

**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 June 30, 2019
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
(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

The 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 August 2, 2019, 15,107,265 shares of common stock of the registrant were outstanding.

PENN VIRGINIA CORPORATION
QUARTERLY REPORT ON FORM 10-Q
For the Quarterly Period Ended June 30, 2019

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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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenues				
Crude oil	\$ 114,031	\$ 101,716	\$ 208,843	\$ 172,974
Natural gas liquids	3,502	5,533	9,050	8,479
Natural gas	5,290	3,912	9,567	6,702
Gain on sales of assets, net	16	4	41	79
Other revenues, net	(72)	415	494	557
Total revenues	122,767	111,580	227,995	188,791
Operating expenses				
Lease operating	10,362	8,730	21,366	16,026
Gathering, processing and transportation	6,408	4,574	10,337	7,933
Production and ad valorem taxes	7,579	5,795	13,271	9,887
General and administrative	6,232	5,322	13,297	11,793
Depreciation, depletion and amortization	44,298	31,273	83,168	53,354
Total operating expenses	74,879	55,694	141,439	98,993
Operating income				
Other income (expense)	47,888	55,886	86,556	89,798
Interest expense	(9,056)	(6,150)	(18,534)	(10,751)
Derivatives	13,603	(52,241)	(54,414)	(71,036)
Other, net	8	(16)	114	(74)
Income (loss) before income taxes	52,443	(2,521)	13,722	7,937
Income tax expense	(818)	—	(794)	(163)
Net income (loss)	\$ 51,625	\$ (2,521)	\$ 12,928	\$ 7,774
Net income (loss) per share:				
Basic	\$ 3.42	\$ (0.17)	\$ 0.86	\$ 0.52
Diluted	\$ 3.40	\$ (0.17)	\$ 0.85	\$ 0.51
Weighted average shares outstanding – basic	15,106	15,058	15,102	15,050
Weighted average shares outstanding – diluted	15,162	15,058	15,174	15,171

See accompanying notes to condensed consolidated financial statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income (loss)	\$ 51,625	\$ (2,521)	\$ 12,928	\$ 7,774
Other comprehensive income:				
Change in pension and postretirement obligations, net of tax	(1)	—	(2)	—
	(1)	—	(2)	—
Comprehensive income (loss)	<u>\$ 51,624</u>	<u>\$ (2,521)</u>	<u>\$ 12,926</u>	<u>\$ 7,774</u>

See accompanying notes to condensed consolidated financial statements.

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

	June 30, 2019	December 31, 2018
Assets		
Current assets		
Cash and cash equivalents	\$ 12,796	\$ 17,864
Accounts receivable, net of allowance for doubtful accounts	52,471	66,038
Derivative assets	7,182	34,932
Income taxes receivable	3,707	2,471
Other current assets	4,733	5,125
Total current assets	80,889	126,430
Property and equipment, net (full cost method)	1,038,687	927,994
Derivative assets	2,756	10,100
Deferred income taxes	—	1,949
Other assets	7,412	2,481
Total assets	\$ 1,129,744	\$ 1,068,954
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 111,993	\$ 103,700
Derivative liabilities	14,203	991
Total current liabilities	126,196	104,691
Other liabilities	8,236	5,533
Deferred income taxes	81	—
Derivative liabilities	2,201	—
Long-term debt, net	531,476	511,375
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock of \$0.01 par value – 5,000,000 shares authorized; none issued	—	—
Common stock of \$0.01 par value – 45,000,000 shares authorized; 15,107,265 and 15,080,594 shares issued as of June 30, 2019 and December 31, 2018, respectively	151	151
Paid-in capital	198,997	197,630
Retained earnings	262,326	249,492
Accumulated other comprehensive income	80	82
Total shareholders' equity	461,554	447,355
Total liabilities and shareholders' equity	\$ 1,129,744	\$ 1,068,954

See accompanying notes to condensed consolidated financial statements.

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

	Six Months Ended June 30,	
	2019	2018
Cash flows from operating activities		
Net income	\$ 12,928	\$ 7,774
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion and amortization	83,168	53,354
Derivative contracts:		
Net losses	54,414	71,036
Cash settlements, net	(3,907)	(19,977)
Deferred income tax expense	2,030	163
Gain on sales of assets, net	(41)	(79)
Non-cash interest expense	1,748	1,644
Share-based compensation (equity-classified)	2,055	2,451
Other, net	26	26
Changes in operating assets and liabilities, net	1,941	4,026
Net cash provided by operating activities	<u>154,362</u>	<u>120,418</u>
Cash flows from investing activities		
Acquisitions, net	—	(86,835)
Capital expenditures	(175,941)	(201,350)
Proceeds from sales of assets, net	29	2,525
Net cash used in investing activities	<u>(175,912)</u>	<u>(285,660)</u>
Cash flows from financing activities		
Proceeds from credit facility borrowings	32,000	166,500
Repayment of credit facility borrowings	(13,000)	—
Debt issuance costs paid	(2,518)	(754)
Net cash provided by financing activities	<u>16,482</u>	<u>165,746</u>
Net increase (decrease) in cash and cash equivalents	(5,068)	504
Cash and cash equivalents – beginning of period	17,864	11,017
Cash and cash equivalents – end of period	<u>\$ 12,796</u>	<u>\$ 11,521</u>
Supplemental disclosures:		
Cash paid for:		
Interest, net of amounts capitalized	\$ 16,784	\$ 8,953
Reorganization items, net	\$ 79	\$ 442
Non-cash investing and financing activities:		
Changes in accounts receivable related to acquisitions	\$ —	\$ (26,631)
Changes in other assets related to acquisitions	\$ —	\$ (2,469)
Changes in accrued liabilities related to acquisitions	\$ —	\$ (15,099)
Changes in accrued liabilities related to capital expenditures	\$ 17,397	\$ 12,231
Changes in other liabilities for asset retirement obligations related to acquisitions	\$ —	\$ 382

See accompanying notes to condensed consolidated financial statements

PENN VIRGINIA CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS – unaudited
For the Quarterly Period Ended June 30, 2019
(in thousands, except per share amounts or where otherwise indicated)

1. Nature of Operations

Penn Virginia Corporation (together with its consolidated subsidiaries, unless the context otherwise requires, “Penn Virginia,” the “Company,” “we,” “us” or “our”) is an independent oil and gas company engaged in the onshore exploration, development and production of oil, natural gas liquids (“NGLs”) and natural gas. Our current operations consist primarily 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.

On March 21, 2019, we and Denbury Resources Inc. (“Denbury”) entered into a Termination Agreement (the “Termination Agreement”) under which the parties mutually agreed to terminate our previously announced merger agreement.

Subject to limited customary exceptions, the Termination Agreement also mutually releases the parties from any claims of liability to one another relating to the contemplated merger transaction. We incurred a total of \$0.8 million of incremental costs associated with the merger transaction as well as the Termination Agreement during the six months ended June 30, 2019. These costs are included in the “General and administrative” (“G&A”) expenses captioned in our Condensed Consolidated Statement of Operations.

2. Basis of Presentation

Our unaudited Condensed Consolidated Financial Statements include the accounts of Penn Virginia and all of our subsidiaries. Intercompany balances and transactions have been eliminated. Our Condensed Consolidated Financial Statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). Preparation of these statements involves the use of estimates and judgments where appropriate. In the opinion of management, all adjustments, consisting of normal recurring accruals, considered necessary for a fair presentation of our Condensed Consolidated Financial Statements, have been included. Our Condensed Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and Notes included in our Annual Report on Form 10-K for the year ended December 31, 2018. Operating results for the six months ended June 30, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019.

Adoption of Recently Issued Accounting Pronouncements

Effective January 1, 2019, we adopted and began applying the relevant guidance provided in Accounting Standards Update (“ASU”) 2016-02, *Leases* (“ASU 2016-02”) and related amendments to GAAP which, together with ASU 2016-02, represent ASC Topic 842, *Leases* (“ASC Topic 842”). We adopted ASC Topic 842 using the optional transition approach with a charge to the beginning balance of retained earnings as of January 1, 2019 (see Note 9 for the impact and disclosures associated with the adoption of ASC Topic 842). Comparative periods and related disclosures have not been restated for the application of ASC Topic 842.

Recently Issued Accounting Pronouncements Pending Adoption

In June 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments* (“ASU 2016-13”), which changes the recognition model for the impairment of financial instruments, including accounts receivable, loans and held-to-maturity debt securities, among others. ASU 2016-13 is required to be adopted using the modified retrospective method by January 1, 2020, with early adoption permitted for fiscal periods beginning after December 15, 2018. In contrast to current guidance, which considers current information and events and utilizes a probable threshold (an “incurred loss” model), ASU 2016-13 mandates an “expected loss” model. The expected loss model: (i) estimates the risk of loss even when risk is remote, (ii) estimates losses over the contractual life, (iii) considers past events, current conditions and reasonable supported forecasts and (iv) has no recognition threshold. ASU 2016-13 will have applicability to our accounts receivable portfolio, particularly those receivables attributable to our joint interest partners which have a higher credit risk than those associated with our traditional customer receivables. At this time, we do not anticipate that the adoption of ASU 2016-13 will have a significant impact on our Consolidated Financial Statements and related disclosures; however, we are continuing to evaluate the requirements as well as monitoring developments regarding ASU 2016-13 that are unique to our industry. We plan to adopt ASU 2016-13 effective January 1, 2020.

Going Concern Presumption

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

Subsequent Events

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

3. Acquisitions and Divestitures

Acquisitions

Hunt Acquisition

In December 2017, we entered into a purchase and sale agreement with Hunt Oil Company (“Hunt”) to acquire certain oil and gas assets in the Eagle Ford Shale, primarily in Gonzales County, Texas for \$86.0 million in cash, subject to adjustments (the “Hunt Acquisition”). The Hunt Acquisition had an effective date of October 1, 2017, and closed on March 1, 2018, at which time we paid cash consideration of \$84.4 million. In connection with the Hunt Acquisition, we also acquired working interests in certain wells that we previously drilled as operator in which Hunt had rights to participate prior to the transaction closing. Accumulated costs, net of suspended revenues for these wells was \$13.8 million, which we have reflected as a component of the total net assets acquired. We funded the Hunt Acquisition with borrowings under our credit agreement (the “Credit Facility”).

The final settlement of the Hunt Acquisition occurred in July 2018, at which time an additional \$0.2 million of acquisition costs was allocated from certain working capital components and Hunt transferred \$1.4 million to us primarily for suspended revenues attributable to the acquired properties.

We incurred a total of \$0.5 million of transaction costs for legal, due diligence and other professional fees associated with the Hunt Acquisition, including \$0.1 million in 2017 and \$0.4 million in the first quarter of 2018. These costs have been recognized as a component of our G&A expenses.

We accounted for the Hunt Acquisition by applying the acquisition method of accounting as of March 1, 2018. The following table represents the final fair values assigned to the net assets acquired and the total acquisition cost incurred, including consideration transferred to Hunt:

Assets	
Oil and gas properties - proved	\$ 82,443
Oil and gas properties - unproved	16,339
Liabilities	
Revenue suspense	1,448
Asset retirement obligations	356
Net assets acquired	\$ 96,978
Cash consideration paid to Hunt, net	\$ 82,955
Application of working capital adjustments	245
Accumulated costs, net of suspended revenues, for wells in which Hunt had rights to participate	13,778
Total acquisition costs incurred	\$ 96,978

Valuation of Acquisitions

The fair value of the oil and gas properties acquired in the Hunt Acquisition was measured using valuation techniques that convert future cash flows to a single discounted amount. Significant inputs to the valuation include estimates of: (i) reserves, (ii) future operating and development costs, (iii) future commodity prices, (iv) future cash flows, (v) the timing of our development plans and (vi) a market-based weighted-average cost of capital. Because many of these inputs are not observable, we have classified the initial fair value estimates as Level 3 inputs as that term is defined in GAAP.

Impact of Acquisitions on Actual and Pro Forma Results of Operations

The results of operations attributable to the Hunt Acquisition have been included in our Consolidated Financial Statements for the periods after March 1, 2018. The Hunt Acquisition provided revenues and estimated earnings (including revenues less operating expenses and excluding allocations of interest expense and income taxes) of approximately \$0.4 million and \$0.2 million, respectively, for the period from March 1, 2018 through March 31, 2018. As the properties and working interests acquired in connection with the Hunt Acquisition are included within our existing Eagle Ford acreage, it is not practical or meaningful to disclose revenues and earnings unique to those assets for periods beyond those during which they were acquired, as they were fully integrated into our regional operations soon after their acquisition. The following table presents unaudited summary pro forma financial information for the six months ended June 30, 2018, assuming the Hunt

Acquisition occurred as of January 1, 2018. The pro forma financial information does not purport to represent what our actual results of operations would have been if the Hunt Acquisition had occurred as of this date, or the results of operations for any future periods.

	Six Months Ended June 30,	
	2018	
Total revenues	\$	194,036
Net income	\$	9,886
Net income per share - basic	\$	0.66
Net income per share - diluted	\$	0.65

Divestitures

Mid-Continent Divestiture

In June 2018, we entered into a purchase and sale agreement with a third party to sell all of our Mid-Continent oil and gas properties, located primarily in Oklahoma in the Granite Wash, for \$6.0 million in cash, subject to customary adjustments. The sale had an effective date of March 1, 2018 and closed on July 31, 2018, and we received net proceeds of \$6.2 million, of which \$0.7 million was received in June 2018 as an earnest deposit. The sale proceeds and de-recognition of certain assets and liabilities were recorded as a reduction of our net oil and gas properties. In November 2018, we paid \$0.5 million, including \$0.2 million of suspended revenues, to the buyer in connection with the final settlement.

The Mid-Continent properties had asset retirement obligations (“AROs”) of \$0.3 million as well as a net working capital deficit attributable to the oil and gas properties of \$1.3 million as of July 31, 2018. The net pre-tax operating income attributable to the Mid-Continent assets was \$0.6 million and \$1.4 million for the three and six months ended June 30, 2018.

Sales of Undeveloped Acreage, Rights and Other Assets

In February 2018, we sold our undeveloped acreage holdings in the Tuscaloosa Marine Shale in Louisiana that were scheduled to expire in 2019. In March 2018, we sold certain undeveloped deep leasehold rights in Oklahoma, and in May 2018, we sold certain pipeline assets in our former Marcellus Shale operating region. We received a combined total of \$1.7 million for these leasehold and other assets which were applied as a reduction of our net oil and gas properties.

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:

	June 30,		December 31,	
	2019		2018	
Customers	\$	48,347	\$	59,030
Joint interest partners		3,546		6,404
Other		629		640
		52,522		66,074
Less: Allowance for doubtful accounts		(51)		(36)
	\$	52,471	\$	66,038

For the six months ended June 30, 2019, three customers accounted for \$150.0 million, or approximately 66%, of our consolidated product revenues. The revenues generated from these customers during the six months ended June 30, 2019, were \$85.6 million, \$37.5 million and \$26.9 million, or 38%, 16% and 12% of the consolidated total, respectively. As of June 30, 2019 and December 31, 2018, \$32.4 million and \$34.8 million, or approximately 67% and 59%, 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. For the six months ended June 30, 2018, three customers accounted for \$157.8 million, or approximately 84%, of our consolidated product revenues. The allowance for doubtful accounts is entirely attributable to certain receivables from joint interest partners.

5. Derivative Instruments

We utilize derivative instruments to mitigate our financial exposure to commodity price volatility. Our derivative instruments are not formally designated as hedges in the context of GAAP.

We typically utilize collars and swaps, which are placed with financial institutions that we believe to be acceptable credit risks, to hedge against the variability in cash flows associated with anticipated sales of our future production. While the use of derivative instruments limits the risk of adverse price movements, such use may also limit future revenues from favorable price movements.

The counterparty to a collar or swap contract is required to make a payment to us if the settlement price for any settlement period is below the floor or swap price for such contract. We are required to make a payment to the counterparty if the settlement price for any settlement period is above the ceiling or swap price for such contract. Neither party is required to make a payment to the other party if the settlement price for any settlement period is equal to or greater than the floor price and equal to or less than the ceiling price for such contract.

We determine the fair values of our commodity derivative instruments based on discounted cash flows derived from third-party quoted forward prices for West Texas Intermediate (“WTI”), Louisiana Light Sweet (“LLS”) and Magellan East Houston (“MEH”) crude oil closing prices as of the end of the reporting period. The discounted cash flows utilize 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. We are currently unhedged with respect to NGL and natural gas production.

The following table sets forth our commodity derivative positions, presented on a net basis by period of maturity, as of June 30, 2019:

	Instrument	Average	Weighted	Fair Value	
		Volume Per	Average	Asset	Liability
		Day	Price		
Crude Oil:		(barrels)	(\$/barrel)		
Third quarter 2019	Swaps-WTI	7,397	\$ 55.70	\$ —	\$ 1,677
Third quarter 2019	Swaps-LLS	5,000	\$ 59.17	—	1,589
Third quarter 2019	Swaps-MEH	1,000	\$ 64.00	15	—
Fourth quarter 2019	Swaps-WTI	7,398	\$ 55.70	—	1,222
Fourth quarter 2019	Swaps-LLS	5,000	\$ 59.17	—	1,059
Fourth quarter 2019	Swaps-MEH	1,000	\$ 64.00	46	—
First quarter 2020	Swaps-WTI	7,000	\$ 54.94	—	1,048
First quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	108
Second quarter 2020	Swaps-WTI	7,000	\$ 54.94	—	375
Second quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	75
Third quarter 2020	Swaps-WTI	7,000	\$ 54.93	164	—
Third quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	52
Fourth quarter 2020	Swaps-WTI	7,000	\$ 54.93	569	—
Fourth quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	51
Settlements to be paid in subsequent period					4

Financial Statement Impact of Derivatives

The impact of our derivative activities on income is included in “Derivatives” in our Condensed Consolidated Statements of Operations. The following table summarizes the effects of our derivative activities for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Derivative income (losses)	\$ 13,603	\$ (52,241)	\$ (54,414)	\$ (71,036)

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

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

Type	Balance Sheet Location	June 30, 2019		December 31, 2018	
		Derivative	Derivative	Derivative	Derivative
		Assets	Liabilities	Assets	Liabilities
Commodity contracts	Derivative assets/liabilities – current	\$ 7,182	\$ 14,203	\$ 34,932	\$ 991
Commodity contracts	Derivative assets/liabilities – noncurrent	2,756	2,201	10,100	—
		<u>\$ 9,938</u>	<u>\$ 16,404</u>	<u>\$ 45,032</u>	<u>\$ 991</u>

As of June 30, 2019, we reported net commodity derivative liabilities of \$6.5 million. The contracts associated with this position are with eight counterparties, 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. 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:

	June 30, 2019	December 31, 2018
Oil and gas properties:		
Proved	\$ 1,224,547	\$ 1,037,993
Unproved	66,419	63,484
Total oil and gas properties	1,290,966	1,101,477
Other property and equipment	24,588	20,383
Total properties and equipment	1,315,554	1,121,860
Accumulated depreciation, depletion and amortization	(276,867)	(193,866)
	<u>\$ 1,038,687</u>	<u>\$ 927,994</u>

Unproved property costs of \$66.4 million and \$63.5 million have been excluded from amortization as of June 30, 2019 and December 31, 2018, respectively. An additional \$4.2 million and \$0.3 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 June 30, 2019 and December 31, 2018. We transferred less than \$0.1 million and \$5.6 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 six months ended June 30, 2019 and 2018, respectively. We capitalized internal costs of \$2.2 million and \$1.6 million and interest of \$2.2 million and \$4.7 million during the six months ended June 30, 2019 and 2018, respectively, in accordance with our accounting policies. Average depreciation, depletion and amortization per barrel of oil equivalent of proved oil and gas properties was \$17.49 and \$15.36 for the six months ended June 30, 2019 and 2018, respectively.

7. Long-Term Debt

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

	June 30, 2019		December 31, 2018	
	Principal	Unamortized Discount and Deferred Issuance Costs ^{1, 2}	Principal	Unamortized Discount and Deferred Issuance Costs ^{1, 2}
Credit facility	\$ 340,000		\$ 321,000	
Second lien term loan	200,000	\$ 8,524	200,000	\$ 9,625
Totals	540,000	\$ 8,524	521,000	\$ 9,625
Less: Unamortized discount	(2,795)		(3,159)	
Less: Unamortized deferred issuance costs	(5,729)		(6,466)	
Long-term debt, net	\$ 531,476		\$ 511,375	

¹ Issuance costs of the Credit Facility, which represent costs attributable to the access to credit over its contractual term, 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 a \$1.0 billion revolving commitment and \$500 million borrowing base and a \$25 million sublimit for the issuance of letters of credit. In May 2019, the borrowing base was increased to \$500 million from \$450 million pursuant to the Borrowing Base Increase Agreement and Amendment No. 6 to the Credit Agreement (the “Sixth Amendment”). In the six months ended June 30, 2019, we incurred and capitalized approximately \$2.5 million of issue and other costs associated with the Sixth Amendment. Availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base. The borrowing base under the Credit Facility is redetermined semi-annually, generally in April and October of each year. Additionally, the Credit Facility lenders may, at their discretion, initiate a redetermination at any time during the six-month period between scheduled redeterminations. The Credit Facility is available to us for general corporate purposes, including working capital. We had \$0.4 million in letters of credit outstanding as of June 30, 2019 and December 31, 2018.

In connection with the Sixth Amendment, maturity of the Credit Facility was extended to May 2024 from September 2020; provided that in June 2022, unless we have either extended the maturity date of our \$200 million Second Lien Credit Agreement dated as of September 29, 2017 (the “Second Lien Facility”) described below to a date that is at least 91 days after the extended maturity date of May 2024 or have repaid our Second Lien Facility in full, the maturity date of the Credit Facility will mean June 2022. Prior to entry into the Sixth Amendment, we received consent from requisite lenders of our Second Lien Facility to extend the maturity of our Credit Facility to May 2024.

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 0.50% to 1.50% (2.00% to 3.00% prior to May 2019), determined based on the average availability under the Credit Facility or (b) a customary London interbank offered rate (“LIBOR”) plus an applicable margin ranging from 1.50% to 2.50% (3.00% to 4.00% prior to May 2019), determined based on the average availability 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 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 June 30, 2019, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 4.42%. Unused commitment fees are charged at a rate of 0.375% to 0.50%, depending upon utilization.

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

In connection with the Sixth Amendment and effective May 2019, the Credit Facility requires us to maintain (1) a minimum current ratio (as defined in the Credit Facility, which considers the unused portion of the total commitment as a current asset), measured as of the last day of each fiscal quarter of 1.00 to 1.00 and (2) a maximum leverage ratio (consolidated indebtedness to adjusted earnings before interest, taxes, depreciation, depletion, amortization and exploration expenses), both as defined in the Credit Facility, measured as of the last day of each fiscal quarter of 4.00 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, 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.

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

As of June 30, 2019, and through the date upon which the Condensed Consolidated Financial Statements were issued, we were in compliance with all of the covenants under the Credit Facility.

Second Lien Facility

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

The outstanding borrowings under the Second Lien Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate based on the prime rate plus an applicable margin of 6.00% or (b) a customary LIBOR rate plus an applicable margin of 7.00%. As of June 30, 2019, the actual interest rate of outstanding borrowings under the Second Lien Facility was 9.41%. Amounts under the Second Lien Facility were borrowed at a price of 98% with an initial interest rate of 8.34%, resulting in an effective interest rate of 9.89%. Interest on reference rate borrowings is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on eurocurrency borrowings is payable every one or three months (including in three-month intervals if we select a six-month interest period), at our election and is computed on the basis of a 360-day year. We have the right, to the extent permitted under the Credit Facility and an intercreditor agreement between the lenders under the Credit Facility and the lenders under the Second Lien Facility, to prepay loans under the Second Lien Facility at any time, subject to the following prepayment premiums (in addition to customary “breakage” costs with respect to eurocurrency loans): during year one, a customary “make-whole” premium; during year two, 102% of the amount being prepaid; during year three, 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: during years one and two, 102% of the amount being prepaid; during year three, 101% of the amount being prepaid; and thereafter, no premium.

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

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

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

As of June 30, 2019, and through the date upon which the Consolidated Financial Statements were issued, we were in compliance with all of the covenants under the Second Lien Facility.

8. Income Taxes

We recognized a federal and state income tax expense for the six months ended June 30, 2019 at the blended rate of 21.6%. 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 5.8%, which related to Texas deferred tax expense. The effect of the valuation allowance, as well as a reclassification of \$1.2 million from deferred tax assets to the current income tax receivable for refundable alternative minimum tax ("AMT") credit carryforwards, was to adjust our deferred tax asset to a deferred tax liability position \$0.1 million as of June 30, 2019. We recognized a federal income tax expense for the six months ended June 30, 2018 at the blended rate of 21.6% which was similarly offset by a valuation allowance against our net deferred tax assets. We recorded an adjustment of \$0.2 million to the deferred tax asset related to sequestration of a portion of the aforementioned AMT credit carryforward resulting in an effective tax rate of 2.1%. We considered both the positive and negative evidence in determining that it was more likely than not that some portion or all of our deferred tax assets will not be realized, due primarily to cumulative losses.

We had no liability for unrecognized tax benefits as of June 30, 2019. There were no interest and penalty charges recognized during the periods ended June 30, 2019 and 2018. Tax years from 2014 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

Adoption of ASC Topic 842

Effective January 1, 2019, we adopted ASC Topic 842 and have applied the guidance therein to all of our contracts and agreements explicitly identified as leases as well as other contractual arrangements that we have determined to include or otherwise have the characteristics of a lease as defined in ASC Topic 842. As illustrated in the disclosures below, the adoption of ASC Topic 842 resulted in the recognition of certain assets and liabilities on our Condensed Consolidated Balance Sheet and changes in the amounts and timing of lease cost recognition in our Condensed Consolidated Statements of Operations as compared to prior GAAP. We have adopted ASC Topic 842 using the optional transition approach with an adjustment to the beginning balance of retained earnings as of January 1, 2019. Accordingly, our 2019 financial statements are not comparable with respect to leases in effect during all periods prior to January 1, 2019. On January 1, 2019, we recognized operating lease right-of-use ("ROU") assets of \$2.5 million and operating lease obligations of \$2.8 million on our Condensed Consolidated Balance Sheet for operating leases in effect on that date. We recorded an immaterial adjustment to the beginning balance of retained earnings as of January 1, 2019 representing the difference between the operating lease ROU assets and operating lease obligations recognized upon adoption net of amounts already included in our liabilities as of December 31, 2018 that were attributable to straight-line lease expense in excess of amounts paid for certain operating leases. We did not identify any finance leases, as defined in ASC Topic 842, upon the date of initial adoption.

Accounting Policies for Leases

We determine if an arrangement is a lease at the inception of the underlying contractual arrangement. Operating leases are included in the captions "Other assets," "Accounts payable and accrued liabilities" and "Other liabilities" on our Condensed Consolidated Balance Sheets and are identified as ROU assets - operating, Current operating lease obligations and Noncurrent operating lease obligations, respectively, below and in Note 10.

ROU assets represent our right to use an underlying asset for the lease term and lease obligations represent our obligation to make lease payments arising from the underlying contractual arrangement. Operating lease ROU assets and obligations are recognized at the commencement date based on the present value of lease payments over the lease term. The operating lease ROU assets include any lease payments made in advance and excludes lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise such options. Lease expense for operating lease payments is recognized on a straight-line basis over the lease term.

Most of our leasing arrangements do not identify or otherwise provide for an implicit interest rate. Accordingly, we utilize a secured incremental borrowing rate based on information available at the commencement date in the determination of the present value of the lease payments. As most of our lease arrangements have terms ranging from two to five years, our secured incremental borrowing rate is primarily based on the rates applicable to our Credit Facility.

We have lease arrangements that include lease and certain non-lease components, including amounts for related taxes, insurance, common area maintenance and similar terms. We have elected to apply a practical expedient provided in ASC Topic 842 to not separate the lease and non-lease components. Accordingly, the ROU assets and lease obligations for such leases will include the present value of the estimated payments for the non-lease components over the lease term.

Certain of our lease arrangements with contractual terms of 12 months or less are classified as short-term leases. Accordingly, we have elected to not include the underlying ROU assets and lease obligations on our Condensed Consolidated Balance Sheets. The associated costs are aggregated with all of our other lease arrangements and are disclosed in the tables that follow.

Certain of our lease arrangements result in variable lease payments which, in accordance with ASC Topic 842, do not give rise to lease obligations. Rather, the basis and terms and conditions upon which such variable lease payments are determined are disclosed in the summary below.

Lease Arrangements and Supplemental Disclosures

We have lease arrangements for office facilities and certain office equipment, certain field equipment including compressors, drilling rigs, land easements and similar arrangements for rights-of-way, and certain gas gathering and gas lift assets. Our short-term leases are primarily comprised of our contractual arrangements with certain vendors for operated drilling rigs and our field compressors. Our primary variable lease includes 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	Six Months Ended
	June 30, 2019	
Operating lease cost	\$ 194	\$ 357
Short-term lease cost	11,484	23,055
Variable lease cost	5,548	10,643
Less: Amounts charged as drilling costs ¹	(10,790)	(21,641)
Total lease cost recognized in the Condensed Consolidated Statement of Operations ²	\$ 6,436	\$ 12,414

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

² Includes \$2.9 million and \$5.0 million recognized in Gathering, processing and transportation, \$3.3 million and \$7.1 million recognized in Lease operating and \$0.2 million and \$0.4 million recognized in G&A for the three and six months ended June 30, 2019, respectively.

The following table summarizes supplemental cash flow information related to leases for the six months ended June 30, 2019:

Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	221
ROU assets obtained in exchange for lease obligations:		
Operating leases ¹	\$	3,325

¹ Includes \$2.5 million recognized upon adoption of ASC Topic 842 and \$0.8 million obtained during the six months ended June 30, 2019.

The following table summarizes supplemental balance sheet information related to leases as of June 30, 2019:

ROU assets - operating leases	\$	3,059
Current operating lease obligations	\$	874
Noncurrent operating lease obligations		2,545
Total operating lease obligations	\$	3,419
Weighted-average remaining lease term		
Operating leases		4.6 Years
Weighted-average discount rate		
Operating leases		5.97%
Maturities of operating lease obligations for the years ending December 31,		
2019	\$	437
2020		846
2021		830
2022		834
2023		833
2024 and thereafter		139
Total undiscounted lease payments		3,919
Less: imputed interest		(500)
Total operating lease obligations	\$	3,419

10. Additional Balance Sheet Detail

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

	June 30, 2019	December 31, 2018
Other current assets:		
Tubular inventory and well materials	\$ 3,733	\$ 4,061
Prepaid expenses	1,000	1,064
	<u>\$ 4,733</u>	<u>\$ 5,125</u>
Other assets:		
Deferred issuance costs of the Credit Facility	\$ 4,308	\$ 2,437
Right-of-use assets – operating leases	3,059	—
Other	45	44
	<u>\$ 7,412</u>	<u>\$ 2,481</u>
Accounts payable and accrued liabilities:		
Trade accounts payable	\$ 15,712	\$ 16,507
Drilling costs	39,831	22,434
Royalties and revenue – related	43,903	51,212
Production, ad valorem and other taxes	5,236	2,418
Compensation – related	3,295	4,489
Interest	673	670
Current operating lease obligations	874	—
Other	2,469	5,970
	<u>\$ 111,993</u>	<u>\$ 103,700</u>
Other liabilities:		
Asset retirement obligations	\$ 4,497	\$ 4,314
Noncurrent operating lease obligations	2,545	—
Defined benefit pension obligations	802	857
Postretirement health care benefit obligations	392	362
	<u>\$ 8,236</u>	<u>\$ 5,533</u>

11. Fair Value Measurements

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

Our financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, derivatives and our Credit Facility and Second Lien Facility borrowings. As of June 30, 2019, 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	June 30, 2019				
	Fair Value	Fair Value Measurement Classification			
	Measurement	Level 1	Level 2	Level 3	
Assets:					
Commodity derivative assets – current	\$ 7,182	\$ —	\$ 7,182	\$ —	
Commodity derivative assets – noncurrent	\$ 2,756	\$ —	\$ 2,756	\$ —	
Liabilities:					
Commodity derivative liabilities – current	\$ (14,203)	\$ —	\$ (14,203)	\$ —	
Commodity derivative liabilities – noncurrent	\$ (2,201)	\$ —	\$ (2,201)	\$ —	

Description	December 31, 2018				
	Fair Value	Fair Value Measurement Classification			
	Measurement	Level 1	Level 2	Level 3	
Assets:					
Commodity derivative assets – current	\$ 34,932	\$ —	\$ 34,932	\$ —	
Commodity derivative assets – noncurrent	\$ 10,100	\$ —	\$ 10,100	\$ —	
Liabilities:					
Commodity derivative liabilities – current	\$ (991)	\$ —	\$ (991)	\$ —	
Commodity derivative liabilities – noncurrent	\$ —	\$ —	\$ —	\$ —	

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 six months ended June 30, 2019 and 2018.

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 based on discounted cash flows derived from third-party quoted forward prices for WTI, LLS and MEH crude oil closing prices as of the end of the reporting periods. We generally use the income approach, using valuation techniques that convert future cash flows to a single discounted value. Each of these is a Level 2 input.

Non-Recurring Fair Value Measurements

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

12. Commitments and Contingencies

Gathering and Intermediate Transportation Commitments

We have long-term agreements with Republic Midstream, LLC (“Republic Midstream”) and Republic Midstream Marketing, LLC (“Republic Marketing”) and, together with Republic Midstream, collectively, “Republic”) to provide gathering and intermediate pipeline transportation services for a substantial portion of our crude oil and condensate production in the South Texas region as well as volume capacity support for certain downstream interstate pipeline transportation.

Republic 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 Republic through 2031 under the gathering agreement.

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

Excluding the potential impact of the effects of price escalation from commodity price changes, the minimum fee requirements attributable to the MVC under the gathering and transportation agreement are as follows: \$6.3 million for the remainder of 2019, \$13.0 million per year for 2020 through 2025, \$7.4 million for 2026, \$3.8 million per year for 2027 through 2030 and \$2.2 million for 2031.

Drilling, Completion and Other Commitments

As of June 30, 2019, we had contractual commitments on a pad-to-pad basis for two drilling rigs. Additionally, we have a one-year agreement, effective January 1, 2019, which can be terminated with 60 days' notice by either party, to utilize of certain frac services. In the absence of any potential early termination, we have an obligation of \$9.9 million associated with the remaining minimum daily utilization commitment.

Legal and Regulatory

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 June 30, 2019, we had a reserve in the amount of \$0.3 million included in "Accounts payable and accrued liabilities" for the estimated settlement of disputes with partners regarding certain transactions that occurred in prior years. As of June 30, 2019, we had AROs of approximately \$4.5 million attributable to the plugging of abandoned wells.

13. Shareholders' Equity

The following tables summarize the components of our shareholders' equity and the changes therein as of and for the six months ended June 30, 2019 and 2018.

	Common Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total Shareholders' Equity
Balance as of December 31, 2018	\$ 151	\$ 197,630	\$ 249,492	\$ 82	\$ 447,355
Net loss	—	—	(38,697)	—	(38,697)
Cumulative effect of change in accounting principle ¹	—	—	(94)	—	(94)
All other changes ²	—	381	—	(1)	380
Balance as of March 31, 2019	\$ 151	\$ 198,011	\$ 210,701	\$ 81	\$ 408,944
Net income	—	—	51,625	—	51,625
All other changes ²	—	986	—	(1)	985
Balance as of June 30, 2019	\$ 151	\$ 198,997	\$ 262,326	\$ 80	\$ 461,554

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

² Includes equity-classified share-based compensation of \$2.1 million during the six months ended June 30, 2019. During the six months ended June 30, 2019, 26,671 shares of common stock were issued in connection with the vesting of certain time-vested restricted stock units ("RSUs"), net of shares withheld for income taxes.

	Common Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total Shareholders' Equity
Balance as of December 31, 2017	\$ 150	\$ 194,123	\$ 27,366	\$ —	\$ 221,639
Net income	—	—	10,295	—	10,295
Cumulative effect of change in accounting principle ¹	—	—	(2,659)	—	(2,659)
All other changes ²	1	988	—	—	989
Balance as of March 31, 2018	\$ 151	\$ 195,111	\$ 35,002	\$ —	\$ 230,264
Net loss	—	—	(2,521)	—	(2,521)
All other changes ²	—	869	—	—	869
Balance as of June 30, 2018	\$ 151	\$ 195,980	\$ 32,481	\$ —	\$ 228,612

¹ Reflects a write-off for certain accounts receivable attributable to natural gas imbalances accounted for under the entitlements method prior to January 1, 2018, in connection with the adoption of ASC Topic 606, *Revenues from Contracts with Customers*.

² Includes equity-classified share-based compensation of \$2.5 million during the six months ended June 30, 2018. During the six months ended June 30, 2018, 38,115 and 1,495 shares of common stock were issued in connection with the vesting of certain RSUs and performance restricted stock units ("PRSUs"), net of shares withheld for income taxes, respectively.

14. Share-Based Compensation and Other Benefit Plans

Share-Based Compensation

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

We reserved a total of 1,424,600 shares of common stock for issuance under the Penn Virginia Corporation Management Incentive Plan for share-based compensation awards. A total of 348,572 RSUs and 98,526 PRSUs have been granted to employees and directors as of June 30, 2019.

We recognized \$1.0 million and \$2.1 million of expense attributable to the RSUs and PRSUs for the three and six months ended June 30, 2019, respectively, and \$0.9 million and \$2.5 million for the three and six months ended June 30, 2018, respectively. Approximately \$0.6 million of the expense for the six months ended June 30, 2018 was attributable to the accelerated vesting of certain awards of our former Executive Chairman upon his retirement. We also paid him \$0.3 million for certain transition and support services during this period in connection with his retirement.

In the six months ended June 30, 2018, we granted 17,456 RSUs to certain employees with an average grant-date fair value of \$43.43 per RSU. A total of 1,132 equity awards were granted during the six months ended June 30, 2019 with an average grant-date fair value of \$43.06. The RSUs are being charged to expense on a straight-line basis over a range of four to five years. In the six months ended June 30, 2019 and 2018, 26,671 and 38,115 shares were issued upon vesting/settlement of equity awards, net of shares withheld for income taxes, respectively.

No PRSUs were granted during the six months ended June 30, 2019 or 2018. In the six months ended June 30, 2018, 1,495 shares were issued upon vesting/settlement of equity awards, net of shares withheld for income taxes. The PRSUs were granted collectively in two to three separate tranches with individual three-year performance periods beginning in January 2017, 2018 and 2019, respectively. Vesting of the PRSUs can range from zero to 200 percent of the original grant based on the performance of our common stock relative to an industry index. Due to their market condition, the PRSUs are being charged to expense using graded vesting over a maximum of five years. The fair value of each PRSU award was estimated on their applicable grant date using a Monte Carlo simulation with a range of \$47.70 to \$65.28 per PRSU. Expected volatilities were based on historical volatilities and range from 59.63% to 62.18%. A risk-free rate of interest with a range of 1.44% to 1.51% was utilized, which is equivalent to the yield, as of the measurement date, of the zero-coupon U.S. Treasury bill commensurate with the longest remaining performance measurement period for each tranche. We assumed no payment of dividends during the performance periods.

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 \$0.1 million and \$0.3 million of expense attributable to the 401(k) Plan for the three and six months ended June 30, 2019, respectively, and \$0.2 million and \$0.3 million for the three and six months ended June 30, 2018, respectively. The charges for the 401(k) Plan are recorded as a component of "G&A expenses" in our Condensed Consolidated Statements of Operation.

We maintain unqualified legacy defined benefit pension and defined benefit postretirement plans that cover a limited number of former employees, all of whom retired prior to 2000. The combined expense recognized with respect to these plans was less than \$0.1 million for each of the three and six months ended June 30, 2019 and 2018. 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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Interest on borrowings and related fees	\$ 9,304	\$ 7,730	\$ 19,015	\$ 13,778
Accretion of original issue discount ¹	183	168	363	333
Amortization of debt issuance costs	644	680	1,385	1,311
Capitalized interest	(1,075)	(2,428)	(2,229)	(4,671)
	<u>\$ 9,056</u>	<u>\$ 6,150</u>	<u>\$ 18,534</u>	<u>\$ 10,751</u>

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

16. Earnings per Share

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income (loss) - basic and diluted	\$ 51,625	\$ (2,521)	\$ 12,928	\$ 7,774
Weighted-average shares – basic	15,106	15,058	15,102	15,050
Effect of dilutive securities ¹	56	—	72	121
Weighted-average shares – diluted	<u>15,162</u>	<u>15,058</u>	<u>15,174</u>	<u>15,171</u>

¹ For the three months ended June 30, 2018, approximately 0.1 million potentially dilutive securities, represented by RSUs and PRSUs, had the effect of being anti-dilutive and were excluded from the calculation of diluted earnings per share.

Forward-Looking Statements

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

- risks related to potential and completed acquisitions, including related costs and our ability to realize their expected benefits;
- our ability to satisfy our short-term and long-term liquidity needs, including our inability to generate sufficient cash flows from operations or to obtain adequate financing to fund our capital expenditures and meet working capital needs;
- negative events or publicity adversely affecting our ability to maintain our relationships with our suppliers, service providers, customers, employees, and other third parties;
- plans, objectives, expectations and intentions contained in this report that are not historical;
- our ability to execute our business plan in volatile and depressed commodity price environments;
- the decline in and volatility of expected and realized commodity prices for oil, natural gas liquids, or NGLs, and natural gas;
- our ability to develop, explore for, acquire and replace oil and gas reserves and sustain production;
- our ability to generate profits or achieve targeted reserves in our development and exploratory drilling and well operations;
- our ability to meet guidance, market expectations and internal projections, including type curves;
- any impairments, write-downs or write-offs of our reserves or assets;
- the projected demand for and supply of oil, NGLs and natural gas;
- our ability to contract for drilling rigs, frac crews, materials, supplies and services at reasonable costs;
- our ability to renew or replace expiring contracts on acceptable terms;
- our ability to obtain adequate pipeline transportation capacity or other transportation for our oil and gas production at reasonable cost and to sell our production at, or at reasonable discounts to, market prices;
- the uncertainties inherent in projecting future rates of production for our wells and the extent to which actual production differs from that estimated in our proved oil and gas reserves;
- use of new techniques in our development, including choke management and longer laterals;
- drilling and operating risks;
- 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;
- and
- other factors set forth in our filings with the Securities and Exchange Commission, or SEC, including the risks set forth in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2018.

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

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

The following discussion and analysis of the financial condition and results of operations of Penn Virginia Corporation and its consolidated subsidiaries ("Penn Virginia," the "Company," "we," "us" or "our") should be read in conjunction with our Condensed Consolidated Financial Statements and Notes thereto included in Part I, Item 1, "Financial Statements." All dollar amounts presented in the tables that follow are in thousands unless otherwise indicated. Also, due to the combination of different units of volumetric measure, the number of decimal places presented and rounding, certain results may not calculate explicitly from the values presented in the tables. References to "quarters" represent the three months ended June 30, 2019 or 2018, as applicable.

Overview and Executive Summary

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

Industry Environment and Recent Operating and Financial Highlights

Crude oil prices increased moderately throughout the first half of 2019, rising from levels in the upper \$40 per barrel range at the beginning of the year and into the lower \$60 per barrel range in April and May before falling back to the upper \$50 per barrel range by the end of June 2019 due primarily to domestic and global supply and demand dynamics. While impacting us to a lesser extent, NGL and natural gas pricing has steadily declined from year-end 2018 levels due primarily to excess domestic supply.

Since February 2019, we have contracted for our drilling rigs on a pad-to-pad basis and the day rates charged for these services have remained relatively unchanged through the first half of 2019 while related casing costs have declined. While we have a minimum utilization commitment for dedicated frac services, certain component stimulation product and service costs have also declined in the first half of 2019. For the balance of the year, we anticipate that both drilling day rate and stimulation costs will decline. Costs incurred for most oilfield products and services associated with operating our properties remained relatively stable during the first half of 2019 and are anticipated to remain as such for the second half of 2019 with moderate declines in certain costs consistent with recent industry experience.

Pursuant to an amendment to our crude oil gathering agreement with Republic Midstream, LLC, or Republic, that was entered into in 2016, the volumetric rate for such service is scheduled to increase effective August 1, 2019. Accordingly, we expect to incur higher Gathering, processing and transportation expenses, or GPT, in future periods on a per unit and absolute basis.

As discussed in further detail in Notes 2 and 9 to the Condensed Consolidated Financial Statements, we have adopted Accounting Standards Codification Topic 842, *Leases*, or ASC Topic 842, effective January 1, 2019. We adopted ASC Topic 842 utilizing the optional transition approach.

The following summarizes our key operating and financial highlights for the three months ended June 30, 2019, with comparison to the three months ended March 31, 2019. The year-over-year highlights for the quarter and six-month periods are addressed in further detail under *Financial Condition and Results of Operations* that follow.

- Daily production increased approximately 13 percent to 27,845 barrels of oil equivalent per day, or BOEPD, from 24,692 BOEPD due primarily to the timing of wells turned to sales, which included eight gross (7.3 net) wells turned to sales in the second quarter of 2019 compared to nine gross (7.8 net) wells turned to sales in the first quarter of 2019, including four gross (4.0 net) wells turned to sales in mid-March 2019. Total production increased to 2,534 thousand barrels of oil equivalent, or MBOE, from 2,222 MBOE.
- Product revenues increased approximately 17 percent to \$122.8 million from \$104.6 million due primarily to 10 percent higher crude oil volume and nine percent higher crude oil prices. Lower NGL revenues were due to a 49 percent decrease in price partially offset by a 23 percent increase in volume. Higher natural gas revenues were due to a 27 percent increase in volume partially offset by a three percent decrease in prices.
- Production and lifting costs (consisting of Lease operating expenses, or LOE, and GPT) increased on an absolute basis to \$16.8 million from \$14.9 million due primarily to higher volume. Production and lifting costs decreased on a per unit basis to \$6.62 per barrel of oil equivalent, or BOE, from \$6.72 per BOE due primarily to the effects of higher volume and more efficient chemical utilization, improved water disposal subsequent to facility repairs and lower gas lift and compression costs.
- Production and ad valorem taxes increased on an absolute and per unit basis to \$7.6 million and \$2.99 per BOE from \$5.7 million and \$2.56 per BOE, respectively, due to higher production, the effect of higher overall product pricing and higher estimated valuations for ad valorem tax assessments.

- General and administrative, or G&A, expenses decreased on an absolute and per unit basis to \$6.2 million and \$2.46 per BOE from \$7.1 million and \$3.18 per BOE, respectively, due primarily to substantially lower costs associated with the termination of the merger with Denbury in the second quarter of 2019 when compared to the first quarter of 2019.
- Depreciation, depletion and amortization, or DD&A, increased on an absolute basis to \$44.3 million from \$38.9 million due primarily to higher volume. DD&A decreased marginally on a per unit basis to \$17.48 per BOE from \$17.49 per BOE.
- Operating income increased to \$47.9 million from \$38.7 million due to the combined impact of the matters noted in the bullets above.

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

	Three Months Ended			Six Months Ended	
	June 30,	March 31,	June 30,	June 30,	
	2019	2019	2018	2019	2018
Total production (MBOE)	2,534	2,222	2,020	4,756	3,473
Average daily production (BOEPD)	27,845	24,692	22,200	26,278	19,189
Crude oil production (MBbl)	1,821	1,652	1,498	3,473	2,625
Crude oil production as a percent of total	72%	74%	74%	73%	76%
Product revenues	\$ 122,823	\$ 104,637	\$ 111,161	\$ 227,460	\$ 188,155
Crude oil revenues	\$ 114,031	\$ 94,812	\$ 101,716	\$ 208,843	\$ 172,974
Crude oil revenues as a percent of total	93%	91%	92%	92%	92%
Realized prices:					
Crude oil (\$ per Bbl)	\$ 62.63	\$ 57.39	\$ 67.89	\$ 60.14	\$ 65.89
NGLs (\$ per Bbl)	\$ 9.01	\$ 17.60	\$ 20.54	\$ 12.85	\$ 19.56
Natural gas (\$ per Mcf)	\$ 2.72	\$ 2.79	\$ 2.58	\$ 2.75	\$ 2.70
Aggregate (\$ per BOE)	\$ 48.47	\$ 47.08	\$ 55.02	\$ 47.82	\$ 54.17
Prices adjusted for derivatives:					
Crude oil (\$ per Bbl)	\$ 58.07	\$ 60.05	\$ 59.61	\$ 59.02	\$ 58.28
Aggregate (\$ per BOE)	\$ 45.20	\$ 49.06	\$ 48.89	\$ 47.00	\$ 48.42
Production and lifting costs:					
Lease operating (\$ per BOE)	\$ 4.09	\$ 4.95	\$ 4.32	\$ 4.49	\$ 4.61
Gathering, processing and transportation (\$ per BOE)	\$ 2.53	\$ 1.77	\$ 2.26	\$ 2.17	\$ 2.28
Production and ad valorem taxes (\$ per BOE)	\$ 2.99	\$ 2.56	\$ 2.87	\$ 2.79	\$ 2.85
General and administrative (\$ per BOE) ¹	\$ 2.46	\$ 3.18	\$ 2.63	\$ 2.80	\$ 3.40
Depreciation, depletion and amortization (\$ per BOE)	\$ 17.48	\$ 17.49	\$ 15.48	\$ 17.49	\$ 15.36
Capital expenditure program costs ²	\$ 90,872	\$ 101,288	\$ 125,035	\$ 192,160	\$ 209,263
Cash provided by operating activities ³	\$ 85,103	\$ 69,259	\$ 81,736	\$ 154,362	\$ 120,418
Cash paid for capital expenditures ⁴	\$ 89,455	\$ 86,486	\$ 123,511	\$ 175,941	\$ 201,350
Cash and cash equivalents at end of period	\$ 12,796	\$ 4,655	\$ 11,521	\$ 12,796	\$ 11,521
Debt outstanding at end of period, net	\$ 531,476	\$ 515,919	\$ 432,824	\$ 531,476	\$ 432,824
Credit available under credit facility at end of period	\$ 159,600	\$ 124,600	\$ 95,745	\$ 159,600	\$ 95,745
Net development wells drilled and completed	7.3	7.8	16.9	15.1	26.9

¹ Includes combined amounts of \$0.43, \$0.79 and \$0.46 per BOE for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively, and \$0.60 and \$0.92 for the six months ended June 30, 2019 and 2018, respectively, attributable to equity-classified share-based compensation and significant special charges, including acquisition, divestiture and strategic transaction and other costs, as described in the discussion of "Results of Operations - General and Administrative" that follows.

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

³ Includes net cash received (paid) for derivative settlements of \$(8.3) million, \$4.4 million and \$(12.4) million for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively, and \$(3.9) million and \$(20.0) million for the six months ended June 30, 2019 and 2018, respectively. Reflects changes in operating assets and liabilities of \$8.4 million, \$(6.5) million and \$11.4 million for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively, and \$1.9 million and \$4.0 million for the six months ended June 30, 2019 and 2018, respectively.

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

Key Developments

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

Production and Development Plans

Total production for the second quarter of 2019 was 2,534 MBOE, or 27,845 barrels of oil equivalent per day, or BOEPD, with approximately 72 percent, or 1,821 MBOE, of production from crude oil, 15 percent from NGLs and 13 percent from natural gas.

We drilled and turned eight gross (7.3 net) wells to sales during the second quarter of 2019. Subsequent to June 30, 2019, we drilled and turned an additional eight gross (7.1 net) wells to sales. As of August 2, 2019, we were drilling five gross (4.4 net) wells with two operated drilling rigs and two gross (1.9 net) wells were completing.

As of August 2, 2019, we had approximately 98,500 gross (84,400 net) acres in the Eagle Ford, net of expirations. Approximately 92 percent of our acreage is held by production and substantially all is operated by us.

Amendment to Credit Facility

In May 2019, we entered into the Borrowing Base Increase Agreement and Amendment No. 6 to the Credit Agreement, or the Sixth Amendment, increasing the lender commitment under our credit agreement, or Credit Facility, to \$1.0 billion from \$450 million and the borrowing base to \$500 million from \$450 million and extending the maturity to May 2024 from September 2020 (subject to certain conditions as described in Note 7 to our Condensed Consolidated Financial Statements included in Part I, Item 1 and the discussion of *Capitalization* within Financial Condition that follows) among other things. In addition, the applicable margin ranges associated with borrowings applicable to the Credit Facility were each reduced by 150 basis points. We incurred and capitalized approximately \$2.5 million of issue and other costs associated with the Sixth Amendment.

Commodity Hedging Program

We have hedged a portion of our estimated future crude oil production from July 2019 through the end of 2020 with a mix of West Texas Intermediate, or WTI-, Light Louisiana Sweet, or LLS- and Magellan East Houston, or MEH- indexed swaps. We are currently unhedged with respect to NGL and natural gas production. The following table summarizes our hedge positions for the periods presented:

	WTI Volumes (Barrels per day)	WTI Average Swap Price (\$ per barrel)	LLS Volumes (Barrels per day)	LLS Average Swap Price (\$ per barrel)	MEH Volumes (Barrels per day)	MEH Average Swap Price (\$ per barrel)
Q3 - Q4 2019	7,400	\$ 55.70	5,000	\$ 59.17	1,000	\$ 64.00
2020	7,000	\$ 54.94	—	—	2,000	\$ 61.03

Executive Transition

On July 1, 2019, the Company and Steven A. Hartman, the Company's Senior Vice President, Chief Financial Officer and Treasurer, or SVP and CFO, mutually agreed that he will separate from the Company, with his last day of employment to be December 31, 2019 or such earlier date as requested by the Company, or the Separation Date. In connection with Mr. Hartman's departure, we entered into a separation and transition agreement, or the Transition Agreement. Under the Transition Agreement, Mr. Hartman has agreed to continue his employment with the Company through the Separation Date in exchange for certain separation pay and benefits, including the accelerated vesting of certain share-based compensation awards upon the Separation Date, subject to various terms and conditions. In connection with the Transition Agreement and the search for a new chief financial officer, we will incur incremental G&A costs during the second half of 2019.

Termination of Merger Agreement with Denbury

On March 21, 2019, we and Denbury Resources Inc., or Denbury, entered into a Termination Agreement, or the Termination Agreement, under which the parties mutually agreed to terminate our previously announced merger agreement. Subject to limited customary exceptions, the Termination Agreement also mutually releases the parties from any claims of liability to one another relating to the contemplated merger transaction. We incurred a total of \$0.8 million of incremental costs associated with the merger transaction as well as the Termination Agreement during the six months ended June 30, 2019. These costs are included in the G&A caption in our Condensed Consolidated Statement of Operations.

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 \$500.0 million. As of August 2, 2019, we had \$152.6 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. In order to mitigate this volatility, we entered into derivative contracts with a number of financial institutions, all of which are participants in the Credit Facility, hedging a portion of our estimated future crude oil production through the end of 2020. The level of our hedging activity and duration of the financial instruments employed depend on our desired cash flow protection, available hedge prices, the magnitude of our capital program and our operating strategy.

Capital Resources

Under our capital program for 2019, we anticipate capital expenditures, excluding acquisitions, to total between \$335 million and \$355 million for 2019 with approximately 96 percent of capital being directed to drilling and completions on our Eagle Ford acreage. We plan to fund our 2019 capital spending primarily with cash from operating activities and, if necessary, borrowings under the Credit Facility. Based upon current price and production expectations for 2019, we believe that our cash from operating activities and borrowings under our Credit Facility will be sufficient to fund our operations through year-end 2019; however, future cash flows are subject to a number of variables and significant additional capital expenditures may be required to more fully develop our properties. For a detailed analysis of our historical capital expenditures, see the “Cash Flows” discussion that follows.

Cash on Hand and Cash From Operating Activities. As of August 2, 2019, we had approximately \$1 million of cash on hand. For additional information and an analysis of our historical cash from operating activities, see the “Cash Flows” discussion that follows.

Credit Facility Borrowings. During the three and six months ended June 30, 2019, we borrowed \$15.0 million and \$19.0 million, respectively, net of repayments, under the Credit Facility. For additional information regarding the terms and covenants under the Credit Facility, see the “Capitalization” discussion that follows.

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

	Borrowings Outstanding		
	Weighted-Average	Maximum	Weighted-Average Rate
Three months ended June 30, 2019	\$ 340,055	\$ 345,000	5.05 %
Six months ended June 30, 2019	\$ 329,652	\$ 345,000	5.51 %

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

Capital Market 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.

Cash Flows

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

	Six Months Ended	
	June 30,	June 30,
	2019	2018
Cash flows from operating activities		
Operating cash flows, net of working capital changes	\$ 177,117	\$ 150,502
Crude oil derivative settlements paid, net	(3,907)	(19,977)
Interest payments, net of amounts capitalized	(16,784)	(8,953)
Acquisition, divestiture and strategic transaction costs paid	(1,985)	(462)
Reorganization-related administration fees and costs paid	(79)	(442)
Consulting costs paid to former Executive Chairman	—	(250)
Net cash provided by operating activities	<u>154,362</u>	<u>120,418</u>
Cash flows from investing activities		
Acquisitions, net	—	(86,835)
Capital expenditures	(175,941)	(201,350)
Proceeds from sales of assets, net	29	2,525
Net cash used in investing activities	<u>(175,912)</u>	<u>(285,660)</u>
Cash flows from financing activities		
Proceeds from credit facility borrowings, net	19,000	166,500
Debt issuance costs paid	(2,518)	(754)
Net cash provided by financing activities	<u>16,482</u>	<u>165,746</u>
Net increase (decrease) in cash and cash equivalents	<u>\$ (5,068)</u>	<u>\$ 504</u>

Cash Flows from Operating Activities. The increase of approximately \$34 million in net cash from operating activities for the six months ended June 30, 2019 compared to the corresponding period in 2018 was primarily attributable to: (i) higher production volume in the 2019 period despite lower overall product pricing, (ii) lower net payments of derivative settlements in the 2019 period, (iii) two months of incremental net operating cash inflows from the acquisition of oil and gas assets from Hunt Oil Company, or the Hunt Acquisition, which was completed on March 1, 2018, (iv) lower payments in the 2019 period for reorganization-related administration costs and (v) the absence in the 2019 period of consulting costs paid to our former Executive Chairman that were paid in 2018 period. These items were partially offset by higher interest payments due to greater outstanding borrowings in the 2019 period and higher costs paid for acquisition, divestiture and strategic transaction costs in the 2019 period, including costs associated with the terminated merger transaction with Denbury.

Cash Flows from Investing Activities. As illustrated in the tables below, our cash payments for capital expenditures were lower during the 2019 period as compared to the 2018 period, due primarily to the employment of two drilling rigs through most of the first half of 2019 during which time we drilled and completed 15.1 net wells. We employed three drilling rigs during most of the comparable period in 2018 during which time we drilled and completed 26.9 net wells. Despite the lower overall well count, a substantially higher number of the net wells in the 2019 period as compared to the 2018 period were higher-cost extended reach laterals, or XRLs. In the 2018 period, we paid a total of \$87.9 million for the Hunt Acquisition and received a total of \$1.1 million in connection with the final settlement of a 2017 acquisition transaction. In addition, we received proceeds of \$1.8 million in the 2018 period attributable to the sales of: (i) undeveloped acreage holdings in the Tuscaloosa Marine Shale in Louisiana, (ii) certain undeveloped deep leasehold rights in Oklahoma, (iii) certain pipeline assets in our former Marcellus Shale operating region and (iv) scrap tubular and well materials. We also received a deposit of \$0.7 million in June 2018 in connection with the Mid-Continent divestiture.

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

	Six Months Ended	
	June 30,	June 30,
	2019	2018
Drilling and completion	\$ 185,649	\$ 202,848
Lease acquisitions and other land-related costs	1,383	2,886
Pipeline, gathering facilities and other equipment, net	4,817	3,344
Geological and geophysical (seismic) costs	311	185
	<u>\$ 192,160</u>	<u>\$ 209,263</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:

	Six Months Ended	
	June 30,	June 30,
	2019	2018
Total capital expenditures program costs (from above)	\$ 192,160	\$ 209,263
Increase in accrued capitalized costs	(17,397)	(12,231)
Less:		
Transfers from tubular inventory and well materials	(3,458)	(4,006)
Sales and use tax refunds received and applied to property accounts	(2,855)	(644)
Other, net	(32)	—
Add:		
Tubular inventory and well materials purchased in advance of drilling	3,130	2,677
Capitalized internal labor	2,164	1,620
Capitalized interest	2,229	4,671
Total cash paid for capital expenditures	<u>\$ 175,941</u>	<u>\$ 201,350</u>

Cash Flows from Financing Activities. The 2019 period includes borrowings of \$32.0 million and repayments of \$13.0 million under the Credit Facility which were used to fund a portion of our capital program. The 2018 period includes borrowings of \$166.5 million under the Credit Facility, a substantial portion of which was used to fund the Hunt Acquisition. We also paid \$2.5 million and \$0.8 million of debt issue costs in the 2019 and 2018 periods, respectively, in connection with amendments to the Credit Facility.

Capitalization

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

	June 30,	December 31,
	2019	2018
Credit facility	\$ 340,000	\$ 321,000
Second lien term loan, net	191,476	190,375
Total debt, net	531,476	511,375
Shareholders' equity	461,554	447,355
	<u>\$ 993,030</u>	<u>\$ 958,730</u>
Debt as a % of total capitalization	54%	53%

Credit Facility. The Credit Facility provides for a \$1.0 billion revolving commitment and \$500 million borrowing base and a \$25 million sublimit for the issuance of letters of credit. The availability under the Credit Facility may not exceed the lesser of the aggregate commitments or the borrowing base. The borrowing base under the Credit Facility is redetermined semi-annually, generally in April and October of each year. Additionally, the Credit Facility lenders may, at their discretion, initiate a redetermination at any time during the six-month period between scheduled redeterminations. The Credit Facility is available to us for general corporate purposes including working capital. We had \$0.4 million in letters of credit outstanding as of June 30, 2019 and December 31, 2018, respectively.

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

The outstanding borrowings under the Credit Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate plus an applicable margin ranging from 0.50% to 1.50% (2.00% to 3.00% prior to May 2019), determined based on the average availability under the Credit Facility or (b) a customary London interbank offered rate, or LIBOR, plus an applicable margin ranging from 1.50% to 2.50% (3.00% to 4.00% prior to May 2019), determined based on the average availability 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 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 June 30, 2019, the actual weighted-average interest rate on the outstanding borrowings under the Credit Facility was 4.42%. Unused commitment fees are charged at a rate of 0.375% to 0.50% depending upon utilization.

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

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

The outstanding borrowings under the Second Lien Facility bear interest at a rate equal to, at our option, either (a) a customary reference rate based on the prime rate plus an applicable margin of 6.00% or (b) a customary LIBOR rate plus an applicable margin of 7.00%. Amounts under the Second Lien Facility were borrowed at a price of 98% with an initial interest rate of 8.34% resulting in an effective interest rate of 9.89%. As of June 30, 2019, the actual interest rate on the Second Lien Facility was 9.41%. Interest on reference rate borrowings is payable quarterly in arrears and is computed on the basis of a year of 365/366 days, and interest on eurocurrency borrowings is payable every one or three months (including in three month intervals if we select a six month interest period), at our election and is computed on the basis of a year of 360 days. We have the right, to the extent permitted under the Credit Facility and an intercreditor agreement between the lenders under the Credit Facility and the lenders under the Second Lien Facility, to prepay loans under the Second Lien Facility at any time, subject to the following prepayment premiums (in addition to customary “breakage” costs with respect to eurocurrency loans): during year one, a customary “make-whole” premium; during year two, 102% of the amount being prepaid; during year three, 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: during years one and two, 102% of the amount being prepaid; during year three, 101% of the amount being prepaid; and thereafter, no premium.

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

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

The Credit Facility and Second Lien Facility also contain customary affirmative and negative covenants, including as to compliance with laws (including environmental laws, ERISA and anti-corruption laws), maintenance of required insurance, delivery of quarterly and annual financial statements, oil and gas engineering reports and budgets, maintenance and operation of property (including oil and gas properties), restrictions on the incurrence of liens and indebtedness, merger, consolidation or sale of assets, payment of dividends, and transactions with affiliates and other customary covenants.

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

As of June 30, 2019, we were in compliance with all of the covenants under the Credit Facility and the Second Lien Facility.

Reference Rate Reform. In July 2017, the U.K.’s Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. At the present time, the Credit Facility and Second Lien Facility are contractually subject to LIBOR rates and both have terms that extend beyond 2021. We have not yet pursued any technical amendment or other contractual alternative to address this matter. We are currently evaluating the potential impact of the eventual replacement of the LIBOR interest rate.

Results of Operations

Production

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

	Total Production			Average Daily Production		
	Three Months Ended		2019 vs. 2018	Three Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Crude oil (MBbl and BOPD)	1,821	1,498	323	20,007	16,465	3,542
NGLs (MBbl and BOPD)	389	269	120	4,272	2,960	1,312
Natural gas (MMcf and MMcfpd)	1,947	1,515	432	21	17	4
Total (MBOE and BOEPD)	2,534	2,020	514	27,845	22,200	5,645
	Three Months Ended		2019 vs. 2018	Three Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
		(MBOE)		(BOEPD)		
South Texas	2,534	1,952	582	27,845	21,451	6,394
Mid-Continent ¹	—	68	(68)	—	749	(749)
	2,534	2,020	514	27,845	22,200	5,645
	Six Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
		(MBOE)		(BOE per day)		
Crude oil (MBbl and BOPD)	3,473	2,625	848	19,185	14,505	4,680
NGLs (MBbl and BOPD)	704	434	270	3,890	2,395	1,495
Natural gas (MMcf and MMcfpd)	3,478	2,486	992	19	14	5
Total (MBOE and BOEPD)	4,756	3,473	1,283	26,278	19,189	7,089
	Six Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
		(MBOE)		(BOE per day)		
South Texas	4,756	3,335	1,421	26,278	18,427	7,851
Mid-Continent ¹	—	138	(138)	—	762	(762)
	4,756	3,473	1,283	26,278	19,189	7,089

¹ Mid-Continent operations were sold on July 31, 2018.

Total production increased 25 percent and 37 percent during the three and six month periods in 2019, respectively, due primarily to more productive and higher working interest wells, including XRLs, turned to sales in the second half of 2018 through the second quarter of 2019 when compared to the corresponding periods in the second half of 2017 through the second quarter of 2018 as well as incremental production from the Hunt Acquisition. Crude oil production increased 22 percent and 32 percent during the three and six month periods in 2019, respectively. These increases were partially offset by the effect of the divestiture in July 2018 of our former Mid-Continent operations, as well as natural production declines from our more mature Eagle Ford wells.

Approximately 72 percent and 73 percent of total production during the three and six month periods in 2019 was attributable to crude oil when compared to approximately 74 percent and 76 percent during the corresponding periods in 2018. The modest decline in the crude oil composition of total production was due primarily to a higher gas to oil ratio experienced with certain of our recently drilled wells in the southeastern portion of our acreage holdings. During the three and six month periods in 2019, we turned eight gross (7.3 net) wells and 17 gross (15.1 net) wells to sales, respectively, compared to 20 gross (16.9 net) wells and 33 gross (26.9 net) wells during the corresponding periods in 2018. As previously mentioned, a substantially higher number of the net wells in the 2019 period consisted of XRLs.

Product Revenues and Prices

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

	Total Product Revenues			Product Revenues per Unit of Volume		
	Three Months Ended		2019 vs. 2018	Three Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
	(\$ per unit of volume)					
Crude oil	\$ 114,031	\$ 101,716	\$ 12,315	\$ 62.63	\$ 67.89	\$ (5.26)
NGLs	3,502	5,533	(2,031)	\$ 9.01	\$ 20.54	\$ (11.53)
Natural gas	5,290	3,912	1,378	\$ 2.72	\$ 2.58	\$ 0.14
Total	\$ 122,823	\$ 111,161	\$ 11,662	\$ 48.47	\$ 55.02	\$ (6.55)
	(\$ per BOE)					
South Texas	\$ 122,823	\$ 109,544	\$ 13,279	\$ 48.47	\$ 56.12	\$ (7.65)
Mid-Continent ¹	—	1,617	(1,617)	—	\$ 23.71	\$ (23.71)
	\$ 122,823	\$ 111,161	\$ 11,662	\$ 48.47	\$ 55.02	\$ (6.55)
	(\$ per BOE)					
	Six Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
	(\$ per unit of volume)					
Crude oil	\$ 208,843	\$ 172,974	\$ 35,869	\$ 60.14	\$ 65.89	\$ (5.75)
NGLs	9,050	8,479	571	\$ 12.85	\$ 19.56	\$ (6.71)
Natural gas	9,567	6,702	2,865	\$ 2.75	\$ 2.70	\$ 0.05
Total	\$ 227,460	\$ 188,155	\$ 39,305	\$ 47.82	\$ 54.17	\$ (6.35)
	(\$ per BOE)					
South Texas	\$ 227,460	\$ 184,860	\$ 42,600	\$ 47.82	\$ 55.43	\$ (7.61)
Mid-Continent ¹	—	3,295	(3,295)	—	\$ 23.89	\$ (23.89)
	\$ 227,460	\$ 188,155	\$ 39,305	\$ 47.82	\$ 54.17	\$ (6.35)

¹ Mid-Continent operations were sold on July 31, 2018.

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

	Three Months Ended June 30, 2019 vs. 2018			Six Months Ended June 30, 2019 vs. 2018		
	Revenue Variance Due to			Revenue Variance Due to		
	Volume	Price	Total	Volume	Price	Total
Crude oil	\$ 21,891	\$ (9,576)	\$ 12,315	\$ 55,836	\$ (19,967)	\$ 35,869
NGLs	2,454	(4,485)	(2,031)	5,291	(4,720)	571
Natural gas	1,116	262	1,378	2,673	192	2,865
	\$ 25,461	\$ (13,799)	\$ 11,662	\$ 63,800	\$ (24,495)	\$ 39,305

Our product revenues during the three and six month periods in 2019 increased over the corresponding periods in 2018 due primarily to approximately 22 percent and 32 percent higher crude oil volumes partially offset by eight percent and nine percent lower crude oil prices, respectively. NGL revenues declined in the three month period in 2019 due to substantially lower pricing partially offset by 45 percent higher volumes while revenues in the six month period in 2019 increased due to 62 percent higher volumes partially offset by 34 percent lower pricing. Higher natural gas revenues were primarily attributable to 29 percent and 40 percent higher volumes and the effect of marginally higher pricing during the three and six month periods in 2019, respectively. Total crude oil revenues were approximately 93 percent and 92 percent of our total revenues during the three and six month periods in 2019 as compared to 92 percent during each of the three and six month periods in 2018.

Effects of Derivatives

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Crude oil revenues, as reported	\$ 114,031	\$ 101,716	\$ 12,315	\$ 208,843	\$ 172,974	\$ 35,869
Derivative settlements, net	(8,301)	(12,401)	4,100	(3,907)	(19,977)	16,070
	<u>\$ 105,730</u>	<u>\$ 89,315</u>	<u>\$ 16,415</u>	<u>\$ 204,936</u>	<u>\$ 152,997</u>	<u>\$ 51,939</u>
Crude oil prices per Bbl	\$ 62.63	\$ 67.89	\$ (5.26)	\$ 60.14	\$ 65.89	\$ (5.75)
Derivative settlements per Bbl	(4.56)	(8.28)	3.72	(1.12)	(7.61)	6.49
	<u>\$ 58.07</u>	<u>\$ 59.61</u>	<u>\$ (1.54)</u>	<u>\$ 59.02</u>	<u>\$ 58.28</u>	<u>\$ 0.74</u>

Gain on Sales of Assets

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Gain on sales of assets, net	\$ 16	\$ 4	\$ 12	\$ 41	\$ 79	\$ (38)

There were insignificant net gains and losses recognized during the three and six month periods in 2019 and 2018 primarily attributable to the disposition of certain support equipment, tubular inventory and well materials.

Other Revenues, net

Other revenues, net, includes fees for marketing and water disposal that we charge to third parties, net of related expenses, as well as other miscellaneous revenues and credits attributable to our current operations.

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Other revenues, net	\$ (72)	\$ 415	\$ (487)	\$ 494	\$ 557	\$ (63)

Other revenues, net decreased during each of the three and six month periods in 2019 from the corresponding periods in 2018 due primarily to certain maintenance costs incurred during the second quarter of 2019 at our water disposal facilities. These costs were partially offset by higher marketing and water disposal revenues due primarily to higher production in each of the periods in 2019 compared to the corresponding periods in 2018.

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		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Lease operating	\$ 10,362	\$ 8,730	\$ (1,632)	\$ 21,366	\$ 16,026	\$ (5,340)
Per unit of production (\$ per BOE)	\$ 4.09	\$ 4.32	\$ 0.23	\$ 4.49	\$ 4.61	\$ 0.12
% change per unit of production			5.3%			2.6%

LOE increased on an absolute basis, but declined on a per unit basis during both the three and six month periods in 2019 when compared to the corresponding periods in 2018. The absolute increases were due primarily to higher production volume as discussed above, as well as the effects of two additional months of production in the 2019 six-month period attributable to the Hunt Acquisition. The higher production volume also had the effect of decreasing the overall per unit cost, particularly those costs that have a higher fixed cost component.

Gathering, Processing and Transportation

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

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Gathering, processing and transportation	\$ 6,408	\$ 4,574	\$ (1,834)	\$ 10,337	\$ 7,933	\$ (2,404)
Per unit of production (\$ per BOE)	\$ 2.53	\$ 2.26	\$ (0.27)	\$ 2.17	\$ 2.28	\$ 0.11
% change per unit of production			(11.9)%			4.8%

GPT expense increased on an absolute basis during the three and six month periods in 2019 when compared to the corresponding periods in 2018 due primarily to substantially higher production volumes as discussed above. Per unit costs increased in the three month period in 2019 and declined in the six month period in 2019 compared to the corresponding periods in 2018 due primarily to a shift in the mix of crude oil production sold at the wellhead with no corresponding GPT expense subsequent to the achievement of required minimum crude oil volumes transported by pipeline.

Production and Ad Valorem Taxes

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

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Production and ad valorem taxes						
Production/severance taxes	\$ 5,626	\$ 5,291	\$ (335)	\$ 10,556	\$ 8,900	\$ (1,656)
Ad valorem taxes	1,953	504	(1,449)	2,715	987	(1,728)
	\$ 7,579	\$ 5,795	\$ (1,784)	\$ 13,271	\$ 9,887	\$ (3,384)
Per unit production (\$ per BOE)	\$ 2.99	\$ 2.87	\$ (0.12)	\$ 2.79	\$ 2.85	\$ 0.06
Production/severance tax rate as a percent of product revenue	4.6%	4.8%		4.6%	4.7%	

Production taxes increased on an absolute basis, but declined on a per unit basis during the three and six month periods in 2019 when compared to the corresponding periods in 2018 due primarily to increased production volume despite lower overall commodity sales prices. Accruals for ad valorem taxes also increased for the 2019 periods due to a higher commodity-price based valuation assessment assumption and the effects of growing our assessable property base and increased working interests from prior year acquisition activity.

General and Administrative

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

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Primary G&A	\$ 5,139	\$ 4,391	\$ (748)	\$ 10,442	\$ 8,605	\$ (1,837)
Share-based compensation (equity-classified)	1,017	875	(142)	2,055	2,451	396
Significant special charges:						
Acquisition, divestiture and strategic transaction costs	76	56	(20)	800	487	(313)
Executive retirement costs	—	—	—	—	250	250
Total G&A	\$ 6,232	\$ 5,322	\$ (910)	\$ 13,297	\$ 11,793	\$ (1,504)
Per unit of production (\$ per BOE)	\$ 2.46	\$ 2.63	\$ 0.17	\$ 2.80	\$ 3.40	\$ 0.60
Per unit of production excluding share-based compensation and other significant special charges identified above (\$ per BOE)	\$ 2.03	\$ 2.17	\$ 0.14	\$ 2.20	\$ 2.48	\$ 0.28

Our primary G&A expenses increased on an absolute and decreased on a per unit basis during both the three and six month periods in 2019 compared to the corresponding periods in 2018. The absolute increases are due primarily to the effects of higher payroll, benefits and support costs attributable to a higher overall employee headcount. Higher production volume had the effect of reducing G&A per unit of production during each of the 2019 three and six month periods.

Equity-classified share-based compensation charges during the periods presented are attributable to the amortization of compensation cost associated with the grants of time-vested restricted stock units, or RSUs, and performance restricted stock units, or PRSUs. The grants of RSUs and PRSUs are described in greater detail in Note 14 to the Condensed Consolidated Financial Statements. A substantial portion of the share-based compensation expense is attributable to the RSU and PRSU grants made in the normal course in January 2017 and RSU grants in September 2016 in connection with our reorganization. The remainder is attributable to grants of RSUs and PRSUs to certain employees upon their hiring or as a result of promotion subsequent to the first quarter of 2017. The six month period in 2018 includes a charge of \$0.6 million attributable to the accelerated vesting of certain RSUs and PRSUs in connection with the retirement of our former Executive Chairman in February 2018.

During the first half of 2019, we incurred consulting and other costs, including legal and other professional fees primarily associated with the previously announced merger transaction with Denbury which was mutually terminated in March 2019. The 2018 period includes similar transaction costs associated with the Hunt Acquisition as well as certain costs attributable to the aforementioned retirement of our former Executive Chairman.

Depreciation, Depletion and Amortization

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
DD&A expense	\$ 44,298	\$ 31,273	\$ (13,025)	\$ 83,168	\$ 53,354	\$ (29,814)
DD&A Rate (\$ per BOE)	\$ 17.48	\$ 15.48	\$ (2.00)	\$ 17.49	\$ 15.36	\$ (2.13)

DD&A increased on an absolute and per unit basis during both the three and six month periods ended in 2019 when compared to the corresponding periods in 2018. Higher production volume provided for an increase of approximately \$8.0 million and \$19.7 million while \$5.1 million and \$10.1 million was attributable to the higher DD&A rates in the 2019 periods. The higher DD&A rates in the 2019 periods are attributable to higher costs added to the full cost pool in the 2019 period.

Interest Expense

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Interest on borrowings and related fees	\$ 9,304	\$ 7,730	\$ (1,574)	\$ 19,015	\$ 13,778	\$ (5,237)
Accretion of original issue discount	183	168	(15)	363	333	(30)
Amortization of debt issuance costs	644	680	36	1,385	1,311	(74)
Capitalized interest	(1,075)	(2,428)	(1,353)	(2,229)	(4,671)	(2,442)
	<u>\$ 9,056</u>	<u>\$ 6,150</u>	<u>\$ (2,906)</u>	<u>\$ 18,534</u>	<u>\$ 10,751</u>	<u>\$ (7,783)</u>

Interest expense increased during the three and six month periods in 2019 as compared to the corresponding periods in 2018 due primarily to higher outstanding balances under the Credit Facility, including amounts borrowed to fund our larger capital expenditure program and the Hunt Acquisition. The accretion of original issue discount is entirely attributable to the Second Lien Facility and the amortization of debt issuance costs includes amounts attributable to both the Credit Facility and Second Lien Facility. We capitalized a larger portion of interest during the 2018 periods as we maintained a substantially larger portion of unproved property as compared to the corresponding periods in 2019.

Derivatives

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

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Crude oil derivative gains (losses)	\$ 13,603	\$ (52,241)	\$ 65,844	\$ (54,414)	\$ (71,036)	\$ 16,622

In the three months period in 2019, the forward curve for commodity prices declined relative to our weighted-average hedged prices resulting in net gains for our derivative portfolio and lower net losses for the six month period. We paid net cash settlements of \$8.3 million and \$3.9 million in the three and six month periods in 2019, respectively, and paid net cash settlements of \$12.4 million and \$20.0 million in the three and six month periods in 2018, respectively.

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		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Other, net	\$ 8	\$ (16)	\$ 24	\$ 114	\$ (74)	\$ 188

Other, net income (expense) increased during both the three and six month periods in 2019 as compared to the corresponding periods in 2018 due primarily to recoveries of sales and use taxes attributable to previously divested properties in the 2019 periods. The 2018 six month period includes interest charges applicable to a settlement with a royalty owner. Each of the three and six month periods includes comparable charges associated with our retiree benefit plans.

Income Taxes

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

	Three Months Ended		2019 vs. 2018	Six Months Ended		2019 vs. 2018
	June 30,	June 30,	Favorable	June 30,	June 30,	Favorable
	2019	2018	(Unfavorable)	2019	2018	(Unfavorable)
Income tax expense	\$ (818)	\$ —	\$ (818)	\$ (794)	\$ (163)	\$ (631)
Effective tax rate	1.6%	—%		5.8%	2.1%	

We recognized a federal and state income tax expense for the six months ended June 30, 2019 at the blended rate of 21.6%. 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 5.8%, which related to Texas deferred tax expense. The effect of the valuation allowance, as well as a reclassification of \$1.2 million from deferred tax assets to the current income tax receivable for refundable alternative minimum tax, or AMT, credit carryforwards, was to adjust our deferred tax asset to a deferred tax liability position of \$0.1 million as of June 30, 2019. We recognized a federal income tax expense for the six months ended June 30, 2018 at the blended rate of 21.6% which was similarly offset by a valuation allowance against our net deferred tax assets. We recorded an adjustment of \$0.2 million to the deferred tax asset related to sequestration of a portion of the aforementioned AMT credit carryforward resulting in an effective tax rate of 2.1%. We considered both the positive and negative evidence in determining that it was more likely than not that some portion or all of our deferred tax assets will not be realized, due primarily to cumulative losses.

Off Balance Sheet Arrangements

As of June 30, 2019, we had no off-balance sheet arrangements other than information technology licensing, service agreements, in-kind commodity recovery arrangements for imbalances and letters of credit, all of which are customary in our business.

Critical Accounting Estimates

The process of preparing financial statements in accordance with accounting principles generally accepted in the United States of America, or GAAP, requires our management to make estimates and judgments regarding certain items and transactions. It is possible that materially different amounts could be recorded if these estimates and judgments change or if the actual results differ from these estimates and judgments. Disclosure of our most critical accounting estimates that involve the judgment of our management can be found in our Annual Report on Form 10-K for the year ended December 31, 2018.

Disclosure of the Impact of Recently Issued Accounting Pronouncements Pending Adoption

In June 2016, the Financial Accounting Standards Board, or FASB, issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*, or ASU 2016-13, which changes the recognition model for the impairment of financial instruments, including accounts receivable, loans and held-to-maturity debt securities, among others. ASU 2016-13 is required to be adopted using the modified retrospective method by January 1, 2020, with early adoption permitted for fiscal periods beginning after December 15, 2018. In contrast to current guidance, which considers current information and events and utilizes a probable threshold (an “incurred loss” model), ASU 2016-13 mandates an “expected loss” model. The expected loss model: (i) estimates the risk of loss even when risk is remote, (ii) estimates losses over the contractual life, (iii) considers past events, current conditions and reasonable supported forecasts and (iv) has no recognition threshold. ASU 2016-13 will have applicability to our accounts receivable portfolio, particularly those receivables attributable to our joint interest partners which have a higher credit risk than those associated with our traditional customer receivables. At this time, we do not anticipate that the adoption of ASU 2016-13 will have a significant impact on our Consolidated Financial Statements and related disclosures; however, we are continuing to evaluate the requirements as well as monitoring developments regarding ASU 2016-13 that are unique to our industry. We plan to adopt ASU 2016-13 effective January 1, 2020.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

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

Interest Rate Risk

All of our long-term debt instruments are subject to variable interest rates. As of June 30, 2019, we had borrowings of \$340.0 million under the Credit Facility and \$200 million under the Second Lien Facility at interest rates of 4.42% and 9.41%, 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 \$5.4 million on an annual basis.

Commodity Price Risk

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

As of June 30, 2019, our commodity derivative portfolio was in a net liabilities position. The contracts associated with this position are with eight counterparties, all of which are investment grade financial institutions. This concentration may impact our overall credit risk, either positively or negatively, in that these counterparties may be similarly affected by changes in economic or other conditions. We neither paid nor received collateral with respect to our derivative positions.

During the six months ended June 30, 2019, we reported net commodity derivative loss of \$54.4 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 price risk management activities.

The following table sets forth our commodity derivative positions as of June 30, 2019:

	Instrument	Average	Weighted	Fair Value	
		Volume Per Day	Average Price	Asset	Liability
Crude Oil:		(barrels)	(\$/barrel)		
Third quarter 2019	Swaps-WTI	7,397	\$ 55.70	\$ —	\$ 1,677
Third quarter 2019	Swaps-LLS	5,000	\$ 59.17	—	1,589
Third quarter 2019	Swaps-MEH	1,000	\$ 64.00	15	—
Fourth quarter 2019	Swaps-WTI	7,398	\$ 55.70	—	1,222
Fourth quarter 2019	Swaps-LLS	5,000	\$ 59.17	—	1,059
Fourth quarter 2019	Swaps-MEH	1,000	\$ 64.00	46	—
First quarter 2020	Swaps-WTI	7,000	\$ 54.94	—	1,048
First quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	108
Second quarter 2020	Swaps-WTI	7,000	\$ 54.94	—	375
Second quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	75
Third quarter 2020	Swaps-WTI	7,000	\$ 54.93	164	—
Third quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	52
Fourth quarter 2020	Swaps-WTI	7,000	\$ 54.93	569	—
Fourth quarter 2020	Swaps-MEH	2,000	\$ 61.03	—	51
Settlements to be paid in subsequent period					4

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 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 \$10.00 per Bbl of Crude Oil (\$ in millions)	
	Increase	Decrease
Effect on the fair value of crude oil derivatives ¹	\$ (83.7)	\$ 56.5
Effect of crude oil price changes for the remainder of 2019 on operating income, excluding derivatives ²	\$ 40.0	\$ (40.0)

¹ Based on derivatives outstanding as of June 30, 2019.

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 June 30, 2019. 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 June 30, 2019, such disclosure controls and procedures were effective.

(b) Changes in Internal Control Over Financial Reporting

During the quarter ended June 30, 2019, 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, 2018.

Item 5. *Other Information.*

None.

Item 6. *Exhibits.*

- (10.1) Master Agreement, Borrowing Base Increase Agreement, and Amendment No. 6 to Credit Agreement, dated as of May 7, 2019, among Penn Virginia Holding Corp., as borrower, Penn Virginia Corporation, as parent, the subsidiaries of the borrower party thereto, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on May 7, 2019).
- (10.2) * Penn Virginia Corporation 2019 Management Incentive Plan.
- (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) * 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) * XBRL Taxonomy Extension Schema Document
- (101.CAL) * XBRL Taxonomy Extension Calculation Linkbase Document
- (101.DEF) * XBRL Taxonomy Extension Definition Linkbase Document
- (101.LAB) * XBRL Taxonomy Extension Label Linkbase Document
- (101.PRE) * 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 June 30, 2019, formatted in Inline XBRL (included within the Exhibit 101 attachments).

* Filed
herewith.

† Furnished
herewith.

SIGNATURES

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

PENN VIRGINIA CORPORATION

August 8, 2019

By: _____
Steven A. Hartman
Senior Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)

August 8, 2019

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

PENN VIRGINIA CORPORATION
2019 MANAGEMENT INCENTIVE PLAN

1. **Purpose.** The purpose of the Penn Virginia Corporation 2019 Management Incentive Plan is to further align the interests of participants with those of the shareholders by providing incentive compensation opportunities tied to the performance of the Common Stock (as defined below) and by promoting increased ownership of the Common Stock by such individuals. The Plan is also intended to advance the interests of the Company and its shareholders by attracting, retaining and motivating key personnel upon whose judgment, initiative and effort the successful conduct of the Company's business is largely dependent.

2. **Definitions.** Wherever the following capitalized terms are used in the Plan, they shall have the meanings specified below:

"Affiliate" shall mean any person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Company (within the meaning of the Exchange Act).

"Award" means an award of a Stock Option, Restricted Stock Award, Restricted Stock Unit Award, or Other Award granted under the Plan.

"Award Agreement" means an agreement (including an electronic agreement) entered into between the Company and a Participant setting forth the terms and conditions of an Award granted to a Participant, as provided in Section 12.1 hereof.

"Board" means the Board of Directors of the Company.

"Cause" shall have the meaning set forth in Section 10.2(b) hereof.

"Change in Control" means the consummation of a transaction or series of related transactions in which either:

(a) one Person (or more than one Person acting as a group) acquires beneficial ownership of stock of the Company that, together with the stock held by such Person or group, constitutes more than 50% of the total fair market value or total voting power of the stock of the Company;

(b) a majority of the members of the Board are replaced during any twelve-month period by directors whose appointment or election is not endorsed by a majority of the Board before the date of appointment or election; or

(c) one Person (or more than one Person acting as a group), acquires (or has acquired during the twelve-month period ending on the date of the most recent acquisition) assets from the Company having a total gross fair market value equal to or more than 50% of the total gross fair market value of all the assets of the Company immediately before such acquisition.

"Code" means the United States Internal Revenue Code of 1986, as amended, together with the applicable regulations thereunder.

“*Committee*” means the Compensation and Benefits Committee of the Board, or such other committee of the Board appointed by the Board to administer the Plan, or the full Board if no such committee is appointed.

“*Common Stock*” means the common stock of the Company (par value \$0.01 per share).

“*Company*” means Penn Virginia Corporation and any successor thereto.

“*Date of Grant*” means the date on which an Award under the Plan is granted by the Committee, or such later date as the Committee may specify to be the effective date of an Award.

“*Eligible Person*” means any person who is an employee, director, or consultant of the Company or any of its Subsidiaries.

“*Exchange Act*” means the United States Securities Exchange Act of 1934, as amended.

“*Fair Market Value*” of a share of Common Stock means, as of a particular date, the fair market value of such share as reasonably determined by the Committee in its good-faith discretion, and to the extent deemed appropriate by the Committee, based upon a recent transaction price per share or third-party valuation of the Common Stock and, to the extent necessary, shall be determined in a manner consistent with Section 409A of the Code; provided that, at any time that the Common Stock is listed on a nationally-recognized securities exchange, the “Fair Market Value” shall be the closing trading price of a share of Common Stock on that date (or if there were no reported prices on such date, on the last preceding date on which the prices were reported).

“*Incentive Stock Option*” means a Stock Option granted under Section 6 hereof that is intended to meet the requirements of Section 422 of the Code.

“*Nonqualified Stock Option*” means a Stock Option granted under Section 6 hereof that is not an Incentive Stock Option.

“*Other Award*” means any right granted pursuant to Section 9 hereof which is (a) not an Award described in Sections 6 through 8 hereof and (b) an Award of Common Stock or an Award denominated or payable in, valued in whole or in part by reference to, or otherwise based on or related to, Common Stock (including, without limitation, securities convertible into Common Stock), as deemed by the Committee to be consistent with the purposes of the Plan.

“*Participant*” means any Eligible Person who holds an outstanding Award under the Plan.

“*Person*” means an individual, partnership, corporation, unincorporated organization, joint stock company, limited liability company, trust, joint venture or other legal entity, or a governmental agency or political subdivision thereof.

“*Plan*” means the Penn Virginia Corporation 2019 Management Incentive Plan as set forth herein, effective as provided in Section 14.1 hereof and as may be amended and/or restated from time to time.

“*Prior Plan*” means the Penn Virginia Corporation 2016 Management Incentive Plan.

“*Restricted Stock Award*” means a grant of shares of Common Stock to an Eligible Person under Section 7 hereof that are issued subject to such vesting and transfer restrictions as the Committee shall determine, and such other conditions, as are set forth in the Plan and the applicable Award Agreement.

“*Restricted Stock Unit Award*” means a grant of a right to receive shares of Common Stock (or other consideration based on the value of shares of Common Stock) to an Eligible Person under Section 8 hereof that are issued subject to such vesting and transfer restrictions as the Committee shall determine, and such other conditions, as are set forth in the Plan and the applicable Award Agreement.

“*Securities Act*” means the United States Securities Act of 1933, as amended.

“*Service*” means a Participant’s service as an employee, director, consultant of the Company or any of its Subsidiaries, as applicable.

“*Stock Option*” means a grant to an Eligible Person under Section 6 hereof of an option to purchase shares of Common Stock at such time and price, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

“*Subsidiary*” means an entity (whether or not a corporation) that is wholly or majority owned or controlled, directly or indirectly, by the Company, or any other Affiliate of the Company that is so designated, from time to time, by the Committee, during the period of such affiliated status; provided, however, that with respect to Incentive Stock Options, the term “Subsidiary” shall include only an entity that qualifies under Section 424(f) of the Code as a “subsidiary corporation” with respect to the Company.

3. Administration.

3.1 Committee Members. The Plan shall be administered by the Committee. The Committee shall have the right, from time to time, to delegate to one or more officers of the Company the authority of the Committee to grant and determine the terms and conditions of Awards granted under the Plan, subject to the requirements of applicable law and such other limitations as the Committee shall determine. The Committee shall also be permitted to delegate, to any appropriate officer or employee of the Company, responsibility for performing certain ministerial functions under the Plan. In the event that the Committee's authority is delegated to officers or employees in accordance with the foregoing, all provisions of the Plan relating to the Committee shall be interpreted in a manner consistent with the foregoing by treating any such reference as a reference to such officer or employee for such purpose. Any action undertaken in accordance with the Committee's proper delegation of authority hereunder shall have the same force and effect as if such action was undertaken directly by the Committee and shall be deemed for all purposes of the Plan to have been taken by the Committee.

3.2 Committee Authority.

(a) **Committee Powers and Authority.** Subject to Section 3.2(b), the Committee shall have such powers and authority as may be necessary or appropriate for the Committee to carry out its functions as described in the Plan. Subject to the express limitations of the Plan, including those set forth in Section 3.2(b), the Committee shall have authority in its discretion to determine the Eligible Persons to whom, and the time or times at which, Awards may be granted, the number and type of shares or units subject to each Award, the purchase price of an Award (if any), the time or times at which an Award will become vested, exercisable or payable, the performance criteria, performance goals and other conditions of an Award, the duration of the Award, and all other terms of the Award. Subject to Section 3.2(b), the Committee may, in its discretion, provide for the extension of the exercisability of an Award, accelerate the vesting or exercisability of an Award, eliminate or make less restrictive any restrictions contained in an Award, waive any restriction or other provision of the Plan or an Award or otherwise amend or modify an Award in any manner that is, in either case, (1) not materially adverse to the Participant to whom such Award was granted, (2) consented to by such Participant or (3) authorized by Section 4.2 hereof; provided, however, no such action shall permit the term of any Stock Option to be greater than 10 years from its grant date. The Committee shall also have discretionary authority to interpret the Plan, to make all factual determinations under the Plan, and to make all other determinations necessary or advisable for Plan administration, including, without limitation, to correct any defect, to supply any omission or to reconcile any inconsistency in the Plan or any Award Agreement hereunder. The Committee may prescribe, amend, and rescind rules and regulations relating to the Plan. The Committee's determinations under the Plan need not be uniform and may be made by the Committee selectively among Participants and Eligible Persons, whether or not such persons are similarly situated. The Committee shall, in its discretion, consider such factors as it deems relevant in making its interpretations, determinations and actions under the Plan including, without limitation, the recommendations or advice of any officer or employee of the Company or such attorneys, consultants, accountants or other advisors as the Committee may select. All interpretations, determinations, and actions by the Committee shall be final, conclusive, and binding upon all parties.

(b) **Limitations on Committee Powers and Authority.**

(1) *Minimum Vesting Period.* All Awards granted under the Plan to Eligible Persons other than non-employee directors of the Company shall vest no earlier than one (1) year following the date of grant. All Awards granted under the Plan to non-employee directors of the Company shall vest no earlier than the sooner of one (1) year after the date of grant or the next annual meeting of shareholders

(provided that such annual meetings are at least fifty (50) weeks apart). Notwithstanding the foregoing, (A) the Committee may permit acceleration of the vesting of an Award in the event of a Participant's death or disability or upon a Change in Control and (B) the Committee may grant Awards covering up to five percent (5%) of the total number of shares of Common Stock authorized for issuance under Section 4.1 of the Plan that are not subject to such minimum vesting periods.

(2) *No Stock Option Repricing.* Subject to Section 4.2, the Committee shall not, without the approval of the shareholders of the Company: (A) lower the exercise price of a Stock Option after it is granted, (B) cancel a Stock Option that is out-of-the-money in exchange for cash or another Award, (C) cancel a Stock Option in exchange for another Stock Option with a lower exercise price, or (D) take any other action with respect to a Stock Option that would be treated as a repricing under the rules and regulations of the principal securities exchange on which the shares of Common Stock are traded.

(3) *Limitation on Director Awards.* The aggregate dollar value of equity-based awards (based on the grant date Fair Market Value of such awards) granted under this Plan or otherwise during any calendar year to a non-employee director, taken together with any cash fees paid during such calendar year to such non-employee director, in respect of the non-employee director's service as a member of the Board during such year (including service as a member or chair of any committees of the Board), shall not exceed \$300,000; provided, however, that in any calendar year in which a non-employee director first joins the Board or serves as Chairman of the Board, the maximum aggregate dollar value of equity-based and cash compensation provided to the non-employee director for services as a director may be up to \$500,000.

3.3 Liability & Indemnification. The members of the Committee and its designees shall not be liable for any action or determination made in good faith with respect to the Plan or any Award issued hereunder. The Company will indemnify and defend the members of the Committee and its designees to the maximum extent permitted by law for all actions taken on behalf of the Company with respect to the Plan.

4. Shares Subject to the Plan.

4.1 Number of Shares Reserved. Subject to adjustment pursuant to Section 4.2 hereof, the aggregate number of shares of Common Stock which may be issued under all Awards granted to Participants under the Plan shall be 675,000 plus (a) any shares of Common Stock that remain available for grant under the Prior Plan as of the Effective Date and (b) any shares of Common Stock subject to outstanding awards under the Prior Plan as of the Effective Date (such outstanding awards the "*Prior Plan Awards*") that on or after the Effective Date are forfeited, terminated, expire or otherwise lapse without being exercised (to the extent applicable), or are settled in cash. The aggregate number of shares of Common Stock with respect to which Incentive Stock Options may be granted shall be 675,000.

4.2 Adjustments. If there shall occur any change with respect to the outstanding shares of Common Stock by reason of any recapitalization, reclassification, stock dividend, extraordinary cash or stock dividend, stock split, reverse stock split, or other distribution or payment with respect to the shares of Common Stock or any merger, reorganization, consolidation, combination, spin-off, or other similar corporate change, or any other change affecting the Common Stock the Committee shall, in the manner and to the extent it considers in good faith to be equitable to the Participants and consistent with the terms of the Plan, cause an adjustment to be made to (a) the number and kind of shares or units subject to Awards under the Plan pursuant to Section 4.1 hereof, (b) the number and kind of shares of Common Stock or other rights (including, without limitation, cancellation of the awards in exchange for a cash payment or awarding cash payments to holders of

such Awards) subject to then outstanding Awards, (c) the exercise price or base price for each share or other right subject to then outstanding Awards, and (d) any other terms of an Award that are affected by the event or change. Notwithstanding the foregoing, (i) any such adjustments shall, to the extent necessary, be made in a manner consistent with the requirements of Section 409A of the Code, and (ii) in the case of Incentive Stock Options, any such adjustments shall, to the extent practicable, be made in a manner consistent with the requirements of Section 424(a) of the Code.

4.3 Availability of Certain Shares; Share Counting. Any shares of Common Stock covered by an Award granted under the Plan shall not be counted against the limit set forth in Section 4.1 above unless and until such shares are actually issued and delivered to a Participant and, therefore, the total number of shares of Common Stock available under the Plan as of a given date shall not be reduced by shares of Common Stock relating to previously granted Awards that (in whole or in part) have expired or have been forfeited or cancelled, or which have been settled in cash, and any shares of Common Stock that were covered by such expired, forfeited, cancelled or cash-settled Award will remain available for issuance hereunder. Shares of Common Stock purchased by Participants for Fair Market Value and shares of Common Stock not issued or delivered as a result of the net settlement of or the payment of the withholding taxes on an outstanding Award (other than a Stock Option) shall again be made available for delivery to Participants under the Plan and shall not be counted against the limit set forth in Section 4.1 above. Notwithstanding the foregoing, the following shares of Common Stock shall not be made available for issuance to Participants under the Plan and shall be counted against the limit set forth in Section 4.1 above: (a) shares of Common Stock not issued or delivered as a result of the net settlement of an outstanding Stock Option, (b) shares of Common Stock used to pay the exercise price or withholding taxes related to a Stock Option, and (c) shares of Common Stock repurchased by the Company using proceeds realized by the Company in connection with a Participant's exercise of a Stock Option.

5. Eligibility and Awards. Any Eligible Person may be selected by the Committee to receive an Award and become a Participant under the Plan. The Committee has the authority, in its discretion, to determine and designate from time to time those Eligible Persons who are to be granted Awards, the types of Awards to be granted, the number of shares of Common Stock subject to Awards to be granted and the terms and conditions of such Awards consistent with the terms of the Plan. In selecting Eligible Persons to be Participants, and in determining the type and amount of Awards to be granted under the Plan, the Committee shall consider any and all factors that it deems relevant or appropriate.

6. Stock Options.

6.1 Grant of Stock Options. A Stock Option may be granted to any Eligible Person selected by the Committee. Subject to the provisions of Section 6.6 hereof and Section 422 of the Code, each Stock Option shall be designated, in the discretion of the Committee, as an Incentive Stock Option or as a Nonqualified Stock Option.

6.2 Exercise Price. The exercise price per share of a Stock Option shall not be less than 100% of the Fair Market Value of the shares of Common Stock on the Date of Grant. The Committee may, in its discretion, specify for any Stock Option an exercise price per share that is higher than the Fair Market Value on the Date of Grant.

6.3 Vesting of Stock Options. Subject to Section 3.2(b)(i), the Committee shall in its discretion prescribe the time or times at which, or the conditions upon which, a Stock Option or portion thereof

shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Option may be based on the continued Service of the Participant, on the attainment of specified performance goals or on such other terms and conditions as approved by the Committee in its discretion. The vesting and exercisability of a Stock Option may be accelerated by, and may be dependent upon, in whole or in part, the occurrence of a Change in Control.

6.4 Term of Stock Options. The Committee shall, in its discretion, prescribe in an Award Agreement the period during which a vested Stock Option may be exercised, provided, however, that the maximum term of a Stock Option shall be ten years from the Date of Grant. A Stock Option may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a Participant's Service with the Company or any Subsidiary.

6.5 Stock Option Exercise; Tax Withholding. Subject to such terms and conditions as specified in an Award Agreement, a vested Stock Option may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company, together with payment of the aggregate exercise price therefore, provided that arrangements satisfactory to the Company have been made with respect to any applicable withholding tax, pursuant to Section 13.4 hereof. Payment of the exercise price shall be made in one or more of the following forms of payment at the election of the Participant: (a) in cash or by cash equivalent acceptable to the Committee, (b) to the extent permitted by the Committee in its discretion, in shares of Common Stock, valued at the Fair Market Value of such shares on the date of exercise, (c) to the extent permitted by the Committee in its discretion, by reduction in the number of shares of Common Stock otherwise deliverable upon exercise of such Stock Option with a Fair Market Value equal to the aggregate exercise price of such Stock Option at the time of exercise, (d) by a combination of the foregoing methods, or (e) by such other method as may be approved by the Committee or set forth in the Award Agreement.

6.6 No Rights as Shareholder. Unless and until shares of Common Stock underlying a Stock Option are actually issued to the Participant upon exercise of the Stock Option, the Participant shall have no rights of a shareholder with respect to the shares granted to the Participant under the Stock Option, including but not limited to the right to vote the shares or receive dividends or other distributions or amounts accrued, paid or made with respect thereto.

6.7 Additional Rules for Incentive Stock Options.

(a) **Eligibility.** An Incentive Stock Option may be granted only to an Eligible Person who is considered an employee for purposes of Treasury Regulation §1.421-7(h) with respect to the Company or any Subsidiary that qualifies as a "subsidiary corporation" with respect to the Company for purposes of Section 424(f) of the Code.

(b) **Annual Limits.** No Incentive Stock Option shall be granted to a Participant as a result of which the aggregate Fair Market Value (determined as of the Date of Grant) of Common Stock with respect to which incentive stock options under Section 422 of the Code are exercisable for the first time in any calendar year under the Plan and any other stock option plans of the Company or any subsidiary or parent corporation, would exceed \$100,000, determined in accordance with Section 422(d) of the Code. This limitation shall be applied by taking stock options into account in the order in which they were granted.

(c) **Termination of Employment.** An Award of an Incentive Stock Option may provide that such Stock Option may be exercised not later than three months following termination of

employment of the Participant with the Company and all Subsidiaries, or not later than one year following a permanent and total disability within the meaning of Section 22(e)(3) of the Code, as and to the extent determined by the Committee to comply with the requirements of Section 422 of the Code.

(d) **Other Terms and Conditions; Nontransferability.** Any Incentive Stock Option granted hereunder shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as are deemed necessary or desirable by the Committee, which terms, together with the terms of the Plan, shall be intended and interpreted to cause such Incentive Stock Option to qualify as an “incentive stock option” under Section 422 of the Code. An Award Agreement for an Incentive Stock Option may provide that such Stock Option shall be treated as a Nonqualified Stock Option to the extent that certain requirements applicable to “incentive stock options” under the Code shall not be satisfied. An Incentive Stock Option shall by its terms be nontransferable other than by will or by the laws of descent and distribution, and shall be exercisable during the lifetime of a Participant only by such Participant.

(e) **Disqualifying Dispositions.** If shares of Common Stock acquired by exercise of an Incentive Stock Option are disposed of within two years following the Date of Grant or one year following the transfer of such shares to the Participant upon exercise, the Participant shall, promptly following such disposition, notify the Company in writing of the date and terms of such disposition and provide such other information regarding the disposition as the Company may reasonably require.

7. Restricted Stock Awards.

7.1 **Grant of Restricted Stock Awards.** A Restricted Stock Award may be granted to any Eligible Person selected by the Committee. The Committee may require the payment by the Participant of a specified purchase price in connection with any Restricted Stock Award.

7.2 **Vesting Requirements.** The restrictions imposed on shares granted under a Restricted Stock Award shall lapse in accordance with the vesting requirements specified by the Committee in the Award Agreement in accordance with the restrictions of Section 3.2(b)(i) hereof. The requirements for vesting of a Restricted Stock Award may be based on the continued Service of the Participant, on the attainment of specified performance goals or on such other terms and conditions as approved by the Committee in its discretion. The vesting of a Restricted Stock Award may be accelerated by, and may be dependent upon, in whole or in part, the occurrence of a Change in Control.

7.3 **Rights as Shareholder.** Subject to the foregoing provisions of the Plan and the applicable Award Agreement, unless otherwise prohibited by applicable law or determined by the Committee, the Participant shall have the rights of a shareholder with respect to the shares granted to the Participant under a Restricted Stock Award, including but not limited to the right to vote the shares and receive all dividends in respect of shares and other distributions paid or made with respect thereto. Notwithstanding the foregoing, any dividends or distributions declared or paid with respect to such Restricted Stock Award prior to the vesting of such Award shall be (a) accrued or (b) reinvested in additional shares of Common Stock (which may thereafter accrue additional dividends). Any such reinvestment shall be at the Fair Market Value at the time thereof and subject to the same terms as the underlying Award. Accrued dividends shall be paid as soon as practicable following vesting of the Restricted Stock Award and may be settled in cash or shares of Common Stock, or a combination thereof, in a single payment or in installments.

7.4 **Section 83(b) Election.** If a Participant makes an election pursuant to Section 83(b) of the Code with respect to a Restricted Stock Award, the Participant shall reasonably promptly provide a copy to

the Company. The Committee may provide in an Award Agreement that the Restricted Stock Award is conditioned upon the Participant's making or refraining from making an election with respect to the Award under Section 83(b) of the Code.

8. Restricted Stock Unit Awards.

8.1 Grant of Restricted Stock Unit Awards. A Restricted Stock Unit Award may be granted to any Eligible Person selected by the Committee. The Committee may require the payment by the Participant of a specified purchase price in connection with any Restricted Stock Unit Award.

8.2 Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock or their cash equivalent, any combination thereof, or in any other form of consideration, as determined by the Committee and contained in the Award Agreement.

8.3 Vesting Requirements. The restrictions or conditions imposed on shares granted under a Restricted Stock Unit Award shall lapse in accordance with the vesting requirements specified by the Committee in the applicable Award Agreement in accordance with the restrictions of Section 3.2(b)(i) hereof. The requirements for vesting of a Restricted Stock Unit Award may be based on the continued Service of the Participant, on the attainment of specified performance goals or on such other terms and conditions as approved by the Committee in its discretion. The vesting and/or settlement of a Restricted Stock Unit Award may be accelerated by, and may be dependent upon, in whole or in part, the occurrence of a Change in Control. At the time of the grant of a Restricted Stock Unit Award, the Committee, as it deems appropriate, may impose such restrictions or conditions that delay the settlement of a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award, subject to Section 409A of the Code.

8.4 No Rights as Shareholder. Unless and until shares of Common Stock underlying a Restricted Stock Unit Award are actually delivered to the Participant upon settlement of the Restricted Stock Unit Award, the Participant shall have no rights of a shareholder with respect to the shares granted to the Participant under a Restricted Stock Unit Award, including but not limited to the right to vote the shares or receive dividends or other distributions or amounts accrued, paid or made with respect thereto.

8.5 Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Committee and contained in the applicable Award Agreement. At the sole discretion of the Committee, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Committee. Any such dividend equivalents (including but not limited to any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents) will be subject to all of the same terms and conditions of the underlying Award Agreement to which they relate, including, without limitation, with respect to the vesting and settlement thereof.

9. Other Awards. An Other Award may be granted to any Eligible Person selected by the Committee. Subject to the terms of the Plan, the Committee will determine the terms and conditions of any such Other Award, including but not limited to the price, if any, at which securities may be purchased pursuant to any Other Award granted under the Plan, and any applicable vesting, settlement and payment terms.

10. Forfeiture Events.

10.1 **General.** The Committee may specify in an Award Agreement that the Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment (including, without limitation, repayment to the Company of any gain related to the Award), or other provisions intended to have a similar effect, upon such terms and conditions as may be determined by the Committee, upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events shall include, but shall not be limited to, termination of the Participant's Service for Cause, the Participant's violation of material Company policies or breach of noncompetition, confidentiality or other restrictive covenants that may apply to the Participant. In addition, notwithstanding anything in the Plan to the contrary, any Award Agreement may also provide for the reduction, cancellation, forfeiture or recoupment of an Award (including, without limitation, repayment to the Company of any gain related to the Award), or other provisions intended to have a similar effect, upon such terms and conditions as may be required by the Committee or under Section 10D of the Exchange Act and any applicable rules or regulations promulgated by the SEC or any national securities exchange or national securities association on which the Common Stock may be traded or under any clawback or similar policy adopted by the Company.

10.2 **Termination for Cause.**

(a) **General.** Unless otherwise set forth in an Award Agreement or a written employment agreement between a Participant and the Company, if applicable, if a Participant's employment with the Company or any Subsidiary shall be terminated for Cause, such Participant's rights, payments and benefits with respect to an Award shall be subject to cancellation, forfeiture and/or recoupment. The Company shall have the power, subject to Section 10.2(b), to determine whether the Participant has been terminated for Cause and the date upon which such termination for Cause occurs. Any such determination shall be final, conclusive and binding upon the Participant. In addition, if the Company shall reasonably determine that a Participant has committed or may have committed any act which is reasonably likely to constitute the basis for a termination of such Participant's employment for Cause, the Company may suspend for up to 30 days the Participant's rights to exercise any option, receive any payment or vest in any right with respect to any Award pending a determination by the Company of whether an act has been committed which is reasonably likely to constitute the basis for a termination for Cause as provided in this Section 10.2, but, in each case, only to the extent that such action would not result in an acceleration of income or imposition of a tax under Section 409A of the Code. If, subsequent to a Participant's voluntary termination of employment or involuntary termination of employment without Cause, it is discovered that the Participant's employment could have been terminated for Cause, the Committee may deem such Participant's employment to have been terminated for Cause.

(b) **Definition of "Cause".** For purposes of the Plan and determining the treatment of Awards granted thereunder, unless otherwise provided in an applicable Award Agreement or as set forth in a written employment agreement between a Participant and the Company, "Cause" shall mean: (1) material dishonesty, which is not the result of an inadvertent or innocent mistake, of the Participant with respect to the Company or any Affiliate; (2) willful misfeasance or nonfeasance of duty by the Participant that is or may be injurious to the Company or any Affiliate, or the reputation, business, or business relationships of the Company or any Affiliate, or any of their respective officers, directors, or employees; (3) material violation by the Participant of his or her employment agreement; (4) conviction of the Participant of any felony, any crime involving moral turpitude or any other crime (other than a minor vehicular offense) which could reflect in some material fashion unfavorably upon the Company or any Affiliate; (5) any refusal by the Participant to obey the lawful orders of the Board or any other person to whom the Participant reports or (6) the Participant's (A) failure to perform any of his or her fiduciary duties to the Company or any Affiliate, (B) failure to make

full disclosure to the Company or any Affiliate of all business opportunities pertaining to their business, (C) acting for his or her own benefit concerning the subject matter of his or her fiduciary relationship with the Company or any Affiliate, or (D) taking any action which he or she knows or should reasonably know would not comply with the law as applicable to his or her employment, including but not limited to the United States Foreign Corrupt Practices Act. No act or failure to act by the Participant shall be considered “willful” if such act is done by the Participant in the good faith belief that such act is or was to be beneficial to the Company and its Affiliates, or such failure to act is due to the Participant’s good faith belief that such action would be materially harmful to the Company and its Affiliates.

11. Restrictions on Transfer. Except as provided below, no Award and no shares of Common Stock subject to Awards that have not been issued or as to which any applicable restriction or performance period has not lapsed, may be sold, assigned, transferred, pledged or otherwise encumbered, other than by will or the laws of descent and distribution, and such Award may be exercised during the life of the Participant only by the Participant or the Participant’s guardian or legal representative. To the extent and under such terms and conditions as determined by the Committee, a Participant may assign or transfer an Award (each transferee thereof, a “*Permitted Assignee*”) to (a) the Participant’s spouse, children or grandchildren (including any adopted and step children or grandchildren), parents, grandparents or siblings, (b) to a trust for the benefit of one or more of the Participant or the persons referred to in clause (a), (c) to a partnership, limited liability company or corporation in which the Participant or the persons referred to in clause (a) are the only partners, members or shareholders, (d) for charitable donations or (e) pursuant to a domestic relations order entered or approved by a court of competent jurisdiction; provided, that such Permitted Assignee shall be bound by and subject to all of the terms and conditions of the Plan and the Award Agreement relating to the transferred Award and shall execute an agreement satisfactory to the Company evidencing such obligations; provided, further, that such Participant shall remain bound by the terms and conditions of the Plan. The Company shall cooperate with any Permitted Assignee and the Company’s transfer agent in effectuating any transfer permitted by the Committee under this Section 11. For the avoidance of doubt, in no event will any Award be transferrable by a Participant in exchange for value.

12. General Provisions.

12.1 Award Agreement. An Award under the Plan shall be evidenced by an Award Agreement in a written or electronic form approved by the Committee setting forth the number of shares of Common Stock subject to the Award, the purchase price of the Award (if any), the time or times at which an Award will become vested, exercisable or payable and the term of the Award. The Award Agreement may also set forth the effect on an Award of a Change in Control and a termination of Service under certain circumstances. The Award Agreement shall be subject to and incorporate, by reference or otherwise, all of the applicable terms and conditions of the Plan, and may also set forth other terms and conditions applicable to the Award as determined by the Committee consistent with the limitations of the Plan. An Award Agreement may be in the form of an agreement to be executed by both the Participant and the Company (or an authorized representative of the Company) or certificates, notices or similar instruments as approved by the Committee. The Committee need not require the execution of an Award Agreement by a Participant, in which case, acceptance of the Award by the Participant shall constitute agreement by the Participant to the terms, conditions, restrictions and limitations set forth in the Plan and the Award Agreement.

12.2 Determinations of Service. Subject to applicable law, including without limitation Section 409A of the Code, the Committee shall, in good faith, make all determinations relating to the Service of a Participant with the Company or any Subsidiary in connection with an Award, including, without

limitation, with respect to the continuation, suspension or termination of such Service. A Participant's Service shall not be deemed terminated if the Committee determines that (a) a transition of employment to service with a partnership, joint venture or corporation not meeting the requirements of a Subsidiary in which the Company or a Subsidiary is a party is not considered a termination of Service, (b) the Participant transfers between service as an employee and service as a consultant or other personal service provider (or vice versa), or (c) the Participant transfers between service as an employee and that of a non-employee director (or vice versa). The Committee may determine whether any corporate transaction, such as a sale or spin-off of a division or subsidiary that employs a Participant, shall be deemed to result in a termination of Service for purposes of any affected Awards.

12.3 No Right to Employment or Continued Service. Nothing in the Plan, in the grant of any Award or in any Award Agreement shall confer upon any Eligible Person or any Participant any right to continue in the Service of the Company or any of its Subsidiaries, or interfere in any way with the right of the Company or any of its Subsidiaries to terminate the employment or other service relationship of an Eligible Person or a Participant for any reason at any time.

12.4 Rights as Shareholder. A Participant shall have no rights as a holder of shares of Common Stock with respect to any unissued securities covered by an Award until the date the Participant becomes the holder of record of such securities. Except as provided in Section 4.2 hereof, no adjustment or other provision shall be made for dividends or other shareholder or security holder rights, except to the extent that the Award Agreement provides for dividend payments or dividend equivalent rights. For the avoidance of doubt, although they may accrue, no dividends or dividend equivalent rights shall be paid on any unvested Award under the Plan. The Committee may determine, in its discretion, the manner of delivery of Common Stock to be issued under the Plan, which may be by delivery of stock certificates, electronic account entry into new or existing accounts or any other means as the Committee, in its discretion, deems appropriate. The Committee may require that any certificates or other evidence of ownership be held in escrow by the Company for any shares of Common Stock or cause the shares to be legended in order to comply with the securities laws, the restrictions arising under the Plan or other applicable restrictions. Should the shares of Common Stock be represented by book or electronic account entry rather than a certificate, the Committee may take such steps to restrict transfer of the shares of Common Stock as the Committee reasonably considers necessary or advisable.

12.5 Other Compensation and Benefit Plans. The adoption of the Plan shall not affect any other share incentive or compensation plans in effect for the Company or any Subsidiary, nor shall the Plan preclude the Company from establishing any other forms of share incentive or other compensation or benefit program for employees of the Company or any Subsidiary. The amount of any compensation deemed to be received by a Participant pursuant to an Award shall not constitute includable compensation for purposes of determining the amount of benefits to which a Participant is entitled under any other compensation or benefit plan or program of the Company or a Subsidiary, including, without limitation, under any pension or severance benefits plan, except to the extent specifically provided by the terms of any such plan.

12.6 Plan Binding on Transferees. The Plan shall be binding upon the Company, its successors, transferees and assigns, and the Participant, the Participant's executor, administrator and Permitted Assignees and beneficiaries.

12.7 Additional Restrictions. In the event of a Change in Control or similar corporate event or a change in capital structure, any Awards that vest or become payable as a result of or in connection with the applicable event or circumstances may be subject to the same terms and conditions applicable to the proceeds

realized by the Company or its shareholders in connection therewith (including, without limitation, payment timing and any escrows, indemnities, payment contingencies or holdbacks), as determined by the Committee in its sole discretion, subject to compliance with Section 409A of the Code.

13. Legal Compliance

13.1 **Securities Laws.** No shares of Common Stock will be issued or transferred pursuant to an Award unless and until all applicable requirements imposed by Federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the shares of Common Stock may be listed, have been fully met. The Committee may in good faith impose such conditions on any shares of Common Stock issuable under the Plan as a result of restrictions under the Securities Act or under the requirements of any exchange upon which such shares of the same class are then listed or of any regulatory agency having jurisdiction over the Company, and under any blue sky or other securities laws applicable to such shares. The Committee may also require the Participant to make customary representations and warranties at the time of issuance or transfer, including, without limitation, that the shares of Common Stock are being acquired only for investment purposes and without any current intention to sell or distribute such shares. Certificates representing Common Stock acquired pursuant to an Award may bear such legends as the Committee may consider appropriate under the circumstances.

13.2 **Unfunded Plan.** The adoption of the Plan and any reservation of shares of Common Stock or cash amounts by the Company to discharge its obligations hereunder shall not be deemed to create a trust or other funded arrangement. Except upon the issuance of Common Stock pursuant to an Award, any rights of a Participant under the Plan shall be those of a general unsecured creditor of the Company, and neither a Participant nor the Participant's permitted transferees or estate shall have any other interest in any assets of the Company by virtue of the Plan. Notwithstanding the foregoing, the Company shall have the right to implement or set aside funds in a grantor trust, subject to the claims of the Company's creditors or otherwise, to discharge its obligations under the Plan.

13.3 **Section 409A Compliance.** To the extent applicable, it is intended that the Plan and all Awards hereunder comply with, or be exempt from, the requirements of Section 409A of the Code and the Treasury Regulations and other guidance issued thereunder, and that the Plan and all Award Agreements shall be interpreted and applied by the Committee in a manner consistent with this intent in order to avoid the imposition of any additional tax under Section 409A of the Code. In the event that any provision of the Plan or an Award Agreement is determined by the Committee to not comply with the applicable requirements of Section 409A of the Code and the Treasury Regulations and other guidance issued thereunder, the Committee shall have the authority to take such actions and to make such changes to the Plan or an Award Agreement as the Committee deems necessary to comply with such requirements. Notwithstanding anything contained herein to the contrary, a Participant shall not be considered to have terminated service with the Company for purposes of any payments under the Plan which are subject to Section 409A of the Code until the Participant has incurred a "separation from service" from the Company within the meaning of Section 409A of the Code. Each amount to be paid or benefit to be provided under the Plan shall be construed as a separate identified payment for purposes of Section 409A of the Code. If any payment or benefit provided to a Participant in connection with his or her separation from service is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code and Participant is determined to be a "specified employee" as defined in Section 409A of the Code, then such payment or benefit shall not be paid until the day following the six-month anniversary of the separation from service or, if earlier, on the Participant's date of death. The Company makes no representation that any or all of the payments described in the Plan will be exempt from or comply with Section 409A of the Code. In no event whatsoever shall the Company or any of its Subsidiaries or Affiliates be liable for any tax, interest or penalties that may be imposed on a Participant by Section 409A of the Code or otherwise, or any damages for failing to comply with Section 409A of the Code.

13.4 **Tax Withholding.** The Participant shall be responsible for payment of any taxes or similar charges permitted by law to be paid by the Participant or withheld from an Award or an amount paid in satisfaction of an Award. Any withholdings shall be paid by the Participant on or prior to the payment or other event that results in taxable income in respect of an Award. In addition to the methods described in the Plan, the Award Agreement may specify the manner in which the withholding or other tax-related obligation shall be satisfied with respect to the particular type of Award. Without limiting the foregoing, if the Company or any Subsidiary reasonably determines that under the requirements of applicable taxation laws or regulations of any applicable governmental authority it is obliged or permitted to withhold for remittance to a taxing authority any amount upon the grant, vesting, or exercise of an Award, the other disposition or deemed disposition by a Participant of an Award or any Common Stock or the provision of any other benefit under the Plan and if the Participant does not provide notice of the applicable withholding method from items (a) through (d) below, the Company or any of its Subsidiaries, may take any steps it considers reasonably necessary in the circumstances in connection therewith, including, without limiting the generality of the foregoing:

(a) requiring the Participant to pay the Company or any of its Subsidiaries such amount as the Company or any of its Subsidiaries is obliged to remit to such taxing authority in respect thereof, with any such payment, in any event, being due no later than the date as of which any such amount first becomes included in the gross income of the Participant for tax purposes;

(b) to the extent permitted, and subject to rules established by, the Committee, issuing any Common Stock issued pursuant to an Award to an agent on behalf of the Participant and directing the agent to sell a sufficient number of such shares on behalf of the Participant to satisfy the amount of any such withholding obligation, with the agent paying the proceeds of any such sale to the Company or any of its Subsidiaries for this purpose;

(c) to the extent permitted, and subject to the rules established by, the Committee, withholding from the Common Stock otherwise issuable pursuant to the exercise or settlement of an Award a number of shares of Common Stock sufficient to satisfy the amount of any such withholding obligation; or

(d) to the extent permitted by law and consistent with Section 409A of the Code, deducting the amount of any such withholding obligation from any payment of any kind otherwise due to the Participant.

13.5 **No Guarantee of Tax Consequences.** Neither the Company, the Board, the Committee nor any other person make any commitment or guarantee that any Federal, state, local or foreign tax treatment will apply or be available to any Participant or any other person hereunder.

13.6 **Severability.** If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

13.7 **Governing Law.** The Plan and all rights hereunder shall be subject to and interpreted in accordance with the laws of the Commonwealth of Virginia, without reference to the principles of conflicts of laws, and to applicable Federal securities laws.

14. Term; Amendment and Termination.

14.1 **Term.** The Plan was approved by the Board on June 17, 2019 and shall become effective on the date the Plan is approved by the Company's shareholders (the "*Effective Date*"). Subject to earlier termination as provided in Section 14.2 hereof, no new Awards may be granted under the Plan on or after June 17, 2029; provided, however, that Awards outstanding on such date shall remain subject to the terms of the Plan and any applicable Award Agreement.

14.2 **Amendment and Termination.** The Board may from time to time and in any respect, amend, modify, suspend or terminate the Plan or any Award or Award Agreement hereunder. Notwithstanding the foregoing, no amendment, modification, suspension or termination shall materially and adversely affect any Award theretofore granted without the consent of the Participant or the permitted transferee of the Award. For purposes of this Section 14.2, any action of the Board or the Committee that in any way alters or affects the tax treatment of any award or that the Board determines is necessary to prevent an award from being subject to tax under Section 409A of the Code shall not be considered to materially or adversely affect any Award.

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

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

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

Date: August 8, 2019

/s/ JOHN A. BROOKS

John A. Brooks
President and Chief Executive Officer

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

I, Steven A. Hartman, 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: August 8, 2019

/s/ STEVEN A. HARTMAN

Steven A. Hartman
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 June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John A. Brooks, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

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

Date: August 8, 2019

/s/ JOHN A. BROOKS

John A. Brooks
President and Chief Executive Officer

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

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

In connection with the Quarterly Report of Penn Virginia Corporation (the "Company") on Form 10-Q for the quarter ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Steven A. Hartman, 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: August 8, 2019

/s/ STEVEN A. HARTMAN

Steven A. Hartman
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.