	\$	52.06	2,000	\$	61.03		
3Q - 2020	8,630	\$	55.20	2,000	\$	61.03		
4Q - 2020	9,804	\$	55.18	2,000	\$	61.03		
1Q - 2021	5,000	\$	51.60	—	\$	—		
2Q - 2021	4,945	\$	51.60	—	\$	—		

Collars	WTI - Oil Volumes		WTI Floor Price		WTI Ceiling Price	
	(Barrels per day)		(\$ per barrel)		(\$ per barrel)	
2Q - 2020	2,000	\$	48.00	\$	57.10	
3Q - 2020	6,891	\$	52.97	\$	58.03	
4Q - 2020	2,000	\$	48.00	\$	57.10	
1Q - 2021	1,667	\$	55.00	\$	58.00	
2Q - 2021	1,648	\$	55.00	\$	58.00	

Long Puts	WTI - Oil Volumes		WTI Average Put Price	
	(Barrels per day)		(\$ per barrel)	
2Q - 2020	3,297	\$	23.00	
2Q - 2020	8,242	\$	30.00	
2Q - 2020	3,297	\$	55.00	
3Q - 2020	2,717	\$	30.00	
1Q - 2021	2,500	\$	36.00	
2Q - 2021	2,473	\$	36.00	

Short Puts	WTI - Oil Volumes		WTI Put Price	
	(Barrels per day)		(\$ per barrel)	
2Q - 2020	912	\$	44.00	
4Q - 2020	5,087	\$	43.50	
1Q - 2021	9,167	\$	37.36	
2Q - 2021	9,066	\$	37.36	

Put Spreads	WTI - Oil Volumes		WTI Long Puts Price		WTI Short Puts Price	
	(Barrels per day)		(\$ per barrel)		(\$ per barrel)	
3Q - 2020	5,435	\$	30.00	\$	20.00	

MEH-WTI Basis Swaps	Basis Volumes		Basis Price	
	(Barrels per day)		(\$ per barrel)	
2Q - 2020	2,747	\$	(0.85)	

Collars	Henry Hub - Gas Volumes		Henry Hub Floor Price		Henry Hub Ceiling Price	
	(MMBtu/d)		(\$/MMBtu)		(\$/MMBtu)	
2Q - 2020	12,901	\$	2.00	\$	2.21	
3Q - 2020	12,804	\$	2.00	\$	2.21	
4Q - 2020	12,804	\$	2.00	\$	2.21	

Financial Condition

Liquidity

Our primary sources of liquidity include our cash on hand, cash provided by operating activities and borrowings under the Credit Facility. The Credit Facility provides us with up to \$1.0 billion in borrowing commitments. The current borrowing base under the Credit Facility is \$400 million through June 30, 2020 at which time it will be further reduced to \$375 million, and effective October 1, 2020, availability under the Credit Facility will be limited to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. As of May 7, 2020, we had \$20.2 million available under the Credit Facility.

Our cash flows from operating activities are subject to significant volatility due to changes in commodity prices for crude oil, NGL and natural gas products, as well as variations in our production. The prices for these commodities are driven by a number of factors beyond our control, including global and regional product supply and demand, weather, product distribution, refining and processing capacity and other supply chain dynamics, among other factors. All of these factors have been negatively impacted by the COVID-19 health crisis and the ongoing disruptions to the global energy markets. In order to mitigate this volatility, we entered into derivative contracts with a number of financial institutions, all of which are participants in the Credit Facility, hedging a portion of our estimated future crude oil and natural gas production through the first half of 2021. The level of our hedging activity and duration of the financial instruments employed depends on our desired cash flow protection, available hedge prices, the magnitude of our capital program and our operating strategy.

Capital Resources

We plan to fund our operations for the next twelve months primarily with cash on hand, cash from operating activities, including net receipts from derivative settlements and borrowings under the Credit Facility. Based upon current price and production expectations for the remainder of the year, we believe that our cash on hand, cash from operating activities and borrowings under our Credit Facility will be sufficient to fund our operations for the next twelve months; however, future cash flows are subject to a number of variables including the length and magnitude of the current global economic slowdown associated with the COVID-19 health crisis and related disruptions to global energy markets.

Cash on Hand and Cash From Operating Activities. As of May 7, 2020, we had approximately \$39 million of cash on hand. For additional information and an analysis of our historical cash from operating activities, see the “Cash Flows” discussion that follows.

Credit Facility Borrowings. During the three months ended March 31, 2020, we borrowed \$37 million, net of repayments, under the Credit Facility. We paid down \$20 million on May 4, 2020 subsequent to the effective date of the Seventh Amendment. For additional information regarding the terms and covenants under the Credit Facility, see the “Capitalization” discussion that follows.

The following table summarizes our borrowing activity under the Credit Facility for the periods presented:

	Borrowings Outstanding			Weighted-Average Rate
	End of Period	Weighted-Average	Maximum	
Three months ended March 31, 2020	\$ 399,400	\$ 376,059	\$ 399,400	3.68%

Proceeds from Sales of Assets. For additional information and an analysis of our historical proceeds from sales of assets, see the “Cash Flows” discussion that follows.

Capital Markets Transactions. From time-to-time and under market conditions that we believe are favorable to us, we may consider capital market transactions, including the offering of debt and equity securities. We intend to maintain an effective shelf registration statement to allow for optionality, including by filing in the near term a new Shelf Registration Statement on Form S-3 in advance of the expiration of our current Shelf Registration Statement. At the present time, however; we do not believe that the market conditions for such transactions are viable for entities of our size within our industry. Accordingly, we do not consider such transactions as a potential source of capital at this time.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Three Months Ended	
	March 31,	March 31,
	2020	2019
Cash flows from operating activities		
Operating cash flows, net of working capital changes	\$ 80,183	\$ 75,031
Crude oil derivative settlements received (paid), net	(440)	4,394
Natural gas derivative settlements received (paid), net	104	—
Interest payments, net of amounts capitalized	(7,442)	(8,413)
Interest rate swap settlements received (paid), net	68	—
Acquisition, divestiture and strategic transaction costs paid	—	(1,674)
Reorganization-related administration fees and costs paid	—	(79)
Net cash provided by operating activities	72,473	69,259
Cash flows from investing activities		
Capital expenditures	(62,015)	(86,486)
Proceeds from sales of assets, net	75	18
Net cash used in investing activities	(61,940)	(86,468)
Cash flows from financing activities		
Proceeds from credit facility borrowings, net	37,000	4,000
Net cash provided by financing activities	37,000	4,000
Net increase (decrease) in cash and cash equivalents	\$ 47,533	\$ (13,209)

Cash Flows from Operating Activities. The increase of \$3.2 million in net cash provided by operating activities for the three months ended March 31, 2020 compared to the corresponding period in 2019 was primarily attributable to: (i) improved working capital management primarily associated with an extension of the number of days utilized to settle accounts payable, (ii) the absence in the 2020 period of acquisition, divestiture, strategic transaction and reorganization-related administration fees and costs that were paid in the 2019 period and (iii) lower interest payments due to substantially lower weighted-average variable rates despite higher outstanding borrowings in the 2020 period. These items were partially offset by substantially lower derivative settlements receipts in the 2020 period.

Cash Flows from Investing Activities. As illustrated in the tables below, our cash payments for capital expenditures were significantly lower during the 2020 period as compared to the 2019 period, due primarily to a somewhat reduced drilling and completion program in the 2020 period. Lower payments in the 2020 period were also impacted by the extension of payment periods with certain of our larger drilling and completion vendors. In addition, we received marginally higher proceeds from the sale of scrap tubular and well materials in the 2020 period compared to the 2019 period.

The following table sets forth costs related to our capital expenditures program for the periods presented:

	Three Months Ended	
	March 31,	March 31,
	2020	2019
Drilling and completion	\$ 76,161	\$ 98,658
Lease acquisitions and other land-related costs	1,930	259
Pipeline, gathering facilities and other equipment, net	1,124	2,331
Geological and geophysical (seismic) costs	5	40
	\$ 79,220	\$ 101,288

The following table reconciles the total costs of our capital expenditures program with the net cash paid for capital expenditures as reported in our Condensed Consolidated Statements of Cash Flows for the periods presented:

	Three Months Ended	
	March 31,	March 31,
	2020	2019
Total capital expenditures program costs (from above)	\$ 79,220	\$ 101,288
Increase in accounts payable for capital items and accrued capitalized costs	(18,660)	(13,569)
Less:		
Transfers from tubular inventory and well materials	(3,424)	(2,245)
Sales and use tax refunds received and applied to property accounts	—	(2,752)
Other, net	—	(20)
Add:		
Tubular inventory and well materials purchased in advance of drilling	3,395	1,658
Capitalized internal labor	796	972
Capitalized interest	688	1,154
Total cash paid for capital expenditures	<u>\$ 62,015</u>	<u>\$ 86,486</u>

Cash Flows from Financing Activities. The 2020 period includes borrowings of \$46 million and repayments of \$9 million under the Credit Facility. A portion of the borrowings were used to fund the capital program and the remainder was maintained to support liquidity prior to a \$20 million repayment on May 4, 2020. The borrowings during the first quarter of 2020 were used to fund our capital program costs at the beginning of the 2020 period. The 2019 period includes borrowings of \$12 million and repayments of \$8 million under the Credit Facility which were used to fund a portion of the capital program during that period.

Capitalization

The following table summarizes our total capitalization as of the dates presented:

	March 31,	December 31,
	2020	2019
Credit facility	\$ 399,400	\$ 362,400
Second lien term loan, net	193,224	192,628
Total debt, net	592,624	555,028
Shareholders' equity	684,319	520,745
	<u>\$ 1,276,943</u>	<u>\$ 1,075,773</u>
Debt as a % of total capitalization	46 %	52 %

Credit Facility. In accordance with the Seventh Amendment which became effective on April 30, 2020, the Credit Facility provides for a \$1.0 billion revolving commitment and a \$400 million borrowing base, reduced from \$500 million, including a \$25 million sublimit for the issuance of letters of credit. Furthermore, the Seventh Amendment provides for an additional decrease in the borrowing base to \$375 million effective July 1, 2020. The availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base provided that effective October 1, 2020, availability under the Credit Facility will be limited to a maximum of \$350 million until the redetermination of the borrowing base in Fall 2021. The borrowing base under the Credit Facility is redetermined semi-annually, generally in April and October of each year. Additionally, the Credit Facility lenders may, at their discretion, initiate a redetermination at any time during the six-month period between scheduled redeterminations. The Credit Facility is available to us for general corporate purposes including working capital. We had \$0.4 million in letters of credit outstanding as of March 31, 2020 and December 31, 2019.

The Credit Facility is scheduled to mature in May 2024; provided that in June 2022, unless we have either extended the maturity date of our \$200 million Second Lien Credit Agreement dated as of September 29, 2017, or the Second Lien Facility, to a date that is at least 91 days after May 7, 2024 or have repaid our Second Lien Facility in full, the maturity date of the Credit Facility will be June 30, 2022.

The outstanding borrowings under the Credit Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate plus an applicable margin ranging from 1.50% to 2.50% (0.50% to 1.50% prior to the Seventh Amendment), determined based on the utilization level under the Credit Facility or (b) a Eurodollar rate, including the London interbank offered rate, or LIBOR, through 2021, plus an applicable margin ranging from 2.50% to 3.50% (1.50% to 2.50% prior to the Seventh Amendment), determined based on the utilization level under the Credit Facility. Interest on reference rate borrowings

is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on Eurodollar, including LIBOR, borrowings is payable every one, three or six months, at our election, and is computed on the basis of a year of 360 days. As of March 31, 2020, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 3.20%. Unused commitment fees are charged at a rate of 0.50% (0.375% to 0.50% prior to the Seventh Amendment).

The Credit Facility is guaranteed by us and all of our subsidiaries, or the Guarantor Subsidiaries. The guarantees under the Credit Facility are full and unconditional and joint and several. Substantially all of our consolidated assets are held by the Guarantor Subsidiaries. There are no significant restrictions on our ability or any of the Guarantor Subsidiaries to obtain funds through dividends, advances or loans. The obligations under the Credit Facility are secured by a first priority lien on substantially all of our assets.

Second Lien Facility. On September 29, 2017, we entered into the Second Lien Facility. The maturity date under the Second Lien Facility is September 29, 2022.

The outstanding borrowings under the Second Lien Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate based on the prime rate plus an applicable margin of 6.00% or (b) a customary LIBOR rate plus an applicable margin of 7.00%. Amounts under the Second Lien Facility were borrowed at a price of 98% with an initial interest rate of 8.34% resulting in an effective interest rate of 9.89%. As of March 31, 2020, the actual interest rate on outstanding borrowings under the Second Lien Facility was 8.00%. Interest on reference rate borrowings is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on eurocurrency borrowings is payable every one or three months (including in three month intervals if we select a six month interest period), at our election and is computed on the basis of a year of 360 days. We have the right, to the extent permitted under the Credit Facility and an intercreditor agreement between the lenders under the Credit Facility and the lenders under the Second Lien Facility, to prepay loans under the Second Lien Facility at any time, subject to the following prepayment premiums (in addition to customary "breakage" costs with respect to eurocurrency loans): 101% of the amount being prepaid through September 2020; and thereafter, no premium. The Second Lien Facility also provides for a 101% prepayment premiums in the event of a change in control that results in an offer of prepayment that is accepted by the lenders under the Second Lien Facility through September 2020, but no prepayment premium thereafter.

The Second Lien Facility is collateralized by substantially all of the Company's and its subsidiaries' assets with lien priority subordinated to the liens securing the Credit Facility. The obligations under the Second Lien Facility are guaranteed by us and the Guarantor Subsidiaries.

Covenant Compliance. The Credit Facility requires us to maintain (1) a minimum current ratio of 1.00 to 1.00 and (2) a maximum leverage ratio of 3.50 to 1.00 (4.00 to 1.00 prior to the Seventh Amendment), both as defined in the Credit Facility.

The Credit Facility and Second Lien Facility also contain customary affirmative and negative covenants, including as to compliance with laws (including environmental laws, ERISA and anti-corruption laws), maintenance of required insurance, delivery of quarterly and annual financial statements, oil and gas engineering reports and budgets, maintenance and operation of property (including oil and gas properties), restrictions on the incurrence of liens and indebtedness, merger, consolidation or sale of assets, payment of dividends, transactions with affiliates, and other customary covenants. In addition, the Credit Facility contains certain anti-cash hoarding provisions, including the requirement to repay outstanding loans and cash collateralize outstanding letters of credit on a weekly basis in the amount of any cash on the balance sheet (subject to certain exceptions) in excess of \$25 million.

The Credit Facility and Second Lien Facility contain customary events of default and remedies. If we do not comply with the financial and other covenants in the Credit Facility and Second Lien Facility, as applicable, the lenders thereto may, subject to customary cure rights, require immediate payment of all amounts outstanding under the Credit Facility and Second Lien Facility.

As of March 31, 2020, we were in compliance with all of the covenants under the Credit Facility and the Second Lien Facility.

Reference Rate Reform. In July 2017, the U.K.'s Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. At the present time, the Credit Facility and Second Lien Facility are contractually subject to LIBOR rates and both have terms that extend beyond 2021. The Seventh Amendment anticipates the phase out of LIBOR and provides for the consideration of other internationally recognized alternative rates at that time. We have not yet pursued any technical amendment or other contractual alternative to address this matter with respect to the Second Lien Facility as well as certain LIBOR-based interest rate swaps that we entered into in 2020. We are continuing to evaluate the potential impact of the eventual replacement of the LIBOR interest rate.

Results of Operations

Presentation of Financial Information and Changes in Accounting Principles

Adoption of New Accounting Standards

As discussed in further detail in Notes 2 and 4 to the Condensed Consolidated Financial Statements included in Part I, Item 1, “Financial Statements,” we have adopted the Financial Accounting Standards Board’s, or FASB, Accounting Standards Update, or ASU, *Measurement of Credit Losses on Financial Instruments*, or ASU 2016–13, effective January 1, 2020. We adopted ASU 2016–13 utilizing the optional cumulative effect transition approach. As a result of the adoption of 2016–13, certain amounts included in the caption *Other revenues, net* are not comparable between the 2020 and 2019 periods; however, we do not believe that such differences are material.

Year over Year Analysis of Operating and Financial Results

Production

The following tables set forth a summary of our total and average daily production volumes by product for the periods presented:

	Total Production			Average Daily Production		
	2020 vs. 2019			2020 vs. 2019		
	Three Months Ended March 31,		Favorable	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)	2020	2019	(Unfavorable)
Crude oil (MBbl and BOPD)	1,881	1,652	229	20,665	18,355	2,310
NGLs (MBbl and BOPD)	307	315	(8)	3,376	3,503	(127)
Natural gas (MMcf and MMcfpd)	1,474	1,531	(57)	16	17	(1)
Total (MBOE and BOEPD)	2,433	2,222	211	26,740	24,692	2,048

Total production increased nine percent during the three month period in 2020 due primarily to a greater number of wells turned to sales in the second half of 2019 through the first quarter of 2020 when compared to the corresponding periods in the second half of 2018 through the first quarter of 2019. Crude oil production increased 14 percent during the three month period in 2020 when compared to the corresponding period in 2019. The increase was partially offset by natural production declines from our more mature wells.

Approximately 77 percent of total production during the three month period in 2020 was attributable to crude oil when compared to approximately 74 percent during the corresponding period in 2019. The increase in the crude oil composition of total production was due primarily to a shift in development plans that began in the second half of 2019 with less emphasis in the southeastern portion of our acreage holdings which have historically higher gas content.

Product Revenues and Prices

The following tables set forth a summary of our revenues and prices per unit of volume by product for the periods presented:

	Total Product Revenues			Product Revenues per Unit of Volume		
	2020 vs. 2019			2020 vs. 2019		
	Three Months Ended March 31,		Favorable	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)	2020	2019	(Unfavorable)
	(\$ per unit of volume)					
Crude oil	\$ 86,308	\$ 94,812	\$ (8,504)	\$ 45.90	\$ 57.39	\$ (11.49)
NGLs	1,893	5,548	(3,655)	6.16	17.60	(11.44)
Natural gas	2,690	4,277	(1,587)	1.83	2.79	(0.96)
Total	\$ 90,891	\$ 104,637	\$ (13,746)	\$ 37.35	\$ 47.08	\$ (9.73)

The following table provides an analysis of the changes in our revenues for the periods presented:

	Three Months Ended March 31, 2020 vs. 2019		
	Revenue Variance Due to		
	Volume	Price	Total
Crude oil	\$ 13,119	\$ (21,623)	(8,504)
NGLs	(142)	(3,513)	(3,655)
Natural gas	(159)	(1,428)	(1,587)
	\$ 12,818	\$ (26,564)	(13,746)

Our product revenues during the three month period in 2020 decreased compared to the corresponding period in 2019 due primarily to approximately 20 percent lower crude oil prices partially offset by 13 percent higher volume. NGL revenues declined in the three month period in 2020 due to substantially lower pricing (65 percent) and three percent lower volumes. Lower natural gas revenues were primarily attributable to 34 percent lower pricing during the three month period in 2020 and four percent lower volume. Total crude oil revenues were approximately 95 percent of our total product revenues during the three month period in 2020 as compared to 91 percent during the three month period in 2019.

Realized Differentials

The following table reconciles our realized price differentials from weighted-average NYMEX-quoted prices for WTI crude oil for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Realized crude oil prices per barrel	\$ 45.90	\$ 57.39	\$ (11.49)
Weighted-average WTI prices	45.78	54.90	(9.12)
Realized differential to WTI	<u>\$ 0.12</u>	<u>\$ 2.49</u>	<u>\$ (2.37)</u>

While the overall magnitude of the margin has declined in the first quarter of 2020 compared to the corresponding period in 2019, we have realized premiums to the NYMEX WTI index price for crude oil as the majority of our production is sold based on Light Louisiana Sweet, or LLS, or Magellan East Houston, or MEH, pricing.

Effects of Derivatives

The following table reconciles crude oil and natural gas revenues to realized prices, as adjusted for derivative activities, for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Crude oil revenues, as reported	\$ 86,308	\$ 94,812	\$ (8,504)
Derivative settlements, net	15,527	(1,689)	17,216
	<u>\$ 101,835</u>	<u>\$ 93,123</u>	<u>\$ 8,712</u>
Crude oil prices per Bbl	\$ 45.90	\$ 57.39	\$ (11.49)
Derivative settlements per Bbl	8.25	(1.02)	9.27
	<u>\$ 54.15</u>	<u>\$ 56.37</u>	<u>\$ (2.22)</u>
Natural gas revenues, as reported	\$ 2,690	\$ 4,276	\$ (1,586)
Derivative settlements, net	104	—	104
	<u>\$ 2,794</u>	<u>\$ 4,276</u>	<u>\$ (1,482)</u>
Natural gas prices per Mcf	\$ 1.83	\$ 2.79	\$ (0.96)
Derivative settlements per Mcf	0.07	—	0.07
	<u>\$ 1.90</u>	<u>\$ 2.79</u>	<u>\$ (0.89)</u>

Gain on Sales of Assets

We recognize gains and losses on the sale or disposition of assets other than our oil and gas properties upon the completion of the underlying transactions. The following table sets forth the total net gains and losses recognized for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Gain on sales of assets, net	\$ 6	\$ 25	\$ (19)

There were insignificant net gains and losses recognized during the three month periods in 2020 and 2019 primarily attributable to the disposition of certain support equipment, tubular inventory and well materials.

Other Revenues, net

Other revenues, net, includes fees for marketing and water disposal services that we charge to third parties, net of related expenses, as well as other miscellaneous revenues and credits attributable to our current operations. In addition, charges attributable to credit losses associated with our trade and joint venture partner receivables are included in this caption as a contra-revenue item.

The following table sets forth the total other revenues, net recognized for the periods presented:

	Three Months Ended March 31,		2020 vs. 2019
			Favorable
	2020	2019	(Unfavorable)
Other revenues, net	\$ 482	\$ 566	\$ (84)

Other revenues, net decreased during the three month period in 2020 from the corresponding period in 2019 due primarily to credit loss charges of \$0.1 million partially offset by higher water disposal revenues attributable to higher production in the three month period in 2020 compared to the corresponding period in 2019.

Lease Operating Expenses

LOE includes costs that we incur to operate our producing wells and field operations. The most significant costs include compression and gas-lift, chemicals, water disposal, repairs and maintenance, including down-hole repairs, field labor, pumping and well-tending, equipment rentals, utilities and supplies, among others.

The following table sets forth our LOE for the periods presented:

	Three Months Ended March 31,		2020 vs. 2019
			Favorable
	2020	2019	(Unfavorable)
Lease operating	\$ 10,532	\$ 11,004	\$ 472
Per unit of production (\$ per BOE)	\$ 4.33	\$ 4.95	\$ 0.62
% change per unit of production			12.5%

LOE decreased on an absolute and per unit basis during the three month period in 2020 when compared to the corresponding period in 2019. The absolute decrease was due to an overall higher level of efficiency attributable to a combination of cost-containment efforts and the application of operational improvements and selected maintenance particularly to those wells that were acquired from other operators in recent years. Despite higher production volumes, which had the effect of decreasing the per unit LOE cost, we experienced lower aggregate costs in our variable components as well as fixed amounts. These reductions were partially offset by higher water disposal costs associated with protective measures from offset stimulation activities.

Gathering, Processing and Transportation

GPT expense includes costs that we incur to gather and aggregate our crude oil, NGL and natural gas production from our wells and deliver them via pipeline or truck to a central delivery point, downstream pipelines or processing plants, and blend or process, as necessary, depending upon the type of production and the specific contractual arrangements that we have with the applicable midstream operators.

The following table sets forth our GPT expense for the periods presented:

	Three Months Ended March 31,		2020 vs. 2019
			Favorable
	2020	2019	(Unfavorable)
Gathering, processing and transportation	\$ 5,444	\$ 3,929	\$ (1,515)
Per unit of production (\$ per BOE)	\$ 2.24	\$ 1.77	\$ (0.47)
% change per unit of production			(26.6)%

GPT expense increased on an absolute basis during the three month period in 2020 when compared to the corresponding period in 2019 due primarily to higher production volumes as discussed above. Per unit costs increased in the three month period in 2020 compared to the corresponding period in 2019 due primarily to a scheduled rate increase that became effective August 1, 2019, for crude oil gathering services partially offset by a shift in the mix of crude oil production sold at the wellhead with no corresponding GPT expense subsequent to the achievement of required minimum crude oil volumes transported by pipeline.

Production and Ad Valorem Taxes

Production or severance taxes represent taxes imposed by the states in which we operate for the removal of resources including crude oil, NGLs and natural gas. Ad valorem taxes represent taxes imposed by certain jurisdictions, primarily counties, in which we operate, based on the assessed value of our operating properties. The assessments for ad valorem taxes are generally based on contemporary commodity prices.

The following table sets forth our production and ad valorem taxes for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Production and ad valorem taxes			
Production/severance taxes	\$ 4,078	\$ 4,930	\$ 852
Ad valorem taxes	2,076	762	(1,314)
	<u>\$ 6,154</u>	<u>\$ 5,692</u>	<u>\$ (462)</u>
Per unit production (\$ per BOE)	\$ 2.53	\$ 2.56	\$ 0.03
Production/severance tax rate as a percent of product revenues	4.5%	4.7%	

Production taxes decreased on an absolute basis and per unit basis during the three month period in 2020 when compared to the corresponding periods in 2019 due primarily to a decrease in aggregate commodity sales prices of over 20 percent despite higher production volume in the 2020 period. Accruals for ad valorem taxes increased substantially beginning in the second quarter of 2019 due to higher commodity-price based valuation assessments, reflective of indicative prices published for 2019, and the effects of growing our assessable property base and increased working interests from acquisition activity.

General and Administrative

Our G&A expenses include employee compensation, benefits and other related costs for our corporate management and governance functions, rent and occupancy costs for our corporate facilities, insurance, and professional fees and consulting costs supporting various corporate-level functions, among others. In order to facilitate a meaningful discussion and analysis of our results of operations with respect to G&A expenses, we have disaggregated certain costs into three components as presented in the table below. Primary G&A encompasses all G&A costs except share-based compensation and certain significant special charges that are generally attributable to material stand-alone transactions or corporate actions that are not otherwise in the normal course.

The following table sets forth the components of our G&A for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Primary G&A	\$ 6,374	\$ 5,303	\$ (1,071)
Share-based compensation	856	1,038	182
Significant special charges:			
Acquisition, divestiture and strategic transaction costs	—	724	724
Total G&A	<u>\$ 7,230</u>	<u>\$ 7,065</u>	<u>\$ (165)</u>
Per unit of production (\$ per BOE)	\$ 2.97	\$ 3.18	\$ 0.21
Per unit of production excluding share-based compensation and other significant special charges identified above (\$ per BOE)	\$ 2.62	\$ 2.39	\$ (0.23)

Our primary G&A expenses increased on an absolute and per unit basis during the three month period in 2020 compared to the corresponding period in 2019. The absolute increases are due primarily to the effects of higher payroll, benefits and support costs, including information technology, attributable to a higher overall employee headcount in the 2020 period and a lower level of capitalized labor attributable to the suspension of our drilling and completion program in the 2020 period. In addition, we incurred higher consulting costs and professional fees. These increases were partially offset by lower incentive compensation accruals and further tempered on a per unit basis by the effect of higher production volume in the 2020 period.

Share-based compensation charges during the periods presented are attributable to the amortization of compensation cost associated with the grants of time-vested restricted stock units, or RSUs, and performance-based restricted stock units, or PRSUs. The grants of RSUs and PRSUs are described in greater detail in Note 14 to the Condensed Consolidated Financial Statements included in Part I, Item 1, "Financial Statements." A substantial portion of the share-based compensation expense is attributable to the RSU and PRSU grants made in the normal course in March of 2020 and January of 2017. The remainder is attributable to grants of RSUs and PRSUs to certain employees upon their hiring or as a result of promotion in 2018 and 2019. All of our share-based compensation represents non-cash expenses.

During the first quarter of 2019, we incurred consulting and other costs, including legal and other professional fees, primarily associated with a merger transaction which was mutually terminated by us and the counterparty in March 2019.

Depreciation, Depletion and Amortization

DD&A expense includes charges for the allocation of property costs based on the volume of production, depreciation of fixed assets other than oil and gas assets as well as the accretion of our asset retirement obligations.

The following table sets forth total and per unit costs for DD&A for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
DD&A expense	\$ 40,718	\$ 38,870	\$ (1,848)
DD&A rate (\$ per BOE)	\$ 16.73	\$ 17.49	\$ 0.76

DD&A increased on an absolute and declined on a per unit basis during the three month period ended in 2020 when compared to the corresponding period in 2019. Higher production volume provided for an increase of approximately \$3.7 million partially offset by \$1.9 million attributable to the lower DD&A rate in the 2020 period. The lower DD&A rate in the 2020 period is primarily attributable to the effect of adding additional reserves in the fourth quarter of 2019 partially offset by associated costs added to the full cost pool.

Interest Expense

Interest expense includes charges for outstanding borrowings under the Credit Facility the Second Lien Facility, derived from internationally-recognized interest rates with a premium based on our credit profile and the level of credit outstanding. In addition, we are assessed certain fees for the overall credit commitments provided to us as well as fees for utilization and letters of credit. Also included is the accretion of original issue discount on the Second Lien Facility and the amortization of costs capitalized attributable to the Credit Facility and the Second Lien Facility. These costs are partially offset by interest amounts that we capitalize on unproved property costs while we are engaged in the evaluation of projects for the underlying acreage.

The following table summarizes the components of our interest expense for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Interest on borrowings and related fees	\$ 8,045	\$ 9,711	\$ 1,666
Accretion of original issue discount	196	180	(16)
Amortization of debt issuance costs	627	741	114
Capitalized interest	(688)	(1,154)	(466)
	\$ 8,180	\$ 9,478	\$ 1,298

Interest expense decreased during the three month period in 2020 as compared to the corresponding period in 2019 due primarily to the effect of lower interest rates partially offset by higher outstanding balances under the Credit Facility. The weighted-average balance under the Credit Facility was higher in the 2020 period compared to the 2019 period by approximately \$57 million while the weighted-average interest rate was lower during the same period by 232 basis points. The accretion of original issue discount is entirely attributable to the Second Lien Facility and the amortization of debt issuance costs includes amounts attributable to both the Credit Facility and Second Lien Facility. We capitalized a smaller portion of interest during the 2020 period as we maintained a smaller portion of unproved property as compared to the corresponding period in 2019.

Derivatives

The gains and losses for our derivatives portfolio reflect changes in the fair value attributable to changes in market values relative to our hedged commodity prices and interest rate swaps.

The following table summarizes the gains and (losses) attributable to our commodity derivatives portfolio and interest rate swaps for the periods presented:

	2020 vs. 2019		
	Three Months Ended March 31,		Favorable
	2020	2019	(Unfavorable)
Commodity derivative gains (losses)	\$ 157,802	\$ (68,017)	\$ 225,819
Interest rate swap gains (losses)	(6,683)	—	(6,683)
	\$ 151,119	\$ (68,017)	\$ 219,136

In the three month period in 2020, commodity prices collapsed dramatically due primarily to the economic slowdown associated with the COVID-19 health crisis and the disruptions in the global energy markets. These circumstances as well as the significant expansion of our commodity derivatives portfolio led to substantial gains being recorded in the 2020 period as compared to the corresponding period in 2019 when the forward curve for commodity prices increased relative to our weighted average hedged prices resulting in net losses for our derivative portfolio. Settlement payments for crude oil derivatives in the first two months of 2020 more than offset settlement receipts in March 2020 resulting in the net payment of \$0.4 million during the 2020 period as compared to the receipt of cash settlements of \$4.4 million in the 2019 period. We began hedging a portion of our natural gas production in 2020 and received net cash settlements of \$0.1 million during the three months ended March 31, 2020. We also began hedging a portion of our exposure to variable interest rates associated with our Credit Facility and Second Lien Facility in 2020. For the three months ended March 31, 2020, we received \$0.1 million of net settlements from our interest rate swaps. By the end of the period, the benchmark rate declined relative to our weighted-average hedged rate and we recorded losses on the interest rate swaps accordingly.

Other, net

Other, net includes interest income, non-service costs associated with our retiree benefit plans and miscellaneous items of income and expense that are not directly associated with our current operations, including certain recoveries and write-offs attributable to prior years and properties that have been divested.

The following table sets forth the other income (expense), net recognized for the periods presented:

	Three Months Ended March 31,		2020 vs. 2019
			Favorable
	2020	2019	(Unfavorable)
Other, net	\$ (8)	\$ 106	\$ (114)

Other, net income (expense) decreased during the three month period in 2020 as compared to the corresponding period in 2019 due primarily to the recovery in the 2019 period of sales and use taxes attributable to previously divested properties. Each of the periods in 2020 and 2019 includes comparable charges of less than \$0.1 million associated with our retiree benefit plans.

Income Taxes

Income taxes represent our income tax provision as determined in accordance with generally accepted accounting principles. It considers taxes attributable to our obligations for federal taxes under the Internal Revenue Code as well as to the various states in which we operate, primarily Texas, or otherwise have continuing involvement.

The following table summarizes our income tax expense for the periods presented:

	Three Months Ended March 31,		2020 vs. 2019
			Favorable
	2020	2019	(Unfavorable)
Income tax (expense) benefit	\$ (1,138)	\$ 24	\$ (1,162)
Effective tax rate	0.7%	0.1%	

We recognized a federal and state income tax expense for the three months ended March 31, 2020 at the blended rate of 21.7%. The federal and state tax expense was offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of 0.7%, which is fully attributable to the State of Texas. The provision also reflects a reclassification of \$1.2 million from deferred tax assets to the current income tax receivable for our remaining refundable alternative minimum tax, or AMT, credit carryforwards, that were accelerated due to certain income tax provisions provided in the CARES Act. As of March 31, 2020, we have a receivable of \$2.5 million for the aforementioned AMT credit carryforwards for which we have applied for an immediate refund in April 2020. Our net deferred income tax liability balance of \$3.7 million as of March 31, 2020 is fully attributable to that State of Texas and primarily related to property and equipment.

We recognized a federal and state income tax benefit for the three months ended March 31, 2019 at the blended rate of 21.5%; however, the federal and state tax expense was offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of less than 0.1%.

Off Balance Sheet Arrangements

As of March 31, 2020, we had no off-balance sheet arrangements other than information technology licensing, service agreements, in-kind commodity recovery arrangements for imbalances and letters of credit, all of which are customary in our business.

Critical Accounting Estimates

The process of preparing financial statements in accordance with accounting principles generally accepted in the United States of America, or GAAP, requires our management to make estimates and judgments regarding certain items and transactions. It is possible that materially different amounts could be recorded if these estimates and judgments change or if the actual results differ from these estimates and judgments. Disclosure of our most critical accounting estimates that involve the judgment of our management can be found in our Annual Report on Form 10-K for the year ended December 31, 2019.

As described in this Quarterly Report on Form 10-Q as well as the Critical Accounting Estimates disclosures in the Annual Report on Form 10-K, we apply the full cost method to account for our oil and gas properties. At the end of each quarterly reporting period, the unamortized cost of our oil and gas properties, net of deferred income taxes, is limited to the sum of the estimated discounted future net revenues from proved properties adjusted for costs excluded from amortization and related income taxes, or a Ceiling Test. The estimated discounted future net revenues are determined using the prior 12-month's average price based on closing prices on the first day of each month, adjusted for differentials, discounted at 10%. The calculation of the Ceiling Test and provision for DD&A are based on estimates of proved reserves. There are significant uncertainties inherent in estimating quantities of proved reserves and projecting future rates of production, timing and plan of development.

As of March 31, 2020, the carrying value of our proved oil and gas properties was below the limit determined by the Ceiling Test by approximately \$350 million. Because the Ceiling Test utilizes commodity prices based on a trailing twelve month average, it does not fully reflect the substantial decline in commodity prices due to the economic impact of the COVID-19 health crisis and the ongoing disruption in global energy markets. If current commodity prices continue at these depressed levels or decline further, it is likely that we will experience a Ceiling Test write-down in the carrying value of our oil and gas properties at some point during the year ended December 31, 2020.

Item 3. *Quantitative and Qualitative Disclosures About Market Risk.*

Market risk is the risk of loss arising from adverse changes in market rates and prices. The principal market risks to which we are exposed are interest rate risk and commodity price risk.

Interest Rate Risk

All of our long-term debt instruments are subject to variable interest rates. As of March 31, 2020, we had borrowings of \$399.4 million under the Credit Facility and \$200 million under the Second Lien Facility at interest rates of 3.20% and 8.00%, respectively. Assuming a constant borrowing level under the Credit Facility and Second Lien Facility, an increase (decrease) in the interest rate of one percent would result in an increase (decrease) in aggregate interest payments of approximately \$6.0 million on an annual basis, excluding the offsetting impact of our interest rate swap derivatives.

Commodity Price Risk

We produce and sell crude oil, NGLs and natural gas. As a result, our financial results are affected when prices for these commodities fluctuate. Our price risk management programs permit the utilization of derivative financial instruments (such as swaps) to seek to mitigate the price risks associated with fluctuations in commodity prices as they relate to a portion of our anticipated production. The derivative instruments are placed with major financial institutions that we believe to be of acceptable credit risk. The fair values of our derivative instruments are significantly affected by fluctuations in the prices of crude oil. We have not typically entered into derivative instruments with respect to NGLs, although we may do so in the future.

As of March 31, 2020, our commodity derivative portfolio was in a net assets position. The contracts associated with this position are with nine counterparties, all of which are investment grade financial institutions. This concentration may impact our overall credit risk, either positively or negatively, in that these counterparties may be similarly affected by changes in economic or other conditions. We neither paid nor received collateral with respect to our derivative positions.

During the three months ended March 31, 2020, we reported net commodity derivative gains of \$151.1 million. We have experienced and could continue to experience significant changes in the estimate of derivative gains or losses recognized due to fluctuations in the value of our derivative instruments. Our results of operations are affected by the volatility of unrealized gains and losses and changes in fair value, which fluctuate with changes in crude oil, NGL and natural gas prices. These fluctuations could be significant in a volatile pricing environment. See Note 5 to the Condensed Consolidated Financial Statements for a further description of our price risk management activities.

The following table sets forth our commodity derivative positions as of March 31, 2020:

	2Q2020	3Q2020	4Q2020	1Q2021	2Q2021
NYMEX WTI Crude Swaps					
Average Volume Per Day (barrels)	13,209	8,630	9,804	5,000	4,945
Weighted Average Swap Price (\$/barrel)	\$ 52.06	\$ 55.20	\$ 55.18	\$ 51.60	\$ 51.60
NYMEX WTI Purchased Puts/Sold Calls					
Average Volume Per Day (barrels)	5,297	6,891	2,000	4,167	4,121
Weighted Average Purchased Put Price (\$/barrel)	\$ 52.36	\$ 52.97	\$ 48.00	\$ 43.60	\$ 43.60
Weighted Average Sold Call (\$/barrel)	\$ 57.60	\$ 58.03	\$ 57.10	\$ 46.84	\$ 46.84
NYMEX WTI Purchased Puts					
Average Volume Per Day (barrels)	3,297				
Weighted Average Purchased Put (\$/barrel)	\$ 23.00				
Weighted Average Purchased Put Deferred Premium (\$/barrel)	\$ 2.11				
NYMEX WTI Purchased Puts					
Average Volume Per Day (barrels)	8,242				
Weighted Average Purchased Put (\$/barrel)	\$ 30.00				
Weighted Average Purchased Put Deferred Premium (\$/barrel)	\$ 3.19				
NYMEX WTI Put Spread					
Average Volume Per Day (barrels)		5,435			
Weighted Average Put Spread Purchased Put (\$/barrel)		\$ 30.00			
Weighted Average Put Spread Sold Put (\$/barrel)		\$ 20.00			
Weighted Average Put Spread Deferred Premium (\$/barrel)		\$ 1.84			
NYMEX WTI Cap Offset					
Average Volume Per Day (barrels)	3,297				
Weighted Average Cap Offset Purchased Call (\$/barrel)	\$ 57.90				
Weighted Average Cap Offset Deferred Premium (\$/barrel)	\$ 0.10				
NYMEX WTI Sold Puts					
Average Volume Per Day (barrels)	912		5,087	9,167	9,066
Weighted Average Sold Put Price (\$/barrel)	\$ 44.00		\$ 43.50	\$ 37.36	\$ 37.36
MEH Crude Swaps					
Average Volume Per Day (barrels)	2,000	2,000	2,000		
Weighted Average Swap Price (\$/barrel)	\$ 61.03	\$ 61.03	\$ 61.03		
HH Purchased Puts/Sold Calls					
Average Volume Per Day (MMBtu)	12,901	12,804	12,804		
Weighted Average Floor (\$/MMBtu)	\$ 2.00	\$ 2.00	\$ 2.00		
Weighted Average Cap (\$/MMBtu)	\$ 2.21	\$ 2.21	\$ 2.21		

The following table illustrates the estimated impact on the fair values of our derivative financial instruments and operating income attributable to hypothetical changes in the underlying commodity prices. This illustration assumes that crude oil and natural gas prices and production volumes remain constant at anticipated levels. The estimated changes in operating income exclude potential cash receipts or payments in settling these derivative positions.

	Change of 10% per Bbl of Crude Oil (\$ in millions)	
	Increase	Decrease
Effect on the fair value of crude oil derivatives ¹	\$ (17.7)	\$ 17.3
Effect of crude oil price changes for the remainder of 2020 on operating income, excluding derivatives ²	\$ 11.0	\$ (11.0)

¹ Based on derivatives outstanding as of March 31, 2020.

² These sensitivities are subject to significant change.

Item 4. Controls and Procedures.

(a) Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, performed an evaluation of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of March 31, 2020. Our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported on a timely basis and that such information is accumulated and communicated to management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of March 31, 2020, such disclosure controls and procedures were effective.

(b) Changes in Internal Control Over Financial Reporting

During the quarter ended March 31, 2020, there were no changes to our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. OTHER INFORMATION

Item 1. *Legal Proceedings.*

We are not aware of any material pending legal or governmental proceedings against us, any material proceedings by governmental officials against us that are pending or contemplated to be brought against us and no such proceedings have been terminated during the period covered by this quarterly report on Form 10-Q. See Note 12 to our Condensed Consolidated Financial Statements included in Part I, Item 1, "Financial Statements" for additional information regarding our legal and regulatory matters.

Item 1A. *Risk Factors.*

There have been no material changes to the risk factors disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019, with the exception of the following:

The COVID-19 pandemic has adversely affected our business, and the ultimate effect on our business, financial position, results of operations and/or cash flows will depend on future developments, which are highly uncertain and cannot be predicted.

In December 2019, COVID-19 was reported to have surfaced in China. The global spread of this virus has caused business disruptions around the world beginning in January 2020, including disruption to the oil and gas industry. In March 2020, the World Health Organization declared the outbreak of COVID-19 to be a pandemic, and the U.S. economy began to experience pronounced effects. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains, and created significant volatility and disruption of financial and commodity markets. In addition, the pandemic has resulted in travel restrictions, business closures and the institution of quarantining and other restrictions on movement in many communities. As a result, there has been a significant reduction in demand for and prices of oil, NGLs and natural gas. The extent of the impact of the COVID-19 pandemic on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected time frame, is uncertain and depends on various factors, including how the pandemic and measures taken in response to it impact demand for oil, NGLs and natural gas, the availability of personnel, equipment and services critical to our ability to operate our properties and the impact of potential governmental restrictions on travel, transports and operations. There is uncertainty around the extent and duration of the disruption, including any resurgence. The degree to which the COVID-19 pandemic or any other public health crisis adversely impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, its impact on the U.S. and world economies, the U.S. capital markets and market conditions, the availability of federal, state, or local funding programs, and how quickly and to what extent normal economic and operating conditions can resume. The disruption from the current pandemic has had a material adverse impact on our industry, but the degree of the adverse financial impact on us cannot be reasonably estimated at this time.

Prices for commodities including crude oil have experienced significant declines due to the global economic slowdown attributable to the COVID-19 health crisis and disagreements among OPEC+ to resolve differences and to successfully implement plans with respect to curtailing future production.

Prices for WTI crude oil were over \$60 per barrel at the beginning of 2020 and declined to an average of approximately \$16 per barrel during the week ended May 1, 2020. The impact of the global economic slowdown due to COVID-19 and the ongoing challenges attributable to actions of OPEC+ have had an adverse impact on both the supply and demand of crude oil which has led to the steep decline in prices and continued price volatility. If crude oil prices continue to decline or remain at current levels for a prolonged period, it could lead to lack of marketability or lower realized profit for some portion or all of our estimated production resulting in an adverse impact on our revenues, financial position and cash flows and the quantity of estimated proved reserves that may be attributed to our properties may be materially and adversely affected.

As domestic demand for crude oil has declined substantially due to the COVID-19 health crisis, we cannot ensure that there will be a physical market for our production at economic prices until markets stabilize.

As a result of low commodity prices, we have curtailed a portion of our estimated crude oil production and may store rather than sell additional crude oil production in the near future. Additionally, the excess supply of oil could lead to further curtailments. We have contracted for additional storage capacity and will incur incremental costs for such services beginning in the second quarter of 2020. In addition, U.S. storage capacity is expected to be fully subscribed by the end of May 2020. While we believe that the shutting-in of such production will not impact the productivity of such wells when reopened, there is no assurance we will not have a degradation in well performance upon returning those wells to production. The storing or shutting in of a portion of our production can also result in increased costs under our midstream and other contracts. Any of the foregoing could result in an adverse impact on our revenues, financial position and cash flows.

Item 5. *Other Information.*

None.

Item 6.Exhibits.

- (31.1) * Certification Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- (31.2) * Certification Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- (32.1) † Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- (32.2) † Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- (101.INS) * Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- (101.SCH) * Inline XBRL Taxonomy Extension Schema Document
- (101.CAL) * Inline XBRL Taxonomy Extension Calculation Linkbase Document
- (101.DEF) * Inline XBRL Taxonomy Extension Definition Linkbase Document
- (101.LAB) * Inline XBRL Taxonomy Extension Label Linkbase Document
- (101.PRE) * Inline XBRL Taxonomy Extension Presentation Linkbase Document
- (104) * The cover page of Penn Virginia Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, formatted in Inline XBRL (included within the Exhibit 101 attachments).

* Filed
herewith.

† Furnished
herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PENN VIRGINIA CORPORATION

May 8, 2020

By: _____
/s/ RUSSELL T KELLEY, JR.
Russell T Kelley, Jr.
Senior Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)

May 8, 2020

By: _____
/s/ TAMMY L. HINKLE
Tammy L. Hinkle
Vice President and Controller
(Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, John A. Brooks, President and Chief Executive Officer of Penn Virginia Corporation (the "Registrant"), certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of the Registrant (this "Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this Report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - (d) Disclosed in this Report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: May 8, 2020

/s/ JOHN A. BROOKS

John A. Brooks
President and Chief Executive Officer

**CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Russell T Kelley, Jr., Senior Vice President, Chief Financial Officer and Treasurer of Penn Virginia Corporation (the "Registrant"), certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of the Registrant (this "Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this Report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - (d) Disclosed in this Report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: May 8, 2020

/s/ RUSSELL T KELLEY, JR.

Russell T Kelley, Jr.

Senior Vice President, Chief Financial Officer and Treasurer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Penn Virginia Corporation (the "Company") on Form 10-Q for the quarter ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John A. Brooks, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2020

/s/ JOHN A. BROOKS

John A. Brooks
President and Chief Executive Officer

This written statement is being furnished to the Securities and Exchange Commission as an exhibit to the Report. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Penn Virginia Corporation (the "Company") on Form 10-Q for the quarter ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Russell T Kelley, Jr., Senior Vice President, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2020

/s/ RUSSELL T KELLEY, JR.

Russell T Kelley, Jr.

Senior Vice President, Chief Financial Officer and Treasurer

This written statement is being furnished to the Securities and Exchange Commission as an exhibit to the Report. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.