

**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, 2021**
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

Non-accelerated Filer

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 April 30, 2021, there were 37,857,930 shares of common stock and common stock equivalents outstanding, including 15,309,821 shares of common stock and equity with economic and voting power equal to 22,548,109 shares of common stock (as further described in this Quarterly Report on Form 10-Q).

PENN VIRGINIA CORPORATION
QUARTERLY REPORT ON FORM 10-Q
For the Quarterly Period Ended March 31, 2021

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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,	
	2021	2020
Revenues and other		
Crude oil	\$ 81,913	\$ 86,308
Natural gas liquids	3,562	1,893
Natural gas	2,833	2,690
Other operating income, net	247	488
Total revenues and other	88,555	91,379
Operating expenses		
Lease operating	8,825	10,532
Gathering, processing and transportation	4,674	5,444
Production and ad valorem taxes	5,513	6,154
General and administrative	13,177	7,230
Depreciation, depletion and amortization	23,884	40,718
Impairments of oil and gas properties	1,811	—
Total operating expenses	57,884	70,078
Operating income	30,671	21,301
Other income (expense)		
Interest expense	(5,397)	(8,180)
Loss on extinguishment of debt	(1,231)	—
Derivatives	(44,368)	151,119
Other, net	(6)	(8)
Income (loss) before income taxes	(20,331)	164,232
Income tax (expense) benefit	310	(1,138)
Net income (loss)	(20,021)	163,094
Net loss attributable to Noncontrolling interest	6,449	—
Net income (loss) attributable to common shareholders	\$ (13,572)	\$ 163,094
Net income (loss) per share:		
Basic	\$ (0.89)	\$ 10.76
Diluted	\$ (0.89)	\$ 10.76
Weighted average shares outstanding – basic	15,263	15,152
Weighted average shares outstanding – diluted	15,263	15,160

See accompanying notes to condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2021	2020
Net income (loss)	\$ (20,021)	\$ 163,094
Other comprehensive income (loss):		
Change in pension and postretirement obligations, net of tax	2	(1)
	2	(1)
Comprehensive income (loss)	(20,019)	163,093
Net loss attributable to Noncontrolling interest	6,449	—
Other comprehensive income attributable to Noncontrolling interest	(1)	—
Comprehensive income (loss) attributable to common shareholders	\$ (13,571)	\$ 163,093

See accompanying notes to condensed consolidated financial statements.

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

	March 31, 2021	December 31, 2020
Assets		
Current assets		
Cash and cash equivalents	\$ 11,868	\$ 13,020
Accounts receivable, net of allowance for credit losses	66,371	45,849
Derivative assets	13,093	75,506
Prepaid and other current assets	19,547	19,045
Total current assets	110,879	153,420
Property and equipment, net (full cost method)	792,077	723,549
Derivative assets	5,269	25,449
Other assets	4,906	4,908
Total assets	<u>\$ 913,131</u>	<u>\$ 907,326</u>
Liabilities and Equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 99,950	\$ 63,089
Derivative liabilities	44,328	85,106
Current portion of long-term debt	7,500	—
Total current liabilities	151,778	148,195
Deferred income taxes	397	—
Derivative liabilities	14,914	28,434
Other non-current liabilities	8,337	8,362
Long-term debt, net	363,562	509,497
Commitments and contingencies (Note 12)		
Equity		
Preferred stock of \$0.01 par value – 5,000,000 shares authorized; 225,481.09 and none issued at March 31, 2021 and December 31, 2020, respectively	2	—
Common stock of \$0.01 par value – 45,000,000 shares authorized; 15,309,821 and 15,200,435 shares issued as of March 31, 2021 and December 31, 2020, respectively	153	152
Paid-in capital	155,164	203,463
Retained earnings (Accumulated deficit)	(4,218)	9,354
Accumulated other comprehensive loss	(130)	(131)
Noncontrolling interest	223,172	—
Total equity	374,143	212,838
Total liabilities and equity	<u>\$ 913,131</u>	<u>\$ 907,326</u>

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,	
	2021	2020
Cash flows from operating activities		
Net income (loss)	\$ (20,021)	\$ 163,094
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Loss on exchange of debt	1,231	—
Depreciation, depletion and amortization	23,884	40,718
Impairments of oil and gas properties	1,811	—
Derivative contracts:		
Net (gains) losses	44,368	(151,119)
Cash settlements and premiums received (paid), net	(7,169)	(269)
Deferred income tax expense (benefit)	(310)	2,320
Gain on sales of assets, net	(4)	(6)
Non-cash interest expense	611	823
Share-based compensation	2,246	856
Other, net	6	8
Changes in operating assets and liabilities, net	(14,442)	16,048
Net cash provided by operating activities	<u>32,211</u>	<u>72,473</u>
Cash flows from investing activities		
Capital expenditures	(34,758)	(62,015)
Proceeds from sales of assets, net	4	75
Net cash used in investing activities	<u>(34,754)</u>	<u>(61,940)</u>
Cash flows from financing activities		
Proceeds from credit facility borrowings	—	46,000
Repayment of credit facility borrowings	(85,500)	(9,000)
Repayment of second lien term loan	(53,140)	—
Proceeds from redeemable common units	151,160	—
Proceeds from redeemable preferred stock	2	—
Transaction costs paid on behalf of Noncontrolling interest	(5,543)	—
Issue costs paid for Noncontrolling interest securities	(3,758)	—
Debt issuance costs paid	(1,830)	—
Net cash provided by financing activities	<u>1,391</u>	<u>37,000</u>
Net increase (decrease) in cash and cash equivalents	(1,152)	47,533
Cash and cash equivalents – beginning of period	13,020	7,798
Cash and cash equivalents – end of period	<u>\$ 11,868</u>	<u>\$ 55,331</u>
Supplemental disclosures:		
Cash paid for:		
Interest, net of amounts capitalized	\$ 4,888	\$ 7,442
Non-cash investing and financing activities:		
Changes in property and equipment related to capital contributions	\$ (38,415)	\$ —
Changes in asset retirement obligation related to capital contributions	\$ 14	\$ —
Changes in accrued liabilities related to capital expenditures	\$ 20,246	\$ 18,660

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, 2021
(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 focused on 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. A substantial noncontrolling interest in our subsidiaries is provided for in our Condensed Consolidated Statements of Operations and Comprehensive Income as well as our Condensed Consolidated Balance Sheets as of and for the period ended March 31, 2021 (see Note 3 for additional detail including the basis of presentation of the noncontrolling interest). 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, 2020. Operating results for the three months ended March 31, 2021 are not necessarily indicative of the results that may be expected for the year ending December 31, 2021. Certain amounts on the Condensed Consolidated Statements of Operation for the three months ended March 31, 2020 and the Condensed Consolidated Balance Sheet as of December 31, 2020 have been reclassified to conform to the 2021 presentation.

Subsequent Events

Management has evaluated all of our activities through the issuance date of our Condensed Consolidated Financial Statements and has concluded that no subsequent events have occurred that would require recognition or disclosure in our Condensed Consolidated Financial Statements or disclosure in the Notes thereto.

3. Juniper Transactions

On January 15, 2021 (the “Closing Date”), the Company consummated the previously announced transactions (collectively, the “Juniper Transactions”) contemplated by: (i) the Contribution Agreement, dated November 2, 2020 (the “Contribution Agreement”), by and among the Company, PV Energy Holdings, L.P. (the “Partnership”) and JSTX Holdings, LLC (“JSTX”), an affiliate of Juniper Capital Advisors, L.P. (“Juniper Capital” and, together with its affiliates “Juniper”); and (ii) the Contribution Agreement, dated November 2, 2020 (the “Asset Agreement,” and, together with the Contribution Agreement, the “Juniper Transaction Agreements”), by and among Rocky Creek Resources, LLC, an affiliate of Juniper Capital (“Rocky Creek”), the Company and the Partnership.

In connection with the consummation of the Juniper Transactions, the Company completed a reorganization into an up-C structure which is intended to, among other things, result in the holders of the Series A Preferred Stock, par value \$0.01 per share, of the Company (“Series A Preferred Stock”) having a voting interest in the Company that is commensurate with such holders’ economic interest in the Partnership, including (i) the conversion of each of the Company’s corporate subsidiaries into limited liability companies which are disregarded for U.S. federal income tax purposes, including the conversion of Penn Virginia Holding Corp. into Penn Virginia Holdings, LLC, a Delaware limited liability company (“Holdings”), and (ii) the Company’s contribution of all of its equity interests in Holdings to the Partnership in exchange for 15,268,686 newly issued common units representing limited partner interests (the “Common Units”).

On the Closing Date, (i) pursuant to the terms of the Contribution Agreement, JSTX contributed to the Partnership, as a capital contribution, \$50 million in cash in exchange for 17,142,857 newly issued Common Units and the Company issued to JSTX 171,428.57 shares of Series A Preferred Stock at a price equal to the par value of the shares acquired, and (ii) pursuant to the terms of the Asset Agreement, including certain closing adjustments based on a September 1, 2020 effective date (the "Effective Date"), Rocky Creek contributed to our operating subsidiary certain oil and gas assets in exchange for 5,405,252 newly issued Common Units and the Company issued to Rocky Creek 54,052.52 shares of Series A Preferred Stock at a price equal to the par value of the shares acquired, including 495,900 Common Units and 4,959 shares of Series A Preferred Stock placed in an indemnity escrow to support post-closing indemnification claims, 50% of such escrowed amount to be disbursed 180 days after the Closing and the remainder one year after the Closing. In connection with the contribution of the oil and gas assets under the Asset Agreement, we received \$1.2 million of revenues attributable to production from the Rocky Creek assets for the period from December 2020 through the Closing Date.

We incurred a total of \$19.0 million of professional fees, including advisory, legal, consulting fees and other costs in connection with the Juniper Transactions. A total of \$5.0 million were attributable to services and costs incurred and recognized in 2020 as general and administrative expenses ("G&A"). The remaining \$4.0 million of costs were incurred in January 2021 or otherwise incurred contingent upon the closing of the Juniper Transactions, including \$5.5 million of transaction costs incurred by Juniper that were required to be paid by the Company under the Juniper Transaction Agreements as well as \$3.8 million of costs incurred by us related to the issuance of the Series A Preferred Stock and Common Units. Collectively, these amounts were classified as a reduction to the capital contribution on our Consolidated Balance Sheet. The remainder of \$4.7 million, representing professional fees and other costs, has been recognized as a component of G&A in the quarter ended March 31, 2021.

In determining the appropriate accounting for the Partnership and Juniper's interest, we considered the guidance in Accounting Standards Codification ("ASC") 810, *Consolidation*. The Partnership is considered a variable interest entity for which the Company is the primary beneficiary as it has a controlling financial interest in the Partnership and has the power to direct the activities most significant to the Partnership's economic performance, as well as the obligation to absorb losses and receive benefits that are potentially significant. As such, the Partnership is reflected as a consolidated subsidiary in the Condensed Consolidated Financial Statements. The ownership interest in the Partnership held by Juniper (the "Noncontrolling interest") is included in the Condensed Consolidated Balance Sheet as Noncontrolling interest, which is classified within permanent equity. The Noncontrolling interest is classified in permanent equity as it does not meet the definition of a liability under ASC 480, *Distinguishing Liabilities from Equity* and, among other considerations, the Common Units are optionally redeemable by the holder for a fixed number of shares (on a one-for-one basis) on and after July 14, 2021 and there's no fixed or determinable date or fixed or determinable price for redemption; further, while the Common Units may be redeemed with Common Stock or cash, the method of settlement is solely at the discretion of the Company, with the Company having the ability to settle the redemption in shares. Additionally, while the holders of the Series A Preferred Stock, who also own the Common Units, could cause the Non-controlling interest to be redeemed through an event that is not solely within the control of the Company such as a change in control, through their majority voting rights, all holders of equally and more subordinated equity interests in the Company would be entitled to receive the same form of consideration upon such event.

The Noncontrolling interest percentage is based on the proportionate amount of the number of Common Units held by Juniper to the total Common Units outstanding which is also equivalent to the voting power in the Company associated with the Series A Preferred Stock held by Juniper. The Noncontrolling interest was initially measured on the Closing Date as the sum of (i) total Shareholders' equity immediately prior to the closing the Juniper Transactions, (ii) the fair value of Juniper's and Rocky Creek's contributions provided in exchange for Common Units and Series A Preferred Stock (net of the of Juniper transaction costs and securities issuance costs paid by the Company and including the cash received directly by the Company for a portion of the Rocky Creek revenues as discussed above and asset retirement obligations ("AROs") associated with the contributed properties); and (iii) a deferred income tax adjustment attributable to the Juniper Transactions, the total of which was then multiplied by the Noncontrolling interest percentage. The difference between the calculated Noncontrolling interest and the fair value of the consideration received was recorded as a reduction to paid-in capital.

The following table reconciles the initial investment by Juniper and the carrying value of their Noncontrolling interest as of the Closing Date with changes through and as of March 31, 2021:

Cash contribution	\$	150,000
Issue costs paid for Noncontrolling interest securities		(3,758)
Transaction costs paid on behalf of Noncontrolling interest		(5,543)
Fair value of Rocky Creek oil and gas properties contributed		38,415
Revenues received attributable to contributed properties		1,160
Asset retirement obligations of the contributed properties		(14)
Fair value of capital contributions		180,260
Income tax adjustment attributable to the Juniper Transactions		(708)
Total shareholders' equity prior to the Closing Date		205,558
	\$	385,110
Juniper voting power through Series A Preferred Stock		59.6 %
Noncontrolling interest as of the Closing Date	\$	229,620
Net loss attributable to Noncontrolling interest		(6,449)
Other comprehensive income attributable to Noncontrolling interest		1
Noncontrolling interest as of March 31, 2021	\$	223,172

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, 2021	December 31, 2020
Customers	\$ 52,623	\$ 39,672
Joint interest partners	11,270	3,079
Derivative settlements from counterparties	2,835	3,287
Other	7	8
	66,735	46,046
Less: Allowance for credit losses	(364)	(197)
	\$ 66,371	\$ 45,849

Revenue from Contracts with Customers

For the three months ended March 31, 2021, three customers accounted for \$54.1 million, or approximately 61%, of our consolidated product revenues. The revenues generated from these customers during the three months ended March 31, 2021, were \$23.0 million, \$20.1 million and \$11.0 million, or 26%, 23% and 12% of the consolidated total, respectively. For the three months ended March 31, 2020, four customers accounted for \$66.5 million, or approximately 73%, of our consolidated product revenues. As of March 31, 2021 and December 31, 2020, \$23.5 million and \$24.1 million, or approximately 45% and 61%, respectively, of our consolidated accounts receivable from customers was related to these customers. No significant uncertainties exist related to the collectability of amounts owed to us by any of these customers.

Credit Losses and Allowance for Credit Losses

In accordance with our accounting policies, we assess our portfolio of accounts receivable for credit losses by assigning credit risks to receivables originating by portfolio segment type as described below.

Customers. We sell our commodity products to approximately 16 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. 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 those receivables originated during the three months ended March 31, 2021.

Mutual Operators. As of March 31, 2021, we had mutual joint interest partner relationships with two upstream producers that also operate properties for which we have non-operated working interests. We have assessed receivables from these operators that originated in the three months ended March 31, 2021 with a five percent risk.

Large Partners. As of March 31, 2021, five legal entities had working interests of 10 percent or greater in properties that we operate. These entities are primarily passive investors. We have assessed receivables from these entities that originated in the three months ended March 31, 2021 with a two percent risk.

All Others. As of March 31, 2021, approximately 15 legal entities had working interests of less than 10 percent in properties that we operate. We have assessed receivables from these entities that originated in the three months ended March 31, 2021 with a 10 percent risk. As of March 31, 2021 and December 31, 2020, approximately \$0.2 million of accounts receivables attributable to this portfolio segment was past due, or over 60 days. In addition, the derivative settlements from counterparties referenced in the table above have been assessed zero risk. Collectability from these counterparties is discussed further in Note 5.

As of March 31, 2021 and December 31, 2020, the allowance for credit losses is entirely attributable to receivables from joint interest partners. The following table summarizes the activity in our allowance for credit losses, by portfolio segment, for the three months ended March 31, 2021:

	Mutual Operators	Large Partners	All Others	Total
Balance at beginning of period	\$ 9	\$ 87	\$ 101	\$ 197
Provision for expected credit losses	(7)	202	(28)	167
Write-offs and recoveries	—	—	—	—
Balance at end of period	\$ 2	\$ 289	\$ 73	\$ 364

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, NYMEX Henry Hub (“NYMEX HH”) natural gas and OPIS Mt. Belvieu Ethane (“OPIS Mt Belv Ethane”) natural gas liquids 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, 2021:

	2Q2021	3Q2021	4Q2021	1Q2022	2Q2022	3Q2022	4Q2022	1Q2023	2Q2023
NYMEX WTI Crude Swaps									
Average Volume Per Day (bbl)	3,297	815	815						
Weighted Average Swap Price (\$/bbl)	\$ 55.89	\$ 45.54	\$ 45.54						
NYMEX WTI Crude Collars									
Average Volume Per Day (bbl)	12,088	10,870	8,152	5,417	4,533	4,484	4,484	2,917	2,855
Weighted Average Purchased Put Price (\$/bbl)	\$ 43.82	\$ 41.80	\$ 40.40	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	40.00	40.00
Weighted Average Sold Call Price (\$/bbl)	\$ 54.67	\$ 56.09	\$ 52.10	\$ 53.49	\$ 52.47	\$ 52.47	\$ 52.47	50.00	50.00
NYMEX WTI Sold Puts									
Average Volume Per Day (bbl)	4,945	5,707	5,707						
Weighted Average Sold Put Price (\$/bbl)	\$ 29.83	\$ 35.14	\$ 35.14						
NYMEX WTI Crude CMA Roll Basis Swaps									
Average Volume Per Day (bbl)	18,132	17,935	17,935						
Weighted Average Swap Price (\$/bbl)	\$ 0.17	\$ 0.17	\$ 0.17						
NYMEX HH Collars									
Average Volume Per Day (MMBtu)	9,890	9,783	9,783						
Weighted Average Purchased Put Price (\$/MMBtu)	\$ 2.607	\$ 2.607	\$ 2.607						
Weighted Average Sold Call Price(\$/MMBtu)	\$ 3.117	\$ 3.117	\$ 3.117						
NYMEX HH Sold Puts									
Average Volume Per Day (MMBtu)	6,593	6,522	6,522						
Weighted Average Sold Put Price (\$/MMBtu)	\$ 2.000	\$ 2.000	\$ 2.000						
OPIS Mt Belv Ethane Swaps									
Average Volume per Day (gal)	36,264	35,870							
Weighted Average Fixed Price (\$/gal)	\$ 0.2263	\$ 0.2288							

Interest Rate Derivatives

We have a series of interest rate swap contracts (the “Interest Rate Swaps”) establishing fixed interest rates on a portion of our variable interest rate indebtedness under the credit agreement (the “Credit Facility”) and the 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 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. Derivative contracts that have expired at the end of a period, but for which cash had not been received or paid as of the balance sheet date, have been recognized as components of “Accounts receivable” (see Note 4) and “Accounts payable and accrued liabilities” (see Note 10) on the Condensed Consolidated Balance Sheets. 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 and premiums received (paid), net.”

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

	Three Months Ended March 31,	
	2021	2020
Interest rate swap gains (losses) recognized in the Condensed Consolidated Statements of Operations	\$ 32	\$ (6,683)
Commodity gains (losses) recognized in the Condensed Consolidated Statements of Operations	(44,400)	157,802
	<u>\$ (44,368)</u>	<u>\$ 151,119</u>
Interest rate cash settlements recognized in the Condensed Consolidated Statements of Cash Flows	\$ (922)	\$ 68
Commodity cash settlements and premiums received (paid) recognized in the Condensed Consolidated Statements of Cash Flows	(6,247)	(337)
	<u>\$ (7,169)</u>	<u>\$ (269)</u>

The following table summarizes the fair values of our derivative instruments, which we elect to present 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, 2021		December 31, 2020	
		Derivative	Derivative	Derivative	Derivative
		Assets	Liabilities	Assets	Liabilities
Interest rate contracts	Derivative assets/liabilities - current	\$ —	\$ 3,730	\$ —	\$ 3,655
Commodity contracts	Derivative assets/liabilities - current	13,093	40,598	75,506	81,451
Interest rate contracts	Derivative assets/liabilities - noncurrent	—	615	—	1,645
Commodity contracts	Derivative assets/liabilities - noncurrent	5,269	14,299	25,449	26,789
		<u>\$ 18,362</u>	<u>\$ 59,242</u>	<u>\$ 100,955</u>	<u>\$ 113,540</u>

As of March 31, 2021, we reported net commodity derivative liabilities of \$6.5 million and net Interest Rate Swap liabilities of \$4.3 million. The contracts associated with these positions are with seven 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, 2021	December 31, 2020
Oil and gas properties:		
Proved	\$ 1,626,435	\$ 1,545,910
Unproved	63,489	49,935
Total oil and gas properties	1,689,924	1,595,845
Other property and equipment	27,796	27,746
Total properties and equipment	1,717,720	1,623,591
Accumulated depreciation, depletion and amortization	(925,643)	(900,042)
	\$ 792,077	\$ 723,549

Unproved property costs of \$63.5 million and \$49.9 million have been excluded from amortization as of March 31, 2021 and December 31, 2020, respectively. An additional \$0.5 million and \$1.2 million of costs, associated with wells in-progress for which we had not previously recognized any proved undeveloped reserves, were excluded from amortization as of March 31, 2021 and December 31, 2020, respectively. We transferred \$7.6 million and \$1.4 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, 2021 and 2020, respectively. We capitalized internal costs of \$0.7 million and \$0.8 million and interest of \$0.8 million and \$0.7 million during the three months ended March 31, 2021 and 2020, respectively, in accordance with our accounting policies. Average depreciation, depletion and amortization per barrel of oil equivalent of proved oil and gas properties was \$12.92 and \$16.73 for the three months ended March 31, 2021 and 2020, 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 after-tax discounted future net revenues from proved properties adjusted for costs excluded from amortization (the "Ceiling Test"). As of March 31, 2021, the carrying value of our proved oil and gas properties exceeded the limit determined by the Ceiling Test, resulting in a \$1.8 million impairment for the quarter.

7. Long-Term Debt

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

	March 31, 2021		December 31, 2020	
	Principal	Unamortized Discount and Deferred Issuance Costs ^{1,2}	Principal	Unamortized Discount and Deferred Issuance Costs ^{1,2}
Credit facility	\$ 228,900		\$ 314,400	
Second lien term loan	146,860	\$ 4,698	200,000	\$ 4,903
Totals	375,760	\$ 4,698	514,400	\$ 4,903
Less: Unamortized discount ²	(1,096)		(1,604)	
Less: Unamortized deferred issuance costs ^{1,2}	(3,602)		(3,299)	
Totals, net	\$ 371,062		\$ 509,497	
Less: Current portion	(7,500)		—	
Long-term debt	\$ 363,562		\$ 509,497	

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

The Credit Facility provides for a \$1.0 billion revolving commitment and a \$375 million borrowing base, including a \$25 million sublimit for the issuance of letters of credit. Availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base; however, outstanding borrowings under the Credit Facility are limited to a maximum of \$350 million. The borrowing base under the Credit Facility is redetermined semi-annually, generally in the Spring and Fall of each year. Additionally, we and the Credit Facility lenders generally may, upon request, initiate a redetermination at any time during the six-month period between scheduled redeterminations. However, we have the option to forego a redetermination until Fall 2021 assuming we continue to satisfy certain minimum hedging conditions that became effective with the Agreement and Amendment No. 9 to Credit Agreement (the “Ninth Amendment”) in January 2021. The Credit Facility is available to us for general corporate purposes, including working capital. The Credit Facility is scheduled to mature in May 2024. We had \$0.4 million in letters of credit outstanding as of March 31, 2021 and December 31, 2020. During the three months ended March 31, 2021, we incurred and capitalized approximately \$0.4 million of issue costs associated with the Ninth Amendment.

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%, 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%, 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, 2021, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 3.11%. Unused commitment fees are charged at a rate of 0.50%.

The Credit Facility is guaranteed by the Partnership and all of its subsidiaries (excluding the borrower subsidiary) (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 the ability of the borrower 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 subsidiaries’ 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, (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 and (3) a maximum first lien leverage ratio (consolidated secured 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 2.50 to 1.00.

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 events of default and remedies. 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, 2021, we were in compliance with all of the covenants under the Credit Facility.

Second Lien Facility

We entered into the \$200 million Second Lien Facility in September 2017 at which time we received proceeds of \$187.8 million, net of an original issue discount (“OID”) of \$4.0 million and issue costs of \$8.2 million, that were used to fund a significant acquisition and related fees and expenses. In January 2021, the amendment dated November 2, 2020 (the “Second Lien Amendment”) became effective at which time we made a \$50 million prepayment as well as a \$1.3 million principal payment to a single participant lender to liquidate their interest in the Second Lien Facility. The Second Lien Amendment provided for (i) the extension of the maturity date of the Second Lien Facility to September 29, 2024, (ii) an increase to the margin applicable to advances under the Second Lien Facility, (iii) the imposition of certain limitations on capital expenditures, acquisitions and investments if the Asset Coverage Ratio (as defined therein) at the end of any fiscal quarter is less than 1.25 to 1.00, (iv) the requirement for maximum and, in certain circumstances as described therein, minimum hedging arrangements, (v) beginning in 2021, a requirement to make quarterly amortization payments equal to \$1.875 million and (vi) a provision for the

replacement of the LIBOR interest rate upon its expiration. We incurred and capitalized \$1.4 million of issue costs in connection with the Second Lien Amendment and wrote off \$1.2 million of previously capitalized issue costs and OID allocable to the aforementioned prepayments as a loss on the extinguishment of debt.

The outstanding borrowings under the Second Lien Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate plus an applicable margin of 7.25% or (b) a Eurodollar rate, including LIBOR through 2021, with a floor of 1.00%, plus an applicable margin of 8.25%; provided that the applicable margin will increase to 8.25% and 9.25%, respectively, during any quarter in which the quarterly amortization payment is not made. As of March 31, 2021, the actual interest rate of outstanding borrowings under the Second Lien Facility was 9.25%. 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 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 Eurodollar loans): from January 15, 2021 through January 14, 2022, 102% of the amount being prepaid; from January 15, 2022 through January 14, 2023, 101% of the amount being prepaid; and thereafter, no premium. The Second Lien Facility also provides for the following 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: from January 15, 2021 through January 14, 2022, 102% of the amount being prepaid; from January 15, 2023 through January 14, 2023, 101% of the amount being prepaid; and thereafter, no premium.

The Second Lien Facility is collateralized by substantially all of the Partnership'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 the Partnership and the Guarantor Subsidiaries.

The Second Lien Facility has no financial covenants, but contains 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), limitations on capital expenditures, investments, the incurrence of liens and indebtedness, merger, consolidation or sale of assets, payment of dividends and transactions with affiliates and other customary covenants.

As of March 31, 2021, we were in compliance with all of the covenants under the Second Lien Facility.

8. Income Taxes

The income tax provision for the three months ended March 31, 2021 resulted in a benefit of \$0.3 million. The federal portion was fully offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of 1.5%, which is fully attributable to the State of Texas. In connection with the Juniper Transactions, we recorded an adjustment of \$0.7 million to "Paid-in capital" (see Note 3) attributable to certain state deferred income tax effects associated with the change in legal entity structure. Our net deferred income tax liability balance of \$0.4 million as of March 31, 2021 is also fully attributable to the State of Texas and primarily related to property.

We recognized a federal and state income tax expense for the three months ended March 31, 2020 of \$1.1 million. 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 was fully attributable to the State of Texas. The provision also reflected a reclassification of \$1.2 million from deferred tax assets to current income taxes receivable for certain refundable alternative minimum tax credit carryforwards that were later received in June 2020.

We had no liability for unrecognized tax benefits as of March 31, 2021. There were no interest and penalty charges recognized during the periods ended March 31, 2021 and 2020. 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

We generally have lease arrangements for office facilities and certain office equipment, certain field equipment including compressors, drilling rigs, crude oil storage tank capacity, 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, crude oil storage tank capacity and our field compressors. 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,	
	2021	2020
Operating lease cost	\$ 216	\$ 210
Short-term lease cost	2,752	11,296
Variable lease cost	4,874	5,657
Less: Amounts charged as drilling costs ¹	(2,082)	(10,621)
Total lease cost recognized in the Condensed Consolidated Statement of Operations ²	<u>\$ 5,760</u>	<u>\$ 6,542</u>

¹ Represents the combined gross amounts incurred 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 \$2.2 million and \$2.8 million recognized in Gathering, processing and transportation expense ("GPT"), \$ 3.3 million and \$3.5 million recognized in Lease operating expense ("LOE") for the three months ended March 31, 2021 and 2020, respectively, and \$0.2 million recognized in G&A for each of the three months ended March 31, 2021 and 2020.

10. Supplemental Balance Sheet Detail

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

	March 31, 2021	December 31, 2020
Prepaid and other current assets:		
Inventories ¹	\$ 4,036	\$ 4,274
Prepaid expenses ²	15,511	14,771
	<u>\$ 19,547</u>	<u>\$ 19,045</u>
Other assets:		
Deferred issuance costs of the Credit Facility, net of amortization	\$ 2,542	\$ 2,349
Right-of-use assets – operating leases	2,237	2,432
Other	127	127
	<u>\$ 4,906</u>	<u>\$ 4,908</u>
Accounts payable and accrued liabilities:		
Trade accounts payable	\$ 29,137	\$ 7,055
Drilling and other lease operating costs	18,002	16,088
Royalties	34,223	26,615
Production, ad valorem and other taxes	5,242	3,094
Derivative settlements to counterparties	8,773	321
Compensation	2,270	4,222
Interest	401	504
Current operating lease obligations	894	936
Other ³	1,008	4,254
	<u>\$ 99,950</u>	<u>\$ 63,089</u>
Other liabilities:		
Asset retirement obligations	\$ 5,648	\$ 5,461
Noncurrent operating lease obligations	1,553	1,752
Defined benefit pension obligations	845	865
Postretirement health care benefit obligations	291	284
	<u>\$ 8,337</u>	<u>\$ 8,362</u>

¹ Includes tubular inventory and well materials of \$ 3.3 million and \$ 3.9 million and crude oil volumes in storage of \$ 0.7 million and \$ 0.4 million as March 31, 2021 and December 31, 2020, respectively.

² The balances as of March 31, 2021 and December 31, 2020 include \$ 13.9 million and \$ 13.6 million for the prepayment of drilling and completion materials and services, respectively.

³ The balance as of December 31, 2020 includes \$ 3.5 million of accrued costs attributable to Juniper Transaction expenses.

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, 2021 and December 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	As of March 31, 2021			
	Fair Value Measurement	Fair Value Measurement Classification		
		Level 1	Level 2	Level 3
Assets:				
Commodity derivative assets – current	\$ 13,093	\$ —	\$ 13,093	\$ —
Commodity derivative assets – noncurrent	\$ 5,269	\$ —	\$ 5,269	\$ —
Liabilities:				
Interest rate swap liabilities – current	\$ (3,730)	\$ —	\$ (3,730)	\$ —
Interest rate swap liabilities – noncurrent	\$ (615)	\$ —	\$ (615)	\$ —
Commodity derivative liabilities – current	\$ (40,598)	\$ —	\$ (40,598)	\$ —
Commodity derivative liabilities – noncurrent	\$ (14,299)	\$ —	\$ (14,299)	\$ —

Description	As of December 31, 2020			
	Fair Value Measurement	Fair Value Measurement Classification		
		Level 1	Level 2	Level 3
Assets:				
Commodity derivative assets – current	\$ 75,506	\$ —	\$ 75,506	\$ —
Commodity derivative assets – noncurrent	\$ 25,449	\$ —	\$ 25,449	\$ —
Liabilities:				
Interest rate swap liabilities – current	\$ (3,655)	\$ —	\$ (3,655)	\$ —
Interest rate swap liabilities – noncurrent	\$ (1,645)	\$ —	\$ (1,645)	\$ —
Commodity derivative liabilities – current	\$ (81,451)	\$ —	\$ (81,451)	\$ —
Commodity derivative liabilities – noncurrent	\$ (26,789)	\$ —	\$ (26,789)	\$ —

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, 2021 and 2020.

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, NYMEX HH natural gas and OPIS Mt Belv Ethane natural gas liquids 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 which discounts future cash flows back to a single present 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

In addition to the fair value measurements applied with respect to assets contributed in the Juniper Transactions, 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 and certain share-based compensation awards. 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

As of March 31, 2021, we had contractual commitments on a pad-to-pad basis for two drilling rigs. Additionally, we have an agreement, effective January 2, 2021, which can be terminated with 30 days' notice by either party, to utilize certain frac services and related materials, with no minimum commitment, through December 31, 2021. In March 2021, we made a prepayment of \$12 million under the frac services agreement in advance of completion projects for the second quarter of 2021.

Gathering and Intermediate Transportation Commitments

We have long-term agreements with 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 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. We are obligated to deliver the first 20,000 gross barrels of oil per day produced from Gonzales, Lavaca, Fayette and DeWitt Counties, Texas.

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, 2021 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, transportation and marketing agreements are as follows: \$10.5 million for the remainder of 2021, approximately \$13.9 million per year for 2022 through 2025, \$7.8 million for 2026, \$3.8 million per year for 2027 through 2030 and \$0.6 million for 2031.

Crude Oil Storage

As a component of the crude oil gathering agreement referenced above, we have access to up to approximately 180,000 barrels of dedicated tank capacity for no additional charge at the service provider's central delivery point facility ("CDP"), in Lavaca County, Texas through February 2041. We have also contracted for access to up to an additional 70,000 barrels of tank capacity at the CDP on a month-to-month basis which can be terminated by either party with 45-days' notice to the counterparty. We have also contracted for crude oil storage capacity for up to 90,000 barrels with a downstream interstate pipeline at a facility in DeWitt County, Texas, on a month-to-month basis which can be terminated by either party with 45-days' notice to the counterparty. Finally, we have an agreement with a marketing affiliate of the aforementioned downstream interstate pipeline to utilize up to 62,000 barrels of capacity within their system on a firm basis and an additional 20,000 barrels, if available, on a flexible basis through July 2021. Costs associated with these agreements are in the form of monthly fixed rate short-term leases and are charged as incurred on a monthly basis to GPT.

Legal, Environmental Compliance and Other Claims

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, 2021, we had AROs of approximately \$5.6 million attributable to the plugging of abandoned wells. As of March 31, 2021, we had an estimated reserve of approximately \$0.1 million for certain claims made against us regarding previously divested operations included in "Accounts payable and accrued liabilities."

13. Equity

The following tables summarize the components of equity and the changes therein as of and for the quarterly periods in 2021 and 2020.

	Preferred Stock	Common Stock	Paid-in Capital	Retained Earnings/(Accumulated Deficit)	Accumulated Other Comprehensive Loss	Noncontrolling interest	Total Equity
Balance as of December 31, 2020	\$ —	\$ 152	\$ 203,463	\$ 9,354	\$ (131)	\$ —	\$ 212,838
Net loss	—	—	—	(13,572)	—	(6,449)	(20,021)
Issuance of preferred stock	2	—	—	—	—	—	2
Issuance of Noncontrolling interest	—	—	(50,068)	—	—	229,620	179,552
All other changes ¹	—	1	1,769	—	1	1	1,772
Balance as of March 31, 2021	<u>\$ 2</u>	<u>\$ 153</u>	<u>\$ 155,164</u>	<u>\$ (4,218)</u>	<u>\$ (130)</u>	<u>\$ 223,172</u>	<u>\$ 374,143</u>

¹ Includes equity-classified share-based compensation of \$2.2 million during the three months ended March 31, 2021. During the three months ended March 31, 2021, 102,586 and 6,800 shares of common stock were issued in connection with the vesting of certain time-vested restricted stock units ("RSUs") and performance restricted stock units ("PRSUs"), net of shares withheld for income taxes.

	Common Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total 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	<u>\$ 152</u>	<u>\$ 201,222</u>	<u>\$ 483,005</u>	<u>\$ (60)</u>	<u>\$ 684,319</u>

¹ Attributable to the adoption of Accounting Standards Update 2016-13, *Measurement of Credit Losses on Financial Instruments*, as of January 1, 2020.

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 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 4,424,600 shares of common stock for issuance under the Penn Virginia Corporation Management Incentive Plan (the “Plan”) for share-based compensation awards. A total of 608,938 RSUs and 201,491 PRSUs have been granted to employees and directors under the Plan through March 31, 2021. Additionally, in the third quarter of 2020 and first quarter of 2021, 57,500 and 24,200 RSUs and 57,500 and 24,200 PRSUs, respectively, were issued outside the Plan to Mr. Henke and to Ms. Gwaltney as an inducement awards upon their appointments as President and CEO and Senior Vice President, Development, respectively. As of March 31, 2021, a total of 209,486 RSUs and 150,512 PRSUs are unvested and outstanding.

We recognized \$2.2 million, including approximately \$1.9 million as a result of change-in-control event associated with the Juniper transactions, and \$0.9 million of expense attributable to the RSUs and PRSUs for the three months ended March 31, 2021 and 2020, respectively

A total of 48,641 RSUs were granted during the three months ended March 31, 2021 with an average grant-date fair value of \$3.69. 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. The RSUs are being charged to expense on a straight-line basis over a range of less than one to three years. In the three months ended March 31, 2021 and 2020, 102,586 and 22,321 shares were issued upon vesting/settlement of RSUs, net of shares withheld for income taxes, respectively.

During the three months ended March 31, 2021, 24,200 PRSUs were granted. A total of 87,899 PRSUs were granted during the three months ended March 31, 2020. For the PRSUs granted in 2019 and March 2020, the performance period is 2020 through 2022. The performance period for Mr. Henke’s September 2020 PRSU inducement grant and Ms. Gwaltney’s January 2021 grant is 2021 through 2023. 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 a defined peer group. Due to their market condition, the PRSUs are being charged to expense using graded vesting over a maximum of three years. The fair value of each PRSU award was estimated on their applicable grant date using a Monte Carlo simulation with \$34.02 per PRSU for the 2019 grants, a range of \$2.40 to \$16.02 per PRSU for the 2020 grants and \$21.82 per PRSU for the 2021 grant. In the three months ended March 31, 2021, 6,800 shares were issued upon settlement of PRSUs, net of shares withheld for income taxes.

The ranges for the assumptions used in the Monte Carlo model for the PRSUs granted during 2021, 2020 and 2019 are presented as follows:

	2021	2020	2019
Expected volatility	126.2 %	101.32% to 117.71%	49.9 %
Dividend yield	0.0 %	0.0 %	0.0 %
Risk-free interest rate	0.22 %	0.18% to 0.51%	1.66 %

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 and \$0.2 million of expense attributable to the 401(k) Plan for the three months ended March 31, 2021 and 2020, 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 January 1, 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, 2021 and 2020. 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,	
	2021	2020
Interest on borrowings and related fees	\$ 5,632	\$ 8,045
Accretion of original issue discount ¹	105	196
Amortization of debt issuance costs	506	627
Capitalized interest	(846)	(688)
	<u>\$ 5,397</u>	<u>\$ 8,180</u>

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

16. Earnings per Share

Basic net earnings (loss) per share is calculated by dividing the net income (loss) available to common shareholders (excluding net income or loss attributable to Noncontrolling interest, as applicable to the three months ended March 31, 2021; see Note 3) by the weighted average common shares outstanding for the period.

In computing diluted earnings (loss) per share, basic net earnings (loss) per share is adjusted based on the assumption that dilutive RSUs and PBRsUs have vested and outstanding Common Units and shares of Series A Preferred Stock held by Juniper as a Noncontrolling interest are exchanged for common shares, as applicable to the three months ended March 31, 2021 (see Note 3).

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,	
	2021	2020
Net income (loss)	\$ (20,021)	\$ 163,094
Net income (loss) attributable to Noncontrolling interest	6,449	—
Net income (loss) attributable to common shareholders - basic	(13,572)	163,094
Reallocation of Noncontrolling interest assuming exchange of Common Units and Series A Preferred Stock held by Noncontrolling interest	(6,449)	—
Net income (loss) attributable to common shareholders - diluted	<u>\$ (20,021)</u>	<u>\$ 163,094</u>
Weighted-average shares – basic	15,263	15,152
Effect of dilutive securities:		
Common Units and Series A Preferred Stock that are exchangeable for common shares	—	—
RSUs and PRSUs	—	8
Weighted-average shares – diluted ¹	<u>15,263</u>	<u>15,160</u>

¹ For the three months ended March 31, 2021, approximately 22.7 million potentially dilutive securities represented by approximately 22.5 million Common Units and 0.2 million shares of Series A Preferred Stock as well as 0.2 million of RSUs and PRSUs, respectively, 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:

- risks related to the recently completed transactions with Juniper and its affiliates, including the risk that the benefits of the transactions may not be fully realized or may take longer to realize than expected, and that management attention will be diverted to transaction-related issues;
- risks related to completed acquisitions, including our ability to realize their expected benefits;
- 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;
- the impact of the COVID-19 pandemic, including reduced demand for oil and natural gas, economic slowdown, governmental actions, stay-at-home orders, interruptions to our operations or our customer’s operations;
- risks related to and the impact of actual or anticipated other world health events;
- risks related to acquisitions and dispositions, including our ability to realize their expected benefits;
- our ability to satisfy our short-term and long-term liquidity needs, including our ability 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;
- our ability to access capital, including through lending arrangements and the capital markets, as and when desired;
- 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;
- changes to our drilling and development program;
- 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 periodic 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, 2020.

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. Certain statistics for the period ended March 31, 2020 have been reclassified to conform to the 2021 presentation. References to "quarters" represent the three months ended March 31, 2021 or 2020, as applicable.

Overview

We are an independent oil and gas company focused on the onshore exploration, development and production of crude 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 in Gonzales, Lavaca, Fayette and DeWitt Counties in South Texas.

Industry Environment and Recent Operating and Financial Highlights

Commodity Price and Other Economic Conditions

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 had an adverse effect on global economic activity with the impact of travel restrictions, business closures, limitations to person-to-person contact and the institution of quarantining and other restrictions on movement in many communities. The slowdown in global economic activity attributable to COVID-19 resulted in a dramatic decline in the demand for energy beginning in March 2020, which directly impacted our industry and the Company. While we have seen a relative improvement in global market stability, a return to pre-COVID 19 levels of economic activity remains uncertain in its magnitude and eventual timing.

In addition, global crude oil prices experienced a collapse starting in early March 2020 as a result of the dual impact of demand deterioration and market oversupply caused by disagreements between the Organization of the Petroleum Exporting Countries ("OPEC") and Russia (together with OPEC, collectively "OPEC+") with respect to production curtailments. OPEC+ ultimately agreed to specific adjustments to production in the Spring of 2020 which, for the most part, held for the remainder of the year and were supplemented by additional voluntary downward adjustments, led primarily by Saudi Arabia. Collectively these curtailments contributed to a relative stabilization of commodity prices and rebalancing of the global crude oil markets by the end of 2020. However, there remains a high level of uncertainty regarding the volatility of energy supply and demand as OPEC+ announced on April 1, 2021 that it would be easing existing limits on production beginning in May.

The combined effect of COVID-19 and the continuing energy industry instability led to significant volatility in NYMEX West Texas Intermediate ("NYMEX WTI") crude oil prices throughout 2020 and first quarter 2021. In the beginning of January 2020, crude oil prices were approximately \$62 per barrel ("bbl") but declined rapidly to end first quarter 2020 at approximately \$20 per bbl, a decrease of approximately 68 percent during the quarter. Prices began to increase and modestly stabilized following the implementation of the aforementioned OPEC+ production curtailments, as well as proactive economic relief efforts in many countries, including the United States and crude oil ended 2020 at approximately \$48 per bbl. In first quarter 2021 the rebound and stabilization continued, with crude oil averaging approximately \$58 per bbl for the quarter.

NYMEX Henry Hub ("NYMEX HH") pricing was also impacted by COVID-19 and the overall industry instability noted above, as well as by the colder-than-normal weather during first quarter 2021 that affected most of the Lower 48 states and caused significant natural gas supply and demand imbalances, particular in February 2021. During the three months ended March 31, 2021, NYMEX HH reached a high of \$23.61 per MMBtu and a low of \$2.38 per MMBtu compared to a high of \$2.12 per MMBtu and a low of \$1.63 per MMBtu during the three months ended March 31, 2020.

Our crude oil production is sold at a premium or deduct differential to the prevailing NYMEX WTI Price. The differential reflects adjustments for location, quality and transportation and gathering costs, as applicable. Historically, our crude oil volume sold was largely priced using either Light Louisiana Sweet ("LLS"), or Magellan East Houston ("MEH") grade differentials; however, in 2020 our contracts continued to shift more heavily to MEH pricing and by year-end 2020 we were selling all of our crude oil volumes under MEH pricing contracts. While both LLS and MEH have historically been at a premium to NYMEX WTI, LLS has had a more favorable differential than MEH. During the three months ended March 31, 2021, the average differential for NYMEX WTI versus MEH was a premium of approximately \$1.37 per bbl, compared to a premium of approximately \$2.04 per bbl and \$1.85 per bbl for NYMEX WTI versus MEH and LLS, respectively, for the same period in 2020. During the first quarter 2020 our realized crude oil price was a slight premium to NYMEX WTI of \$0.12 but

sold at a discount of \$2.38 for the three months ended March 31, 2021 primarily as a result of shifting fully to MEH pricing, as well as the narrowing of the MEH differential to NYMEX WTI.

Natural gas prices vary by region and locality, depending upon the distance to markets, availability of pipeline capacity, and supply and demand relationships in that region or locality. Similar to crude oil, our natural gas production price has a premium or deduct differential to the prevailing NYMEX HH price primarily due to differential adjustments for the location and the energy content of the natural gas. Location differentials result from variances in natural gas transportation costs based on the proximity of the natural gas to its major consuming markets that correspond with the ultimate delivery point as well as individual interaction of supply and demand. Our realized natural gas prices of \$2.80 and \$1.83 per Mcf sold at discounts to NYMEX HH of \$0.58 and \$0.05 per MMBtu for the three months ended March 31, 2021 and 2020, respectively.

A summary of these pricing differentials in tabular form is provided in the discussion of “*Results of Operations – General and Administrative*” that follows.

Capital Expenditures and Development Progress

We are operating two drilling rigs and during the three months ended March 31, 2021, incurred capital expenditures of approximately \$54.1 million with 99 percent directed to drilling and completion projects through which a total of 13 gross (11.5 net) wells were drilled, completed and turned to sales.

Sequential Quarterly Analysis

The following summarizes our key operating and financial highlights for the three months ended March 31, 2021, with comparison to the three months ended December 31, 2020 as presented in the table that follows. The year-over-year highlights for the quarterly periods ended March 31, 2021 and 2020 are addressed in further detail in the discussions for *Financial Condition* and *Results of Operations* that follow.

- Daily sales volume declined marginally to 20,534 barrels of oil equivalent (“boe”) per day from 21,502 boe per day due primarily to the effect of natural well declines, as well as the impacts of Winter Storm Uri that occurred in February 2021 that resulted in shut-ins of our wells for a portion of several days during the month. The declines were partially offset by new wells turned to sales during the three months ended March 31, 2021. Total sales volume decreased seven percent to 1,848 thousand barrels of oil equivalent (“Mboe”) from 1,978 Mboe due primarily to the impact of the aforementioned natural well declines.
- Product revenues increased 33 percent to \$88.3 million from \$66.5 million due primarily to 41 percent higher crude oil prices, or \$23.7 million, partially offset by five percent lower crude oil sales volume, or \$2.7 million. NGL revenues were 34 percent higher due to 58 percent higher prices, or \$1.3 million partially offset by 15 percent lower sales volume, or \$0.4 million. Natural gas revenues were essentially unchanged with offsetting amounts from higher pricing and lower sales volume.
- Production and lifting costs (consisting of Lease operating expenses (“LOE”) and Gathering, processing and transportation expenses (“GPT”)) decreased on an absolute basis to \$13.5 million from \$14.8 million and declined on a per unit basis to \$7.31 per boe from \$7.49 per boe. Contributing to this decline were lower chemicals, water disposal, repairs and maintenance and contract labor costs primarily associated with the lower crude oil sales volume, partially offset by higher gas lift and natural gas gathering costs.
- Production and ad valorem taxes increased on an absolute and per unit basis to \$5.5 million and \$2.98 per boe from \$3.5 million and \$1.75 per boe, respectively, due to the overall effects of 42 percent higher aggregate realized product pricing partially offset by lower than anticipated ad valorem tax assessments.
- General and administrative (“G&A”) expenses increased on an absolute and per unit basis to \$13.2 million and \$7.13 per boe from \$10.0 million and \$5.05 per boe, respectively, due primarily to: (i) \$1.9 million of costs associated with share-based compensation awards whose vesting was accelerated by the Juniper Transactions, (ii) \$0.2 million of higher transaction costs associated with the Juniper Transactions in the three month period in 2021, (iii) \$0.2 million of executive restructuring charges including severance costs and termination benefits and (iv) \$0.4 million of higher employee benefits costs in the three month period in 2021.
- Depreciation, depletion and amortization (“DD&A”) decreased to \$23.9 million and \$12.92 per boe during the first quarter of 2021 as compared to \$25.8 million and \$13.03 per boe during the fourth quarter of 2020 due primarily to the lower depletion rate attributable to the impairment recorded in the fourth quarter of 2020.
- We recorded an impairment of our oil and gas properties of \$1.8 million during the first quarter of 2021 and \$120.3 million in the fourth quarter of 2020 as the unamortized cost of our oil and gas properties, net of deferred income taxes, exceeded the sum of our estimated after-tax discounted future net revenues from proved properties adjusted for costs excluded from amortization (the “Ceiling Test”).
- Due to the combined impact of the matters noted in the bullets above, we recorded operating income of \$30.7 million in the first quarter of 2021 compared to an operating loss of \$107.4 million in fourth quarter of 2020.

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,
	2021	2020	2020
Total sales volume (Mboe) ¹	1,848	1,978	2,433
Average daily sales volume (boe/d) ¹	20,534	21,502	26,740
Crude oil sales volume (Mbbl) ¹	1,469	1,538	1,881
Crude oil sold as a percent of total ¹	80 %	78 %	77 %
Product revenues	\$ 88,308	\$ 66,492	\$ 90,891
Crude oil revenues	\$ 81,913	\$ 61,009	\$ 86,308
Crude oil revenues as a percent of total	93 %	92 %	95 %
Realized prices:			
Crude oil (\$/bbl)	\$ 55.76	\$ 39.66	\$ 45.90
NGLs (\$/bbl)	\$ 16.95	\$ 10.71	\$ 6.16
Natural gas (\$/Mcf)	\$ 2.80	\$ 2.45	\$ 1.83
Aggregate (\$/boe)	\$ 47.79	\$ 33.61	\$ 37.35
Realized prices, including effects of derivatives, net ²			
Crude oil (\$/bbl)	\$ 44.80	\$ 48.84	\$ 54.15
Natural gas (\$/Mcf)	\$ 2.84	\$ 1.95	\$ 1.90
Aggregate (\$/boe)	\$ 39.10	\$ 40.46	\$ 43.78
Production and lifting costs:			
Lease operating (\$/boe)	\$ 4.78	\$ 4.83	\$ 4.33
Gathering, processing and transportation (\$/boe)	\$ 2.53	\$ 2.66	\$ 2.24
Production and ad valorem taxes (\$/boe)	\$ 2.98	\$ 1.75	\$ 2.53
General and administrative (\$/boe) ³	\$ 7.13	\$ 5.05	\$ 2.97
Depreciation, depletion and amortization (\$/boe)	\$ 12.92	\$ 13.03	\$ 16.73
Capital expenditure program costs ⁴	\$ 54,122	\$ 32,627	\$ 79,220
Cash provided by operating activities ⁵	\$ 32,211	\$ 32,055	\$ 72,473
Cash paid for capital expenditures ⁶	\$ 34,758	\$ 29,555	\$ 62,015
Cash and cash equivalents at end of period	\$ 11,868	\$ 13,020	\$ 55,331
Debt outstanding at end of period, net ⁷	\$ 371,062	\$ 509,497	\$ 592,624
Credit available under credit facility at end of period ⁸	\$ 145,700	\$ 35,200	\$ 100,200
Net development wells drilled and completed	11.5	2.0	11.0

¹ All volumetric statistics presented above represent volumes of commodity production that were sold during the periods presented. Volumes of crude oil physically produced in excess of volumes sold are placed in temporary storage to be sold in subsequent periods.

² Realized prices, including effects of derivatives, net is a non-GAAP measure (see discussion and reconciliation to GAAP measure below in “*Results of Operations – Effects of Derivatives*” that follows).

³ Includes combined amounts of \$3.86, \$1.93 and \$0.35 per boe for the three months ended March 31, 2021, December 31, 2020 and March 31, 2020, respectively, attributable to share-based compensation and significant special charges, including organizational restructuring and acquisition, divestiture and strategic transaction costs, as described in the discussion of “*Results of Operations – General and Administrative*” that follows.

⁴ Includes amounts accrued and excludes capitalized interest and capitalized labor.

⁵ Includes net cash received (paid) for derivative settlements and premiums received (paid) of \$(7.2) million, \$12.8 million and \$(0.3) million for the three months ended March 31, 2021, December 31, 2020 and March 31, 2020, respectively. Reflects changes in operating assets and liabilities of \$(14.4) million, \$(12.9) million and \$16.0 million for the three months ended March 31, 2021, December 31, 2020 and March 31, 2020, respectively.

⁶ Represents actual cash paid for capital expenditures including capitalized interest and capitalized labor.

⁷ Represents amounts net of unamortized discount and deferred issue costs of \$4.7 million, \$4.9 million and \$6.8 million as of March 31, 2021, December 31, 2020 and March 31, 2020, respectively.

⁸ The borrowing base under the credit agreement (“Credit Facility”) was \$375 million with availability further limited to a maximum of \$350 million.

Key Developments

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

Strategic Investment by Juniper

In January 2021, we consummated the previously announced Juniper Transactions whereby affiliates of Juniper contributed \$150 million in cash and certain oil and gas assets in Lavaca and Fayette Counties in Texas to us in exchange for equity that entitles Juniper to both vote and share in any dividend on the same basis as 22,548,109 shares of common stock. Each holder of Common Units has the right to cause the Company to redeem on or after July 14, 2021, all or a portion of its Common Units (together with one one-hundredth (1/100th) of a share of Preferred Stock for each Common Unit to be redeemed), in exchange for, at the Partnership's option, shares of Common Stock, on a one-for-one basis, or cash. Each 1/100th of a share of preferred Stock has no economic rights but entitles its holder to one vote on all matters to be voted on by shareholders generally. Further, because Penn Virginia is a holding company with no independent means of generating revenues and the assets of the consolidated Company all reside in operating subsidiaries, the holders of Common Units would be entitled to participate in any cash distribution or dividend on the same basis as the Common Stock whether or not the Common Units and Preferred Stock are redeemed or exchanged. Because the Common Units and Preferred Stock entitle Juniper to both vote and share in any distribution or dividend on the same basis as 22,548,109 shares of common stock, we view them as common stock equivalents. For additional information regarding the Juniper Transactions, see Note 3 to the Condensed Consolidated Financial Statements included in Part I, Item 1, "Financial Statements."

Amendments to Credit Facility and Affirmation of Borrowing Base

In January 2021, we entered into Amendment No. 9 to the Credit Agreement (the "Ninth Amendment") permitting the Juniper Transactions and affirming our borrowing base at \$375 million with borrowings limited to a maximum of \$350 million. In addition, the Ninth Amendment: (i) provides for certain minimum hedging conditions, (ii) a first lien leverage ratio covenant of 2.50 times, tested quarterly and (iii) permits amortization payments of up to \$1.875 million per quarter to be made under the Second Lien Credit Agreement, dated as of September 29, 2017 (the "Second Lien Facility") until January 2022 if no default exists both before and after giving effect to the payments and thereafter using available free cash flow upon the satisfaction of certain conditions (including maintaining a leverage ratio of 2.00 to 1.00 and availability of at least 25% under the Credit Facility after giving pro forma effect to the payment). Concurrent with the Ninth Amendment, we paid down \$80.5 million of outstanding borrowings under the Credit Facility plus accrued interest of \$0.1 million which was funded with the proceeds from the Juniper Transactions. We incurred and capitalized \$0.4 million of issue and other costs associated with the Ninth Amendment in January 2021.

Amendment to the Second Lien Facility

On November 2, 2020, we entered into the amendment dated November 2, 2020 (the "Second Lien Amendment") which became effective upon the Closing of the Juniper Transactions. The Second Lien Amendment (1) extends the maturity date of the Second Lien Facility to September 29, 2024, (2) increases the margin applicable to advances under the Second Lien Facility, (3) impose certain limitations on capital expenditures, acquisitions and investments if the Asset Coverage Ratio (as defined therein) at the end of any fiscal quarter is less than 1.25 to 1.00 and (4) requires maximum and, in certain circumstances as described therein, minimum hedging arrangements.

Under the Second Lien Amendment, the Company is required to make quarterly amortization payments equal to \$1,875,000 and 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 7.25% or (b) a Eurodollar rate, including LIBOR through 2021, with a floor of 1%, plus an applicable margin of 8.25%; provided that the applicable margin will increase to 8.25% and 9.25% respectively during any quarter in which the quarterly amortization payment is not made.

We paid down \$50.0 million of outstanding loans under the Second Lien Facility plus accrued interest of \$0.2 million attributable to lenders and \$1.3 million including accrued interest to a non-consenting lender in January 2021 which was funded with the proceeds from the Juniper Transaction. We incurred and capitalized \$1.4 million of issue and other costs and wrote-off \$1.3 million of unamortized issuance costs in connection with the Second Lien Amendment in January 2021 as a loss on the extinguishment of debt.

Development Plans and Production

We drilled, completed and turned 13 gross (11.5 net) wells to sales during the quarter ended March 31, 2021. As of April 30, 2021, we turned an additional two gross (1.6 net) wells to sales and four gross (2.9 net) wells were completing and seven gross (6.3 net) wells were in progress.

Total sales volume for the first quarter of 2021 was 1,848 Mboe, or 20,534 boe/d, with approximately 80 percent, or 1,469 Mbbls, of sales volume from crude oil, 11 percent from NGLs and 9 percent from natural gas, respectively.

As of March 31, 2021, we had approximately 102,400 gross (90,400 net) acres in the Eagle Ford, net of expirations. Approximately 91 percent of our acreage is held by production and substantially all is operated by us.

Commodity Hedging Program

As of April 30, 2021, we have hedged a portion of our estimated future crude oil and natural gas production from April 1, 2021 through the first half of 2023. The following table summarizes our net hedge positions for the periods presented:

	2Q2021	3Q2021	4Q2021	1Q2022	2Q2022	3Q2022	4Q2022	1Q2023	2Q2023
NYMEX WTI Crude Swaps									
Average Volume Per Day (bbl)	3,297	815	815						
Weighted Average Swap Price (\$/bbl)	\$ 55.89	\$ 45.54	\$ 45.54						
NYMEX WTI Collars									
Average Volume Per Day (bbl)	12,637	12,500	9,783	5,417	4,533	4,484	4,484	2,917	2,855
Weighted Average Purchased Put Price (\$/bbl)	\$ 44.65	\$ 42.87	\$ 42.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00
Weighted Average Sold Call Price (\$/bbl)	\$ 55.10	\$ 55.13	\$ 54.92	\$ 53.49	\$ 52.47	\$ 52.47	\$ 52.47	\$ 50.00	\$ 50.00
NYMEX WTI Sold Puts									
Average Volume Per Day (bbl)	4,945	5,707	5,707						
Weighted Average Sold Put Price (\$/bbl)	\$ 29.83	\$ 35.14	\$ 35.14						
NYMEX WTI Crude CMA Roll Basis Swaps									
Average Volume Per Day (bbl)	18,132	17,935	17,935						
Weighted Average Swap Price (\$/bbl)	\$ 0.17	\$ 0.17	\$ 0.17						
NYMEX HH Collars									
Average Volume Per Day (MMBtu)	9,890	9,783	9,783						
Weighted Average Purchased Put Price(\$/MMBtu)	\$ 2.607	\$ 2.607	\$ 2.607						
Weighted Average Sold Call Price (\$/MMBtu)	\$ 3.117	\$ 3.117	\$ 3.117						
NYMEX HH Sold Puts									
Average Volume Per Day (MMBtu)	6,593	6,522	6,522						
Weighted Average Sold Put Price (\$/MMBtu)	\$ 2.000	\$ 2.000	\$ 2.000						
OPIS Mt Belv Ethane Swaps									
Average Volume per Day (gal)	36,264	35,870							
Weighted Average Fixed Price (\$/gal)	\$ 0.2263	\$ 0.2288							

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 \$375 million with availability further limited to a maximum of \$350 million. As of April 30, 2021, we had \$100.7 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 continuing COVID-19 pandemic and the related instability in the global energy markets. In order to mitigate this volatility, we are extensively utilizing 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, NGLs and natural gas production through the first half of 2023. 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

Under our 2021 capital program, we anticipate capital expenditures of up to \$186 million for the remaining three quarters of the year for an estimated annual total of up to \$240 million with approximately 98 percent of capital being directed to drilling and completions. We plan to fund our 2021 capital program and our operations for the next twelve months primarily with cash on hand, cash from operating activities and, to the extent necessary, supplemental borrowings under the Credit Facility. Based upon current price and production expectations for the remainder of 2021, we believe that our cash on hand, cash from operating activities and borrowings under our Credit Facility, as necessary, will be sufficient to fund our capital spending and operations for at least 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 uncertainties associated with the COVID-19 pandemic and related instability in the global energy markets.

Cash on Hand and Cash From Operating Activities. 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, 2021, we repaid \$85.5 million under the Credit Facility including \$80.5 million funded from the capital contribution associated with the Juniper Transactions. We also borrowed \$20 million in April 2021 to fund a portion of our capital expenditures. 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			
	End of Period	Weighted-Average	Maximum	Weighted-Average Rate
Three months ended March 31, 2021	\$ 228,900	\$ 243,644	\$ 314,400	3.18 %

Proceeds from Sales of Assets. We continually evaluate potential sales of assets, including certain non-strategic oil and gas properties and undeveloped acreage, among others. 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 maintain an effective shelf registration statement to allow for optionality.

Cash Flows

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Cash flows from operating activities		
Operating cash flows, net of working capital changes	\$ 49,162	\$ 80,183
Crude oil derivative settlements and premiums received (paid), net	(6,289)	(440)
Natural gas derivative settlements received, net	42	104
Interest rate swap settlements paid, net	(922)	68
Interest payments, net of amounts capitalized	(4,888)	(7,442)
Organizational restructuring costs, including severance benefits, paid	(239)	—
Strategic transaction costs paid	(4,655)	—
Net cash provided by operating activities	32,211	72,473
Cash flows from investing activities		
Capital expenditures	(34,758)	(62,015)
Proceeds from sales of assets, net	4	75
Net cash used in investing activities	(34,754)	(61,940)
Cash flows from financing activities		
Proceeds from (repayment of) credit facility borrowings, net	(85,500)	37,000
Repayment of second lien term loan	(53,140)	—
Proceeds from redeemable common units	151,160	—
Proceeds from redeemable preferred stock	2	—
Transaction costs of Noncontrolling interest paid	(5,543)	—
Issue costs of Noncontrolling interest paid	(3,758)	—
Debt issuance costs paid	(1,830)	—
Net cash provided by financing activities	1,391	37,000
Net increase (decrease) in cash and cash equivalents	\$ (1,152)	\$ 47,533

Cash Flows from Operating Activities. The decrease of \$40.2 million in net cash provided by operating activities for the three months ended March 31, 2021 compared to the corresponding period in 2020 was primarily attributable to the effect of 24 percent lower total sales volume and the timing effect of revenues receipts as the first quarter of 2021 included cash receipts from the fourth quarter of 2020 which were derived from lower average prices than revenue receipts in the first quarter of 2020 which were derived from higher average prices from the fourth quarter of 2019. The adverse impact on cash received from realized revenues in the three months ended March 31, 2021 was exacerbated by: (i) higher net payments for commodity derivatives settlements and premiums, (ii) transaction costs paid in connection with the Juniper Transactions and (iii) executive restructuring costs including severance payments. These items were partially offset by lower interest payments, net of interest rate swap settlements, due to substantially lower outstanding borrowings and lower weighted-average variable rates.

Cash Flows from Investing Activities. As illustrated in the tables below, our cash payments for capital expenditures were significantly lower during the three months ended March 31, 2021 as compared to the corresponding period in 2020, due primarily to the fact that we were operating three drilling rigs during the three month ended March 31, 2020 prior to the suspension of the program that resulted from the COVID-19 pandemic, compared to two drilling rigs throughout the three months ended March 31, 2021. In addition, we received lower proceeds from the sale of scrap tubular and well materials during the three months ended March 31, 2021 compared to the corresponding period in 2020.

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

	Three Months Ended	
	March 31,	March 31,
	2021	2020
Drilling and completion	\$ 53,585	\$ 76,161
Lease acquisitions and other land-related costs	787	1,930
Pipeline, gathering facilities and other equipment, net	(251)	1,124
Geological and geophysical (seismic) costs	1	5
	<u>\$ 54,122</u>	<u>\$ 79,220</u>

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,
	2021	2020
Total capital expenditures program costs (from above)	\$ 54,122	\$ 79,220
Decrease (increase) in accounts payable for capital items and accrued capitalized costs	(20,246)	(18,660)
Less:		
Transfers from tubular inventory and well materials	(2,194)	(3,424)
Sales and use tax refunds received and applied to property accounts	(425)	—
Add:		
Prepayments for drilling and completion services, net of transfers	339	—
Tubular inventory and well materials purchased in advance of drilling	1,649	3,395
Capitalized internal labor	667	796
Capitalized interest	846	688
Total cash paid for capital expenditures	<u>\$ 34,758</u>	<u>\$ 62,015</u>

Cash Flows from Financing Activities. In January 2021, we received over \$150 million of proceeds from the issuance of Common Units and Series A Preferred Stock in connection with the Juniper Transactions. These proceeds were used to fund the repayments of \$80.5 million and \$50.0 million under the Credit Facility and Second Lien Facility, respectively. The remainder of the proceeds were used to pay: (i) \$3.8 million of issue costs associated with the redeemable securities (Common Units and Series A Preferred Stock), (ii) \$5.5 million of transaction costs attributable to Juniper's Noncontrolling interest, (iii) \$1.8 million of issue costs associated with the amendments to the Credit Facility and Second Lien Facility in connection with the Juniper Transactions, (iv) \$1.3 million to liquidate outstanding Second Lien Facility advances attributable to a single participant lender and (v) a portion of interest payments and other Juniper Transactions costs, both of which are presented as cash disbursements included in net cash provided by operating activities above. The three months ended March 31, 2021 includes an additional repayment of \$5 million under the Credit Facility and a \$1.9 million quarterly amortization payment under the Second Lien Facility. The three months ended March 31, 2020 includes borrowings of \$46.0 million and repayments of \$9.0 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,
	2021	2019
Credit facility	\$ 228,900	\$ 314,400
Second lien term loan, net	142,162	195,097
Total debt, net	371,062	509,497
Equity	374,143	212,838
	<u>\$ 745,205</u>	<u>\$ 722,335</u>
Debt as a % of total capitalization	50 %	71 %

Credit Facility. The Credit Facility provides a \$1.0 billion revolving commitment and a \$375 million borrowing base including a \$25 million sublimit for the issuance of letters of credit. Availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base; however, outstanding borrowings under the Credit Facility are limited to a maximum of \$350 million. The borrowing base under the Credit Facility is redetermined semi-annually, generally in the Spring and Fall of each year. Additionally, we and the Credit Facility lenders generally may, upon request, initiate a redetermination at any time during the six-month period between scheduled redeterminations. However, we have the option to forego a redetermination until Fall 2021 assuming we continue to satisfy certain minimum hedging conditions. The Credit Facility is available to us for general corporate purposes including working capital. The Credit Facility is scheduled to mature in May 2024. We had \$0.4 million in letters of credit outstanding as of March 31, 2021 and December 31, 2020.

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%, determined based on the utilization level under the Credit Facility or (b) a Eurodollar rate, including the London interbank offered rate (“LIBOR”) through 2021, plus an applicable margin ranging from 2.50% to 3.50%, 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, 2021, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 3.11%. Unused commitment fees are charged at a rate of 0.50%.

The Credit Facility is guaranteed by the Partnership and all of its subsidiaries excluding the borrower subsidiary (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 subsidiaries’ assets.

Second Lien Facility. In accordance with the recent amendment, the maturity date of the Second Lien Facility was extended to September 29, 2024.

The Company is required to make quarterly amortization payments of \$1.875 million and 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 7.25% or (b) a Eurodollar rate, including LIBOR through 2021, with a floor of 1.00%, plus an applicable margin of 8.25%; provided that the applicable margin will increase to 8.25% and 9.25%, respectively, during any quarter in which the quarterly amortization payment is not made. As of March 31, 2021, the actual interest rate of outstanding borrowings under the Second Lien Facility was 9.25%. 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 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 Eurodollar loans): from January 15, 2021 through January 14, 2022, 102% of the amount being prepaid; from January 15, 2022 through January 14, 2023, 101% of the amount being prepaid; and thereafter, no premium. The Second Lien Facility also provides for the following 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: from January 15, 2021 through January 14, 2023, 102% of the amount being prepaid; from January 15, 2023 through January 14, 2024, 101% of the amount being prepaid; and thereafter, no premium.

The Second Lien Facility is collateralized by substantially all of our subsidiaries’ assets with lien priority subordinated to the liens securing the Credit Facility. The obligations under the Second Lien Facility are guaranteed by the Partnership and the Guarantor Subsidiaries.

Covenant Compliance. 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) of 1.00 to 1.00, (2) a maximum leverage ratio (consolidated indebtedness to EBITDAX, each as defined in the Credit Facility), in each case measured as of the last day of each fiscal quarter of 3.50 to 1.00, and (3) a maximum first lien leverage ratio (consolidated secured 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 2.50 to 1.00.

The Credit Facility and Second Lien Facility also contain 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), limitations on capital expenditures, investments, 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 and Second Lien Facility contain 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, 2021, we were in compliance with all of the covenants under the Credit Facility and the Second Lien Facility.

Results of Operations

Year over Year Analysis of Operating and Financial Results

Sales Volume

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

	Total Sales Volume ¹			Average Daily Sales Volume ¹		
	Three Months Ended March 31,		2021 vs. 2020	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)	2021	2020	Favorable (Unfavorable)
Crude oil (Mbbbl and bbl/d)	1,469	1,881	(412)	16,324	20,665	(4,341)
NGLs (Mbbbl and bbl/d)	210	307	(97)	2,335	3,376	(1,041)
Natural gas (MMcf and MMcf/d)	1,013	1,474	(461)	11	16	(5)
Total (Mboe and boe/d)	1,848	2,433	(585)	20,534	26,740	(6,206)

¹ All volumetric statistics presented represent volumes of commodity production that were actually sold during the periods presented. Volumes of crude oil physically produced in excess of volumes sold are placed in temporary storage to be sold in subsequent periods.

Total sales volume decreased 24 percent during the three month period in 2021 when compared to the corresponding period in 2020. While the number of wells turned to sales were comparable during each of the three month periods, fewer wells were turned to sales in the fourth quarter of 2020 than during the fourth quarter of 2019 resulting in comparatively lower production for the three month period in 2021 from the most recently completed wells. Crude oil sales volume decreased 22 percent during the three month period in 2021 when compared to the corresponding period in 2020.

Approximately 80 percent of total sales volume during the three month period in 2021 was attributable to crude oil when compared to approximately 77 percent during the corresponding period in 2020. The increase in the crude oil composition of total sales volume was due primarily to a focus on development plans with emphasis in our oilier northern and eastern portions of our acreage holdings.

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		
	Three Months Ended March 31,		2021 vs. 2020	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)	2021	2020	Favorable (Unfavorable)
Crude oil	\$ 81,913	\$ 86,308	\$ (4,395)	\$ 55.76	\$ 45.90	\$ 9.86
NGLs	3,562	1,893	1,669	16.95	6.16	10.79
Natural gas	2,833	2,690	143	2.80	1.83	0.97
Total	\$ 88,308	\$ 90,891	\$ (2,583)	47.79	37.35	10.44

(\$ per unit of volume)

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

	Three Months Ended March 31, 2021 vs. 2020		
	Revenue Variance Due to		
	Volume	Price	Total
Crude oil	\$ (18,880)	\$ 14,485	\$ (4,395)
NGLs	(598)	2,267	1,669
Natural gas	(842)	985	143
	\$ (20,320)	\$ 17,737	\$ (2,583)

Our product revenues during the three month period in 2021 decreased compared to the corresponding period in 2020 due primarily to 22 percent lower crude oil volume partially offset by 22 percent higher realized prices. NGL revenues increased in the three month period in 2021 due to 175 percent higher realized prices partially offset by 32 percent lower volume. Natural gas revenues increased moderately due to 53 percent higher realized prices partially offset by 31 percent lower

volume. Total crude oil revenues were approximately 93 percent of our total product revenues during the three month period in 2021 as compared to 95 percent during the three month period in 2020.

Realized Differentials

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

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Realized crude oil prices (\$/bbl)	\$ 55.76	\$ 45.90	\$ 9.86
Weighted-average WTI prices	58.14	45.78	12.36
Realized differential to WTI	\$ (2.38)	\$ 0.12	\$ (2.50)
Realized natural gas prices (\$/Mcf)	\$ 2.80	\$ 1.83	\$ 0.97
Weighted-average HH prices (\$/MMBtu)	3.38	1.88	1.50
Realized differential to HH	\$ (0.58)	\$ (0.05)	\$ (0.53)

The adverse impact of COVID-19 and instability in the global energy markets exacerbated a declining trend in realized prices that effectively eliminated our premium margin to the NYMEX WTI index price for crude oil. Our less favorable differential to NYMEX WTI for the three month period in 2021 is primarily due to the change during 2020 from selling our production volumes based on LLS and MEH pricing to selling fully based on MEH pricing for the three month period in 2021. While both LLS and MEH have historically been at a premium to NYMEX WTI, MEH is less of a premium than LLS. NYMEX HH pricing was also impacted by COVID-19 and the overall industry instability, as well as by the colder-than-normal weather during the winter of 2021. See the discussion of *Commodity Price and Other Economic Conditions* in the Overview above.

Effects of Derivatives

We present our revenues and realized prices for crude oil and natural gas, as adjusted for the effects of derivatives, net as we believe these measures are useful to management and stakeholders in determining the effectiveness of our price-risk management program that is designed to reduce the volatility associated with our operations. Revenues and realized prices for crude oil and natural gas, as adjusted for the effects of derivatives, net, are supplemental financial measures that are not prepared in accordance with generally accepted accounting principles ("GAAP"). The following table presents the calculation of our non-GAAP revenues and realized prices for crude oil and natural gas, as adjusted for the effects of derivatives, net and reconciles to revenues and realized prices for crude oil and natural gas determined in accordance with GAAP:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Crude oil revenues, as reported	\$ 81,913	\$ 86,308	\$ (4,395)
Derivative settlements, net	(16,101)	15,527	(31,628)
Crude oil revenues, including effects of derivatives, net	\$ 65,812	\$ 101,835	\$ (36,023)
Realized crude oil prices (\$/bbl)	\$ 55.76	\$ 45.90	\$ 9.86
Effects of derivatives, net (\$/bbl)	(10.96)	8.25	(19.21)
Crude oil realized prices, including effects of derivatives, net (\$/bbl)	\$ 44.80	\$ 54.15	\$ (9.35)
Natural gas revenues, as reported	\$ 2,833	\$ 2,690	\$ 143
Derivative settlements, net	\$ 42	\$ 104	(62)
Natural gas revenues, including effects of derivatives, net	\$ 2,875	\$ 2,794	\$ 81
Realized natural gas prices (\$/Mcf)	\$ 2.80	\$ 1.83	\$ 0.97
Effects of derivatives, net (\$/Mcf)	\$ 0.04	\$ 0.07	(0.03)
Natural gas realized prices, including effects of derivatives, net (\$/Mcf)	\$ 2.84	\$ 1.90	\$ 0.94

Derivative settlements, net and Effects of derivatives, net include, as applicable to the period presented: (i) current period commodity derivative settlements; (ii) the impact of option premiums paid or received in prior periods related to current period production; (iii) the impact of prior period cash settlements of early-terminated derivatives originally designated to settle against current period production; (iv) the exclusion of option premiums paid or received in current period related to future period production; and (v) the exclusion of the impact of current period cash settlements for early-terminated derivatives originally designated to settle against future period production.

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 and gains and losses on the sale or disposition of assets other than our oil and gas properties. 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,		2021 vs. 2020	
	Favorable		(Unfavorable)	
	2021	2020		
Other revenues, net	\$ 247	\$ 488	\$	(241)

Our water disposal fees, net of operating costs, and marketing fees declined in the three month period in 2021 due primarily to lower overall sales volume.

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,		2021 vs. 2020	
	Favorable		(Unfavorable)	
	2021	2020		
Lease operating	\$ 8,825	\$ 10,532	\$	1,707
Per unit (\$/boe)	\$ 4.78	\$ 4.33	\$	(0.45)
% change per unit				(10.4) %

LOE decreased on an absolute basis during the three month period in 2021 when compared to the corresponding period in 2020. The absolute decrease was due primarily to lower sales volume in the three month period in 2021 primarily resulting in lower chemical, water disposal, contract labor, environmental and utility costs. In addition, we experienced an overall higher level of efficiency attributable to a combination of cost-containment efforts and the application of operational improvements. These broad reductions were partially offset by higher gas lift costs due, in part, to the colder than usual months during the first quarter of 2021. The increase on a per unit basis is due primarily to the decrease in sales volumes.

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. In addition, GPT expense includes short-term rental charges for crude oil storage tanks.

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

	Three Months Ended March 31,		2021 vs. 2020	
	Favorable		(Unfavorable)	
	2021	2020		
Gathering, processing and transportation	\$ 4,674	\$ 5,444	\$	770
Per unit (\$/boe)	\$ 2.53	\$ 2.24	\$	(0.29)
% change per unit				(12.9) %

GPT expense declined on an absolute basis during the three month period in 2021 as compared to the corresponding period in 2020 and increased on a per unit basis during the three month period in 2021 due, primarily to lower sales volumes as well as a decline in the mix of crude oil volume sold at the wellhead resulting in higher transportation costs. In addition, we began incurring short-term rental charges to temporarily store a portion of our crude oil production during periods beginning after March 31, 2020 through to the current period.

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 a published index prices.

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

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Production and ad valorem taxes			
Production/severance taxes	\$ 4,242	\$ 4,078	\$ (164)
Ad valorem taxes	1,271	2,076	805
	<u>\$ 5,513</u>	<u>\$ 6,154</u>	<u>\$ 641</u>
Per unit (\$/boe)	\$ 2.98	\$ 2.53	\$ (0.45)
Production/severance tax rate as a percent of product revenues	4.8 %	4.5 %	

Production taxes increased on an absolute basis and per unit basis during the three month period in 2021 when compared to the corresponding period in 2020 due primarily to the increases in aggregate commodity sales prices of 28 percent in the three month period in 2021. Our accruals for ad valorem taxes are based on our most recent estimates for assessments which reflect lower property values primarily due to the collapse of commodity prices during 2020.

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:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Primary G&A	\$ 6,037	\$ 6,374	\$ 337
Share-based compensation	2,246	856	(1,390)
Significant special charges:			
Organizational restructuring, including severance	239	—	(239)
Acquisition, divestiture and strategic transaction costs	4,655	—	(4,655)
Total G&A	<u>\$ 13,177</u>	<u>\$ 7,230</u>	<u>\$ (5,947)</u>
Per unit (\$/boe)	\$ 7.13	\$ 2.97	\$ (4.16)
Per unit of excluding share-based compensation and other significant special charges identified above (\$/boe)	\$ 3.27	\$ 2.62	\$ (0.65)

Our primary G&A expenses decreased on an absolute basis and increased on a per unit basis during the three month period in 2021 compared to the corresponding period in 2020. The absolute decrease is due primarily to a lower level of employee headcount resulting from reductions in force that occurred during the second half of 2020. The lower headcount also resulted in lower overall support costs. The decrease was partially offset by higher incentive compensation accruals. The increase in per unit costs was primarily due to the effect of lower overall production volume in the three month period in 2021.

Share-based compensation charges during the periods presented are attributable to the amortization of compensation cost, net of forfeitures, associated with the grants of time-vested restricted stock units (“RSUs”), and performance-based restricted stock units (“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.” As a result of the Juniper Transactions which qualified as a change-in-control event, all of the RSUs granted before 2019 vested as of the Closing Date in accordance with their terms. This resulted in an incremental charge of approximately \$1.9 million. All of our share-based compensation represents non-cash expenses.

In connection with the restructuring and elimination of certain executive management positions, we incurred incremental G&A costs including severance costs and termination benefits. During the first quarter of 2021, we incurred certain professional fees and consulting costs, including certain success-based fees of approximately \$4.7 million in connection with the Juniper Transactions.

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:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
DD&A expense	\$ 23,884	\$ 40,718	\$ 16,834
DD&A rate (\$/boe)	\$ 12.92	\$ 16.73	\$ 3.81

DD&A decreased on an absolute and a per unit basis during the three month period in 2021 when compared to the corresponding period in 2020. Lower production volume provided for decreases of \$9.8 million and lower DD&A rates resulted in decreases of \$7.0 million in 2021. The lower DD&A rates in 2021 is primarily attributable to the effect of adding additional reserves in the fourth quarter of 2020 and first quarter of 2021 as well as the effect of the impairment recorded in the fourth quarter of 2020.

Impairment of Oil and Gas Properties

We assess our oil and gas properties on a quarterly basis based on the results of a Ceiling Test in accordance with the full cost method of accounting for oil and gas properties. During the first quarter of 2021, we recorded an impairment of our oil and gas properties of \$1.8 million due primarily to the decline in the twelve-month average prices of crude oil, NGLs and natural gas as indicated by our Ceiling Test under the full cost method of accounting for oil and gas properties. No impairment was recorded during the first quarter of 2020.

Interest Expense

Interest expense includes charges for outstanding borrowings under the Credit Facility and 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 credit utilization and letters of credit. Also included is the accretion of original issue discount (“OID”) on the Second Lien Facility and the amortization of issuance 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:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Interest on borrowings and related fees	\$ 5,632	\$ 8,045	\$ 2,413
Accretion of original issue discount	105	196	91
Amortization of debt issuance costs	506	627	121
Capitalized interest	(846)	(688)	158
	\$ 5,397	\$ 8,180	\$ 2,783

Interest expense decreased during the three month period in 2021 as compared to the corresponding period in 2020 due primarily to the effect of lower outstanding balances under the Credit Facility and Second Lien Facility during the three month period in 2021 and lower interest rates associated with the Credit Facility, due primarily to lower applicable margins resulting from lower utilization levels. The weighted-average balance under the Credit Facility was lower in the three month period in 2021 compared to the three month period in 2020 by approximately \$132 million. The weighted-average interest rate was lower during the same period by 50 basis points. The weighted-average balance of the Second Lien Facility was lower in the three month period in 2021 compared to the three month period in 2020 by approximately \$43 million while the weighted-average interest rate was higher during the same period by 33 basis points. The accretion of OID 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 larger portion of interest during the three month period in 2021 as we maintained a higher portion of unproved property as compared to the corresponding period in 2020 due primarily to the property contribution from the Juniper Transactions.

Loss on Extinguishment of Debt

In connection with the prepayments associated with the recent amendments to the Credit Facility and Second Lien Facility, we wrote-off \$1.2 million of unamortized OID and debt issuance costs in proportion to the principal balances prior to the prepayments during the quarter ended March 31, 2021.

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:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Commodity derivative gains (losses)	\$ (44,400)	\$ 157,802	\$ (202,202)
Interest rate swap gains (losses)	32	(6,683)	6,715
	<u>\$ (44,368)</u>	<u>\$ 151,119</u>	<u>\$ (195,487)</u>

In the three month period in 2021, commodity prices recovered to levels that were 28 percent higher on an average aggregate basis than those during the corresponding period in 2020. Accordingly, the derivative losses in the three month period in 2021 reflect the decline in the mark-to-market values consistent with the increase in prices attributable to open positions. The effect in the three month period in 2020 was in the opposite direction as the market-to-market gains associated were attributable to the substantial collapse in prices for the underlying commodities relative to our hedged positions. Realized settlement payments, net for crude oil and natural gas derivatives were \$3.4 million and \$0.4 million during the three months ended March 31, 2021 and 2020, respectively. In 2020, we began hedging a portion of our exposure to variable interest rates associated with our Credit Facility and Second Lien Facility. For the three months ended March 31, 2021, we paid \$0.9 million of net settlements from our interest rate swaps while we received \$0.1 million of net settlements during the three months ended March 31, 2020.

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,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Other, net	\$ (6)	\$ (8)	\$ 2

Other, net expense decreased marginally during the three month period in 2021 as compared to the corresponding period in 2020 and was comprised entirely of costs associated with our retiree benefit plans for each of the three month periods in 2021 and 2020.

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 taxes for the periods presented:

	Three Months Ended March 31,		2021 vs. 2020
	2021	2020	Favorable (Unfavorable)
Income tax (expense) benefit	\$ 310	\$ (1,138)	\$ 1,448
Effective tax rate	1.5 %	0.7 %	

The income tax provision for the three months ended March 31, 2021 resulted in a benefit of \$0.3 million. The federal portion was fully offset by an adjustment to the valuation allowance against our net deferred tax assets resulting in an effective tax rate of 1.5%, which is fully attributable to the State of Texas. In connection with the Juniper Transactions, we recorded an adjustment of \$0.7 million to "Paid-in capital" (see Note 3 to the Condensed Consolidated Financial Statements) attributable to certain state deferred income tax effects associated with the change in legal entity structure. Our net deferred income tax liability balance of \$0.4 million as of March 31, 2021 is also fully attributable to the State of Texas and primarily related to property.

We recognized a federal and state income tax expense for the three months ended March 31, 2020 of \$1.1 million. 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 was fully attributable to the State of Texas. The provision also reflected a reclassification of \$1.2 million from deferred tax assets to current income taxes receivable for certain refundable alternative minimum tax credit carryforwards that were later received in June 2020.

Off Balance Sheet Arrangements

As of March 31, 2021, 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 ("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, 2020.

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, we perform a Ceiling Test in order to determine if our oil and gas properties have been impaired. For purposes of the Ceiling Test, 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, 2021, the carrying value of our proved oil and gas properties exceeded the limit determined by the Ceiling Test, resulting in a \$1.8 million impairment for the quarter.

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, 2021, we had borrowings of \$228.9 million under the Credit Facility and \$146.9 million under the Second Lien Facility at interest rates of 3.11% and 9.25%, 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 \$3.8 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 collars and 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 are of acceptable credit risk. The fair values of our derivative instruments are significantly affected by fluctuations in the prices of crude oil, NGLs and natural gas.

As of March 31, 2021, our commodity derivative portfolio was in a net liabilities position in the amount of \$36.5 million. The contracts associated with this position are with seven 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 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.

During the three months ended March 31, 2021, we reported a net commodity derivative loss of \$44.4 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 commodity price risk management activities.

The following table sets forth our commodity derivative positions as of March 31, 2021:

	2Q2021	3Q2021	4Q2021	1Q2022	2Q2022	3Q2022	4Q2022	1Q2023	2Q2023
NYMEX WTI Crude Swaps									
Average Volume Per Day (bbl)	3,297	815	815						
Weighted Average Swap Price (\$/bbl)	\$ 55.89	\$ 45.54	\$ 45.54						
NYMEX WTI Crude Collars									
Average Volume Per Day (bbl)	12,088	10,870	8,152	5,417	4,533	4,484	4,484	2,917	2,855
Weighted Average Purchased Put Price (\$/bbl)	\$ 43.82	\$ 41.80	\$ 40.40	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00
Weighted Average Sold Call Price (\$/bbl)	\$ 54.67	\$ 56.09	\$ 52.10	\$ 53.49	\$ 52.47	\$ 52.47	\$ 52.47	\$ 50.00	\$ 50.00
NYMEX WTI Sold Puts									
Average Volume Per Day (bbl)	4,945	5,707	5,707						
Weighted Average Sold Put Price (\$/bbl)	\$ 29.83	\$ 35.14	\$ 35.14						
NYMEX WTI Crude CMA Roll Basis Swaps									
Average Volume Per Day (bbl)	18,132	17,935	17,935						
Weighted Average Swap Price (\$/bbl)	\$ 0.17	\$ 0.17	\$ 0.17						
NYMEX HH Collars									
Average Volume Per Day (MMBtu)	9,890	9,783	9,783						
Weighted Average Purchased Put Price (\$/MMBtu)	\$ 2.607	\$ 2.607	\$ 2.607						
Weighted Average Sold Call Price(\$/MMBtu)	\$ 3.117	\$ 3.117	\$ 3.117						
NYMEX HH Sold Puts									
Average Volume Per Day (MMBtu)	6,593	6,522	6,522						
Weighted Average Sold Put Price (\$/MMBtu)	\$ 2.000	\$ 2.000	\$ 2.000						
OPIS Mt Belv Ethane Swaps									
Average Volume per Day (gal)	36,264	35,870							
Weighted Average Fixed Price (\$/gal)	\$ 0.2263	\$ 0.2288							

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	\$ (27.5)	\$ 21.2
Effect of crude oil price changes for the remainder of 2021 on operating income, excluding derivatives ²	\$ 32.6	\$ (32.6)

¹ Based on derivatives outstanding as of March 31, 2021.

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, 2021. 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, 2021, such disclosure controls and procedures were effective.

(b) Changes in Internal Control Over Financial Reporting

During the quarter ended March 31, 2021, 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, 2020.

Item 5. Other Information.

None.

Item 6. Exhibits.

- (10.1) * Separation Agreement, dated as of January 4, 2021, by and between Penn Virginia Corporation and Benjamin A. Mathis.
- (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, 2021, formatted in Inline XBRL (included within the Exhibit 101 attachments).

* Filed herewith.

† Furnished herewith.

SEPARATION AGREEMENT

This SEPARATION AGREEMENT (this "Agreement") is entered into by and between Penn Virginia Corporation (the "Company") and Benjamin Mathis (the "Executive") effective, except as provided in Section 3.2 below, as of the 4th day of January, 2021 (the "Effective Date").

WHEREAS, the Executive has served as Senior Vice President, Operations & Engineering of the Company since September 2017;

WHEREAS, the Executive previously received grants of time-vested restricted stock units and performance-based restricted stock units (collectively, the "Equity Awards") under the Penn Virginia Corporation Management Incentive Plan (as the same may be amended, the "Equity Plan");

WHEREAS, the Executive will step down from his positions as an officer and employee of the Company and each of its subsidiaries, effective as of the Effective Date; and

WHEREAS, the Executive and the Company wish to resolve all matters related to the Executive's employment with the Company and the termination thereof, on the terms and conditions expressed in this Agreement.

NOW THEREFORE, in consideration of the mutual promises contained herein, the parties, intending to be legally bound, hereby agree as follows:

1. Termination of Employment. The Executive and the Company agree that the Executive's employment with and position as Senior Vice President, Operations & Engineering of the Company, and all other positions that the Executive may hold as an officer or director of the Company or any of its subsidiaries or affiliates, ceased effective as of January 4, 2021 (the "Separation Date").

2. Accrued Rights; Separation Pay; Legal Fees; Other Benefits.

2.1 Accrued Rights. The Executive shall be entitled to payment of his regular base salary earned through the Separation Date and all expense reimbursements properly accrued and submitted on or before the Separation Date, which amounts shall be payable in a lump sum within fifteen (15) days following the Separation Date. In addition, the Executive shall be entitled to any payments due to him under the Company's benefit plans, programs or arrangements, with such amounts payable in accordance with the terms of such plans, programs or arrangements.

2.2 Separation Pay; 2020 Bonus; Equity Awards. Conditioned upon the Executive's timely execution and delivery on or prior to January 25, 2021, and non-revocation of this Agreement (including the releases of claims described in Sections 3.1 and

3.2 below that form a material part of this Agreement), and this Agreement becoming effective and irrevocable in accordance with its terms, the Company will provide the Executive with the following payments and benefits:

(a) A lump sum cash severance payment in the amount of \$181,500, less applicable taxes and withholdings, payable within thirty (30) days following the Separation Date;

(b) A lump sum cash payment, equal to the annual bonus the Executive would have earned for 2020 based on the Company's actual performance for the year as applied to other officers of the Company, less applicable taxes and withholdings, payable in 2021 at the same time bonuses are paid to executives of the Company generally;

(c) If the Executive timely elects continuation coverage through COBRA (in accordance with the terms of the Company's health plan), continued receipt of the applicable subsidy towards the cost of such continuation coverage equivalent to that provided to active employees of the Company for up to six (6) months following the Separation Date (or, if shorter, until such time as the Executive becomes eligible for coverage under a subsequent employer's health plan);

(d) Treatment of the Equity Awards upon the Executive's termination of employment as if such employment had been terminated by the Company without Cause on the Separation Date in accordance with the existing terms of the Equity Plan and the Equity Awards. For the avoidance of doubt, the Executive shall be entitled, in accordance with the terms of the Equity Plan and the Equity Awards, to vesting of (i) 9,160 of the time-vested restricted stock units (vesting upon the Separation Date), and (ii) 6,372 of the performance-based restricted stock units (vesting upon the Separation Date); and

(e) Reimbursement for outplacement services through an agency selected by the Executive, provided that the cost of such reimbursement shall not exceed \$10,000.

2.3 No Other Benefits. Except as provided in this Agreement, the Executive shall not be entitled to receive any other payment, benefit or other form of compensation as a result of his employment through the Separation Date or the termination thereof.

3. Releases of Claims.

3.1 General Release. Except for those obligations of the Company under this Agreement, and in consideration for the promises described herein, the Executive, on behalf of himself and his dependents, successors, heirs, assigns, agents, and executors (collectively, the "Releasors"), hereby releases and discharges and covenants not to sue to the maximum extent permitted by law, the Company and its predecessors, successors, subsidiaries, parents, branches, divisions, and other affiliates, and each of their current and former directors, officers, employees, shareholders, members, representatives, attorneys, insurers, employee benefit plans, benefit plan fiduciaries, trustees successors and assignees, past and present, and each of them (individually and collectively, the "Releasees") from and with respect to

any and all claims, wages, agreements, obligations, demands, causes of action, rights, liabilities, costs or expenses, known or unknown, suspected or unsuspected, concealed or hidden (collectively, "Claims"), of any kind whatsoever, related to any fact, circumstance or event occurring or existing at any time before the Executive's execution of this Agreement, arising out of or in any way connected with the Executive's engagement by, employment relationship with or separation from the Company, including by way of example only, any Claims for severance pay, bonus or similar benefit, sick leave, pension, retirement, vacation pay, life insurance, health or medical insurance or any other fringe benefit, any benefits arising from any ERISA benefit plan, workers' compensation or disability, Claims of breach of contract, tort Claims, any Claims under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, the Family and Medical Leave Act, or any other federal, state or local law, regulation or ordinance, including Claims for attorneys' fees. The Executive, on behalf of the Releasers, expressly waives any and all rights granted by federal or state law or regulation that may limit the release of unknown claims. Nothing in this Agreement, however, shall be construed as prohibiting the Executive from filing a charge or complaint with the Equal Employment Opportunity Commission, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal, state or local governmental agency or commission (each a "Government Agency"). The Executive further understands that this Agreement does not limit the Executive's ability to communicate with any Government Agency or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company. However, to the maximum extent permitted by law, the Executive agrees that if such a charge or complaint is made, the Executive shall not be entitled to recover any individual monetary relief or other individual remedies. This Agreement does not limit or prohibit the Executive's right to receive an award for information provided to any Government Agency to the extent that such limitation or prohibition is a violation of law. This Release will not operate to extinguish any rights of the Executive to indemnification or advancement of expenses as provided in Section 6.5 of this Agreement in respect of claims that relate to the performance of duties for the Company during his period of employment prior to the Separation Date or benefits under the Company's employee benefits plans that are due and payable in accordance with the terms and conditions of such plans.

3.2 ADEA Waiver. In consideration for the payments and other promises described in Section 2.2 above, which the Executive acknowledges and agrees that he is not otherwise entitled to receive absent execution and non-revocation of this Agreement, the Executive, on behalf of himself and his dependents, successors, heirs, assigns, agents, and executors, forever gives up, waives, discharges and releases the Releasees from any and all claims pursuant to the Age Discrimination in Employment Act, as amended by the Older Workers Benefit Protection Act, and the rules and regulations promulgated thereunder (the "ADEA"). In connection with this specific waiver of claims set forth in this Section 3.2, the Executive agrees and acknowledges that he has at least twenty-one (21) days to consider this Section 3.2 and if the Executive signs this Agreement earlier, he does so voluntarily, freely and without reservation. The Executive further agrees and acknowledges that he has seven

(7) days after he signs this Agreement to revoke his release of claims under this Section 3.2. In order to revoke his release of claims under this Section 3.2, the Executive must do so in writing delivered to the Company's General Counsel on or before 5:00 p.m. of the seventh (7th) day after the execution of this Agreement. If the release of claims under this Section 3.2 is not properly revoked within the seven (7)-day period, it shall become fully enforceable on the eighth (8th) day after the Executive signs this Agreement, without any affirmative act by either party. This ADEA waiver does not waive rights or claims that may arise after the date this Agreement is executed.

4. Advice of Counsel. THE EXECUTIVE IS HEREBY ADVISED TO CONSULT WITH AN ATTORNEY BEFORE SIGNING THIS AGREEMENT AND ACKNOWLEDGES THAT HE HAS BEEN AFFORDED AN OPPORTUNITY FOR COUNSEL OF HIS CHOOSING TO READ AND REVIEW IT AND THAT HE IS SIGNING THIS AGREEMENT FREELY, VOLUNTARILY AND WITH FULL KNOWLEDGE OF ITS TERMS AND CONSEQUENCES.

5. Non-Disparagement. The Executive agrees that he shall not disparage the Company (or any officer, director or affiliate thereof) in any way that materially and adversely affects the goodwill, reputation or business relationships of the Company or the officer, director or affiliate with the public generally, or with any of the Company's customers, vendors or employees.

6. Continuing Obligations.

6.1 Confidentiality. During the course of the Executive's employment with the Company, the Executive acknowledges and agrees that he has been given access to and received Confidential Information (as defined below) regarding the business of the Company and its affiliates. The Executive covenants and agrees that at all times the Executive will not, directly or indirectly, disclose any Confidential Information. As used in this Agreement, the term "Confidential Information" means any and all confidential, proprietary or trade secret information of the Company or an affiliate not within the public domain, whether disclosed, directly or indirectly, verbally, in writing (including electronically) or by any other means in tangible or intangible form, including that which is or was conceived or developed by the Executive, applicable to or in any way related to: (i) the past, present or future business activities, products and services, and customers of the Company or its affiliates; (ii) the research and development of the Company or its affiliates; or (iii) the business of any customer, client or vendor of the Company or its affiliates. Such Confidential Information includes the following property or information of the Company or its affiliates, by way of example and without limitation, trade secrets, processes, formulas, data, program documentation, customer lists, designs, drawings, algorithms, source code, object code, know-how, improvements, inventions, licenses, techniques, all plans or strategies for marketing, development and pricing, business plans, product roadmaps, financial statements, profit margins and all information concerning existing or potential customers, clients, suppliers or vendors. Confidential Information of the Company also means all similar information disclosed to any employee, officer, director or consultant of the Company by third parties during the course of Executive's employment with the Company that is subject to confidentiality obligations. The Company shall not be required

to advise the Executive specifically of the confidential nature of any such information, nor shall the Company be required to affix a designation of confidentiality to any tangible item, in order to establish and maintain its confidential nature. Notwithstanding the preceding to the contrary, Confidential Information shall not include general industry information or information that is publicly available or readily discernable from publicly available products or literature; information that the Executive lawfully acquired from a source other than the Company or its affiliates or any client or vendor of the Company or any of its affiliates (provided that such source is not bound by a confidentiality agreement with the Company or any of its affiliates); information that is required to be disclosed pursuant to any law, regulation, rule of any governmental body or authority, or stock exchange, or court order; or information that reflects the Executive's own skills, knowledge, know-how and experience gained prior to employment or service and outside of any connection to or relationship with the Company or any of its affiliates, or the predecessors of any such entities. For the avoidance of doubt, nothing in this Agreement prohibits the Executive from voluntarily communicating, without notice to or approval by the Company, with any federal government agency about a potential violation of a federal law or regulation. In addition, in accordance with the Defend Trade Secrets Act of 2016, the Executive will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (x) is made (i) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (y) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

6.2 Return of Property. The Executive represents and warrants that promptly following the Separation Date, except as provided below, he will not retain, or deliver to any person or entity (including the Executive by means of a Company or personal or other non-Company e-mail account owned or used by the Executive), any Company property, including the original and any copies of any documents, records, notebooks, computer files, flash drives, images, emails, pdf files, zip files, computer programs or disks or any other similar repositories containing Confidential Information within his possession, custody, or control. The Executive further agrees not to keep any Company documents in the Executive's possession or under the Executive's control, re-create any Company documents, or deliver any Company documents to any third party.

6.3 Agreement not to Compete. The Executive acknowledges that the Company has spent significant time, effort and resources protecting its Confidential Information and customer goodwill. The Executive further acknowledges that the Confidential Information is of significant competitive value to the Company in the industry in which it competes, and that the use or disclosure, even if inadvertent, of such Confidential Information for the benefit of a competitor would cause significant damage to the legitimate business interests of the Company. Accordingly, in order to protect the legitimate business and customer goodwill interests of the Company, to protect the Confidential Information against inappropriate use or disclosure, and in consideration for the promises herein and benefits provided hereunder, including, without limitation, the payments and benefits described in Section 2.2, the Executive agrees that during the period commencing on the Separation Date and ending on the date that is twelve (12) months after the Separation Date (the "Restricted

Period"), without the prior written consent of the Company (which consent shall be exercised in the Company's sole and absolute discretion), the Executive will not directly or indirectly (including, without limitation, as an employee, agent, officer, director, owner, holder of beneficial interest, creditor, consultant, manager, or independent contractor) engage in or be employed by or otherwise provide services to any entity that competes with the business of the Company or its affiliates, including any entity engaged in the onshore exploration, development and production of crude oil, NGLs and natural gas, within 15 miles of properties currently under lease by the Company or its affiliates as of the Separation Date in Gonzales, Lavaca, Fayette and DeWitt Counties in South Texas.

6.4 No Solicitation. The Executive further agrees that during the Restricted Period and for a one year period thereafter, the Executive will not directly or indirectly through another entity induce or attempt to induce any employee or contractor of the Company or any of its parents, subsidiaries or affiliates, to leave the employment or service of the Company, its parents, subsidiaries or such affiliate, or in any way interfere with the relationship between the Company or any such parent, subsidiary or affiliate and any employee or contractor thereof. The foregoing shall not prohibit a general solicitation to the public of general advertising not specifically directed at Company employees or contractors.

6.5 Indemnification. The Executive shall retain all rights to (i) coverage, if any, provided under directors' and officers' fiduciary errors and omissions and other liability insurance policies of the Company that by their terms would apply to the Executive's acts and omissions while serving as a director, officer, employee, or consultant of the Company or its subsidiaries and affiliates prior to the Separation Date, subject to any exclusions, limitations and other terms and provisions set forth in such policies, and (ii) indemnification and advancement of expenses under the Company's Second Amended and Restated Articles of Incorporation, Article VII, and the Company's Bylaws that apply to the Executive's service as a director, officer or employee of the Company, its subsidiaries and affiliates prior to the Separation Date.

7. Further Assurances; Cooperation. Each party shall cooperate with the other party as reasonably requested by the other party in connection with the performance of their respective obligations under this Agreement. During the Restricted Period, the Executive agrees to make himself available as reasonably practical with respect to, and to use reasonable efforts to cooperate in conjunction with, any requests for information in connection with Executive's employment with the Company as well as any litigation or investigation arising from events that occurred during the Executive's employment with or engagement by the Company (whether such litigation or investigation is then pending or subsequently initiated) involving the Company or any affiliate thereof, including providing testimony and preparing to provide testimony if so requested by the Company. The Company shall promptly reimburse the Executive for reasonable documented expenses incurred by the Executive in complying with this Section 7 and for his time at a rate of \$200 per hour provided that Executive shall be required to obtain prior consent for any expenses that could exceed \$5,000.

8. Entire Agreement; Assignment. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior

agreements between the parties with respect to such matters. This Agreement may be modified or amended only with the written consent of both parties. The Company may assign its rights and obligations hereunder to any person without the prior written consent of the Executive.

9. **No Admission of Liability.** It is understood and agreed that this is a settlement of any potential claims, and that the furnishing of the consideration for this Agreement shall not be deemed or construed as an admission of liability or responsibility at any time for any purpose. It is further agreed and understood that this Agreement is being entered into solely for the purpose of avoiding any expense and inconvenience from defending against any and all claims, rights, demands, actions, obligations, liabilities, and causes of action referred to herein. Liability for any and all claims or potential claims is expressly denied by the Executive and the Company.

10. **Waiver.** Neither the failure nor any delay on the part of either party to exercise any right, remedy, power, or privilege under this Agreement shall operate as a waiver thereof.

11. **Notice.** All notices required by this Agreement must be in writing and must be delivered or mailed to the addresses given below or such other addresses as the parties may designate in writing.

If to the Company:

Penn Virginia Corporation
16285 Park Ten Place, Suite 500 Houston, Texas 77084 Attention: General
Counsel

If to the Executive:

to the last residential address on the records of the Company.

12. **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument. This Agreement may be executed and delivered by exchange of facsimile or electronically mailed copies showing the signatures of the parties, and those signatures need not be affixed to the same copy.

13. **Governing Law; Jurisdiction; Venue.** The laws of the State of Texas, applicable to contracts made or to be wholly performed there (without giving effect to choice of law or conflict of law principles) shall govern the validity, construction, performance, and effect of this Agreement. The Company and the Executive hereby irrevocably and unconditionally (a) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the courts of the State of Texas (the "Texas Courts"), and not in any other state or federal court in the United States of America or any court in any other country, (b) consent to submit to the exclusive jurisdiction of the Texas Courts for purposes of any action or proceeding arising out of or in connection with this Agreement, (c) waive any objection to

the laying of venue of any such action or proceeding in the Texas Courts, and (d) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Texas Courts has been brought in an improper or inconvenient forum.

14. Compliance with Section 409A. Notwithstanding anything herein to the contrary, this Agreement is intended to be interpreted and applied so that the payments and benefits set forth herein either shall be exempt from the requirements of Code Section 409A, or shall comply with the requirements of Code Section 409A, and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be exempt from or in compliance with Code Section 409A. To the extent that the Company determines that any provision of this Agreement would cause the Executive to incur any additional tax or interest under Code Section 409A, the Company shall be entitled to reform such provision to attempt to comply with or be exempt from Code Section 409A through good faith modifications. To the extent that any provision hereof is modified in order to comply with Code Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to the Executive and the Company without violating the provisions of Code Section 409A. Notwithstanding any of the foregoing to the contrary, none of the Company or its subsidiaries or affiliates or any of their officers, directors, members, employees, agents, advisors, predecessors, successors, or equity holders shall have any liability for the failure of this Plan to be exempt from, or to comply with, the requirements of Section 409A of the Code. Each payment and/or benefit provided hereunder shall be a payment in a series of separate payments for purposes of Code Section 409A. To the extent any reimbursements or in-kind benefits due to the Executive under this Agreement constitute “deferred compensation” under Section 409A of the Code, any such reimbursements or in-kind benefits shall be paid to the Executive in a manner consistent with Treas. Reg. Section 1.409A-3(i)(1)(iv).

[signature page follows]

IN WITNESS WHEREOF , the parties have executed this Agreement as of the dates indicated below.

COMPANY

Penn Virginia Corporation

/s/ Darrin Henke

Name: Darrin Henke

Title: President and CEO

Date: January 4, 2021

EXECUTIVE

Benjamin Mathis

/s/ Benjamin Mathis

Date: January 18, 2021

[Signature Page to Separation Agreement]

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

I, Darrin J. Henke, 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 4, 2021

/s/ DARRIN J. HENKE

Darrin J. Henke
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 4, 2021

/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, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Darrin J. Henke, 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 4, 2021

/s/ DARRIN J. HENKE

Darrin J. Henke
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, 2021, 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 4, 2021

/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.